

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

API NUMBER: 017 25043

Approval Date: 07/13/2017
Expiration Date: 01/13/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 02 Twp: 14N Rge: 9W County: CANADIAN
SPOT LOCATION: NE NW NE NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 200 970

Lease Name: FRED 1409 Well No: 1-2MH Well will be 200 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

RICK J SCHWEITZER
21139 N CALMUET ROAD
OKARCHE OK 73762

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

Name	Depth	Name	Depth
1	MISSISSIPPI SOLID	9850	6
2			7
3			8
4			9
5			10

Spacing Orders: 166936

Location Exception Orders: 658787

Increased Density Orders:

Pending CD Numbers: 201704554

Special Orders:

Total Depth: 14988

Ground Elevation: 1212

Surface Casing: 1500

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: 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: FLOWERPOT

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

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: 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: FLOWERPOT

HORIZONTAL HOLE 1

Sec 02 Twp 14N Rge 9W County CANADIAN

Spot Location of End Point: S2 SE SE SE

Feet From: SOUTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 330

Depth of Deviation: 9388

Radius of Turn: 462

Direction: 177

Total Length: 4874

Measured Total Depth: 14988

True Vertical Depth: 10118

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

Notes:

Category

Description

DEEP SURFACE CASING

7/5/2017 - 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

7/5/2017 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK [HTTP://FRACFOCUS.ORG/](http://fracfocus.org/) WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE

INTERMEDIATE CASING

7/5/2017 - 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

LOCATION EXCEPTION - 658787

7/6/2017 - G60 - (I.O.) 2-14N-9W
X166936 MSSSD
COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 330' FEL OR FWL
NO OP. NAMED
12/12/16

MEMO

7/5/2017 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201704554

7/13/2017 - G60 - (E.O.) 2-14N-9W
X166936 MSSSD
1 WELL
MARATHON OIL CO.
HEARING 7/21/17

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.

Category

Description

SPACING - 166936

7/6/2017 - G60 - (640) 2-14N-9W
EXT OTHERS
EXT 76186/164538 MSSSD, OTHER

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.

