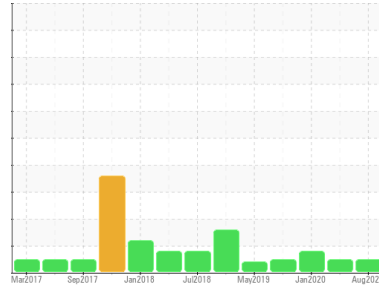




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

Wide Cold Mill/Reduction Mill

Machine Id

80" REDUCTION MILL AGC HYD - WORKING (WCM038) (S/N 1000005878)

Component

Hydraulic System

Fluid

AW HYDRAULIC OIL ISO 46 (800 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

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	WC0752307	WC0434879	WC0419677
Sample Date	Client Info	22 Aug 2023	12 Nov 2020	29 Jan 2020
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	NORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185(m)	>20	<1	<1	0
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)		<1	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	0	<1	0
Lead	ppm	ASTM D5185(m)	>20	0	<1	<1
Copper	ppm	ASTM D5185(m)	>20	8	14	11
Tin	ppm	ASTM D5185(m)	>20	0	<1	<1
Antimony	ppm	ASTM D5185(m)		0	0	<1
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)	5	0	<1	<1
Barium	ppm	ASTM D5185(m)	5	0	0	0
Molybdenum	ppm	ASTM D5185(m)	5	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	25	<1	<1	<1
Calcium	ppm	ASTM D5185(m)	200	56	31	26
Phosphorus	ppm	ASTM D5185(m)	300	268	279	271
Zinc	ppm	ASTM D5185(m)	370	309	345	334
Sulfur	ppm	ASTM D5185(m)	2500	679	724	738
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	>15	0	<1	0
Sodium	ppm	ASTM D5185(m)		0	<1	0
Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1

FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>1300	667	---	▲ 3075
Particles >6µm	ASTM D7647	>320	214	---	▲ 1064
Particles >14µm	ASTM D7647	>80	14	---	74
Particles >21µm	ASTM D7647	>20	6	---	19
Particles >38µm	ASTM D7647	>4	1	---	0
Particles >71µm	ASTM D7647	>3	0	---	0
Oil Cleanliness	ISO 4406 (c)	>17/15/13	17/15/11	---	▲ 19/17/13

