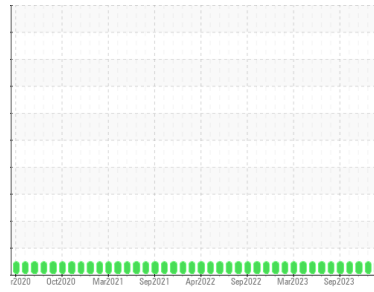




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

Direct Strip Mill/Finishing

Machine Id

NH1 HYDRAULIC SYSTEM - CONDITIONING (DSC001) (S/N 1000014279)

Component

Hydraulic System

Fluid

SHELL TELLUS S2 MX 46 (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			WC0813579	WC0837438	WC0837445
Sample Date	Client Info			16 Apr 2024	28 Feb 2024	18 Jan 2024
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	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		>0.05	NEG	NEG	NEG

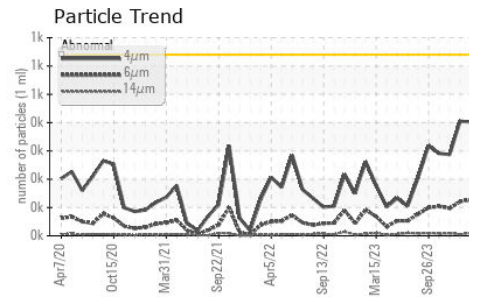
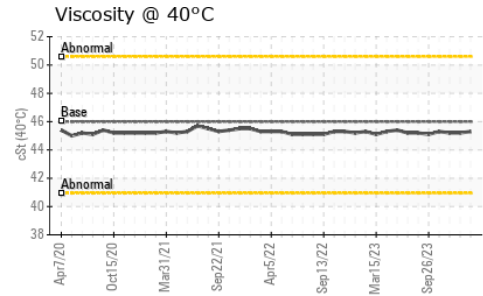
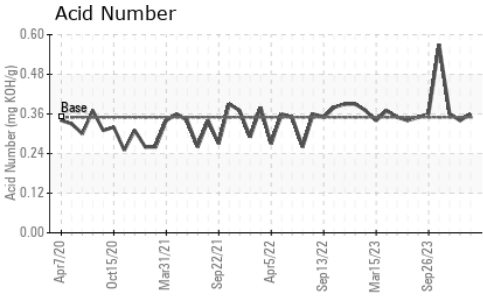
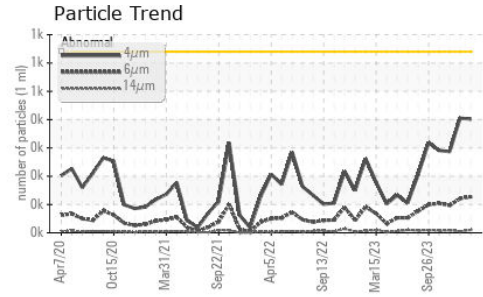
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>40	<1	<1	<1
Chromium	ppm	ASTM D5185(m)	>4	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	<1	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>4	0	<1	<1
Lead	ppm	ASTM D5185(m)	>10	0	<1	0
Copper	ppm	ASTM D5185(m)	>60	<1	1	1
Tin	ppm	ASTM D5185(m)	>4	0	0	0
Antimony	ppm	ASTM D5185(m)		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)	0	0	0	0
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	70	31	27	27
Calcium	ppm	ASTM D5185(m)	10	15	16	16
Phosphorus	ppm	ASTM D5185(m)	300	268	283	274
Zinc	ppm	ASTM D5185(m)	325	299	295	291
Sulfur	ppm	ASTM D5185(m)	665	629	764	686
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

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

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>640	402	405	287
Particles >6µm		ASTM D7647	>160	127	121	97
Particles >14µm		ASTM D7647	>20	10	5	9
Particles >21µm		ASTM D7647	>4	2	1	1
Particles >38µm		ASTM D7647	>3	0	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>16/14/11	16/14/10	16/14/10	15/14/10

OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.35	0.36	0.34	0.36

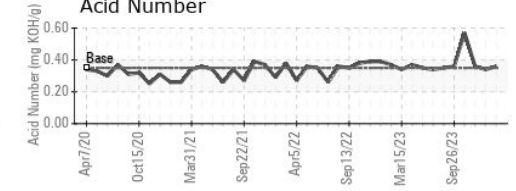
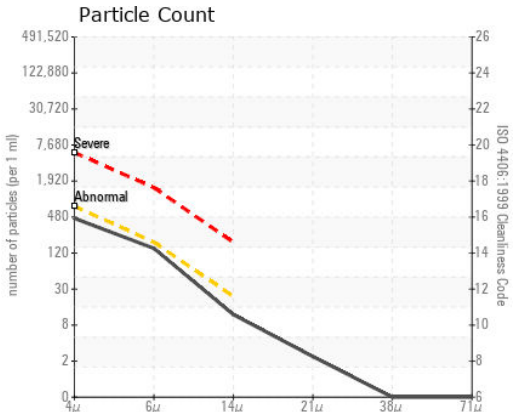
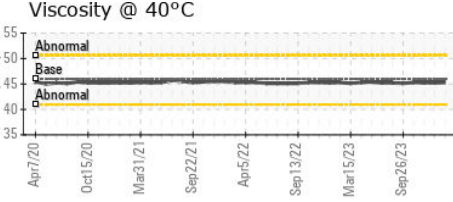
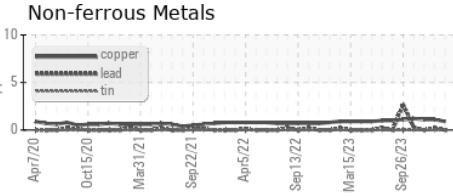
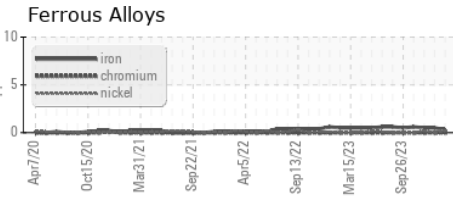
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	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)	46.0	45.3	45.2	45.2

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **ALGOMA STEEL INC. - STORES DEPT.**
Sample No. : WC0813579 **Received** : 22 Apr 2024 **301 WALLACE TERRACE**
Lab Number : **02630571** **Tested** : 23 Apr 2024 **SAULT STE MARIE, ON**
Unique Number : 5763703 **Diagnosed** : 23 Apr 2024 - Kevin Marson **CA P6C 1K8**
Test Package : IND 2 **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.