District L	Hobbe NM 99	240				State of I	New Me		IM O	IL CONS	ERVAT	ION	Form C-101
1625 N. French Dr. Phone: (575) 393-6 District_11_				E					urces	AUG 25	2014		Revised July 18, 2013
811 S, First St., Art Phone: (575) 748-1						Conserv				18	Y A	2	AMENDED Report
District III 1000 Rio Brazos Re						teonsel (RECEI	VED	1	
Phone: (505) 334-6 District IV					:	Santa Fe	e, NM 87	505					
	220 S. St. Francis Dr., Santa Fe, NM 87505 hone: (505) 476-3460 Fax: (505) 476-3462												
AP	PLICA	TION FO	OR PERMI	тто) DRILI	L, RE-F	ENTER	, DEEP	PEN,				DD A ZONE
			¹ Operator Nam LRE Oper							:	OGRID Num 281	ber 1994	
	·	1111 Bag	by Street, Suite 4			s 77002				30-01.	SAPT Num	125	50
"Pr	onerty Code 39111		·			roperty Name em Union 3	30 G State					⁶ Well No.	#4
L						Irface L		<u> </u>					
UL - Lot	Section	Township	Kange	La	ot Idn	Feet From		N/S Line		Feet From	E/W Line	•	County
G		178	28E	<u> </u>	<u> </u>	2310		N		1650	E	<u> </u>	Eddy
UL - Loi	Section	Township	Range		oposed	Bottom		Jocatio	-	Feet From	E/W Line	e I	County
G	30	175	28E			2310		N		1650	E		Eddy
					9 Po	ol Info	rmatio	<u>n</u>					
Red Lake; Glo	rieta-Yeso N	NE	-										96836
				A	ddition			ation					
	k Tvoc N		¹⁰ Well Type O		1	Cable/Rotarv R	S 357				d Level Elevation 3579.1		
	ultiole N	510	¹³ Proposed Depth 0' MD / 5100' TV	/D	^{Te} Formation			¹⁷ Contractor United Drilling, Inc.			¹⁸ Soud Date After 9/1/2014		
Depth to Grour		200	Distan	··	nearest fresh	Yeso water well:				nearest'su			
X We will	be using a c	closed-loop sy	ystem in lieu of li	ined pits]		<u></u>		
	-			-			10	2. 1 0-1-1					
· ۲	- [:	<u></u>	· · · · · · · · ·	Prope	osed Ca	sing an	d Cem	ent Pro	gran	n	• ••	<u>.</u>	
Туре		e Size	Casing Size		asing Weigh	ht/ft	Setting Depth			Sacks of Cement			Estimated TOC
Conductor		0" 1"	<u> </u>	<u> </u>	68.7					40	f		Surface
Surface Production		7/8"	5-1/2"		24		•••			<u>300</u> 950			Surface
	·	4		g/Ce		ogram	gram: Additional Comments						Bullino,
				0 \								· · ·	
			Р	ropos	ed Blow	out Pre	eventio	n Progr	am				
	Туре			Working	Pressure			Test Pres	ssure		Manufacturer		
	XLT 11"			50	00		2000				National Varco		
·	· · · · · · · · · · · · · · · · · · ·									Į			
linereby certify of my knowledg			above is true and	complet	e to the best			OILO	ON	SFRVATI	ON DI	VISI	ON
I further certify that I have complied with 19,15,14,9 (A) NMAC ind/or					1/or	OIL CONSERVATION DIVISION							
19. <u>15</u> .14.9 (B)	ŴŊŴĊ Ű ^p 'n	applicable.	2			Ар	proved By		10		1		
Signature:	E/G.1	1 has El	July 1					i []]]	anar			
Printed Name: Eric McClusky					Tit	Title: "Geologist"							
Title: Production Engineer					Ар	Approved Date: 8-18-2014 Expiration Date: 8-18-2016							
E-mail Addres	s: emcclus	sky@limeroc	kresources.com				•						
Date: 8/18/20)14		Phone: 713-36	50-5714	······································	Ca	onditions o	f Approval	Attache	ed			

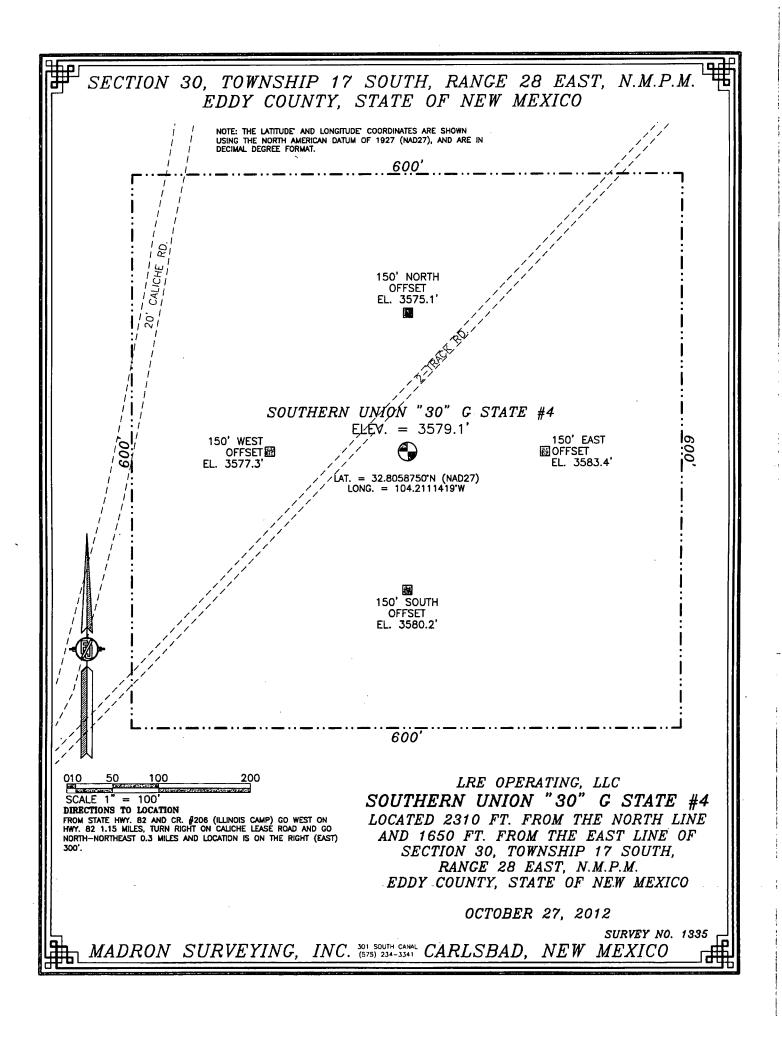
Diatrict.1 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District.11 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 District.111 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 District.12V 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462 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

