

# LABORATORY ANALYSIS



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Department **1-ASSEMBLY**  
Equipment No. **R1-1618 4 POLE OIL RECYCLE (00001)**  
System **Oil**  
Oil Type **ENGINEERED LUBRICANTS ENLUBE 500-LAW (--- GAL)**

## DIAGNOSIS

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. All component wear rates are normal. There is a high amount of particulates (2 to 100 microns in size) present in the oil. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

## SAMPLE INFORMATION

Lab Number	New	2302-00485	2211-00611	2209-00663
Date of Sample	(Typical)	03 Feb 2023	18 Nov 2022	14 Sep 2022
Oil Added		UNK	UNK	UNK
Last Drain Date		--	--	--
Last Filter Service		--	--	--
Sample Point		---	---	---
Sample Status		SEVERE	ABNORMAL	SEVERE

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

SSU Vis. @ 100F	SSU	480.9	484.6	153.3
cSt Vis. @ 40C	cSt	100	92.83	29.61

## PARTICLE COUNT (PER 1ML)

ISO CODE	ISO 4406(c)	>19/17/14	23/21/16	21/19/14	23/21/16
4 Micron & Larger	particles/ml	>5000	▲ 76,744	▲ 15,109	▲ 50,514
6 Micron & Larger	particles/ml	>1300	▲ 17,686	▲ 3,312	▲ 11,695
14 Micron & Larger	particles/ml	>160	▲ 615	■ 124	▲ 359
21 Micron & Larger	particles/ml	>40	▲ 98	■ 25	52
38 Micron & Larger	particles/ml	>10	■ 3	■ 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	<5	<5	<5	
Magnesium (Mg)	ppm	<5	<5	<5	
Phosphorus(P)	ppm	645	■ 589	■ 541	479
Silicon (Si)	ppm	<5	<5	<5	
Zinc (Zn)	ppm	25	■ <5	<5	<5
Sulfur (S)	ppm		2,170	2,130	1,780

## CONTAMINATION

Water	NEG	NEG	NEG
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Customer Id: NIDMEN  
Sample No.: EN23020485  
Lab Number: 23020485  
Test Package: TEST



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To discuss the diagnosis or test data:

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# OIL ANALYSIS REPORT

