

District I
1625 N French Dr , Hobbs, NM 88240
Phone (575) 393-6161 Fax (575) 393-0720
District II
811 S First St , Artesia, NM 88210
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District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone (505) 334-6178 Fax (505) 334-6170
District IV
1220 S St Francis Dr , Santa Fe, NM 87505
Phone (505) 476-3460 Fax (505) 476-3462

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505



Permit

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address LRE OPERATING, LLC c/o Mike Pippin LLC, 3104 N. Sullivan, Farmington, NM 87401		² OGRID Number 281994
		³ API Number 30-015-36253
⁴ Property Code 309874	⁵ Property Name STALEY STATE	⁶ Well No. 7

⁷ Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
I	30	17-S	28-E		1750	South	990	East	Eddy

⁸ Pool Information

Red Lake, Glorieta-Yeso NE	96836
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Additional Well Information

⁹ Work Type D	¹⁰ Well Type O	¹¹ Cable/Rotary R	¹² Lease Type S	¹³ Ground Level Elevation 3604'
¹⁴ Multiple N	¹⁵ Proposed Depth 4700'	¹⁶ Formation Yeso	¹⁷ Contractor	¹⁸ Spud Date 6/9/08
Depth to Ground water 1000'		Distance from nearest fresh water well >1000'		Distance to nearest surface water >1000'

¹⁹ Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
*Surface	12-1/4"	8-5/8"	23#	420'	375	Surface
*Prod.	7-7/8"	5-1/2"	14#	3960'	750	Surface
*Existing						

Casing/Cement Program: Additional Comments

The existing Yeso perms are 33 holes from 3323' to 3515'.
We propose to squeeze the existing Yeso perms 3323'-3515' w/about 200 sx cmt. Then, deepen this wellbore w/4-3/4" bit from its 5-1/2" csg shoe @ 3960' to ~4700'. Run open hole logs from ~4700' to 3960'. W/ 5-1/2" pkr set @ ~3900' on 3-1/2" frac string, breakdown & frac Yeso open hole w/about 150,000# 16/30 sand in 25# X-linked gel. Set a 5-1/2" CBP @ ~3940' & perf Yeso @ ~3604'-3920'. W/5-1/2" pkr @ ~3540' on a 3-1/2" frac string, breakdown & stimulate w/~74,000# 16/30 sand in 25# X-linked gel. Set a 5-1/2" CBP @ ~3580' & perf Yeso @ ~3303'-3499'. Breakdown & stimulate down 5-1/2" csg w/~85,000# 16/30 sand in 25# X-linked gel. The CBPs will be drilled out & the well CO to ~4700'. Land 2-7/8" 6.5# J-55 tbg @ ~3940'. Run pump & rods & initiate production. See attached wellbore diagrams.

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Dual Hydraulic 81 - 7-1/16"	5000#	2000#	Townsend

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines <input type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input checked="" type="checkbox"/> (Closed Loop). Signature: <i>Mike Pippin</i>		OIL CONSERVATION DIVISION	
Printed name Mike Pippin		Approved By: <i>T. C. Shepard</i>	
Title Petroleum Engineer		Title: <i>Geologist</i>	
E-mail Address: mike@pippinllc.com		Approved Date: <i>4/5/2012</i> Expiration Date: <i>4/5/2014</i>	
Date: 4/3/12	Phone: 505-327-4573	Conditions of Approval Attached	



LIME ROCK
RESOURCES

LRE OPERATING, LLC

Current Wellbore Diagram 4-2-2012

Staley State #7
Sec 30-17S-28E (I)
1750' FSL, 990' FEL
Elevation – 3,604'
API #: 30-015-36253
Eddy County, NM



8-5/8", 23#, J-55, ST&C Casing @ 420'.
Circulated 103 sx to Surface.

2-7/8"; 6.5#, J-55 Tubing @ 3,639'

Perfs: 3,323'; 25'; 29'; 35' - 36'; 41' - 43'; 51' - 52'; 56' - 57'; 61'; 63' - 65'; 71'; 73'; 75' - 76'; 89'; 94'; 97'; 3,401'; 08' - 09'; 25'; 27'; 33'; 94'; 99'; 3,513' & 15' (1 SPF - 33 holes)

PBTD @ +/- 3,960'

5-1/2"; 17#, J-55, ST&C Casing @ 3,960'.
Circulated 73 sx to Surface. (06/18/2008)

TD @ 3,960'

GEOLOGY

Zone	Top
Queen	1,060'
Grayburg	1,478'
San Andres	1,788'
Glorieta	3,177'
Yeso	3,303'

SURVEYS

Degrees	Depth
0°	425'
1/4°	932'
1/4°	1,434'
1/2°	1,906'
1/2°	2,441'
1/4°	2,913'
1/2°	3,416'
3/4°	3,951'

Stim Info: 3500 gal 15% NEFE; Treat w/ 20k gal 20% HCL & 30k gal 40# linear gel & 3000 gal 15% HCL. (8/19/08)



LRE Operating, LLC
Proposed: Deepen Well Thru
Lower Yeso, Fracture Stimulate
Lower and Upper Yeso
AFE # D12107

Staley State #7
Sec 30-17S-28E (I)
1750' FSL, 990' FEL
Elevation – 3,604'
API #: 30-015-36253
Eddy County, NM

Procedure Summary

- LRE Operating, LLC wished to deepen the Staley State #7 thru the Lower Yeso Section to 4,700' MD using a workover rig, closed loop pit system, 2000 psi BOP's, 4-3/4" PDC bit, 3-1/8" Mud Motor, 3-1/8 drill collars and 2-7/8" tubing
- Before deepening the well, LRE will squeeze the current perforations w/ 200 sx cement to 1500 psi, then drill out the cement while tripping in the hole to deepen the well,
- LRE will use 9.7+ ppg brine water and salt water gel while drilling through the Lower Yeso,
- Once a total depth of 4,700' is reached, an open hole log will be run from 4700' to 3960' MD,
- The new open hole section will be frac via 3-1/2" tubing and a packer set at 3900' as listed below,
- After the new open hole is stimulated, a second stage of L Yeso will be perforated from 3604'-3920' and stimulated above a CBP @ 3940' and below a packer set at 3540'. Once frac'd, the tbq and packer will be pulled,
- After a CBP is set at 3580' MD, the original perfs and 21 new holes will be perforated, and that zone stimulated down casing,
- Finally, the well will be cleaned out to 4700' and placed on pump.

GEOLOGY

<u>Zone</u>	<u>Top</u>
Queen	1,060'
Grayburg	1,478'
San Andres	1,788'
Glorieta	3,177'
Yeso	3,303'

SURVEYS

<u>Degrees</u>	<u>Depth</u>
0°	425'
1/4°	932'
1/4°	1,434'
1/2°	1,906'
1/2°	2,441'
1/4°	2,913'
1/2°	3,416'
3/4°	3,951'

8-5/8",
23#, LS,
ST&C
Casing @
420'.
Circulated
103 sx to
Surface.

2-7/8"; 6.5#, J-55 Tubing @ 3,940' to put well back on line

Add Perfs: After TOOH w/ Pkr, set CBP @

3580'. Perf additional Yeso section 3,303',
3309', 3313', 3316', 3319', 3380', 3385', **3416',**
3420', 3430', 3438', 3445', 3451', 3455', 3462',
3468', 3474', 3477', 3490', 3494', 3499' (1 SPF -
21 holes)

Frac Info: Frac old and new perfs with
2000 lbs 100 mesh sd, 50000 gal 25#
xlinked Borate gel, 70000 lbs 16/30
Brady Sd & 15000 lbs 16/30 Resin
Coated Sd – 65 BPM

Perfs: 3,323'; 25'; 29'; 35'-36'; 41'-43'; 51'-52';
56'-57'; 61'; 63'-65'; 71'; 73'; 75'-76'; 89'; 94'; 97';
3,401'; 08' – 09'; 25'; 27'; 33'; 94'; 99'; 3,513' & 15'
(1 SPF - 33 holes)

Stim Info: 3500 gal 15%
NEFE; Treat w/ 20k gal 20%
heated HCL & 30k gal 40#
linear gel & 3000 gal 15%
HCl. (8/19/08)

Add Perfs: Set CBP @ 3940' MD. Perf

3604', 3611', 3622', 3628', 3632', 3638',
3645', 3652', 3663', 3698', **3702', 3708',**
3714', 3722', 3730', 3740', 3745', 3764',
3796', **3816', 3818', 3917', 3920'** (2 spf – 46
holes)

Frac Info: Frac new perfs under packer
with, 44000 gal 25# xlinked Borate gel,
60000 lbs 16/30 Brady Sd & 14000 lbs
16/30 Resin Coated Sd – 60 BPM

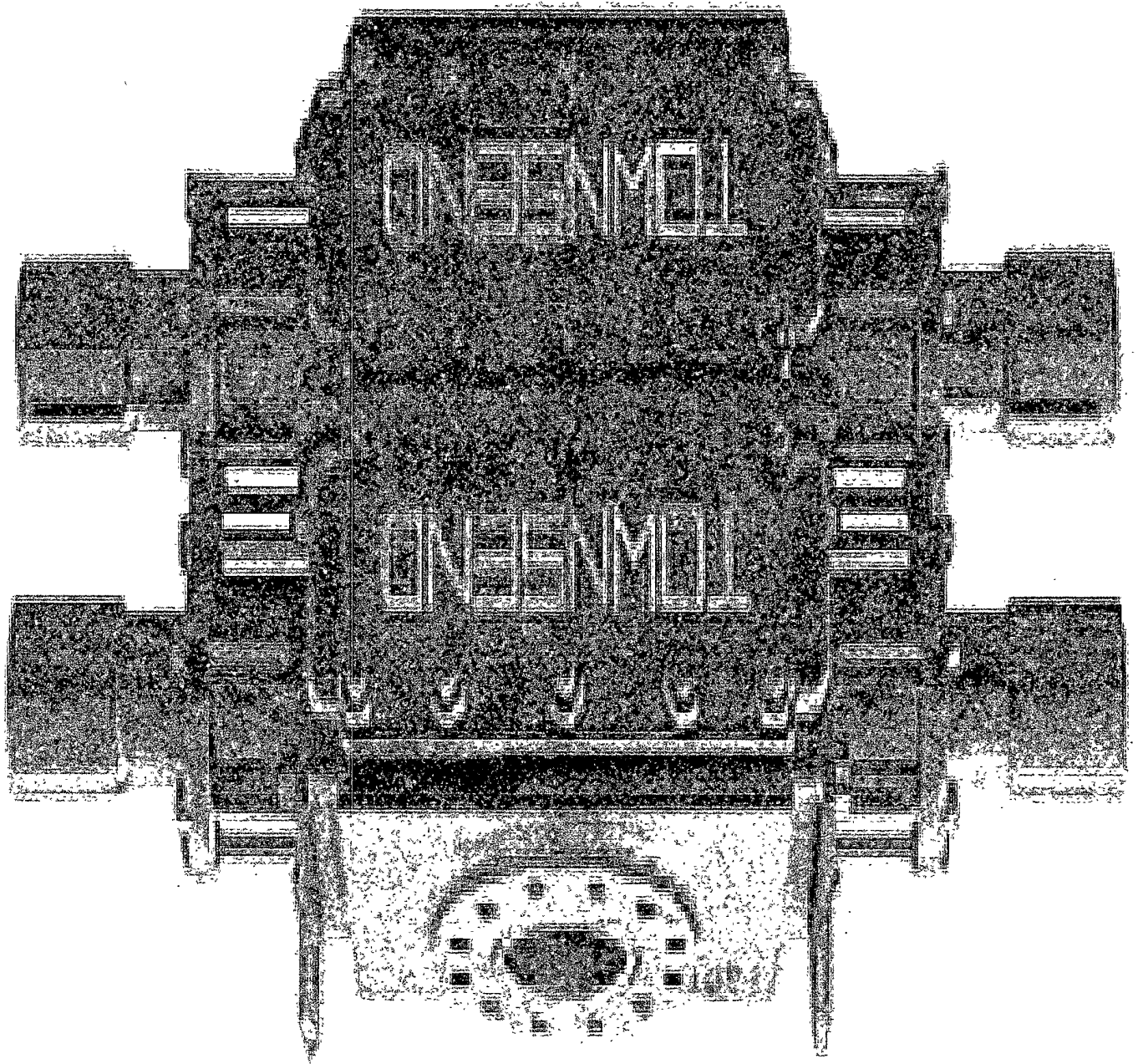
Original TD @ 3,962'

5-1/2"; 14#; K-55;
ST&C Csg @
3,960'. Circ 73 sx
to Surf 6/18/2008

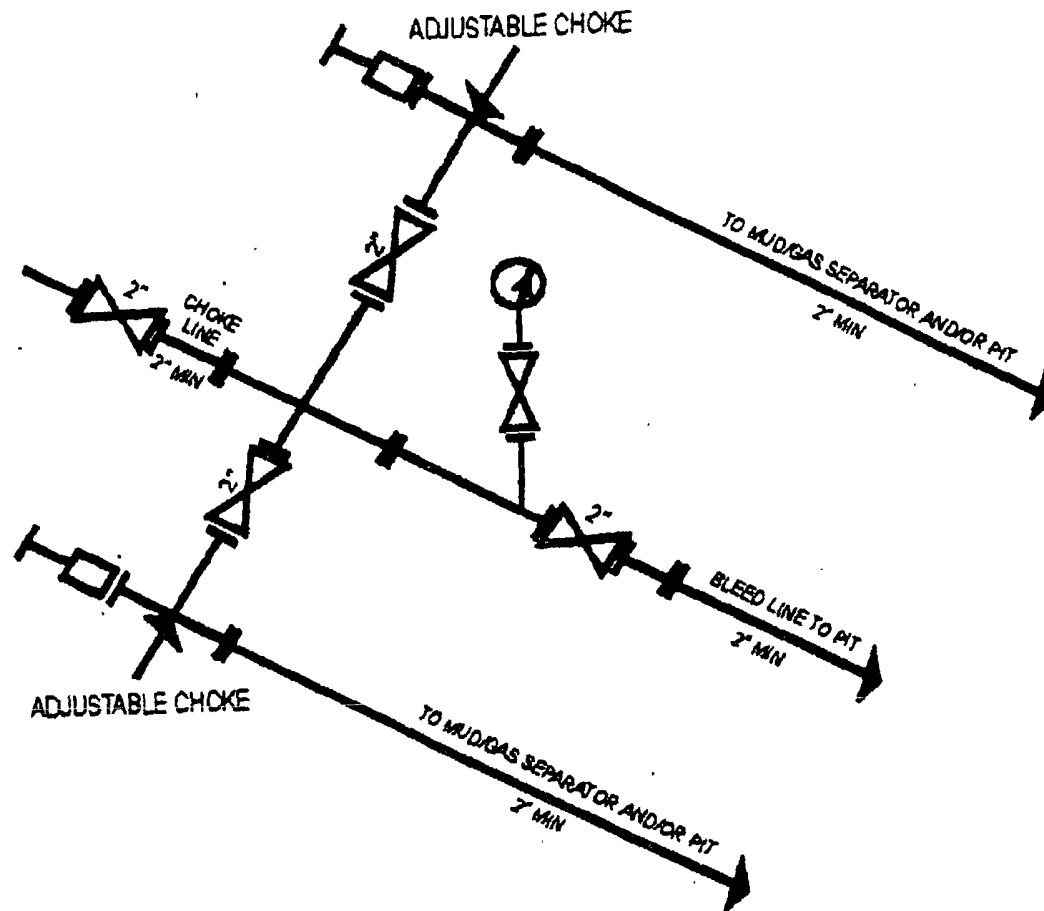
NOTE:
Burst = 4270 psig
ID = 5.012"

Open Hole Addition: Drill out float collar and guide shoe. Drill new 4-3/4" hole from 3,962' MD to 4,700' MD and circ hole clean. TOOH & LD drilling tools. TIH w/ Pkr and set same at 3800' MD. Use acid to break down new open hole Lower Yeso Section and frac same with 75,000 gal 25# x-linked gel, 125,000lbs 16/30 Brady sand and 25,000 lbs 16/30SiberProp resin coated proppant. Kill well, pull packer and tubing. Clean out to PBTD after frac.

Proposed TD @ 4,700'



2" Choke Manifold – LRE Operating, LLC



HYDROGEN SULFIDE (H₂S) CONTINGENCY PLAN

Assumed 100 ppm ROE = 3000'

100 ppm H₂S concentration shall trigger activation of this plan.

Emergency Procedures

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
 - Detection of H₂S, 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 (SO₂). 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 SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air = 1	2 ppm	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).

H₂S CONTINGENCY PLAN EMERGENCY CONTACTS

Company Office –Lime Rock Resources 713-292-9510
Answering Service (During Non-Office Hours) 713-292-9555

Key Personnel

<u>Name</u>	<u>Title</u>	<u>Phone Number</u>
Richard Ghiselin.	Production Engineer	713-345-2136 Cell: 218-507-0386
Mike Barrett	Production Supervisor	575-623-8424 Cell: 505-353-2644

Ambulance	911
State Police	575-746-2703
City Police	575-746-2703
Sheriff's Office	575-746-9888
Fire Department	575-746-2701
Local Emergency Planning Committee	575-746-2122
New Mexico Oil Conservation Division	575-748-1283

Carlsbad

Ambulance	911
State Police	575-8885-3137
City Police	575-885-2111
Sheriff's Office	575-887-7551
Fire Department	575-887-3798
Local Emergency Planning Committee	575-887-6544
US Bureau of Land Management	575-887-6544

New Mexico Emergency Response Commission (Santa Fe)	505-476-9600
24 Hour	505-827-9126
New Mexico State Emergency Operations Center	505-476-9635
National Emergency Response Center (Washington, DC)	800-424-8802

Other

Boots & Coots IWC	800-256-9688 or 281-931-8884
Cudd PressureControl	915-699-0139 or 915-563-3356
Halliburton	575-746-2757
B. J. Services	575-746-3569
Flight For Life – 4000 24 th St. Lubbock, Texas	806-743-9911
Aerocare – R3, Box 49F, Lubbock, Texas	806-747-8923
Med Flight Air Amb – 2301 Yale Blvd SE #D3, Albuquerque, NM	505-842-4433
S B Air Med Service – 2505 Clark Carr Loop SE, Albuquerque, NM	505-842-4949

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

RECEIVED

APR 4 2012

NMOCD ARTESIA

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-36253	² Pool Code 96836	³ Pool Name Red Lake, Glorieta-Yeso NE
⁴ Property Code 309874	⁵ Property Name STALEY STATE	⁶ Well Number 7
⁷ OGRID No. 281994	⁸ Operator Name LRE OPERATING, LLC.	⁹ Elevation 3604' GL

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	30	17-S	28-E		1750	SOUTH	990	EAST	EDDY

¹¹ 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

¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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.

<div style="text-align: center; font-size: 2em;">30</div>	¹⁷ OPERATOR CERTIFICATION 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 unleased 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. Signature: <u>Mike Pippin</u> Date: <u>4/3/12</u> Printed Name: <u>Mike Pippin</u>	
	¹⁸ SURVEYOR CERTIFICATION 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. Date of Survey: <u>3/11/08</u> Signature and Seal of Professional Surveyor: <u>Dan R. Reddy</u> Certificate Number: <u>5412</u>	