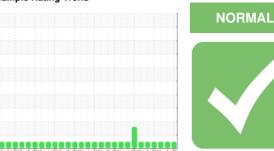


# **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

# ATLAS COPCO ATLAS COPCO 100HP (S/N API671075)

**Air Compressor** 

**USPI AIR 46 (--- GAL)** 

### Recommendation

Resample at the next service interval to monitor.

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.

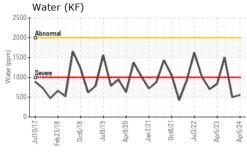
### **Fluid Condition**

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

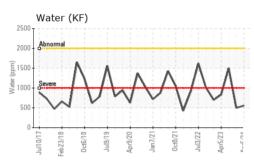
Sample Number	uld017 Feb.2018 Oct2018 Jul2019 Apr2020 Jun2021 Oct2021 Jul2022 Apr2023 Apr20.							
Sample Date	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2	
Machine Age Oil Age         hrs Institute         Client Info Client Info Client Info         43921 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Sample Number		Client Info		USPM36676	USPM30608	USPM5898142	
Oil Age         hrs         Client Info         0         0         0           Oil Changed         Client Info         N/A         N/A         N/A         N/A           Sample Status         method         limit/base         current         history1         history1           WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >70         2         0         2           Chromium         ppm         ASTM D5185m         >15         <1	Sample Date		Client Info		05 Apr 2024	04 Jan 2024	07 Jul 2023	
Oil Changed Sample Status         Client Info         N/A         N/A         N/A         N/A           WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >70         2         0         2           Chromium         ppm         ASTM D5185m         >15         <1	Machine Age	hrs	Client Info		•	41846	39514	
Oil Changed Sample Status         Client Info         N/A         N/A         N/A         N/A           WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >70         2         0         2           Chromium         ppm         ASTM D5185m         >15         <1	Oil Age	hrs	Client Info		0	0	0	
NORMAL   NORMAL   NORMAL	ŭ		Client Info		N/A	N/A	N/A	
Iron					NORMAL	NORMAL	NORMAL	
Chromium         ppm         ASTM D5185m         >15         <1	WEAR METALS		method	limit/base	current	history1	history2	
Nickel	Iron	ppm	ASTM D5185m	>70	2	0	2	
Titanium	Chromium	ppm	ASTM D5185m	>15	<1	<1	<1	
Titanium	Nickel	ppm	ASTM D5185m	>6	<1	<1	<1	
Silver         ppm         ASTM D5185m         0         0         0           Aluminum         ppm         ASTM D5185m         >10         1         0         <1           Lead         ppm         ASTM D5185m         >20         1         0         1           Copper         ppm         ASTM D5185m         >80         <1         0         3           Tin         ppm         ASTM D5185m         >15         1         0         1           Vanadium         ppm         ASTM D5185m         <1         0         <1           Cadmium         ppm         ASTM D5185m         1         0         <1           Cadmium         ppm         ASTM D5185m         0         0         0         0           Boron         ppm         ASTM D5185m         0         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0         0           Barium         ppm         ASTM D5185m         0         <1         0         <1           Magnesium         ppm         ASTM D5185m         0         <1         0         0	Titanium		ASTM D5185m		<1	0	<1	
Aluminum         ppm         ASTM D5185m         >10         1         0         <1           Lead         ppm         ASTM D5185m         >20         1         0         1           Copper         ppm         ASTM D5185m         >80         <1	Silver		ASTM D5185m		0		0	
Lead         ppm         ASTM D5185m         >20         1         0         1           Copper         ppm         ASTM D5185m         >80         <1         0         3           Tin         ppm         ASTM D5185m         >15         1         0         1           Vanadium         ppm         ASTM D5185m         <1         0         <1           Cadmium         ppm         ASTM D5185m         1         0         <1           Cadmium         ppm         ASTM D5185m         0         0         0         <1           ADDITIVES         method         limit/base         current         history1         history1           Boron         ppm         ASTM D5185m         0         0         0         0           Malagnesium         ppm         ASTM D5185m         0         <1         0         0           Calcium	Aluminum		ASTM D5185m	>10	1	0	<1	
Copper         ppm         ASTM D5185m         >80         <1         0         3           Tin         ppm         ASTM D5185m         >15         1         0         1           Vanadium         ppm         ASTM D5185m         <1								
Tin         ppm         ASTM D5185m         >15         1         0         1           Vanadium         ppm         ASTM D5185m         <1         0         <1           Cadmium         ppm         ASTM D5185m         1         0         <1           ADDITIVES         method         limit/base         current         history1         history1           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         <1         0         <1           Manganese         ppm         ASTM D5185m         0         <1         0         <1           Magnesium         ppm         ASTM D5185m         0         <1         0         0           Calcium         ppm         ASTM D5185m         0         0         0         0           Phosphorus         ppm         ASTM D5185m         0         <1         0         9           Zinc         ppm         ASTM D5185m         0         <1         0         6           Sulfur<					-			
Vanadium         ppm         ASTM D5185m         <1         0         <1           Cadmium         ppm         ASTM D5185m         1         0         <1           ADDITIVES         method         limit/base         current         history1         history1           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         <1         0         <1           Manganese         ppm         ASTM D5185m         0         <1         0         <1           Magnesium         ppm         ASTM D5185m         0         <1         0         0           Calcium         ppm         ASTM D5185m         0         0         0         0           Phosphorus         ppm         ASTM D5185m         0         <1         0         9           Zinc         ppm         ASTM D5185m         0         <1         0         6           Sulfur         ppm         ASTM D5185m         >12         <1         <1         1 <t< td=""><td></td><td></td><td></td><td></td><th></th><td></td><td></td></t<>								
Cadmium         ppm         ASTM D5185m         1         0         <1           ADDITIVES         method         limit/base         current         history1         history1           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         <1				>10	-			
ADDITIVES         method         limit/base         current         history1         history1           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         <1         0         <1           Manganese         ppm         ASTM D5185m         0         <1         0         <1           Magnesium         ppm         ASTM D5185m         0         0         0         0           Calcium         ppm         ASTM D5185m         0         0         0         0           Phosphorus         ppm         ASTM D5185m         1         0         0         9           Zinc         ppm         ASTM D5185m         0         <1         0         6           Sulfur         ppm         ASTM D5185m         >12         <1         <1         1           Silicon         ppm         ASTM D5185m         >12         <1         <1         1           Sodium         ppm         ASTM D5185m         >20         <1         0 <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>								
Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         <1		ррпі			-			
Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         <1         0         <1           Manganese         ppm         ASTM D5185m         0         <1         0         <1           Magnesium         ppm         ASTM D5185m         0         <1         0         0           Calcium         ppm         ASTM D5185m         0         0         0         0           Phosphorus         ppm         ASTM D5185m         0         <1         0         9           Zinc         ppm         ASTM D5185m         0         <1         0         6           Sulfur         ppm         ASTM D5185m         0         0         0         0           CONTAMINANTS         method         limit/base         current         history1         history1           Silicon         ppm         ASTM D5185m         >12         <1         <1         1           Sodium         ppm         ASTM D5185m         >20         <1         0         2           Potassium         ppm         ASTM D6304         >0.2         0.055         0.049<	ADDITIVES			limit/base	current	history1	history2	
Molybdenum         ppm         ASTM D5185m         0         <1         0         <1           Manganese         ppm         ASTM D5185m         <1         0         <1           Magnesium         ppm         ASTM D5185m         0         <1         0         0           Calcium         ppm         ASTM D5185m         0         0         0         0           Phosphorus         ppm         ASTM D5185m         0         <1         0         9           Zinc         ppm         ASTM D5185m         0         <1         0         6           Sulfur         ppm         ASTM D5185m         0         0         0         0           CONTAMINANTS         method         limit/base         current         history1         history1           Silicon         ppm         ASTM D5185m         >12         <1         <1         1           Sodium         ppm         ASTM D5185m         >20         <1         0         2           Potassium         ppm         ASTM D6304         >0.2         0.055         0.049         0.149	Boron	ppm	ASTM D5185m				0	
Manganese         ppm         ASTM D5185m         <1         0         <1           Magnesium         ppm         ASTM D5185m         0         <1		ppm	ASTM D5185m	0	0	0	0	
Magnesium         ppm         ASTM D5185m         0         <1         0         0           Calcium         ppm         ASTM D5185m         0         0         0         0         0           Phosphorus         ppm         ASTM D5185m         1         0         0         9           Zinc         ppm         ASTM D5185m         0         <1         0         6           Sulfur         ppm         ASTM D5185m         0         0         0         0           CONTAMINANTS         method         limit/base         current         history1         history1           Silicon         ppm         ASTM D5185m         >12         <1         <1         1           Sodium         ppm         ASTM D5185m         0         4         2           Potassium         ppm         ASTM D6304         >0.2         0.055         0.049         0.149	Molybdenum	ppm	ASTM D5185m	0	<1	0	<1	
Calcium         ppm         ASTM D5185m         0         0         0         0         0           Phosphorus         ppm         ASTM D5185m         1         0         0         9           Zinc         ppm         ASTM D5185m         0         <1	-	ppm	ASTM D5185m		<1	0	<1	
Phosphorus         ppm         ASTM D5185m         1         0         0         9           Zinc         ppm         ASTM D5185m         0         <1         0         6           Sulfur         ppm         ASTM D5185m         0         0         0         0           CONTAMINANTS         method         limit/base         current         history1         history1           Silicon         ppm         ASTM D5185m         >12         <1         <1         1           Sodium         ppm         ASTM D5185m         0         4         2           Potassium         ppm         ASTM D6304         >0.2         0.055         0.049         0.149           Water         %         ASTM D6304         >0.2         0.055         0.049         0.149	Magnesium	ppm	ASTM D5185m	0	<1	0	0	
Zinc         ppm         ASTM D5185m         0         <1         0         6           Sulfur         ppm         ASTM D5185m         0         0         0         0         0           CONTAMINANTS         method         limit/base         current         history1         history1           Silicon         ppm         ASTM D5185m         >12         <1	Calcium	ppm	ASTM D5185m	0	0	0	0	
Sulfur         ppm         ASTM D5185m         0         0         0         0         0           CONTAMINANTS         method         limit/base         current         history1         history1           Silicon         ppm         ASTM D5185m         >12         <1	Phosphorus	ppm	ASTM D5185m	1	0	0	9	
CONTAMINANTS         method         limit/base         current         history1         history1           Silicon         ppm         ASTM D5185m         >12         <1         <1         1           Sodium         ppm         ASTM D5185m         0         4         2           Potassium         ppm         ASTM D5185m         >20         <1         0         2           Water         %         ASTM D6304         >0.2         0.055         0.049         0.149	Zinc	ppm	ASTM D5185m	0	<1	0	6	
Silicon         ppm         ASTM D5185m         >12         <1	Sulfur	ppm	ASTM D5185m	0	0	0	0	
Sodium         ppm         ASTM D5185m         0         4         2           Potassium         ppm         ASTM D5185m         >20         <1	CONTAMINANTS		method	limit/base	current	history1	history2	
Potassium         ppm         ASTM D5185m         >20         <1         0         2           Water         %         ASTM D6304         >0.2         0.055         0.049         0.149	Silicon	ppm	ASTM D5185m	>12	<1	<1	1	
Water         %         ASTM D6304         >0.2         0.055         0.049         0.149	Sodium	ppm	ASTM D5185m		0	4	2	
	Potassium	ppm	ASTM D5185m	>20	<1	0	2	
	Water	%	ASTM D6304	>0.2	0.055	0.049	0.149	
	ppm Water	ppm		>2000	557	499	1498.5	
FLUID CLEANLINESS method limit/base current history1 history	FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2	
Particles >4μm ASTM D7647 >10000 <b>162</b> 432 267	Particles >4µm		ASTM D7647	>10000	162	432	267	
Particles >6μm ASTM D7647 >2500 <b>45</b> 146 71	Particles >6µm		ASTM D7647	>2500	45	146	71	
Particles >14μm ASTM D7647 >320 <b>8</b> 14 5	Particles >14µm		ASTM D7647	>320	8	14	5	
Particles >21μm ASTM D7647 >80 <b>2</b> 3 2	Particles >21µm		ASTM D7647	>80	2	3	2	
Particles >38μm ASTM D7647 >20 <b>0</b> 0 0	Particles >38µm		ASTM D7647	>20	0	0	0	
Particles >71µm	·			>4	0	0	0	
	·					16/14/11	15/13/10	
FLUID DEGRADATION method limit/base current history1 history	FLUID DEGRADA	TION _	method_	limit/base	current	history1	history2	
Acid Number (AN) mg KOH/g ASTM D8045 0.05 0.27 0.13 1.05	Acid Number (AN)	mg KOH/g		0.05	0.27	•	•	

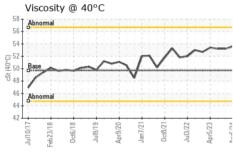


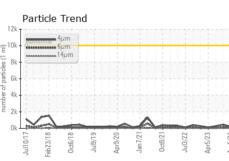
## **OIL ANALYSIS REPORT**



	12k -	Par	ticle	Tren	d						
	10k •	Atomo	4, 1,1111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	μm μm							
number of particles (1 ml)	8k -	*****		4μm							
f partic	6k -										
nber o	4k -										i
nu	2k -		$\overline{}$					H			
	0k	Jul10/17	Feb23/18	Oct6/18	Jul9/19	Apr9/20 -	Jan7/21	0ct8/21	Jul3/22	Apr5/23	Apr5/24







VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

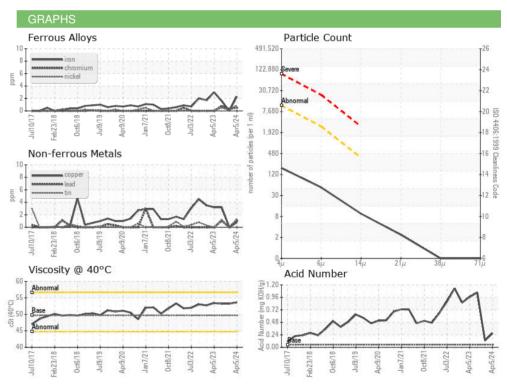
FLUID PROPERI	IES	method			history1	history2
Visc @ 40°C	cSt	ASTM D445	49.7	53.6	53.2	53.2

SAMPLE IMAGES	method		history2

Color











Certificate 12367

Laboratory Sample No.

Test Package : IND 2

: USPM36676 Lab Number : 06147355

Unique Number : 10977433

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 12 Apr 2024 **Tested** 

Diagnosed

: 15 Apr 2024

: 15 Apr 2024 - Doug Bogart

ROGERS, AR US Contact: SERVICE MANAGER

**TYSON GP-ROGERS-USP** 

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)

T:

F: