

LABORATORY ANALYSIS



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Department **REYLAM - DIECAST**
Equipment No. **PROTECH10 IHS ANNEAL QUENCH (X0076)**
System **Quenching Fluid**
Oil Type **ENGINEERED LUBRICANTS ENCOOL SOL-6465GF-ND-XL-RO (--- GAL)**

DIAGNOSIS

Add make up dilution of 50:1 ENGINEERED LUBRICANTS ENCOOL SOL-6465GF-ND-XL-RO lean dilution until reaching recommended dilution of 10. The desired refractometer reading for this reservoir is 3.02. Inspect the reservoir for settled chips/fines, tramp oils, physical growth and remove them before there is an accumulation. Add a "severe" dose of BioTech 084, -0.1 ounces to the tank side reservoir in an area of high agitation. Follow up three days later with a "maintenance" dose, -0 ounces, to stabilize the microbial additive package. Circulate the coolant daily for proper aeration.(not applicable) Small amount of yeast present. Ratio is slightly strong. Total amine content is out of range. Primary amine content is out of range. Alkaline Reserve is excessively high.

SAMPLE INFORMATION

Lab Number	New	2310-00662	2309-00666	2308-00892
Date of Sample	(Typical)	10 Oct 2023	14 Sep 2023	09 Aug 2023
Oil Added		UNK	UNK	UNK
Last Drain Date		--	--	--
Months on Sample		37.4	36.6	35.4
Last Filter Service		--	--	--
Sample Point		---	---	---
Sample Status		SEVERE	SEVERE	SEVERE

RATIO PER REFRACTOMETER

Refract. Reading		3.6	2.5	2.0
Refract. Model		DIGITAL	DIGITAL	DIGITAL
Refract. Ratio	oil:water	▲ 7:1	■ 11:1	■ 14:1

ALKALINE RESERVE (ADDITION OF DEIONIZED WATER IS PREFERRED)

Alkaline Reserve		■ 144	■ 84	■ 76
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PH (ASTM E-70)

pH	Scale 0-14	■ 8.9	■ 8.5	■ 8.6
Ratio Rec'd	oil:water	AS REC'D	AS REC'D	AS REC'D

HARDNESS (MG/L CaCO3)

Hardness (CaCO3)	mg/L	35.6	160.1	119.6
Grains		2.1	9.4	7.0

TOTAL AMINE

Total	mmol/gram	▲ 0.23	■ 0.10	■ 0.08
Tertiary	mmol/gram	■ 0.14	■ 0.06	■ 0.05
Primary	mmol/gram	▲ 0.09	■ 0.04	■ 0.03

CIC CORROSION

CIC Dilution		AS REC'D	AS REC'D	AS REC'D
CIC Corrosion	%	■ 0.0	■ 0.0	■ 0.0

GRAVIMETRIC, MG/L

Filter Micron	μ	0.45	0.45	0.45
Gravimetric	mg/L	■ 16	■ 34	■ 20

BACTERIA COUNT (CLASS RANGE 0 TO 6)

Bacteria Class	Scale 0-6	■ 2	■ 1	■ 2
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FUNGUS COUNT (CLASS RANGES: YEAST 0 TO 4/MOLD 0 TO 3)

Yeast Class	Scale 0-4	▲ 2	■ 3	▲ 2
Mold Class	Scale 0-3	■ 0	■ 0	■ 0

ENERGY DISPERSIVE XRF (*BELOW MINIMUM DETECTION LIMIT)

ppm Chlorine (Cl)	ppm	*	*	*
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CONTAMINATION

Water		NEG	NEG	NEG
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Customer Id: MOTMCA
Sample No.: EN23100662
Lab Number: 23100662
Test Package: TEST



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FUEL REPORT

