



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**4031**  
Component  
**Swing Drive**  
Fluid  
**SHELL SPIRAX S4 CX 50 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0169431</b>	JR0169735	JR0120360
Sample Date		Client Info		<b>14 Mar 2024</b>	21 Jun 2023	24 Feb 2022
Machine Age	hrs	Client Info		<b>4588</b>	3223	1034
Oil Age	hrs	Client Info		<b>4000</b>	3000	0
Filter Age	hrs	Client Info		<b>4000</b>	3000	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ		ASTM D8184		<b>19</b>	12	54
Iron	ppm	ASTM D5185m	>400	<b>11</b>	11	56
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	2	1
Lead	ppm	ASTM D5185m	>50	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>200	<b>&lt;1</b>	0	<1
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	2
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

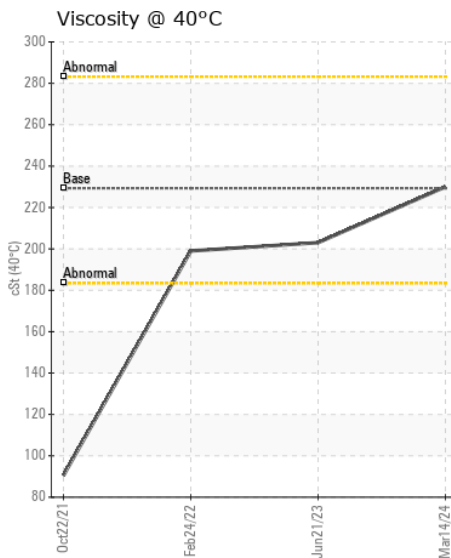
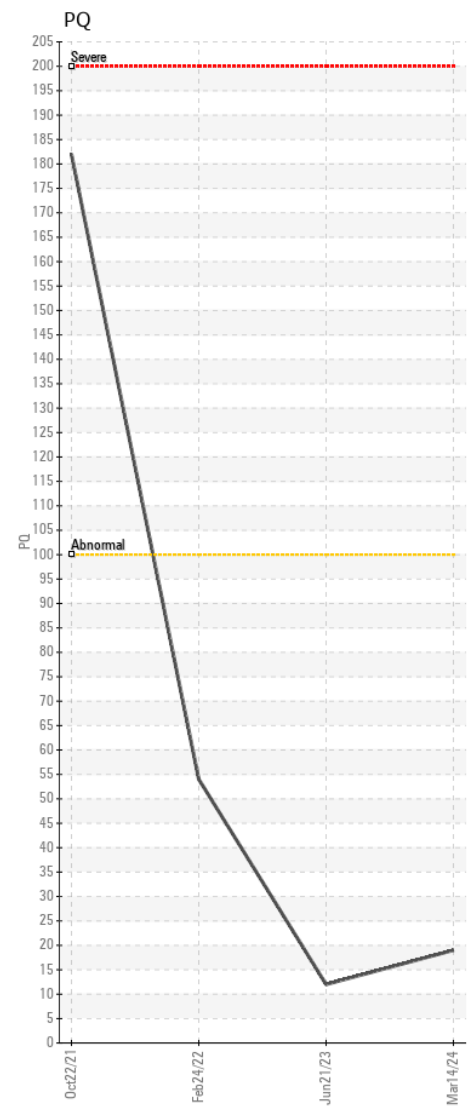
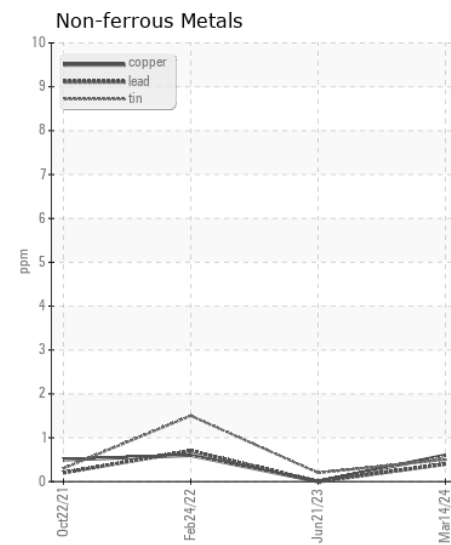
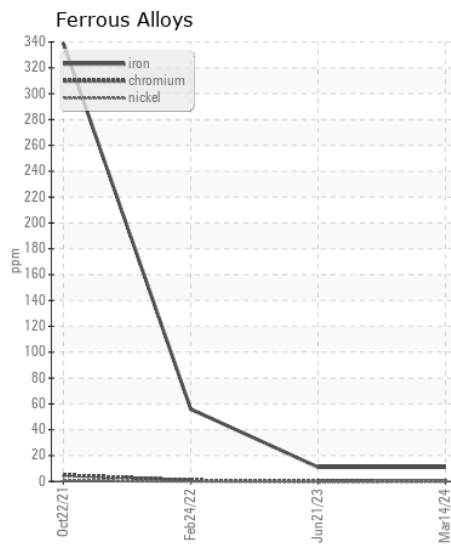
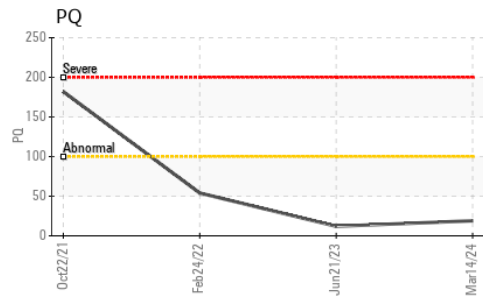
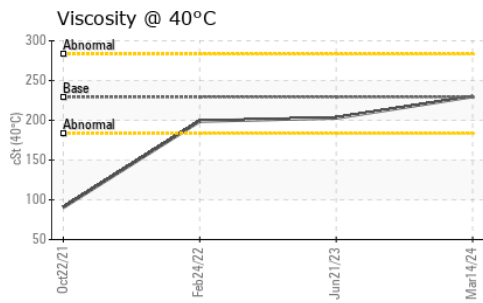
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>21</b>	21	13
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Boron	ppm	ASTM D5185m		<b>&lt;1</b>	2	3
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>2</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>16</b>	14	13
Calcium	ppm	ASTM D5185m	4200	<b>2380</b>	3602	4366
Phosphorus	ppm	ASTM D5185m		<b>775</b>	917	912
Zinc	ppm	ASTM D5185m	1080	<b>985</b>	1163	1041
Sulfur	ppm	ASTM D5185m		<b>13781</b>	10622	7682
Visc @ 40°C	cSt	ASTM D445	229.3	<b>230</b>	203	199



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0169431 **Received** : 20 Mar 2024  
**Lab Number** : 06123941 **Tested** : 21 Mar 2024  
**Unique Number** : 10938092 **Diagnosed** : 22 Mar 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

**PATRIOT DEVELOPMENT CORP**  
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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)