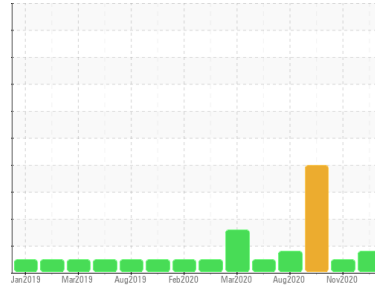




# PROBLEM SUMMARY

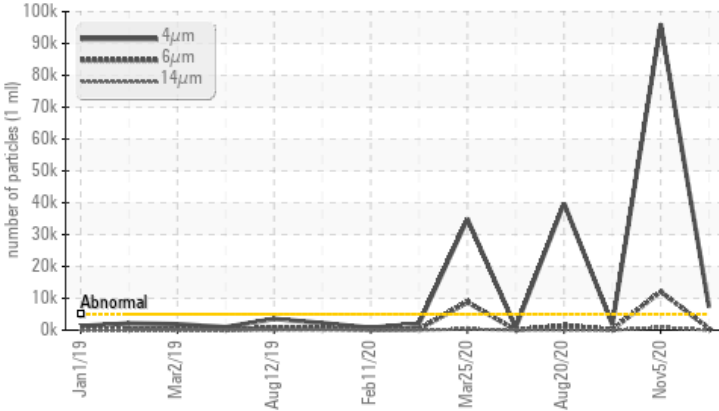
Sample Rating Trend



Machine Id  
**Water Injection Pool 1 Train 2 (S/N CAHE-V684225)**  
 Component  
**Hydraulic System**  
 Fluid  
**MOBIL DTE OIL LIGHT (--- LTR)**

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

## PROBLEMATIC TEST RESULTS

Sample Status		ATTENTION	NORMAL	SEVERE
Particles >4µm	ASTM D7647 >5000	▲ 7319	1781	● 96070
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 20/16/11	18/14/10	● 24/21/17

Customer Id: EXXSTJ  
 Sample No.: PP13899819  
 Lab Number: 02577464  
 Test Package: MAR 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Wes Davis +1 905-569-8600 x223  
[wesd@wearcheck.ca](mailto:wesd@wearcheck.ca)

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
Change Filter	---	---	?	We recommend you service the filters on this component.
Information Required	---	---	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

## HISTORICAL DIAGNOSIS

### 05 Nov 2020 Diag: Wes Davis

NORMAL



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. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 05 Nov 2020 Diag: Wes Davis

ISO



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. All component wear rates are normal. Particles >6µm are severely high. Particles >4µm are severely high. Particles >14µm are abnormally high. Particles >21µm are abnormally high. Particles >38µm are notably high. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 20 Aug 2020 Diag: Wes Davis

ISO



We recommend you service the filters on this component. 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. Particles >4µm are abnormally high. Particles >6µm are notably high. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

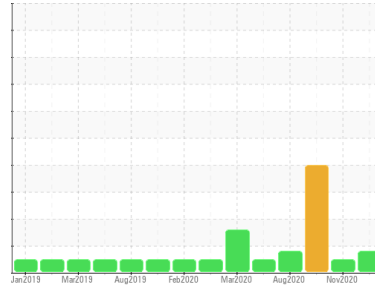
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**Water Injection Pool 1 Train 2 (S/N CAHE-V684225)**

Component  
**Hydraulic System**

Fluid  
**MOBIL DTE OIL LIGHT (--- LTR)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### Wear

All component wear rates are normal.

### 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.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PP13899819</b>	PP13554651	PP13505973
Sample Date	Client Info		<b>07 Aug 2023</b>	05 Nov 2020	05 Nov 2020
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>ATTENTION</b>	NORMAL	SEVERE

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<1	<1
Chromium	ppm	ASTM D5185(m)	>10	0	0
Nickel	ppm	ASTM D5185(m)	>10	<1	0
Titanium	ppm	ASTM D5185(m)		0	0
Silver	ppm	ASTM D5185(m)		0	<1
Aluminum	ppm	ASTM D5185(m)	>10	<1	<1
Lead	ppm	ASTM D5185(m)	>20	0	<1
Copper	ppm	ASTM D5185(m)	>20	2	4
Tin	ppm	ASTM D5185(m)	>10	0	0
Antimony	ppm	ASTM D5185(m)		0	0
Vanadium	ppm	ASTM D5185(m)		0	0
Beryllium	ppm	ASTM D5185(m)		0	0
Cadmium	ppm	ASTM D5185(m)		0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		0	<1
Barium	ppm	ASTM D5185(m)		0	0
Molybdenum	ppm	ASTM D5185(m)		0	0
Manganese	ppm	ASTM D5185(m)		0	0
Magnesium	ppm	ASTM D5185(m)		4	11
Calcium	ppm	ASTM D5185(m)		<1	<1
Phosphorus	ppm	ASTM D5185(m)		108	102
Zinc	ppm	ASTM D5185(m)		25	55
Sulfur	ppm	ASTM D5185(m)		598	791
Lithium	ppm	ASTM D5185(m)		<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	0	<1
Sodium	ppm	ASTM D5185(m)		<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	13

## FLUID CLEANLINESS

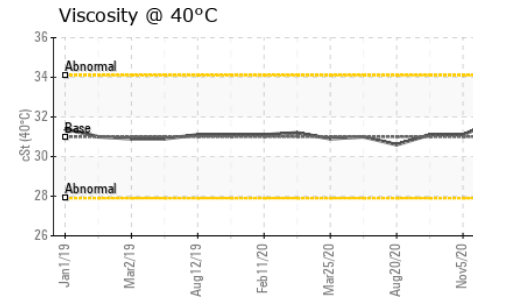
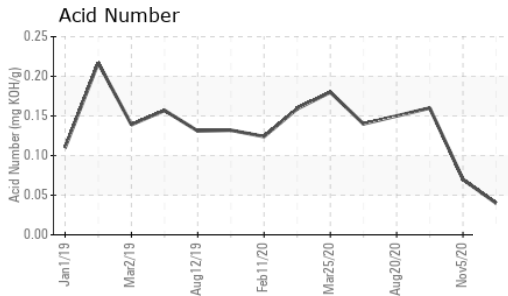
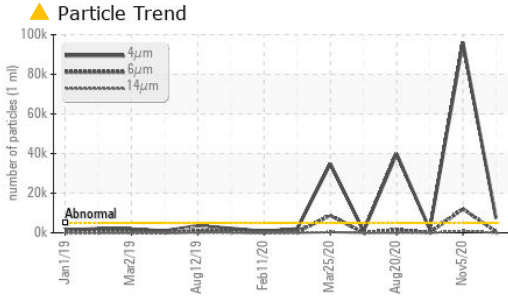
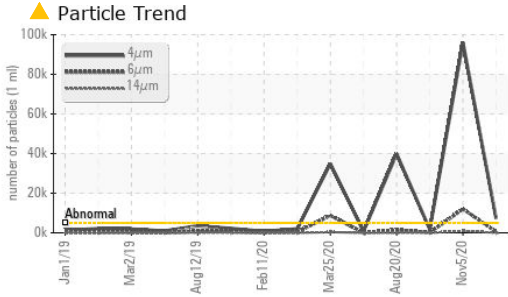
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ <b>7319</b>	1781	● 96070
Particles >6µm	ASTM D7647	>1300	<b>543</b>	157	● 12049
Particles >14µm	ASTM D7647	>160	<b>11</b>	7	▲ 904
Particles >21µm	ASTM D7647	>40	<b>3</b>	2	▲ 280
Particles >38µm	ASTM D7647	>10	<b>0</b>	0	▲ 16
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	1
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ <b>20/16/11</b>	18/14/10	● 24/21/17

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	<b>0.04</b>	0.07	0.16



# OIL ANALYSIS REPORT

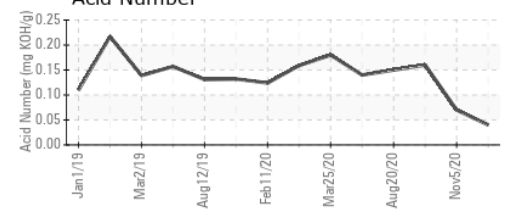
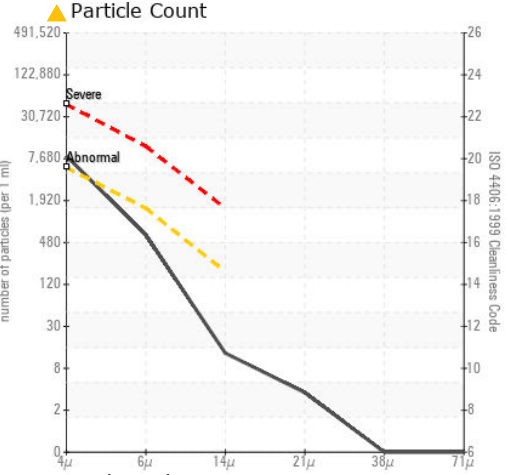
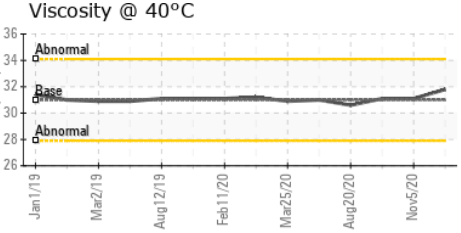
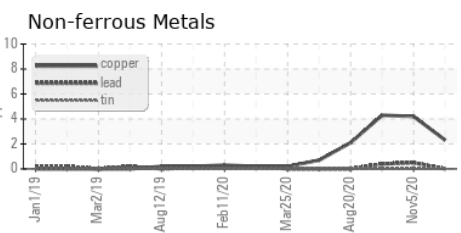
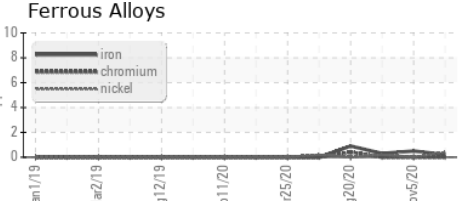


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	31	31.8	31.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PP13899819 **Received** : 22 Aug 2023  
**Lab Number** : 02577464 **Diagnosed** : 23 Aug 2023  
**Unique Number** : 5630524 **Diagnostician** : Wes Davis  
**Test Package** : MAR 2

**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:

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.