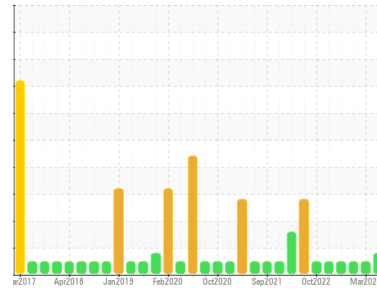




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area

Materials Handling/NE Pedestal Crane
WPD471231 CRANE PEDESTAL NORTH EAST

Machine Id

Component
Auxiliary Brake

Fluid

MOBIL MOBILUBE HD 80W90 (--- GAL)

DIAGNOSIS

Recommendation

We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the component make and model with your next sample.

Wear

Tin ppm levels are marginal. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the fluid.

Fluid Condition

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

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PP13994630	PP	PP13897519
Sample Date	Client Info	26 May 2024	27 Mar 2024	01 Jul 2023
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		MARGINAL	NORMAL	NORMAL

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184*	33	12	32
Iron	ppm ASTM D5185(m) >350	52	26	41
Chromium	ppm ASTM D5185(m) >5	0	0	0
Nickel	ppm ASTM D5185(m) >5	0	0	0
Titanium	ppm ASTM D5185(m)	<1	0	0
Silver	ppm ASTM D5185(m)	0	0	<1
Aluminum	ppm ASTM D5185(m) >8	<1	0	<1
Lead	ppm ASTM D5185(m) >10	6	4	<1
Copper	ppm ASTM D5185(m) >150	121	67	25
Tin	ppm ASTM D5185(m) >5	6	3	<1
Antimony	ppm ASTM D5185(m) >5	0	0	0
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)	130	147	175
Barium	ppm ASTM D5185(m)	<1	<1	0
Molybdenum	ppm ASTM D5185(m)	0	0	<1
Manganese	ppm ASTM D5185(m)	<1	0	<1
Magnesium	ppm ASTM D5185(m)	8	4	2
Calcium	ppm ASTM D5185(m)	30	26	6
Phosphorus	ppm ASTM D5185(m)	941	968	1062
Zinc	ppm ASTM D5185(m)	35	27	11
Sulfur	ppm ASTM D5185(m)	23647	24255	23634
Lithium	ppm ASTM D5185(m)	3	2	2

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >400	4	2	1
Sodium	ppm ASTM D5185(m)	5	4	<1
Potassium	ppm ASTM D5185(m) >20	7	5	<1

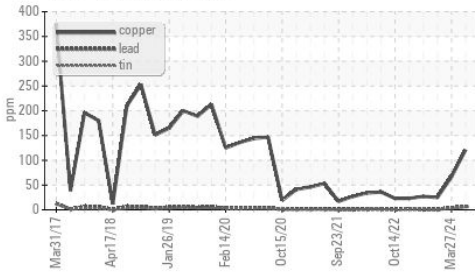
FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	1.22	1.40	1.34

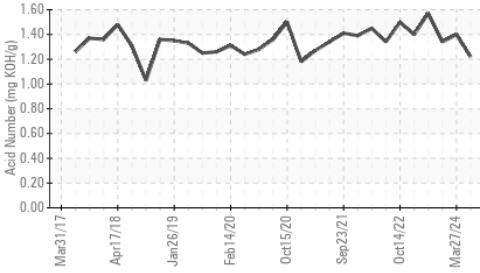


OIL ANALYSIS REPORT

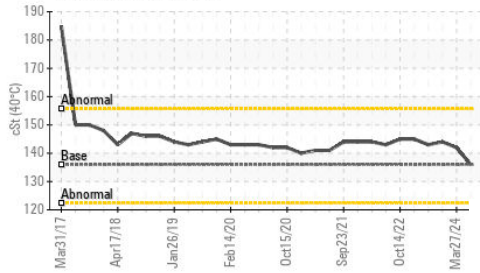
Non-ferrous Metals



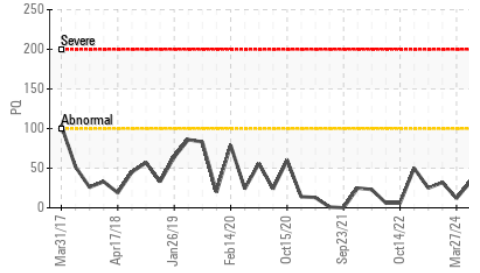
Acid Number



Viscosity @ 40°C



PQ



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	136	142	144

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

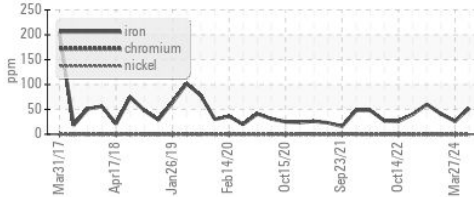


Bottom

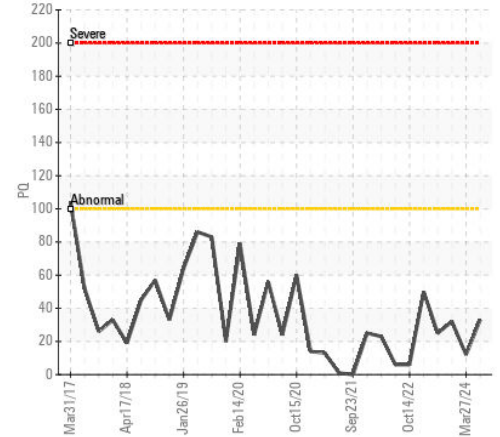


GRAPHS

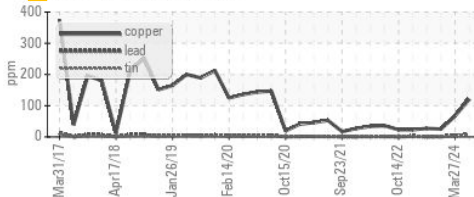
Ferrous Alloys



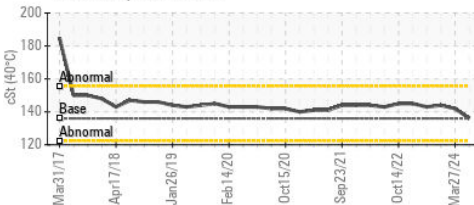
PQ



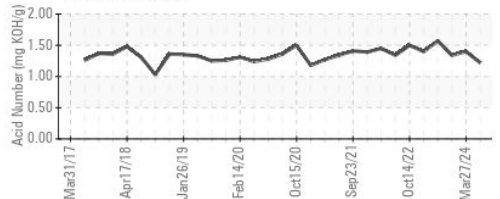
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PP13994630 **Received** : 13 Jun 2024
Lab Number : 02641844 **Tested** : 14 Jun 2024
Unique Number : 5799383 **Diagnosed** : 14 Jun 2024 - Kevin Marson
Test Package : MAR 2 (Additional Tests: 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.