## <u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 <u>District II</u>

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 Phone: (505) 476-3460 Fax: (505) 476-3462

## State of New Mexico EnergyMinerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 NM OIL CONSERVATION

ARTESIA DISTRICT

Form C-101

Revised July 18, 2013

SEP 1 1 2014

AP	PLICAT	ΓΙΟΝ Ε	OR PERMI	IT TO DRII	LL. RE-F	ENTER. DEEI		RECEIV ACK. O	ED R ADD A ZONE	
			<sup>1</sup> Operator Nam	ne and Address		<u> </u>		<sup>2</sup> OGRID Numl		
		1111 Ba	LRE Oper agby Street, Suite	rating, LLC 4600 Houston, Te	xas 77002		42727			
<sup>4</sup> P	Property Code 309874				<sup>5</sup> Property Name Staley Stat	te A			<sup>6</sup> Well No. #30	
				7 5	Surface I	Location				
UL - Lot	Section	Township	Range	Lot Idn	Feet From 850	N/S Line S	Feet From	E/W Line W	e County Eddy	
N .	30	178	28E	8 Proposed	.1	Hole Locatio	-k	<u>                                     </u>	Ludy	
UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County	
N	30	178	28E		850	S	1680	W	Eddy	
				91	Pool Info	rmation			· 	
Red Lake; Glo	orieta-Yeso N	1E							96836	
				Additio		Information				
l	ork Type N		10 Well Type		11 Cable/Rotarv R	,	12 Lease Type S		<sup>13</sup> Ground Level Elevation 3621.8 ·	
14 N	Multiple		15 Proposed Depth		16 Formation		17 Contractor		18 Spud Date	
Depth to Grou	N Ind Water:		00' MD / 5100' T	VD ce from nearest from	Yeso -		ited Drilling, Inc.  Distance from	om nearest su	After 9/1/2014	
			) Ft.			0.73	Miles		6.5 Miles	
X We wil	Il be using a c	losed-loop	system in lieu of l	ined pits						
			19	Proposed C	Casing an	d Cement Pro	ogram			
Туре	Hole	Size	Casing Size	Casing We	ight/ft	Setting Depth	Sacks of	Cement	Estimated TOC	
Conducto	or 20	0"	14"	68.7	68.7		40		Surface	
Surface	1	1"	8-5/8"	24		425	250	)	Surface	
Productio	n . 7-7	7/8"	5-1/2"	17		5100	95:		Surface	
		•	Casir	ng/Cement l	Program	: Additional C	Comments		10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	
_			P	roposed Blo	wout Pro	evention Prog	ram			
	Type		,	Working Pressure		Test Pressure			Manufacturer	
	XLT 11"		:	5000		200	0	National Varco		
							· · · · · · · · · · · · · · · · · · ·			
I hereby certify of my knowled	-	_	en above is true and	d complete to the be	est	OIL	CONSERVAT	TON DI	VISION	
I further cert	ify that I hav	e complied	with 19.15.14.9 (A	A) NMAC	and/or				VISIOIV	
19.15.14.9 (B)	) NMAC 0, if	applicable	. <u>x</u>		Ap	oproved By:	2/			
Signature:	810	A a	d. o			-//	Thous 1			
· Pac v. pac corry					/. ( SIMPLES					
	Printed Name: Eric McClusky					Title: "Geologist"				
	ection Engine				Ap	oproved Date:	4-2014 Ex	piration Date	10-14-2016	
E-mail Addre	ess: emcclus	sky@limer	ockresources.com							
Date: 9/8/20	Date: 9/8/2014 Phone: 713-360-5714				Co	Conditions of Approval Attached				

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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.

