API NUMBER: 063 24829

Straight Hole Stratigraphic Test

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

Approval Date: 07/18/2018
Expiration Date: 01/18/2019

PERMIT TO DRILL

WELL LOCATION: Sec: 08 Twp: 8N Rge: 11E County: HUGHES

SPOT LOCATION: SE SW NE SE FEET FROM QUARTER: FROM **SOUTH** FROM **EAST**
SECTION LINES: **1497** **814**

Lease Name: JOHNSON TRUST **Well No: 3-9/16H** **Well will be 814 feet from nearest unit or lease boundary.**

Operator Name: **BRAVO ARKOMA LLC** Telephone: 9188944440; 9188944 OTC/OCC Number: 23562 0

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

MARK L. MASENBRICK
16217 SE 119TH STREET
NEWALLA OK 74857

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

	Name	Depth		Name	Depth
1	WOODFORD	4227	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: 4377 Ground Elevation: 865 **Surface Casing: 1000** Depth to base of Treatable Water-Bearing FM: 110

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

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. PIT 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

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

Notes:

Category	Description
DEEP SURFACE CASING	7/16/2018 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING
INTENT TO DRILL	7/18/2018 - G75 - THIS WELL HAS BEEN APPROVED AS A STRATIGRAPHIC TEST WITH THE INTENT TO SET SURFACE CASING ONLY. OPERATOR WILL FILE AN AMENDED FORM 1000 CHANGING THE TYPE OF DRILLING OPERATION AT A LATER DATE
SPACING	7/18/2018 - G75 - NA-STRATIGRAPHIC TEST

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.