

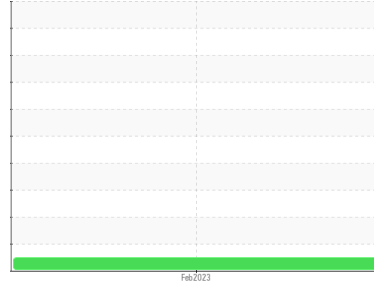
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
1870
Machine Id
1870-5433-8004 - SERVICE COMPLEX AIR COMPRESSOR
Component
Air Compressor
Fluid
INGERSOLL-RAND SSR ULTRA COOLANT (34 LTR)



DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

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	PC0040352	---	---
Sample Date	Client Info	24 Feb 2023	---	---
Machine Age	hrs Client Info	0	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		NORMAL	---	---

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184*	0	---	---
Iron	ppm ASTM D5185(m) >50	<1	---	---
Chromium	ppm ASTM D5185(m) >4	0	---	---
Nickel	ppm ASTM D5185(m) >4	<1	---	---
Titanium	ppm ASTM D5185(m)	0	---	---
Silver	ppm ASTM D5185(m)	0	---	---
Aluminum	ppm ASTM D5185(m) >10	0	---	---
Lead	ppm ASTM D5185(m) >20	<1	---	---
Copper	ppm ASTM D5185(m) >40	<1	---	---
Tin	ppm ASTM D5185(m) >5	0	---	---
Antimony	ppm ASTM D5185(m)	0	---	---
Vanadium	ppm ASTM D5185(m)	0	---	---
Beryllium	ppm ASTM D5185(m)	0	---	---
Cadmium	ppm ASTM D5185(m)	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 0	<1	---	---
Barium	ppm ASTM D5185(m) 500	1026	---	---
Molybdenum	ppm ASTM D5185(m) 0	0	---	---
Manganese	ppm ASTM D5185(m)	0	---	---
Magnesium	ppm ASTM D5185(m) 0	0	---	---
Calcium	ppm ASTM D5185(m) 0	<1	---	---
Phosphorus	ppm ASTM D5185(m) 20	0	---	---
Zinc	ppm ASTM D5185(m) 0	2	---	---
Sulfur	ppm ASTM D5185(m) 200	275	---	---
Lithium	ppm ASTM D5185(m)	<1	---	---

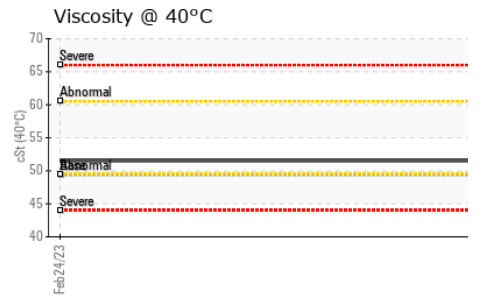
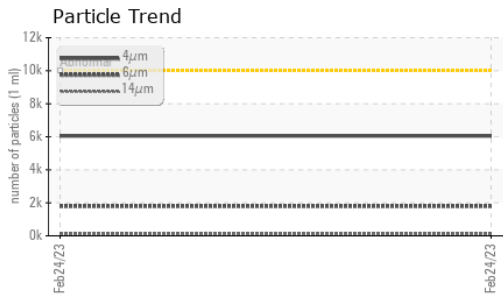
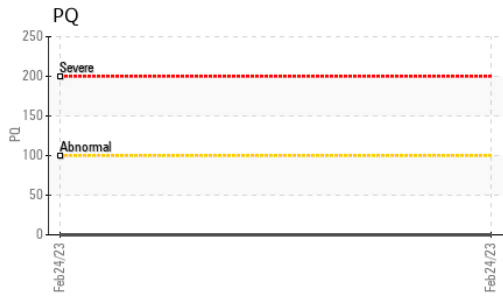
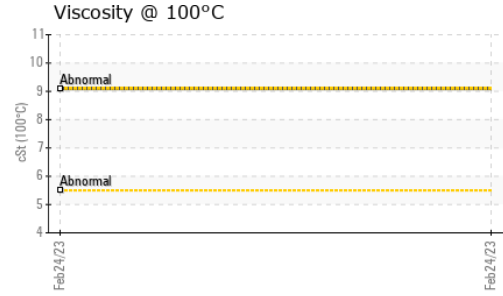
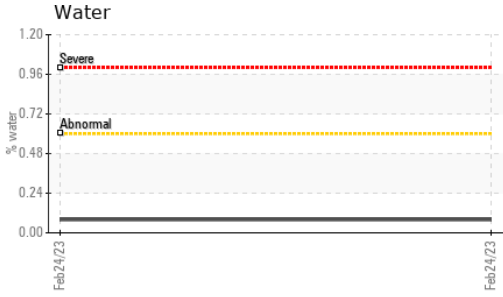
CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	3	---	---
Sodium	ppm ASTM D5185(m)	4	---	---
Potassium	ppm ASTM D5185(m) >20	<1	---	---
Water	% ASTM D6304* >0.6	0.080	---	---
ppm Water	ppm ASTM D6304* >6000	809.5	---	---

