API NUMBER: 151 24568

Oil & Gas

Horizontal Hole

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

Approval Date: 06/12/2019
Expiration Date: 12/12/2020

PERMIT TO DRILL

WELL LOCATION: S	Sec:	18	Twp:	28N	Rge:	16W	County:	WOODS
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SPOT LOCATION: NW NW NW FEET FROM QUARTER: FROM NORTH FROM WEST SECTION LINES: 187 283

Lease Name: CUNNINGHAM 13-28-17 Well No: 3H Well will be 187 feet from nearest unit or lease boundary.

OperatorBCE-MACH LLCTelephone:4052528151OTC/OCC Number:241740Name:

**BCE-MACH LLC** 

14201 WIRELESS WAY STE 300

OKLAHOMA CITY, OK 73134-2512

RICK & JANET L. CUNNINGHAM 705 OKI AHOMA BI VD.

ALVA OK 73717

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

	Name	Depth	Name	Depth
1	MISSISSIPPI	5540	6	
2			7	
3			8	
4			9	
5			10	
Spacing Orders:	97151	Location Exception Orders: 696	965	Increased Density Orders:

Pending CD Numbers: 201902806 Special Orders:

Total Depth: 11100 Ground Elevation: 1892 Surface Casing: 530 Depth to base of Treatable Water-Bearing FM: 480

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

Chlorides Max: 25000 Average: 8000

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

Within 1 mile of municipal water well? N

Type of Mud System: WATER BASED

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: MARLOW

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-36612
H. CLOSED SYSTEM = STEEL PITS PER OPERATOR REQUEST

## **HORIZONTAL HOLE 1**

Sec 13 Twp 28N Rge 17W County WOODS

Spot Location of End Point: S2 S2 SE SE
Feet From: SOUTH 1/4 Section Line: 150
Feet From: EAST 1/4 Section Line: 660

Depth of Deviation: 5061
Radius of Turn: 547
Direction: 191
Total Length: 5180

Measured Total Depth: 11100

True Vertical Depth: 5615

End Point Location from Lease,
Unit, or Property Line: 150

Notes:

Category Description

HYDRAULIC FRACTURING 6/10/2019 - 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

LOCATION EXCEPTION - 696965 6/12/2019 - GB1 - (I.O.) 13-28N-17W

X97151 MISS

COMPL. INT. NCT 150' FNL, NCT 150' FSL, NCT 330' FEL

BCE-MACH, LLC 5/31/2019

PENDING CD - 201902806 6/12/2019 - GB1 - 13-28N-17W

X97151 MISS 1 WELL NO OP. NAMED

REC. 6/3/2019 (P. PORTER)

SPACING - 97151 6/12/2019 - GB1 - (640) 13-28N-17W

**EST OTHERS** 

EXT 47686/64042 MISS, OTHERS

OPERATOR: MACH RESOURCES LEASE NAME: CUNNINGHAM 13-28-17 WELL NO.: 3H

RANGE: 16W SECTION: 18 TOWNSHIP: 28N

SURFACE HOLE FOOTAGE: 187' FNL - 283' FWL GROUND ELEVATION AT SURFACE HOLE: 1892,30' LANDING POINT FOOTAGE: 600' FNL - 660' FEL BOTTOM HOLE FOOTAGE: 150' FSL - 660' FEL

