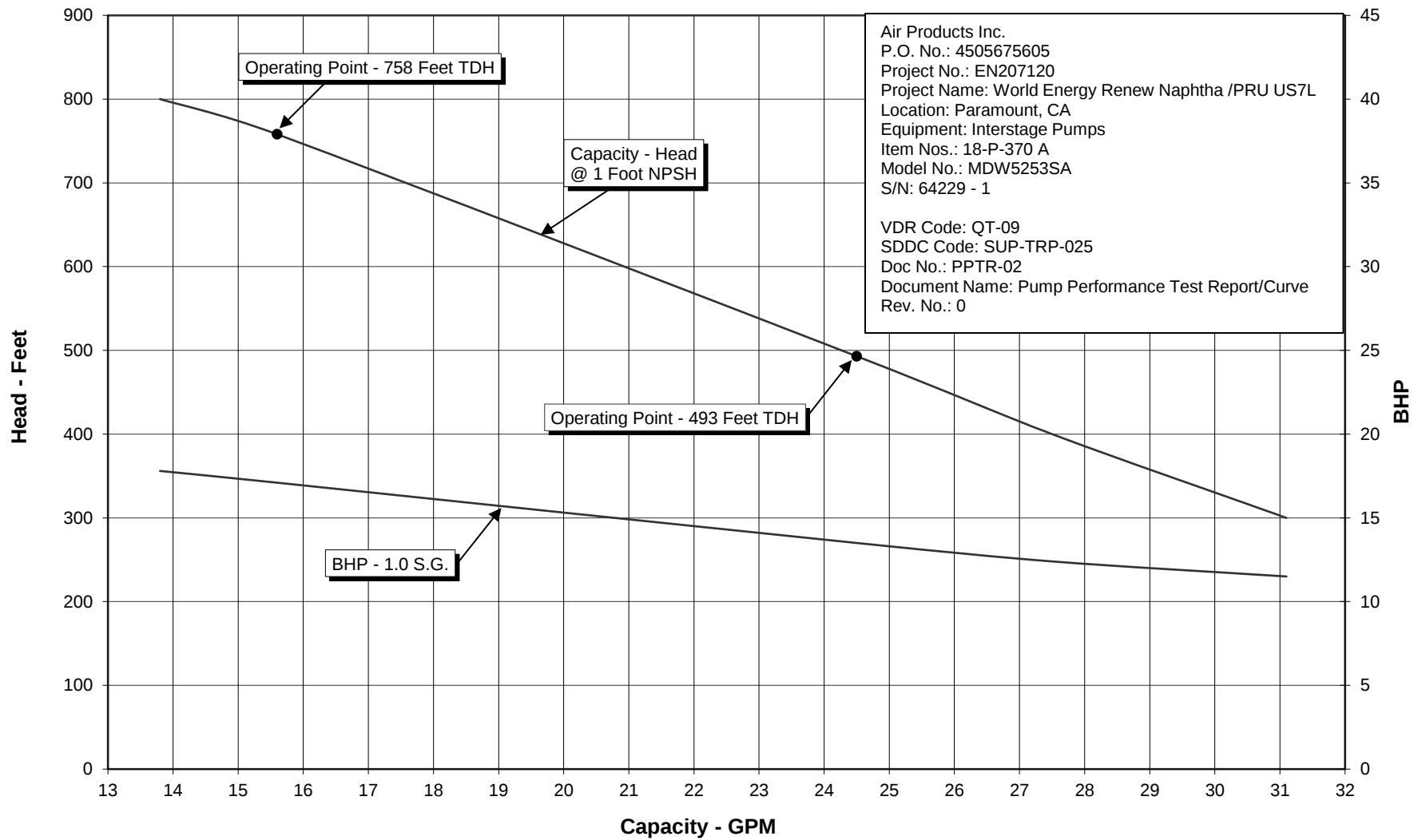
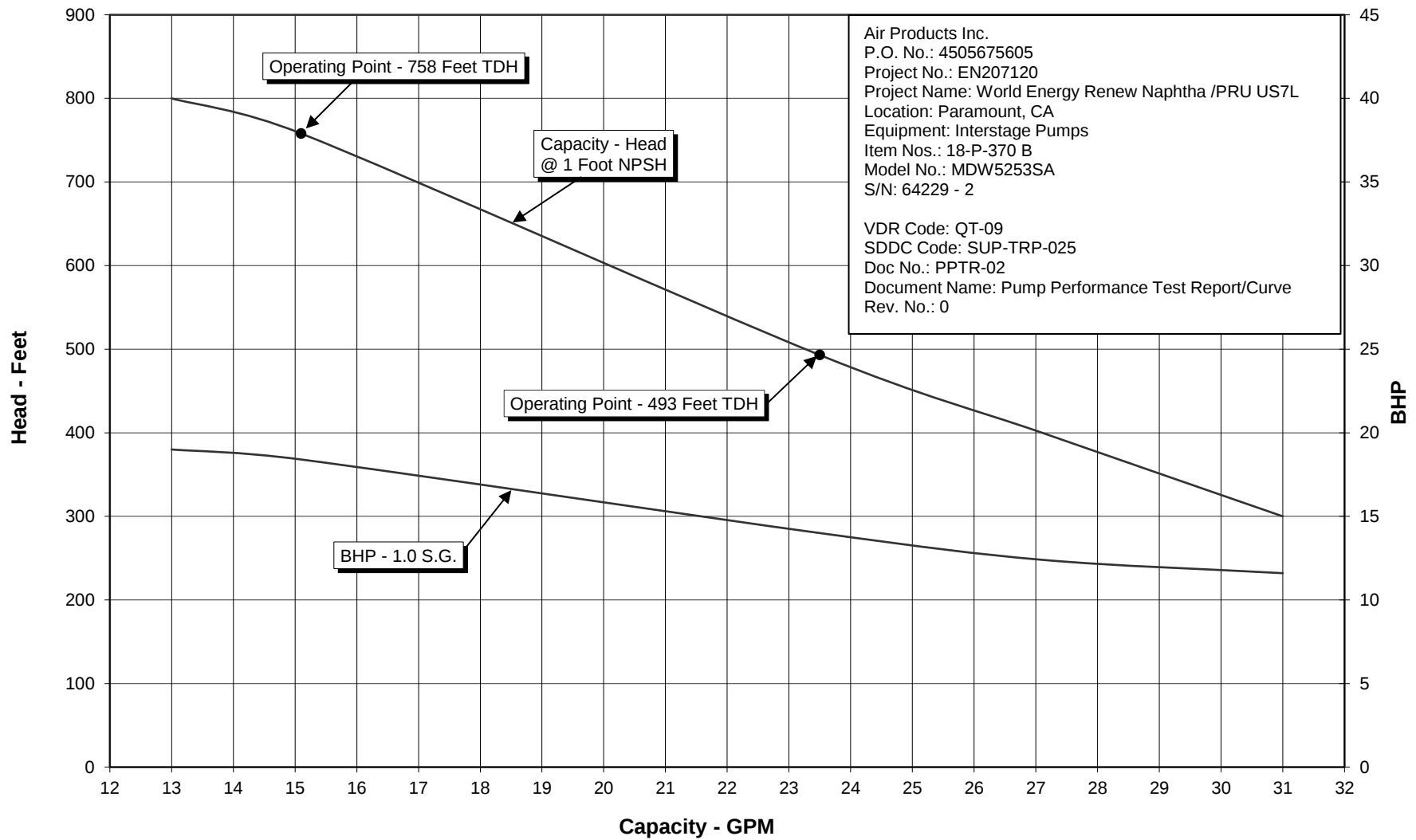


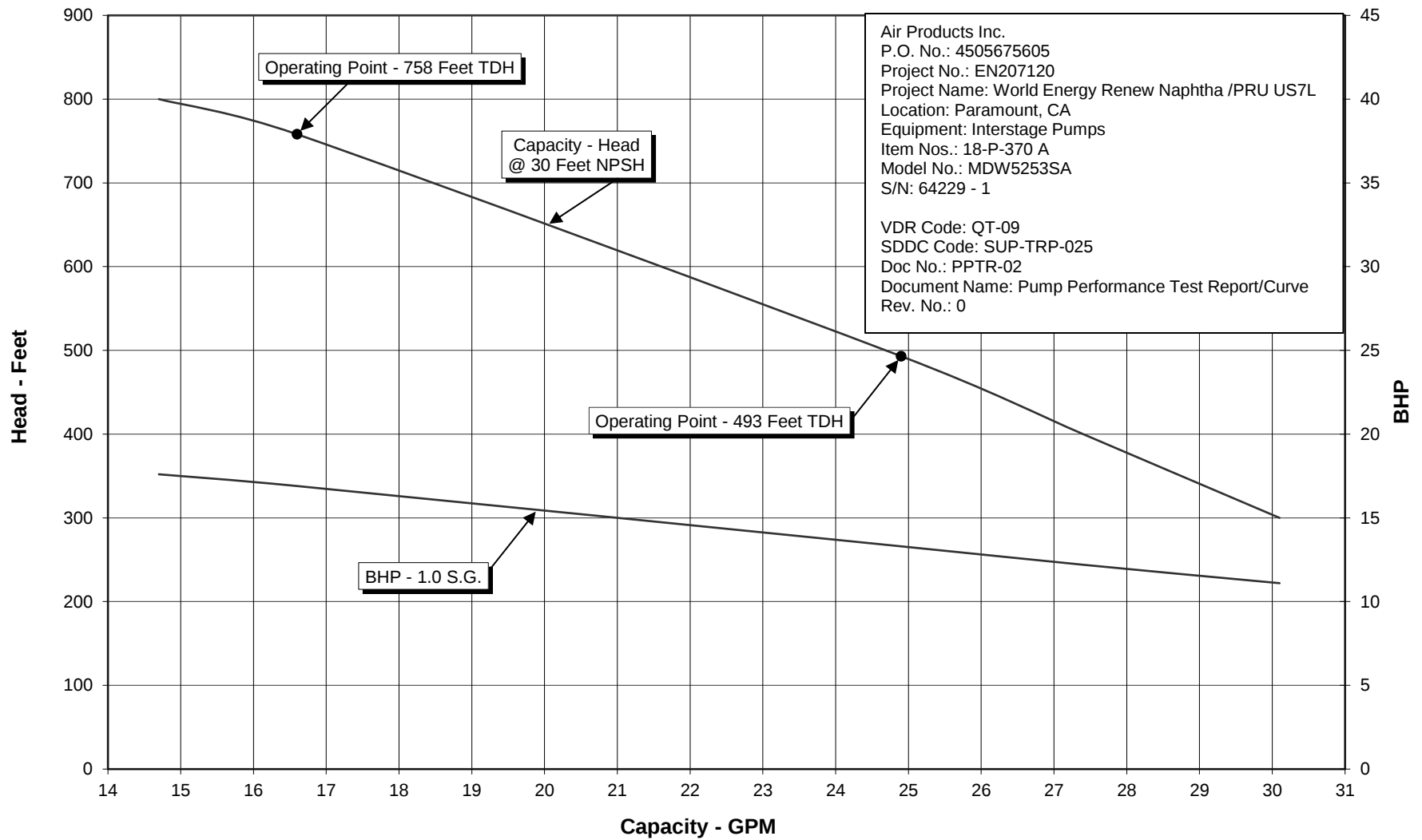
**Roth Pump Company
Model MD5253 @ 3500 RPM
Witnessed 1 Foot NPSH Performance Test**



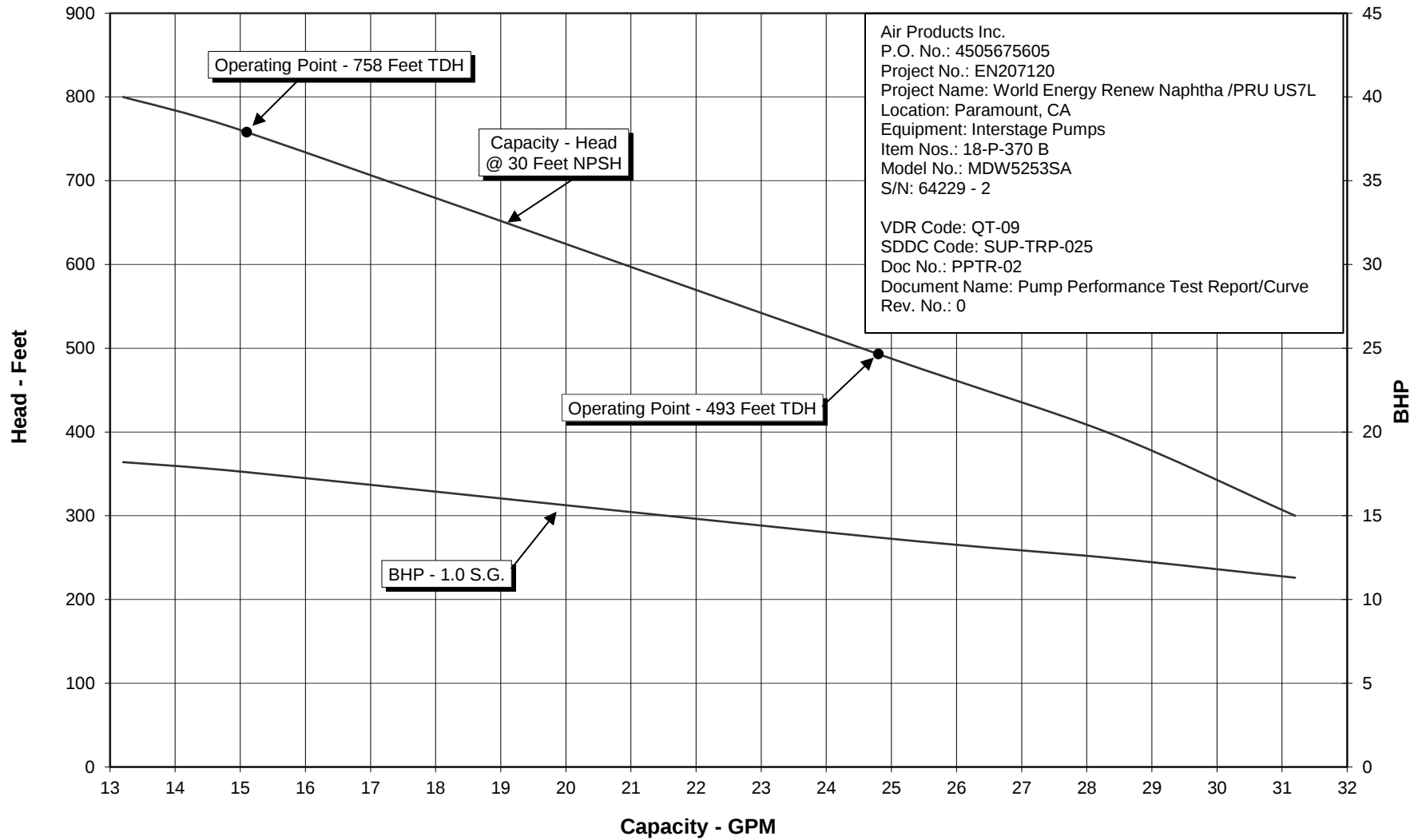
**Roth Pump Company
Model MD5253 @ 3500 RPM
Witnessed 1 Foot NPSH Performance Test**



**Roth Pump Company
Model MD5253 @ 3500 RPM
Witnessed Cold Water Performance Test**



**Roth Pump Company
Model MD5253 @ 3500 RPM
Witnessed Cold Water Performance Test**



Vibration Analysis

Date:

2/22/2024

Operating Point (PSI)	Position	Unfiltered (V) RMS Limit (in/sec.)	Filtered (V) Limit (in/sec.)	Unfiltered (D) Limit (mil p-p)	Outboard Bearing RMS (in/sec.)	Outboard Bearing Peak (in/sec.)	Outboard Bearing Displacement (mil p-p)	Inboard Bearing RMS (in/sec.)	Inboard Bearing Peak (in/sec.)	Inboard Bearing Displacement (mil p-p)
130	H	0.12	x	2	0.046	0.130	0.294	0.034	0.093	0.268
	V	0.12	x	2	0.057	0.117	0.429	0.025	0.076	0.268
	A	0.12	x	2	0.034	0.102	0.268	x	x	x
	H	x	0.08	x	x	0.040	x	x	0.030	x
	V	x	0.08	x	x	0.050	x	x	0.030	x
	A	x	0.08	x	x	0.030	x	x	x	x
173	H	0.12	x	2	0.042	0.153	0.268	0.034	0.093	0.268
	V	0.12	x	2	0.051	0.110	0.268	0.034	0.076	0.268
	A	0.12	x	2	0.034	0.102	0.268	x	x	x
	H	x	0.08	x	x	0.030	x	x	0.030	x
	V	x	0.08	x	x	0.050	x	x	0.030	x
	A	x	0.08	x	x	0.030	x	x	x	x
213	H	0.12	x	2	0.051	0.161	0.268	0.034	0.110	0.268
	V	0.12	x	2	0.051	0.119	0.268	0.034	0.085	0.268
	A	0.12	x	2	0.042	0.110	0.268	x	x	x
	H	x	0.08	x	x	0.030	x	x	0.030	x
	V	x	0.08	x	x	0.060	x	x	0.030	x
	A	x	0.08	x	x	0.070	x	x	x	x
328	H	0.12	x	2	0.068	0.212	0.268	0.051	0.144	0.268
	V	0.12	x	2	0.068	0.144	0.536	0.042	0.119	0.268
	A	0.12	x	2	0.042	0.127	0.268	x	x	x
	H	x	0.08	x	x	0.050	x	x	0.050	x
	V	x	0.08	x	x	0.080	x	x	0.030	x
	A	x	0.08	x	x	0.050	x	x	x	x
346	H	0.12	x	2	0.059	0.204	0.268	0.051	0.119	0.268
	V	0.12	x	2	0.059	0.136	0.536	0.042	0.110	0.268
	A	0.12	x	2	0.042	0.136	0.268	x	x	x
	H	x	0.08	x	x	0.090	x	x	0.050	x
	V	x	0.08	x	x	0.060	x	x	0.030	x
	A	x	0.08	x	x	0.050	x	x	x	x

Air Products Inc.

P.O. No.: 4505675605

Project No.: EN207120

Project Name: World Energy Renew Naphtha /PRU US7L

Location: Paramount, CA

Equipment: Interstage Pumps

Item Nos.: 18-P-370 a

Model No.: MDW5253SA

S/N: 64229 - 1

VDR Code: QT-09

SDDC Code: SUP-TRP-025

Doc No.: PPTR-02

Document Name: Pump Performance Test Report/Curve

Rev. No.: 0

Vibration Analysis

Date:

