PI NUMBER: 045 23428 rizontal Hole Oil & Gas	OIL & GAS (I OKLAHOI	CORPORATION COMMISS CONSERVATION DIVISIC P.O. BOX 52000 MA CITY, OK 73152-2000 Rule 165:10-3-1)		Approval Date: Expiration Date:	01/24/2014 07/24/2014	
	PERMIT TO DRILL					
WELL LOCATION: Sec: 29 Twp: 17N Rge: 24	W County: ELLIS					
SPOT LOCATION: NE NE NW NW	FEET FROM QUARTER: FROM	ORTH FROM WEST				
	SECTION LINES: 2	50 1300				
Lease Name: BRENDA 20-17-24	Well No: 1	н	Well will be 2	50 feet from neares	st unit or lease boundary.	
Operator CHESAPEAKE OPERATING INC Name:		Telephone: 4059358143	0	FC/OCC Number:	17441 0	
CHESAPEAKE OPERATING INC		MIKE &	BRENDA GROS	s		
PO BOX 18496			HCR 63, BOX 49			
OKLAHOMA CITY, OK	73154-0496			01/ 70000		
		ARNETT		OK 7	3832	
1 CLEVELAND 2 MARMATON 3 4 5 Spacing Orders: ¹³⁸²⁶⁴	9299 9500 Location Exception Or	6 7 8 9 10 rders: 614465	Increa	ased Density Orders:		
614260						
Pending CD Numbers:			Specia	al Orders:		
Total Depth: 14450 Ground Elevation: 21	50 Surface Ca	asing: 640	Depth to b	ase of Treatable Water	r-Bearing FM: 390	
Under Federal Jurisdiction: No	Fresh Water S	upply Well Drilled: No		Surface Water u	sed to Drill: No	
PIT 1 INFORMATION		Approved Method fo	r disposal of Drilling Fl	luids:		
Type of Pit System: ON SITE		A. Evaporation/dew	ater and backfilling of	reserve pit.		
Type of Mud System: WATER BASED						
Chlorides Max: 25000 Average: 8000		D. One time land a H. SEE MEMO	D. One time land application (REQUIRES PERMIT) PERMIT NO: 14-26242			
Is depth to top of ground water greater than 10ft below ba	se 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: 1B						
Liner required for Category: 1B						
Pit Location is BED AQUIFER						
Pit Location Formation: RUSH SPRINGS						

PIT 2 INFORMATION Type of Pit System: ON SITE 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: 3 Liner required for Category: 3

Pit Location is BED AQUIFER Pit Location Formation: RUSH SPRINGS

HORIZONTAL HOLE 1

Sec	20	Twp	17N	Rge	24W	Count	y ELLIS
Spot	Locatior	of En	d Point	: NE	E NE	E NW	NW
Feet	From:	NOF	RTH	1/4 Seo	ction Lir	ne:	230
Feet	From:	WE	ST	1/4 Se	ction Li	ne:	1300
Depth of Deviation: 8720							
Radius of Turn: 780							
Direction: 360							
Total Length: 4505							
Measured Total Depth: 14450							
True Vertical Depth: 9704							
End Point Location from Lease,							
Unit, or Property Line: 230							

Notes:	
Category	Description
LOCATION EXCEPTION - 614465	1/24/2014 - G75 - (I.O.) 20-17N-24W X138264 CLVD X614260 MRMN COMPL. INT. NCT 330' FSL, NCT 330' FNL, NCT 560 FWL CHESAPEAKE OP., INC. 8-2-2013
MEMO	1/22/2014 - G71 - PIT 1 & 2 - CONCRETE-LINED PIT PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT
SPACING - 138264	1/24/2014 - G75 - (640) 20-17N-24W EXT OTHERS EXT 97069 OSWG EXT 131528 CLVD, OTHERS
SPACING - 614260	1/24/2014 - G75 - (640)(HOR) 20-17N-24W EST MRMN POE TO BHL NCT 660' FB (SUPERSEDE NON-PRODUCING NON-HORIZONTAL SPACING UNITS; COEXIST WITH PRODUCING NON-HORIZONTAL SPACING UNITS)