

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

API NUMBER: 047 25004

Approval Date: 02/02/2015
Expiration Date: 08/02/2015

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 04 Twp: 23N Rge: 7W County: GARFIELD
SPOT LOCATION: N2 N2 N2 NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 230 1320

Lease Name: NORTHWOOD 2307 Well No: 1-9/4H Well will be 230 feet from nearest unit or lease boundary.
Operator Name: SANDRIDGE EXPLORATION & PRODUCTION LLC Telephone: 4054296169 OTC/OCC Number: 22281 0

SANDRIDGE EXPLORATION & PRODUCTION LLC
123 ROBERT S KERR AVE STE 1702
OKLAHOMA CITY, OK 73102-6406

ROSALIE MASSIE
27605 DECATUR WAY
SUN CITY CA 92586

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

Name	Depth	Name	Depth
1	MISSISSIPPIAN	6240	6
2			7
3			8
4			9
5			10

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201408845
201408846

Special Orders:

Total Depth: 17044 Ground Elevation: 1368 **Surface Casing: 1500** Depth to base of Treatable Water-Bearing FM: 220

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: 10000 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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 15-29490

E. Haul to Commercial pit facility: Sec. 15 Twn. 24N Rng. 7W Cnty. 47 Order No: 623842

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

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 09 Twp 23N Rge 7W County GARFIELD

Spot Location of End Point: S2 S2 SE SE

Feet From: SOUTH 1/4 Section Line: 150

Feet From: EAST 1/4 Section Line: 660

Depth of Deviation: 5740

Radius of Turn: 715

Direction: 175

Total Length: 10180

Measured Total Depth: 17044

True Vertical Depth: 6423

End Point Location from Lease,
Unit, or Property Line: 150

Notes:

Category	Description
DEEP SURFACE CASING	2/2/2015 - 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
PENDING CD - 201408845	2/2/2015 - G91 - (640)(IRR)(HOR) 4 & 9-23N-7W SU VAC 70713 MISS, OTHERS VAC OTHERS VAC 220762 CSTR, OTHERS EST MSSP, OTHERS POE TO BHL NCT 660' FB SANDRIDGE EXPLOR. & PROD. LLC. REC. 12-30-2014 (LEAVITT)
PENDING CD - 201408846	2/2/2015 - G91 - (I.O.) E2 4 & E2 9-23N-7W X201408845 MSSP COMPL. INT. NCT 150 FNL, NCT 150 FSL, NCT 560 FEL NO OP. NAMED REC. 12-30-2014 (LEAVITT)

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