

LABORATORY ANALYSIS



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Department **REYLAM - DIECAST**
Equipment No. **PROTECH06 IHS ANNEAL QUENCH (X0075)**
System **Quenching Fluid**
Oil Type **ENGINEERED LUBRICANTS ENCOOL SOL-6465GF-ND-XL-RO (--- GAL)**

DIAGNOSIS

Leaning the concentration to 10-15:1 will bring down the alkaline reserve and amine levels. Add some distilled water to this system. (not applicable) There is no indication of any contamination in the quenching fluid. Total amine content is out of range. Primary amine content is out of range. Alkaline Reserve is marginally high.

SAMPLE INFORMATION

Lab Number	New	2310-00658	2309-00662	2308-00888
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		ABNORMAL	SEVERE	SEVERE

RATIO PER REFRACTOMETER

Refract. Reading		3.2	2.5	2.0
Refract. Model		DIGITAL	DIGITAL	DIGITAL
Refract. Ratio	oil:water	8:1	11:1	14:1

ALKALINE RESERVE (ADDITION OF DEIONIZED WATER IS PREFERRED)

Alkaline Reserve		▲ 135	85	81
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PH (ASTM E-70)

pH	Scale 0-14	9.0	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	17.3	157.6	147.7
Grains		1.0	9.3	8.7

TOTAL AMINE

Total	mmol/gram	▲ 0.20	0.10	0.08
Tertiary	mmol/gram	■ 0.11	0.07	0.06
Primary	mmol/gram	▲ 0.09	0.03	0.02

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	■ 8	36	22

BACTERIA COUNT (CLASS RANGE 0 TO 6)

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

Yeast Class	Scale 0-4	■ 0	3	▲ 2
Mold Class	Scale 0-3	■ 0	0	1

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.: EN23100658
Lab Number: 23100658
Test Package: TEST



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FUEL REPORT

