

# LABORATORY ANALYSIS



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

**WOODWARD CORPORATION**  
6300 WEST HOWARD STREET  
NILES, IL  
United States 60714  
Contact: Daniel Aviles  
daniel.aviles@woodward.com  
T:  
F:

Department **PRODUCTION-OILS**  
Equipment No. **1912 CNC LATHE (00045)**  
System **Hydraulic System**  
Oil Type **ENGINEERED LUBRICANTS ENLUBE 15-AW (13 GAL)**

## Diagnosis

Particle counts have improved but still slightly elevated. Continue to use oil and filter element at this time, sample at next interval to monitor. 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	2403-00497	2311-00516	2308-00146
Date of Sample	(Typical)	<b>14 Mar 2024</b>	16 Nov 2023	03 Aug 2023
Oil Added		<b>UNK</b>	UNK	UNK
Last Drain Date		--	--	--
Months on Sample		<b>70.9</b>	67.1	63.7
Last Filter Service		--	--	--
Sample Point		---	---	---
Sample Status		<b>ATTENTION</b>	ABNORMAL	SEVERE

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

SSU Vis. @ 100F	SSU	159.0	159.0	157.4
cSt Vis. @ 40C	cSt	32.0	<b>30.71</b>	30.71
			30.71	30.39

## COLOR (BASED ON ASTM D1500 STANDARDS)

Color	Scale 0-8	1.0	0.5	0.5
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## PARTICLE COUNT (PER 1ML)

ISO CODE	ISO 4406(c)	>19/18/14	<b>20/18/15</b>	22/20/17	22/21/17
4 Micron & Larger	particles/ml	>5000	<b>8,636</b>	37,219	37,755
6 Micron & Larger	particles/ml	>2500	<b>1,999</b>	9,350	10,536
14 Micron & Larger	particles/ml	>160	<b>176</b>	702	745
21 Micron & Larger	particles/ml	>40	<b>60</b>	183	164
38 Micron & Larger	particles/ml	>10	<b>5</b>	14	10
70 Micron & Larger	particles/ml	>3	<b>1</b>	2	1

## 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	<b>6</b>	7	<5
Iron (Fe)	ppm	<b>&lt;5</b>	<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	<b>96</b>	95	99
Magnesium (Mg)	ppm	<5	<5	<5
Phosphorus(P)	ppm	<b>540</b>	500	525
Silicon (Si)	ppm	<5	<5	<5
Zinc (Zn)	ppm	668	<b>641</b>	607
Sulfur (S)	ppm		<b>1,480</b>	1,280
				1,440

Customer Id: ENC0658001  
Sample No.: EN24030497  
Lab Number: 24030497  
Test Package: TEST



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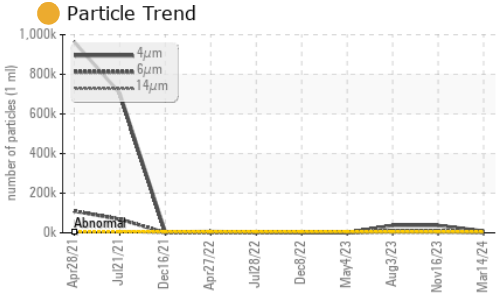
To discuss the diagnosis or test data:

Beau Vuagniaux +1  
[bvuagniaux@englube.com](mailto:bvuagniaux@englube.com)

To change component or sample information:

Tracy Weaks +1 (314)872-9540  
[tweaks@englube.com](mailto:tweaks@englube.com)

# OIL ANALYSIS REPORT



### DR FERROGRAPHY READINGS

L		■ 7.2	▲ 25.8	▲ 33.8
S		■ 1.5	■ 7.5	■ 5.7
WPC	DL + DS	■ 8.7	▲ 33.3	▲ 39.5

### Contamination

Water	>0.05	<b>NEG</b>	NEG	NEG
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