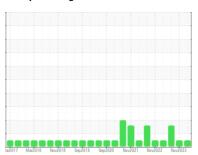


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



VP-1 (S/N C-4199)

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 a trace of moisture present in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

An increase in the AN level is noted. Confirmed. The condition of the oil is suitable for further service.

lu/2017 Mus/2018 Nov/2018 Sep;2013 Sep;2020 Nov/2021 Nov/2022 Nov/2023						
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USPM30123	USPM31246	USPM27074
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	MARGINAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	15	8	11
Chromium	ppm	ASTM D5185m	>5	<1	0	0
Nickel	ppm	ASTM D5185m	>5	1	0	<1
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>7	<1	2	5
Lead	ppm	ASTM D5185m	>12	<1	0	<1
Copper	ppm	ASTM D5185m	>30	2	0	<1
Tin	ppm	ASTM D5185m	>9	<1	0	<1
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	<1
Barium	ppm	ASTM D5185m	0	0	0	<1
Molybdenum	ppm	ASTM D5185m	0	<1	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	0	2	0	1
Calcium	ppm	ASTM D5185m	0	20	17	15
Phosphorus	ppm	ASTM D5185m	1800	1480	1640	1678
Zinc	ppm	ASTM D5185m	0	41	32	24
Sulfur	ppm	ASTM D5185m	0	0	0	6
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	10	7	8
Sodium	ppm	ASTM D5185m		0	1	<1
Potassium	ppm	ASTM D5185m	>20	2	0	1
Water	%	ASTM D6304	>.1	0.100	0.074	△ 0.135
ppm Water	ppm	ASTM D6304	>1000	1006	745.4	▲ 1357.2
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	2704	927	850
Particles >6µm		ASTM D7647	>1300	738	280	300
Particles >14µm		ASTM D7647	>160	73	24	42
Particles >21µm		ASTM D7647	>40	23	6	10
Particles >38µm		ASTM D7647	>10	1	0	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/17/13	17/15/12	17/15/13
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
A sist Niversia sur (ANI)	I/OLI/-	ACTM DODAE	0.05	E E0	4.40	0.500

5.50

mg KOH/g ASTM D8045 0.05

Acid Number (AN)

4.13

2.592



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: F: