API NUMBER: 129 24043

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: 01/12/2015
Expiration Date: 07/12/2015

PERMIT TO DRILL

							SECTION LINES:		250		2440
SPOT LOCATION:	NE	NE	N		NW		FEET FROM QUARTER:	FROM	NORTH	FROM	WEST
WELL LOCATION:	Sec:	26	Twp:	17N	Rge:	25V	V Count	ty: ROC	SER MILLS		

Lease Name: CATHERINE Well No: 4H-23 Well will be 250 feet from nearest unit or lease boundary.

Operator LE NORMAN OPERATING LLC Telephone: 4055481200 OTC/OCC Number: 22738 0

LE NORMAN OPERATING LLC 4700 GAILLARDIA PKWY STE 200

OKLAHOMA CITY, OK 73142-1839

TWO D RANCH, L.L.C.

14200 GAILLARDIA PARKWAY

OKLAHOMA CITY OK 73142

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

	Name	Depth	Name	Dept	h
1	CLEVELAND	9800	3		
2		7	7		
3		8	3		
4		g)		
5		1	10		
Spacing Orders:	606800	Location Exception Orders:		Increased Density Orders:	634825

Pending CD Numbers: 201408526 Special Orders:

Total Depth: 15061 Ground Elevation: 2206 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 390

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: ON SITE A. Evaporation/dewater and backfilling of reserve pit.

Type of Mud System: WATER BASED

Chlorides Max: 35000 Average: 5000

H. SOIL COMPACTED PIT, NOTIFY DISTRICT PRIOR TO TESTING SOIL PIT LINER
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

Chlorides Max: 35000 Average: 5000

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: 1B

Liner required for Category: 1B
Pit Location is AP/TE DEPOSIT
Pit Location Formation: TERRACE

HORIZONTAL HOLE 1

Sec 23 Twp 17N Rge 25W County ROGER MILLS

Spot Location of End Point: N2 N2 N2 N2 N2 Feet From: NORTH 1/4 Section Line: 165
Feet From: EAST 1/4 Section Line: 2640

Depth of Deviation: 9220 Radius of Turn: 580

Direction: 1

Total Length: 4930

Measured Total Depth: 15061

True Vertical Depth: 9800

End Point Location from Lease,
Unit, or Property Line: 165

Notes:

Category Description

DEEP SURFACE CASING 1/12/2015 - 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

INCREASED DENSITY - 634825 1/12/2015 - G91 - 23-17N-25W

X606800 CLVD

1 WELL

LE NORMAN OPERATING, LLC

1-6-2015

PENDING CD - 201408526 1/12/2015 - G91 - (I.O.) 23-17N-25W

X606800 CLVD

SHL 250 FNL 2640 FEL **

COMPL. INT. NCT 165 FSL, NCT 165 FNL, NCT 1320 FEL

LE NORMAN OPERATING, LLC REC. 12-8-2014 (OSBURN)

** SHL TO BE CORRECTED IN FINAL ORDER PER OPERATOR**

SPACING - 606800 1/12/2015 - G91 - (640)(HOR) 23-17N-25W

EST CLVD, OTHERS POE TO BHL NLT 660' FB

(SUPERSEDE NON-PRODUCING NON-HORIZONTAL SPACING UNITS; COEXIST WITH

PRODUCING NON-HORIZONTAL SPACING UNITS)