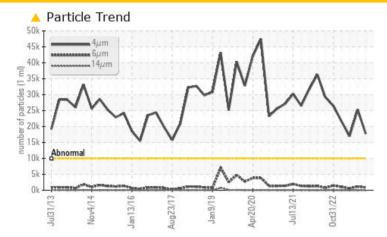
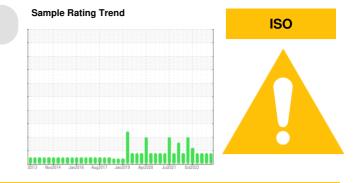
# **PROBLEM SUMMARY**

### Area SAB2 Machine Id SAB2 G11 Component Thrust Bearing Fluid ESSO TERESSO ISO 46 (3182 LTR)

### COMPONENT CONDITION SUMMARY





### RECOMMENDATION

We recommend you service the filters on this component. 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 IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.

PROBLEMATIC TEST RESULTS							
Sample Status		ATTENTION	ABNORMAL	ATTENTION			
Particles >4µm	ASTM D7647 >10	000 🔺 17750	▲ 25335	<b>1</b> 6976			
Oil Cleanliness	ISO 4406 (c) >20	/17/14 🔺 21/17/10	🔺 22/17/11	🔺 21/16/11			
PrtFilter							

Customer Id: ONTQUE Sample No.: WC0858059 Lab Number: 02592121 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 <u>aloria.gonzalez@wearcheck.com</u>

RECOMMENDED A	ACTIONS			
Action	Status	Date	Done By	Description
Change Filter			?	We recommend you service the filters on this component.
Contact Required			?	Please contact your representative for information regarding the proper sampling kits for your service.
Alert			?	NOTE: We recommend using IND 3 test kits,

### **HISTORICAL DIAGNOSIS**



### 31 Jul 2023 Diag: Kevin Marson

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.Component wear rates appear to be normal (unconfirmed). There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



view report

### 05 Jun 2023 Diag: Kevin Marson

We recommend you service the filters on this component. 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 IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.Component wear rates appear to be normal (unconfirmed). There is a light amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





We recommend you service the filters on this component. We recommend an early resample to monitor this condition.All component wear rates are normal. Particles >4µm and oil cleanliness are abnormally high. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.





## **OIL ANALYSIS REPORT**

Sample Rating Trend

# ISO

### Area SAB2 **SAB2 G11** Component **Thrust Bearing** Fluid ESSO TERESSO ISO 46 (3182 LTR)

### DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. 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 IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.

### Wear

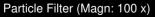
Component wear rates appear to be normal (unconfirmed).

### Contamination

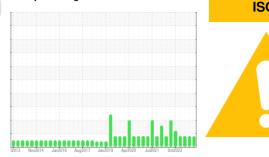
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