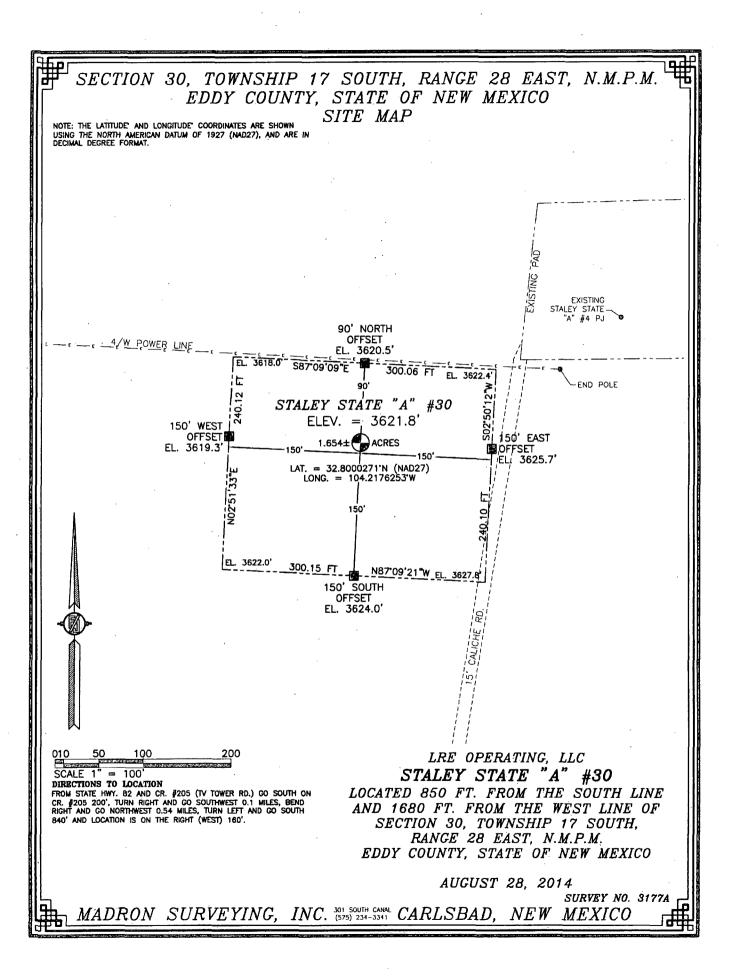
Santa Fe, NM 87505

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

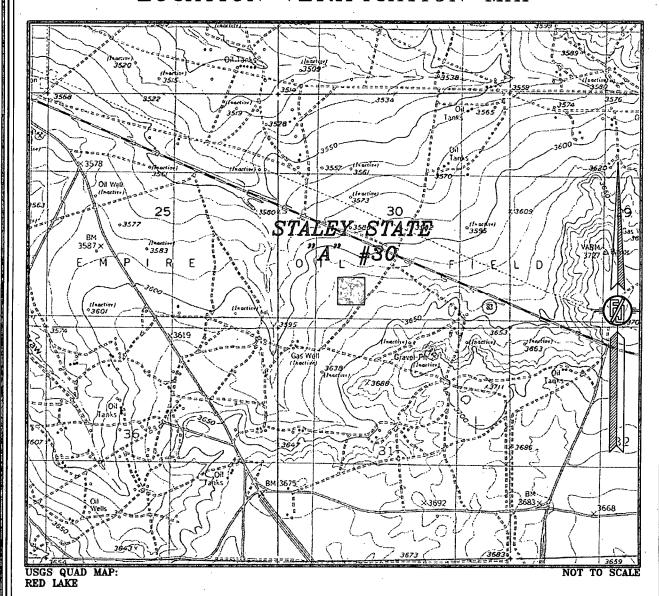
	AMENDED	REPORT
LJ	TAIVILLIAIDED	IVEL OIL

Prione: (203) 476-346	0 Fax: (505) 47			>	NI ANID ACT	DEACE DEDIC	ግ ል ጥ፣	ONIDE	var -		
30-1	API Numbe			Pool Code 76876	<u> </u>	REAGE DEDIC		3 Pool No	10)0		
No allow	<i>)</i> (3	1/1/6		0 4 7		e/ 6/01	1014	7010	, <u>, , , , , , , , , , , , , , , , , , </u>	-	
* Property 3098					5 Property STALEY S					6	Well Number 30
OGRID 28199				]	*Operator LRE OPERAT		,		-		<sup>9</sup> Elevation 3621.8
					<sup>10</sup> Surface	Location			•		
UL or lot no. N	Section 30	Township 17 S	Range 28 E	Lot Idn	Feet from the 850	North/South line SOUTH	1	t from the 1680	East/Wes WES		County EDDY
	•		'' Bo	ttom Ho	le Location I	f Different From	n Su	rface			
UL or lot no.	Section	Township	Range	-Lot Idn	Feet from the	North/South line	Fee	t from the	East/Wes	st line	County
Dedicated Acre			consolidation		der No.	colidated or a non	utand	ard unit be	nc haan one	woved b	by the division
	N89*32*54 ! SEC. 30 3121896'N	NOTE: LATITUDE A COORDINAT USING THE AMERICAN (MADZ7), /	FT N/4 C LAT. = LONG. =	ORNER SEC. : 32!8122404 = 104.214304:   	N89:30'51"E :	solidated or a non- 2621.96 FT  NE CORNER SEC LAT. = 32.8122931 LONG. = 104.2057728	30 'N	t hereby certif to the best of to the best of to the proposed of the proposed location purst interest, or to order heretofo	PERATO!  fy that the informative knowledge and ing interest or unle bottom hole location to a contract	R CER ation contain I belief, and assed mineral ion or has a with an owning agreement of the contains agreement of the con	py the division.  FIFICATION  red herein is true and complete that this organization either linerest in the land including right to drill this well at this er of such a mineral or working a or a compulsory pooling

emcclusky e limerock resources, for E-mail Address E/4 CORNER SEC. 30 LAT. = 32.8050190 N LONG. = 104.2058486 W W/4 CORNER SEC. 30 LAT. = 32.8049295'N LONG. = 104.2231191'W \*SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys N00.19.55 v me or under myssupervision, and that the Who and <del>correct</del> to the fest of my belief. 2014 METO STALEY STATE "A" #30 ELEV. = 3621.8 : LAT. = 32.8000271'N (NAD27) ž SO0.23,03,W 2642.32 LONG. = 104.2176253'W 1680" П SURFACE LOCATION S/4 CORNER SEC. 30 LAT. = 32.7977048'N SE CORNER SEC. 30 SW CORNER SEC. 30 LAT. = 32.7977451'N LAT. = 32.7976686'N JARAMILLO: PLS 12797 LONG. = 104.2230783'W LONG. = 104.2059167'W LONG. = 104.2143104'W SURVEY NO. 3177A 589'36'26"W 2579.94 FT S89'39'25"W 2694.96 FT



# SECTION 30, TOWNSHIP 17 SOUTH, RANGE 28 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO LOCATION VERIFICATION MAP



LRE OPERATING, LLC

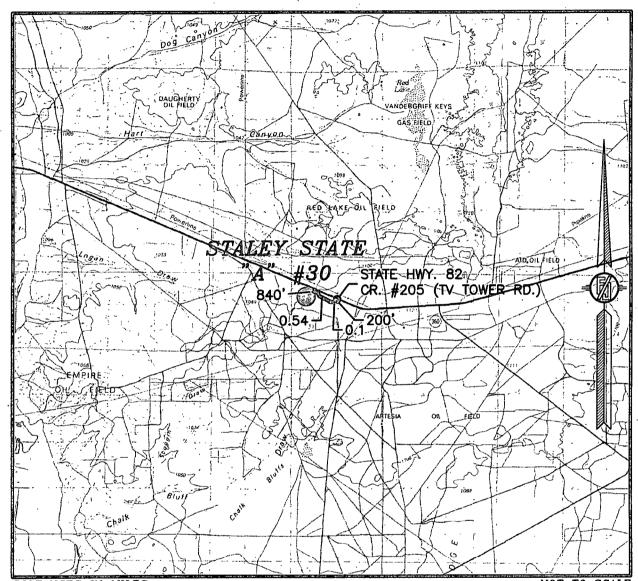
STALEY STATE "A" #30

LOCATED 850 FT. FROM THE SOUTH LINE
AND 1680 FT. FROM THE WEST LINE OF
SECTION 30, TOWNSHIP 17 SOUTH,
RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

AUGUST 28, 2014

SURVEY NO. 3177A

## SECTION 30, TOWNSHIP 17 SOUTH, RANGE 28 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

DIRECTIONS TO LOCATION
FROM STATE HWY. 82 AND CR. \$205 (TV TOWER RD.) GO SOUTH ON
CR. \$205 200'. TURN RIGHT AND GO SOUTHWEST 0.1 MILES, BEND
RIGHT AND GO NORTHWEST 0.54 MILES, TURN LEFT AND GO SOUTH
840' AND LOCATION IS ON THE RIGHT (WEST) 180'.

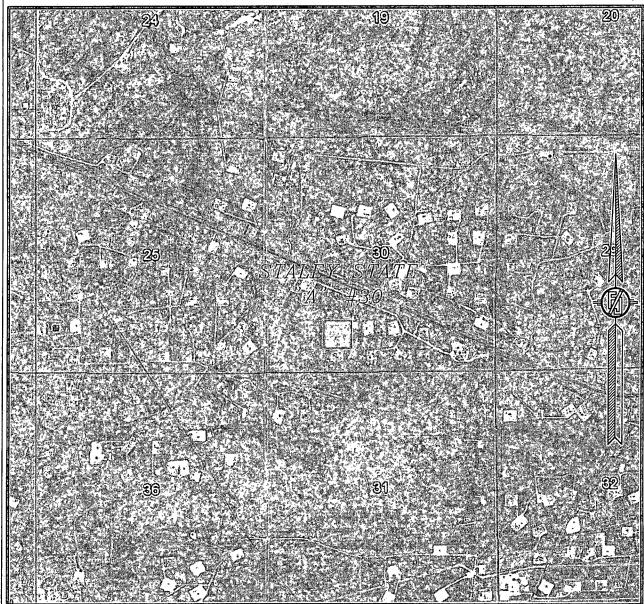
LRE OPERATING, LLC
STALEY STATE "A" #30

LOCATED 850 FT. FROM THE SOUTH LINE
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SECTION 30, TOWNSHIP 17 SOUTH,
RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

AUGUST 28, 2014

SURVEY NO. 3177A

# SECTION 30, TOWNSHIP 17 SOUTH, RANGE 28 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO AERIAL PHOTO



NOT TO SCALE AERIAL PHOTO: GOOGLE EARTH MAY 2014

LRE OPERATING, LLC

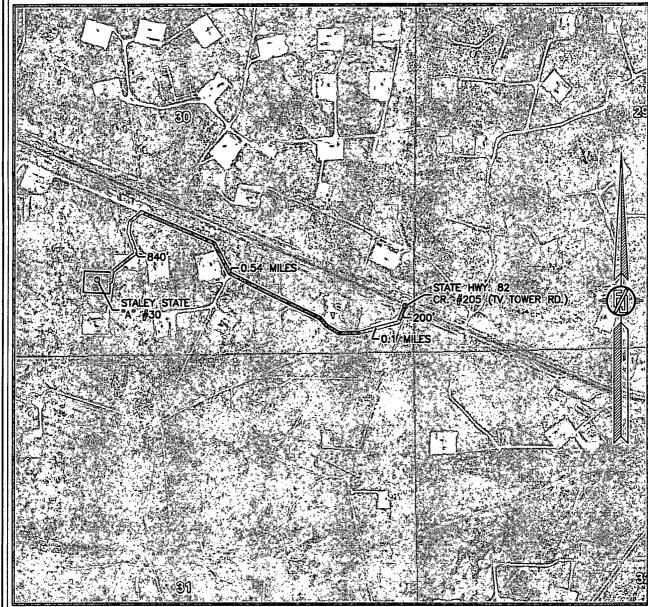
STALEY STATE "A" #30

LOCATED 850 FT. FROM THE SOUTH LINE
AND 1680 FT. FROM THE WEST LINE OF
SECTION 30, TOWNSHIP 17 SOUTH,
RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

AUGUST 28, 2014

SURVEY NO. 3177A

# SECTION 30, TOWNSHIP 17 SOUTH, RANGE 28 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO AERIAL ACCESS ROUTE MAP



NOT TO SCALE AERIAL PHOTO: GOOGLE EARTH MAY 2014

LRE OPERATING, LLC STALEY STATE "A" #30

LOCATED 850 FT. FROM THE SOUTH LINE AND 1680 FT. FROM THE WEST LINE OF SECTION 30, TOWNSHIP 17 SOUTH, RANGE 28 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO

AUGUST 28, 2014

SURVEY NO. 3177A

## LRE Operating, LLC Drilling Plan

Staley State A #30 850' FSL 1680' FWL (N) 30-17S-28E Eddy County, NM

- 1. The elevation of the unprepared ground is 3621.8 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	242	242
7 Rivers	464	464
Queen	1013	1013
Grayburg	1452	1452
Premier	1713	1713
San Andres	1752	1752
Glorieta	3151	3151
Yeso	3263	3263
Tubb	4635	4635
TD	5100	5100

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

	MD	TVD
Yates	242	242
7 Rivers	464	464
Queen	1013	1013
Grayburg	1452	1452
Premier	1713	1713
San Andres	1752	1752
Glorieta	3151	3151
Yeso	3263	3263
Tubb	4635	4635
TD	5100	5100

7. Proposed Casing and Cement program is as follows:

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	425	250	14.8	1.35	Cl C Cmt + 0.25 lbs/sk Cello Flake + 2% CaCl2
Intermediate										
Production	7-7/8"	5-1/2"	17	J-55	LT&C	5100	330	12.8	1.903	(35:65) Poz/Cl C Cmt + 5% NaCl + 0.25 lbs/sk Celio Flake + 5 lbs/sk LCM-1 +0.2% R-3 + 6% Gel
·							625	14.8	1.33	Class C w/ 0.6% R-3 and 1/4 pps cello flake

