LABORATORY ANALYSIS

ENGINEERED LUBRICANTS
11525 Rock Island Court, St. Louis, MO 63043
Tel: 1-800-876-0008 info@englube.com

Department **CNC**

Equipment No. **O-12 5-AXIS Machine Center (X0029)**

System **Machining Fluid**

Oil Type **ENGINEERED LUBRICANTS ENCOOL SS-7478EP-AS (45 GAL)**

PLANET TOOL & ENGINEERING
315 COOL SPRINGS ROAD
O`FALLON, MO
US 63366
Contact: Dave Diedrich
ddiedrich@planet-tool.com
T: (636)379-9800
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DIAGNOSIS

Add ENGINEERED LUBRICANTS ENCOOL SS-7478EP-AS concentrate until reaching a dilution of 15:1. The desired refractometer reading for this reservoir is 3.59. Resubmit sample for testing. Add ENCOOL BASE PH-1-2 to the reservoir in an area of high agitation. Circulate the reservoir for a minimum 15 minutes. Check pH for a minimum reading of 8.9. If the reading has not stabilized at or above an 8.9, repeat the same addition and circulation process until a pH minimum of 8.9 has been achieved. 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, to the tank side reservoir in an area of high agitation. Follow up three days later with a “maintenance” dose to stabilize the microbial additive package. Circulate the coolant daily for proper aeration.{not applicable} Excessively high bacteria counts. Elevated yeast counts. Ratio is too lean. Maintaining the desired ratio is the top priority for optimum coolant performance and longevity. The pH is marginally low. PH is a metric for overall coolant health and stability. Maintaining the desired pH assists with corrosion protection and is a microorganism deterrent.

SAMPLE INFORMATION

Lab Number		New	**2307-00266**	2305-00432	2303-00068
Date of Sample		(Typical)	**07 Jul 2023**	08 May 2023	06 Mar 2023
Oil Added			**UNK**	UNK	UNK
Last Drain Date			**--**	--	--
Last Filter Service			**--**	--	--
Sample Point			**---**	---	---
Sample Status			**SEVERE**	ABNORMAL	ABNORMAL

RATIO PER REFRACTOMETER

Refract. Reading			**1.2**	3.2	3.0
Refract. Model			**DIGITAL**	DIGITAL	DIGITAL
Refract. Ratio	oil:water		**47:1**	17:1	18:1

PH (ASTM E-70)

pH	Scale 0-14		**8.3**	9.1	8.9
Ratio Rec`d	oil:water		**AS REC'D**	AS REC'D	AS REC'D

BACTERIA COUNT (CLASS RANGE 0 TO 6)

Bacteria Class	Scale 0-6		**6**	3	0

FUNGUS COUNT (CLASS RANGES: YEAST 0 TO 4/MOLD 0 TO 3)

Yeast Class	Scale 0-4		**3**	0	2
Mold Class	Scale 0-3		**0**	0	0

Customer Id: ENC0303701
Sample No.: EN23070266
Lab Number: 23070266
Test Package: TEST

To manage this report scan the QR code

To discuss the diagnosis or test data:
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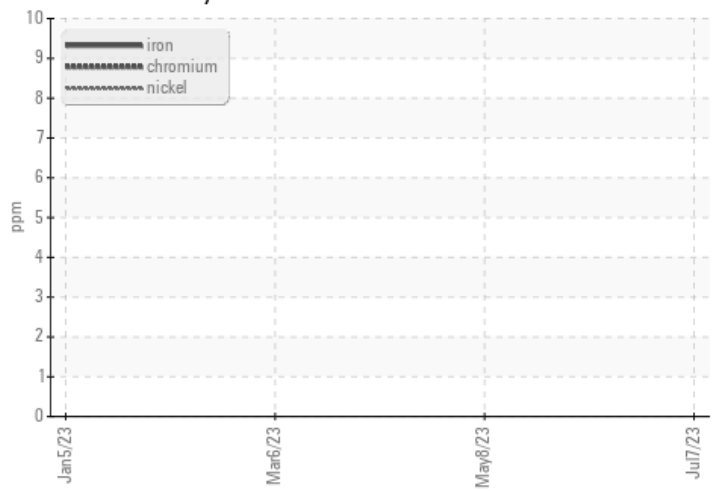
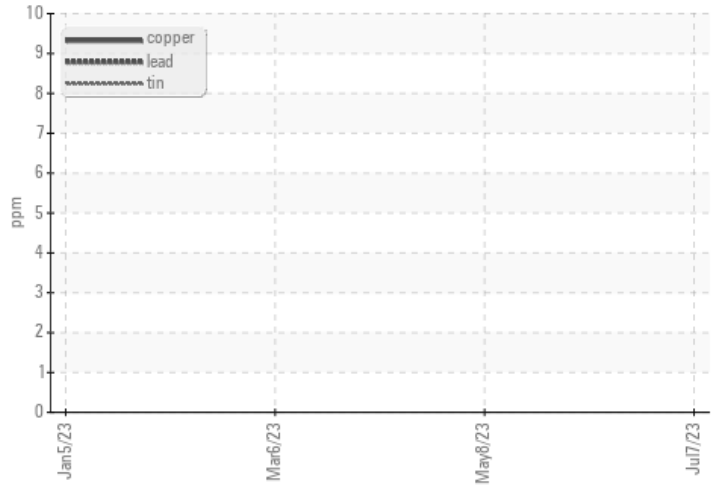
FUEL REPORT

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C