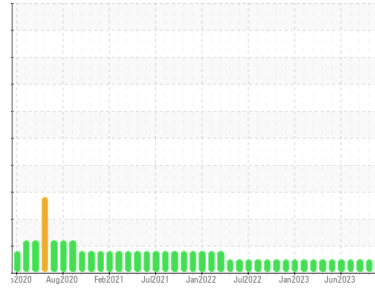




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**Direct Strip Mill/Caster**  
 Machine Id  
**LLO.3 CIRCULATING LUBE OIL SYSTEM (DSC032) (S/N 1000026092)**  
 Component  
**Gear Lube System**  
 Fluid  
**GEAR OIL ISO 460 (3720 LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.

### Wear

Component wear rates appear to be normal (unconfirmed).

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

### 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>WC0837570</b>	WC0837409	WC0837304
Sample Date	Client Info		<b>18 Jan 2024</b>	14 Nov 2023	27 Sep 2023
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >150	<b>3</b>	2	4
Chromium	ppm	ASTM D5185(m) >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m) >25	<b>&lt;1</b>	0	<1
Lead	ppm	ASTM D5185(m) >100	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m) >50	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m) >5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 50	<b>&lt;1</b>	<1	<1
Barium	ppm	ASTM D5185(m) 15	<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m) 15	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 50	<b>0</b>	0	0
Calcium	ppm	ASTM D5185(m) 50	<b>1</b>	<1	<1
Phosphorus	ppm	ASTM D5185(m) 350	<b>91</b>	97	106
Zinc	ppm	ASTM D5185(m) 100	<b>3</b>	3	3
Sulfur	ppm	ASTM D5185(m) 12500	<b>9762</b>	9740	9638
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

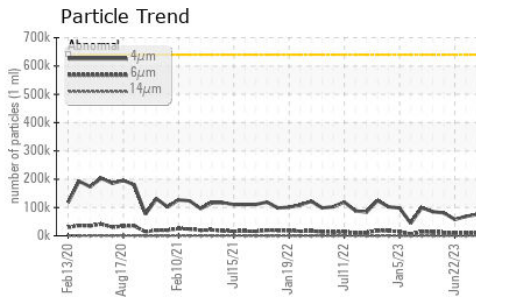
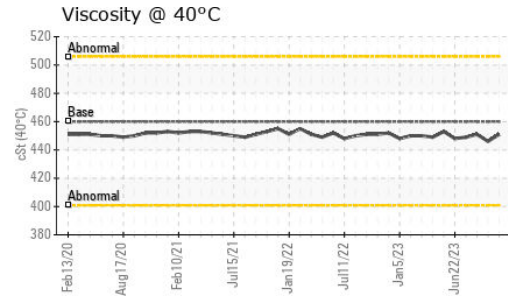
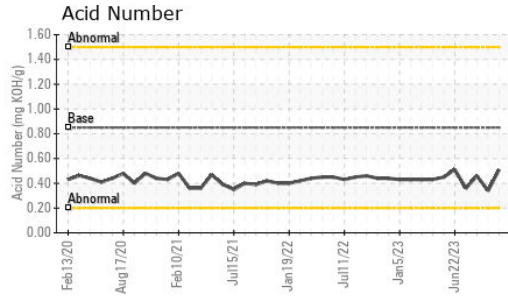
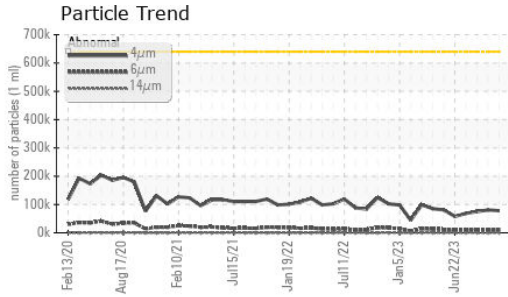
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	<b>2</b>	3	3
Sodium	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	0

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>640000	<b>78094</b>	80659	75374
Particles >6µm	ASTM D7647	>160000	<b>11446</b>	9635	10183
Particles >14µm	ASTM D7647	>40000	<b>95</b>	93	116
Particles >21µm	ASTM D7647	>10000	<b>9</b>	9	15
Particles >38µm	ASTM D7647	>2500	<b>1</b>	0	1
Particles >71µm	ASTM D7647	>640	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>26/24/22	<b>23/21/14</b>	24/20/14	23/21/14



# OIL ANALYSIS REPORT

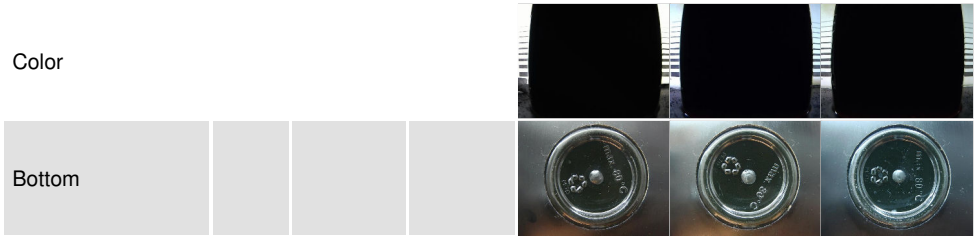


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.85	<b>0.51</b>	0.34	0.46

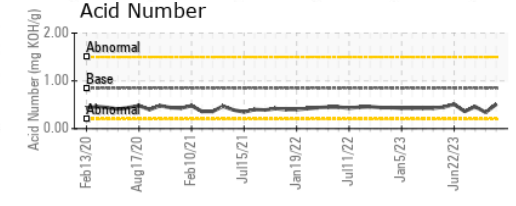
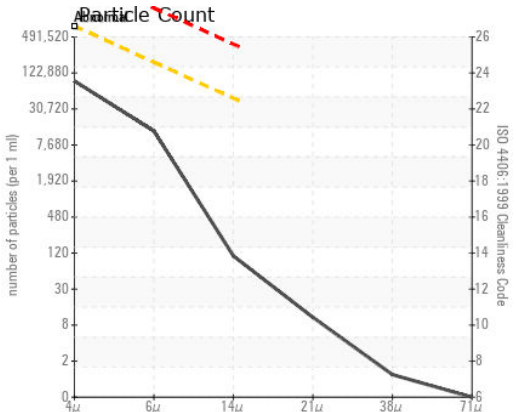
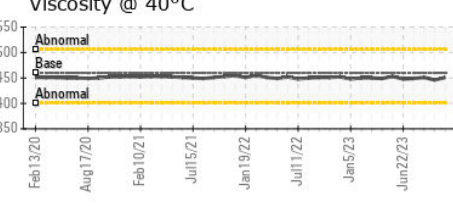
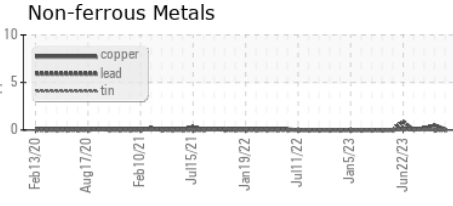
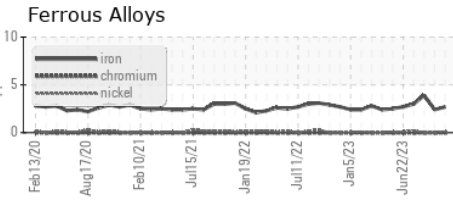
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	460	<b>451</b>	446	451

## SAMPLE IMAGES



## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **ALGOMA STEEL INC. - STORES DEPT.**  
**Sample No.** : WC0837570 **Received** : 22 Jan 2024 301 WALLACE TERRACE  
**Lab Number** : **02610383** **Diagnosed** : 23 Jan 2024 SAULT STE MARIE, ON  
**Unique Number** : 5711469 **Diagnostician** : Kevin Marson CA P6C 1K8  
**Test Package** : IND 2 ( Additional Tests: TAN Man )  
 Contact: Algoma Reliability  
 algomareliability@algoma.com  
 T: (705)206-1059  
 F: (705)945-3585

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.