

LABORATORY ANALYSIS



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Department **REYLAM - DIECAST**
Equipment No. **GRIND02 FINISH ROTOR GRINDER (00031)**
System **Hydraulic System**
Oil Type **ENGINEERED LUBRICANTS ENSPIN 10-PF (--- GAL)**

Diagnosis

This oil is too contaminated. We recommend the system be drained, flushed and refilled with new ENSPIN 10-PF. Please change the filter too. When refilling, please provide us the reservoir volume and the micron rating of the filter used. L and % large particles and severity index levels are severe. WPC levels are abnormal. There is a moderate amount of silt (particulates < 14 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	2406-00459	2401-00427	2310-00515
Date of Sample	(Typical)	12 Jun 2024	10 Jan 2024	27 Sep 2023
Oil Added		UNK	UNK	UNK
Last Drain Date		--	--	--
Months on Sample		50.3	45.4	42.0
Last Filter Service		--	--	--
Sample Point		---	---	---
Sample Status		SEVERE	ABNORMAL	SEVERE

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

SSU Vis. @ 100F	SSU	121.2	116.7	119.9
cSt Vis. @ 40C	cSt	22	22.31	22.96

COLOR (BASED ON ASTM D1500 STANDARDS)

Color	Scale 0-8	0.5	1.0	1.0	4.0

PARTICLE COUNT (PER 1ML)

ISO CODE	ISO 4406(c)	>20/19/15	23/20/15	22/20/17	26/26/23
4 Micron & Larger	particles/ml	>10000	▲ 40,065	▲ 30,368	▲ 525,229
6 Micron & Larger	particles/ml	>5000	● 8,920	● 8,198	▲ 368,021
14 Micron & Larger	particles/ml	>320	■ 234	▲ 829	▲ 65,305
21 Micron & Larger	particles/ml	>80	■ 22	▲ 247	▲ 14,361
38 Micron & Larger	particles/ml	>20	■ 0	■ 14	▲ 128
70 Micron & Larger	particles/ml	>4	■ 0	■ 0	■ 1

ICP - OILS (REPORTED IN PARTS PER MILLION)

Aluminum (Al)	ppm	<5	<5	▲ 19
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	■ <5	■ <5	■ <5
Iron (Fe)	ppm	<5	<5	31
Lead (Pb)	ppm	<5	<5	6
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	<5	<5	<5
Magnesium (Mg)	ppm	<5	<5	<5
Phosphorus(P)	ppm	21	21	20
Silicon (Si)	ppm	<5	<5	<5
Zinc (Zn)	ppm	<5	<5	9
Sulfur (S)	ppm	1,110	1,200	1,430

Customer Id: MOTMCA
Sample No.: EN24060459
Lab Number: 24060459
Test Package: TEST

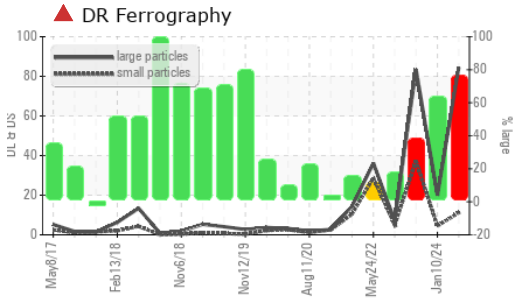


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OIL ANALYSIS REPORT



DR FERROGRAPHY READINGS

L		▲ 84.4	■ 20.0	▲ 83.5
S		■ 11.2	■ 4.5	▲ 37.3
WPC	DL + DS	▲ 95.6	■ 24.5	▲ 120.8

Contamination

Water	>0.05	NEG	NEG	NEG
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