API NUMBER: 011 23722

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: 01/11/2017
Expiration Date: 07/11/2017

PERMIT TO DRILL

WELL LOCATION: Sec: 05 Twp: 19N Rge: 12W County: BLAINE

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

SECTION LINES: 394 618

Lease Name: HOSKINS 5-19-12 Well No: 2H Well will be 394 feet from nearest unit or lease boundary.

Operator CHESAPEAKE OPERATING LLC Telephone: 4059353425; 4059358 OTC/OCC Number: 17441 0

CHESAPEAKE OPERATING LLC

PO BOX 18496

OKLAHOMA CITY, OK 73154-0496

JEFF H. HOSKINS RT 1, BOX 171X

LONGDALE OK 73755

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

Name Depth Name Depth MISSISSIPPI LIME 1 8600 6 2 7 3 8 4 9 10 106317 Spacing Orders: Location Exception Orders: Increased Density Orders: 654398

Pending CD Numbers: 201606126 Special Orders:

Total Depth: 13830 Ground Elevation: 1497 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 40

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

Within 1 mile of municipal water well? N

Wellhead Protection Area?

Pit is not located in a Hydrologically Sensitive Area.

Category of Pit: 2

Liner not required for Category: 2

Pit Location is NON HSA
Pit Location Formation: BLAINE

H. SEE MEMO

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

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

PERMIT NO: 17-31993

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 not located in a Hydrologically Sensitive Area.

Category of Pit: 3

Liner required for Category: 3
Pit Location is NON HSA
Pit Location Formation: BLAINE

HORIZONTAL HOLE 1

Sec 05 Twp 19N Rge 12W County **BLAINE** Spot Location of End Point: ΝE NW NW NW Feet From: NORTH 1/4 Section Line: 50 WEST Feet From: 1/4 Section Line: 430

Depth of Deviation: 8271 Radius of Turn: 528 Direction: 358

Total Length: 4730

Measured Total Depth: 13830

True Vertical Depth: 8632

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

Notes:

Category Description

COMPLETION INTERVAL 1/11/2017 - G64 - WILL BE GREATER THAN 150' FSL, 150' FNL, 330' FWL PER OPERATOR

DEEP SURFACE CASING 1/6/2017 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF

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

SURFACE CASING

HYDRAULIC FRACTURING 1/6/2017 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF HYDRAULIC

FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK HTTP://FRACFOCUS.ORG/ WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO GIVEN FIVE BUSINESS

DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME

COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE

INCREASED DENSITY - 654398 1/6/2017 - G64 - 5-19N-12W

X106317 MSSLM

2 WELLS

CHESAPEAKE OPERATING, L.L.C.

7-11-2016

INTERMEDIATE CASING 1/6/2017 - G71 - DUE TO THE KNOWN POTENTIAL RISK OF ENCOUNTERING AN OVER-

PRESSURED ZONE IN THE MORROW SERIES IN THIS AREA, THE TECHNICAL MANAGER RECOMMENDS SETTING AN INTERMEDIATE STRING OF CASING IMMEDIATELY ABOVE THE

MORROW SERIES

MEMO 1/6/2017 - G71 - PITS 1 & 2 - CONCRETE LINED PIT PER OPERATOR REQUEST, PIT 2 - OBM

RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

Category Description

PENDING CD - 201606126 1/6/2017 - G64 - (E.O.) 5-19N-12W

X106317 MSSLM

COMPL. INT. NCT 150 FSL, NCT 150 FNL, NCT 330 FWL CHESAPEAKE OPERATING, L.L.C.

REC. 1-9-2017 (DECKER)

SPACING - 106317 1/6/2017 - G64 - (640) 5-19N-12W

EXT OTHERS

EXT 101816 MSSLM, OTHERS

COORDINATES: (US Feet) ZONE: OK NORTH X: 1849389.9 417262.3

Surveyors of Oklahoma, do hereby certify to the information shown herein

Oklahoma Lic. No. 1433

