

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

API NUMBER: 045 23481

Approval Date: 06/03/2014

Expiration Date: 12/03/2014

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 21 Twp: 18N Rge: 23W

County: ELLIS

SPOT LOCATION:

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 200 2640

Lease Name: SHREWDER TRUST

Well No: 1H-16

Well will be 200 feet from nearest unit or lease boundary.

Operator Name: LE NORMAN OPERATING LLC

Telephone: 4055481200

OTC/OCC Number: 22738 0

LE NORMAN OPERATING LLC
4700 GAILLARDIA PKWY STE 200
OKLAHOMA CITY, OK 73142-1881

SHREWDER TRUST A-B C/O MATT FOOS
P.O. BOX 542016
OMAHA NE 68154

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

Name	Depth	Name	Depth
1 CLEVELAND	9376	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 91750

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201403228

Special Orders:

Total Depth: 14154

Ground Elevation: 2334

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 550

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

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: 35000 Average: 5000

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

D. One time land application -- (REQUIRES PERMIT)

PERMIT NO: 14-27187

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

This permit does not address the right of entry or settlement of surface damages.

The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1.

Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

HORIZONTAL HOLE 1

Sec 16 Twp 18N Rge 23W County ELLIS

Spot Location of End Point: C N2 N2 N2

Feet From: NORTH 1/4 Section Line: 330

Feet From: WEST 1/4 Section Line: 2640

Depth of Deviation: 8628

Radius of Turn: 580

Direction: 360

Total Length: 4615

Measured Total Depth: 14154

True Vertical Depth: 9376

End Point Location from Lease,

Unit, or Property Line: 330

Notes:

Category

Description

DEEP SURFACE CASING

5/14/2014 - G71 - APPROVED CONTINGENT ON NOTIFYING OCC FIELD STAFF IMMEDIATELY OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING

PENDING CE - 201403228

5/19/2014 - G72 - 16-18N-23W X 91750 CLVD;
SHL 200 FNL 2640 FWL (21-18N-23W);
COMP INT. NCT 165 FNL NCT 165 FSL NCT 1980 FWL;
NO OPER NAMED;
REC 6/2/2014 (STUCK)

SPACING - 91750

5/19/2014 - G72 - (640) 16-18N-23W
EXT 68593 CLVD, OTHERS;
EXT OTHERS;

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Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

045 23481 SHREWDER TRUST 1H-16