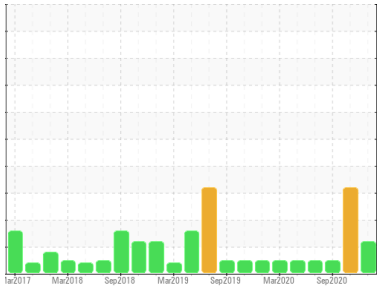
OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
Plate Mill/166 Hot Mill
Machine Id
4 HI ROLL BALANCE HYD (PLS040) (S/N 1000001421)
Component
Hydraulic System
Fluid
FIRE-RESISTANT FLUID ISO 32 (--- GAL)

DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We recommend you service the filters on this component. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. 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 light amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The pH level of this fluid is within the acceptable limits. The reserve alkalinity of this fluid is acceptable. The water concentration 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		**WC0813594**	WC0496431	WC0494800
Sample Date		Client Info		**08 Mar 2024**	23 Jan 2021	25 Sep 2020
Machine Age	days	Client Info		**0**	0	0
Oil Age	days	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ATTENTION**	ABNORMAL	NORMAL

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

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	5	**0**	12	2
Barium	ppm	ASTM D5185(m)	5	**<1**	0	<1
Molybdenum	ppm	ASTM D5185(m)	5	**0**	1	1
Manganese	ppm	ASTM D5185(m)		**0**	<1	<1
Magnesium	ppm	ASTM D5185(m)	5	**0**	3	2
Calcium	ppm	ASTM D5185(m)	50	**<1**	5	31
Phosphorus	ppm	ASTM D5185(m)	175	**2**	3	2
Zinc	ppm	ASTM D5185(m)	62	**0**	<1	1
Sulfur	ppm	ASTM D5185(m)	500	**56**	33	33
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	**0**	1	2
Sodium	ppm	ASTM D5185(m)		**24**	20	30
Potassium	ppm	ASTM D5185(m)	>20	**18**	10	16
Water	%	ASTM D6304*	>55	**34.9**	▲ 82.9	43.7
ppm Water	ppm	ASTM D6304*	>55000	**349000**	▲ 829000	437000

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**9423**	240	1900
Particles >6µm		ASTM D7647	>1300	**1839**	120	970
Particles >14µm		ASTM D7647	>160	**42**	15	120
Particles >21µm		ASTM D7647	>40	**4**	2	15
Particles >38µm		ASTM D7647	>10	**0**	0	2
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**20/18/13**	15/14/11	18/17/14

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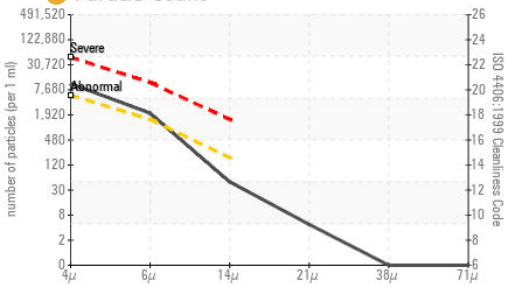
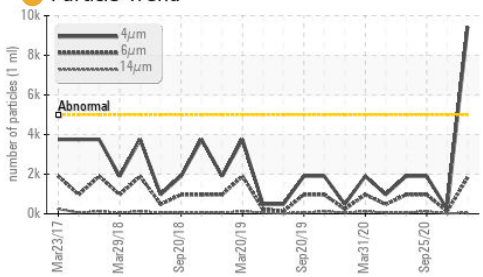
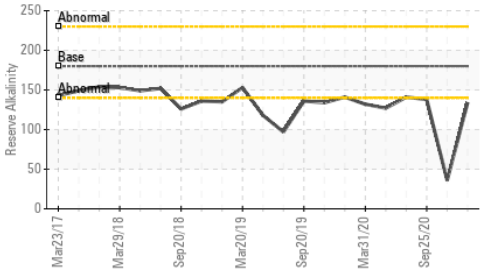
Particle Count



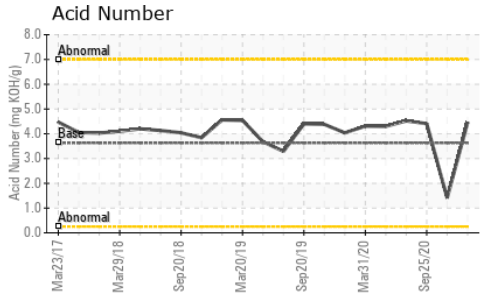
Particle Trend



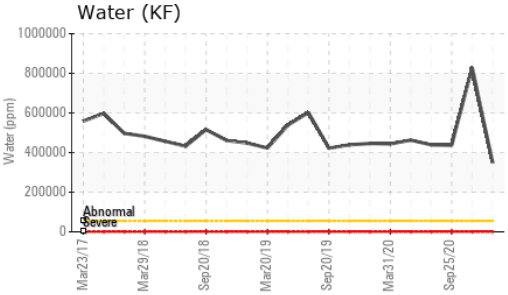
Reserve Alkalinity



Acid Number



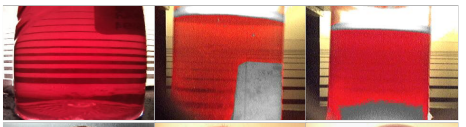
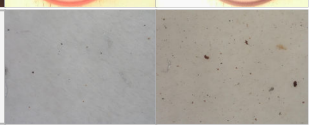
Water (KF)



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	3.63	**4.46**	1.41	4.41
Alkiline Reserve (Oils)	ml KOH/g	ASTM D1121*		**134**	▲ 36	138

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	VLITE
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Appearance	scalar	Visual*	NORML	**FRGLY**	NORML	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>55	**>10%**	>10%	>10%
Free Water	scalar	Visual*		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
pH	Scale 0-14	ASTM D1287*		**9.40**	9.63	9.52
Visc @ 40°C	cSt	ASTM D7279(m)	32	**32.0**	▲ 3.1	35.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					
PrtFilter			*no image* 		

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0813594
Lab Number : 02621605
Unique Number : 5746724
Test Package : IND 2 (Additional Tests: KF, pH, ReserveAlk, TAN Man)
Received : 12 Mar 2024
Tested : 14 Mar 2024
Diagnosed : 14 Mar 2024 - Kevin Marson

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.

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