

Form	ACO1 - Well Completion
Operator	Natural Gas Pipeline Company of America LLC
Well Name	AMA 429 B2 NGPL 2
Doc ID	1809239

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	14	10.75	9.1	20	Bentonite	15	N/A

CITATION

DEEP GROUND BED DRILL LOG & RECTIFIER FORM

DRILLING & BORING

CLIENT INFORMATION

Client	Kinder Morgan					Job Number	2024-0310				
Facility	AMA 429 DW-2					Customer Contact	Kevin Brown				
City	Moorrowville	County	Washington	State	ks	Phone No.	+1 (308) 325-3563				

DEEP GROUND BED & DRILLING LOG INFORMATION

☒ New Installation ☐ Existing Rectifier

Hole Dia.	10"	Total Depth	250'	Casing Feet	20'	Dia.	10"	Type	SDR21 PVC	Groundbed GPS	
No. Anodes	13	Size & Type	2660 cast iron	Anode Lead	300'	Size	#8	Type	Halar	N	39.901119
Lbs. Coke	5000	Coke Type	SC3	Top of Coke Column	100'	Vent	140'	W	-97.213981		
Lbs. Plug	3000	Plug Type	Bentonite	Top of Plug	3'	Logging Volts			12.8		

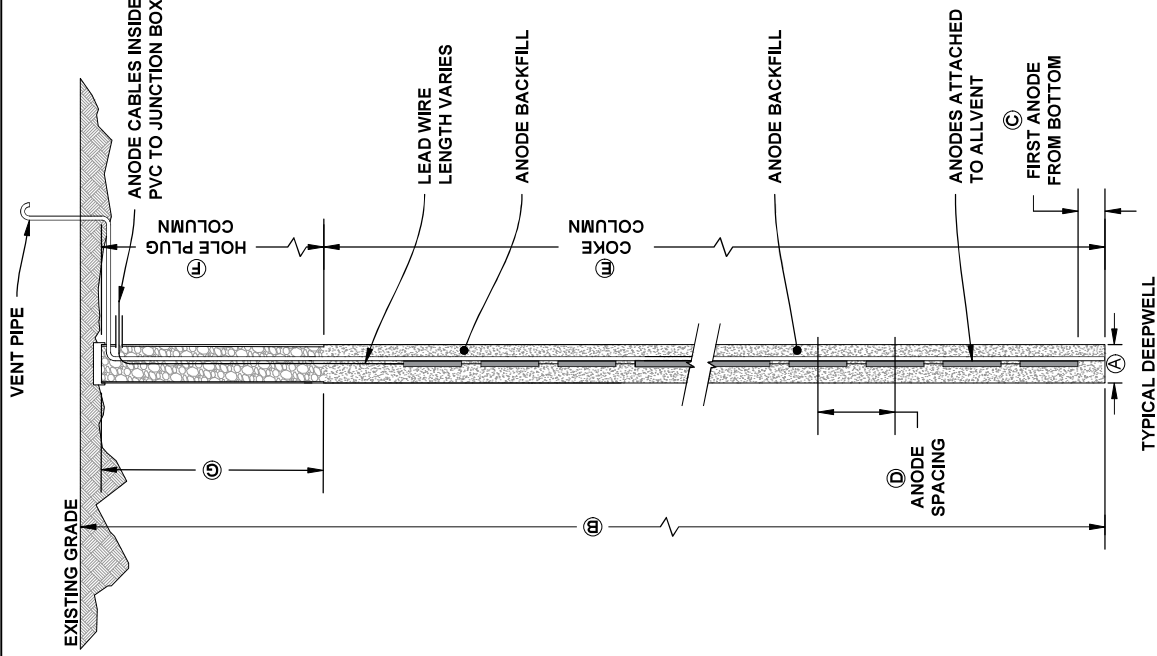
Depth Ft.	DRILLER'S LOG	Anode NO.	Electric Log				Depth Ft.	DRILLER'S LOG	Anode NO.	Electric Log			
			Volts	Amps Before	Amps After	Remarks				Volts	Amps Before	Amps After	Remarks
0							205		5			11.5	
5							210	Sandy Clay			1.9		
10	Casing						215		4			11.1	
15							220	Sandy Clay			2.2		
20	Casing						225		3			10.5	
25							230	Sandy Clay			2.0		
30	Sandy Clay			1.6			235		2			10.2	
35							240	Sandy Clay			2.0		
40	Sandy Clay			.8			245		1			9.0	
45							250	Sandy Clay			2.0		
50	Sand			.6			255						
55							260						
60	Sand			.6			265						
65							270						
70	Sandy Clay			1.5			275						
75							280						
80	Grey clay			1.7			285						
85							290						
90	Grey clay			1.4			295						
95							300						
100	Grey clay			1.3			305						
105							310						
110	Grey clay			1.6			315						
115							320						
120	Grey clay			1.2			325						
125		13			6.6		330						
130	Grey clay			1.2			335						
135		12			6.9		340						
140	Grey clay			1.3			345						
145		11			7.2		350						
150	Grey clay			1.4			355						
155		10			8.1		360						
160	Grey clay			1.0			365						
165		9			10.8		370						
170	Grey clay			1.6			375						
175		8			11.5		380						
180	Grey clay			1.9			385						
185		7			12.0		390						
190	Grey clay			1.7			395						
195		6			12.6		400						
200	Grey clay			2.0			Total						

ANODE JUNCTION BOX INFORMATION

ANODE JUNCTION BOX												COMMENTS
Cir.	Amp	Cir.	Amp	Cir.	Amp	Cir.	Amp	Cir.	Amp	Cir.	Amp	
1		6		11		16		21		26		
2		7		12		17		22		27		
3		8		13		18		23		28		
4		9		14		19		24		29		
5		10		15		20		25		30		
Shunt	Mv		Amp					TOTAL				

BILL OF MATERIALS			
ITEM	DESCRIPTION	QTY.	UNITS
1	ANODES, SET OF 13, 2660 CAST IRON, 10' CENTERS AT 250', #8 HALAR	1	EACH
2	SC-3 COKE BREEZE	100	50 LB BAGS
3	BENTONITE PLUG	60	50 LB BAGS

DIMENSIONS		
CALLOUT	ITEM	UNITS
A	HOLE DIAMETER	10 IN
B	HOLE DEPTH	250 FT
C	FIRST ANODE FROM BOTTOM	5 FT
D	ANODE SPACING	10 FT CTC
E	ANODE BACKFILL COLUMN	150 FT
F	HOLE PLUG COLUMN	100 FT
G	CASING LENGTH	20 FT



REVISIONS				DEEP GROUNDED LEGEND				CATHODIC PROTECTION LAYOUT	
No.	Description	Drawn By:	Date	Checked By:	Date	Drawn By:	Date	AMA 429A - DW2	DEEP GROUNDED INSTALLATION
						J. GREENFIELD	2024	WASHINGTON	
						Checked By:	Date:	Project No.	2024-0310
						R. McCLAIN	2024	Sheet No.	3 of 5
								Revision	0