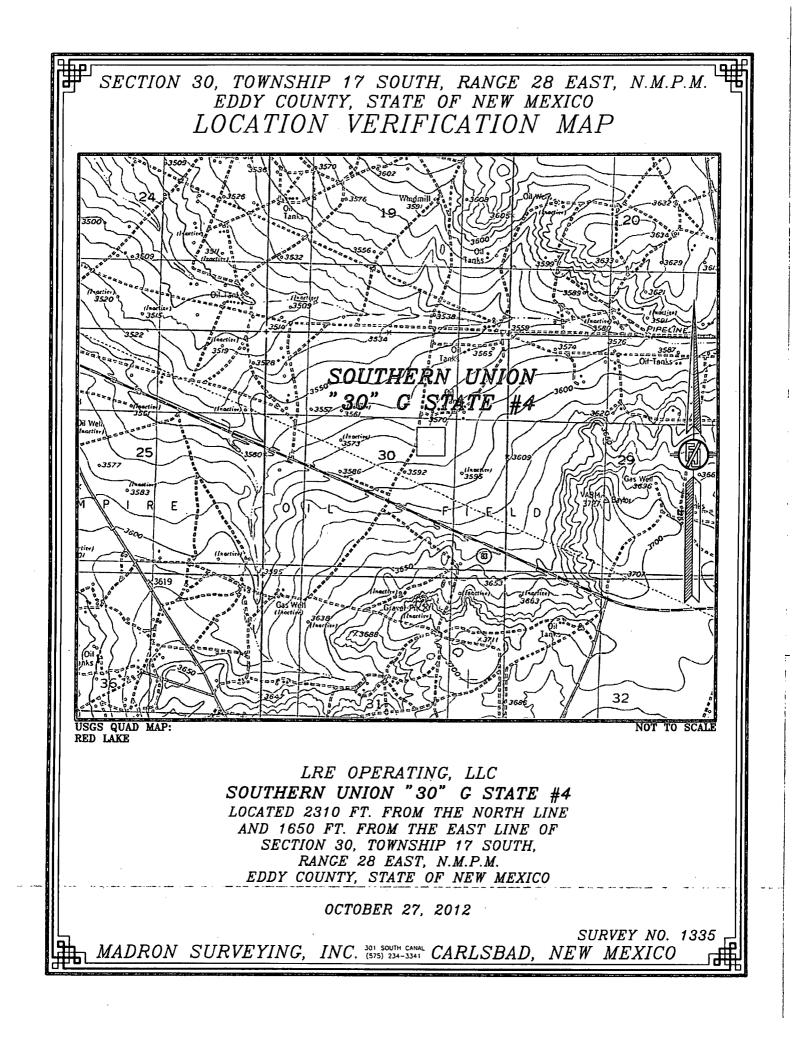
AMENDED REPORT

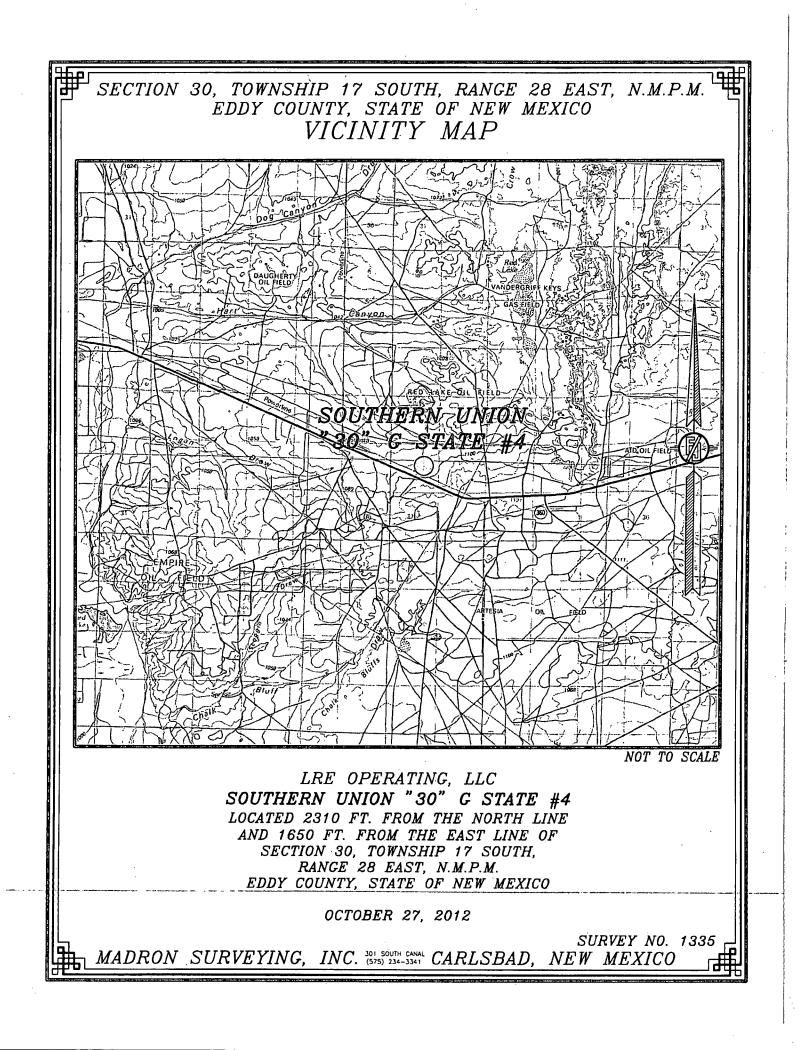
		W	'ELL LO	DCATIO	N AND AC	REAGE DEDIC	CATION PLA	4T			
30-01	API NumPle	2590) 1	2 Pool Code	; 	Redbake; (SOLICTA -)	ame 1890 N	£ -	,	
⁴ Property	Code				⁵ Propert		·······			Well Number	
3914				SOUT	HERN UNIC	N "30" G STATI	2		4		
⁷ OGRID	No.				⁸ Operato	r Name			⁹ Elevation		
28199	94			1	LRE OPERA	TING, LLC	•			3579.1	
					Surface	Location					
UL or let no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/We	est line	County	
G	30	17 S	28 E		2310	NORTH	1650	EAS	ST	EDDY	
, , , , , , , , , , , , , , , , , , ,			11 Bc	ttom Ho	le Location	If Different From	n Surface				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Wo	st line	County	
12 Dedicated Acre	Dedicated Acres 13 Joint or Infill 14 Consolidation Code 15 Order No.										
10						·					

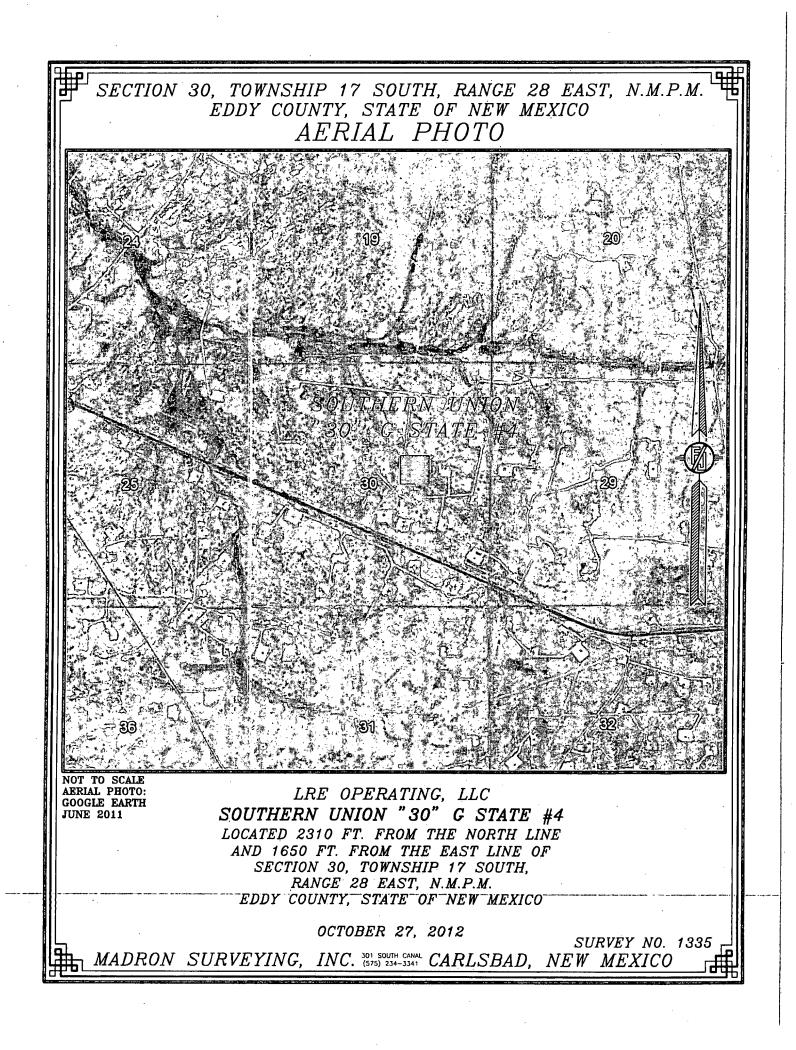
No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

