

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

API NUMBER: 045 23729

Approval Date: 02/02/2018

Expiration Date: 08/02/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 16 Twp: 18N Rge: 24W

County: ELLIS

SPOT LOCATION: ☐ SW ☐ SW ☐ SE ☐ SE

FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 281 1210

Lease Name: WILLA

Well No: 21 3H

Well will be 281 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

JUDY ANN JOHNSON
P.O. BOX 511
ARNETT OK 73832

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

Name	Depth	Name	Depth
1 MARMATON	9250	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 580287

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201708713
201708711

Special Orders:

Total Depth: 15000

Ground Elevation: 2368

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 660

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: 18-33686

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: 100000

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 21 Twp 18N Rge 24W County ELLIS

Spot Location of End Point: SE SW SW SE

Feet From: SOUTH 1/4 Section Line: 165

Feet From: EAST 1/4 Section Line: 2280

Depth of Deviation: 8838

Radius of Turn: 750

Direction: 190

Total Length: 4984

Measured Total Depth: 15000

True Vertical Depth: 9430

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

Notes:

Category

Description

DEEP SURFACE CASING

1/26/2018 - G71 - 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

1/26/2018 - 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: 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

1/26/2018 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 1 – WBM & CUTTINGS TO BE SOIL FARMED; PIT 2 - OBM TO VENDOR, OBM CUTTINGS TO COMMERCIAL PIT OR LONE MOUNTAIN FACILITY, EPA ID # OKD065438376, 28 & 33-23N-15W, MAJOR CO.

PENDING CD - 201708711

2/2/2018 - G75 - 21-18N-24W
X580287 MRMN
2 WELLS
NO OP. NAMED
REC 1-22-2018 (MURER)

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

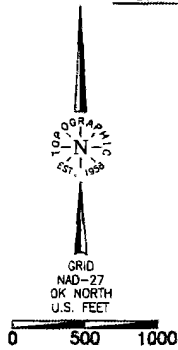
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Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

045 23729 WILLA 21 3H

Category	Description
PENDING CD - 201708713	2/2/2018 - G75 - (I.O.) 21-18N-24W X580287 MRMN COMPL. INT. NCT 165' TO NL, NCT 165' TO SL, NCT 2280' TO EL NO OP. NAMED REC 1-22-2018 (MURER)
SPACING - 580287	2/2/2018 - G75 - (640)(HOR) 21-18N-24W EST MRMN, OTHERS POE TO BHL NCT 660 FB (SUPERSEDE NON-DEVELOPED NON-HORIZONTAL SPACING UNITS; COEXIST WITH PRODUCING NON-HORIZONTAL SPACING UNITS)

281' FSL - 1210' FEL Section 16 Township 18N Range 24W I.M.



LANDING POINT, TPT, BOTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED.

