

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

API NUMBER: 109 22431

Approval Date: 09/15/2014

Expiration Date: 03/15/2015

Straight Hole

Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 09 Twp: 12N Rge: 1E

County: OKLAHOMA

SPOT LOCATION:

FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 2133 977

Lease Name: BREWER

Well No: 1-9

Well will be 343 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

DARRELL WAYNE BREWER
5585 N. LUTHER RD.
HARRAH OK 73045

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

	Name	Depth		Name	Depth
1	TONKAWA	4050	6	PENN BASAL UNCONF SAND	5675
2	LOVELL	4340	7	HUNTON-MISENER	5725
3	CLEVELAND	4950	8	SIMPSON DOLOMITE	6025
4	OSWEGO	5250	9	1ST WILCOX	6050
5	SKINNER	5550	10	2ND WILCOX	6150

Spacing Orders: 150045

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 6200

Ground Elevation: 1219

Surface Casing: 600

Depth to base of Treatable Water-Bearing FM: 450

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

PIT 1 INFORMATION

Approved Method for disposal of Drilling Fluids:

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? Y

Wellhead Protection Area? Y

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

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

PERMIT NO: 14-27894

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

Notes:

This permit does not address the right of entry or settlement of surface damages.

109 22431 BREWER 1-9

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
FRAC FOCUS	9/15/2014 - G71 - THE REQUIREMENT FOR CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS WILL BE EXTENDED TO INCLUDE ALL NON-HORIZONTAL WELLS FOR HYDRAULIC FRACTURING OPERATIONS BEGINNING JANUARY 1, 2014. REFER TO OCC RULE 165:10-3-10 FOR COMPLIANCE REQUIREMENTS. PLEASE REPORT DIRECTLY TO FRACFOCUS USING THE FOLLOWING LINK HTTP://FRACFOCUS.ORG/ OR FOR OCC ASSISTANCE CONTACT DENNIS NISKERN AT 405-522-2977 OR D.NISKERN@OCCEMAIL.COM
PUBLIC WATER SUPPLY/WELLHEAD PROTECTION AREA	9/15/2014 - G71 - SUMMIT RIDGE - 6 PWS/WPA, S/2 4-12N-1E, OKLAHOMA ACADEMY DAY CARE - 1 PWS/WPA, SE/4 4-12N-1E, & OKLAHOMA ACADEMY CAFE - 1 PWS/WPA, NE/4 9-12N-1E
SPACING - 150045	9/15/2014 - G91 - (80) 9-12N-1E LD NE/SW EST LVLL, TNKW, CLVD, OSWG, SKNR, BPUNC, HNTMS, SMPSD, WLCX1, WLCX2