

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

API NUMBER: 043 23631

Approval Date: 06/07/2018
Expiration Date: 12/07/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 08 Twp: 18N Rge: 14W County: DEWEY
SPOT LOCATION: N2 S2 NW NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 800 1980

Lease Name: BROWN Well No: 8-17-1XH Well will be 800 feet from nearest unit or lease boundary.
Operator Name: DERBY EXPLORATION LLC Telephone: 4056393786 OTC/OCC Number: 24143 0

DERBY EXPLORATION LLC
PO BOX 779
OKLAHOMA CITY, OK 73101-0779

CARL EDWARD VANMETER
P.O. BOX 728
CANTON OK 73724

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	9279	6	
2 WOODFORD	10894	7	
3 HUNTON	10954	8	
4		9	
5		10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201803014
201803015
201803016
201800965

Special Orders:

Total Depth: 20130 Ground Elevation: 1911 Surface Casing: 600 Depth to base of Treatable Water-Bearing FM: 420

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: 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? 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

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-34553

H. SEE MEMO

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.

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? 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

HORIZONTAL HOLE 1

Sec 17 Twp 18N Rge 14W County DEWEY

Spot Location of End Point: S2 S2 SW SE

Feet From: SOUTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 1980

Depth of Deviation: 9172

Radius of Turn: 382

Direction: 180

Total Length: 10358

Measured Total Depth: 20130

True Vertical Depth: 10954

End Point Location from Lease,
Unit, or Property Line: 50

Notes:

Category

Description

HYDRAULIC FRACTURING

6/6/2018 - 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

INTERMEDIATE CASING

6/6/2018 - G71 - DUE TO THE KNOWN POTENTIAL RISK OF ENCOUNTERING AN OVER-PRESSURED ZONE IN THE MORROW SERIES IN THIS AREA, THE TECHNICAL MANAGER RECOMMENDS SETTING AN INTERMEDIATE STRING OF CASING IMMEDIATELY ABOVE THE MORROW SERIES

MEMO

6/6/2018 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

Category	Description
PENDING CD - 201800965	6/7/2018 - G75 - (E.O.) 8 & 17-18N-14W X201803014 MSSP, WDFD, HNTN 8-18N-14W X201803015 MSSP, WDFD, HNTN 17-18N-14W COMPL. INT. (8-18N-14W) NCT 165' FNL, NCT 0' FSL, NCT 330' FWL ** COMPL. INT. (17-18N-14W) NCT 0' FNL, NCT 165' FSL, NCT 330' FWL ** DERBY EXPLOR., LLC REC 5-25-2018 (P. PORTER) ** S/B NCT 330' FEL; TO BE CORRECTED AT MERIT HEARING PER ATTORNEY FOR OPERATOR
PENDING CD - 201803014	6/6/2018 - G75 - (640)(HOR) 8-18N-14W VAC 225323 CSTR VAC 302121 HNTN EST MSSP, WDFD, HNTN POE TO BHL (MSSP, HNTN) NCT 660' FB POE TO BHL (WDFD) NCT 165' FNL & FSL, NCT 330' FEL & FWL REC 5-8-2018 (MILLER)
PENDING CD - 201803015	6/7/2018 - G75 - (640)(HOR) 17-18N-14W VAC 95923 CSTR VAC 302386 MSSLM, HNTN VAC 307029 KDRK, WDFD EST MSSP, WDFD, HNTN POE TO BHL (MSSP, HNTN) NCT 660' FB POE TO BHL (WDFD) NCT 165' FNL & FSL, NCT 330' FEL & FWL REC 5-8-2018 (MILLER)
PENDING CD - 201803016	6/7/2018 - G75 - (E.O.) 8 & 17-18N-14W EST MULTIUNIT HORIZONTAL WELL X201803014 MSSP, WDFD, HNTN 8-18N-14W X201803015 MSSP, WDFD, HNTN 17-18N-14W (WDFD, HNTN ADJACENT COMMON SOURCES OF SUPPLY TO MSSP) 50% 8-18N-14W 50% 17-18N-14W DERBY EXPLOR., LLC REC 5-25-2018 (P. PORTER)
PUBLIC WATER SUPPLY WELL	6/6/2018 - G71 - COUNTRY INN BAR, 1 PWS/WPA, NW4 9-18N-14W

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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.

Well Location Plat

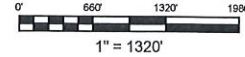
S.H.L. Sec. 8-18N-14W I.M.
B.H.L. Sec. 17-18N-14W I.M.

