API NUMBER: 045 23364

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: 06/13/2013 12/13/2013 **Expiration Date**

PERMIT TO DRILL

WELL LOCATION: Sec: Twp: 20N Rge: 25W County: ELLIS

FEET FROM QUARTER: WEST SPOT LOCATION: sw lsw FROM SOUTH FROM Isw llsw SECTION LINES:

Lease Name: MKS 10-20-25 Well No: 1H Well will be 255 feet from nearest unit or lease boundary.

270

CHESAPEAKE OPERATING INC Operator OTC/OCC Number: Telephone: 4059358143 17441 0 Name:

255

CHESAPEAKE OPERATING INC

PO BOX 18496

OKLAHOMA CITY. OK 73154-0496 MARLYN & KEVIN E. SCHOENHALS

P.O. BOX 28

OKLAHOMA CITY OK 73154

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

	Name	Depth	Name	Depth
1	DOUGLAS	6620	6	
2	TONKAWA	7060	7	
3	COTTAGE GROVE	7560	8	
4	CLEVELAND	8100	9	
5			10	
Spacing Orders:	569662	Location Exception Orders:	610268	Increased Density Orders: 610266

Pending CD Numbers: 201302339 Special Orders:

Total Depth: 13500 Ground Elevation: 2381 Surface Casing: 860 Depth to base of Treatable Water-Bearing FM: 610

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: 5000

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?

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) PERMIT NO: 13-23598

H. SEE MEMO

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: OGALLALA

HORIZONTAL HOLE 1

Sec 10 Twp 20N Rge 25W County **ELLIS** NW Spot Location of End Point: С N2 NW Feet From: NORTH 1/4 Section Line: 330 Feet From: WEST 1/4 Section Line: 660

Depth of Deviation: 7845
Radius of Turn: 361
Direction: 360
Total Length: 4563

Measured Total Depth: 13500

True Vertical Depth: 8206

End Point Location from Lease,
Unit, or Property Line: 330

Notes:

Category Description

INCREASED DENSITY - 610266 6/13/2013 - G30 - 10-20N-25W

X569662 CLVD

3 WELLS

CHESAPEAKE OPERATING, INC.

4/11/13

LOCATION EXCEPTION - 610268 6/13/2013 - G30 - (I.O.) 10-20N-25W

X569662 DGLS, TNKW, CGGV, CLVD

COMP. INT. NCT 330 FNL, NCT 330 FSL, NCT 560 FWL

CHESAPEAKE OPERATING, INC.

4/11/13

MEMO 6/12/2013 - G71 - PITS 1 & 2 - CONCRETE LINED PIT PER OPERATOR REQUEST, PIT 2 - OBM

RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201302339 6/13/2013 - G30 - 10-20N-25W

AMEND 569662 FOR TOP AND BASE OF CLVD

REC 4/23/13 (M.PORTER)

SPACING - 569662 6/13/2013 - G30 - (640) 10-20N-25W

X105701 DGLS, TNKW, CGGV, CLVD