

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

API NUMBER: 125 23101 B

Approval Date: 03/20/2020

Expiration Date: 09/20/2021

Straight Hole Disposal

Amend reason: OCC CORRECTION - RANGE ON SHL

AMEND PERMIT TO DRILL

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

SPOT LOCATION: SE SE NW NE FEET FROM QUARTER: FROM SOUTH FROM WEST
SECTION LINES: 1470 1020

Lease Name: PEARCY Well No: 1-21 Well will be 1020 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
FOLLET TX 79034

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

Name	Code	Depth
1 VIRGILIAN	406VRGN	1800

Spacing Orders: No Spacing

Location Exception Orders: No Exceptions

Increased Density Orders: No Density Orders

Pending CD Numbers: No Pending

Special Orders: No Special Orders

Total Depth: 2200

Ground Elevation: 0

Surface Casing: 531 IP

Depth to base of Treatable Water-Bearing FM: 370

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

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

PIT 1 INFORMATION

Type of Pit System: ON SITE

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: 1B

Liner required for Category: 1B

Pit Location is: BED AQUIFER

Pit Location Formation: OSCAR

NOTES:

Category	Description
HYDRAULIC FRACTURING	3/2/2020 - 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: OCCWEB.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
SPACING	3/3/2020 - GC2 - N/A DISPOSAL WELL

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.

125 23101 PEARCY 1-21

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