

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

API NUMBER: 015 23308 A

Approval Date: 12/27/2018  
Expiration Date: 06/27/2020

Horizontal Hole Oil & Gas

Amend reason: SOIL FARMING APPLICATION PERMIT

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 12 Twp: 7N Rge: 9W

County: CADD0

SPOT LOCATION:

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 215 350

Lease Name: CADE ESTATE

Well No: 12-1H

Well will be 215 feet from nearest unit or lease boundary.

Operator Name: ZARVONA ENERGY LLC

Telephone: 7136000600

OTC/OCC Number: 23135 0

ZARVONA ENERGY LLC  
1010 LAMAR ST STE 500  
HOUSTON, TX 77002-6334

EDWARD AND APRIL GRANGER  
PO BOX 49  
GRACEMONT OK 73042-

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

	Name	Depth	Name	Depth
1	HOXBAR	11000	6	
2			7	
3			8	
4			9	
5			10	

Spacing Orders: 191735

Location Exception Orders: 688421

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 11000

Ground Elevation: 1136

**Surface Casing: 1500**

Depth to base of Treatable Water-Bearing FM: 490

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

PIT 1 INFORMATION

Approved Method for disposal of Drilling Fluids:

Type of Pit System: ON SITE

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: 1A

Liner required for Category: 1A

Pit Location is ALLUVIAL

Pit Location Formation: ALLUVIUM

D. One time land application -- (REQUIRES PERMIT)

PERMIT NO: 19-36131

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: 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 ALLUVIAL

Pit Location Formation: ALLUVIUM

## HORIZONTAL HOLE 1

Sec 12 Twp 7N Rge 9W County CADD0

Spot Location of End Point: N2 NW NW NW

Feet From: NORTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 330

Depth of Deviation: 10400

Radius of Turn: 876

Direction: 3

Total Length: 5223

Measured Total Depth: 17000

True Vertical Depth: 11000

End Point Location from Lease,  
Unit, or Property Line: 165

### Notes:

#### Category

#### Description

#### DEEP SURFACE CASING

11/26/2018 - 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

#### HYDRAULIC FRACTURING

11/26/2018 - 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](http://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](http://FRACFOCUS.ORG)

#### LOCATION EXCEPTION - 688421

12/27/2018 - G58 - (I.O.) 12-7N-9W  
X191735 HXBR  
COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 330' FWL  
ZARVONA ENERGY, LLC  
12/17/2018

#### MEMO

1/18/2019 - G71 - PIT 1 - MIN. 20-MIL PIT LINER REQUIRED, PIT 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

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.

015 23308 CADE ESTATE 12-1H

Category	Description
SPACING - 191735	12/27/2018 - G58 - (640) 12-7N-9W VAC 89453 HXBR N2 VAC 157740 MRCD, CLPM S2 EXT 113637 HXBR, OTHERS

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.