District 1
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

1220 S. St. Francis Dr., Santa Fe, NM 87505

Title: Operations Manager

E-mail Address: sashworth@limerockresources com

Phone: 713-292-9572

District IV

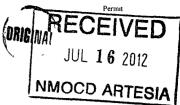
### State of New Mexico

**Energy Minerals and Natural Resources** 

Oil Conservation Division 1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-101 Revised December 16, 2011



Phone (505) 476-3460 Fax: (505) 476-3462 APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE Operator Name and Address OGRÍD Number Lime Rock Resources II-A, L.P. 277558 1111 Bagby Street, Suite 4600 Houston, Texas 77042 Property Code Property Name Everest 14 N Surface Location Lot Idn Feet from N/S Line E/W Line UL - Lot Section Township Range Feet From County 990 14 18S 26E 2210 Eddy <sup>8</sup> Pool Information ATOKA Additional Well Information Work Type Well Type Cable/Rotary <sup>2</sup> Lease Type <sup>1</sup> Ground Level Elevation N 0 R . 33188 14 Multiple Proposed Depth 16 Formation 17 Contractor 18 Spud Date United Drilling, Inc After 07/15/2012 N Yeso Depth to Ground water 227 Feet Distance from nearest fresh water well 0.28 Miles Distance to nearest surface water- 191 Miles 19 Proposed Casing and Cement Program Hole Size Casing Size Casing Weight/ft Setting Depth Sacks of Cement Estimated TOC Type 26" 20" 915 Conductor Ready Mix Surface 12-1/4" 24 425 Surface 8-5/8" 300 Surface 7-7/8" 5-1/2" 17 4700 875 Surface Production **Casing/Cement Program: Additional Comments Proposed Blowout Prevention Program** Working Pressure Туре Test Pressure Manufacturer XLT 11" 5000 2000 National Varco I hereby certify that the information given above is true and complete to the best of my knowledge and belief. OIL CONSERVATION DIVISION I further certify that the drilling pit will be constructed according to NMOCD guidelines , a general permit , or an (attached) alternative Approved By OCD-approved plan, Signature: Title Printed name Sid Ashworth

Approved Date.

Conditions of Approval Attached

Expiration Date:

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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

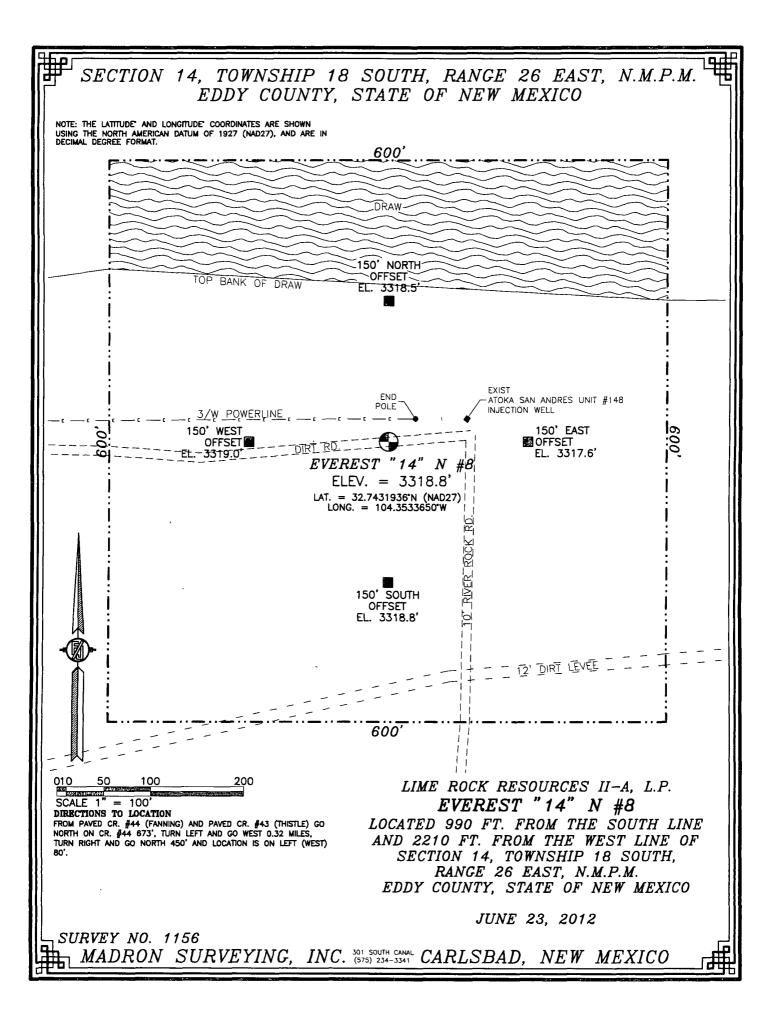
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

☐ AMENDED REPORT

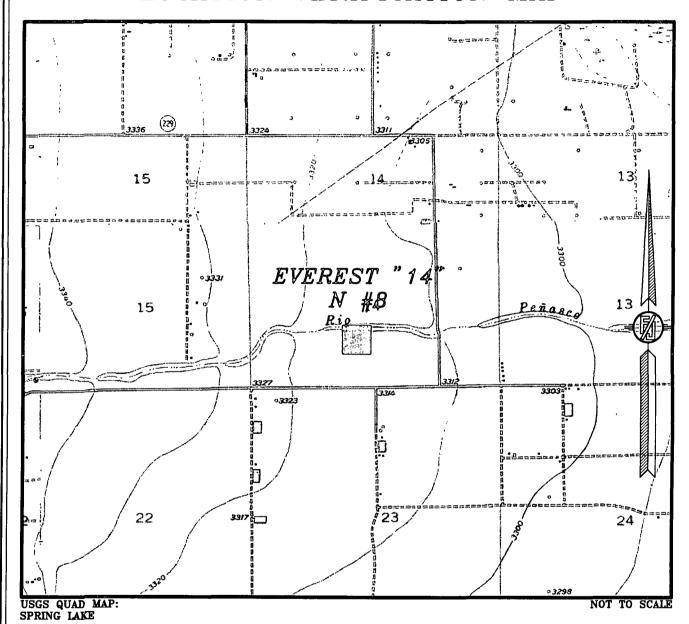
Phone (505) 476-3460	Fax (505) 47	6-3462									
		W	ELL LO	OCATIO	N AND ACR	EAGE DEDIC	CATION PLA	T			
30-0	API Numbe	40488		<sup>2</sup> Pool Coo	de RE	MOKA DLAKE; GI	³ Pool Na ori eta - Y				
Proper"	nda .			37.5	O 5 Property	Name			6 V	Vell Number	
3090	27]				EVEREST	"14" N			8		
7 OGRID	No.				<sup>8</sup> Operator	Name			<sup>9</sup> Elevation		
27755	277558			LIME ROCK RESOURCES II-A, L.P.						3318.8	
					10 Surface 1	Location				<u> </u>	
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/We	st line	County	
N	14	18 S	18 S   26 E   990   SOUTH   2210   WES						ST	EDDY	
			п <b>Е</b>	Bottom F	Hole Location	If Different Fro	om Surface				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/We	st line	County	
12 Dedicated Acres	i l3 Joint o	r Infill 14 C	onsolidation	Code 15 C	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.

