

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

API NUMBER: 119 24411

Approval Date: 07/06/2016  
Expiration Date: 01/06/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 33 Twp: 19N Rge: 5E County: PAYNE  
SPOT LOCATION:  NW  NE  NW  NE FEET FROM QUARTER: FROM NORTH FROM EAST  
SECTION LINES: 200 1675

Lease Name: GERTIE Well No: 3-33MH Well will be 200 feet from nearest unit or lease boundary.  
Operator Name: CROWN ENERGY COMPANY Telephone: 4055260111 OTC/OCC Number: 19779 0

CROWN ENERGY COMPANY  
1117 NW 24TH ST  
OKLAHOMA CITY, OK 73106-5615

HEIRS OF GERTIE CURLEY CHIEF C/O BIA  
PO BOX 440  
PAWNEE OK 74058

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	3645	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 651364

Location Exception Orders: 652147

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 9444

Ground Elevation: 915

**Surface Casing: 750**

Depth to base of Treatable Water-Bearing FM: 620

Under Federal Jurisdiction: Yes

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

PIT 1 INFORMATION

Approved Method for disposal of Drilling Fluids:

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 3500 Average: 1000

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: C

Liner not required for Category: C

Pit Location is AP/TE DEPOSIT

Pit Location Formation: TERRACE

D. One time land application -- (REQUIRES PERMIT)

PERMIT NO: 16-31395

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

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 33 Twp 19N Rge 5E County PAYNE

Spot Location of End Point: SW SW SE SW

Feet From: SOUTH 1/4 Section Line: 225

Feet From: WEST 1/4 Section Line: 1351

Depth of Deviation: 3114

Radius of Turn: 559

Direction: 185

Total Length: 5452

Measured Total Depth: 9444

True Vertical Depth: 3645

End Point Location from Lease,  
Unit, or Property Line: 225

Notes:

Category

Description

HYDRAULIC FRACTURING

7/6/2016 - 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 MILE.

LOCATION EXCEPTION - 652147

7/6/2016 - G60 - (I.O.) 33-19N-5E  
X651364 MSSP  
COMPL. INT. NCT 150' FNL, NCT 150' FSL, NCT 330' FEL  
CROWN ENERGY COMPANY  
4-27-16

SPACING - 651364

7/6/2016 - G60 - (640)(HOR) 33-19N-5E  
EXT 633296 MSSP  
POE TO BHL NLT 660' FB  
(COEXIST WITH SP. ORDER 176940 MSSLM)

Sec. 33-19N-5E I.M.



# Well Location Plat

Operator: CROWN ENERGY COMPANY  
 Lease Name and No. : GERTIE #3-33MH  
 Footage : 200' FNL - 1675' FEL GR. ELEVATION : 915' Good Site? YES  
 Section: 33 Township: 19N Range: 5E I.M.  
 County : PAYNE State of Oklahoma  
 Terrain at Loc. : Location fell in pasture, fell South of E-W fence & aerial powerline. N-S fence cuts West edge of pad. Mobile home ±225' East from East edge of pad.

Accessibility : From the South.  
 Directions : From the town of Cushing, OK at the intersection of Hwy 33 & Hwy 18 going North on Hwy 18 for approximately 7 miles to E0640 Road then turning West on E0640 Road go approximately 0.4 miles to site to the South.

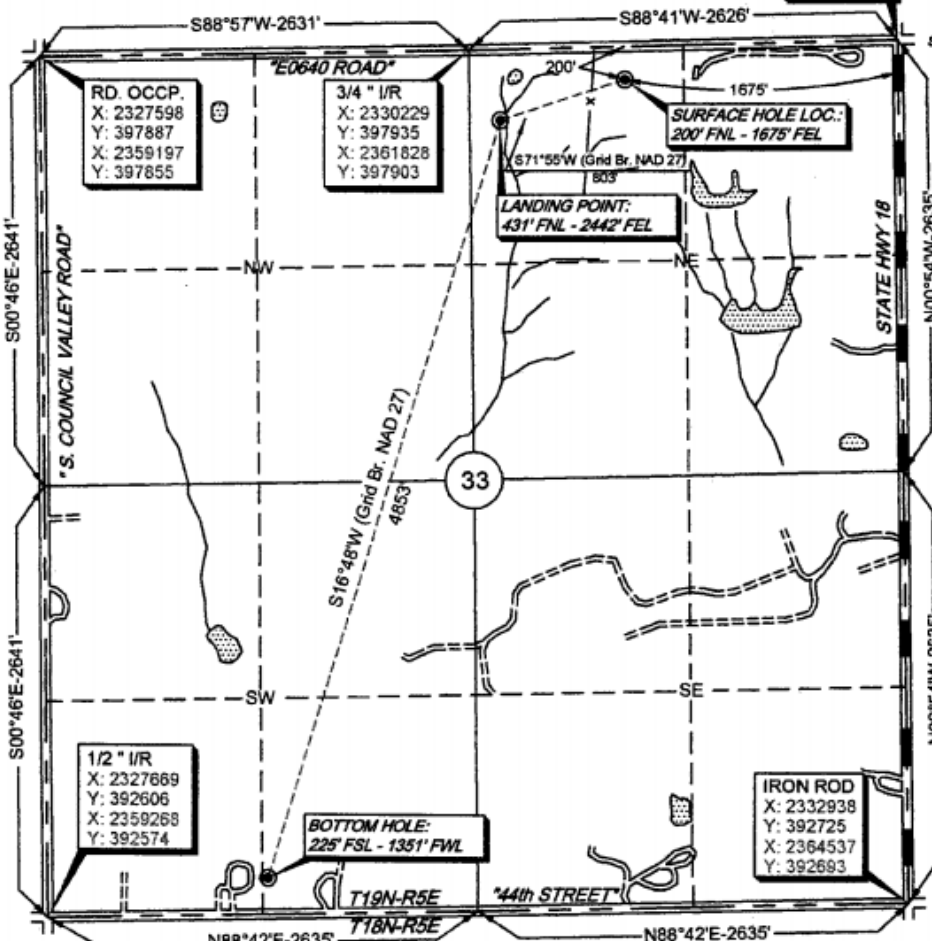


1"=1000'  
 GPS DATUM  
 NAD 83  
 OK NORTH ZONE  
 NAD 27  
 OK NORTH ZONE

BASIS OF BEARING:  
 GRID NORTH - NAD 83  
 STATE PLANE - OK NORTH ZONE

Quarter Section distances may be assumed from a Government Survey Plat or assumed at a proportionate distance from opposing section corners, or occupation thereof, and may not have been measured on-the-ground, and further, does not represent a true boundary survey.

NOTE: X and Y data shown hereon for Section Corners may NOT have been surveyed on-the-ground, and further, does NOT represent a true Boundary Survey.



Surface Hole Loc.:  
 Lat: 36.08638698  
 Lon: -96.77250385  
 X: 2331183  
 Y: 397756

Surface Hole Loc.:  
 Lat: 36.08632416  
 Lon: -96.77219663  
 X: 2362782  
 Y: 397724

Landing Point:  
 Lat: 36.08572952  
 Lon: -96.77509596  
 X: 2330420  
 Y: 397507

Landing Point:  
 Lat: 36.08566591  
 Lon: -96.77478827  
 X: 2362019  
 Y: 397476

Bottom Hole Loc.:  
 Lat: 36.07301614  
 Lon: -96.78004205  
 X: 2329017  
 Y: 392861

Bottom Hole Loc.:  
 Lat: 36.07287958  
 Lon: -96.77563030  
 X: 2360616  
 Y: 392829

Please note that this location was staked on the ground under the supervision of a Licensed Professional Land Surveyor, but the accuracy of the survey is not guaranteed. Please contact Arkoma Surveying and Mapping for further information. GPS data is obtained from RTK - GPS.

survey and plat by,  
**Arkoma Surveying and Mapping, PLLC**  
 P.O. Box 238 Wilburton, OK 74578  
 Ph. 918-465-5711 Fax 918-465-5030  
 Certificate of Authorization No. 5348  
 Expires June 30, 2016  
 Invoice #5212-C  
 Date Staked : 01/08/15 By : J.W.  
 Date Drawn : 01/13/15 By : S.S.  
 Revise Lease Name : 01/19/15 By : R.M.  
 Revise LP & BHL: 03/20/15 By: T.S.  
 Revise BHL Callout: 03/25/15 By: J.H.

**Certification:**  
 This is to certify that this Well Location Plat represents the results of a survey made on the ground performed under the supervision of the undersigned.

*Stan Drannon* 3/26/15  
**STAN DRANNON** OK LPLS 1672

BASIS OF ELEVATION:  
 OPUS SOLUTION

