PI NUMBER: 073 26473	OIL & GAS CON P.O. OKLAHOMA C	PORATION COMMISSION SERVATION DIVISION BOX 52000 CITY, OK 73152-2000 165:10-3-1)	Approval Date: 03/06/2019 Expiration Date: 09/06/2020
	PERM	IIT TO DRILL	
WELL LOCATION: Sec: 31 Twp: 18N Rge: 9W	County: KINGFISHER	WEDT	
SPOT LOCATION: NW NW NW	FEET FROM QUARTER: FROM NORTH SECTION LINES: 209	FROM WEST 295	
Lease Name: ERMOKE 18-09-30	209 Well No: 1MH		Vell will be 209 feet from nearest unit or lease boundary.
Operator CHISHOLM OIL & GAS OPERATING Name:	LLC Tele	phone: 9184886400	OTC/OCC Number: 23991 0
CHISHOLM OIL & GAS OPERATING LLG 6100 S YALE AVE STE 1700	C		
TULSA, OK	74136-1921	6500 E. 720	
		LOYAL	OK 73756
1 MISSISSIPPIAN (LESS CHESTER) 2 3 4 5	8045	6 7 8 9 10	
Spacing Orders: 686808	Location Exception Orders:	690843	Increased Density Orders:
Pending CD Numbers:			Special Orders:
Total Depth: 13917 Ground Elevation: 120	<sup>2</sup> Surface Casing	j: 350	Depth to base of Treatable Water-Bearing FM: 300
Under Federal Jurisdiction: No	Fresh Water Supply V	Nell Drilled: No	Surface Water used to Drill: Yes
PIT 1 INFORMATION		Approved Method for disp	osal of Drilling Fluids:
Type of Pit System: CLOSED Closed System Means Str Type of Mud System: WATER BASED	eel Pits	D. One time land applica	tion (REQUIRES PERMIT) PERMIT NO: 19-3607
Chlorides Max: 8000 Average: 5000		H. CLOSED SYSTEM=S	TEEL PITS PER OPERATOR REQUEST
Is depth to top of ground water greater than 10ft below base Within 1 mile of municipal water well? N Wellhead Protection Area? N	e of pit? Y		
Pit <b>is not</b> located in a Hydrologically Sensitive Area.			
Category of Pit: C			
Liner not required for Category: C			
Pit Location is NON HSA			
Pit Location Formation: FLOWERPOT			

## HORIZONTAL HOLE 1

Sec 30 Twp 18N Rge 9W Cour Spot Location of End Point: NE NW N Feet From: NORTH 1/4 Section Line: Feet From: WEST 1/4 Section Line: Depth of Deviation: 7796 Radius of Turn: 750 Direction: 5 Total Length: 4943 Measured Total Depth: 13917	
True Vertical Depth: 8650	
End Point Location from Lease, Unit, or Property Line: 175	
Notes:	
Category	Description
HYDRAULIC FRACTURING	1/10/2019 - 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
INTERMEDIATE CASING	1/10/2019 - G71 - DUE TO THE KNOWN POTENTIAL RISK OF ENCOUNTERING AN OVER- PRESSURED ZONE IN THE MORROW SERIES IN THIS AREA, THE TECHNICAL MANAGER RECOMMENDS SETTING AN INTERMEDIATE STRING OF CASING IMMEDIATELY ABOVE THE MORROW SERIES
LOCATION EXCEPTION - 690843	2/11/2019 - GA8 - (I.O.) 30-18N-9W X686808 MSNLC COMPL. INT. NCT 150' FSL, NCT 150' FNL, NCT 330' FWL CHISHOLM OIL & GAS OPERATING, LLC REC 11/13/2018 (JOHNSON)
SPACING - 686808	2/11/2019 - GA8 - (640)(HOR) 30-18N-9W EXT OTHER EXT 677887 MSNLC, OTHER COMPL. INT. NLT 660' FB (COEXIST SP. ORDER #65151 MSSSD & #382125 SW4 MSSSD, MNNG, OSAGE)

