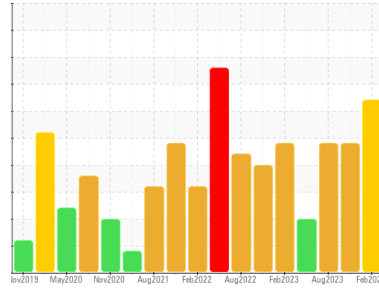




# PROBLEM SUMMARY

## Sample Rating Trend



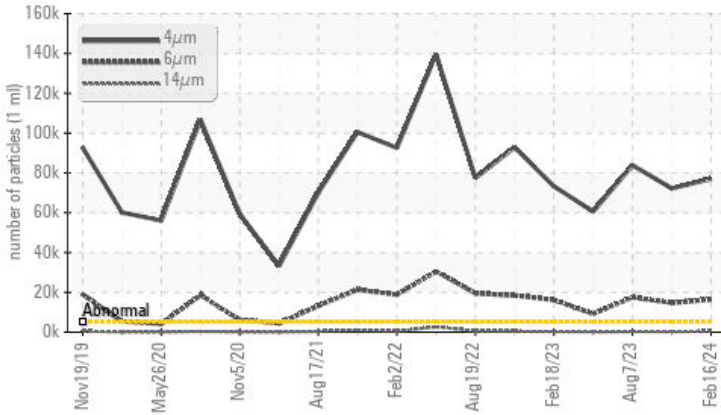
ISO



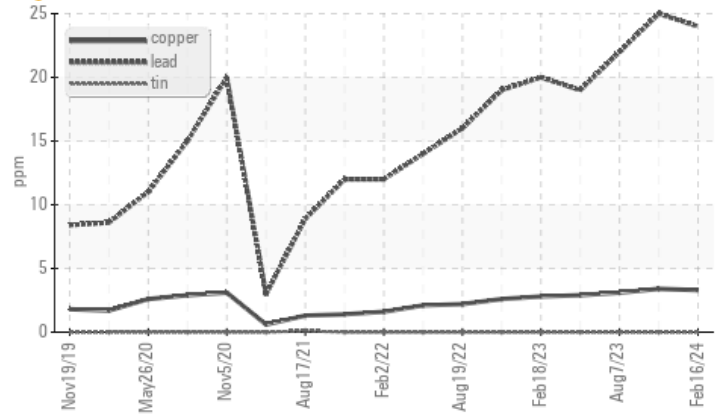
Machine Id  
**CAHE-V641765**  
 Component  
**Hydraulic System**  
 Fluid  
**MOBIL DTE 10 EXCEL 32 (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



### ● Non-ferrous Metals



## RECOMMENDATION

## PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	SEVERE	SEVERE
Particles >4µm	ASTM D7647	>5000	▲ <b>77008</b>	▲ 72184	▲ 83843
Particles >6µm	ASTM D7647	>1300	▲ <b>16450</b>	▲ 14688	▲ 17434
Particles >14µm	ASTM D7647	>160	▲ <b>457</b>	● 230	● 276
Particles >21µm	ASTM D7647	>40	▲ <b>90</b>	25	39
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ <b>23/21/16</b>	▲ 23/21/15	▲ 24/21/15
White Metal	scalar Visual*	NONE	▲ <b>VLITE</b>	NONE	NONE
PrtFilter				no image	no image

Customer Id: EXXSTJ  
 Sample No.: PP13963656  
 Lab Number: 02625228  
 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

There are no recommended actions for this sample.

## HISTORICAL DIAGNOSIS

### 11 Nov 2023 Diag: Kevin Marson

ISO



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 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. Lead ppm levels are noted. All other component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. 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



### 07 Aug 2023 Diag: Kevin Marson

ISO



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 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. Lead ppm levels are noted. All other component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. 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



### 21 May 2023 Diag: Wes Davis

ISO



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 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. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. 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

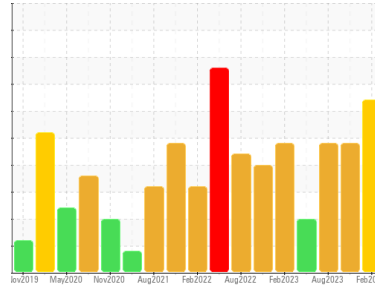




# OIL ANALYSIS REPORT

## Sample Rating Trend

ISO



Machine Id  
**CAHE-V641765**  
 Component  
**Hydraulic System**  
 Fluid  
**MOBIL DTE 10 EXCEL 32 (--- GAL)**

### DIAGNOSIS

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PP13963656</b>	PP13931469	PP13899816
Sample Date	Client Info			<b>16 Feb 2024</b>	11 Nov 2023	07 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>	SEVERE	SEVERE

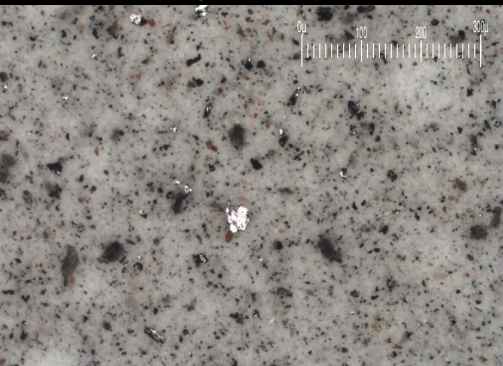
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<b>3</b>	3	4
Chromium	ppm	ASTM D5185(m)	>10	<b>2</b>	2	2
Nickel	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>20	<b>24</b>	25	22
Copper	ppm	ASTM D5185(m)	>20	<b>3</b>	3	3
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)		<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>0</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>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m)	120	<b>105</b>	108	103
Phosphorus	ppm	ASTM D5185(m)	475	<b>438</b>	440	461
Zinc	ppm	ASTM D5185(m)		<b>7</b>	8	9
Sulfur	ppm	ASTM D5185(m)	1275	<b>1266</b>	1292	1284
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	<b>4</b>	5	6
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Water	%	ASTM D6304*	>0.05	<b>0.024</b>	---	---
ppm Water	ppm	ASTM D6304*	>500	<b>241</b>	---	---

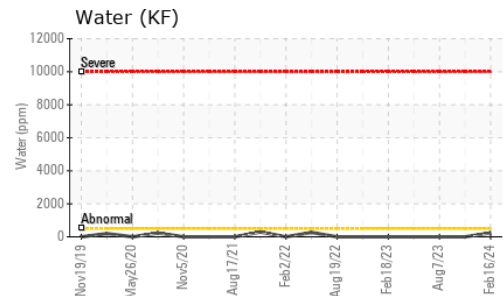
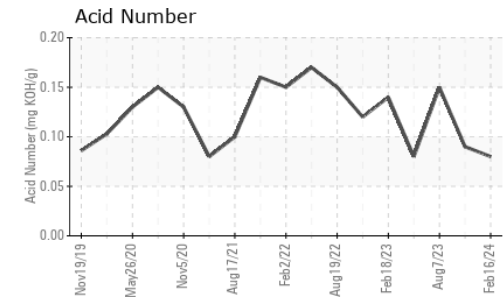
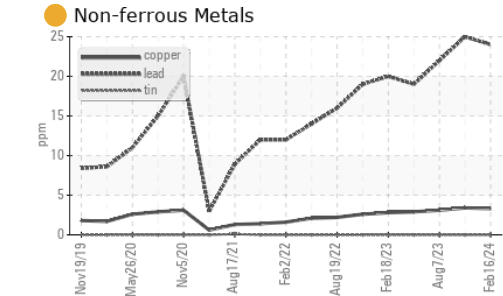
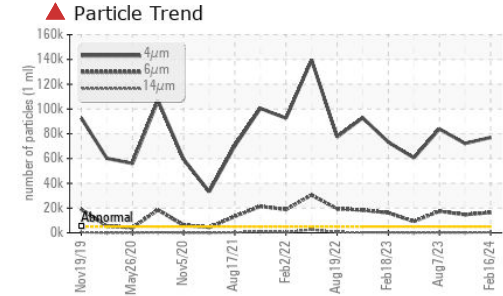
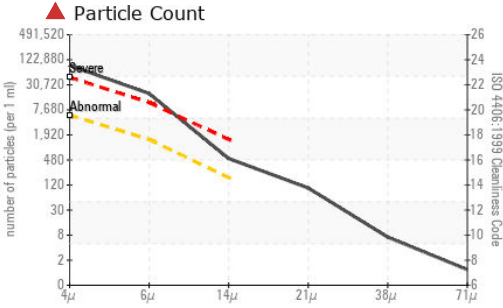
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>▲ 77008</b>	▲ 72184	▲ 83843
Particles >6µm		ASTM D7647	>1300	<b>▲ 16450</b>	▲ 14688	▲ 17434
Particles >14µm		ASTM D7647	>160	<b>▲ 457</b>	● 230	● 276
Particles >21µm		ASTM D7647	>40	<b>▲ 90</b>	25	39
Particles >38µm		ASTM D7647	>10	<b>6</b>	2	1
Particles >71µm		ASTM D7647	>3	<b>1</b>	1	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 23/21/16</b>	▲ 23/21/15	▲ 24/21/15

Particle Filter (Magn: 100 x)





# OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		<b>0.08</b>	0.09	0.15

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	▲ <b>VLITE</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>VLITE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	VLITE
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*	>0.05	<b>.2%</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)	32	<b>32.1</b>	31.8	31.8

SAMPLE IMAGES		method	limit/base	current	history1	history2
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Color						
Bottom						
PrtFilter						



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PP13963656 **Received** : 28 Mar 2024  
**Lab Number** : **02625228** **Tested** : 01 Apr 2024  
**Unique Number** : 5750347 **Diagnosed** : 01 Apr 2024 - Kevin Marson

**ExxonMobil Canada East Ltd.**  
 Hebron-Materials and Repair Coordin, Suite 1000, 100 New Gow  
 St. John's, NL  
 CA A1C 6K3  
 Contact: Liam Maher  
 liam.m.maher@exxonmobil.com  
 T: (709)273-3729  
 F:

**Test Package** : MAR 2 ( Additional Tests: Bottom, BottomAnalysis, FilterPatch, KF, PrtFilter )  
 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.