



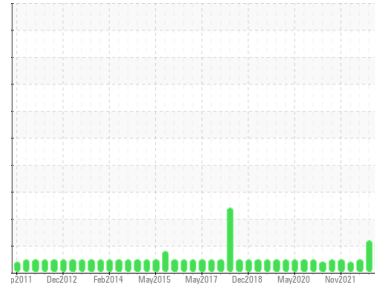
PROBLEM SUMMARY

Sample Rating Trend

ADDITIVES

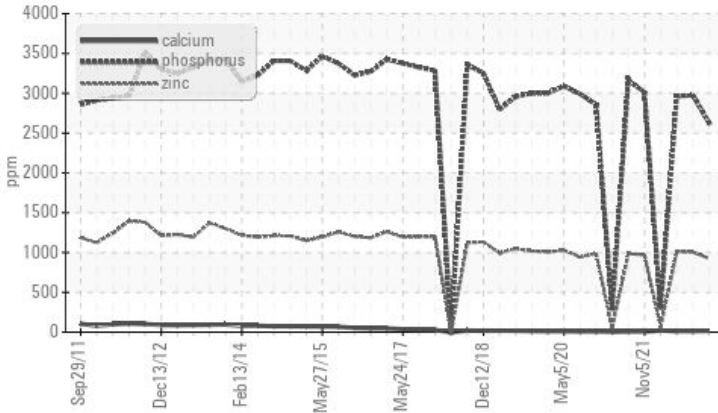
Area
TC02
Machine Id
TC02 Top 6 Inch

Component
Gearbox
Fluid
SHELL OMALA S2 GX 220 (17 GAL)



COMPONENT CONDITION SUMMARY

▲ Additives



RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as SHELL OMALA S2 GX 220, however, a fluid match indicates that this fluid is ISO 220 Gear Oil (Hi Molybdenum). Please confirm the oil type and grade on your next sample.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ATTENTION	NORMAL
Molybdenum	ppm	ASTM D5185(m)	0	▲ 1711	▲ 1834	1949
Phosphorus	ppm	ASTM D5185(m)	290	▲ 2629	▲ 2974	2963
Zinc	ppm	ASTM D5185(m)	3.8	▲ 925	▲ 1007	1010

Customer Id: GOONAP
Sample No.: WC0873620
Lab Number: 02602412
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
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RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Alert	---	---	?	The fluid was specified as SHELL OMALA S2 GX 220, however, a fluid match indicates that this fluid is ISO 220 Gear Oil (Hi Molybdenum). Please confirm the oil type and grade on your next sample.
Check Fluid Source	---	---	?	Confirm the source of the lubricant being utilized for top-up/fill.

HISTORICAL DIAGNOSIS

25 Aug 2023 Diag: Kevin Marson

ADDITIVES



Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as SHELL OMALA S2 GX 220, however, a fluid match indicates that this fluid is ISO 220 Gear Oil (Hi Molybdenum). Please confirm the oil type and grade on your next sample. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. There is no indication of any contamination in the oil. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



05 Feb 2023 Diag: Kevin Marson

NORMAL



Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. There is no indication of any contamination in the oil. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



27 Oct 2022 Diag: Kevin Marson

VISCOSITY



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 320 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

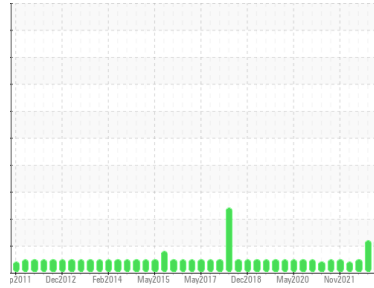
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ADDITIVES



Area
TC02
 Machine Id
TC02 Top 6 Inch
 Component
Gearbox
 Fluid
SHELL OMALA S2 GX 220 (17 GAL)

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as SHELL OMALA S2 GX 220, however, a fluid match indicates that this fluid is ISO 220 Gear Oil (Hi Molybdenum). Please confirm the oil type and grade on your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. 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		WC0873620	WC0841286	WC0754411
Sample Date	Client Info		05 Nov 2023	25 Aug 2023	05 Feb 2023
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ATTENTION	ATTENTION	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m) >200	11	10	10
Chromium	ppm	ASTM D5185(m) >15	0	0	0
Nickel	ppm	ASTM D5185(m) >15	0	0	0
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	0	0	0
Aluminum	ppm	ASTM D5185(m) >25	7	4	18
Lead	ppm	ASTM D5185(m) >100	3	2	2
Copper	ppm	ASTM D5185(m) >200	28	31	30
Tin	ppm	ASTM D5185(m) >25	0	0	0
Antimony	ppm	ASTM D5185(m) >5	<1	0	0
Vanadium	ppm	ASTM D5185(m)	0	<1	<1
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 6.2	1	<1	<1
Barium	ppm	ASTM D5185(m) 0.0	<1	0	0
Molybdenum	ppm	ASTM D5185(m) 0	▲ 1711	▲ 1834	1949
Manganese	ppm	ASTM D5185(m)	0	<1	<1
Magnesium	ppm	ASTM D5185(m) 0	<1	<1	<1
Calcium	ppm	ASTM D5185(m) 0.0	15	13	13
Phosphorus	ppm	ASTM D5185(m) 290	▲ 2629	▲ 2974	2963
Zinc	ppm	ASTM D5185(m) 3.8	▲ 925	▲ 1007	1010
Sulfur	ppm	ASTM D5185(m) 8167	8347	8305	8581
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

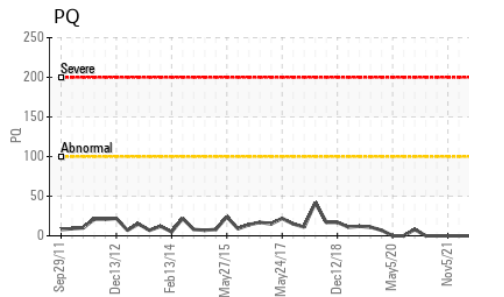
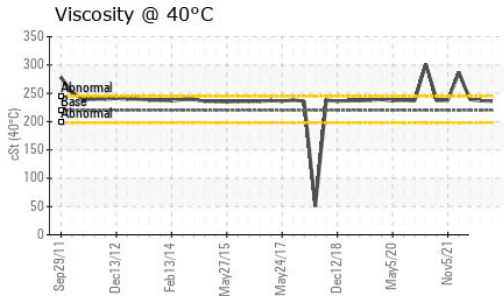
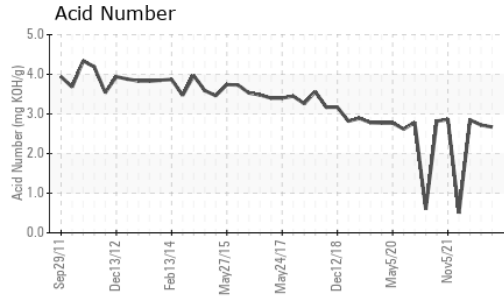
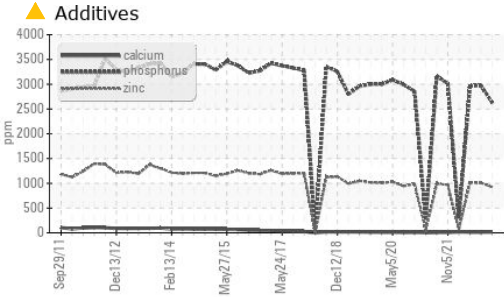
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	32	30	30
Sodium	ppm	ASTM D5185(m)	<1	0	<1
Potassium	ppm	ASTM D5185(m) >20	0	0	0

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	2.67	2.72	2.85



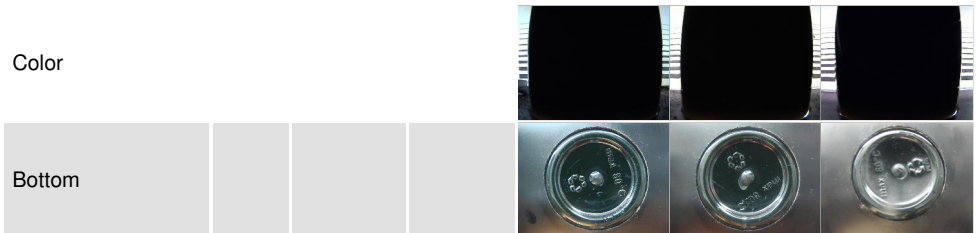
OIL ANALYSIS REPORT



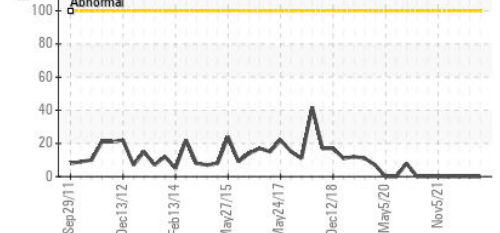
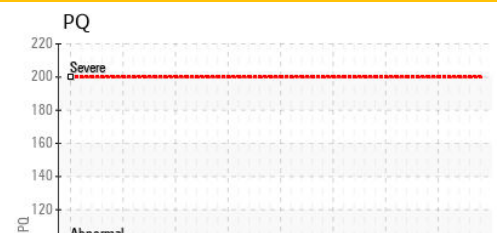
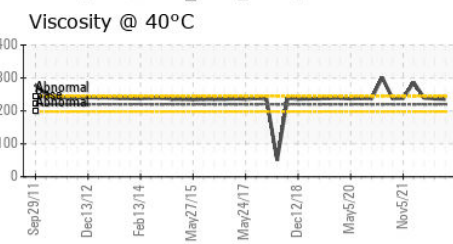
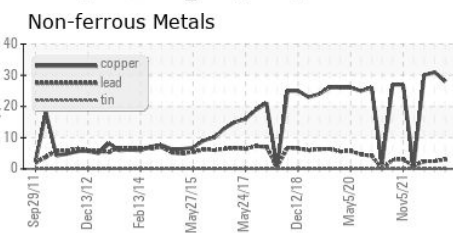
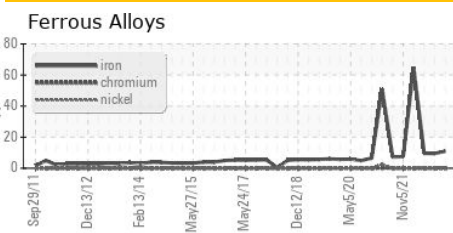
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	220	236	237

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0873620 **Received** : 11 Dec 2023
Lab Number : 02602412 **Diagnosed** : 12 Dec 2023
Unique Number : 5695497 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: TAN Man)

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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.