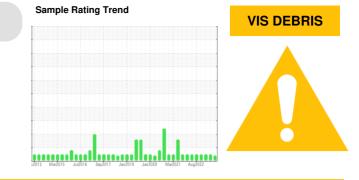


# **PROBLEM SUMMARY**



# FRICK C-2 1104 (S/N 80819)

Refrigeration Compressor Fluid USPI 1009-68 SC (--- LTR)

COMPONENT CONDITION SUMMARY

No relevant graphs to display

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.

PROBLEMATIC TEST RESULTS							
Sample Status				ABNORMAL	NORMAL	NORMAL	
Debris	scalar	*Visual	NONE	🔺 MODER	NONE	NONE	

Customer Id: CARSPRALB Sample No.: USP0003483 Lab Number: 06015792 Test Package: IND 2



To manage this report scan the QR code

*To discuss the diagnosis or test data:* Doug Bogart +1 (800)237-1369 x4016 <u>dougb@wearcheckusa.com</u>

*To change component or sample information:* Customer Service +1 1-800-237-1369 <u>customerservice@wearcheck.com</u>

RECOMMENDED	ACTIONS			
Action	Status	Date	Done By	Description
Change Filter			?	We recommend you service the filters on this component.
Alert			?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

# HISTORICAL DIAGNOSIS



# 06 Jul 2023 Diag: Doug Bogart

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



view report

# 30 Mar 2023 Diag: Doug Bogart



Resa any o AN le

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

# 15 Dec 2022 Diag: Doug Bogart





Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.







# **OIL ANALYSIS REPORT**

# **VIS DEBRIS**

# FRICK C-2 1104 (S/N 80819)

Refrigeration Compressor Fluid USPI 1009-68 SC (--- LTR)

# 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

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.

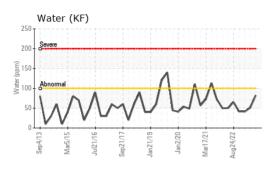
# 

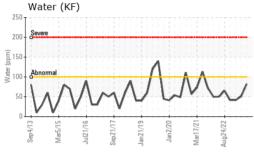
Machine Age     hrs     Client Info     92201     90279     88554       Oil Age     hrs     Client Info     N/A     Not Changed     Not Changed       Sample Status     Client Info     N/A     Not Changed     Not Changed     Not Changed       WEAR METALS     method     Imit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >8     0     0     2       Iron     ppm     ASTM D5185m     >2     0     0     0       Nickel     ppm     ASTM D5185m     >2     0     0     0       Silver     ppm     ASTM D5185m     >2     0     0     0       Lead     ppm     ASTM D5185m     >2     0     0     0       Cadmium     ppm     ASTM D5185m     >4     0     0     0       ADDTIVES     method     Imit/base     current     history1     history2       Barium     ppm     ASTM D5185m     0     0     0	SAMPLE INFORMATION		method	limit/base	current	history1	history2
Machine Age hrs Client Info 92201 90279 88554   Oil Aga hrs Client Info 0 0 0   Sample Status Image Nor Changod Nor Changod Nor Changod Nor Changod   Sample Status Image Image Nor Mal Nor Changod Nor Changod   WEAR METALS method Imit/base current history1 history2   Iron ppm ASTM DS185m >8 0 0 2   Chromium ppm ASTM DS185m >2 0 0 0   Nickel ppm ASTM DS185m >2 0 0 0   Silver ppm ASTM DS185m >2 0 0 0   Cadmium ppm ASTM DS185m >2 0 0 0   Cadmium ppm ASTM DS185m >2 0 0 0   ADDTIVES method Imit/base current history1 history2   Barum ppm ASTM DS185m < 0 0 0   Mandanese ppm ASTM DS185m  0 0 0   Barum ppm ASTM DS185m	Sample Number		Client Info		USP0003483	USP211973	USP249590
Machine Age hrs Client Info 92201 90279 88554   Oil Aga hrs Client Info 0 0 0   Sample Status Image Nor Changod Nor Changod Nor Changod Nor Changod   Sample Status Image Image Nor Mal Nor Changod Nor Changod   WEAR METALS method Imit/base current history1 history2   Iron ppm ASTM DS185m >8 0 0 2   Chromium ppm ASTM DS185m >2 0 0 0   Nickel ppm ASTM DS185m >2 0 0 0   Silver ppm ASTM DS185m >2 0 0 0   Cadmium ppm ASTM DS185m >2 0 0 0   Cadmium ppm ASTM DS185m >2 0 0 0   ADDTIVES method Imit/base current history1 history2   Barum ppm ASTM DS185m < 0 0 0   Mandanese ppm ASTM DS185m  0 0 0   Barum ppm ASTM DS185m	Sample Date		Client Info		02 Nov 2023	06 Jul 2023	30 Mar 2023
Oli Changed Client Info N/A Not Changd NORMAL Not Changd   Sample Status Image current Nistory2   Iron ppm ASTM D5185n >8 0 0 2   Chromium ppm ASTM D5185n >8 0 0 2   Nickel ppm ASTM D5185n >2 0 0 0   Nickel ppm ASTM D5185n 2 0 0 0   Silver ppm ASTM D5185n >2 0 0 0   Aluminum ppm ASTM D5185n >2 0 0 0   Cadmium ppm ASTM D5185n >2 0 0 0   Cadmium ppm ASTM D5185n >2 0 0 0   Cadmium ppm ASTM D5185n >4 0 0 0   Cadmium ppm ASTM D5185n 0 0 0 0   Boron ppm ASTM D5185n 0 0 0 0   Magnesium ppm ASTM D5185n 0 0 0 0   Magnesium ppm ASTM D5185n 0 0 0 0 <th>Machine Age</th> <th>hrs</th> <th>Client Info</th> <th></th> <th>92201</th> <th></th> <th>88554</th>	Machine Age	hrs	Client Info		92201		88554
Oli Changed Client Info N/A Not Changd NORMAL Not Changd   Sample Status Image current Nistory2   Iron ppm ASTM D5185n >8 0 0 2   Chromium ppm ASTM D5185n >8 0 0 2   Nickel ppm ASTM D5185n >2 0 0 0   Nickel ppm ASTM D5185n 2 0 0 0   Silver ppm ASTM D5185n >2 0 0 0   Aluminum ppm ASTM D5185n >2 0 0 0   Cadmium ppm ASTM D5185n >2 0 0 0   Cadmium ppm ASTM D5185n >2 0 0 0   Cadmium ppm ASTM D5185n >4 0 0 0   Cadmium ppm ASTM D5185n 0 0 0 0   Boron ppm ASTM D5185n 0 0 0 0   Magnesium ppm ASTM D5185n 0 0 0 0   Magnesium ppm ASTM D5185n 0 0 0 0 <th>Oil Age</th> <th>hrs</th> <th>Client Info</th> <th></th> <th>0</th> <th>0</th> <th>0</th>	Oil Age	hrs	Client Info		0	0	0
Sample Status     method     Imit/base     current     history1     NORMAL       WEAR METALS     method     limit/base     current     history2     history2       Iron     ppm     ASTM D5185n     >2     0     0     0       Nickel     ppm     ASTM D5185n     >2     0     0     0       Nickel     ppm     ASTM D5185n     >2     0     0     0       Silver     ppm     ASTM D5185n     >2     0     0     0       Lead     ppm     ASTM D5185n     >2     0     0     0       Copper     ppm     ASTM D5185n     >2     0     0     0       Cadmium     ppm     ASTM D5185n     >4     0     0     0       Cadmium     ppm     ASTM D5185n     0     0     0     0       Boron     ppm     ASTM D5185n     0     0     0     0       Barium     ppm     ASTM D5185n     0     0     0     0 </th <th>-</th> <th></th> <th>Client Info</th> <th></th> <th></th> <th>Not Changd</th> <th>Not Chanod</th>	-		Client Info			Not Changd	Not Chanod
WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5165m     >8     0     0     2       Chromium     ppm     ASTM D5165m     >2     0     0     0       Nickel     ppm     ASTM D5165m     >2     0     0     0       Silver     ppm     ASTM D5165m     >2     0     0     0       Auminum     ppm     ASTM D5165m     >2     0     0     0       Lead     ppm     ASTM D5165m     >2     0     0     0       Cadmium     ppm     ASTM D5165m     >4     0     0     0       Cadmium     ppm     ASTM D5165m      0     0     0       Barium     ppm     ASTM D5165m     0     0     0     0       Maganese     ppm     ASTM D5165m     0     0     0     0       Maganese     ppm     ASTM D5165m     0     0     0     0 </th <th>-</th> <th></th> <th></th> <th></th> <th>ABNORMAL</th> <th>•</th> <th></th>	-				ABNORMAL	•	
