



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
GM Seattle Off Road Shop
 Machine Id
[GM Seattle Off Road Shop] 24-588
 Component
Hydraulic System
 Fluid
{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PE0003079	PE0001781	PE12291490
Sample Date		Client Info		12 Apr 2024	23 Feb 2023	09 Sep 2020
Machine Age	hrs	Client Info		3527	3070	1993
Oil Age	hrs	Client Info		3527	3070	1993
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Chngd	Oil Added	Not Chngd
Filter Changed		Client Info		Not Chngd	Changed	---
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184		15	7	---
Iron	ppm	ASTM D5185m	>20	7	7	6
Chromium	ppm	ASTM D5185m	>10	<1	<1	0
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		<1	0	<1
Aluminum	ppm	ASTM D5185m	>10	3	2	1
Lead	ppm	ASTM D5185m	>10	<1	<1	1
Copper	ppm	ASTM D5185m	>75	28	25	29
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

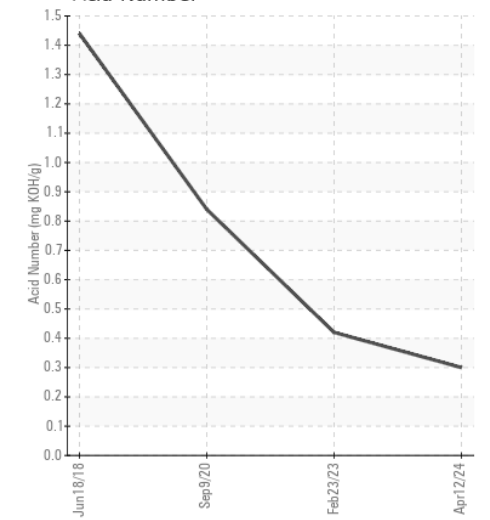
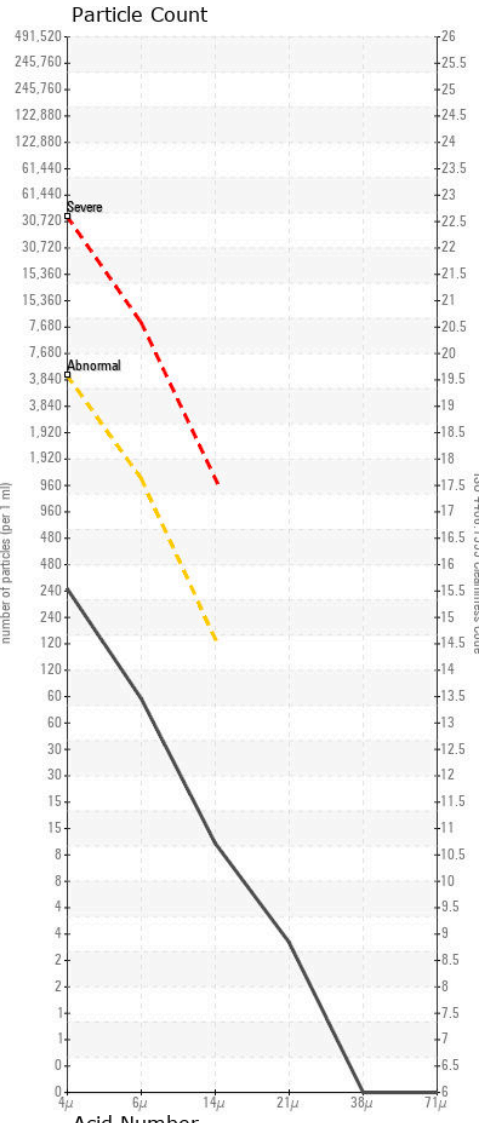
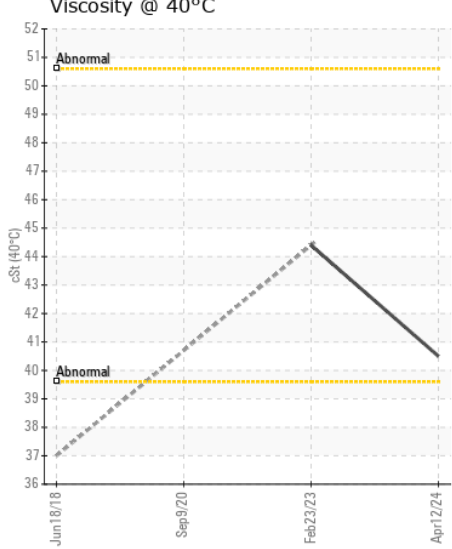
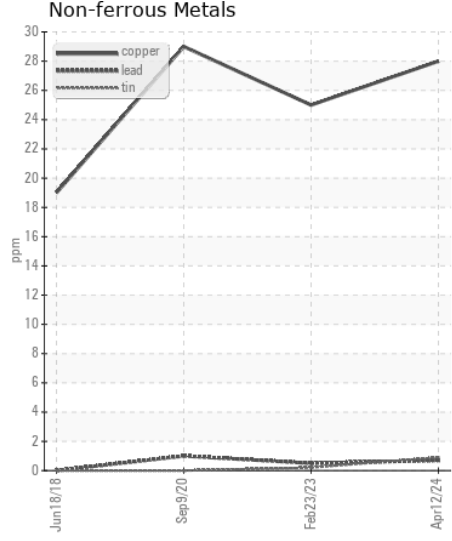
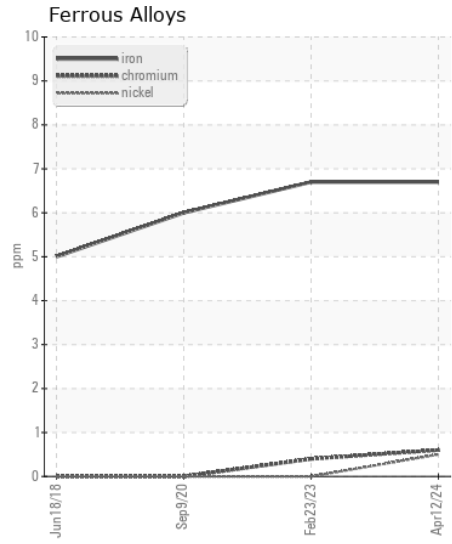
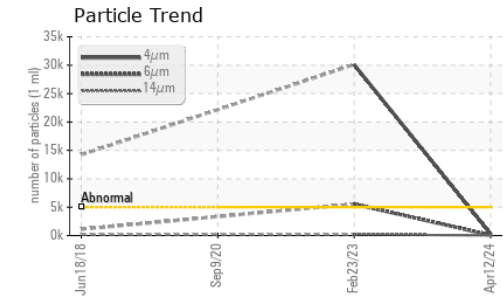
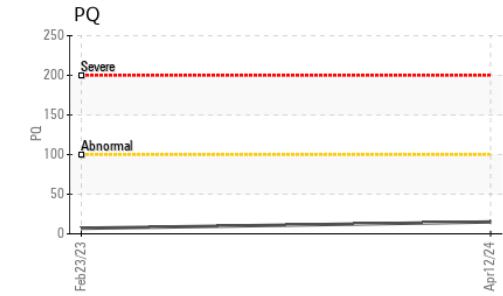
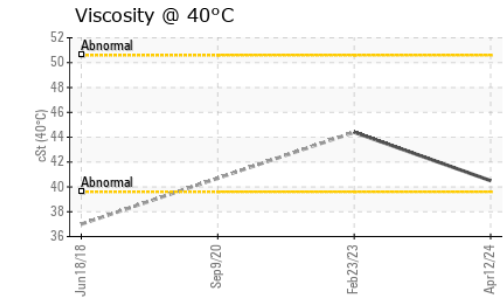
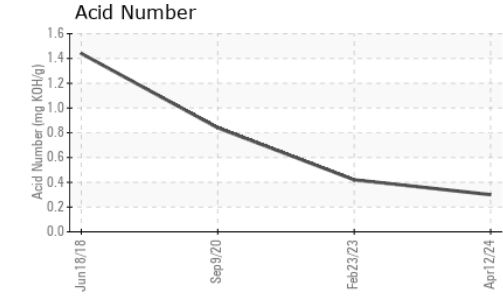
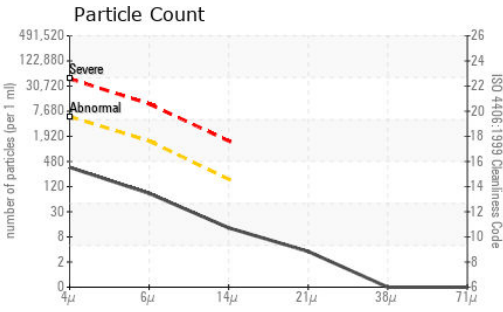
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>20	6	5	6
Potassium	ppm	ASTM D5185m	>20	2	2	2
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	307	▲ 30113	---
Particles >6µm		ASTM D7647	>1300	73	▲ 5550	---
Particles >14µm		ASTM D7647	>160	11	▲ 214	---
Particles >21µm		ASTM D7647	>40	3	▲ 48	---
Particles >38µm		ASTM D7647	>10	0	0	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	15/13/11	▲ 22/20/15	19/16/12
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

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	2	5
Boron	ppm	ASTM D5185m		<1	2	2
Barium	ppm	ASTM D5185m		0	1	1
Molybdenum	ppm	ASTM D5185m		1	1	2
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		7	7	9
Calcium	ppm	ASTM D5185m		1285	1437	2109
Phosphorus	ppm	ASTM D5185m		500	489	549
Zinc	ppm	ASTM D5185m		603	626	689
Sulfur	ppm	ASTM D5185m		3625	3783	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.30	0.42	0.84
Visc @ 40°C	cSt	ASTM D445		40.5	44.4	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0003079 **Received** : 22 Apr 2024
Lab Number : 06156858 **Tested** : 23 Apr 2024
Unique Number : 10992281 **Diagnosed** : 24 Apr 2024 - Angela Borella
Test Package : CONST (Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN)
 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)

Gary Merlino Construction - Off Road Shop
 9125 10TH AVE SOUTH
 SEATTLE, WA
 US 98108
 Contact: Jesse Patterson
 oilsamples@gmccinc.com
 T: 1(866)292-1303
 F: