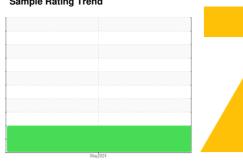


## **OIL ANALYSIS REPORT**

Sample Rating Trend





Machine Id

# **CUP DECK - A TANK**

Component Gearbox

USPI FG GEAR 220 (--- GAL)

### **DIAGNOSIS**

#### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

#### Wear

All component wear rates are normal.

#### Contamination

Elemental level of silicon (Si) above normal indicating ingress of seal material. Moderate concentration of visible dirt/debris present in the oil.

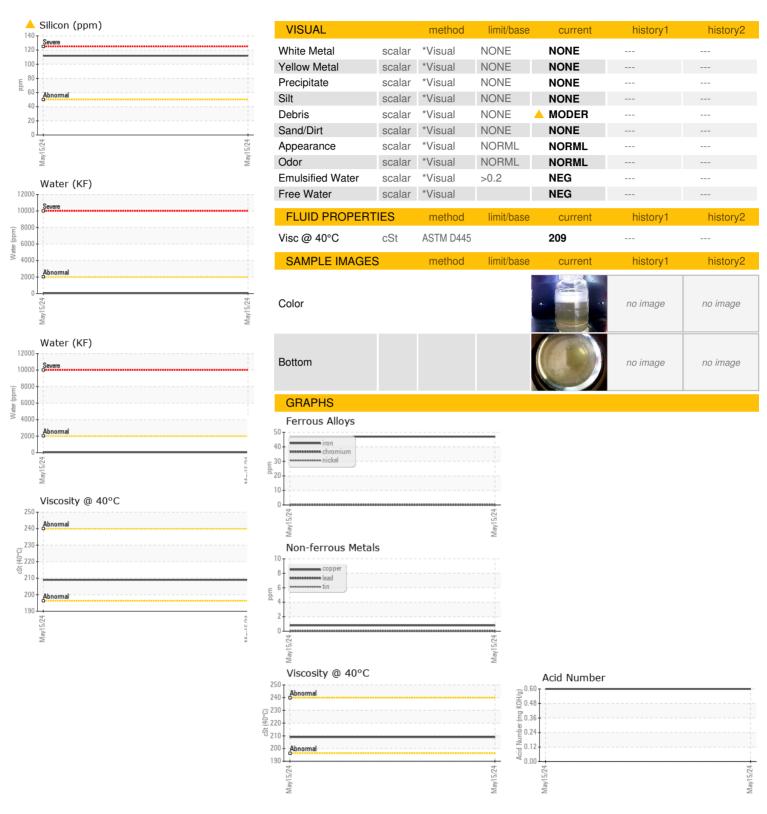
#### **Fluid Condition**

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

Sample Number   Client Info   USP0011827	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Date   Client Info   15 May 2024	Sample Number		Client Info		USP0011827		
Machine Age					15 May 2024		
Oil Age         hrs         Client Info         N/A             Sample Status         Client Info         N/A             WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >200         47             Chromium         ppm         ASTM D5185m         >15         0             Nickel         ppm         ASTM D5185m         >15         0             Silver         ppm         ASTM D5185m         >15         0             Aluminum         ppm         ASTM D5185m         >25         3             Aluminum         ppm         ASTM D5185m         >20         -1	•	hrs			•		
Oil Changed Sample Status         Client Info         N/A             WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >200         47             Chromium         ppm         ASTM D5185m         >15         0             Nickel         ppm         ASTM D5185m         >15         0             Titanium         ppm         ASTM D5185m         >1              Alluminum         ppm         ASTM D5185m         >25         3             Alluminum         ppm         ASTM D5185m         >20         -1             Lead         ppm         ASTM D5185m         >20         -1             Copper         ppm         ASTM D5185m         >20         -1             Tin         ppm         ASTM D5185m         >25         0             Calcium         ppm         ASTM D5185m         0	<u> </u>						
WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >200         47             Chromium         ppm         ASTM D5185m         >15         0             Nickel         ppm         ASTM D5185m         >15         0             Titanium         ppm         ASTM D5185m         >15         0             Silver         ppm         ASTM D5185m         <1	•				-		
Iron					ABNORMAL		
Chromium         ppm         ASTM D5185m         >15         0             Nickel         ppm         ASTM D5185m         >15         0             Titanium         ppm         ASTM D5185m         <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel         ppm         ASTM D5185m         >15         0             Titanium         ppm         ASTM D5185m         <1	Iron	ppm	ASTM D5185m	>200	47		
Titanium         ppm         ASTM D5185m         <1             Silver         ppm         ASTM D5185m         <1	Chromium	ppm	ASTM D5185m	>15	0		
Silver	Nickel	ppm	ASTM D5185m	>15	0		
Aluminum	Titanium	ppm	ASTM D5185m		<1		
Ast   Ast	Silver	ppm	ASTM D5185m		<1		
Lead         ppm         ASTM D5185m         >100         0             Copper         ppm         ASTM D5185m         >200         <1             Tin         ppm         ASTM D5185m         >25         0             Vanadium         ppm         ASTM D5185m         <1             Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0             Boron         ppm         ASTM D5185m         0             Molybdenum         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         7             Calcium         ppm         ASTM D5185m	Aluminum		ASTM D5185m	>25	3		
Tin	Lead	ppm	ASTM D5185m	>100	0		
Vanadium         ppm         ASTM D5185m         <1             Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history2           Boron         ppm         ASTM D5185m         0             Barium         ppm         ASTM D5185m         0             Molybdenum         ppm         ASTM D5185m         0             Manganese         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         7             Calcium         ppm         ASTM D5185m         7             Phosphorus         ppm         ASTM D5185m         557             Zinc         ppm         ASTM D5185m         803             Sulfur         ppm         ASTM D5185m         803             CONTAMINANTS         method         limit/base         current         history1         history2	Copper	ppm	ASTM D5185m	>200	<1		
Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0             Barium         ppm         ASTM D5185m         0             Molybdenum         ppm         ASTM D5185m         0             Manganese         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         7             Calcium         ppm         ASTM D5185m         557             Phosphorus         ppm         ASTM D5185m         19             Zinc         ppm         ASTM D5185m         803             Sulfur         ppm         ASTM D5185m         803             CONTAMINANTS         method         limit/base         current         history1         history2           Sodium         ppm         ASTM D5185m         >20         <1		ppm	ASTM D5185m	>25	0		
ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0             Barium         ppm         ASTM D5185m         <1	Vanadium	ppm	ASTM D5185m		<1		
Boron ppm ASTM D5185m 0	Cadmium	ppm	ASTM D5185m		0		
Barium         ppm         ASTM D5185m         <1             Molybdenum         ppm         ASTM D5185m         0             Manganese         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         7             Calcium         ppm         ASTM D5185m         557             Phosphorus         ppm         ASTM D5185m         19             Zinc         ppm         ASTM D5185m         803             Sulfur         ppm         ASTM D5185m         803             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >50         112             Sodium         ppm         ASTM D5185m         >20         112             Water         %         ASTM D6304         >0.2         0.004             Potassium         ppm         ASTM D6304 </td <td>ADDITIVES</td> <td></td> <td>method</td> <td>limit/base</td> <td>current</td> <td>history1</td> <td>history2</td>	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         0             Calcium         ppm         ASTM D5185m         7             Phosphorus         ppm         ASTM D5185m         557             Zinc         ppm         ASTM D5185m         19             Sulfur         ppm         ASTM D5185m         803             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >50         112             Sodium         ppm         ASTM D5185m         3             Potassium         ppm         ASTM D6304         >0.2         <1             Water         %         ASTM D6304         >2000         45             FLUID DEGRADATION         method         limit/base         current         history1         history2	Boron	ppm	ASTM D5185m		0		
Manganese         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         0             Calcium         ppm         ASTM D5185m         7             Phosphorus         ppm         ASTM D5185m         557             Zinc         ppm         ASTM D5185m         19             Sulfur         ppm         ASTM D5185m         803             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >50         112             Sodium         ppm         ASTM D5185m         3             Potassium         ppm         ASTM D6304         >0.2         <1             Water         %         ASTM D6304         >0.0         45             FLUID DEGRADATION         method         limit/base         current         history1         history2	Barium	ppm	ASTM D5185m		<1		
Magnesium         ppm         ASTM D5185m         0             Calcium         ppm         ASTM D5185m         7             Phosphorus         ppm         ASTM D5185m         557             Zinc         ppm         ASTM D5185m         19             Sulfur         ppm         ASTM D5185m         803             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >50         112             Sodium         ppm         ASTM D5185m         3             Potassium         ppm         ASTM D5185m         >20         <1             Water         %         ASTM D6304         >0.2         0.004             FLUID DEGRADATION         method         limit/base         current         history1         history2	Molybdenum	ppm	ASTM D5185m		0		
Calcium         ppm         ASTM D5185m         7             Phosphorus         ppm         ASTM D5185m         557             Zinc         ppm         ASTM D5185m         19             Sulfur         ppm         ASTM D5185m         803             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >50         112             Sodium         ppm         ASTM D5185m         3             Potassium         ppm         ASTM D5185m         >20         <1	Manganese	ppm	ASTM D5185m		0		
