

# **OIL ANALYSIS REPORT**

Sample Rating Trend

ISO

30-9 GEA ER1 (S/N 09127011)

Component

**Refrigeration Compressor** 

**USPI ALT-68 SC (150 GAL)** 

## **DIAGNOSIS**

### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

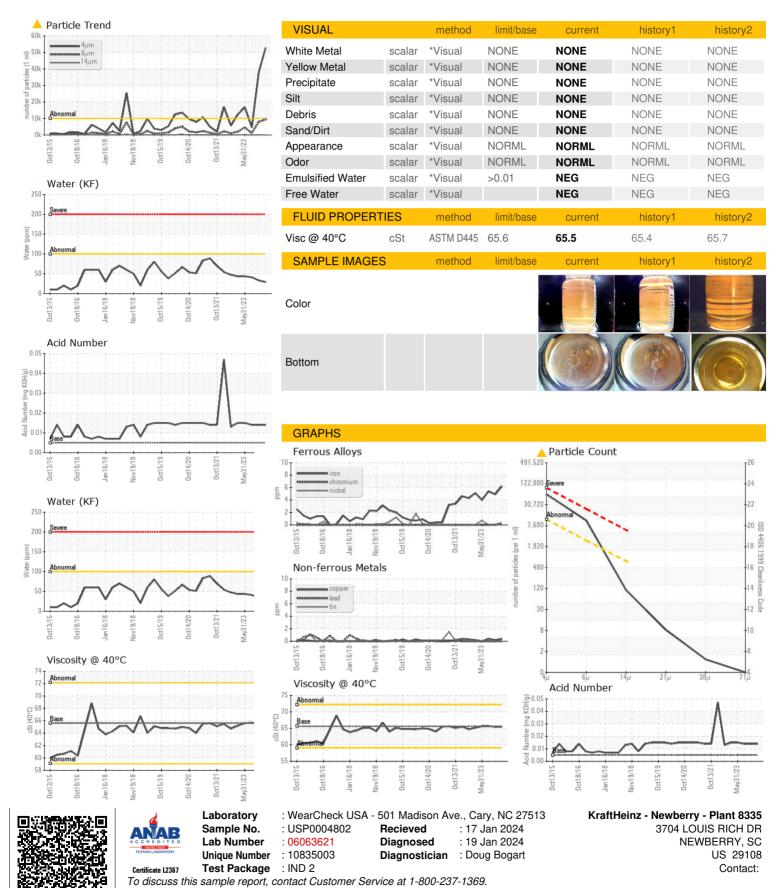
## **Fluid Condition**

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

		:t2015 Oct20	16 Jan2018 Nov2018	Oct2019 Oct2020 Oct2021 I	Лау2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0004802	USP0001095	USP250204
Sample Date		Client Info		05 Jan 2024	11 Oct 2023	06 Jul 2023
Machine Age	hrs	Client Info		82050	81249	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	6	5	5
Chromium	ppm	ASTM D5185m	>2	<1	0	0
Nickel	ppm	ASTM D5185m		0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>3	0	0	<1
Lead	ppm	ASTM D5185m	>2	0	0	0
Copper	ppm	ASTM D5185m	>8	<1	<1	<1
Tin	ppm	ASTM D5185m	>4	0	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
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		0	0	0
Calcium	ppm	ASTM D5185m		1	0	0
Phosphorus	ppm	ASTM D5185m		0	0	0
Zinc	ppm	ASTM D5185m		0	0	0
Sulfur	ppm	ASTM D5185m	50	0	6	0
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	2	2	3
Sodium	ppm	ASTM D5185m		0	0	0
Potassium	ppm	ASTM D5185m	>20	<1	0	1
Water	%	ASTM D6304	>0.01	0.003	0.003	0.004
ppm Water	ppm	ASTM D6304	>100	29	33.2	41.1
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<u> </u>	▲ 37950	4533
Particles >6µm		ASTM D7647	>2500	<u> </u>	<u>^</u> 7904	1123
Particles >14μm		ASTM D7647	>640	96	82	35
Particles >21µm		ASTM D7647	>160	7	6	5
Particles >38µm		ASTM D7647	>40	1	1	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/16	<b>23/20/14</b>	<u>22/20/14</u>	19/17/12
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	0.014	0.014	0.014



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\* - 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)

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