

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

API NUMBER: 017 25547

Approval Date: 10/18/2019

Expiration Date: 04/18/2021

Horizontal Hole  
Multi Unit

Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 09 Twp: 14N Rge: 8W County: CANADIAN

SPOT LOCATION: ☐ NE ☐ SW ☐ SE ☐ SW FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 339 1871

Lease Name: KNIGHT 1408 Well No: 4-9-4MXH Well will be 339 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

GEORGE RAY HEUPEL  
15151 N CHILES RD  
OKARCHE OK 73762

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	9764	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 625910  
651936  
703121

Location Exception Orders: 703769

Increased Density Orders: 702959  
702960

Pending CD Numbers:

Special Orders:

Total Depth: 19726

Ground Elevation: 1237

**Surface Casing: 1500**

Depth to base of Treatable Water-Bearing FM: 340

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

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: FLOWERPOT

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: FLOWERPOT

## HORIZONTAL HOLE 1

Sec 04 Twp 14N Rge 8W County CANADIAN

Spot Location of End Point: NW NE NW NW

Feet From: NORTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 700

Depth of Deviation: 9322

Radius of Turn: 462

Direction: 353

Total Length: 9678

Measured Total Depth: 19726

True Vertical Depth: 10292

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

### Notes:

#### Category

#### Description

DEEP SURFACE CASING

10/1/2019 - 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

10/1/2019 - 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](http://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](http://FRACFOCUS.ORG)

INCREASED DENSITY - 702959

10/16/2019 - GB1 - 4-14N-8W  
X625910 MSSP \*\*\*  
3 WELLS  
NO OP. NAMED  
9/30/2019

\*\*\* NPT WILL BE FILED TO ADD SP 651936 PER ATTORNEY

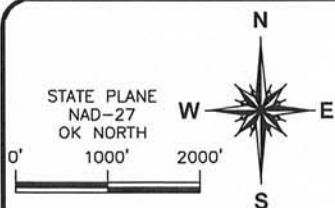
This permit does not address the right of entry or settlement of surface damages.

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.

