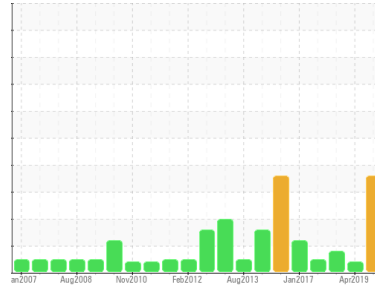


# PROBLEM SUMMARY

Sample Rating Trend



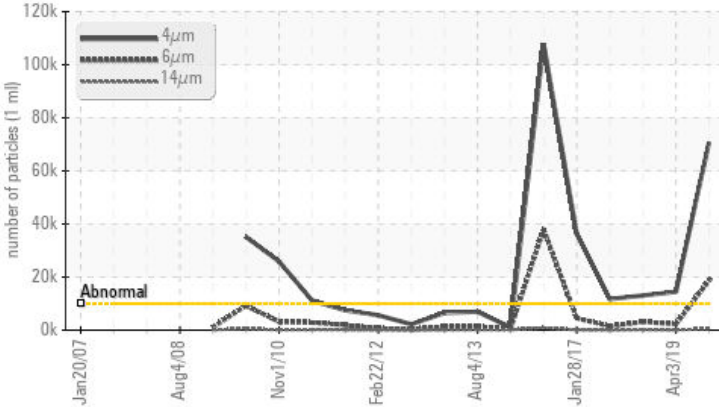
## CONTAMINANT



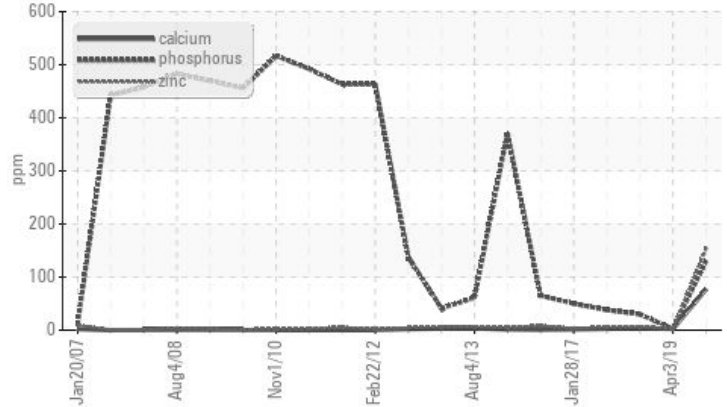
Area  
**1623**  
Machine Id  
**1623-5433-6003 - RECLAIM TRANSFER TOWER AIR COMPRESSOR #1**  
Component  
**Air Compressor**  
Fluid  
**INGERSOLL-RAND SSR ULTRA COOLANT (30 LTR)**

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



▲ Additives



## RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status			<b>ABNORMAL</b>	ATTENTION	ATTENTION	
Calcium	ppm	ASTM D5185(m)	0	▲ <b>77</b>	2	4
Phosphorus	ppm	ASTM D5185(m)	20	▲ <b>130</b>	2	30
Zinc	ppm	ASTM D5185(m)	0	▲ <b>153</b>	2	7
Particles >4µm		ASTM D7647	>10000	▲ <b>70725</b>	▲ 14444	▲ 13045
Particles >6µm		ASTM D7647	>2500	▲ <b>18716</b>	2242	▲ 3098
Particles >14µm		ASTM D7647	>320	▲ <b>500</b>	66	150
Oil Cleanliness		ISO 4406 (c)	>20/18/15	▲ <b>23/21/16</b>	▲ 21/18/13	▲ 21/19/14
Appearance	scalar	Visual*	NORML	▲ <b>LAYRD</b>	NORML	NORML

Customer Id: INCVOS  
Sample No.: PC0040350  
Lab Number: 02542931  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Kevin Marson +1 (289)291-4644 x4644  
[Kevin.Marson@wearcheck.com](mailto:Kevin.Marson@wearcheck.com)

To change component or sample information:  
Gloria Gonzalez +1 (289)291-4643 x4643  
[gloria.gonzalez@wearcheck.com](mailto:gloria.gonzalez@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Change Filter	---	---	?	We recommend you service the filters on this component.
Resample	---	---	?	We recommend an early resample to monitor this condition.

## HISTORICAL DIAGNOSIS

### 03 Apr 2019 Diag: Wes Davis

ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a light amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 19 Jan 2018 Diag: Wes Davis

ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a light amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 27 Aug 2017 Diag: Wes Davis

NORMAL

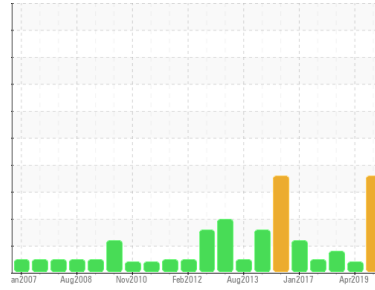


Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Area  
**1623**  
Machine Id  
**1623-5433-6003 - RECLAIM TRANSFER TOWER AIR COMPRESSOR #1**  
Component  
**Air Compressor**  
Fluid  
**INGERSOLL-RAND SSR ULTRA COOLANT (30 LTR)**



**DIAGNOSIS**

**Recommendation**  
We recommend that you drain the oil from the component if this has not already been done. We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

**Wear**  
All component wear rates are normal.

**Contamination**  
Oil Cleanliness are abnormally high. Particles >4µm are abnormally high. Particles >6µm are abnormally high. Particles >14µm are notably high. The water content is negligible. The sample contained a visible layer of foreign fluid contaminant, the origin and/or type of fluid is unknown.

