



PROBLEM SUMMARY



Area
GM SEATTLE OFF ROAD SHOP
 Machine Id
[GM SEATTLE OFF ROAD SHOP] 24-172
 Component
Hydraulic System
 Fluid
CAT HYDO (--- GAL)

Sample Rating Trend

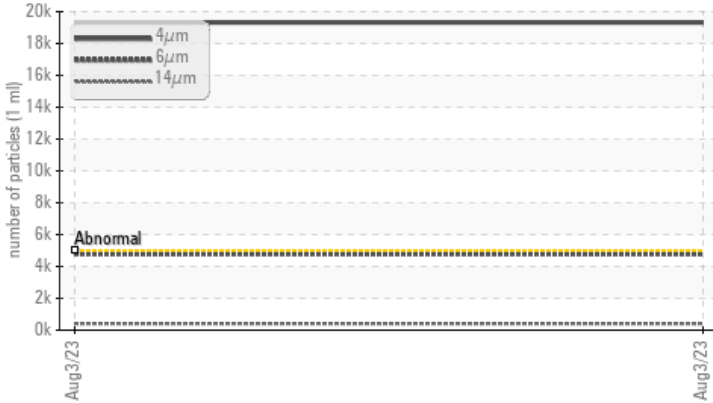


ISO



COMPONENT CONDITION SUMMARY

▲ Particle Trend



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. (Customer Sample Comment: Top Up Amount: 1 gallon)

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	---	---
Particles >4µm	ASTM D7647	>5000	▲ 19311	---	---
Particles >6µm	ASTM D7647	>1300	▲ 4786	---	---
Particles >14µm	ASTM D7647	>160	▲ 408	---	---
Particles >21µm	ASTM D7647	>40	▲ 124	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 21/19/16	---	---

Customer Id: GARSEA
 Sample No.: PE0002304
 Lab Number: 05922799
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Area
GM SEATTLE OFF ROAD SHOP
 Machine Id
[GM SEATTLE OFF ROAD SHOP] 24-172
 Component
Hydraulic System
 Fluid
CAT HYDO (--- 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. (Customer Sample Comment: Top Up Amount: 1 gallon)

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates 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	PE0002304	---	---
Sample Date	Client Info	03 Aug 2023	---	---
Machine Age	hrs Client Info	1024	---	---
Oil Age	hrs Client Info	1024	---	---
Oil Changed	Client Info	Oil Added	---	---
Sample Status		ABNORMAL	---	---

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184	18	---	---
Iron	ppm ASTM D5185m >20	9	---	---
Chromium	ppm ASTM D5185m >10	<1	---	---
Nickel	ppm ASTM D5185m >10	0	---	---
Titanium	ppm ASTM D5185m	0	---	---
Silver	ppm ASTM D5185m	0	---	---
Aluminum	ppm ASTM D5185m >10	2	---	---
Lead	ppm ASTM D5185m >10	0	---	---
Copper	ppm ASTM D5185m >75	7	---	---
Tin	ppm ASTM D5185m >10	0	---	---
Vanadium	ppm ASTM D5185m	<1	---	---
Cadmium	ppm ASTM D5185m	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	0	---	---
Barium	ppm ASTM D5185m	0	---	---
Molybdenum	ppm ASTM D5185m	0	---	---
Manganese	ppm ASTM D5185m	<1	---	---
Magnesium	ppm ASTM D5185m	1	---	---
Calcium	ppm ASTM D5185m	223	---	---
Phosphorus	ppm ASTM D5185m 1100	622	---	---
Zinc	ppm ASTM D5185m 1210	842	---	---
Sulfur	ppm ASTM D5185m	2153	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	2	---	---
Sodium	ppm ASTM D5185m	<1	---	---
Potassium	ppm ASTM D5185m >20	0	---	---