### Fluid Condition

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





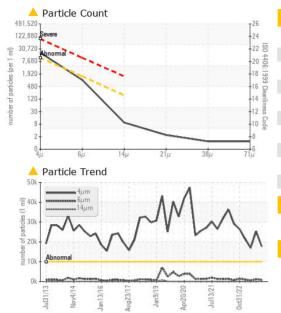


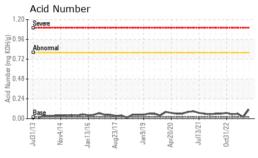
			12013 Nov20	14 Jan2016 Aug2017	Jan2019 Apr2020 Jul2021	0ct2022	
Sample Date     Client Info     25 Oct 2023     31 Jul 2023     05 Jun 2023       Machine Age     hrs     Client Info     0     0     0       Oil Age     hrs     Client Info     0     0     0       Oil Changed     Client Info     N/A     N/A     ATTENTION     ABNORMAL     ATTENTION       WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM05185m     >85     4     5     4       Ohromium     ppm     ASTM05185m     >20     <1     <1     <1       Itanium     ppm     ASTM05185m     >20     <1     <1     <1       Itanium     ppm     ASTM05185m     >40     <1     0     <1       Lead     ppm     ASTM05185m     >40     0     0     0     0       Antimony     ppm     ASTM05185m     >0     0     0     0     0       Cadmium     ppm     ASTM05185m     >0     0	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Machine Age     hrs     Client Info     0     0     0     0       Oil Age     hrs     Client Info     0     0     0     0       Oil Changed     Client Info     N/A     N/A     N/A     N/A       Sample Status     Imutbase     current     history1     history2       Iron     ppm     ASTMD516(m)     >85     4     5     4       Chromium     ppm     ASTMD516(m)     >20     0     0     0       Nickel     ppm     ASTMD516(m)     >20     1     <1	Sample Number		Client Info		WC0858059	WC0830359	WC0780525
Oil Age     hrs     Client Info     0     0     0       Oil Changed     Client Info     N/A     N/A     N/A     N/A       Sample Status     Imethod     Imitbase     current     history1     history2       Iron     ppm     ASTM D51500     >85     4     5     4       Chromium     ppm     ASTM D51500     >20     0     0     0       Nickel     ppm     ASTM D51500     <1	Sample Date		Client Info		25 Oct 2023	31 Jul 2023	05 Jun 2023
Oli Changed     Client Info     N/A     N/A     N/A     N/A       Sample Status     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5185(m)     >85     4     5     4       Chromium     ppm     ASTM D5185(m)     >20     0     0     0     0       Nickel     ppm     ASTM D5185(m)     >20     0     0     0     0     0       Silver     ppm     ASTM D5185(m)     >40     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0<	Machine Age	hrs	Client Info		0	0	0
Sample Status     method     Imit/base     current     history1     history2       Iron     ppm     ASTM D5186/m     >85     4     5     4       Chromium     ppm     ASTM D5186/m     >20     0     0     0       Nickel     ppm     ASTM D5186/m     >20     <1	Oil Age	hrs	Client Info		0	0	0
WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D518(m)     >85     4     5     4       Chromium     ppm     ASTM D518(m)     >20     0     0     0       Nickel     ppm     ASTM D518(m)     >20     <1	Oil Changed		Client Info		N/A	N/A	N/A
Iron     ppm     ASTM D5185(m)     >885     4     5     4       Chromium     ppm     ASTM D5185(m)     >20     0     0     0       Nickel     ppm     ASTM D5185(m)     >20     <1	Sample Status				ATTENTION	ABNORMAL	ATTENTION
Chromium     ppm     ASTM D5168(m)     >20     0     0     0       Nickel     ppm     ASTM D5168(m)     >20     <1     <1     <1       Titanium     ppm     ASTM D5168(m)     >20     <1     <1     0     0       Aluminum     ppm     ASTM D5168(m)     >40     <1     0     <1     1     <1       Lead     ppm     ASTM D5168(m)     >50     1     1     <1     <1       Copper     ppm     ASTM D5168(m)     >60     0     0     0       Antimony     ppm     ASTM D5168(m)     >7     <1     <1     <1     0     0       Antimony     ppm     ASTM D5168(m)     >0     0     0     0     0     0       Cadmium     ppm     ASTM D5168(m)     0     <1     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0	WEAR METALS		method	limit/base	current	history1	history2
Nickel     ppm     ASTM D5185(m)     >20     <1     <1     <1     <1       Titanium     ppm     ASTM D5185(m)     <1	Iron	ppm	ASTM D5185(m)	>85	4	5	4
Titanium     ppm     ASTM 05185(m)     0     0     0     0       Silver     ppm     ASTM 05185(m)     <1	Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Silver     ppm     ASTM D5185(m)     <1     0     0       Aluminum     ppm     ASTM D5185(m)     >60     1     1     <1	Nickel	ppm	ASTM D5185(m)	>20	<1	<1	<1
Aluminum     ppm     ASTM D5185(m)     >40     <1     0     <1       Lead     ppm     ASTM D5185(m)     >60     1     1     <1	Titanium	ppm	ASTM D5185(m)		0	0	0
Lead     ppm     ASTM D5185(m)     >600     1     1     <1       Copper     ppm     ASTM D5185(m)     >77     <1	Silver	ppm	ASTM D5185(m)		<1	0	0