Phosphorus         ppm         ASTM D5185m         557             Zinc         ppm         ASTM D5185m         19             Sulfur         ppm         ASTM D5185m         803             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >50         112             Sodium         ppm         ASTM D5185m         3             Potassium         ppm         ASTM D5185m         >20         <1             Water         %         ASTM D6304         >0.2         0.004             FLUID DEGRADATION         method         limit/base         current         history1         history2	Magnesium	ppm	ASTM D5185m		0		
Zinc         ppm         ASTM D5185m         19             Sulfur         ppm         ASTM D5185m         803             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >50         112             Sodium         ppm         ASTM D5185m         3             Potassium         ppm         ASTM D5185m         >20         <1	Calcium	ppm	ASTM D5185m		7		
Sulfur         ppm         ASTM D5185m         803             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >50         112             Sodium         ppm         ASTM D5185m         3             Potassium         ppm         ASTM D5185m         >20         <1	Phosphorus	ppm	ASTM D5185m		557		
CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >50         ▲ 112             Sodium         ppm         ASTM D5185m         3             Potassium         ppm         ASTM D5185m         >20         <1	Zinc	ppm	ASTM D5185m		19		
Silicon         ppm         ASTM D5185m         >50         ▲ 112             Sodium         ppm         ASTM D5185m         3             Potassium         ppm         ASTM D5185m         >20         <1             Water         %         ASTM D6304         >0.2         0.004             ppm Water         ppm         ASTM D6304         >2000         45             FLUID DEGRADATION         method         limit/base         current         history1         history2							
Sodium         ppm         ASTM D5185m         3             Potassium         ppm         ASTM D5185m         >20         <1	Sulfur	ppm	ASTM D5185m		803		
Potassium         ppm         ASTM D5185m         >20         <1             Water         %         ASTM D6304         >0.2         0.004             opm Water         ppm         ASTM D6304         >2000         45             FLUID DEGRADATION         method         limit/base         current         history1         history2				limit/base			history2
Water         %         ASTM D6304         >0.2         0.004              ppm Water         ppm         ASTM D6304         >2000         45             FLUID DEGRADATION         method         limit/base         current         history1         history2	CONTAMINANTS	3	method		current	history1	history2
ppm Water ppm ASTM D6304 >2000 <b>45</b> FLUID DEGRADATION method limit/base current history1 history2	CONTAMINANTS Silicon	ppm	method ASTM D5185m		current  ▲ 112	history1	history2
FLUID DEGRADATION method limit/base current history1 history2	CONTAMINANTS Silicon Sodium	ppm	method ASTM D5185m ASTM D5185m	>50	current  112 3	history1	history2
	CONTAMINANTS Silicon Sodium Potassium	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	>50 >20	current  ▲ 112 3 <1	history1	history2
Acid Number (AN) mg KOH/g ASTM D8045 0.60	CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304	>50 >20 >0.2	current  ▲ 112 3 <1 0.004	history1	history2  
	CONTAMINANTS Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm %	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304	>50 >20 >0.2 >2000	current  ▲ 112 3 <1 0.004 45	history1	history2  



### **OIL ANALYSIS REPORT**







Certificate 12367

Laboratory Sample No. Lab Number : 06181353 Unique Number : 11032679 Test Package : IND 2

: USP0011827

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

Received : 16 May 2024 **Tested** Diagnosed

: 20 May 2024 : 20 May 2024 - Jonathan Hester

KraftHeinz - Jacksonville PPL - Plant 8367 7500 FORSHEE DR JACKSONVILLE, FL

US 32202 Contact: Paul Jones

paul.jones@kraftheinz.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.  $^st$  - 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)

Report Id: KRAJACHEI [WUSCAR] 06181353 (Generated: 05/20/2024 11:07:11) Rev: 1

Contact/Location: Paul Jones - KRAJACHEI

T:

F: