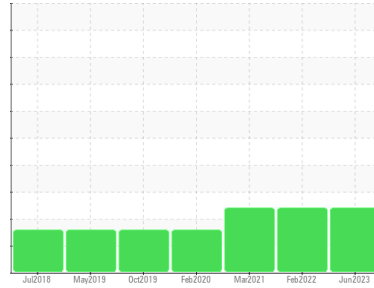


PROBLEM SUMMARY

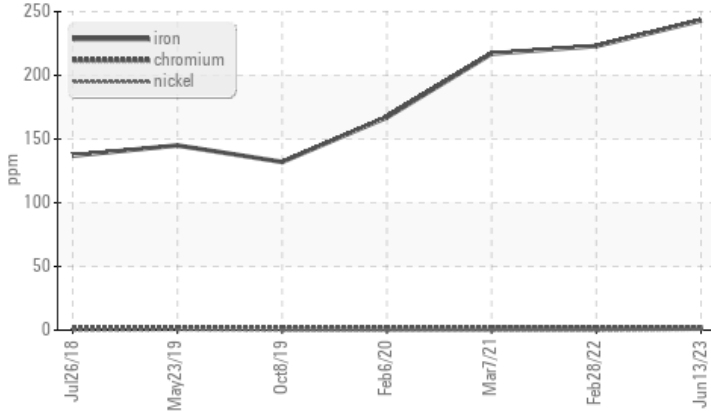
Sample Rating Trend



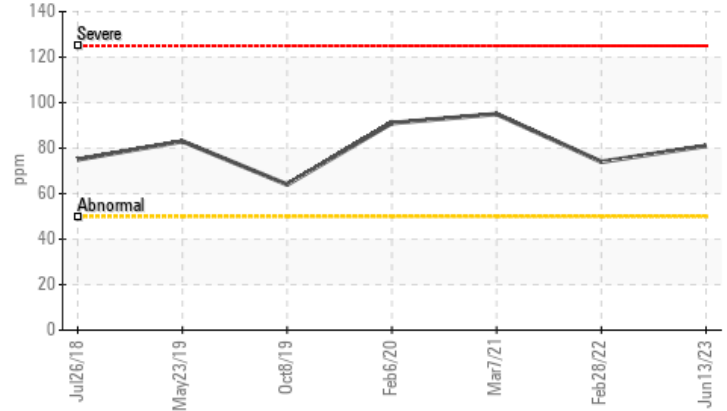
Area
CRW CRANES
 Machine Id
10.1 CRANE - NORTH BRIDGE
 Component
Gearbox
 Fluid
GEAR OIL ISO 220 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



▲ Silicon (ppm)



RECOMMENDATION

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>200	▲ 243	▲ 223	▲ 217
Silicon	ppm	ASTM D5185m	>50	▲ 81	▲ 74	▲ 95

Customer Id: OUTCALAL
 Sample No.: RP0034501
 Lab Number: 05873933
 Test Package: IND 2



To manage this report scan the QR code

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

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	MISSED	Jul 03 2023	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

28 Feb 2022 Diag: Jonathan Hester

DIRT



No corrective action is recommended at this time. We recommend an early resample to monitor this condition. Gear wear is indicated. Elemental level of silicon (Si) above normal. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



07 Mar 2021 Diag: Don Baldrige

DIRT



No corrective action is recommended at this time. We recommend an early resample to monitor this condition. Gear wear is indicated. Elemental level of silicon (Si) above normal. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



06 Feb 2020 Diag: Don Baldrige

DIRT



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Elemental level of silicon (Si) above normal. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

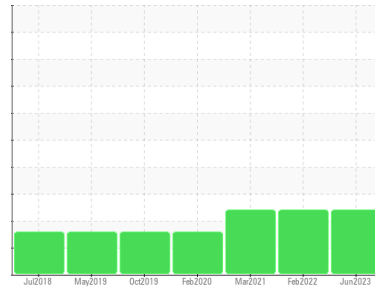
view report





OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Area
CRW CRANES
 Machine Id
10.1 CRANE - NORTH BRIDGE
 Component
Gearbox
 Fluid
GEAR OIL ISO 220 (--- GAL)

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

▲ Wear

Gear wear is indicated.

▲ 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		RP0034501	RP0024938	RP0016636
Sample Date	Client Info		13 Jun 2023	28 Feb 2022	07 Mar 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	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		130	89	98
Iron	ppm	ASTM D5185m >200	▲ 243	▲ 223	▲ 217
Chromium	ppm	ASTM D5185m >15	2	2	2
Nickel	ppm	ASTM D5185m >15	<1	0	0
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m	0	0	<1
Aluminum	ppm	ASTM D5185m >25	1	2	<1
Lead	ppm	ASTM D5185m >100	0	0	<1
Copper	ppm	ASTM D5185m >200	<1	<1	<1
Tin	ppm	ASTM D5185m >25	0	0	0
Antimony	ppm	ASTM D5185m >5	---	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 50	4	6	5
Barium	ppm	ASTM D5185m 15	2	0	0
Molybdenum	ppm	ASTM D5185m 15	<1	<1	<1
Manganese	ppm	ASTM D5185m	1	1	1
Magnesium	ppm	ASTM D5185m 50	43	44	53
Calcium	ppm	ASTM D5185m 50	27	26	29
Phosphorus	ppm	ASTM D5185m 350	298	322	324
Zinc	ppm	ASTM D5185m 100	35	23	5

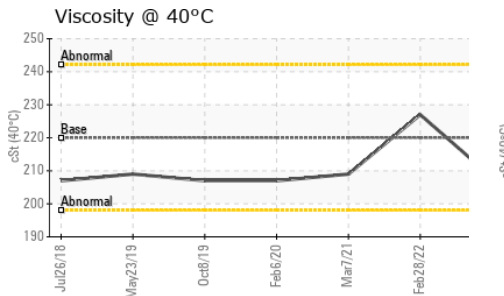
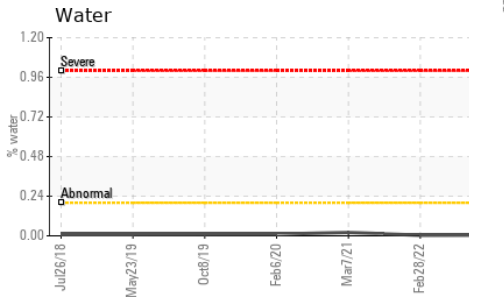
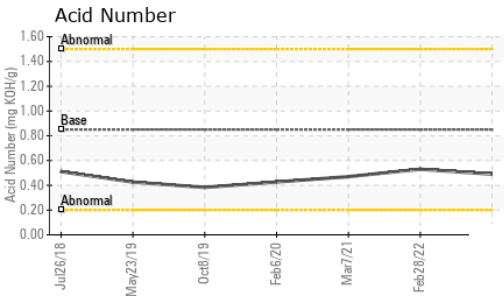
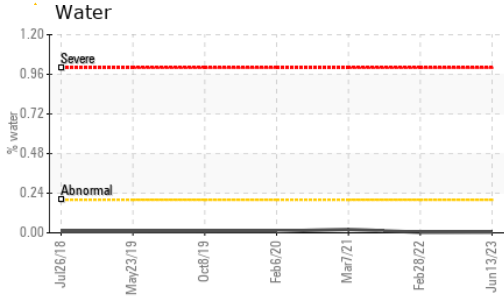
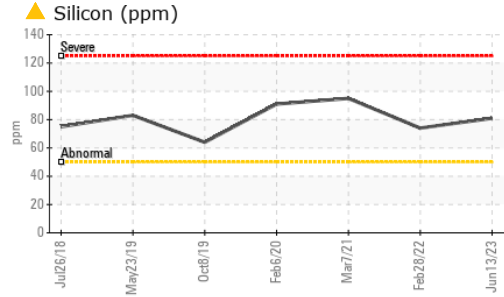
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	▲ 81	▲ 74	▲ 95
Sodium	ppm	ASTM D5185m	10	10	10
Potassium	ppm	ASTM D5185m >20	2	2	1
Water	%	ASTM D6304 >0.2	0.004	0.003	0.021
ppm Water	ppm	ASTM D6304 >2000	49.5	37.1	212.9

