

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

API NUMBER: 017 24705 A

Approval Date: 09/22/2014
Expiration Date: 03/22/2015

Horizontal Hole Oil & Gas

Amend reason: REVISE SURFACE CASING DEPTH & DEEP CASING ATTACHMENTS

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 20 Twp: 14N Rge: 8W

County: CANADIAN

SPOT LOCATION: NW NE NW NW

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 250 758

Lease Name: FARO

Well No: 17-1H

Well will be 250 feet from nearest unit or lease boundary.

Operator Name: FELIX ENERGY LLC

Telephone: 7209742067

OTC/OCC Number: 23331 0

FELIX ENERGY LLC
1530 16TH ST STE 500
DENVER , CO 80202-1467

KATHRYN THORNHILL
P.O. BOX 65
OKARCHE OK 73762

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

	Name	Depth	Name	Depth
1	MISSISSIPPI SOLID	9000	6	
2	WOODFORD	9300	7	
3			8	
4			9	
5			10	

Spacing Orders: 166936
631677

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201406003

Special Orders:

Total Depth: 14750

Ground Elevation: 1263

Surface Casing: 1975

Depth to base of Treatable Water-Bearing FM: 380

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: Yes

Surface Water used to Drill: Yes

PIT 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 5000 Average: 3000

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: BLAINE

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 14-28283

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: 200000 Average: 50000

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: BLAINE

HORIZONTAL HOLE 1

Sec 17 Twp 14N Rge 8W County CANADIAN

Spot Location of End Point: N2 NW NW NW

Feet From: NORTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 330

Depth of Deviation: 8880

Radius of Turn: 600

Direction: 356

Total Length: 4927

Measured Total Depth: 14750

True Vertical Depth: 9480

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

Notes:

Category

Description

DEEP SURFACE CASING

9/22/2014 - G76 - APPROVED CONTINGENT ON NOTIFYING OCC FIELD STAFF IMMEDIATELY OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING

DEEP SURFACE CASING

11/14/2014 - G71 - APPROVED CONTINGENT ON NOTIFYING OCC FIELD STAFF IMMEDIATELY OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING

MEMO

9/22/2014 - G76 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201406003

9/22/2014 - G91 - (I.O.) 17-14N-8W
X 166936 MSSSD
X 201406002 WDFD
COMP. INT. NCT 165 FNL, NCT 165 FSL, NCT 330 FWL
NO OP. NAMED
REC. 9-12-2014 (LEAVITT)

SPACING - 166936

9/22/2014 - G91 - (640) 17-14N-8W
EXT VARIOUS OTHERS
EXT 76186/164538 MSSSD

SPACING - 631677

11/14/2014 - G91 - (640)(HOR) 17-14N-8W
EXT 625910 WDFD
POE TO BHL NCT 330 FEL OR FWL, NCT 165 FNL OR FSL

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