

OIL ANALYSIS REPORT

Plate Mill/166 Hot Mill #1 LUBE SYSTEM (PLS005) (S/N 1000001259)

Tank Return Lube System

GEAR OIL ISO 460 (8000 GAL)

Sample Rating Trend



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

ISO Cleanliness Code (ISO 4406:1999): 25/23/18; Cumulative particle counts $>4\mu m = 175420$, $>6\mu m =$ 66666, $>14 \mu m = 1578$, $>21 \mu m = 232$, $>38 \mu m = 7$, $>71 \mu m = 0.$

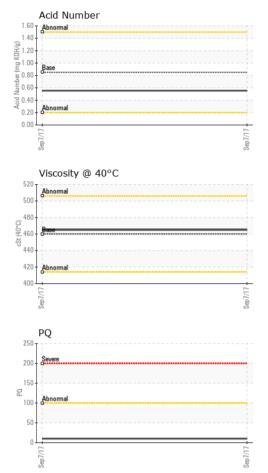
Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0286430		
Sample Date		Client Info		07 Sep 2017		
Machine Age		Client Info		0		
Oil Age		Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATIO	V	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG		
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		10		
Iron	ppm	ASTM D5185(m)	>20	39		
Chromium	ppm	ASTM D5185(m)	>20	0		
Nickel	ppm	ASTM D5185(m)	>20	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>20	3		
Lead	ppm	ASTM D5185(m)	>20	<1		
Copper	ppm	ASTM D5185(m)	>20	3		
Tin	ppm	ASTM D5185(m)	>20	0		
Antimony	ppm	ASTM D5185(m)		<1		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	50	<1		
Barium	ppm	ASTM D5185(m)	15	0		
Molybdenum	ppm	ASTM D5185(m)	15	<1		
Manganese	ppm	ASTM D5185(m)		<1		
Magnesium	ppm	ASTM D5185(m)	50	0		
Calcium	ppm	ASTM D5185(m)	50	0		
Phosphorus	ppm	ASTM D5185(m)	350	239		
Zinc	ppm	ASTM D5185(m)	100	2		
Sulfur	ppm	ASTM D5185(m)	12500	8734		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	2		
Sodium	ppm	ASTM D5185(m)		<1		
Potassium	ppm	ASTM D5185(m)	>20	<1		



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FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	175420		
Particles >6µm		ASTM D7647	>1300	66666		
Particles >14µm		ASTM D7647	>160	1578		
Particles >21µm		ASTM D7647	>40	232		
Particles >38µm		ASTM D7647	>10	7		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	25/23/18		
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.85	0.554		
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Precipitate	scalar	Visual*	NONE	NONE		
Silt	scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	VLITE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	NORML		
Odor	scalar	Visual*	NORML	NORML		
Emulsified Water	scalar	Visual*	>0.05	NEG		
Free Water	scalar	Visual*		NEG		
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	460	465		
SAMPLE IMAGES	;	method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image



CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02168385 Unique Number : 4563456

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 ALGOMA STEEL INC. - STORES DEPT. : WC0286430

Received **Tested** Diagnosed Test Package: IND 2 (Additional Tests: PQ, TAN Man)

: 08 Sep 2017 : 11 Sep 2017

301 WALLACE TERRACE SAULT STE MARIE, ON : 12 Sep 2017 - Kevin Marson

CA P6C 1K8 Contact: Algoma Reliability algomareliability@algoma.com

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.

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