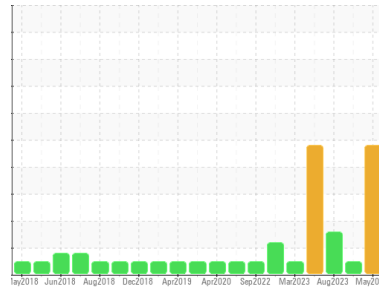




# PROBLEM SUMMARY

Machine Id  
**GTC Train 1 MINERAL OIL (S/N V650201)**  
 Component  
**1 Gearbox**  
 Fluid  
**MOBIL DTE 832 (--- LTR)**

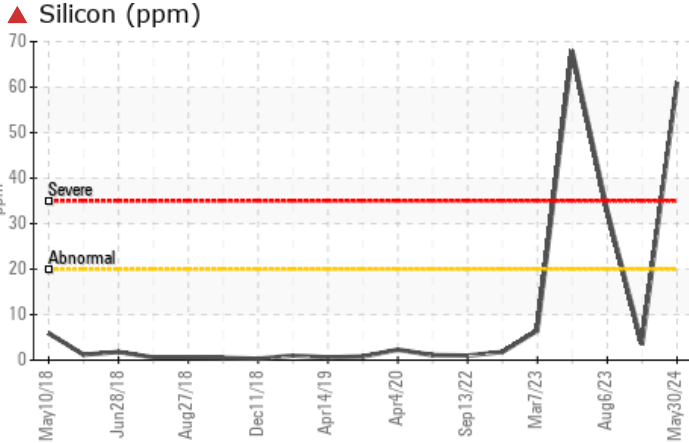
Sample Rating Trend



**DIRT**



## COMPONENT CONDITION SUMMARY




### RECOMMENDATION

Check seals and/or filters for points of contaminant entry. 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 an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	ABNORMAL
Silicon	ppm	ASTM D5185(m)	>20	▲ 61	4	▲ 33

**Customer Id:** EXXSTJ  
**Sample No.:** PP14002073  
**Lab Number:** 02644387  
**Test Package:** MAR 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](mailto:Kevin.Marson@wearcheck.com)


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

**RECOMMENDED ACTIONS**

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.
Information Required	---	---	?	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 Seals	---	---	?	Check seals and/or filters for points of contaminant entry.


**HISTORICAL DIAGNOSIS**

NORMAL




**25 Nov 2023 Diag: Wes Davis**  
 Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with 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.

view report




DIRT




**06 Aug 2023 Diag: Kevin Marson**  
 Check seals and/or filters for points of contaminant entry. 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 an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. Elemental level of silicon (Si) above normal indicating ingress of seal material, dirt and/or grease. The water content is negligible. 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




DIRT



**02 Jun 2023 Diag: Kevin Marson**  
 Check seals and/or filters for points of contaminant entry. 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 an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. Elemental level of silicon (Si) above normal indicating ingress of seal material, dirt and/or grease. The water content is negligible. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

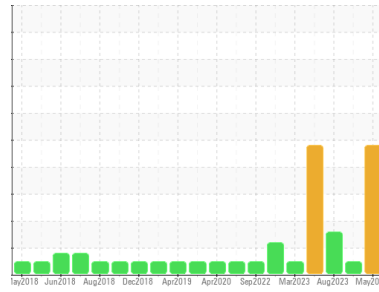
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**DIRT**



Machine Id  
**GTC Train 1 MINERAL OIL (S/N V650201)**  
 Component  
**1 Gearbox**  
 Fluid  
**MOBIL DTE 832 (--- LTR)**

### DIAGNOSIS

**▲ Recommendation**  
 Check seals and/or filters for points of contaminant entry. 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 an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

**Wear**  
 All component wear rates are normal.

**▲ Contamination**  
 High silicon level indicates possible contamination with silicone-based oil or silicone-based fitting compound/grease. Advise investigate any possible cross-contamination with silicone-based oil, or any points that are sealed/greased with silicone-based compound/grease. The water content is negligible.

**Fluid Condition**  
 The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PP14002073</b>	PP13937659	PP13907152
Sample Date	Client Info		<b>30 May 2024</b>	25 Nov 2023	06 Aug 2023
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>SEVERE</b>	NORMAL	ABNORMAL

### CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG

### WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>0</b>	0	0
Iron	ppm	ASTM D5185(m) >150	<b>0</b>	0	0
Chromium	ppm	ASTM D5185(m) >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m) >5	<b>&lt;1</b>	0	<1
Lead	ppm	ASTM D5185(m) >65	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m) >80	<b>0</b>	0	0
Tin	ppm	ASTM D5185(m) >8	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185(m) >5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	0
Barium	ppm	ASTM D5185(m)	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Calcium	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Phosphorus	ppm	ASTM D5185(m)	<b>1095</b>	1175	1191
Zinc	ppm	ASTM D5185(m)	<b>&lt;1</b>	1	1
Sulfur	ppm	ASTM D5185(m)	<b>27</b>	29	30
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

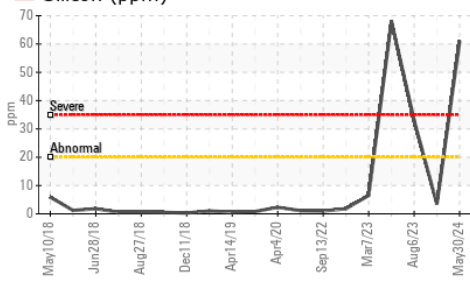
### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >20	<b>▲ 61</b>	4	▲ 33
Sodium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Potassium	ppm	ASTM D5185(m) >20	<b>0</b>	0	<1

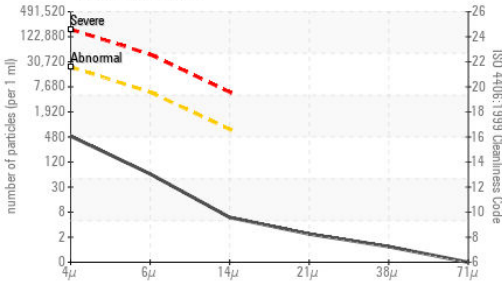


# OIL ANALYSIS REPORT

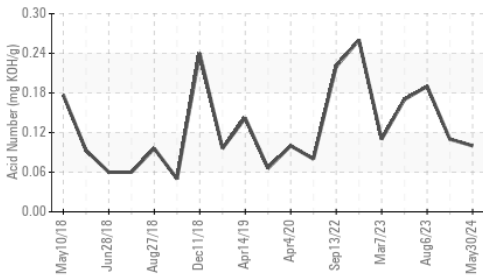
▲ Silicon (ppm)



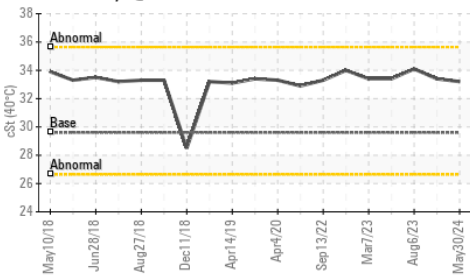
Particle Count



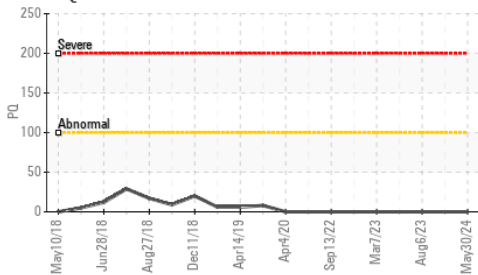
Acid Number



Viscosity @ 40°C



PQ



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>442</b>	---	---
Particles >6µm	ASTM D7647	>5000	<b>55</b>	---	---
Particles >14µm	ASTM D7647	>640	<b>5</b>	---	---
Particles >21µm	ASTM D7647	>160	<b>2</b>	---	---
Particles >38µm	ASTM D7647	>40	<b>1</b>	---	---
Particles >71µm	ASTM D7647	>10	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>16/13/10</b>	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*		<b>0.10</b>	0.11	0.19

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar Visual*	NONE	<b>NONE</b>	NONE	VLITE
Debris	scalar Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar Visual*	>0.2	<b>NEG</b>	NEG	NEG
Free Water	scalar Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D7279(m)	29.6	<b>33.2</b>	33.4	34.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color



Bottom



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
 Sample No. : PP14002073  
 Lab Number : **02644387**  
 Unique Number : 5801926  
 Test Package : MAR 2 ( Additional Tests: PQ, PRTCOUNT, TAN Man )

**ExxonMobil Canada East Ltd.**  
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 F:

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.