

OKLAHOMA CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION  
P.O. BOX 52000  
OKLAHOMA CITY, OK 73152-2000  
(Rule 165:10-3-1)

API NUMBER: 051 24559

Approval Date: 01/23/2019

Expiration Date: 07/23/2020

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 15 Twp: 5N Rge: 8W

County: GRADY

SPOT LOCATION: ☐ SW ☐ NW ☐ NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 504 2375

Lease Name: CROW 10-5-8

Well No: 1H

Well will be 504 feet from nearest unit or lease boundary.

Operator KAISER-FRANCIS OIL COMPANY  
Name:

Telephone: 9184940000

OTC/OCC Number: 6390 0

KAISER-FRANCIS OIL COMPANY  
PO BOX 21468  
TULSA, OK 74121-1468

DONALD L. CROW & ROBIN CROW COOPER  
3310 COUNTY STREET 2790  
CEMENT OK 73017

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

| Name     | Depth | Name | Depth |
|----------|-------|------|-------|
| 1 HOXBAR | 11139 | 6    |       |
| 2        |       | 7    |       |
| 3        |       | 8    |       |
| 4        |       | 9    |       |
| 5        |       | 10   |       |

Spacing Orders: 629222

Location Exception Orders: 687164

Increased Density Orders: 679526

Pending CD Numbers:

Special Orders:

Total Depth: 16788

Ground Elevation: 1248

**Surface Casing: 1200**

Depth to base of Treatable Water-Bearing FM: 690

Under Federal Jurisdiction: Yes

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: 3700 Average: 1500

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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: MARLOW

D. One time land application -- (REQUIRES PERMIT)

PERMIT NO: 19-36152

H. SEE MEMO

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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: MARLOW

## HORIZONTAL HOLE 1

Sec 10 Twp 5N Rge 8W County GRADY

Spot Location of End Point: NE NE NW NW

Feet From: NORTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 1160

Depth of Deviation: 10600

Radius of Turn: 549

Direction: 343

Total Length: 5325

Measured Total Depth: 16788

True Vertical Depth: 11237

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

### Notes:

#### Category

#### Description

#### DEEP SURFACE CASING

1/23/2019 - G56 - 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

12/30/2018 - 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](http://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](http://FRACFOCUS.ORG)

#### INCREASED DENSITY - 679526

1/22/2019 - G56 - 10-5N-8W  
X629222 HXBR  
2 WELLS  
KAISER-FRANCIS OIL COMPANY  
6/25/2018

#### LOCATION EXCEPTION - 687164

1/22/2019 - G56 - (I.O.) 10-5N-8W  
X629222 HXBR  
COMPL INT NCT 165' FNL, NCT 165' FSL, NCT 660' FWL  
KAISER-FRANCIS OIL COMPANY  
11/27/2018

This permit does not address the right of entry or settlement of surface damages.

051 24559 CROW 10-5-8 1H

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.

| Category         | Description   |
|------------------|---|
| MEMO             | 12/30/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2<br>- OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT |
| SPACING - 629222 | 1/22/2019 - G56 - (640)(HOR) 10-5N-8W<br>EST HXBR<br>COMPL INT NCT 660' FB<br>(COEXIST WITH SP # 225576 HXBRL)                                    |

## TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

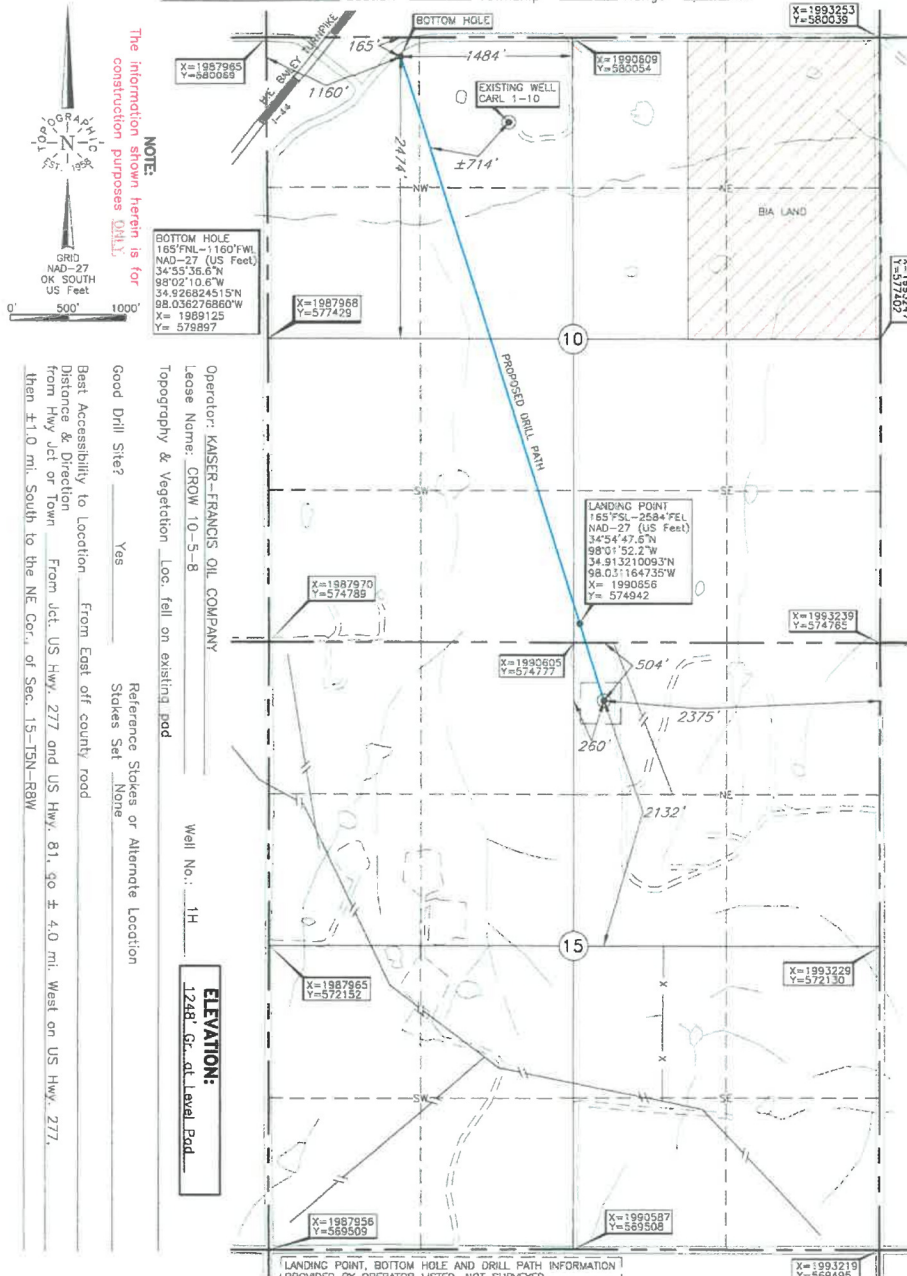
13800 Wireless Way, Okla. City, OK 73134 • LOCAL (405) 843-4847 • OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS

GRADY

County, Oklahoma

504° FNL - 2375° FEL Section 15 Township 5N Range 8W I.M.



**DATUM:** NAD-27  
**LAT:** 34° 54' 40.9" N  
**LONG:** 98° 01' 49.7" W  
**LAT:** 34.911369671° N  
**LONG:** 98.030473805° W  
**STATE PLANE**  
**COORDINATES:** (US Feet)  
**ZONE:** OK SOUTH  
**X:** 1990863  
**Y:** 574272

(Reference jct. of Hwy. 277 and Hwy. 81 with US Hwy. 277, then go South on US Hwy. 277)