Operator: DERBY EXPLORATION, LLC
Lease Name and No.: BROWN 8-17-1XH
Footage: 800' FNL - 1980' FEL Gr. Elevation: 1911'
Section: 8 Township: 18N Range: 14W I.M.
County: Dewey State of Oklahoma
Terrain at Loc.: Location fell in a flat sandy field with brush, South of an existing location.

API 043-23631



All bearings shown are grid bearings.



GPS DATUM
NAD 83
OK NORTH ZONE

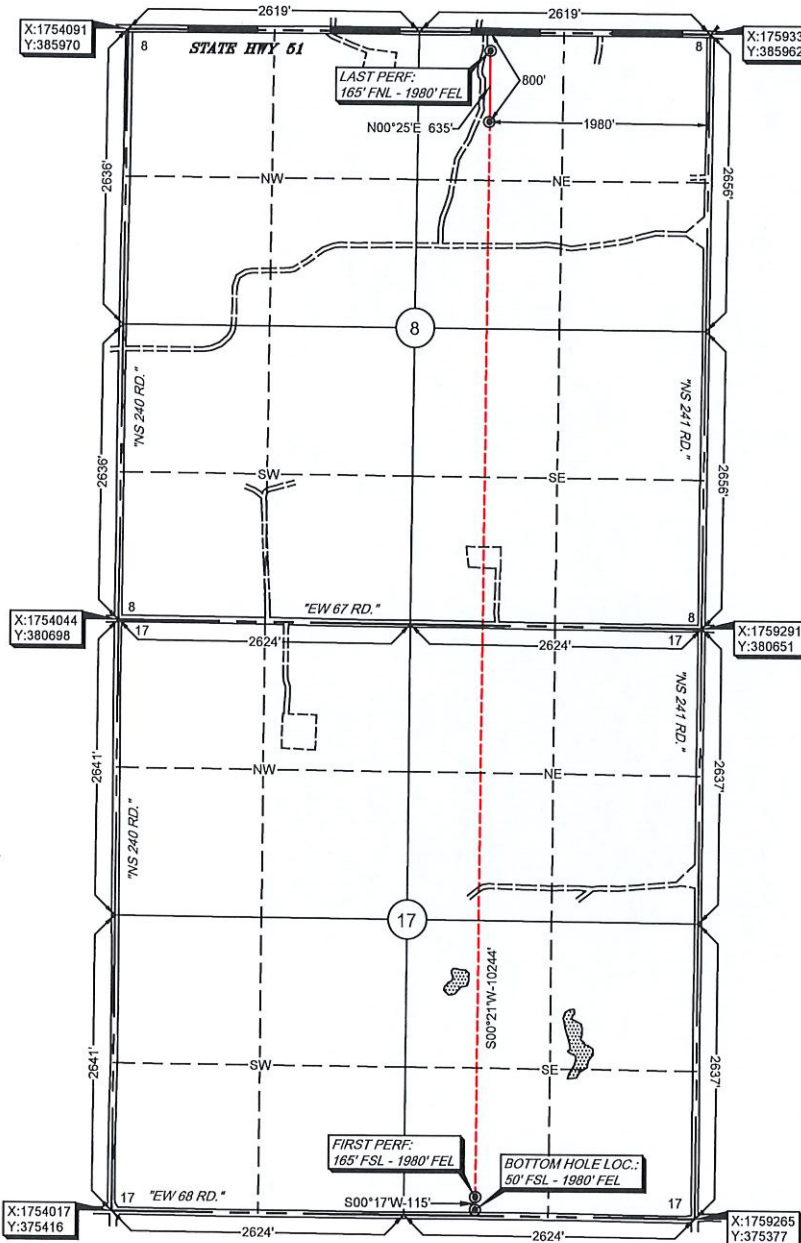
Surface Hole Loc.:
Lat: 36°03'21.46"N
Lon: 98°42'51.72"W
X: 1757344
Y: 385165

Last Perf:
Lat: 36°03'27.74"N
Lon: 98°42'51.73"W
X: 1757348
Y: 385800

First Perf:
Lat: 36°01'46.44"N
Lon: 98°42'51.57"W
X: 1757285
Y: 375557

Bottom Hole Loc.:
Lat: 36°01'45.30"N
Lon: 98°42'51.57"W
X: 1757285
Y: 375442

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, PLLC for more information. NOTE: X and Y data shown herein 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 thereon, 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, 2018.

Invoice #7832-A
Date Staked: 05/02/18 By: C.K.
Date Drawn: 05/03/18 By: C.K.

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 05/08/18
OK LPLS 1664

