



Machine Id
BIG EASY
Component
Main Hydraulic System
Fluid
ATF (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. We advise that you inspect for the source(s) of metal. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to metal particles present in this sample.

WEAR

Moderate concentration of visible metal present. All component wear rates are normal.

CONTAMINATION

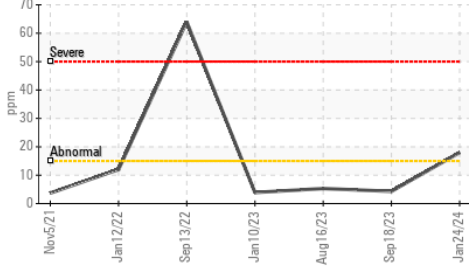
Elemental level of silicon (Si) above normal.

FLUID CONDITION

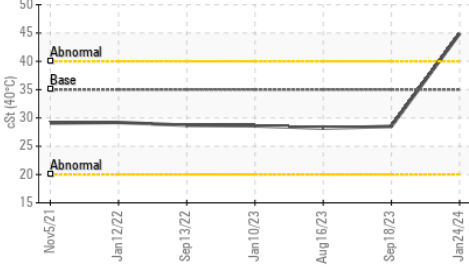
The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0064916	MW0057185	MW0052219
Sample Date		Client Info		24 Jan 2024	18 Sep 2023	16 Aug 2023
Machine Age	hrs	Client Info		15649	0	14387
Oil Age	hrs	Client Info		0	14654	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Filter Changed		Client Info		Not Changd	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>20	0	1	1
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	0	<1
Lead	ppm	ASTM D5185m	>20	1	<1	<1
Copper	ppm	ASTM D5185m	>20	8	8	8
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	▲ MODER	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>15	▲ 18	4	5
Potassium	ppm	ASTM D5185m	>20	<1	0	0
Water		WC Method	>0.05	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	---	▲ 27820	▲ 26879
Particles >6µm		ASTM D7647	>1300	---	▲ 9227	▲ 9260
Particles >14µm		ASTM D7647	>160	---	▲ 982	▲ 894
Particles >21µm		ASTM D7647	>40	---	▲ 255	▲ 240
Particles >38µm		ASTM D7647	>10	---	▲ 10	▲ 12
Particles >71µm		ASTM D7647	>3	---	0	1
Oil Cleanliness		ISO 4406 (c)	>19/17/14	---	▲ 22/20/17	▲ 22/20/17
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT	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	>0.05	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		15	15	14
Boron	ppm	ASTM D5185m		8	8	9
Barium	ppm	ASTM D5185m		6577	6759	6936
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		0	<1	1
Calcium	ppm	ASTM D5185m		31	16	35
Phosphorus	ppm	ASTM D5185m		799	848	827
Zinc	ppm	ASTM D5185m		917	969	965
Sulfur	ppm	ASTM D5185m		4264	5107	5037
Acid Number (AN)	mg KOH/g	ASTM D8045		0.55	0.79	0.65
Visc @ 40°C	cSt	ASTM D445	35.0	▲ 44.9	28.5	28.2

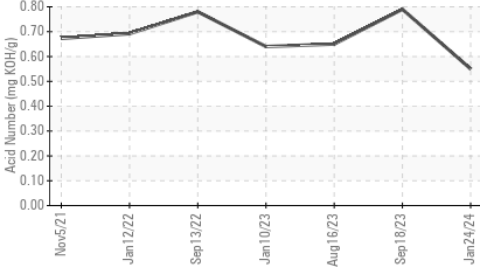
▲ Silicon (ppm)



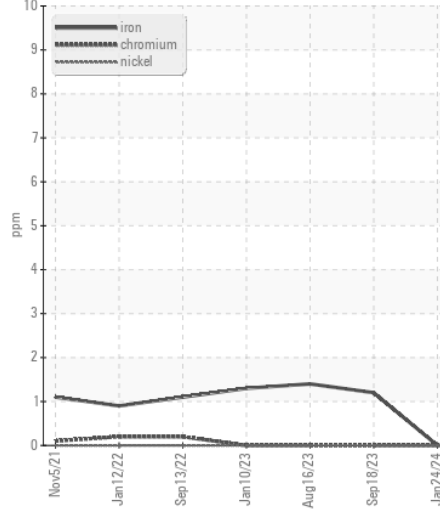
▲ Viscosity @ 40°C



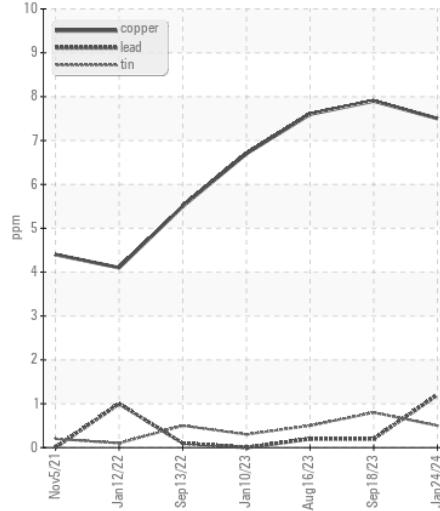
Acid Number



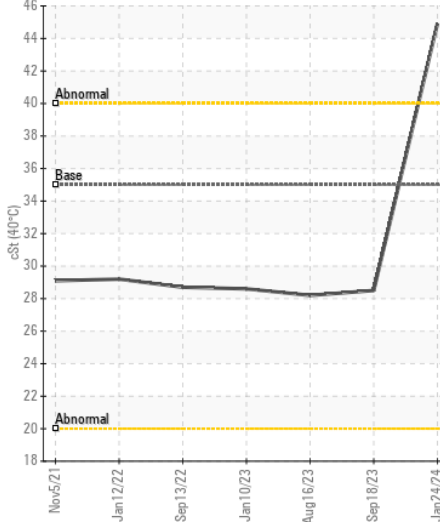
Ferrous Alloys



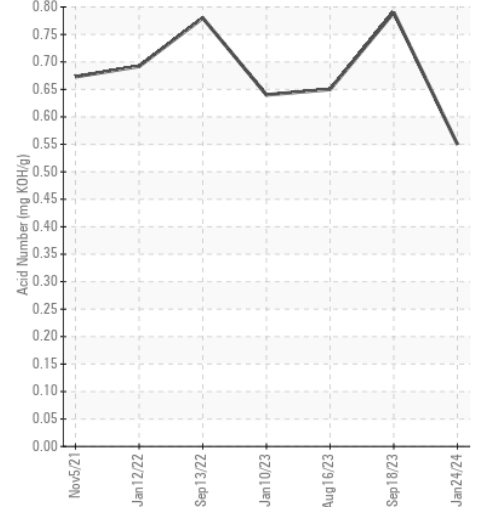
Non-ferrous Metals



▲ Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : MW0064916

Lab Number : 06084927

Unique Number : 10872372

Test Package : MAR 2

Received : 09 Feb 2024

Tested : 12 Feb 2024

Diagnosed : 12 Feb 2024 - Don Baldrige

AMERICAN RIVER TRANSPORTATION CO.

P.O. BOX 2889

ST. LOUIS, MO

US 63111

Contact: BRIAN GRIEWING

brian.griewing@adm.com

T:

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)

F: (314)481-5278