LABORATORY ANALYSIS

ENGINEERED LUBRICANTS

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Department	**REYLAM - DIECAST**
Equipment No.	**PROTECH07 IHS ANNEAL QUENCH (X0071)**
System	**Unknown Component**
Oil Type	**ENGINEERED LUBRICANTS ENCOOL SOL-6465GF-ND-XL-RO (--- GAL)**

COPELAND (MHDS)
6001 S. 35TH STREET, SUITE D""
REYNOSA, ZZ
US
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Diagnosis

The coolant mineral/hardness level is becoming elevated and amine levels are low. We recommend this system be drained, cleaned and refilled with new ENCOOL SOL-6465GF-ND-XL-RO.All component wear rates are normal. There is no indication of any contamination in the sample. The condition of the sample is acceptable for the time in service.

Sample Information

Lab Number		New	**2402-00423**	2401-00444	2312-01086
Date of Sample		(Typical)	**08 Feb 2024**	10 Jan 2024	20 Dec 2023
Oil Added			**UNK**	UNK	UNK
Last Drain Date			**--**	--	--
Months on Sample			**41.3**	40.3	39.7
Last Filter Service			**--**	--	--
Sample Point			**---**	---	---
Sample Status			**SEVERE**	NORMAL	SEVERE

RATIO PER REFRACTOMETER

Refract. Reading			**2.1**	3.2	2.4
Refract. Model			**DIGITAL**	DIGITAL	DIGITAL
Refract. Ratio	oil:water		■ **13:1**	■ 8:1	■ 12:1

pH (ASTM E-70)

pH	Scale 0-14		■ **8.9**	■ 9.0	■ 8.9
Ratio Rec`d	oil:water		**AS REC'D**	AS REC'D	AS REC'D

HARDNESS (mg/L CaCO3)

Hardness (CaCO3)	mg/L		**55.3**	31.4	20.7
Grains			**3.3**	1.8	1.2

TOTAL AMINE

Total	mmol/gram		▲ **0.10**	■ 0.15	■ 0.12
Tertiary	mmol/gram		▲ **0.07**	■ 0.11	▲ 0.06
Primary	mmol/gram		■ **0.03**	■ 0.04	■ 0.06

BACTERIA COUNT (Class Range 0 to 6)

Bacteria Class	Scale 0-6		■ **0**	■ 0	■ 0

FUNGUS COUNT (Class Ranges: Yeast 0 to 4/Mold 0 to 3)

Yeast Class	Scale 0-4		■ **0**	■ 0	■ 0
Mold Class	Scale 0-3		■ **0**	■ 0	■ 0

ENERGY DISPERSIVE XRF (*BELOW MINIMUM DETECTION LIMIT)

ppm Chlorine (Cl)	ppm		*	*	*

Contamination

Water			**NEG**	NEG	NEG

Customer Id: MOTMCA
Sample No.: EN24020423
Lab Number: 24020423
Test Package: TEST

To manage this report scan the QR code

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