MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
SPARTAN 4020
Component
Middle Transfer Case
Fluid
PETRO CANADA ATF D3M (--- LTR)

RECOMMENDATION

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

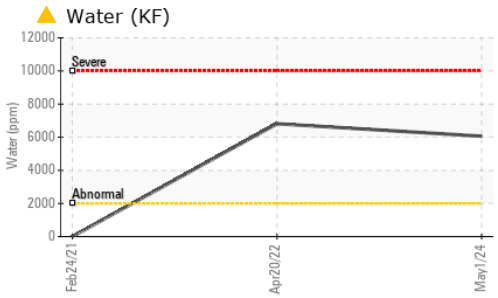
CONTAMINATION

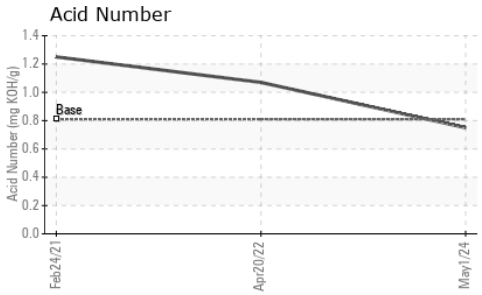
There is a moderate concentration of water present in the oil.

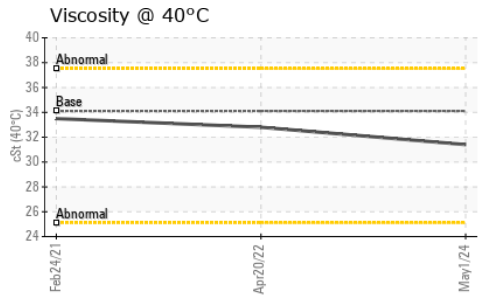
FLUID CONDITION

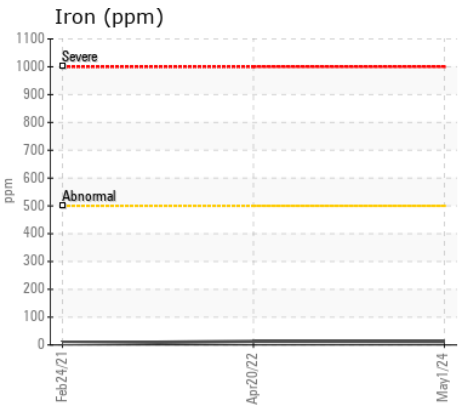
The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

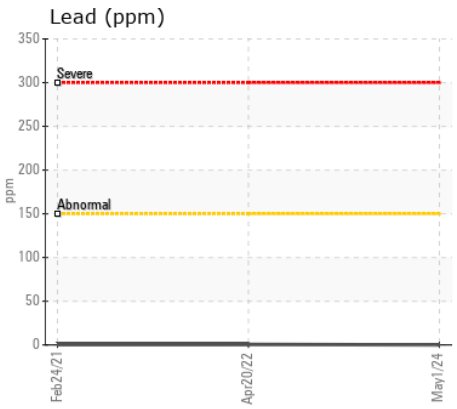
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0895859**	WC0702353	PC0041714
Sample Date		Client Info		**01 May 2024**	20 Apr 2022	24 Feb 2021
Machine Age	kms	Client Info		**10791**	193188	185601
Oil Age	kms	Client Info		**589**	4000	2391
Filter Age	kms	Client Info		**0**	4000	0
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**N/A**	Changed	N/A
Sample Status				**ABNORMAL**	ABNORMAL	NORMAL
PQ		ASTM D8184*		**0**	---	---
Iron	ppm	ASTM D5185(m)	>500	**12**	13	6
Chromium	ppm	ASTM D5185(m)	>5	**0**	0	0
Nickel	ppm	ASTM D5185(m)	>5	**0**	<1	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	0	<1
Aluminum	ppm	ASTM D5185(m)	>45	**0**	0	<1
Lead	ppm	ASTM D5185(m)	>150	**0**	<1	<1
Copper	ppm	ASTM D5185(m)	>100	**<1**	<1	1
Tin	ppm	ASTM D5185(m)	>5	**0**	0	0
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)	>85	**4**	6	3
Potassium	ppm	ASTM D5185(m)	>20	**<1**	<1	<1
Water	%	ASTM D6304*	>0.2	▲ **0.606**	▲ 0.681	---
ppm Water	ppm	ASTM D6304*	>2000	▲ **6060**	▲ 6811.9	---
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**VLITE**	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Appearance	scalar	Visual*	NORML	▲ **HAZY**	▲ HAZY	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	▲ **.2%**	▲ .2%	NEG
Sodium	ppm	ASTM D5185(m)		**3**	4	1
Boron	ppm	ASTM D5185(m)	98	**83**	90	103
Barium	ppm	ASTM D5185(m)	<0.00	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)		**0**	<1	<1
Manganese	ppm	ASTM D5185(m)		**0**	<1	<1
Magnesium	ppm	ASTM D5185(m)	<1	**3**	3	2
Calcium	ppm	ASTM D5185(m)	70	**76**	61	38
Phosphorus	ppm	ASTM D5185(m)	220	**218**	242	234
Zinc	ppm	ASTM D5185(m)		**14**	11	9
Sulfur	ppm	ASTM D5185(m)	710	**763**	733	748
Acid Number (AN)	mg KOH/g	ASTM D974*	0.81	**0.75**	1.07	1.25
Visc @ 40°C	cSt	ASTM D7279(m)	34.11	**31.4**	32.8	33.5

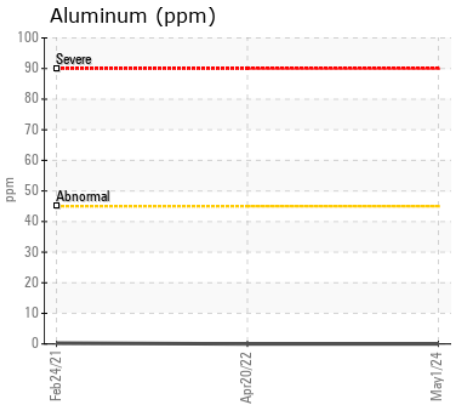


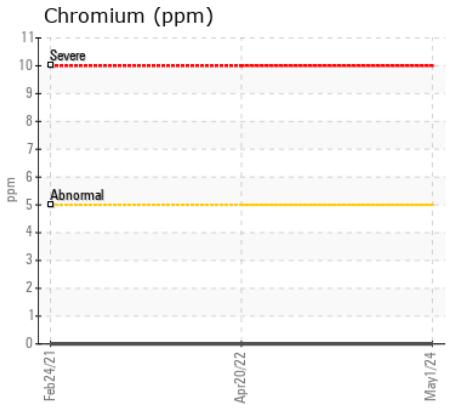


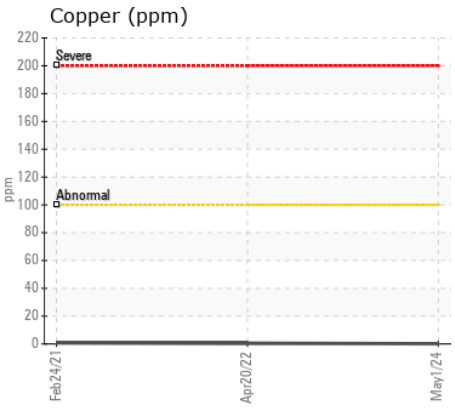


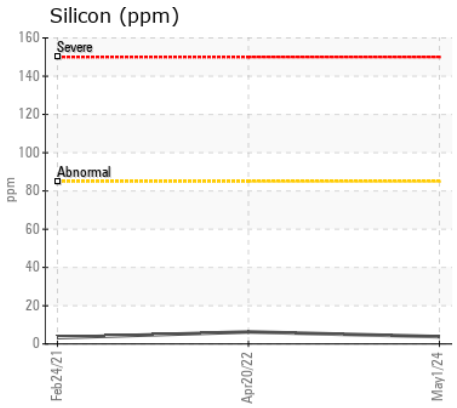


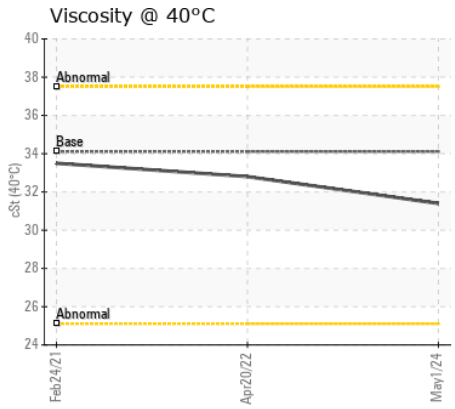


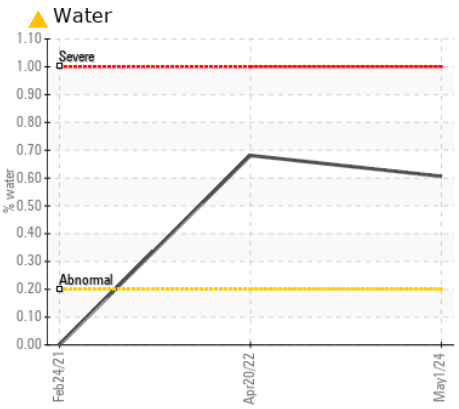












ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0895859 **Received** : 17 May 2024
Lab Number : 02636386 **Tested** : 21 May 2024
Unique Number : 5785548 **Diagnosed** : 21 May 2024 - Kevin Marson
Test Package : MOB 2 (Additional Tests: KF, PQ)

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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