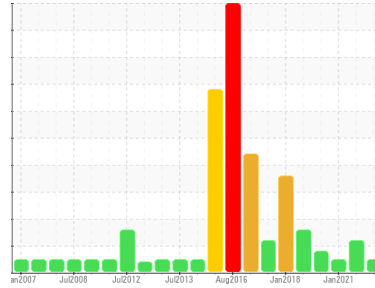


Area  
**1480**  
Machine Id  
**1480-5433-4011 - PLANT AIR COMPRESSOR 4**  
Component  
**Air Compressor**  
Fluid  
**INGERSOLL-RAND SSR ULTRA COOLANT (87 LTR)**



**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	<b>PC0040295</b>	PC0030005	PC0016759
Sample Date	Client Info	<b>11 Mar 2023</b>	06 Jun 2021	14 Jan 2021
Machine Age	yrs Client Info	<b>0</b>	0	0
Oil Age	yrs Client Info	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	ABNORMAL	NORMAL

**WEAR METALS**

method	limit/base	current	history1	history2
PQ	ASTM D8184*	<b>0</b>	0	0
Iron	ppm ASTM D5185(m) >50	<b>2</b>	<1	<1
Chromium	ppm ASTM D5185(m) >4	<b>0</b>	0	0
Nickel	ppm ASTM D5185(m) >4	<b>&lt;1</b>	0	<1
Titanium	ppm ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm ASTM D5185(m)	<b>0</b>	<1	<1
Aluminum	ppm ASTM D5185(m) >10	<b>0</b>	<1	<1
Lead	ppm ASTM D5185(m) >20	<b>&lt;1</b>	<1	0
Copper	ppm ASTM D5185(m) >40	<b>4</b>	1	<1
Tin	ppm ASTM D5185(m) >5	<b>0</b>	<1	0
Antimony	ppm ASTM D5185(m)	<b>&lt;1</b>	0	<1
Vanadium	ppm ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm ASTM D5185(m)	<b>0</b>	0	0

**ADDITIVES**

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Barium	ppm ASTM D5185(m) 500	<b>950</b>	876	798
Molybdenum	ppm ASTM D5185(m) 0	<b>0</b>	<1	0
Manganese	ppm ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Calcium	ppm ASTM D5185(m) 0	<b>&lt;1</b>	3	2
Phosphorus	ppm ASTM D5185(m) 20	<b>0</b>	<1	<1
Zinc	ppm ASTM D5185(m) 0	<b>50</b>	3	2
Sulfur	ppm ASTM D5185(m) 200	<b>346</b>	331	263
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1

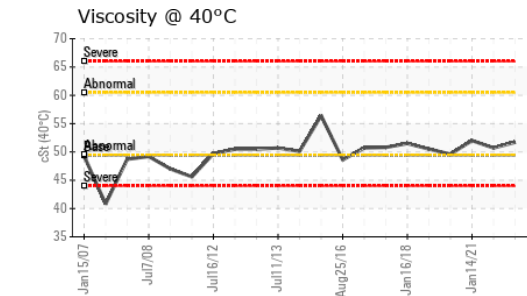
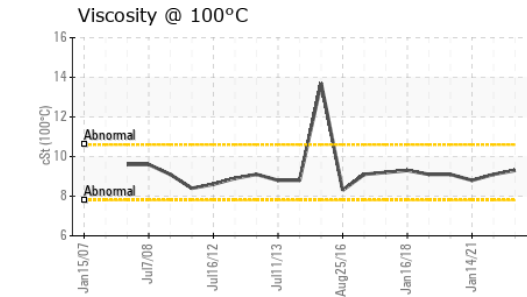
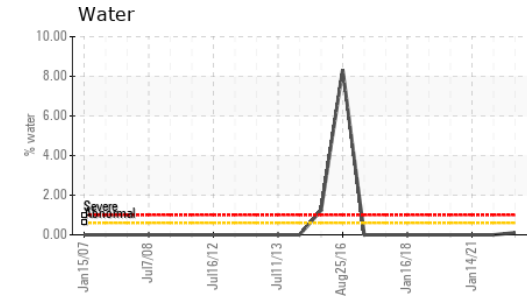
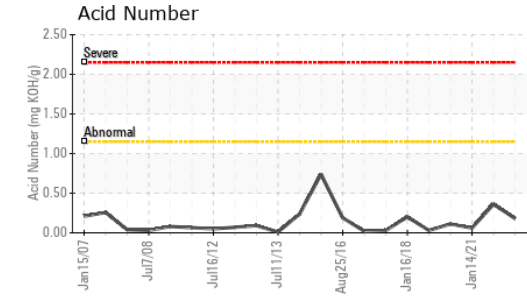
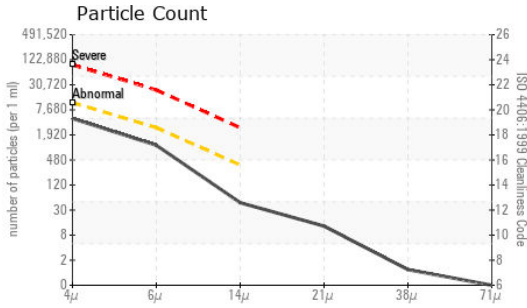
**CONTAMINANTS**

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	<b>2</b>	<1	1
Sodium	ppm ASTM D5185(m)	<b>19</b>	14	11
Potassium	ppm ASTM D5185(m) >20	<b>2</b>	1	1
Water	% ASTM D6304* >0.6	<b>0.107</b>	---	---
ppm Water	ppm ASTM D6304* >6000	<b>1078.6</b>	---	---

**FLUID CLEANLINESS**

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	<b>4164</b>	▲ 44172	5280
Particles >6µm	ASTM D7647 >2500	<b>950</b>	▲ 10505	1055
Particles >14µm	ASTM D7647 >320	<b>40</b>	▲ 478	75
Particles >21µm	ASTM D7647 >80	<b>11</b>	72	22
Particles >38µm	ASTM D7647 >20	<b>1</b>	2	2
Particles >71µm	ASTM D7647 >4	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >20/18/15	<b>19/17/12</b>	▲ 23/21/16	20/17/13

# OIL ANALYSIS REPORT

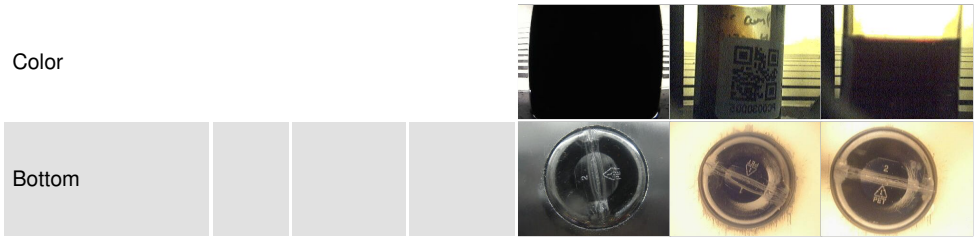


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		<b>0.18</b>	0.36	0.06

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	49.4	<b>51.7</b>	50.7	52.0
Visc @ 100°C	cSt	ASTM D7279(m)		<b>9.3</b>	9.1	8.8
Viscosity Index (VI)	Scale	ASTM D2270*	161	<b>164</b>	162	148

## SAMPLE IMAGES



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0040295  
**Lab Number** : **02548035**  
**Unique Number** : 5553045  
**Test Package** : IND 2 ( Additional Tests: KF, KV100, PrtCount, VI )

**Vale - Voisey's Bay**  
 Voisey's Bay Mine Site, P.O. Box 7001, Str. 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: