

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires July 31, 1996

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE – Other instructions on reverse side**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

**LRE OPERATING, LLC**

3a. Address c/o Mike Pippin LLC  
3104 N. Sullivan, Farmington, NM 87401

3b. Phone No. (include area code)  
505-327-4573

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

990' FNL & 2310' FWL Unit C  
Sec. 5, T18S, R27E

**RECEIVED**

**JAN 29 2014**

5. Lease Serial No.

**NMNM 97122**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

**CHALK FEDERAL #5**

3

**30-015-29650**

10. Field and Pool, or Exploratory Area (51300)

Red Lake, Glorieta-Yeso (51120)

AND

Eddy County, New Mexico

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize <input checked="" type="checkbox"/> Deepen <input type="checkbox"/> Production (Start/Resume) <input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing <input checked="" type="checkbox"/> Fracture Treat <input type="checkbox"/> Reclamation <input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair <input type="checkbox"/> New Construction <input type="checkbox"/> Recomplete <input checked="" type="checkbox"/> Other Deepen to Add More Yeso
	<input type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Convert to Injection <input type="checkbox"/> Plug Back <input type="checkbox"/> Water Disposal

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Accepted for record  
NMOC  
1-29-2014

LRE OPERATING, LLC would like to SQ the existing Yeso perfs, drill deeper, run a 4" liner & complete all of the Yeso as follows: MIRUSU. TOH w/all production equipment. W/RBP @ ~2750', PT 5-1/2" csg to ~2000 psi. TOH w/RBP. Set a 5-1/2" cmt ret @ ~2700' on 2-7/8" P-110 tbg & SQ existing Yeso perfs 2796'-3059' w/~500 sx "C" cmt w/2% CaCl<sub>2</sub>. WOC. Drill out SQ to below perfs & PT to 1000 psi. Release SU. MI drilling rig. Using 4-3/4" bit, drill deeper through 5-1/2" shoe @ 3448' to new TD @ ~4400'. Run open hole logs from TD to 5-1/2" shoe. Set a 4" 11.6# L-80 ultra flush joint liner @ ~TD4400'. Set pkr seal assembly liner hanger @ ~2700' & tie back to surface w/4" 11.6# L-80 ultra flush joint pipe. Cmt new liner w/~100 sx (132 cf) "C" cmt w/0.2% PF-103 retarder & 0.125% PF-029 CF. WOC. PT 4" liner & tie back pipe to 5000 psi for 30 min. Release drilling rig. See the attached drilling plan, pressure control plan, H<sub>2</sub>S contingency plan, & 2 WBDs.

MIRUSU. Complete the entire Yeso from ~2796'-4400' in 4 stages of about 350' each. Stages to be separated by about 50' & 4" CBPs. Each stimulation to consist of about 3000 gal 15% HCL & 125,000# 16/30 sand in X-linked gel. CO after fracs & drill out CBPs. Sting out of seal assembly @ ~2700' & TOH w/4" tie back pipe. Land ~1650' 2-3/8" 4.7# J-55 tbg w/SCC on ~2650' 2-7/8" 6.5# J-55 tbg @ ~4300'. Run pump & rods, release SU, & complete as a single Yeso oil well.

*Waiting on operator said he would submit new NOI*

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)	Title
Mike Pippin	Petroleum Engineer (Agent)
Signature	Date
<i>Mike Pippin</i>	March 28, 2013

THIS SPACE FOR FEDERAL OR STATE USE

Approved by	Title	Date
<i>[Signature]</i>	<i>[Signature]</i>	<i>1/27/14</i>
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



LIME ROCK  
RESOURCES

Chalk Federal #5  
Sec 5-18S-27E  
990' FNL, 2310' FWL  
Elevation - 3,481'  
API # 30-015-29650  
Eddy County, NM

<u>Zone</u>	<u>Top</u>
San Andres	1,380'
Glorieta	2,650'
Yeso	2,880'

8-5/8", 24#, J-55, ST&C Casing @ 1154'

2-7/8", 6.5#, J-55 Tubing @ 3,089'

Perfs: 2,796'; 2,805'; 11'; 14'; 22'; 38'; 41'; 52';  
64'; 66'; 67'; 2,905'; 14'; 41'; 49'; 52'; 69'; 87';  
97'; 3,011'; 15'; 34'; 46' & 59' (1 SPF - 24  
holes)

PBTD @ 3,405'

5-1/2", 14#, K-55, ST&C Casing @ 3,448'  
(10/25/2000)

TD @ 3,450'

**Stim Info:** 4000 gal of 15% NEFE HCl. Frac w/  
59.7k gal Viking 3000 + 100,320 # 16/30 + 35,120 #  
12/20.



**LIME ROCK  
RESOURCES**

**Proposed 3-26-2013**

**Chalk Federal #5  
Sec 5-T18S-R28E (C)  
990' FNL & 2310' FWL  
Elevation - 3,481'  
API #: 30-015-29650  
Eddy County, NM**

Spud  
10/18/00

8-5/8",  
24#, J-55,  
ST&C  
Casing @  
1154'.  
Cement w  
575 sks  
Circulated  
129 sx to  
Surface.  
10/18/00

4" 11.6# L80  
Ultra Flush  
Joint will be  
removed  
after the  
completion  
from above  
the Liner  
Hanger  
Packer Seal  
Assembly

2 7/8" 6.5#  
J55 tbg

**Squeeze**

**Perfs:**

2796';2805';  
11';14';22';38';  
41';52';64';6';  
2905';14';41';  
49';52';69';87';  
97';3011';15';  
34';46';59' (1  
SPF - 24  
holes) 500  
SX Cl C w/2%  
CC to 2000  
psi

2 3/8" 4.7# J55-  
Turned Down  
Collars

**Proposed  
TD = 4400'**

1. POH and lay down pump, rods, and tubing.
  2. Test Casing with RBP at 2750' and PKR at 2720'.
  3. Set cement retainer at 2700' and squeeze Yeso perfs 2796'-3059' w/500 sx Class C with 2% CC to 2000 psi. WOC.
  4. Drill out cement through perfs and test squeezed perfs to 1000 psi.
  5. Use 4-3/4" bit and drill new open hole from 3450' (after drl'g out shoe at 3448') to 4400'.
  6. Circ hole clean, POOH, log Yeso formation from 5-1/2" csg to 4400'.
  7. Set 4" 11.6# L80 Ultra Flush joint liner to 4400' with liner top hanger packer and seal assembly set at 2700' MD and tie back to surface with 4" 11.6# L80 Ultra Flush joint.
  8. Cement 4" 11.6# L80 Ultra Flush Joint Liner with 100 sks Class C with .2% PF-103 Retarder & 0.125% PF-029 Cello-flake, 14.8 ppg, 1.32 yield. WOC.
  9. Pressure test 4" 11.6# L80 Ultra Flush Joint to 5000 psi for 30 min.
  10. Perf Glorieta-Yeso from 2796' to 4430' with 1 spf in 4 stages each phase 350' long with a 50' skip for a composite bridge plug. Frac each stage with 3000 g 15% NEFE HCL and 20# - 25# x-linked gel loaded from 1-4 ppg with 100,000 lbs of 16/30 brown sand and 25,000 lbs of 16/30 resin coated sand.
  11. Drill out bridge plugs and clean out to PBTD.
  12. Pull 4" 11.6# L80 Ultra Flush Joint out of the seal assembly and pull out of hole.
  13. Run 2 7/8" 6.5 # J55 tbg to the top of the 4" liner and then crossed over to 2 3/8" tbg w turned down collars inside the 4" liner.
  14. Run a tapered rod string and pump and turn to production.
- 4" x 5-1/2" Liner Hanger, Packer, and Seal Assembly at 2700'

5-1/2"; 14#; K-55; ST&C Casing @ 3,448'. Cement w 600 sks.  
Circulated 66 sx to Surface. (10/25/2000) (10/25/00 TD @3450')

Perf Glorieta-Yeso in 4 Stages from 2796'-4300' and Frac Each stage with 3000 g 15% NEFE HCL and 20#-25# x-linked gel loaded 1-4 ppg with 100K lbs 16/30 brown and 25K lbs 16/30 resin coated sand.

4" 11.6" L-80; Flush Joint Liner 2700'-4400'. Cemented w/ 100 sx Class C w .2% PF-013 retarder & 0.125% PF-029 Cello-Flake, 14.8 ppg, 1.32 yield

**GEOLOGY**

Zone	Top
San Andres	1,380'
Glorieta	2,650'
Yeso	2,880'

**SURVEYS**

Degrees	Depth
1/4°	504'
1/4°	1,175'
1/2°	1,505'
3/4°	2,027'
3/4°	2,490'
3/4°	2,982'
1/4°	3,450'

**LRE OPERATING, LLC**  
**DRILLING PLAN**  
**CHALK FEDERAL #5 - DEEPENING**

CHALK FEDERAL #5  
API#: 30-015-29650  
990' FNL & 2310' FWL  
C-Sec 5-T18S-R27E  
Eddy County, NM

1. The elevation of this existing well is 3481'.
2. The geologic name of the surface formation is Quaternary-Alluvium.
3. A rotary rig will be used to deepen this well from the 5-1/2" casing shoe at 3448' to a new ~TD4400'.
4. Proposed TD is ~4400'.
5. Actual and estimated geologic markers:

Formation	Actual	Estimated
San Andres	1380'	
Glorieta	2650'	
Yeso	2796'	
Tubb		4500'
6. Estimated depths at which oil, gas, or other minerals are expected to be encountered:

Yeso	2796'
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7. Proposed Casing Liner & Cementing Program:

Type	Hole Size	Csg Size	Wt	Grade	Depth	SX	Density	Yield	Additives
Liner	4-3/4"	4" FJ	11.6#	L-80	~4400'	~100	14.8	1.32	"C" w/0.2% PF-103 & 1/8# CF

Liner Hanger w/seal assembly will be at 2700'.
8. Proposed Mud Program:

Depth	3448'-4400'
Mud Type	Brine, Salt Gel, & Starch
Properties	
NW	9.9-10.2
pH	10-11.5
WL	20-30
Vis	32-35
MC'	<2
Solids	<3
Pump Rate	400-450
Special	Hi Vis Sweeps, add acid & starch as req. Raise Vis to 35 for logs
9. Pressure Control Equipment: See Attached Description and diagram of Pressure Control Equipment
10. Testing, Logging & Coring Program

No drill stem tests are anticipated  
Electric Logs: GR & Neutron/Density Logs from ~TD4400' to 5-1/2" shoe @ 3448'  
No coring is anticipated

**DRILLING PLAN**  
**STALEY STATE #3S - DEEPENING**

11. No abnormal temperatures or pressures are expected. There is no known presence of H<sub>2</sub>S in this area. If H<sub>2</sub>S is encountered, the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 1936 psi based on 0.44xTD. The estimated BHT is 125 degrees F.
12. Anticipated start date will be soon after approval and as soon as a rig will be available. Move in operations and drilling is expected to take 6 days. An additional 8 days will be needed to complete the well.
13. The well will be completed in the Yeso using a 4 stage frac treatment with a total of about 500,000# 16/30 sand in X-linked gel. The well will be stimulated using a 4" 11.6# L-80 ultra flush joint tie back frac string from the seal assembly/liner hanger @ ~2700'.

**District I**  
1625 N. French Dr., Hobbs, NM 88240

**District II**  
1301 W. Grand Avenue, Artesia, NM 88210

**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410

**District IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-1C  
Revised October 12, 200  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number 30-015-29650	<sup>2</sup> Pool Code 51120	<sup>3</sup> Pool Name Red Lake; Glorieta-Yeso
<sup>4</sup> Property Code 309870	<sup>5</sup> Property Name <b>CHALK FEDERAL</b>	<sup>6</sup> Well Number <b>5</b>
<sup>7</sup> OGRID No. 281994	<sup>8</sup> Operator Name <b>LRE OPERATING, LLC.</b>	<sup>9</sup> Elevation 3481' GL

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	5	18-S	27-E	3	990'	NORTH	2310	WEST	EDDY

<sup>11</sup> 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

<sup>12</sup> Dedicated Acres 40	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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.

	<p><sup>17</sup> <b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or released 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature: <i>Mike Pippin</i> Date: 3/28/13</p> <p>Mike Pippin Printed Name</p>	
	<p><sup>18</sup> <b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>4/14/97</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor: Ronald J. Eidson</p>	
	<p>3239</p> <p>Certificate Number</p>	

### **Pressure Control Equipment**

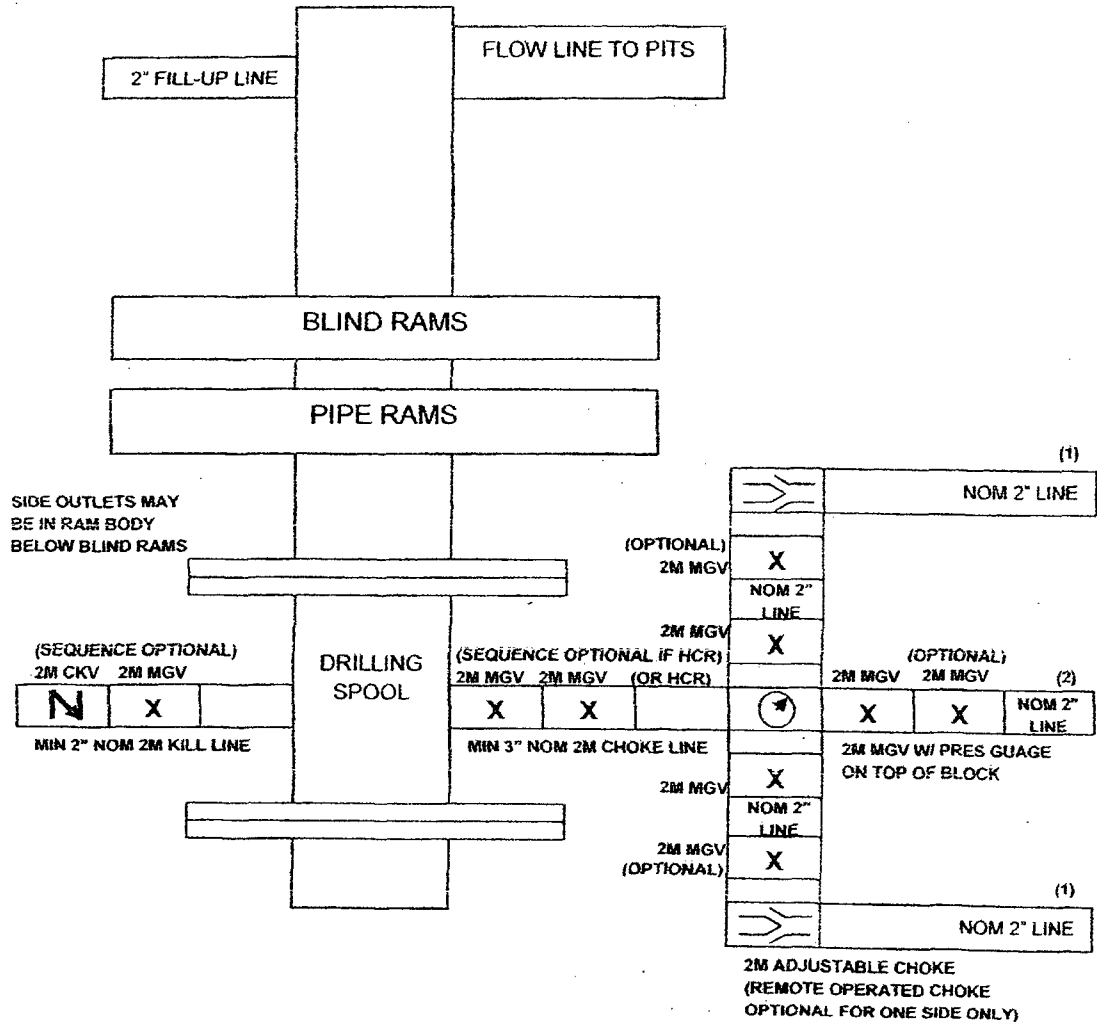
The blowout preventer equipment (BOP) will consist of a 2000 psi double ram type preventer, a bag-type (Hydrill) preventer and rotating head. Both units will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and drill pipe rams on bottom. A 2M BOP will be installed on the 5-1/2" casing spool and utilized continuously until the depth is reached. The liner will be tested as per Onshore Order #2.

Pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily drilling logs.

The BOP equipment will consist of the following:

- Annular preventers
- Double ram with blind rams and pipe rams.
- Drilling spool, or blowout preventer with 2 side outlets (choke side shall be a 2 inch minimum diameter, kill side will be at least 2 inch diameter)
- Kill line (2 inch minimum)
- A minimum of 2 choke line valves (2 inch minimum)
- 3 inch diameter choke line
- 2 kill valves, one of which will be a check valve (2 inch minimum)
- 2 chokes
- pressure gauge on choke manifold
- Upper Kelly cock valve with handle available
- Safety valve and subs to fit all drill string connections in use
- All BOPE connections subjected to well pressure will be flanged, welded, or clamped.
- Fill-up line above the uppermost preventer.

## 2M BOP SCHEMATIC



(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



## **LRE OPERATING, LLC**

### **CHALK FEDERAL #5**

## **HYDROGEN SULFIDE (H<sub>2</sub>S) CONTINGENCY DRILLING PLAN**

**Assumed 100 ppm ROE = 3000'**

**100 ppm H<sub>2</sub>S concentration shall trigger activation of this plan.**

**This is an open drilling site. H<sub>2</sub>S monitoring equipment, along with a choke manifold, mud/gas separator, and flare will be rigged up and in use when the company drills out from under surface casing. H<sub>2</sub>S monitors, warning signs, wind indicators and flags will be in use.**

### **SUMMARY PLAN**

1. All personnel shall receive proper H<sub>2</sub>S training in accordance with Onshore Oil and Gas Order No. 6.III.C.3.a. A minimum of an initial training session and weekly H<sub>2</sub>S and well control drills for all personnel in each working crew shall be conducted. The initial training session for each well shall include a review of the this Drilling Operations Plan and site specific measures and areas set up when the rig is moved onto location.
2. The company has caused the drilling contractor and other vendors to install 2000 psi well control systems including:
  - A. A choke manifold with:
    - i. One remotely operated choke,
    - ii. a flare line and flare that is 150' from the wellhead to be ignited, in the event the plan is put into effect, with an electronic ignition system or a back up flare gun,
    - iii. a mud/gas separator downstream of the of the choke and upstream of the flare,
    - iv. All BOP equipment required for a 2000 psi well control system will be in place and tested by a third party to 250 psi low pressure and 2000 psi high pressure. This test will include testing all lines and equipment associated with the choke manifold and kill line. Weekly BOP function and control drills will be performed with all applicable crews and personnel on location.
3. At rig move in, two perpendicular briefing areas readily accessible will be designated and marked with signage. A clear foot path for escape will be designated and marked.
4. The following protective equipment for essential personnel will be located on location at rig move in:
  - A. Breathing apparatus:
    - i. Rescue Packs (1 at each briefing area and 2 stored in the designated safety equipment storage area), shall be on location,
    - ii. 4 work/escape packs shall be stored on the rig floor with sufficient hose to allow work activity,
    - iii. 4 Emergency escape packs shall be stored in the rig doghouse for emergency evacuation,

