API NUMBER: 045 23531

Horizontal Hole   Oil & Gas

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

Approval Date:	11/05/2014
Expiration Date:	05/05/2015

PERMIT TO DRILL

WELL LOCATION: Sec: 33   Twp: 20N   Rge: 25W   County: ELLIS

SPOT LOCATION: | S2 | S2 | SW | SE | FEET FROM QUARTER: FROM **SOUTH**   FROM **EAST**

SECTION LINES: **250**   **1980**

Lease Name: RODNEY RAY 33-20-25   Well No: **1H**   Well will be   **250**   feet from nearest unit or lease boundary.

Operator Name: **CHESAPEAKE OPERATING LLC**   Telephone: 4059358143; 4059358   OTC/OCC Number: 17441 0

CHESAPEAKE OPERATING LLC PO BOX 18496 OKLAHOMA CITY, OK 73154-0496	RODNEY RAY PSHIGHODA ROUTE 2, BOX 72 SHATTUCK OK 73858

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

	Name	Depth		Name	Depth
1	TONKAWA	7376	6		
2	COTTAGE GROVE	8208	7		
3	CLEVELAND	8478	8		
4			9		
5			10		

Spacing Orders: 65115   597179   Location Exception Orders: 621353   Increased Density Orders: 621351

Pending CD Numbers: 201407980   Special Orders:

Total Depth: 13500   Ground Elevation: 2475   **Surface Casing: 1500**   Depth to base of Treatable Water-Bearing FM: 620

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: 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: 14-28553

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: 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.

Category of Pit: 3

Liner required for Category: 3

Pit Location is   BED AQUIFER

Pit Location Formation: OGALLALA

HORIZONTAL HOLE 1

Sec   33   Twp   20N   Rge   25W   County   ELLIS

Spot Location of End Point: N2   N2   NW   NE

Feet From: NORTH   1/4 Section Line: 230

Feet From: EAST   1/4 Section Line: 1980

Depth of Deviation: 7974

Radius of Turn: 780

Direction: 360

Total Length: 4301

Measured Total Depth: 13500

True Vertical Depth: 8754

End Point Location from Lease,
     Unit, or Property Line: 230

Notes:

Category	Description
DEEP SURFACE CASING	10/3/2014 - 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 - 621351	10/20/2014 - G75 - 33-20N-25W X65115/597179 CLVD 2 WELLS CHESAPEAKE OP., INC. (NOW CHESAPEAKE OP., L.L.C) 2-6-2014
LOCATION EXCEPTION - 621353	10/20/2014 - G75 - (I.O.) 33-20N-25W X65115/597179 CLVD, X65115 TNKW, CGGV COMPL. INT. NCT 300 FSL, NCT 300 FNL, NCT 660 FEL CHESAPEAKE OP, INC, (NOW CHESAPEAKE OP., L.L.C.) 2-6-2014
MEMO	10/3/2014 - G76 - PIT 1 & 2 - CONCRETE-LINED PIT PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT
PENDING CD - 201407980	10/28/2014 - G75 - (E.O.) 33-20N-25W X165:10-3-28(C)(2)(B) CLVD (RODNEY RAY 33-20-25 1H) NCT 200' FROM LONGHOFER 2H-33 NO OP. NAMED REC 11-3-2014 (LEAVITT)
SPACING - 597179	10/20/2014 - G75 - 33-20N-25W CLARIFY 65115 FOR FOR DEPTH TO TOP AND BASE OF CLVD

This permit does not address the right of entry or settlement of surface damages.
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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.

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Category	Description
SPACING - 65115	10/20/2014 - G75 - (640) 33-20N-25W EXT 64184 TNKW, CGGV, CLVD, OTHERS

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.