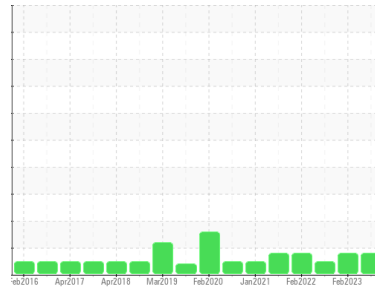


# PROBLEM SUMMARY

Sample Rating Trend



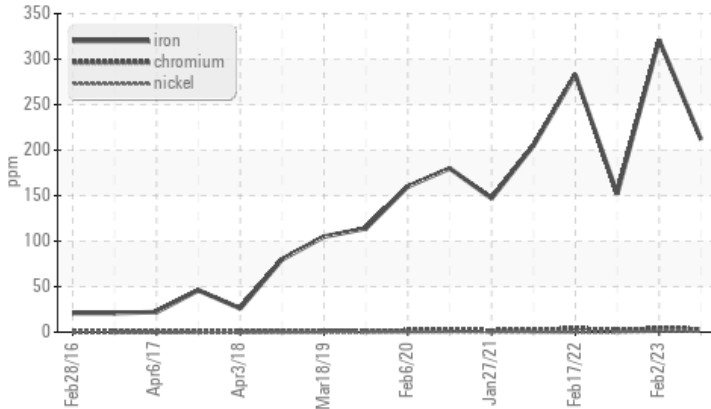
**WEAR**



Area  
**CAPL**  
 Machine Id  
**CAPL BRIDLE ROLL 3.1 DRIVE R-1 (S/N 16-3100-0410)**  
 Component  
**Gearbox**  
 Fluid  
**GEAR OIL ISO 460 (--- QTS)**

## COMPONENT CONDITION SUMMARY

### ▲ Ferrous Alloys



## RECOMMENDATION

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

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>200	<b>▲ 212</b>	▲ 321	152

Customer Id: OUTCALAL  
 Sample No.: RP0034530  
 Lab Number: 05856737  
 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](mailto:don.b505@comcast.net)

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

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 02 Feb 2023 Diag: Don Baldrige

WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. Gear wear is indicated. All other 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



### 07 Jul 2022 Diag: Don Baldrige

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



### 17 Feb 2022 Diag: Don Baldrige

WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. Gear wear is indicated. All other 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.

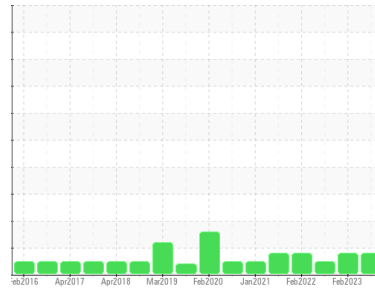
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area  
**CAPL**  
 Machine Id  
**CAPL BRIDLE ROLL 3.1 DRIVE R-1 (S/N 16-3100-0410)**  
 Component  
**Gearbox**  
 Fluid  
**GEAR OIL ISO 460 (--- QTS)**

## DIAGNOSIS

### Recommendation

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

### Wear

Gear wear is indicated. All other component wear rates are normal.

### Contamination

The water content is negligible. There is no indication of any contamination in the oil.

### 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	<b>RP0034530</b>	RP0030666	RP0028765
Sample Date	Client Info	<b>24 May 2023</b>	02 Feb 2023	07 Jul 2022
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
PQ	ASTM D8184	<b>206</b>	228	216	
Iron	ppm	ASTM D5185m >200	<b>▲ 212</b>	▲ 321	152
Chromium	ppm	ASTM D5185m >15	<b>3</b>	4	2
Nickel	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >25	<b>1</b>	0	<1
Lead	ppm	ASTM D5185m >100	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >200	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185m >25	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m >5	<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 50	<b>24</b>	13	8
Barium	ppm	ASTM D5185m 15	<b>&lt;1</b>	<1	0
Molybdenum	ppm	ASTM D5185m 15	<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185m	<b>1</b>	2	1
Magnesium	ppm	ASTM D5185m 50	<b>5</b>	<1	<1
Calcium	ppm	ASTM D5185m 50	<b>23</b>	13	7
Phosphorus	ppm	ASTM D5185m 350	<b>253</b>	163	90
Zinc	ppm	ASTM D5185m 100	<b>5</b>	6	2

