

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

API NUMBER: 043 23469

Approval Date: 07/22/2016  
Expiration Date: 01/22/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 01 Twp: 18N Rge: 15W County: DEWEY  
SPOT LOCATION:  SW  SW  SE  SW FEET FROM QUARTER: FROM SOUTH FROM WEST  
SECTION LINES: 230 1500

Lease Name: ARMSTRONG-HAMEL Well No: 1-1H Well will be 230 feet from nearest unit or lease boundary.  
Operator Name: CRAWLEY PETROLEUM CORPORATION Telephone: 4052329700 OTC/OCC Number: 7980 0

CRAWLEY PETROLEUM CORPORATION  
105 N HUDSON AVE STE 800  
OKLAHOMA CITY, OK 73102-4803

KAREN FLETCHER  
3135 ST. IVES COUNTRY CLUB PARKWAY  
JOHN'S CREEK GA 30097

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

Name	Depth	Name	Depth
1 MISS'AN LM	10300	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 644448

Location Exception Orders: 649623

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 15625

Ground Elevation: 1920

**Surface Casing: 430**

Depth to base of Treatable Water-Bearing FM: 380

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

PIT 1 INFORMATION

Type of Pit System: ON SITE

Type of Mud System: WATER BASED

Chlorides Max: 45000 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 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: 16-31457

H. SOIL COMPACTED PIT, NOTIFY DISTRICT PRIOR TO TESTING SOIL PIT LINER

This permit does not address the right of entry or settlement of surface damages.

The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1.

Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

HORIZONTAL HOLE 1

Sec 01 Twp 18N Rge 15W County DEWEY

Spot Location of End Point: NW NW NE NW

Feet From: NORTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 1500

Depth of Deviation: 10305

Radius of Turn: 573

Direction: 360

Total Length: 4420

Measured Total Depth: 15625

True Vertical Depth: 10865

End Point Location from Lease,  
Unit, or Property Line: 165

Notes:

Category

Description

HYDRAULIC FRACTURING

7/21/2016 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK [HTTP://FRACFOCUS.ORG/](http://fracfocus.org/) WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MI.

INTERMEDIATE CASING

7/21/2016 - 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

LOCATION EXCEPTION - 649623

7/22/2016 - G60 - (I.O.) 1-18N-15W  
X644448 MPLM  
COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 1320' FWL  
CRAWLEY PETROLEUM CORPORATION  
2-8-16

