

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

API NUMBER: 073 26261

Approval Date: 09/21/2018

Expiration Date: 03/21/2020

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 19 Twp: 17N Rge: 8W

County: KINGFISHER

SPOT LOCATION: ☐ SW ☐ SE ☐ SE ☐ SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 250 2010

Lease Name: HELEN

Well No: 1708 3H-30X

Well will be 250 feet from nearest unit or lease boundary.

Operator Name: NEWFIELD EXPLORATION MID-CON INC

Telephone: 2816742521; 9188781

OTC/OCC Number: 20944 0

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

DON GRUNTMEIR
13621 E. 860 RD
KINGFISHER OK 73762

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	8413	6	
2	WOODFORD	8983	7	
3			8	
4			9	
5			10	

Spacing Orders: 646834

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201805407
201805408
201805419
201805411
201805412

Special Orders:

Total Depth: 19039

Ground Elevation: 1140

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 270

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 BED AQUIFER

Pit Location Formation: CEDAR HILLS

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-35347

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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: CEDAR HILLS

HORIZONTAL HOLE 1

Sec 31 Twp 17N Rge 8W County KINGFISHER

Spot Location of End Point: SW SE SE SW

Feet From: SOUTH 1/4 Section Line: 85

Feet From: WEST 1/4 Section Line: 2200

Depth of Deviation: 8143

Radius of Turn: 382

Direction: 179

Total Length: 10295

Measured Total Depth: 19039

True Vertical Depth: 8983

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

Notes:

Category

Description

DEEP SURFACE CASING

9/12/2018 - 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

9/12/2018 - 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

9/19/2018 - G57 - 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

9/12/2018 - G71 - PIT 1 & 2 - CLOSED SYSTEM = STEEL PITS PER OPERATOR REQUEST, 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

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

073 26261 HELEN 1708 3H-30X

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
PENDING CD - 201805407	9/19/2018 - G57 - 30-17N-8W X646834 MSSP 5 WELLS NO OP. NAMED REC 8-7-2018 (P. PORTER)
PENDING CD - 201805408	9/19/2018 - G57 - 31-17N-8W X646834 MSSP 5 WELLS NO OP. NAMED REC 8-7-2018 (P. PORTER)
PENDING CD - 201805411	9/19/2018 - G57 - (I.O.) 30 & 31-17N-8W EST MULTIUNIT HORIZONTAL WELL X646834 MSSP, WDFD (WDFD IS AN ADJACENT COMMON SOURCE OF SUPPLY TO THE MSSP) 50% 30-17N-8W 50% 31-17N-8W NEWFIELD EXPLORATION MID-CONTINENT INC. REC 8-7-2018 (P. PORTER)
PENDING CD - 201805412	9/19/2018 - G57 - (I.O.) 30 & 31-17N-8W X646834 MSSP, WDFD SHL SW4 31** COMPL. INT. (31-17N-8W) NCT 165' FSL, NCT 0' FNL, NCT 1980' FWL COMPL. INT. (30-17N-8W) NCT 0' FSL, NCT 165' FNL, NCT 1980' FWL NO OP. NAMED REC 8-7-2018 (P. PORTER) **S/B SHL 250' FSL, 2010' FWL 19-17N-8W & DIRECTION OF LATERAL FROM N-S; WILL BE CORRECTED AT THE HEARING FOR THE FINAL ORDER PER OPERATOR
PENDING CD - 201805419	9/19/2018 - G57 - (I.O.) 30 & 31-17N-8W X165:10-3-28(C)(2)(B) MSSP, WDFD (HELEN 1708 3H-30X) MAY BE CLOSER THAN 600' TO THE HELEN 1H-30X & PROPOSED HORIZONTAL WELLS NEWFIELD EXPLORATION MID-CONTINENT INC. REC 8-7-2018 (P. PORTER)
SPACING - 646834	9/19/2018 - G57 - (640)(HOR) 30 & 31-17N-8W EXT 639736 MSSP EXT 644685 WDFD POE TO BHL (MSSP) NLT 660' FB POE TO BHL (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL (COEXIST W/ SP. ORDER 143434/168065 MNNG, ORDER 143505/168065 MSSLM 30-17N-8W) (COEXIST W/ SP. ORDER 143434 MNNG S2 & NW4, ORDER 143434/213918 MNNG NE4, ORDER 143505 S2 & NW4 MSSLM, ORDER 143505/213918 NE4, 209749 CRLMN NW4, ORDER 212530 CRLMN SW4, ORDER 213918 CRLM NE4, ORDER 504686 CRLM SE4 31-17N-8W)

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

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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.

PERMIT PLAT

API:073 26261

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: **HELEN 1708 3H-30X**

Section 19 Township 17 N Range 8 W ,I.B.M.