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

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

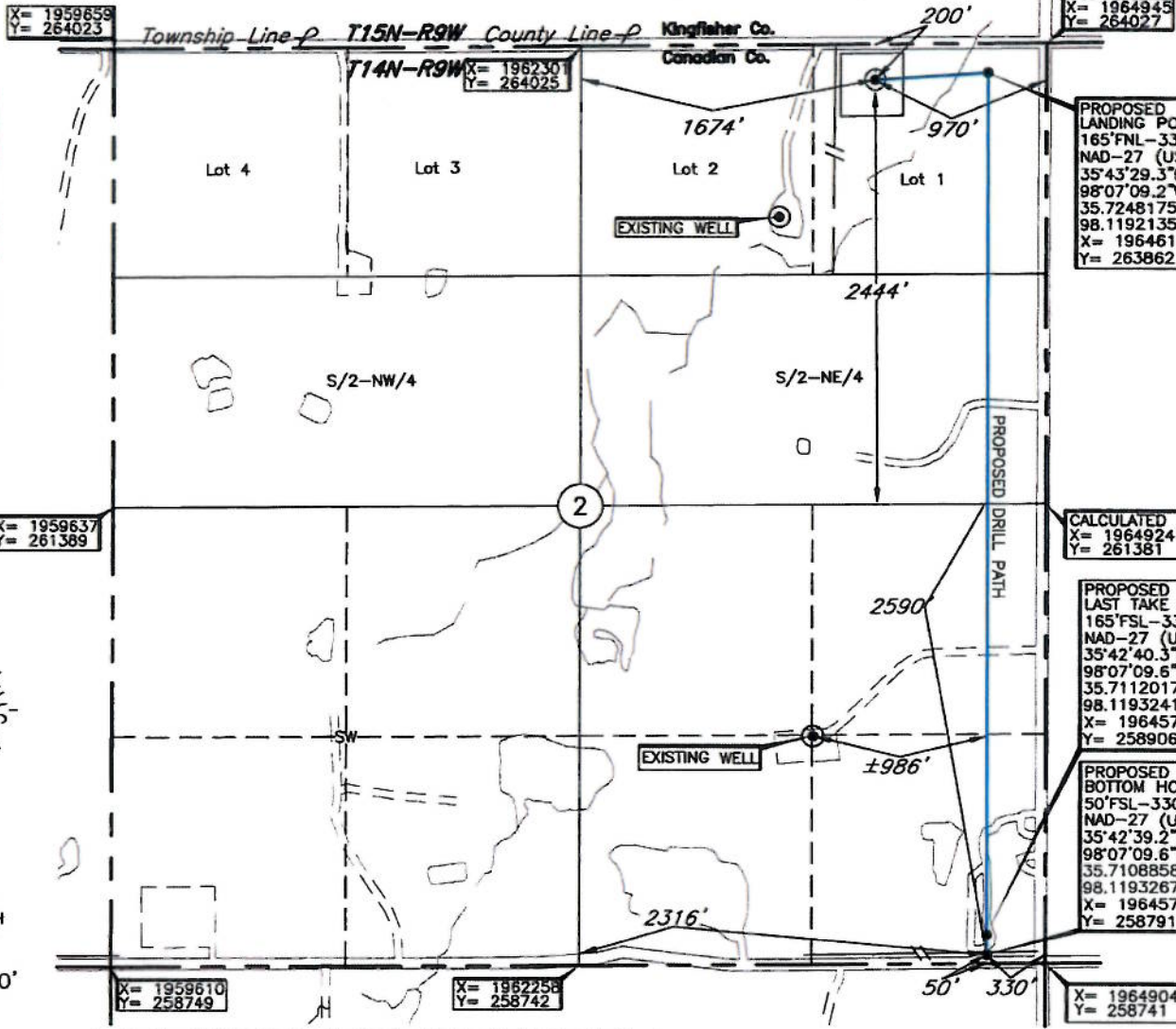
Certificate of Authorization No. 1293 LS

CANADIAN

County, Oklahoma

200'FNL-970'FEL Section 2 Township 14N Range 9W I.M.

NOTE:
The information shown herein is for construction purposes ONLY.



PROPOSED LANDING POINT
165'FNL-330'FEL
NAD-27 (US Feet)
35°43'29.3"N
98°07'09.2"W
35.724817582°N
98.119213556°W
X= 1964614
Y= 263862

CALCULATED
X= 1964924
Y= 261381

PROPOSED LAST TAKE POINT
165'FSL-330'FEL
NAD-27 (US Feet)
35°42'40.3"N
98°07'09.6"W
35.711201744°N
98.119324134°W
X= 1964575
Y= 258906

PROPOSED BOTTOM HOLE
50'FSL-330'FEL
NAD-27 (US Feet)
35°42'39.2"N
98°07'09.6"W
35.710885811°N
98.119326713°W
X= 1964574
Y= 258791

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

Operator: MARATHON OIL COMPANY

Lease Name: FRED 1409

Well No.: 1-2MH **ELEVATION:** 1212' Gr. at Stake

Topography & Vegetation Loc. fell in pature ±230' East of N-S pipeline, ±365' NW of NE-SW Creek Bank

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

Best Accessibility to Location From North off county road
Distance & Direction from Hwy Jct or Town From US Hwy. 81 and County Line, in Okarche, OK, go west on county line road for ±8.0 miles to the NE Cor. of Sec. 2-T14N-R9W.

DATUM: NAD-27
LAT: 35°43'29.0"N
LONG: 98°07'16.9"W
LAT: 35.724717522°N
LONG: 98.121370597°W
STATE PLANE COORDINATES: (US Feet)
ZONE: OK NORTH
X: 1963973
Y: 263826

Date of Drawing: June 30, 2017
Invoice # 278410 Date Staked: Aug. 30, 2016 TR

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

