



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area
MINI EXCAVATOR

Machine Id

Mx-7

Component

Diesel Engine

Fluid

PETRO CANADA DURON HP 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KFS0006092	KFS0004090	---
Sample Date		Client Info		16 May 2024	22 Nov 2023	---
Machine Age	hrs	Client Info		910	492	---
Oil Age	hrs	Client Info		418	492	---
Filter Age	hrs	Client Info		418	492	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ATTENTION	NORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	36	29	---
Chromium	ppm	ASTM D5185m	>20	1	1	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	<1	0	---
Aluminum	ppm	ASTM D5185m	>20	9	4	---
Lead	ppm	ASTM D5185m	>40	<1	0	---
Copper	ppm	ASTM D5185m	>330	23	13	---
Tin	ppm	ASTM D5185m	>15	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

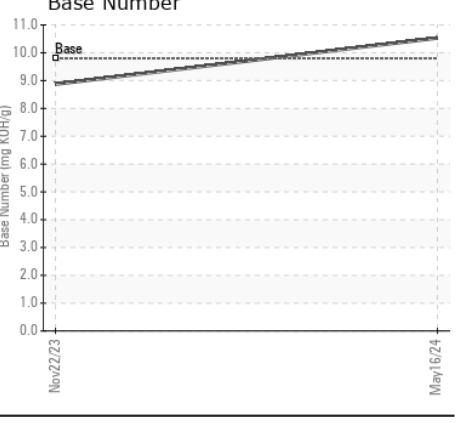
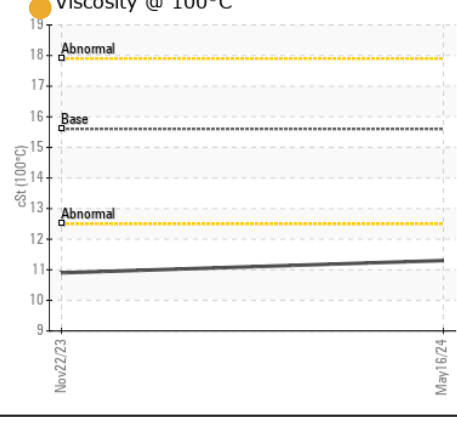
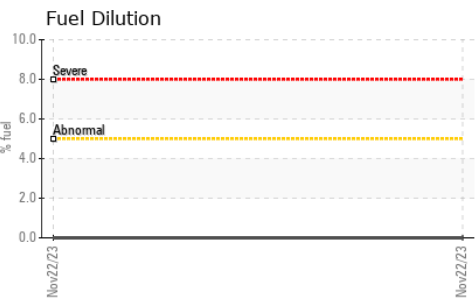
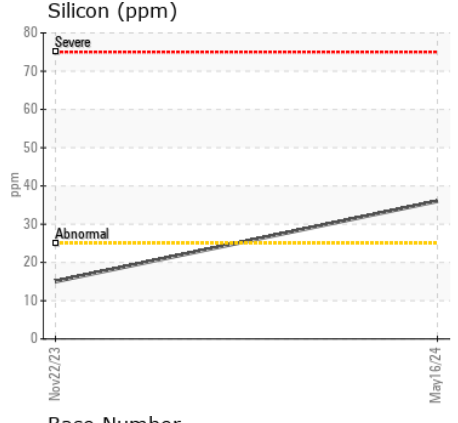
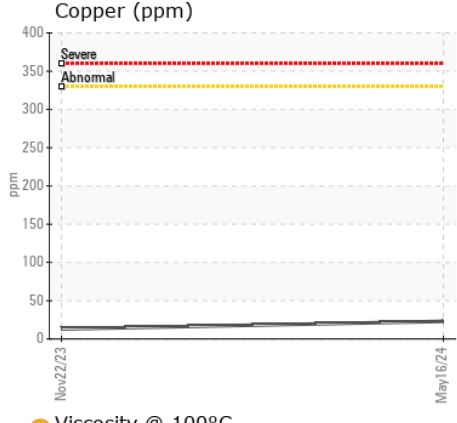
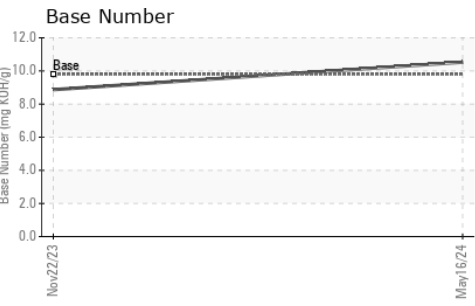
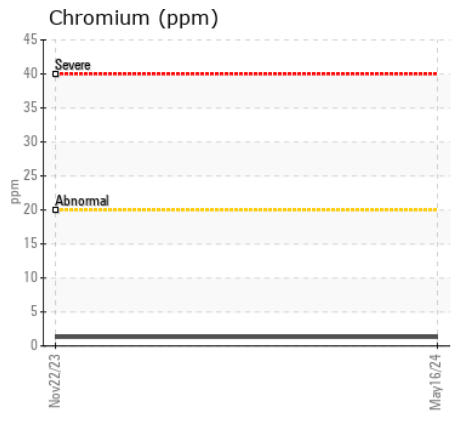
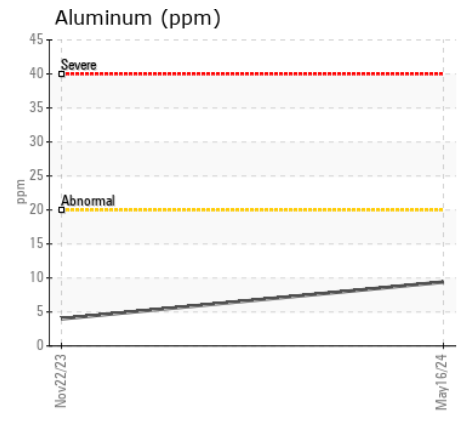
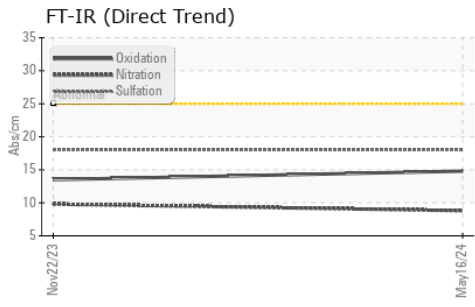
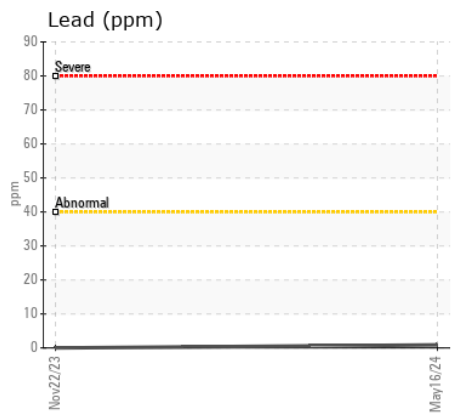
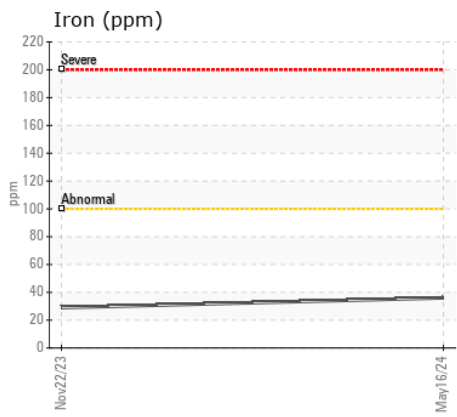
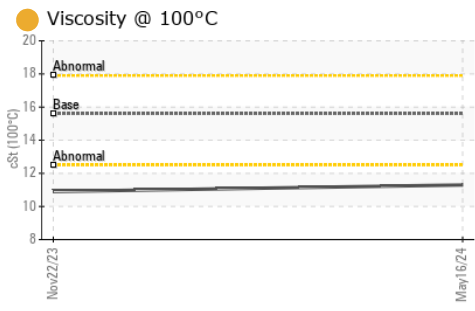
