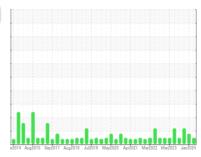


# **OIL ANALYSIS REPORT**

Sample Rating Trend







Machine Id LC-3 (S/N 3221373) Refrigeration Compressor

**USPI ALT-68 SC (165 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.

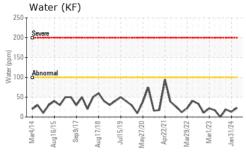
## **Fluid Condition**

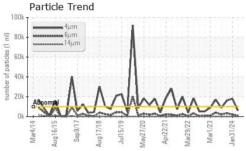
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

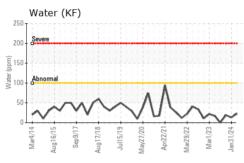
Sample Number         Client Info         USP0011418         USP0007700         USP0003           Sample Date         Client Info         23 Apr 2024         31 Jan 2024         07 Nov 20           Machine Age         hrs         Client Info         16346         14716         13160           Oil Age         hrs         Client Info         N/A         N/A         N/A           Oil Changed         Client Info         N/A         N/A         N/A           Sample Status         NORMAL         ATTENTION         ATTENTION           WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >8         0         0         0           Chromium         ppm         ASTM D5185m         >2         0         0         0           Nickel         ppm         ASTM D5185m         >2         0         0         0           Silver         ppm         ASTM D5185m         >2         0         0         0           Aluminum         ppm         ASTM D5185m         >2         0         <1         0           Lead         ppm         ASTM D5185m         >8		w2014 Au		5 Sep2017 Aug2018 Jul201	9 May2020 Apr2021 Mar2022 Mar.	2023 Jan 2024	
Sample Date	SAMPLE INFORM	ION method	SAMPLE INFORM	limit/base	current	history1	history2
Machine Age         hrs         Client Info         16346         14716         13160           Oil Age         hrs         Client Info         0         0         0           Oil Changed         Client Info         N/A         N/A         N/A           Sample Status         NoRMAL         ATTENTION         ATTENTION           WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >8         0         0         0           Iron         ppm         ASTM D5185m         >2         0         0         0           Nickel         ppm         ASTM D5185m         >2         0         0         0           Silver         ppm         ASTM D5185m         >2         0         0         0           Aluminum         ppm         ASTM D5185m         >2         0         -1         0           Lead         ppm         ASTM D5185m         >3         0         -1         0           Copper         ppm         ASTM D5185m         >8         0         -1         0           Vanadium         ppm         ASTM D5185m<	ample Number	Client Inf	Sample Number		USP0011418	USP0007700	USP0003390
Oil Age         hrs         Client Info         0         0         0           Oil Changed         Client Info         N/A         N/A         N/A         N/A           Sample Status         Description         Normal         ATTENTION         ATTENTION         ATTENTION           WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >8         0         0         0           Chromium         ppm         ASTM D5185m         >2         0         0         0           Nickel         ppm         ASTM D5185m         >2         0         0         0           Silver         ppm         ASTM D5185m         >2         0         0         0           Aluminum         ppm         ASTM D5185m         >3         0         <1	ample Date	Client Inf	Sample Date		23 Apr 2024	31 Jan 2024	07 Nov 2023
Oil Changed Sample Status         Client Info         N/A         N/A         N/A         N/A           WEAR METALS         method         limit/base         current         history1         history1           WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >2         0         0         0           Chromium         ppm         ASTM D5185m         >2         0         0         0           Nickel         ppm         ASTM D5185m         >2         0         0         0           Silver         ppm         ASTM D5185m         >2         0         0         0           Silver         ppm         ASTM D5185m         >2         0         0         0           Aluminum         ppm         ASTM D5185m         >3         0         <1	Machine Age	Client Inf	fachine Age		16346	14716	13160
NORMAL   ATTENTION   ATTENTION	Dil Age	Client Inf	Dil Age		0	0	0
WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >8         0         0         0           Chromium         ppm         ASTM D5185m         >2         0         0         0           Nickel         ppm         ASTM D5185m         0         0         0         0           Titanium         ppm         ASTM D5185m         >2         0         0         0           Aluminum         ppm         ASTM D5185m         >2         0         0         0           Lead         ppm         ASTM D5185m         >3         0         <1         0           Lead         ppm         ASTM D5185m         >2         0         <1         0           Copper         ppm         ASTM D5185m         >8         0         <1         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0	Dil Changed	Client Inf	Dil Changed		N/A	N/A	N/A
Iron	ample Status		Sample Status		NORMAL	ATTENTION	ATTENTION
Chromium         ppm         ASTM D5185m         >2         0         0         0           Nickel         ppm         ASTM D5185m         0         <1         <1           Titanium         ppm         ASTM D5185m         0         0         0           Silver         ppm         ASTM D5185m         >2         0         0         0           Aluminum         ppm         ASTM D5185m         >3         0         <1         0           Lead         ppm         ASTM D5185m         >2         0         <1         0           Copper         ppm         ASTM D5185m         >8         0         <1         0           Tin         ppm         ASTM D5185m         >4         <1         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum	WEAR METALS	method	WEAR METALS	limit/base	current	history1	history2
Nickel         ppm         ASTM D5185m         0         <1	on	m ASTM D5185	on	>8	0	0	0
Titanium         ppm         ASTM D5185m         0         0         0           Silver         ppm         ASTM D5185m         >2         0         0         0           Aluminum         ppm         ASTM D5185m         >2         0         <1         0           Lead         ppm         ASTM D5185m         >2         0         <1         0           Copper         ppm         ASTM D5185m         >8         0         <1         0           Tin         ppm         ASTM D5185m         >4         <1         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         0         <1         0           Calcium	hromium	m ASTM D5185	Chromium	>2	0	0	0
