API NUMBER: 093 25201

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: 02/08/2019
Expiration Date: 08/08/2020

## PERMIT TO DRILL

I ease Name	нитсн	IISON						Wa	all No:	6-32-1H			
							SECTION LINE	S:		470		350	
SPOT LOCATION:	SW	NE	N	E	NE		FEET FROM QU	UARTER:	FROM	NORTH	FROM	EAST	
WELL LOCATION:	Sec:	06	Twp:	20N	Rge:	15V	٧	County	r: MAJ	OR			

Well will be 350 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

PATRICIA & TORI HUTCHISON 233722 E. COUNTY RD 54

FAIRVIEW OK 73737

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

Name Depth Name	Depth
1 MISSISSIPPI LIME 8959 6	
2 7	
3	
4 9	
5 10	
Spacing Orders: 110453 Location Exception Orders:	Increased Density Orders:

Pending CD Numbers: 201810343 Special Orders:

201810344

Total Depth: 14121 Ground Elevation: 1853 Surface Casing: 800 Depth to base of Treatable Water-Bearing FM: 430

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: 19-36196

Chlorides Max: 8000 Average: 5000 H. SEE MEMO

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 32 Twp 21N Rge 15W County **MAJOR** NW Spot Location of End Point: N2 N2 NW Feet From: NORTH 1/4 Section Line: 135 WEST Feet From: 1/4 Section Line: 660

Depth of Deviation: 8330
Radius of Turn: 599
Direction: 360
Total Length: 4850

Measured Total Depth: 14121

True Vertical Depth: 8959

End Point Location from Lease,
Unit, or Property Line: 135

Notes:

Category Description

DEEP SURFACE CASING 2/4/2019 - 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 2/4/2019 - 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

INTERMEDIATE CASING 2/4/2019 - 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 2/4/2019 - 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 - 201810343 2/5/2019 - GB1 - 32-21N-15W

X110453 MSSLM, OTHER

1 WELL

COMANCHE EXPLORATION COMPANY, LLC

REC. 1/7/2019 (P. PORTER)

PENDING CD - 201810344 2/5/2019 - GB1 - (I.O.) 32-21N-15W

X110453 MSSLM, OTHER

X165:10-3-28(C)(2)(B) MSSLM MAY BE CLOSER THAN 600' TO REESE 1-32

COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 560' FWL

NO OP. NAMED

REC. 1/7/2019 (P. PORTER)

SPACING - 110453 2/5/2019 - GB1 - (640) 32-21N-15W

EXT OTHERS EST MSSLM, OTHER

35-093-25201 TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA
13800 Wireless Way, Okila, City, OK, 73134 \* LOCAL (405) 843-4847 \* OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS County, Oklahoma \_\_20N Range MAJOR 470'FNL - 350'FEL Section \_ Township \_15W\_I.M\_ BOTTOM HOLE X 1753717 Y 460072 X 1756347 Y 460036 EXISTING WELL = PROPOSED BOTTOM HOLE 135 FNL - 660 FWL 3615 38.2 N 98'49'59.2 W 36.260607926'N 98.833121873'W X 1754377 Y 459928 GRID
NAD-27
OK NORTH
US FEET
Scale:
= 1000' ====== 31 1000 X 1753709 Y 457443 PATH PROPOSED LANDING POINT 300 FSL - 660 FWL 3614 50.4 N 98'49'58.9 W 36,247345963 N 98,833030132'W X 1754362 Y 455100 Best Accessibility to Location From North Distance & Direction from Hwy Jct or Town From Chester, Ok., Fast to the NE carner of Section 5, 170N -Operator: COMANCHE Lease Topography Name: æ Vegetation HUTCHISON EXPL Location ORATION LANDING POINT T21N - R15W Township Line P T20N - R15W PARALLEL NORTH fe\_ X 1752098 Y 454821 8 470 North ≥. heavy R15W 90 Reference S Stakes Set off county 350 LOT 3 LOT 2 LOT 1 brush miles LOT 4 East Stakes ±200' road 9 q SW. ş 2630' Alternate Location None Hwy <u>o</u>, No.: 6-32-1H existing pipeline S/2-NE/4 S/2-NW/4 ළ SE-NW then #2 6 miles X 1754712 Y 451699 ELEVATION: 1853' Gr. at North, then Stake # E/2-SW/4 mile. NOTES:

LANDING POINT, BOTTOM HOLE
AND DRILL PATH PROVIDED BY
OPERATOR LISTED, NOT SURVEYED

THE INFORMATION SHOWN
HEREIN IS FOR CONSTRUCTION
PURPOSES ONLY. X 1754699 Y 449073 X 1752081 Y 449072 Revision X A Date of Drawing: February 6, 2019 5510NAL NAD-27 NDATUM:\_ Date Staked: January 31, 2019 RKM Project # 123574 LAT: 36'14'42.8"N LAT: 36'14'42.8"N

"88' LONG: 98'49'58.7"W

8 1 LAT: 36.245230847' N

E 1 LONG: 98.832963503' W

5 0 STATE PLANE **CERTIFICATE:** SURV THOMAS L I, Thomas L. Howell \_\_an Oklahoma Licensed Land Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the LONG: 98.832963503' W
STATE PLANE
COORDINATES (US FEET): HOWELL 1433 information shown herein. ZONE: OK NORTH recei recei OKLAHOMP X: 1754375 1433 454330 Oklahoma Lic. No.