

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

API NUMBER: 017 25575

Approval Date: 12/13/2019

Expiration Date: 06/13/2021

Horizontal Hole

Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 01 Twp: 14N Rge: 8W

County: CANADIAN

SPOT LOCATION: ☐ NW ☐ NE ☐ SE ☐ SE

FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 1188 619

Lease Name: GRELLNER 1408

Well No: 4-1MH

Well will be 619 feet from nearest unit or lease boundary.

Operator Name: MARATHON OIL COMPANY

Telephone: 4057285228

OTC/OCC Number: 1363 0

MARATHON OIL COMPANY

PO BOX 68

HOUSTON, TX 77001-0068

NEAL R. GOODWIN, TRUSTEE

4909 SOUTH W STREET

FORT SMITH AR 72903

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	9000	6	
2			7	
3			8	
4			9	
5			10	

Spacing Orders: 647318

Location Exception Orders: 703838

Increased Density Orders: 705100

Pending CD Numbers:

Special Orders:

Total Depth: 12831

Ground Elevation: 1208

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 360

Deep surface casing has been approved

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

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

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

PERMIT NO: 19-37139

H. SEE MEMO

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

The duration of this permit is 18 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 01 Twp 14N Rge 8W County CANADIAN

Spot Location of End Point: NW NE NE NE

Feet From: NORTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 375

Depth of Deviation: 8523

Radius of Turn: 477

Direction: 360

Total Length: 3559

Measured Total Depth: 12831

True Vertical Depth: 9007

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

Notes:

Category

Description

DEEP SURFACE CASING

12/9/2019 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING

HYDRAULIC FRACTURING

12/9/2019 - 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

INCREASED DENSITY - 705100 (201904486)

12/13/2019 - GC2 - 1-14N-8W
X647318 MSSP
2 WELLS
MARATHON OIL COMPANY
11-12-2019

INTERMEDIATE CASING

12/9/2019 - 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

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

The duration of this permit is 18 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.

017 25575 GRELLNER 1408 4-1MH

LOCATION EXCEPTION - 703838
(201904485)

12/13/2019 - GC2 - (I.O.) 1-14N-8W
X647318 MSSP
COMPL. INT. NCT 150' FNL, NCT 150' FSL, NCT 330' FEL
MARATHON OIL COMPANY
10-17-2019

MEMO

12/9/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -
OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

SPACING - 647318

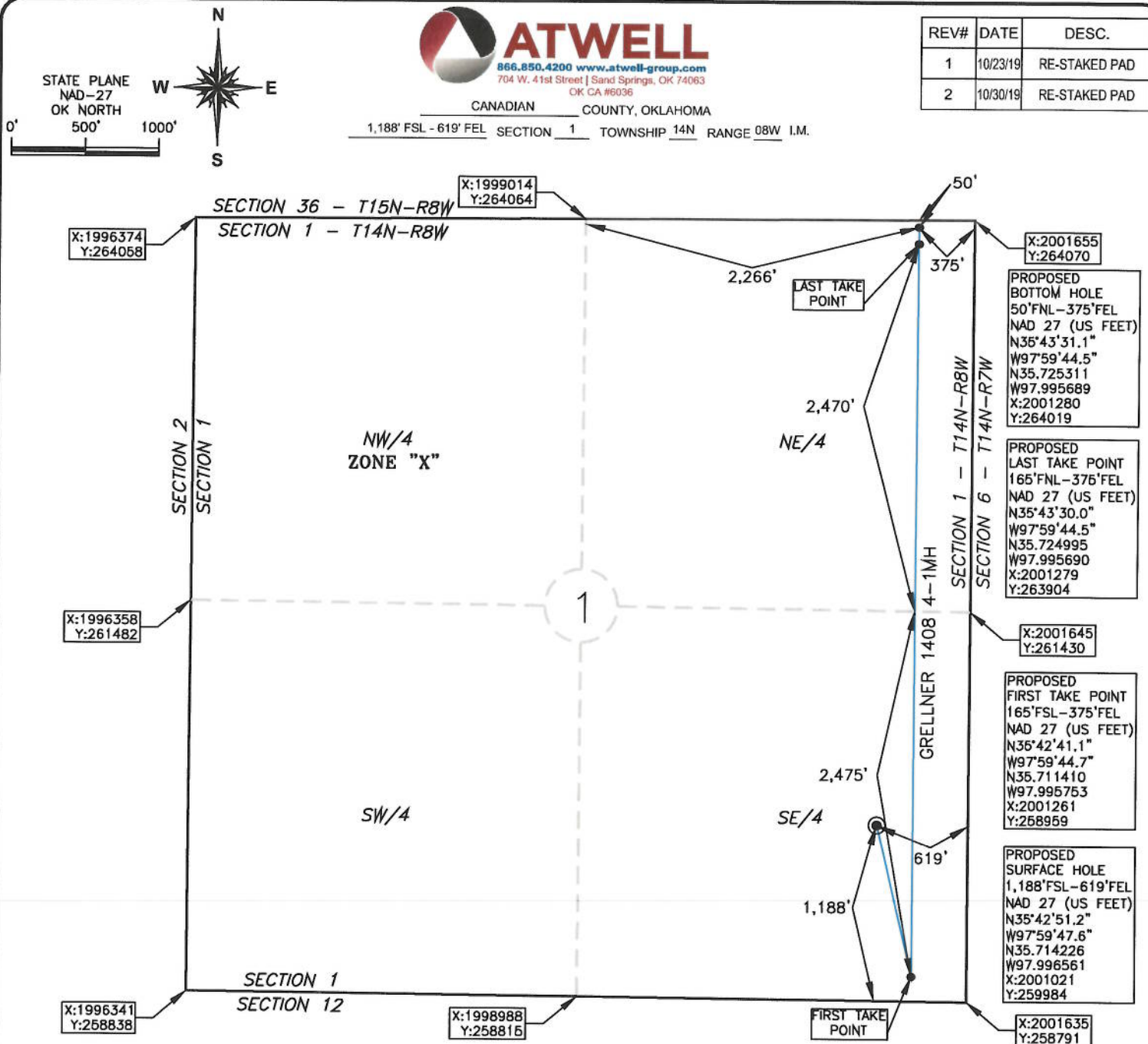
12/13/2019 - GC2 - (640)(HOR) 1-14N-8W
EXT 633940 MSSP
EST OTHER
COMPL. INT. NLT 660' FB
(EXIST CONCURRENTLY NON-HORIZONTAL DRILLING AND SPACING UNITS)



CANADIAN COUNTY, OKLAHOMA

1,188' FSL - 619' FEL SECTION 1 TOWNSHIP 14N RANGE 08W I.M.

REV#	DATE	DESC.
1	10/23/19	RE-STAKED PAD
2	10/30/19	RE-STAKED PAD



OPERATOR: MARATHON OIL COMPANY

LEASE NAME: GRELLNER 1408

WELL NO.: 4-1MH

TOPOGRAPHY & VEGETATION: OPEN FIELD

ELEVATION:

1,211' GR. AT STAKE NAVD88

1,208' GR. AT STAKE NGVD29

GOOD DRILL SITE? YES

REFERENCE STAKES OR ALTERNATE LOCATION
STAKES SET NONE

BEST ACCESS TO LOCATION: FROM THE WEST SIDE OF N REFORMATORY RD.

DISTANCE AND DIRECTION

FROM HWY JCT OR TOWN BEGINNING AT THE INTERSECTION OF 248TH ST NW & N REFORMATORY RD ±1.0 MI. WEST OF OKARCHIE, OK. THENCE SOUTH ALONG N REFORMATORY RD ±0.8MI. THE PAD SITE IS ON THE WEST SIDE OF THE ROAD.

DATUM: NAD 27

LAT: 35° 42' 51.2" N

LONG: 97° 59' 47.6" W

LAT: 35.714226° N

LONG: 97.996561° W

STATE PLANE

COORDINATES: (US FEET)

ZONE: OK NORTH

X: 2001021

Y: 259984

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

JOB NO.: 19003711

DATE OF DRAWING: 10/10/19

DATE STAKED: 10/09/19

CERTIFICATE:

I, MICHAEL C. RAY on Oklahoma Licensed Land
Surveyor and an authorized agent of Atwell, LLC, do
hereby certify to the information shown herein

Oklahoma Lic. No. 1653

