

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

API NUMBER: 045 23421

Approval Date: 12/30/2013

Expiration Date: 06/30/2014

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 14 Twp: 17N Rge: 24W

County: ELLIS

SPOT LOCATION: ☐ SW ☐ SW ☐ SE ☐ SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 245 1468

Lease Name: BERRYMAN

Well No: 23-3H

Well will be 245 feet from nearest unit or lease boundary.

Operator
Name: EOG RESOURCES INC

Telephone: 4052463226; 7136517

OTC/OCC Number: 16231 0

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

THOMAS R.C. BERRYMAN
PO BOX 787
ASHLAND KS 67831

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

Name	Depth	Name	Depth
1 MARMATON	9600	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 578772

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201308362
201308363

Special Orders:

Total Depth: 14852

Ground Elevation: 2308

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 540

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 BED AQUIFER

Pit Location Formation: OGALLALA

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

PERMIT NO: 13-26078

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 BED AQUIFER

Pit Location Formation: OGALLALA

HORIZONTAL HOLE 1

Sec 23 Twp 17N Rge 24W County ELLIS

Spot Location of End Point: SE SE SW SW

Feet From: SOUTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 1100

Depth of Deviation: 9904

Radius of Turn: 435

Direction: 184

Total Length: 4948

Measured Total Depth: 14852

True Vertical Depth: 9719

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

Notes:

Category

Description

DEEP SURFACE CASING

12/30/2013 - 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

MEMO

12/30/2013 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR OPTION, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201308362

12/30/2013 - G30 - 23-17N-24W
X578772 MRMN
1 WELL
NO OP. NAMED
REC 12/30/13 (P.PORTER, BY INITIALS)

PENDING CD - 201308363

12/30/2013 - G30 - 23-17N-24W
X578772 MRMN
1ST PERF NCT 330 FNL, NCT 1468 FWL
LAST PERF NCT 330 FSL, NCT 1100 FWL
NO OP. NAMED
REC 12/30/13 (P.PORTER, BY INITIALS)

SPACING - 578772

12/30/2013 - G30 - (640 HOR) 23-17N-24W
EST MRMN
POE TO BHL NCT 660' FB
(COEXIST WITH PRODUCING NON-HORIZONTAL SPACING UNITS; SUPERCEDE NON-DEVELOPED NON-HORIZONTAL SPACING UNITS)

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

045 23421 BERRYMAN 23-3H

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.