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.85	0.49	0.53	0.470

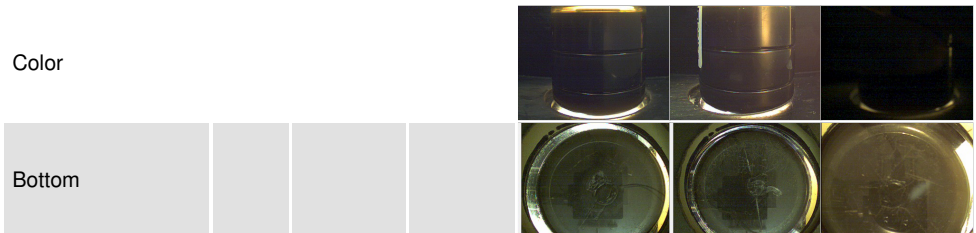
OIL ANALYSIS REPORT



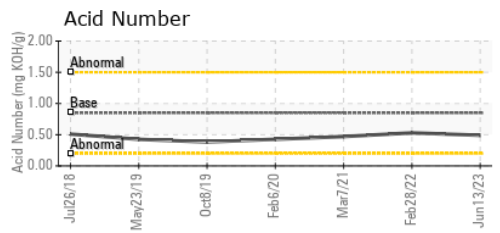
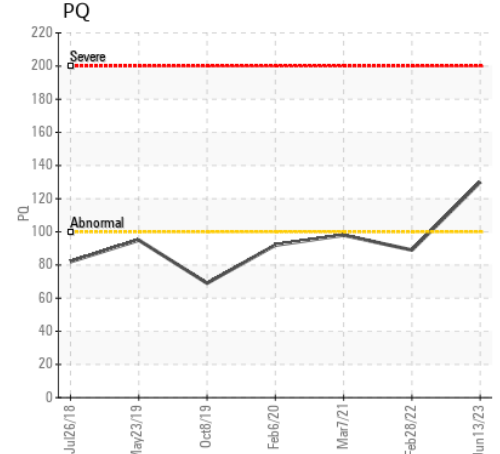
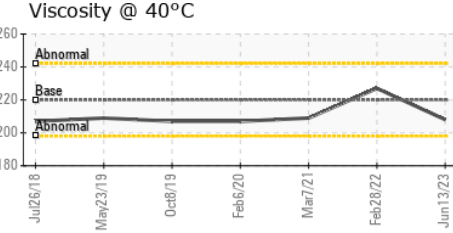
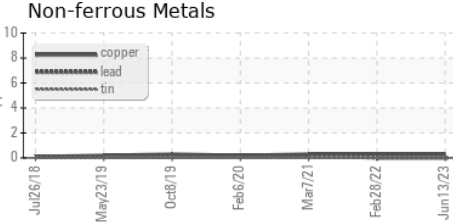
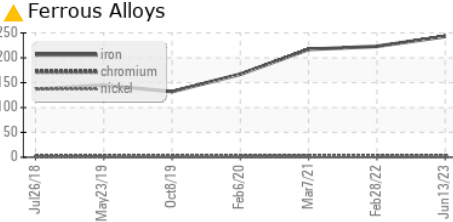
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	LIGHT	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	208	227

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0034501 **Received** : 14 Jun 2023
Lab Number : 05873933 **Diagnosed** : 16 Jun 2023
Unique Number : 10519036 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: PQ)

OUTOKUMPU STAINLESS USA
 HWY 43 N
 CALVERT, AL
 US 36513
 Contact: MARIO JOHNSON
 Mario.johnson@outokumpu.com
 T: (251)321-4105
 F: x:

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)