API NUMBER: 149 21677

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: 04/01/2013
Expiration Date: 10/01/2013

## PERMIT TO DRILL

WELL LOCATION:	Sec:	20	Twp:	11N	Rge:	18W	County:	WASHITA

SPOT LOCATION: SW SE SW FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: **270 1500** 

Lease Name: DEBRA 20-11-18 Well No: 1H Well will be 270 feet from nearest unit or lease boundary.

Operator CHESAPEAKE OPERATING INC Telephone: 4059358143 OTC/OCC Number: 17441 0

CHESAPEAKE OPERATING INC

PO BOX 18496

Spa

OKLAHOMA CITY, OK 73154-0496

DEBRA DEANN KARBER 7606 GARDEN KNOLL LN

HUMBLE TX 77396

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

	Name	Depth	Nam	ne	Depth	h
1	VIRGILIAN	7600	6			
2	MISSOURIAN	9860	7			
3	DES MOINES	11800	8			
4			9			
5			10			
pacing Orders:	575713 208748	Location Exception Orders:	608418	1	Increased Density Orders:	609092

Pending CD Numbers: Special Orders:

Total Depth: 17807 Ground Elevation: 1751 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 380

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

PIT 1 INFORMATION

Type of Pit System: ON SITE

Type of Mud System: WATER BASED

Chlorides Max: 25000 Average: 5000

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

H. SEE

Within 1 mile of municipal water well? N
Wellhead Protection Area? N

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: 1B

Liner required for Category: 1B

Pit Location is OTHER HSA

Pit Location Formation: DOXEY

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 13-22857

H. SEE MEMO

PIT 2 INFORMATION

Type of Pit System: ON SITE

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: 3

Liner required for Category: 3

Pit Location is OTHER HSA

Pit Location Formation: DOXEY

## **HORIZONTAL HOLE 1**

Sec 20 Twp 11N Rge 18W County WASHITA

Spot Location of End Point: NW NW NE NW
Feet From: NORTH 1/4 Section Line: 200
Feet From: WEST 1/4 Section Line: 1500

Depth of Deviation: 12295
Radius of Turn: 361
Direction: 360
Total Length: 4420

Measured Total Depth: 17807

True Vertical Depth: 12656

End Point Location from Lease,
Unit, or Property Line: 200

Notes:

Category Description

DEEP SURFACE CASING 3/29/2013 - 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

INCREASED DENSITY - 609092 4/1/2013 - G30 - 20-11N-18W

X208748 DSMN

1 WELL

CHESAPEAKE OPERATING, INC.

3/15/13

LOCATION EXCEPTION - 608418 4/1/2013 - G30 - (I.O.) 20-11N-18W

X208748 DSMN

X575713 VRGN, MSRN

COMP. INT. NCT 300 FNL, NCT 300 FSL, NCT 1320 FWL

CHESAPEAKE OPERATING, INC.

3/1/13

MEMO 3/29/2013 - G71 - PITS 1 & 2 - CONCRETE LINED PIT PER OPERATOR REQUEST, PIT 2 - OBM

RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

SPACING - 208748 4/1/2013 - G30 - (640) 20-11N-18W

EXT 197707 MOUGW, DSMN, OTHERS

(VAC MOUGW BY 281459)

SPACING - 575713 4/1/2013 - G30 - (640) 20-11N-18W

VAC 281459 HXBR, OTHERS

EXT 281578 VRGN

**EST MSRN** 

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.