



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



Machine Id  
**4016**  
Component  
**Hydraulic System**  
Fluid  
**SHELL TELLUS S2 VX 46 (--- GAL)**

### RECOMMENDATION

No corrective action is recommended at this time. Oil and filter 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		<b>JR0195412</b>	JR0120466	JR0120246
Sample Date		Client Info		<b>17 Jan 2024</b>	13 Jun 2022	09 Mar 2022
Machine Age	hrs	Client Info		<b>10033</b>	8322	7913
Oil Age	hrs	Client Info		<b>2000</b>	0	0
Filter Age	hrs	Client Info		<b>2000</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

### WEAR

The iron level is abnormal. All other component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	<b>41</b>	24	13
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>10	<b>6</b>	3	3
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>75	<b>10</b>	7	6
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	1
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

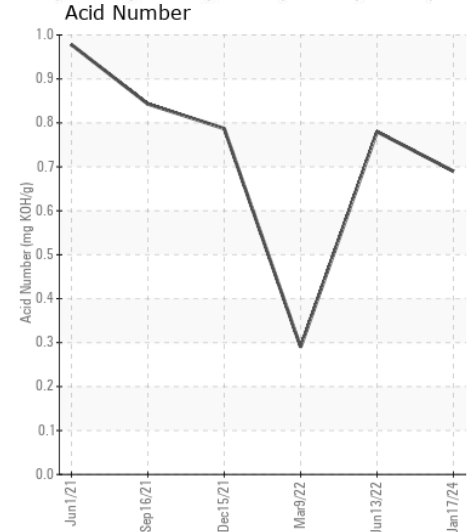
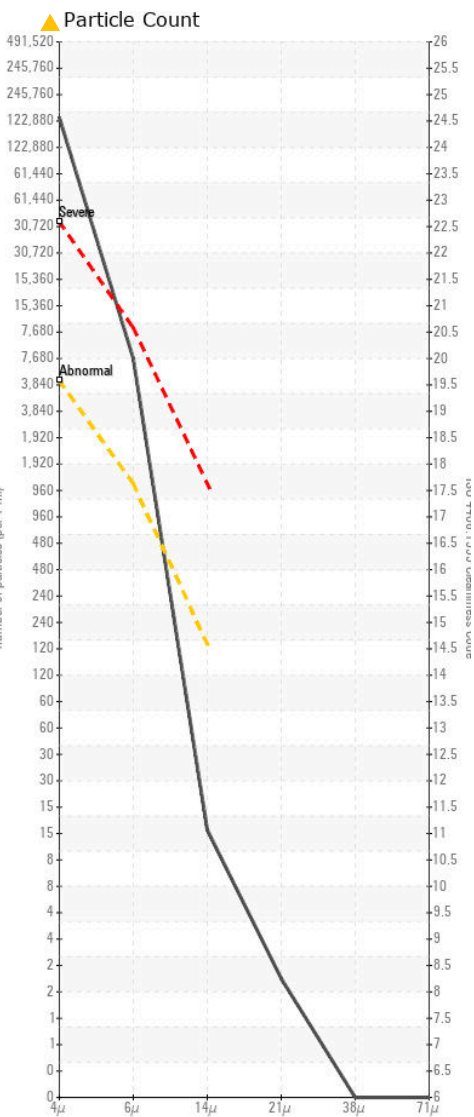
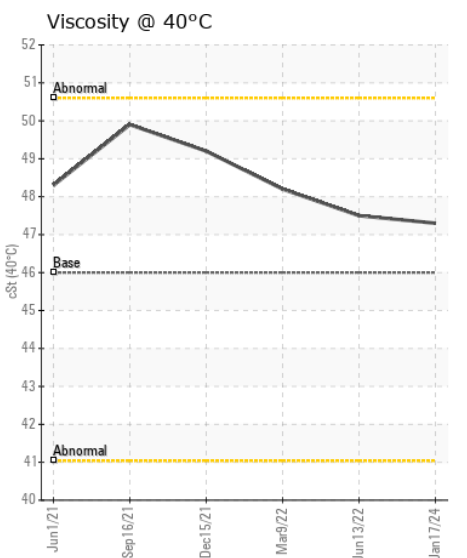
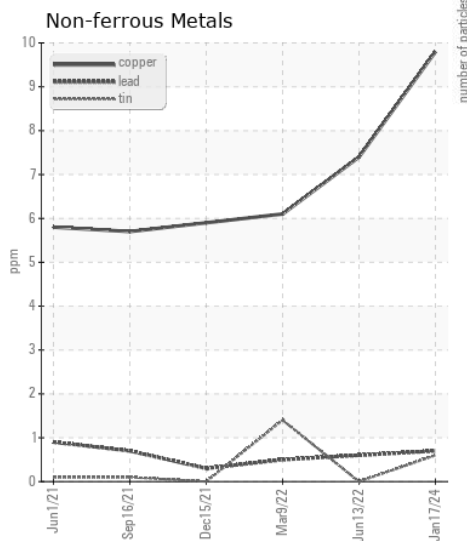
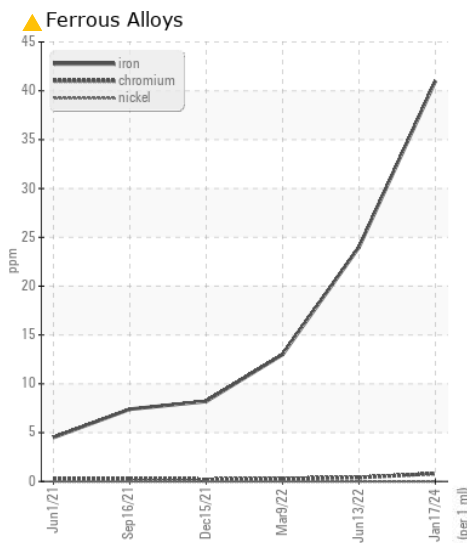
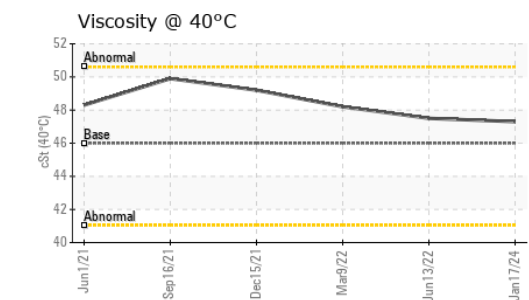
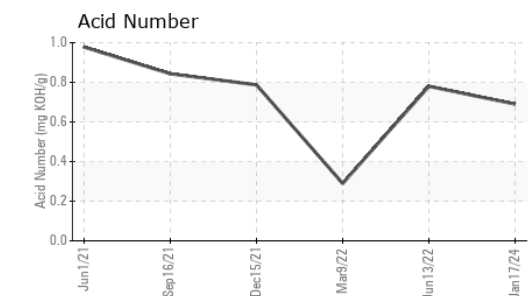
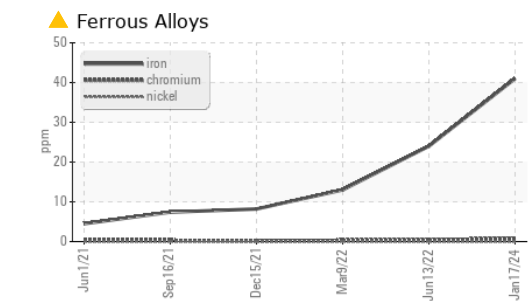
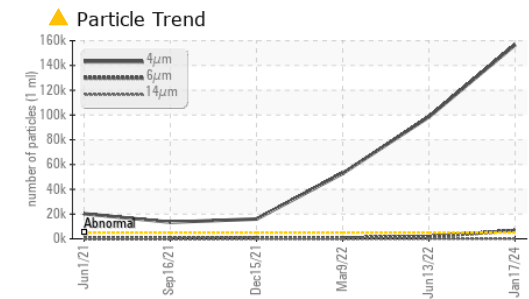
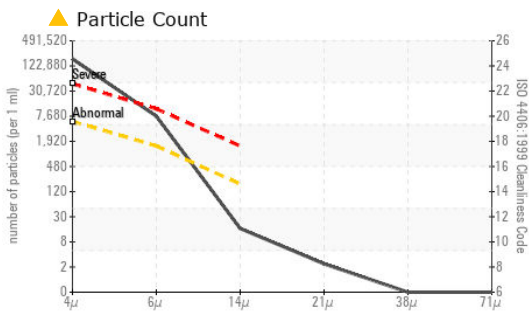
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>18</b>	13	9
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	0	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>156654</b>	98431	52816
Particles >6µm		ASTM D7647	>1300	<b>6686</b>	1732	668
Particles >14µm		ASTM D7647	>160	<b>14</b>	40	11
Particles >21µm		ASTM D7647	>40	<b>2</b>	12	3
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>24/20/11</b>	24/18/12	23/17/11
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	>0.1	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oils additive package is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>3</b>	2	0
Boron	ppm	ASTM D5185m		<b>49</b>	91	71
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>2</b>	2	2
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>42</b>	37	27
Calcium	ppm	ASTM D5185m		<b>1589</b>	2281	2212
Phosphorus	ppm	ASTM D5185m		<b>728</b>	908	877
Zinc	ppm	ASTM D5185m		<b>850</b>	1126	1037
Sulfur	ppm	ASTM D5185m		<b>3486</b>	2665	2157
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.69</b>	0.78	0.29
Visc @ 40°C	cSt	ASTM D445	46	<b>47.3</b>	47.5	48.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0195412 **Received** : 31 Jan 2024  
**Lab Number** : 06075632 **Diagnosed** : 01 Feb 2024  
**Unique Number** : 10857723 **Diagnostician** : Angela Borella  
**Test Package** : CONST ( Additional Tests: PQ )

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)

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