[S89:33'02"W	2722.70 FT	S89'30'49"	W 2621.88 FT	"OPERATOR CERTIFICATION
1	NW CORNER SEC. 30	N/4 CORN	ER SEC. 30	NE CORNER SEC. 30	I hereby certify that the information contained herein is true and complete
	LAT. = 32.8121534'N		8122039'N 4,2142379'W	LAT. = 32.8122566'N LONG. = 104.2057065'W	to the best of my knowledge and belief, and that this organization either
	LONG. = 104.2230975'W	LONG. = 10	4.2142379 W	2010 104.2007000 1	owns a working interest or unleased mineral interest in the land including
			1		the proposed boutom hole location or has a right to drill this well at this
2.005				2 11	location pursuant to a contract with an owner of such a mineral or working
21				1	interest, or to a voluntary pooling agreement or a compulsory pooling
36			31	64	order heretofore entered by the division.
"E 26			<u> </u>	59 ^E	Etai A. millinky 8/14/14
41			1	25'5	Signature Date
.97 F	so	UTHERN UNION "30"	C STATE #4		Signature Date Fric Mc(lvsky Printed Name
-		EL	EV. = 3579.1'		
		LAT. = 32.8058 LONG. =	750'N (NAD27) / ' 104.2111419'W	1650'	Emclusky e line rack Vasouvies, com
					E-mail Address
	W/4_CORNER_SEC30 LAT. = 32.8048934'N		<u> </u>	- -E/4 CORNER SEC. 30 LAT. = 32.8049828'N	
	LA1. = 52.804893410 LONG. = 104.2230524'W			LONG. = 104.2057820'W	SURVEYOR CERTIFICATION
l)					I hereby certify that the well location shown on this
S			NOTE:	L L	plat was plotted from field notes of actual surveys
200.			COORDINATES ARE SHOWN	1	made by me or under my supervision, and that the
19'			USING THE NORTH AMERICAN DATUM OF 192	1	same is true and correct to the best of my belief.
3"7‡			(NAD27), AND ARE IN DECIMAL DEGREE FORMAT.	264	OCTOBER 27, 2012 F. JARA
2642			[01"E	Date of Survey
2.42				N00'23'	ALL ALL
1				NN NN	King Jangelo-
	SW CORNER SEC. 30	S/4 CORNE	R SEC. 30	SE CORNER SEC. 30	Signapure and Sector Professional Surveyor:
	LAT. = 32.7976322'N	LAT. = 32	7,976685'N	LAT. = 32.7977087'N LONG. = 104.2058501'W	Certificate Numbers, Ellution F. JARAMILLO, PLS 12797
	LONG. = 104.2230120'W N89'39'23"E		4.2142439'W	2579.98 FT	
					THEOLAN SURVEY NO. 1335









LRE Operating, LLC Drilling Plan

Southern Union 30 G State #4 2310' FNL 1650' FEL (G) 30-17S-28E Eddy County, NM

- 1. The elevation of the unprepared ground is 3579.1 feet above sea level.
- 2. The geologic name of the surface formation is Quaternary Alluvium.
- 3. A rotary rig will be utilized to drill the well to 5100' and run casing. This equipment will be rigged down and the well will be completed with a workover rig.
- 4. Well will be drilled to a total proposed depth of 5100' MD.
- 5. Estimated tops of geologic markers:

	MD	TVD
Quaternary – Alluvium	Surface	Surface
Yates	NA	NA
7 Rivers	483	483
Queen	1029	1029
Grayburg	1459	1459
Premier	1723	1723
San Andres	1764	1764
Glorieta	3154	3154
Yeso	3278	3278
Tubb	4650	4650
TD	5100	5100

7. Proposed Casing and Cement program is as follows:

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

	MD	· TVD
Yates	NA	NA
7 Rivers	483	483
Queen	1029	1029
Grayburg	1459	1459
Premier	1723	1723
San Andres	1764	1764
Glorieta	3154	3154
Yeso	3278	3278
Tubb	4650	4650
TD	5100	5100

