

# LABORATORY ANALYSIS



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Department **NC**  
Equipment No. **2038 (00061)**  
System **Hydraulic System**  
Oil Type **ENGINEERED LUBRICANTS ENLUBE 15-AW (--- GAL)**

## Diagnosis

The oil is near the end of its useful service life, recommend schedule an oil change. We recommend you service the filters on this component. 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. There is a light amount of silt (particulates < 14 microns in size) present in the oil. Zinc (Zn) ppm levels are abnormally low.

## Sample Information

Lab Number	New	2406-00872	2404-00145	2301-00197
Date of Sample	(Typical)	25 Jun 2024	03 Apr 2024	04 Jan 2023
Oil Added		UNK	UNK	UNK
Last Drain Date		--	--	--
Last Filter Service		--	--	--
Sample Point		---	---	---
Sample Status		ABNORMAL	NORMAL	NORMAL

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

SSU Vis. @ 100F	SSU	165.8	167.2	166.9
cSt Vis. @ 40C	cSt	32.0	32.32	32.26

## % WATER - KARL FISCHER (ASTM E203)

% Water (KF)	%	0.014	---	---
ppm Water (KF)	ppm	140	---	---

## COLOR (BASED ON ASTM D1500 STANDARDS)

Color	Scale 0-8	5.0	5.0	4.0
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## PARTICLE COUNT (PER 1ML)

ISO CODE	ISO 4406(c)	>19/18/14	20/18/12	19/16/11	17/15/11
4 Micron & Larger	particles/ml	>5000	9,262	3,200	1,205
6 Micron & Larger	particles/ml	>2500	2,065	462	219
14 Micron & Larger	particles/ml	>160	32	19	16
21 Micron & Larger	particles/ml	>40	3	4	5
38 Micron & Larger	particles/ml	>10	0	0	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	9	9	8
Iron (Fe)	ppm	8	8	7
Lead (Pb)	ppm	6	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	58
Magnesium (Mg)	ppm	<5	<5	<5
Phosphorus(P)	ppm	445	449	501
Silicon (Si)	ppm	<5	<5	<5
Zinc (Zn)	ppm	668	442	536
Sulfur (S)	ppm	1,490	1,440	1,750

Customer Id: BACSTL  
Sample No.: EN24060872  
Lab Number: 24060872  
Test Package: TEST



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To discuss the diagnosis or test data:

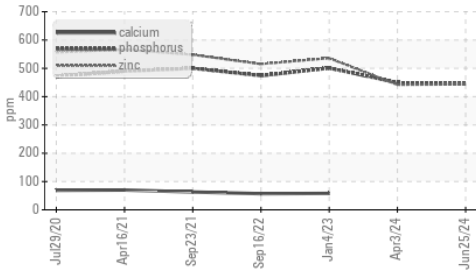
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To change component or sample information:

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# OIL ANALYSIS REPORT

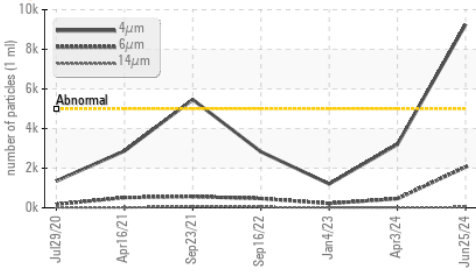
### ▲ Additives



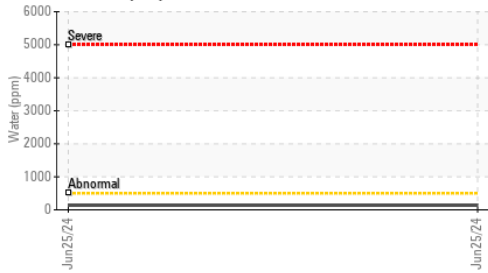
### DR FERROGRAPHY READINGS

L		<span style="color: green;">■</span> 0.1	<span style="color: lightgreen;">■</span> 0.6	<span style="color: lightgreen;">■</span> 2.7
S		<span style="color: green;">■</span> 0.1	<span style="color: lightgreen;">■</span> 0.5	<span style="color: lightgreen;">■</span> 1.2
WPC	DL + DS	<span style="color: green;">■</span> 0.2	<span style="color: lightgreen;">■</span> 1.1	<span style="color: lightgreen;">■</span> 3.9

### ● Particle Trend



### Water (KF)



### Viscosity @ 40°C

