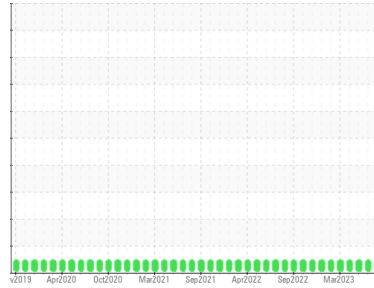




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



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

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>WC0780831</b>	WC0813656	WC0780804
Sample Date	Client Info		<b>08 Aug 2023</b>	21 Jun 2023	15 May 2023
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

## 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>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185(m) >10	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m) >60	<b>&lt;1</b>	<1	0
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>&lt;1</b>	<1	<1
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>66</b>	65	65
Calcium	ppm	ASTM D5185(m) 10	<b>13</b>	14	13
Phosphorus	ppm	ASTM D5185(m) 300	<b>298</b>	304	310
Zinc	ppm	ASTM D5185(m) 325	<b>345</b>	350	341
Sulfur	ppm	ASTM D5185(m) 665	<b>650</b>	685	705
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>0</b>	0	0
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	0

## FLUID CLEANLINESS

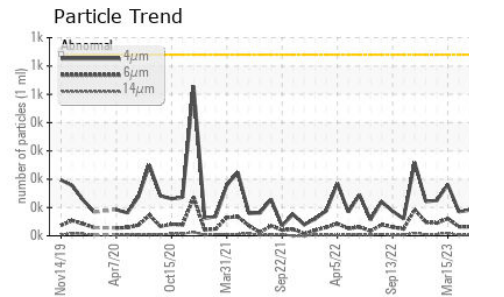
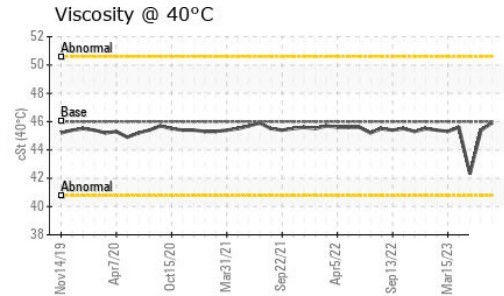
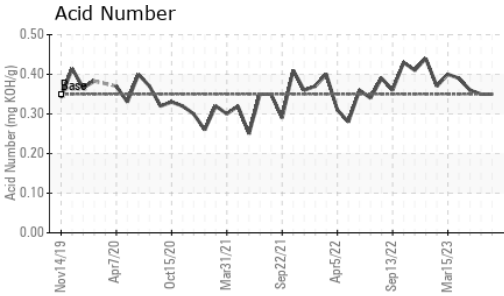
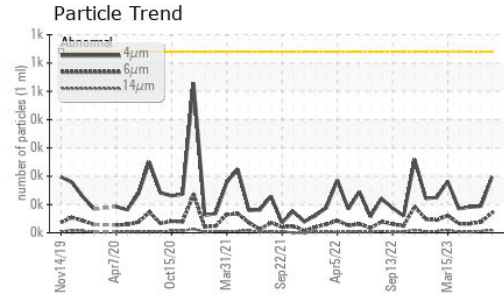
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>640	<b>198</b>	94	91
Particles >6µm	ASTM D7647	>160	<b>70</b>	38	32
Particles >14µm	ASTM D7647	>20	<b>9</b>	6	3
Particles >21µm	ASTM D7647	>4	<b>3</b>	2	1
Particles >38µm	ASTM D7647	>3	<b>0</b>	0	1
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	1
Oil Cleanliness	ISO 4406 (c)	>16/14/11	<b>15/13/10</b>	14/12/10	14/12/9

## FLUID DEGRADATION

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



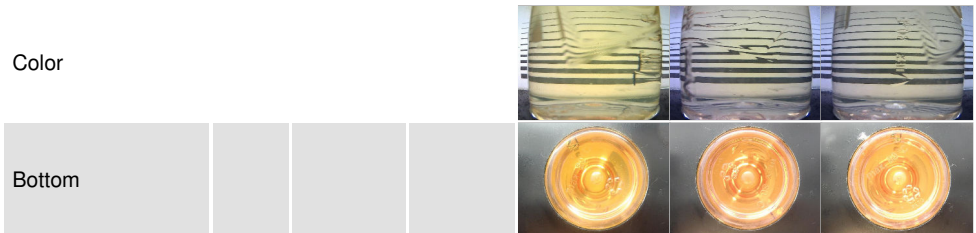
# OIL ANALYSIS REPORT



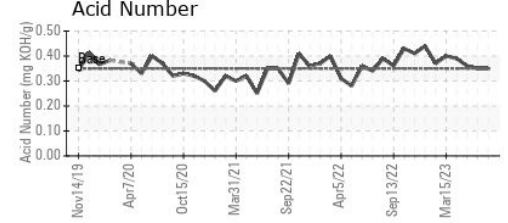
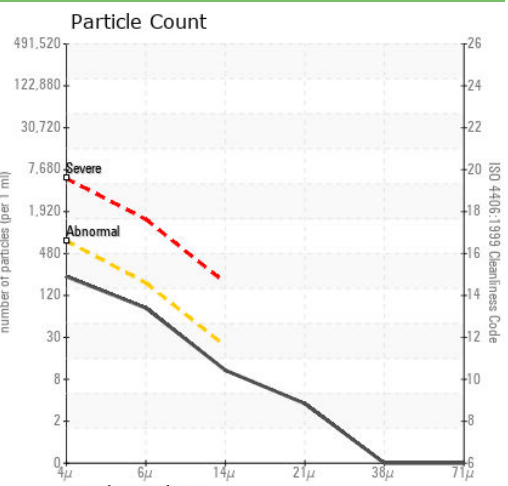
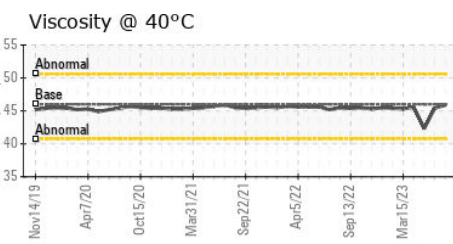
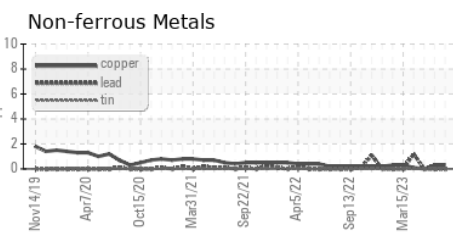
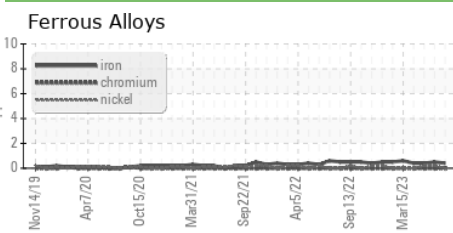
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46.0	45.9	45.4

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.** : WC0780831 **Received** : 11 Aug 2023 **301 WALLACE TERRACE**  
**Lab Number** : 02575363 **Diagnosed** : 14 Aug 2023 **SAULT STE MARIE, ON**  
**Unique Number** : 5620414 **Diagnostician** : Wes Davis **CA P6C 1K8**  
**Test Package** : IND 2

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.

Contact: Algoma Reliability  
 algomareliability@algoma.com  
 T: (705)206-1059  
 F: (705)945-3585