

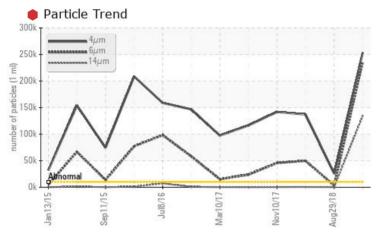
# **PROBLEM SUMMARY**

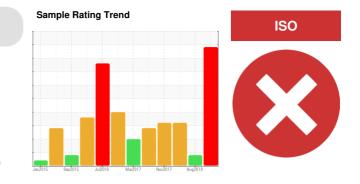
# CHIQUITA TROPICAL INGREDIENTS SA (MUNDIMAR) Machine Id VILTER COMPRESSOR VILTER 451

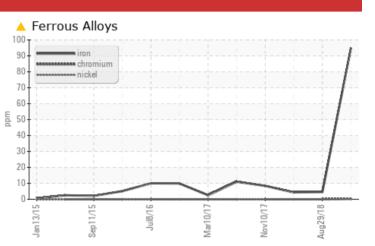
Compressor

## PETRO CANADA REFLO SYNTHETIC 68A LOW TEMP FLUID (65 GAL)

### COMPONENT CONDITION SUMMARY







### RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

PROBLEMATIC TEST RESULTS										
Sample Status				SEVERE	ABNORMAL	SEVERE				
Iron	ppm	ASTM D5185(m)	>50	<mark>/</mark> 95	5	4				
Particles >4µm		ASTM D7647	>10000	<b>e</b> 253422	🔺 25565	<b>1</b> 37174				
Particles >6µm		ASTM D7647	>2500	<b>e</b> 235444	▲ 3247	49740				
Particles >14µm		ASTM D7647	>320	🛑 134330	27	607				
Particles >21µm		ASTM D7647	>80	62336	4	78				
Particles >38µm		ASTM D7647	>20	<u> </u>	0	0				
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>e</b> 25/25/24	A 22/19/12	• 24/23/16				

Customer Id: INDALA Sample No.: PC0077178 Lab Number: 02562231 Test Package: IND 2



To manage this report scan the QR code

*To discuss the diagnosis or test data:* Kevin Marson +1 (289)291-4644 x4644 Kevin.Marson@wearcheck.com

*To change component or sample information:* Gloria Gonzalez +1 (289)291-4643 x4643 <u>gloria.gonzalez@wearcheck.com</u>

RECOMMENDE	ECOMMENDED ACTIONS								
Action	Status	Date	Done By	Description					
Change Filter			?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.					
Resample			?	Resample in 30-45 days to monitor this situation.					
Check Breathers			?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.					
Check Dirt Access			?	We advise that you check all areas where contaminants can enter the system.					
Filter Fluid			?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.					

### HISTORICAL DIAGNOSIS



ISO



IS0

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. All component wear rates are normal. Particles >4 $\mu$ m are abnormally high. Particles >6 $\mu$ m are notably high. The water content is negligible. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



### 03 May 2018 Diag: Bill Quesnel

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation.All component wear rates are normal. Particles  $>6\mu$ m are severely high. Particles  $>14\mu$ m are notably high. The water content is negligible. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



view report

#### 10 Nov 2017 Diag: Wes Davis



Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation.All component wear rates are normal. Particles >6µm are severely high. Particles >14µm are notably high. The water content is negligible. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.





# **OIL ANALYSIS REPORT**

# CHIQUITA TROPICAL INGREDIENTS SA (MUNDIMAR) Machine Id VILTER COMPRESSOR VILTER 451

Compressor

## PETRO CANADA REFLO SYNTHETIC 68A LOW TEMP FLUID (65 GAL)

### DIAGNOSIS

### Recommendation

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

### 📥 Wear

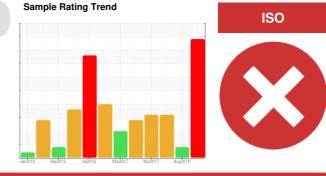
Iron ppm levels are abnormal.

### Contamination

There is a high amount of particulates (2 to 100 microns in size) present in the oil.

#### **Fluid Condition**

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PC0077178	PC410521	PC409188
Sample Date		Client Info		25 May 2023	29 Aug 2018	03 May 2018
Machine Age	yrs	Client Info		1	43791	41455
Oil Age	yrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	Not Changd
Sample Status				SEVERE	ABNORMAL	SEVERE
WEAR METAL	S	method	limit/base	current	history1	history2
PQ		ASTM D8184*		12		
Iron	ppm	ASTM D5185(m)	>50	<u> </u>	5	4
Chromium	ppm	ASTM D5185(m)	>10	<1	0	0
Nickel	ppm	ASTM D5185(m)		<1	0	0
Titanium	ppm	ASTM D5185(m)		<1	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	1	0	0
Lead	ppm	ASTM D5185(m)		0	0	<1
Copper	ppm	ASTM D5185(m)	>50	2	0	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Antimony	ppm	ASTM D5185(m)		0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	<1	0	0
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)		<1	0	0
Magnesium	ppm	ASTM D5185(m)	0	<1	<1	0
Calcium	ppm	ASTM D5185(m)	0	1	<1	0
Phosphorus	ppm	ASTM D5185(m)	0	<1	<1	<1
Zinc	ppm	ASTM D5185(m)	0	52	<1	1
Sulfur	ppm	ASTM D5185(m)	0	7	<1	4
Lithium	ppm	ASTM D5185(m)		<1	0	<1
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	12	<1	<1
Sodium	ppm	ASTM D5185(m)		3	0	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1
Water	%	ASTM D6304*	>0.1	0.013	0.000	0.001
ppm Water	ppm	ASTM D6304*	>1000	135.4	6.1	11.7
FLUID CLEANI	INESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	253422	▲ 25565	137174
Particles Sum		ASTM D7647	>2500	235444	A 3247	49740
Particles >6µm		ASTM D7647		235444	▲ 3247 27	49740
Particles >14µm		ASTM D7647	>320	134330	27	607
Particles >14µm Particles >21µm		ASTM D7647 ASTM D7647	>320 >80	<ul><li>134330</li><li>62336</li></ul>	27 4	▲ 607 78
Particles >14µm		ASTM D7647	>320 >80 >20	134330	27	607

Contact/Location: Erick Bogantes - INDALA



491,520 122 880 ere

Ê 30,720 7,680

300 Ê<sup>250)</sup> 150k 100 50 Ok

0.35 (B/H0X 0.30 0.25 0.20 0.15

number of particles (per 1

# **OIL ANALYSIS REPORT**

91,520	Particle Count				T26	FLUID DEGRAD	DATION	method	limit/base	current	history1	history2
22,880	Severe		~		-24	Acid Number (AN)	mg KOH/g	ASTM D974*	0.1	0.36	0.031	0.043
30,720 7,680	Abnormal				-22 ISO 4406:1999 Cleanliness Code	VISUAL		method	limit/base	current	history1	history2
1,920 480				\	18 1999	White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
120					14 Clean	Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
30				1	-12 ness	Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
8					10 8	Silt	scalar	Visual*	NONE	NONE	NONE	NONE
2						Debris	scalar	Visual*	NONE	NONE	VLITE	VLITE
8		14µ	21μ	38µ	71µ	Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
300k	Particle Trend					Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
= 250k	4μm 6μm					Odor	scalar	Visual*	NORML	NORML	AMMON	AMMON
200k	14μm					Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
150k		-				Free Water	scalar	Visual*		NEG	NEG	NEG
5 100k	V	~	-			FLUID PROPE	RTIES	method	limit/base	current	history1	history2
50k	Almormal		-	and the second	V	Visc @ 40°C	cSt	ASTM D7279(m)	61.8	56.9	56.7	57.5
Ok		9	17	11	8	Visc @ 100°C	cSt	ASTM D7279(m)	8.89	8.4	8.3	8.4
	Jan 13/15 Sep 11/15	Jul8/16	Mar10/17	Nov10/17	Aug29/18	Viscosity Index (VI)	Scale		119	119	117	117
	Ferrous Alloys					SAMPLE IMAG	ES	method	limit/base	current	history1	history2
100	T				1							
80	nickel				1	Color						
60 Ed 40												
20 0		16				Bottom						
	Jan 13/15 Sep 11/15	Jul8/16	Mar1 0/17	Nov10/17	Aug29/18						and the second se	
0.40	Acid Number											
0.35					1							
9.25 Bull					1							
0.20 0.15												
2 0.10	Base											
0.05		$\sim$		-								
0.00	Jan13/15	Jul8/16	0/17	0/17	9/18							
	Jan 13/15 Sep 11/15	Jul	Mar10/17	Nov10/17	Aug29/18							
	Water											
1.20	Severe											
0.96	- 9											
nater Nater												
8 ≥°0.48	+											
0.24												
	Abnormal											
0.00	Jan 13/15	Jul8/16 .	Mar10/17 .	Nov10/17	Aug29/18							
	Sep	7	Ma	No	Aug							

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 INDUSTRIAS del PETROLEO CANAD. SA Laboratory CALA Sample No. : PC0077178 Received : 06 Jun 2023 Contiguo FANAL, frente a la Autopista Bernardo Soto Lab Number : 02562231 Diagnosed Grecia, A : 08 Jun 2023 ISO 17025:2017 Accredited Laboratory Unique Number : 5591272 Diagnostician : Kevin Marson CR Test Package : IND 2 (Additional Tests: KF, KV100, PQ, VI) Contact: Erick Bogantes To discuss this sample report, contact Customer Service at 1-800-268-2131. cotizaciones@lubricantescanada.com Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: 1(115)062-1598 Validity of results and interpretation are based on the sample and information as supplied. F: 1(115)062-2870