County of Kingfisher, State of Oklahoma

Good Location? **YES**

Original Location: 250'FSL - 2010'FWL Elevation 1140' GROUND

Distance & Direction From Nearest Town: 10.3 miles Northwest of Kingfisher

SURFACE LOCATION

DATUM: NAD27

LAT: 35° 55' 41.32"N

LONG: 98° 05' 46.06"W

LAT: 35.928145°N

LONG: 98.096128°W

STATE PLANE

COORDINATES: (US

SURVEY FEET)

ZONE: **NORTH ZONE**

Y (N): 337865.73

X (E): 1971538.9

DATUM: NAD83

LAT: 35° 55' 41.47"N

LONG: 98° 05' 47.28"W

LAT: 35.928186°N

LONG: 98.096467°W

STATE PLANE

COORDINATES: (US

SURVEY FEET)

ZONE: **NORTH ZONE**

Y (N): 337889.43

X (E): 1939939.32

DATA DERIVED FROM

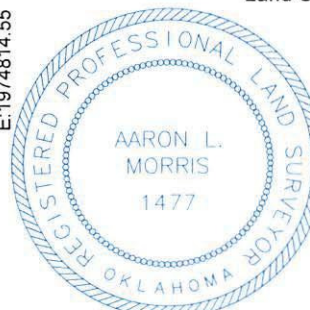
G.P.S. WITH O.P.U.S.

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.

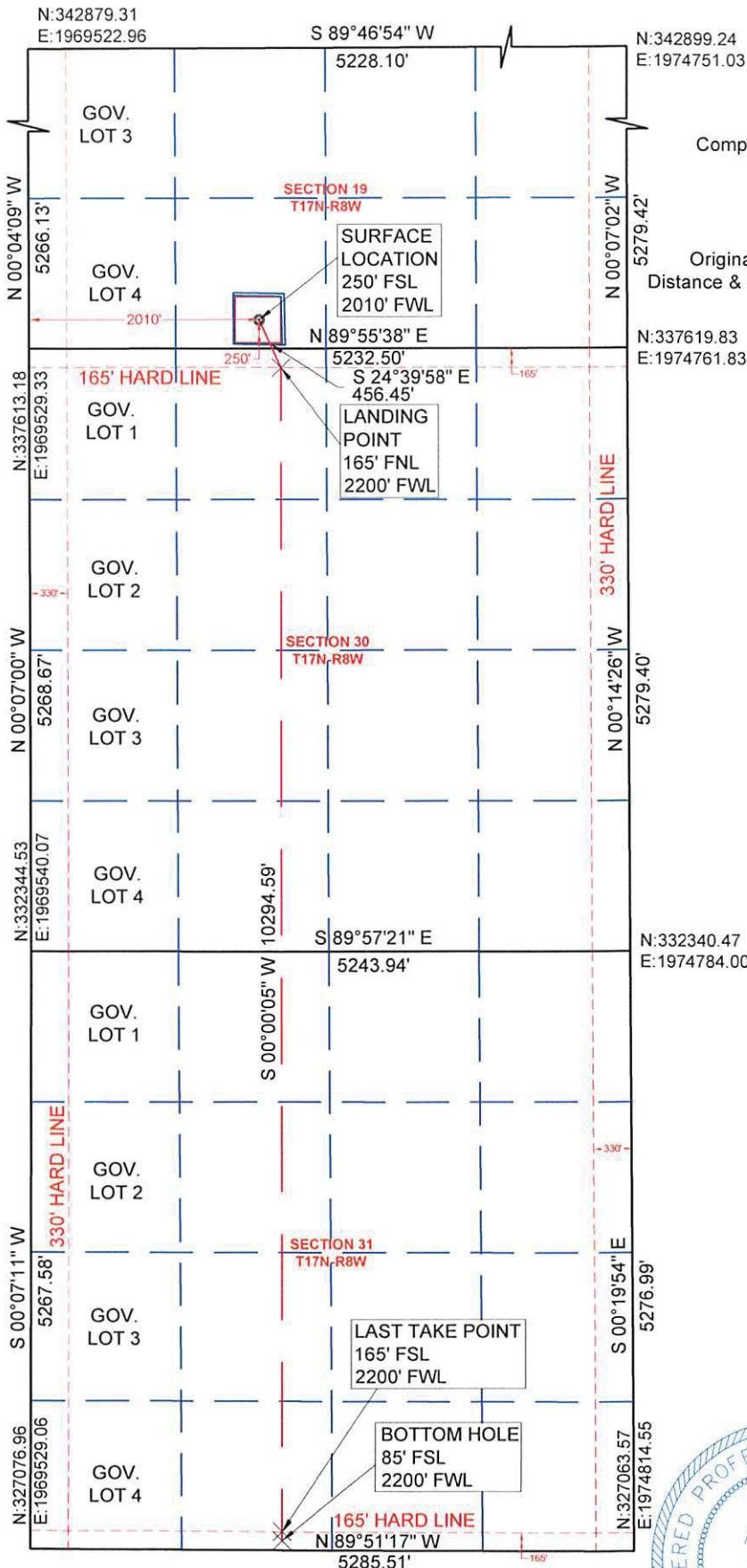
CERTIFICATE:

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.



Aaron L. Morris 08/22/2018

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: 18338	SITE VISIT: (Explanation and Date)
SHEET: 6 OF 10	STAKING DATE: 08/07/2018
	DRAWING DATE: 08/21/2018