

OKLAHOMA CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION  
P.O. BOX 52000  
OKLAHOMA CITY, OK 73152-2000  
(Rule 165:10-3-1)

API NUMBER: 153 23604 A

Approval Date: 05/31/2017  
Expiration Date: 11/30/2017

Horizontal Hole Oil & Gas

Amend reason: CHANGE BOTTOM HOLE LOCATION, TOTAL DEPTH, & UPDATE ORDERS

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 32 Twp: 21N Rge: 18W

County: WOODWARD

SPOT LOCATION: SW SE SW SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 280 700

Lease Name: ODYSSEUS 32-21-18

Well No: 1HC

Well will be 280 feet from nearest unit or lease boundary.

Operator Name: CHESAPEAKE OPERATING LLC

Telephone: 4059353425; 4059358

OTC/OCC Number: 17441 0

CHESAPEAKE OPERATING LLC  
PO BOX 18496  
OKLAHOMA CITY, OK 73154-0496

JIMMY & MARIE KIRKWOOD  
53064 S. CR 217  
MUTUAL OK 73853

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	9280	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 664348  
664428

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201702481  
201702485  
201702488

Special Orders:

Total Depth: 17000

Ground Elevation: 1846

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 130

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? N

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: RUSH SPRINGS

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

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

PERMIT NO: 17-32545

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.

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 BED AQUIFER
Pit Location Formation: RUSH SPRINGS

HORIZONTAL HOLE 1

Sec 29 Twp 21N Rge 18W County WOODWARD
Spot Location of End Point: NE SW NW SW
Feet From: SOUTH 1/4 Section Line: 1660
Feet From: WEST 1/4 Section Line: 430
Depth of Deviation: 9354
Radius of Turn: 772
Direction: 357
Total Length: 6433
Measured Total Depth: 17000
True Vertical Depth: 9715
End Point Location from Lease,
Unit, or Property Line: 430

Notes:

Table with 2 columns: Category, Description. Rows include DEEP SURFACE CASING, HYDRAULIC FRACTURING, MEMO, PENDING CD - 201702481, and PENDING CD - 201702485.

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Category	Description
PENDING CD - 201702488	5/30/2017 - G64 - (I.O.) 32-21N-18W X201702484 MSSP COMPL. INT. NCT 150' FSL, NCT 0' FNL, NCT 330' FWL CHESAPEAKE OPERATING, L.L.C. REC. 5-16-2017 (P. PORTER)
SPACING - 664348	6/13/2017 - G64 - (640)(HOR) 29-21N-18W EST MSSP POE TO BHL NLT 660' FB (COEXIST SP. ORDER 163557 CSTR, MRMC)
SPACING - 664428	6/13/2017 - G64 - (640)(HOR) 32-21N-18W EST MSSP POE TO BHL NLT 660' FB (COEXIST SP. ORDER 163557 CSTR, MRMC)

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