API NUMBER: 129 24101

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: 05/10/2017
Expiration Date: 11/10/2017

PERMIT TO DRILL

WELL LOCATION:	Sec:	19	Twp:	12N	Rge:	26W	Co	ounty:	ROGER MILLS	
			$\neg$	$\overline{}$		$\neg$				

SPOT LOCATION: SE NW NE NE FEET FROM QUARTER: FROM NORTH FROM EAST SECTION LINES: 647 662

Lease Name: THUNDER 17-12-26 Well No: 1HA Well will be 647 feet from nearest unit or lease boundary.

Operator FOURPOINT ENERGY LLC Telephone: 3032900990 OTC/OCC Number: 23429 0

FOURPOINT ENERGY LLC 100 SAINT PAUL ST STE 400

DENVER, CO 80206-5140

JERRY AND ORNA DAVIS 10434 NORTH 1670 ROAD

SWEETWATER OK 73666

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

	Name	Depth	Name	Depti	h
1	DES MOINES	12860	6		
2			7		
3			8		
4			9		
5			10		
Spacing Orders:	171758	Location Exception Orders: 661391		Increased Density Orders:	662364

Pending CD Numbers: Special Orders:

Total Depth: 17935 Ground Elevation: 2350 **Surface Casing: 870** 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 Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED
Chlorides Max: 40000 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: OGALLALA

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 17-32526

H. SEE MEMO

## 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 BED AQUIFER

Pit Location Formation: OGALLALA

## **HORIZONTAL HOLE 1**

Sec 17 Twp 12N Rge 26W County ROGER MILLS

Spot Location of End Point: NW NE NW NW Feet From: NORTH 1/4 Section Line: 50
Feet From: WEST 1/4 Section Line: 880

Depth of Deviation: 12285 Radius of Turn: 573

Direction: 10
Total Length: 4750

Measured Total Depth: 17935

True Vertical Depth: 12860

End Point Location from Lease,
Unit, or Property Line: 50

Notes:

Category Description

HYDRAULIC FRACTURING 5/3/2017 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF HYDRAULIC

FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK HTTP://FRACFOCUS.ORG/ WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME

COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE

INCREASED DENSITY - 662364 5/10/2017 - G60 - 17-12N-26W

X171758 DSMN 1 WELL

I WELL

NO OP. NAMED

3/31/17

LOCATION EXCEPTION - 661391 5/10/2017 - G60 - (I.O.) 17-12N-26W

X171758 DSMN

COMPL. INT. NCT 300' FNL, NCT 300' FSL, NCT 600' FWL

NO OP. NAMED

2/27/17

MEMO 5/3/2017 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

SPACING - 171758 5/10/2017 - G60 - (640) 17-12N-26W

EXT 132448 DSMN EXT OTHERS

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA
6709 NORTH CLASSEN BLVD., OKIA CITY, DKIA. 73116 \* LOCAL (405) 843-4847 \* OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS ROGER MILLS County, Oklahoma

Description 

County, Oklahoma

Description 

Range 

County, Oklahoma 647'FNL-662'FEL 3512924101 19 Township . Section X= 1410254 Y= 196705 50 BOTTOM HOLE BOTTOM HOLE 50 FRL -880 FWL NAD-27 (US Feet) 35 31 25.5 TM 35 523740983 TM 35 523740983 TM X= 1411133 Y= 196849 NAD-83 (US Feet) 35 31 25.6 TM 35 323789737 TM X= 1379531 Y= 196674 X= 141552 Y= 196669 X= 1407601 Y= 196778 880 (1760') LAST TAKE Y= 196674

LAST TAKE POINT
300'FNL-880'FML
NAD-27 (US Feet)
35'31'23.0"N
99'38'44.1"W
35.523054150'N
99.978921666'W
X= 1411129
Y= 196399
NAD-83 (US Feet)
35'31'23.2"N
99'58'45.5" W
35.523102913'N
99-979312081'W
X= 1379527
Y= 196424 2590 X= 141021 Y= 194067 18 17 X= 1415459 Y= 194023 EXISTING WELL //1 Y= 198424

FRST TAKE POINT
300 FSL-880 FML
NAD-27 (US Feet) 35730 '36.7 Feet) 35730 '36.7 Feet) 35.510197546'N
99.578856668'W
E= 1411053
Y= 191720
NAD-83 (US Feet) 35.530 '36.9 'N
99.5924695'N
99.5924695'Y
Y= 191744 1/1 11 11-1 11 T 11 li DAVIS 1-18 11 X= 1412781 Y= 191403 ¥= 1515394 ]{ X= 1410169 Y= 191429 FIRST TAKE POINT 2000 F-71 SURFACE HOLE 647 FNL-662 FEL NAD-83 (US Feet) 35'30'27.5" N 99'59'03.9" W 35.50'7636860'N 99.984426650'W X= 1377890 Y= 190826 <u>662'</u> DAVIS 1-20 DAVIS 3-19 06R484 0-N-5 DAVIS 2-19 1996 141534 X= 1410110 Y= 188788 19 (20 NOTE: II1000 The information shown herein is for 11 construction purposes ONLY. 11 Distances shown in (parenthesis) are calculated based upon the Quarter Section being 2640 feet, those shown in [brackets] are based on GLO (General Land Office) FOURPOINT distances and have NOT been measured on the ground. BOTTOM HOLE, FIRST TAKE POINT, LAST TAKE POINT AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED. Operator: FOURPOINT ENERGY, LLC. **ELEVATION:** Legse Name: THUNDER 17-12-26 Well No.: 1HA 2350' Gr. at Level Pad Topography & Vegetation <u>Loc. fell on existing pad; ±15' North of existing well</u> Reference Stakes or Alternate Location Stakes Set None Good Drill Site? \_ From North off county road Best Accessibility to Location \_ Distance & Direction From St. Hwy. 152 and the Texas and Oklahoma State line, go SE ±0.1 mile on St. Hwy. 152, from Hwy Jct or Town then North ±4.5 miles, then East ±1.0 mile, then North ±1.0 mile to the NE Cor. of Sec. 19-T12N-R26W. Revision 🛛 🗚 Revision ■ Date of Drawing: May 1, 2
Invoice # 267113 Date Staked: Oct. 24, 2016 May 1, 2017 5510NAL DATUM: NAD-27 LAT: 35°30'27.3"N LONG: 99'59'02.5"W **CERTIFICATE:** LAT: \_\_35.507587897"N THOMAS I Thomas L. Howell I, Thomas L. Howell \_\_an Oklahoma Licensed Land Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the HOWELL LONG: 99.984036299'W STATE PLANE 1433 COORDINATES: (US Feet) information shown herein 플로 ZONE: OK NORTH X: 1409493 Thomas Z. Nan OKLAHOWA

Oklahoma Lic. No.

190802