## H2S CONTINGENCY DRILLING PLAN

- B. Auxiliary Rescue Equipment will be available in the designated safety equipment storage area and will include:
- i. Stretcher,
  - ii. Two OSHA approved full body harnesses,
  - iii. 100 feet of 5/8 inch OSHA approved rope,
  - iv. 2-20# Class ABC fire extinguishers.
5. H<sub>2</sub>S detection and monitoring equipment shall be in place before drilling out surface casing. There will be a stationary detector in the rig dog house and another with the mud log equipment on the end of the flow line. Three sensors will be placed on the rig floor, the wellhead/cellar, and on the closed loop equipment. The detection level for H<sub>2</sub>S will be set at 10 ppm and the alarm will sound if any level of the gas is detected over 10 ppm.
6. Visual warning systems will be in place at rig move in and before the surface casing is drilled out. Color coded signage will be placed at the entrance to location indicating H<sub>2</sub>S is possible, and furthermore, the color will be changed should the site condition dictate. If H<sub>2</sub>S is detected, then a color coded condition flag will be displayed to indicate levels of detection. Wind socks will be placed at the location entrance and one other fully visible site to allow personnel to determine wind direction and safe escape/briefing routes.
7. The mud program utilized on this well is intended to provide sufficient density to exclude H<sub>2</sub>S from the wellbore. Furthermore, Loss Circulation Material will be added before any known loss circulation (low pressure) zones are encountered. Corrosion inhibitors are included in the mud system to prevent failures in the event H<sub>2</sub>S does enter the wellbore, and seal rings are used to prevent the use of elastomers on the wellhead equipment. In the event a rotating head is necessary, elastomers will be designed to operate in H<sub>2</sub>S conditions. Drill collars and other bottom hole assembly components are to be inspected after each well, and in the event H<sub>2</sub>S is encountered in the wellbore, drill pipe shall be inspected as well.
8. The location shall be equipped with one cell telephone in the rig doghouse, one cell telephone with the well site supervisor, two way communication devices to communicate between mud system personnel, rig floor personnel, mud log personnel, and safety personnel on location. In the event H<sub>2</sub>S is detected, a company vehicle with two way radios shall be moved into a safe briefing area and manned for communication with all vendors, company personnel or agency personnel as required.

## H2S CONTINGENCY DRILLING PLAN

### EMERGENCY PROCEDURES

#### Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas, or if monitors indicate H<sub>2</sub>S is present. Escape will take place via the entry road away from the flare stack, or a foot path marked and designated before the well is spud by on site personnel. Once crews and other personnel are a safe distance, the crews will move to evacuate any persons in the Radius of Exposure, followed by blocking access to the Radius of Exposure.

There are no homes or buildings within the Radius of Exposure ("ROE"), so efforts will be concentrated on evacuating any third parties within the ROE. Immediate response will include evacuation of any persons potentially affected by toxic or flammable gasses. Once evacuation is under way, perimeter monitoring and control of access will be executed to ensure safe areas and stage areas.

In the event of a release of gas containing H<sub>2</sub>S, 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 H<sub>2</sub>S 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 H<sub>2</sub>S, 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 (SO<sub>2</sub>). 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 H<sub>2</sub>S and SO<sub>2</sub>

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

## **H2S CONTINGENCY DRILLING PLAN**

### **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 Mexico's "Hazardous Materials Emergency Response Plan" (HMER) and BLM Onshore Order #6.

### **H<sub>2</sub>S OPERATIONS**

Though no H<sub>2</sub>S is anticipated during the drilling operation, this contingency plan will provide for methods to ensure the well is kept under control in the event an H<sub>2</sub>S reading of 100 ppm or more are encountered.

