

# **OIL ANALYSIS REPORT**

Sample Rating Trend

**NORMAL** 

Machine Id

# 30-2 GEA ER1 (S/N 07446102)

Refrigeration Compressor

PETRO CANADA REFLO 68A AMMONIA OI

### DIAGNOSIS

### 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**

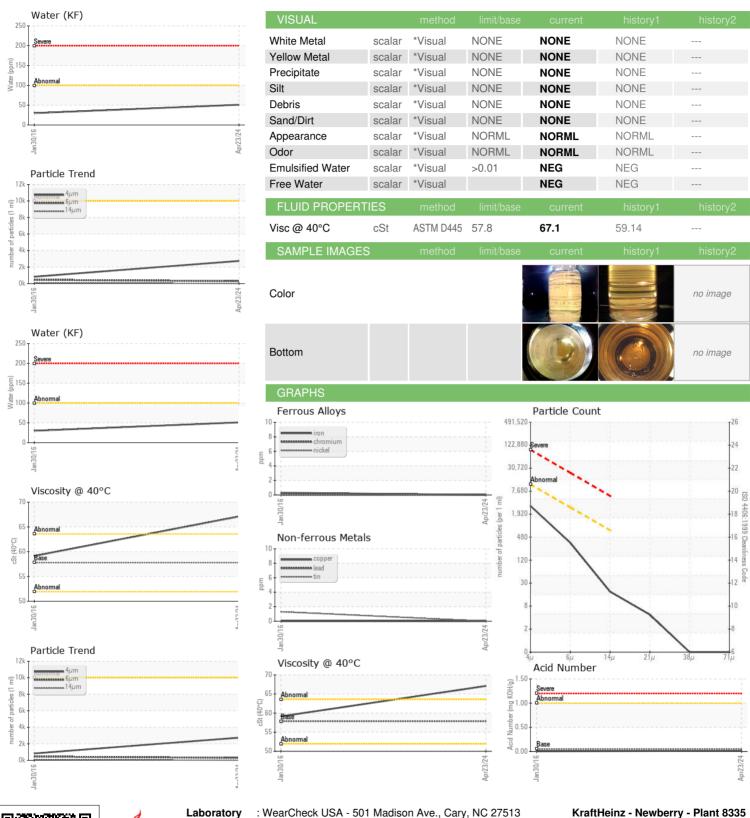
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Iron	L ( GAL)			Jan 2016	Apr2024		
Sample Number   Client Info   USP0006667   USP154762	SAMBLE INFORM	MATION	mothod	limit/bass	ourrent	hiotomy1	hioton/2
Client Info   23 Apr 2024   30 Jan 2016				iiiiii/base			HIStory2
Machine Age   hrs   Client Info   0   0   0   0   0   0							
Dil Age	•				-		
Client Info							
NORMAL   N	-						
WEAR METALS         method         limit/base         current         history1         history1           oron         ppm         ASTM D5185m         >8         0         <1	-	С	Client Info				
Description	Sample Status				NORMAL	NORMAL	
Chromium   ppm   ASTM D5185m   >2   0   0   0	WEAR METALS		method	limit/base	current	history1	history2
Nickel	ron	ppm A	STM D5185m	>8	0	<1	
Description	Chromium	ppm A	STM D5185m	>2	0	0	
Silver	Nickel	ppm A	STM D5185m		0	0	
Aluminum	Titanium	ppm A	STM D5185m		0	0	
December   December	Silver	ppm A	STM D5185m	>2	0	0	
Description	Aluminum	ppm A	STM D5185m	>3	0	0	
Description	ead	ppm A	STM D5185m	>2	0	0	
Antimony	Copper		STM D5185m	>8	0	0	
Antimony			STM D5185m	>4	0	1	
Vanadium         ppm         ASTM D5185m         0         0            Cadmium         ppm         ASTM D5185m         0         0            ADDITIVES         method         limit/base         current         history1         history3           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         <1            Phosphorus         ppm         ASTM D5185m         0         0         4            Phosphorus         ppm         ASTM D5185m         0         0         4	Antimony		STM D5185m			0	
Cadmium         ppm         ASTM D5185m         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            Magnesium         ppm         ASTM D5185m         0         0             Calcium         ppm         ASTM D5185m         0         0         <1	•				0		
Soron   ppm   ASTM D5185m   0   0   0   0   0   0   0   0		I- I-					
Sarium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185m         0         0            Manganese         ppm         ASTM D5185m         0         0            Magnesium         ppm         ASTM D5185m         0         0         <1	Boron	ppm A	STM D5185m	0	0	0	
Manganese         ppm         ASTM D5185m         0         0            Magnesium         ppm         ASTM D5185m         0         0         <1	Barium	ppm A	STM D5185m	0	0	0	
Magnesium         ppm         ASTM D5185m         0         0         <1            Calcium         ppm         ASTM D5185m         0         0         <1	Nolybdenum	ppm A	STM D5185m	0	0	0	
Calcium         ppm         ASTM D5185m         0         0         <1            Phosphorus         ppm         ASTM D5185m         0         0         4            Zinc         ppm         ASTM D5185m         0         0         0            Sulfur         ppm         ASTM D5185m         0         0         13            CONTAMINANTS         method         limit/base         current         history1         history1         history1           Soliicon         ppm         ASTM D5185m         >15         0         <1	Manganese	ppm A	STM D5185m		0	0	
Phosphorus         ppm         ASTM D5185m         0         0         4            Zinc         ppm         ASTM D5185m         0         0         0            Sulfur         ppm         ASTM D5185m         0         0         13            CONTAMINANTS         method         limit/base         current         history1         history1         history1           Silicon         ppm         ASTM D5185m         >15         0         <1	//agnesium	ppm A	STM D5185m	0	0	<1	
Phosphorus         ppm         ASTM D5185m         0         0         4            Zinc         ppm         ASTM D5185m         0         0         0            Sulfur         ppm         ASTM D5185m         0         0         13            CONTAMINANTS         method         limit/base         current         history1         history1           Silicon         ppm         ASTM D5185m         >15         0         <1            Sodium         ppm         ASTM D5185m         <1         0            Potassium         ppm         ASTM D5185m         >20         0         0            Water         %         ASTM D6304         >0.01         0.005         0.003            Opm Water         ppm         ASTM D6304         >100         51         30			STM D5185m	0	0	<1	
Zinc         ppm         ASTM D5185m         0         0         0            Sulfur         ppm         ASTM D5185m         0         0         13            CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >15         0         <1            Sodium         ppm         ASTM D5185m         <1         0            Potassium         ppm         ASTM D5185m         >20         0         0            Water         %         ASTM D6304         >0.01         0.005         0.003            opm Water         ppm         ASTM D6304         >100         51         30	Phosphorus		STM D5185m	0	0	4	
Sulfur         ppm         ASTM D5185m         0         0         13            CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >15         0         <1		11		0		0	
Silicon         ppm         ASTM D5185m         >15         0         <1            Sodium         ppm         ASTM D5185m         <1         0            Potassium         ppm         ASTM D5185m         >20         0         0            Water         %         ASTM D6304         >0.01         0.005         0.003            opm Water         ppm         ASTM D6304         >100         51         30	Sulfur				-		
Sodium         ppm         ASTM D5185m         <1         0            Potassium         ppm         ASTM D5185m         >20         0         0            Water         %         ASTM D6304         >0.01         0.005         0.003            opm Water         ppm         ASTM D6304         >100         51         30	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium         ppm         ASTM D5185m         >20         0         0            Nater         %         ASTM D6304         >0.01         0.005         0.003            opm Water         ppm         ASTM D6304         >100         51         30	Silicon	ppm A	STM D5185m	>15	0	<1	
Potassium         ppm         ASTM D5185m         >20         0         0            Vater         %         ASTM D6304         >0.01         0.005         0.003            ppm Water         ppm         ASTM D6304         >100         51         30	Sodium	ppm A	STM D5185m		<1	0	
Vater         %         ASTM D6304         >0.01         0.005         0.003            opm Water         ppm         ASTM D6304         >100         51         30		ppm A	STM D5185m	>20	0	0	
ppm Water ppm ASTM D6304 >100 <b>51</b> 30	Vater		STM D6304	>0.01	0.005	0.003	
FLUID CLEANLINESS method limit/base current history1 history	opm Water	ppm A	STM D6304				
	FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm ASTM D7647 >10000 <b>2741</b> 833	Particles >4µm	A	STM D7647	>10000	2741	833	
Particles >6µm ASTM D7647 >2500 <b>302</b> 453	Particles >6µm	А	STM D7647	>2500	302	453	
Particles >14μm ASTM D7647 >640 <b>16</b> 77	Particles >14µm	А	STM D7647	>640	16	77	
Particles >21µm	•	А	STM D7647	>160	4	26	
Particles >38µm ASTM D7647 >40 <b>0</b> 4	•						
Particles >71µm							
Dil Cleanliness ISO 4406 (c) >20/18/16 <b>19/15/11</b> 17/16/13							
FLUID DEGRADATION method limit/base current history1 history	FLUID DEGRADA	TION _	method	limit/base	current	history1	history2

0.015



## **OIL ANALYSIS REPORT**





Certificate 12367

Laboratory Sample No. Lab Number : 06161510

: USP0006667 Unique Number : 10996933 Test Package : IND 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 26 Apr 2024 **Tested** : 02 May 2024

Diagnosed : 02 May 2024 - Jonathan Hester

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)

T: F:

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