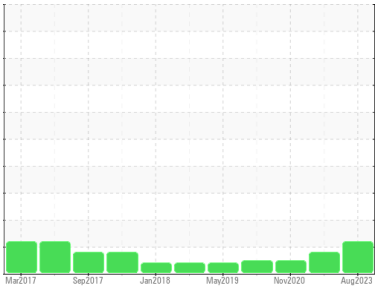
PROBLEM SUMMARY

Sample Rating Trend

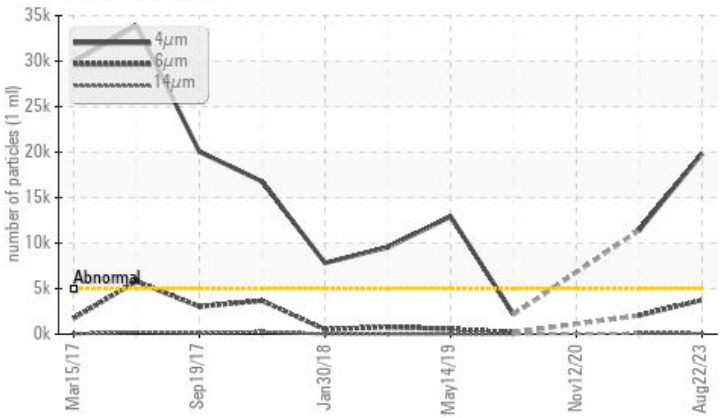


ISO

Area
Wide Cold Mill/Reduction Mill
Machine Id
80" MILL MAIN HYD (WCM003) (S/N 1000005874)
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 46 (5000 GAL)

COMPONENT CONDITION SUMMARY

Particle Trend



RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	NORMAL
Particles >4µm		ASTM D7647	>5000	▲ **19835**	▲ 11417	---
Particles >6µm		ASTM D7647	>1300	▲ **3752**	▲ 2056	---
Oil Cleanliness		ISO 4406 (c)	>19/17/16	▲ **21/19/14**	▲ 21/18/14	---

Customer Id: ALGSSM
Sample No.: WC0752306
Lab Number: 02577736
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

To change component or sample information:
Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample.

HISTORICAL DIAGNOSIS

29 Jan 2021 Diag: Wes Davis

ISO

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using Advanced Oil Monitoring (AOM) kits for this system. The AOM test package includes advanced level testing to determine the suitability of turbine and large industrial compressor oils for continued use.All component wear rates are normal. Particles >4µm are abnormally high. Particles >6µm are notably high. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service (unconfirmed). The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report

12 Nov 2020 Diag: Wes Davis

NORMAL

Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using Advanced Oil Monitoring (AOM) kits for this system. The AOM test package includes advanced level testing to determine the suitability of turbine and large industrial compressor oils for continued use.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service (unconfirmed).

view report

10 Oct 2019 Diag: Wes Davis

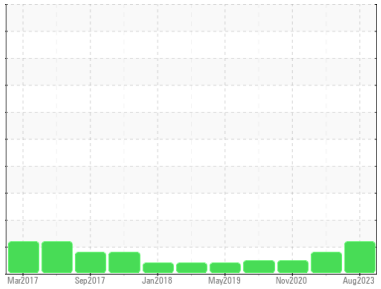
NORMAL

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using Advanced Oil Monitoring (AOM) kits for this system. The AOM test package includes advanced level testing to determine the suitability of turbine and large industrial compressor oils for continued use.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service (unconfirmed).

view report

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
Wide Cold Mill/Reduction Mill
Machine Id
80" MILL MAIN HYD (WCM003) (S/N 1000005874)
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 46 (5000 GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0752306**	WC0419569	WC0434886
Sample Date		Client Info		**22 Aug 2023**	29 Jan 2021	12 Nov 2020
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				**ABNORMAL**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	**<1**	<1	1
Chromium	ppm	ASTM D5185(m)	>20	**0**	0	0
Nickel	ppm	ASTM D5185(m)	>20	**0**	0	0
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	**0**	<1	<1
Lead	ppm	ASTM D5185(m)	>20	**0**	0	<1
Copper	ppm	ASTM D5185(m)	>20	**<1**	<1	2
Tin	ppm	ASTM D5185(m)	>20	**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

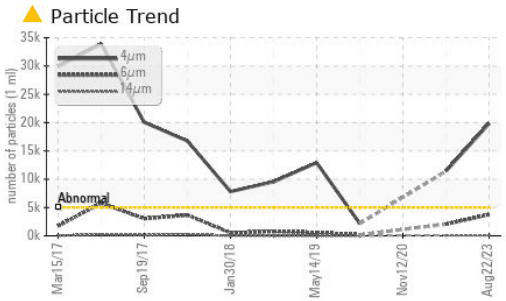
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	5	**<1**	<1	<1
Barium	ppm	ASTM D5185(m)	5	**0**	0	<1
Molybdenum	ppm	ASTM D5185(m)	5	**0**	0	0
Manganese	ppm	ASTM D5185(m)		**0**	0	0
Magnesium	ppm	ASTM D5185(m)	25	**1**	<1	<1
Calcium	ppm	ASTM D5185(m)	200	**68**	45	34
Phosphorus	ppm	ASTM D5185(m)	300	**276**	263	278
Zinc	ppm	ASTM D5185(m)	370	**319**	335	347
Sulfur	ppm	ASTM D5185(m)	2500	**820**	735	707
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