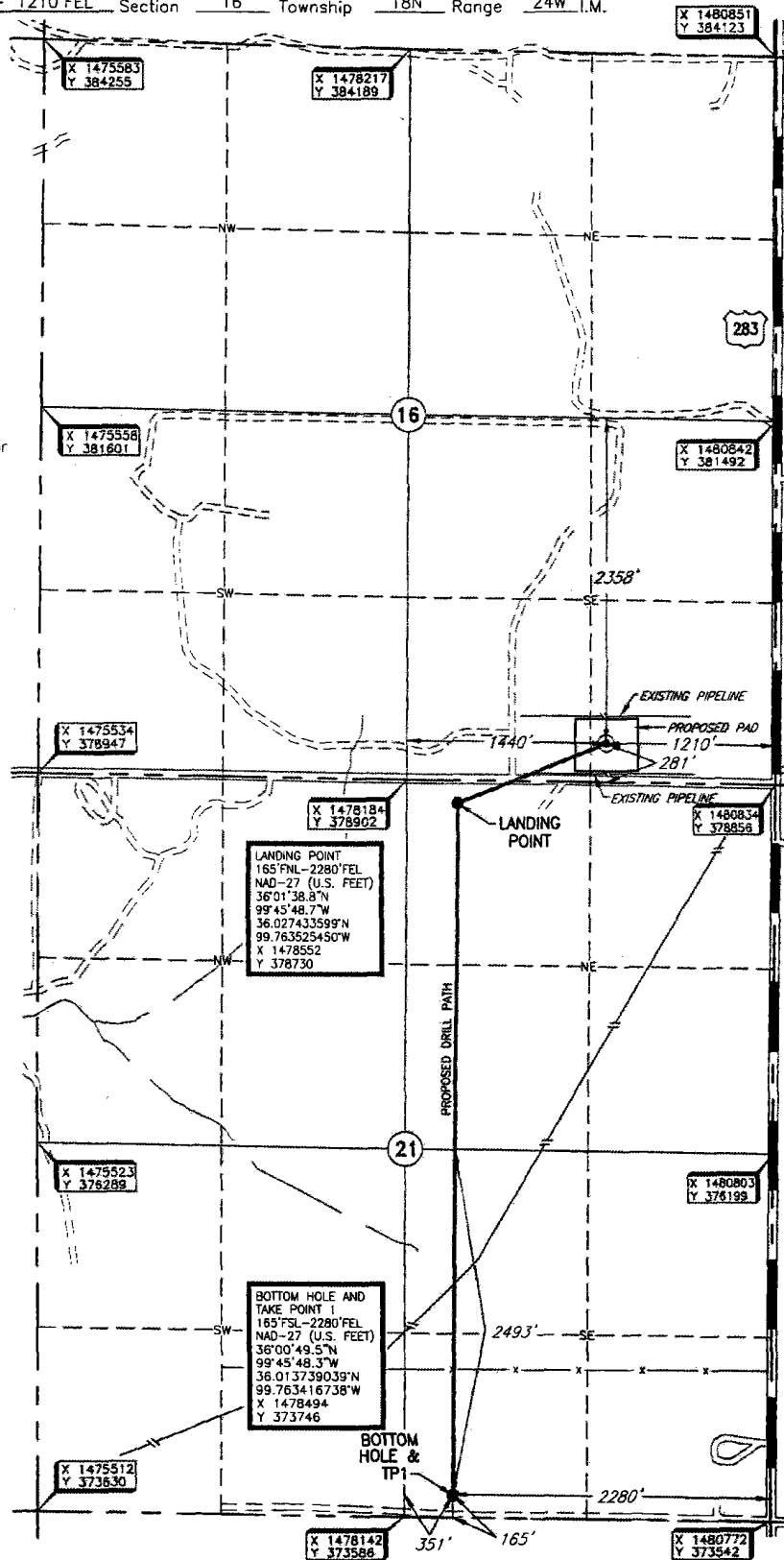
-NOTE-

The information shown herein is for construction purposes ONLY.

Operator: EOG RESOURCES, INC.
 Lease Name: WILLA 21
 Topography & Vegetation: Location fell in slope grass pasture, E-W pipeline ±195' North and ±220' South.
 Good Drill Site? Yes
 Reference Stakes or Alternate Location: Stakes Set None
 Best Accessibility to Location: From South off county road
 Distance & Direction from Hwy Jct or Town: From the Jct. of U.S. Hwy. 60 and U.S. Hwy. 283, go ±7.5 miles South on U.S. Hwy. 283 to the SE corner of Section 16, T18N - R24W.

Well No.: #311

ELEVATION:
2368' Gr. at Stake



DATUM: NAD-27
 LAT: 36°01'43.2"N
 LONG: 99°45'35.7"W
 LAT: 36.028662204°N
 LONG: 99.759923427°W
 STATE PLANE
 COORDINATES: (US Feet)
 ZONE: OK NORTH
 X: 1479626
 Y: 379158

Date of Drawing: January 19, 2018
 Invoice # 285814A Date Staked: January 12, 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

Thomas L. Howell
 Oklahoma Lic. No. 1433

