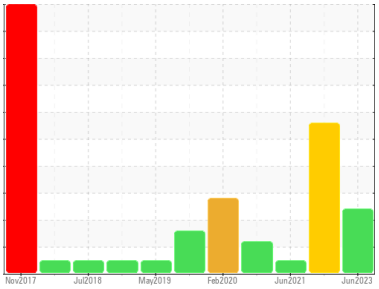
PROBLEM SUMMARY

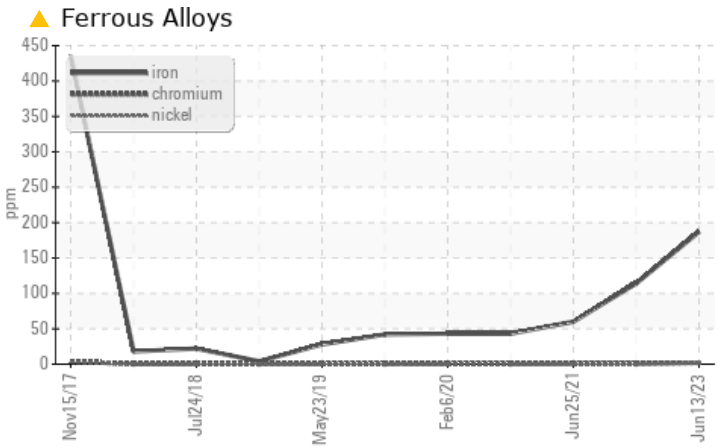
Sample Rating Trend

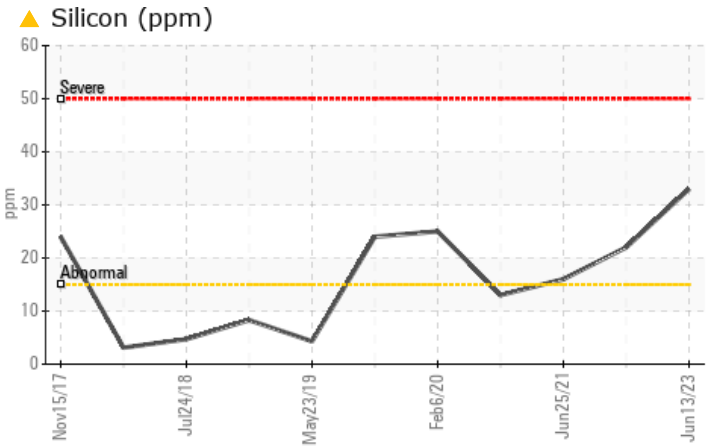


DIRT

Area
CRW CRANES
Machine Id
10.1 CRANE
Component
Main Hoist
Fluid
NOT GIVEN (--- GAL)

COMPONENT CONDITION SUMMARY





RECOMMENDATION

No corrective action is recommended at this time.
Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>20	▲ **187**	▲ 114	60
Silicon	ppm	ASTM D5185m	>15	▲ **33**	▲ 22	16

Customer Id: OUTCALAL
Sample No.: RP0034503
Lab Number: 05873926
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

28 Feb 2022 Diag: Jonathan Hester

WEAR

We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.The iron level is abnormal. Moderate concentration of visible metal present. The high ferrous density (PQ) index indicates that abnormal wear is occurring. Elemental level of silicon (Si) above normal indicating ingress of seal material. The AN level is acceptable for this fluid.

view report

25 Jun 2021 Diag: Don Baldridge

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

07 Mar 2021 Diag: Jonathan Hester

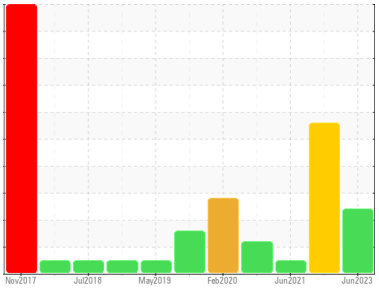
VISUAL METAL

We suspect abnormal metal contamination may be due to sampling method. No corrective action is recommended at this time. Resample at the next service interval to monitor.Moderate concentration of visible metal present. All component wear rates are normal. The water content is negligible. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



DIRT

Area
CRW CRANES
Machine Id
10.1 CRANE
Component
Main Hoist
Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation
No corrective action is recommended at this time. Resample at the next service interval to monitor.

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

Contamination
Elemental level of silicon (Si) above normal.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**RP0034503**	RP0022779	RP0019930
Sample Date		Client Info		**13 Jun 2023**	28 Feb 2022	25 Jun 2021
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**465**	▲ 115	88
Iron	ppm	ASTM D5185m	>20	▲ **187**	▲ 114	60
Chromium	ppm	ASTM D5185m	>20	**2**	<1	<1
Nickel	ppm	ASTM D5185m	>20	**1**	0	<1
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**0**	0	0
Lead	ppm	ASTM D5185m	>20	**0**	0	0
Copper	ppm	ASTM D5185m	>20	**<1**	<1	<1
Tin	ppm	ASTM D5185m	>20	**0**	0	<1
Antimony	ppm	ASTM D5185m		**---**	0	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

