

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

API NUMBER: 073 26466

Approval Date: 03/05/2019

Expiration Date: 09/05/2020

Horizontal Hole
Multi Unit
Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 16 Twp: 15N Rge: 8W

County: KINGFISHER

SPOT LOCATION: ☐ NE ☐ SW ☐ NE ☐ NW

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 690 1810

Lease Name: FREDERICK

Well No: 1508 2H-4X

Well will be 690 feet from nearest unit or lease boundary.

Operator Name: NEWFIELD EXPLORATION MID-CON INC

Telephone: 2812105100; 9188781

OTC/OCC Number: 20944 0

NEWFIELD EXPLORATION MID-CON INC
24 WATERWAY AVE ST 900
THE WOODLANDS, TX 77380-2764

FREDERICK & MARTHA BREDEL
26612 N 2780 RD
KINGFISHER OK 73750

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	8913	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 634773
687537

Location Exception Orders: 687538
686475

Increased Density Orders: 688335
686476

Pending CD Numbers:

Special Orders:

Total Depth: 19662

Ground Elevation: 1146

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 300

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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: CHICKASHA

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

PERMIT NO: 19-36154

E. Haul to Commercial pit facility: Sec. 31 Twn. 12N Rng. 8W Cnty. 17 Order No: 587498

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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: CHICKASHA

HORIZONTAL HOLE 1

Sec 04 Twp 15N Rge 8W County KINGFISHER

Spot Location of End Point: NE NW NE NW

Feet From: NORTH 1/4 Section Line: 85

Feet From: WEST 1/4 Section Line: 1714

Depth of Deviation: 8594

Radius of Turn: 489

Direction: 359

Total Length: 10299

Measured Total Depth: 19662

True Vertical Depth: 9482

End Point Location from Lease,
Unit, or Property Line: 85

Notes:

Category

Description

DEEP SURFACE CASING

1/31/2019 - 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

EXCEPTION TO RULE - 686475

3/4/2019 - G56 - (I.O.) 4 & 9-15N-8W
X165:10-3-28(C)(2)(B) MSSP MAY BE CLOSER THAN 600' TO FRANKS 1, FREDERICK 1H-4X,
BREDEL 1-9 AND/OR PROPOSED WELLS
NEWFIELD EXPLOR. MID-CON.
11/9/2018

HYDRAULIC FRACTURING

1/31/2019 - 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

INCREASED DENSITY - 686476

3/4/2019 - G56 - 9-15N-8W
X634773 MSSP
7 WELLS
NEWFIELD EXPLOR. MID-CON. INC.
11/9/2018

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

073 26466 FREDERICK 1508 2H-4X

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
INCREASED DENSITY - 688335	3/4/2019 - G56 - 4-15N-8W X634773 MSSP 7 WELLS NEWFIELD EXPLOR. MID-CON. INC. 12/14/2018
INTERMEDIATE CASING	1/31/2019 - 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
LOCATION EXCEPTION - 687538	3/4/2019 - G56 - (I.O.) 4 & 9-15N-8W X634773 MSSP COMPL INT (9-15N-8W) NCT 0' FNL, NCT 165' FSL, NCT 1320' FWL COMPL INT (4-15N-8W) NCT 0' FSL, NCT 165' FNL, NCT 1320' FWL NEWFIELD EXPLOR. MID-CON. INC. 12/3/2018
MEMO	1/31/2019 - G71 - PIT 1 & 2 - CLOSED SYSTEM = STEEL PITS (REQUIRED - DEAD INDIAN CREEK), WBM/CUTTINGS & OBM CUTTINGS CAPTURED IN STEEL HALF PITS, WBM CUTTINGS WILL BE SOIL FARMED, WBM & OBM CUTTINGS TRANSFERRED TO R360 587498 (31-12N-8W), CANADIAN CO, PIT 2 - OBM TO VENDOR
SPACING - 634773	3/4/2019 - G56 - (640)(HOR) 4 & 9-15N-8W EXT 608292 MSSP COMPL INT NLT 660' FB (COEXIST WITH SP # 324671 CSTRU, MNNG, MSSLM 9-15N-8W; SP # 231191 CSTRU, MNNG, MSSLM 4-15N-8W)
SPACING - 687537	3/4/2019 - G56 - (I.O.) 4 & 9-15N-8W ESTABLISH MULTIUNIT HORIZONTAL WELL X634773 MSSP 50% 4-15N-8W 50% 9-15N-8W NEWFIELD EXPLOR. MID-CON. INC. 12/3/2018

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.

PERMIT PLAT

M & M Land Surveying, Inc.
Phone (580) 226-0446
520 E Street N.W.
Ardmore, OK 73401

Company Name: **NEWFIELD EXPLORATION MID-CONTINENT INC.**

Lease Name: **FREDERICK 1508 2H-4X**
Section 16 Township 15 N Range 8 W, I.B.M.,
County of Kingfisher, State of Oklahoma
Good Location? **YES**

Original Location: 690'FNL - 1810'FWL Elevation 1146' GROUND
Distance & Direction From Nearest Town: 6.0 miles Northwest of Okarche

SURFACE LOCATION

DATUM: NAD27

LAT: 35° 46' 53.47"N

LONG: 98° 03' 34.16"W

LAT: 35.781519°N

LONG: 98.059490°W

STATE PLANE

COORDINATES: (US

SURVEY FEET)

ZONE: NORTH ZONE

Y (N): 284484.33

X (E): 1982353.99

DATUM: NAD83

LAT: 35° 46' 53.63"N

LONG: 98° 03' 35.36"W

LAT: 35.781564°N

LONG: 98.059824°W

STATE PLANE

COORDINATES: (US

SURVEY FEET)

ZONE: NORTH ZONE

Y (N): 284508.06

X (E): 1950755.36

DATA DERIVED FROM

G.P.S. WITH O.P.U.S.

DATA.

This location has been staked according to the best official survey records available to us. The metrical data shown hereon is for permitting the well location and the section location may or may not be field verified. Please review this plat and notify us immediately of any discrepancy.

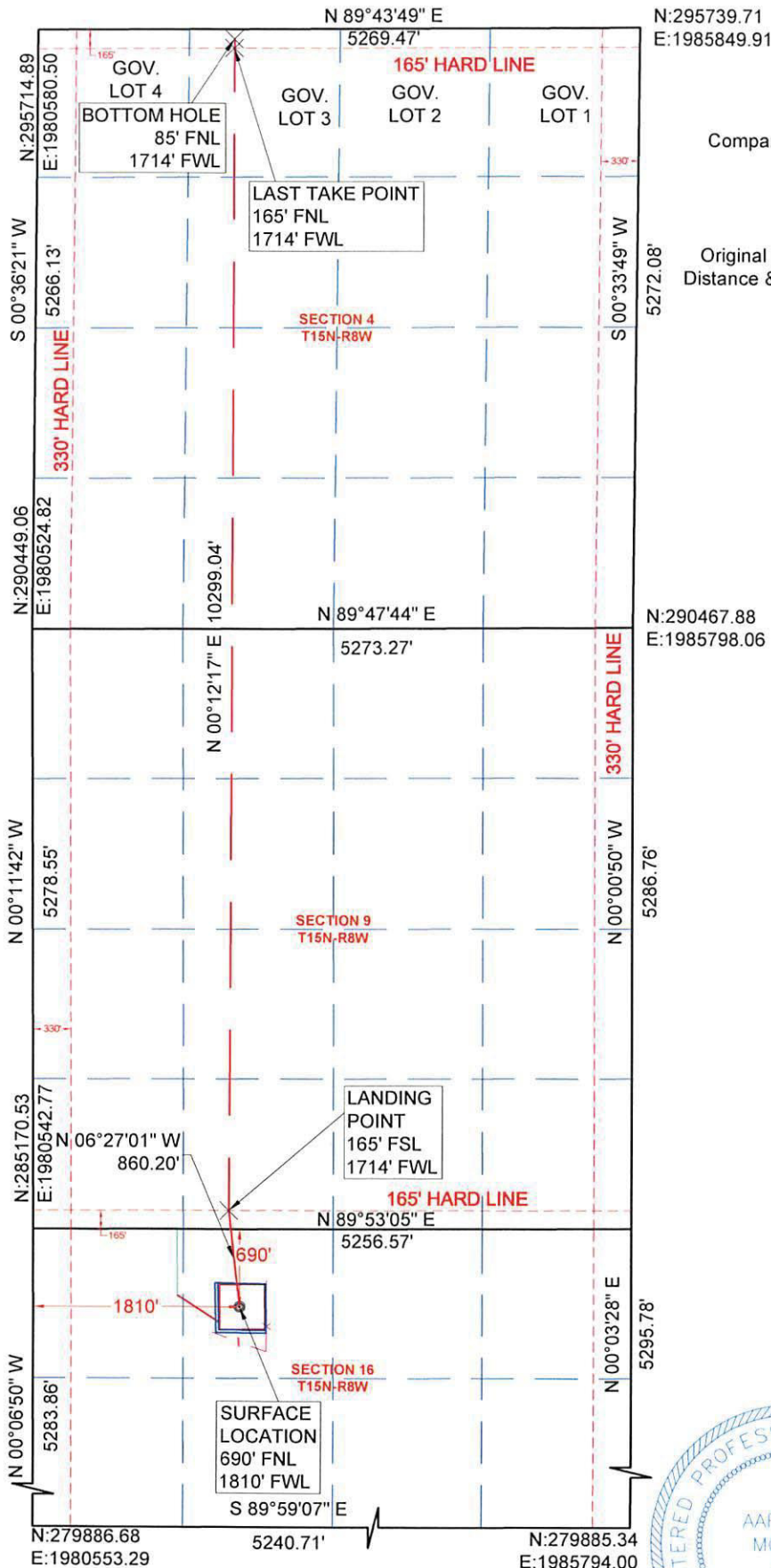
CERTIFICATE:

I Aaron Morris a Registered Land Surveyor in the State Of Oklahoma, do hereby certify that the above described Well Location was surveyed and staked on the ground as shown and that said plat meets or exceeds the Oklahoma Minimum Technical Standards for the practice of land surveying as adopted by the Oklahoma State Board of Licensure for Professional Engineers and Land Surveyors.



[Signature] 9/26/2018

Aaron L. Morris R.P.L.S. No.1477
Bennett-Morris & Associates Land
Surveying P.C. ~ C.A. No. 5795 (LS)
Phone (580) 226-5108
Fax (888) 662-7778
1010 Northwest Boulevard
Ardmore, OK 73401



SURVEY BY: M & M Land Surveying, Inc. ~ C.A. No. 3093 (LS)	
DRAWING BY: Bennett-Morris And Associates Land Surveying, P.C.	
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PROJECT NUMBER: 18404	SITE VISIT: (Explanation and Date)
SHEET: 6 OF 10	STAKING DATE: 09/13/2018
	DRAWING DATE: 09/20/2018