

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

API NUMBER: 153 23639

Approval Date: 11/08/2018
Expiration Date: 05/08/2020

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 16 Twp: 23N Rge: 22W

County: WOODWARD

SPOT LOCATION: ☐ NE ☐ SW ☐ SE ☐ SE

FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 360 750

Lease Name: DALE THOMAS

Well No: 1-16H

Well will be 360 feet from nearest unit or lease boundary.

Operator Name: BMR II LLC

Telephone: 7206939470

OTC/OCC Number: 24173 0

BMR II LLC
1202 BERGEN PKWY STE 212
EVERGREEN, CO 80439-9559

W. DALE THOMAS AND VIOLET J THOMAS
37295 SCR 199
WOODWARD OK 73801

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	8256	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201802342

Special Orders:

Total Depth: 13893

Ground Elevation: 2103

Surface Casing: 1000

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: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 8000 Average: 3000

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: 18-35519

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: 70000 Average: 40000

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 16 Twp 23N Rge 22W County WOODWARD

Spot Location of End Point: C NE NE

Feet From: NORTH 1/4 Section Line: 660

Feet From: EAST 1/4 Section Line: 660

Depth of Deviation: 9250

Radius of Turn: 620

Direction: 2

Total Length: 3669

Measured Total Depth: 13893

True Vertical Depth: 8256

End Point Location from Lease,
Unit, or Property Line: 660

Notes:

Category

Description

DEEP SURFACE CASING

10/19/2018 - GA8 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING

HYDRAULIC FRACTURING

10/19/2018 - GA8 - 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

10/19/2018 - GA8 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

PENDING CD - 201802342

11/8/2018 - G58 - (640)(HOR) 16-23N-22W
VAC 113422 CSTR
VAC 124259 MRM
EST MSSP
POE TO BHL NCT 660' FB

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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.

153 23639 DALE THOMAS 1-16H

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

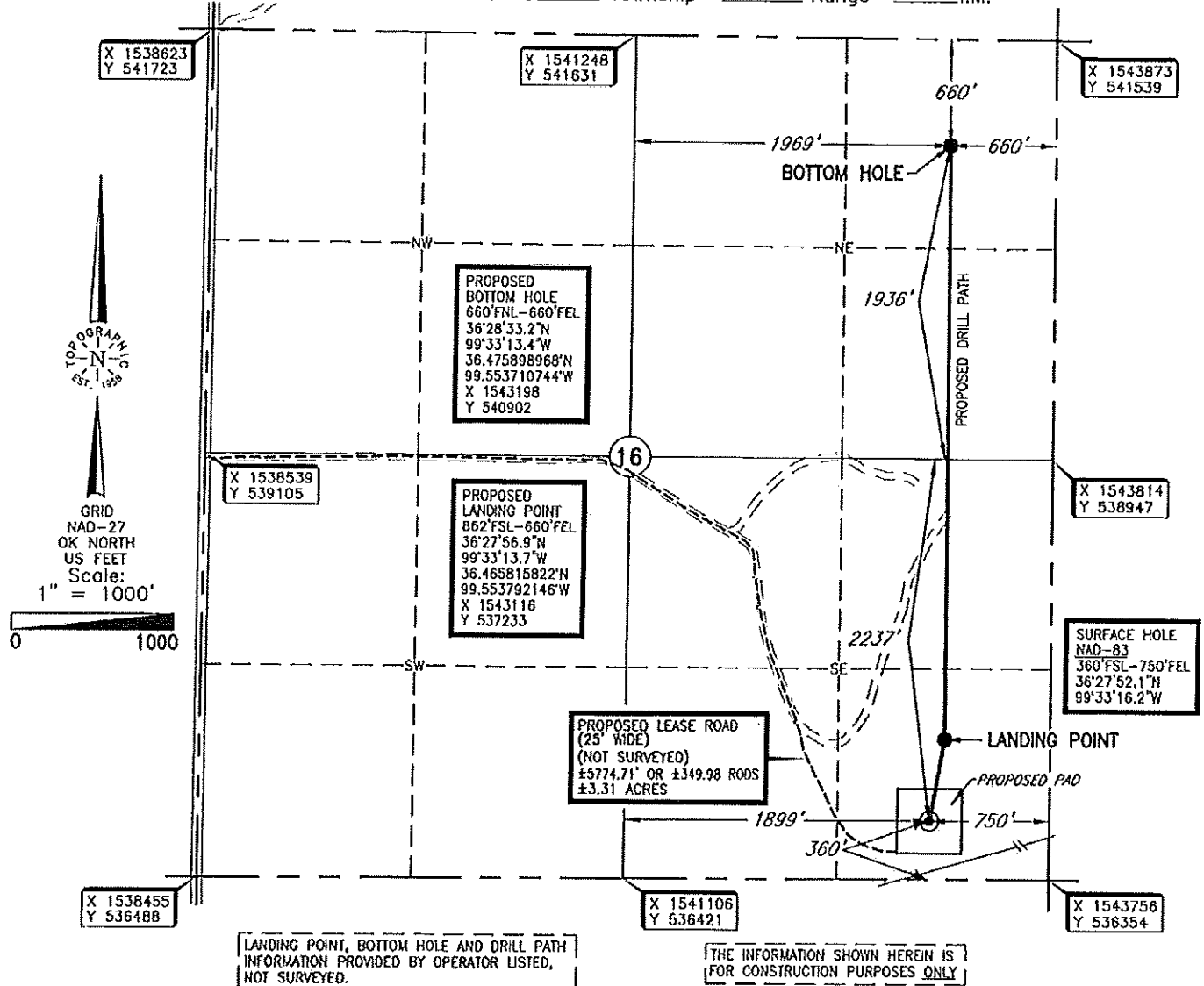
13800 WIRELESS WAY, OKLA. CITY, OKLA. 73134 • LOCAL (405) 843-4847 • OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS

WOODWARD

County, Oklahoma

360'FSL - 750'FEL Section 16 Township 23N Range 22W 1.M.



Operator: BMR II, LLC

Lease Name: DALE THOMAS

Well No.: 1-16H

ELEVATION:

2104' Gr. at Stake (NAVD88)

2103' Gr. at Stake (NGVD29)

Topography & Vegetation Location fell in sandy hills and level pasture, ±220' NW of NE-SW OneOk pipeline.

Good Drill Site? Yes Reference Stakes or Alternate Location Stakes Set None

Best Accessibility to Location From northwest off lease road.

Distance & Direction

from Hwy Jct or Town From the Jct. of St. Hwy. 15 E-W and U.S. Hwy. 183 North in Woodward, OK, go ±5.0 miles North, then ±3.75 miles West, then ±2.0 miles South, then ±1.0 mile East through Section 16 to the SE Corner of Section 16, T23N - R22W.

DATUM: NAD-27

LAT: 36°27'52.0\"N

LONG: 99°33'14.8\"W

LONG: 36.464438074\"N

LONG: 99.554109704\"W

STATE PLANE
COORDINATES (US FEET):

ZONE: OK NORTH

X: 1543014

Y: 536733

Invoice # 293520 Date of Drawing: May 11, 2018

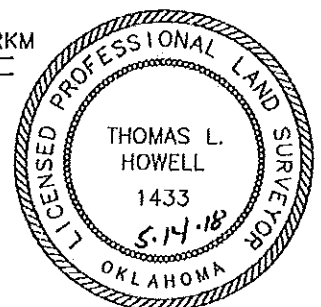
Date Staked: May 8, 2018

RKM

CERTIFICATE:

I, Thomas L. Howell an Oklahoma Licensed Land Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the information shown herein.

Oklahoma Reg. No. 1433



This information was gathered with a GPS receiver with ±1 foot Horiz./Vert. accuracy.