

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

API NUMBER: 043 23704

Approval Date: 06/17/2019

Expiration Date: 12/17/2020

Horizontal Hole
Multi Unit

Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 14 Twp: 18N Rge: 14W County: DEWEY

SPOT LOCATION: ☐ SE ☐ NE ☐ NE ☐ NW FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 650 2350

Lease Name: ALVADEAN

Well No: 14-23-1XH

Well will be 650 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

STEVE BOND
PO BOX 98
CANTON OK 73724

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	9130	6	
2	WOODFORD	10725	7	
3			8	
4			9	
5			10	

Spacing Orders: 685492
687568

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201901379
201901380

Special Orders:

Total Depth: 19725

Ground Elevation: 1828

Surface Casing: 560

Depth to base of Treatable Water-Bearing FM: 310

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: 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 BED AQUIFER

Pit Location Formation: RUSH SPRINGS

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

PERMIT NO: 19-36682

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? 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 BED AQUIFER

Pit Location Formation: RUSH SPRINGS

HORIZONTAL HOLE 1

Sec 23 Twp 18N Rge 14W County DEWEY

Spot Location of End Point: S2 S2 SE SW

Feet From: SOUTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 1980

Depth of Deviation: 9428

Radius of Turn: 478

Direction: 185

Total Length: 9547

Measured Total Depth: 19725

True Vertical Depth: 10725

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

Notes:

Category

Description

HYDRAULIC FRACTURING

6/5/2019 - 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

6/5/2019 - 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

6/5/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

Category	Description
PENDING CD - 201901379	6/17/2019 - G58 - (I.O.) 14 & 23-18N-14W EST MULTIUNIT HORIZONTAL WELL X687568 MSSP, WDFD X685492 MSSP, WDFD (WDFD IS ADJACENT CSS TO MSSP) 50% 14-18N-14W 50% 23-18N-14W NO OP. NAMED REC 3/26/2019 (P. PORTER)
PENDING CD - 201901380	6/17/2019 - G58 - (I.O.) 14 & 23-18N-14W X687568 MSSP, WDFD X685492 MSSP, WDFD COMPL. INT. 23-18N-14W NCT 165' FSL, NCT 0' FNL, NCT 660' FWL COMPL. INT. 14-18N-14W NCT 165' FNL, NCT 0' FSL, NCT 660' FWL NO OP. NAMED REC 3/26/2019 (P. PORTER)
SPACING - 685492	6/17/2019 - G58 - (640)(HOR) 14-18N-14W EXT 668907 MSSP, WDFD, OTHER POE TO BHL (MSSP) NLT 660' FB POE TO BHL (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL
SPACING - 687568	6/17/2019 - G58 - (640)(HOR) 23-18N-14W VAC 296906CSTR, MSSLM, KDRK, WDFD, OTHER EST MSSP, WDFD, OTHER POE TO BHL (MSSP) NLT 660' FB POE TO BHL (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL

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.



DERBY

Well Location Plat

S.H.L. Sec. 14-18N-14W I.M.
B.H.L. Sec. 23-18N-14W I.M.

Operator: DERBY EXPLORATION, LLC
Lease Name and No.: ALVADEAN 14-23-1XH
Footage: 650' FNL - 2350' FWL Gr. Elevation: 1828'
Section: 14 Township: 18N Range: 14W I.M.
County: Dewey State of Oklahoma
Terrain at Loc.: Location fell in a flat open field.

043-23704



All bearings shown
are grid bearings.

0' 660' 1320' 1980'
1" = 1320'

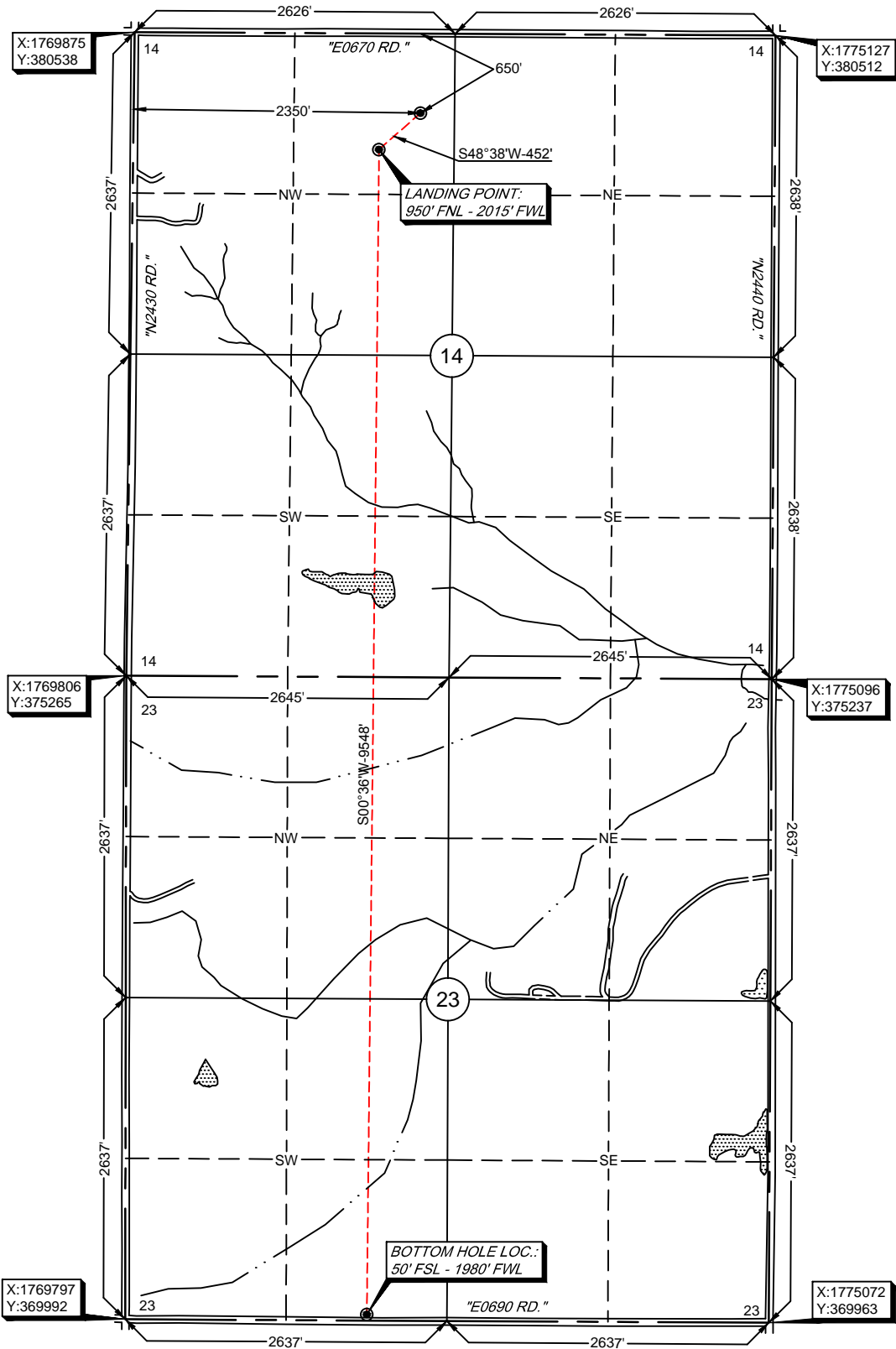
GPS DATUM
NAD 83
OK NORTH ZONE

Surface Hole Loc.:
Lat: 36°02'30.21"N
Lon: 98°39'50.15"W
Lat: 36.04172456
Lon: -98.66392989
X: 1772217
Y: 379877

Landing Point:
Lat: 36°02'27.23"N
Lon: 98°39'54.25"W
Lat: 36.04089858
Lon: -98.66506921
X: 1771878
Y: 379578

Bottom Hole Loc.:
Lat: 36°00'52.81"N
Lon: 98°39'54.68"W
Lat: 36.01466971
Lon: -98.66518831
X: 1771777
Y: 370031

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 #8645
Date Staked: 05/10/19 By: D.K.
Date Drawn: 05/14/19 By: E.W.
Rev. Lease Name: 06/04/19 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

06/04/19

OK LPLS 1664