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	6046	---	---
Particles >6µm	ASTM D7647 >2500	1795	---	---
Particles >14µm	ASTM D7647 >320	118	---	---
Particles >21µm	ASTM D7647 >80	25	---	---
Particles >38µm	ASTM D7647 >20	4	---	---
Particles >71µm	ASTM D7647 >4	4	---	---
Oil Cleanliness	ISO 4406 (c) >20/18/15	20/18/14	---	---

OIL ANALYSIS REPORT



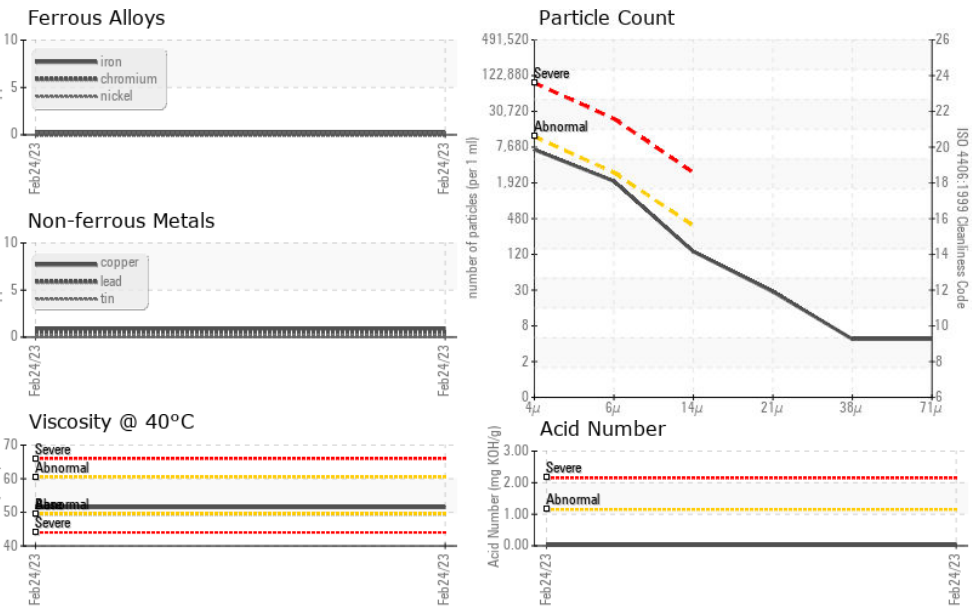
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.02	---	---

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.6	NEG	---	---
Free Water	scalar	Visual*		NEG	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	49.4	51.5	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		9.1	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	161	159	---	---

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0040352
Lab Number : 02542932
Unique Number : 5539937
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, VI)

Vale - Voisey's Bay
 Voisey's Bay Mine Site, P.O. Box 7001, Stn. C Happy Valley
 Goose Bay, NL
 CA A0P 1C0
 Contact: Robert Feltham
 robert.feltham@vale.com

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

T:
F: x