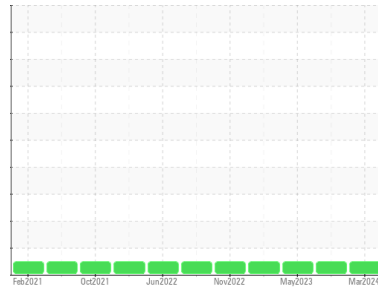




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
13549
 Component
Compressor
 Fluid
INGERSOLL-RAND TECHTROL GOLD TL (85 GAL)

DIAGNOSIS

Recommendation
 Resample at the next service interval to monitor.

Wear
 All component wear rates are normal.

Contamination
 There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition
 The AN level is acceptable for this fluid. The condition of the oil is suitable for further service. Color 1.5.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		CCSI2014529	CCSI2014577	CCSI2014606
Sample Date	Client Info		05 Mar 2024	06 Sep 2023	30 May 2023
Machine Age	hrs	Client Info	18439	14101	11742
Oil Age	hrs	Client Info	14443	10135	7746
Oil Changed	Client Info		Not Changed	Not Changed	Not Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	0	0	0
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m	0	<1	<1
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	<1	0
Aluminum	ppm	ASTM D5185m >25	0	0	0
Lead	ppm	ASTM D5185m >25	0	0	<1
Copper	ppm	ASTM D5185m >50	<1	0	0
Tin	ppm	ASTM D5185m >15	<1	<1	<1
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<1	0
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1	5	3
Calcium	ppm	ASTM D5185m	16	4	5
Phosphorus	ppm	ASTM D5185m	127	123	133
Zinc	ppm	ASTM D5185m	4	16	9
Sulfur	ppm	ASTM D5185m	11	14	8

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	0	<1
Sodium	ppm	ASTM D5185m	3	0	0
Potassium	ppm	ASTM D5185m >20	2	1	<1

FLUID CLEANLINESS

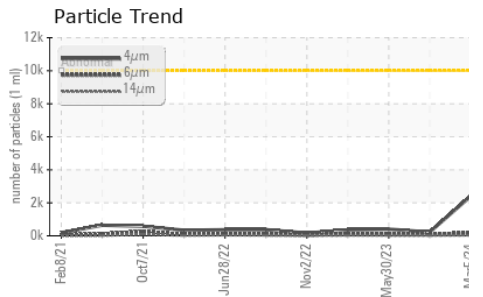
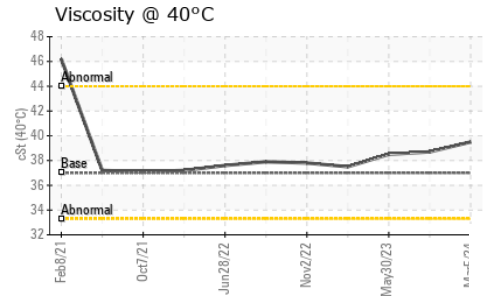
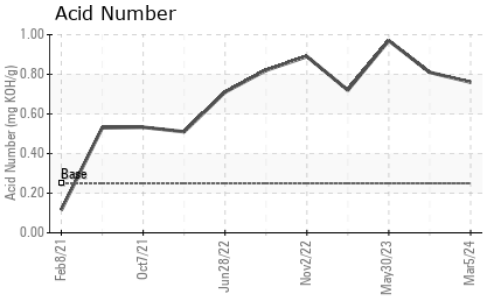
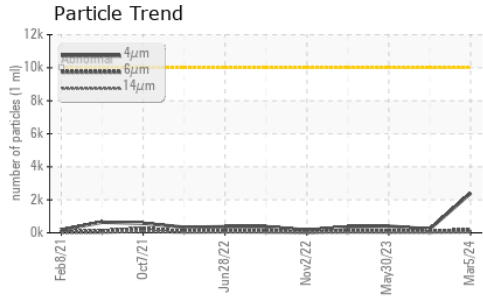
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	2398	223	405
Particles >6µm	ASTM D7647	>2500	207	69	117
Particles >14µm	ASTM D7647	>320	23	10	9
Particles >21µm	ASTM D7647	>80	7	2	2
Particles >38µm	ASTM D7647	>20	1	0	0
Particles >71µm	ASTM D7647	>4	0	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	18/15/12	15/13/10	16/14/10

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.25	0.76	0.81	0.97



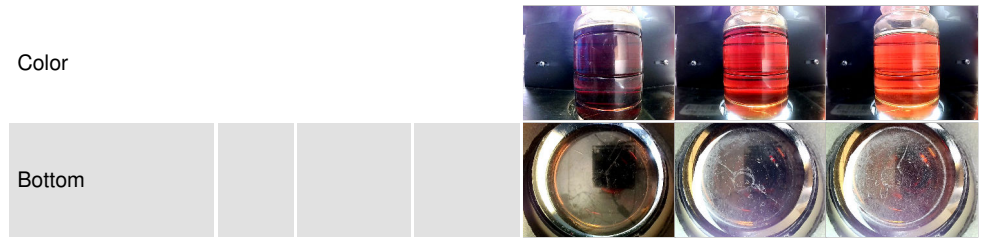
OIL ANALYSIS REPORT



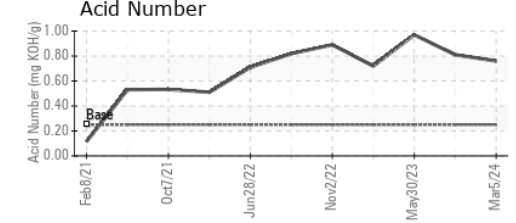
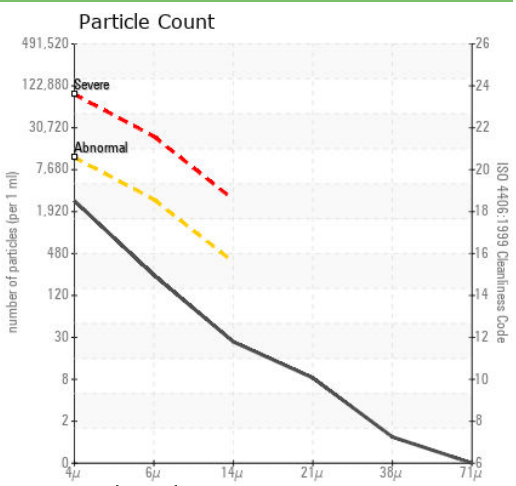
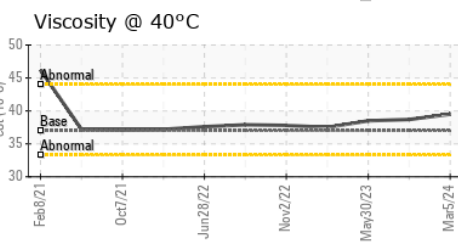
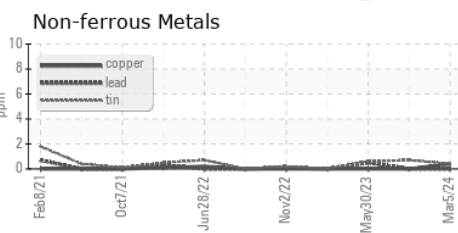
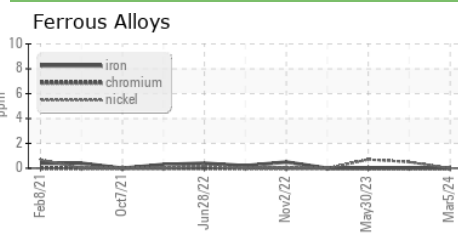
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 37	39.5	38.7	38.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : CCSI2014529 **Received** : 18 Apr 2024
Lab Number : **06153094** **Tested** : 19 Apr 2024
Unique Number : 10983172 **Diagnosed** : 22 Apr 2024 - Angela Borella
Test Package : IND 2 (Additional Tests: PrtCount)

CLEARWATER PAPER CORP
 805 MILL RD
 LEWISTON, ID
 US 83501
 Contact: STEVE SKEEN
 stephen.skeen@clearwaterpaper.com

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)