PI NUMBER: 043 23486 prizontal Hole Oil & Gas	OKLAHOMA CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION P.O. BOX 52000 OKLAHOMA CITY, OK 73152-2000 (Rule 165:10-3-1)			11/08/2016 05/08/2017	
	_	PERMIT TO DRILL			
	ECTION LINES:	Y NORTH FROM EAST 100 2350			
Lease Name: FRED 4-19-17	Well No:	1H	Well will be	400 feet from nearest u	nit or lease boundary.
Operator TAPSTONE ENERGY LLC Name:		Telephone: 405702160	0	OTC/OCC Number:	23467 0
TAPSTONE ENERGY LLC 100 E MAIN ST OKLAHOMA CITY, OK 73	RT	FRED M. SANDER & REBECCA SANDER RT. 2, BOX 62			
		SE	ILING	OK 736	03
Formation(s) (Permit Valid for Listed Forma Name 1 MISSISSIPPIAN (LESS UPPER CHESTER) 2 3 4 5	Depth	N 6 7 8 9 10	lame	Depth	
Spacing Orders: 646339	Location Exception Orders:		Ir	Increased Density Orders:	
Pending CD Numbers: 201603923 Total Depth: 16600 Ground Elevation: 1824	Surface C	asing: 1500		pecial Orders: to base of Treatable Water-Be	aring FM: 130
Under Federal Jurisdiction: No	Fresh Water S	Supply Well Drilled: No		Surface Water used	to Drill: Yes
PIT 1 INFORMATION		Approved M	ethod for disposal of Drillin	ng Fluids:	
Type of Pit System: CLOSED Closed System Means Stee Type of Mud System: WATER BASED Chlorides Max: 8000 Average: 5000 Is depth to top of ground water greater than 10ft below base of			e land application (REQ D SYSTEM=STEEL PITS	EQUIRES PERMIT) PERMIT NO: 16-31715 IS PER OPERATOR REQUEST	
Within 1 mile of municipal water well? N Wellhead Protection Area? N					
Pit <b>is</b> located in a Hydrologically Sensitive Area.					
Category of Pit: C					
Liner not required for Category: C Pit Location is BED AQUIFER					
Pit Location Formation: RUSH SPRINGS					

## HORIZONTAL HOLE 1

DEWEY Sec 04 Twp 19N Rge 17W County Spot Location of End Point: NF NI\// NI\// NE Feet From: NORTH 1/4 Section Line: 165 Feet From: EAST 1/4 Section Line: 2200 Depth of Deviation: 10815 Radius of Turn: 750 Direction: 1 Total Length: 4607 Measured Total Depth: 16600 True Vertical Depth: 11500 End Point Location from Lease. Unit. or Property Line: 165 Notes: Description Category DEEP SURFACE CASING 10/31/2016 - G71 - APPROVED: NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING HYDRAULIC FRACTURING 10/31/2016 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK HTTP://FRACFOCUS.ORG/ WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE. INTERMEDIATE CASING 10/31/2016 - 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 PENDING CD - 201603923 11/1/2016 - G75 - (I.O.) 4-19N-17W X646339 MSLUC COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 560' FEL NO OP. NAMED REC 10-17-2016 (THOMAS) SPACING - 646339 11/1/2016 - G75 - (640) 4-19N-17W VAC 85657 MCSTR EST (VER) OTHER EST (HOR) MSLUC, OTHER

COMPL. INT. NLT 660' FB

