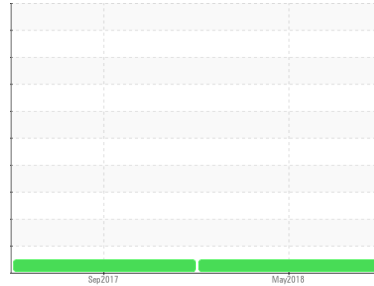




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
Plate Mill/166 Hot Mill
 Machine Id
#1 LUBE SYSTEM (PLS005) (S/N 1000001259)
 Component
Tank Return Lube System
 Fluid
GEAR OIL ISO 460 (8000 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. 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 no indication of any contamination 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			WC0293607	WC0286430	---
Sample Date	Client Info			28 May 2018	07 Sep 2017	---
Machine Age	Client Info			0	0	---
Oil Age	Client Info			0	0	---
Oil Changed	Client Info			N/A	N/A	---
Sample Status				NORMAL	NORMAL	---

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

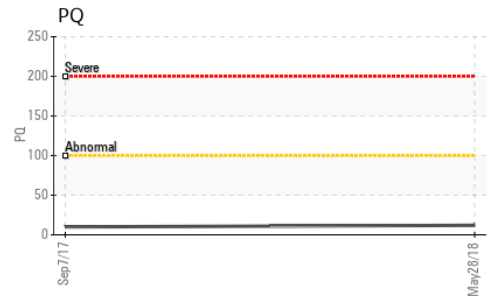
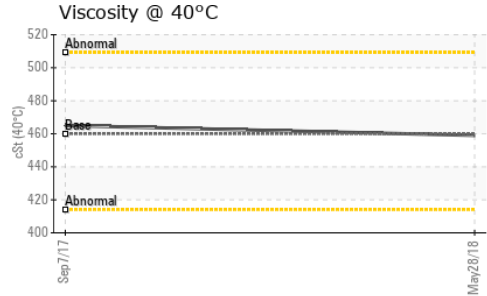
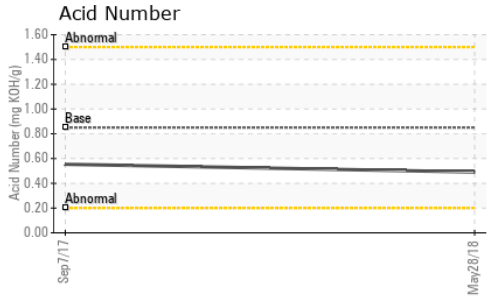
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		12	10	---
Iron	ppm	ASTM D5185(m)	>20	26	39	---
Chromium	ppm	ASTM D5185(m)	>20	0	0	---
Nickel	ppm	ASTM D5185(m)	>20	<1	<1	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)		0	0	---
Aluminum	ppm	ASTM D5185(m)	>20	2	3	---
Lead	ppm	ASTM D5185(m)	>20	<1	<1	---
Copper	ppm	ASTM D5185(m)	>20	2	3	---
Tin	ppm	ASTM D5185(m)	>20	0	0	---
Antimony	ppm	ASTM D5185(m)		<1	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
Beryllium	ppm	ASTM D5185(m)		0	0	---
Cadmium	ppm	ASTM D5185(m)		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	50	2	<1	---
Barium	ppm	ASTM D5185(m)	15	0	0	---
Molybdenum	ppm	ASTM D5185(m)	15	0	<1	---
Manganese	ppm	ASTM D5185(m)		<1	<1	---
Magnesium	ppm	ASTM D5185(m)	50	<1	0	---
Calcium	ppm	ASTM D5185(m)	50	2	0	---
Phosphorus	ppm	ASTM D5185(m)	350	264	239	---
Zinc	ppm	ASTM D5185(m)	100	2	2	---
Sulfur	ppm	ASTM D5185(m)	12500	8963	8734	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	3	2	---
Sodium	ppm	ASTM D5185(m)		<1	<1	---
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	---



OIL ANALYSIS REPORT



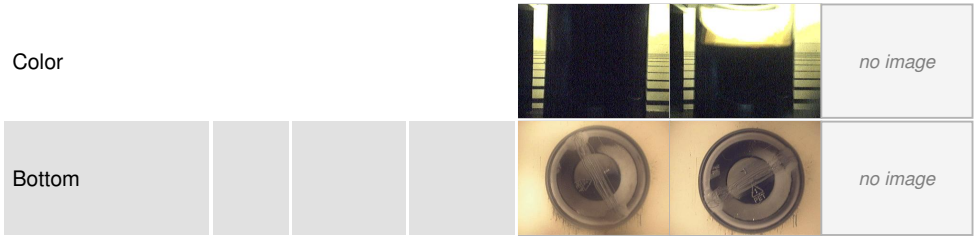
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	138123	175420	---
Particles >6µm	ASTM D7647	>1300	50611	66666	---
Particles >14µm	ASTM D7647	>160	1172	1578	---
Particles >21µm	ASTM D7647	>40	181	232	---
Particles >38µm	ASTM D7647	>10	3	7	---
Particles >71µm	ASTM D7647	>3	1	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	24/23/17	25/23/18	---

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.85	0.491	0.554	---

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	VLITE	---
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)	460	459	465	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0293607
Lab Number : **02219533**
Unique Number : 4694658
Test Package : IND 2 (Additional Tests: PQ, TAN Man)
Received : 30 May 2018
Tested : 31 May 2018
Diagnosed : 01 Jun 2018 - Kevin Marson

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

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.