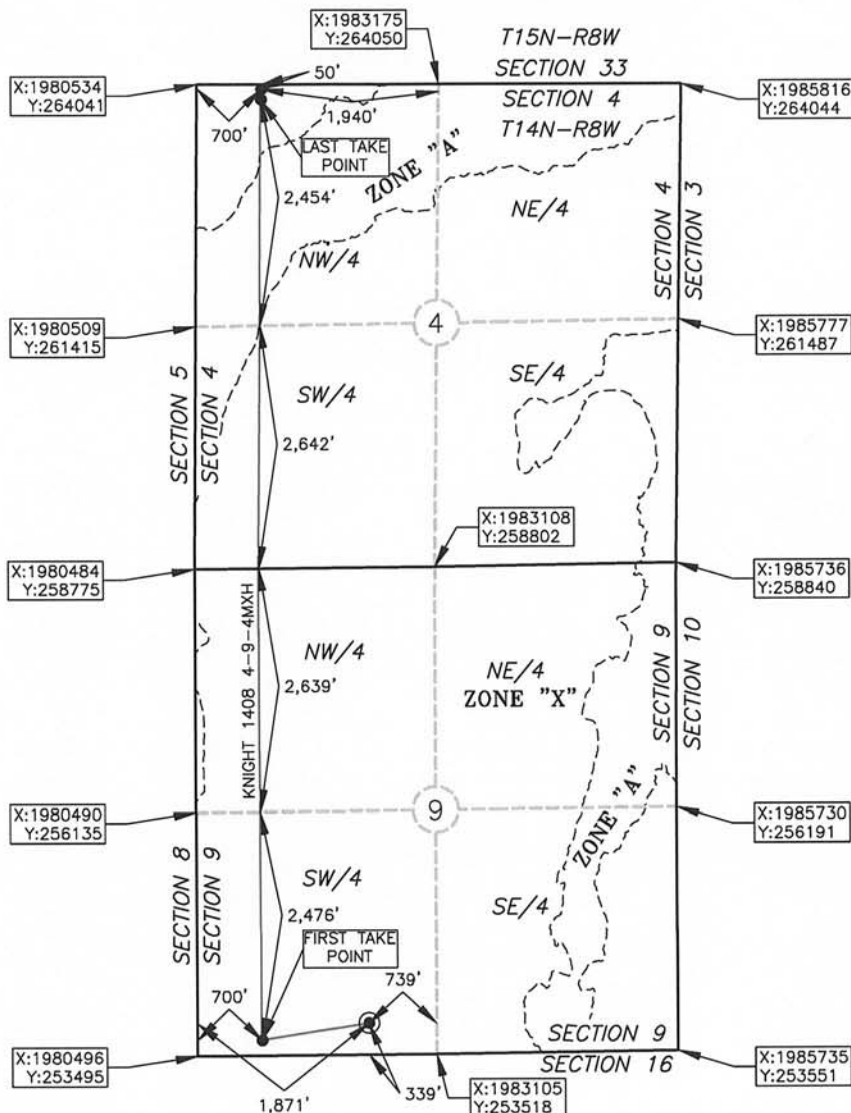
017 25547 KNIGHT 1408 4-9-4MXH

INCREASED DENSITY - 702960	10/16/2019 - GB1 - 9-14N-8W X625910 MSSP *** 3 WELLS NO OP NAMED 9/30/2019  *** NPT WILL BE FILED TO ADD SP 651936 PER ATTORNEY
INTERMEDIATE CASING	10/1/2019 - 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
LOCATION EXCEPTION - 703769	10/16/2019 - GB1 - (I.O.) 4 & 9-14N-8W X625910/651936 MSSP COMPL. INT. (4-14N-8W) NCT 150' FNL, NCT 0' FSL, NCT 330' FWL COMPL. INT. (9-14N-8W) NCT 0' FNL, NCT 150' FSL, NCT 330' FWL NO OP. NAMED 10/16/2019
MEMO	10/1/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
SPACING - 625910	10/16/2019 - GB1 - (640)(HOR) 4 & 9-14N-8W VAC 168986 CSTRU, MSSSD, MNNG VAC 171385 CSTRU, MSSSD, MNNG EXT 619356 MSSP, OTHER COMPL. INT. (MSSP) NLT 330' FB
SPACING - 651936	10/16/2019 - GB1 - NPT PARAGRAPH 8.D OF #625910 TO CHANGE MSSP TO CONVENTIONAL RESERVOIR WITH WELL LOCATION NLT 660' FB
SPACING - 703121	10/16/2019 - GB1 - (I.O.) 4 & 9-14N-8W EST MULTIUNIT HORIZONTAL WELL X625910 MSSP *** 50% 4-14N-8W 50% 9-14N-8W NO OP. NAMED 10/2/2019  *** SP 651936 WILL BE ADDED AT FINAL HEARING PER ATTORNEY



REV#	DATE	DESC.
1	07/23/19	MOVED PAD

CANADIAN COUNTY, OKLAHOMA  
339' FSL - 1,871' FWL SECTION 09 TOWNSHIP 14N RANGE 08W I.M.



PROPOSED  
BOTTOM HOLE  
50'FNL-700'FWL  
NAD 27 (US FEET)  
N35°43'30.8"  
W98°03'47.6"  
N35.725224  
W98.063222  
X:1981234  
Y:263993

PROPOSED  
LAST TAKE POINT  
165'FNL-700'FWL  
NAD 27 (US FEET)  
N35°43'29.7"  
W98°03'47.6"  
N35.724908  
W98.063225  
X:1981233  
Y:263878

PROPOSED  
FIRST TAKE POINT  
165'FSL-700'FWL  
NAD 27 (US FEET)  
N35°41'48.7"  
W98°03'48.0"  
N35.696853  
W98.063327  
X:1981196  
Y:253666

PROPOSED  
SURFACE HOLE  
339'FSL-1,871'FWL  
NAD 27 (US FEET)  
N35°41'50.5"  
W98°03'33.8"  
N35.697362  
W98.059385  
X:1982366  
Y:253851

OPERATOR: MARATHON OIL COMPANY

LEASE NAME: KNIGHT 1408

WELL NO.: 4-9-4MXH

TOPOGRAPHY & VEGETATION: OPEN FIELD

ELEVATION:
1,237' GR. AT STAKE NAVD88
1,234' GR. AT STAKE NGVD29

GOOD DRILL SITE? YES

REFERENCE STAKES OR ALTERNATE LOCATION  
STAKES SET NONE

BEST ACCESS TO LOCATION: NORTH FROM 220TH ST NW

DISTANCE AND DIRECTION

FROM HWY JCT OR TOWN BEGINNING AT THE INTERSECTION OF OKLAHOMA AVE & OK HWY 3/OK HWY 81 IN OKARCHE OK. THENCE WEST ALONG COUNTY LINE RD/E0890 RD APPROX.

4.0 MI. THENCE SOUTH ALONG N BRANDLEY RD APPROX. 2.0 MI. THENCE WEST ALONG 220TH ST NW APPROX. 0.7 MI. PAD IS IN THE FIELD ON THE NORTH SIDE OF THE ROAD.

DATUM: NAD 27

LAT: 35° 41' 50.5" N

LONG: 98° 03' 33.8" W

LAT: 35.697362° N

LONG: 98.059385° W

STATE PLANE

COORDINATES: (US FEET)

ZONE: OK NORTH

X: 1982366

Y: 253851

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

JOB NO.: 19002489

DATE OF DRAWING: 07-08-19

DATE STAKED: 07-03-19

CERTIFICATE:

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

Oklahoma Lic. No. 1653

