

Company CMS Energy

Sec 16 Township 20

(S) Range 12 ^EW

County Lyon State KS

Job Number 02-111

Voltage Used 12.90

Depth	Amps	Geological Log	Depth	Amps	Geological Log	No.	Depth	No	Coke	With	Coke
5		0-4 Surface	205	0.96		1	295			2.80	
10		4-12 Clay	210	1.09		2	285			2.27	
15		12-31 Sandstone	215	1.16		3	275			2.12	
20			220	1.09	220-231 White Rock	4	265			1.84	
25			225	1.06		5	255			1.67	
30		31-220 Gray Shale	230	1.03	231-300 Gray Shale	6	245			2.00	
35			235	0.70		7	230			1.56	
40			240	0.96		8	220			2.35	
45			245	1.03		9	210			2.43	
50			250	1.05		10					
55			255	1.15		11					
60			260	1.11		12					
65		65 Top of Coke	265	1.06		13					
70			270	1.08		14					
75			275	1.13		15					
80			280	1.04		16					
85			285	1.09		17					
90			290	1.11		18					
95			295	1.13		19					
100	0.70		300	1.21	300 T.D.	20					
105	0.94		305			21					
110	0.98		310			22					
115	0.86		315			23					
120	0.88		320			24					
125	0.92		325			25					
130	0.93		330			26					
135	0.88		335			27					
140	0.85		340			28					
145	0.78		345			29					
150	0.82		350			30					
155	0.76		355			Volts		11.73			
160	0.78		360			Amps		19.04			
165	0.83		365			Ohms		0.62			
170	0.73		370			Rectifier Information					
175	0.63		375			Model					
180	0.66		380			Serial					
185	0.69		385			DCV		DCA			
190	0.89		390			C		F			
195	0.97		395			ACV		ACA			
200	0.94		400			Shunt					

Interior Plug 1400# Hole Plug @ 10'			Vent 1" Loresco All-Vent		Length 200'	
Hole Dia.	8"	Total Depth	300'	Remarks		
No. Anodes	9	Size and Type	1" x 60" Lidas			
Lbs. Coke	5000	Coke Type	Loresco SC-3			
Ft. Casing	100	Casing Diameter	8"	Signature	David French	Date 11/16/02