	OKLAHOMA CORPORATION CO OIL & GAS CONSERVATION I P.O. BOX 52000 OKLAHOMA CITY, OK 7315 (Rule 165:10-3-1) PERMIT TO DRILL County: DEWEY FROM QUARTER: FROM SOUTH FROM WEST ON LINES: 260 815 Well No: 2H Telephone: 40570216	DIVISION Approval Date 2-2000 Expiration Date . . . Well will be 260 feet from ne	te: 05/27/2020 arest unit or lease boundary.
Name:			1. 23407 0
TAPSTONE ENERGY LLC 100 E MAIN ST OKLAHOMA CITY, OK 7310	D4-2509	REG HORN AND PENNY HORN H/V OX 643 EILING OK	V 73663
Formation(s) (Permit Valid for Listed Formation Name 1 MISSISSIPPIAN (LESS UPPER CHESTER) 2 3 4	Depth 10900 6 7 8 9	Name D	epth
5 Spacing Orders: 646339	10 Location Exception Orders: 685613	Increased Density Order	rs: 685612
Pending CD Numbers:		Special Orders:	
Total Depth: 15900 Ground Elevation: 1833	Surface Casing: 1500	Depth to base of Treatable W	/ater-Bearing FM: 90
Under Federal Jurisdiction: No	Fresh Water Supply Well Drilled: No		er used to Drill: Yes
PIT 1 INFORMATION Type of Pit System: CLOSED Closed System Means Steel P Type of Mud System: WATER BASED	its	Method for disposal of Drilling Fluids: me land application (REQUIRES PERMIT)	PERMIT NO: 18-35760
Chlorides Max: 8000 Average: 5000 Is depth to top of ground water greater than 10ft below base of p 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: RUSH SPRINGS	H. RUSH	SPRINGS	

PIT 2 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 BED AQUIFER Pit Location Formation: RUSH SPRINGS

HORIZONTAL HOLE 1

Sec	04	Twp	19N	Rge	17	W	County	DEWEY
Spot Location of End Point: SE SW SW SW						SW		
Feet I	From:	SOL	JTH	1/4 Sec	ction	n Line	e: 1	65
Feet I	From:	WES	ST	1/4 Sec	ctior	n Line	e: 4	65
Depth of Deviation: 10240								
Radius of Turn: 484								
Direction: 182								
Total Length: 4900								
Measured Total Depth: 15900								
True Vertical Depth: 11050								
End Point Location from Lease,								
Unit, or Property Line: 165								

Notes:	
Category	Description
DEEP SURFACE CASING	11/6/2018 - 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	11/6/2018 - 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
INCREASED DENSITY - 685612	11/27/2018 - G56 - 4-19N-17W X646339 MSLUC 3 WELLS TAPSTONE ENERGY, LLC 10/26/2018
INTERMEDIATE CASING	11/6/2018 - 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

Category	Description
LOCATION EXCEPTION - 685613	11/27/2018 - G56 - (I.O.) 4-19N-17W X646339 MSLUC COMPL INT NCT 150' FNL, NCT 150' FSL, NCT 330' FWL TAPSTONE ENERGY, LLC 10/26/2018
MEMO	11/6/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
SPACING - 646339	11/27/2018 - G56 - (640)(HOR) 4-19N-17W EST OTHER VAC 85657 MSCST EST MSLUC, OTHER COMPL INT NLT 660' FB

