

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

API NUMBER: 029 21363

Approval Date: 06/16/2017  
Expiration Date: 12/16/2017

Straight Hole Stratigraphic Test

PERMIT TO DRILL

WELL LOCATION: Sec: 05 Twp: 1N Rge: 11E County: COAL  
SPOT LOCATION:  NE  NW  SE  SE FEET FROM QUARTER: FROM SOUTH FROM EAST  
SECTION LINES: 1099 988

Lease Name: COALGATE Well No: 2-8/17H Well will be 988 feet from nearest unit or lease boundary.  
Operator Name: BRAVO ARKOMA LLC Telephone: 9188944440; 9188944 OCC/OCC Number: 23562 0

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

BRENDA HICKMAN  
P.O. BOX 385  
COALGATE OK 74538

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

Name	Depth	Name	Depth
1 WOODFORD	10022	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 10065 Ground Elevation: 627 **Surface Casing: 400** Depth to base of Treatable Water-Bearing FM: 290

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: SAVANNA

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: SAVANNA

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: SAVANNA

Notes:

Category

Description

MEMO

6/15/2017 - G71 - PITS 2 & 3 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 3 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

SPACING

6/15/2017 - G71 - N/A - STRATIGRAPHIC TEST

# BNR Well Location Plat

S.H.L. Sec. 5-1N-11E I.M.  
B.H.L. Sec. 17-1N-11E I.M.

Operator : BRAVO ARKOMA, LLC.  
Lease Name and No. : COALGATE 2-8-17H  
Footage : 1099' FSL - 988' FEL GR. ELEVATION : 627' Good Site? YES  
Section : 5 Township : 1N Range : 11E I.M.  
County : Coal State of Oklahoma

