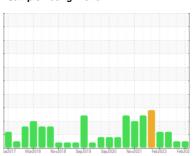


OIL ANALYSIS REPORT

Sample Rating Trend







VP-12 (S/N C-4238) Component

Pump Fluid

USPI VAC 100 (--- GAL)

Recommendation

Resample at the next service interval to monitor.

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.

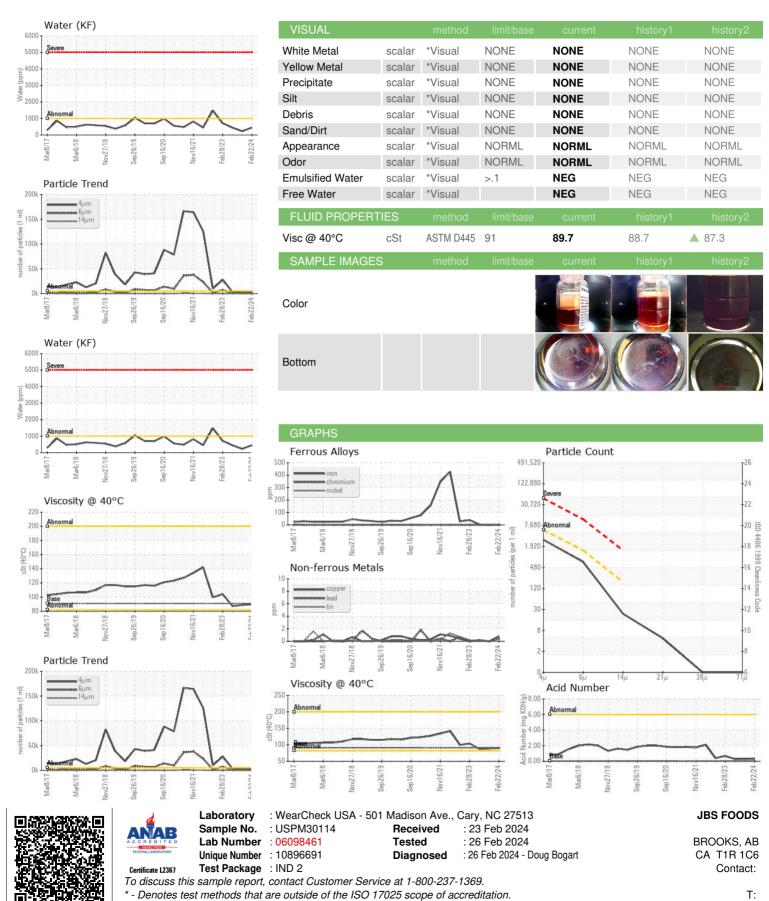
Fluid Condition

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

		lar2017 Mar	2018 Nov2018 Sep201	9 Sep2020 Nov2021 Feb20	123 Feb202	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USPM30114	USPM31227	USPM27078
Sample Date		Client Info		22 Feb 2024	07 Nov 2023	17 Jul 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	NORMAL	ATTENTION
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	1	0	3
Chromium	ppm	ASTM D5185m	>5	<1	0	0
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>7	<1	0	2
Lead	ppm	ASTM D5185m	>12	<1	0	<1
Copper	ppm	ASTM D5185m	>30	<1	0	<1
Tin	ppm	ASTM D5185m	>9	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		<1	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	<1	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	0	0	0	<1
Calcium	ppm	ASTM D5185m	0	0	0	<1
Phosphorus	ppm	ASTM D5185m	1800	887	858	▲ 857
Zinc	ppm	ASTM D5185m	0	2	0	7
Sulfur	ppm	ASTM D5185m	0	41	74	▲ 222
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	4	2	3
Sodium	ppm	ASTM D5185m		0	0	0
Potassium	ppm	ASTM D5185m	>20	<1	0	<1
Water	%	ASTM D6304	>.1	0.045	0.022	0.044
ppm Water	ppm	ASTM D6304	>1000	451	225.8	440.1
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	2625	3382	3425
Particles >6µm		ASTM D7647	>1300	604	845	963
Particles >14µm		ASTM D7647	>160	20	33	53
Particles >21µm		ASTM D7647	>40	4	7	10
Particles >38µm		ASTM D7647	>10	0	1	2
Particles >71µm		ASTM D7647	>3	0	0	1
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/16/11	19/17/12	19/17/13
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	0.32	0.32	0.28



OIL ANALYSIS REPORT



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

F: