API NUMBER: 017 25123

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: 11/21/2017
Expiration Date: 05/21/2018

PERMIT TO DRILL

WELL LOCATION: Sec: 11 Twp: 12N Rge: 6W County: CANADIAN

SPOT LOCATION: NE NE NW NW FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: **250 1230** 

Lease Name: GLACIER 11-14-12-6 Well No: 2HX Well will be 250 feet from nearest unit or lease boundary.

Operator JONES ENERGY LLC Telephone: 5123282953 OTC/OCC Number: 21043 0

JONES ENERGY LLC

807 LAS CIMAS PKWY STE 350

AUSTIN, TX 78746-6193

MATTHEW CHARLES MACH 13600 NW 10TH STREET

YUKON OK 73099

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

 Name
 Depth
 Name
 Depth

 1
 MISSISSIPPIAN
 8448
 6

 2
 WOODFORD
 8773
 7

3 8 4 9 5

Spacing Orders: 668588 Location Exception Orders: Increased Density Orders:

Pending CD Numbers: 201702774 Special Orders:

Total Depth: 18653 Ground Elevation: 1281 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 530

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 D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 17-40004
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 ALLUVIAL

Pit Location Formation: ALLUVIUM

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 ALLUVIAL

Pit Location Formation: ALLUVIUM

## **HORIZONTAL HOLE 1**

Sec 14 Twp 12N Rge 6W County CANADIAN

Spot Location of End Point: S2 S2 S2 S2 Feet From: SOUTH 1/4 Section Line: 165
Feet From: WEST 1/4 Section Line: 2640

Depth of Deviation: 8236 Radius of Turn: 477 Direction: 174

Total Length: 9668

Measured Total Depth: 18653

True Vertical Depth: 8773

End Point Location from Lease,
Unit, or Property Line: 165

Notes:

**MEMO** 

Category Description

DEEP SURFACE CASING 11/3/2017 - 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 11/3/2017 - 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

11/3/2017 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201702774 11/21/2017 - G60 - (640)(HOR) 14-12N-6W

EXT 635714 MSSP, WDFD, OTHER COMPL. INT. (MSSP) NLT 660' FB

COMPL. INT. (WDFD) NLT 165' FNL/FSL, NLT 330' FEL/FWL

**REC. 8/8/17 (MINMIER)** 

Category Description

PENDING CD - 201705955 11/21/2017 - G60 - (I.O.) 11 & 14-12N-6W

EST MULTIUNIT HÒRIZONTAL WELL X668588 (11-12N-6W) MSSP, WDFD X201702774 (14-12N-6W) MSSP, WDFD

(WDFD IS AN ADJACENT COMMON SOURCE OF SUPPLY TO MSSP)

50% 11-12N-6W 50% 14-12N-6W NO OP. NAMED REC. 10/3/17 (NORRIS)

PENDING CD - 201705956 11/21/2017 - G60 - (I.O.) 11 & 14-12N-6W

X668588 (11-12N-6W) MSSP, WDFD X201702774 (14-12N-6W) MSSP, WDFD

COMPL. INT. (11-12N-6W) NCT 165' FNL, NCT 0' FSL, NCT 2000' FWL COMPL. INT. (14-12N-6W) NCT 0' FNL, NCT 165' FSL, NCT 2000' FWL

NO OP. NAMED

REC. 10/23/17 (MILLER)

PENDING CD - 201705957 11/21/2017 - G60 - 11-12N-6W

X668588 MSSP, WDFD

1 WELL

NO OP. NAMED REC. 10/3/17 (NORRIS)

PENDING CD - 201705958 11/21/2017 - G60 - 14-12N-6W

X201702774 MSSP, WDFD

1 WELL

NO OP. NAMED REC. 10/3/17 (NORRIS)

SPACING - 668588 11/21/2017 - G60 - (640)(HOR) 11-12N-6W

EXT 629376 MSSP. WDFD. OTHER COMPL. INT. (MSSP) NCT 660' FB

COMPL. INT. (WDFD) NCT 165' FNL/FSL, NCT 330' FEL/FWL

(COEXIST WITH SP. ORDER 135124/141550 MISS)

## S.H.L. Sec. 11-12N-6W I.M. JONES Well Location Plat B.H.L. Sec. 14-12N-6W I.M. Operator: JONES ENERGY, LTD Lease Name and No.: GLACIER 11-14-12-6 2HX Foolage: 250' FNL - 1230' FWL GR. ELEVATION: 1281' Section: 11 Township: 12N Range: 6W I.M. 3501725123 County: Canadian State of Oklahoma Terrain at Loc.: Location fell in open flat cultivated field. 1"=1320 S89°49'57"E 589°49'57"E - 2640' GPS DATUM X:2055746 Y:195457 X:2061026 Y:195441 **NAD 27** 'EW FOREMAN RE OK NORTH ZONE ENETRATION POINT: 165' FNL - 2640' FWL Surface Hole Loc.: 1.0 Lat: 35°32'09.97"N 6°43'E (Grid Br. 6°43'E (Geod Br. Lon: 97°48'30.62"W N00\*2222\*W X: 2056978 Y: 195203 AND RD. Penetration Point: Lat: 35°32'10.74"N Lon: 97°48'13.56"W X: 2058387 Y: 195284 \*EW SUNSHINE RD X:2055763 Y:192813 Bottom Hole Loc.: Lat: 35°30'29.73"N Lon: 97°48'13.54"W ڪ X: 2058410 Y: 185070 ₹. N00"22"11 -- 2643"-X:2055780 Y:190170 -2622 X:2061024 Y:190163 8 NORTH CANADIAN RIVER S00°05'31"W. X:2061029 Y:187535 UNION PACIFIC RAILROAD 10 S00°05'31"W BOTTOM HOLE LOC. 165' FSL - 2640' FWL X:2061034 Y:184897 X.2055770 Y-184913 STATE HIGHWAY 66 S89°50'25"E \$89°50'25"F Quarter Section distances may be assumed from a Government Survey Plat or assumed as a proportionale distance from opposing section corners, or occupation livereof, an may not have been measured on-the-ground, and further, does not represent a true boundary survey. boundary survey. Please note that this location was staked on the ground under the supervision of a Licensed Professional Land Surveyor, but the accuracy of this survey is not guaran Please contact Arborna Surveying and Mapping promptly if any inconsistency is determined. DPS data is observed from RTK - GPS. determined. GPS data a observed from RTK. GPS. NOTE: X and Y data show hereon for Section Corners may NOT have been surveyed on-the-ground, and further, does NOT represent a true Boundary Survey. Survey and plat by. Arkoma Surveying and Mapping, PLLC P.O. Box 238 Wilburton. OK 74578 Ph. 918-465-5711 Fax 918-465-5030 Certificate of Authorization No. 5348 Expires June 30. 2018 Invoice 47701 A.R. SIONAL Certification: This is to certify that this Well Location Plat represents LANCE G. the results of a survey made on the ground performed under the supervision of the undersigned. MATHIS Invoice #7001-A-B Date Staked: 07/06/17 By C.K. Date Drawn: 07/10/17 By K.B. Added PP & BHL: 08/02/17 By K.B. 08/08/17 OKLAHOMA CAHOMP

LANCE G. MATHIS

**OK LPLS 1664** 

Rev PP & BHL: 08/07/17 By: R.S.