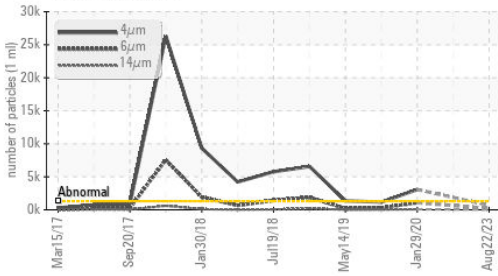
FLUID DEGRADATION

method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	0.27	---	0.334

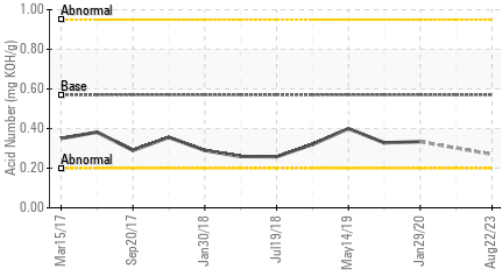


OIL ANALYSIS REPORT

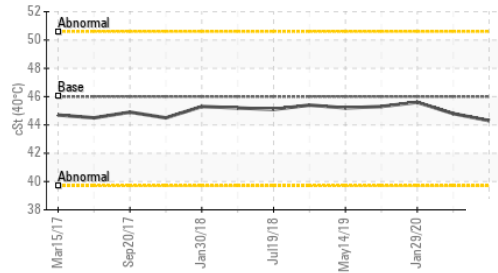
Particle Trend



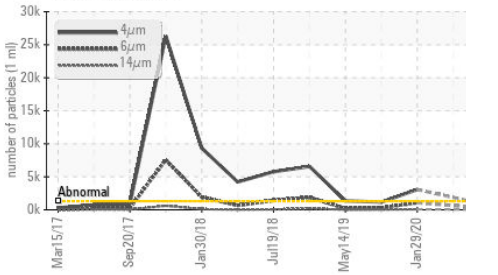
Acid Number



Viscosity @ 40°C



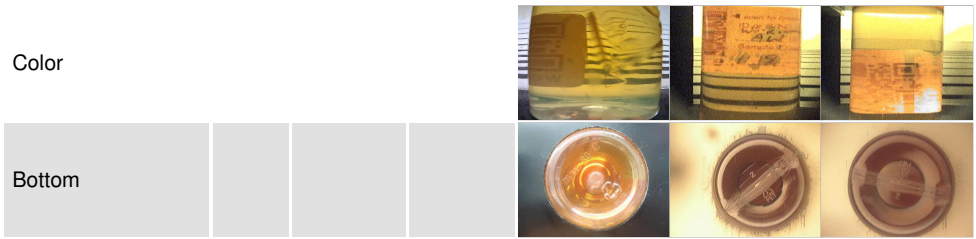
Particle Trend



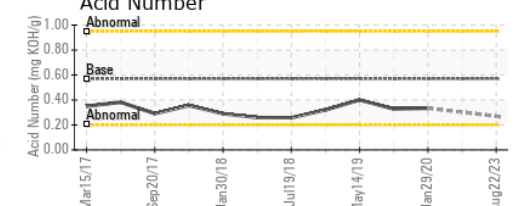
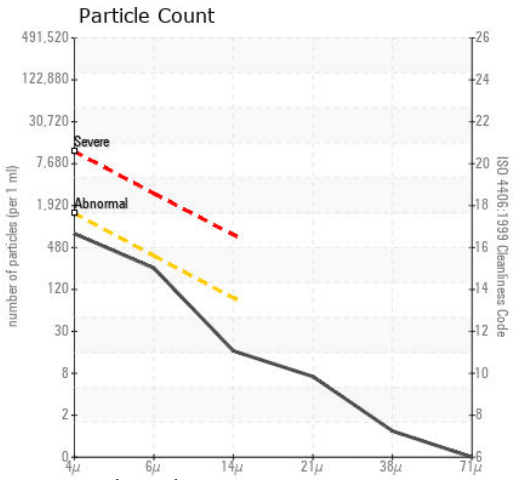
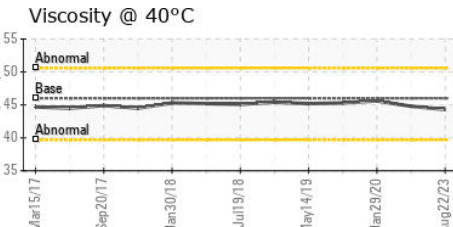
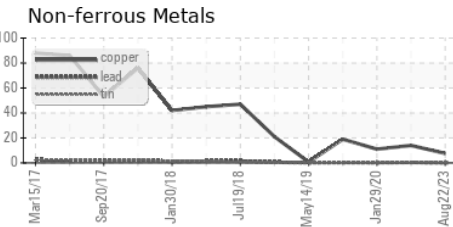
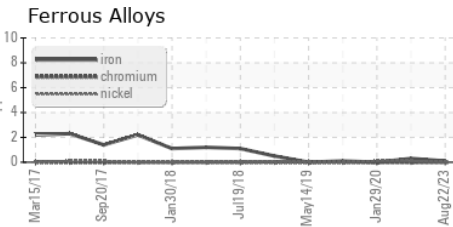
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	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	44.3	44.8

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. : WC0752307 **Received** : 23 Aug 2023 **301 WALLACE TERRACE**
Lab Number : 02577734 **Diagnosed** : 24 Aug 2023 **SAULT STE MARIE, ON**
Unique Number : 5630794 **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.