Туре	Hole	Casing	Wt	Grade	Thread	Depth	Sx	Density	Yield	Components
Conductor	20"	14"	68.7	В	Welded	40	40			Ready Mix
Surface	11"	8-5/8"	24	J-55	ST&C	450	300	14.8	1.35	CI C Cmt + 0.25 lbs/sk Cello Flake + 2% CaCl2
Intermediate										
Production	7-7/8"	5-1/2"	17	J-55	LT&C	5100	300	12.8	1.903	(35:65) Poz/CI C Cmt + 5% NaCl + 0.25 lbs/sk Cello Flake + 5 lbs/sk LCM-1 +0.2% R-3 + 6% Gel
							650	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	· 0-460	460-4950	4950-5100
Mud Type	Fresh Water Mud	Brine	Brine, Salt Gel, & Starch
Properties			
MW	8.4-9.2	9.8-10.1	9.9-10.1
pН	9.0-10.5	10.0-12.0	10.0-12.0
WL	NC	NC	20-30
Vis	28-34	28-29	32-34
МС	NC	NC	<2
Solids	NC	<2%	<3%
Pump Rate	300-500 gpm	375-425 gpm	400-425 gpm
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 5000' to 1764'. 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 2244 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.

Hydrogen Sulfide Drilling Plan Summary

A. All personnel shall receive proper H2S training in accordance with Onshore Order 6 III.C.3.a.

B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.

C. Required Emergency Equipment:

- Well control equipment
 - a. Flare line 150' from wellhead to be ignited by flare gun.
 - b. Choke manifold with a remotely operated choke.
 - c. Mud/gas separator

Protective equipment for essential personnel.

Breathing apparatus:

a. Rescue Packs (SCBA) — 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.

b. Work/Escape packs —4 packs shall be stored on the rig floor and contain sufficiently long air hoses as to not to restrict work activity.

c. Emergency Escape Packs —4 packs shall be stored in the doghouse for emergency evacuation.

Auxiliary Rescue Equipment:

- a. Stretcher
- b. Two OSHA full body harness
- c. 100 ft 5/8 inch OSHA approved rope
- d. 1-20# class ABC fire extinguisher

H2S detection and monitoring equipment:

The stationary detector with three sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible @ 14 ppm. Calibrate a minimum of every 30 days or as needed. The sensors will be placed in the following places: Rig floor / Bell nipple / End of flow line or where well bore fluid is being discharged.

(Gas sample tubes will be stored in the safety trailer)

Visual warning systems:

a. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.

b. A colored condition flag will be on display, reflecting the current condition at the site at the time.c. Two wind socks will be placed in strategic locations, visible from all angles.

Mud program:

The mud program has been designed to minimize the volume of H2S circulated to surface. ¹The operator will have the necessary mud products to minimize hazards while drilling in H2S bearing zones.

Metallurgy:

a. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.

b. All elastomers used for packing and seals shall be H2S trim.

Communication:

Communication will be via two way radio in emergency and company vehicles. Cell phones and land lines where available.

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 #
Mike Loudermilk	Operations Manager	Houston	713-292-9526	832-331-7367	Same as Cell
Spencer Cox	Production Engineer	Houston	713-292-9528	432-254-5140	Same as Cell
Eric McClusky	Production Engineer	Houston	713-360-5714	405-821-0534	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
Dalw Kennard	Well Site Supervisor	Rotates on Site	NA	575-420-1651	NA
Gary McCelland	Well Site Supervisor	Rotates on Site	NA	903-503-8997	NA
Brad Tate	Well Site Supervisor	Rotates on Site	NA	575-441-1966	NA
Dave Williamson	Well Site Supervisor	Rotates on Site	NA	575-308-9980	NA

	Agency Call List							
City	Agency or Office	Telephone #						
Artesia	Ambulance	911						
Artesia	State Police	575-746-2703						
Artesia	Sherriff'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	Sherriff'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 Commisssion ("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						

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 Services	Artesia, Hobbs & Odessa	575-746-2757	Same				
Total Safety	Safety Equipment & Personnel	Artesia	575-746-2847	Same				
Cutter Oilfirld Services	Drilling Systems Equipment	Midland	432-488-6707	Same				
Safety Dog	Safety Equipment & Personnel	Artesia	575-748-5847	575-441-1370				
Fighting 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 13th Street				

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Pressure Control Equipment

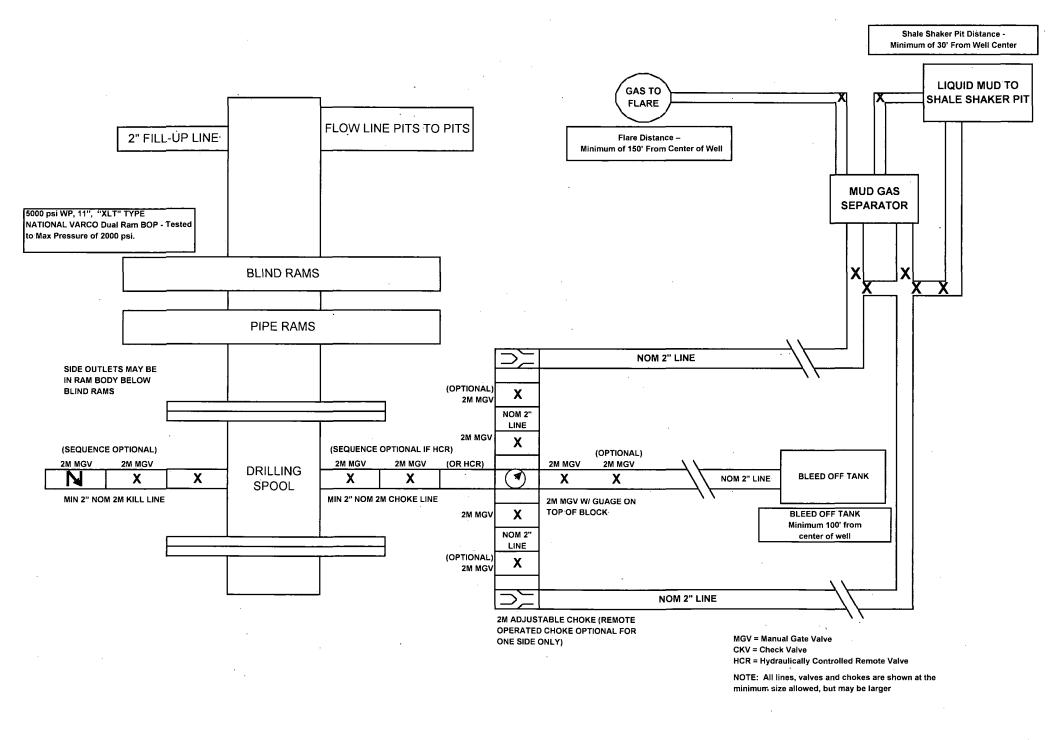
The blowout preventer equipment (BOP) will consist of a 5000 psi rated, "XLT" type, National VARCO double ram preventer that will be tested to a maximum pressure of 2000 psi. The unit will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and drill pipe rams 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.

2M BOP SCHEMATIC



LRE Operating, LLC Southern Union 30 G State #4 Unit G, S30-T17S-R28E, Eddy County, NM

Design: Closed Loop System with roll-off steel bins (pits)

CRI/HOBBS will supply (2) bins (100 bbl) volume, rails and transportation relating to the Close Loop System. Specification of the Closed Loop System is attached.

Contacts: Gary Wallace (432) 638-4076 Cell (575) 393-1079 Office

Scomi Oil Tool: Supervisor – Armando Soto (432) 553-7979 Hobbs, NM

Monitoring 24 Hour service Equipment:

Centrifuges – Derrick Brand Rig Shakers – Brandt Brand D-watering Unit Air pumps on location for immediate remediation process Layout of Close Loop System with bins, centrifuges and shakers attached.

Cuttings and associated liquids will be hauled to a State regulated third party disposal site (CRI or Controlled Recovery, Inc.). The disposal site permit is DFP = #R9166.

2- (250 bbl) tanks to hold fluid2-CRI bins with track system2-500 bbl frac tanks with fresh water2-500 bbl frac tanks for brine water

Operations:

Closed Loop System equipment will be inspected daily by each tour and any necessary maintenance performed. leak in system will be repaired and/or contained immediately. OCD will be notified within 48 hours of any spill. Remediation process will start immediately.

Closure:

During drilling operations all liquids, drilling fluids and cuttings will be hauled off via CRI equipment to DFP #R9166.

