

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

API NUMBER: 017 25093

Approval Date: 10/17/2017
Expiration Date: 04/17/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 31 Twp: 11N Rge: 8W County: CANADIAN
SPOT LOCATION: NE NE NW NW FEET FROM QUARTER: FROM NORTH FROM WEST
SECTION LINES: 250 1200

Lease Name: SHELLY Well No: 4H-3106X Well will be 250 feet from nearest unit or lease boundary.
Operator Name: CIMAREX ENERGY CO Telephone: 9185851100 OTC/OCC Number: 21194 0

CIMAREX ENERGY CO
202 S CHEYENNE AVE STE 1000
TULSA, OK 74103-3001

AAA LAND INVESTMENTS, LLC
15141 COUNTY STREET 2720
MINCO OK 73059

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

	Name	Depth	Name	Depth
1	MISSISSIPPI LIME	12006	6	
2	MISSISSIPPIAN	12268	7	
3	WOODFORD	12583	8	
4			9	
5			10	

Spacing Orders: 663653
138217
560154

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201706433
201706432
201706449
201706447
201706446

Special Orders:

Total Depth: 22604

Ground Elevation: 1433

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 360

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: No

PIT 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 5000 Average: 3000

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: MARLOW

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 17-33197
H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

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.

HORIZONTAL HOLE 1

Sec 06 Twp 10N Rge 8W County GRADY

Spot Location of End Point: SE SE SW SW

Feet From: SOUTH 1/4 Section Line: 150

Feet From: WEST 1/4 Section Line: 1214

Depth of Deviation: 12162

Radius of Turn: 521

Direction: 179

Total Length: 9624

Measured Total Depth: 22604

True Vertical Depth: 12683

End Point Location from Lease,
Unit, or Property Line: 150

Notes:

Category	Description
DEEP SURFACE CASING	10/16/2017 - 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	10/16/2017 - 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
PENDING CD - 201706432	10/17/2017 - G60 - (E.O.) 31-11N-8W & 6-10N-8W X663653 (31-11N-8W) MSSP, WDFD X138217 (6-10N-8W) MSSLM X560154 (6-10N-8W) WDFD (MSSP AND MSSLM ARE ASSOCIATED COMMON SOURCES OF SUPPLY TO WDFD) 50% 31-11N-8W 50% 6-10N-8W CIMAREX ENERGY, CO. REC. 10/2/17 (JOHNSON)
PENDING CD - 201706433	10/17/2017 - G60 - (E.O.) 31-11N-8W & 6-10N-8W X663653 (31-11N-8W) MSSP, WDFD X138217 (6-10N-8W) MSSLM X560154 (6-10N-8W) WDFD COMPL. INT. (31-11N-8W) NCT 150' FNL, NCT 0' FSL, NCT 900' FWL COMPL. INT. (6-10N-8W) NCT 0' FNL, NCT 150' FSL, NCT 900' FWL CIMAREX ENERGY, CO. REC. 10/2/17 (THOMAS)
PENDING CD - 201706446	10/17/2017 - G60 - 6-10N-8W X560154 WDFD 8 WELLS NO OP. NAMED HEARING 10/23/17
PENDING CD - 201706447	10/17/2017 - G60 - 31-11N-8W X663653 WDFD 8 WELLS NO OP. NAMED HEARING 10/23/17

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Category	Description
PENDING CD - 201706449	10/17/2017 - G60 - (E.O.) 31-11N-8W & 6-10N-8W X165:10-3-28(C)(2)(B) WDFD MAY BE CLOSER THAN 600' TO ANY OF THE SHELLY 1H-3106X, SHELLY 2H-3106X, SHELLY 3H-3106X, SHELLY 4H-3106X, SHELLY 5H-3106X, SHELLY 6H-3106X, SHELLY 7H-3106X, SHELLY 8H-3106X, SHELLY 9H-3106X WELLS NO OP. NAMED REC. 10/2/17 (JOHNSON)
SPACING - 138217	10/17/2017 - G60 - (640) 6-10N-8W EXT OTHERS EXT 98732 MSSLM, OTHERS
SPACING - 560154	10/17/2017 - G60 - (640) 6-10N-8W EXT 144223 WDFD, OTHER EXT OTHER EST OTHER
SPACING - 663653	10/17/2017 - G60 - (640)(HOR) 31-11N-8W VAC 138217 MSSLM, CSTR VAC 144223 WDFD EST MSSP, WDFD POE TO BHL (MSSP) NCT 660' FB POE TO BHL (WDFD) NCT 165' FNL/FSL, NCT 330' FEL/FWL

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