Copper     ppm     ASTM D5185(m)     >7     <1     <1     <1     <1       Tin     ppm     ASTM D5185(m)     >40     0     0     0       Antimony     ppm     ASTM D5185(m)     0     0     0       Vanadium     ppm     ASTM D5185(m)     0     0     0       Beryllium     ppm     ASTM D5185(m)     0     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185(m)     0     <1	Aluminum	ppm	ASTM D5185(m)	>40	<1	0	<1
Tin     ppm     ASTM D5/85(m)     >40     0     0     0       Antimony     ppm     ASTM D5/85(m)     0     0     0     0       Vanadium     ppm     ASTM D5/85(m)     0     0     0     0       Beryllium     ppm     ASTM D5/85(m)     0     0     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5/85(m)     0     <1     0     <1       Barium     ppm     ASTM D5/85(m)     0     0     0     0     0       Magnese     ppm     ASTM D5/85(m)     0     0     0     0     0       Calcium     ppm     ASTM D5/85(m)     0     <1     2     <1     0       Stifu D5/85(m)     0     <1     2     <1     0     0       Calcium     ppm     ASTM D5/85(m)     0     <1     2     <1       Stifu D5/85(m)     2.0     1     <	Lead	ppm	ASTM D5185(m)	>60	1	1	<1
Tin     ppm     ASTM D5/85(m)     >40     0     0     0       Antimony     ppm     ASTM D5/85(m)     0     0     0     0       Baryllium     ppm     ASTM D5/85(m)     0     0     0     0       Baryllium     ppm     ASTM D5/85(m)     0     0     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5/85(m)     0     -1     0     -1       Barium     ppm     ASTM D5/85(m)     0     0     0     0       Magnesium     ppm     ASTM D5/85(m)     0     0     0     0       Calcium     ppm     ASTM D5/85(m)     0     -1     2     -1       Sulfur     ppm     ASTM D5/85(m)     0     -1     2     -1       Sulfur     ppm     ASTM D5/85(m)     0     -1     2     -1       Sulfur     ppm     ASTM D5/85(m)     2.0     1     1 </td <td>Copper</td> <td>ppm</td> <td>ASTM D5185(m)</td> <td>&gt;7</td> <th>&lt;1</th> <td>&lt;1</td> <td>&lt;1</td>	Copper	ppm	ASTM D5185(m)	>7	<1	<1	<1
Antimony     ppm     ASTM D5185(m)     0     0     0     0       Vanadium     ppm     ASTM D5185(m)     0     0     0     0       Beryllium     ppm     ASTM D5185(m)     0     0     0     0       Cadmium     ppm     ASTM D5185(m)     0     -1     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185(m)     0     -1     0     -1       Barium     ppm     ASTM D5185(m)     0     0     0     0       Molybdenum     ppm     ASTM D5185(m)     0     -1     -1     0       Magnesium     ppm     ASTM D5185(m)     0     -1     -1     0       Calcium     ppm     ASTM D5185(m)     0     <1	••		ASTM D5185(m)	>40	0	0	0
Vanadium     ppm     ASTM D5185(m)     0     0     0     0       Beryllium     ppm     ASTM D5185(m)     0     0     0     0       Cadmium     ppm     ASTM D5185(m)     0     0     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185(m)     0     <1     0     <1       Barium     ppm     ASTM D5185(m)     0     0     0     0     0       Magnesium     ppm     ASTM D5185(m)     0     0     <1     0     0       Calcium     ppm     ASTM D5185(m)     0     <1     <1     0       Phosphorus     ppm     ASTM D5185(m)     0     <1     2     <1       Sulfur     ppm     ASTM D5185(m)     0     <1     1     1       Soliton     ppm     ASTM D5185(m)     >20     1     1     1       Story1     ASTM D5185(m)     >20 <th< td=""><td>Antimony</td><td></td><td>ASTM D5185(m)</td><td></td><th>0</th><td>0</td><td>0</td></th<>	Antimony		ASTM D5185(m)		0	0	0
Beryllium     ppm     ASTM D5188(m)     0     0     0     0       Cadmium     ppm     ASTM D5188(m)     0     -<1	•		1 I I I I I I I I I I I I I I I I I I I		0	0	0
Cadmium     ppm     ASTM D5185(m)     0     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185(m)     0     <1     0     <1       Barium     ppm     ASTM D5185(m)     0     0     0     0     0       Magnesium     ppm     ASTM D5185(m)     0     0     0     0     0       Magnesium     ppm     ASTM D5185(m)     0     0     0     0     0       Calcium     ppm     ASTM D5185(m)     0.4     <1     0     0       Magnesium     ppm     ASTM D5185(m)     0.4     <1     0     0       Calcium     ppm     ASTM D5185(m)     2.4     <1     0     0       Stifur     ppm     ASTM D5185(m)     2.4     <1     0     0       Stifur     ppm     ASTM D5185(m)     2.0     1     1     1       Story1     MSTM D5185(m)     >2.0	Beryllium		ASTM D5185(m)		0	0	0
Boron     ppm     ASTM D5185(m)     0     <1     0     <1       Barium     ppm     ASTM D5185(m)     0     0     0     0       Molybdenum     ppm     ASTM D5185(m)     0     0     0     0       Manganese     ppm     ASTM D5185(m)     0     0     0     0       Magnesium     ppm     ASTM D5185(m)     0     <1	,				0		0
Barium     ppm     ASTM D5185(m)     <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum     ppm     ASTM D5185(m)     0     0     0     0     0       Manganese     ppm     ASTM D5185(m)     0     0     0     0       Magnesium     ppm     ASTM D5185(m)     0     -1     -1     0       Calcium     ppm     ASTM D5185(m)     0     -1     2     -1       Phosphorus     ppm     ASTM D5185(m)     0     -1     2     -1       Sulfur     ppm     ASTM D5185(m)     0     -1     2     -1       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185(m)     >20     1     1     1       Sodium     ppm     ASTM D5185(m)     >20     0     <1	Boron	ppm	ASTM D5185(m)	0	<1	0	<1
Manganese     ppm     ASTM D5185(m)     0     0     0     0     0       Magnesium     ppm     ASTM D5185(m)     0     <1	Barium	ppm	ASTM D5185(m)		<1	0	0
Magnesium     ppm     ASTM D5185(m)     0     0     0     <1       Calcium     ppm     ASTM D5185(m)     0     <1	Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Calcium   ppm   ASTM D5185(m)   0   <1   <1   0     Phosphorus   ppm   ASTM D5185(m)   2.4   <1   0   0     Zinc   ppm   ASTM D5185(m)   0   <1   2   <1   0   0     Sulfur   ppm   ASTM D5185(m)   0   <1   2   <1   0   0     Sulfur   ppm   ASTM D5185(m)   0   <1   2   <1   0   0     CONTAMINANTS   method   limit/base   current   history1   history2     Silicon   ppm   ASTM D5185(m)   >20   1   1   1     Sodium   ppm   ASTM D5185(m)   >20   0   0   0   0     Potassium   ppm   ASTM D5185(m)   >20   0   <11   1   1     FLUID CLEANLINESS   method   limit/base   current   history1   history2     Particles >4µm   ASTM D7647   >10000   17750   25335   16976     Particles >54µm   ASTM D7647   1300   876   117	Manganese	ppm	ASTM D5185(m)		0	0	0
Phosphorus     ppm     ASTM D5185(m)     2.4     <1     0     0       Zinc     ppm     ASTM D5185(m)     0     <1	Magnesium	ppm	ASTM D5185(m)	0	0	0	<1
Zinc   ppm   ASTM D5185(m)   0   <1   2   <1     Sulfur   ppm   ASTM D5185(m)   641   709   641     Lithium   ppm   ASTM D5185(m)   641   709   641     CONTAMINANTS   method   limit/base   current   history1   history2     Silicon   ppm   ASTM D5185(m)   >20   1   1   1     Sodium   ppm   ASTM D5185(m)   >20   1   1   1     Sodium   ppm   ASTM D5185(m)   >20   0   <1   1   1     Sodium   ppm   ASTM D5185(m)   >20   0   <1   1   1     FLUID CLEANLINESS   method   limit/base   current   history1   history2     Particles >4µm   ASTM D7647   >10000   17750   25335   16976     Particles >6µm   ASTM D7647   >10000   1174   573     Particles >14µm   ASTM D7647   >40   2   2   3     Particles >38µm   ASTM D7647   3   1   0   0 <td>Calcium</td> <td>ppm</td> <td>ASTM D5185(m)</td> <td>0</td> <th>&lt;1</th> <td>&lt;1</td> <td>0</td>	Calcium	ppm	ASTM D5185(m)	0	<1	<1	0
Sulfur     ppm     ASTM D5185(m)     641     709     641       Lithium     ppm     ASTM D5185(m)     <     641     709     641       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185(m)     >20     1     1     1       Sodium     ppm     ASTM D5185(m)     >20     0     <1     1       Sodium     ppm     ASTM D5185(m)     >20     0     <1     1       Potassium     ppm     ASTM D5185(m)     >20     0     <1     <1       FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >10000     17750     25335     16976       Particles >6µm     ASTM D7647     >10000     17750     25335     16976       Particles >1µm     ASTM D7647     >100     2     3     3     3     3       Particles >38µm     ASTM D7647     3     1 <td>Phosphorus</td> <td>ppm</td> <td>ASTM D5185(m)</td> <td>2.4</td> <th>&lt;1</th> <td>0</td> <td>0</td>	Phosphorus	ppm	ASTM D5185(m)	2.4	<1	0	0
LithiumppmASTM D5185(m)<1<1<1CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185(m)>20111SodiumppmASTM D5185(m)>20000PotassiumppmASTM D5185(m)>200<1	Zinc	ppm	ASTM D5185(m)	0	<1	2	<1
CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185(m)     >20     1     1     1       Sodium     ppm     ASTM D5185(m)     >20     0     0     0       Potassium     ppm     ASTM D5185(m)     >20     0     <1	Sulfur	ppm	ASTM D5185(m)		641	709	641
Silicon     ppm     ASTM D5185(m)     >20     1     1     1       Sodium     ppm     ASTM D5185(m)     0     0     0     0       Potassium     ppm     ASTM D5185(m)     >20     0     <1     1     1       FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >10000     ▲ 17750     ▲ 25335     ▲ 16976       Particles >6µm     ASTM D7647     >10000     ▲ 17750     ▲ 25335     ▲ 16976       Particles >6µm     ASTM D7647     >10000     ▲ 17750     ▲ 25335     ▲ 16976       Particles >6µm     ASTM D7647     >1000     ▲ 1174     573       Particles >14µm     ASTM D7647     >40     2     2     3       Particles >21µm     ASTM D7647     >40     2     2     3       Particles >71µm     ASTM D7647     >3     1     0     0       Oil Cleanliness     ISO 4406 (c)     >20/17/14     21/17/10     22/17/11     21	Lithium	ppm	ASTM D5185(m)		<1	<1	<1
Sodium     ppm     ASTM D5185(m)     0     0     0     0       Potassium     ppm     ASTM D5185(m)     >20     0     <1     <1       FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >10000     17750     25335     16976       Particles >6µm     ASTM D7647     >1300     876     1174     573       Particles >14µm     ASTM D7647     >160     8     11     12       Particles >21µm     ASTM D7647     >40     2     2     3       Particles >38µm     ASTM D7647     >10     1     0     0       Particles >71µm     ASTM D7647     >3     1     0     0       Oil Cleanliness     ISO 4406 (c)     >20/17/14     21/17/10     22/17/11     21/16/11       FLUID DEGRADATION     method     limit/base     current     history1     history2	CONTAMINANTS		method	limit/base	current	history1	history2
Sodium     ppm     ASTM D5185(m)     0     0     0     0       Potassium     ppm     ASTM D5185(m)     >20     0     <1	Silicon	ppm	ASTM D5185(m)	>20	1	1	1
Potassium     ppm     ASTM D5185(m)     >20     0     <1     <1       FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >10000     17750     25335     16976       Particles >6µm     ASTM D7647     >1300     876     1174     573       Particles >14µm     ASTM D7647     >160     8     11     12       Particles >21µm     ASTM D7647     >40     2     2     3       Particles >38µm     ASTM D7647     >10     1     0     0       Particles >71µm     ASTM D7647     >3     1     0     0       Oil Cleanliness     ISO 4406 (c)     >20/17/14     21/17/10     22/17/11     21/16/11       FLUID DEGRADATION     method     limit/base     current     history1     history2					0	0	0
Particles >4µm   ASTM D7647   >10000   ▲ 17750   ▲ 25335   ▲ 16976     Particles >6µm   ASTM D7647   >1300   876   1174   573     Particles >14µm   ASTM D7647   >160   8   11   12     Particles >21µm   ASTM D7647   >40   2   2   3     Particles >21µm   ASTM D7647   >40   2   2   3     Particles >38µm   ASTM D7647   >10   1   0   0     Particles >71µm   ASTM D7647   >3   1   0   0     Oil Cleanliness   ISO 4406 (c)   >20/17/14   21/17/10   22/17/11   21/16/11     FLUID DEGRADATION   method   limit/base   current   history1   history2	Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1
Particles >6µm     ASTM D7647     >1300     876     1174     573       Particles >14µm     ASTM D7647     >160     8     11     12       Particles >21µm     ASTM D7647     >40     2     2     3       Particles >21µm     ASTM D7647     >40     2     2     3       Particles >38µm     ASTM D7647     >10     1     0     0       Particles >71µm     ASTM D7647     >3     1     0     0       Oil Cleanliness     ISO 4406 (c)     >20/17/14     21/17/10     22/17/11     21/16/11       FLUID DEGRADATION     method     limit/base     current     history1     history2	FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >14µm   ASTM D7647   >160   8   11   12     Particles >21µm   ASTM D7647   >40   2   2   3     Particles >21µm   ASTM D7647   >40   2   2   3     Particles >38µm   ASTM D7647   >10   1   0   0     Particles >38µm   ASTM D7647   >3   1   0   0     Particles >71µm   ASTM D7647   >3   1   0   0     Oil Cleanliness   ISO 4406 (c)   >20/17/14   21/17/10   22/17/11   21/16/11     FLUID DEGRADATION   method   limit/base   current   history1   history2	Particles >4µm		ASTM D7647	>10000	<b>A</b> 17750	▲ 25335	16976
Particles >21μm     ASTM D7647     >40     2     2     3       Particles >38μm     ASTM D7647     >10     1     0     0       Particles >38μm     ASTM D7647     >3     1     0     0       Particles >71μm     ASTM D7647     >3     1     0     0       Oil Cleanliness     ISO 4406 (c)     >20/17/14     21/17/10     22/17/11     21/16/11       FLUID DEGRADATION     method     limit/base     current     history1     history2	Particles >6µm		ASTM D7647	>1300	876	1174	573
Particles >38μm     ASTM D7647     >10     1     0     0       Particles >71μm     ASTM D7647     >3     1     0     0       Oil Cleanliness     ISO 4406 (c)     >20/17/14     21/17/10     22/17/11     21/16/11       FLUID DEGRADATION     method     limit/base     current     history1     history2	Particles >14µm		ASTM D7647	>160	8	11	12
Particles >38μm     ASTM D7647     >10     1     0     0       Particles >71μm     ASTM D7647     >3     1     0     0       Oil Cleanliness     ISO 4406 (c)     >20/17/14     21/17/10     22/17/11     21/16/11       FLUID DEGRADATION     method     limit/base     current     history1     history2	Particles >21µm		ASTM D7647	>40	2	2	3
Oil Cleanliness   ISO 4406 (c) >20/17/14   21/17/10   22/17/11   21/16/11     FLUID DEGRADATION   method   limit/base   current   history1   history2			ASTM D7647	>10	1	0	0
Oil Cleanliness   ISO 4406 (c) >20/17/14   21/17/10   22/17/11   21/16/11     FLUID DEGRADATION   method   limit/base   current   history1   history2	Particles >71µm		ASTM D7647	>3	1	0	0
					<b>A</b> 21/17/10	▲ 22/17/11	▲ 21/16/11
Acid Number (AN) mg KOH/g ASTM D974* 0.02 0.11 0.02 0.06	FLUID DEGRADA		method	limit/base	current	history1	history2

Report Id: ONTQUE [WCAMIS] 02592121 (Generated: 11/01/2023 14:13:21) Rev: 1



# **OIL ANALYSIS REPORT**



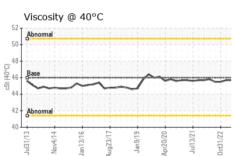


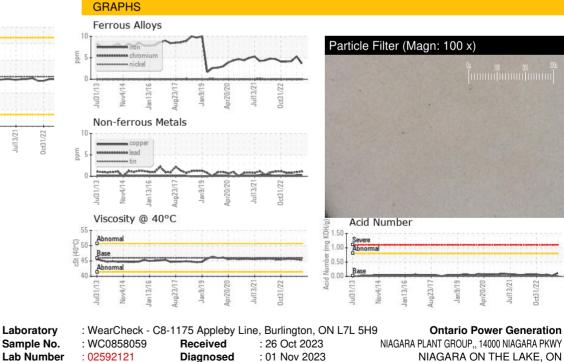
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46	45.3	45.6	45.7
SAMPLE IMAGES	3	method	limit/base	current	history1	history2
Color						

Bottom

PrtFilter







ISO 17025:2017 Accredited Laboratory : 5669200 Diagnostician : Kevin Marson CA LOS 1J0 Unique Number Test Package : IND 2 (Additional Tests: BottomAnalysis, FilterPatch, PrtFilter, TAN Macontact: Alex Courtemanche To discuss this sample report, contact Customer Service at 1-800-268-2131. alex.courtemanche@opg.com Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (905)357-0322 Validity of results and interpretation are based on the sample and information as supplied. F: (905)357-6558

CALA

Laboratory