API NUMBER: 085 21301 Α

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

Approval Date: 03/29/2019 09/29/2020 Expiration Date:

6390 0

Horizontal Hole Oil & Gas

Multi Unit

Amend reason: INCREASE DEPTH OF SURFACE CASING TO 2000'

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 12 Twp: 7S	Rge: 1W	County:	LOVE	į		
SPOT LOCATION: SW NE NE	NE	FEET FROM QUARTER: F	ROM	NORTH	FROM	EAST
Lease Name: WARREN		Well	No:	430 1-12H7X8		500

KAISER-FRANCIS OIL COMPANY Operator Telephone: 9184940000 Well will be 430 feet from nearest unit or lease boundary.

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

WARREN EDWARD STRATE 17559 DIXON ROAD **MARIETTA** OK 73448

OTC/OCC Number:

Formation(s) (Permit Valid for Listed Formations Only): Name Depth Name Depth WOODFORD 14142 1 6 2 7 3 8 4 9 5 10 686810 Spacing Orders: Location Exception Orders: 689284 Increased Density Orders: 260251

Pending CD Numbers: 201806704 Special Orders:

Total Depth: 23732 Ground Elevation: 899 Surface Casing: 2000 Depth to base of Treatable Water-Bearing FM: 610

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: Yes

Approved Method for disposal of Drilling Fluids: PIT 1 INFORMATION

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?

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: ANTLERS D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-36414 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: ANTLERS

HORIZONTAL HOLE 1

County Sec 08 Twp 7S Rge 1E LOVE NE Spot Location of End Point: SE NE ΝE Feet From: NORTH 1/4 Section Line: 430 EAST Feet From: 1/4 Section Line: 165

Depth of Deviation: 12752 Radius of Turn: 477

Direction: 90

Total Length: 10230

Measured Total Depth: 23732

True Vertical Depth: 14142

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

Notes:

Category Description

DEEP SURFACE CASING 4/3/2019 - G71 - APPROVED; (1) NOTIFYING OCC FIELD INSPECTOR IMMEDIATELY OF ANY

LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING (2) 2-STAGE CEMENTING TOOL TO BE SET AT 100'

BELOW BTW

HYDRAULIC FRACTURING 4/3/2019 - 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

LOCATION EXCEPTION - 689284 4/5/2019 - G56 - (I.O.) 7 & 8-7S-1E

X686810 WDFD, OTHERS 7-7S-1E X260251 WDFD, OTHERS 8-7S-1E

COMPL INT (7-7S-1E) NCT 165' FWL, NCT 0' FEL, NCT 330' FNL COMPL INT (8-7S-1E) NCT 0' FWL, NCT 165' FEL, NCT 330' FNL

KAISER-FRANCIS OIL CO.

1/16/2019

MEMO 4/3/2019 - 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 - 201806704 4/5/2019 - G56 - (I.O.) 7 & 8-7S-1E

4/5/2019 - G56 - (I.O.) 7 & 8-7S-1E ESTABLISH MULTIUNIT HORIZONTAL WELL

X686810 WDFD, OTHERS 7-7S-1E X260251 WDFD, OTHERS 8-7S-1E

50% 7-7S-1E 50% 8-7S-1E

KAISER-FRANCIS OIL CO. REC 9/18/2018 (DUNN)

SPACING - 260251 4/5/2019 - G56 - (640) 8-7S-1E

EXT OTHERS

EXT 248343 WDFD, OTHERS

SPACING - 686810 4/5/2019 - G56 - (640) 7-7S-1E

EXT 628419 WDFD