SECTION: 13 TOWNSHIP: 28N RANGE: 17W

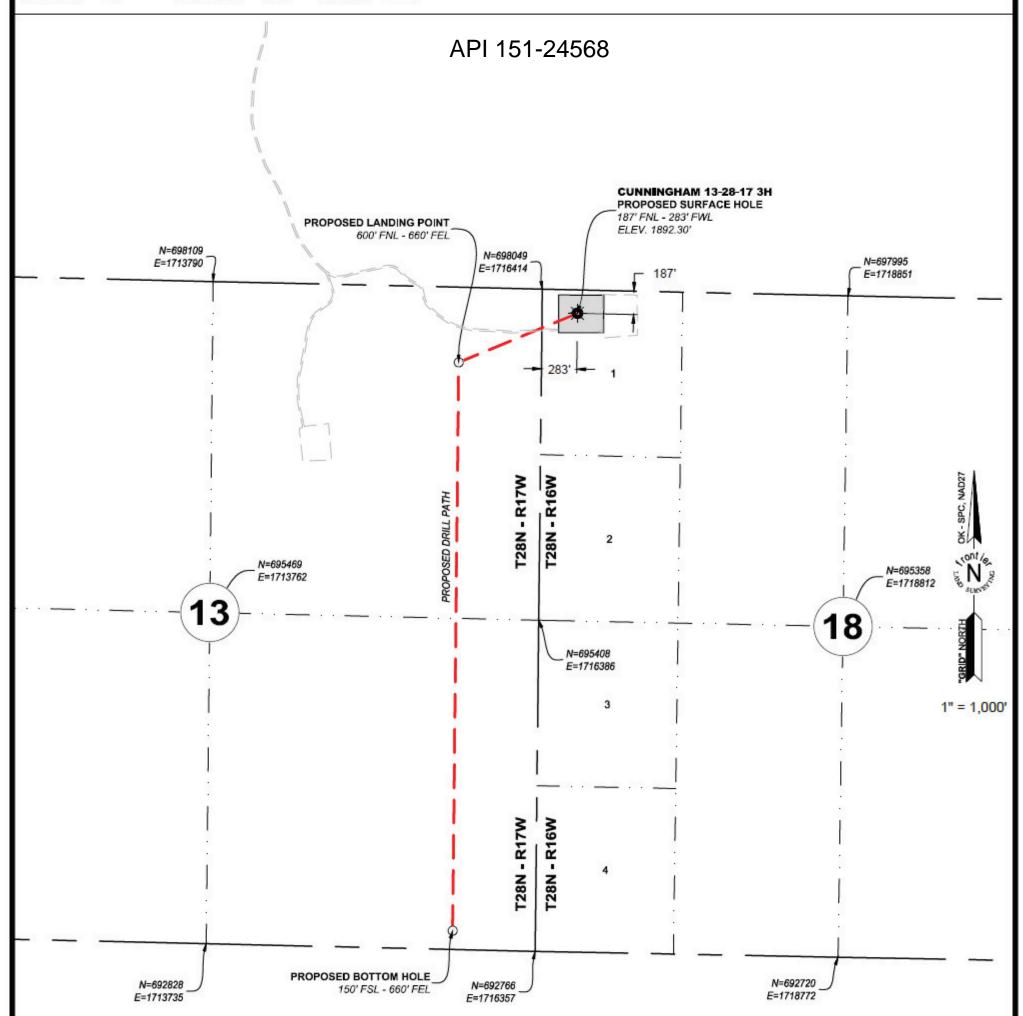
WOODS STATE: OKLAHOMA COUNTY:

ACCEPTABLE DRILL SITE? YES

TERRAIN: LOCATION FELL IN A FIELD, SLOPING FROM SOUTHWEST TO NORTHEAST, WEST OF EXISTING LOCATION.

ACCESSIBILITY TO LOCATION: FROM WEST LINE

DIRECTIONS: FROM THE INTERSECTION OF HWY 64 AND N2260 RD. HEAD NORTH ON N2260 RD FOR 8.1 MILES AND TURN EAST ON LEASE RD. CONTINUE EAST ALONG LEASE RD FOR 1.5 MILES THEN EAST INTO.



## **CUNNINGHAM 13-28-17 3H**

LANDING POINT, BOTTOM HOLE, AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED.

PROPOSED SURFACE HOLE 187' FNL - 283' FWL LAT: 36.91316761 LONG: -98.96897968 N= 697855.7 E= 1716694.3

311 N, MAIN STREET SEILING, OK 73663

PROPOSED LANDING POINT 600' FNL - 660' FEL LAT: 36.91206683 LONG: -98.97220450

N= 697464.4

E= 1715747.5

PROPOSED BOTTOM HOLE 150' FSL - 660' FEL LAT: 36.89961629

LONG: -98.97221480 N= 692931.5 E= 1715699.1

ADAM K. HINDS

PROFESSIONAL LAND SURVEYOR # 1781

PLEASE NOTE THAT THIS LOCATION WAS STAKED ON THE GROUND UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL LAND SURVEYOR. THE ACCURACY OF THIS EXHIBIT IS NOT GUARANTEED. PLEASE CONTACT FRONTIER LAND SURVEYING PROMPTLY IF ANY INCONSISTENCY IS DETERMINED. GPS DATA IS OBSERVED FROM RTK-GPS.

- X AND Y DATA SHOWN HEREON FOR SECTION CORNERS MAY NOT HAVE BEEN SURVEYED ON THE GROUND, AND FURTHERMORE THIS EXHIBIT DOES NOT REPRESENT A TRUE BOUNDARY SURVEY.
- QUARTER SECTION DISTANCE 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.
- ALL VALUES LISTED ARE IN NAD27 HORIZONTALLY AND NAVD88 VERTICALLY.
- THE LOCATION OF EXISTING WELLS SHOWN ARE APPROXIMATE FROM OKLAHOMA CORPORATION COMMISSION DATA PROVIDED BY OTHERS.



Land Services & Consulting

## **CUNNINGHAM 13-28-17 3H**

SHL: 187' FNL - 283' FWL BHL: 150' FSL - 660' FEL

LOCATED IN THE NW/4 OF SECTION 18 28N - 16W I.M. WOODS COUNTY, OKLAHOMA



ENSED

AND ESSIONAL

URVE

14201 WIRELESS WAY OKC, OK 73134 DWG DATE: 5/16/19 DRAWN BY: JPG CHK'D BY: JWB STAKED DATE: 5/15/19 FLS #: 19-0080 SHEET #: 1 OF 5 REV. DWN. DESCRIPTION DATE: JMB R1 MOVE PAD SITE 5/31/19 R2 MDM MOVE PAD SITE, SHL, CHANGE NAME 6/04/19