

PROBLEM SUMMARY

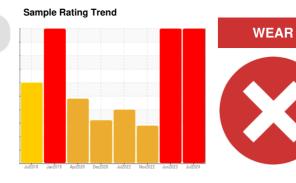
106 Mill

ROLL BALANCE, #2 PUMP CRANKCASE (PLS117) (S/N 1000000713)

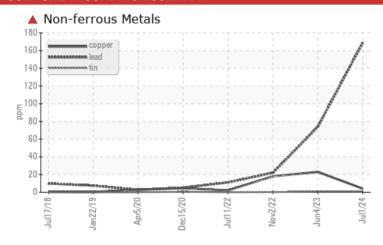
Pump

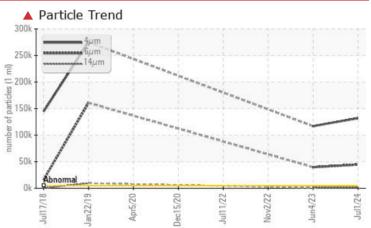
Fluid

R&O OIL ISO 68 (--- GAL)



COMPONENT CONDITION SUMMARY





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 advise that you check all areas where contaminants can enter the system. We advise that you check for visible metal particles in the oil. We recommend either performing an oil change or oil filtration. We cannot recommend specific action as we have limited information with regards to reservoir capacity and/or lubricant type. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. 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.

Customer Id: ALGSSM Sample No.: WC0689916 Lab Number: 02645644 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Kevin Marson +1 (289)291-4644 x4644 Kevin.Marson@wearcheck.com

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

PROBLEMATIC TEST RESULTS							
Sample Status				SEVERE	SEVERE	ABNORMAL	
Lead	ppm	ASTM D5185(m)	>12	169	▲ 74	<u>▲</u> 22	
Antimony	ppm	ASTM D5185(m)		<u> </u>	9	<1	
Particles >4µm		ASTM D7647	>5000	131953	1 16954		
Particles >6µm		ASTM D7647	>1300	44632	39650		
Particles >14µm		ASTM D7647	>160	1595	<u>▲</u> 863		
Particles >21µm		ASTM D7647	>40	255	▲ 128		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	4 24/23/18	2 4/22/17		
White Metal	scalar	Visual*	NONE	▲ VLITE	VLITE	▲ LIGHT	
PrtFilter					no image		

RECOMMENDED ACTIONS						
Action	Status	Date	Done By	Description		
Change Filter			?	We recommend you service the filters on this component.		
Resample			?	Resample in 30-45 days to monitor this situation.		
Alert			?	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.		
Information Required			?	Please specify the brand, type, and viscosity of the oil on your next sample. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.		
Check Breathers			?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.		
Check Dirt Access			?	We advise that you check all areas where contaminants can enter the system.		
Check For Visual Metal			?	We advise that you check for visible metal particles in the oil.		
Filter Fluid			?	We recommend either performing an oil change or oil filtration. We cannot recommend specific action as we have limited information with regards to reservoir capacity and/or lubricant type.		

HISTORICAL DIAGNOSIS

04 Jun 2023 Diag: Kevin Marson

WEAR



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 advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. 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. Lead ppm levels are severe. Bearing and/or bushing wear is indicated. There is a high amount of particulates (2 to 100 microns in size) present in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.



VISUAL METAL



02 Nov 2022 Diag: Kevin Marson

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 advise that you check for visible metal particles in the oil. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. 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. Lead ppm levels are abnormal. Copper ppm levels are noted. Light concentration of visible metal present. Bearing and/or gear wear is indicated. Bearing and/or bushing wear is indicated. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.



WATER



11 Jul 2022 Diag: Kevin Marson

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 advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. 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. Lead ppm levels are noted. All other component wear rates are normal. There is a high concentration of water present in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.





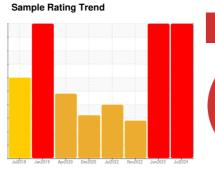
OIL ANALYSIS REPORT

106 Mill

ROLL BALANCE, #2 PUMP CRANKCASE (PLS117) (S/N 1000000713)

Pump

R&O OIL ISO 68 (--- 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 advise that you check all areas where contaminants can enter the system. We advise that you check for visible metal particles in the oil. We recommend either performing an oil change or oil filtration. We cannot recommend specific action as we have limited information with regards to reservoir capacity and/or lubricant type. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. 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.

Lead Lead ppm levels are severe. Antimony ppm levels are abnormal. Light concentration of visible metal present. Bearing and/or bushing wear is indicated.

