



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
GM RENTON DUMP TRUCK SHOP
Machine Id
[GM RENTON DUMP TRUCK SHOP] 16-763
Component
Main Engine
Fluid
CASTROL CRB Multi 15W-40 CK-4 (--- GAL)

RECOMMENDATION

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PE0002336	PE0001846	---
Sample Date		Client Info		04 Dec 2023	01 Mar 2023	---
Machine Age	hrs	Client Info		2229	992	---
Oil Age	hrs	Client Info		1237	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

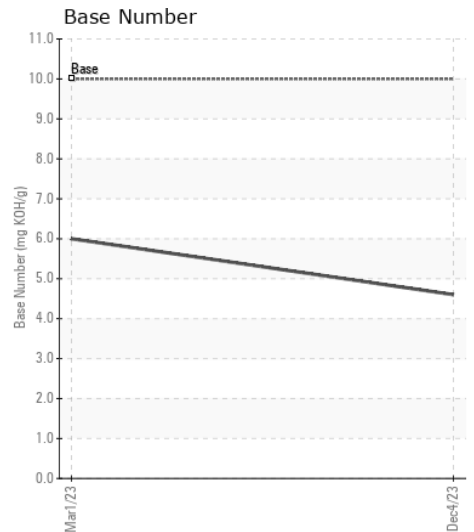
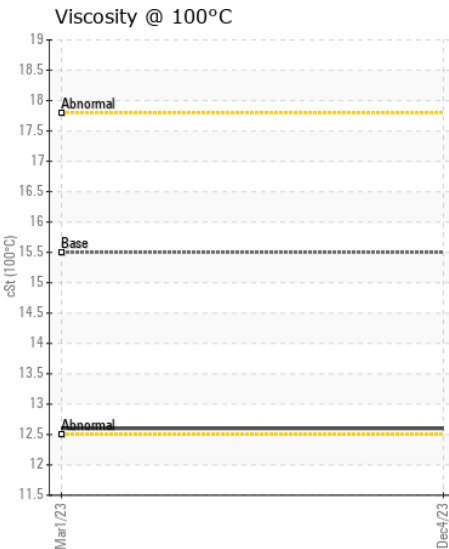
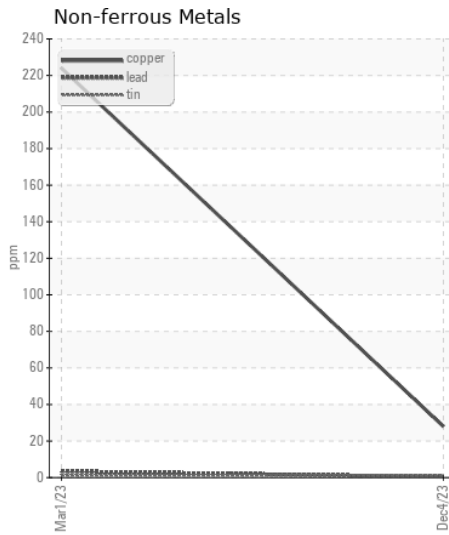
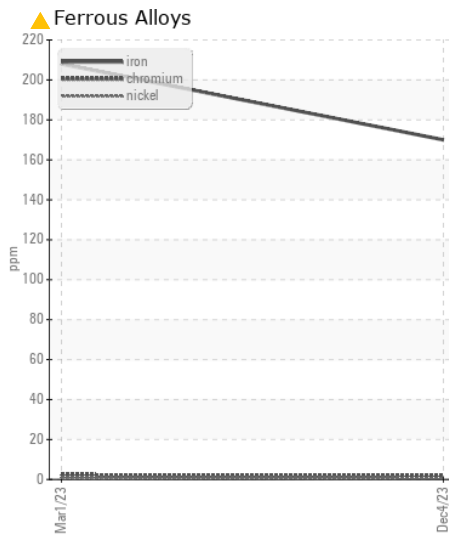
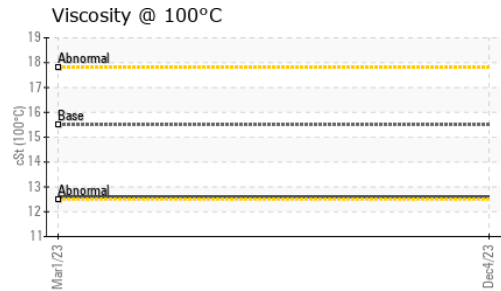
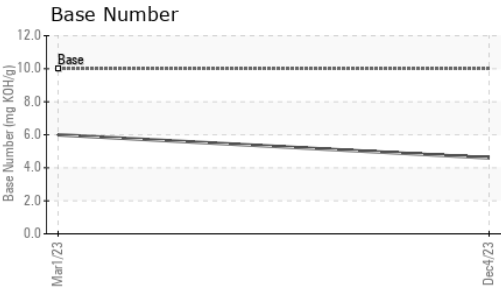
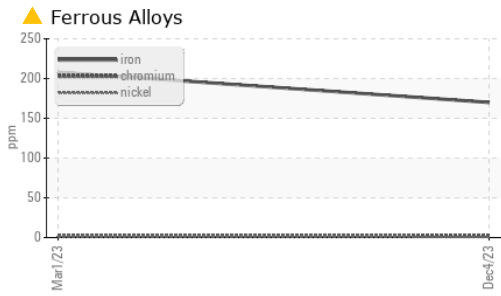
Iron	ppm	ASTM D5185m	>75	▲ 170	▲ 208	---
Chromium	ppm	ASTM D5185m	>8	2	2	---
Nickel	ppm	ASTM D5185m	>2	<1	<1	---
Titanium	ppm	ASTM D5185m	>3	<1	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>15	13	23	---
Lead	ppm	ASTM D5185m	>18	<1	3	---
Copper	ppm	ASTM D5185m	>80	28	▲ 224	---
Tin	ppm	ASTM D5185m	>14	1	1	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

Silicon	ppm	ASTM D5185m	>20	18	▲ 36	---
Potassium	ppm	ASTM D5185m	>20	30	53	---
Fuel		WC Method	>4.0	<1.0	<1.0	---
Water		WC Method	>0.1	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844		1.3	1	---
Nitration	Abs/cm	*ASTM D7624	>20	12.9	13.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	29.3	27.1	---
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	>0.1	NEG	NEG	---

FLUID CONDITION

Sodium	ppm	ASTM D5185m	>75	3	5	---
Boron	ppm	ASTM D5185m		11	28	---
Barium	ppm	ASTM D5185m		<1	0	---
Molybdenum	ppm	ASTM D5185m		14	43	---
Manganese	ppm	ASTM D5185m		2	8	---
Magnesium	ppm	ASTM D5185m		134	528	---
Calcium	ppm	ASTM D5185m		1929	1592	---
Phosphorus	ppm	ASTM D5185m		921	851	---
Zinc	ppm	ASTM D5185m		1072	1156	---
Sulfur	ppm	ASTM D5185m		3042	2788	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.0	24.5	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	4.6	6.0	---
Visc @ 100°C	cSt	ASTM D445	15.5	12.6	12.6	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0002336 **Recieved** : 12 Jan 2024
Lab Number : 06060120 **Diagnosed** : 16 Jan 2024
Unique Number : 10831502 **Diagnostician** : Doug Bogart
Test Package : CONST (Additional Tests: FT-IR, ICP, KV100, SCREEN, TBN)

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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)