

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

API NUMBER: 125 23954

Approval Date: 09/14/2020

Expiration Date: 03/14/2022

Straight Hole Oil & Gas

**PERMIT TO DRILL**

WELL LOCATION: Section: 21 Township: 8N Range: 3E County: POTTAWATOMIE

SPOT LOCATION: C S2 NE NE FEET FROM QUARTER: FROM SOUTH FROM WEST  
SECTION LINES: 1650 1980

Lease Name: PEARCY Well No: 4-21 Well will be 1650 feet from nearest unit or lease boundary.

Operator Name: ARROWHEAD ENERGY INC Telephone: 4058485777 OTC/OCC Number: 10239 0

ARROWHEAD ENERGY INC  
2934 NW 156TH ST  
EDMOND, OK 73013-2102

KAREN SUE PEARCY  
160 SPERRY DRIVE  
FOLLETT TX 79034

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

Name	Code	Depth
1 HUNTON	269HNTN	4650

Spacing Orders: 213527

Location Exception Orders: No Exceptions

Increased Density Orders: No Density Orders

Pending CD Numbers: 202001397

Special Orders: No Special Orders

Total Depth: 5000 Ground Elevation: 927

Surface Casing: 250

Depth to base of Treatable Water-Bearing FM: 190

Under Federal Jurisdiction: No  
Fresh Water Supply Well Drilled: No  
Surface Water used to Drill: No

**Approved Method for disposal of Drilling Fluids:**

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

PERMIT NO: 20-37389

H. (Other)

CLOSED SYSTEM=STEEL PITS (REQUIRED - LITTLE RIVER)

**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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is: ALLUVIAL

Pit Location Formation: ALLUVIUM

**NOTES:**

Category	Description
HYDRAULIC FRACTURING	9/10/2020 - GC2 - 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

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.

PENDING CD - 202001397	9/10/2020 - GC2 - (I.O.) NE4 NE4 21-8N-3E X205029 HNTN, OTHERS NCT 652' FWL, NCT 216' FSL NO OP NAMED REC. 9-1-2020 (P. PORTER)
SPACING - 205029	9/10/2020 - GC2 - (40) 21-8N-3E EXT 174191 HNTN, OTHERS EXT OTHER EST OTHERS

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