API NUMBER: 045 23450 A

OKLAHOMA CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION P.O. BOX 52000 OKLAHOMA CITY, OK 73152-2000 (Rule 165:10-3-1)

Approval Date: 03/17/2014
Expiration Date: 09/17/2014

Well will be 220 feet from nearest unit or lease boundary.

Horizontal Hole Oil & Gas

Amend reason: REQUEST DEEP SURFACE CASING

AMEND PERMIT TO DRILL

WELL LOCATION:	Sec:	33 Tv	vp: 19N	Rge	: 26\	V	County	: ELLI	S		
SPOT LOCATION:	SE	SE	SE	SW		FEET FROM QL	JARTER:	FROM	SOUTH	FROM	WEST
						SECTION LINES	S:		220		2470
Lease Name: OTHEL 33-19-26							We	ell No:	1H		

Telephone: 4059358143 OTC/OCC Number: 17441 0

CHESAPEAKE OPERATING INC

PO BOX 18496

Operator

Name:

OKLAHOMA CITY, OK 73154-0496

CHESAPEAKE OPERATING INC

JACK WILSON 134 JUNIPER LANE

BOERNE TX 78006

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

	Name	Depth		Name	Depth	
1	BROWN DOLOMITE	6500	6	MARMATON	8800	
2	DOUGLAS	7000	7			
3	TONKAWA	7438	8			
4	COTTAGE GROVE	8000	9			
5	CLEVELAND	8647	10			
Spacing Orders:	100596	Location Exception Orders:		Increased Density Orders:		
	484435					
	622296					

Pending CD Numbers: 201400882 Special Orders:

Total Depth: 13800 Ground Elevation: 2339 **Surface Casing: 1500** Depth to base of Treatable Water-Bearing FM: 410

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

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: OGALLALA

Approved Method for disposal of Drilling Fluids:

 $\hbox{A. Evaporation/dewater and backfilling of reserve pit.}\\$

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 14-26641

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: OGALLALA

HORIZONTAL HOLE 1

Sec 33 Twp 19N Rge 26W County **ELLIS** NW Spot Location of End Point: NW ΝE ΝE Feet From: NORTH 1/4 Section Line: 200 Feet From: WEST 1/4 Section Line: 2040

Depth of Deviation: 8255
Radius of Turn: 780
Direction: 360
Total Length: 4453

Measured Total Depth: 13800

True Vertical Depth: 9035

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

Notes:

Category Description

DEEP SURFACE CASING 3/17/2014 - 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

MEMO 3/14/2014 - G71 - PITS 1 & 2 - CONCRETE LINED PIT PER OPERATOR REQUEST, PIT 2 - OBM

RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201400882 3/17/2014 - G30 - 33-19N-26W

X100596 DGLS, TNKW, CGGV, CLVD

X484435 BRWDO X201400881 MRMN

COMP. INT. NCT 165 FNL, NCT 165 FSL, NCT 1320 FWL

NO OP. NAMED REC 3/4/14 (STUCK)

SPACING - 100596 3/14/2014 - G30 - (640) 33-19N-26W

EST DGLS, TNKW, CGGV, CLVD

EXT OTHERS

SPACING - 484435 3/14/2014 - G30 - (640) 33-19N-26W

EXT 151105 BRWDO, OSWG, OTHER

(DEL OSWG PER 622296)

SPACING - 622296 3/17/2014 - G30 - (640) 33-19N-26W

DEL 484435 OSWG EXT 595864 MRMN