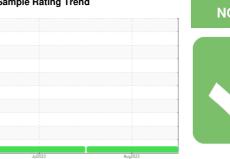


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



AF12-610-7000-3000 COMPRESSOR #3

Component

Compressor

GARDNER DENVER AEON 9000 SP (--- GA

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

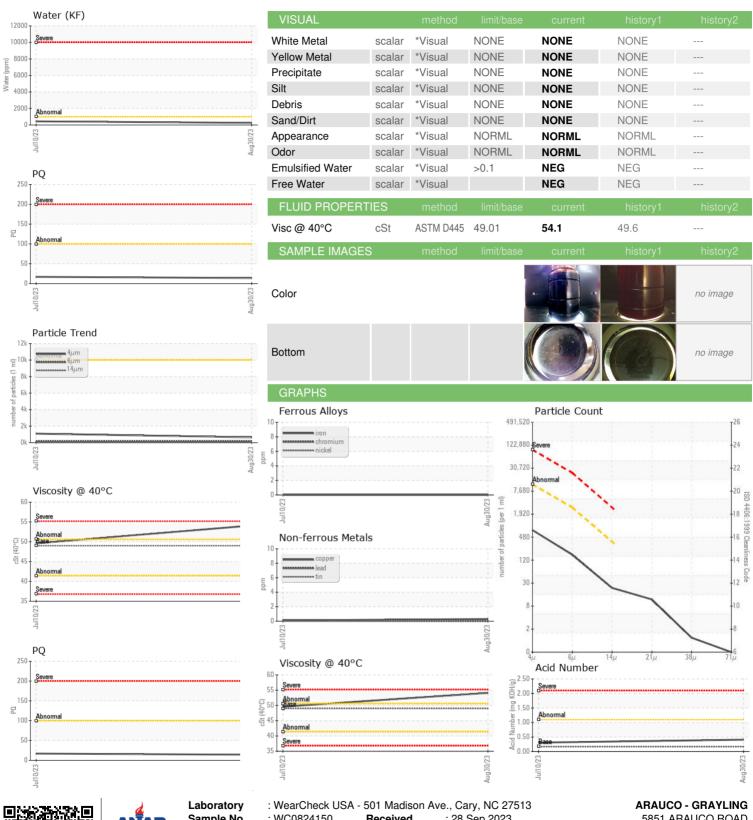
Fluid Condition

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 WC0824150 WC0818974	L)			Jul2023	Aug ² 023		
Sample Date miths Client Info 66 0 0 0 0 0 0 0 0	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age mths Client Info 66 0 Oil Age mths Client Info 6 0 Oil Changed NIA Sample Status Imitibuse current NORMAL WEAR METALS method limit/base current history1 history2 PC ASTM D8184 14 17 Iron ppm ASTM D8185m >50 0 0 Chromium ppm ASTM D8185m >10 0 0 Nikele ppm ASTM D8185m 0 0 Silver ppm ASTM D8185m 0 0 Alluminum ppm ASTM D8185m 0 0 Capper ppm ASTM D8185m 0 0 Vanadium ppm ASTM D8185m 0 0	Sample Number		Client Info		WC0824150	WC0818974	
Oil Changed	Sample Date		Client Info		30 Aug 2023	10 Jul 2023	
Client Info Changed N/A NORMAL NORMAL	Machine Age	mths	Client Info		66	0	
Sample Status NORMAL NORMAL WEAR METALS method limit/base current history1 history2 PQ ASTM D8184 14 17 Iron ppm ASTM D5185m >50 0 0 Chromium ppm ASTM D5185m >50 0 0 Nickel ppm ASTM D5185m 0 0 0 Silver ppm ASTM D5185m 0 0 0 ALuminum ppm ASTM D5185m 0 0 Lead ppm ASTM D5185m >25 0 <1 Copper ppm ASTM D5185m >50 <1 <1 Vanadium ppm ASTM D5185m 0 0 Variadium ppm ASTM D5185m 0 0 Ozadmium ppm ASTM D5185	Oil Age	mths	Client Info		6	0	
WEAR METALS	Oil Changed		Client Info				
PQ	Sample Status				NORMAL	NORMAL	
ASTM D5185m S	WEAR METALS		method	limit/base	current	history1	history2
Chromium ppm ASTM D5185m >10 0 0	PQ		ASTM D8184		14	17	
Nickel ppm ASTM D5185m 0 0 0 Silver ppm ASTM D5185m 0 0 0 Silver ppm ASTM D5185m 0 0 0 Silver ppm ASTM D5185m 0 0 0 Aluminum ppm ASTM D5185m >25 < 1 <1 <1 Lead ppm ASTM D5185m >25 0 <1 <1 Lead ppm ASTM D5185m >25 0 <1 <1 Copper ppm ASTM D5185m >50 <1 <1 Tin ppm ASTM D5185m >15 0 0 Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 Manganese ppm ASTM D5185m 0 0 0 Calcium ppm ASTM D5185m 0 0 0 Calcium ppm ASTM D5185m 0 0 0 Calcium ppm ASTM D5185m 0 0 0 Salfuc ppm ASTM D5185m 0 0 0 Calcium ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m 0 0 0 CONTAMINANTS method limit/base current history1 history2 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D5830 >25 2 0 FLUID CLEANLINESS method limit/base current history1 history2 Particles >6µm ASTM D7647 >2500 146 166 Particles >6µm ASTM D7647 >20 0 1 Particles >7µm ASTM D7647 >20 0 1 Particles >7µm ASTM D7647 >20 0 Particles >7µm ASTM D7647 >20 1 1 Particles >7µm ASTM D7647 >40 0 Particles >7µm ASTM D7647 >40 0 DIC Cleanliness ISO 4406 (c) >20/18/15 17/14/11 17/15/11	Iron	ppm	ASTM D5185m	>50	0	0	
Titanium ppm ASTM D5185m 0 0 Silver ppm ASTM D5185m 0 0 Aluminum ppm ASTM D5185m >25 <1	Chromium	ppm	ASTM D5185m	>10	0	0	
Silver	Nickel	ppm	ASTM D5185m		0	0	
Astronometric Astronometr	Titanium	ppm	ASTM D5185m		0	0	
Lead	Silver	ppm	ASTM D5185m		0	0	
Copper ppm ASTM D5185m >50 <1 <1 ··· Tin ppm ASTM D5185m >15 0 0 ··· Vanadium ppm ASTM D5185m 0 0 0 ··· Cadmium ppm ASTM D5185m 0 0 0 ··· ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 ··· Barium ppm ASTM D5185m 0 0 0 ··· Magnesium ppm ASTM D5185m 0 0 0 ··· Magnesium ppm ASTM D5185m 0 0 0 ··· Magnesium ppm ASTM D5185m 0 0 0 ··· Sulfur ppm ASTM D5185m 0 0 0 ··· Sulfur ppm ASTM D5185m 0 0 0	Aluminum	ppm	ASTM D5185m	>25	<1	<1	
Tin	Lead	ppm	ASTM D5185m	>25	0	<1	
Vanadium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 Magnesium ppm ASTM D5185m 0 0 0 Magnesium ppm ASTM D5185m 0 0 0 Calcium ppm ASTM D5185m 0 0 0 Phosphorus ppm ASTM D5185m 0 0 0 Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m >225 2 0	Copper	ppm	ASTM D5185m	>50	<1	<1	
Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 Magnesium ppm ASTM D5185m 0 0 0 Phosphorus ppm ASTM D5185m 0 0 0 Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m >25 2 0 </td <td>Tin</td> <td>ppm</td> <td>ASTM D5185m</td> <td>>15</td> <th>0</th> <td>0</td> <td></td>	Tin	ppm	ASTM D5185m	>15	0	0	
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0	Vanadium	ppm	ASTM D5185m		0	0	
Boron ppm ASTM D5185m 0 0 0 0 0 0 0 0	Cadmium	ppm	ASTM D5185m		0	0	
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0 0 0 Manganese ppm ASTM D5185m <1	Boron	ppm	ASTM D5185m	0	0	0	
Manganese ppm ASTM D5185m <1 0 Magnesium ppm ASTM D5185m 0 0 0 Calcium ppm ASTM D5185m 0 0 0 Phosphorus ppm ASTM D5185m 0 0 0 Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 Sodium ppm ASTM D5185m 1 0 Sodium ppm ASTM D5185m 1 0 Potassium ppm ASTM D5185m 20 0 1 Water % ASTM D6304 >0.1 0.025 0.044 Particles >4µm ASTM D6304 >1000 257.1 440.9	Barium	ppm	ASTM D5185m	0	0	0	
Magnesium ppm ASTM D5185m 0 0 0 Calcium ppm ASTM D5185m 0 0 0 Phosphorus ppm ASTM D5185m 800 6666 740 Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 0 0 Sodium ppm ASTM D5185m 1 0 Potassium ppm ASTM D5185m >20 0 1 Potassium ppm ASTM D5185m >20 0 1 Water % ASTM D6304 >0.1 0.025 0.044 ppm Water ppm ASTM D6304 >1000 257.1 <td>Molybdenum</td> <td>ppm</td> <td>ASTM D5185m</td> <td>0</td> <th>0</th> <td>0</td> <td></td>	Molybdenum	ppm	ASTM D5185m	0	0	0	
Calcium ppm ASTM D5185m 0 0 0 Phosphorus ppm ASTM D5185m 800 666 740 Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 2 0 Sodium ppm ASTM D5185m >20 0 1 Potassium ppm ASTM D5185m >20 0 1 Water % ASTM D5185m >20 0 1 Water % ASTM D5185m >20 0 1 Particles > 4µm ASTM D6304 >0.100 643 10.92	Manganese	ppm	ASTM D5185m		<1	0	
Phosphorus ppm ASTM D5185m 800 666 740 Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m 25 2 0 Sodium ppm ASTM D5185m 1 0 Potassium ppm ASTM D5185m 20 0 1 Water % ASTM D5185m >20 0 1 Water % ASTM D6304 >0.1 0.025 0.044 Ppm Water ppm ASTM D6304 >1000 257.1 440.9 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >2500 146 166	Magnesium	ppm	ASTM D5185m	0	0	0	
Zinc ppm ASTM D5185m 0 0 0 0 0 0 0 0	Calcium	ppm	ASTM D5185m	0	0	0	
Sulfur ppm ASTM D5185m 0 0 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 2 0 Sodium ppm ASTM D5185m >20 0 1 Potassium ppm ASTM D5185m >20 0 1 Water % ASTM D6304 >0.1 0.025 0.044 ppm Water ppm ASTM D6304 >1000 257.1 440.9 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >10000 643 1092 Particles >6µm ASTM D7647 >2500 146 166 Particles >21µm ASTM D7647 >80 10 6 Particles >71µm ASTM D7647 >4 0	Phosphorus	ppm	ASTM D5185m	800	666	740	
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 2 0 Sodium ppm ASTM D5185m >20 0 1 Potassium ppm ASTM D5185m >20 0 1 Water % ASTM D6304 >0.1 0.025 0.044 ppm Water ppm ASTM D6304 >1000 257.1 440.9 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >10000 643 1092 Particles >6μm ASTM D7647 >2500 146 166 Particles >21μm ASTM D7647 >80 10 6 Particles >38μm ASTM D7647 >4 0 0 Particles >71μm ASTM D7647 >4 0 <td< td=""><td>Zinc</td><td>ppm</td><td>ASTM D5185m</td><td>0</td><th>0</th><td>0</td><td></td></td<>	Zinc	ppm	ASTM D5185m	0	0	0	
Silicon ppm ASTM D5185m >25 2 0 Sodium ppm ASTM D5185m 1 0 Potassium ppm ASTM D5185m >20 0 1 Water % ASTM D6304 >0.1 0.025 0.044 ppm Water ppm ASTM D6304 >1000 257.1 440.9 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >10000 643 1092 Particles >6μm ASTM D7647 >2500 146 166 Particles >14μm ASTM D7647 >320 20 13 Particles >21μm ASTM D7647 >80 10 6 Particles >38μm ASTM D7647 >4 0 0 Particles >71μm ASTM D7647 >4 0 0	Sulfur	ppm	ASTM D5185m	0	0	0	
Sodium ppm ASTM D5185m 1 0 Potassium ppm ASTM D5185m >20 0 1 Water % ASTM D6304 >0.1 0.025 0.044 ppm Water ppm ASTM D6304 >1000 257.1 440.9 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >10000 643 1092 Particles >6μm ASTM D7647 >2500 146 166 Particles >14μm ASTM D7647 >320 20 13 Particles >21μm ASTM D7647 >80 10 6 Particles >38μm ASTM D7647 >20 1 1 Particles >71μm ASTM D7647 >4 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/11 17/15/11	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 0 1 Water % ASTM D6304 >0.1 0.025 0.044 ppm Water ppm ASTM D6304 >1000 257.1 440.9 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >10000 643 1092 Particles >6μm ASTM D7647 >2500 146 166 Particles >14μm ASTM D7647 >320 20 13 Particles >21μm ASTM D7647 >80 10 6 Particles >38μm ASTM D7647 >4 0 0 Particles >71μm ASTM D7647 >4 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/11 17/15/11 FLUID DEGRADATION method limit/base current history1	Silicon	ppm	ASTM D5185m	>25	2	0	
Potassium ppm ASTM D5185m >20 0 1 Water % ASTM D6304 >0.1 0.025 0.044 ppm Water ppm ASTM D6304 >1000 257.1 440.9 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >10000 643 1092 Particles >6μm ASTM D7647 >2500 146 166 Particles >14μm ASTM D7647 >320 20 13 Particles >21μm ASTM D7647 >80 10 6 Particles >38μm ASTM D7647 >4 0 0 Particles >71μm ASTM D7647 >4 0 0 Poli Cleanliness ISO 4406 (c) >20/18/15 17/14/11 17/15/11 FLUID DEGRADATION method limit/base current history1	Sodium	ppm	ASTM D5185m		1	0	
ppm Water ppm ASTM D6304 >1000 257.1 440.9 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >10000 643 1092 Particles >6μm ASTM D7647 >2500 146 166 Particles >14μm ASTM D7647 >320 20 13 Particles >21μm ASTM D7647 >80 10 6 Particles >38μm ASTM D7647 >20 1 1 Particles >71μm ASTM D7647 >4 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/11 17/15/11 FLUID DEGRADATION method limit/base current history1 history2	Potassium		ASTM D5185m	>20	0	1	
