API NUMBER: 117 23678

OKLAHOMA CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION P.O. BOX 52000 OKLAHOMA CITY, OK 73152-2000 (Rule 165:10-3-1)

Approval Date:	05/10/2016
Expiration Date:	11/10/2016

Straight Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 30 Twp: 21N Rge: 8E	County: PAWNE			
of of EcoAffort. [22] [WV] [WV]	CTION LINES:	SOUTH FROM WEST 190 575		
Lease Name: MACKEY	Well No:	1-30	Well will be 330 feet from nearest unit or lease bound	dary.
Operator MACKEY CONSULTING & LEASING L Name:	LC	Telephone: 9184304443	OTC/OCC Number: 22179 0	
MACKEY CONSULTING & LEASING LLC PO BOX 490	1020 0400	MACKI PO BO	EY CONSULTING AND LEASING, LLC 0X 490	
CLEVELAND, OK 74	1020-0490	CLEVE	ELAND OK 74020	
Formation(s) (Permit Valid for Listed Formation Name 1 LAYTON 2 CLEVELAND 3 4 5	tions Only): Depth 1300 1800	Name 6 7 8 9 10	Depth	
Spacing Orders: No Spacing	Location Exception O	orders:	Increased Density Orders:	
Pending CD Numbers:			Special Orders:	_
Total Depth: 1850 Ground Elevation: 786	Surface C	asing: 150	Depth to base of Treatable Water-Bearing FM: 100	
Under Federal Jurisdiction: No	Fresh Water S	Supply Well Drilled: No	Surface Water used to Drill: No	
PIT 1 INFORMATION		Approved Method	I for disposal of Drilling Fluids:	
Type of Pit System: ON SITE Type of Mud System: AIR		A. Evaporation/de	lewater and backfilling of reserve pit.	
Is depth to top of ground water greater than 10ft below base Within 1 mile of municipal water well? Wellhead Protection Area? N	of pit? Y			
Pit is located in a Hydrologically Sensitive Area.				
Category of Pit: 4				
Liner not required for Category: 4 Pit Location is BED AQUIFER				
Pit Location Formation: VAMOOSA				
The Education Torridations Transfer of the				

Notes:

Category Description

HYDRAULIC FRACTURING

5/9/2016 - 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.

SPACING 5/10/2016 - G60 - FORMATIONS UNSPACED; 60-ACRE LEASE NW4 NW4, N2 SW4 NW4