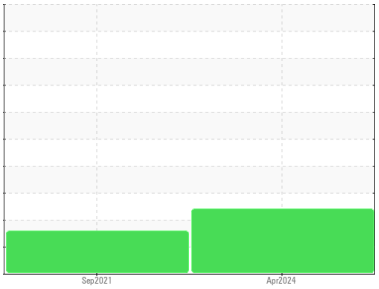
OIL ANALYSIS REPORT

Machine Id
51-06
Component
Hydraulic System
Fluid
{not provided} (--- GAL)

Sample Rating Trend



WEAR

DIAGNOSIS

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0750273**	WC0549088	---
Sample Date		Client Info		**11 Apr 2024**	07 Sep 2021	---
Machine Age	hrs	Client Info		**8144**	7096	---
Oil Age	hrs	Client Info		**0**	1096	---
Oil Changed		Client Info		**Not Changd**	Changed	---
Sample Status				**ABNORMAL**	ABNORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.1	**NEG**	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**9**	7	---
Chromium	ppm	ASTM D5185m	>10	**<1**	<1	---
Nickel	ppm	ASTM D5185m	>10	**<1**	0	---
Titanium	ppm	ASTM D5185m		**<1**	<1	---
Silver	ppm	ASTM D5185m		**0**	<1	---
Aluminum	ppm	ASTM D5185m	>10	▲ **17**	▲ 14	---
Lead	ppm	ASTM D5185m	>10	**5**	4	---
Copper	ppm	ASTM D5185m	>75	**44**	26	---
Tin	ppm	ASTM D5185m	>10	**<1**	<1	---
Antimony	ppm	ASTM D5185m		**---**	0	---
Vanadium	ppm	ASTM D5185m		**<1**	0	---
Cadmium	ppm	ASTM D5185m		**<1**	0	---

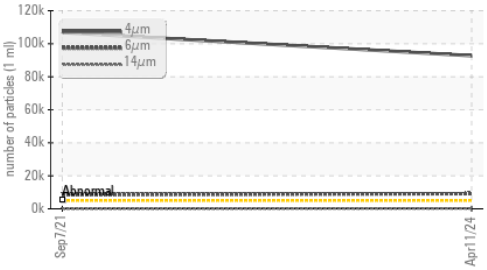
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**102**	120	---
Barium	ppm	ASTM D5185m		**0**	0	---
Molybdenum	ppm	ASTM D5185m		**36**	38	---
Manganese	ppm	ASTM D5185m		**<1**	<1	---
Magnesium	ppm	ASTM D5185m		**251**	269	---
Calcium	ppm	ASTM D5185m		**1573**	1382	---
Phosphorus	ppm	ASTM D5185m		**1027**	968	---
Zinc	ppm	ASTM D5185m		**1107**	1075	---
Sulfur	ppm	ASTM D5185m		**5535**	3643	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**16**	11	---
Sodium	ppm	ASTM D5185m		**<1**	<1	---
Potassium	ppm	ASTM D5185m	>20	**3**	1	---

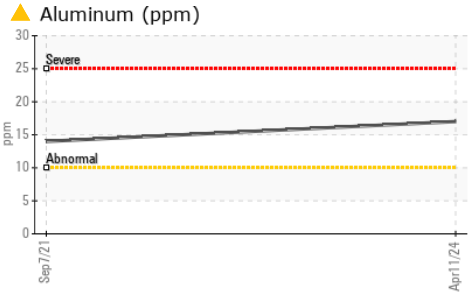
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **92737**	▲ 106778	---
Particles >6µm		ASTM D7647	>1300	▲ **9186**	▲ 8632	---
Particles >14µm		ASTM D7647	>160	▲ **186**	43	---
Particles >21µm		ASTM D7647	>40	**33**	6	---
Particles >38µm		ASTM D7647	>10	**1**	0	---
Particles >71µm		ASTM D7647	>3	**1**	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **24/20/15**	▲ 24/20/13	---

OIL ANALYSIS REPORT

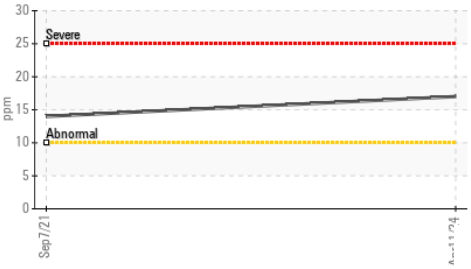
Particle Trend



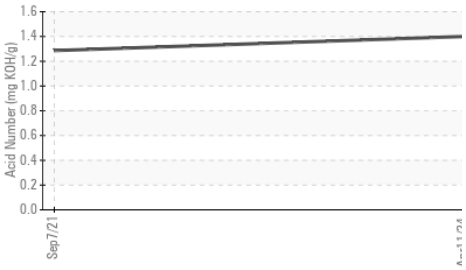
Aluminum (ppm)



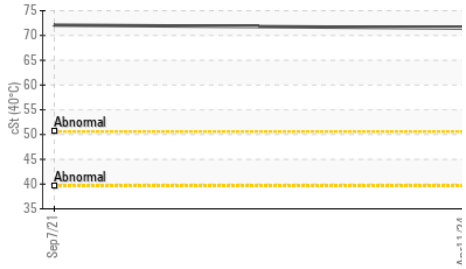
Aluminum (ppm)



Acid Number



Viscosity @ 40°C



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.40**	1.286	---

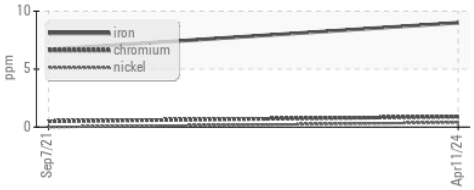
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	NONE	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	**NORML**	NORML	---
Odor	scalar	*Visual	NORML	**NORML**	NORML	---
Emulsified Water	scalar	*Visual	>0.1	**NEG**	NEG	---
Free Water	scalar	*Visual		**NEG**	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**71.5**	72.1	---

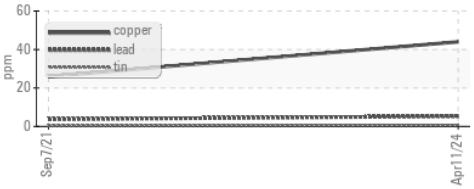
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS

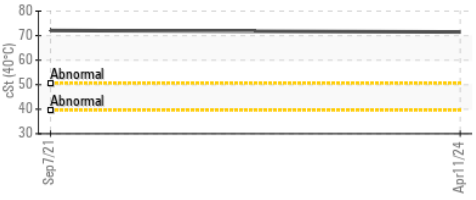
Ferrous Alloys



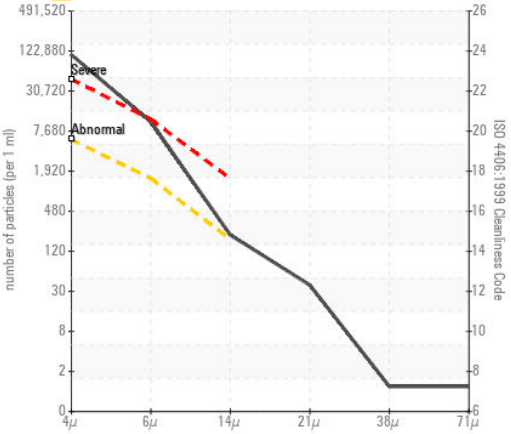
Non-ferrous Metals



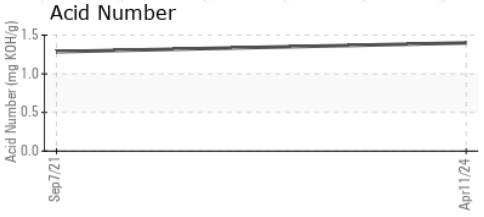
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0750273
Lab Number : 06148047
Unique Number : 10978125
Test Package : CONST

Received : 12 Apr 2024
Tested : 15 Apr 2024
Diagnosed : 16 Apr 2024 - Don Baldridge

Certificate L2367

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)

MANHATTAN ROAD AND BRIDGE
5601 S 122ND E AVE
TULSA, OK
US 74146
Contact: BEN CALDWELL
kevin.marson@wearcheck.com
T: (918)728-5749
F:

Report Id: MANTUL [WUSCAR] 06148047 (Generated: 04/16/2024 17:11:19) Rev: 1

Submitted By: JAMES STEELMON