	N89'39'53"W	2636 03 FT	N89'39'53"W 2636 03 FT		"OPERATOR CERTIFICATION
	NW CORNER SEC. 14	COMPUTED	NE CORN	ER SEC. 14	I hereby certify that the information contained herein is true and complete
	LAT = 32.7551232'N LONG. = 104.3606069'W	!	LAT. = 35 LONG. = 10	2 7550409'N 4 3434626'W	to the best of my knowledge and belief, and that this organization either
			20110.	1.0 10 1020 11	owns a working interest or unleased mineral interest in the land including
\ \c			Ì	z	the proposed bottom hole location or has a nghi to drill this well at this
S00.1				.000	location pursuant to a contract with an owner of such a mineral or working
2				17'.	interest, or to a voluntary pooling agreement or a compulsory pooling
4.5 E			1	17.7	order herefofore entered by the division
	F				Sillah Thill
2659.		ļ.		2650	Signature Date
.17		!		).54	S.D. A. Junear
		NOTE:		1	Printed Name
		COORDINAT	AND LONGITUDE TES ARE SHOWN	'	, ,
			DATUM OF 1927		Sashworth@linerockresources.
	COMPUTED		AND ARE IN DEGREE FORMAT	COMPUTED	E-mail Address COM
					· · · · · · · · · · · · · · · · · · ·
					*SURVEYOR CERTIFICATION
					I hereby certify that the well location shown on this
S00.	[			z	plat was plotted from field notes of actual surveys
0.15		l L		N00.1	made by me or under my supervision, and that the
2'43				7' 4	same is true and correct to the best of my belief
3 E				1 "W	JUNE 23-2012
26		SURFACE EVEREST "	14" N #8		
2659.	2210'	LOCATION ELEV. = 33		2650	Date of Survey
17	2210	LAT = 32.7 LONG = 10	431936°N (NAD27) 4.3533650°W	54	LETOCON XX ORONO
_		<b>!</b>		\ <sub>\\\\</sub>	The man
		,06			Signalure and Seal of Professional Surveyor.
	SW CORNER SEC 14	S/4 CORNER S		ER SEC. 14	Certificate Number: FILIMON F. JARAMILLO, PLS 12797
	LAT. = 32.7405084'N LONG. = 104 3605385'W	LAT. = 32.7404 LONG. = 104.352		7404736'N 4.3433724'W	SURVEY NO 1156
	S89:39'07"E		N89'56'57"E 2662.03 FT		



# SECTION 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO LOCATION VERIFICATION MAP



LIME ROCK RESOURCES II—A, L.P.

EVEREST "14" N #8

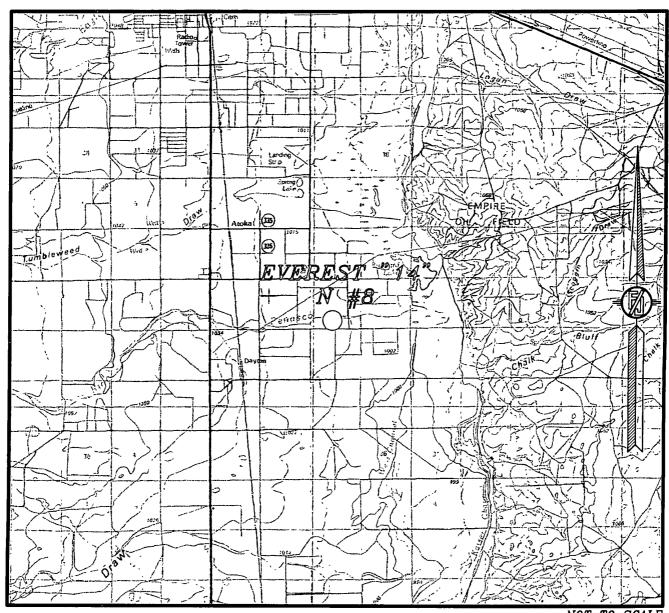
LOCATED 990 FT. FROM THE SOUTH LINE
AND 2210 FT. FROM THE WEST LINE OF
SECTION 14, TOWNSHIP 18 SOUTH,
RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JUNE 23, 2012

SURVEY NO. 1156

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO

# SECTION 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO VICINITY MAP



NOT TO SCALE

LIME ROCK RESOURCES II—A, L.P.

EVEREST "14" N #8

LOCATED 990 FT. FROM THE SOUTH LINE
AND 2210 FT. FROM THE WEST LINE OF
SECTION 14, TOWNSHIP 18 SOUTH,
RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JUNE 23, 2012

SURVEY NO. 1156

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO

# Lime Rock Resources II-A, L.P. Drilling Plan

Everest 14 N #8 990' FSL 2210' FWL N-S14-T18S-R26E Eddy County, NM

- 1. The elevation of the unprepared ground is 3318.8' feet above sea level.
- 2. The geologic name of the surface formation is Quaternary Alluvium.
- 3. A rotary rig will be utilized to the well to 4700' and run casing. This equipment will be rigged down and the well will be completed with a workover rig.
- 4. Proposed total depth is 4700'.
- 5. Estimated tops of geologic markers:

Quaternary – Alluvium	Surface
Queen	372
Grayburg	728
San Andres	961
Glorieta	2386
Yeso	2532
Tubb	3986
TD	4700'

6. Estimated depths at which anticipated oil, gas, or other mineral bearing formations are expected to be encountered:

Queen	372
Grayburg	728
San Andres	961
Glorieta	2386
Yeso	2532
Tubb	3986
TD	4700'

# 7. Proposed Casing and Cement program is as follows:

Туре	Hole Size	Casing Size	Wt	Grade	Thread	Depth	Sx	Density	Yield	Components
Conductor	26"	20"	91.5	В	Welded	40				Ready Mix
Surface	12-1/4"	8-5/8"	24	J-55	ST&C	425	300	14.8	1.35	CI C Cmt + 0.25 lbs/sk Cello Flake + 2% CaCl2
Production	7-7/8"	5-1/2"	17	J-55	LT&C	4700	200	12.8	1.903	35:65 Poz/Cl H w/ 6% Gel, 0.125 lbs/sk Cello Flake, 5 pps LCM-1 and retarder
							675	14.8	1.33	Cl H w/ 0.6% R-3, 0.125% Cello Flake, 2% Gel

# 8. Proposed Mud Program is as follows

Depth	0-40	40-4400	4400-4700
Mud Type	Fresh Water Mud	Brine	Brine, Salt Gel, & Starch
Properties			
MW	8.5-9.2	9.8-10-1	9.9-10.2
рН	10	10-11.5	11/12/2012
WL	NC	NC	20-30
Vis	28-34	29-32	32-35
МС	NC	NC	<2
Solids	NC	<1	<3
Pump Rate	300-350	375-425	400-450
Special		Use Poymers sticks and MF-55 Hi-Vis Sweeps as necessary	Hi Vis Sweeps, add acid and starch as req. Raise Vis to 35 for log.

# 9. Pressure Control Equipment: See Attached Description and diagram of Pressure Control Equipment.

# 10. Testing, Logging and Coring Program

Testing Program: No drill stem tests are anticipated

Electric Logging Program: SGR-DLL-CDL-CNL Quad Combo from 4700 to surf. Csg. SGR-CNL to Surf.

Coring Program: No full or sidewall cores are anticipated.

### 11. Potential Hazards:

No abnormal temperatures or pressures are expected. There is no known presence of H2S in this area. If H2S 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 2068 psi based on 0.44 x TD. The estimated BHT is 125 degrees F.

### 12. Duration of Operations:

Anticipated spud date will be soon after approval and as soon as a rig will be available. Move in operations and drilling is expected to take 10 days. An additional 14 days will be needed it complete the well and to construct surface facilities.

