



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
5C07
Machine Id
INTERNATIONAL 4900 FBK2901 (S/N 1HTSDAAN3YH269199)
Component
Front Transmission
Fluid
{not provided} (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend you service the filters on this component. We advise that you inspect for the source(s) of wear. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ARI0007578	ARI0005292	ARI05106101
Sample Date		Client Info		24 Jan 2024	10 Mar 2022	01 Nov 2020
Machine Age	mls	Client Info		138452	137739	0
Oil Age	mls	Client Info		713	0	0
Filter Age	mls	Client Info		713	0	0
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Filter Changed		Client Info		Not Changd	Not Changd	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

Moderate concentration of visible metal present. Gear wear is indicated.

Iron	ppm	ASTM D5185m	>250	▲ 256	▲ 277	▲ 261
Chromium	ppm	ASTM D5185m	>2	2	2	2
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m		0	2	<1
Aluminum	ppm	ASTM D5185m	>55	▲ 15	11	7
Lead	ppm	ASTM D5185m	>65	7	6	6
Copper	ppm	ASTM D5185m	>230	46	46	46
Tin	ppm	ASTM D5185m	>6	2	2	2
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	▲ MODER	▲ MODER	▲ MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

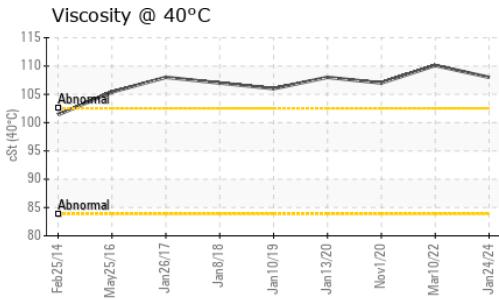
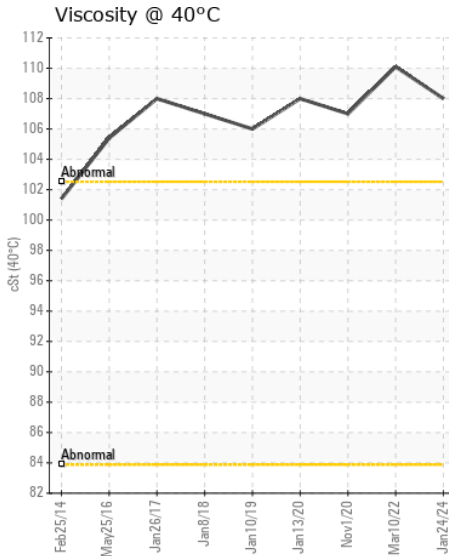
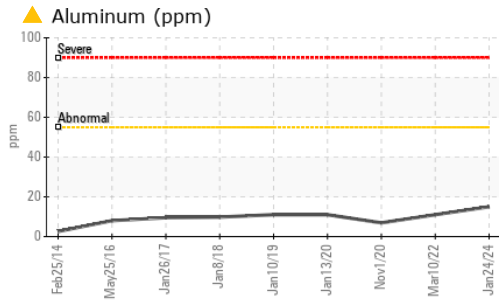
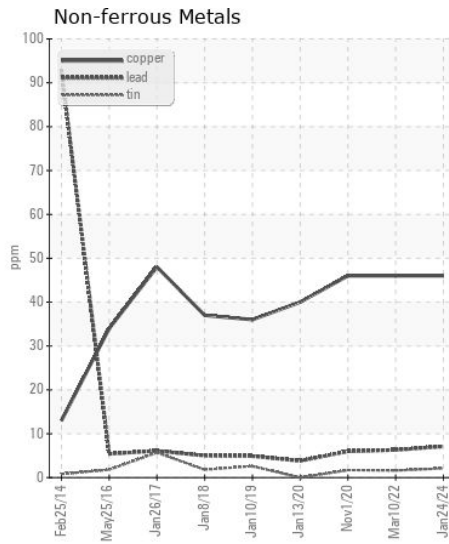
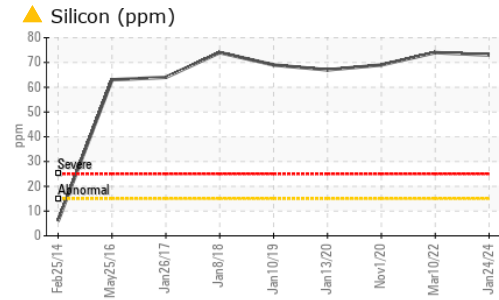
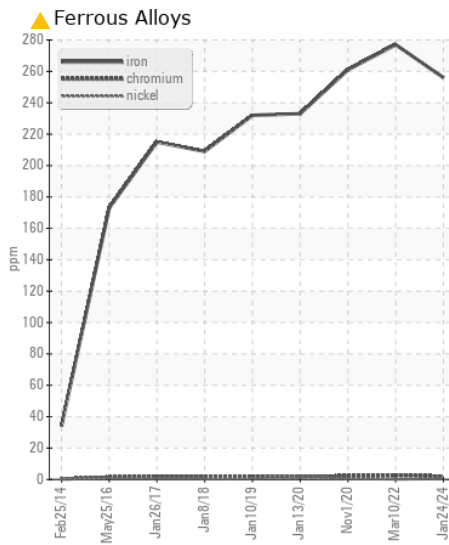
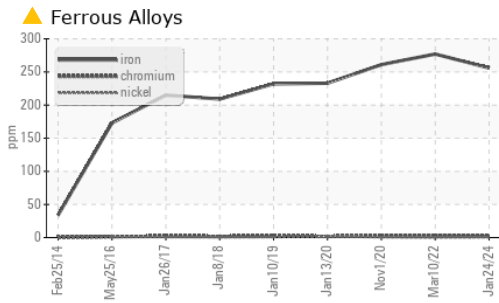
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. Moderate concentration of visible dirt/debris present in the fluid.

Silicon	ppm	ASTM D5185m	>15	▲ 73	▲ 74	▲ 69
Potassium	ppm	ASTM D5185m	>20	4	43	4
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	NONE	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	▲ 0.2%	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		26	32	26
Boron	ppm	ASTM D5185m		16	24	9
Barium	ppm	ASTM D5185m		8964	11711	10005
Molybdenum	ppm	ASTM D5185m		1	2	2
Manganese	ppm	ASTM D5185m		5	5	4
Magnesium	ppm	ASTM D5185m		6	4	3
Calcium	ppm	ASTM D5185m		322	391	381
Phosphorus	ppm	ASTM D5185m		1346	1591	1541
Zinc	ppm	ASTM D5185m		147	183	176
Sulfur	ppm	ASTM D5185m		2361	2625	2391
Visc @ 40°C	cSt	ASTM D445		108	110.1	107



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ARI0007578
Lab Number : 06075231
Unique Number : 10857322
Test Package : CONST

INSITUFORM TECHNOLOGIES, INC
 12820 PENNRIDGE DRIVE
 BRIDGETON, MO
 US 63044

Contact: NEIL STRAUSSNER
 NSTRAUSSNER@INSITUFORM.COM

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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F: