

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

API NUMBER: 011 24028

Approval Date: 06/12/2018
Expiration Date: 12/12/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 02 Twp: 19N Rge: 12W County: BLAINE
SPOT LOCATION: FEET FROM QUARTER: FROM NORTH FROM WEST
SECTION LINES: 200 330

Lease Name: MAJOR Well No: 19-12-02 1H Well will be 200 feet from nearest unit or lease boundary.
Operator Name: STAGHORN PETROLEUM II LLC Telephone: 9185842558 OTC/OCC Number: 24056 0

STAGHORN PETROLEUM II LLC
1 W 3RD ST STE 1000
TULSA, OK 74103-3500

TIM CRAVENS
2018 GREENSTONE TRAIL
PRESIDENT OF THE CRAVENS RANCH INC
CARROLLTON TX 75010

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

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

Spacing Orders: 678687

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201802861

Special Orders:

Total Depth: 13500

Ground Elevation: 1332

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 310

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

PIT 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 8000 Average: 5000

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

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 18-34641

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 19N Rge 12W County BLAINE

Spot Location of End Point: SE SW SW SW

Feet From: SOUTH 1/4 Section Line: 135

Feet From: WEST 1/4 Section Line: 360

Depth of Deviation: 7208

Radius of Turn: 1000

Direction: 179

Total Length: 4721

Measured Total Depth: 13500

True Vertical Depth: 8332

End Point Location from Lease,
Unit, or Property Line: 135

Notes:

Category

Description

DEEP SURFACE CASING

6/7/2018 - 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

6/7/2018 - 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

6/7/2018 - 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

6/7/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

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.

Category	Description
PENDING CD - 201802861	6/12/2018 - G57 - (I.O.) 2-19N-12W X678687 MSSP COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 330' FWL NO OP. NAMED REC 4-30-2018 (JOHNSON)
SPACING - 678687	6/12/2018 - G57 - (640)(HOR) 2-19N-12W EST MSSP, OTHERS POE TO BHL NLT 660' FB (COEXIST WITH SP. ORDER #35526 UNCCR, #223041 MNNG, MSSSD)

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.

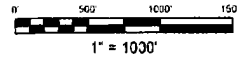


Well Location Plat

Operator: STAGHORN PETROLEUM, LLC
 Lease Name and No.: MAJOR 19-12-02 1H
 Footage: 200' FNL - 330' FWL Gr. Elevation: 1332'
 Section: 2 Township: 19N Range: 12W I.M.
 County: Blaine State of Oklahoma
 Terrain at Loc.: Location fell in wide open pasture with a Rural Water District water line running North-South on West side of location.



