



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**ATLAS COPCO CMP #2**  
 Component  
**Centrifugal Compressor**  
 Fluid  
**ATLAS COPCO ROTO H PLUS (681 LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor. ( Customer Sample Comment: Yearly oil sample test CMP2 )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0943222</b>	WC0701214	WC0701228
Sample Date		Client Info		<b>28 May 2024</b>	23 Aug 2023	11 May 2022
Machine Age	yrs	Client Info		<b>20</b>	20	7
Oil Age	yrs	Client Info		<b>0</b>	0	0
Filter Age	yrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Chromium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)		<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)		<b>0</b>	0	0
Lead	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	1
Copper	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Tin	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

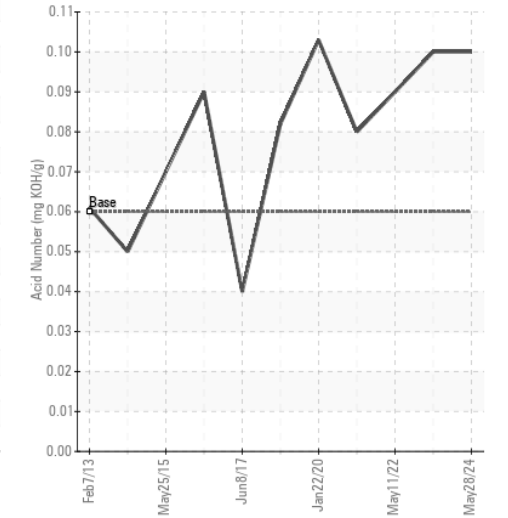
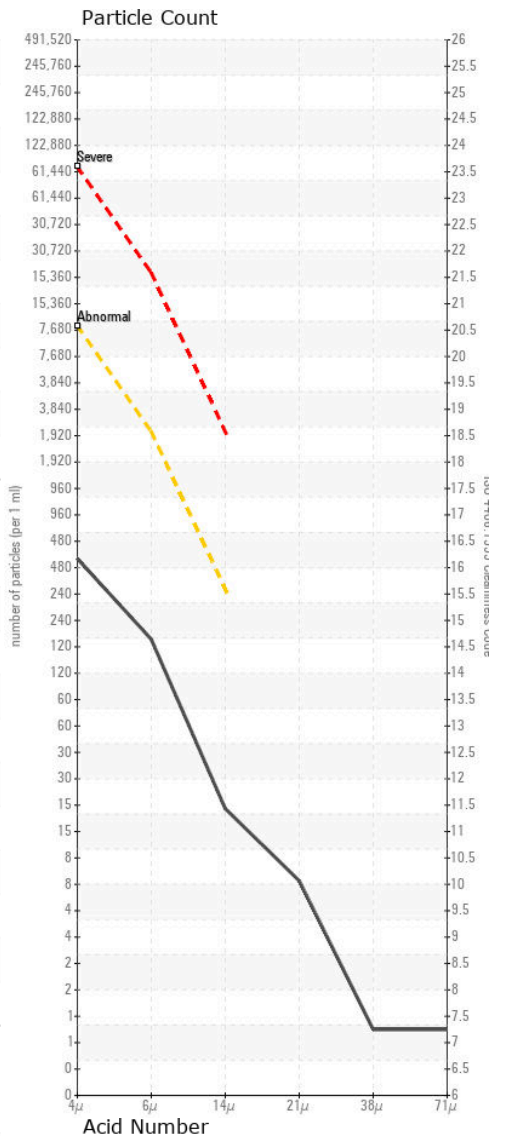
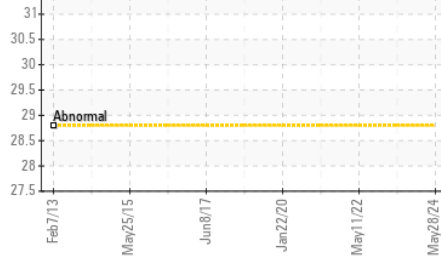
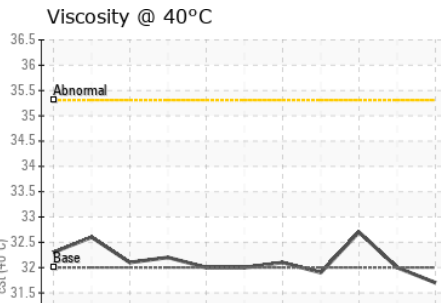
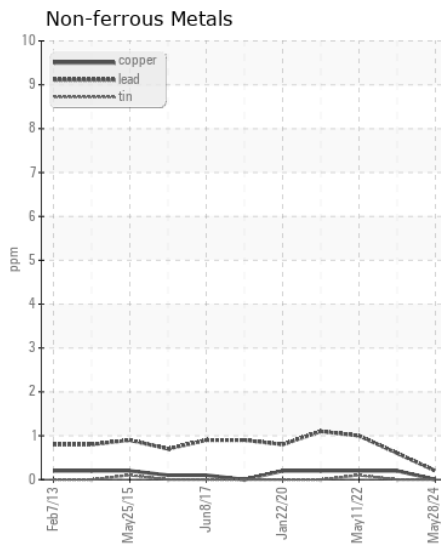
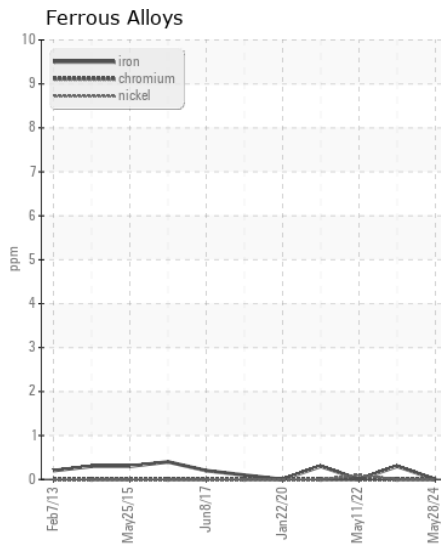
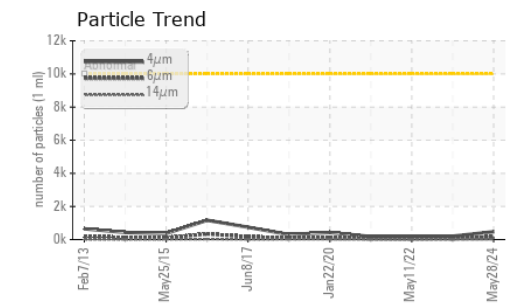
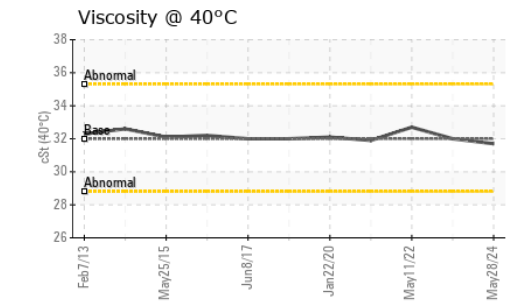
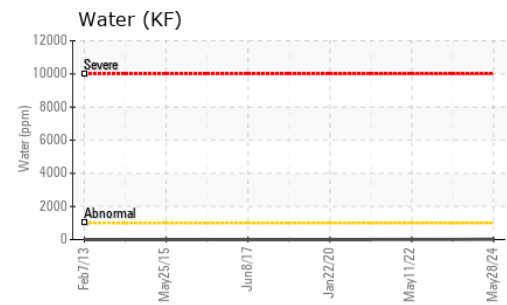
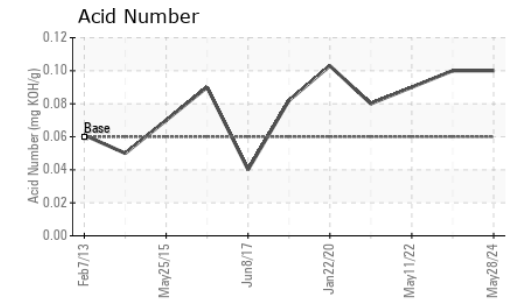
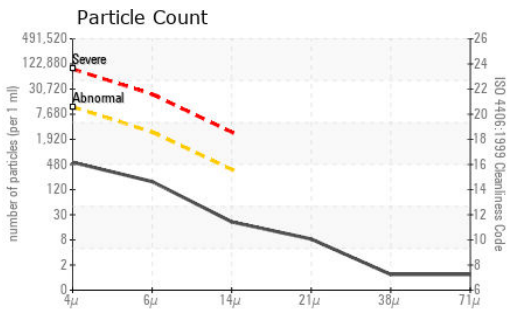
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable. NOTE: An increase in the particle count is noted.

