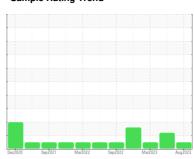


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



C3 TUMBLER

Component **Pump** Fluid

USPI VAC 100 (--- LTR)

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.

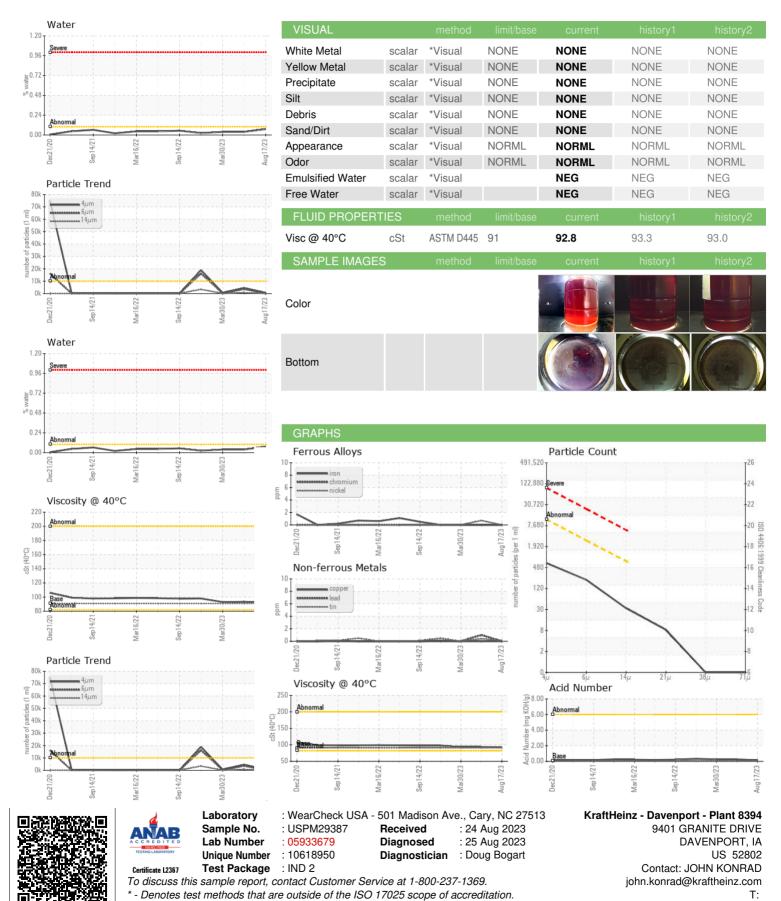
Fluid Condition

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

		Dec2020	Sep2021 Mar2022	Sep2022 Mar2023	Aug2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USPM29387	USPM28415	USPM28526
Sample Date		Client Info		17 Aug 2023	23 May 2023	30 Mar 2023
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	ATTENTION	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	0	0	0
Chromium	ppm	ASTM D5185m	>5	0	0	0
Nickel	ppm	ASTM D5185m	>5	0	<1	0
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>7	0	0	<1
Lead	ppm	ASTM D5185m	>12	0	1	0
Copper	ppm	ASTM D5185m	>30	0	0	0
Tin	ppm	ASTM D5185m	>9	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	0	0	0	2
Calcium	ppm	ASTM D5185m	0	2	0	0
Phosphorus	ppm	ASTM D5185m	1800	1049	1062	993
Zinc	ppm	ASTM D5185m	0	0	0	0
Sulfur	ppm	ASTM D5185m	0	47	0	0
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	6	7	7
Sodium	ppm	ASTM D5185m		0	0	0
Potassium	ppm	ASTM D5185m	>20	0	2	0
Water	%	ASTM D6304		0.071	0.038	0.038
ppm Water	ppm	ASTM D6304	>.1	712.6	381.9	381.0
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	565	4532	684
Particles >6µm		ASTM D7647	>2500	188	▲ 3620	371
Particles >14μm		ASTM D7647	>640	29	1 740	27
Particles >21µm		ASTM D7647	>160	7	58	2
Particles >38µm		ASTM D7647	>40	0	3	0
Particles >71µm		ASTM D7647	>10	0	2	0
Oil Cleanliness		ISO 4406 (c)	>20/18/16	16/15/12	▲ 19/19/17	17/16/12
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	0.14	0.26	0.24



OIL ANALYSIS REPORT



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

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