PI NUMBER: 017 25111	OIL & GAS	CORPORATION COMMIS CONSERVATION DIVISI P.O. BOX 52000 DMA CITY, OK 73152-200 (Rule 165:10-3-1)	Approval Date: 11/15/2017
rrizontal Hole Oil & Gas		(
		PERMIT TO DRILL	
WELL LOCATION: Sec: 31 Twp: 11N Rge:	8W County: CANA	DIAN	
SPOT LOCATION: NW NE NW NW	FEET FROM QUARTER: FROM	NORTH FROM WEST	
	SECTION LINES:	270 647	
Lease Name: SHELLY	Well No:	3H-3106X	Well will be 270 feet from nearest unit or lease boundary.
Operator CIMAREX ENERGY CO Name:		Telephone: 9185851100	OTC/OCC Number: 21194 0
CIMAREX ENERGY CO 202 S CHEYENNE AVE STE 1000		AAA LA	AND INVESTMENTS, LLC
TULSA, OK	74103-3001	15141	COUNTY STREET 2720
		MINCO	OK 73059
1 MISSISSIPPI LIME 2 MISSISSIPPIAN 3 WOODFORD 4 5 Spacing Orders: 663653 560154 138217 Pending CD Numbers: 201706447	12006 12268 12583 Location Exception (6 7 8 9 10 Drders:	Increased Density Orders:
201706446 201706449 201706430 201706431			
Total Depth: 22801 Ground Elevation:	1446 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 Mea	ns Stool Pits	Approved Method	for disposal of Drilling Fluids:
Type of Pit System: CLOSED Closed System Nea Type of Mud System: WATER BASED Chlorides Max: 5000 Average: 3000 Is depth to top of ground water greater than 10ft below Within 1 mile of municipal water well? N			application (REQUIRES PERMIT) PERMIT NO: 17-33196 STEM=STEEL PITS PER OPERATOR REQUEST
Wellhead Protection Area? N Pit is located in a Hydrologically Sensitive Area Output Control of the sensitive Area	а.		
Category of Pit: C Liner not required for Category: C			
Pit Location is BED AQUIFER			

HORIZONTAL HOLE 1 GRADY Sec 06 Twp 10N Rge 8W County Spot Location of End Point: SW SE SW SW SOUTH 1/4 Section Line: 150 Feet From: Feet From: WEST 1/4 Section Line: 807 Depth of Deviation: 12207 Radius of Turn: 521 Direction: 180 Total Length: 9739 Measured Total Depth: 22801 True Vertical Depth: 12728 End Point Location from Lease. Unit. or Property Line: 150 Notes: Category Description HYDRAULIC FRACTURING 11/3/2017 - 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 11/3/2017 - G71 - APPROVED: NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF MEMO CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING PENDING CD - 201706431 11/14/2017 - G60 - (I.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 600' FWL COMPL. INT. (6-10N-8W) NCT 0' FNL, NCT 150' FSL, NCT 600' FWL CIMAREX ENERGY, CO. REC. 10/31/17 (JOHNSON) PENDING CD - 201706446 11/14/2017 - G60 - 6-11N-8W X663653 WDFD 8 WELLS NO OP. NAMED REC. 10/31/17 (JOHNSON) PENDING CD - 201706447 11/14/2017 - G60 - 31-11N-8W X663653 WDFD 8 WELLS NO OP. NAMED REC. 10/31/17 (JOHNSON) 11/14/2017 - G60 - (E.O.) 31-11N-8W & 6-10N-8W PENDING CD - 201706449 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)

Category	Description
PENDING CD - 20176430	11/14/2017 - G60 - (E.O.) 31-11N-8W & 6-10N-8W EST MULTIUNIT HORIZONTAL WELL 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. 10/31/17 (JOHNSON)
SPACING - 138217	11/14/2017 - G60 - (640) 6-10N-8W EXT OTHERS EXT 98732 MSSLM, OTHERS
SPACING - 560154	11/14/2017 - G60 - (640) 6-10N-8W EXT 144223 WDFD, OTHER EXT OTHER EST OTHER
SPACING - 663653	11/14/2017 - G60 - (640) 31-11N-8W EST OTHERS EXT OTHERS EXT 138433 WDFD (VAC BY 663653), OTHER

