H. SEE MEMO H. SEE MEMO	PI NUMBER:	063 24804 Oil & Gas	OIL & GAS	CORPORATION CONSERVATIO P.O. BOX 52000 DMA CITY, OK 73 (Rule 165:10-3-1	N DIVISION 3152-2000	N Approval Date: Expiration Date	05/29/2018 : 05/29/2019
SPOT LOCATION: RE RE WIT RE VERY WEINE 20 1570 Lesse Name: JERENY Well No. 231H Well will be 250 feet from nearest unit or lesse boun Overain CONTERNA ENERGY OPERATING LLC 1717 S BOULDER AVE STE 900 TULSA, OK 74119-4844 CONTERNA ENERGY OPERATING LLC 1717 S BOULDER AVE STE 900 TULSA, OK 74119-4844 Formation(s) (Permit Valid for Listed Formations Only): Name Depth Name Depth 1 MiSSISSIPPUN Set 6 2 WOODFORD 5 943 7 3 SYLVAN 5 103 8 5 10 Seeing Offers: No Spearing Location Exception Orders: Increased Density Orders: 201603170 Total Depth: 1125 Cound Elevation: 811 Surface Casing: 710 Depth to base of Treatable Water-Bearing FM: 510 Location Exception Orders: Spearal Orders: Spearal Orders: Period Colores: Spearal Orders: Spearal Orders: Vers Print Info@Station 7 Total Depth: 1125 Cound Elevation: 811 Surface Casing: 710 Depth to base of Treatable Water-Bearing FM: 510 Location Exception Orders: Approved Method for disposal of Drillips Fluds: 7 Period Disposal Orders: No Speara 7 9 Print Info@Station No STE 7 Period Disposal Orders: No Speara 7 7 Netwood Down State: No				PERMIT TO DRIL	<u>_L</u>		
SPOT LOCATION: Reference VIEW REFERE					—		
CONTRERATING LLC 200 1370 Descriptions 200 1370 Descriptions CORTERRA ENERGY OPERATING LLC Telephone: 919910400 OTC/OCC Number: 23995 0 CORTERRA ENERGY OPERATING LLC Telephone: 919910400 OTC/OCC Number: 23995 0 CORTERRA ENERGY OPERATING LLC Telephone: 919910400 OTC/OCC Number: 23995 0 CORTERRA ENERGY OPERATING LLC Tritp-4844 ATWOOD OK 74827	WELL LOCATION	I: Sec: 26 Twp: 6N Rge:	9E County: HUGH	IES			
Less Name: JEREMY Well No: 23-11 Well will be 260 feet from nearest unit or less boar Operator CORTERRA ENERGY OPERATING LLC Telephone: 9180150400 OTC/COC Number: 23995 0 Image: CORTERRA ENERGY OPERATING LLC Telephone: 9180150400 OTC/COC Number: 23995 0 Image: CORTERRA ENERGY OPERATING LLC Telephone: 9180150400 OTC/COC Number: 23995 0 Image: CORTERRA ENERGY OPERATING LLC Tatalogo Network GARY & RUTH DESHIELDS 4185 N.376 RD. TULSA, OK 74119-4844 OTC/COC Number: 23995 0 Formation(s) (Permit Valid for Listed Formations Only): Name Depth 0 Name Depth Name Depth 0 1 MISSISPINAN 5491 6 0 2 WOODFORD 6493 7 3 5 3 STUAN 0103 8 0 5 201503170 Location Exception Orders: Increased Density Orders: Special Orders: 201503170 201503170 Surface Casing: 710 Depth to base of Treatable Water-Bearing PM. 510 Urder Forderil Junidetion: No Surfa	SPOT LOCATION	I: NE NE NW NE	FEET FROM QUARTER: FROM	NORTH FROM EA	ST		
Owner OTTERRA ENERGY OPERATING LLC Transmission COCC Number 2995 0 CORTERRA ENERGY OPERATING LLC 11/17 S BOULDER AVE STE 900 GARY & RUTH DESHIELDS 4155 3156 70			SECTION LINES:	260 15	70		
Nime: CORTERRA ENERGY OPERATING LLC 1717 S BOULDER AVE STE 900 TULSA, OK 74119-4844 Formation(s) (Permit Valid for Listed Formations Only): Name Depth AWOOD OK 74827 Formation(s) (Permit Valid for Listed Formations Only): Name Depth Ok 74827 Formation(s) (Permit Valid for Listed Formations Only): Name Depth Ok 74827 Formation(s) (Permit Valid for Listed Formations Only): Name Depth Ok 74827 Formation(s) (Permit Valid for Listed Formations Only): Name Depth Ok 74827 Formation(s) (Permit Valid for Listed Formations Only): Name Depth Ok 74827 Formation(s) (Permit Valid for Listed Formations Only): Name Depth Ok 74827 Formation(s) (Permit Valid for Listed Formations Only): Name Depth Ok 74827 Formation(s) (Permit Valid for Listed Formations Only): Name Depth Ok 74827 Formation(s) (Permit Valid for Listed Formations Only): Name Depth System: No Spacing Liccation Exception Orders: Increased Density Orders: Special Orders: 201803169 201803170 For Muter Supply Well Dellet: No Surface Casing: 710 Depth to base of Treatable Water-Bearing FM: 510 Under Foderal Jurisdiction: No Fresh Water Supply Well Dellet: No Surface Water used to Drill: Yes PT 1 INFORMATION Type of Ms System: AIR Is depth to base of provide water welt? N Wellmead Protection Area? N P H is Elevation is Atypication Strates. Casegory of PE: 4 Harrow requirement for Category: 4 Pis Location is Atypic DEPOSIT	Lease Name:	JEREMY	Well No:	23-1H		Well will be 260 feet from near	est unit or lease boundary.
1717 S BOULDER AVE STE 900 TULSA, OK 74119-4844 GARY & RUTH DESHIELDS 4185 N. 376 RD. Formation(s) (Permit Valid for Listed Formations Only): Name Depth ATWOOD OK 74827 Formation(s) (Permit Valid for Listed Formations Only): Name Depth Name Depth 1 MISSISSIPFIAN 5461 6 6 0000F0RD 5943 7 3 SYLVAN 6103 8 9 5 10 Spacing Orders: No Spacing Location Exception Orders: Increased Density Orders: Special Orders: 201803169 201803170 Surface Casing: 710 Depth to base of Treatable Water-Bearing FM: 510 Under Federal Juridiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: Yes PIT 1 INFORMATION Fresh Water Supply Well Drilled: No Surface Water used to Drill: Yes PERMIT NO: 16 Type of Missystem: CM Striter: N D. One time land application - (REQUIRES PERMIT) PERMIT NO: 16 Under Federal Jurisdiction: N Fresh Water Supply Well Drilled: No Surface Water used to Drill: Yes PIT 1 INFORMATION Fresh Water Supply Well Dri		CORTERRA ENERGY OPERAT	FING LLC	Telephone: 91861	50400	OTC/OCC Number:	23995 0
ATWOOD OK 74827 Formation(s) (Permit Valid for Listed Formations Only): Depth Name Depth 1 MississiPpiAN 5461 6 2 WOODFORD 5943 7 3 SYLVAN 6103 8 4 9 10 Spacing Ordern: No Spacing Location Exception Orders: Increased Density Orders: 201803170 201803170 Special Orders: Special Orders: Pending CD Numbers: 201703287 Special Orders: Special Orders: 201803170 Cotation Exception Orders: Increased Density Orders: 201803170 Cotation: 811 Surface Casing: 710 Depth to base of Treatable Water-Bearing FM: 510 Under Federal Jurisdiction: No Fresh Water Supply Well Dilled: No Surface Water used to Drill: Yes PIT 11 NFORMATION Approved Method for disposal of Drilling Fluids: D. One time land application - (REQUIRES PERMIT) PERMIT NO: 10 1s depth to top of ground water greater than 10t below base of pit? Y N N N Welhead Protection Area? N N N N Pit is located in a hydrologically Sensitive Area. Casegory of Pit: 4 H. SEE MEMO Pit is located in a hydrologically sensitive Area.		OULDER AVE STE 900	-				
Name Depth Name Depth 1 MISSISSIPPIAN 5461 6 2 WOODPORD 5943 7 3 SYLVAN 6103 9 5 10 9 5 10 5 Pending CD Numbers: 201703287 Increased Density Orders: 201803169 201803170 Special Orders: Special Orders: 201803170 Cotation Exception Orders: Special Orders: Special Orders: 201803170 Cotation Exception Orders: Special Orders: Special Orders: Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: Yes PrT 1 INFORMATION Approved Method for disposal of Drilling Fluids: Yes Type of Mud System: AIR D. One time land application - (REQUIRES PERMIT) PERMIT NO: 16 Is depth to top of ground water greater than 10ft below base of pit? Y Y H. SEE MEMO Weithead Protection Area? N H. SEE MEMO H. SEE MEMO	TULSA,	OK	74119-4844		ATWOOD	ОК	74827
Pending CD Numbers: 201703287 201803169 201803170 Total Depth: 11325 Ground Elevation: 811 Surface Casing: 710 Depth to base of Treatable Water-Bearing FM: 510 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: AIR D. One time land application - (REQUIRES PERMIT) PERMIT NO: 16 H. SEE MEMO Within 1 mile of municipal water well? N Within 1 mile of municipal water well? N Pit is located in a Hydrologically Sensitive Area. Category of Pit: 4 Liner not required for Category: 4 Pit Location is AP/TE DEPOSIT	2 3 4 5	WOODFORD	5943 6103	7 8 9 10		Increased Density Orders	
201803169 201803170 Total Depth: 11325 Ground Elevation: 811 Surface Casing: 710 Depth to base of Treatable Water-Bearing FM: 510 Under Federal Jurisdiction: No Fresh Water Supply Well Drillet: No Surface Water used to Drill: Yes PIT 1 INFORMATION Fresh Water Supply Well Drillet: No Surface Water used to Drill: Yes PIT 1 INFORMATION Type of Mtd System: ON SITE Type of Mtd System: AIR Is depth to top of ground water greater than 10t below base of pit? Y Wellhead Protection Area? N Pit is located in a Hydrologically Sensitive Area. Category of Pit: 4 Liner not required for Category: 4 Pit Location is AP/TE DEPOSIT		No Spacing					
Under Federal Jurisdiction: 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: 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 located in a Hydrologically Sensitive Area. Category of Pit: 4 Liner not required for Category: 4 Pit Location is AP/TE DEPOSIT	Pending CD Num	201803169				Special Orders:	
PIT 1 INFORMATION Approved Method for disposal of Drilling Fluids: Type of Pit System: ON SITE D. One time land application (REQUIRES PERMIT) PERMIT NO: 18 Is depth to top of ground water greater than 10ft below base of pit? Y D. One time land application (REQUIRES PERMIT) PERMIT NO: 18 Wellhead Protection Area? N Pit is located in a Hydrologically Sensitive Area. Category of Pit: 4 Liner not required for Category: 4 PIT Location is AP/TE DEPOSIT	Total Depth: 1	11325 Ground Elevation	: 811 Surface (Casing: 710		Depth to base of Treatable Wa	ter-Bearing FM: 510
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 located in a Hydrologically Sensitive Area. Category of Pit: 4 Liner not required for Category: 4 Pit Location is AP/TE DEPOSIT	Under Federal	I Jurisdiction: No	Fresh Water	Supply Well Drilled: N	lo	Surface Water	used to Drill: Yes
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 located in a Hydrologically Sensitive Area. Category of Pit: 4 Liner not required for Category: 4 Pit Location is AP/TE DEPOSIT Pit Location is AP/TE DEPOSIT	PIT 1 INFORMA	TION		Approv	ed Method for dis	posal of Drilling Fluids:	
H. SEE MEMO	Type of Pit Syste	em: ON SITE					
Wellhead Protection Area? N Pit is located in a Hydrologically Sensitive Area. Category of Pit: 4 Liner not required for Category: 4 Pit Location is AP/TE DEPOSIT	Is depth to top of ground water greater than 10ft below base of pit? Y						
Pit is located in a Hydrologically Sensitive Area. Category of Pit: 4 Liner not required for Category: 4 Pit Location is AP/TE DEPOSIT							
Category of Pit: 4 Liner not required for Category: 4 Pit Location is AP/TE DEPOSIT			a.				
Liner not required for Category: 4 Pit Location is AP/TE DEPOSIT							
	Pit Location is	AP/TE DEPOSIT					
Pit Location Formation: TERRACE	Pit Location Forr	mation: TERRACE					

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
 C

Pit Location is AP/TE DEPOSIT Pit Location Formation: TERRACE

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 located in a Hydrologically Sensitive Area. Category of Pit: C Liner not required for Category: C Pit Location is AP/TE DEPOSIT Pit Location Formation: TERRACE

HORIZONTAL HOLE 1

Sec 23 Twp 6N Rge 9E County HUGHES Spot Location of End Point: NW NW NW NE NORTH 1/4 Section Line: Feet From: 165 Feet From: EAST 1/4 Section Line: 2500 Depth of Deviation: 5261 Radius of Turn: 573 Direction: 350 Total Length: 5164 Measured Total Depth: 11325 True Vertical Depth: 6193 End Point Location from Lease, Unit, or Property Line: 165

Notes:

Category	Description			
HYDRAULIC FRACTURING	5/9/2018 - 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; 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			
MEMO	5/9/2018 - G71 - PITS 2 & 3 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 3 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT			
PENDING CD - 201703287	5/9/2018 - G57 - (640)(HOR) 23-6N-9E EST MSSP, WDFD, SLVN POE TO BHL (MSSP) NCT 660' FB POE TO BHL (SLVN) NCT 330' FB POE TO BHL (WDFD) NCT 165' FNL & FSL, NCT 330' FEL & FWL REC 5-1-2018 (DUNN)			
PENDING CD - 201803169	5/9/2018 - G57 - (I.O.) 23-6N-9E X201703287 MSSP, WDFD, SLVN SHL (26-6N-9E) 315' FNL, 1220' FEL ** COMPL. INT. (23-6N-9E) NCT 150' FSL, NCT 150' FNL, NCT 660' FEL NO OP. NAMED REC 5-8-2018 (JOHNSON)			
	**S/B SHL (26-6N-9E) 260' FNL, 1570' FEL WILL BE CORRECTED AT THE HEARING FOR THE FINAL ORDER PER OPERATOR			