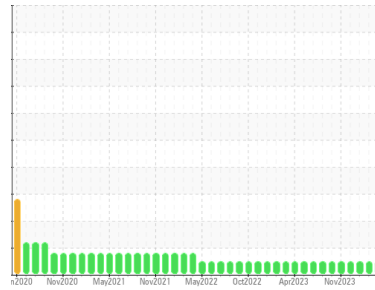




OIL ANALYSIS REPORT

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	WC0931236	WC0780551	WC0837376
Sample Date	Client Info	11 Jun 2024	16 Apr 2024	29 Feb 2024
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	NORMAL	NORMAL

CONTAMINATION

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

WEAR METALS

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

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185(m)	50	<1	<1	<1
Barium	ppm	ASTM D5185(m)	15	0	0	0
Molybdenum	ppm	ASTM D5185(m)	15	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	50	<1	0	0
Calcium	ppm	ASTM D5185(m)	50	0	0	0
Phosphorus	ppm	ASTM D5185(m)	350	69	69	82
Zinc	ppm	ASTM D5185(m)	100	2	2	2
Sulfur	ppm	ASTM D5185(m)	12500	8782	8762	10112
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

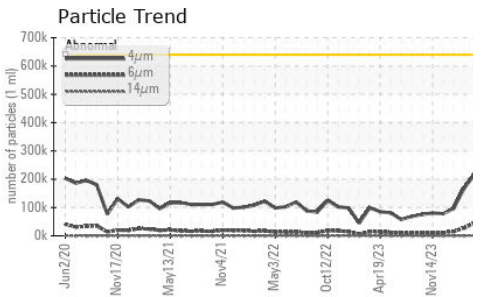
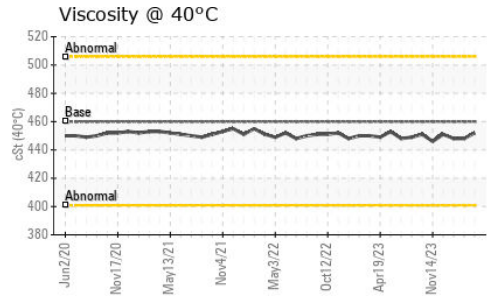
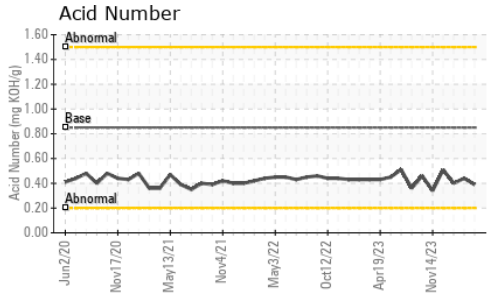
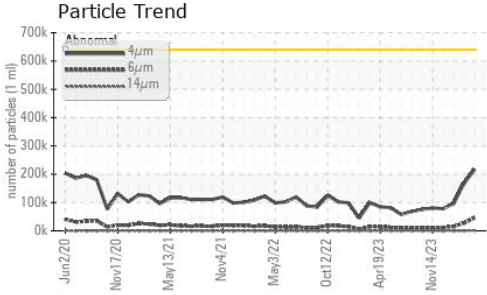
method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	>50	<1	<1	2
Sodium	ppm	ASTM D5185(m)		2	0	0
Potassium	ppm	ASTM D5185(m)	>20	2	0	<1

FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>640000	217265	168392	97000
Particles >6µm	ASTM D7647	>160000	45906	27392	14836
Particles >14µm	ASTM D7647	>40000	584	447	160
Particles >21µm	ASTM D7647	>10000	65	43	18
Particles >38µm	ASTM D7647	>2500	2	0	0
Particles >71µm	ASTM D7647	>640	1	0	0
Oil Cleanliness	ISO 4406 (c)	>26/24/22	25/23/16	25/22/16	24/21/14



OIL ANALYSIS REPORT

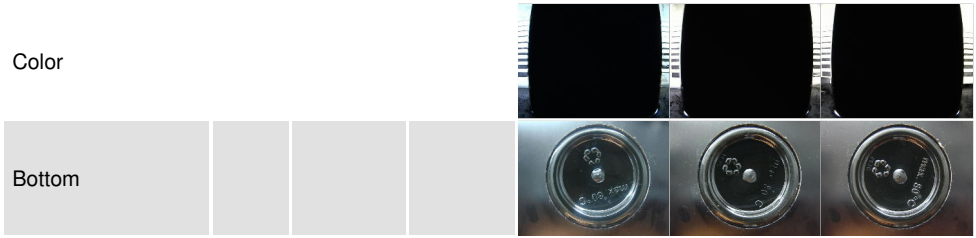


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.85	0.39	0.44	0.40

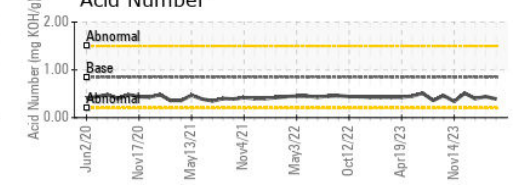
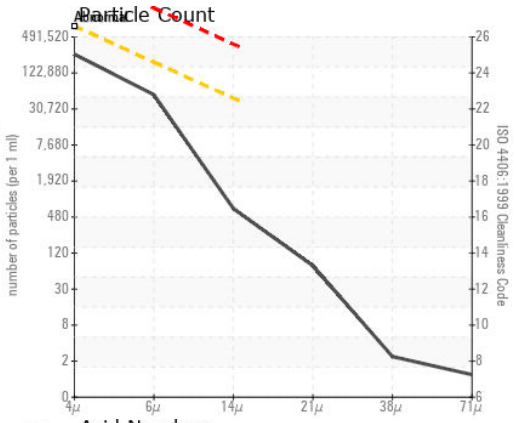
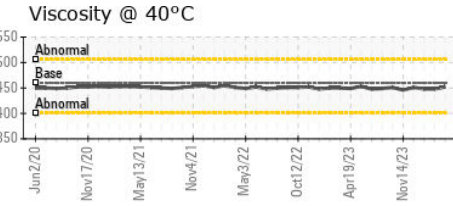
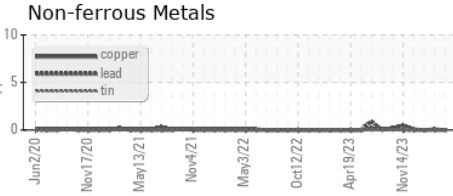
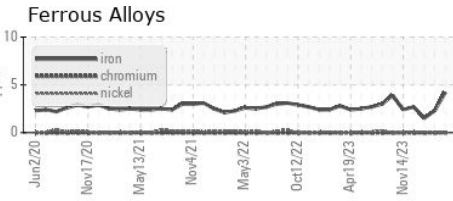
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	460	452	448	448

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **ALGOMA STEEL INC. - STORES DEPT.**
Sample No. : WC0931236 **Received** : 14 Jun 2024 **301 WALLACE TERRACE**
Lab Number : **02642119** **Tested** : 17 Jun 2024 **SAULT STE MARIE, ON**
Unique Number : 5799658 **Diagnosed** : 17 Jun 2024 - Kevin Marson **CA P6C 1K8**
Test Package : IND 2 (Additional Tests: TAN Man) **Contact: Algoma Reliability**
algomareliability@algoma.com

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.