

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

API NUMBER: 063 24640

Approval Date: 01/17/2017  
Expiration Date: 07/17/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 28 Twp: 8N Rge: 11E County: HUGHES  
SPOT LOCATION:  N2  SE  NW  SW FEET FROM QUARTER: FROM SOUTH FROM WEST  
SECTION LINES: 1800 990

Lease Name: BUFORD Well No: 1-28/21H Well will be 990 feet from nearest unit or lease boundary.  
Operator Name: BRAVO ARKOMA LLC Telephone: 9188944440; 9188944 OCC Number: 23562 0

BRAVO ARKOMA LLC  
1323 E 71ST ST STE 400  
TULSA, OK 74136-5067

BUFORD M. JOHNSON  
2898 N. 383 ROAD  
WETUMKA OK 74883

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

	Name	Depth	Name	Depth
1	CANEY	4199	6	
2	WOODFORD	4579	7	
3			8	
4			9	
5			10	

Spacing Orders: 656586  
657180

Location Exception Orders: 657088

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 11792

Ground Elevation: 916

**Surface Casing: 1500**

Depth to base of Treatable Water-Bearing FM: 210

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: AIR

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: 4

Liner not required for Category: 4

Pit Location is BED AQUIFER

Pit Location Formation: CALVIN

Mud System Change to Water-Based or Oil-Based Mud Requires an Amended Intent (Form 1000).

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

F. Haul to Commercial soil farming facility: Sec. 14 Twn. 7N Rng. 9E Cnty. 63 Order No: 551649

H. SEE MEMO

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.

PIT 2 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 8000 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: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: CALVIN

PIT 3 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

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: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: CALVIN

HORIZONTAL HOLE 1

Sec 21 Twp 8N Rge 11E County HUGHES

Spot Location of End Point: C NW NW

Feet From: NORTH 1/4 Section Line: 660

Feet From: WEST 1/4 Section Line: 660

Depth of Deviation: 3747

Radius of Turn: 832

Direction: 355

Total Length: 6738

Measured Total Depth: 11792

True Vertical Depth: 4579

End Point Location from Lease,  
Unit, or Property Line: 660

Notes:

Category	Description
DEEP SURFACE CASING	1/11/2017 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING
HYDRAULIC FRACTURING	1/11/2017 - 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 <a href="http://fracfocus.org/">HTTP://FRACFOCUS.ORG/</a> 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

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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.

Category	Description
LOCATION EXCEPTION - 657088	<p>1/11/2017 - G75 - (I.O.) 21 &amp; 28-8N-11E  X656586 CNEY, WDFD, OTHER  SHL (28-8N-11E) NCT 1845' FNL, NCT 1275' FWL **  COMPL. INT. (28-8N-11E) NCT 2500' FNL, NCT 0' FNL, NCT 660' FWL  COMPL. INT. (21-8N-11E) NCT 0' FSL, NCT 165' FNL, NCT 660' FWL  BRAVO ARKOMA, LLC  10-19-2016</p> <p>** ITD HAS SHL AS 990' FWL 28-8N-11E; TO BE CORRECTED AT HEARING FOR FINAL ORDER  LOCATION EXCEPTION PER OPERATOR</p>
MEMO	<p>1/11/2017 - G71 - PIT 2 &amp; 3 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 3 -  OBM TO VENDOR, OBM CUTTINGS PER DISTRICT</p>
MEMO	<p>1/11/2017 - G71 - DRILLING IN GREASY CREEK SPRING GAS STORAGE (ORDER # 95952/96291)  FOR BOOCH; MUST NOTIFY GAS STORAGE OPERATOR PER OCC 165:10-3-5</p>
SPACING - 656586	<p>1/11/2017 - G75 - (640)(HOR) 21 &amp; 28-8N-11E  EST CNEY  EXT 642100 WDFD, OTHER  COMPL. INT. (CNEY) NLT 330' FB  COMPL. INT. (WDFD) NLT 165' FNL &amp; FSL, NLT 330' FEL &amp; FWL</p>
SPACING - 657180	<p>1/11/2017 - G75 - (I.O.) 21 &amp; 28-8N-11E  EST MULTIUNIT HORIZONTAL WELL  X656586 CNEY, WDFD, OTHER  (CNEY ASSOCIATED COMMON SOURCE OF SUPPLY TO WDFD)  33% 28-8N-11E  67% 21-8N-11E  BRAVO ARKOMA, LLC  10-21-2016</p>

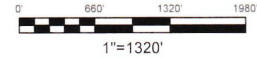
This permit does not address the right of entry or settlement of surface damages.  
The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1.  
Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District  
Office of the Conservation Division as to when Surface Casing will be run.