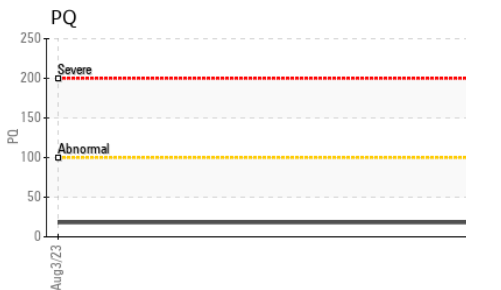
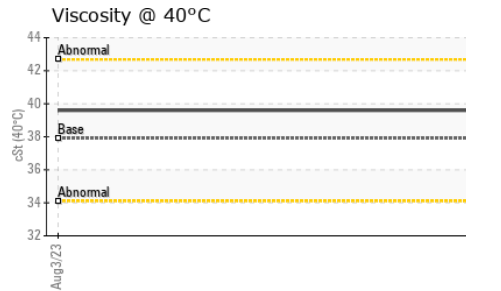
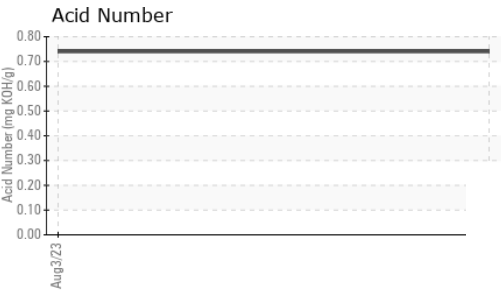
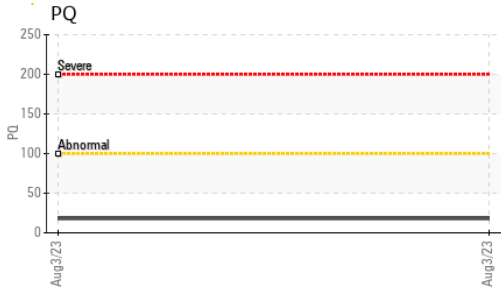
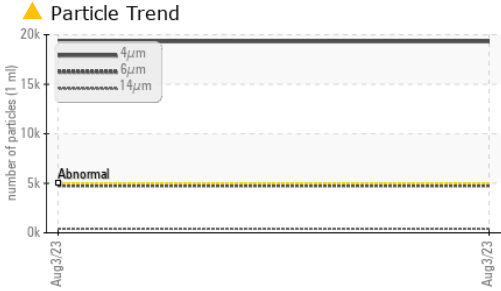
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 19311	---	---
Particles >6µm	ASTM D7647 >1300	▲ 4786	---	---
Particles >14µm	ASTM D7647 >160	▲ 408	---	---
Particles >21µm	ASTM D7647 >40	▲ 124	---	---
Particles >38µm	ASTM D7647 >10	7	---	---
Particles >71µm	ASTM D7647 >3	0	---	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 21/19/16	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	0.74	---	---

OIL ANALYSIS REPORT



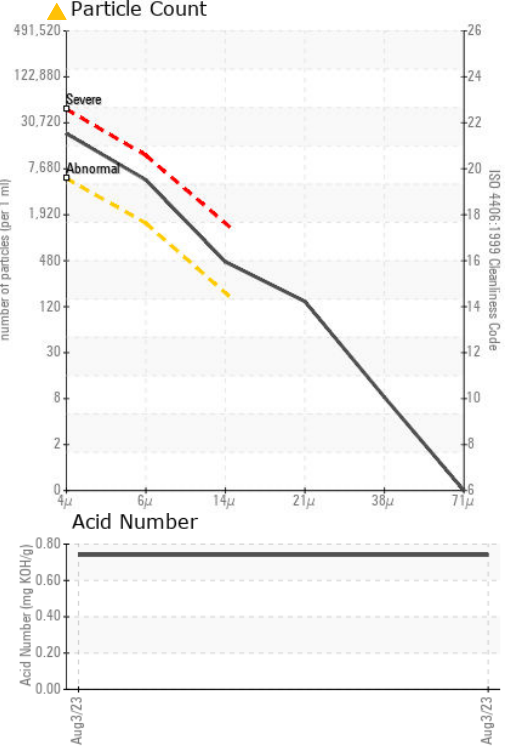
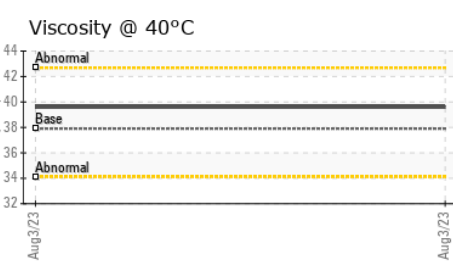
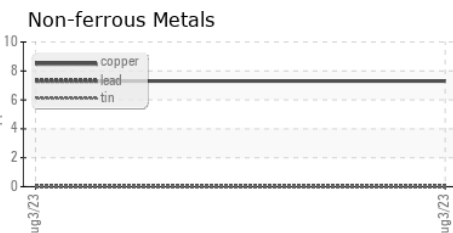
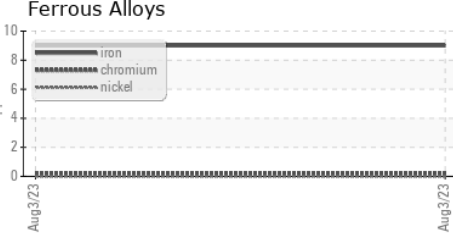
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	LIGHT	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	37.9	39.6	---

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0002304 **Received** : 11 Aug 2023
Lab Number : 05922799 **Diagnosed** : 14 Aug 2023
Unique Number : 10602746 **Diagnostician** : Doug Bogart
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)

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