

LABORATORY ANALYSIS



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COPELAND(EMERSON CLIMATE TECHNOLOGIES)
3101 W MILITARY HWY BUILDING 2, (SALTILLO PLANT)
SALTILLO, AM
MX
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Department **WINDING**
Equipment No. **INSERTADORA PRINCIPAL-LINEA 06-CELDA 7.1 (00029)**
System **Hydraulic System**
Oil Type **ENGINEERED LUBRICANTS ENLUBE 15-AW (73 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. All component wear rates are normal. 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 still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

Lab Number	New	2311-00654	---	---
Date of Sample	(Typical)	26 Oct 2023	---	---
Oil Added		UNK	---	---
Last Drain Date		--	---	---
Last Filter Service		--	---	---
Sample Point		---	---	---
Sample Status		ABNORMAL	---	---

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

SSU Vis. @ 100F	SSU	161.4	---	---
cSt Vis. @ 40C	cSt	32.0	31.19	---

COLOR (BASED ON ASTM D1500 STANDARDS)

Color	Scale 0-8	0.5	---	---
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PARTICLE COUNT (PER 1ML)

ISO CODE	ISO 4406(c)	>19/18/14	21/18/15	---	---
4 Micron & Larger	particles/ml	>5000	▲ 18,324	---	---
6 Micron & Larger	particles/ml	>2500	■ 1,886	---	---
14 Micron & Larger	particles/ml	>160	▲ 198	---	---
21 Micron & Larger	particles/ml	>40	▲ 86	---	---
38 Micron & Larger	particles/ml	>10	■ 10	---	---
70 Micron & Larger	particles/ml	>3	■ 1	---	---

ICP - OILS (REPORTED IN PARTS PER MILLION)

Aluminum (Al)	ppm	<5	---	---
Antimony (Sb)	ppm	<5	---	---
Cadmium (Cd)	ppm	<5	---	---
Chromium (Cr)	ppm	<5	---	---
Cobalt (Co)	ppm	<5	---	---
Copper (Cu)	ppm	■ <5	---	---
Iron (Fe)	ppm	■ <5	---	---
Lead (Pb)	ppm	<5	---	---
Manganese (Mn)	ppm	<5	---	---
Molybdenum(Mo)	ppm	<5	---	---
Nickel (Ni)	ppm	<5	---	---
Silver (Ag)	ppm	<5	---	---
Tin (Sn)	ppm	<5	---	---
Titanium (Ti)	ppm	<5	---	---
Vanadium (V)	ppm	<5	---	---
Barium (Ba)	ppm	<5	---	---
Boron (B)	ppm	<5	---	---
Calcium (Ca)	ppm	71	---	---
Magnesium (Mg)	ppm	<5	---	---
Phosphorus(P)	ppm	500	---	---
Silicon (Si)	ppm	<5	---	---
Zinc (Zn)	ppm	668	■ 647	---
Sulfur (S)	ppm	1,700	---	---

Customer Id: EMESAL
Sample No.: EN23110654
Lab Number: 23110654
Test Package: TEST



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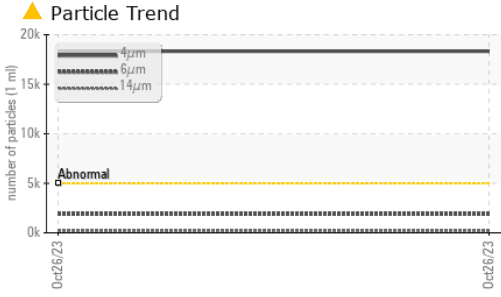
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OIL ANALYSIS REPORT



DR FERROGRAPHY READINGS				
L			19.3	---
S			1.3	---
WPC	DL + DS		20.6	---

CONTAMINATION				
Water	>0.05	NEG	---	---

