

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

API NUMBER: 137 27197

Approval Date: 04/10/2014  
Expiration Date: 10/10/2014

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 19 Twp: 1S Rge: 4W

County: STEPHENS

SPOT LOCATION:  N2  NE  NE  NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 250 330

Lease Name: HK DOOM

Well No: 1-19H

Well will be 250 feet from nearest unit or lease boundary.

Operator Name: MARATHON OIL COMPANY

Telephone: 7136296600; 4057205

OTC/OCC Number: 1363 0

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

CHEVRON USA INC.  
1400 SMITH STREET  
HOUSTON TX 77002

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	8886	6	
2	WOODFORD	11136	7	
3	HUNTON	11636	8	
4			9	
5			10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201400953  
201400954

Special Orders:

Total Depth: 16301

Ground Elevation: 1001

**Surface Casing: 1500**

Depth to base of Treatable Water-Bearing FM: 640

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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: GARBER

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

PERMIT NO: 14-26732

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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: GARBER

HORIZONTAL HOLE 1

Sec 19 Twp 1S Rge 4W County STEPHENS

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: 11091

Radius of Turn: 409

Direction: 180

Total Length: 4567

Measured Total Depth: 16301

True Vertical Depth: 11636

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

Notes:

Category

Description

DEEP SURFACE CASING

4/2/2014 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING

MEMO

4/2/2014 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

PENDING CD - 201400953

4/9/2014 - G75 - (640) 19-1S-4W  
EST MSSP, WDFD, HNTN, OTHERS  
REC 3-11-2014 (CANDLER)

PENDING CD - 201400954

4/9/2014 - G75 - (I.O.) 19-1S-4W  
X201400953 MSSP, WDFD, HNTN  
FIRST PERF NCT 150 FNL, NCT 250 FEL  
LAST PERF NCT 150 FSL, NCT 250 FEL  
NO OP. NAMED  
REC 3-11-2014 (CANDLER)

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.