

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

API NUMBER: 011 23862

Approval Date: 09/20/2017  
Expiration Date: 03/20/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 17 Twp: 19N Rge: 12W County: BLAINE  
SPOT LOCATION:  NW  NW  NW  NW FEET FROM QUARTER: FROM NORTH FROM WEST  
SECTION LINES: 200 225

Lease Name: CROWS NEST Well No: 19-12-08 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

ANGELA F. AND JOEY CANTELLAY JR,  
ROUTE 1 BOX 172  
LONGDALE OK 73755

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

Name	Depth	Name	Depth
1 MISSISSIPPI LIME	8700	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201705661  
201705660

Special Orders:

Total Depth: 13850 Ground Elevation: 1491 **Surface Casing: 600** Depth to base of Treatable Water-Bearing FM: 40

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: BLAINE

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 17-33180  
H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

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.

HORIZONTAL HOLE 1

Sec 08 Twp 19N Rge 12W County BLAINE

Spot Location of End Point: N2 NW NW NW

Feet From: NORTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 330

Depth of Deviation: 7970

Radius of Turn: 521

Direction: 2

Total Length: 5062

Measured Total Depth: 13850

True Vertical Depth: 8770

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

Notes:

Category	Description
DEEP SURFACE CASING	9/15/2017 - 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	9/15/2017 - 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: <a href="http://OCCEWEB.COM/OG/OGFORMS.HTML">OCCEWEB.COM/OG/OGFORMS.HTML</a> ; 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: <a href="http://FRACFOCUS.ORG">FRACFOCUS.ORG</a>
INTERMEDIATE CASING	9/15/2017 - 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
PENDING CD - 201705660	9/20/2017 - G60 - (E.O.)(640)(HOR) 8-19N-12W EST MSSLM, OTHERS COMPL. INT. NLT 660' FB (COEXIST WITH SP. ORDER 106317 MSSLM) REC. 9/18/17 (MCKEOWN)
PENDING CD - 201705661	9/20/2017 - G60 - (E.O.) 8-19N-12W X201705660 MSSLM COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 330' FWL NO. OP. NAMED REC. 9/15/17 (MCKEOWN)

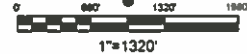
This permit does not address the right of entry or settlement of surface damages.  
The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1.  
Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.



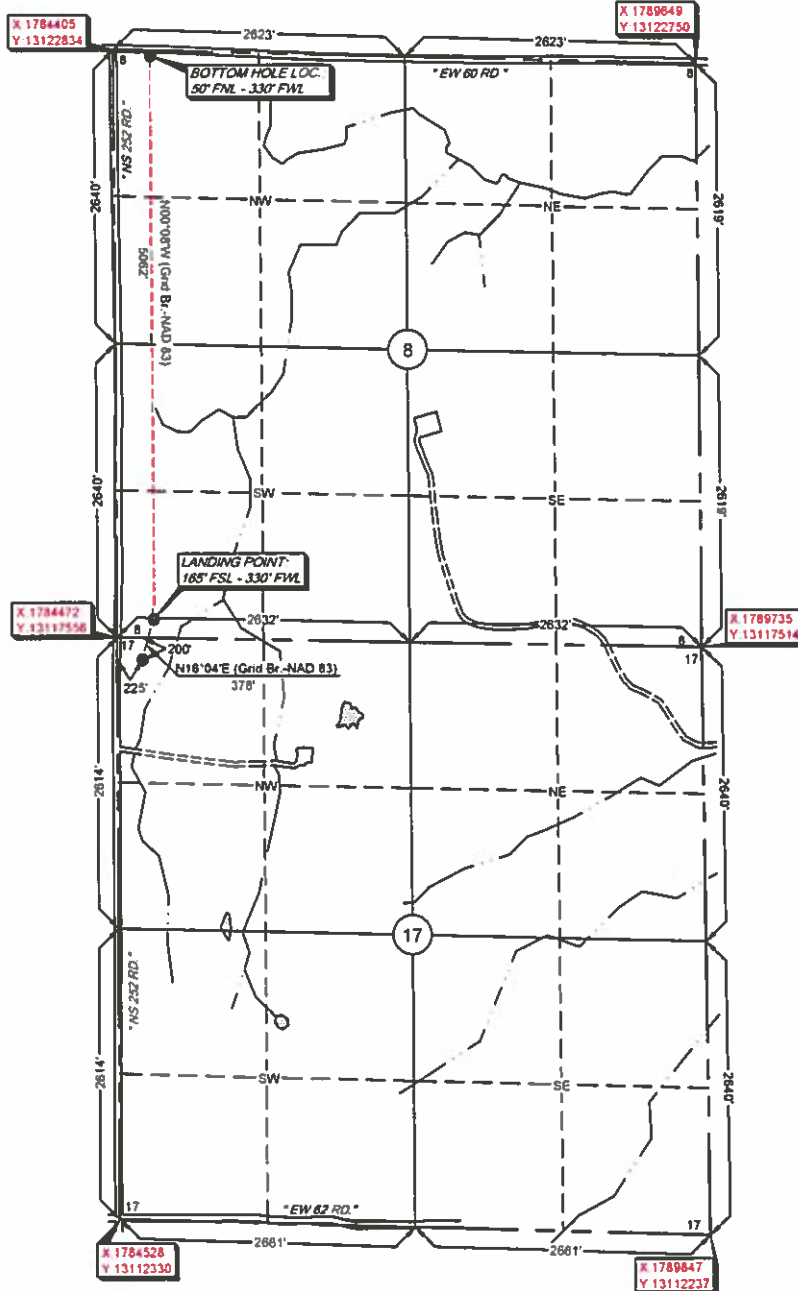
# Well Location Plat 3501123862

S.H.L. Sec. 17-19N-12W I.M.  
B.H.L. Sec. 8-19N-12W I.M.

Operator : STAGHORN PETROLEUM, LLC  
Lease Name and No. : CROWS NEST 19-12-08 1H  
Footage : 200' FNL - 225' FWL GR. ELEVATION : 1491'  
Section : 17 Township : 19N Range : 12W I.M.  
County : Blaine State of Oklahoma  
Alternate Loc. : N/A  
Terrain at Loc. : Stake fell in a flat pasture with scattered trees throughout location.



GPS DATUM  
NAD - 83  
NAD - 27  
UTM - ZONE 14



<b>Surface Hole Loc.:</b>
Lat: 36°07'44.90"N
Lon: 98°30'41.86"W
Lat: 36.12910203
Lon: -98.51126924
X: 1784699
Y: 13117355
<b>Landing Point:</b>
Lat: 36°07'48.50"N
Lon: 98°30'40.61"W
Lat: 36.13010103
Lon: -98.51092156
X: 1784800
Y: 13117719
<b>Bottom Hole Loc.:</b>
Lat: 36°08'38.56"N
Lon: 98°30'41.08"W
Lat: 36.14400733
Lon: -98.51105372
X: 1784736
Y: 13122779

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. Please note that this location was staked on the ground under the supervision of a Licensed Professional Land Surveyor, but the accuracy of this survey is not guaranteed. Please contact Arkoma Surveying and Mapping promptly if any inconsistency is determined. GPS data is observed from RTK - GPS

Quarter Section distances may be assumed from a Government Survey Plat or assumed at a proportional 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 #7050  
Date Staked : 04/07/17 By: C.K.  
Date Drawn : 04/11/17 By: P.B.  
Added LP & BHL: 04/18/17 BY: K.B.  
Rev. LP & BHL: 04/25/17 By: K.B.  
Rev. LP: 08/16/17 By: K.B.

**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 08/17/17  
OK LPLS 1664

