

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



STL64.2 Machine Id

STL 64.2 RECOILER MAIN TANK (S/N 16-5110-0305)

Component

Gearbox

{not provided} (--- QTS)

DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

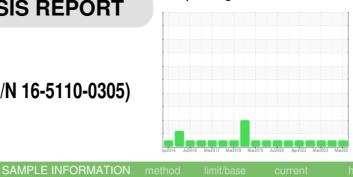
All component wear rates are normal.

Contamination

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

Fluid Condition

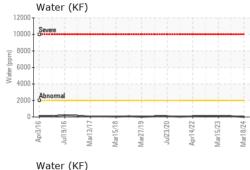
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



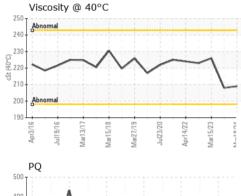
Sample Number		Client Info		RP0042638	RP0038393	RP0031157
Sample Date		Client Info		18 Mar 2024	02 Nov 2023	15 Mar 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		31	15	31
Iron	ppm	ASTM D5185m	>200	10	9	41
Chromium	ppm	ASTM D5185m	>15	0	<1	<1
Nickel	ppm	ASTM D5185m	>15	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	2	0
Lead	ppm	ASTM D5185m	>100	0	0	0
Copper	ppm	ASTM D5185m	>200	0	<1	2
Tin	ppm	ASTM D5185m	>25	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 12	history1 14	history2 2
	ppm		limit/base			
Boron		ASTM D5185m	limit/base	12	14	2
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	12 0	14 19	2
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	12 0 0	14 19 <1	2 0 <1
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	12 0 0 0	14 19 <1 0	2 0 <1 1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	12 0 0 0 0 <1	14 19 <1 0	2 0 <1 1 3
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	12 0 0 0 0 <1 12	14 19 <1 0 6 13	2 0 <1 1 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	12 0 0 0 0 <1 12 200	14 19 <1 0 6 13 219	2 0 <1 1 3 14 90
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		12 0 0 0 <1 12 200	14 19 <1 0 6 13 219 24	2 0 <1 1 3 14 90
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	12 0 0 0 0 <1 12 200 14	14 19 <1 0 6 13 219 24	2 0 <1 1 3 14 90 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	12 0 0 0 0 <1 12 200 14 current	14 19 <1 0 6 13 219 24 history1	2 0 <1 1 3 14 90 0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	12 0 0 0 <1 12 200 14 current 2	14 19 <1 0 6 13 219 24 history1 3 0	2 0 <1 1 3 14 90 0 history2 2 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >50 >20	12 0 0 0 <1 12 200 14 current 2 0	14 19 <1 0 6 13 219 24 history1 3 0 1	2 0 <1 1 3 14 90 0 history2 2 3 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >50 >20 >0.2	12 0 0 0 <1 12 200 14 current 2 0 0 0.001	14 19 <1 0 6 13 219 24 history1 3 0 1 0.009	2 0 <1 1 3 14 90 0 history2 2 3 0 0.010

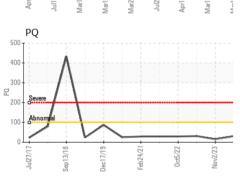


OIL ANALYSIS REPORT



17	2000 -	Wate	er (K	F)						
	0000	Severe	4							
E 8	3000									
Water (ppm)	000									
× 4	1000									
2	2000 -	Abnom	nal	+			+ + +			+
	01	Apr3/16	Jul19/16	Mar13/17	Mar15/18	Mar27/19	Jul23/20	Apr14/22	Mar15/23	Mar18/24





VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
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	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPER	RIIES	metnoa	ilmit/base	current	nistory i	nistory2
Visc @ 40°C	cSt	ASTM D445		209	208	226

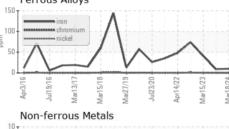
SAN	лог	INAA	cec	
SAIV	/ -	 IIVIA	GEO.	

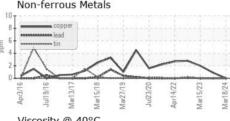


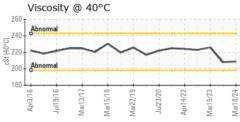


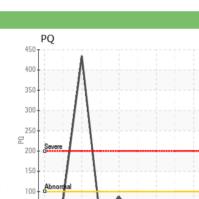
Color

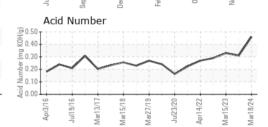
Bottom















Laboratory Sample No. Unique Number: 10936598

Lab Number : 06122447

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : RP0042638

Received **Tested** Diagnosed

: 22 Mar 2024

: 19 Mar 2024

: 22 Mar 2024 - Wes Davis

US 36513 Contact: MARIO JOHNSON Mario.johnson@outokumpu.com T: (251)321-4105

OUTOKUMPU STAINLESS USA

Test Package : IND 2 (Additional Tests: PQ) 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)

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HWY 43 N

CALVERT, AL