

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

API NUMBER: 051 24450 A

Approval Date: 08/23/2018

Expiration Date: 02/23/2019

Horizontal Hole Oil & Gas

Amend reason: CORRECT SHL LOCATION, UPDATE ORDERS

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 27 Twp: 6N Rge: 6W

County: GRADY

SPOT LOCATION: ☐ NE ☐ NE ☐ NW ☐ NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 222 1501

Lease Name: ADAMS 27-34

Well No: 1XH

Well will be 222 feet from nearest unit or lease boundary.

Operator Name: RED WOLF OPERATING LLC

Telephone: 4054641920

OTC/OCC Number: 24373 0

RED WOLF OPERATING LLC
801 West Covell Rd
EDMOND, OK 73003-2179

ADAMS ALFALFA FARMS, INC
1222 COUNTY ROAD 1420
NINNEKAH OK 73067

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

Name	Depth	Name	Depth
1 WOODFORD	14099	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 666457
669414
692649

Location Exception Orders: 692650

Increased Density Orders: 702291
702292

Pending CD Numbers:

Special Orders:

Total Depth: 25000

Ground Elevation: 1043

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 500

Deep surface casing has been approved

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: No

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? 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

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

PERMIT NO: 18-35143

H. SEE MEMO

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.

PIT 2 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: OIL BASED

Chlorides Max: 300000 Average: 200000

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

HORIZONTAL HOLE 1

Sec 34 Twp 6N Rge 6W County GRADY

Spot Location of End Point: SW SE SE SE

Feet From: SOUTH 1/4 Section Line: 150

Feet From: EAST 1/4 Section Line: 650

Depth of Deviation: 13821

Radius of Turn: 573

Direction: 175

Total Length: 10278

Measured Total Depth: 25000

True Vertical Depth: 14870

End Point Location from Lease,
Unit, or Property Line: 150

Notes:

Category

Description

DEEP SURFACE CASING

8/20/2018 - 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

8/20/2018 - 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: 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

INCREASED DENSITY - 702291 (201800165)

12/6/2019 - G56 - 27-6N-6W
X666457 WDFD
3 WELLS
NO OP NAMED
9/17/2019

INCREASED DENSITY - 702292 (201800166)

12/6/2019 - G56 - 34-6N-6W
X669414 WDFD
3 WELLS
NO OP NAMED
9/17/2019

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.

051 24450 ADAMS 27-34 1XH

LOCATION EXCEPTION - 692650 (201805823)	12/6/2019 - G56 - (I.O.) 27 & 34-6N-6W X666457 WDFD 27-6N-6W X669414 WDFD 34-6N-6W SHL (27-6N-6W) NCT 200' FNL, NCT 1500' FEL COMPL. INT. (27-6N-6W) NCT 150' FNL, NCT 0' FSL, NCT 330' FEL COMPL. INT. (34-6N-6W) NCT 0' FNL, NCT 150' FSL, NCT 330' FEL NO OP NAMED 3/11/2019
MEMO	8/20/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
SPACING - 666457	12/6/2019 - G56 - (640)(HOR) 27-6N-6W EST WDFD, OTHERS POE TO BHL (WDFD) NCT 165' FNL & FSL, NCT 330' FEL & FWL
SPACING - 669414	12/6/2019 - G56 - (640)(HOR) 34-6N-6W EST WDFD, OTHERS POE TO BHL (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL
SPACING - 692649 (201805822)	12/6/2019 - G56 - (I.O.) 27 & 34-6N-6W EST MULTIUNIT HORIZONTAL WELL X666457 WDFD 27-6N-6W X669414 WDFD 34-6N-6W 50% 27-6N-6W 50% 34-6N-6W NO OP NAMED 3/11/2019

Apache Well Location Plat - As-Drilled

Operator: APACHE CORPORATION
 Lease Name and No.: ADAMS 27-34-1XH (Side Track)
 Footage: 222' FNL - 1501' FEL Gr. Elevation: 1041' (NAVD 88)
 Section: 27 Township: 6N Range: 6W I.M.
 County: Grady State of Oklahoma
 Terrain at Loc.: Location fell on existing pad.

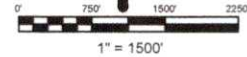
S.H.L. Sec. 27-6N-6W I.M.
 B.H.L. Sec. 34-6N-6W I.M.

201805823
 (LATE EXHIBIT)

051-24450A



All bearings shown
 are grid bearings.



