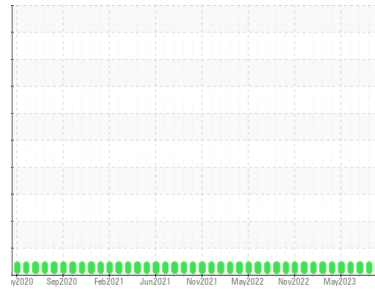




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
CRM54
 Machine Id
CRM 54 GEAR LUBRICATION SYSTEMS MAIN TANK (S/N 16-2200-1030)
 Component
Gearbox
 Fluid
GEAR OIL ISO 320 (2510 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All 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	RP0038579	RP0038403	RP0035179
Sample Date	Client Info	29 Sep 2023	29 Aug 2023	28 Jun 2023
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		NORMAL	NORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184	32	25	26
Iron	ppm ASTM D5185m >200	25	23	23
Chromium	ppm ASTM D5185m >15	<1	<1	<1
Nickel	ppm ASTM D5185m >15	0	0	<1
Titanium	ppm ASTM D5185m	0	0	0
Silver	ppm ASTM D5185m	0	0	0
Aluminum	ppm ASTM D5185m >25	<1	0	<1
Lead	ppm ASTM D5185m >100	0	<1	0
Copper	ppm ASTM D5185m >200	<1	<1	1
Tin	ppm ASTM D5185m >25	0	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	5	4	5
Barium	ppm ASTM D5185m 15	0	2	0
Molybdenum	ppm ASTM D5185m 15	0	0	0
Manganese	ppm ASTM D5185m	<1	<1	<1
Magnesium	ppm ASTM D5185m 50	0	1	<1
Calcium	ppm ASTM D5185m 50	3	4	5
Phosphorus	ppm ASTM D5185m 350	214	191	198
Zinc	ppm ASTM D5185m 100	0	12	0

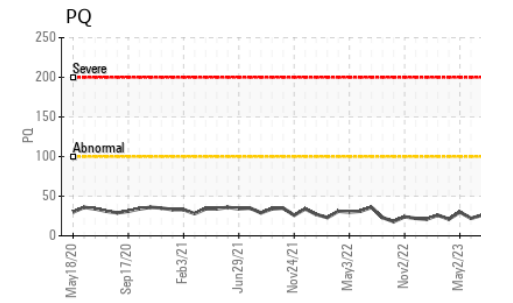
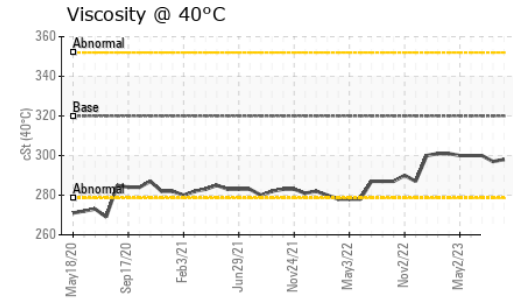
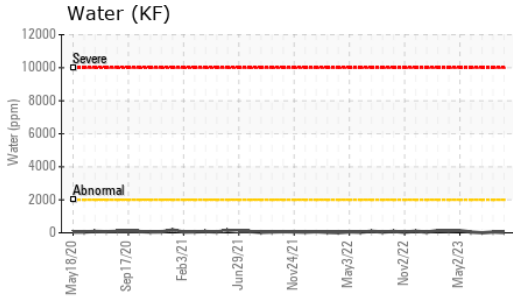
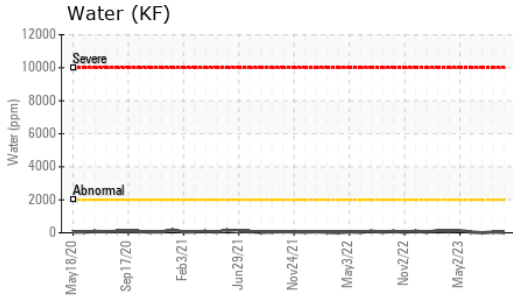
CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >50	1	1	<1
Sodium	ppm ASTM D5185m	0	0	<1
Potassium	ppm ASTM D5185m >20	0	<1	0
Water	% ASTM D6304 >0.2	0.002	0.005	0.00
ppm Water	ppm ASTM D6304 >2000	15.1	52.3	0.00