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	36	15	---
Potassium	ppm	ASTM D5185m	>20	36	121	---
Fuel	%	ASTM D3524	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	0.0	---
Soot %	%	*ASTM D7844	>3	0.2	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	8.8	9.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.0	18.0	---
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	>0.2	NEG	NEG	---

FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		4	5	---
Boron	ppm	ASTM D5185m		52	61	---
Barium	ppm	ASTM D5185m		3	0	---
Molybdenum	ppm	ASTM D5185m		10	126	---
Manganese	ppm	ASTM D5185m		5	2	---
Magnesium	ppm	ASTM D5185m		754	228	---
Calcium	ppm	ASTM D5185m		1356	2379	---
Phosphorus	ppm	ASTM D5185m		742	548	---
Zinc	ppm	ASTM D5185m		777	687	---
Sulfur	ppm	ASTM D5185m		3306	3570	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.8	13.5	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	10.53	8.87	---
Visc @ 100°C	cSt	ASTM D445	15.6	11.3	10.9	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KFS0006092 **Received** : 23 May 2024
Lab Number : 06189773 **Tested** : 29 May 2024
Unique Number : 11046525 **Diagnosed** : 29 May 2024 - Sean Felton
Test Package : MOB 2 (Additional Tests: FuelDilution)

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To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)