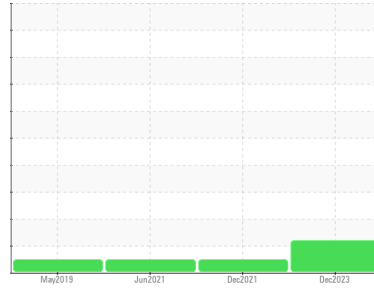




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
GM Seattle Off Road Shop
 Machine Id
[GM Seattle Off Road Shop] 26-213
 Component
Hydraulic System
 Fluid
CHEVRON CLARITY HYDRAULIC AW 46 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

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

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PE0002178	PE12290974	PE12291232
Sample Date	Client Info	04 Dec 2023	02 Dec 2021	11 Jun 2021
Machine Age	hrs	9724	8523	1704
Oil Age	hrs	9724	8523	1704
Oil Changed	Client Info	Not Chngd	Not Chngd	Not Chngd
Sample Status		ABNORMAL	NORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184	16	---	---
Iron	ppm ASTM D5185m >20	20	16	3
Chromium	ppm ASTM D5185m >10	1	1	0
Nickel	ppm ASTM D5185m >10	0	0	0
Titanium	ppm ASTM D5185m	<1	0	0
Silver	ppm ASTM D5185m	0	<1	<1
Aluminum	ppm ASTM D5185m >10	2	4	1
Lead	ppm ASTM D5185m >10	<1	0	3
Copper	ppm ASTM D5185m >75	4	4	31
Tin	ppm ASTM D5185m >10	0	0	2
Antimony	ppm ASTM D5185m	---	0	1
Vanadium	ppm ASTM D5185m	0	0	0
Cadmium	ppm ASTM D5185m	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	0	0	0
Barium	ppm ASTM D5185m	0	0	0
Molybdenum	ppm ASTM D5185m	<1	0	0
Manganese	ppm ASTM D5185m	0	---	---
Magnesium	ppm ASTM D5185m	14	13	7
Calcium	ppm ASTM D5185m	67	64	1151
Phosphorus	ppm ASTM D5185m	404	369	911
Zinc	ppm ASTM D5185m	361	386	1104
Sulfur	ppm ASTM D5185m	1068	---	---

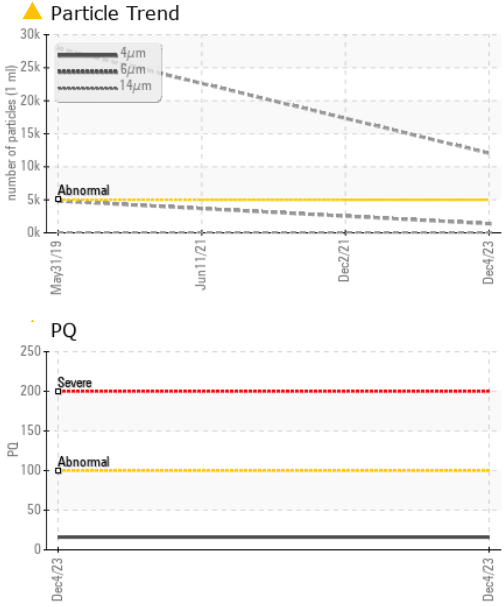
CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	13	9	4
Sodium	ppm ASTM D5185m	0	0	3
Potassium	ppm ASTM D5185m >20	2	0	3

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 12049	---	---
Particles >6µm	ASTM D7647 >1300	▲ 1382	---	---
Particles >14µm	ASTM D7647 >160	43	---	---
Particles >21µm	ASTM D7647 >40	11	---	---
Particles >38µm	ASTM D7647 >10	0	---	---
Particles >71µm	ASTM D7647 >3	0	---	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 21/18/13	21/18/12	20/17/13

OIL ANALYSIS REPORT

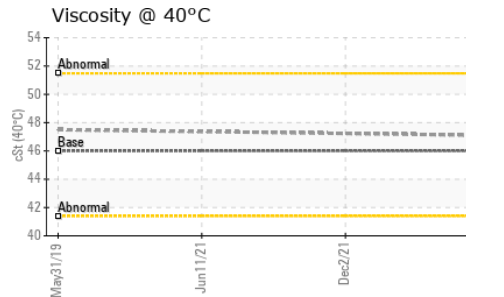
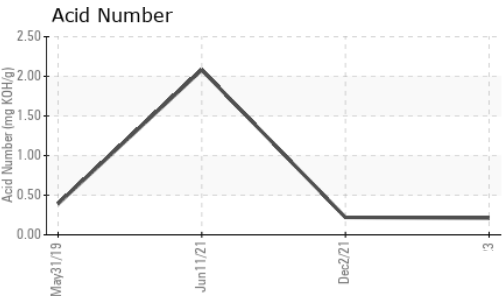


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.21	0.22	2.08

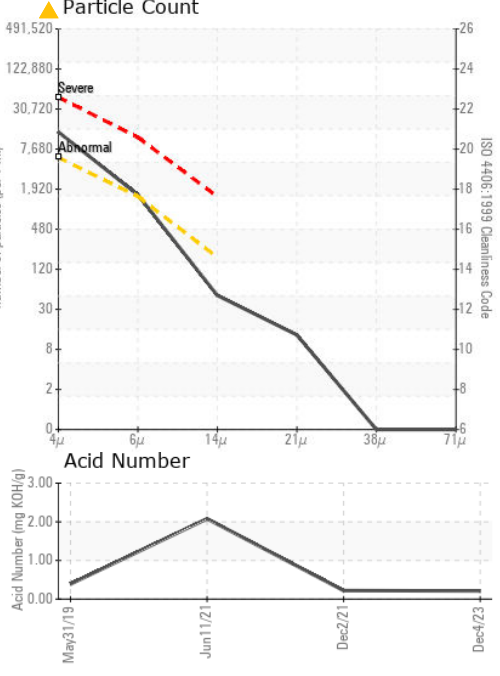
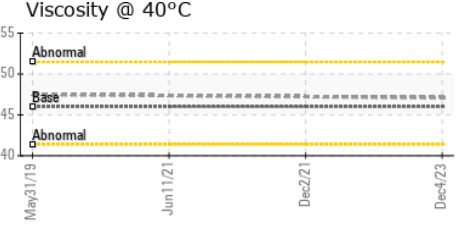
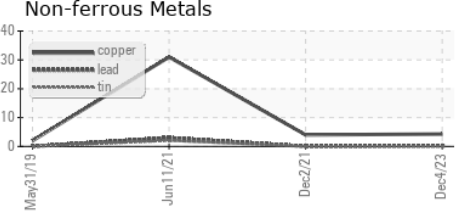
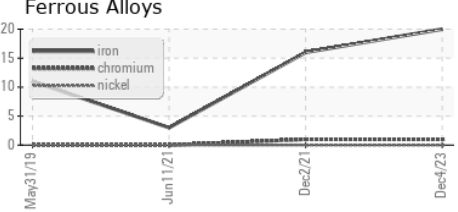
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46.0	47.1	---	---

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0002178 **Received** : 12 Jan 2024
Lab Number : 06060147 **Diagnosed** : 16 Jan 2024
Unique Number : 10831529 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN)

Gary Merlino Construction - Off Road Shop
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 F:

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)