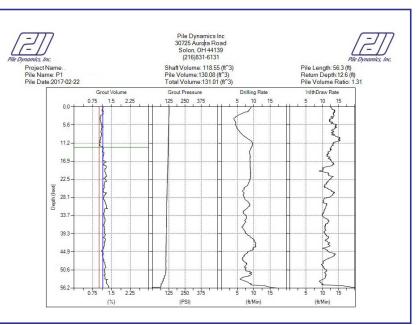


Pile Installation Recorder (PIR-PLOT) Software

PIR-PLOT software allows you to summarize multiple piles on one chart, and to graph parameters of a specific pile

PIR-PLOT summary report:

- Actual and theoretical volumes
- Total length drilled
- Duration of drilling, grouting, and total installation
- Starting and return head
- Actual and requirement percent of neat line



File	Project Proper	ties Tools	Help	Load Pile							
Project Summary Report				Pile Profile				0026.28			
Company: PDI				Pile Name: 0026.28							
Project Site: PDI Yard Number of Piles: 85 Total Shaft Volume: 13292.69 (ft [*] 3) Total Pile Volume: 14313.86 (ft [*] 3) Total Volume: 14684.3 (ft [*] 3)				Max Depth: 75.1 (ft)				1.5 1.5 0.5 0.0 0.0 1.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0			
					Volume Ratio: 1.39 Shaft Volume: 171.2 (ft [*] 3) Pile Volume:184.21 (ft [*] 3) Total Volume:184.88 (ft [*] 3)						
Pile	 Pile Length (ft) 	Grout Ratio	Shaft Volume	Pile Volume	Total Volume	Target	Nominal	Drilling Time	Grouting Time	Return Depth	Date
0026.102	75.2	1.5	(ft^3) 186.29	(ft^3) 199.3	(ft^3) 200.23	Volume (ft^3) 162.05	Volume (ft^3) 132.83	(min)	(min)	(ft) 13.3	2014-05-22
0026.102	75.2	1.5	186.29	199.3	200.23	162.05	132.83	11	9	9.7	2014-05-22
0026.103	75.1	0.94	112.21	125.29	128.18	152.59	132.54	9	6	17.0	2014-05-30
0026.105	75.0	1.24	151.88	164.96	167.71	152.55	132.56	7	7	35.3	2014-05-30
0026.108	75.0	1.37	168.68	181.69	182.39	161.69	132.54	8	11	8.2	2014-05-29
0026.109	75.1	1.39	170.87	183.87	185.28	161.87	132.68	10	9	18.0	2014-05-23
0026.14	75.1	1.33	163.64	176.64	189.62	161.87	132.68	23	13	15.3	2014-05-22
0026.15	75.0	1.4	172.72	185.73	185.91	161.69	132.54	7	10	15.7	2014-05-21
0026.16	75.1	1.38	170.05	183.06	183.06	161.87	132.68	8	10	12.0	2014-05-22
0026.17	75.1	1.37	169.12	182.13	182.28	161.87	132.68	7	9	13.4	2014-05-21
0026.18	75.0	1.31	160.45	173.46	182.17	161.69	132.54	9	9	16.0	2014-05-22
0026.24	75.2	1.4	172.35	185.36	185.8	162.05	132.83	7	10	12.7	2014-05-21
0026.25	75.1	1.37	168.31	181.32	192.48	161.87	132.68	7	11	13.9	2014-05-22
0026.26	75.2	1.36	167.53	180.54	180.72	162.05	132.83	7	11	13.3	2014-05-21
0026.27	75.0	1.33	162.93	175.94	184.02	161.69	132.54	8	13	9.4	2014-05-22
0026.28	75.1	1.39	171.2	184.21	184.88	161.87	132.68	7	10	13.8	2014-05-21
0026.34	75.1	1.37	168.23	181.2 <mark>4</mark>	188.03	161.87	132.68	12	9	9.0	2014-05-22
0026.35	75.1	1.4	172.31	185.32	197.78	161.87	132.68	6	12	15.9	2014-05-21
0026.36	75.0	1.39	170.68	183.69	192.33	161.69	132.54	10	10	12.0	2014-05-22
0026.37	75.1	1.38	169.57	182.58	182.65	161.87	132.68	7	11	12.5	2014-05-21
0026.38	75.1	1.34	165.3	178.31	184.39	161.87	132.68	9	9	9.6	2014-05-22
0026.39	75.2	1.28	156.89	169.9	179.2	162.05	132.83	6	11	11.4	2014-05-21
0026.43	75.1	1.47	182.4	195.41	196.04	161.87	132.68	8	11	8.0	2014-05-21
0026.44	75.2	1.5	185.7	198.71	199.93	162.05	132.83	8	10	10.2	2014-05-23

PIR-PLOT graphs the following quality control variables versus depth:

- Grout pressure
- Grout volume
- Drilling rate
- Withdraw rate
- Torque pressure
- Percent of neat line
- Drilling resistance

Pile Installation Recorder

The key parameters for a precise installation are pumped grout volume and auger depth. The PIR accurately records and displays

both in real time. The equipment consists of a main unit installed in the crane cabin, a depth measurement device, a magnetic flow meter, a pressure sensor to measure grout line pressure, and optional devices including a pressure sensor for determining auger torque and a proximity sensor for measuring auger rotation.

Project: Aurora.P01				
	me Profile er Increment (ft): 5			
Summary Report Options				
Operator Ørecurrent State Ørecurrent	e 🔲 Stem Volume			
Rig I Target Volume	Head Volume			
 Date Pile Grout Ratio 	D Spill Volume			
Auger Diameter Shaft Volume	PIR Project: Aurora.P01			
 Stem Diameter Pile Volume Pile Length Total Volume 	Volume Slider Inc (ft): 5 Title: Grout Volume Scale: min 0 max 3	Drilling Rate Image: Constraint of the second se	Dilling Resistance	
Units	Une Pressure Enable Title: Grout Pressure Scale: min 0 max 500	WthDraw Rate V Enable Points To Avg: 20 Title: WithDraw Rate Scale: min 0 max 20	Crowd Pressure Enable 1 Title: Crowd Pressure Scale: min 0 max 1000	
	Torque Pressure ☑ Enable Title: Torque Pressure Scale: min 0 max 5000 Auger RPM ☑ Enable Title: RPM Scale: min 0 max 100	Header Information Line 1: Pile Dynamics Inc Line 2: 30725 Aurora Road Line 3: Solon, OH 44139 Line 4: (216)831-6131	Units English O Metric Apply Est	

Pile Dynamics, Inc. (PDI) is the world leader in developing, manufacturing and supplying state of the art QA/QC products and systems for the deep foundations industry. The company is headquartered in Cleveland, Ohio, USA, with offices and representatives worldwide. For additional information visit us at <u>www.pile.com</u> or contact <u>info@pile.com</u>.