API NUMBER: 083 24146

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: 07/12/2013
Expiration Date: 01/12/2014

## PERMIT TO DRILL

WEST

WELL LOCATION:	Sec:	23	Twp:	19N	Rge:	4W	County:	LOG	AN	
SPOT LOCATION:	NW	sw	SI	V	sw		FEET FROM QUARTER:	FROM	SOUTH	

SECTION LINES: **350 263** 

Lease Name: CAIG 23-19N-4W Well No: 1WH Well will be 263 feet from nearest unit or lease boundary.

 Operator Name:
 DEVON ENERGY PRODUCTION CO LP
 Telephone:
 4052353611; 4052353
 OTC/OCC Number:
 20751
 0

DEVON ENERGY PRODUCTION CO LP 333 W SHERIDIAN AVE DEC 34.428

OKLAHOMA CITY, OK 73102-5010

ROBERT T. CAIG AND KAREN CAIG 11117 SABINE VALLEY DR.

LITTLE ROCK AR 72212

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

	Name	Depth		Name	Depth
1	MISSISSIPPIAN	5697	6		
2	MISENER-HUNTON	6050	7		
3	VIOLA	6075	8		
4	WOODFORD	6112	9		
5			10		
Spacing Orders:	590649	Location Exception Orders:	610223		Increased Density Orders:
	607854	·			·
				<del></del>	

Pending CD Numbers: Special Orders:

Total Depth: 10933 Ground Elevation: 1022 Surface Casing: 500 Depth to base of Treatable Water-Bearing FM: 340

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 D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 13-23797

Chloridae May 5000 August 2000

Chlorides Max: 5000 Average: 3000 H. SEE ME

Is depth to top of ground water greater than 10ft below base of pit? Y

Within 1 mile of municipal water well? N

 $\mbox{Pit} \qquad \mbox{is} \qquad \mbox{located in a Hydrologically Sensitive Area}.$ 

Category of Pit: C

Wellhead Protection Area?

Liner not required for Category: C
Pit Location is BED AQUIFER
Pit Location Formation: GARBER

## 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: GARBER

## HORIZONTAL HOLE 1

Sec 23 Twp 19N Rge 4W County LOGAN NW Spot Location of End Point: N2 N2 NW Feet From: NORTH 1/4 Section Line: 50 Feet From: WEST 1/4 Section Line: 660

Depth of Deviation: 5626 Radius of Turn: 716

Direction: 5

Total Length: 4178

Measured Total Depth: 10933

True Vertical Depth: 6120

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

Notes:

Category Description

LOCATION EXCEPTION - 610223 7/12/2013 - G30 - (I.O.) 23-19N-4W

X590650\*\* MSSP, WDFD, MSRH

X607854 VIOL

MSSP, WDFD, MSRH: 1ST PERF NCT 150 FSL, NCT 330 FWL

LAST PERF NCT 150 FNL, NCT 330 FWL VIOL: NCT 330 FSL, NCT 330 FWL LAST PERF NCT 330 FNL, NCT 330 FWL DEVON ENERGY PRODUCTION COMPANY, L.P.

4/11/13

\*\*S/B 590649, TO BE CORRECTED AT HEARING FOR FINAL ORDER LOCATION EXCEPTION

MEMO 7/11/2013 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR OPTION, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

SPACING - 590649 7/12/2013 - G30 - (640 HOR) 23-19N-4W

EST MSSP. WDFD. MSRH

POE TO BHL (MSSP, MSRH): NLT 660' FB, NCT 600' FWB POE TO BHL (WDFD): NLT 330' FB, NCT 600' FWB

(SUPERSEDE SP. 122035 MSSLM)

SPACING - 607854 7/12/2013 - G30 - (640 HOR) 23-19N-4W

EST VIOL

POE TO BHL: NCT 660' FB

(COEXSIT WITH PRODUCING NON-HORIZONTAL SPACING UNITS; SUPERCEDE NON-

DEVELOPED NON-HORIZONTAL SPACING UNITS)