API NUMBER: 051 24242

Oil & Gas

Horizontal Hole

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

Approval Date: 01/04/2018
Expiration Date: 07/04/2018

PERMIT TO DRILL

WELL LOCATION: Sec: 23 Twp: 8N Rge: 5W County: GRADY

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

SECTION LINES: 445 1545

Lease Name: TED Well No: 2326 1H Well will be 445 feet from nearest unit or lease boundary.

Operator EOG RESOURCES INC Telephone: 4052463212 OTC/OCC Number: 16231 0

EOG RESOURCES INC

3817 NW EXPRESSWAY STE 500

OKLAHOMA CITY, OK 73112-1483

BETTY JEAN & JEFFREY RALPH SHANNON

2712 NW 25TH STREET

BLANCHARD OK 73010

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

Name Depth Name Depth WOODFORD 1 10365 6 2 HUNTON 10495 7 3 8 4 9 10

Spacing Orders: 527145 Location Exception Orders: Increased Density Orders:

Pending CD Numbers: 201707670 Special Orders:

201707671 201707668 201707669

Total Depth: 21195 Ground Elevation: 1293 **Surface Casing: 1500** Depth to base of Treatable Water-Bearing FM: 380

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 D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 17-33641

Chlorides Max: 5000 Average: 3000 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

Within Time of municipal water well:

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: DUNCAN

## 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: DUNCAN

## **HORIZONTAL HOLE 1**

Rge 5W Sec 26 Twp 8N County **GRADY** Spot Location of End Point: S2 SW SW SW Feet From: SOUTH 1/4 Section Line: 50 WEST Feet From: 1/4 Section Line: 330

Depth of Deviation: 10085 Radius of Turn: 477 Direction: 190

Total Length: 10361

Measured Total Depth: 21195
True Vertical Depth: 10695
End Point Location from Lease,
Unit, or Property Line: 50

Notes:

Category Description

DEEP SURFACE CASING 1/3/2018 - 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 1/3/2018 - 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 1/3/2018 - G71 - PITS 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 LONE MOUNTAIN FACILITY, EPA ID # OKD065438376, 28 & 33-23N-15W, MAJOR CO. OR DEQ

APPROVED FACILITY (SOUTHERN PLAINS LANDFILL, GRADY CO., # 3526013)

PENDING CD - 201707668 1/4/2018 - G75 - (E.O.)(640)(HOR) 23-8N-5W

EXT 652880 WDFD

POE TO BHL NCT 165' FNL & FSL, NCT 330' FEL & FWL

EOG RESOURCES, INC. REC 12-28-2017 (DUNN)

Category Description

PENDING CD - 201707669 1/4/2018 - G75 - (E.O.)(640)(HOR) 26-8N-5W

EXT 634535 WDFD, HNTN

POE TO BHL (HNTN) NCT 660' FB

POE TO BHL (WDFD) NCT 165' FNL & FSL, NCT 330' FEL & FWL

(COEXIST SP. ORDER # 239129 MSRH) EOG RESOURCES, INC.

REC 12-28-2017 (DUNN)

PENDING CD - 201707670 1/4/2018 - G75 - (E.O.) 23 & 26-8N-5W

EST MULTIUNIT HORIZONTAL WELL

X527145 HNTN 23-8N-5W X201707668 WDFD 23-8N-5W X201707669 WDFD. HNTN 26-8N-5W

(HNTN ADJACENT COMMON SOURCE OF SUPPLY TO WDFD)

50% 23-8N-5W 50% 26-8N-5W

EOG RESOURCES, INC. REC 12-28-2017 (DUNN)

PENDING CD - 201707671 1/4/2018 - G75 - (E.O.) 23 & 26-8N-5W

X527145 HNTN 23-8N-5W X201707668 WDFD 23-8N-5W X201707669 WDFD. HNTN 26-8N-5W

COMPL. INT. (23-8N-5W) NCT 165' FNL, NCT 0' FSL, NCT 330' FWL COMPL. INT. (26-8N-5W) NCT 0' FNL, NCT 165' FSL, NCT 330' FWL

EOG RESOURCES, INC. REC 12-28-2017 (DUNN)

1/4/2018 - G75 - (640) 23-8N-5W **SPACING - 527145** 

**EST OTHERS** 

EXT 163211 HNTN, OTHERS

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA
6709 NORTH CLASSEN BLVD., OKLA. CITY, OKLA. 73116 \* LOCAL (405) 843-4847 \* OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS GRADY County, Oklahoma
8N Range API 051-24242 445'FNL-1545'FWL \_\_5W\_\_I.M. \_ Section Township \_ Range 445' BLANCHARD CITY LIMITS X= 2088023 Y= 664982 X= 2090667 Y= 665002 construction purposes information LANDING POINT 165'FNL-330'FWL NAD-27 (US Feet 35'09'35.3"N 97'42'15.9"W 35.159802750'N 97.704422137'W X= 2088354 Y= 664819 1099 NOTE: herein N //[ for 11 X= 2093329 Y= 662366 (23)Best Accessibility to L Distance & Direction from Hwy Jct or Town North, then West ± X= 2088031 Y= 662337 Good Operator: opography & Drill Name: ±809 Site? EOG Vegetation Œ RESOURCES, tion Yes From Loc. NC From fell St. ⊒. Hwy. mile North pasture X= 2093329 Y= 659724 X= 2090685 Y= 659709 9/76/US Hwy. Reference S Stakes Set North off with county then brush Stakes or road. 62/277 mile PATH EXISTING WELL Well Alternate and ±833' No. // the ō // #1H the Location Grady-McClain X= 2088058 Y= 657055 X= 2093337 Y= 657079 Z (26) Cor TAKE POINT 1 165 FSL-330 FWL NAD-27 (US Feet) 35 07 53.9 "N 97 42 15.8 "W 35.131 650036 N 97.704383719 W X= 2088395 Y= 654573 **ELEVATION:** 1293' Gr. at 今 county Sec 2599' 23-T8N-R5W ine BOTTOM HOLE 50"FSL-330"FWL NAD-27 (US Feet) 35"07"52.8"N 97"42"15.8"W 35,131334074"N 97.704383659"W X= 2088396 Y= 654458 go ±0.25 miles X= 2088066 Y= 654406 X= 2090706 Y= 654420 2310' LANDING POINT, TAKE POINT 1, BOTTOM HOLE, AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED. 330' 50' Date of Drawing: \_\_\_Jan. 4, 2018 ESSIONAL DATUM: NAD-27 LAT: 35°09'32.6"N Invoice # 286553 Date Staked: Dec. 11, 2017 TR LONG: 97°42'01.3"W **CERTIFICATE:** LAT: \_\_35.159048393°N THOMAS L Thomas L. Howell an Oklahoma Licensed Land LONG: 97.700357540°W HOWELL Surveyor and an authorized agent of Topographic Land STATE PLANE Surveyors of Oklahoma, do hereby certify to the 1433 COORDINATES: (US Feet) -4-18 information shown herein This ered ±1 fc OK SOUTH ZONE: Thomas INaway 2089570 664548 Oklahoma Lic. No. \_