API NUMBER: 003 23337

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: 09/12/2018
Expiration Date: 03/12/2019

PERMIT TO DRILL

WELL LOCATION:	Sec:	80	Twp:	28N	Rge:	11W	Count	y:	ALFALFA
		$\neg$ $\overline{}$	-	$\overline{}$		_			

SPOT LOCATION: N2 NE NE NW FEET FROM QUARTER: FROM NORTH FROM WEST SECTION LINES: 175 1980

Lease Name: ALVA 5-28-11 Well No: 1H Well will be 175 feet from nearest unit or lease boundary.

Operator BCE-MACH LLC Telephone: 4052528151 OTC/OCC Number: 24174 0

BCE-MACH LLC

14201 WIRELESS WAY STE 300

OKLAHOMA CITY, OK 73134-2512

CITY OF ALVA
415 4TH STREET
ALVA
OK 73717

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

I	Name	Depth	Name	Depth
1	MISSISSIPPIAN	5016 6		
2		7		
3		8		
4		9		
5		10		
Spacing Orders:	594547	Location Exception Orders:		Increased Density Orders:

Pending CD Numbers: 201806759 Special Orders:

Total Depth: 10275 Ground Elevation: 1255 Surface Casing: 400 Depth to base of Treatable Water-Bearing FM: 200

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

Type of Mud System: WATER BASED
Chlorides Max: 45000 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? 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: BISON

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-35264
H. CLOSED SYSTEM = STEEL PITS PER OPERATOR REQUEST

## **HORIZONTAL HOLE 1**

Sec 05 Twp 28N Rge 11W County ALFALFA

Spot Location of End Point: N2 N2 NE NW
Feet From: NORTH 1/4 Section Line: 150
Feet From: WEST 1/4 Section Line: 1980

Depth of Deviation: 4611
Radius of Turn: 573
Direction: 360
Total Length: 4764

Measured Total Depth: 10275

True Vertical Depth: 5095

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

Notes:

Category Description

HYDRAULIC FRACTURING 8/31/2018 - 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

PENDING CD - 201806759 9/4/2018 - G57 - 5-28N-11W

X594547 MSSP

COMPL. INT. NCT 150' FSL, NCT 150' FNL, NCT 1320' FWL

NO OP. NAMED

REC 9-10-2018 (JACKSON)

SPACING - 594547 9/4/2018 - G57 - (640) 5-28N-11W

VAC 526452 MSCT, MSSLM, OTHERS

REFORM OTHERS

EST MSSP

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA
Wireless Way, Okla. City, OK. 73134 (405) 843-4847 \* OUT OF STATE (800) 654-3219
Certificate of Authorization No. 1293 LS 13800 Wireless API:003 23337 ALFALFA County, Oklahoma \_\_\_8 28N Range 11W I.M. 175'FNL - 1980'FWL Section Township T29N-R11W Township Line-P STANDARD PARALLEL 1502 T28N-R11W X 1879139 Y 707320 X 1884422 Y 707329 1980 X 1883062 Y 707326 The 00 R4 % LOT 2 LOT 1 LOT 4 LOT 3 NOTE: construction purposes BOTTOM HOLE 90TYOM HOLE 150'FNL-1980'FWL NAD-27 (US Feet) 36'56'31.0" N 98'24'24.3" W 36.94'1953669' N 98.406752658' W X=1881118 Y=707173 2421 PROPOSED GRID S/2-NW/ S/2-NE/4 DRILL NAD-27 herein OK NORTH US Feet ONLY 1000' X 188440 Y 704747 X 1879130 Y 704754 5 Good LANDING POINT 302'FSL-1980'FWL NAD-27 (US Feet) 36'55'43.9" N 98'24'24.3" W 36.928870327' N 98.406741233' W X= 1881102 Y= 772409 Best Accessibility to Distance & Direction from Hwy Jct or Tov Operator: MACH RESOURCES Topography & Vegetation the NW Cor. of Sec. Drill Name: ALVA 5-28-Site? Y= 702409 Town Location 8-T28N-R11W Yes Loc. ANDING 702105 fell-From Burlington, 2, 175 North cut X 1881758 Y 702108 X 1884392 Y 702110 Reference Stakes Set wheat 657 웃 1980 off go county road pasture Set ±0.5 Stakes None 2465 3. East, 9 Well Alternate 1 then 2 0 ±2.0 宝 LANDING POINT, BOTTOM HOLE AND DRILL PATH PROVIDED BY OPERATOR LISTED, NOT SURVEYED. Location ]⊒. 8 X 1879117 Y 699469 X 1884389 Y 699465 North ELEVATION: lõ Stok INFORMATION X 1879097 Y 696831 X 1881742 Y 696826 X 188438 Y 696819 Date of Drawing: Aug. 16, 2018 SSIONAL DATUM: NAD-27 LAT: 36\*55'39.2"N Invoice # 297063A Date Staked: Aug. 06, 2018 AC LONG: 98'24'24.3"W CERTIFICATE: d with a GPS foot Horiz, Nert. LAT: 36.927560242° N SURVE THOMAS L. Thomas L. Howell \_\_\_an Oklahoma Licensed Land LONG: 98.406740091° W HOWELL Surveyor and an authorized agent of Topographic Land STATE PLANE Surveyors of Oklahoma, do hereby certify to the 1433 COORDINATES: (US Feet) information shown herein This ered ±1.4 OK NORTH ZONE: Nave OKLAHOMA 1881100 ath distribution X:\_\_

701932

Oklahoma Lic. No.