API NUMBER: 093 25120

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:	01/18/2018
Expiration Date:	07/18/2018

PERMIT TO DRILL

WELL LOCATION:	Sec:	26	Twp:	20N	Rge:	15W	County:	MAJOR
		_	$\neg$	$\overline{}$		$\neg$		

SPOT LOCATION: NW SE SW SW FEET FROM QUARTER: FROM SOUTH FROM WEST SECTION LINES: 519 813

Lease Name: JOHNSON Well No: 26-35-2H Well will be 519 feet from nearest unit or lease boundary.

Operator COMANCHE EXPLORATION CO LLC Telephone: 4057555900 OTC/OCC Number: 20631 0

COMANCHE EXPLORATION CO LLC 6520 N WESTERN AVE STE 300

OKLAHOMA CITY, OK 73116-7334

TED & RITA JOHNSON REVOCABLE TRUST

4814 S. KESSELER

WICHITA KS 67217

Special Orders:

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

	Name	Depth	Name	Depth
1	MISSISSIPPI LIME	9100	6	
2			7	
3			8	
4			9	
5			10	
Spacing Orders:	643721	Location Exception Orders:		Increased Density Orders:

201708673 201800563

201708674

Pending CD Numbers:

Total Depth: 13230 Ground Elevation: 1697 **Surface Casing: 800** Depth to base of Treatable Water-Bearing FM: 340

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: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-33738

Chlorides Max: 8000 Average: 5000

H. SEE MEMO

Chlorides Max: 8000 Average: 5000 H. SEE MEN

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 AP/TE DEPOSIT
Pit Location Formation: TERRACE

## 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 AP/TE DEPOSIT
Pit Location Formation: TERRACE

## **HORIZONTAL HOLE 1**

Sec 35 Twp 20N Rge 15W County **MAJOR** SW Spot Location of End Point: SW SE NW Feet From: SOUTH 1/4 Section Line: 1418 WEST Feet From: 1/4 Section Line: 813

Depth of Deviation: 8466 Radius of Turn: 600 Direction: 180

Total Length: 4340

Measured Total Depth: 13230

True Vertical Depth: 9380

End Point Location from Lease,
Unit, or Property Line: 813

Notes:

Category Description

DEEP SURFACE CASING 1/12/2018 - 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 1/12/2018 - 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 1/12/2018 - 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

MEMO 1/12/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

Category Description

PENDING CD - 201800563 1/18/2018 - G58 - (E.O.) N2 & N2 S2 35-20N-15W

X165:10-3-28(C)(2)(B) MSSLM (JOHNSON 26-35-2H) MAY BE CLOSER THAN 600' TO THE JOHNSON 26-35-1H

HEARING 1/24/2018 (OK PER HULLINGER)

PENDING CD - 201708673 1/12/2018 - G58 - (E.O.) N2 & N2 S2 35-20N-15W

X643761 MSSLM

1 WELL

NO OP. NAMED

REC 1/16/2018 (M. PORTER)

PENDING CD - 201708674 1/12/2018 - G58 - (E.O.) N2 & N2 S2 35-20N-15W

X643761 MSSLM

COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 330' FWL OF N2 & N2 S2 UNIT IN 35-20N-15W

NO OP. NAMED

REC 1/16/2018 (M. PORTER)

SPACING - 643721 1/12/2018 - G58 - (480)(HOR)(IRR UNIT) N2, N2 S2 35-20N-15W

EST MSSLM, OTHERS POE TO BHL NCT 660' FB

(COEXIST WITH PRODUCING NON-HORIZONTAL SPACING UNITS)

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA
13800 Wireless Way, Okla. City, Ok. 73134 (405) 843-48477 \* OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS MAJOR County, Oklahoma 093-25120 519'FSL - 813'FWL 26 Township <u>20N</u> Range <u>15W</u> I<sub>s</sub>M<sub>s</sub> Section X= 1775616 Y= 433263 X≈ 1772988 Y≈ 433269 X= 1770360 Y= 433275 The 0 GR4 A S construction EEEEs herein is GRID NAD-27 Okla. North US Feet Scale: 1"= 1000 X= 1775616 Y= 430632 X= 1770347 Y= 430653 (26) Best Accessibility t Distance & Directi from Hwy Jct or 1 Good Topography Operator: COMANCHE Drill Name: & Direction Jct or Tow & Vegetation 2105 NOSNHOF ó UMO Location RESOURCES 813 1828 From Loc EXISTING WELL 519 fe Orion, From 8 읔 South LANDING POINT 150°FN.—813°FWL NAD—27 (US Feet) 36°10°22.6° N 98'46°31.4° W 36.172945957 N 98.775378133° W X=1771146 Y=427877 X= 1772975 Y= 428017 2 level X= 1775617 Y= 428003 Reference S Stakes Set 90 pad, off county ±3.0 ±155' [⊒. Stakes o road South BOTTOM HOLE 1418 FSL - ±135' NORTH OF CALC COLE BOUNDARY LINE - 8137M NAD-27 (US Feet) 36'09'48.0" N 98'46'31.0" W 36 162773190' N 98.775283371' W X=1771144 Y=424174 PROPOSED ٩ 잌 ₩ell ਰਿ Alternate existing No.: 26-35-2H DRILL The ¥S. ¥e\_ X= 1775589 Y= 424104 Location Cor 35 0 Lot 8 Sec. 1697' Gr. at level pad **ELEVATION:** Lot 9 1216 26-T20N-R15W 1817 813 MAJOR CO. C.O.E. CALCULTED CORNER X= 1775589 Y= 424104 DEWEY CO. ±135 (CAL) Lot 2 Lot 3 Lot 1 Lot 7 Lot 5 T20N-R15W Township Line-P T19N-R15W X= 1770330 Y= 422760 X= 1772956 Y= 422748 LANDING POINT, BOTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED. Date of Drowing: Jan. 12, 2018 DATUM: NAD-27 LAT: 36'10'29.2"N LONG: 98'46'31.4"W Invoice # 286879 Date Staked: Jan. 12, 2018 AC wos receiver occurecy, **CERTIFICATE:** d with a GPS foot Horiz./Vert THOMAS I LAT: 36.174783234° N Thomas L. Howell \_\_\_an Oklahoma Licensed Land HOWELL LONG: 98.775386334° W Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the information shown herein STATE PLANE COORDINATES: (US Feet) 1433 -12.18 ZONE: <u>OK NORTH</u> X: 1771149 Z. Nane OKLAHOM Mome

Oklahoma Lic. No. \_\_\_1433

428546