

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

API NUMBER: 117 23519

Approval Date: 03/06/2013
Expiration Date: 09/06/2013

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 23 Twp: 22N Rge: 4E

County: PAWNEE

SPOT LOCATION: S2 N2 NE NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 450 660

Lease Name: BRYANT

Well No: 2-14H

Well will be 450 feet from nearest unit or lease boundary.

Operator Name: CUMMINGS OIL COMPANY

Telephone: 4059481818

OTC/OCC Number: 5481 0

CUMMINGS OIL COMPANY
5400 NW GRAND BLVD STE 100
OKLAHOMA CITY, OK 73112-6113

JACK LYON
43501 SOUTH 346 ROAD
PAWNEE OK 74058

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

Name	Depth	Name	Depth
1	MISSISSIPPI	3591	6
2			7
3			8
4			9
5			10

Spacing Orders: 586250

Location Exception Orders:

Increased Density Orders: 596682

Pending CD Numbers: 201300912

Special Orders:

Total Depth: 9163

Ground Elevation: 991

Surface Casing: 400

Depth to base of Treatable Water-Bearing FM: 210

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: No

PIT 1 INFORMATION

Approved Method for disposal of Drilling Fluids:

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 30000 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: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: OSCAR

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 13-22621
H. CLOSED SYSTEM=STEEL PITS (PER OPERATOR OPTION)

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.

HORIZONTAL HOLE 1

Sec 14 Twp 22N Rge 4E County PAWNEE

Spot Location of End Point: N2 N2 NE NE

Feet From: NORTH 1/4 Section Line: 165

Feet From: EAST 1/4 Section Line: 660

Depth of Deviation: 2800

Radius of Turn: 900

Direction: 360

Total Length: 4950

Measured Total Depth: 9163

True Vertical Depth: 3681

End Point Location from Lease,
Unit, or Property Line: 165

Additional Surface Owner	Address	City, State, Zip
TERRY LYON	23800 HARVEST	MORRISON, OK 73061
TIM LYON	12800 GLEN EAGLE DRIVE	CHOCTAW, OK 73020

Notes:

Category

Description

INCREASED DENSITY - 596682

2/14/2013 - G30 - 14-22N-4E
X586250 MISS
2 WELLS
CUMMINGS OIL COMPANY
4/20/12

PENDING CD - 201300912

2/14/2013 - G30 - 14-22N-4E
X586250 MISS
SHL 450 FNL, 600 FWL 23-22N-4E
COMP. INT. NCT 165 FSL, NCT 165 FNL, NCT 560 FEL 14-22N-4E
NO OP. NAMED
REC 3/5/13 (M.PORTER)

SPACING - 586250

2/14/2013 - G30 - (640 HOR) 14-22N-4E
EST MISS
NLT 660' FBL