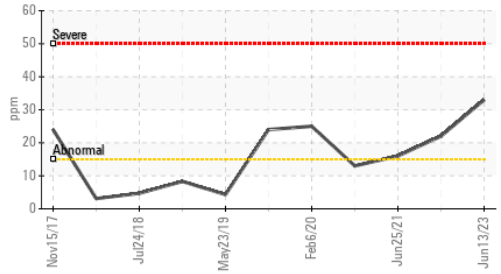
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**6**	7	14
Barium	ppm	ASTM D5185m		**2**	0	0
Molybdenum	ppm	ASTM D5185m		**<1**	<1	0
Manganese	ppm	ASTM D5185m		**2**	1	<1
Magnesium	ppm	ASTM D5185m		**1**	<1	2
Calcium	ppm	ASTM D5185m		**4**	6	2
Phosphorus	ppm	ASTM D5185m		**174**	179	173
Zinc	ppm	ASTM D5185m		**17**	9	10

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	▲ **33**	▲ 22	16
Sodium	ppm	ASTM D5185m		**0**	0	<1
Potassium	ppm	ASTM D5185m	>20	**<1**	<1	0
Water	%	ASTM D6304	>0.05	**0.003**	0.003	0.012
ppm Water	ppm	ASTM D6304	>500	**34.0**	28.3	124.7

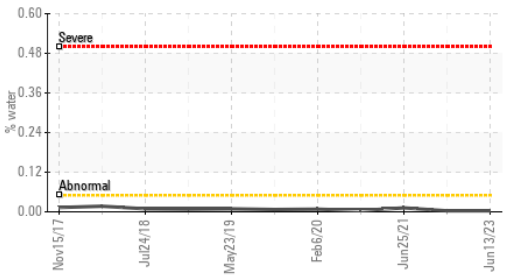
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.47**	0.52	0.466

OIL ANALYSIS REPORT

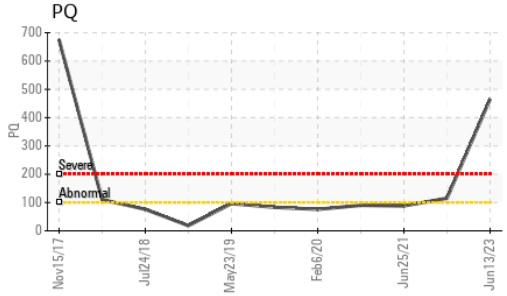
Silicon (ppm)



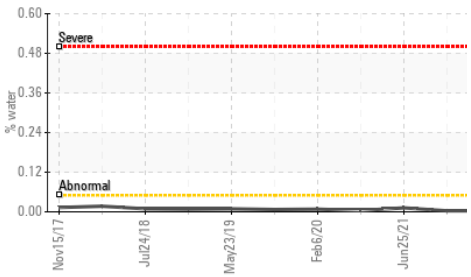
Water



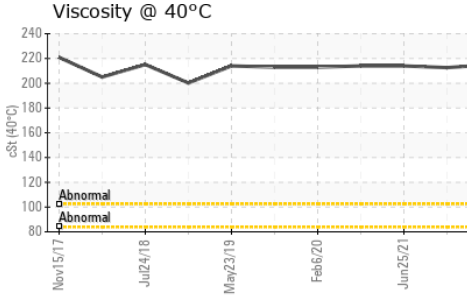
PQ



Water

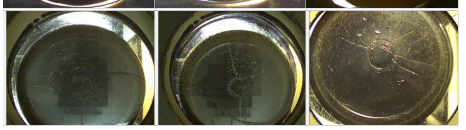


Viscosity @ 40°C



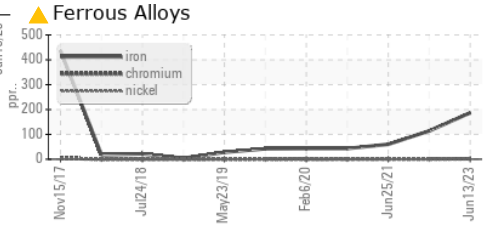
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	▲ MODER	LIGHT
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**215**	212.6	214

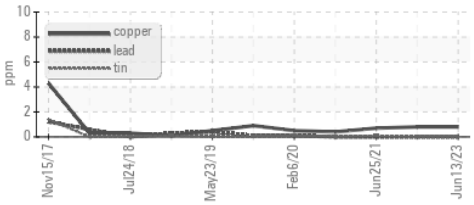
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						

GRAPHS

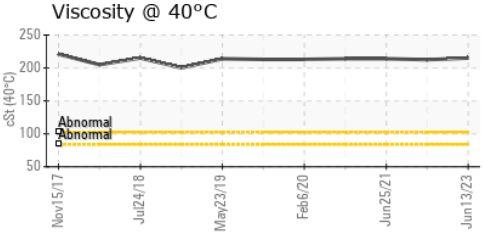
Ferrous Alloys



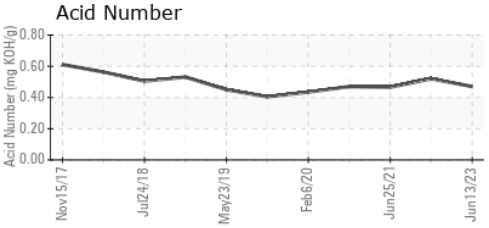
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0034503 **Received** : 14 Jun 2023
Lab Number : 05873926 **Diagnosed** : 16 Jun 2023
Unique Number : 10519029 **Diagnostician** : Don Baldridge
Test Package : IND 2 (Additional Tests: PQ, PrtCount)

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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CALVERT, AL
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Report Id: OUTCALAL [WUSCAR] 05873926 (Generated: 07/25/2023 14:47:52) Rev: 1

Submitted By: DALE ROBINSON