

Submit 1 Copy to Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-015-41066
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☒ FEE ☐
2. Name of Operator LRE OPERATING, LLC		6. State Oil & Gas Lease No.
3. Address of Operator c/o Mike Pippin LLC, 3104 N. Sullivan, Farmington, NM 87401		7. Lease Name or Unit Agreement Name STALEY STATE
4. Well Location Unit Letter <u>I</u> : <u>2310</u> feet from the <u>South</u> line and <u>965</u> feet from the <u>East</u> line Section <u>30</u> Township <u>17-S</u> Range <u>28-E</u> NMPM <u>Eddy</u> County		8. Well Number #25
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3597' GL		9. OGRID Number 281994
		10. Pool name or Wildcat Red Lake, Glorieta-Yeso NE (96836) Red Lake, Queen-Grayburg-San Andres (51300)

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☒
DOWNHOLE COMMINGLE ☒
CLOSED-LOOP SYSTEM ☒
OTHER: Recomplete to San Andres ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐
OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work).
SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

LRE Operating, LLC would like to recomplete this Yeso oil well to the San Andres & DHC as follows: MIRUSU. TOH w/rods, pump, & tbq. Set a 5-1/2" CBP @ ~3250' & PT to ~3500 psi. (Existing Yeso perms are @ 3314'-4606'). Perf lower San Andres @ ~2632'-3015' w/~35 holes. Stimulate with ~1500 gal 15% HCL acid & frac w/~30,000# 100 mesh & ~325,080# 40/70 Ottawa sand in slick water.

Set a 5-1/2" CBP @ ~2600' & PT to ~3500 psi. Perf San Andres @ ~2200'-2571' w/~36 holes. Stimulate with ~1500 gal 15% HCL acid & frac w/~30,000# 100 mesh & ~311,430# 40/70 Ottawa sand in slick water.

Set a 5-1/2" CBP @ ~2100' & PT to ~3500 psi. Perf upper San Andres @ ~1740'-1963' w/~25 holes. Stimulate with ~1500 gal 15% HCL acid & frac w/~30,000# 100 mesh & ~119,700# 40/70 Ottawa sand in slick water.

CO after frac & drill out CBPs @ 2100' & 2600', & CO to CBP @ 3250'. Run 2-7/8" 6.5#J-55 production tbq & land @ ~3055'. Run pump & rods. Release workover rig. Complete as a single San Andres oil well. See the attached proposed wellbore diagram. Following a test of the San Andres alone, the CBP @ 3250' will be removed & the well DHC as per State order ART-4609-BB.

Spud Date: 8/22/13

Drilling Rig Release Date: 8/28/13

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE _____ TITLE Petroleum Engineer - Agent DATE 6/24/15

Type or print name Mike Pippin E-mail address: mike@pippinllc.com PHONE: 505-327-4573

For State Use Only

APPROVED BY: [Signature] TITLE Dist P. Spewson DATE 7-6-15
Conditions of Approval (if any):

Staley State #25
Sec 30-T17S-R28E (NW of I)
2310' FSL and 965' FEL
API # 30-015-41066
Eddy County, NM
San Andres 3 Stage Slick Water Recompletion Summary
LRE Operating, LLC
LRE Rights: Surface to 5000'
AFE # R15030

Recomplete the San Andres formation in three stages and produce on rod pump. After production declines commingle the Yeso and San Andres and produce on Rod Pump.

1. MIRU PU & TOH w rods and pump. Release TAC, Tag and POH w TBG.
2. Run a bit and csg scraper and clean out to 3260'.
3. Set a RBP at 3250' and PKR at 3220' and test the casing to 3500 psi for 15 min. POH w tbg, PKR, and RBP.
4. Set CBP at 3250' and Test CBP to 3500 psi.
5. RU wireline and RIH to perforate the San Andres- Stage 1: 2632'-3015', 383', 1 spf, 35 holes.
6. Slick water frac Stage 1 perfs w 1500 g 15% NEFE HCL, 30,000 # 100 Mesh & 325,080 # 40/70 Ottawa sand with 7,714 bbls of water at 80 + BPM.
7. Set CBP at 2600' and test CBP to 3500 psi.
8. RU wireline and RIH to perforate the San Andres- Stage 2: 2200'-2571', 371', 1 spf, 36 holes.
9. Slick water frac Stage 2 perfs w 1500 g 15% NEFE HCL, 30,000 # 100 Mesh & 311,430 # 40/70 Ottawa sand with 7,514 bbls of water at 80 + BPM.
10. Set CBP at 2100' and Test CBP to 3500 psi.
11. RU wireline and RIH to perforate the San Andres- Stage 3: 1740'-1963', 223', 1 spf, 25 holes.
12. Slick water frac Stage 3 perfs w 1500 g 15% NEFE HCL, 30,000 # 100 Mesh & 119,700 # 40/70 Ottawa sand with 4,414 bbls of water at 80 + BPM.
13. Flowback, drill CBP at 2100', & 2600', and clean out to CBP at 3250'. Do not drill CBP at 3250'.
14. Run 2 7/8" tbg, TAC at 1640', SN at 3020', 4' slotted sub, 1 jt MA w BP at 3055'.
15. Run 1" KD pony set, 58- 1" KD, 58- 7/8" KD, 4- 1.5" kbars, 2.5"x2"x20' RHBC-HVR pump, 168" stroke length at 8 SPM.
16. After production decreases the CBP at 3250' will be drilled out and the Yeso and San Andres will be commingled and produced via rod pump.

