

PROBLEM SUMMARY

Sample Rating Trend

DEGRADATION



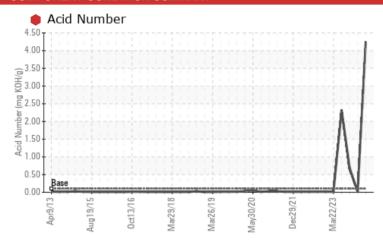
VILTER B37157 - HC5

Component

Compressor

PETRO CANADA REFLO XL SYNTHETIC BLEND (110 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS							
Sample Status				SEVERE	ATTENTION	NORMAL	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.1	4.25	0.014	0.69	

Customer Id: ROCROCUS Sample No.: WC0820501 Lab Number: 05922156 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 jhester@wearcheckusa.com

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

RECOMMENDED ACTIONS								
Action	Status	Date	Done By	Description				
Change Fluid	MISSED	Aug 14 2023	?	We recommend that you drain the oil from the component if this has not already been done.				
Resample	MISSED	Aug 14 2023	?	We recommend an early resample to monitor this condition.				

HISTORICAL DIAGNOSIS

22 Jun 2023 Diag: Don Baldridge

ISO



No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 6 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



30 May 2023 Diag: Jonathan Hester

NORMAL



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.



06 May 2023 Diag: Jonathan Hester

DEGRADATION



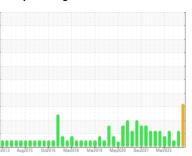
We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is above the recommended limit.





OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



VILTER B37157 - HC5

Component

Compressor

PETRO CANADA REFLO XL SYNTHETIC BLEND (110 GAL)

DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

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 oil viscosity is higher than normal. The AN level is above the recommended limit.

BLEND (110 GAL	.)	r2013 Aug20	-2013 Aug2015 Oc2016 Muz2018 Muz2020 Oc2021 Muz2020 Oc2021 Muz2023							
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2				
Sample Number		Client Info		WC0820501	WC0814147	WC0799739				
Sample Date		Client Info		29 Jul 2023	22 Jun 2023	30 May 2023				
Machine Age	hrs	Client Info		49115	79223	0				
Oil Age	hrs	Client Info		0	100	0				
Oil Changed		Client Info		N/A	Not Changd	N/A				
Sample Status				SEVERE	ATTENTION	NORMAL				
WEAR METALS		method	limit/base	current	history1	history2				
Iron	ppm	ASTM D5185m	>50	0	11	<1				
Chromium	ppm	ASTM D5185m	>5	0	0	0				
Nickel	ppm	ASTM D5185m		0	0	0				
Titanium	ppm	ASTM D5185m		0	0	0				
Silver	ppm	ASTM D5185m		0	0	0				
Aluminum	ppm	ASTM D5185m	>15	1	<1	2				
Lead	ppm	ASTM D5185m	>65	0	0	0				
Copper	ppm	ASTM D5185m	>65	1	<1	0				
Tin	ppm	ASTM D5185m	>10	0	0	0				
Vanadium	ppm	ASTM D5185m		<1	<1	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	<1	0				
Molybdenum	ppm	ASTM D5185m		0	0	0				
Manganese	ppm	ASTM D5185m		<1	0	0				
Magnesium	ppm	ASTM D5185m		0	2	0				
Calcium	ppm	ASTM D5185m		0	0	0				
Phosphorus	ppm	ASTM D5185m		113	2	238				
Zinc	ppm	ASTM D5185m		0	1	0				
Sulfur	ppm	ASTM D5185m		284	1490	470				
CONTAMINANTS	6	method	limit/base	current	history1	history2				
Silicon	ppm	ASTM D5185m	>35	2	<1	8				
Sodium	ppm	ASTM D5185m		2	<1	0				
Potassium	ppm	ASTM D5185m	>20	0	<1	<1				
FLUID CLEANLIN	NESS	method	limit/base	current	history1	history2				
Particles >4µm		ASTM D7647	>10000	2905	▲ 17294	1910				
Particles >6µm		ASTM D7647	>2500	792	▲ 4277	645				
Particles >14µm		ASTM D7647	>320	45	118	74				
Particles >21µm		ASTM D7647	>80	7	15	21				
Particles >38µm		ASTM D7647	>20	0	0	1				
Particles >71µm		ASTM D7647	>4	0	0	0				
Oil Cleanliness		ISO 4406 (c)	>20/18/15	19/17/13	<u>^</u> 21/19/14	18/17/13				
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2				

Acid Number (AN) mg KOH/g ASTM D8045 0.1

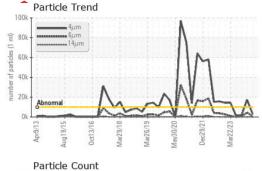
0.014

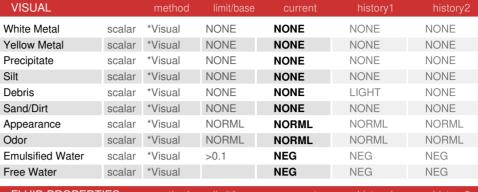
4.25

0.69



OIL ANALYSIS REPORT





122,880 Severe					-24
30,720 Abnormal					-23
7,680					-20
1,920					-18
480 -	1				-16
120-					-14
30+					-12
8 -					-10
2+					-8
0. 4µ	C	140	21	-	716
4μ	6μ	14μ	21μ	38μ	71µ

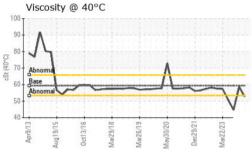
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	59.3	52.8	58.6	44.65

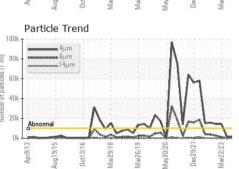


Color

SAMPLE IMAGES







GRAPHS								
Ferrous Allo	oys				Part	ticle Count	·	т26
iron			1					
40 - chromi	ium	~//	11		122,880 Severe			+24
20	1	V 1			30,720 - Abnom	nal		-22
0 20		6 9		$\Delta \Delta$	7 680 1			-20 8
Apr9/13	Oct13/16 Mar29/18	Mar26/19	Dec29/21	Mar22/23	1,920			-18
Non-ferrou	-	10000		2	1.920 480	1:		-20 3 -18 8 -16 4 -14 4 -12
10 copper					120+			-14
6 - ***********************************	Janain.				30	-		12 8
2					8		/	10
					. **		1	710
Apr9/13 -	Uctl 3/16	Mar26/19	Dec29/21	Mar22/23	2+			18
Viscosity @	_	≥ §		Σ	04/1	6μ 14μ	21μ	38μ 71μ
100 T	40 C			naganas	● Acio	l Number		
80 .					¥ 4.00			
Abnormal Base					€3.00			
60 Base Abnorma			-	V	Pase (%)			\mathcal{M}
40 12 2	2 8	19	717	-23+	0.00 Pase	16	6 6	23 721
Apr9/13 .	ar29/18	ar26/19	ec29/21	ar22/23	.T/6.u4	g19/15 ct13/16	ar26/19	ec29/21





Certificate L2367

Laboratory Sample No. Lab Number

Unique Number

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0820501 : 05922156 : 10602103

Received Diagnosed

: 11 Aug 2023 : 14 Aug 2023 : Jonathan Hester

Diagnostician Test Package : IND 2 (Additional Tests: PrtCount)

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) Rochelle Foods - PRE

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