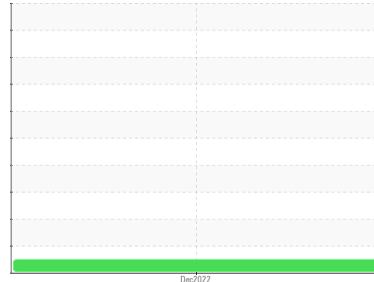




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
SHELL TELLUS S2 MX 46

Component
Tank New (Unused) Oil

Fluid
SHELL TELLUS S2 MX 46 (--- GAL)

DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample.

SAMPLE INFORMATION		method	limit/base	current	history 1	history 2
Sample Number	Client Info			WC05716722	---	---
Sample Date	Client Info			12 Dec 2022	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Oil Changed	Client Info			N/A	---	---
Sample Status				NORMAL	---	---

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>5	0	---	---
Chromium	ppm	ASTM D5185m	>5	0	---	---
Nickel	ppm	ASTM D5185m	>5	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>5	0	---	---
Aluminum	ppm	ASTM D5185m	>5	<1	---	---
Lead	ppm	ASTM D5185m	>5	0	---	---
Copper	ppm	ASTM D5185m	>5	0	---	---
Tin	ppm	ASTM D5185m	>5	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
Cadmium	ppm	ASTM D5185m		0	---	---

ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m		0	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		0	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m		0	---	---
Calcium	ppm	ASTM D5185m		48	---	---
Phosphorus	ppm	ASTM D5185m		293	---	---
Zinc	ppm	ASTM D5185m		342	---	---
Sulfur	ppm	ASTM D5185m		938	---	---

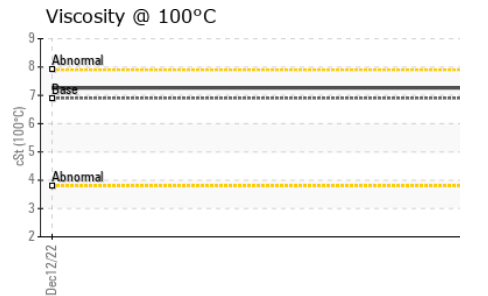
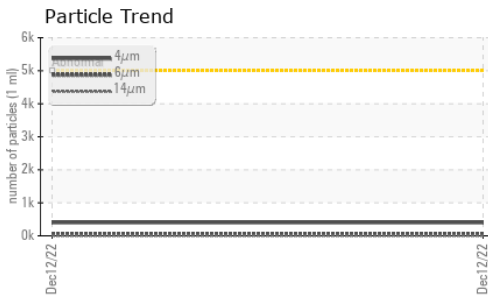
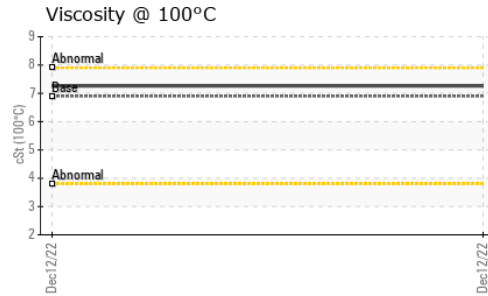
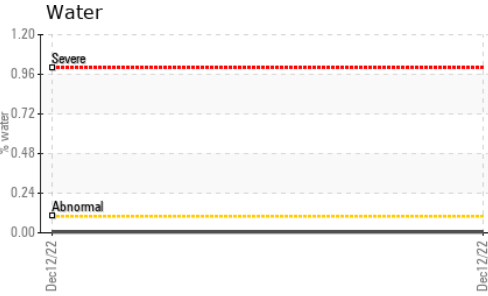
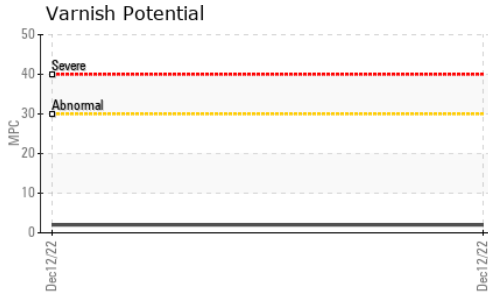
CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>15	<1	---	---
Sodium	ppm	ASTM D5185m		0	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Water	%	ASTM D6304		0.005	---	---
ppm Water	ppm	ASTM D6304		52.4	---	---

FLUID CLEANLINESS		method	limit/base	current	history 1	history 2
Particles >4µm		ASTM D7647	>5000	401	---	---
Particles >6µm		ASTM D7647	>1300	70	---	---
Particles >14µm		ASTM D7647	>160	4	---	---
Particles >21µm		ASTM D7647	>40	1	---	---
Particles >38µm		ASTM D7647	>10	0	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	16/13/9	---	---

FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.24	---	---
MPC Varnish Potential	Scale	ASTM D7843	>15	2	---	---



OIL ANALYSIS REPORT

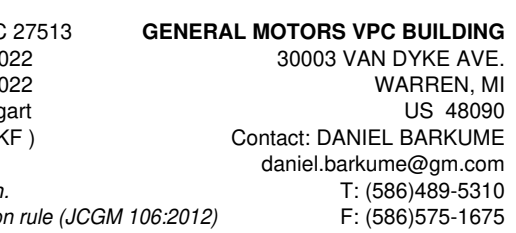
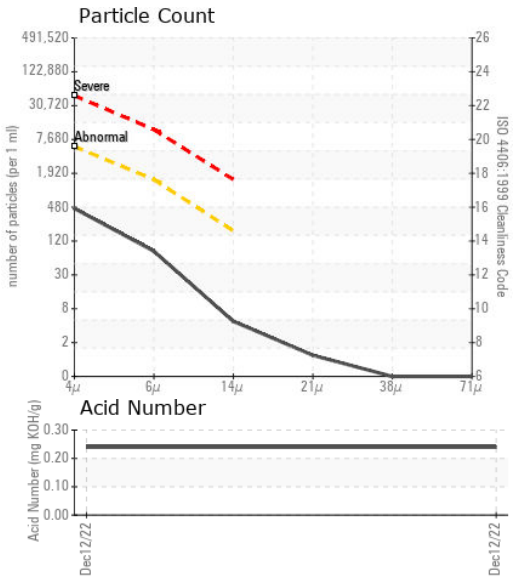
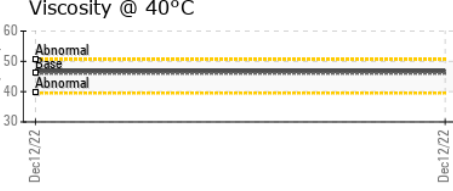
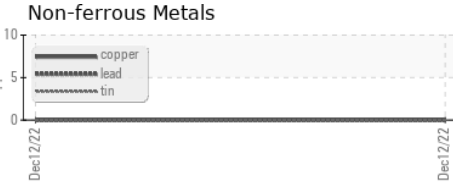
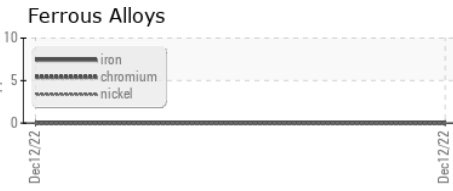


VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual NONE	NONE	---	---
Yellow Metal	scalar	*Visual NONE	NONE	---	---
Precipitate	scalar	*Visual NONE	NONE	---	---
Silt	scalar	*Visual NONE	NONE	---	---
Debris	scalar	*Visual NONE	NONE	---	---
Sand/Dirt	scalar	*Visual NONE	NONE	---	---
Appearance	scalar	*Visual NORML	NORML	---	---
Odor	scalar	*Visual NORML	NORML	---	---
Emulsified Water	scalar	*Visual	NEG	---	---
Free Water	scalar	*Visual	NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445 46.0	46.73	---	---
Visc @ 100°C	cSt	ASTM D445 6.9	7.26	---	---
Viscosity Index (VI)	Scale	ASTM D2270 105	116	---	---

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
Color				no image	no image
Bottom				no image	no image
MPC				no image	no image

GRAPHS

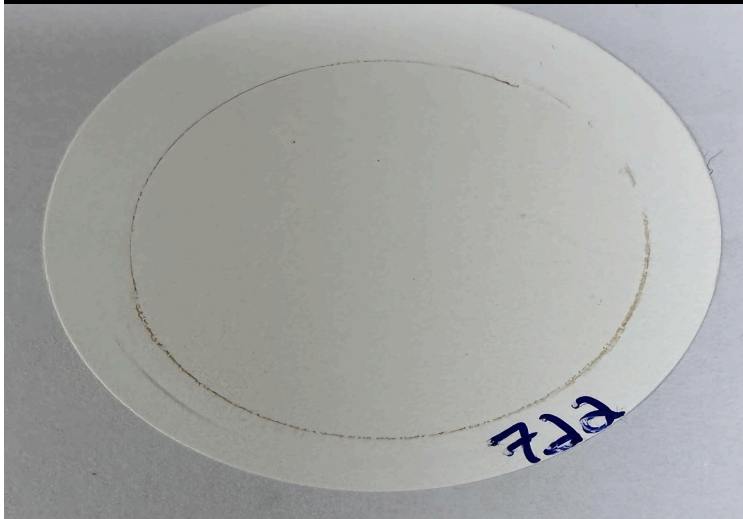


Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC05716722 **Received** : 13 Dec 2022
Lab Number : **05716722** **Diagnosed** : 20 Dec 2022
Unique Number : 10256298 **Diagnostician** : Doug Bogart
Test Package : AOM 1 (Additional Tests: FT-IR, ICP-NewOil, KF)

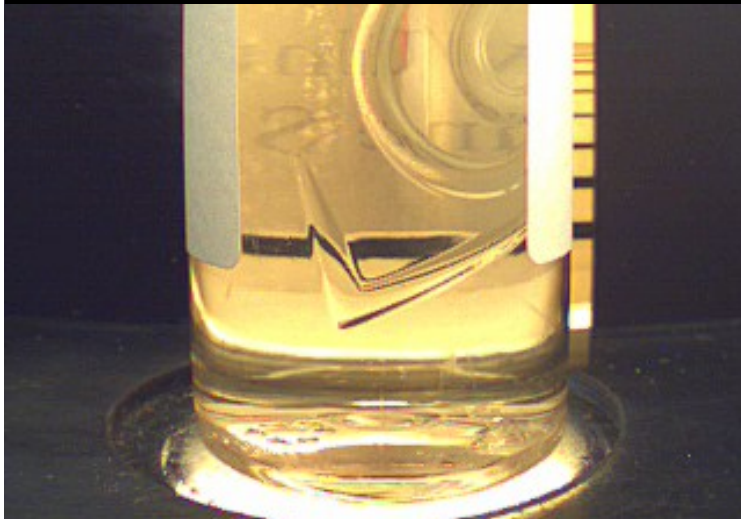
GENERAL MOTORS VPC BUILDING
 30003 VAN DYKE AVE.
 WARREN, MI
 US 48090
 Contact: DANIEL BARKUME
 daniel.barkume@gm.com
 T: (586)489-5310
 F: (586)575-1675

Certificate L2367
 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)

MPC (Varnish Test)



Sample Color & Clarity



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