API NUMBER: 151 24579

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: 10/22/2019
Expiration Date: 04/22/2021

PERMIT TO DRILL

WELL LOCATION:	Sec: 1	0 Twp:	27N	Rge:	17W	, ,	County:	WOO	DS		
SPOT LOCATION:	SE	SE S	W	SW		FEET FROM QUAR	RTER:	FROM	SOUTH	FROM	WEST
						SECTION LINES:			249		1009
Lease Name: N	MACK 15-27	7-17					We	II No:	2H		

Well will be 249 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

LEE MACKEY LLC
PO BOX 852
ALVA
OK 73717

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	5720	6	
2			7	
3			8	
4			9	
5			10	
Spacing Orders:	697102	Location Exception Orders:		Increased Density Orders:

Pending CD Numbers: 201904778 Special Orders:

201905090

Type of Pit System: CLOSED Closed System Means Steel Pits

Total Depth: 10900 Ground Elevation: 1761 Surface Casing: 790 Depth to base of Treatable Water-Bearing FM: 720

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 Mud System: WATER BASED D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-37007

Chlorides Max: 8000 Average: 5000 H. CLOSED SYSTEM = STEEL PITS PER OPERATOR REQUEST

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

Pit is not located in a Hydrologically Sensitive Area.

Category of Pit: C

Within 1 mile of municipal water well? N

Wellhead Protection Area?

Liner not required for Category: C
Pit Location is NON HSA
Pit Location Formation: BLAINE

HORIZONTAL HOLE 1

Sec 15 Twp 27N Rge 17W County WOODS

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

Depth of Deviation: 5240
Radius of Turn: 532
Direction: 185
Total Length: 4825

Measured Total Depth: 10900

True Vertical Depth: 5755

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

Notes:

Category Description

HYDRAULIC FRACTURING 10/18/2019 - 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

PENDING CD - 201904778 10/18/2019 - GC2 - 15-27N-17W

X697102 MSSP 1 WELL

NO OP. NAMED REC. 10-15-2019 (THOMAS)

PENDING CD - 201905090 10/18/2019 - GC2 - (E.O.) 15-27N-17W

X697102 MSSP

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

NO OP. NAMED

REC. 10-22-2019 (NORRIS)

SPACING - 697102 10/18/2019 - GC2 - (640)(HOR) 15-27N-17W

EST MSSP

COMPL. INT. (MSSP) NCT 660' FB

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA
13800 Wireless Way, Okla. City, OK. 73134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS API: 151-24579 County, Oklahoma

27N Range 17W I.M. WOODS 249'FSL - 1009'FWL Section 10 Township X 1705579 Y 671818 X 1702926 Y 671836 X 1700275 Y 671855 NOTES:

THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY

AND AND ROTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED. GRID
NAD-27
OK NORTH
US FEET
Scale:
= 1000 11 11 X 1700251 Y 669215 1000 10 X 1705543 Y 569181 Best Accessibility to Lo Distance & Direction from Hwy Jct or Town Good Operator: BCE-MACH Topography & Vegetation to the SW Cor. of Sec. Drill Site? Name: MACK 15-27-17 2390 Location FC Yes 10-T27N-R17W From Comp Houston, Loc. V-DOOR EAST e e From X 1702867 Y 666560 1009'-EXISTING WELL 249' on South eve X 1705507 Y 666543 LANDING POINT 200'FNL-660'FWL NAD-27 (US Feet) 36'49'34.5" N 99'01'18.9" W 36.826252206' N 99.021922490' W X 1700883 Y 665372 1700227 Reference S Stakes Set off pad, 웃 ease ±52' et None go road NE. 11 ±5.0 9, ∄. existing ₩ell Alternate East, No.: well 1700180 663923 then Location 24 ±1.25 15 X 1705468 Y 663906 PROPOSED DRILL ∃. ELEVATION: 761' Gr. at leve North 11 PATH BOTIOM HOLE 150'FSL-680'FWL NAD-27 (US Feet) 36'48'45.5' N 93'01'19.4" W 35.B12647311' N 93.022042789' W X 1700786 Y 561419 pad X 170542 Y 661268 X 1702781 Y 661269 X 1700133 Y 661270 Project # 130860 Date of Drawing: Oct. 16, 2019

Date Staked: Oct. 15, 2019 PROFESSIONAL DATUM: NAD-27 LAT: 36'49'39.0"N AC LONG: 99'01'14.6"W CERTIFICATE: I, Inomas L. Howell an Oklahoma Licensed Land Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the information shown herein LAT: 36.827489520° N THOMAS LONG: 99.020726364' W HOWELL STATE PLANE COORDINATES: (US Feet) 1433 ZONE: OK NORTH 1701238 X:_ *LAHOMA 666819 Oklahoma Lic. No.