

LABORATORY ANALYSIS



11525 Rock Island Court, St. Louis, MO 63043
Tel: 1-800-876-0008 info@englube.com

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

Department **REYLAM-PRESS**
Equipment No. **OSSC01 TENSIONER STANDS/COIL/REWINDS (00065)**
System **Hydraulic System**
Oil Type **ENGINEERED LUBRICANTS ENLUBE 30-AW (--- GAL)**

Diagnosis

All component wear rates are normal. There is a light amount of silt (particulates < 14 microns in size) present in the oil. The oil viscosity is lower than typical, possibly indicating the addition of lighter grade oil. The condition of the oil is acceptable for the time in service.

Sample Information

Lab Number	New	2404-00873	2401-00712	2310-00793
Date of Sample	(Typical)	05 Apr 2024	19 Jan 2024	10 Oct 2023
Oil Added		UNK	UNK	UNK
Last Drain Date		--	--	--
Months on Sample		294.0	291.6	288.4
Last Filter Service		--	--	--
Sample Point		---	---	---
Sample Status		NORMAL	ABNORMAL	ABNORMAL

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

SSU Vis. @ 100F	SSU	314.3	314.0	350.1
cSt Vis. @ 40C	cSt	68.0	60.62	67.47

COLOR (BASED ON ASTM D1500 STANDARDS)

Color	Scale 0-8	1.0	0.5	0.5
-------	-----------	-----	-----	-----

PARTICLE COUNT (PER 1ML)

ISO CODE	ISO 4406(c)	>19/18/14	20/17/12	21/18/14	21/18/14
4 Micron & Larger	particles/ml	>5000	9,818	13,228	15,755
6 Micron & Larger	particles/ml	>2500	924	1,590	2,324
14 Micron & Larger	particles/ml	>160	26	82	107
21 Micron & Larger	particles/ml	>40	8	26	23
38 Micron & Larger	particles/ml	>10	0	2	1
70 Micron & Larger	particles/ml	>3	0	0	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	92	93	61
Magnesium (Mg)	ppm	<5	<5	<5
Phosphorus(P)	ppm	526	519	494
Silicon (Si)	ppm	<5	<5	<5
Zinc (Zn)	ppm	668	623	631
Sulfur (S)	ppm	1,410	1,550	1,460

Customer Id: MOTMCA
Sample No.: EN24040873
Lab Number: 24040873
Test Package: TEST

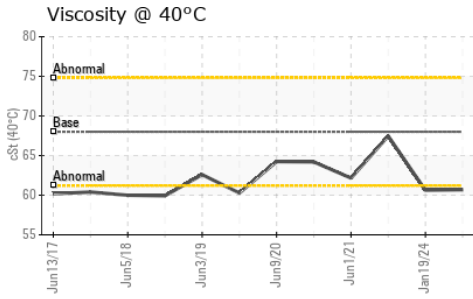


To manage this report scan the QR code

To discuss the diagnosis or test data:
Brian Klutenkamper +1 (314)872-9540
bkluitenkamper@englube.com

To change component or sample information:
Tracy Weaks +1 (314)872-9540
tweaks@englube.com

OIL ANALYSIS REPORT



DR FERROGRAPHY READINGS

L		■ 13.5	■ 13.8	■ 5.5
S		■ 4.9	■ 4.4	■ 2.3
WPC	DL + DS	■ 18.4	■ 18.2	■ 7.8

Contamination

Water	>0.05	NEG	NEG	NEG
-------	-------	------------	-----	-----