

# **OIL ANALYSIS REPORT**

# **UTILITIES ATLAS COPCO VACUUM PUMP 2 (S/N API850275)** Component

Vacuum Pump ISO 46 (--- QTS)

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

## Wear

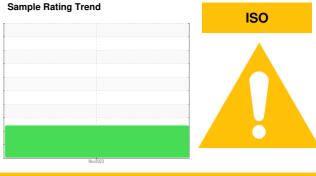
All component wear rates are normal.

### Contamination

There is a high amount of particulates present in the oil.

### Fluid Condition

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



	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0111844		
Sample Date		Client Info		04 Nov 2023		
Machine Age	hrs	Client Info		31738		
Oil Age	hrs	Client Info		4910		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>.1	NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m		<1		
Chromium	ppm	ASTM D5185m		<1		
Nickel	ppm	ASTM D5185m		0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m		2		
Lead	ppm	ASTM D5185m		0		
Copper	ppm	ASTM D5185m		<1		
Tin	ppm	ASTM D5185m		0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0		
Barium	ppm	ASTM D5185m		565		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		0		
Magnesium	ppm	ASTM D5185m		<1		
Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m		<1 2		
0						
Calcium Phosphorus	ppm	ASTM D5185m		2		
Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m		2 35		
Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 35 0		
Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 35 0 320		
Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	limit/base	2 35 0 320 current		
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m		2 35 0 320 current <1	   history1	
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm <b>TS</b> ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		2 35 0 320 current <1 31 2	  history1 	  history2 
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm <b>TS</b> ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20	2 35 0 320 current <1 31 2	  history1 	  history2  
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm	ppm ppm ppm ppm <b>TS</b> ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 limit/base	2 35 0 320 current <1 31 2 current	  history1   history1	  history2   history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI	ppm ppm ppm ppm <b>TS</b> ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 limit/base >1300	2 35 0 320 current <1 31 2 2 current 2 2 2 2 919	  history1   history1	  history2   history2 
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm	ppm ppm ppm ppm <b>TS</b> ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D7647 ASTM D7647	>20 limit/base >1300 >320	2 35 0 320 current <1 31 2 current 2 2 2919 ▲ 2919	  history1   history1  history1	  history2   history2 
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm <b>TS</b> ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	>20 limit/base >1300 >320 >80	2 35 0 320 current <1 31 2 2 current 2919 ▲ 1150 ▲ 251	  history1   history1  	 history2   history2  history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm <b>TS</b> ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>20 limit/base >1300 >320 >80 >20 >4	2 35 0 320 current <1 31 2 2 current ▲ 2919 ▲ 1150 ▲ 251 ▲ 127	  history1   history1  history1	 history2   history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm <b>TS</b> ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>20 limit/base >1300 >320 >80 >20 >4	2 35 0 320 current <1 31 2 2 current 2 919 ▲ 2919 ▲ 1150 ▲ 251 ▲ 127 ▲ 7	  history1   history1  history1  	 history2    history2  history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm Particles >14µm Particles >38µm Particles >71µm	ppm ppm ppm TS ppm ppm ppm _INESS	ASTM D5185m   ASTM D7647   ASTM D7647	>20 limit/base >1300 >320 >80 >20 >20 >4 >3	2 35 0 320 current <1 31 2 2 current ▲ 2919 ▲ 1150 ▲ 251 ▲ 127 ▲ 7 0	  history1   history1  history1  	 history2    history2        -

Acid Number (AN) Report Id: KRASPRMO [WUSCAR] 06046615 (Generated: 12/29/2023 09:04:23) Rev: 1

Contact/Location: Service Manager - KRASPRMO



Acid Number

0.2

# **OIL ANALYSIS REPORT**

method

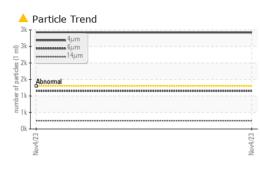
limit/base

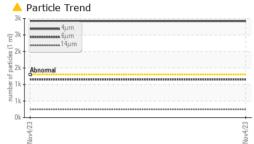
current

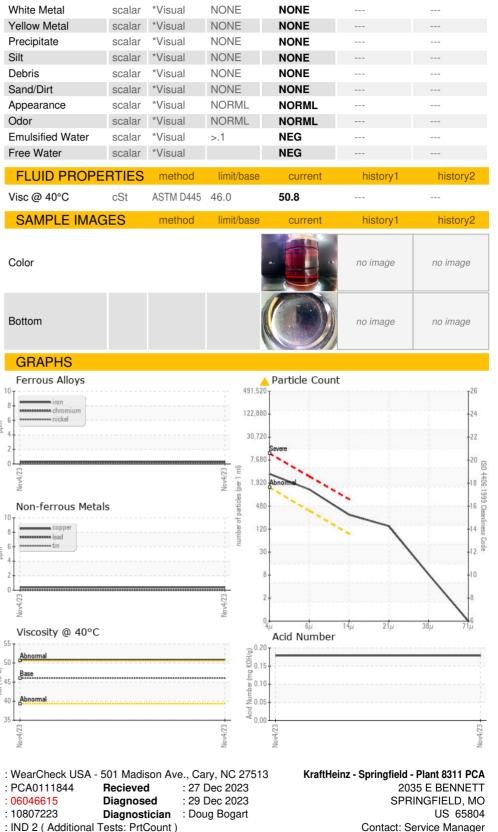
history1

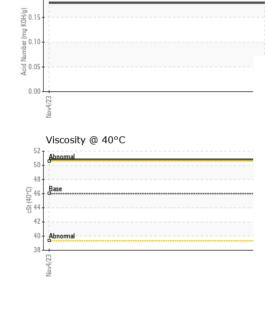
history2

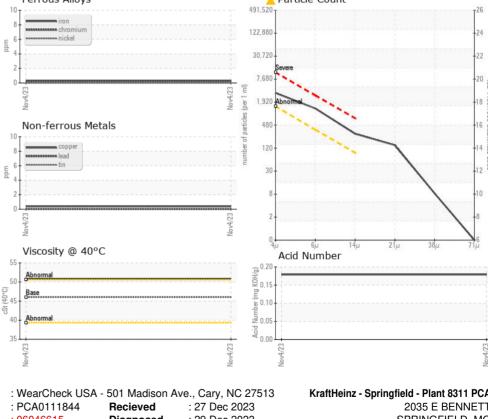
VISUAL













Test Package : IND 2 (Additional Tests: PrtCount) Certificate L2367 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)

Laboratory

Sample No.

Lab Number

Unique Number

Contact/Location: Service Manager - KRASPRMO

T:

F: