

LABORATORY ANALYSIS



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Department **TOOL ROOM**
Equipment No. **1026 NEW GRINDER (00041)**
System **Unknown Component**
Oil Type **ENGINEERED LUBRICANTS ENWAY 15-HWO (--- GAL)**

Diagnosis

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. L and S, % large particles, severity index and wpc levels are severe. Copper (Cu) ppm levels are abnormal. There is a moderate amount of particulates (2 to 100 microns in size) present in the sample. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. Additive levels indicate the addition of a different brand, or type of sample. The sample is no longer serviceable as a result of the abnormal and/or severe wear.

Sample Information

Lab Number	New	2404-00477	2305-00753	2211-00331
Date of Sample	(Typical)	05 Apr 2024	19 May 2023	17 Nov 2022
Oil Added		UNK	UNK	UNK
Last Drain Date		--	--	--
Months on Sample		292.7	282.4	276.5
Last Filter Service		--	--	--
Sample Point		---	---	---
Sample Status		SEVERE	NORMAL	NORMAL

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

SSU Vis. @ 100F	SSU	144.0	158.3	157.9	157.5
cSt Vis. @ 40C	cSt		30.56	30.49	30.40

PARTICLE COUNT (PER 1ML)

ISO CODE	ISO 4406(c)	>25/23/17	21/20/18	20/19/16	20/18/16
4 Micron & Larger	particles/ml	>320000	12,144	6,696	7,339
6 Micron & Larger	particles/ml	>80000	5,747	2,731	2,153
14 Micron & Larger	particles/ml	>1300	1,573	466	343
21 Micron & Larger	particles/ml	>320	827	186	127
38 Micron & Larger	particles/ml	>80	121	22	17
70 Micron & Larger	particles/ml	>20	11	1	2

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	<5
Chromium (Cr)	ppm		<5	<5	<5
Cobalt (Co)	ppm		<5	<5	<5
Copper (Cu)	ppm		13	8	6
Iron (Fe)	ppm		27	16	14
Lead (Pb)	ppm		9	<5	<5
Manganese (Mn)	ppm	5	<5	<5	<5
Molybdenum(Mo)	ppm	5	<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	<5
Boron (B)	ppm	5	<5	<5	<5
Calcium (Ca)	ppm	5	<5	<5	<5
Magnesium (Mg)	ppm	5	<5	<5	<5
Phosphorus(P)	ppm	5	538	466	505
Silicon (Si)	ppm	5	<5	<5	<5
Zinc (Zn)	ppm	5	214	342	434
Sulfur (S)	ppm	9540	2,030	1,810	1,760

DR FERROGRAPHY READINGS

L		132.0	24.6	8.7
S		54.0	3.5	1.2
WPC	DL + DS	186	28.1	9.9

Customer Id: BACSTL
Sample No.: EN24040477
Lab Number: 24040477
Test Package: TEST



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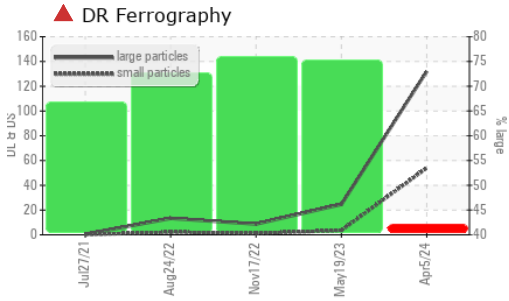
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OIL ANALYSIS REPORT



Contamination

Water NEG NEG NEG

