

# LABORATORY ANALYSIS



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Department **REYLAM-PRESS**  
 Equipment No. **TURNSC0102 TURNSTYLE UNIT 2 (00153)**  
 System **Gearbox**  
 Oil Type **ENGINEERED LUBRICANTS ENLUBE S-POLY-G-2188-WGO-X (--- GAL)**

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

## Diagnosis

The oil is near the end of its useful service life, recommend schedule an oil change. 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. TAN and mg KOH/g is abnormally high. Phosphorus(P) ppm levels are abnormally low.

## Sample Information

Lab Number	New	2404-00875	2401-00759	2310-00795
Date of Sample	(Typical)	<b>05 Apr 2024</b>	19 Jan 2024	10 Oct 2023
Oil Added		<b>UNK</b>	UNK	UNK
Last Drain Date		--	--	--
Months on Sample		<b>123.9</b>	121.4	118.2
Last Filter Service		--	--	--
Sample Point		---	---	---
Sample Status		<b>ABNORMAL</b>	ABNORMAL	NORMAL

## VISCOSITY INDEX (ASTM D445)

cSt Vis. @ 40C	cSt	460	<b>31.44</b>	520.5	493.4
SSU Vis. @ 100F	SSU		<b>148.0</b>	2,411.6	2,286.2
cSt Vis. @ 100C	cSt		<b>5.461</b>	81.30	75.3
SSU Vis. @ 210F	SSU		<b>44.2</b>	379.5	351.6
cSt Vis. @ 40C	cSt	460	<b>31.44</b>	520.5	493.4
SSU Vis. @ 40C	SSU		<b>148.0</b>	2,411.6	2,286.2
cSt Vis. @ 100C	cSt		<b>5.461</b>	81.30	75.3
SSU Vis. @ 100C	SSU		<b>44.2</b>	379.5	351.6
Viscosity Index			<b>109</b>	242	235

## TOTAL ACID NUMBER (NEUT. NO.)(ASTM D974)

TAN, mg KOH/g	mg KOH/g	0.61	<b>▲ 2.44</b>	■ 0.64	■ 0.46
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## Hiac Particle Count/ISO 4406

4 Micron & Larger	particles/ml	>640000	<b>■ 38,301</b>	■ 43,178	■ 7,611
6 Micron & Larger	particles/ml	>80000	<b>■ 4,520</b>	■ 14,278	■ 2,193
14 Micron & Larger	particles/ml	>2500	<b>■ 159</b>	■ 1,924	■ 186
ISO Code	ISO 4406(c)	>26/23/18	<b>■ 22/19/14</b>	■ 23/21/18	■ 20/18/15

## ENERGY DISPERSIVE XRF - PPM (\*BELOW MINIMUM DETECTION LIMIT)

Aluminum (Al)	ppm		*	*	*
Antimony (Sb)	ppm		*	*	*
Cadmium (Cd)	ppm		*	*	*
Chromium (Cr)	ppm		*	*	*
Cobalt (Co)	ppm		*	*	*
Copper (Cu)	ppm		■ *	■ *	■ *
Iron (Fe)	ppm		<b>■ 60</b>	■ *	■ *
Lead (Pb)	ppm		*	*	*
Manganese (Mn)	ppm		*	*	*
Molybdenum(Mo)	ppm		*	*	*
Nickel (Ni)	ppm		*	*	*
Potassium (K)	ppm		■ *	■ *	■ *
Tin (Sn)	ppm		*	*	*
Titanium (Ti)	ppm		*	*	*
Vanadium (V)	ppm		*	*	*
Barium (Ba)	ppm		<b>194</b>	*	*
Calcium (Ca)	ppm		*	*	*
Magnesium (Mg)	ppm		*	*	*
Phosphorus(P)	ppm	957	<b>▲ 560</b>	<b>▲ 593</b>	■ 702
Silicon (Si)	ppm		*	*	*
Zinc (Zn)	ppm		<b>16</b>	*	14
Chlorine (Cl)	ppm		*	*	*
Sulfur (S)	ppm	555	<b>2,190</b>	777	282

Customer Id: MOTMCA  
 Sample No.: EN24040875  
 Lab Number: 24040875  
 Test Package: TEST

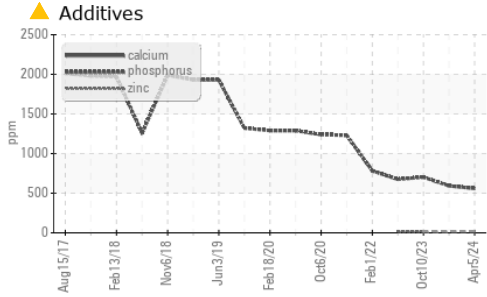


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# OIL ANALYSIS REPORT



### DR FERROGRAPHY READINGS

L		■ 5.1	■ 11.0	■ 15.0
S		■ 0.9	■ 1.0	■ 2.5
WPC	DL + DS	■ 6	■ 12	■ 17.5

### Contamination

Water	>0.45	<b>NEG</b>	NEG	NEG
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