Contamination

There is a high amount of particulates (2 to 100 microns in size) present in the oil.

Fluid Condition

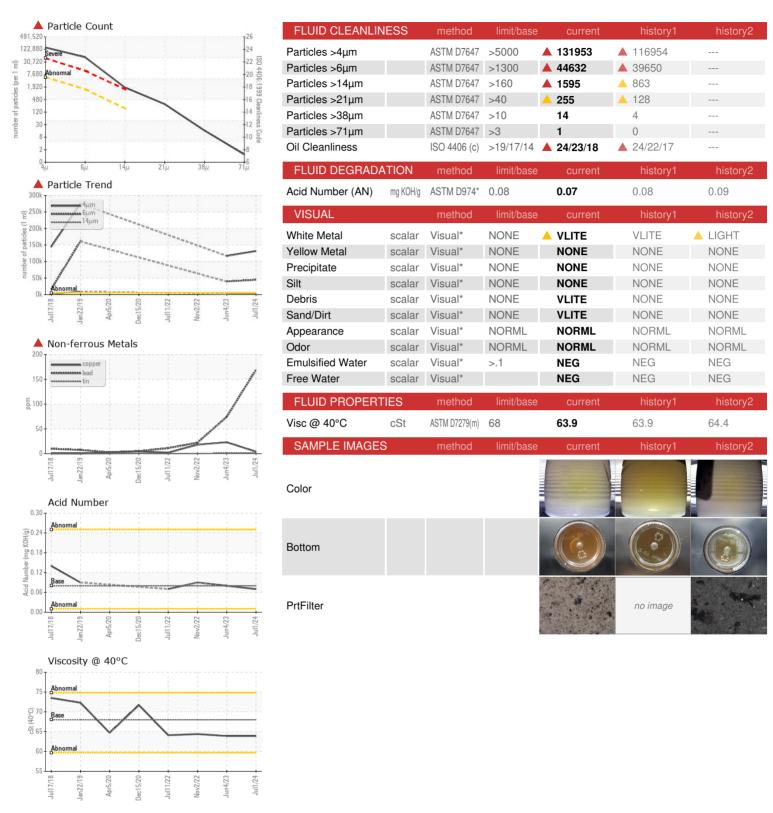
The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Particle Filter (Magn: 100 >	ζ)	
		0u 100 20 	300µ
7.	1.		
		4.1	
0.9			4

CAMPLE INFOR	44TION					
SAMPLE INFORM	MATION	method	limit/base		history1	history2
Sample Number		Client Info		WC0689916	WC0714517	WC0714615
Sample Date		Client Info		01 Jul 2024	04 Jun 2023	02 Nov 2022
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				SEVERE	SEVERE	ABNORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>.1	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m)	>90	16	10	13
Chromium	ppm	ASTM D5185(m)	>5	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	<1	0	0
Titanium	ppm	ASTM D5185(m)	>3	<1	1	2
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>7	<1	1	2
Lead	ppm	ASTM D5185(m)	>12	169	1 74	<u>^</u> 22
Copper	ppm	ASTM D5185(m)	>30	4	23	18
Tin	ppm	ASTM D5185(m)	>9	<1	<1	<1
Antimony	ppm	ASTM D5185(m)		<u> </u>	9	<1
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	2
Barium	ppm	ASTM D5185(m)	5	<1	<1	<1
Molybdenum	ppm	ASTM D5185(m)	5	0	0	0
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	5	<1	<1	1
Calcium	ppm	ASTM D5185(m)	5	2	11	20
Phosphorus	ppm	ASTM D5185(m)	100	6	12	15
Zinc	ppm	ASTM D5185(m)	25	2	12	15
Sulfur	ppm	ASTM D5185(m)	1500	182	332	246
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS	3	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>60	3	8	6
Sodium	ppm	ASTM D5185(m)		<1	4	4
Potassium	ppm	ASTM D5185(m)	>20	2	10	9



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02645644

Unique Number : 5803183

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0689916

Received : 04 Jul 2024 Tested : 11 Jul 2024

: 11 Jul 2024 - Kevin Marson

301 WALLACE TERRACE SAULT STE MARIE, ON **CA P6C 1K8**

ALGOMA STEEL INC. - STORES DEPT.

Diagnosed Test Package: IND 2 (Additional Tests: BottomAnalysis, FILTERPATCH, PQ, PrtCount, PrtFilter, T6NrWact) 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. Validity of results and interpretation are based on the sample and information as supplied.

T: (705)206-1059 F: (705)945-3585