

# LABORATORY ANALYSIS



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Department **1-ASSEMBLY**  
Equipment No. **R1-2782 RECOVERY TANK (00003)**  
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 viscosity is lower than typical, possibly indicating the addition of lighter grade oil. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

## SAMPLE INFORMATION

Lab Number	New	2302-00483	2210-00792	2204-00449
Date of Sample	(Typical)	03 Feb 2023	20 Oct 2022	05 Apr 2022
Oil Added		UNK	UNK	UNK
Last Drain Date		--	--	--
Last Filter Service		--	--	--
Sample Point		---	---	---
Sample Status		SEVERE	SEVERE	SEVERE

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

SSU Vis. @ 100F	SSU	468.6	453.7	462.5
cSt Vis. @ 40C	cSt	100	87.03	88.68

## PARTICLE COUNT (PER 1ML)

ISO CODE	ISO 4406(c)	>19/17/14	24/22/18	24/22/17	24/22/18
4 Micron & Larger	particles/ml	>5000	▲ 119,913	▲ 93,538	▲ 109,701
6 Micron & Larger	particles/ml	>1300	▲ 37,572	▲ 27,113	▲ 37,551
14 Micron & Larger	particles/ml	>160	▲ 1,734	▲ 1,131	▲ 2,237
21 Micron & Larger	particles/ml	>40	▲ 343	▲ 216	▲ 526
38 Micron & Larger	particles/ml	>10	● 19	■ 5	▲ 30
70 Micron & Larger	particles/ml	>3	■ 0	■ 0	■ 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		<5	<5	■ <5
Iron (Fe)	ppm		■ 5	<5	■ <5
Lead (Pb)	ppm		■ 7	<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		7	<5	20
Magnesium (Mg)	ppm		<5	<5	<5
Phosphorus(P)	ppm	645	■ 568	■ 517	■ 537
Silicon (Si)	ppm		<5	<5	■ <5
Zinc (Zn)	ppm	25	<5	6	7
Sulfur (S)	ppm		2,060	1,960	1,550

## CONTAMINATION

Water		NEG	NEG	NEG
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Customer Id: NIDMEN  
Sample No.: EN23020483  
Lab Number: 23020483  
Test Package: TEST



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To discuss the diagnosis or test data:

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# OIL ANALYSIS REPORT

