

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

API NUMBER: 045 23455

Approval Date: 03/28/2014

Expiration Date: 09/28/2014

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 14 Twp: 20N Rge: 25W

County: ELLIS

SPOT LOCATION: SE SE SW SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 275 1235

Lease Name: HELEN HACKER 14-20-25

Well No: 1H

Well will be 275 feet from nearest unit or lease boundary.

Operator Name: CHESAPEAKE OPERATING INC

Telephone: 4059358143

OTC/OCC Number: 17441 0

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

HELEN HACKER
1359 PCR 340
FROHNA MO 63748

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

	Name	Depth	Name	Depth
1	TONKAWA	7500	6	
2	COTTAGE GROVE	7800	7	
3	CLEVELAND	8197	8	
4	MARMATON	8500	9	
5			10	

Spacing Orders: 105701
618648

Location Exception Orders: 618909

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 13020

Ground Elevation: 2398

Surface Casing: 930

Depth to base of Treatable Water-Bearing FM: 680

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)

H. SEE MEMO

PERMIT NO: 14-26642

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: OGALLALA

HORIZONTAL HOLE 1

Sec 14 Twp 20N Rge 25W County ELLIS
Spot Location of End Point: NW NE NW NW
Feet From: NORTH 1/4 Section Line: 200
Feet From: WEST 1/4 Section Line: 960
Depth of Deviation: 7505
Radius of Turn: 571
Direction: 359
Total Length: 4618
Measured Total Depth: 13020
True Vertical Depth: 8500
End Point Location from Lease,
Unit, or Property Line: 200

Notes:

Table with 2 columns: Category, Description. Includes entries for LOCATION EXCEPTION - 618909, MEMO, SPACING - 105701, and SPACING - 618648.

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