

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

API NUMBER: 063 24887 A

Approval Date: 03/08/2019  
Expiration Date: 09/08/2020

Horizontal Hole Oil & Gas  
Multi Unit

Amend reason: UPDATE SURFACE HOLE LOCATION, CHANGE  
TO MULTIUNIT HORIZONTAL OIL/GAS WELL; ADD FORMATIONS

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 12 Twp: 8N Rge: 11E County: HUGHES  
SPOT LOCATION: ☐ NW ☐ NE ☐ NE ☐ SW FEET FROM QUARTER: FROM SOUTH FROM WEST  
SECTION LINES: 2447 1985

Lease Name: HOMSEY Well No: 1-12/13/24H Well will be 2000 feet from nearest unit or lease boundary.  
Operator BRAVO ARKOMA LLC Telephone: 9188944440; 9188944 OTC/OCC Number: 23562 0  
Name:

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

MICHAEL T. BOSE & CHERYL A. BOSE  
7056 HACKBERRY COURT  
TULSA OK 74132

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	4515	6	
2	WOODFORD	5026	7	
3	SYLVAN	5096	8	
4			9	
5			10	

Spacing Orders: 668135  
668322

Location Exception Orders:

Increased Density Orders: 693598  
693599

Pending CD Numbers: 201900745  
201900746  
201900756

Special Orders:

Total Depth: 14283 Ground Elevation: 961 Surface Casing: 1300 Depth to base of Treatable Water-Bearing FM: 220

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

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

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

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

H. SEE MEMO

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).

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 24 Twp 8N Rge 11E County HUGHES

Spot Location of End Point: S2 S2 SW NW

Feet From: NORTH 1/4 Section Line: 2630

Feet From: WEST 1/4 Section Line: 660

Depth of Deviation: 4700

Radius of Turn: 873

Direction: 185

Total Length: 8211

Measured Total Depth: 14283

True Vertical Depth: 5096

End Point Location from Lease,

Unit, or Property Line: 660

Notes:

Category

Description

DEEP SURFACE CASING

3/1/2019 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING

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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.

063 24887 HOMSEY 1-12/13/24H

Category	Description
HYDRAULIC FRACTURING	<p>3/29/2019 - G71 - OCC 165:10-3-10 REQUIRES:</p> <p>1) PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE;</p> <p>2) WITH NOTICE ALSO GIVEN 48 HOURS IN ADVANCE OF HYDRAULIC FRACTURING ALL WELLS TO BOTH THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES, USING THE "FRAC NOTICE FORM" FOUND AT THE FOLLOWING LINK: <a href="http://OCCEWEB.COM/OG/OGFORMS.HTML">OCCEWEB.COM/OG/OGFORMS.HTML</a>; AND,</p> <p>3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION THE HYDRAULIC FRACTURING OPERATIONS, USING THE FOLLOWING LINK: <a href="http://FRACFOCUS.ORG">FRACFOCUS.ORG</a></p>
INCREASED DENSITY - 693598	<p>4/5/2019 - G56 - 12-8N-11E X668135 WDFD 5 WELLS BRAVO ARKOMA, LLC 3/27/2019</p>
INCREASED DENSITY - 693599	<p>4/5/2019 - G56 - 13-8N-11E X668322 WDFD 3 WELLS BRAVO ARKOMA, LLC 3/27/2019</p>
MEMO	<p>3/1/2019 - G71 - PIT 2 &amp; 3 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, WBM &amp; OBM CUTTINGS CAPTURED IN CONCRETE-LINED PIT, SOLIDIFIED AND HELD UNTIL DISPOSAL APPROVED BY OCC; PIT 3 - OBM TO VENDOR</p>
PENDING CD - 201900745	<p>4/5/2019 - G56 - (I.O.) 12, 13 &amp; 24-8N-11E ESTABLISH MULTIUNIT HORIZONTAL WELL X668135 MSSP, WDFD, SLVN, OTHER 12-8N-11E X668322 MSSP, WDFD, SLVN, OTHER 13 &amp; 24-8N-11E (MSSP, SLVN ARE ADJACENT COMMON SOURCES OF SUPPLY TO WDFD) 10% 12-8N-11E 45% 13-8N-11E 45% 24-8N-11E NO OP NAMED REC 2/22/2019 (JOHNSON)</p>
PENDING CD - 201900746	<p>4/5/2019 - G56 - (I.O.) 12, 13 &amp; 24-8N-11E X668135 MSSP, WDFD, SLVN, OTHER 12-8N-11E X668322 MSSP, WDFD, SLVN, OTHER 13 &amp; 24-8N-11E COMPL INT (12-8N-11E) NCT 0' FSL, NCT 0' FSL, NCT 330' FWL COMPL INT (13-8N-11E) NCT 0' FSL, NCT 0' FNL, NCT 330' FWL COMPL INT (24-8N-11E) NCT 0' FNL, NCT 165' FSL, NCT 330' FWL NO OP NAMED REC 2/22/2019 (JOHNSON)</p>
PENDING CD - 201900756	<p>4/5/2019 - G56 - 24-8N-11E X668322 WDFD 3 WELLS NO OP NAMED REC 2/22/2019 (JOHNSON)</p>
SPACING - 668135	<p>4/5/2019 - G56 - (640)(HOR) 12-8N-11E EXT 659541 MSSP, WDFD, SLVN, OTHER COMPL INT (MSSP) NLT 660' FB COMPL INT (SLVN) NLT 330' FB COMPL INT (WDFD) NLT 165' FNL/FSL, NLT 330' FEL/FWL</p>
SPACING - 668322	<p>4/5/2019 - G56 - (640)(HOR) 13 &amp; 24-8N-11E X659541 MSSP, WDFD, SLVN, OTHER COMPL INT (MSSP) NLT 660' FB COMPL INT (SLVN) NLT 330' FB COMPL INT (WDFD) NLT 165' FNL/FSL, NLT 330' FEL/FWL</p>

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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.