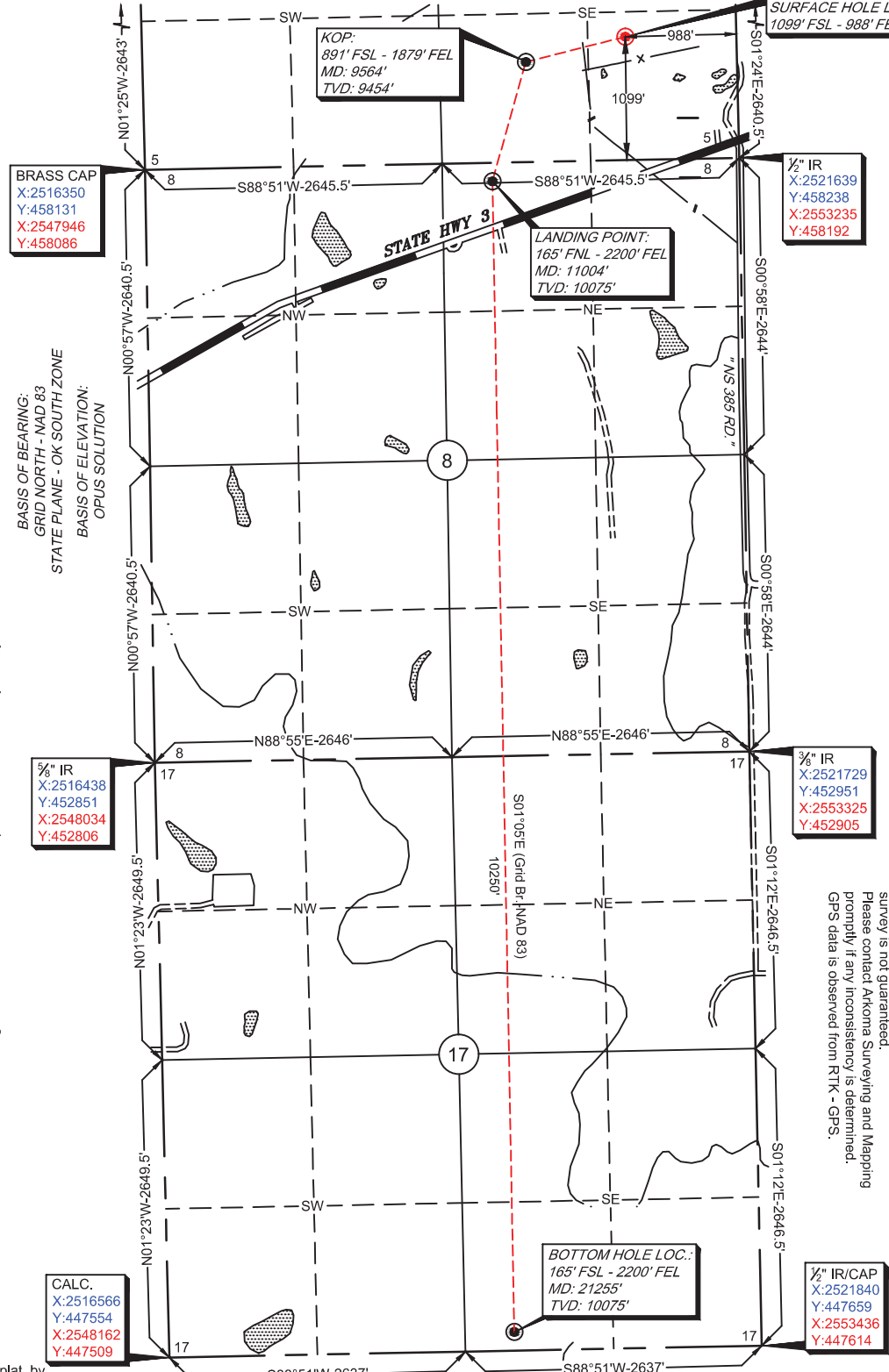
## API: 029 21363

Terrain at Loc. : Location fell in pasture with North half of proposed pad falling in scattered timber, ±220' North of an existing E-W fence & ±385' East of an existing N-S MarkWest pipeline. Terrain slopes downward from North to South.  
Accessibility : From the East.  
Directions : From the junction of State Hwy 3 & State Hwy 131, Northeast of Coalgate, OK, go 1.0 mile West on Hwy 3 to the Southeast Corner of Section 5-1N-11E.



GPS DATUM  
NAD 83  
NAD 27  
OK SOUTH ZONE

1"=1500'



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.

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.

<b>Surface Hole Loc.:</b> Lat: 34.58167917 Lon: -96.16558659 X: 2520625 Y: 459316
<b>Surface Hole Loc.:</b> Lat: 34.58158622 Lon: -96.16531132 X: 2552221 Y: 459271
<b>KOP:</b> Lat: 34.58110314 Lon: -96.16854335 X: 2519739 Y: 459090
<b>KOP:</b> Lat: 34.58101022 Lon: -96.16826799 X: 2551335 Y: 459045
<b>Landing Point:</b> Lat: 34.57819991 Lon: -96.16959140 X: 2519442 Y: 458028
<b>Landing Point:</b> Lat: 34.57810700 Lon: -96.16931610 X: 2551039 Y: 457983
<b>Bottom Hole Loc.:</b> Lat: 34.55003350 Lon: -96.16956375 X: 2519637 Y: 447780
<b>Bottom Hole Loc.:</b> Lat: 34.54994069 Lon: -96.16928899 X: 2551233 Y: 447734

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.

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 Invoice #6359-B  
Date Staked : 05/04/16 By : H.S.  
Date Drawn : 05/23/16 By : K.M. Date Revised: 07/22/16 By : S.S.  
Added Proposed Bore Path: 08/25/16 By: R.S.  
Rev Lease Name & Bore Path: 03/08/17 By: P.B.  
Rev Landing Point & Bore Path: 06/21/17 By: R.S.

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* 06/22/17  
LANCE G. MATHIS OK LPLS 1664

