

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

API NUMBER: 073 26126

Approval Date: 06/27/2018

Expiration Date: 12/27/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 15 Twp: 16N Rge: 9W

County: KINGFISHER

SPOT LOCATION: ☐ NW ☐ SE ☐ NW ☐ NW

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 818 930

Lease Name: RUTHIE 1609

Well No: 4-15-22MXH

Well will be 818 feet from nearest unit or lease boundary.

Operator Name: MARATHON OIL COMPANY

Telephone: 7132962003

OTC/OCC Number: 1363 0

MARATHON OIL COMPANY
5555 SAN FELIPE ST
HOUSTON, TX 77056-2701

BOB & RUTH MURRAY TRUST
19057 N. 2710 ROAD
OMEGA OK 73764

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN (EX CHESTER)	9245	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 658849
658952

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201803250
201803242
201803244
201803251
201803243
201803245

Special Orders:

Total Depth: 19632

Ground Elevation: 1156

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 580

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: 5000 Average: 3000

E. Haul to Commercial pit facility: Sec. 31 Twn. 12N Rng. 8W Cnty. 17 Order No: 587498

Is depth to top of ground water greater than 10ft below base of pit? Y

H. SEE MEMO

Within 1 mile of municipal water well? N

Wellhead Protection Area? N

Pit is not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: CHICKASHA

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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: CHICKASHA

HORIZONTAL HOLE 1

Sec 22 Twp 16N Rge 9W County KINGFISHER

Spot Location of End Point: SW SE SE SW

Feet From: SOUTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 2125

Depth of Deviation: 8558

Radius of Turn: 477

Direction: 160

Total Length: 10325

Measured Total Depth: 19632

True Vertical Depth: 9776

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

Additional Surface Owner	Address	City, State, Zip
BOB & RUTH MURRAY TRUST	19057 N. 2710 ROAD	OMEGA, OK 73764

Notes:

Category

Description

DEEP SURFACE CASING

6/6/2018 - 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

6/6/2018 - 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

INTERMEDIATE CASING

6/6/2018 - G71 - DUE TO THE KNOWN POTENTIAL RISK OF ENCOUNTERING AN OVER-PRESSURED ZONE IN THE MORROW SERIES IN THIS AREA, THE TECHNICAL MANAGER RECOMMENDS SETTING AN INTERMEDIATE STRING OF CASING IMMEDIATELY ABOVE THE MORROW SERIES

MEMO

6/6/2018 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

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

073 26126 RUTHIE 1609 4-15-22MXH

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.

Category	Description
PENDING CD - 201803242	6/26/2018 - G75 - (I.O.) 15-16N-9W X658849 MSNLC 7 WELLS MARATHON OIL CO. REC 5-14-2018 (DENTON)
PENDING CD - 201803243	6/26/2018 - G75 - (I.O.) 15-16N-9W X165:10-3-28(C)(2)(B) MSNLC (RUTHIE 1609 4-15-22MXH) MAY BE CLOSER THAN 600' TO OTHER PROPOSED WELLS MARATHON OIL CO. REC 5-14-2018 (DENTON)
PENDING CD - 201803244	6/26/2018 - G75 - (I.O.) 22-16N-9W X658952 MSNLC 7 WELLS MARATHON OIL CO. REC 5-14-2018 (DENTON)
PENDING CD - 201803245	6/26/2018 - G75 - (I.O.) 22-16N-9W X165:10-3-28(C)(2)(B) MSNLC (RUTHIE 1609 4-15-22MXH) MAY BE CLOSER THAN 600' TO OPPEL 4-22, OPPEL TRUST 5-22 OR OTHER PROPOSED WELLS MARATHON OIL CO. REC 5-14-2018 (DENTON)
PENDING CD - 201803250	6/26/2018 - G75 - (I.O.) 15 & 22-16N-9W EST MULTIUNIT HORIZONTAL WELL X658849 MSNLC 15-16N-9W X658952 MSNLC 22-16N-9W 50% 15-16N-9W 50% 22-16N-9W MARATHON OIL CO. REC 5-14-2018 (DENTON)
PENDING CD - 201803251	6/26/2018 - G75 - (I.O.) 15 & 22-16N-9W X658849 MSNLC 15-16N-9W X658952 MSNLC 22-16N-9W COMPL. INT. (15-16N-9W) NCT 150' FNL, NCT 0' FSL, NCT 1320' FWL COMPL. INT. (22-16N-9W) NCT 0' FNL, NCT 150' FSL, NCT 1320' FWL MARATHON OIL CO. REC 5-14-2018 (DENTON)
SPACING - 658849	6/26/2018 - G75 - (640)(HOR) 15-16N-9W EST MSNLC POE TO BHL NLT 660' FB (COEXIST SP. ORDER # 489218 MSSLM & ORDER # 72763 MNNG)
SPACING - 658952	6/26/2018 - G75 - (640)(HOR) 22-16N-9W EST MSNLC POE TO BHL NLT 660' FB (COEXIST SP. ORDER # 165403 MSSSD W2; ORDER # 77626 MNNG W2 & ORDER # 127439/391664 MNNG E2)

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

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ATWELL
866.850.4200 www.atwell-group.com

4271 South Lee St., Suite 202
Buford, GA 30518
C.O.A. No. CA 6036

API 073-26126

KINGFISHER COUNTY, OKLAHOMA

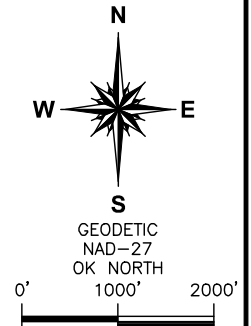
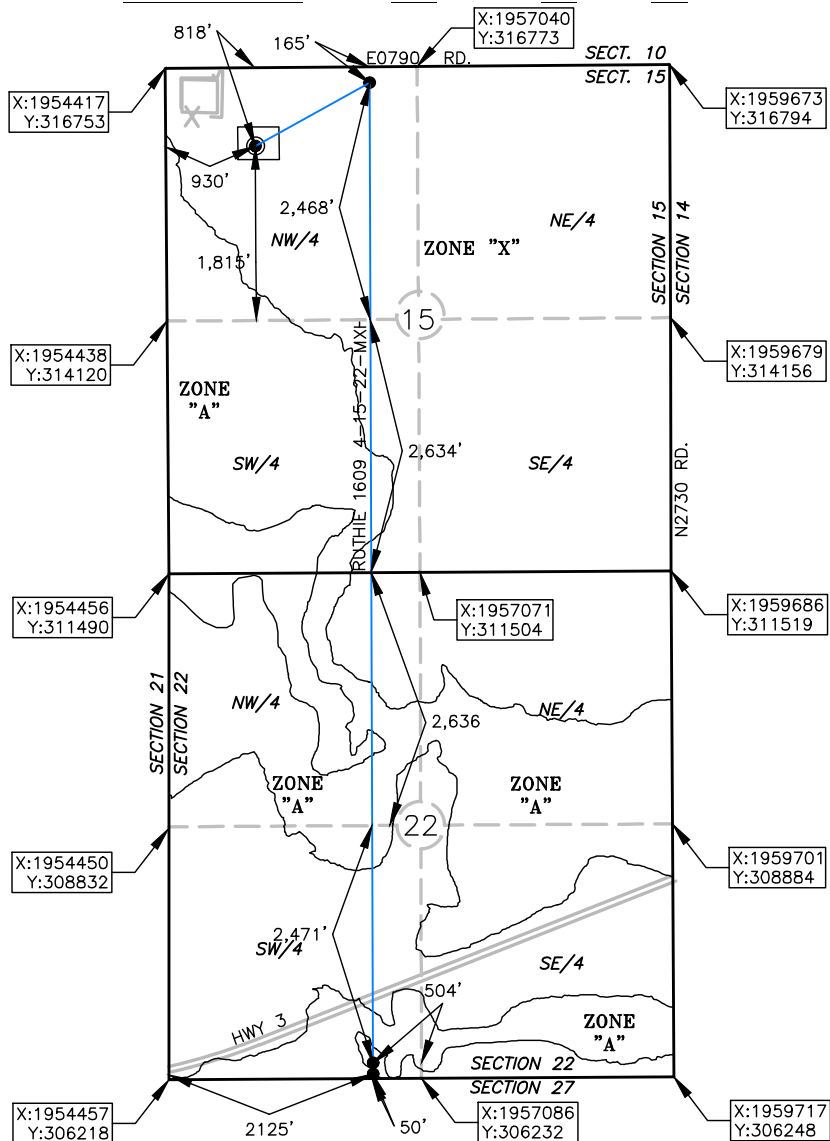
818' FNL - 930' FWL SECTION 15 TOWNSHIP 16N RANGE 9W I.M.

PROPOSED
SURFACE HOLE
818'FNL-930'FWL
NAD 27 (US FEET)
N35°52'04.3"
W98°09'02.4"
N35.867859
W98.150680
X:1955354
Y:315942

PROPOSED
FIRST TAKE POINT
165'FNL-2125'FWL
NAD 27 (US FEET)
N35°52'10.9"
W98°08'48.0"
N35.869684
W98.146688
X:1956543
Y:316604

PROPOSED
LAST TAKE POINT
165'FSL-2125'FWL
NAD 27 (US FEET)
N35°50'29.9"
W98°08'47.3"
N35.841635
W98.146484
X:1956582
Y:306394

PROPOSED
BOTTOM HOLE
50'FSL-2125'FWL
NAD 27 (US FEET)
N35°50'28.7"
W98°08'47.3"
N35.841319
W98.146484
X:1956582
Y:306279



OPERATOR: MARATHON OIL COMPANY

LEASE NAME: RUTHIE 1609

WELL NO.: 4-15-22MXH

TOPOGRAPHY & VEGETATION: OPEN FIELD

ELEVATION:

1,159' GR. AT STAKE NAVD88

1,156' GR. AT STAKE NGVD29

GOOD DRILL SITE? YES REFERENCE STAKES OR ALTERNATE LOCATION
STAKES SET NONE

BEST ACCESS TO LOCATION: E0790 RD TO THE SOUTH.

DISTANCE AND DIRECTION
FROM HWY JCT OR TOWN BEGINNING AT THE INTERSECTION OF MAIN STREET (OK HWY 8) AND AIRPORT DR. IN KINGFISHER OK DRIVE WEST ON AIRPORT DR. FOR APPROX. 5.5 MILES
AT WHICH POINT ROAD TURNS INTO E0790 RD. CONTINUE WEST ON E0790 RD. APPROX. 6.8 MILES. SITE IS IN THE FIELD ON THE SOUTH SIDE OF THE ROAD.

DATUM: NAD 27

LAT: 35° 52' 04.3" N

LONG: 98° 09' 02.2" W

LAT: 35.867859° N

LONG: 98.150680° W

STATE PLANE
COORDINATES: (US FEET)

ZONE: OK NORTH

X: 1955354

Y: 315942

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

JOB NO.: 18001058

DATE OF DRAWING: 03/30/18

DATE STAKED: 03/28/18

CERTIFICATE:

I, DAVID L. ANDERSON an Oklahoma Licensed Land
Surveyor and an authorized agent of Atwell, LLC, do
hereby certify to the information shown herein

David L. Anderson
Oklahoma Lic. No. 1927

6/21/18

