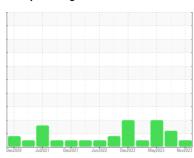


OIL ANALYSIS REPORT

Sample Rating Trend







A5 TUMBLER

Component

Pump Fluid

USPI VAC 100 (--- LTR)

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

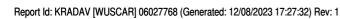
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

		Dec2020	Jul2021 Dec2021	Jun 2022 Dec 2022 May 2023	Nov2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USPM31932	USPM29383	USPM28403
Sample Date		Client Info		28 Nov 2023	18 Aug 2023	24 May 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	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	0	0	0
Chromium	ppm	ASTM D5185m	>5	<1	0	<1
Nickel	ppm	ASTM D5185m	>5	0	0	<1
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>7	0	0	0
Lead	ppm	ASTM D5185m	>12	0	0	1
Copper	ppm	ASTM D5185m	>30	0	0	0
Tin	ppm	ASTM D5185m	>9	0	<1	<1
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	0	<1
Magnesium	ppm	ASTM D5185m	0	0	0	0
Calcium	ppm	ASTM D5185m	0	0	2	0
Phosphorus	ppm	ASTM D5185m	1800	969	1019	1121
Zinc	ppm	ASTM D5185m	0	0	0	0
Sulfur	ppm	ASTM D5185m	0	0	19	0
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	7	6	6
Sodium	ppm	ASTM D5185m		0	0	0
Potassium	ppm	ASTM D5185m	>20	1	0	2
Water	%	ASTM D6304	>.1	0.041	0.051	0.051
ppm Water	ppm	ASTM D6304	>1000	412	518.4	511.7
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	814	4560	▲ 80258
Particles >6µm		ASTM D7647	>2500	633	△ 3777	<u></u> 63952
Particles >14μm		ASTM D7647	>640	187	△ 689	<u>▲</u> 10147
Particles >21µm		ASTM D7647	>160	26	57	△ 987
Particles >38µm		ASTM D7647	>40	0	2	1
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/16	17/16/15	1 9/19/17	<u>4</u> 24/23/21
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	0.17	0.19	0.16



OIL ANALYSIS REPORT





Certificate L2367

Test Package

: IND 2

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)

Contact/Location: JOHN KONRAD - KRADAV

F: (563)326-8391

T:

Contact: JOHN KONRAD

john.konrad@kraftheinz.com