



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
GM Seattle Off Road Shop
 Machine Id
[GM Seattle Off Road Shop] 24-840
 Component
Diesel Engine
 Fluid
SHELL 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PE0003088	PE0001983	PE12291320
Sample Date		Client Info		17 Jun 2024	23 Oct 2023	19 Apr 2021
Machine Age	hrs	Client Info		4452	4259	3648
Oil Age	hrs	Client Info		532	338	253
Filter Age	hrs	Client Info		0	338	---
Oil Changed		Client Info		Changed	Oil Added	Not Changd
Filter Changed		Client Info		Changed	None	---
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	10	10	5
Chromium	ppm	ASTM D5185m	>20	0	<1	0
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	4	3	1
Lead	ppm	ASTM D5185m	>40	<1	<1	1
Copper	ppm	ASTM D5185m	>330	2	2	1
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

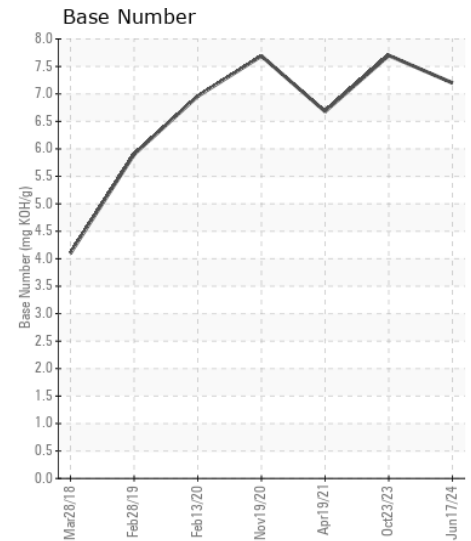
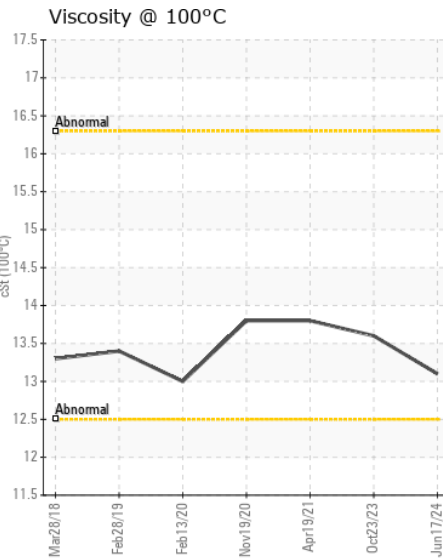
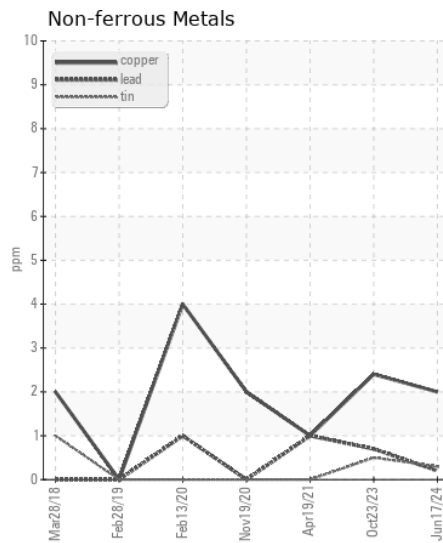
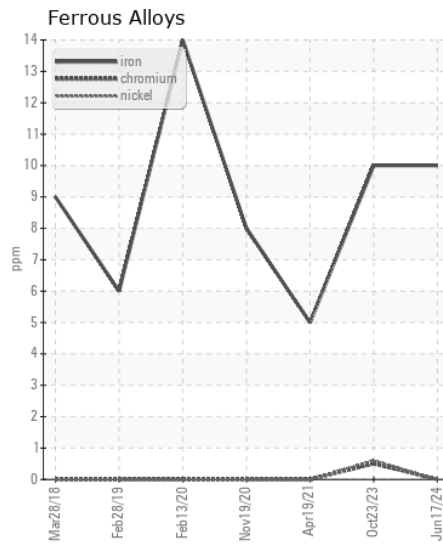
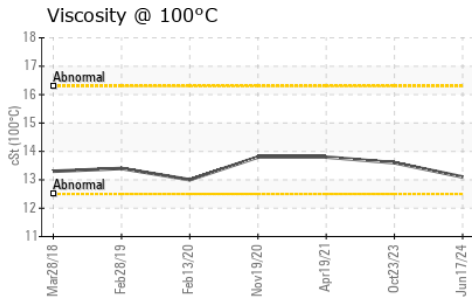
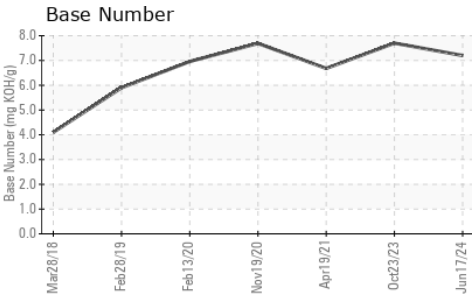
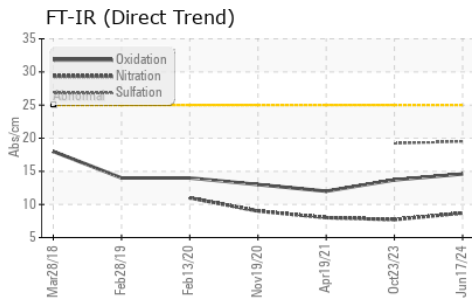
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	3	4	2
Potassium	ppm	ASTM D5185m	>20	4	3	0
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	0.6	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.7	7.7	8
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5	19.2	---
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	>150	<1	0	0
Boron	ppm	ASTM D5185m		53	85	18
Barium	ppm	ASTM D5185m		0	1	0
Molybdenum	ppm	ASTM D5185m		50	62	18
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		194	224	146
Calcium	ppm	ASTM D5185m		1977	2234	2246
Phosphorus	ppm	ASTM D5185m		961	1098	957
Zinc	ppm	ASTM D5185m		1177	1295	1056
Sulfur	ppm	ASTM D5185m		3875	4369	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.6	13.7	12
Base Number (BN)	mg KOH/g	ASTM D2896		7.2	7.7	6.68
Visc @ 100°C	cSt	ASTM D445		13.1	13.6	13.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0003088
Lab Number : 06220568
Unique Number : 11098765
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)

T: 1(866)292-1303

F: