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 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

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 0CT 2 9 2012

NMOCD ARTESIA

d December 16, 2011

Form C-101

Pernut

API	PLICA'	TION I			ILL, RI	E-ENTER	, DEEP	EN, PLUGB		R ADD A ZONE	
Lynx Petroleum Consultants, Inc. P.O. Box 1708 Hobbs, NM 88240							<sup>2</sup> OGRID Number 13645				
							'API Number				
							30-015-20200				
<sup>‡</sup> Prope				<sup>5</sup> Property	Name <sup>6</sup> Well No						
	36099			EI	DDY 'BD'	STATE			001		
<sup>7</sup> Surface Location											
UL - Lot	Section	Township	Range	Lot Idn	Feet		/S Line	Feet From	E/W Line	County	
Р	32	20S	30E		66	60 SC	OUTH	990	EAST	EDDY	
<sup>8</sup> Pool Information											
WC-015G-07 S203032G; WC											
Additional Well Information											
	к Туре		10 Well Type				-		13 Ground Level Elevation		
Plugback  14 Multiple			Oil	O11  15 Proposed Depth  16 Forms			State  17 Contractor		3358' GL  18 Spud Date		
10960' PBTD Wolf								1/21/69			
Depth to Grou		Distance	from nearest fres	h water wel	l		Distance to nearest surface water				
Avg: 189, Mir	x: 225	Approxim	ately 1320'		Approximately 15 miles						
19 Proposed Casing and Cement Program											
Туре	Hole Size Casing Size Casing Weight/ft			/eight/ft	Setting Depth Sacks of		Cement	Estimated TOC			
Surf	2	20	16	16 65		435		600	)	Circ Surf	
Int	1	5	11 3/4		42. 1		514 1050				
Int	1	1	8.5/8	32	32		42.09		5	Circ Surf	
Prod	Prod <u>7.7/8</u>		5 1/2	17.&	17 & 20		11074		)	TOC 8760	
Casing/Cement Program: Additional Comments											
NO CHAN	GE										
				Proposed I	Blowou	t Preventi	on Prog	ram			
Type Working Pressure					re	Test Pressure			Manufacturer		
D	ouble Ra	ım		5000			5000		Shaffer		
of my knowled	ıef	given above is true			OIL CONSERVATION DIVISION						
I further certify that the drilling pit will be constructed according to NMOCD guidelines $\square$ , a general permit $\square$ , or an (attached) alternative OCD-approved plan $X$						Approved By.					
Signature Albie M. Keley						L. C. Shapard					
Printed name	McKely	<i>y</i>			Title 660/gc/\$7						
Title					Approved Date. 10/29/2012   Expiration Date 10/29/2014						
E-mail Addres	ckelvey@	earthlink.net									
Date 10/24		Phone: 575	5-392-3575		Conditions of Approval Attached						

## Eddy 'BD' State No. 1 Wolfcamp Recompletion Procedure

API No.: 30-015-20200

Location: 660' FSL & 990' FEL Section 32, T-20S, R-30E

Eddy County, New Mexico

Elevation: 3358' GL

KB: +15'

TD: 11,171'

PBTD: 11,035'

Casing & Cement:

16", 65#/ft., H-40, ST&C @ 435' cmt. w/600 sx. circulated

11-3/4", 42#/ft., H-40, ST&C @ 1600' cmt. w/1614 sx. circulated

8-5/8", 32#/ft., K-55, ST&C @ 4209' cmt. in two stages w/1075 sx. circulated

DV tool in 8-5/8" @ 2076'

5-1/2", 17#/ft.& 20#/ft., N-80, LT&C @ 11,074' cmt. w/300 sx. TOC @ 8,760' by temp svy

Tubing:

334 joints 2-7/8", 6.5#/ft., L-80, EUE @ 11,000' KB

**Existing Perforations:** 

Strawn: Open hole 11,074'-11,171'

Strawn: 10,980'-98', 11,006-11,011' squeezed w/64 sx. classs H cement under retainer 11/17/2000

Strawn: 10,980-98' w/4 JSPF reperfed w/4 JSPF (72 holes) 1/16/2001

CIBP: 11,060' w/2 sx. cement on top

Proposed Perfs:

Wolfcamp 1st stage: 10230'-35', 10242'-54', 10324'-26', 10380'-86'

Wolfcamp 2nd stage: 10132'-62'

### Procedure:

- 1. MIRU pulling unit. Pull, LD, and warehouse rods and pump.
- 2. Kill well if necessary using 2% KCL TFW. ND wellhead. NU BOP.
- 3. Release TAC and tally tubing OOH. If well not killed in step 2, load hole w/100 bbls. 2% KCL TFW.
- 4. RU Schlumberger wireline. RU and run GR/CNL/CCL from 10,980' back up to 7,400'. Run and set CIBP @10,960'. RD wireline truck.
- 5. TIH w/tubing OE to 10,400'. Pump 150 bbls. 2% KCL TFW down tubing followed by 10 bbls. 15% HCL-NE-FE acid followed by 57 bbls. 2% KCL-TFW. TOOH w/tubing.
- 6. NU 5-1/2" full opening casing valve w/rated WP of 5000 psig or greater.
- 7. RU Schlumberger w/full lubricator. Perforate Wolfcamp 1st stage perfs w/4 JSPF (116 holes total).
- 8. TIH w/wireline set packer assembly consisting of a pump out plug, 10' sub, packer, and On/Off tool. Set packer at +/- 9800'.
- 9. ND casing valve.
- 10. Test tubing in hole to 5000 psig. Space out tubing and latch packer.
- 11. ND BOP. NU 5000 psig tree.
- 12. Breakdown Wolfcamp perforations and displace spot acid at 2 BPM. Note and record ISIP and 5, 10, and 15 minute shut-in pressures.
- 13. RU swab and evaluate Wolfcamp 1st stage perfs for commercial production/possible additional stimulation.
- 14. Additional recommendations TBD based on results of swab tests.

# LYNX PETROLEUM CONSULTANTS, INC. WOLFCAMP RECOMPLETION H<sub>2</sub>S PRECAUTIONS Eddy 'BD' STATE NO. 1

### I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing operations on this well:

- 1. The hazards and characteristics of hydrogen sulfide  $(H_2S)$ .
- 2. The proper use and maintenance of personal protective equipment and life support systems.
- 3. The proper use of H<sub>2</sub>S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- 4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- 1. The effects of H<sub>2</sub>S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- 2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.

### II. H2S SAFETY EQUIPMENT AND SYSTEMS

- 1. Well Control Equipment:
  - A. A 5000 psig WP Blowout preventer with blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit will be furnished.
- 2. H<sub>2</sub>S detection and monitoring equipment:
  - A. 2 portable H<sub>2</sub>S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H<sub>2</sub>S levels of 20 ppm are reached.
- 3. Visual warning systems:
  - A. A wind direction indicator will be in place on the pulling unit doghouse.
- 4. Mud program:
  - A. The working fluid for this recompletion will be 2% KCL treated fresh water.

# Page 2 Eddy 'BD' State #1

- 5. Metallurgy:
  - A. Tubing, wellhead, and blowout preventers shall be suitable for H<sub>2</sub>S service.
  - B. All elastomers used for packing and seals shall be H<sub>2</sub>S trim.
- 6. Communication:
  - A. Communications in company vehicles are provided by cellular telephones.

B. Land line (telephone) communications at Hobbs office.

Phone: 575-392-6950

C: Emergency Numbers

911

Carlsbad Sheriff's Dept.: 575-887-1888

Carlsbad Hospital: 575-887-4100 Carlsbad Fire Dept.: 575-885-3125 Maljamar Fire Dept.: 575-676-4100 Hobbs Hospital: 575-492-5000

New Mexico State Police: 575-392-5588

- 8. Well testing:
  - A. No drill stem tests are being contemplated during this operation.

# PRODUCTION WORKOVER PIPE RAMS BLIND RAMS WELLHEAD SPOOL 2" Nominal 5000 PSI WORKING PRESSURE

Location: SE/4 SE/4
Sec. 32, T-20S, R-30E

Eddy County, NM

Eddy 'BD' State No. 1
RECOMPLETION BLOWOUT PREVENTER

4-1-10 Scale: None