

OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



TR-1-VP (S/N UO52002657)

Component **Pump** Fluid

USPI VAC 100 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

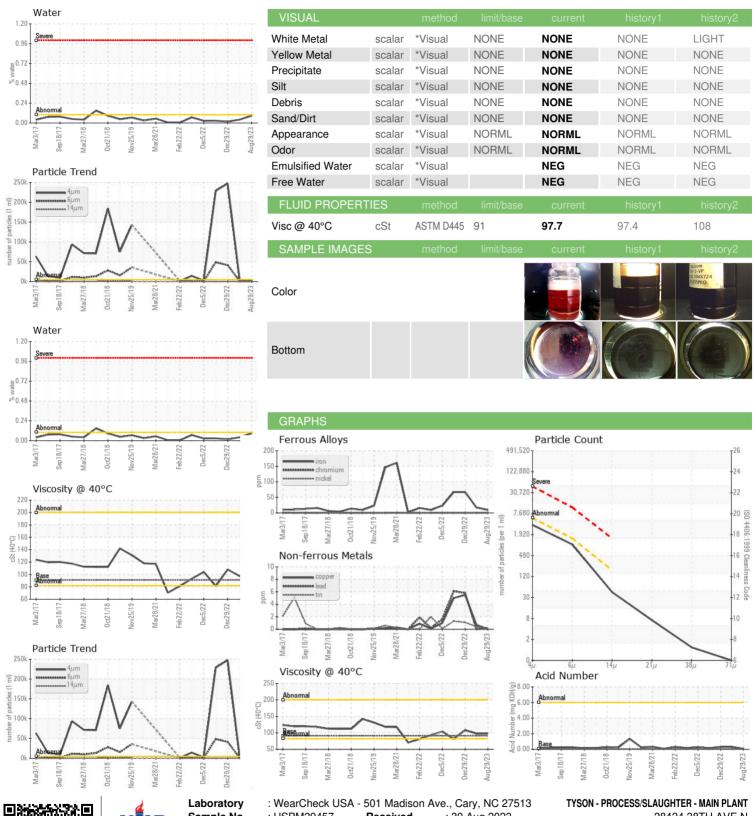
Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

		1ar2017 Sep201	7 Mar2018 Oct2018 Nov2	019 Mar2021 Feb2022 Dec2022 De	c2022 Aug202	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USPM29457	USPM28113	USPM25298
Sample Date		Client Info		29 Aug 2023	21 May 2023	29 Dec 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	9	17	▲ 67
Chromium	ppm	ASTM D5185m	>5	0	<1	0
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m	>3	0	<1	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>7	1	1	3
Lead	ppm	ASTM D5185m	>12	<1	0	6
Copper	ppm	ASTM D5185m	>30	0	<1	6
Tin	ppm	ASTM D5185m	>9	<1	<1	1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	<1	<u> </u>
Barium	ppm	ASTM D5185m	0	2	0	0
Molybdenum	ppm	ASTM D5185m	0	0	<1	<1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	0	<1	6	7
Calcium	ppm	ASTM D5185m	0	21	181	<u>▲</u> 1772
Phosphorus	ppm	ASTM D5185m	1800	638	737	▲ 869
Zinc	ppm	ASTM D5185m	0	10	61	<u>▲</u> 627
Sulfur	ppm	ASTM D5185m	0	5	174	▲ 1815
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	4	7	13
Sodium	ppm	ASTM D5185m		5	18	45
Potassium	ppm	ASTM D5185m	>20	1	2	0
Water	%	ASTM D6304		0.088	0.041	0.016
ppm Water	ppm	ASTM D6304	>.1	885.4	412.8	161.3
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	3173	3918	<u>4</u> 247468
Particles >6µm		ASTM D7647	>1300	873	827	△ 41332
Particles >14μm		ASTM D7647	>160	38	54	△ 266
Particles >21µm		ASTM D7647	>40	6	13	30
Particles >38μm		ASTM D7647	>10	1	0	2
Particles >71μm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/17/12	19/17/13	<u>\$\text{\Delta}\$ 25/23/15</u>
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	0.076	0.31	0.319



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Certificate L2367

Sample No. Lab Number **Unique Number** Test Package

: USPM29457

: 05938997 : 10629609 : IND 2

: 30 Aug 2023 Received Diagnosed Diagnostician

: 01 Sep 2023 : Doug Bogart 28424 38TH AVE N JOSLIN, IL US 61257

Contact: RICK DUVALL

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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