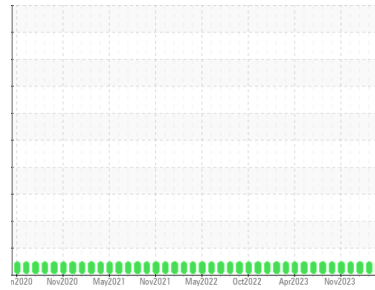




# OIL ANALYSIS REPORT

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	<b>WC0837395</b>	WC0813579	WC0837438
Sample Date	Client Info	<b>11 Jun 2024</b>	16 Apr 2024	28 Feb 2024
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 >0.05	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >40	<b>&lt;1</b>	<1	<1
Chromium	ppm ASTM D5185(m) >4	<b>0</b>	0	0
Nickel	ppm ASTM D5185(m) >20	<b>0</b>	<1	0
Titanium	ppm ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm ASTM D5185(m)	<b>0</b>	0	0
Aluminum	ppm ASTM D5185(m) >4	<b>0</b>	0	<1
Lead	ppm ASTM D5185(m) >10	<b>0</b>	0	<1
Copper	ppm ASTM D5185(m) >60	<b>1</b>	<1	1
Tin	ppm ASTM D5185(m) >4	<b>0</b>	0	0
Antimony	ppm ASTM D5185(m)	<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) 0	<b>2</b>	0	0
Barium	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Magnesium	ppm ASTM D5185(m) 70	<b>38</b>	31	27
Calcium	ppm ASTM D5185(m) 10	<b>14</b>	15	16
Phosphorus	ppm ASTM D5185(m) 300	<b>271</b>	268	283
Zinc	ppm ASTM D5185(m) 325	<b>295</b>	299	295
Sulfur	ppm ASTM D5185(m) 665	<b>709</b>	629	764
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

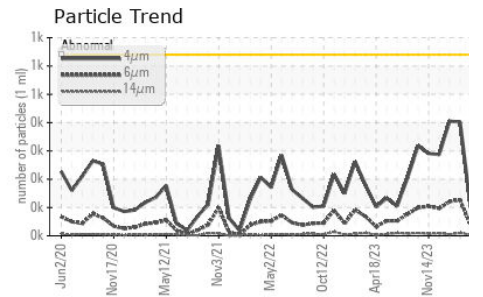
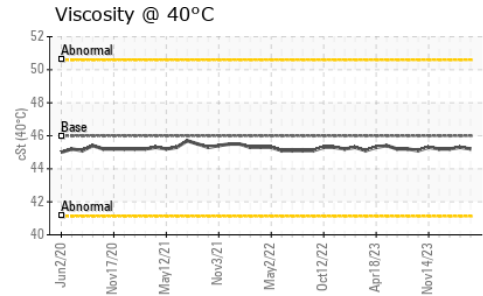
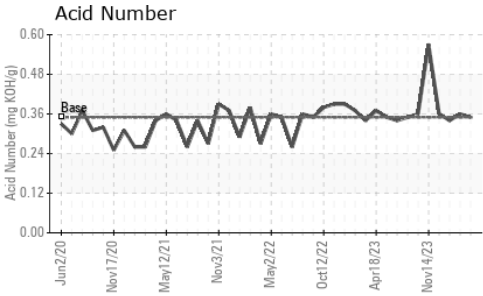
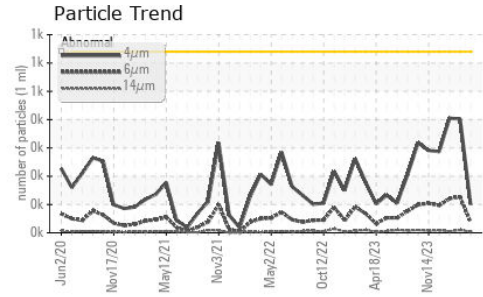
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >20	<b>0</b>	0	<1
Sodium	ppm ASTM D5185(m)	<b>2</b>	<1	<1
Potassium	ppm ASTM D5185(m) >20	<b>3</b>	0	<1

## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >640	<b>100</b>	402	405
Particles >6µm	ASTM D7647 >160	<b>37</b>	127	121
Particles >14µm	ASTM D7647 >20	<b>4</b>	10	5
Particles >21µm	ASTM D7647 >4	<b>1</b>	2	1
Particles >38µm	ASTM D7647 >3	<b>0</b>	0	0
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0

method	limit/base	current	history1	history2
Oil Cleanliness	ISO 4406 (c) >16/14/11	<b>14/12/9</b>	16/14/10	16/14/10

# OIL ANALYSIS REPORT

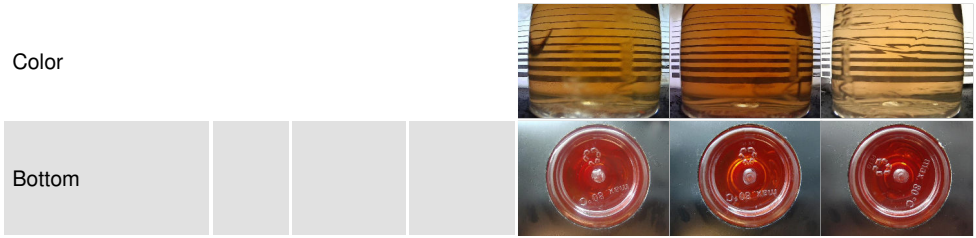


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.35	<b>0.35</b>	0.36	0.34

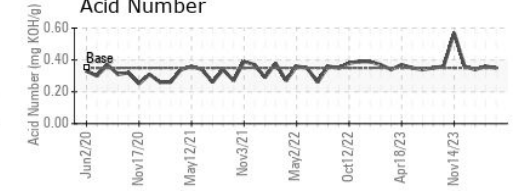
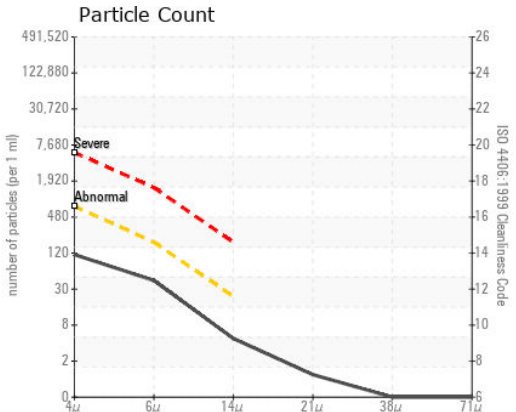
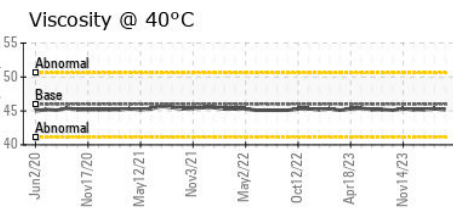
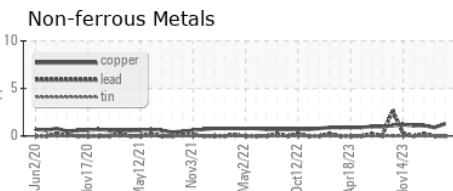
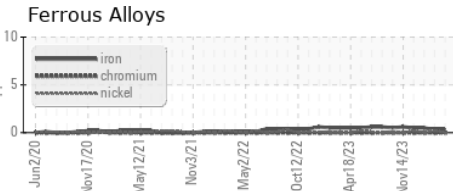
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	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*	>0.05	<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)	46.0	<b>45.2</b>	45.3	45.2

### SAMPLE IMAGES



### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0837395  
**Lab Number** : 02642005  
**Unique Number** : 5799544  
**Test Package** : IND 2

**ALGOMA STEEL INC. - STORES DEPT.**  
 301 WALLACE TERRACE  
 SAULT STE MARIE, ON  
 CA P6C 1K8  
 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.