

OIL ANALYSIS REPORT

Sample Rating Trend



HAPL Machine Id HAPL PINCH ROLL 3 Component

Bottom Gearbox Fluid GEAR OIL ISO 220 (--- 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.

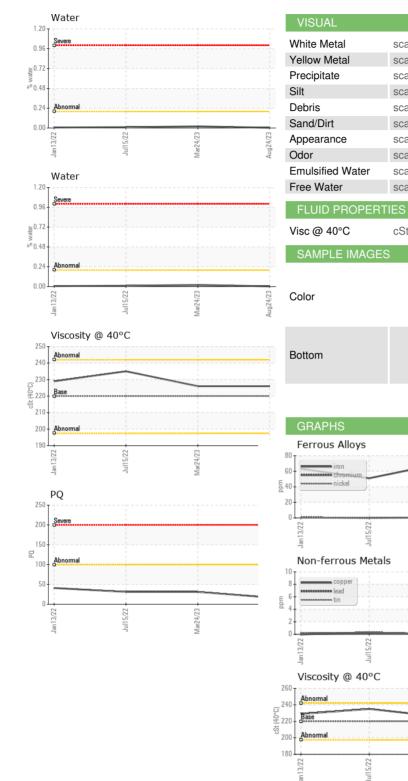
Fluid Condition

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

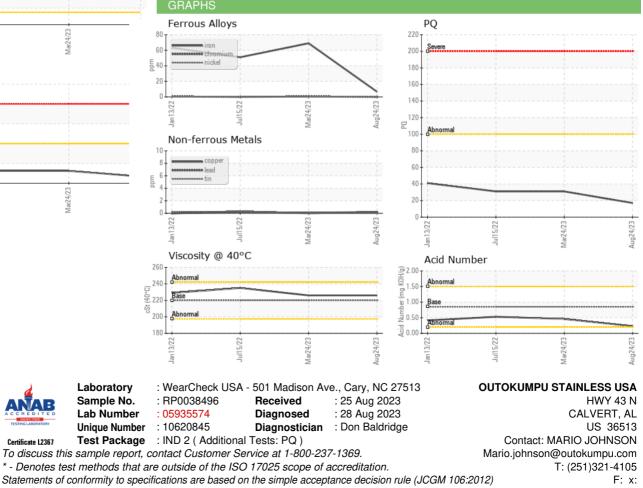
		Jan202	2 Jul2022	Marzuza A	Mar2023 Aug2023		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		RP0038496	RP0031200	RP0028818	
Sample Date		Client Info		24 Aug 2023	24 Mar 2023	15 Jul 2022	
Machine Age	hrs	Client Info		0	0	0	
Oil Age	hrs	Client Info		0	0	0	
Oil Changed		Client Info		N/A	N/A	N/A	
Sample Status				NORMAL	NORMAL	NORMAL	
WEAR METALS		method	limit/base	current	history1	history2	
PQ		ASTM D8184		17	31	31	
Iron	ppm	ASTM D5185m	>200	7	69	51	
Chromium	ppm	ASTM D5185m	>15	0	<1	0	
Nickel	ppm	ASTM D5185m	>15	<1	0	0	
Titanium	ppm	ASTM D5185m		0	0	0	
Silver	ppm	ASTM D5185m		<1	0	0	
Aluminum	ppm	ASTM D5185m	>25	0	<1	<1	
Lead	ppm	ASTM D5185m	>100	<1	0	<1	
Copper	ppm	ASTM D5185m	>200	<1	<1	<1	
Tin	ppm	ASTM D5185m	>25	0	0	<1	
Antimony	ppm	ASTM D5185m	>5				
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	50	6	4	4	
Barium	ppm	ASTM D5185m	15	1	0	0	
Molybdenum	ppm	ASTM D5185m	15	<1	0	0	
Manganese	ppm	ASTM D5185m		<1	<1	<1	
Magnesium	ppm	ASTM D5185m	50	1	<1	<1	
Calcium	ppm	ASTM D5185m	50	12	8	4	
Phosphorus	ppm	ASTM D5185m	350	143	253	173	
Zinc	ppm	ASTM D5185m	100	7	21	12	
CONTAMINANTS	;	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>50	10	3	<1	
Sodium	ppm	ASTM D5185m		0	1	0	
Potassium	ppm	ASTM D5185m	>20	1	2	3	
Water	%	ASTM D6304	>0.2	0.003	0.020	0.010	
ppm Water	ppm	ASTM D6304	>2000	27.3	209.9	109.9	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	0.23	0.46	0.53	



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NONE NONE *Visual NONE NONE scalar NONE NONE NONE NONE scalar *Visual scalar *Visua NONE NONE NONE NONE scalar *Visual NONE NONE NONE NONE NONE *Visual NONE NONE NONE scalar NONE NONE scalar *Visual NONE NONE NORML *Visual NORML NORML NORML scalar *Visual NORML NORML NORML NORML scalar scalar *Visual >0.2 NEG NEG NEG scalar *Visual NEG NEG NEG 226 cSt ASTM D445 220 226 235



Certificate L2367