# BNR Well Location Plat

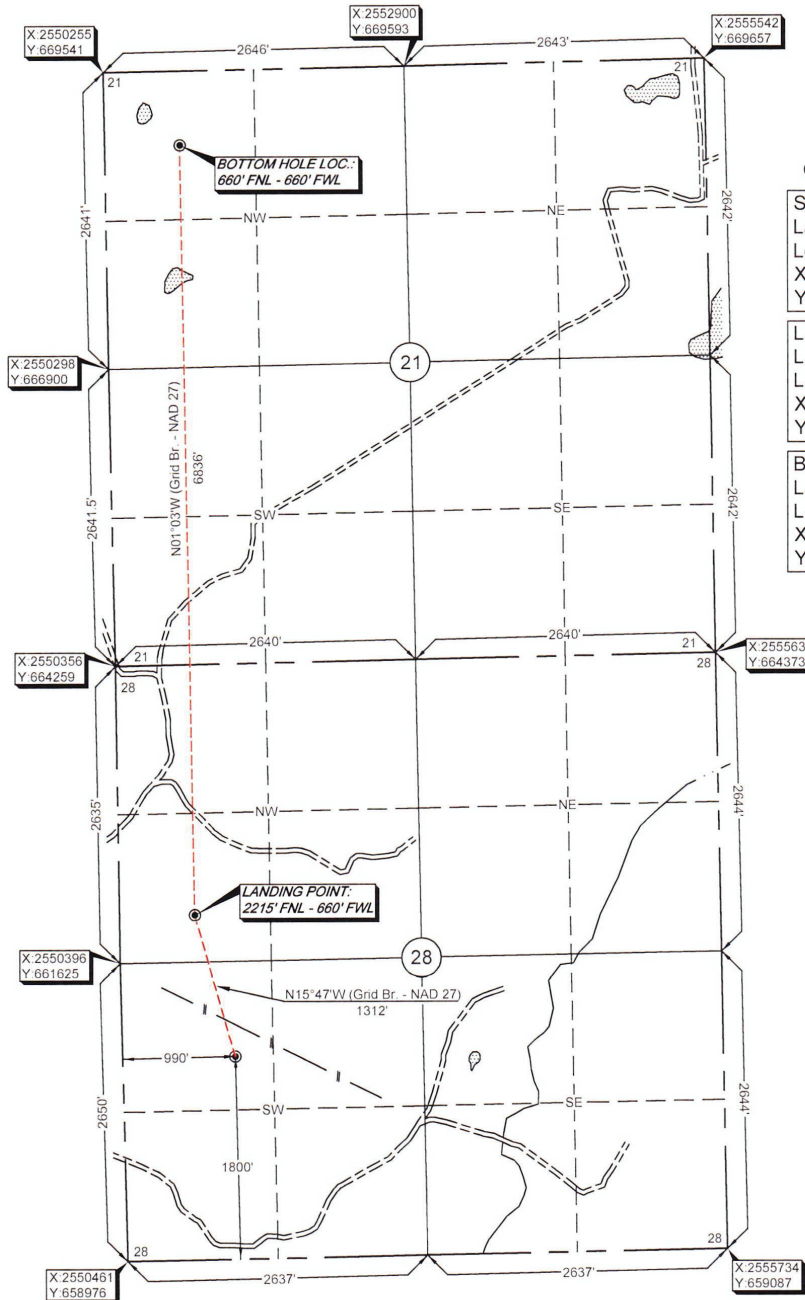
S.H.L. Sec. 28-8N-11E I.M.  
B.H.L. Sec. 21-8N-11E I.M.

Operator : BRAVO NATURAL RESOURCES  
Lease Name and No. : BUFORD 1-28/21H  
Footage : 1800' FSL - 990' FWL GR. ELEVATION : 916' Good Site? YES  
Section : 28 Township : 8N Range : 11E I.M.  
County : Hughes State of Oklahoma  
Alternate Loc. : N/A  
Terrain at Loc. : Location fell in mostly open terrain sloping downhill from South to North.

API 063-24640



Accessibility : From the West.  
Directions : From the intersection of Highway 270 and Highway 75 in Horntown, OK, go 3.0 miles East on E1330, turn North on N3830 Road and go 3.8 miles to the Enable Plant entrance road, go East ±2.0 miles on the Enable Plant entrance road to the W/2 of Section 28-8N-11E.



GPS DATUM  
NAD 27  
OK SOUTH ZONE

Surface Hole Loc. :  
Lat: 35°08'06.95"N  
Lon: 96°09'20.82"W  
X: 2551407  
Y: 660796

Landing Point:  
Lat: 35°08'19.51"N  
Lon: 96°09'24.84"W  
X: 2551050  
Y: 662059

Bottom Hole Loc. :  
Lat: 35°09'27.12"N  
Lon: 96°09'24.84"W  
X: 2550925  
Y: 668894

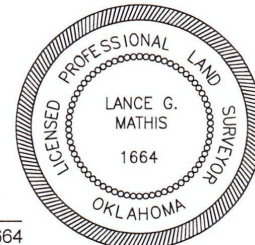
Quarter Section distances may be assumed from a Government Survey Plat or assumed at a proportionate distance from opposing section corners, or occupation thereof, and may not have been measured on-the-ground, and further, does not represent a true boundary survey.

Please note that this location was staked on the ground under the supervision of a Licensed Professional Land Surveyor, but the accuracy of this survey is not guaranteed. Please contact Arkoma Surveying and Mapping promptly if any inconsistency is determined. GPS data is observed from RTK - GPS.  
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.

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, 2018

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.

*Lance G. Mathis* 01/13/17  
LANCE G. MATHIS OK LPLS 1664



Invoice #6568-A-A  
Date Staked : 08/30/16 By : H.S.  
Date Drawn : 08/16/16 By : J.H.  
Date Revised : 08/31/16 By : S.S.  
Added Landing Point & BHL: 01/13/17 By : R.S.