API NUMBER: 045 23555

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:	12/30/2014
Expiration Date:	06/30/2015

## PERMIT TO DRILL

							SECTION LINES:		63		201
SPOT LOCATION:	SW	SW	/ S	W	SW		FEET FROM QUARTER:	FROM	SOUTH	FROM	WEST
WELL LOCATION:	Sec:	05	Twp:	16N	Rge:	22V	V Count	y: ELLI	S		

Lease Name: WILLIAMS 5-16-22 Well No: 2H Well will be 63 feet from nearest unit or lease boundary.

Operator CHESAPEAKE OPERATING LLC Telephone: 4059358143; 4059358 OTC/OCC Number: 17441 0

CHESAPEAKE OPERATING LLC

PO BOX 18496

OKLAHOMA CITY, OK 73154-0496

DANNY J. & BRENDA K. WILLIAMS

ROUTE 1, BOX 118

ARNETT OK 73832

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

	Name	Depth	Name	Depti	1
1	TONKAWA	8243	6		
2			7		
3			8		
4			9		
5			10		
Spacing Orders:	66170	Location Exception Orders:	631895	Increased Density Orders:	632536

Pending CD Numbers: Special Orders:

Total Depth: 13050 Ground Elevation: 2001 Surface Casing: 720 Depth to base of Treatable Water-Bearing FM: 470

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: 8000

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?

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: 1B

Liner required for Category: 1B
Pit Location is BED AQUIFER
Pit Location Formation: OGALLALA

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

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

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.

PERMIT NO: 14-29277

PIT 2 INFORMATION

Type of Pit System: ON SITE

Type of Mud System: OIL BASED

Chlorides Max: 300000 Average: 160000

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 BED AQUIFER

Pit Location Formation: OGALLALA

## **HORIZONTAL HOLE 1**

Sec 05 Twp 16N Rge 22W County **ELLIS** N2 NW Spot Location of End Point: N2 NW Feet From: NORTH 1/4 Section Line: 200 WEST Feet From: 1/4 Section Line: 660

Depth of Deviation: 7463 Radius of Turn: 780

Direction: 4

Total Length: 4362

Measured Total Depth: 13050

True Vertical Depth: 8243

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

Notes:

Category Description

INCREASED DENSITY - 632536 12/29/2014 - G76 - 5-16N-22W

X66170 TNKW

1 WELL

CHESAPEAKE OPERATING, LLC.

11/3/2014

LOCATION EXCEPTION - 631895 12/29/2014 - G76 - (I.O.) 5-16N-22W

X66170 TNKW

COMPL. INT. NCT 300 FNL, NCT 300 FSL, NCT 500 FWL

CHESAPEAKE OPERATING, LLC.

10/15/2014

MEMO 12/19/2014 - G71 - PITS 1 & 2 - CONCRETE LINED PIT PER OPERATOR REQUEST, PIT 2 - OBM

RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

SPACING - 66170 12/29/2014 - G76 - (640) 5-16N-22W

EXT 61184/65653 & 63358/65421 TNKW