API NUMBER: 047 24845

Oil & Gas

Horizontal Hole

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

Approval Date: 04/25/2014
Expiration Date: 10/25/2014

PERMIT TO DRILL

WELL LOCATION: Sec: 30 Twp: 20N Rge: 3W County: GARFIELD

SPOT LOCATION: SE SE SW SW FEET FROM QUARTER: FROM SOUTH FROM WEST

CTION LINES: 240 1020

Lease Name: IREY TRUST 20-3-31 Well No: 1 HW Well will be 240 feet from nearest unit or lease boundary.

Operator SUNDANCE ENERGY OKLAHOMA LLC dba SEO LLC Telephone: 3034070471 OTC/OCC Number: 22918 0

SUNDANCE ENERGY OKLAHOMA LLC dba SEO LLC

633 17TH ST STE 1950

DENVER, CO 80202-3620

TERESA BENNETT NORWOOD

110 BENNER ROAD

SHEPHERD TX 77371

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

Name Depth Name Depth MISSISSIPPI LIME 1 5350 6 2 WOODFORD 5695 7 3 MISENER-HUNTON 5770 8 4 9 5 10 Spacing Orders: Location Exception Orders: 201402735 Increased Density Orders: No Spacing

Pending CD Numbers: 201402733 Special Orders:

Total Depth: 10600 Ground Elevation: 1042 Surface Casing: 350 Depth to base of Treatable Water-Bearing FM: 200

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: Yes

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: 5000 Average: 3000

Is depth to top of ground water greater than 10ft below base of pit?  $\quad \mbox{Y}$ 

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: GARBER

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 14-27028

H CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

## **HORIZONTAL HOLE 1**

Sec 31 Twp 20N Rge 3W County GARFIELD

Spot Location of End Point: SE SW SW SW Feet From: SOUTH 1/4 Section Line: 165
Feet From: EAST 1/4 Section Line: 540

Depth of Deviation: 5277
Radius of Turn: 712
Direction: 180
Total Length: 4900

Measured Total Depth: 10600

True Vertical Depth: 5877

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

Notes:

Category Description

PENDING - 201402733 4/25/2014 - G72 - (640) 31-20N-3W EST MISENER-HNTN;

EXT 598131 MSSP, WDFD;

SUPERSEDE 189327 MSSLM (NE), MISENER, HNTN SEC 31;

COEXIST WITH NON-HORZ DEV SUCH AS JOHNSON 3 (SWNW), JOHNSON 4 (NWNW) MSSLM;

COEXIST WITH DEV NON-HORZ SUCH AS HORSLEY 3(NWNWŚW) MSSLM ON AN

UNLEASED/TRACT BASIS;

PENDING - 201402735 4/25/2014 - G72 - 31-20N-3W E.O. X 201402733 MSSP, WDFD, MSRH;

COMP INT NCT 150 FNL NCT 150 FSL NCT 300 FWL(AMD AT HRG);

NO OPER NAMED;

REC 4/18/2014 (P. PORTER)