


PANTERRA ENERGY SURFACE CASING CEMENT REPORT

Panterra Energy, LLC 6900 Highway 86 Kiowa CO 80117								
PROJECT NUMBER	pcs17-4-cp	PROJECT LEAD DRILLER		RIG #	HOLE #	BIT TYPE(S)	START DATE	
PROJECT LOCATION	COFFEYVILLE, KS	SKYLER WILSON		PE: 1002	COF_AC 8	HAMMER	6/28/2017	
GENERAL CONTRACTOR	PIPELINE CONTROLS AND SERVICES						COMPLETION DATE	
							7/7/2017	
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
clay	5'-20'	clay	solid	tan				
shale	20'-50'	shale	solid	black				
	50-90	CLAY	SOLID	TAN				
	90-400	LIMESTONE	SOLID	GREY				
GPS COORDINATES (UTM)			N: 37.045638	E:	-95.690939			
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	90 bags Portland 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							
	rental air compressor							
DRILLER'S SIGNATURE VERIFYING THE ACCURACY OF THIS INFORMATION : <i>Skyler Wilson</i>						License #916		