SPACING - 644448

7/22/2016 - G60 - (640) 1-18N-15W  
VAC 347615 MSSSD  
EXT 633539 MPLM

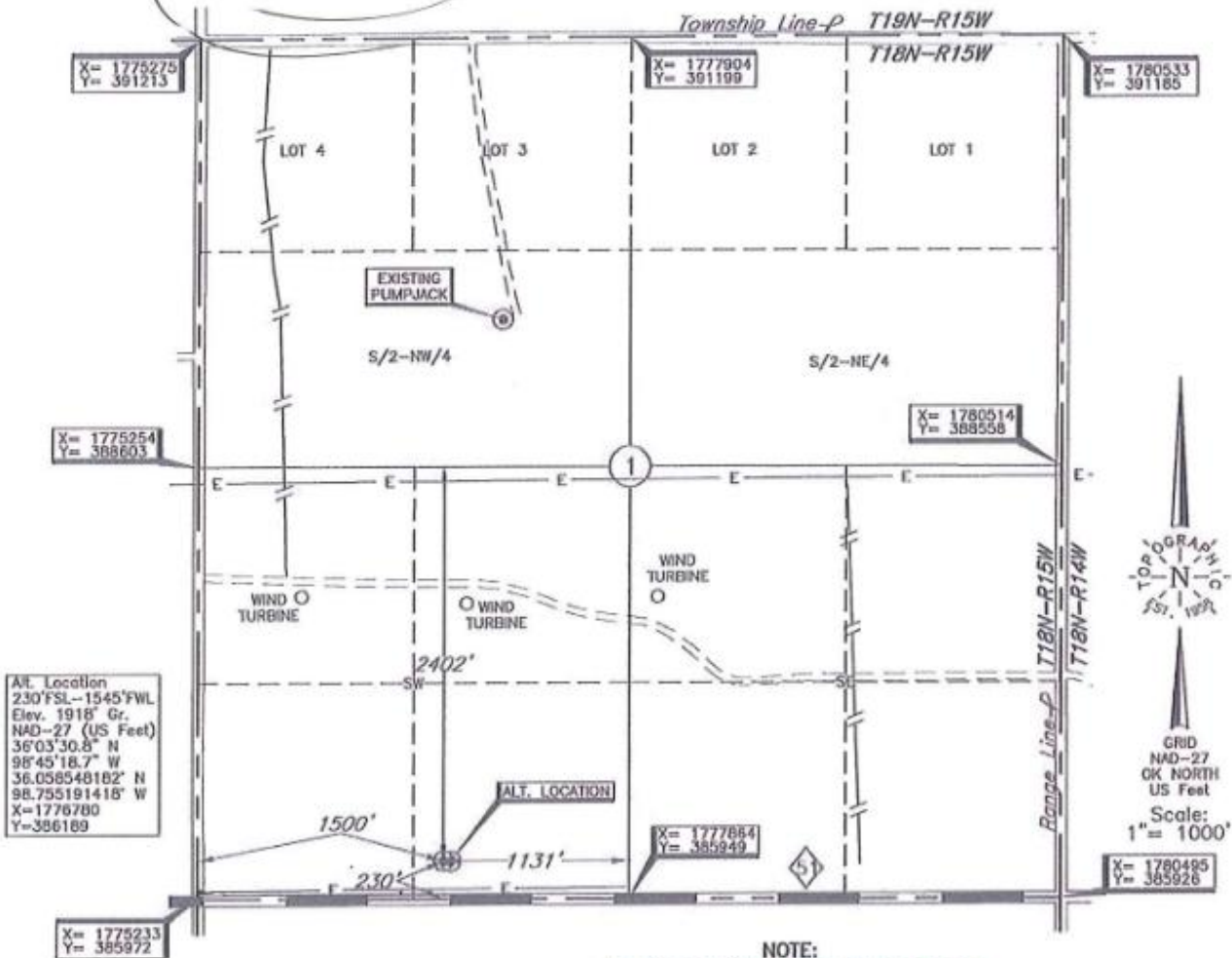
**TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA**

6709 NORTH CLASSEN BLVD., OKLA. CITY, OKLA. 73116 \* LOCAL (405) 843-4847 \* OUT OF STATE (800) 654-3219  
 Certificate of Authorization No. 1293 LS

DEWEY

County, Oklahoma

230'FSL -- 1500'FWL Section 1 Township 18N Range 15W I.M.



**NOTE:**  
 The information shown herein is for construction purposes ONLY.

Operator: CRAWLEY PETROLEUM CORP. **ELEVATION:** 1920' Gr. at Stake  
 Lease Name: Armstrong-Hamel #1-1H Well No.: 1-1H  
 Topography & Vegetation Loc. fell in rough wooded slope pasture with heavy trees; Alt. loc. fell in pasture with heavy trees  
 Good Drill Site? Yes; Alt. Yes Reference Stakes or Alternate Location Stakes Set Alt. 230'FSL-1545'FWL; Elev. 1918' Gr.  
 Best Accessibility to Location From South off St. Hwy. 51  
 Distance & Direction From Jct. St. Hwy. 51 East and St. Hwy. 3 NW-SE, go ±3.2 mi. East on St. Hwy. 51 to the SW Cor. of Sec. 1-T18N-R15W

DATUM: NAD-27  
 LAT: 36°03'30.8"N  
 LONG: 98°45'19.2"W  
 LAT: 36.058548015° N  
 LONG: 98.755343691° W  
 STATE PLANE  
 COORDINATES: (US Feet)  
 ZONE: OK NORTH  
 X: 1776735  
 Y: 386189

Date of Drawing: Dec. 01, 2015  
 Invoice # 253846 Date Staked: Nov. 25, 2015 AC

**CERTIFICATE:**  
 I, Thomas L. Howell an Oklahoma Licensed Land Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the information shown herein  
Thomas L. Howell  
 Oklahoma Lic. No. 1433



This information was gathered with a GPS receiver with ±1 foot horiz./vert. accuracy