API NUMBER: 129 23901

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: 12/17/2013
Expiration Date: 06/17/2014

PERMIT TO DRILL

							SECTION LINES:		250		660
SPOT LOCATION:	S2	S2	SE	:	SE		FEET FROM QUARTER:	FROM	SOUTH	FROM	EAST
WELL LOCATION:	Sec:	22	Twp:	14N	Rge:	24V	V County	: ROG	ER MILLS		

Lease Name: FARRELL 22-14-24 Well No: 1H Well will be 250 feet from nearest unit or lease boundary.

Operator APACHE CORPORATION Telephone: 9184914900 OTC/OCC Number: 6778 0

APACHE CORPORATION 6120 S YALE AVE STE 1500

TULSA, OK 74136-4224

KAREN FARRELL LIFE ESTATE 1900 SOUTH L.L. MALES AVENUE

CHEYENNE OK 73628

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

	Name	Depth	Name	Dep	th
1	MARMATON	10591 6			
2		7			
3		8			
4		9			
5		10			
Spacing Orders:	128051	Location Exception Orders:		Increased Density Orders:	618522

Pending CD Numbers: 201306728 Special Orders:

Total Depth: 16100 Ground Elevation: 2057 Surface Casing: 620 Depth to base of Treatable Water-Bearing FM: 570

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

PIT 1 INFORMATION

Type of Pit System: ON SITE

Type of Mud System: WATER BASED
Chlorides Max: 200000 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.

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 13-25111

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 BED AQUIFER
Pit Location Formation: CLOUD CHIEF

HORIZONTAL HOLE 1

Sec 22 Twp 14N Rge 24W County ROGER MILLS

Spot Location of End Point: E2 NW NW NE
Feet From: NORTH 1/4 Section Line: 330
Feet From: EAST 1/4 Section Line: 2100

Depth of Deviation: 10695 Radius of Turn: 573 Direction: 344 Total Length: 4707

Measured Total Depth: 16100

True Vertical Depth: 11207

End Point Location from Lease,
Unit, or Property Line: 330

Notes:

Category Description

INCREASED DENSITY - 618522 12/17/2013 - G30 - 22-14N-24W

X128051 MRMN

1 WELL

APACHE CORPORATION

11/26/13

MEMO 12/17/2013 - G71 - PITS 1 & 2 - CONCRETE LINED PIT PER OPERATOR REQUEST, PIT 2 - OBM

RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201306728 12/17/2013 - G30 - 22-14N-24W

X128051 MRMN

SHL NCT 100 FSL, NCT 100 FEL 1ST PERF NCT 330 FSL, NCT 500 FEL LAST PERF NCT 330 FNL, NCT 500 FEL

NO OP. NAMED

REC 11/5/13 (JOHNSON)

SPACING - 128051 12/17/2013 - G30 - (640) 22-14N-24W

VAC OTHERS

EXT 125353 MRMN, OTHERS

WATERSHED STRUCTURE 12/17/2013 - G71 - WELL WITHIN 1/2 MILE OF AN OKLAHOMA CONSERVATION COMMISSION

WATERSHED STRUCTURE. CONTACT THE LOCAL CONSERVATION DISTRICT OFFICE AT (580)

497-3413 PRIOR TO DRILLING