API NUMBER: 129 24029

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: 12/04/2014
Expiration Date: 06/04/2015

PERMIT TO DRILL

WELL LOCATION: Sec: 08 Twp: 15N Rge: 24W County: ROGER MILLS

SPOT LOCATION: NW NW NW NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 205

SECTION LINES: 285 2325

Lease Name: BLACK 5-15-24 Well No: 1H Well will be 285 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

KRIS BLACK

18022 EAST 840 ROAD

CRAWFORD OK 73638

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

Name Depth Name Depth 1 **DOUGLAS** 8161 6 2 TONKAWA 8570 7 3 8 4 9 10 168985 Spacing Orders: Location Exception Orders: 629456 Increased Density Orders: 629455

Pending CD Numbers: Special Orders:

Total Depth: 14000 Ground Elevation: 2327 Surface Casing: 770 Depth to base of Treatable Water-Bearing FM: 520

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?

Wellhead Protection Area? Y

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: 1A

Liner required for Category: 1A

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) PERMIT NO: 14-28906

H. SEE MEMO

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? Y

Wellhead Protection Area? Y

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 15N Rge 24W County ROGER MILLS

Spot Location of End Point: N2 N2 NE NW
Feet From: NORTH 1/4 Section Line: 200
Feet From: WEST 1/4 Section Line: 1980

Depth of Deviation: 7931
Radius of Turn: 780
Direction: 350
Total Length: 4844

Measured Total Depth: 14000

True Vertical Depth: 8711

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

Notes:

Category Description

INCREASED DENSITY - 629455 12/2/2014 - G75 - 5-15N-24W

X168985 TNKW

1 WFI I

CHESAPEAKE OP., INC. (NOW CHESAPEAKE OP., L.L.C.)

LOCATION EXCEPTION - 629456 12/2/2014 - G75 - (I.O.) 5-15N-24W

X168985 DGLS, TNKW

COMPL. INT. NCT 300 FSL & NCT 2000 FEL, NCT 300 FNL & NCT 1500 FWL

CHESAPEAKE OP., INC. (NOW CHESAPEAKE OP., L.L.C.)

MEMO 11/12/2014 - G76 - PIT 1 & 2 - CONCRETE-LINED PIT PER OPERATOR REQUEST; PIT 2 - OBM TO

VENDOR, OBM CUTTINGS PER DISTRICT

PUBLIC WATER SUPPLY WELLS 11/12/2014 - G76 - ROGER MILLS RWD #2, 3 PWS/WPA, SW4 8-15N-24W

SPACING - 168985 12/2/2014 - G75 - (640) 5-15N-24W

EST OTHERS

EXT 61499/139578 DGLS EXT 61184/163744 TNKW

EXT OTHERS