GPS DATUM
 NAD - 83
 OK SOUTH ZONE

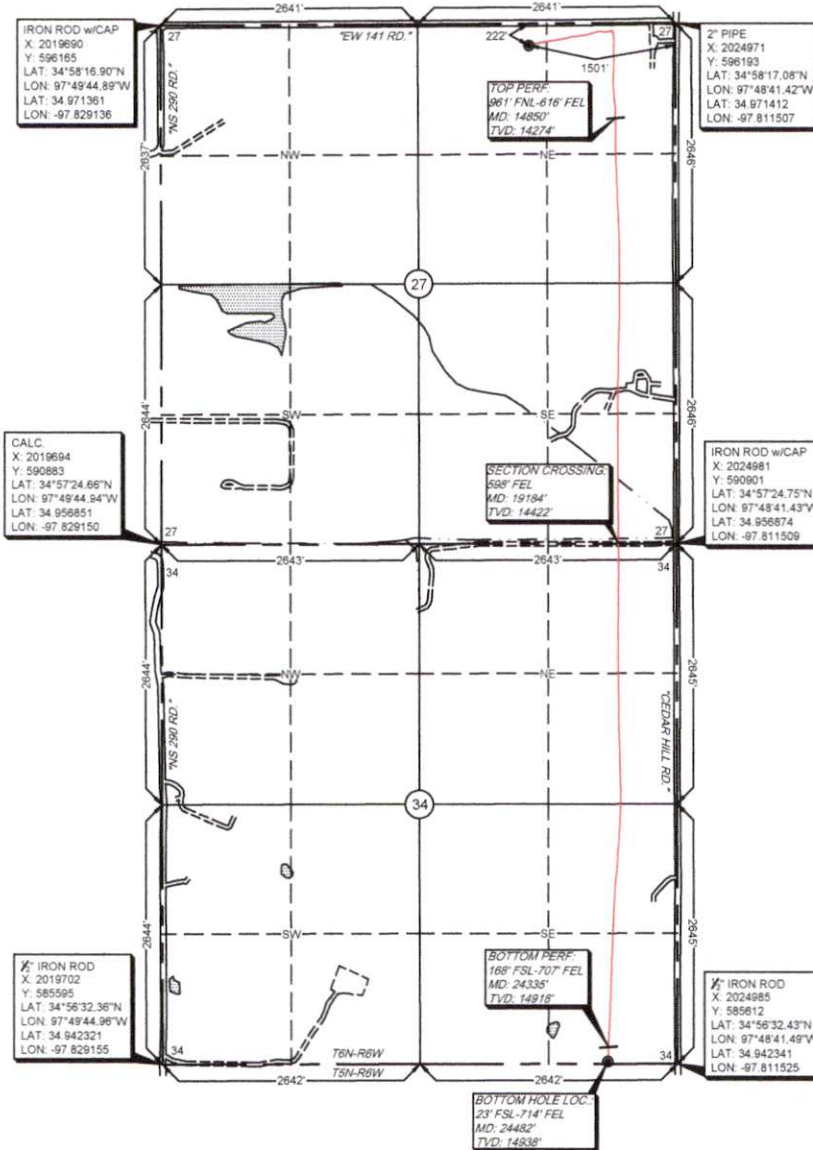
Surface Hole Loc.:
 Lat: 34°58'14.84"N
 Lon: 97°48'59.46"W
 Lat: 34.970789
 Lon: -97.816518
 X: 2023470
 Y: 595963

Top Perf:
 Lat: 34°58'07.56"N
 Lon: 97°48'48.82"W
 Lat: 34.968767
 Lon: -97.813562
 X: 2024357
 Y: 595229

Section Crossing:
 Lat: 34°57'24.74"N
 Lon: 97°48'48.61"W
 Lat: 34.956872
 Lon: -97.813503
 X: 2024383
 Y: 590899

Bottom Perf:
 Lat: 34°56'34.08"N
 Lon: 97°48'49.99"W
 Lat: 34.942800
 Lon: -97.813885
 X: 2024278
 Y: 585778

Bottom Hole Loc.:
 Lat: 34°56'32.65"N
 Lon: 97°48'50.06"W
 Lat: 34.942402
 Lon: -97.813907
 X: 2024272
 Y: 585633



FILED
 AUG 29 2019

COURT CLERK'S OFFICE - OKC
 CORPORATION COMMISSION
 OF OKLAHOMA

-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.
 -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.
 -Quarter Section distances may be assumed from a Government Survey Plat or assumed at a proportionate 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, 2020
 Invoice #8567-A-A-AD
 Date Staked: 04/10/19 By: B.A.
 Date Drawn: 06/19/19 By: J.H.
 Added Perfs: 08/28/19 By: R.S.

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
 LANCE G. MATHIS

08/28/19

OK LPLS 1664