#### 8. Proposed Mud Program is as follows

Depth	0-435	435-4950	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
рН	9.0-10.5	10.0-12.0	10.0-12.0
WL	NC	NC	20-30
Vis	28-34	28-29	32-34
MC	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 5100 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 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. The 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				
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			

	Emerge	ency 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**

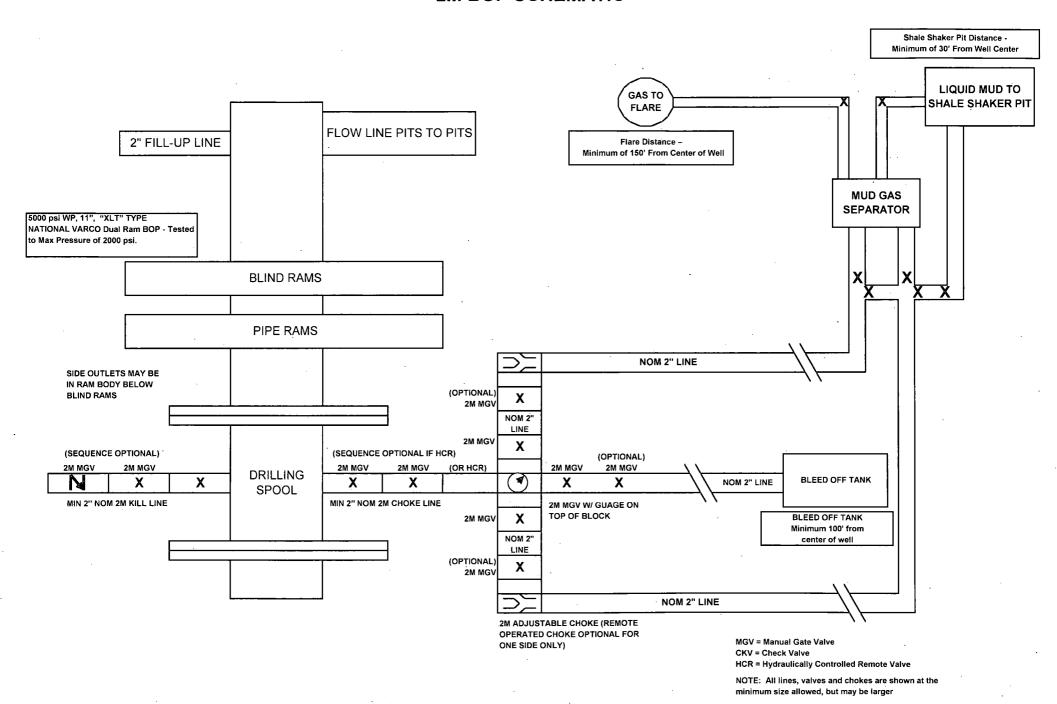
The blowout preventer equipment (BOP) will consist of a 5000 psi rated, "XLT" type, National VARCO double ram preventer that will be tested to a maximum pressure of 2000 psi. The unit will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and drill pipe rams 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 Staley State A #30

### Unit N, 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 fluid 2-CRI bins with track system

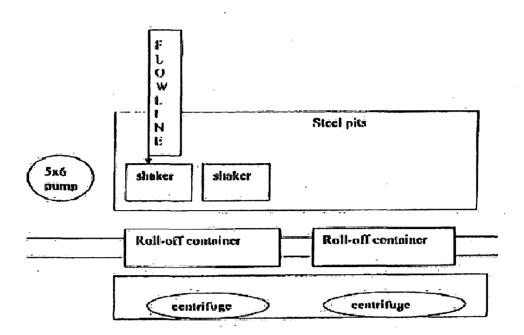
2-500 bbl frac tanks with fresh water 2-500 bbl frac tanks for brine water

#### **Operations:**

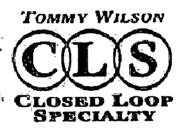
Closed Loop System equipment will be inspected daily by each tour and any necessary maintenance performed. leak in system will be repaired and/or contained immediately. OCD will be notified within 48 hours of any spill. Remediation process will start immediately.

#### Closure:

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



This will be maintained by 24 hour solids control personnel that stay on location.



OMice: 515.746.1689

Call: 579.748.6367