



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
GM Renton Dump Truck Shop
 Machine Id
[GM Renton Dump Truck Shop] S12-551
 Component
Diesel Engine
 Fluid
CASTROL Vecton LD 10W30 (--- 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		PE0002334	PE0001222	PE12290220
Sample Date		Client Info		04 Dec 2023	09 Jun 2023	16 Apr 2022
Machine Age	hrs	Client Info		1782	929	1852
Oil Age	hrs	Client Info		1782	929	1852
Filter Age	hrs	Client Info		0	929	---
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	---
Sample Status				NORMAL	NORMAL	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	92	49	▲ 112
Chromium	ppm	ASTM D5185m	>20	1	<1	1
Nickel	ppm	ASTM D5185m	>4	<1	0	1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	9	7	● 49
Lead	ppm	ASTM D5185m	>40	<1	0	2
Copper	ppm	ASTM D5185m	>330	12	7	15
Tin	ppm	ASTM D5185m	>15	3	2	4
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

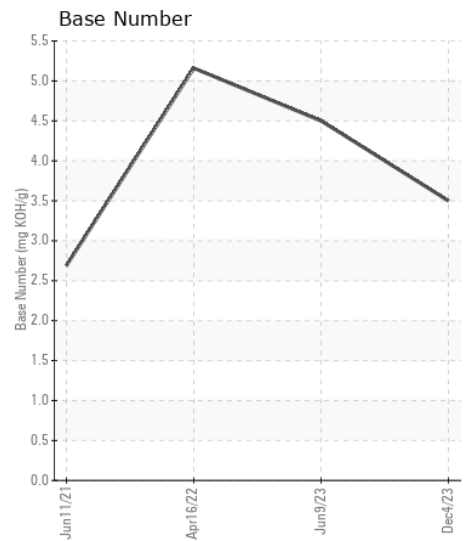
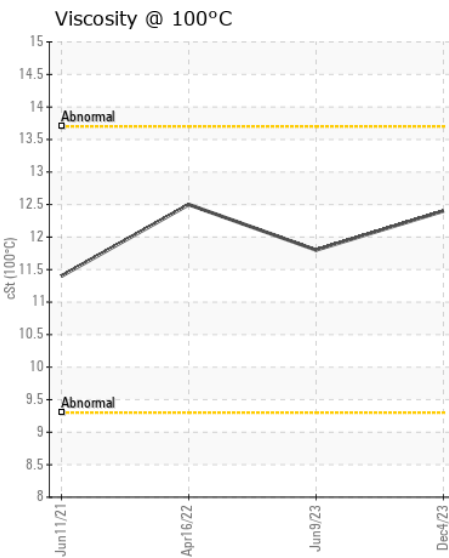
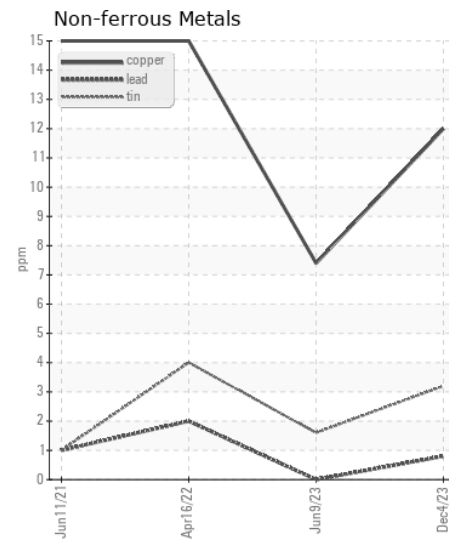
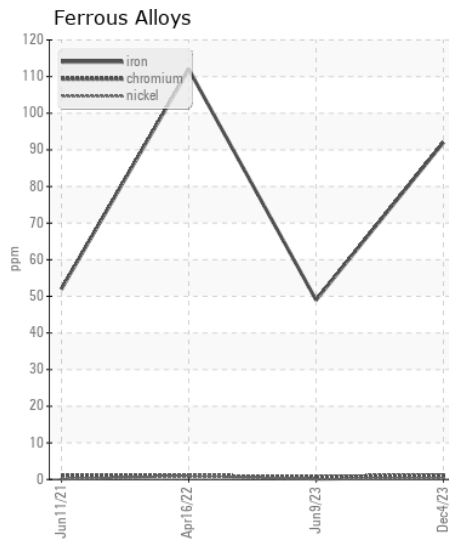
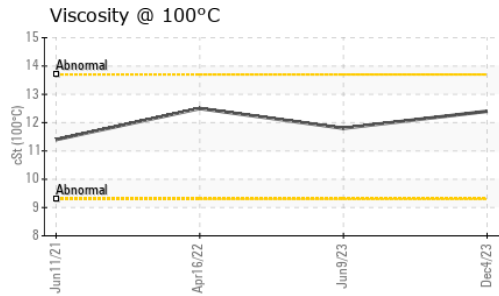
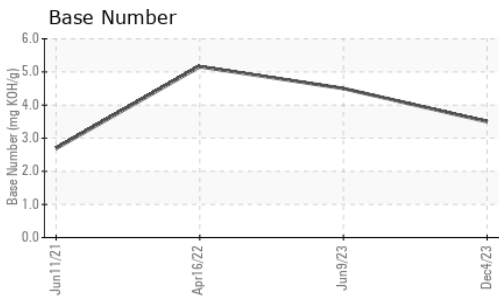
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	21	18	▲ 21
Potassium	ppm	ASTM D5185m	>20	18	12	● 116
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.8	0.5	0.6
Nitration	Abs/cm	*ASTM D7624	>20	13.0	10.8	15
Sulfation	Abs/.1mm	*ASTM D7415	>30	31.4	26.4	---
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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		11	3	13
Boron	ppm	ASTM D5185m		21	24	22
Barium	ppm	ASTM D5185m		1	0	1
Molybdenum	ppm	ASTM D5185m		7	6	42
Manganese	ppm	ASTM D5185m		2	2	---
Magnesium	ppm	ASTM D5185m		463	572	1025
Calcium	ppm	ASTM D5185m		1841	1792	1240
Phosphorus	ppm	ASTM D5185m		984	892	962
Zinc	ppm	ASTM D5185m		1119	1104	1144
Sulfur	ppm	ASTM D5185m		3101	4009	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	28.7	22.6	32
Base Number (BN)	mg KOH/g	ASTM D2896		3.5	4.5	5.16
Visc @ 100°C	cSt	ASTM D445		12.4	11.8	▲ 12.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0002334 **Received** : 12 Jan 2024
Lab Number : 06060121 **Diagnosed** : 16 Jan 2024
Unique Number : 10831503 **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)

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