All bearings shown are grid bearings

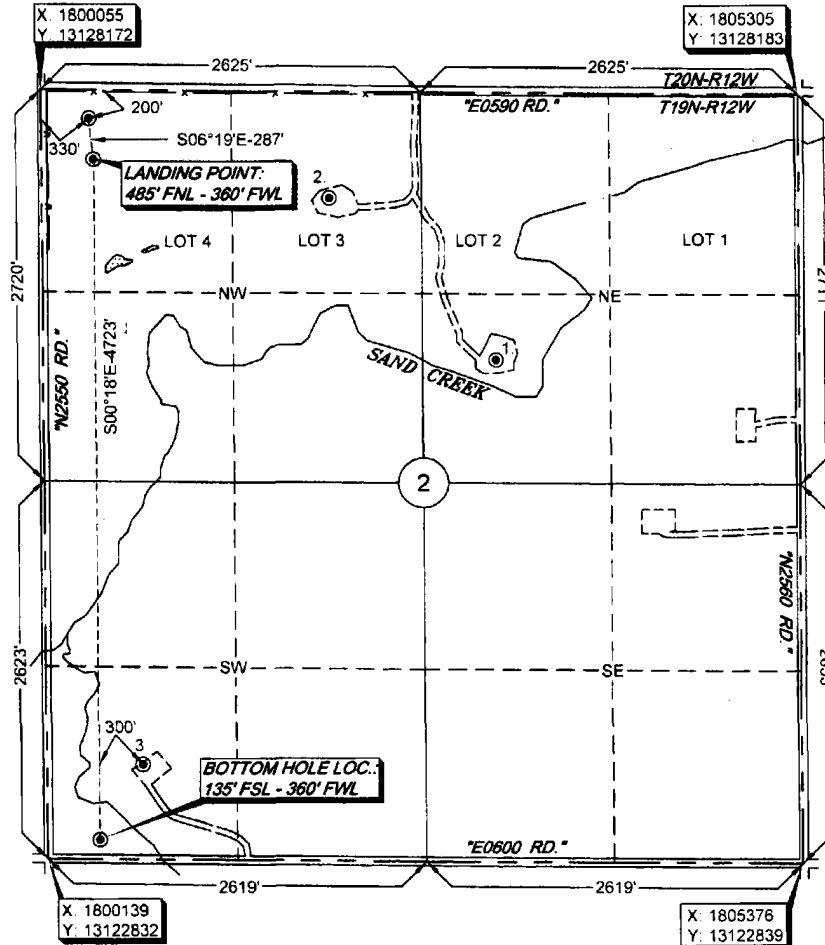


GPS DATUM
 NAD 83
 NAD 27
 UTM - ZONE 14

Surface Hole Loc.:
 Lat: 36°09'29.12"N
 Lon: 98°27'29.82"W
 Lat: 36.15805220
 Lon: -98.45792635
 X: 1800389
 Y: 13127973

Landing Point:
 Lat: 36°09'26.30"N
 Lon: 98°27'29.41"W
 Lat: 36.15726890
 Lon: -98.45781483
 X: 1800423
 Y: 13127688

Bottom Hole Loc.:
 Lat: 36°08'39.60"N
 Lon: 98°27'28.83"W
 Lat: 36.14429469
 Lon: -98.45765266
 X: 1800497
 Y: 13122967



1. CROWN EXPLORATION LLC CRAVENS UNIT 1 860' FSL - 510' FWL (NE/4) OCC STATUS: PA	2. DOMINION OK TX E & P INC CRAIG 1 1980' FSL - 1980' FWL (NW/4) OCC STATUS: PA	3. TWENTY/TWENTY OIL & GAS INC MARVA 1-2 660' FSL - 660' FWL (SW/4) OCC STATUS: PA
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PLEASE NOTE
 EXISTING WELL DATA SHOWN HEREON WAS
 FURNISHED FROM THE OCC WEBSITE AND WAS NOT
 SURVEYED OR VERIFIED ON THE GROUND

*Please note that this location was staked on the ground under the supervision of a Licensed Professional Land Surveyor but the accuracy of the survey is not guaranteed. Please contact Arkoma Surveying and Mapping promptly if any inconsistency is determined. GPS data is collected from HTRK. GPS NOTE: X and Y data shown hereon for Section Corners may NOT have been surveyed on-the-ground and further, does NOT represent a true Boundary Survey. Caution: Section distances may be assumed from a Government Survey Plat or assumed at a proportionate distance from opposing section corners, or occupation thereof, and may not have been measured on-the-ground and further, does not represent a true boundary survey.

Survey and plat by:
Arkoma Surveying and Mapping, PLLC
 P.O. Box 238 Wilburton, OK 74578
 Ph. 918-465-5711 Fax 918-465-5030
 Certificate of Authorization No. 5348
 Expires June 30, 2018

Invoice #7699
 Date Staked: 03/12/18 By: J.L.
 Date Drawn: 03/14/18 By: J.D.

Certification:
 This is to certify that this Well Location Plat represents the results of a survey made on the ground performed under the supervision of the undersigned.

Lance G. Mathis 03/15/18
 LANCE G. MATHIS OK LPLS 1664

