

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

API NUMBER: 045 23704

Approval Date: 11/17/2017

Expiration Date: 05/17/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 09 Twp: 17N Rge: 24W County: ELLIS

SPOT LOCATION: ☐ NW ☐ NE ☐ NW ☐ NW FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 250 965

Lease Name: JOYCE Well No: 4 5H Well will be 250 feet from nearest unit or lease boundary.

Operator Name: EOG RESOURCES INC

Telephone: 4052463212

OTC/OCC Number: 16231 0

EOG RESOURCES INC
3817 NW EXPRESSWAY STE 500
OKLAHOMA CITY, OK 73112-1483

MAX E MILLER FAMILY TRUST
121 NORTH VAN BUREN STREET
NORMA LEE MILLER REVOCABLE TRUST
ARNETT OK 73832

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

Name	Depth	Name	Depth
1 MARMATON	9400	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 604263

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201705837
201705836

Special Orders:

Total Depth: 14954

Ground Elevation: 2288

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 440

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: 100000 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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 17-33323

E. Haul to Commercial pit facility: Sec. 21 Twn. 14N Rng. 21W Cnty. 129 Order No: 376462

H. SEE MEMO

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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

HORIZONTAL HOLE 1

Sec 04 Twp 17N Rge 24W County ELLIS

Spot Location of End Point: NW NE NW NW

Feet From: NORTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 965

Depth of Deviation: 9300

Radius of Turn: 346

Direction: 360

Total Length: 5110

Measured Total Depth: 14954

True Vertical Depth: 9613

End Point Location from Lease,
Unit, or Property Line: 50

Notes:

Category

Description

DEEP SURFACE CASING

11/3/2017 - 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

11/3/2017 - 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: OCCEWEB.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

MEMO

11/15/2017 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 1 - WBM CUTTINGS TO BE SOIL FARMED, PIT 2 - OBM CUTTINGS TO HAULED TO COMM PITS, OBM TO VENDOR

PENDING CD - 201705836

11/16/2017 - G58 - (I.O.) 4-17N-24W
X604263 MRMN
3 WELLS
NO OP NAMED
REC 9/25/2017 (THOMAS)

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.

045 23704 JOYCE 4 5H

Category	Description
PENDING CD - 201705837	11/16/2017 - G58 - (I.O.) 4-17N-24W X604263 MRMN COMPL INT NCT 165' FSL, NCT 165' FNL, NCT 965' FWL NO OP NAMED REC 9/25/2017 (THOMAS)
SPACING - 604263	11/16/2017 - G58 - (640)(HOR) 4-17N-24W EXT 601473 MRMN, OTHERS POE TO BHL NCT 660' FB (SUPERCEDE NON-PRODUCING, NON-HORIZONTAL SPACING UNITS; COEXIST WITH PRODUCING, NON-HORIZONTAL SPACING UNITS)