

LABORATORY ANALYSIS



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Department **FACILITIES**
Equipment No. **E1463 COMPRESSOR #3 (00010)**
System **Hydraulic System**
Oil Type **ENGINEERED LUBRICANTS ENLUBE S-CHEM PAO-ACO-48 (--- GAL)**

DIAGNOSIS

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. There is no indication of any contamination in the oil. The system and fluid cleanliness is acceptable. Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

Lab Number	New	2306-00732	2302-00447	2202-00419
Date of Sample	(Typical)	21 Jun 2023	09 Feb 2023	10 Feb 2022
Oil Added		UNK	UNK	UNK
Last Drain Date		--	--	--
Last Filter Service		--	--	--
Sample Point		---	---	---
Sample Status		ATTENTION	SEVERE	NORMAL

VISCOSITY INDEX (ASTM D445)

cSt Vis. @ 40C	cSt	43.3	45.40	31.69	47.01
SSU Vis. @ 100F	SSU	221.5	311.5	149.1	218.9
cSt Vis. @ 100C	cSt		7.841	7.76	7.85
SSU Vis. @ 210F	SSU		51.9	51.61	51.9
cSt Vis. @ 40C	cSt	43.3	45.40	31.69	47.01
SSU Vis. @ 40C	SSU	221.5	311.5	149.1	218.9
cSt Vis. @ 100C	cSt		7.841	7.76	7.85
SSU Vis. @ 100C	SSU		51.9	51.61	51.9
Viscosity Index		136	143	230	137

TOTAL ACID NUMBER (NEUT. NO.)(ASTM D974)

TAN, mg KOH/g	mg KOH/g	0.19	0.34	0.29	0.46

TEMPERATURE CHECK

Fluid Temp, F	°F	198	166	216

PARTICLE COUNT (PER 1ML)

ISO CODE	ISO 4406(c)	>21/19/14	17/16/12	15/13/10	16/15/12
4 Micron & Larger	particles/ml	>20000	1,169	165	588
6 Micron & Larger	particles/ml	>5000	403	71	233
14 Micron & Larger	particles/ml	>160	36	10	35
21 Micron & Larger	particles/ml	>40	10	4	10
38 Micron & Larger	particles/ml	>10	1	0	1
70 Micron & Larger	particles/ml	>3	0	0	0

Customer Id: EMERUS
Sample No.: EN23060732
Lab Number: 23060732
Test Package: TEST



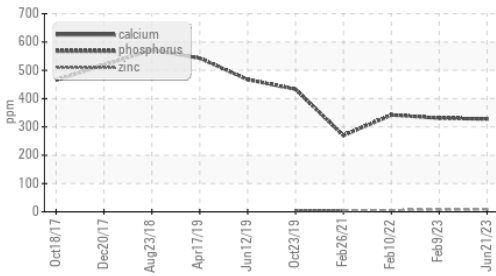
To manage this report scan the QR code

To discuss the diagnosis or test data:
Brad Fritz +1 (314)872-9540
bfritz@englube.com

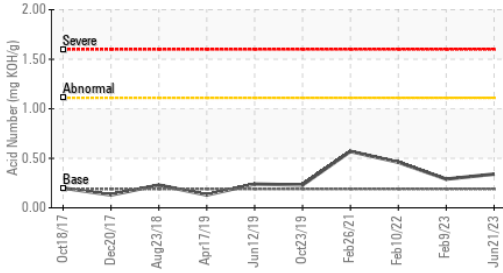
To change component or sample information:
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OIL ANALYSIS REPORT

▲ Additives



Acid Number



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	5	■ <5	■ <5	
Magnesium (Mg)	ppm	5	■ <5	■ <5	
Phosphorus(P)	ppm	580	▲ 328	▲ 331	342
Silicon (Si)	ppm	5	<5	<5	<5
Zinc (Zn)	ppm	5	■ 8	<5	<5
Sulfur (S)	ppm	5	▲ 696	▲ 187	■ 17

DR FERROGRAPHY READINGS

L		■ 0.7	◆ 35.0	■ 0.3
S		■ 0.2	■ 0.7	■ 0.3
WPC	DL + DS	■ 0.9	▲ 35.7	■ 0.6