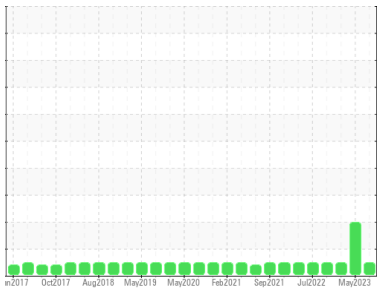
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
Materials Handling/SE Pedestal Crane
Machine Id
WPD471261 CRANE PEDESTAL SOUTH EAST
Component
Hydraulic System
Fluid
MOBIL DTE 10 EXCEL 46 (--- GAL)

DIAGNOSIS

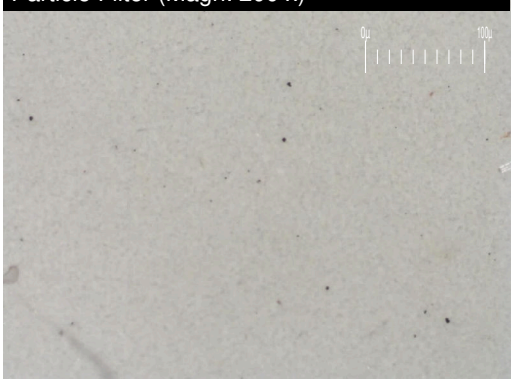
Recommendation
Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear
All component wear rates are normal.

Contamination
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

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

Particle Filter (Magn: 200 x)



SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PC13897520**	PP13890909	PP13818428
Sample Date		Client Info		**01 Jul 2023**	03 May 2023	12 Jan 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	N/A
Sample Status				**NORMAL**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	**2**	2	2
Chromium	ppm	ASTM D5185(m)	>10	**0**	0	0
Nickel	ppm	ASTM D5185(m)	>10	**0**	0	0
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>10	**<1**	<1	0
Lead	ppm	ASTM D5185(m)	>20	**1**	1	1
Copper	ppm	ASTM D5185(m)	>20	**1**	2	1
Tin	ppm	ASTM D5185(m)	>10	**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)		**<1**	0	<1
Barium	ppm	ASTM D5185(m)		**0**	0	0
Molybdenum	ppm	ASTM D5185(m)		**0**	0	0
Manganese	ppm	ASTM D5185(m)		**0**	0	0
Magnesium	ppm	ASTM D5185(m)		**1**	<1	<1
Calcium	ppm	ASTM D5185(m)		**105**	118	112
Phosphorus	ppm	ASTM D5185(m)		**465**	476	470
Zinc	ppm	ASTM D5185(m)		**50**	47	46
Sulfur	ppm	ASTM D5185(m)		**1415**	1435	1426
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

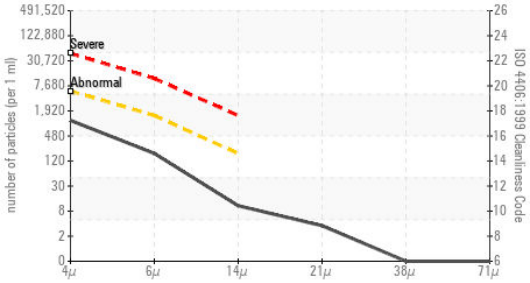
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	**1**	<1	0
Sodium	ppm	ASTM D5185(m)		**2**	1	2
Potassium	ppm	ASTM D5185(m)	>20	**<1**	<1	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**998**	▲ 37867	4235
Particles >6µm		ASTM D7647	>1300	**161**	▲ 8041	1018
Particles >14µm		ASTM D7647	>160	**9**	▲ 578	21
Particles >21µm		ASTM D7647	>40	**3**	▲ 181	4
Particles >38µm		ASTM D7647	>10	**0**	10	0
Particles >71µm		ASTM D7647	>3	**0**	1	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**17/15/10**	▲ 22/20/16	19/17/12

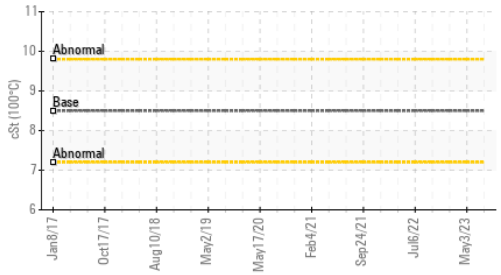
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**0.09**	0.09	0.07

OIL ANALYSIS REPORT

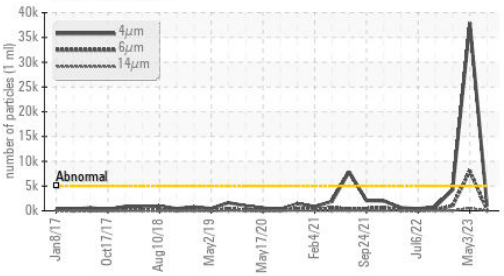
Particle Count



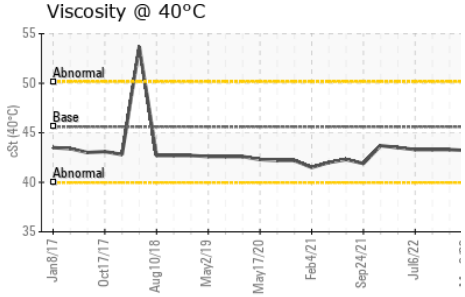
Viscosity @ 100°C



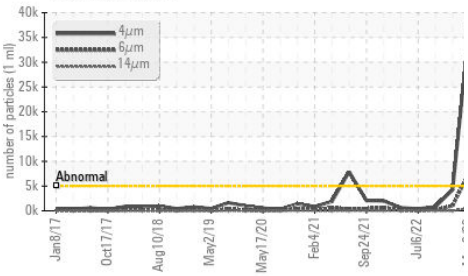
Particle Trend



Viscosity @ 40°C

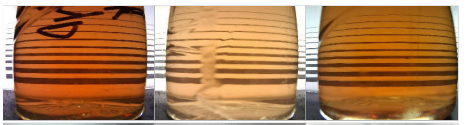


Particle Trend



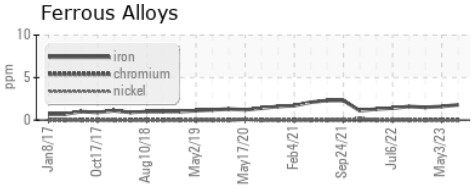
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**VLITE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	VLITE	NONE
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	45.6	**43.4**	43.2	43.3
Visc @ 100°C	cSt	ASTM D7279(m)	8.5	**7.9**	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	164	**155**	---	---

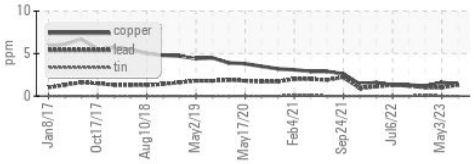
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					
PrtFilter				*no image*	*no image*

GRAPHS

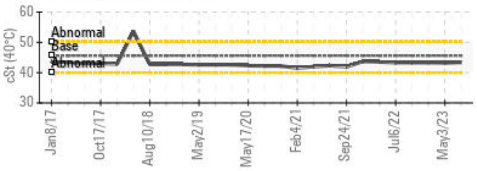
Ferrous Alloys



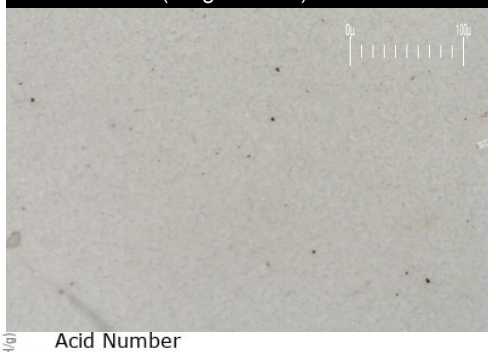
Non-ferrous Metals



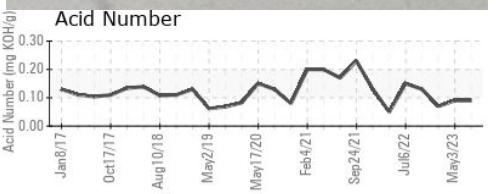
Viscosity @ 40°C



Particle Filter (Magn: 200 x)



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9			**ExxonMobil Canada East Ltd.**
Sample No.	: PC13897520	**Received**	: 02 Aug 2023	Hebron-Materials and Repair Coordin, Suite 1000, 100 New Gow
Lab Number	: 02573738	**Diagnosed**	: 03 Aug 2023	St. John`s, NL
Unique Number	: 5618789	**Diagnostician**	: Kevin Marson	CA A1C 6K3
Test Package	: MAR 2 (Additional Tests: Bottom, BottomAnalysis, FilterPatch, KV100, PrtFilter, VI)			Contact: Liam Maher

To discuss this sample report, contact Customer Service at 1-800-268-2131. liam.m.maher@exxonmobil.com

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (709)273-3729

Validity of results and interpretation are based on the sample and information as supplied. F: