API NUMBER: 011 23949

Oil & Gas

Horizontal Hole

Sp

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

Approval Date: 03/02/2018

Expiration Date: 09/02/2018

PERMIT TO DRILL

FROM

EAST

WELL LOCATION:	Sec:	15	Twp:	15N	Rge:	13W	County:	BLAI	NE
SPOT LOCATION:	NW	NE	NE		NE		FEET FROM QUARTER:	FROM	NORTH

SECTION LINES: 300 470

Lease Name: CEDAR RANCH Well No: 1513 1H-15 Well will be 300 feet from nearest unit or lease boundary.

Operator 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

WILBUR DEAN DUNCAN 3425 N. IMO ROAD

ENID OK 73703

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	11920	6	
2	WOODFORD	12600	7	
3			8	
4			9	
5			10	
Spacing Orders:	666835	Location Exception Orders: 667912	2	Increased Density Orders:

Pending CD Numbers: Special Orders:

Total Depth: 17377 Ground Elevation: 1732 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 250

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: ON SITE A. Evaporation/dewater and backfilling of reserve pit.

Type of Mud System: AIR

Is depth to top of ground water greater than 10ft below base of pit? Y G. Haul to recycling/re-use facility: Sec. 22 Twn. 16N Rng. 9W Cnty. 73 Order No: 647741

Within 1 mile of municipal water well? N H. SEE MEMO

Wellhead Protection Area? N

Pit **is** located in a Hydrologically Sensitive Area.

Category of Pit: 4
Liner not required for Category: 4

Pit Location is AP/TE DEPOSIT
Pit Location Formation: TERRACE

Mud System Change to Water-Based or Oil-Based Mud Requires an Amended Intent (Form 1000).

PIT 2 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? N

Wellhead Protection Area?

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

PIT 3 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?

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 15 Twp 15N Rge 13W County **BLAINE**

Spot Location of End Point: SW SE SF Feet From: SOUTH 1/4 Section Line: 50 Feet From: EAST 1/4 Section Line: 380

Depth of Deviation: 11064 Radius of Turn: 800 Direction: 175

Total Length: 5056

Measured Total Depth: 17377 True Vertical Depth: 12600 End Point Location from Lease, Unit, or Property Line: 50

Notes:

Category Description

3/2/2018 - G57 - COMPLETION INTERVAL FOR THE WOODFORD WILL BE GREATER THAN 165' COMPLETION INTERVAL

FNL AND FSL; GREATER THAN 330' FEL AND FWL OF 15-15N-13W PER SPACING ORDER

#666835 PER OPERATOR

2/27/2018 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF **DEEP SURFACE CASING**

CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR

SURFACE CASING

Category Description

HYDRAULIC FRACTURING 2/27/2018 - 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 2/27/2018 - 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

LOCATION EXCEPTION - 667912 3/2/2018 - G57 - (I.O.) 15-15N-13W

X666835 MSSP

COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 330' FEL NEWFIELD EXPLORATION MID-CONTINENT, INC.

9-7-2017

MEMO 2/27/2018 - G71 - PIT 2 & 3 - CLOSED SYSTEM = STEEL PITS PER OPERATOR REQUEST, WBM

& OBM CUTTINGS CAPTURED IN STEEL HALF PITS & TRANSFERRED TO BACKYARD ENERGY

SERVICES 647741 (22-16N-9W), KINGFISHER CO); PIT 3 - OBM TO VENDOR

SPACING - 666835 3/2/2018 - G57 - (640)(HOR) 15-15N-13W

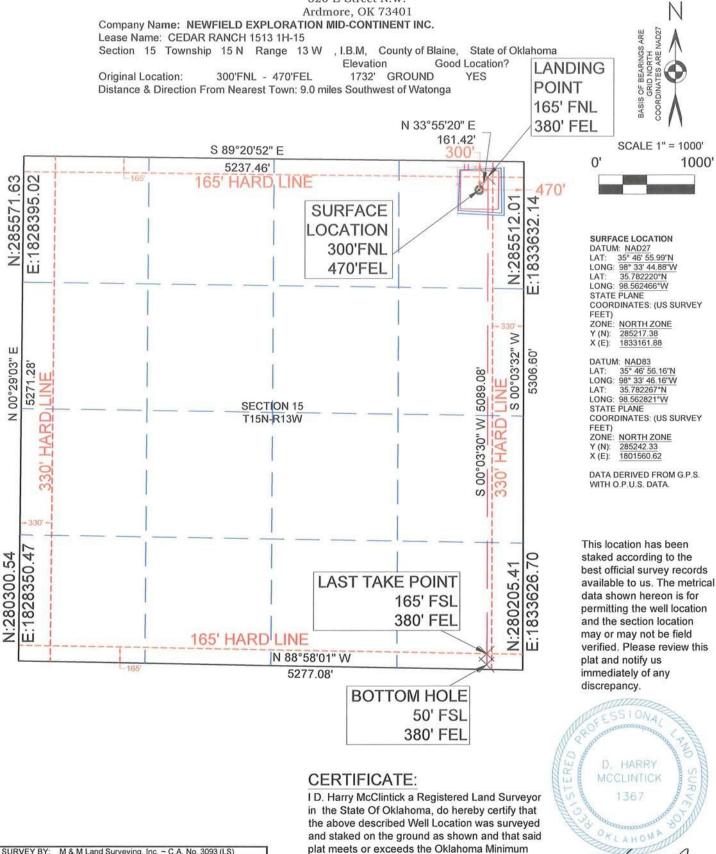
EST MSSP, WDFD, OTHERS POE TO BHL (MSSP) NCT 660' FB

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

PERMIT PLAT

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

API: 011 23949



Technical Standards for the practice of land surveying as adopted by the Oklahoma State

Land Surveyors.

Board of Licensure for Professional Engineers and

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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C.A. No. 5975 (LS) ~ Aaron L. Morris, RPLS
PROJECT NUMBER:

SITE VISIT: (Explanation and Date)

STAKING DATE: 01/25/2018

SHEET: 6 OF 10

DRAWING DATE: 02/06/2018

D. Harry McClintick PLS. No.1367 CFEDS