Iron     ppm     ASTM D5185m     >8     0     0     2       Chromium     ppm     ASTM D5185m     >2     0     0     0       Nickel     ppm     ASTM D5185m     0     0     0     0       Silver     ppm     ASTM D5185m     >2     0     0     0       Aluminum     ppm     ASTM D5185m     >2     0     0     0       Lead     ppm     ASTM D5185m     >2     0     0     0       Copper     ppm     ASTM D5185m     >8     <1     0     0       Tin     ppm     ASTM D5185m     >8     <1     0     0       Cadmium     ppm     ASTM D5185m     S     0     0     0       Boron     ppm     ASTM D5185m     0     0     0     0       Magnessium     ppm     ASTM D5185m     0     0     0     0       Magnessium     ppm     ASTM D5185m     0     0     0     0			method	limit/base	current	historv1	history2
Chromium     ppm     ASTM D5185m     >2     0     0     0       Nickel     ppm     ASTM D5185m     0     0     0     0       Silver     ppm     ASTM D5185m     >2     0     0     0       Silver     ppm     ASTM D5185m     >2     0     0     0       Aduminum     ppm     ASTM D5185m     >2     0     0     0       Lead     ppm     ASTM D5185m     >2     0     0     0       Vanadium     ppm     ASTM D5185m     >4     0     0     0       Vanadium     ppm     ASTM D5185m     <1     0     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0       Boron     ppm     ASTM D5185m     0     0     0     0       Galaium     ppm     ASTM D5185m     0     0     0     0       Calcium     ppm     ASTM D5185m     0     0     0     1		nnm					
Nickel     ppm     ASTM D5185m     0     0     0       Titanium     ppm     ASTM D5185m     >2     0     0     0       Silver     ppm     ASTM D5185m     >2     0     0     0       Aluminum     ppm     ASTM D5185m     >2     0     0     0       Lead     ppm     ASTM D5185m     >2     0     0     0       Copper     ppm     ASTM D5185m     >2     0     0     0       Vanadium     ppm     ASTM D5185m     >4     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       Magnese     ppm     ASTM D5185m     0     0     0     0       Sulfur     ppm     ASTM D5185m     0     0     0     0       Su							
Titanium     ppm     ASTM D5185m     0     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     0     0       Copper     ppm     ASTM D5185m     >2     0     0     0       Tin     ppm     ASTM D5185m     >4     0     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       Magnaese     ppm     ASTM D5185m     0     0     0     0       Aluminum     ppm     ASTM D5185m     0     0     0     0       Calcium     ppm     ASTM D5185m     0     0     0     11				22	-		
Silver     ppm     ASTM D5185m     >2     0     0     0       Aluminum     ppm     ASTM D5185m     >3     0     <1     0       Lead     ppm     ASTM D5185m     >2     0     0     0       Copper     ppm     ASTM D5185m     >8     <1     0     0       Vanadium     ppm     ASTM D5185m     >4     0     0     0       Cadmium     ppm     ASTM D5185m     <1     0     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0     0     0     0       Magnases     ppm     ASTM D5185m     0     0     0     0       Calcium     ppm     ASTM D5185m     0     0     0     11       Contradinm     ppm     ASTM D5185m     50     0     0     11 <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>							
Aluminum     ppm     ASTM D5185m     >3     0     <1				. 0	-		
Lead     ppm     ASTM D5185m     >2     0     0     0       Copper     ppm     ASTM D5185m     >8     <1     0     0       Tin     ppm     ASTM D5185m     >4     0     0     0       Vanadium     ppm     ASTM D5185m      0     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0     0     0     0       Manganese     ppm     ASTM D5185m     0     0     0     0       Calcium     ppm     ASTM D5185m     0     0     0     0       Sulfur     ppm     ASTM D5185m     0     0     0     11       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     50     0     0     0							
Copper     ppm     ASTM D5185m     >8     <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     0       Barium     ppm     ASTM D5185m     0     0     0     0       Maganese     ppm     ASTM D5185m     0     0     0     0       Calcium     ppm     ASTM D5185m     0     0     0     0       Phosphorus     ppm     ASTM D5185m     0     0     0     11       Sulfur     ppm     ASTM D5185m     50     0     0     11       CONTAMINANTS     method     limit/base     current     history1     history2       Sulfur     ppm     ASTM D5185m     >15     <1     1     1     0					-		
Vanadium     ppm     ASTM D5185m     <							
CadmiumppmASTM D5185m000ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m000BariumppmASTM D5185m000MolybdenumppmASTM D5185m000ManganeseppmASTM D5185m000ManganeseppmASTM D5185m000CalciumppmASTM D5185m000PhosphorusppmASTM D5185m000ZincppmASTM D5185m000SulfurppmASTM D5185m000SulfurppmASTM D5185m500011CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>15<1<11SodiumppmASTM D5185m>20000PotassiumppmASTM D5185m>20000Water%ASTM D56304>0.010.0080.0050.004ppm WaterppmASTM D7647>2500747Particles >4µmASTM D7647>2077Particles >4µmASTM D7647>2000Particles >21µmASTM D7647>2000Particles >21µmASTM D764				>4	-		
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       Magnese     ppm     ASTM D5185m     0     0     0       Magnesium     ppm     ASTM D5185m     0     0     0       Phosphorus     ppm     ASTM D5185m     0     0     0       Sulfur     ppm     ASTM D5185m     0     0     0       Sulfur     ppm     ASTM D5185m     50     0     0     11       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >15     <1     <1     1       Sodium     ppm     ASTM D5185m     >20     0     0     0       Potassium     ppm     ASTM D6304     >0.01							
