

LABORATORY ANALYSIS



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Department **WINDING**
 Equipment No. **CLAM05 CLAMP MACHINE 5 (00005)**
 System **Hydraulic System**
 Oil Type **ENGINEERED LUBRICANTS ENLUBE 20-AW (--- GAL)**

COPELAND (MHDS)
 6001 S. 35TH STREET, SUITE D"
 REYNOSA, ZZ
 US
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 T:
 F:

Diagnosis

All component wear rates are normal. There is a light amount of silt (particulates < 14 microns in size) present in the oil. The condition of the oil is acceptable for the time in service.

Sample Information

Lab Number	New	2405-00141	2312-00756	2307-00021
Date of Sample	(Typical)	28 Apr 2024	14 Dec 2023	27 Jun 2023
Oil Added		UNK	UNK	UNK
Last Drain Date		--	--	--
Last Filter Service		--	--	--
Sample Point		---	---	---
Sample Status		NORMAL	SEVERE	ABNORMAL

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

SSU Vis. @ 100F	SSU	237.3	238.3	237.4
cSt Vis. @ 40C	cSt	46	46.15	45.98

COLOR (BASED ON ASTM D1500 STANDARDS)

Color	Scale 0-8	0.5	0.5	0.5

PARTICLE COUNT (PER 1ML)

ISO CODE	ISO 4406(c)	>19/18/14	20/18/14	23/21/17	22/20/16
4 Micron & Larger	particles/ml	>5000	7,919	51,786	33,129
6 Micron & Larger	particles/ml	>2500	1,573	15,527	6,821
14 Micron & Larger	particles/ml	>160	93	808	420
21 Micron & Larger	particles/ml	>40	33	211	103
38 Micron & Larger	particles/ml	>10	4	14	4
70 Micron & Larger	particles/ml	>3	0	2	0

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	103	106	109
Magnesium (Mg)	ppm	<5	<5	<5
Phosphorus(P)	ppm	510	539	539
Silicon (Si)	ppm	<5	<5	<5
Zinc (Zn)	ppm	715	627	674
Sulfur (S)	ppm	1,600	1,680	1,720

Customer Id: MOTMCA
 Sample No.: EN24050141
 Lab Number: 24050141
 Test Package: TEST

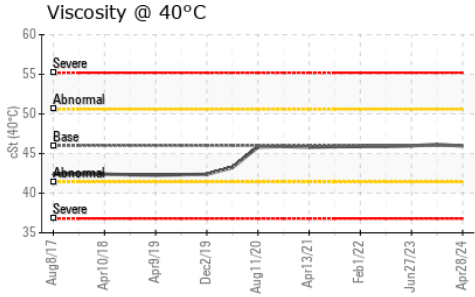


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OIL ANALYSIS REPORT



DR FERROGRAPHY READINGS

L		■ 8.7	■ 15.9	▲ 27.0
S		■ 1.5	■ 1.6	■ 5.8
WPC	DL + DS	■ 10.2	■ 17.5	▲ 32.8

Contamination

Water	>0.05	NEG	NEG	NEG
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