

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

API NUMBER: 009 21989

Approval Date: 02/27/2018

Expiration Date: 08/27/2018

Horizontal Hole

Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 27 Twp: 11N Rge: 21W

County: BECKHAM

SPOT LOCATION: ☐ SE ☐ SE ☐ SW ☐ SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 312 1189

Lease Name: RAZOR'S EDGE

Well No: 1H-27

Well will be 312 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 73142-1839

LE NORMAN OPERATING, LLC
4700 GAILLARDIA PARKWAY, SUITE 200
OKLAHOMA CITY OK 73142

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

	Name	Depth	Name	Depth
1	GRANITE WASH LOW (DES MOINES)	13020	6	
2			7	
3			8	
4			9	
5			10	

Spacing Orders: 167149

Location Exception Orders: 673698

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 17640

Ground Elevation: 1935

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 520

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: 8000

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

PERMIT NO: 18-33913

H. SEE MEMO

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 OTHER HSA

Pit Location Formation: DOXEY

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.

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 OTHER HSA

Pit Location Formation: DOXEY

HORIZONTAL HOLE 1

Sec 27 Twp 11N Rge 21W County BECKHAM

Spot Location of End Point: NE NW NE NW

Feet From: NORTH 1/4 Section Line: 250

Feet From: WEST 1/4 Section Line: 1800

Depth of Deviation: 12674

Radius of Turn: 800

Direction: 10

Total Length: 4620

Measured Total Depth: 18551

True Vertical Depth: 13020

End Point Location from Lease,
Unit, or Property Line: 250

Notes:

Category

Description

DEEP SURFACE CASING

2/7/2018 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING

HYDRAULIC FRACTURING

2/7/2018 - G71 - OCC 165:10-3-10 REQUIRES:

1) PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE;

2) WITH NOTICE ALSO GIVEN 48 HOURS IN ADVANCE OF HYDRAULIC FRACTURING ALL WELLS TO BOTH THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES, USING THE "FRAC NOTICE FORM" FOUND AT THE FOLLOWING LINK: OCCWEB.COM/OG/OGFORMS.HTML; AND,

3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION THE HYDRAULIC FRACTURING OPERATIONS, USING THE FOLLOWING LINK: FRACFOCUS.ORG

LOCATION EXCEPTION - 673698

2/26/2018 - G57 - (I.O.) 27-11N-21W
X167149 DMGWL
SHL NCT 150' FSL, NCT 150' FWL
COMPL. INT. NCT 330' FSL, NCT 330' FNL, NCT 660' FWL
NO OP. NAMED
2-15-2018

MEMO

2/7/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

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.

009 21989 RAZOR'S EDGE 1H-27

Category	Description
SPACING - 167149	2/20/2018 - G57 - (640/560) 27-11N-21W VAC OTHERS EST (640) 163724 DMGWL, OTHERS EST (560) OTHERS

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.