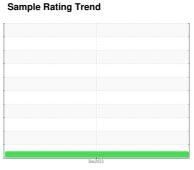


OIL ANALYSIS REPORT

Sa



NORMAL



#2 BACKWASH PUMP

Component

Pump Hydraulic System

SHELL TURBO T ISO 68 (--- GAL)

Ν		

Recommendation

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 MOB 2 test kits, this testkit includes Particle Count to determine the ISO cleanliness of the fluid.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the component(unconfirmed).

Fluid Condition

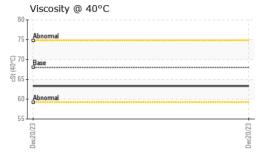
The condition of the oil is acceptable for the time in service.

Machine Age hrs Client Info 0 Oil Age hrs Client Info 0 Oil Changed Client Info N/A Sample Status NORMAL CONTAMINATION method limit/base current history1 history2 Water WC Method >0.05 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >20 3 Chromium ppm ASTM D5185(m) >20 0 Nickel ppm ASTM D5185(m) >20 <1							
Sample Number Client Info WC0659248			1		Dec2023		
Sample Date Client Info 20 Dec 2023	SAMPLE INFORM	MATION	method				history2
Machine Age hrs Client Info 0	Sample Number		Client Info		WC0659248		
Oil Age hrs Client Info N/A Sample Status NORMAL CONTAMINATION method limit/base current history1 history2 Water WC Method >0.05 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >20 3 Chromium ppm ASTM D5185(m) >20 0 Nickel ppm ASTM D5185(m) >20 <1 Silver ppm ASTM D5185(m) >20 <1 Aluminum ppm ASTM D5185(m) >20 <1 Aluminum ppm ASTM D5185(m) >20 0 Lead ppm ASTM D5185(m) >20 0	Sample Date		Client Info		20 Dec 2023		
Oil Changed Sample Status Client Info N/A CONTAMINATION method limit/base current history1 history2 Water WC Method >0.05 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >20 3 Chromium ppm ASTM D5185(m) >20 0 Nickel ppm ASTM D5185(m) >20 <1 Silver ppm ASTM D5185(m) >20 <1 Lead ppm ASTM D5185(m) >20 <1 Copper ppm ASTM D5185(m) >20 0 Copper ppm ASTM D5185(m) >20 0 Tin ppm ASTM D5185(m) >20 0 </td <td>Machine Age</td> <td>hrs</td> <td>Client Info</td> <td></td> <td>0</td> <td></td> <td></td>	Machine Age	hrs	Client Info		0		
Sample Status	Oil Age	hrs	Client Info		0		
CONTAMINATION method limit/base current history1 history2 Water WC Method >0.05 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >20 3 Chromium ppm ASTM D5185(m) >20 41 Nickel ppm ASTM D5185(m) >20 41 Silver ppm ASTM D5185(m) >20 41 Aluminum ppm ASTM D5185(m) >20 41 Aluminum ppm ASTM D5185(m) >20 0 Lead ppm ASTM D5185(m) >20 0 Copper ppm ASTM D5185(m) >20 0 Antimatin ppm ASTM D5185(m) 0	Oil Changed		Client Info		N/A		
Water WC Method >0.05 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >20 3 Chromium ppm ASTM D5185(m) >20 <1 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 <1 Lead ppm ASTM D5185(m) >20 0 Copper ppm ASTM D5185(m) >20 0 Tin ppm ASTM D5185(m) 0 Antimory ppm ASTM D5185(m) 0 Vanadium ppm <	Sample Status				NORMAL		
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >20 3 Chromium ppm ASTM D5185(m) >20 0 Nickel ppm ASTM D5185(m) >20 <1	CONTAMINATIO	N	method	limit/base	current	history1	history2
Iron	Water		WC Method	>0.05	NEG		
Chromium ppm ASTM D5185(m) >20 0 Nickel ppm ASTM D5185(m) >20 <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185(m)	>20	3		
Nickel	Chromium	ppm	ASTM D5185(m)	>20	0		
Silver	Nickel		ASTM D5185(m)	>20	<1		
Aluminum	Titanium	ppm	ASTM D5185(m)		0		
Lead	Silver	ppm	ASTM D5185(m)		0		
Copper ppm ASTM D5185(m) >20 0 Tin ppm ASTM D5185(m) >20 0 Antimony ppm ASTM D5185(m) 0 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) 0 Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) <1	Aluminum	ppm	ASTM D5185(m)	>20	<1		
Tin ppm ASTM D5185(m) >20 0 Antimony ppm ASTM D5185(m) 0 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) 0 Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) 0 Calcium ppm ASTM D5185(m) <1 Phosphorus ppm ASTM D5185(m) <1 Zinc ppm ASTM D5185(m) 1 Sulfur ppm ASTM D5185(m) 1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >15 0 Sodium ppm ASTM D5185(m) >15 0 Sodium ppm ASTM D5185(m) >15 0	Lead	ppm	ASTM D5185(m)	>20	0		
Antimony ppm ASTM D5185(m) 0 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) 0 Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) <1 Magnesium ppm ASTM D5185(m) <1 Phosphorus ppm ASTM D5185(m) 4 Sulfur ppm ASTM D5185(m) 142 Sulfur ppm ASTM D5185(m) >15 0	Copper	ppm	ASTM D5185(m)	>20	0		
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) 0 Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 0 Magnaese ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) <1 Calcium ppm ASTM D5185(m) 4 Phosphorus ppm ASTM D5185(m) 1 Sulfur ppm ASTM D5185(m) 142 CONTAMINANTS method limit/base current his	Tin	ppm	ASTM D5185(m)	>20	0		
Beryllium	Antimony	ppm	ASTM D5185(m)		0		
Cadmium ppm ASTM D5185(m) 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 0 Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) <1	Vanadium	ppm	ASTM D5185(m)		0		
ADDITIVES	Beryllium	ppm	ASTM D5185(m)		0		
Boron ppm ASTM D5185(m) 0 Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) <1	Cadmium	ppm	ASTM D5185(m)		0		
Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) <1 Calcium ppm ASTM D5185(m) <1 Phosphorus ppm ASTM D5185(m) 1 Zinc ppm ASTM D5185(m) 142 Sulfur ppm ASTM D5185(m) <1 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >15 0 Sodium ppm ASTM D5185(m) 0	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) <1 Calcium ppm ASTM D5185(m) 4 Phosphorus ppm ASTM D5185(m) 1 Zinc ppm ASTM D5185(m) 142 Sulfur ppm ASTM D5185(m) <1 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) 0 Sodium ppm ASTM D5185(m) 0	Boron	ppm	ASTM D5185(m)		0		
Manganese ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) <1	Barium	ppm	ASTM D5185(m)		0		
Magnesium ppm ASTM D5185(m) <1 Calcium ppm ASTM D5185(m) <1	Molybdenum	ppm	ASTM D5185(m)		0		
Calcium ppm ASTM D5185(m) <1 Phosphorus ppm ASTM D5185(m) 4 Zinc ppm ASTM D5185(m) 1 Sulfur ppm ASTM D5185(m) 142 Lithium ppm ASTM D5185(m) <1	Manganese	ppm	ASTM D5185(m)		0		
Phosphorus ppm ASTM D5185(m) 4 Zinc ppm ASTM D5185(m) 1 Sulfur ppm ASTM D5185(m) 142 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >15 0 Sodium ppm ASTM D5185(m) 0	Magnesium	ppm	ASTM D5185(m)		<1		
Zinc ppm ASTM D5185(m) 1 Sulfur ppm ASTM D5185(m) 142 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >15 0 Sodium ppm ASTM D5185(m) 0	Calcium	ppm	ASTM D5185(m)		<1		
Sulfur ppm ASTM D5185(m) 142 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >15 0 Sodium ppm ASTM D5185(m) 0	Phosphorus	ppm	ASTM D5185(m)		4		
Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >15 0 Sodium ppm ASTM D5185(m) 0	Zinc	ppm	ASTM D5185(m)		1		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >15 0 Sodium ppm ASTM D5185(m) 0	Sulfur	ppm	ASTM D5185(m)		142		
Silicon ppm ASTM D5185(m) >15 0 Sodium ppm ASTM D5185(m) 0	Lithium	ppm	ASTM D5185(m)		<1		
Sodium ppm ASTM D5185(m) 0	CONTAMINANTS	;	method	limit/base	current	history1	history2
	Silicon	ppm	ASTM D5185(m)	>15	0		
Potassium ppm ASTM D5185(m) >20 2	Sodium	ppm	ASTM D5185(m)		0		
	Potassium	ppm	ASTM D5185(m)	>20	2		



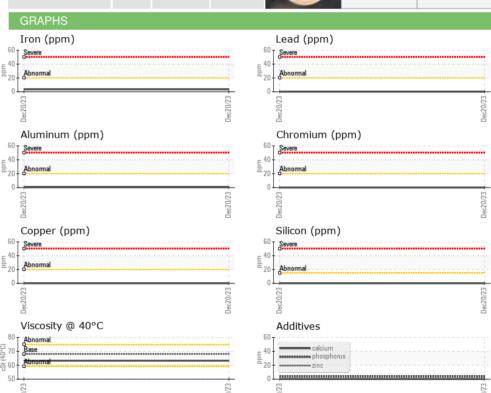
OIL ANALYSIS REPORT

SAMPLE IMAGES



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	NONE		
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	FLUID PROPERTIES		limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	68	63.3		

SAIVIFLE IIVIAGES	memou	IIIIII/Dase	Current	Thistory	HISTOLYZ
Color				no image	no image
Bottom				no image	no image
ODABUO					





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5706978

Test Package : MOB 1

: WC0659248 : 02605892

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 ALGOMA STEEL INC. - STORES DEPT. Recieved : 02 Jan 2024 Diagnosed

: 02 Jan 2024 Diagnostician : Wes Davis

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.