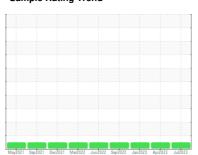


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



B138 BUTT CV BOTTOM (S/N 5598973)

Component **Pump** Fluid

USPI MAX FG 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.

Mayd2021 Sap2021 Onc2021 Mard2022 Juni2022 Sap2022 Jani2023 Apri2023 Juni2023						
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USPM5905488	USPM28611	USP05732314
Sample Date		Client Info		23 Jul 2023	09 Apr 2023	05 Jan 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	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	<1	0	0
Aluminum	ppm	ASTM D5185m	>7	0	0	0
Lead	ppm	ASTM D5185m	>12	<1	0	0
Copper	ppm	ASTM D5185m	>30	0	0	0
Tin	ppm	ASTM D5185m	>9	0	0	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
Barium	ppm	ASTM D5185m		<1	1	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		0	0	1
Calcium	ppm	ASTM D5185m		0	0	0
Phosphorus	ppm	ASTM D5185m		6	20	46
Zinc	ppm	ASTM D5185m		0	0	0
Sulfur	ppm	ASTM D5185m		3	11	0
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	6	7	6
Sodium	ppm	ASTM D5185m		0	0	0
Potassium	ppm	ASTM D5185m	>20	<1	<1	0
Water	%	ASTM D6304		0.021	0.010	0.00
ppm Water	ppm	ASTM D6304	>.1	219.6	108.3	0.00
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	2852	1315	1710
Particles >6µm		ASTM D7647	>1300	562	262	360
Particles >14µm		ASTM D7647	>160	20	19	16
Particles >21µm		ASTM D7647	>40	3	6	3
Particles >38μm		ASTM D7647	>10	0	1	1
Particles >71μm		ASTM D7647	>3	0	0	1
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/16/11	18/15/11	18/16/11
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.081	0.13	0.063



OIL ANALYSIS REPORT



* - 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)

T: (712)263-7414

F: (712)263-7314