



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
SHELLVIS

Component
Reduction Gear

Fluid
SHELL OMALA S2 GX 150 (--- GAL)

RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

WEAR

All component wear rates are normal.

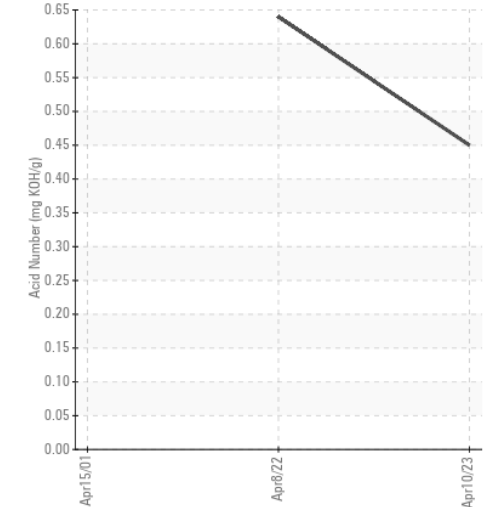
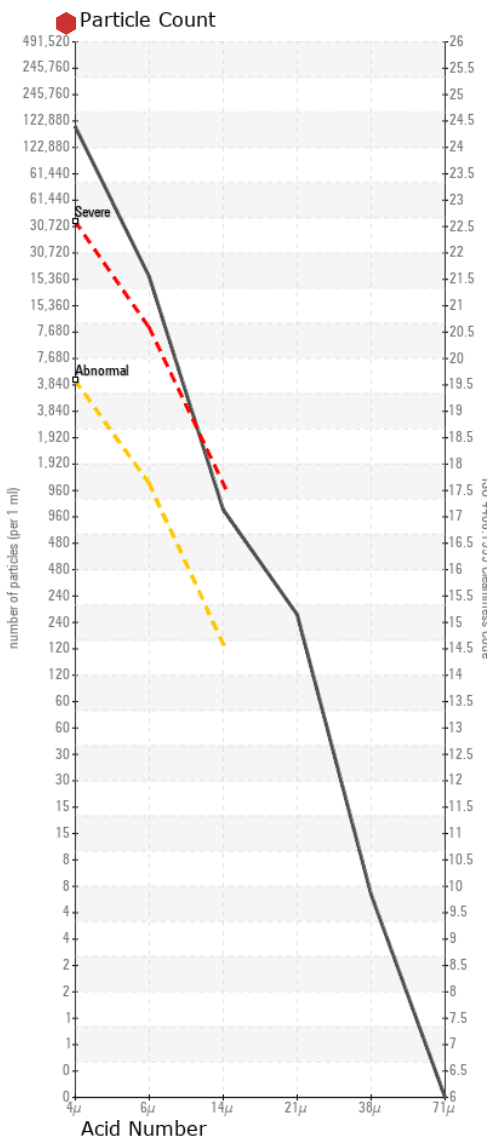
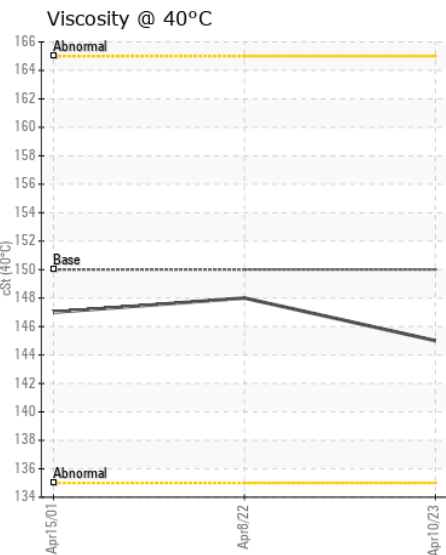
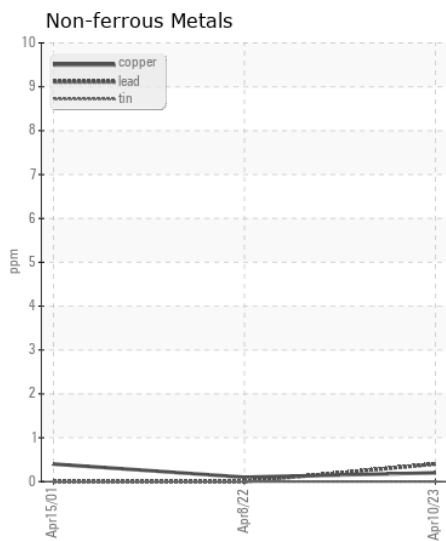
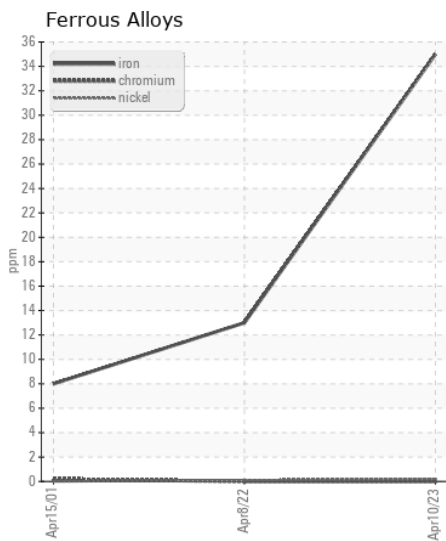
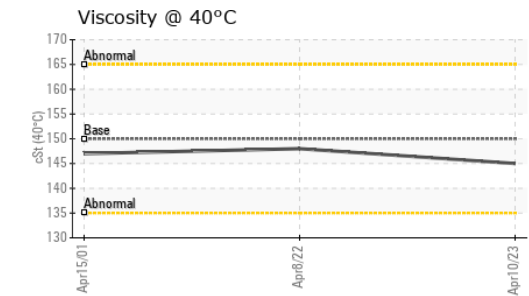
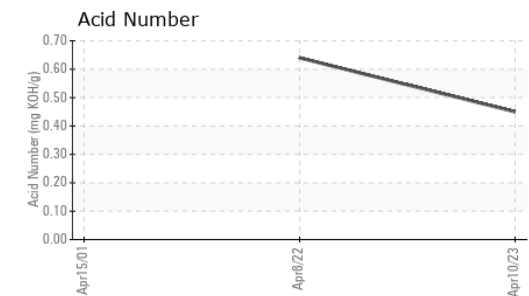
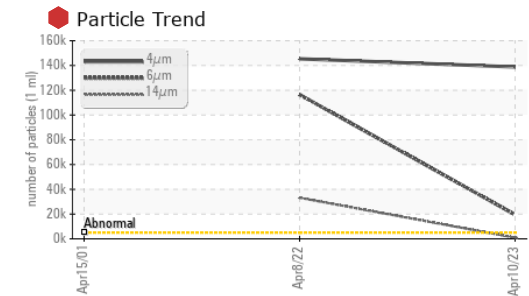
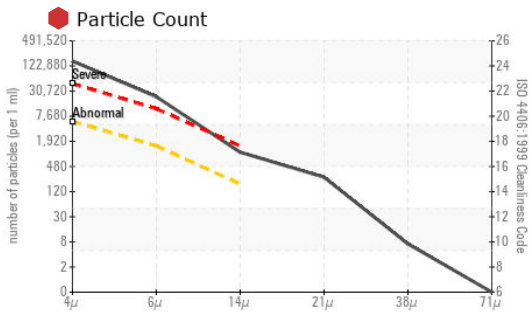
CONTAMINATION

There is a high amount of particulates (2 to 100 microns in size) present in the oil. The system cleanliness code is much higher than the acceptable limit for the target ISO 4406 cleanliness code.

FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC967546	WC967550	WC520076
Sample Date		Client Info		10 Apr 2023	08 Apr 2022	15 Apr 2001
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	270	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Filter Changed		Client Info		None	N/A	N/A
Sample Status				SEVERE	SEVERE	---
Iron	ppm	ASTM D5185(m)	>150	35	13	8
Chromium	ppm	ASTM D5185(m)	>10	0	0	<1
Nickel	ppm	ASTM D5185(m)	>10	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)		<1	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	<1	<1	4
Lead	ppm	ASTM D5185(m)	>100	<1	0	0
Copper	ppm	ASTM D5185(m)	>50	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>10	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>50	3	3	▲ 99
Potassium	ppm	ASTM D5185(m)	>20	0	<1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	● 138781	● 145375	---
Particles >6µm		ASTM D7647	>1300	● 19467	● 116470	---
Particles >14µm		ASTM D7647	>160	▲ 924	● 33163	---
Particles >21µm		ASTM D7647	>40	▲ 234	● 6090	---
Particles >38µm		ASTM D7647	>10	6	13	---
Particles >71µm		ASTM D7647	>3	0	4	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	● 24/21/17	● 24/24/22	---
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	VLITE	LIGHT
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		<1	0	4
Boron	ppm	ASTM D5185(m)	6.2	<1	1	<1
Barium	ppm	ASTM D5185(m)	0.0	<1	0	<1
Molybdenum	ppm	ASTM D5185(m)	0	7	3	6
Manganese	ppm	ASTM D5185(m)		0	0	---
Magnesium	ppm	ASTM D5185(m)	0	3	1	61
Calcium	ppm	ASTM D5185(m)	0.0	7	5	59
Phosphorus	ppm	ASTM D5185(m)	290	184	295	312
Zinc	ppm	ASTM D5185(m)	3.8	35	25	368
Sulfur	ppm	ASTM D5185(m)	8167	8036	8708	3832
Acid Number (AN)	mg KOH/g	ASTM D974*		0.45	0.64	---
Visc @ 40°C	cSt	ASTM D7279(m)	150	145	148	147



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 SHELL CANADA-BROCKVILLE LUB. PLANT
Sample No. : WC967546 **Received** : 10 Oct 2023 250 LAURIER BLVD., P.O. BOX 489
Lab Number : 02588025 **Diagnosed** : 10 Oct 2023 BROCKVILLE, ON
Unique Number : 5657091 **Diagnostician** : Wes Davis CA K6V 5V7
Test Package : IND 2 (Additional Tests: TAN Man)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

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