

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

API NUMBER: 029 21370

Approval Date: 02/14/2018

Expiration Date: 08/14/2018

Straight Hole

Stratigraphic Test

PERMIT TO DRILL

WELL LOCATION: Sec: 27 Twp: 2N Rge: 10E

County: COAL

SPOT LOCATION: ☐ SW ☐ NE ☐ SE ☐ SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 850 2265

Lease Name: MCGRAW

Well No: 2-34/3/10H

Well will be 850 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

CHARLES FREDERICK LARECY
3000 S. HULEN STREET, STE. 124-229
FORT WORTH TX 76109

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

	Name	Depth	Name	Depth
1	CANEY	8239	6	
2	WOODFORD	8515	7	
3			8	
4			9	
5			10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 8550

Ground Elevation: 640

Surface Casing: 1000

Depth to base of Treatable Water-Bearing FM: 530

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 not located in a Hydrologically Sensitive Area.

Category of Pit: 4

Liner not required for Category: 4

Pit Location is NON HSA

Pit Location Formation: BOGGY

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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: BOGGY

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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: BOGGY

Notes:

Category

Description

DEEP SURFACE CASING

2/2/2018 - 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

MEMO

2/2/2018 - G71 - PITS 2 & 3 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 3 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

STRAT TEST

2/13/2018 - G57 - 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.



Well Location Plat

S.H.L. Sec. 27-2N-10E I.M.
B.H.L. Sec. 10-1N-10E I.M.

Operator: BRAVO NATURAL RESOURCES, LLC
Lease Name and No.: McGRAW 2-34/3/10H
Footage: 850' FSL - 2265' FWL Gr. Elevation: 640'
Section: 27 Township: 2N Range: 10E I.M.
County: Coal State of Oklahoma
Terrain at Loc.: Location fell in timber.

API: 029 21370



All bearings shown
are grid bearings.

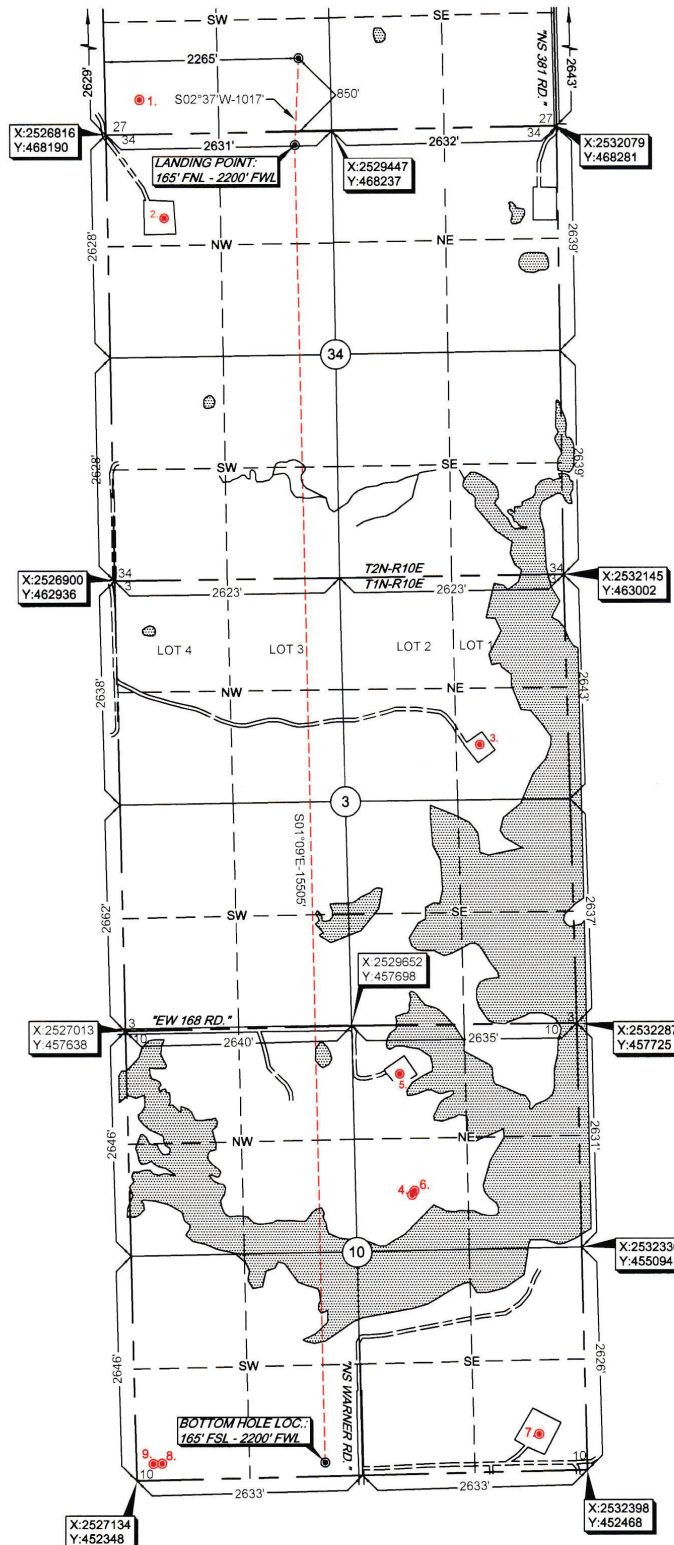
0' 875' 1750' 2625'
1" = 1750'

GPS DATUM
NAD 27
OK SOUTH ZONE

Surface Hole Loc.:
Lat: 34°36'34.81"N
Lon: 96°14'29.98"W
X: 2529065
Y: 469081

Landing Point:
Lat: 34°36'24.77"N
Lon: 96°14'30.74"W
X: 2529019
Y: 468065

Bottom Hole Loc.:
Lat: 34°33'51.40"N
Lon: 96°14'30.26"W
X: 2529330
Y: 452563



-Please note that this location was stated 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 inaccuracy is determined. GPS data is obtained from RINEX GPS receivers and is not guaranteed to be accurate. The survey was conducted on the ground, and further, does NOT represent a true Boundary Survey. 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 #7531-A-B
Date Staked: 01/10/18 By: D.A.
Date Drawn: 01/15/18 By: K.B.
Rev. Lse Name & BH: 01/23/18 Bv: C.K.

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
LANCE G. MATHIS

01/25/18

OK LPLS 1664