2/22/2024

Operating Point (PSI)	Position	Unfiltered (V) RMS Limit (in/sec.)	Filtered (V) Limit (in/sec.)	Unfiltered (D) Limit (mil p-p)	Outboard Bearing RMS (in/sec.)	Outboard Bearing Peak (in/sec.)	Outboard Bearing Displacement (mil p-p)	Inboard Bearing RMS (in/sec.)	Inboard Bearing Peak (in/sec.)	Inboard Bearing Displacement (mil p-p)
130	H	0.12	x	2	0.068	0.187	0.804	0.059	0.161	0.536
	V	0.12	x	2	0.068	0.195	0.268	0.051	0.170	0.268
	A	0.12	x	2	0.034	0.093	0.268	x	x	x
	H	x	0.08	x	x	0.07	x	x	0.060	x
	V	x	0.08	x	x	0.05	x	x	0.050	x
	A	x	0.08	x	x	0.01	x	x	x	x
173	H	0.12	x	2	0.078	0.187	0.536	0.068	0.153	0.536
	V	0.12	x	2	0.068	0.178	0.268	0.059	0.161	0.268
	A	0.12	x	2	0.034	0.102	0.268	x	x	x
	H	x	0.08	x	x	0.07	x	x	0.060	x
	V	x	0.08	x	x	0.05	x	x	0.050	x
	A	x	0.08	x	x	0.01	x	x	x	x
213	H	0.12	x	2	0.085	0.204	0.536	0.076	0.161	0.536
	V	0.12	x	2	0.068	0.187	0.268	0.059	0.153	0.268
	A	0.12	x	2	0.034	0.102	0.268	x	x	x
	H	x	0.08	x	x	0.08	x	x	0.060	x
	V	x	0.08	x	x	0.03	x	x	0.050	x
	A	x	0.08	x	x	0.05	x	x	x	x
328	H	0.12	x	2	0.102	0.238	0.536	0.085	0.195	0.536
	V	0.12	x	2	0.076	0.195	0.268	0.068	0.170	0.268
	A	0.12	x	2	0.042	0.136	0.268	x	x	x
	H	x	0.08	x	x	0.08	x	x	0.080	x
	V	x	0.08	x	x	0.06	x	x	0.050	x
	A	x	0.08	x	x	0.03	x	x	x	x
346	H	0.12	x	2	0.102	0.229	0.804	0.085	0.204	0.536
	V	0.12	x	2	0.085	0.221	0.536	0.068	0.178	0.936
	A	0.12	x	2	0.042	0.136	0.268	x	x	x
	H	x	0.08	x	x	0.08	x	x	0.080	x
	V	x	0.08	x	x	0.06	x	x	0.050	x
	A	x	0.08	x	x	0.03	x	x	x	x

Air Products Inc.

P.O. No.: 4505675605

Project No.: EN207120

Project Name: World Energy Renew Naphtha /PRU US7L

Location: Paramount, CA

Equipment: Interstage Pumps

Item Nos.: 18-P-370 B

Model No.: MDW5253SA

S/N: 64229 - 2

VDR Code: QT-09

SDDC Code: SUP-TRP-025

Doc No.: PPTR-02

Document Name: Pump Performance Test Report/Curve

Rev. No.: 0

Air Products Inc.
P.O. No.: 4505675605
Project No.: EN207120
Project Name: World Energy Renew Naphtha /PRU US7L
Location: Paramount, CA

Equipment: Interstage Pumps
Item Nos.: 18-P-370 A/B
Model No.: MDW5253SA
S/N: 64229 - 1 & 2

VDR Code: QT09
SDDC Code: SUP-TRP-025
Doc No.: PPTR-02
Rev. No.: 0

CERTIFICATE OF NOISE TEST

S/N: 64229 – 1

Test Point – 300 Feet = 80.8 dba
Test Point – 400 Feet = 81.0 dba
Test Point – 493 Feet = 81.0 dba (Operating Point)
Test Point – 758 Feet = 80.7 dba (Operating Point)
Test Point – 800 Feet = 80.8 dba

S/N: 64229 – 2

Test Point – 300 Feet = 80.5 dba
Test Point – 400 Feet = 80.9 dba
Test Point – 493 Feet = 81.0 dba (Operating Point)
Test Point – 758 Feet = 81.0 dba (Operating Point)
Test Point – 800 Feet = 80.7 dba

Readings taken at 3 Feet from equipment.