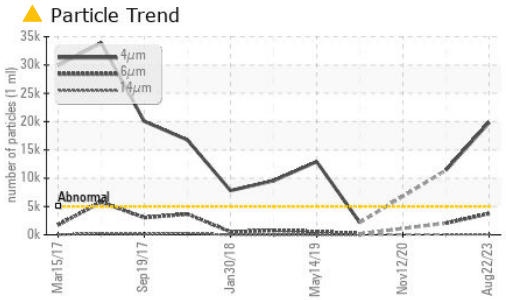
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	**<1**	<1	<1
Sodium	ppm	ASTM D5185(m)		**0**	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	**<1**	<1	<1

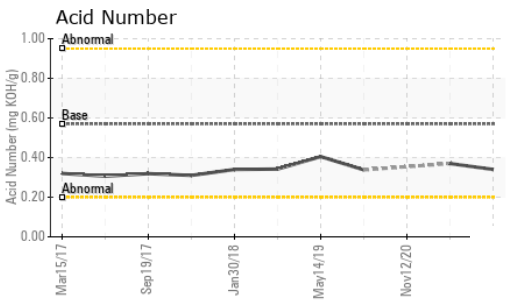
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **19835**	▲ 11417	---
Particles >6µm		ASTM D7647	>1300	▲ **3752**	▲ 2056	---
Particles >14µm		ASTM D7647	>640	**82**	90	---
Particles >21µm		ASTM D7647	>160	**12**	16	---
Particles >38µm		ASTM D7647	>40	**1**	1	---
Particles >71µm		ASTM D7647	>10	**1**	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/16	▲ **21/19/14**	▲ 21/18/14	---

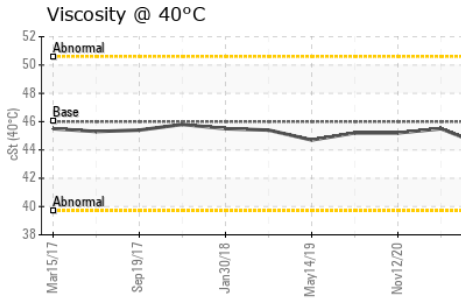
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	**0.34**	0.37	---

OIL ANALYSIS REPORT







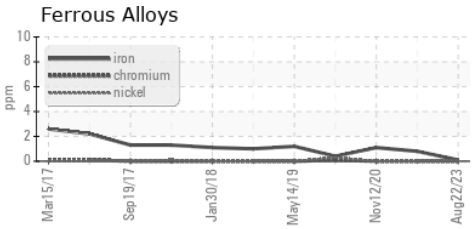


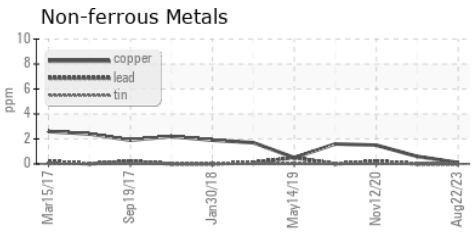
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	VLITE	NONE
Sand/Dirt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

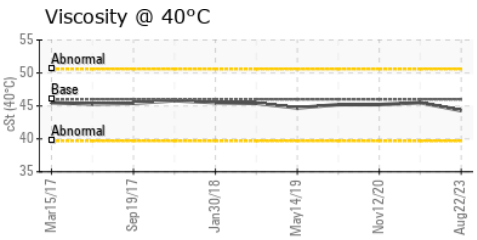
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46	**44.3**	45.5	45.2

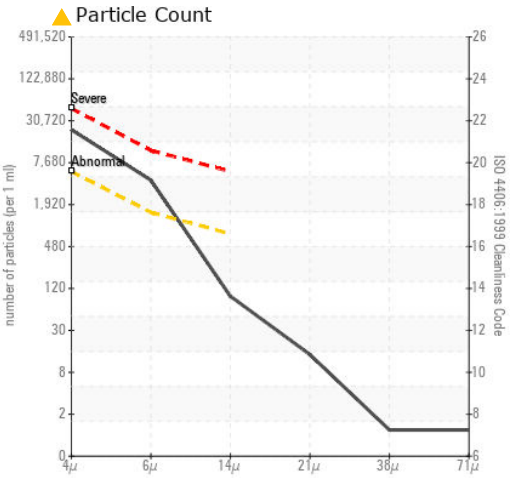
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

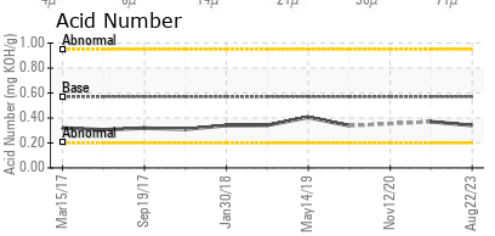
GRAPHS











ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **ALGOMA STEEL INC. - STORES DEPT.**
Sample No. : WC0752306 **Received** : 23 Aug 2023 301 WALLACE TERRACE
Lab Number : 02577736 **Diagnosed** : 24 Aug 2023 SAULT STE MARIE, ON
Unique Number : 5630796 **Diagnostician** : Wes Davis CA P6C 1K8
Test Package : IND 2 Contact: Algoma Reliability

To discuss this sample report, contact Customer Service at 1-800-268-2131. algomareliability@algoma.com
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (705)206-1059
Validity of results and interpretation are based on the sample and information as supplied. F: (705)945-3585