

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

API NUMBER: 073 25438

Approval Date: 11/28/2016
Expiration Date: 05/28/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 17 Twp: 18N Rge: 5W County: KINGFISHER
SPOT LOCATION: NW NW NW NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 235 2436

Lease Name: IRISH 18-05-17 Well No: 1H Well will be 200 feet from nearest unit or lease boundary.
Operator Name: STAGHORN PETROLEUM LLC Telephone: 9185842558 OTC/OCC Number: 23753 0

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

SIECK PROPERTIES LLC
415 RIDGEOAK ROAD
SAPULPA OK 74066

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

Name	Depth	Name	Depth
1 MISS'AN (EX CHESTER)	6537	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 657215

Location Exception Orders: 657819

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 11700

Ground Elevation: 1140

Surface Casing: 400

Depth to base of Treatable Water-Bearing FM: 170

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: 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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 16-31875

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 17 Twp 18N Rge 5W County KINGFISHER

Spot Location of End Point: SW SW SW SE

Feet From: SOUTH 1/4 Section Line: 200

Feet From: EAST 1/4 Section Line: 2600

Depth of Deviation: 6225

Radius of Turn: 511

Direction: 182

Total Length: 4673

Measured Total Depth: 11700

True Vertical Depth: 6655

End Point Location from Lease,
Unit, or Property Line: 200

Notes:

Category	Description
HYDRAULIC FRACTURING	11/23/2016 - 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/ 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.
LOCATION EXCEPTION - 657819	11/28/2016 - G60 - (I.O.) 17-18N-5W X657215 MSNLC SHL NCT 235' FNL, NCT 2436' FEL COMPL. INT. NCT 165' FNL, NCT 2436' FEL, NCT 165' FSL, NCT 2600' FEL STAGHORN PETROLEUM, LLC. 11/9/16
SPACING - 657215	11/28/2016 - G60 - (640)(HOR) 17-18N-5W EXT 648200/650170 MSNLC, OTHER EST OTHER COMPL. INT. NLT 660' FB (COEXIST WITH SP. ORDER 44960/62761 MSSLM)