

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

API NUMBER: 045 23405 A

Approval Date: 10/22/2013  
Expiration Date: 04/22/2014

Straight Hole Oil & Gas

Amend reason: CHANGE SURFACE CASING

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 22 Twp: 19N Rge: 23W

County: ELLIS

SPOT LOCATION:  N2  SW  NW  SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 1700 330

Lease Name: BERRYMAN

Well No: 5-22

Well will be 330 feet from nearest unit or lease boundary.

Operator Name: UNIT PETROLEUM COMPANY

Telephone: 9184937700; 9184937

OTC/OCC Number: 16711 0

UNIT PETROLEUM COMPANY  
P.O. Box 702500  
TULSA, OK 74170-2500

ANNE PORTER BERRYMAN; GEORGE C. BERRYMAN;  
NATHAN R. OLANSEN, TRUST  
PO BOX 131  
CASCADE CO 80809-

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

Name	Depth	Name	Depth
1 COTTAGE GROVE	8450	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 369382

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 8500

Ground Elevation: 2473

**Surface Casing: 1200**

Depth to base of Treatable Water-Bearing FM: 640

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: Yes

Surface Water used to Drill: No

**PIT 1 INFORMATION**

Type of Pit System: ON SITE

Type of Mud System: WATER BASED

Chlorides Max: 20000 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? 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: 13-24658

H. SEE MEMO

**Notes:**

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.

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Category	Description
DEEP SURFACE CASING	10/29/2013 - G71 - APPROVED CONTINGENT ON NOTIFYING OCC FIELD STAFF IMMEDIATELY OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING
MEMO	10/17/2013 - G71 - SOIL COMPACTED PIT, NOTIFY DISTRICT PRIOR TO TESTING SOIL PIT LINER, 20 MIL LINED GEOMEMBRANE TRENCH PIT FOR SOIL FARMING
SPACING - 369382	10/22/2013 - G30 - (UNIT) 22-19N-23W EST BERRYMAN (COTTAGE GROVE) WATERFLOOD UNIT FOR CCGV

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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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