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

Approval Date: 02/15/2019 08/15/2020 **Expiration Date**

API NUMBER: 063 24882

Oil & Gas

Multi Unit

Horizontal Hole

Lease Name: BROWN

Amend reason: CHANGE TO HORIZONTAL OIL/GAS WELL; ADD FORMATION; UPDATE ORDERS;

AMEND PERMIT TO DRILL

WELL LOCATION:	Sec:	26	Twp:	8N	Rge:	11E	County:	HUGHES

FEET FROM QUARTER: SPOT LOCATION: NW NW NE SE SOUTH EAST FROM 2363 1120

> Well No: 2-26/23/14H Well will be 1120 feet from nearest unit or lease boundary.

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

Spa

BRAVO ARKOMA LLC 1323 E 71ST ST STE 400

TULSA. OK 74136-5067 RYAN BROWN & RACHEL BROWN

7940 F. 138 ROAD

HOLDENVILLE OK 74848

Special Orders:

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

		Name	Depth	Name	Depth
1	1	MISSISSIPPIAN	4220	6	
2	2	CANEY	4380	7	
3	3	WOODFORD	4735	8	
2	1	SYLVAN	4820	9	
5	5			10	
pacing Orders:		657005	Location Exception Orders:		Increased Density Orders:
		659541			

Pending CD Numbers: 201900892

Total Depth: 14801 Ground Elevation: 762 Surface Casing: 1000 Depth to base of Treatable Water-Bearing FM: 190

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: Yes

Approved Method for disposal of Drilling Fluids: PIT 1 INFORMATION

Type of Pit System: ON SITE A. Evaporation/dewater and backfilling of reserve pit.

Type of Mud System: AIR

Is depth to top of ground water greater than 10ft below base of pit? Y F. Haul to Commercial soil farming facility: Sec. 14 Twn. 7N Rng. 9E Cnty. 63 Order No: 551649

Within 1 mile of municipal water well?

H. SEE MEMO Wellhead Protection Area?

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: SENORA

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: SENORA

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?

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: SENORA

HORIZONTAL HOLE 1

Sec 14 Twp 8N Rge 11E County HUGHES

Spot Location of End Point: N2 S2 NW SE
Feet From: SOUTH 1/4 Section Line: 1700
Feet From: EAST 1/4 Section Line: 1980

Depth of Deviation: 4179 Radius of Turn: 750

Total Length: 9444

Direction: 355

Total Longilli o i i i

Measured Total Depth: 14801

True Vertical Depth: 4820

End Point Location from Lease,
Unit, or Property Line: 1700

Notes:

Category Description

DEEP SURFACE CASING 2/12/2019 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS

OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR

SURFACE CASING

Category Description

HYDRAULIC FRACTURING 2/25/2019 - G71 - OCC 165:10-3-10 REQUIRES:

> 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:

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:

OCCEWEB.COM/OG/OGFORMS.HTML; AND,

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: FRACFOCUS.ORG

2/12/2019 - G71 - PIT 2 & 3 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, WBM & MFMO

OBM CUTTINGS CAPTURED IN CONCRETE-LINED PIT, SOLIDFIED AND HELD UNTIL DISPOSAL

APPROVED BY OCC; PIT 3 - OBM TO VENDOR

PENDING CD - 201900892 2/25/2019 - G75 - (640)(HOR) 23-8N-11E

EXT 668322 MSSP, WDFD, SLVN COMPL. INT. (MSSP) NLT 660' FB COMPL. INT. (SLVN) NLT 330' FB

COMPL. INT. (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL

REC 2-25-2019 (M. PORTER)

PENDING CD - 201900893 2/25/2019 - G75 - (I.O.) 26, 23 & 14-8N-11E

EST MULTIUNIT HORIZONTAL WELL X657005 CNEY, WDFD, SLVN 26-8N-11E X201900892 MSSP, WDFD, SLVN 23-8N-11E X659541 MSSP, WDFD, SLVN 14-8N-11E

(CNEY, MSSP, SLVN ADJACENT COMMON SOURCES OF SUPPLY TO WDFD)

20% 26-8N-11E 70% 23-8N-11E 10% 14-8N-11E NO OP. NAMED

REC 2-25-2019 (M. PORTER)

PENDING CD - 201900894 2/25/2019 - G75 - (I.O.) 26, 23 & 14-8N-11E

X657005 CNEY, WDFD, SLVN 26-8N-11E X201900892 MSSP, WDFD, SLVN 23-8N-11E X659541 MSSP, WDFD, SLVN 14-8N-11E

COMPL. INT. (26-8N-11E) NFT 2362' FSL, NCT 0' FNL, NCT 990' FEL COMPL. INT. (23-8N-11E) NCT 0' FSL, NCT 0' FNL, NCT 990' FEL COMPL. INT. (14-8N-11E) NCT 0' FSL, NCT 2640' FNL, NCT 990' FEL

NO OP. NAMED

REC 2-25-2019 (M. PORTER)

PENDING CD - 201900897 2/25/2019 - G75 - (I.O.) 14-8N-11E

X659541 WDFD 2 WELLS

NO OP. NAMED

REC 2-25-2019 (M. PORTER)

PENDING CD - 201900898 2/25/2019 - G75 - 23-8N-11E

X201900892 WDFD 1 WELL

NO OP. NAMED

REC 2-25-2019 (M. PORTER)

PENDING CD - 201900899 2/25/2019 - G75 - 26-8N-11E

X657005 WDFD 2 WELLS NO OP. NAMED

REC 2-25-2019 (M. PORTER)

SPACING - 657005 2/25/2019 - G75 - (640)(HOR) 26-8N-11E

> **EXT 616553 CNEY** EXT 642100 WDFD, SLVN

COMPL. INT. (CNEY, SLVN) NLT 330' FB

COMPL. INT. (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL

(COEXIST SP. ORDER # 524633 CNEY, WDFD)

SPACING - 659541 2/25/2019 - G75 - (640)(HOR) 14-8N-11E

EXT 641266 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

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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.