Silicon	ppm	ASTM D5185(m)		<b>0</b>	1	1
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	<1
Water	%	ASTM D6304*	>0.1	<b>0.002</b>	0.00	0.001
ppm Water	ppm	ASTM D6304*	>1000	<b>18</b>	0.00	0.2
Particles >4µm		ASTM D7647	>10000	<b>475</b>	205	208
Particles >6µm		ASTM D7647	>2500	<b>165</b>	59	52
Particles >14µm		ASTM D7647	>320	<b>18</b>	7	5
Particles >21µm		ASTM D7647	>80	<b>7</b>	3	2
Particles >38µm		ASTM D7647	>20	<b>1</b>	1	0
Particles >71µm		ASTM D7647	>4	<b>1</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>16/15/11</b>	15/13/10	15/13/10
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</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*	>0.1	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		<b>1</b>	1	1
Boron	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	0
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m)		<b>15</b>	16	16
Phosphorus	ppm	ASTM D5185(m)		<b>6</b>	7	7
Zinc	ppm	ASTM D5185(m)		<b>9</b>	10	10
Sulfur	ppm	ASTM D5185(m)		<b>62</b>	55	54
Acid Number (AN)	mg KOH/g	ASTM D974*	0.06	<b>0.10</b>	0.10	0.09
Visc @ 40°C	cSt	ASTM D7279(m)	32.0	<b>31.7</b>	32.0	32.7



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0943222  
**Lab Number** : 02638881  
**Unique Number** : 5788043  
**Test Package** : IND 2 ( Additional Tests: KF, TAN Man )

**Received** : 30 May 2024  
**Tested** : 04 Jun 2024  
**Diagnosed** : 04 Jun 2024 - Kevin Marson

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.

**NATIONAL RESEARCH COUNCIL**  
 1200 MONTREAL ROAD, BUILDING M-10  
 OTTAWA, ON  
 CA K1A 0R6

Contact: David Stevenson  
 david.s.stevenson@nrc-cnrc.gc.ca  
 T: (613)998-3483  
 F: (613)952-7677