API NUMBER: 103 24631

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: 01/31/2014
Expiration Date: 07/31/2014

PERMIT TO DRILL

EAST

WELL LOCATION:	Sec:	20	Twp:	24N	Rge: 2V	V County	: NOB	LE	
SPOT LOCATION:	NW	NE	N	E	NE	FEET FROM QUARTER:	FROM	NORTH	FRO
						SECTION LINES:			

202 508

Lease Name: BADLANDS Well No: 20-8S Well will be 202 feet from nearest unit or lease boundary.

Operator RANGE PRODUCTION COMPANY Telephone: 4058107341; 4058107 OTC/OCC Number: 22664 0

RANGE PRODUCTION COMPANY 5600 N MAY AVE STE 350

OKLAHOMA CITY, OK 73112-3967

M.H. WILLIAMS, INDIVIDUALLY 8700 COUNTY RD 100

TONKAWA OK 74651

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

	Name	Depth	Name	Depth		
1	MISSISSIPPIAN	4516 6				
2		7				
3		8				
4		9				
5		10				
Spacing Orders:	611442	Location Exception Orders: 611444	Increased Density O	Increased Density Orders: 611443		
	600642	· 				

Pending CD Numbers: Special Orders:

Total Depth: 9600 Ground Elevation: 1021 Surface Casing: 140 Depth to base of Treatable Water-Bearing FM: 90

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: ON SITE

A. Evaporation/dewater and backfilling of reserve pit.

Type of Mud System: WATER BASED

D. One time land application -- (REQUIRES PERMIT)

Chlorides Max: 5000 Average: 3000

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 13-23427

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: 2

Liner not required for Category: 2
Pit Location is BED AQUIFER
Pit Location Formation: WELLINGTON

HORIZONTAL HOLE 1

Sec 20 **NOBLE** Twp 24N Rge 2W County Spot Location of End Point: SW SF SE SE Feet From: SOUTH 1/4 Section Line: 165 Feet From: EAST 1/4 Section Line: 500

Depth of Deviation: 3786
Radius of Turn: 750
Direction: 180
Total Length: 4636

Measured Total Depth: 9600

True Vertical Depth: 4536

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

Notes:

Category Description

INCREASED DENSITY - 611443 1/31/2014 - G30 - 20-24N-2W

X600642/201302524 MSSP

1 WELL

RANGE PRODUCTION COMPANY

5/9/13

LOCATION EXCEPTION - 611444 1/31/2014 - G30 - (I.O.) 20-24N-2W

X600642/201302524 MSSP SHL 225 FNL, 500 FEL**

COMP. INT. NCT 660 FNL, NCT 165 FSL, NCT 330 FEL

RANGE PRODUCTION COMPANY

5/9/13

**SHL TO BE CORRECTED AT HEARING FOR FINAL ORDER LOCATION EXCEPTION PER

OPERATOR

SPACING - 600642 1/31/2014 - G30 - (640 HOR) 20-24N-2W

EST MSSP

POE TO BHL NLT 660' FB

(SUPERSEDE NON-PRODUCING NON-HORIZOTNAL SPACING NITS; COEXIST WITH

PRODUCING NON-HORIZONTAL SPACING UNITS)

SPACING - 611442 1/31/2014 - G30 - (640) 20-24N-2W

CONFIRM SP. 600642 MSSP