API NUMBER: 149 21712

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: 12/03/2014
Expiration Date: 06/03/2015

PERMIT TO DRILL

WELL LOCATION: Sec: 12 Twp: 11N Rge: 19W County: WASHITA

SPOT LOCATION: SW SE SE FEET FROM QUARTER: FROM SOUTH FROM EAST SECTION LINES: 310 1215

Lease Name: LEAL 13-11-19 Well No: 1H Well will be 310 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

BEN BRANSON HC 66, BOX 31

FOSS OK 73647

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

Name Depth Name Depth BROWN DOLOMITE DES MOINES 1 4400 6 11500 2 PERMIAN GRANITE WASH 5200 7 TONKAWA UP (DOUGLAS) 8850 8 3 TONKAWA LOW 9330 9 HOXBAR 10150 10 131149 Spacing Orders: Location Exception Orders: 632535 Increased Density Orders: 632534

Pending CD Numbers: Special Orders:

Total Depth: 17350 Ground Elevation: 1735 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 410

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

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 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)

H. SEE MEMO

PERMIT NO: 14-29124

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.

DOXEY

Category of Pit: 3
Liner required for Category: 3
Pit Location is OTHER HSA

Pit Location Formation:

HORIZONTAL HOLE 1

Sec 13 Twp 11N Rge 19W County WASHITA

Spot Location of End Point: S2 S2 SE SE
Feet From: SOUTH 1/4 Section Line: 200
Feet From: EAST 1/4 Section Line: 660

Depth of Deviation: 11003
Radius of Turn: 780
Direction: 173
Total Length: 5122

Measured Total Depth: 17350

True Vertical Depth: 12625

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

Notes:

Category Description

DEEP SURFACE CASING 11/26/2014 - G76 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS

OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR

SURFACE CASING

INCREASED DENSITY - 632534 12/2/2014 - G75 - 13-11N-19W

X131149 DSMN 2 WELLS

CHESAPEAKE OP., L.L.C.

11-3-2014

LOCATION EXCEPTION - 632535 12/2/2014 - G75 - (I.O.) 13-11N-19W

X131149 BRWDO, PMGW, TKUDG, TNKWL, HXBR, DSMN COMPL. INT. NCT 300 FNL, NCT 300 FSL, NCT 500 FEL

CHESAPEAKE OP., L.L.C.

11-3-2014

MEMO 11/26/2014 - G76 - PIT 1 & 2 - CONCRETE-LINED PIT PER OPERATOR REQUEST; PIT 2 - OBM TO

VENDOR, OBM CUTTINGS PER DISTRICT

SPACING - 131149 12/2/2014 - G75 - (640) 13-11N-19W

EST BRWDO, PMGW, TKUDG, TNKWL, HXBR, DSMN, OTHERS

WATERSHED STRUCTURE 11/26/2014 - G76 - WELL WITHIN 1/2 MILE OF AN OKLAHOMA CONSERVATION COMMISSION

WATERSHED STRUCTURE. CONTACT THE LOCAL CONSERVATION DISTRICT OFFICE AT (580)

832-3719 PRIOR TO DRILLING