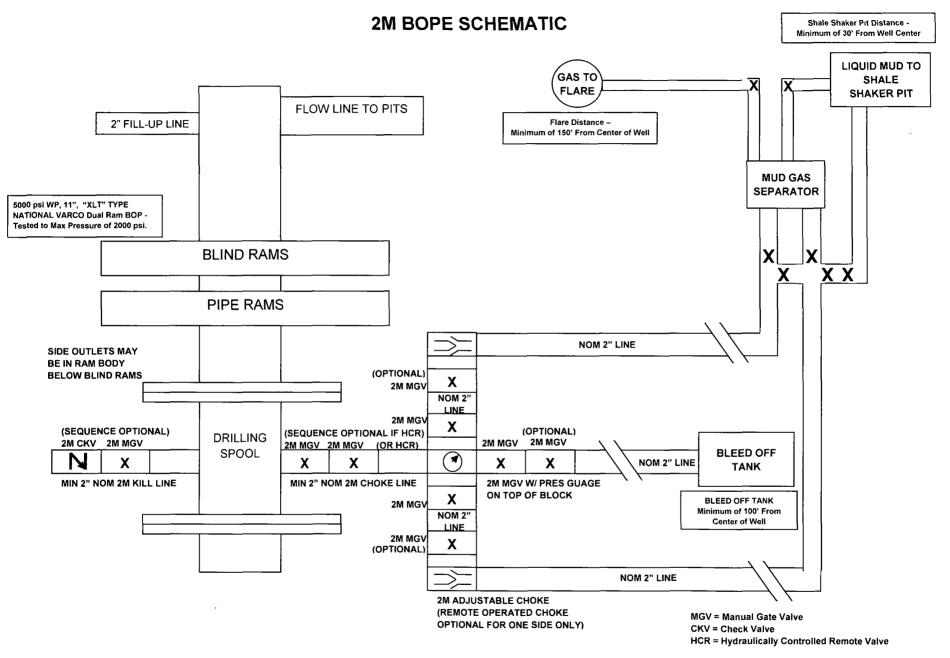
#### **Pressure Control Equipment**

The blowout preventer equipment (BOP) will consist of a 5000 psi rated, 11", "XLT" type, National VARCO double ram preventer that will be tested to a maximum pressure of 2000 psi. The unit will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and drill pipe rams on bottom. The 2M BOP will be installed on the 8 5/8" surface casing and utilized continuously until total depth is reached. All casing strings will be tested as per Onshore Order #2. This also includes a thirty day (30) test, should the rig still be operating on the same well in thirty days.

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:

- Double ram with blind rams (top) and pipe rams (bottom),
- Drilling spool, or blowout preventer with 2 side outlets (choke side shall be a 2" 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),
- 2 inch diameter choke line,
- 2 kill valves, one of which will be a check valve (2 inch minimum),
- 2 chokes, one of which will be capable of remote operation,
- 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.
- A Fill-up line above the uppermost preventer.



NOTE: All lines, valves and chokes are shown at the minimum size allowed, but may be larger.

# Lime Rock Resources II-A, L.P.

# Everest 14 N #8 HYDROGEN SULFIDE (H2S) CONTINGENCY DRILLING PLAN

Assumed 100 ppm ROE = 3000'

100 ppm H2S concentration shall trigger activation of this plan.

This is an open drilling site.  $H_2S$  monitoring equipment and emergency response equipment will be rigged up and in use when the company drills out from under surface casing.  $H_2S$  monitors, warning signs, wind indicators and flags will be in use.

## **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 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
  - o Detection of H2S, and
  - o Measures for protection against the gas,
  - o Equipment used for protection and emergency response.

## H2S CONTINGENCY DRILLING PLAN EMERGENCY CONTACTS

# Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (S02). 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 S02

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H₂S	1.189 Air= 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	S0 <sub>2</sub>	2.21 Air= 1	2ppm	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 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, 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 713·292·9510
Answering Service(After Hours) 713·292-9555
Artesia, NM Office 575-748-9724
Roswell, NM 575-623-8424

KEY PERSONNEL							
Name	Title	Location	Office #	Cell #	Home #		
SID ASHWORTH	PRODUCTION ENGINEER	HOUSTON	713-292-9526	713-906-7750	713-783-1959		
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 Huges 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	Alburquerque	505-842-4433	SAME			
Artesia General Hospital	Emergency Medical Care	Artesia	575-748-3333	702 North 13 Street			