API NUMBER: 083 24057

Horizontal Hole Oil & Gas

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

Approval Date: 01/15/2013
Expiration Date: 07/15/2013

PERMIT TO DRILL

WELL LOCATION: Sec: 11 Twp: 16N Rge: 4W County: LOGAN

SPOT LOCATION: SW SW SE SW FEET FROM QUARTER: FROM **SOUTH** FROM **WEST**
SECTION LINES: **241** **1450**

Lease Name: ROTHER 16-4-11 **Well No: 2HW** **Well will be 241 feet from nearest unit or lease boundary.**

Operator Name: **SUNDANCE ENERGY OKLAHOMA LLC dba SEO LLC** Telephone: 4057521800 OTC/OCC Number: 22918 0

SUNDANCE ENERGY OKLAHOMA LLC dba SEO LLC
633 17TH ST STE 1950
DENVER , CO 80202-3620

LEO AND KAY ROTHER
P O BOX 413
OKARCHE OK 73762

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

	Name	Depth		Name	Depth
1	MISSISSIPPI LIME	5900	6		
2	WOODFORD	5929	7		
3	MISENER-HUNTON	6044	8		
4			9		
5			10		

Spacing Orders: 605164 Location Exception Orders: 605848 Increased Density Orders:

Pending CD Numbers: 201207260 Special Orders:

Total Depth: 9325 Ground Elevation: 1005 **Surface Casing: 380** Depth to base of Treatable Water-Bearing FM: 330

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

PIT 1 INFORMATION

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? 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

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 12-21672
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 11 Twp 16N Rge 4W County LOGAN

Spot Location of End Point: NW NW NE NW

Feet From: SOUTH 1/4 Section Line: 2475

Feet From: WEST 1/4 Section Line: 1450

Depth of Deviation: 3675

Radius of Turn: 700

Direction: 360

Total Length: 4950

Measured Total Depth: 9325

True Vertical Depth: 6044

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

Notes:

Category	Description
LOCATION EXCEPTION - 605848	1/14/2013 - G30 - (I.O.) 11-16N-4W X605164 MSSP, WDFD, MSRH, OTHERS COMP. INT. NCT 241 FSL, NCT 165 FNL, NCT 330 FWL SUNDANCE ENERGY OKLAHOMA, LLC 12/21/12
SPACING - 605164	1/14/2013 - G30 - (40/160/640) 11-16N-4W (640 HOR) EST MSSP, WDFD, MSRH EST OTHERS EXT OTHERS

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.