

# **PROBLEM SUMMARY**

# Area **106** MIII Machine Id ROLL BALANCE, #1 PUMP REDUCER (PLS116) (S/N 1000000712) Pump Fluid GEAR OIL ISO 150 (--- 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 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.

#### PROBLEMATIC TEST RESULTS Sample Status SEVERE ABNORMAL ABNORMAL Lead ASTM D5185(m) >12 **108** 20 15 ppm Visc @ 40°C cSt ASTM D7279(m) 150 78.1 90.8 93.4 PrtFilter no image no image

Customer Id: ALGSSM Sample No.: WC0813581 Lab Number: 02645646 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

DEOON	MENDED	AOTIONI
RECOM	MENDED	ACTIONS

Action	Status	Date	Done By	Description
Change Fluid			?	We recommend that you drain the oil from the component if this has not already been done.
Resample			?	We recommend an early resample to monitor this condition.
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

# HISTORICAL DIAGNOSIS

### 26 May 2023 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. 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.Lead ppm levels are noted. All other component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 100 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



#### 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. 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. All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 100 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





#### 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. 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.All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Report Id: ALGSSM [WCAMIS] 02645646 (Generated: 07/08/2024 20:15:40) Rev: 1



# **OIL ANALYSIS REPORT**

# Area **106** MIII Machine Id ROLL BALANCE, #1 PUMP REDUCER (PLS116) (S/N 1000000712) Pump Fluid

GEAR OIL ISO 150 (--- 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 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.

# 🔺 Wear

Lead ppm levels are severe. Bearing and/or bushing wear is indicated.

# Contamination

There is no indication of any contamination in the oil.

## Fluid Condition

Viscosity of sample indicates oil is within ISO 68 range, advise investigate. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.



SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0813581	WC0714516	WC0714616
Sample Date		Client Info		01 Jul 2024	26 May 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	ABNORMAL	ABNORMAL
CONTAMINATION	٧	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	3
Iron	ppm	ASTM D5185(m)	>90	28	29	30
Chromium	ppm	ASTM D5185(m)	>5	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	<1	0	0
Titanium	ppm	ASTM D5185(m)	>3	0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>7	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>12	<b>1</b> 08	20	15
Copper	ppm	ASTM D5185(m)	>30	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>9	0	0	<1
Antimony	ppm	ASTM D5185(m)		0	<1	<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)	50	8	14	22
Barium	ppm	ASTM D5185(m)	15	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	15	0	0	0
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	50	<1	<1	<1
Calcium	ppm	ASTM D5185(m)	50	3	<1	1
Phosphorus	ppm	ASTM D5185(m)	350	180	129	137
Zinc	ppm	ASTM D5185(m)	100	47	7	7
Sulfur	ppm	ASTM D5185(m)	12500	2355	1962	2212
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>60	5	4	4
Sodium	ppm	ASTM D5185(m)		2	1	1
Potassium	ppm	ASTM D5185(m)	>20	4	2	2
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.85	0.30	0.21	0.18



# **OIL ANALYSIS REPORT**







VISUAL		method	limit/base	current	history1	history2
Vhite Metal	scalar	Visual*	NONE	VLITE	NONE	NONE
ellow 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	VLITE	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORMI	NORMI	NORMI	NORMI
- - - - - - - - - - - - - - - - - - -	scalar	Visual*	► 1	NEG	NEG	NEG
Free Water	scalar	Visual*	2.1	NEG	NEG	NEG
FLUID PROPER	TIES	method	limit/base	current	history1	history
/isc @ 40°C	cSt	ASTM D7279(m)	150	<b>A</b> 78.1	▲ 90.8	▲ 93.4
SAMPLE IMAGE	S	method	limit/base	current	history1	history
Deler				8		
20101						
Bottom						
				and the second second		
PrtFilter					no image	no image
GRAPHS						
Ferrous Alloys				PQ		
iron	$\mathbf{i}$		22	Severe		
nanananan chromium			20		1 1 1 1	
Hillkei			18	0		
L			16	0		
22/19	or5/20	v2/22 26/23	14/11/24	0		
Jan Jul	Ar	No		Abnormal		
Non-ferrous Meta	ls		8	0		
copper			6	0 -		
tin			4	0 -		
			2	0		
ACCOUNTS OF THE REAL PROPERTY OF THE PROPERTY				0		
22/19	11/22	v2/22 26/23	11/24	2/19	9/19	6/23
Jan Jul	Ar	No	7	Jul1 Jan2	Jul2	May2
Viscosity @ 40°C			(1)	Acid Numbe	r	
$\land$			Hoy 2.0	Abnormal		
Abpormal			E 1.5			
a.			1.0 E 0.5	Dase		
				Abnormal		
	++-					
17/18	r5/20 +	12/22 -	Ac	2/19	r5/20 1/22	12/22

Laboratory CALA Sample No. : 04 Jul 2024 301 WALLACE TERRACE : WC0813581 Received Lab Number : 02645646 Tested : 08 Jul 2024 SAULT STE MARIE, ON ISO 17025:2017 Accredited Laboratory Unique Number : 5803185 Diagnosed : 08 Jul 2024 - Kevin Marson CA P6C 1K8 Test Package : IND 2 (Additional Tests: BottomAnalysis, FILTERPATCH, TAN Man) Contact: Algoma Reliability algomareliability@algoma.com To discuss this sample report, contact Customer Service at 1-800-268-2131. T: (705)206-1059 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. F: (705)945-3585

Report Id: ALGSSM [WCAMIS] 02645646 (Generated: 07/08/2024 20:15:41) Rev: 1

ŝ

Contact/Location: Maintenance Technology - Algoma Reliability - ALGSSM