API NUMBER: 009 21902 Α

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: 03/31/2014 09/30/2014 **Expiration Date**

PERMIT TO DRILL

WELL LOCATION: Sec: Twp: 11N Rge: 21W County: BECKHAM

FEET FROM QUARTER: SPOT LOCATION: NW NORTH FROM WEST SE NW llnw SECTION LINES:

Lease Name: APACHE 20-11-21 Well No: 1H Well will be 445 feet from nearest unit or lease boundary.

659

APACHE CORPORATION Operator OTC/OCC Number: Telephone: 9184914900: 9184914 6778 0 Name:

445

APACHE CORPORATION 6120 S YALE AVE STE 1500

TULSA. OK 74136-4224 APACHE CORPORATION

6120 SOUTH YALE AVE., SUITE 1500

TULSA OK 74136

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

Name Depth Name Depth DES MOINES 12786 1 6 2 7 3 8 4 9 10 131148 Spacing Orders: Location Exception Orders: Increased Density Orders:

Pending CD Numbers: 201305857 Special Orders:

Total Depth: 18200 Ground Elevation: 1995 Surface Casing: 1500 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: 25000 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?

located in a Hydrologically Sensitive Area.

Category of Pit: 1B

Liner required for Category: 1B Pit Location is BED AQUIFER Pit Location Formation: ELK CITY Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 12-24486

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: ELK CITY

HORIZONTAL HOLE 1

Sec 20 Twp 11N Rge 21W County BECKHAM

Spot Location of End Point: N2 N2 NE NE Feet From: NORTH 1/4 Section Line: 200

Feet From: EAST 1/4 Section Line: 660

Depth of Deviation: 12427 Radius of Turn: 573

Direction: 1

Total Length: 5552

Measured Total Depth: 18200

True Vertical Depth: 13000

End Point Location from Lease,
Unit, or Property Line: 200

Notes:

Category Description

DEEP SURFACE CASING 9/27/2013 - 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

MEMO 9/27/2013 - G71 - PITS 1 & 2 - CONCRETE LINED PIT PER OPERATOR REQUEST, PIT 2 - OBM

RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201305857 9/30/2013 - G30 - 20-11N-21W

X131148 DSMN

SHL NCT 10 FNL, NCT 10 FWL 28-11N-12W 1ST PERF NCT 330 FSL, NCT 500 FEL 20-11N-21W LAST PERF NCT 330 FNL, NCT 500 FEL 20-11N-21W

NO OP. NAMED

REC 9/24/13 (JOHNSON)

SPACING - 131148 9/30/2013 - G30 - (640) 20-11N-21W

EST DSMN, OTHERS