ppm Water ppm ASTM D6304 >1000 257.1 440.9 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >10000 643 1092 Particles >6μm ASTM D7647 >2500 146 166 Particles >14μm ASTM D7647 >320 20 13 Particles >21μm ASTM D7647 >80 10 6 Particles >38μm ASTM D7647 >20 1 1 Particles >71μm ASTM D7647 >4 0 0 Particles >71μm ASTM D7647 <td< td=""><td>Water</td><td></td><td>ASTM D6304</td><td>>0.1</td><th>0.025</th><td>0.044</td><td></td></td<>	Water		ASTM D6304	>0.1	0.025	0.044	
Particles >4μm ASTM D7647 >10000 643 1092 Particles >6μm ASTM D7647 >2500 146 166 Particles >14μm ASTM D7647 >320 20 13 Particles >21μm ASTM D7647 >80 10 6 Particles >38μm ASTM D7647 >20 1 1 Particles >71μm ASTM D7647 >4 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/11 17/15/11 FLUID DEGRADATION method limit/base current history1 history2	ppm Water	ppm	ASTM D6304	>1000	257.1	440.9	
Particles >6μm ASTM D7647 >2500 146 166 Particles >14μm ASTM D7647 >320 20 13 Particles >21μm ASTM D7647 >80 10 6 Particles >38μm ASTM D7647 >20 1 1 Particles >71μm ASTM D7647 >4 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/11 17/15/11 FLUID DEGRADATION method limit/base current history1 history2	FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >6μm ASTM D7647 >2500 146 166 Particles >14μm ASTM D7647 >320 20 13 Particles >21μm ASTM D7647 >80 10 6 Particles >38μm ASTM D7647 >20 1 1 Particles >71μm ASTM D7647 >4 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/11 17/15/11 FLUID DEGRADATION method limit/base current history1 history2	Particles >4µm		ASTM D7647	>10000	643	1092	
Particles >14μm ASTM D7647 >320 20 13 Particles >21μm ASTM D7647 >80 10 6 Particles >38μm ASTM D7647 >20 1 1 Particles >71μm ASTM D7647 >4 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/11 17/15/11 FLUID DEGRADATION method limit/base current history1 history2	Particles >6µm						
Particles >21μm ASTM D7647 >80 10 6 Particles >38μm ASTM D7647 >20 1 1 Particles >71μm ASTM D7647 >4 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/11 17/15/11 FLUID DEGRADATION method limit/base current history1 history2	•						
Particles >38μm ASTM D7647 >20 1 1 Particles >71μm ASTM D7647 >4 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/11 17/15/11 FLUID DEGRADATION method limit/base current history1 history2	·						
Particles >71µm ASTM D7647 >4 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/11 17/15/11 FLUID DEGRADATION method limit/base current history1 history2	·						
Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/11 17/15/11 FLUID DEGRADATION method limit/base current history1 history2							
	Oil Cleanliness						
	FLUID DEGRADA	TION	method_	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g			0.41		



OIL ANALYSIS REPORT





Certificate L2367

Sample No. Lab Number **Unique Number** Test Package : PLANT

: WC0824150 : 05963566 : 10670117

Received

: 28 Sep 2023 Diagnosed : 29 Sep 2023 : Don Baldridge Diagnostician

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)

5851 ARAUCO ROAD GRAYLING, MI US 49738

Contact: JOSEPH GREEN joseph.green@arauco.com

T:

F: