



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
PHR-G2-TUBR

Component
Bearing

Fluid
MOBIL DTE OIL HVY MEDIUM (--- GAL)

RECOMMENDATION

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.

WEAR

PQ levels are abnormal. Tin and antimony ppm levels are abnormal. Iron and lead ppm levels are noted. Bearing wear is indicated. The high ferrous density (PQ) index indicates that abnormal wear is occurring.

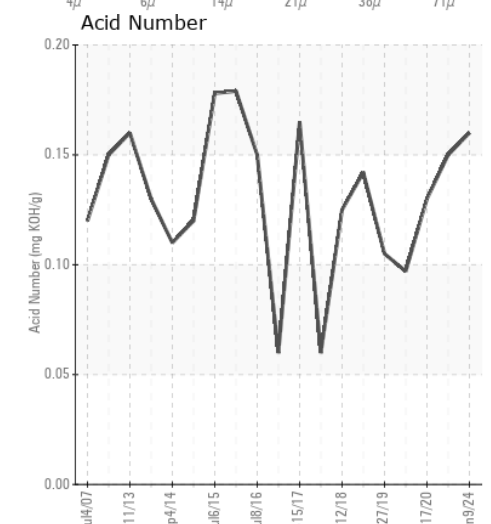
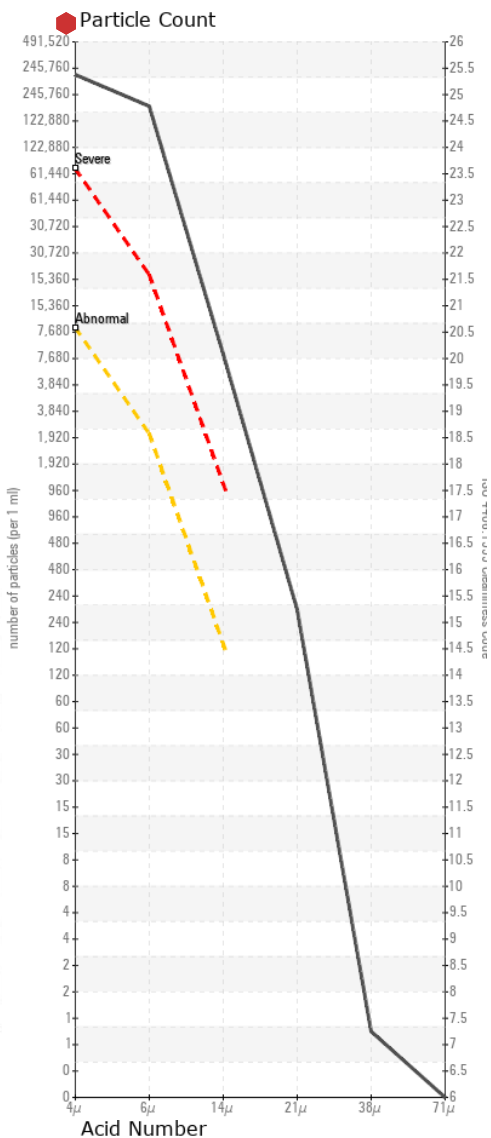
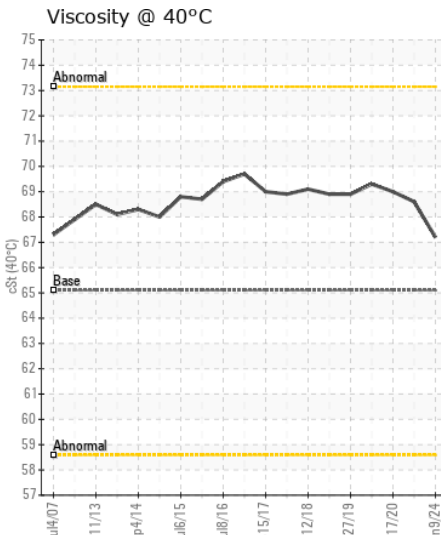
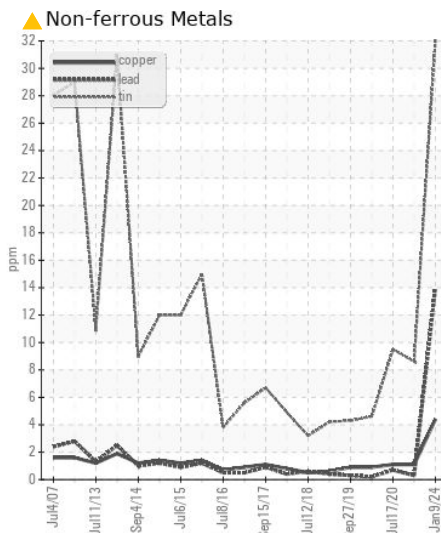
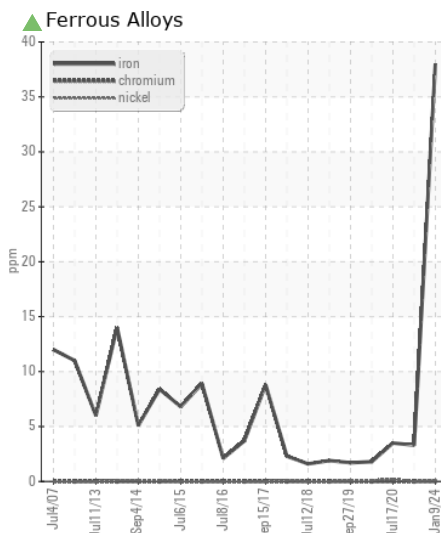
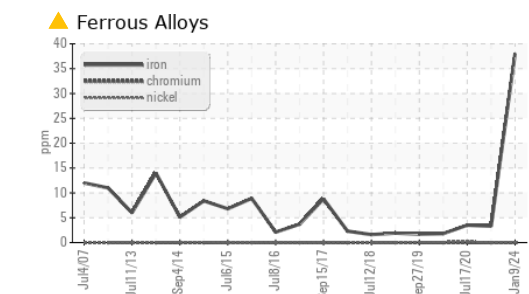
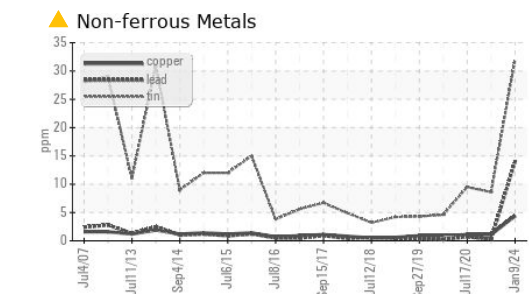
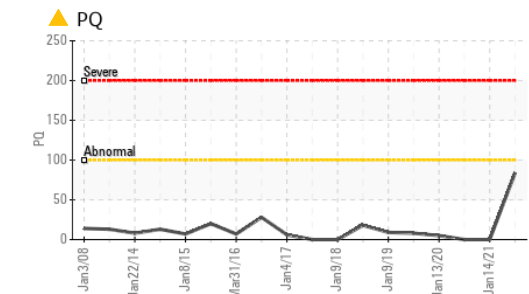
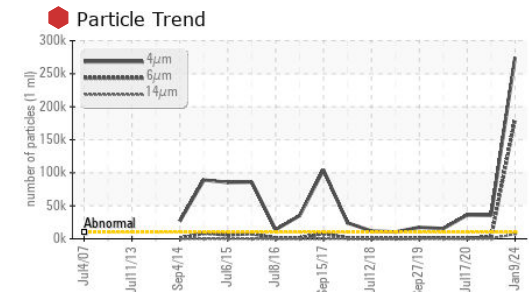
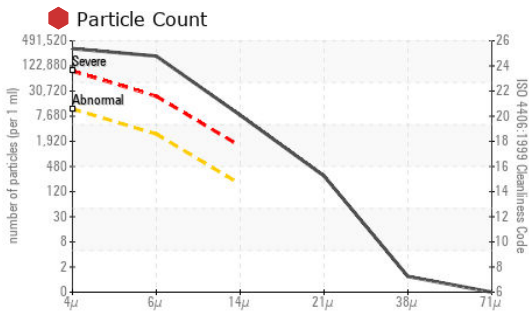
CONTAMINATION

There is a high amount of particulates (2 to 100 microns in size) present in the oil.

FLUID CONDITION

The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear. NOTE: The color of the oil is darker then previous samples.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0706127	WC0327913	WC0327998
Sample Date		Client Info		09 Jan 2024	14 Jan 2021	17 Jul 2020
Machine Age	days	Client Info		0	0	0
Oil Age	days	Client Info		0	0	0
Filter Age	days	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	ABNORMAL	ABNORMAL
PQ		ASTM D8184*		▲ 84	0	0
Iron	ppm	ASTM D5185(m)	>63	▲ 38	3	4
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	<1	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	<1
Aluminum	ppm	ASTM D5185(m)	>2	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>161	▲ 14	<1	<1
Copper	ppm	ASTM D5185(m)	>13	4	1	1
Tin	ppm	ASTM D5185(m)	>27	▲ 32	9	10
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>12	2	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1
Water		WC Method	>2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>10000	● 274477	▲ 35643	▲ 36034
Particles >6µm		ASTM D7647	>2500	● 181639	2127	1394
Particles >14µm		ASTM D7647	>160	● 7093	95	19
Particles >21µm		ASTM D7647	>40	▲ 250	23	3
Particles >38µm		ASTM D7647	>10	1	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/14	● 25/25/20	▲ 22/18/14	▲ 22/18/11
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	HAZY	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		2	<1	<1
Boron	ppm	ASTM D5185(m)		0	<1	<1
Barium	ppm	ASTM D5185(m)		<1	<1	<1
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		<1	<1	0
Calcium	ppm	ASTM D5185(m)		4	<1	<1
Phosphorus	ppm	ASTM D5185(m)		112	2	2
Zinc	ppm	ASTM D5185(m)		54	3	3
Sulfur	ppm	ASTM D5185(m)		1059	2022	2024
Acid Number (AN)	mg KOH/g	ASTM D974*		0.16	0.15	0.13
Visc @ 40°C	cSt	ASTM D7279(m)	65.1	67.2	68.6	69.0



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0706127 **Received** : 17 Jan 2024
Lab Number : 02609405 **Diagnosed** : 19 Jan 2024
Unique Number : 5710491 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: PQ, PRTCOUNT, TAN Man)

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.

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