

# WEAR NORMAL CONTAMINATION SEVERE FLUID CONDITION NORMAL

#### Machine Id **002389** Component **Hydraulic System** Fluid **{not provided} (--- GAL)**

#### RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. The oil change at the time of sampling has been noted. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. Please specify the brand, type, and viscosity of the oil on your next sample.

#### WEAR

All component wear rates are normal.

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## CONTAMINATION

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There is a high amount of particulates (2 to 100 microns in size) present in the oil.

### FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0856297	WC0823949	WC0724601
	Sample Date		Client Info		26 Mar 2024	23 Oct 2023	26 Jul 2023
	Machine Age	hrs	Client Info		2920	2570	2261
	Oil Age	hrs	Client Info		1000	309	352
	Filter Age	hrs	Client Info		350	309	352
	Oil Changed		Client Info		Changed	Not Changd	Not Changd
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				SEVERE	ABNORMAL	ABNORMAL
	Iron	ppm	ASTM D5185m	>20	12	8	8
	Chromium	ppm	ASTM D5185m	>10	<1	<1	0
	Nickel	ppm	ASTM D5185m	>10	1	0	<1
	Titanium	ppm	ASTM D5185m		<1	0	<1
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m	>10	2	<1	<1
	Lead	ppm	ASTM D5185m	>10	2	<1	<1
	Copper	ppm	ASTM D5185m	>75	22	22	20
	Tin	ppm	ASTM D5185m	>10	1	0	0
	Vanadium	ppm	ASTM D5185m		<1	0	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
_	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Silicon	nom	ASTM D5185m	>20	5	4	4
	Potassium	ppm	ASTM D5185m	>20	3	4	2
	Water	ppm	WC Method	>0.1	NFG	NEG	NEG
	Particles >4um		ASTM D7647	>5000	49818		
	Particles >6um		ASTM D7647	>1300	<b>15179</b>		
	Particles >14µm		ASTM D7647	>160	<b>A</b> 749		
	Particles >21µm		ASTM D7647	>40	<b>171</b>		
	Particles >38µm		ASTM D7647	>10	2		
	Particles >71µm		ASTM D7647	>3	0		
	Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>23/21/17</b>		
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	A MODER	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
	0				•	_	0
	Sodium	ppm	ASTM D5185m		0	0	2
	Boron	ppm	ASTM D5185m		11	12	13
	Darium	ррп			<1	< 1	0
	Manganaga	ppm	ASTM D5185m		0	6	5
	Magnosium	ppm	ASTM DE105		60	72	< 1
	Calcium	ppm	ASTM D5195m		335	2/2	346
	Phoenhorup	ppm	ASTM DE105		330	221	393
	Zinc	ppill	ΔSTM D5185m		3/5	355	372
	Sulfur	nnm	ASTM D5185m		12/1	1327	1546
	Acid Number (AN)	ma KOH/a	ASTM D8045		0 40	0.50	0 49
		cSt	ASTM D445		41 5	41.2	41 1
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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)

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