

PANTERRA ENERGY SURFACE CASING CEMENT REPORT

Panterra Energy, LLC 6900 Highway 86 Kiowa CO 80117									
PROJECT NUMBER	pcs17-4-cp	PROJECT LEAD DRILLER	SKYLER WILSON	RIG #	PE: 1002	HOLE #	COF AC_6	BIT TYPE(S)	HAMMER
PROJECT LOCATION	COFFEYVILLE, KS							START DATE	
GENERAL CONTRACTOR	PIPELINE CONTROLS AND SERVICES							COMPLETION DATE	
								6/24/2017	
GEOLOGIC LOG	DEPTH	TYPE	GRAIN SIZE	COLOR	WATER Y/N	ADDITIVES	PH	MUD WT	
top soil	0-5	DIRT	solid	brown		NONE	N/A	N/A	
limestone	5-400	LIMESTONE	solid	grey	y				
GPS COORDINATES (UTM)		N: 37.047366		E: -95.671282					
HOLE DIAMETER (IN)	9 7/8"							NOTES:	
TOTAL HOLE DEPTH	400'							CASING COMPLETED AND FILLED WITH 108 BAGS OF CEMENT	
CASING SIZE	10.75"								
CASING HOLE DIAMETER	16"								
CASING HOLE DEPTH	150								
CEMENT CIRCULATED TO SURFACE	YES								
GROUT MATERIAL	PORTLAND CEMENT								
#OF BAGS OF CEMENT	88 bags of cement								
ANODE SIZE	2" x 25								
BOTTOM ANODE DEPTH	400'								
TOP ANODE DEPTH	150'								
# OF BAGS OF COKE BREEZE	200								
WAS VAC TRUCK USED	YES								
EQUIPMENT USED ON SITE	DRILL MAX								
	MUD PUPPY								
	SUPPORT VEHICLES								
	GROUTING RIG								
	PICK UP								
DRILLER'S SIGNATURE VERIFYING THE ACCURACY OF THIS INFORMATION :		Skyler Wilson						License #916	