



WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL



Machine Id
4031
Component
Right Final Drive
Fluid
SHELL SPIRAX S4 CX 50 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0210626	JR0120362	JR0112547
Sample Date		Client Info		14 Mar 2024	24 Feb 2022	13 Jan 2022
Machine Age	hrs	Client Info		4588	1034	832
Oil Age	hrs	Client Info		4000	0	0
Filter Age	hrs	Client Info		4000	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		N/A	Not Changd	Not Changd
Sample Status				MARGINAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>500	46	48	50
Iron	ppm	ASTM D5185m	>800	89	40	39
Chromium	ppm	ASTM D5185m	>10	1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m	>15	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>75	4	2	0
Lead	ppm	ASTM D5185m	>10	<1	<1	0
Copper	ppm	ASTM D5185m	>75	2	<1	3
Tin	ppm	ASTM D5185m	>8	<1	2	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

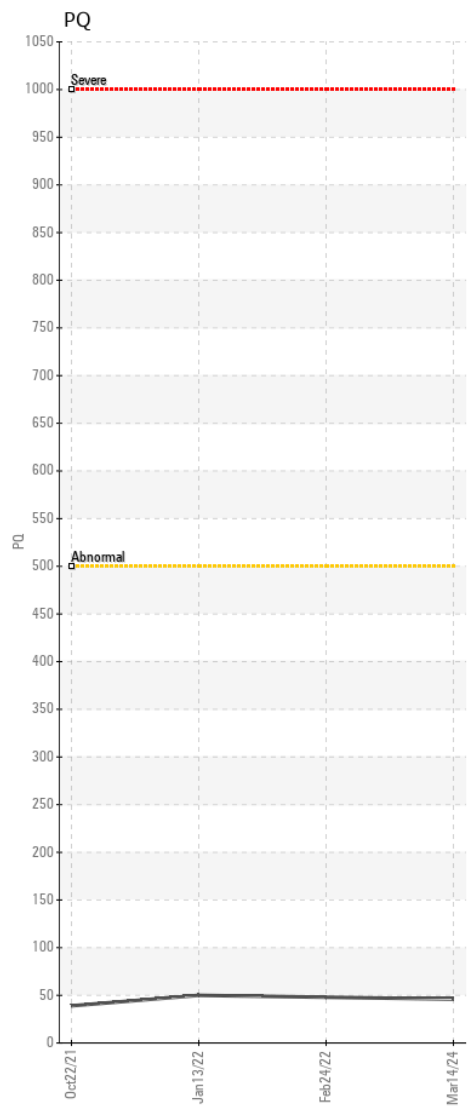
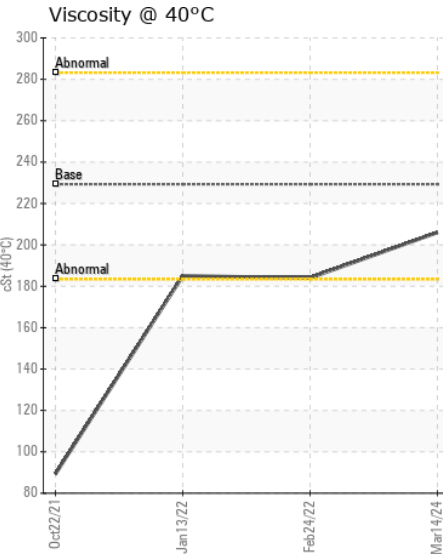
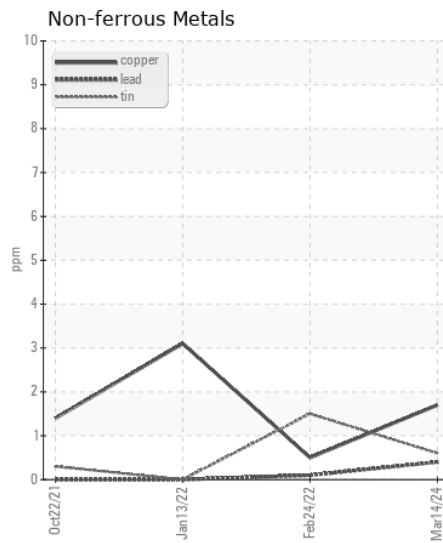
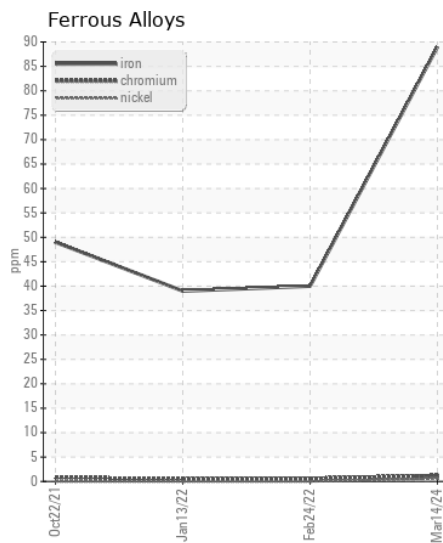
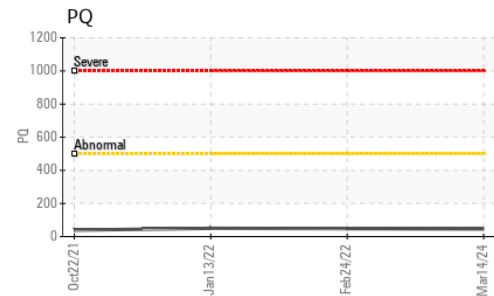
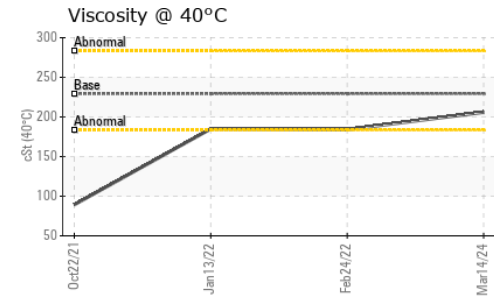