[illegible]

Completion Information						
DEPTHS (MD)	FORMATION TOPS / WELL INFO	PERFORATIONS			# of HOLES	DETAILS
		from	to			
0						
40'	26" Hole					20" Conductor Pipe
445'	11" Hole					9-5/8" Surf Csg Circ 108 sx Cmt to surf
489'	Seven Rivers					
1054'	Queen					
1448'	Grayburg					
1,736'	Premier					
1,774'	San Andres					
2 7/8" tbg, TAC nt 1640', SN nt 3020', 4' slotted sub, 1 jt MA w BP at 3055'						
Tennaric Rods w T-couplings; 58-1" KD, 58- 7/8" KD, 4- 1.5" kbars, 2.5"x2"x20" RHBC-HVR Pump						
Lufkin 640-365-160- 50 HP, 168" SL at 8 SPM						
	San Andres	1,740'		1,963'	25	223', 1500 g 15% HCL, 4,414 bbls water
						30,000 # 100 Mesh, 119,700 # 40/70 Ottawa
						80 + BPM
CBP at 2100'						
	San Andres	2,200'		2,571'	36	371', 1500 g 15% HCL, 7,514 bbls water
						30,000 # 100 Mesh, 311,430 # 40/70 Ottawa
						60 + BPM
CBP at 2600'						
	San Andres	2,632'		3,015'	35	363', 1500 g 15% HCL, 7,714 bbls water
						30,000 # 100 Mesh, 325,080 # 40/70 Ottawa
						80 + BPM
3,166'	Glorieta					
CBP at 3250'						
3,288'	Yeso					
	Stage 4 U. Yeso Frac	3314'		3499'	33	185' Stg 4 - See Frac Design
	Stage 3 L. Yeso Frac	3552'		3799'	25	247' Stg 3 - See Frac Design
	Stage 2 L. Yeso Frac	3900'		4229'	29	329' Stg 2 - See Frac Design
	Stage 1 L. Yeso Frac	4298'		4607'	28	309' Stg1 - See Frac Design
4706'	Tubb					
	PBTD					above 5-1/2" Float Collar
4909'	PROD CSG					5-1/2" Prod Csg. Circ 199 SX Cmt to Surf
Comments: NM OCD CLP 0213930						Plug back Depth: 4,856' MD Total Well Depth: 4920' 4920' MD Prepared By: Date: Eric McClusky 23-Jun-15

Lime Rock Resources
LRE Operating, LLC
Staley State #25
API # 30-015-41066
Sec 30-T17S-R28E (NW of I)
Eddy County, NM
AFE #R15030

Three Stage San Andres Slick Water Frac Design

Stage #1 San Andres Perfs: 2632'-3015' -383'- 35 holes (.40"- 60 degree phasing), CBP at 3250'. See perforation data below for more detail.

