## LABORATORY ANALYSIS

**REYLAM-PRESS** 



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## **COPELAND (MHDS)**

6001 S. 35TH STREET, SUITE D"" REYNOSA, ZZ

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2,046

276

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942

**154** 

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## Diagnosis

Department

System

Equipment No.

Oil Type **ENGINEERED LUBRICANTS ENLUBE 85-EP GEAR OIL (--- GAL)** 

STRSC03 LEVELER(SCROLL LINE 3) (00077)

14 Micron & Larger particles/1ml >640

21 Micron & Larger particles/1ml >160

38 Micron & Larger particles/1ml >40

70 Micron & Larger particles/1ml >10

ICP - OILS (REPORTED IN PARTS PER MILLION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.S levels are abnormal. Iron (Fe) ppm levels are abnormal. Gear wear is indicated. 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. Viscosity of sample indicates oil is within ISO 46 range, advise investigate. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Gearbox

Sample Informati	on							
Lab Number		New	2404-00891	2401-00768	2310-00813			
Date of Sample		(Typical)	05 Apr 2024	19 Jan 2024	10 Oct 2023			
Oil Added			UNK	UNK	UNK			
Last Drain Date								
Months on Sample			269.7	267.2	264.0			
Last Filter Service								
Sample Point								
Sample Status			SEVERE	ABNORMAL	ABNORMAL			
VISCOSITY @ 100F or 40C (ASTM D-445)								
SSU Vis. @ 100F	SSU		261.2	809.1	1,122.6			
cSt Vis. @ 40C	cSt	220	▲ 50.56	<u>▲</u> 154.0	212.4			
PARTICLE COUNT (PER 1ML)								
ISO CODE	ISO 4406(c)	>23/22/16	22/18/13	24/22/18	22/21/17			
4 Micron & Larger	particles/1ml	>80000	<b>20,178</b>	93,986	■31,338			
6 Micron & Larger	particles/1ml	>40000	<b>1,615</b>	□36,059	<b>■</b> 15,476			

**62** 

**16** 

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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	<b>13</b>	<b>&lt;</b> 5	<b>&lt;</b> 5
Iron (Fe)	ppm	<u> ^</u> 71	<b>&lt;</b> 5	<b>&lt;</b> 5
Lead (Pb)	ppm	9	<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	10	<5	<5
Calcium (Ca)	ppm	45	16	<5
Magnesium (Mg)	ppm	<5	<5	<5
Phosphorus(P)	ppm 23	<b>34 ■468</b>	<b>329</b>	<b>270</b>
Silicon (Si)	ppm	<5	<5	<5

Zinc (Zn) 466 141 <5 ppm 1,830 2,540 Sulfur (S) 3,470 ppm DR FERROGRAPHY READINGS L **69.3 19.3** 2.8 S 44.3 **5.1** 1.4 **WPC** DL + DS **4.2 113.6** 24.4

Customer Id: MOTMCA Sample No.: EN24040891 Lab Number: 24040891 Test Package: TEST

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## **OIL ANALYSIS REPORT**