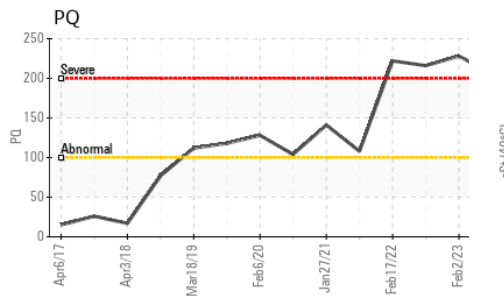
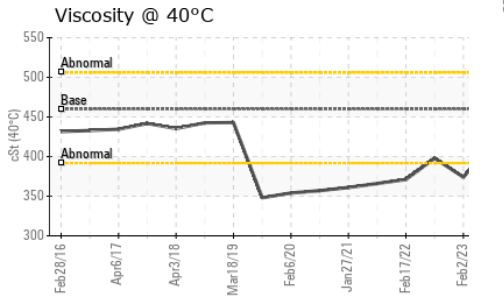
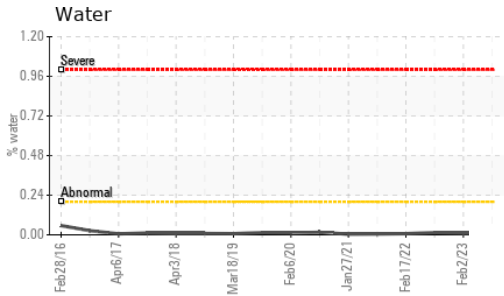
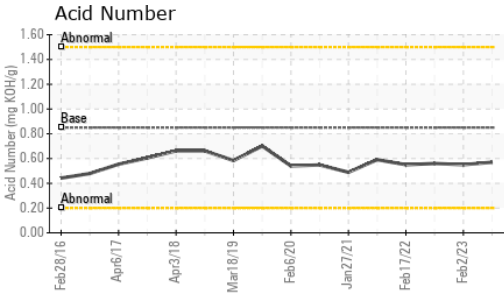
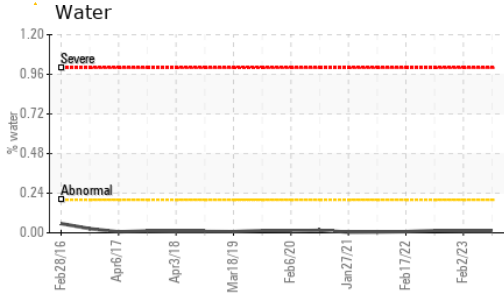
## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >50	<b>5</b>	5	2
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	1	1
Water	%	ASTM D6304 >0.2	<b>0.009</b>	0.010	0.014
ppm Water	ppm	ASTM D6304 >2000	<b>96.0</b>	101.8	146.4

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.85	<b>0.57</b>	0.55	0.56

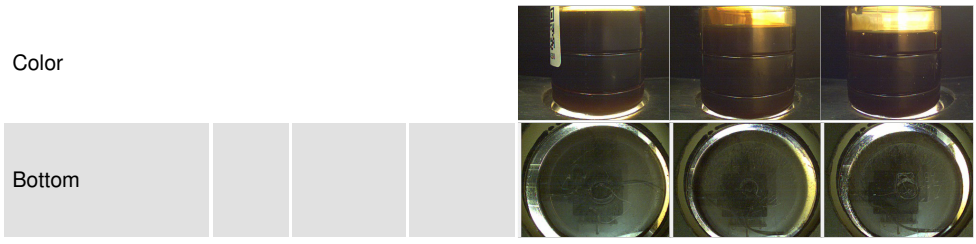
# OIL ANALYSIS REPORT



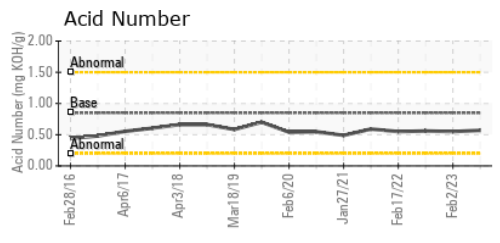
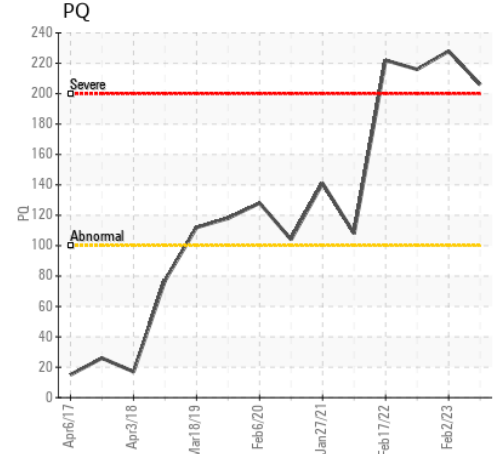
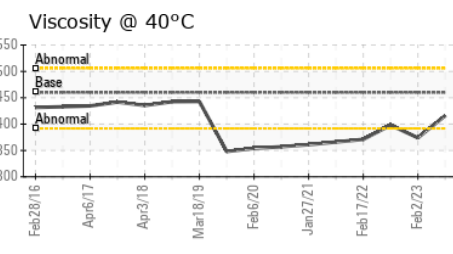
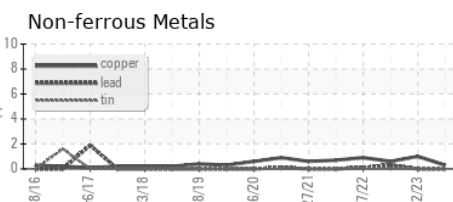
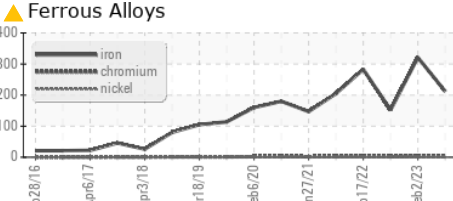
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>MODER</b>	MODER
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE
Sand/Dirt	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	460	<b>416</b>	374

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0034530 **Received** : 25 May 2023  
**Lab Number** : **05856737** **Diagnosed** : 26 May 2023  
**Unique Number** : 10486092 **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)