**Fluid Condition**  
Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

**SAMPLE INFORMATION**

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PC0040350</b>	PC411465	PC385160
Sample Date	Client Info		<b>23 Feb 2023</b>	03 Apr 2019	19 Jan 2018
Machine Age	mths	Client Info	<b>0</b>	0	0
Oil Age	mths	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ATTENTION	ATTENTION

**WEAR METALS**

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>0</b>	19	11
Iron	ppm	ASTM D5185(m) >50	<b>&lt;1</b>	<1	<1
Chromium	ppm	ASTM D5185(m) >4	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185(m) >20	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m) >40	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >5	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	<b>0</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>	0	1
Barium	ppm	ASTM D5185(m) 500	<b>522</b>	793	786
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	2
Calcium	ppm	ASTM D5185(m) 0	<b>▲ 77</b>	2	4
Phosphorus	ppm	ASTM D5185(m) 20	<b>▲ 130</b>	2	30
Zinc	ppm	ASTM D5185(m) 0	<b>▲ 153</b>	2	7
Sulfur	ppm	ASTM D5185(m) 200	<b>488</b>	259	310
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	0	<1

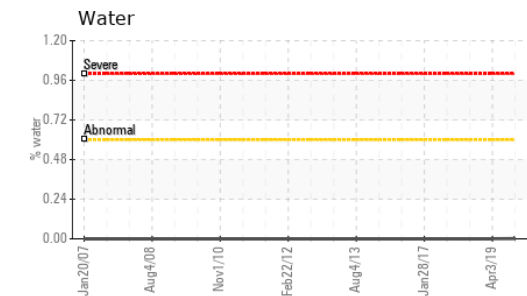
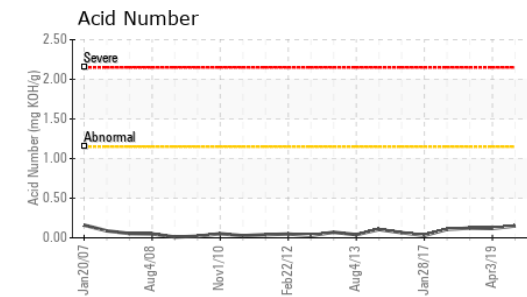
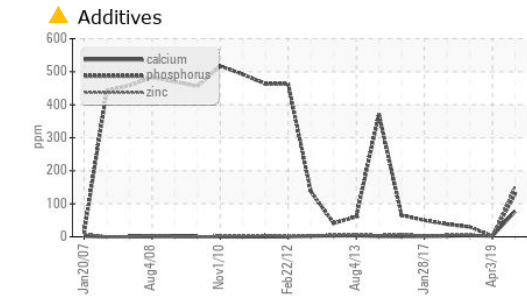
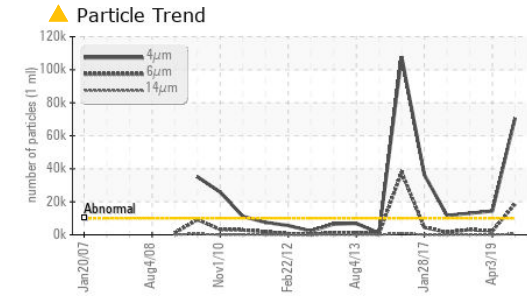
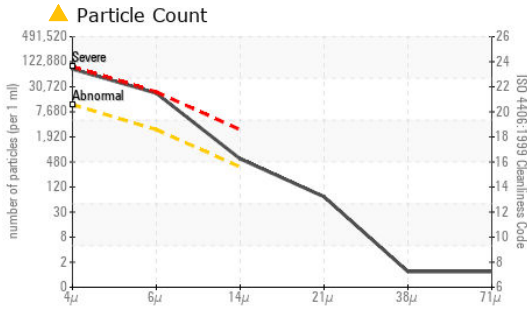
**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>4</b>	<1	<1
Sodium	ppm	ASTM D5185(m)	<b>6</b>	5	17
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	1
Water	%	ASTM D6304* >0.6	<b>0.001</b>	---	---
ppm Water	ppm	ASTM D6304* >6000	<b>13.6</b>	---	---

**FLUID CLEANLINESS**

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>▲ 70725</b>	▲ 14444	▲ 13045
Particles >6µm	ASTM D7647	>2500	<b>▲ 18716</b>	2242	▲ 3098
Particles >14µm	ASTM D7647	>320	<b>▲ 500</b>	66	150
Particles >21µm	ASTM D7647	>80	<b>62</b>	13	29
Particles >38µm	ASTM D7647	>20	<b>1</b>	0	0
Particles >71µm	ASTM D7647	>4	<b>1</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>▲ 23/21/16</b>	▲ 21/18/13	▲ 21/19/14

# OIL ANALYSIS REPORT



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0040350  
**Lab Number** : 02542931  
**Unique Number** : 5539936  
**Test Package** : IND 2 ( Additional Tests: KF, KV100, PrtCount, VI )

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.

**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

T:  
F: x:

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		<b>0.15</b>	0.118	0.123
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	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>LAYRD</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>36.8</b>	50.3	50.0
Visc @ 100°C	cSt	ASTM D7279(m)		<b>7</b>	9.1	9.1
Viscosity Index (VI)	Scale	ASTM D2270*	161	<b>154</b>	164	165

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						