API NUMBER: 045 23414

Oil & Gas

Horizontal Hole

## OKLAHOMA CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION P.O. BOX 52000 OKLAHOMA CITY, OK 73152-2000 (Rule 165:10-3-1)

Approval Date: 12/09/2013
Expiration Date: 06/09/2014

PERMIT TO DRILL

WELL LOCATION: Sec: Twp: 18N Rge: 24W County: ELLIS FEET FROM QUARTER: SPOT LOCATION: FROM NORTH FROM EAST NW NW ll NE NE SECTION LINES: 100 1110

Lease Name: JACKS Well No: 4-28H Well will be 100 feet from nearest unit or lease boundary.

Operator PRIMARY NATURAL RESOURCES III LLC Telephone: 9184950598 OTC/OCC Number: 22514 0

PRIMARY NATURAL RESOURCES III LLC 7134 S YALE AVE STE 430

TULSA, OK 74136-6351

SHIRLEY ARMOUR 3725 WREN LANE AVE.

FORT WORTH TX 76133

Formation(s) (Permit Valid for Listed Formations Only):

Name Depth Name Depth CLEVELAND 9457 1 6 2 7 3 8 4 9 10 588987 Spacing Orders: Location Exception Orders: 618454 Increased Density Orders: 618571

Pending CD Numbers: Special Orders:

Total Depth: 14298 Ground Elevation: 2374 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 630

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: No

PIT 1 INFORMATION Approved Method for disposal of Drilling Fluids:

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED
Chlorides Max: 100000 Average: 5000

Is depth to top of ground water greater than 10ft below base of pit?  $\quad \mbox{Y}$ 

Within 1 mile of municipal water well? N

Wellhead Protection Area? N

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C
Pit Location is BED AQUIFER
Pit Location Formation: OGALLALA

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 13-25010

H. SEE MEMO

## PIT 2 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: OIL BASED
Chlorides Max: 300000 Average: 200000

Is depth to top of ground water greater than 10ft below base of pit? Y

Within 1 mile of municipal water well? N
Wellhead Protection Area? N

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C
Pit Location is BED AQUIFER
Pit Location Formation: OGALLALA

## **HORIZONTAL HOLE 1**

Sec 28 Twp 18N Rge 24W County **ELLIS** NE Spot Location of End Point: С N2 ΝE Feet From: NORTH 1/4 Section Line: 330 Feet From: EAST 1/4 Section Line: 660

Depth of Deviation: 8857 Radius of Turn: 600

Direction: 5

Total Length: 4498

Measured Total Depth: 14298

True Vertical Depth: 9457

End Point Location from Lease,
Unit, or Property Line: 330

Notes:

Category Description

DEEP SURFACE CASING 12/3/2013 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS

OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR

SURFACE CASING

> X588987 CLVD XOTHER 1 WELL NO OP. NAMED 11-27-2013

LOCATION EXCEPTION - 618454 12/5/2013 - G75 - (I.O.) 28-18N-24W

X588987 CLVD, OTHERS

XOTHER

POE NCT 330 TO SL, NCT 660 TO EL BHL NCT 330 TO NL, NCT 660 TO EL

NO OP. NAMED 11-22-2013

MEMO 12/3/2013 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 2 -

OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

POINT OF ENTRY 12/9/2013 - G75 - NOT CLOSER THAN 330' TO SL, NOT CLOSER THAN 660' TO EL 28-18N-24W

PER OPERATOR

Category

Description

**SPACING - 588987** 

12/5/2013 - G75 - (640)(HOR) 28-18N-24W EXT 585689 CLVD, OTHERS EXT OTHER EST OTHER POE TO BHL NCT 660' FB (COEXIST SP. ORDER # 479562 CLVD)