Once personnel are safe and the proper protective gear is in place and on personnel, the operator and rig crew essential personnel will ensure the well is under control, suspend drilling operations and shut-in the well (unless pressure build up or other operational situations dictate suspending operations will prevent well control), increase the mud weight and circulate all gas from the hole utilizing the mud/gas separator downstream of the choke, the choke manifold and the emergency flare system located 150' from the well. Bring the mud system into compliance and the H<sub>2</sub>S level below 10 ppm, and then notify all emergency officers that drilling ahead is practical and safe.

Proceed with drilling ahead only after all provisions of Onshore Order 6, Section III.C. have been satisfied.

## H2S CONTINGENCY DRILLING PLAN EMERGENCY CONTACTS

### Company Offices -

Lime Rock Houston Office  
 Answering Service (After Hours)  
 Artesia, NM Office  
 Roswell, NM

713-292-9510  
 713-292-9555  
 575-748-9724  
 575-623-8424

KEY PERSONNEL					
Name	Title	Location	Office #	Cell #	Home #
ERIC McCLUSKY	PRODUCTION ENGINEER	HOUSTON	713-360-5714	832-491-3079	832-491-3079
JERRY SMITH	ASSISTANT PRODUCTION SUPERVISOR	ARTESIA	575-748-9724	505-918-0556	575-746-2478
MICHAEL BARRETT	PRODUCTION SUPERVISOR	ROSWELL	575-623-8424	505-353-2644	575-623-4707
GARY FATHEREE	WELL SITE SUPERVISOR	ROTATES ON SITE	NA	940-389-6044	NA
GARY MCCELLAND	WELL SITE SUPERVISOR	ROTATES ON SITE	NA	903-503-8997	NA

Agency Call List		
City	Agency or Office	Telephone Number
Artesia	Ambulance	911
Artesia	State Police	575-746-2703
Artesia	Sheriff's Office	575-746-9888
Artesia	City Police	575-746-2703
Artesia	Fire Department	575-746-2701
Artesia	Local Emergency Planning Committee	575-746-2122
Artesia	New Mexico OCD District II	575-748-1283
Carlsbad	Ambulance	911
Carlsbad	State Police	575-885-3137
Carlsbad	Sheriff's Office	575-887-7551
Carlsbad	City Police	575-885-2111
Carlsbad	Fire Department	575-885-2111
Carlsbad	Local Emergency Planning Committee	575-887-3798
Carlsbad	US DOI Bureau of Land Management	575-887-6544
State Wide	New Mexico Emergency Response Commission ("NMERC")	505-476-9600
State Wide	NMERC 24 hour Number	505-827-9126
State Wide	New Mexico State Emergency Operations Center	505-476-9635
National	National Emergency Response Center (Washington, D.C.)	800-424-8802

## H2S CONTINGENCY DRILLING PLAN EMERGENCY CONTACTS

Emergency Services				
Name	Service	Location	Telephone Number	Alternate Number
Boots & Coots International Well Control	Well Control	Houston / Odessa	1-800-256-9688	281-931-8884
Cudd Pressure Control	Well Control & Pumping	Odessa	915-699-0139	915-563-3356
Baker Hughes Inc.	Pumping Service	Artesia, Hobbs and Odessa	575-746-2757	SAME
Total Safety	Safety Equipment and Personnel	Artesia	575-746-2847	SAME
Cutter Oilfield Services	Drilling Systems Equipment	Midland	432-488-6707	SAME
Assurance Fire & Safety	Safety Equipment and Personnel	Artesia	575-396-9702	575-441-2224
Flight for Life	Emergency Helicopter Evacuation	Lubbock	806-743-9911	SAME
Aerocare	Emergency Helicopter Evacuation	Lubbock	806-747-8923	SAME
Med Flight Air Ambulance	Emergency Helicopter Evacuation	Albuquerque	505-842-4433	SAME
Artesia General Hospital	Emergency Medical Care	Artesia	575-748-3333	702 North 13 Street