

LABORATORY ANALYSIS



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Department **REYLAM-PRESS**
 Equipment No. **MAN03 DEREELEER (LAM LINE 3) (00034)**
 System **Hydraulic System**
 Oil Type **ENGINEERED LUBRICANTS ENLUBE 30-AW (--- GAL)**

COPELAND (MHDS)
 6001 S. 35TH STREET, SUITE D"
 REYNOSA, ZZ
 US
 Contact: GERARDO GUERRERO
 francisco.castillo@Copeland.com
 T:
 F:

Diagnosis

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. 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 viscosity is lower than typical, possibly indicating the addition of lighter grade oil. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sample Information

Lab Number	New	2404-00831	2401-00670	2310-00747
Date of Sample	(Typical)	05 Apr 2024	19 Jan 2024	10 Oct 2023
Oil Added		UNK	UNK	UNK
Last Drain Date		--	--	--
Months on Sample		216.4	213.9	210.7
Last Filter Service		--	--	--
Sample Point		---	---	---
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

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

SSU Vis. @ 100F	SSU	814.3	313.8	350.8
cSt Vis. @ 40C	cSt	68.0	▲ 60.68	▲ 60.59
				■ 67.62

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	21/18/13	21/18/15	21/18/14
4 Micron & Larger	particles/ml	>5000	▲ 11,656	▲ 14,700	▲ 16,602
6 Micron & Larger	particles/ml	>2500	■ 1,586	■ 2,268	■ 2,066
14 Micron & Larger	particles/ml	>160	■ 66	▲ 171	■ 105
21 Micron & Larger	particles/ml	>40	■ 16	48	■ 23
38 Micron & Larger	particles/ml	>10	■ 0	■ 4	■ 2
70 Micron & Larger	particles/ml	>3	■ 0	■ 0	■ 1

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	■ <5	■ <5	■ <5
Iron (Fe)	ppm	■ <5	■ <5	■ <5
Lead (Pb)	ppm	<5	<5	<5
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	96	84	63
Magnesium (Mg)	ppm	<5	<5	<5
Phosphorus(P)	ppm	556	482	503
Silicon (Si)	ppm	<5	<5	<5
Zinc (Zn)	ppm	668	■ 646	■ 579
Sulfur (S)	ppm		1,590	1,260
				1,560

Customer Id: MOTMCA
 Sample No.: EN24040831
 Lab Number: 24040831
 Test Package: TEST

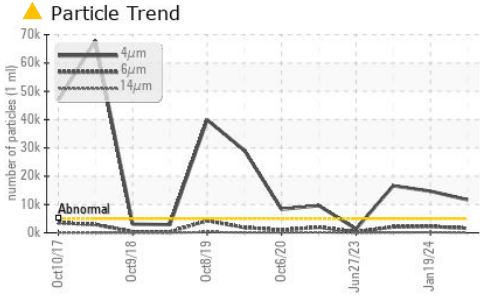


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OIL ANALYSIS REPORT



DR FERROGRAPHY READINGS

L		■ 16.6	■ 0.1	■ 10.9
S		■ 6.0	■ 0.1	■ 3.6
WPC	DL + DS	■ 22.6	■ 0.2	■ 14.5

Contamination

Water	>0.05	NEG	NEG	NEG
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