

LABORATORY ANALYSIS



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Department **REYLAM - TOOL ROOM**
 Equipment No. **GRINDTR07 GRINDER (TOOL ROOM) (00148)**
 System **Hydraulic System**
 Oil Type **ENGINEERED LUBRICANTS ENWAY 15-HWO (--- GAL)**

COPELAND (MHDS)
 6001 S. 35TH STREET, SUITE D"
 REYNOSA, ZZ
 US
 Contact: GERARDO GUERRERO
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 T:
 F:

Diagnosis

Confirm the source of the lubricant being utilized for top-up/fill. 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. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. There is no indication of any contamination in the oil. The system and fluid cleanliness is acceptable. Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Sample Information

Lab Number	New	2404-00920	2401-00782	2310-00844
Date of Sample	(Typical)	05 Apr 2024	19 Jan 2024	10 Oct 2023
Oil Added		UNK	UNK	UNK
Last Drain Date		--	--	--
Months on Sample		146.3	143.8	140.6
Last Filter Service		--	--	--
Sample Point		---	---	---
Sample Status		ATTENTION	ATTENTION	ABNORMAL

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

SSU Vis. @ 100F	SSU	144.0	163.5	163.1	165.3
cSt Vis. @ 40C	cSt		31.60	31.51	31.96

PARTICLE COUNT (PER 1ML)

ISO CODE	ISO 4406(c)	>25/23/17	21/19/14	21/18/14	21/19/16
4 Micron & Larger	particles/ml	>320000	11,243	10,221	13,316
6 Micron & Larger	particles/ml	>80000	2,599	2,217	4,940
14 Micron & Larger	particles/ml	>1300	133	100	470
21 Micron & Larger	particles/ml	>320	17	16	115
38 Micron & Larger	particles/ml	>80	0	0	6
70 Micron & Larger	particles/ml	>20	0	0	2

ICP - OILS (REPORTED IN PARTS PER MILLION)

Aluminum (Al)	ppm		<10	<5	<5
Antimony (Sb)	ppm		<10	<5	<5
Cadmium (Cd)	ppm	5	<10	<5	<5
Chromium (Cr)	ppm		<10	<5	<5
Cobalt (Co)	ppm		<10	<5	<5
Copper (Cu)	ppm		<10	<5	<5
Iron (Fe)	ppm		86	75	<5
Lead (Pb)	ppm		<10	<5	<5
Manganese (Mn)	ppm	5	<10	<5	<5
Molybdenum(Mo)	ppm	5	<10	<5	<5
Nickel (Ni)	ppm		<10	<5	<5
Silver (Ag)	ppm		<10	<5	<5
Tin (Sn)	ppm		<10	<5	<5
Titanium (Ti)	ppm		<10	<5	<5
Vanadium (V)	ppm		<10	<5	<5
Barium (Ba)	ppm	5	233	250	<5
Boron (B)	ppm	5	<10	<5	<5
Calcium (Ca)	ppm	5	<10	<5	66
Magnesium (Mg)	ppm	5	<10	<5	<5
Phosphorus(P)	ppm	5	586	631	517
Silicon (Si)	ppm	5	<10	<5	<5
Zinc (Zn)	ppm	5	27	16	632
Sulfur (S)	ppm	9540	2,170	2,370	1,480

DR FERROGRAPHY READINGS

L			7.4	5.7	11.2
S			1.4	1.6	1.6
WPC	DL + DS		8.8	7.3	12.8

Customer Id: MOTMCA
 Sample No.: EN24040920
 Lab Number: 24040920
 Test Package: TEST

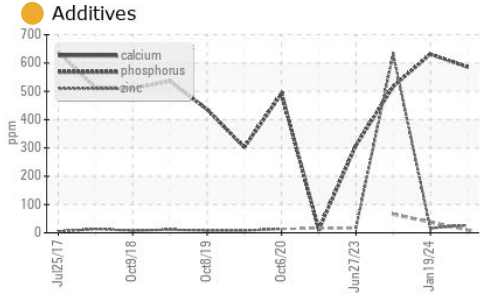


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OIL ANALYSIS REPORT



Contamination

Water	>0.05	NEG	NEG
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