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 0.85	0.27	0.45	0.44

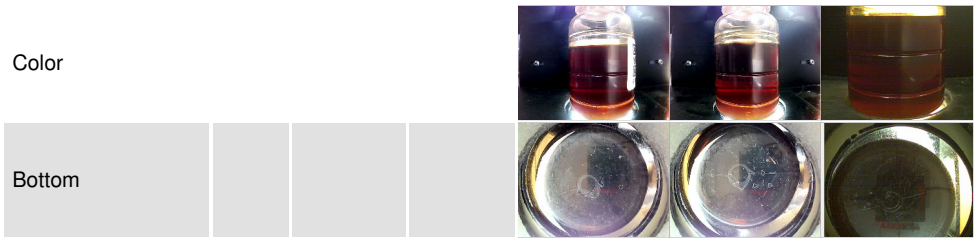
OIL ANALYSIS REPORT



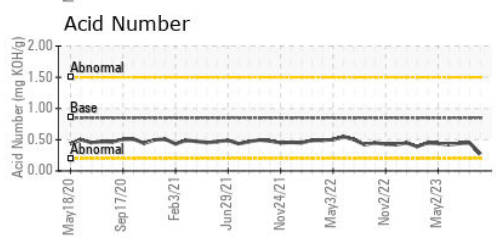
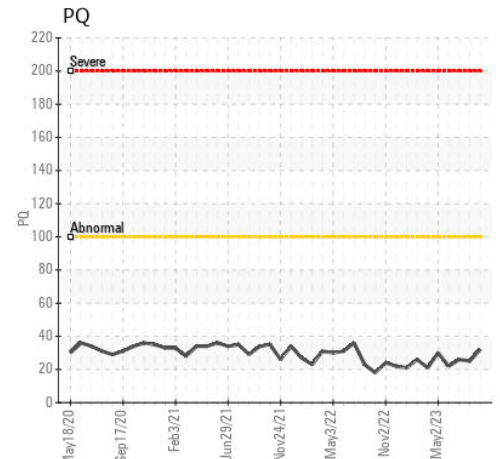
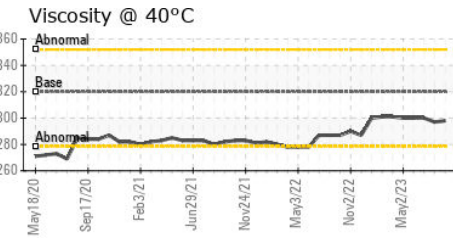
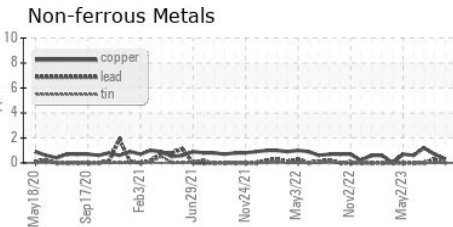
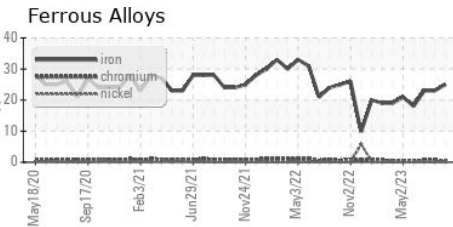
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	320	298	297

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0038579 **Received** : 02 Oct 2023
Lab Number : 05966428 **Diagnosed** : 03 Oct 2023
Unique Number : 10672979 **Diagnostician** : Wes Davis
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)