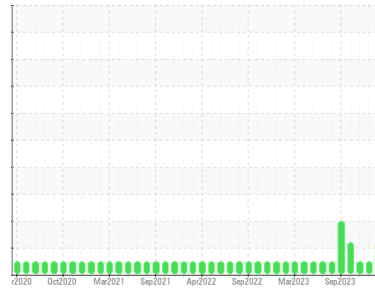




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

## Direct Strip Mill/Finishing

Machine Id  
**PH4 HYDRAULIC SYSTEM - CONDITIONING (DSC005) (S/N 1000015320)**

Component

**Hydraulic System**

Fluid

**SHELL TELLUS S2 MX 46 (12000 LTR)**

### DIAGNOSIS

#### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

#### 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>WC0813576</b>	WC0837441	WC0837448
Sample Date	Client Info			<b>16 Apr 2024</b>	28 Feb 2024	18 Jan 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>ATTENTION</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.05	<b>NEG</b>	NEG	NEG

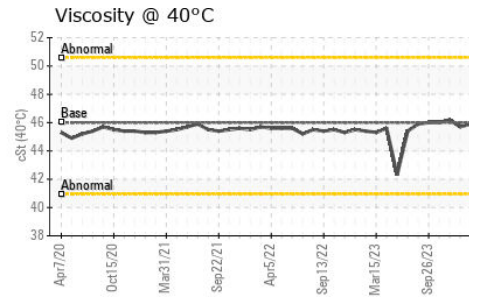
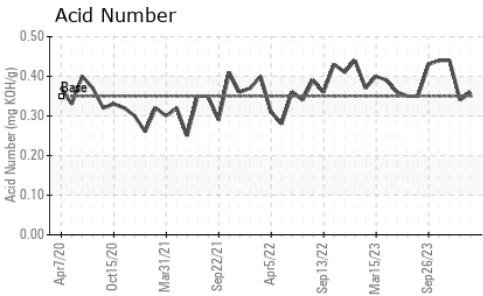
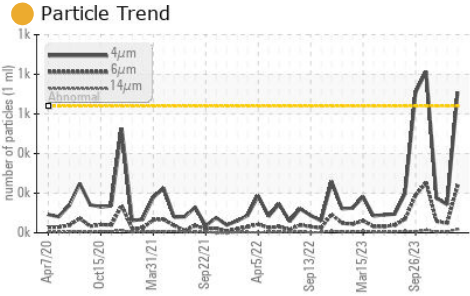
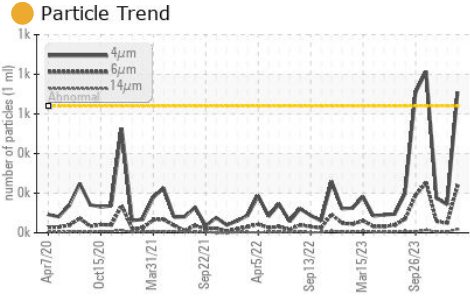
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	<1	<1
Chromium	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>60	<b>&lt;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>0</b>	<1	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>64</b>	64	64
Calcium	ppm	ASTM D5185(m)	10	<b>12</b>	13	13
Phosphorus	ppm	ASTM D5185(m)	300	<b>269</b>	283	291
Zinc	ppm	ASTM D5185(m)	325	<b>331</b>	335	337
Sulfur	ppm	ASTM D5185(m)	665	<b>623</b>	733	701
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	0
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>640	<b>711</b>	143	174	
Particles >6µm	ASTM D7647	>160	<b>237</b>	49	57	
Particles >14µm	ASTM D7647	>20	<b>18</b>	6	5	
Particles >21µm	ASTM D7647	>4	<b>4</b>	2	1	
Particles >38µm	ASTM D7647	>3	<b>0</b>	0	0	
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0	
Oil Cleanliness	ISO 4406 (c)	>16/14/11	<b>17/15/11</b>	14/13/10	15/13/10	

# OIL ANALYSIS REPORT

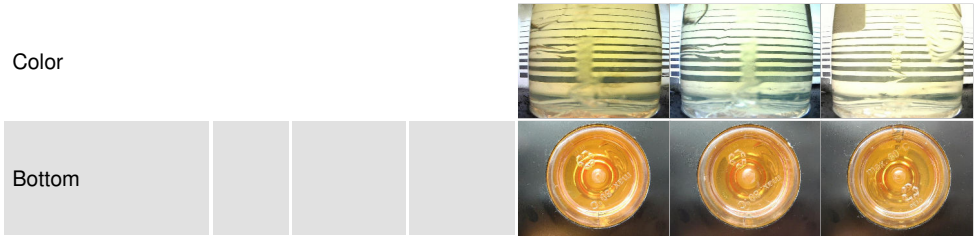


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.35	<b>0.36</b>	0.34	0.44

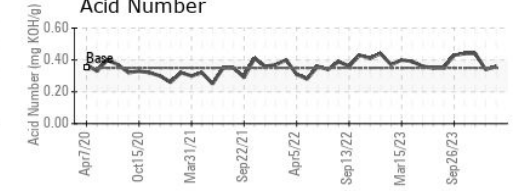
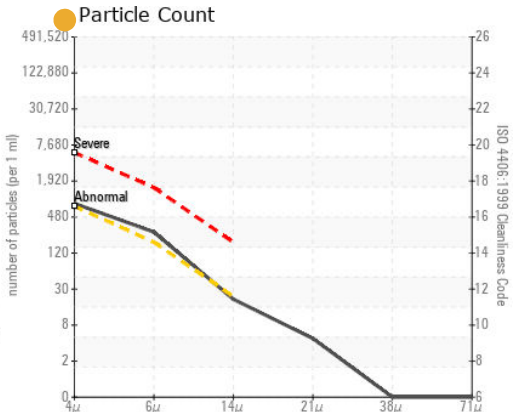
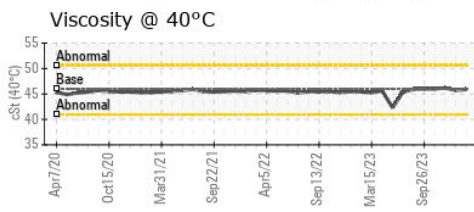
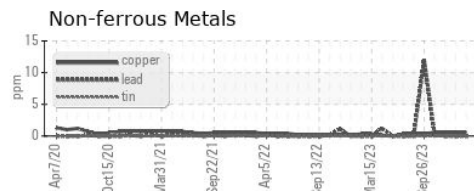
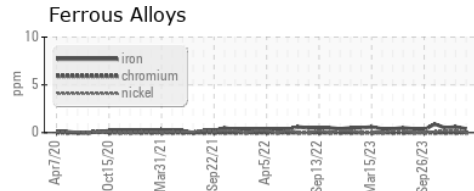
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	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>45.9</b>	45.7	46.2

SAMPLE IMAGES		method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **ALGOMA STEEL INC. - STORES DEPT.**  
**Sample No.** : WC0813576 **Received** : 22 Apr 2024 **301 WALLACE TERRACE**  
**Lab Number** : **02630572** **Tested** : 23 Apr 2024 **SAULT STE MARIE, ON**  
**Unique Number** : 5763704 **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.