



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
GM Seattle Off Road Shop
 Machine Id
[GM Seattle Off Road Shop] 26-213
 Component
Transmission
 Fluid
CHEVRON DRIVE TRAIN FLUID HD 30 (--- GAL)

RECOMMENDATION

We advise that you check for the source of water entry. 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		PE0002177	PE12290975	PE12291953
Sample Date		Client Info		04 Dec 2023	02 Dec 2021	31 May 2019
Machine Age	hrs	Client Info		9724	8523	7641
Oil Age	hrs	Client Info		9724	1823	941
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	Not Chngd	Not Chngd
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Test	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		16	---	---
Iron	ppm	ASTM D5185m	>200	12	18	10
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m		0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	<1	1
Aluminum	ppm	ASTM D5185m	>50	2	2	2
Lead	ppm	ASTM D5185m	>50	<1	1	0
Copper	ppm	ASTM D5185m	>200	4	8	5
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

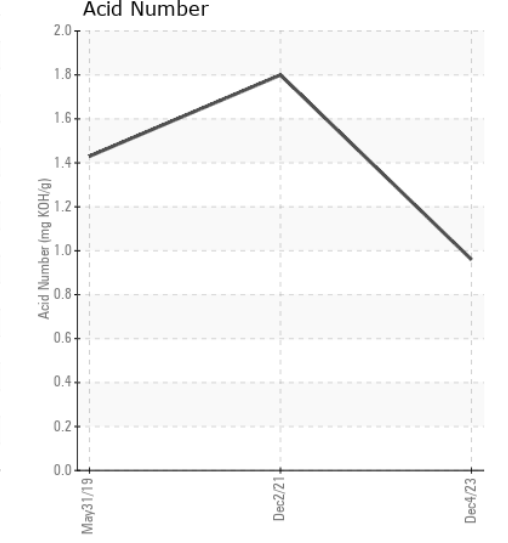
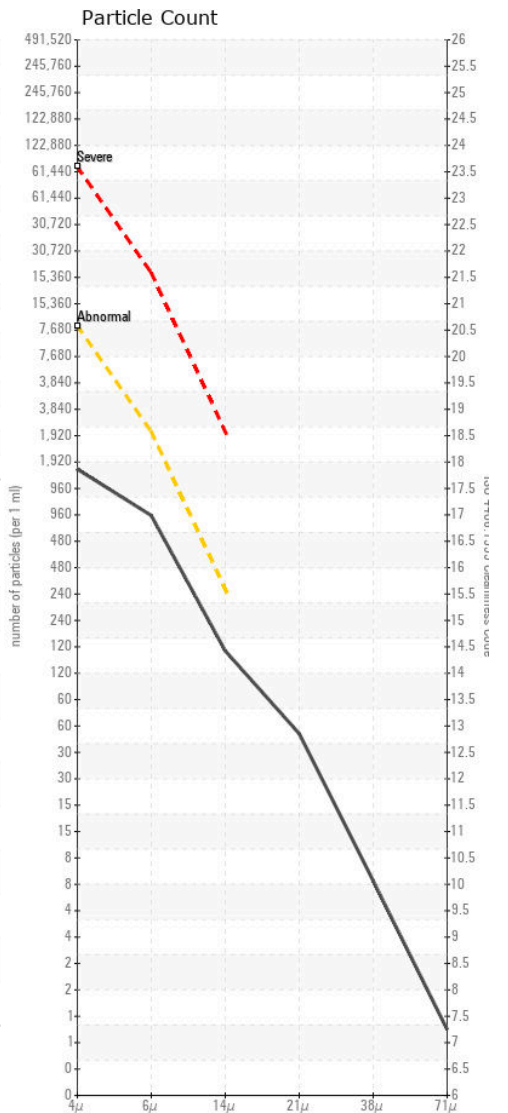
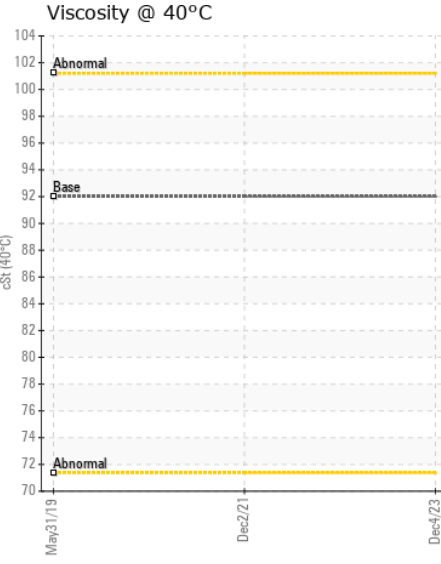
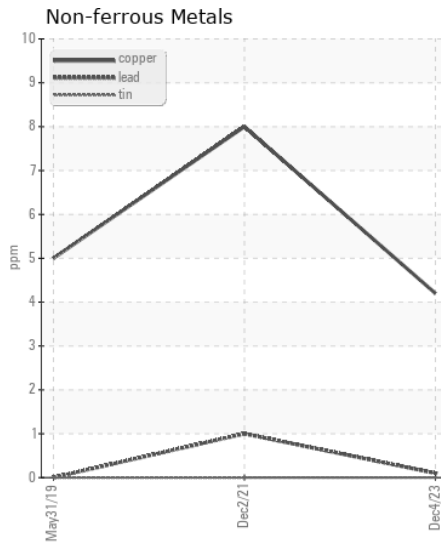
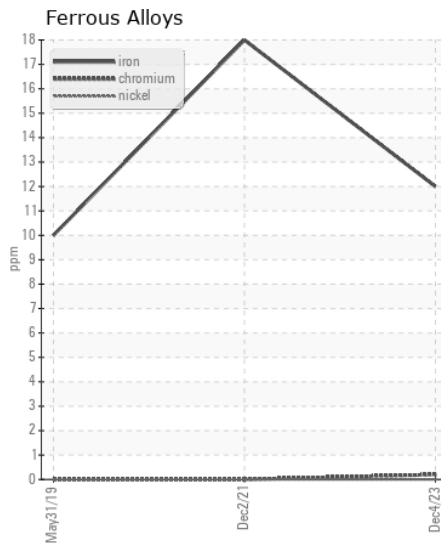
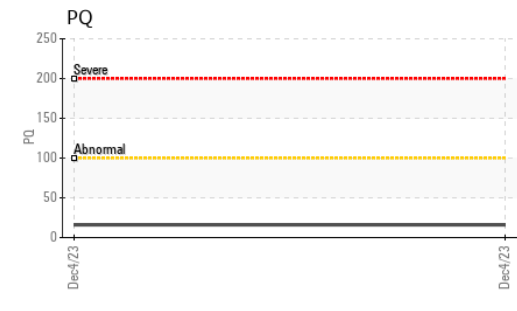
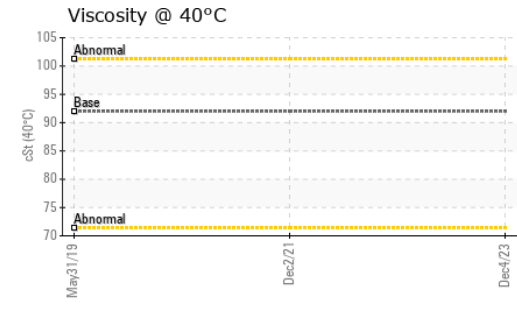
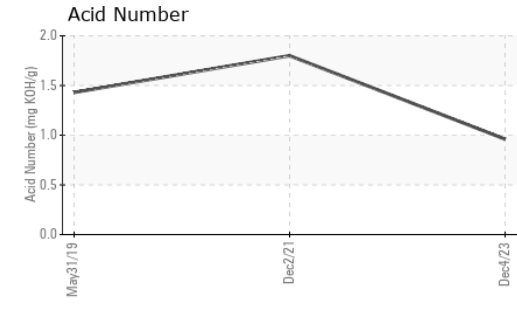
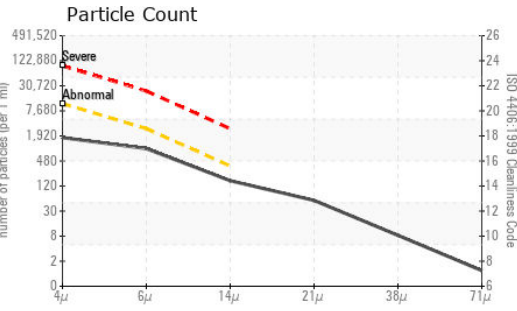
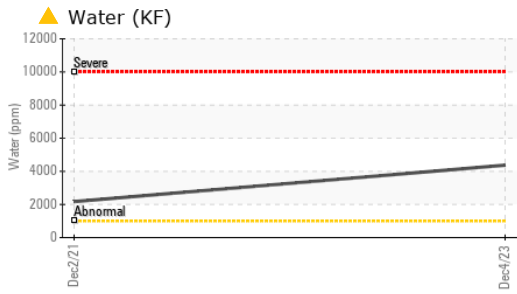
There is a moderate concentration of water present in the fluid. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>50	8	7	7
Potassium	ppm	ASTM D5185m	>20	2	0	4
Water	%	ASTM D6304	>0.1	▲ 0.437	---	---
ppm Water	ppm	ASTM D6304	>1000	▲ 4370	2172	---
Particles >4µm		ASTM D7647	>10000	1531	---	7865
Particles >6µm		ASTM D7647	>2500	834	---	853
Particles >14µm		ASTM D7647	>320	142	---	103
Particles >21µm		ASTM D7647	>80	48	---	35
Particles >38µm		ASTM D7647	>20	7	---	6
Particles >71µm		ASTM D7647	>4	1	---	---
Oil Cleanliness		ISO 4406 (c)	>20/18/15	18/17/14	21/16/13	20/17/14
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	0.2%	---	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		0	2	2
Boron	ppm	ASTM D5185m		17	39	45
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		5	9	11
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m		32	30	41
Calcium	ppm	ASTM D5185m		4208	3578	4407
Phosphorus	ppm	ASTM D5185m		937	961	924
Zinc	ppm	ASTM D5185m		1154	1149	1118
Sulfur	ppm	ASTM D5185m		4986	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.96	1.80	1.43
Visc @ 40°C	cSt	ASTM D445	92	88.7	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0002177 **Received** : 12 Jan 2024
Lab Number : 06060125 **Diagnosed** : 18 Jan 2024
Unique Number : 10831507 **Diagnostician** : Jonathan Hester
Test Package : CONST (Additional Tests: ICP, KF, KV40, PQ, PrtCount, SCREEN)

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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)