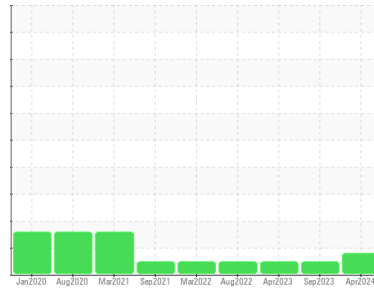




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**MILLING**  
 Machine Id  
**C-840**  
 Component  
**Gearbox**  
 Fluid  
**MOBIL SHC 630 (2 LTR)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0929831</b>	WC0854672	WC0809582
Sample Date	Client Info			<b>09 Apr 2024</b>	06 Sep 2023	17 Apr 2023
Machine Age	yrs	Client Info		<b>5</b>	5	5
Oil Age	yrs	Client Info		<b>5</b>	2	2
Oil Changed	Client Info			<b>N/A</b>	Not Changd	Not Changd
Sample Status				<b>ATTENTION</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	<b>24</b>	20	22
Chromium	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>0</b>	<1	0
Lead	ppm	ASTM D5185m	>100	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>200	<b>0</b>	<1	0
Tin	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Calcium	ppm	ASTM D5185m		<b>7</b>	4	1
Phosphorus	ppm	ASTM D5185m		<b>435</b>	511	435
Zinc	ppm	ASTM D5185m		<b>0</b>	0	1
Sulfur	ppm	ASTM D5185m		<b>35</b>	0	230

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>49</b>	48	64
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	0

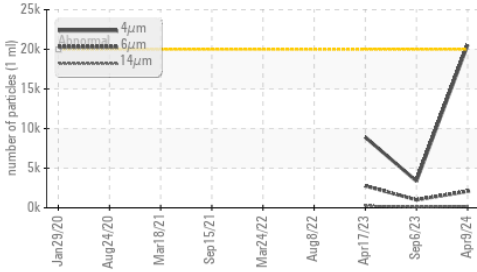
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	<b>20542</b>	3367	8911
Particles >6µm		ASTM D7647	>5000	<b>2081</b>	1000	2772
Particles >14µm		ASTM D7647	>640	<b>209</b>	124	244
Particles >21µm		ASTM D7647	>160	<b>39</b>	37	36
Particles >38µm		ASTM D7647	>40	<b>3</b>	2	2
Particles >71µm		ASTM D7647	>10	<b>1</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>22/18/15</b>	19/17/14	20/19/15

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.48</b>	0.49	0.39

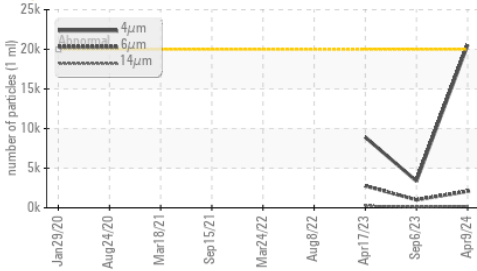


# OIL ANALYSIS REPORT

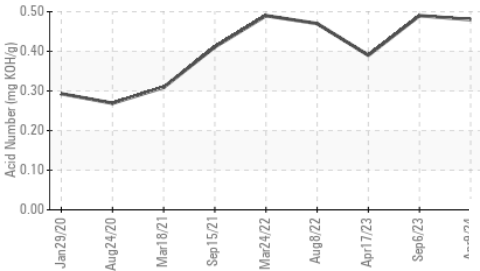
## Particle Trend



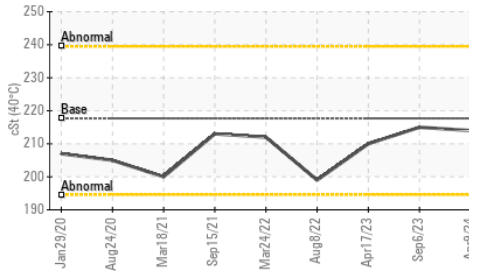
## Particle Trend



## Acid Number



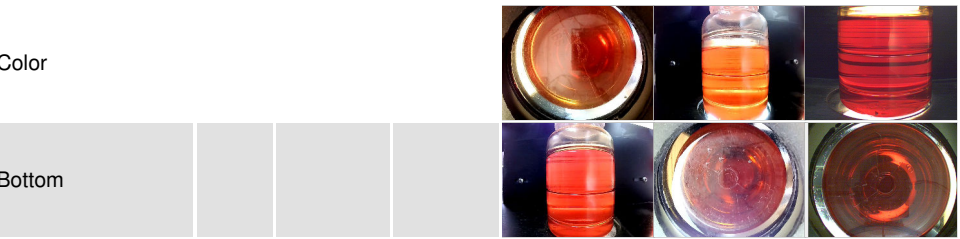
## Viscosity @ 40°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

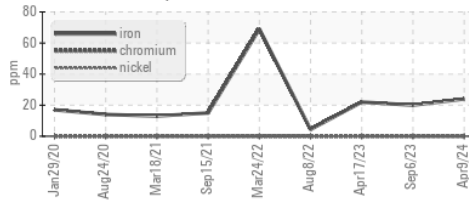
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	217.7	215	210

SAMPLE IMAGES	method	limit/base	current	history1	history2
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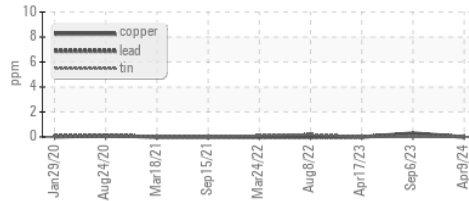


## GRAPHS

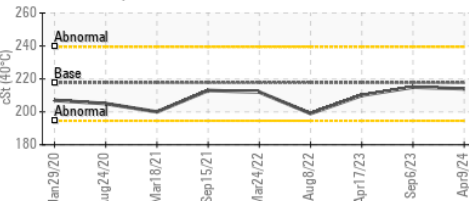
### Ferrous Alloys



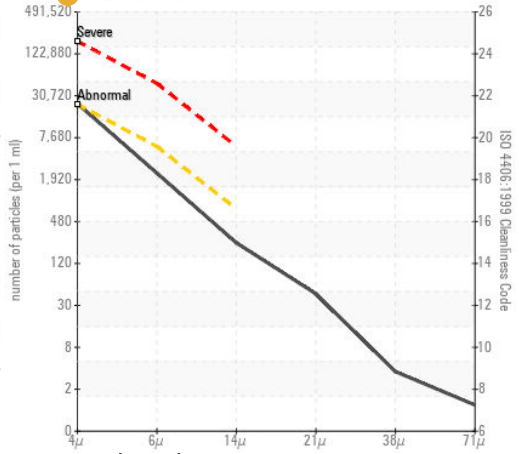
### Non-ferrous Metals



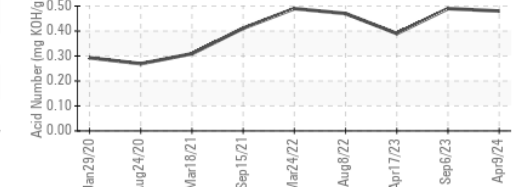
### Viscosity @ 40°C



### Particle Count



### Acid Number



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0929831 **Received** : 11 Apr 2024  
**Lab Number** : 06145815 **Tested** : 12 Apr 2024  
**Unique Number** : 10975893 **Diagnosed** : 14 Apr 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

**POET BIOREFINING - Groton**  
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 Contact: GAVIN KRUEGER  
 Gavin.Krueger@POET.COM  
 T: 6(05) 846-6863  
 F: (605)397-2754

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)