Silver         ppm         ASTM D5185m         >2         0         0         0           Aluminum         ppm         ASTM D5185m         >3         0         <1	lickel	m ASTM D5185	lickel		0	<1	<1
Aluminum         ppm         ASTM D5185m         >3         0         <1	itanium	m ASTM D5185	itanium		0	0	0
Lead	ilver	m ASTM D5185	Silver	>2	0	0	0
Lead         ppm         ASTM D5185m         >2         0         <1	Juminum	m ASTM D5185	luminum	>3	0	<1	0
Copper         ppm         ASTM D5185m         >8         0         <1	ead		ead	>2	0	<1	0
Tin         ppm         ASTM D5185m         >4         <1				>8	0	<1	0
Vanadium         ppm         ASTM D5185m         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history1           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         <1			• •		_		
Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         histor           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         <1         0           Magnesium         ppm         ASTM D5185m         0         <1         0           Calcium         ppm         ASTM D5185m         0         <1         0           Phosphorus         ppm         ASTM D5185m         0         <1         0           Zinc         ppm         ASTM D5185m         0         0         0           Sulfur         ppm         ASTM D5185m         50         19         0         0           CONTAMINANTS         method         limit/base         current         history1         history1           Silicon         ppm         ASTM D5185m         >1         <1         <1 <td< th=""><th>anadium</th><th></th><th>anadium</th><th></th><th></th><th></th><th></th></td<>	anadium		anadium				
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         1         <1					-		
Barium         ppm         ASTM D5185m         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0           Manganese         ppm         ASTM D5185m         1         <1         0           Magnesium         ppm         ASTM D5185m         0         <1         0           Calcium         ppm         ASTM D5185m         0         0         0           Phosphorus         ppm         ASTM D5185m         0         <1         0           Zinc         ppm         ASTM D5185m         0         0         0           Sulfur         ppm         ASTM D5185m         50         19         0         0           CONTAMINANTS         method         limit/base         current         history1         histo           Silicon         ppm         ASTM D5185m         >15         <1         1         <1           Sodium         ppm         ASTM D5185m         >20         0         <1         0           Water         %         ASTM D6304         >0.01         0.002         0.001         0.002	ADDITIVES	method	ADDITIVES	limit/base	current	history1	history2
Barium         ppm         ASTM D5185m         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0           Manganese         ppm         ASTM D5185m         1         <1         0           Magnesium         ppm         ASTM D5185m         0         <1         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         50         19         0         0           CONTAMINANTS         method         limit/base         current         history1         histo           Silicon         ppm         ASTM D5185m         >15         <1         1         <1           Sodium         ppm         ASTM D5185m         >20         0         <1         0           Water         %         ASTM D6304         >0.01         0.002         0.001         0.002	Soron	m ASTM D5185	Boron		0	0	0
Molybdenum         ppm         ASTM D5185m         0         0         0           Manganese         ppm         ASTM D5185m         1         <1	arium		Barium		0	0	0
Manganese         ppm         ASTM D5185m         1         <1	/lolvbdenum		1olvbdenum		0	0	0
Magnesium         ppm         ASTM D5185m         0         <1	•		-		1	<1	0
Calcium         ppm         ASTM D5185m         0         0         0           Phosphorus         ppm         ASTM D5185m         0         <1         0           Zinc         ppm         ASTM D5185m         0         0         0         0           Sulfur         ppm         ASTM D5185m         50         19         0         0         0           CONTAMINANTS         method         limit/base         current         history1         history2         history2         history2         history2         history2         history3         history3         history3         history3         history3         history4         histo	-		-		0	<1	0
Phosphorus         ppm         ASTM D5185m         0         <1	-		-			0	0
Zinc         ppm         ASTM D5185m         0         0         0         0           Sulfur         ppm         ASTM D5185m         50         19         0         0           CONTAMINANTS         method         limit/base         current         history1         history1           Silicon         ppm         ASTM D5185m         >15         <1         1         <1           Sodium         ppm         ASTM D5185m         1         <1         <1         <1           Potassium         ppm         ASTM D5185m         >20         0         <1         0           Water         %         ASTM D6304         >0.01         0.002         0.001         0.002					0	<1	0
Sulfur         ppm         ASTM D5185m         50         19         0         0           CONTAMINANTS         method         limit/base         current         history1         histor           Silicon         ppm         ASTM D5185m         >15         <1         1         <1         <1           Sodium         ppm         ASTM D5185m         1         <1         <1         <1           Potassium         ppm         ASTM D5185m         >20         0         <1         0           Water         %         ASTM D6304         >0.01         0.002         0.001         0.002	·		•		0	0	0
Silicon         ppm         ASTM D5185m         >15         <1	-			50			
Sodium         ppm         ASTM D5185m         1         <1	CONTAMINANTS	method	CONTAMINANTS	limit/base	current	history1	history2
Sodium         ppm         ASTM D5185m         1         <1	ilicon	m ASTM D5185	Silicon	<b>&gt;15</b>	<b>-1</b>	1	<i>z</i> 1
Potassium         ppm         ASTM D5185m         >20         0         <1				>10			
Water % ASTM D6304 >0.01 0.002 0.001 0.002				>20			
					-		
••							
FLUID CLEANLINESS method limit/base current history1 histo	FLUID CLEANLIN		FLUID CLEANLIN	limit/base	current	history1	history2
Particles >4μm ASTM D7647 >10000 <b>6063</b> 18071 16106	articles >4um		Particles >4um				
Particles >6µm	·						
Particles >14µm ASTM D7647 >320 <b>22</b> 11 79							
Particles >21 µm							
Particles >38µm ASTM D7647 >20 <b>0</b> 0 0	·						
Particles >71 µm							
	•		•				21/19/13
		`					history2
Acid Number (AN) mg KOH/g ASTM D974 0.005 <b>0.014</b> 0.014 0.014						•	•

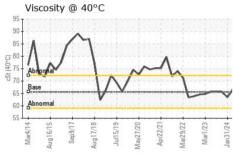


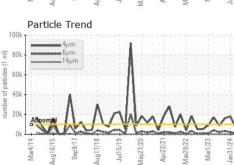
# **OIL ANALYSIS REPORT**











VISUAL		method	limit/base	current	history1	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	LIGHT	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	>0.01	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
ELLIIN DDODEDT	TIEC	mothod	limit/bass	ourrent	hiotony1	hioton/2

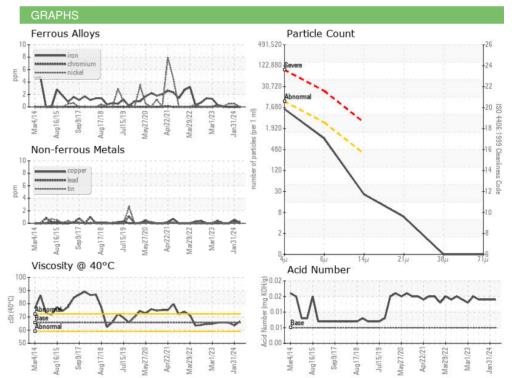
I LOID I HOI L	ITTILO	memou			Thistory	Tilotol y Z
Visc @ 40°C	cSt	ASTM D445	65.6	66.6	63.5	65.64

SAMPLE	IMAGES	

Color

**Bottom** 









Certificate 12367

Laboratory Sample No.

Lab Number : 06177203 Unique Number : 11023256

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : USP0011418 Received : 13 May 2024

**Tested** : 14 May 2024 Diagnosed : 14 May 2024 - Doug Bogart

Test Package : IND 2 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)

Contact/Location: ? ? - ADVENIENT

**ADVANCE PIERRE FOODS - ENTERPRISE PLANT** 

ENID, OK

US 73701

Contact:

T:

F: