API NUMBER: 045 23377

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: 07/25/2013
Expiration Date: 01/25/2014

PERMIT TO DRILL

WELL LOCATION	: Sec: 21 Twp: 18N	Rge: 25W	County: ELLI	S	
SPOT LOCATION	NW NE NE	NE FEET F	ROM QUARTER: FROM	NORTH FROM	EAST
		SECTIO	ON LINES:	130	600
Lease Name:	PARKER 21-18-25		Well No:	4H	
Operator	LINN OPERATING INC			Telephone:	4052412200

OTC/OCC Number: 22182 0

130 feet from nearest unit or lease boundary.

Well will be

LINN OPERATING INC 14000 QUAIL SPRINGS PKWY STE 5000 OKLAHOMA CITY, OK 73134

BRANDON DOUG KNOWLES
HCR 63, BOX 7
ARNETT OK 73832

Formation(s) (Permit Valid for Listed Formations Only): Name Depth Name Depth **DOUGLAS** 7600 1 6 2 7 3 8 4 9 10 78094 Spacing Orders: Location Exception Orders: 612887 Increased Density Orders: 612748 Pending CD Numbers: Special Orders:

Total Depth: 12500 Ground Elevation: 2257 Surface Casing: 550 Depth to base of Treatable Water-Bearing FM: 430

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

PIT 1 INFORMATION

Type of Pit System: ON SITE

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: 1B

Liner required for Category: 1B

Pit Location is BED AQUIFER

Pit Location Formation: CLOUD CHIEF

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

B. Solidification of pit contents.

H. SEE MEMO

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

PERMIT NO: 13-23765

PIT 2 INFORMATION

Type of Pit System: ON SITE

Type of Mud System: OIL BASED

Chlorides Max: 300000 Average: 200000

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: 3

Liner required for Category: 3

Pit Location is BED AQUIFER

Pit Location Formation: CLOUD CHIEF

## **HORIZONTAL HOLE 1**

Sec 21 Twp 18N Rge 25W County **ELLIS** SE SE Spot Location of End Point: SW SE Feet From: SOUTH 1/4 Section Line: 250 Feet From: EAST 1/4 Section Line: 600

Depth of Deviation: 6697 Radius of Turn: 575 Direction: 180 Total Length: 4900

Measured Total Depth: 12500

True Vertical Depth: 7600

End Point Location from Lease,
Unit, or Property Line: 250

Additional Surface Owner	Address	City, State, Zip
RODNEY GENE KNOWLES	307 NORTH WESTCHESTER WAY	MUSTANG, OK 73064
ELMER KNOWLES TRUST, GERTRU	117 MADISON	ARNETT, OK 73832
VICKIE L. YEAGER	102330 COTTON ROAD	HUNTER, OK 74640

Notes:

Category Description

INCREASED DENSITY - 612748 7/23/2013 - G75 - 21-18N-25W

X78094 DGLS 1 WELL LINN OP., INC. 6-13-2013

LOCATION EXCEPTION - 612887 7/23/2013 - G75 - (I.O.) 21-18N-25W

X78094 DGLS

COMPL. INT. NCT 300 FNL, NCT 300 FSL, NCT 600 FEL

LINN OP., INC. 6-18-2013

MEMO 7/23/2013 - G71 - PIT 1 & 2 - CONCRETE-LINED PIT PER OPERATOR REQUEST: PIT 2 - OBM TO

VENDOR, OBM CUTTINGS PER DISTRICT

SPACING - 78094 7/23/2013 - G75 - (640) 21-18N-25W

**EST DGLS**