

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

GARDNER DENVER SITE 1 AIR B (S/N S491424)

Component

Air Compressor

SHELL CORENA S4 R 68 (--- QTS)

DIAGNOSIS

Recommendation

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.

		Apr2021	Nov2021 Apr2022	Dec2022 Mar2023	III/0/23	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0837875	WC0731515	WC0731530
Sample Date		Client Info		07 Oct 2023	31 Jul 2023	20 May 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	2	2
Chromium	ppm	ASTM D5185m	>4	0	0	<1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	1	2	<1
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>40	1	<1	0
Tin	ppm	ASTM D5185m	>5	0	0	1
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		<1	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		3	0	0
Calcium	ppm	ASTM D5185m		3	0	1
Phosphorus	ppm	ASTM D5185m		277	343	798
Zinc	ppm	ASTM D5185m		8	9	0
Sulfur	ppm	ASTM D5185m		56	91	20
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm				,	
Sillouri			> 25	0	~1	~1
Sodium			>25	0	<1	<1 5
Sodium Potassium	ppm	ASTM D5185m		8	<1 2 0	5
Potassium	ppm ppm	ASTM D5185m ASTM D5185m	>20	8 0	0	5 2
Potassium FLUID CLEANLIN	ppm ppm	ASTM D5185m ASTM D5185m method	>20 limit/base	8 0 current	2 0 history1	5 2 history2
Potassium FLUID CLEANLIN Particles >4µm	ppm ppm	ASTM D5185m ASTM D5185m method ASTM D7647	>20 limit/base >10000	8 0 current 7717	2 0 history1 3521	5 2 history2 1357
Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm	ASTM D5185m ASTM D5185m method ASTM D7647 ASTM D7647	>20 limit/base >10000 >2500	8 0 current 7717 798	2 0 history1 3521 974	5 2 history2 1357 183
Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm	ASTM D5185m ASTM D5185m method ASTM D7647 ASTM D7647 ASTM D7647	>20 limit/base >10000 >2500 >320	8 0 current 7717 798 29	2 0 history1 3521 974 62	5 2 history2 1357 183 3
Potassium FLUID CLEANLIN Particles >4μm Particles >6μm Particles >14μm Particles >21μm	ppm ppm	ASTM D5185m ASTM D5185m method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>20 limit/base >10000 >2500 >320 >80	8 0 current 7717 798 29 11	2 0 history1 3521 974 62 14	5 2 history2 1357 183 3 1
Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm	ASTM D5185m ASTM D5185m method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>20 limit/base >10000 >2500 >320 >80 >20	8 0 current 7717 798 29 11	2 0 history1 3521 974 62 14	history2 1357 183 3 1 0
Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm	ASTM D5185m ASTM D5185m method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>20 limit/base >10000 >2500 >320 >80 >20 >4	8 0 current 7717 798 29 11 1	2 0 history1 3521 974 62 14 0	5 2 history2 1357 183 3 1 0 0 0
Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm	ASTM D5185m ASTM D5185m method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>20 limit/base >10000 >2500 >320 >80 >20	8 0 current 7717 798 29 11	2 0 history1 3521 974 62 14	history2 1357 183 3 1 0

0.55

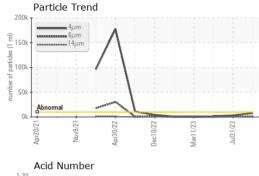
0.51

Acid Number (AN) mg KOH/g ASTM D8045

1.02



OIL ANALYSIS REPORT



VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
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
Emulsified Water	scalar	*Visual	>0.6	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

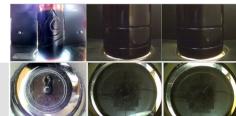
	Number				
0.96 Number (mg KOH/0)			<u> </u>		
Apr20/21	Nov9/21	Apr30/22	Dec10/22	Mar11/23	Jul31/23

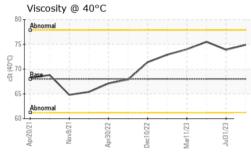
FLUID PROPERTIES 74.9 73.9 75.5 Visc @ 40°C cSt ASTM D445 68

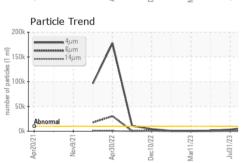
SAMPLE IMAGES

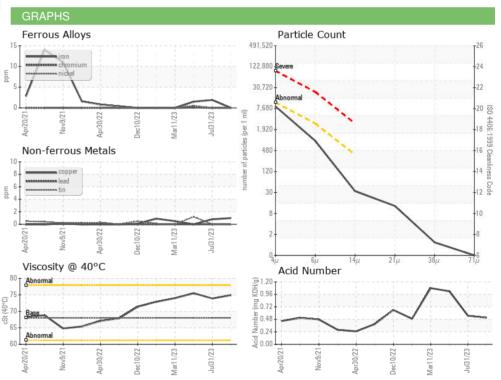


Bottom











Laboratory Sample No. Lab Number **Unique Number**

: 05982507 : 10699802

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0837875

Received Diagnosed

: 18 Oct 2023 : 25 Oct 2023 Diagnostician : Doug Bogart

Test Package : IND 2 (Additional Tests: PRTCOUNT) 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)

HILCORP ENERGY - VANDERBILT

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Report Id: HILVANWC [WUSCAR] 05982507 (Generated: 10/27/2023 02:46:57) Rev: 1

Contact/Location: DEREK HARGRAVE - HILVANWC