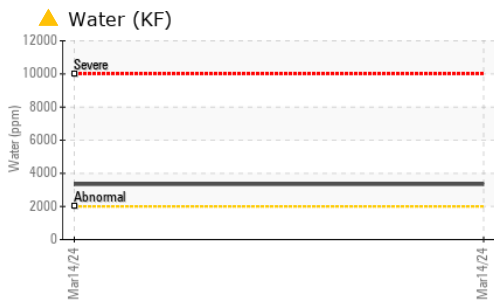
There is a light concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>400	30	16	13
Potassium	ppm	ASTM D5185m	>20	2	0	<1
Water	%	ASTM D6304	>0.2	▲ 0.334	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ 3340	---	---
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
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	>0.2	0.2%	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		10	0	3
Boron	ppm	ASTM D5185m		2	3	8
Barium	ppm	ASTM D5185m		3	0	3
Molybdenum	ppm	ASTM D5185m		1	<1	<1
Manganese	ppm	ASTM D5185m		2	<1	<1
Magnesium	ppm	ASTM D5185m		13	14	12
Calcium	ppm	ASTM D5185m	4200	3089	4367	4164
Phosphorus	ppm	ASTM D5185m		799	917	918
Zinc	ppm	ASTM D5185m	1080	1080	1053	1124
Sulfur	ppm	ASTM D5185m		9809	7769	8836
Visc @ 40°C	cSt	ASTM D445	229.3	206	184	185



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0210626 **Received** : 20 Mar 2024
Lab Number : 06123949 **Tested** : 21 Mar 2024
Unique Number : 10938100 **Diagnosed** : 22 Mar 2024 - Don Baldrige
Test Package : CONST (Additional Tests: KF, PQ)

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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)