

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

API NUMBER: 045 23530

Approval Date: 10/27/2014

Expiration Date: 04/27/2015

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 05 Twp: 19N Rge: 25W County: ELLIS
SPOT LOCATION: C N2 NW NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 330 1980

Lease Name: T BRENT 5-19-25 Well No: 1H Well will be 330 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

T. BRENT IMKE
ROUTE 2, BOX 71
SHATTUCK OK 73858

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

	Name	Depth	Name	Depth
1	TONKAWA	8200	6	
2	CLEVELAND	8571	7	
3			8	
4			9	
5			10	

Spacing Orders: 82943
614132

Location Exception Orders: 615087
628235

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 13650

Ground Elevation: 2488

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 580

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: 14-28663

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 05 Twp 19N Rge 25W County ELLIS
Spot Location of End Point: C S2 SW SE
Feet From: SOUTH 1/4 Section Line: 330
Feet From: EAST 1/4 Section Line: 1980
Depth of Deviation: 8097
Radius of Turn: 780
Direction: 180
Total Length: 4328
Measured Total Depth: 13650
True Vertical Depth: 8877
End Point Location from Lease,
Unit, or Property Line: 330

Notes:

Table with 2 columns: Category, Description. Rows include DEEP SURFACE CASING, LOCATION EXCEPTION - 615087, LOCATION EXCEPTION - 628235, MEMO, SPACING - 614132, and SPACING - 82943.

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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.