API NUMBER: 039 22430 A

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

Approval Date: 04/01/2014
Expiration Date: 10/01/2014

Horizontal Hole Oil & Gas

Amend reason: ADD SOIL FARM PERMIT NUMBER

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: Twp: 15N Rge: 16W County: CUSTER FEET FROM QUARTER: FROM SPOT LOCATION: NW FROM SOUTH WEST Isw NW ll NE SECTION LINES: 2140 1400

Lease Name: BOYD MILLER Well No: 2-22H Well will be 500 feet from nearest unit or lease boundary.

Operator TOKLAN OIL & GAS CORPORATION Telephone: 9188787412 OTC/OCC Number: 10043 0

TOKLAN OIL & GAS CORPORATION

7404 S YALE AVE

TULSA, OK 74136-7029

VICKI & BRYAN MANNERING

8582 N 2250 RD

CUSTER CITY OK 74639

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

	Name	Depth	Name	Depth
1	DOUGLAS (UP TONKAWA)	7450	6	
2	TONKAWA (LOW TONKAWA)	7900	7	
3	COTTAGE GROVE	8530	8	
4			9	
5			10	
Spacing Orders:	155173	Location Exception Orders:	621432	Increased Density Orders:

Pending CD Numbers: Special Orders:

Total Depth: 13900 Ground Elevation: 1823 Surface Casing: 950 Depth to base of Treatable Water-Bearing FM: 430

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: 20000 Average: 5000

Is depth to top of ground water greater than 10ft below base of pit? $\quad \mbox{Y}$

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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 14-27431
H. SOIL COMPACTED PIT, NOTIFY DISTRICT PRIOR TO TESTING SOIL PIT LINER

HORIZONTAL HOLE 1

Sec 22 Twp 15N Rge 16W County CUSTER

Spot Location of End Point: NW NW NE NW
Feet From: SOUTH 1/4 Section Line: 2340
Feet From: WEST 1/4 Section Line: 1400

Depth of Deviation: 8650
Radius of Turn: 700
Direction: 360
Total Length: 5000

Measured Total Depth: 13900

True Vertical Depth: 8600

End Point Location from Lease,
Unit, or Property Line: 300

Notes:

Category Description

DEEP SURFACE CASING 3/25/2014 - 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

LOCATION EXCEPTION - 621432 4/1/2014 - G30 - (I.O.) 22-15N-16W

X155173 DGTKU, TNKLT, CGGV SHL NCT 200 FSL, NCT 1320 FWL** 1ST PERF NCT 300 FSL, NCT 1320 FWL LAST PERF NCT 300 FNL, NCT 1320 FWL TOKLAN OIL AND GAS CORPORATION

2/7/14

**SHL TO BE CORRECTED AT HEARING FOR FINAL ORDER LOCATION EXCEPTION

SPACING - 155173 4/1/2014 - G30 - (640) 22-15N-16W

EXT 133817 DGTKU, TNKLT, CGGV