

LABORATORY ANALYSIS



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Department **WINDING**
Equipment No. **BTF10 STENCIL PRESS (00166)**
System **Hydraulic System**
Oil Type **ENGINEERED LUBRICANTS ENLUBE 20-AW (--- GAL)**

Diagnosis

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. L and % large particles and severity index levels are severe. WPC levels are abnormal. There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sample Information

Lab Number	New	2405-00164	2312-00777	2308-01105
Date of Sample	(Typical)	28 Apr 2024	14 Dec 2023	14 Aug 2023
Oil Added		UNK	UNK	UNK
Last Drain Date		--	--	--
Months on Sample		141.2	136.8	132.9
Last Filter Service		--	--	--
Sample Point		---	---	---
Sample Status		SEVERE	SEVERE	SEVERE

VISCOSITY @ 100F or 40C (ASTM D-445)

SSU Vis. @ 100F	SSU	232.7	231.6	232.2
cSt Vis. @ 40C	cSt	46	44.86	44.98

COLOR (BASED ON ASTM D1500 STANDARDS)

Color	Scale 0-8	1.0	1.0	1.0
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PARTICLE COUNT (PER 1ML)

ISO CODE	ISO 4406(c)	>19/18/14	22/19/15	22/20/18	24/23/19
4 Micron & Larger	particles/ml	>5000	▲ 21,009	▲ 31,332	▲ 128,915
6 Micron & Larger	particles/ml	>2500	● 4,026	▲ 9,239	▲ 40,978
14 Micron & Larger	particles/ml	>160	● 306	▲ 1,309	▲ 4,494
21 Micron & Larger	particles/ml	>40	▲ 104	▲ 396	▲ 1,329
38 Micron & Larger	particles/ml	>10	▲ 12	▲ 17	▲ 61
70 Micron & Larger	particles/ml	>3	■ 0	■ 0	2

ICP - OILS (REPORTED IN PARTS PER MILLION)

Aluminum (Al)	ppm	<5	<5	<5	
Antimony (Sb)	ppm	<5	<5	<5	
Cadmium (Cd)	ppm	<5	<5	<5	
Chromium (Cr)	ppm	<5	<5	<5	
Cobalt (Co)	ppm	<5	<5	<5	
Copper (Cu)	ppm	■ 31	■ 30	■ 30	
Iron (Fe)	ppm	■ <5	■ <5	■ <5	
Lead (Pb)	ppm	20	20	14	
Manganese (Mn)	ppm	<5	<5	<5	
Molybdenum(Mo)	ppm	<5	<5	<5	
Nickel (Ni)	ppm	<5	<5	<5	
Silver (Ag)	ppm	<5	<5	<5	
Tin (Sn)	ppm	<5	<5	<5	
Titanium (Ti)	ppm	<5	<5	<5	
Vanadium (V)	ppm	<5	<5	<5	
Barium (Ba)	ppm	<5	<5	<5	
Boron (B)	ppm	<5	<5	<5	
Calcium (Ca)	ppm	66	73	71	
Magnesium (Mg)	ppm	<5	<5	<5	
Phosphorus(P)	ppm	506	544	525	
Silicon (Si)	ppm	<5	<5	<5	
Zinc (Zn)	ppm	715	■ 578	■ 612	■ 616
Sulfur (S)	ppm	1,460	1,510	1,460	

Customer Id: MOTMCA
Sample No.: EN24050164
Lab Number: 24050164
Test Package: TEST

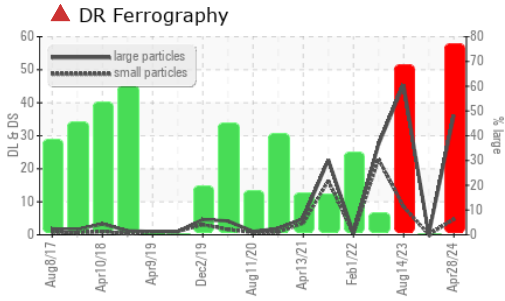


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OIL ANALYSIS REPORT



DR FERROGRAPHY READINGS

L		▲ 36.2	■ 0.1	▲ 45.4
S		■ 4.7	■ 0.1	■ 8.5
WPC	DL + DS	▲ 40.9	■ 0.2	▲ 53.9

Contamination

Water	>0.05	NEG	NEG	NEG
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