API NUMBER: 043 23711

Chlorides Max: 8000 Average: 5000

Liner not required for Category: C

Pit Location is AP/TE DEPOSIT

Pit Location Formation: TERRACE

Wellhead Protection Area?

Category of Pit: C

Within 1 mile of municipal water well? N

Is depth to top of ground water greater than 10ft below base of pit? Y

located in a Hydrologically Sensitive Area.

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

Approval Date: 08/20/2019
Expiration Date: 02/20/2021

Horizontal Hole Multi Unit

Oil & Gas

## PERMIT TO DRILL

| DERBY EXPLORATION LLC  DERBY EXPLORATION LLC  PO BOX 779  OKLAHOMA CITY, OK 73:  Ormation(s) (Permit Valid for Listed Format Name  1 MISSISSIPPIAN 2 WOODFORD | Well No: 24-25-13 Telep           | phone: 4056393786          |  |
|---|-----------------------------------|----------------------------|--|
| DERBY EXPLORATION LLC PO BOX 779 OKLAHOMA CITY, OK 73  ormation(s) (Permit Valid for Listed Format  Name  1 MISSISSIPPIAN                                     |                                   | DEBRA MAY I<br>12183 NARRO | DAVIS & DEBRA MAY LIFE<br>DW LANE                |
| PO BOX 779  OKLAHOMA CITY, OK 73-  ormation(s) (Permit Valid for Listed Format  Name  1 MISSISSIPPIAN   | 101-0779                          | 12183 NARRO                | DW LANE  |
| OKLAHOMA CITY, OK 73-  Ormation(s) (Permit Valid for Listed Format  Name  1 MISSISSIPPIAN   | 101-0779                          |                            |  |
| ormation(s) (Permit Valid for Listed Format<br>Name<br>1 MISSISSIPPIAN  | 101-0779                          | BROOKWOOI                  | D AL 35444                                       |
| Name  1 MISSISSIPPIAN   |                                   |                            |  |
| 3<br>4<br>5<br>acing Orders: 693879<br>684543   | 10820  Location Exception Orders: | 7<br>8<br>9<br>10          | Increased Density Orders:                        |
| nding CD Numbers: 201903501<br>201903502  |                                   |                            | Special Orders:                                  |
| Total Depth: 18298 Ground Elevation: 1752   | Surface Casing                    | : 470                      | Depth to base of Treatable Water-Bearing FM: 220 |
| Under Federal Jurisdiction: No  | Fresh Water Supply W              | /ell Drilled: No           | Surface Water used to Drill: Yes                 |
| T 1 INFORMATION   |                                   | Approved Method for dispos | sal of Drilling Fluids:                          |

H. SEE MEMO

## 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 AP/TE DEPOSIT
Pit Location Formation: TERRACE

## **HORIZONTAL HOLE 1**

Sec 24 Twp 18N Rge 14W County **DEWEY** NW Spot Location of End Point: N2 N2 NW Feet From: NORTH 1/4 Section Line: 50 Feet From: WEST 1/4 Section Line: 660

Depth of Deviation: 9737 Radius of Turn: 478

Direction: 10
Total Length: 7810

Measured Total Depth: 18298
True Vertical Depth: 10820
End Point Location from Lease,
Unit, or Property Line: 50

Notes:

Category Description

HYDRAULIC FRACTURING 8/1/2019 - 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 8/1/2019 - 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 8/1/2019 - 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 - 201903501 8/20/2019 - G56 - (E.O.) 24 & 25-18N-14W

EST MULTIUNIT HORIZONTAL WELL X684543 MSSP, WDFD, OTHER 24-18N-14W X693879 MSSP, WDFD, OTHER 25-18N-14W

(WDFD IS AN ADJACENT COMMON SOURCE OF SUPPLY TO MSSP)

50% 24-18N-14W\*\*\* 50% 25-18N-14W\*\*\* DERBY EXPLORATION, LLC 7/26/2019 (P. PORTER)

\*\*\*S/B 67% 24-18N-14W; 33% 25-18N-14W PER SURVEY PLAT; WILL BE CORRECTED AT FINAL

HEARING PER ATTORNEY FOR OPERATOR

PENDING CD - 201903502 8/20/2019 - G56 - (E.O.) 24 & 25-18N-14W

X684543 MSSP, WDFD, OTHER 24-18N-14W X693879 MSSP, WDFD, OTHER 25-18N-14W

X165:10-3-28(C)(2)(B) MSSP MAY BE CLOSER THAN 600' TO EXISTING AND/OR PROPOSED

**WELLS** 

COMPL INT (25-18N-14W) NCT 165' FSL, NCT 0' FNL, NCT 330' FWL COMPL INT (24-18N-14W) NCT 0' FSL, NCT 165' FNL, NCT 330' FWL

DERBY EXPLORATION, LLC REC 7/26/2019 (P. PORTER)

SPACING - 684543 8/20/2019 - G56 - (640)(HOR) 24-18N-14W

VAC 67943 CRLM

VAC 296906 MSSLM, KDRK, WDFD, OTHER

EST MSSP, WDFD, OTHER POE TO BHL (MSSP) NCT 660' FB

POE TO BHL (WDFD) NCT 165' FNL/FSL, NCT 330' FEL/FWL

SPACING - 693879 8/20/2019 - G56 - (640)(HOR) 25-18N-14W

VAC 93130 CSTR

VAC 269914 KDRK, WDFD, OTHER

VAC 391320 MSSLM E2 EST MSSP, WDFD, OTHER COMPL INT (MSSP) NCT 660' FB

COMPL INT (WDFD) NCT 165' FNL/FSL, NCT 330' FEL/FWL

(COEXIST WITH W2 SP # 391320 MSSLM)

