API NUMBER: 039 22449

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: 10/28/2014 04/28/2015 Expiration Date:

PERMIT TO DRILL

WELL LOCATION:	Sec:	27	Twp:	15N	Rge:	14W	County:	CUS	TER
SPOT LOCATION:	S2	SE	□ [s	E	SE	FEE	T FROM QUARTER:	FROM	SOUTH

FROM EAST OT LOCATION: S2 SE SE SE SE SECTION LINES 215 330

Lease Name: AKIN Well No: 1-27-22XH Well will be 215 feet from nearest unit or lease boundary.

CONTINENTAL RESOURCES INC Operator OTC/OCC Number: Telephone: 4052349000; 4052349 3186 0 Name:

CONTINENTAL RESOURCES INC

PO BOX 269000

OKLAHOMA CITY. OK 73126-9000 MANNERING IRREVOCABLE TRUST

DEE ANN (MANNERING) MOORE, CO-TRUSTEE

RT. 3 BOX 126

**WATONGA** OK 73772

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	12500	6	
2	WOODFORD	13500	7	
3	HUNTON	13600	8	
4			9	
5			10	
Spacing Orders:	No Spacing	Location Exception Orders:		Increased Density Orders:

Pending CD Numbers: 201407301 Special Orders:

> 201407300 201407505 201407504

Total Depth: 23510 Ground Elevation: 1696 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 50

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

Approved Method for disposal of Drilling Fluids: PIT 1 INFORMATION

Type of Pit System: ON SITE

Type of Mud System: WATER BASED PERMIT NO: 14-28333

Chlorides Max: 8000 Average: 5000

Is depth to top of ground water greater than 10ft below base of pit? Y

Within 1 mile of municipal water well?

Wellhead Protection Area?

located in a Hydrologically Sensitive Area.

Category of Pit: 1B

Liner required for Category: 1B Pit Location is AP/TE DEPOSIT Pit Location Formation: TERRACE D. One time land application -- (REQUIRES PERMIT)

H. SEE MEMO

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 AP/TE DEPOSIT
Pit Location Formation: TERRACE

## **HORIZONTAL HOLE 1**

Sec 22 Twp 15N Rge 14W County CUSTER

Spot Location of End Point: NW NE NE NE Feet From: NORTH 1/4 Section Line: 60

Feet From: EAST 1/4 Section Line: 350

Depth of Deviation: 12833
Radius of Turn: 478
Direction: 360
Total Length: 9927

Measured Total Depth: 23510

True Vertical Depth: 13600

End Point Location from Lease,
Unit, or Property Line: 60

Additional Surface OwnerAddressCity, State, ZipCOLEEN MANNERING LIFE ESTATE907 N. 6THTHOMAS, OK 73669MANNERING IRREVOCABLE TRUST8582 N. 2290 ROAD BRYAN E. MANNERING, CO-TRUCUSTER CITY, OK 73639MANNERING IRREVOCABLE TRUST22995 E 840 ROAD MARK ALLEN MANNERING, CO-TCUSTER CITY, OK 73639

Notes:

Category Description

DEEP SURFACE CASING 10/20/2014 - 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

INTERMEDIATE CASING 10/20/2014 - G71 - DUE TO THE KNOWN POTENTIAL RISK OF ENCOUNTERING AN OVER-

PRESSURED ZONE IN THE MORROW SERIES IN THIS AREA, THE TECHNICAL MANAGER RECOMMENDS SETTING AN INTERMEDIATE STRING OF CASING IMMEDIATELY ABOVE THE

MORROW SERIES

MEMO 10/20/2014 - G71 - PITS 1 & 2 - CONCRETE LINED PIT PER OPERATOR REQUEST, PIT 2 - OBM

RETURNED TO VENDOR, CUTTINGS HAULED TO DEQ APPROVED FACILITY - PAUL VALLEY

LANDFILL (GARVIN) - 3525009 - SOUTHERN PLAINS LANDFILL (GRADY) - 3526013

PENDING CD - 201407300 10/28/2014 - G72 - (640) 22-15N-14W

EXT 593842 WDFD, HNTN,

EXT OTHERS EST MSSP,

REC 10/20/2014 (CANDLER)

PENDING CD - 201407301 10/28/2014 - G72 - (640) 27-15N-14W

VAC 214725 MSSCT,

EXT 593842 WDFD, HNTN, OTHERS,

**EST MSSP** 

REC 10/20/2014 (CANDLER)

Category Description

PENDING CD - 201407504 10/28/2014 - G72 - (MULTI) 27 & 22-15N-14W (E.O.)

EST WDFD SHALE RES,

X 201407300 & 201407301 MSSP, WDFD, HNTN,

50&/50%

NO OPER NAMED.

REC 10/17/2014 (NORRIS)

PENDING CD - 201407505 10/28/2014 - G72 - 27 & 22-15N-14W (E.O.)

X 201407300 & 201407301 MSSP, WDFD, HNTN, SHL NCT 215 FSL NCT 330 FEL 27-15N-14W,

COMP INT. SEC 27 NCT 150 FSL NCT 0 FNL NCT 330 FEL, COMP INT. SEC 22 NCT 0 FSL NCT 150 FNL NCT 330 FEL,

NO OPER NAMED,

REC 10/17/2014 (NORRIS)

Continental

## Well Location Plat

S.H.L. Sec. 27-15N-14W B.H.L. Sec. 22-15N-14W I.M.

## SHOWING FINISHED PAD ELEVATION

Operator: CONTINENTAL RESOURCES, INC.

Lease Name and No.: AKIN #1-27-22XH

Footage: 215' FSL -330' FEL

GR. ELEVATION: 1696' Range: 14W

Good Site? YES Final Elev: 1696

Section: 27 Township: 15N County: Custer State of Oklahoma

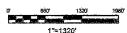
Alternate Loc.: N/A

Terrain at Loc. : Stake fell in a cultivated field, 190' N. of E-W fence.

Accessibility: From the West,

Directions: From the intersection of "EW 89 Road" and "NS 238 Road", 1.0 mile South of Thomas, OK, go 5.0 miles East on "EW 89 Road", then 1.0 miles North on "NS 243

Road" to the Southeast Corner of Section 27-15N-14W.

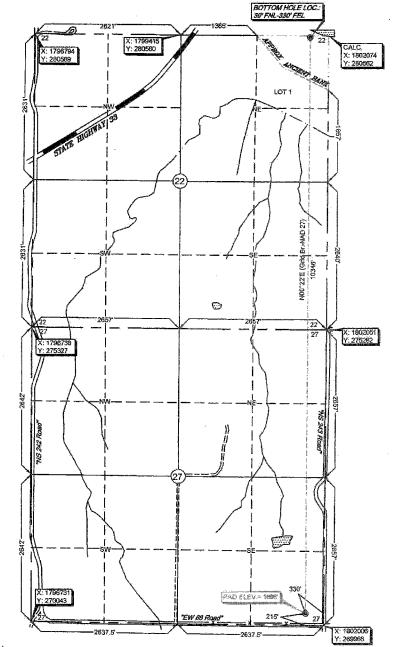


GPS DATUM NAD - 27 OK NORTH ZONE

Surface Hole Loc.: Lat: 35°44'25.38"N Lon: 98°40'05.72"W X: 1801678 Y: 270188

Bottom Hole Loc.: Lat: 35°46'07.70"N Lon: 98°40'05.79"W X: 1801744

Y: 280534



NOTE: X and Y data shown hereon for Section Corners may NOT have been surveyed on-the-ground, and further, does NOT represent a true Boundary Survey.

Please note that this location was staked on the ground under the supervision of a Licensed Professional Land Surveyor, but the accuracy of this survey is not getarranteed.

Please contact Arkoma Surveying and Mapping promptly if any inconsistency is determined.

Quarter Section distances may be assumed from a Covernment Survey. Plat or assumed at a proportionate distance from apposing section corners, or occupation thereof, and may not have been measured or the expound, and further, does not represent a true boundary survey, or the present at the boundary survey.

Arkoma Surveying and Mapping, PLLC

P.O. Box 238 Wilburton, OK 74578 Ph. 918-465-5711 Fax 918-465-5030 Certificate of Authorization No. 5348 Expires June 30, 2016

Invoice #4233

Date Staked: 12/13/13 By: CK Date Drawn: 12/18/13 By:RM 09/36/14 Rev. Lease Name: 09/04/14 By: RM Certification:

This is to certify that this Well Location Plat represents the results of a survey made on the ground performed under the supervision of the undersigned.

STAN DRANNON

SSIONAL STAN DRANNON 1672 OFLAHOWA