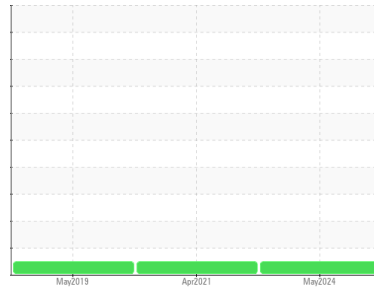




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area  
**GM Seattle Off Raod Shop**  
 Machine Id  
**[GM Seattle Off Raod Shop] 24-747**  
 Component  
**Hydraulic System**  
 Fluid  
**CHEVRON HYDRAULIC OIL AW ISO 46 (--- GAL)**

### DIAGNOSIS

#### Recommendation

We recommend an early resample to monitor this condition.

#### Wear

Iron ppm levels are marginal. All other component wear rates are normal.

#### Contamination

The water content is negligible. There is no indication of any contamination 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			<b>PE0003032</b>	PE12291343	PE12291946
Sample Date	Client Info			<b>22 May 2024</b>	05 Apr 2021	22 May 2019
Machine Age	hrs	Client Info		<b>3919</b>	2116	1276
Oil Age	hrs	Client Info		<b>3919</b>	0	1276
Oil Changed	Client Info			<b>Changed</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

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

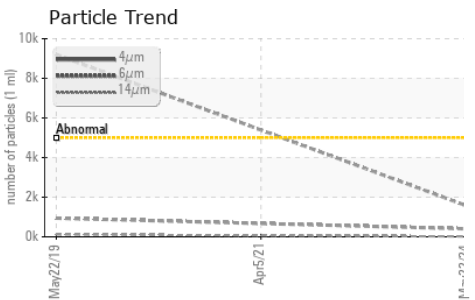
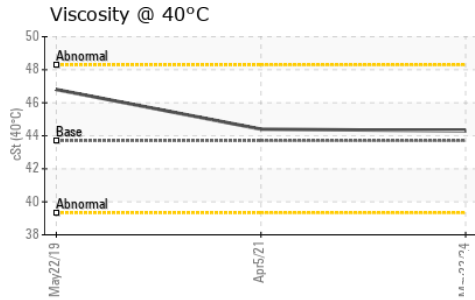
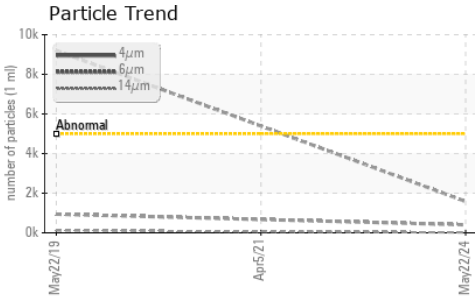
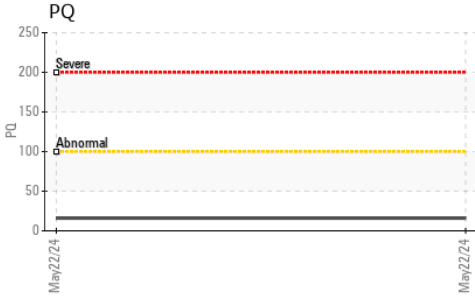
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		<b>16</b>	---	---
Iron	ppm	ASTM D5185m	>20	<b>10</b>	9	11
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	<1	1
Aluminum	ppm	ASTM D5185m	>10	<b>2</b>	1	0
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>75	<b>7</b>	8	1
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m		<b>---</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Barium	ppm	ASTM D5185m		<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>4</b>	2	0
Calcium	ppm	ASTM D5185m		<b>151</b>	162	13
Phosphorus	ppm	ASTM D5185m		<b>416</b>	404	355
Zinc	ppm	ASTM D5185m		<b>227</b>	153	60
Sulfur	ppm	ASTM D5185m		<b>1062</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	<b>3</b>	3	2
Sodium	ppm	ASTM D5185m		<b>0</b>	0	1
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	4

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>1584</b>	---	9199
Particles >6µm		ASTM D7647	>1300	<b>404</b>	---	941
Particles >14µm		ASTM D7647	>160	<b>17</b>	---	115
Particles >21µm		ASTM D7647	>40	<b>1</b>	---	36
Particles >38µm		ASTM D7647	>10	<b>0</b>	---	4
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>18/16/11</b>	22/17/10	20/17/14

# OIL ANALYSIS REPORT

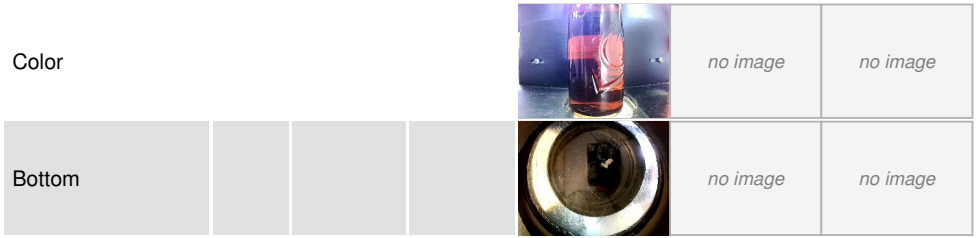


FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.22</b>	0.22	0.12

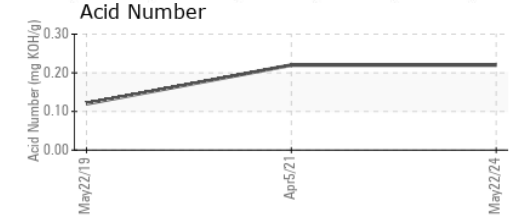
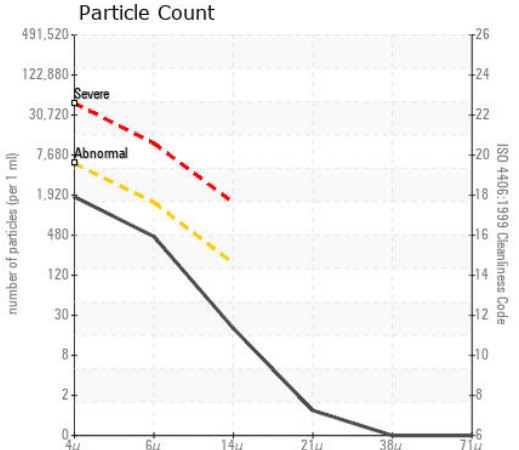
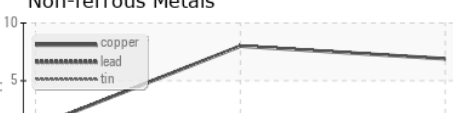
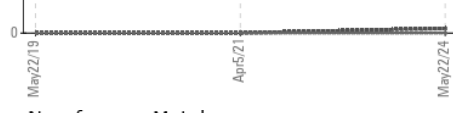
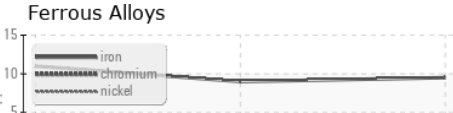
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	<b>44.3</b>	44.4	46.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PE0003032      **Received** : 14 Jun 2024  
**Lab Number** : **06210683**      **Tested** : 18 Jun 2024  
**Unique Number** : 11083547      **Diagnosed** : 18 Jun 2024 - Angela Borella  
**Test Package** : CONST ( Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN )

**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:

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)