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     0     0     0       Phosphorus     ppm     ASTM D5185m     0     0     0       Sulfur     ppm     ASTM D5185m     50     0     0     11       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >15     <1     <1     1       Sodium     ppm     ASTM D5185m     >20     0     0     0       Water     %     ASTM D6304     >0.01     0.008     0.005     0.004       pm Water     pm     ASTM D7647     >1000 <th>Cadmium</th> <th>ppm</th> <th>ASTM D5185m</th> <th></th> <th>0</th> <th>0</th> <th>0</th>	Cadmium	ppm	ASTM D5185m		0	0	0
Barium     ppm     ASTM D5185m     0     0     0       Molybdenum     ppm     ASTM D5185m     0     <11     <1       Magnesee     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       Sulfur     ppm     ASTM D5185m     0     0     <11       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >15     <1     <1     1       Sodium     ppm     ASTM D5185m     >20     0     0     0       Potassium     ppm     ASTM D5185m     >20     0     0.005     0.004       ppm Water     %     ASTM D6304     >0.01     0.008     0.005     0.004       particles >4µm     ASTM D7647     >10	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum     ppm     ASTM D5185m     0     0     0       Manganese     ppm     ASTM D5185m     0     <1     <1       Magnesium     ppm     ASTM D5185m     0     0     0       Calcium     ppm     ASTM D5185m     0     0     0     0       Phosphorus     ppm     ASTM D5185m     0     0     0     <1       Sulfur     ppm     ASTM D5185m     50     0     0     <11       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >15     <1     <1     1       Sodium     ppm     ASTM D5185m     >20     0     0     0       Potassium     ppm     ASTM D6185m     >20     0     0.005     0.004       ppm Water     %     ASTM D6304     >0.01     0.008     0.005     0.004       particles >4µm     ASTM D7647     >10000      784     1073	Boron	ppm	ASTM D5185m		0	0	0
Manganese     ppm     ASTM D5185m     0     <1	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     0     0     0       Zinc     ppm     ASTM D5185m     0     0     0     11       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >15     <1     <1     1       Sodium     ppm     ASTM D5185m     >15     <1     <1     1       Sodium     ppm     ASTM D5185m     >20     0     0     0       Potassium     ppm     ASTM D5185m     >20     0     0     0       Water     %     ASTM D6304     >0.01     0.008     0.005     0.004       ppm Water     ppm     ASTM D7647     >10000      784     1073       Particles >4µm     ASTM D7647     >2500      745     200	Molybdenum	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     <1       Sulfur     ppm     ASTM D5185m     50     0     0     11       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >15     <1     <1     1       Sodium     ppm     ASTM D5185m     >15     <1     0     0       Potassium     ppm     ASTM D5185m     >20     0     0     0       Water     %     ASTM D5185m     >20     0     0.005     0.004       ppm Water     ppm     ASTM D504     >0.01     82     50.8     41.3       FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >10000      784     1073	Manganese	ppm	ASTM D5185m		0	<1	<1
Phosphorus     ppm     ASTM D5185m     0     0     0       Zinc     ppm     ASTM D5185m     50     0     0     11       Sulfur     ppm     ASTM D5185m     50     0     0     11       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >15     <1	Magnesium	ppm	ASTM D5185m		0	0	0
Zinc     ppm     ASTM D5185m     0     0     <1	Calcium	ppm	ASTM D5185m		0	0	0
Sulfur     ppm     ASTM D5185m     50     0     0     11       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >15     <1	Phosphorus	ppm	ASTM D5185m		0	0	0
CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >15     <1     <1     1       Sodium     ppm     ASTM D5185m     >15     <1     0     0       Potassium     ppm     ASTM D5185m     >20     0     0     0       Water     %     ASTM D6304     >0.01     0.008     0.005     0.004       ppm Water     ppm     ASTM D6304     >100     82     50.8     41.3       FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >10000      784     1073       Particles >6µm     ASTM D7647     >2500      245     200       Particles >14µm     ASTM D7647     >20      7     7       Particles >38µm     ASTM D7647     >20      0     0       Particles >71µm     ASTM D7647     20      0     0	Zinc	ppm	ASTM D5185m		0	0	<1
Silicon     ppm     ASTM D5185m     >15     <1	Sulfur	ppm	ASTM D5185m	50	0	0	11
Sodium     ppm     ASTM D5185m     <1	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium     ppm     ASTM D5185m     >20     0     0     0       Water     %     ASTM D6304     >0.01     0.008     0.005     0.004       ppm Water     ppm     ASTM D6304     >100     82     50.8     41.3       FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >10000      784     1073       Particles >6µm     ASTM D7647     >2500      245     200       Particles >14µm     ASTM D7647     >320      7     7       Particles >21µm     ASTM D7647     >20      0     0       Particles >38µm     ASTM D7647     >20      0     0       Particles >71µm     ASTM D7647     >4      0     0       Oil Cleanliness     ISO 4406 (c)     >20/18/15      17/15/10     17/15/10       FLUID DEGRADATION     method     limit/base     current     history1     history2 <th>Silicon</th> <th>ppm</th> <th>ASTM D5185m</th> <th>&gt;15</th> <th>&lt;1</th> <th>&lt;1</th> <th>1</th>	Silicon	ppm	ASTM D5185m	>15	<1	<1	1
Water     %     ASTM D6304     >0.01     0.008     0.005     0.004       ppm Water     ppm     ASTM D6304     >100     82     50.8     41.3       FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >10000      784     1073       Particles >6µm     ASTM D7647     >2500      245     200       Particles >14µm     ASTM D7647     >320      7     7       Particles >21µm     ASTM D7647     >80      2     0       Particles >38µm     ASTM D7647     >20      0     0       Particles >71µm     ASTM D7647     >4      0     0       Oil Cleanliness     ISO 4406 (c)     >20/18/15      17/15/10     17/15/10       FLUID DEGRADATION     method     limit/base     current     history1     history2	Sodium	ppm	ASTM D5185m		<1	0	0
ppm Water     ppm     ASTM D6304     >100     82     50.8     41.3       FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >10000      784     1073       Particles >6µm     ASTM D7647     >2500      245     200       Particles >14µm     ASTM D7647     >320      7     7       Particles >21µm     ASTM D7647     >20      0     0       Particles >38µm     ASTM D7647     >20      0     0       Particles >71µm     ASTM D7647     >4      0     0       Oil Cleanliness     ISO 4406 (c)     >20/18/15      17/15/10     17/15/10       FLUID DEGRADATION     method     limit/base     current     history1     history2	Potassium	ppm	ASTM D5185m	>20	0	0	0
FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >10000      784     1073       Particles >6µm     ASTM D7647     >2500      245     200       Particles >14µm     ASTM D7647     >320      7     7       Particles >14µm     ASTM D7647     >320      7     7       Particles >21µm     ASTM D7647     >80      2     0       Particles >38µm     ASTM D7647     >20      0     0       Particles >38µm     ASTM D7647     >4      0     0       Oil Cleanliness     ISO 4406 (c)     >20/18/15      17/15/10     17/15/10       FLUID DEGRADATION     method     limit/base     current     history1     history2	Water	%	ASTM D6304	>0.01	0.008	0.005	0.004
Particles >4μm   ASTM D7647   >10000    784   1073     Particles >6μm   ASTM D7647   >2500    245   200     Particles >14μm   ASTM D7647   >320    7   7     Particles >21μm   ASTM D7647   >80    2   0     Particles >21μm   ASTM D7647   >80    2   0     Particles >38μm   ASTM D7647   >20    0   0     Particles >71μm   ASTM D7647   >4    0   0     Oli Cleanliness   ISO 4406 (c)   >20/18/15    17/15/10   17/15/10     FLUID DEGRADATION   method   limit/base   current   history1   history2	ppm Water	ppm	ASTM D6304	>100	82	50.8	41.3
Particles >6µm     ASTM D7647     >2500      245     200       Particles >14µm     ASTM D7647     >320      7     7       Particles >21µm     ASTM D7647     >80      2     0       Particles >38µm     ASTM D7647     >20      0     0       Particles >38µm     ASTM D7647     >20      0     0       Particles >71µm     ASTM D7647     >4      0     0       Oil Cleanliness     ISO 4406 (c)     >20/18/15      17/15/10     17/15/10       FLUID DEGRADATION     method     limit/base     current     history1     history2	FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >14µm     ASTM D7647     >320      7     7       Particles >21µm     ASTM D7647     >80      2     0       Particles >38µm     ASTM D7647     >20      0     0       Particles >38µm     ASTM D7647     >20      0     0       Particles >71µm     ASTM D7647     >4      0     0       Oil Cleanliness     ISO 4406 (c)     >20/18/15      17/15/10     17/15/10       FLUID DEGRADATION     method     limit/base     current     history1     history2	Particles >4µm					784	1073
Particles >21µm     ASTM D7647     >80      2     0       Particles >38µm     ASTM D7647     >20      0     0       Particles >38µm     ASTM D7647     >20      0     0       Particles >71µm     ASTM D7647     >4      0     0       Oil Cleanliness     ISO 4406 (c)     >20/18/15      17/15/10     17/15/10       FLUID DEGRADATION     method     limit/base     current     history1     history2	Particles >6µm		ASTM D7647	>2500		245	200
Particles >38μm     ASTM D7647     >20      0     0       Particles >71μm     ASTM D7647     >4      0     0       Oil Cleanliness     ISO 4406 (c)     >20/18/15      17/15/10     17/15/10       FLUID DEGRADATION     method     limit/base     current     history1     history2	Particles >14µm		ASTM D7647	>320		7	7
Particles >71μm     ASTM D7647     >4      0     0       Oil Cleanliness     ISO 4406 (c)     >20/18/15      17/15/10     17/15/10       FLUID DEGRADATION     method     limit/base     current     history1     history2	Particles >21µm		ASTM D7647	>80		2	0
Oil Cleanliness   ISO 4406 (c) >20/18/15    17/15/10   17/15/10     FLUID DEGRADATION   method   limit/base   current   history1   history2	Particles >38µm		ASTM D7647	>20		0	0
FLUID DEGRADATION method limit/base current history1 history2	Particles >71µm		ASTM D7647	>4		0	0
	Oil Cleanliness		ISO 4406 (c)	>20/18/15		17/15/10	17/15/10
Acid Number (AN) mg KOH/g ASTM D974 0.005 0.01 0.013 0.012	FLUID DEGRADA		method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D974	0.005	0.01	0.013	0.012

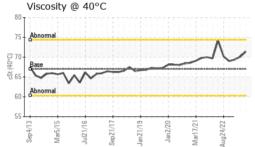
Contact/Location: SERVICE MANAGER ? - CARSPRALB



# **OIL ANALYSIS REPORT**



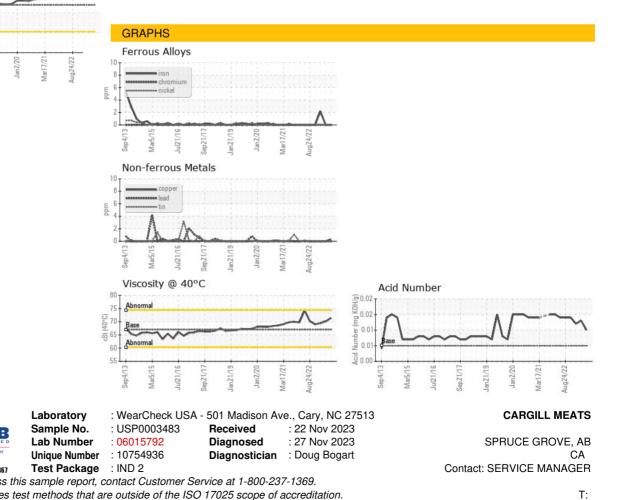




VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	A MODER	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.01	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	67	71.4	70.1	69.4
SAMPLE IMAGES	S	method	limit/base	current	history1	history2
Color				2 JE11		



Bottom



Certificate L2367 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: SERVICE MANAGER ? - CARSPRALB

F: