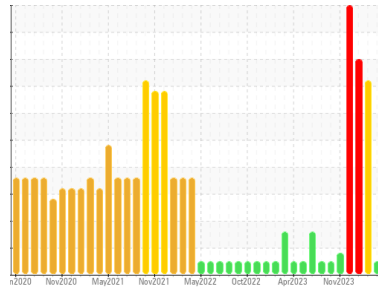




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

Direct Strip Mill/Finishing

Machine Id

NL1 ROUGHER MORGOIL SYSTEM (DSC016) (S/N 1000016795)

Component

Gear Lube System

Fluid

SHELL OMALA 680 (6000 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

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	WC0931098	WC0837483	WC0837544
Sample Date	Client Info	11 Jun 2024	16 Apr 2024	28 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	SEVERE	SEVERE

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	41	▲ 240	▲ 247
Chromium	ppm	ASTM D5185(m) >10	<1	2	2
Nickel	ppm	ASTM D5185(m) >10	<1	1	1
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	0	0	0
Aluminum	ppm	ASTM D5185(m) >25	<1	2	3
Lead	ppm	ASTM D5185(m) >100	0	0	<1
Copper	ppm	ASTM D5185(m) >50	1	7	7
Tin	ppm	ASTM D5185(m) >10	7	▲ 52	▲ 53
Antimony	ppm	ASTM D5185(m) >5	0	● 3	● 3
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)	<1	1	<1
Barium	ppm	ASTM D5185(m)	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0
Manganese	ppm	ASTM D5185(m)	<1	4	4
Magnesium	ppm	ASTM D5185(m)	<1	1	2
Calcium	ppm	ASTM D5185(m)	1	4	4
Phosphorus	ppm	ASTM D5185(m) 512	207	171	183
Zinc	ppm	ASTM D5185(m) 3.8	2	6	7
Sulfur	ppm	ASTM D5185(m) 8167	7839	7610	8314
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

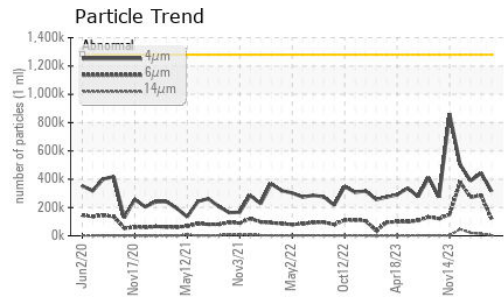
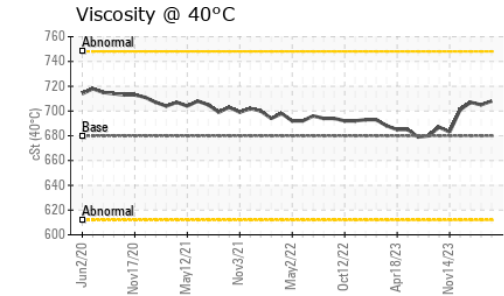
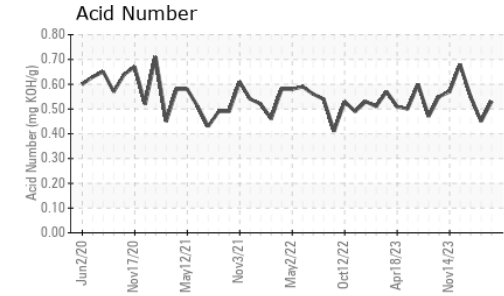
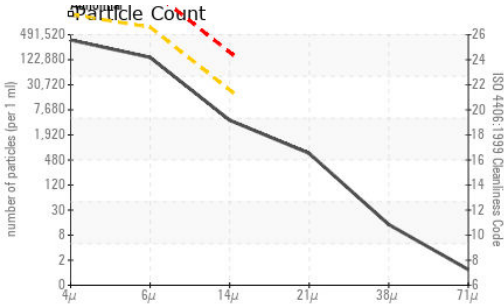
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >50	1	2	3
Sodium	ppm	ASTM D5185(m)	1	4	4
Potassium	ppm	ASTM D5185(m) >20	1	3	3

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >1280000	314792	442731	388463
Particles >6µm	ASTM D7647 >640000	120633	284899	273804
Particles >14µm	ASTM D7647 >20000	3780	13543	● 20873
Particles >21µm	ASTM D7647 >5000	608	1171	2029
Particles >38µm	ASTM D7647 >1300	12	11	12
Particles >71µm	ASTM D7647 >320	1	0	0
Oil Cleanliness	ISO 4406 (c) >27/26/21	25/24/19	26/25/21	● 26/25/22



OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.53	0.45	0.55

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)	680	708	705	707

SAMPLE IMAGES		method	limit/base	current	history1	history2
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Color			
Bottom			
PrFilter	no image	no image	no image



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0931098
Lab Number : **02642108**
Unique Number : 5799647
Test Package : IND 2 (Additional Tests: TAN Man)

ALGOMA STEEL INC. - STORES DEPT.
 301 WALLACE TERRACE
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 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.