Stage	Fluid Type	Fluid Volume (gals)	Fluid Volume (bbls)	Downhole Proppant Concentration (ppg)	Stage Proppant (lbs)	Rate (bpm)
1	HCL	1,500	36	-	-	10
2	PW	8,400	200	-	-	80
3	PW	10,000	238	1 # 100 Mesh	10,000	80
4	PW	8,400	200	-	-	80
5	PW	10,000	238	1 # 100 Mesh	10,000	80
6	PW	8,400	200	-	-	80
7	PW	10,000	238	1 # 100 Mesh	10,000	80
8	PW	4,200	100	-	-	80
9	PW	12,600	300	.2# 40/70	2,520	80
10	PW	12,600	300	.4# 40/70	5,040	80
11	PW	12,600	300	.6 # 40/70	7,560	80
12	PW	25,200	600	.8# 40/70	20,160	80
13	PW	33,600	800	1# 40/70	33,600	80
14	PW	33,600	800	1.25# 40/70	42,000	80
15	PW	37,800	900	1.5# 40/70	56,700	80
16	PW	42,000	1,000	1.75# 40/70	73,500	80
17	PW	42,000	1,000	2.0# 40/70	84,000	80
18	PW	8,400	200	0	-	80
19	FW	4,200	100	0	-	80
Totals		325,500	7,750		355,080	

Fluid Volume (bbl/ft)
20

Sand Volume (lbs/ft)
927

TOTALS:	Produced Water	-	319,788 gals (7614 bbls)
	Fresh Water	-	4,200 gals (100 bbls)
	40/70 Ottawa	-	325,080 lbs
	100 Mesh	-	30,000 lbs
	15 % HCL	-	1,500 gallons

The additional water is for extending flush stages where we are seeing banking and or excess pressure.

- DESIGN/FLUID CRITERIA:

1. Design Pump rate - 80 bpm.
2. Maximum Pump rate - 100 bpm.
3. Maximum treating pressure –4,200 psi.
4. HHP required 4,000 HHP plus 100% standby. Standby for rate due to surface pressures < 2,500 psi.
5. Fluid – Produced & Fresh Water
6. Based on pumping down 5 1/2 "17 # J-55 casing.

ADDITIVES:

1. Water based friction reducer.
2. Biocide –as required.
3. Scale Inhibitor as required

ADDITIONAL EQUIPMENT:

1. 2 in-line densiometer(s).
2. Sand sieves, and associated equipment to perform QC on location. Sand sieves on all compartments and water analysis on pit water.
3. 100% Standby horsepower.
4. Pressure relief valve on the casing and kickouts or popoff required on downhole pumps.
5. Have ball gun on site and 70 low temperature bio-balls if ball out is required.

Staley State #25				
Stage #1 San Andres				
2632'-3015', 383', 35 holes, CBP at 3250'				
Top	Bottom	FT.	SPF	# of Holes
2632	2633	1	1	1
2642	2643	1	1	1
2654	2655	1	1	1
2668	2669	1	1	1
2680	2681	1	1	1
2692	2693	1	1	1
2702	2703	1	1	1
2710	2711	1	1	1
2720	2721	1	1	1
2730	2731	1	1	1
2740	2741	1	1	1
2756	2757	1	1	1
2768	2769	1	1	1
2778	2779	1	1	1
2788	2789	1	1	1
2800	2801	1	1	1
2810	2811	1	1	1
2820	2821	1	1	1
2830	2831	1	1	1
2840	2841	1	1	1
2850	2851	1	1	1
2860	2861	1	1	1
2872	2873	1	1	1
2884	2885	1	1	1
2894	2895	1	1	1
2906	2907	1	1	1
2922	2923	1	1	1
2932	2933	1	1	1
2944	2945	1	1	1
2954	2955	1	1	1
2966	2967	1	1	1
2980	2981	1	1	1
2990	2991	1	1	1
3004	3005	1	1	1
3014	3015	1	1	1
Totals		35		35

Stage #2 San Andres Perfs: 2200'-2551' - 371' - 36 holes (.40" - 60 degree phasing), CBP at 2600'. See perforation data below for more detail.

Stage	Fluid Type	Fluid Volume (gals)	Fluid Volume (bbls)	Downhole Proppant Concentration (ppg)	Stage Proppant (lbs)	Rate (bpm)
1	HCL	1,500	36	-	-	10
2	PW	8,400	200	-	-	80
3	PW	10,000	238	1 # 100 Mesh	10,000	80
4	PW	8,400	200	-	-	80
5	PW	10,000	238	1 # 100 Mesh	10,000	80
6	PW	8,400	200	-	-	80
7	PW	10,000	238	1 # 100 Mesh	10,000	80
8	PW	4,200	100	-	-	80
9	PW	12,600	300	.2# 40/70	2,520	80
10	PW	12,600	300	.4# 40/70	5,040	80
11	PW	12,600	300	.6 # 40/70	7,560	80
12	PW	25,200	600	.8# 40/70	20,160	80
13	PW	33,600	800	1# 40/70	33,600	80
14	PW	33,600	800	1.25# 40/70	42,000	80
15	PW	33,600	800	1.5# 40/70	50,400	80
16	PW	37,800	900	1.75# 40/70	66,150	80
17	PW	42,000	1,000	2.0# 40/70	84,000	80
18	PW	8,400	200	0	-	80
19	FW	4,200	100	0	-	80
Totals		317,100	7,550		341,430	

Fluid Volume (bbl/ft)
20

Sand Volume (lbs/ft)
920

TOTALS: Produced Water - 311,388 gals (7414 bbls)
 Fresh Water - 4,200 gals (100 bbls)
 40/70 Ottawa - 311,430 lbs
 100 Mesh - 30,000 lbs
 15 % HCL - 1,500 gallons

The additional water is for extending flush stages where we are seeing banking and or excess pressure.

- DESIGN/FLUID CRITERIA:

1. Design Pump rate - 80 bpm.
2. Maximum Pump rate - 100 bpm.
3. Maximum treating pressure –4,200 psi.
4. HHP required 4,000 HHP plus 100% standby. Standby for rate due to surface pressures < 2,500 psi.
5. Fluid – Produced & Fresh Water
6. Based on pumping down 5 1/2 "17 # J-55 casing.

ADDITIVES:

1. Water based friction reducer.
2. Biocide –as required.
3. Scale Inhibitor as required

ADDITIONAL EQUIPMENT:

1. 2 in-line densiometer(s).
2. Sand sieves, and associated equipment to perform QC on location. Sand sieves on all compartments and water analysis on pit water.
3. 100% Standby horsepower.
4. Pressure relief valve on the casing and kickouts or popoff required on downhole pumps.
5. Have ball gun on site and 70 low temperature bio-balls if ball out is required.

Staley State #25				
Stage #2 San Andres				
2200'-2571', 371', 36 holes, CBP at 2600'				
Top	Bottom	FT.	SPF	# of Holes
2200	2201	1	1	1
2210	2211	1	1	1
2216	2217	1	1	1
2224	2225	1	1	1
2234	2235	1	1	1
2242	2243	1	1	1
2258	2259	1	1	1
2266	2267	1	1	1
2276	2277	1	1	1
2284	2285	1	1	1
2300	2301	1	1	1
2310	2311	1	1	1
2318	2319	1	1	1
2332	2333	1	1	1
2338	2339	1	1	1
2348	2349	1	1	1
2358	2359	1	1	1
2370	2371	1	1	1
2378	2379	1	1	1
2394	2395	1	1	1
2404	2405	1	1	1
2424	2425	1	1	1
2438	2439	1	1	1
2450	2451	1	1	1
2456	2457	1	1	1
2466	2467	1	1	1
2484	2485	1	1	1
2492	2493	1	1	1
2502	2503	1	1	1
2510	2511	1	1	1
2520	2521	1	1	1
2530	2531	1	1	1
2538	2539	1	1	1
2548	2549	1	1	1
2558	2559	1	1	1
2570	2571	1	1	1
Totals		36		36

Stage #3 San Andres Perfs: 1740'-1963' -223'- 25 holes (.40"- 60 degree phasing), CBP at 2100'. See perforation data below for more detail.

Stage	Fluid Type	Fluid Volume (gals)	Fluid Volume (bbls)	Downhole Proppant Concentration (ppg)	Stage Proppant (lbs)	Rate (bpm)
1	HCL	1,500	36	-	-	10
2	PW	8,400	200	-	-	80
3	PW	10,000	238	1 # 100 Mesh	10,000	80
4	PW	8,400	200	-	-	80
5	PW	10,000	238	1 # 100 Mesh	10,000	80
6	PW	8,400	200	-	-	80
7	PW	10,000	238	1 # 100 Mesh	10,000	80
8	PW	4,200	100	-	-	80
9	PW	12,600	300	.2# 40/70	2,520	80
10	PW	12,600	300	.4# 40/70	5,040	80
11	PW	12,600	300	.6 # 40/70	7,560	80
12	PW	12,600	300	.8# 40/70	10,080	80
13	PW	12,600	300	1# 40/70	12,600	80
14	PW	12,600	300	1.25# 40/70	15,750	80
15	PW	12,600	300	1.5# 40/70	18,900	80
16	PW	12,600	300	1.75# 40/70	22,050	80
17	PW	12,600	300	2.0# 40/70	25,200	80
18	PW	8,400	200	0	-	80
19	FW	4,200	100	0	-	80
Totals		186,900	4,450		149,700	

Fluid Volume (bbl/ft)
20

Sand Volume (lbs/ft)
671

TOTALS: Produced Water - 181,188 gals (4314 bbls)
 Fresh Water - 4,200 gals (100 bbls)
 40/70 Ottawa - 119,700 lbs
 100 Mesh - 30,000 lbs
 15 % HCL - 1,500 gallons

The additional water is for extending flush stages where we are seeing banking and or excess pressure.

- DESIGN/FLUID CRITERIA:

1. Design Pump rate - 80 bpm.
2. Maximum Pump rate - 100 bpm.
3. Maximum treating pressure –4,200 psi.
4. HHP required 4,000 HHP plus 100% standby. Standby for rate due to surface pressures < 2,500 psi.
5. Fluid – Produced & Fresh Water
6. Based on pumping down 5 1/2 "17 # J-55 casing.

ADDITIVES:

1. Water based friction reducer.
2. Biocide –as required.
3. Scale Inhibitor as required

ADDITIONAL EQUIPMENT:

1. 2 in-line densiometer(s).
2. Sand sieves, and associated equipment to perform QC on location. Sand sieves on all compartments and water analysis on pit water.
3. 100% Standby horsepower.
4. Pressure relief valve on the casing and kickouts or popoff required on downhole pumps.
5. Have ball gun on site and 70 low temperature bio-balls if ball out is required.

Staley State #25				
Stage #3 San Andres				
1740'-1963', 223', 25 holes, CBP at 2100'				
Top	Bottom	FT.	SPF	# of Holes
1740	1741	1	1	1
1742	1743	1	1	1
1744	1745	1	1	1
1746	1747	1	1	1
1748	1749	1	1	1
1750	1751	1	1	1
1752	1753	1	1	1
1754	1755	1	1	1
1756	1757	1	1	1
1758	1759	1	1	1
1764	1765	1	1	1
1766	1767	1	1	1
1768	1769	1	1	1
1770	1771	1	1	1
1772	1773	1	1	1
1774	1775	1	1	1
1828	1829	1	1	1
1835	1836	1	1	1
1842	1843	1	1	1
1848	1849	1	1	1
1850	1851	1	1	1
1852	1853	1	1	1
1854	1855	1	1	1
1956	1957	1	1	1
1958	1959	1	1	1
1960	1961	1	1	1
1962	1963	1	1	1
Totals		27		27

STALEY STATE 25

30015410660000

LRE OPERATING

STALEY STATE 25

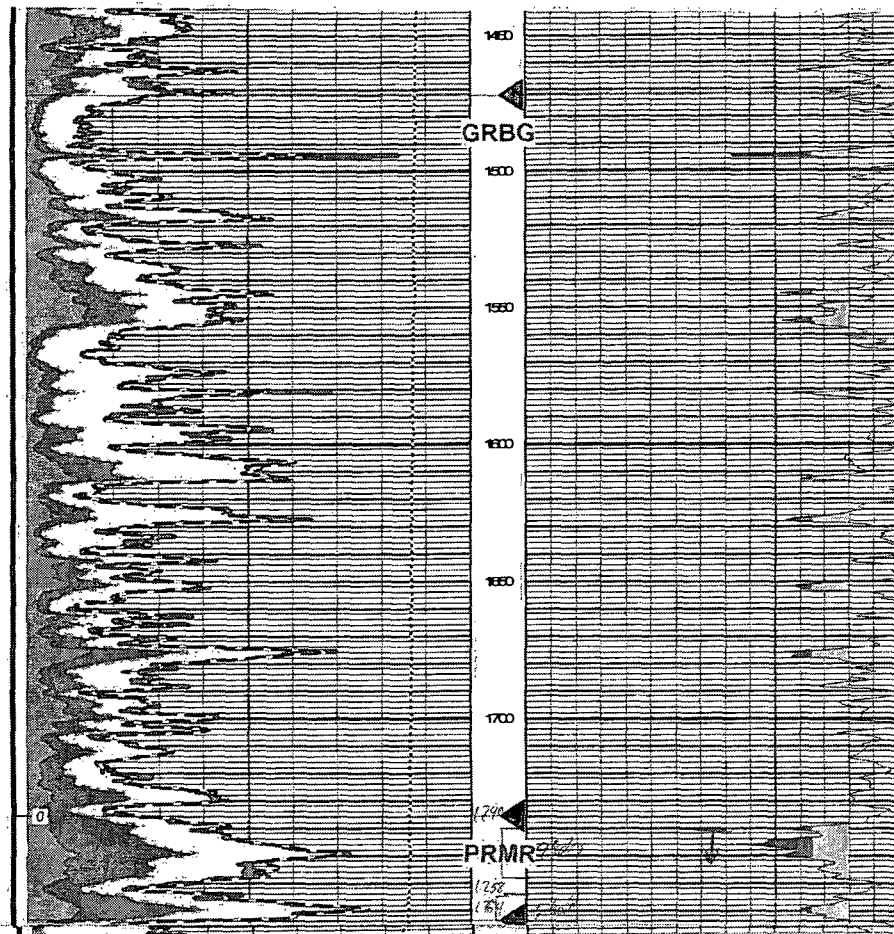
2310 FSL 965 FEL

TWP: 17 S - Range: 28 E - Sec. 30

Datum=3609.00

Reference=KB

GAMMA RAY		Depth	SIGMA INT
CALI(NA)		TVD	NPHI
5,000	16,000	0.3	decp
TENS			Por
10000	0		
GRTH			XPR(NA)
0	100	0.3	
GRCT(GRTC)			Gas
0	-100		
GKUT(GRTO)			
0	100		
GR			
0.000	100.000		
Sandstone			
Shale			
White			



SNDR

1800

1804

1806

1808

1810

1812

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1918

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MSA

1932

1934

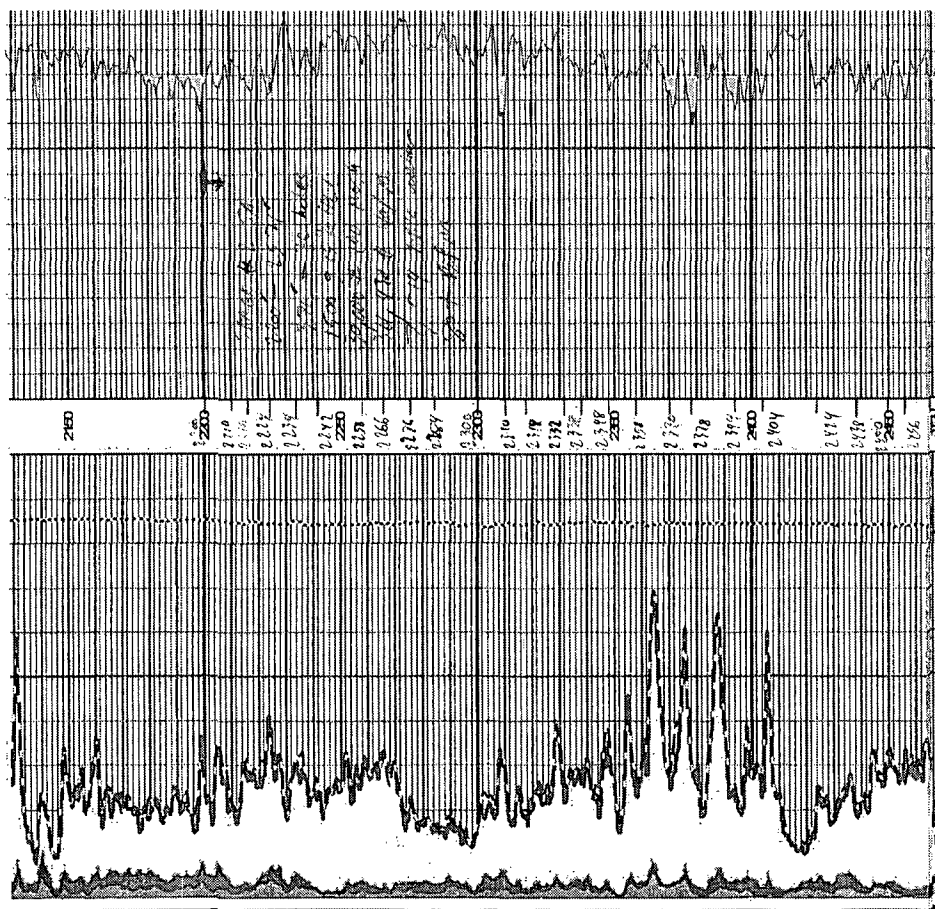
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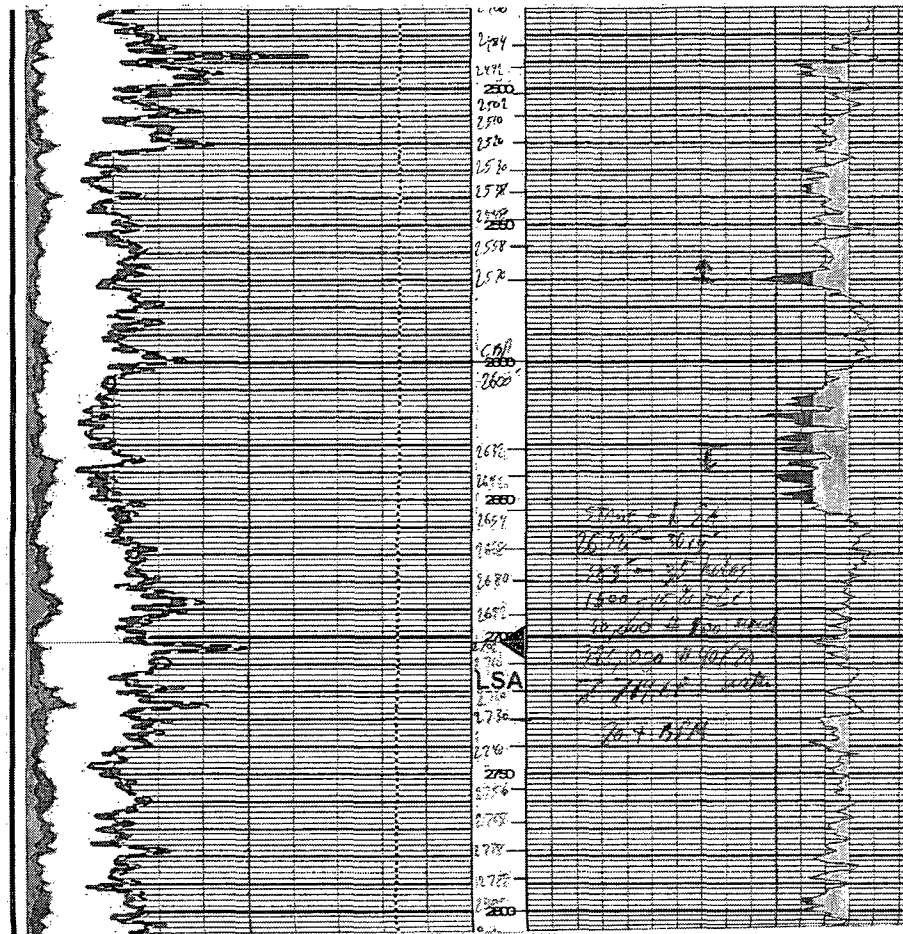
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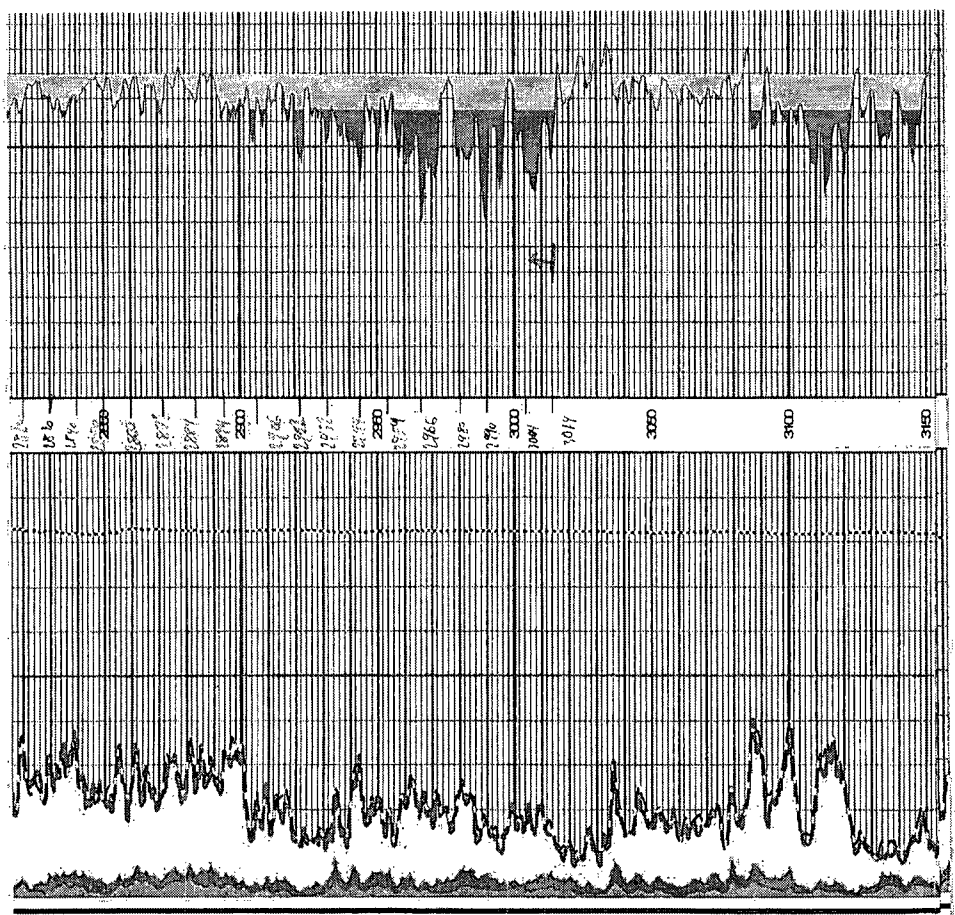
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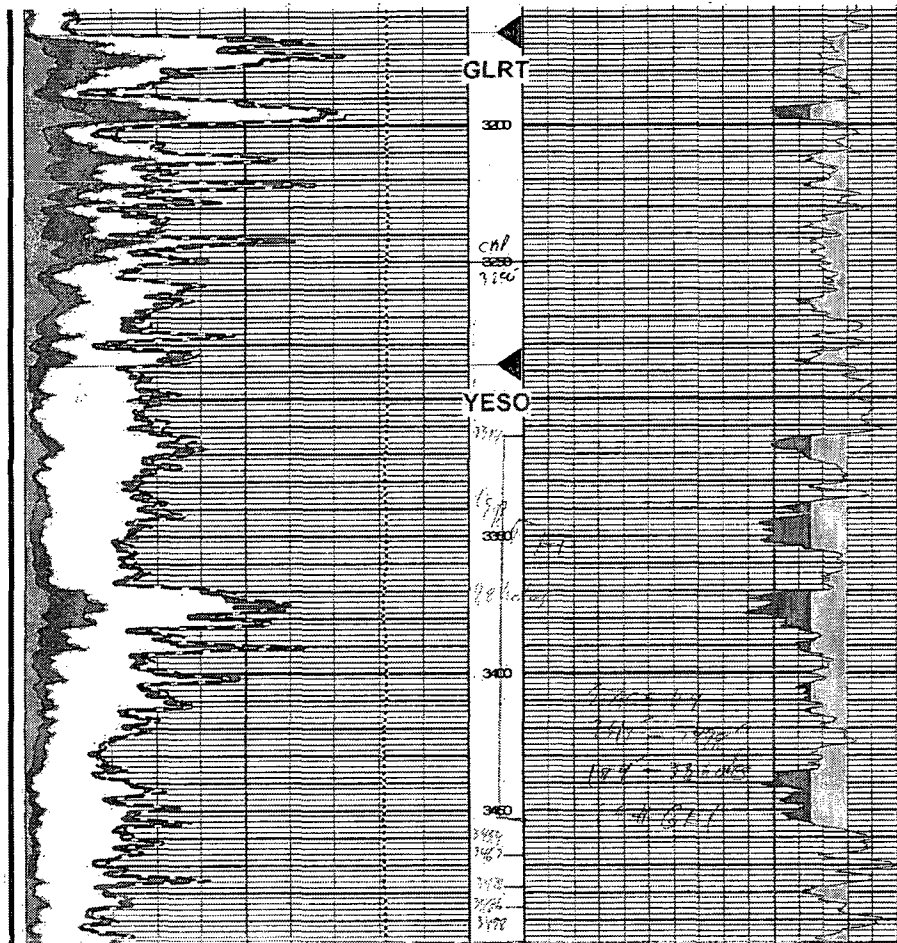
1942

1944









LRE OPERATING, LLC

STALEY STATE #25

DRIVING DIRECTIONS

AFE# D13015

UDI #33

UNIT I, S30, T17S, R28E 2310 FSL AND 990 FEL OF EDDY CO. NM

FROM THE INTERSECTION OF US HWY 82 AND US HWY 285 IN ARTESIA NM, TRAVEL
10.5 MILES EAST ON HWY 82 TO MM 118.5, TURN NORTH (LEFT) ON MAIN LEASE ROAD
0.2 MILE, TURN EAST (RIGHT) THROUGH TANK BATTERY 0.2 TO LOCATION ON RIGHT.