

## **PROBLEM SUMMARY**

#### Area **PLANTA NARANJO CIA COTO 54** Machine Id **TRIVELLI** Component

Turbine

## PETRO CANADA SUPER TURBOFLO 46 (1845 LTR)

## COMPONENT CONDITION SUMMARY



### RECOMMENDATION

We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. Please note that this is a corrected copy for data entry updates.

## **PROBLEMATIC TEST RESULTS**

Sample Status			ATTENTION	 
Particles >4µm	ASTM D7647	>2500	<u> </u>	 
Particles >6µm	ASTM D7647	>640	<b>A</b> 825	 
Oil Cleanliness	ISO 4406 (c)	>18/16/13	<u> </u>	 

Customer Id: INDALA Sample No.: PC0076600 Lab Number: 02568236 Test Package: IND 2



To manage this report scan the QR code

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



RECOMMENDED ACTIONS							
Action	Status	Date	Done By	Description			
Change Filter			?	We recommend you service the filters on this component.			
Check Fluid Source			?	Confirm the source of the lubricant being utilized for top-up/fill.			

## HISTORICAL DIAGNOSIS



## **OIL ANALYSIS REPORT**

#### Area **PLANTA NARANJO CIA COTO 54** Machine Id **TRIVELLI** Component

Turbine Fluid

PETRO CANADA SUPER TURBOFLO 46 (1845 LTR)

### DIAGNOSIS

#### Recommendation

We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. Please note that this is a corrected copy for data entry updates.

#### Wear

All component wear rates are normal.

#### Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

### Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION       method       limit/base       current       history1       h         Sample Number       Client Info       PC0076600            Sample Date       Client Info       15 Jun 2023           Machine Age       yrs       Client Info       1           Oil Age       yrs       Client Info       0           Oil Changed       Client Info       Changed           Sample Status       Client Info       Changed	istory2	
Sample Number     Client Info     PC0076600         Sample Date     Client Info     15 Jun 2023         Machine Age     yrs     Client Info     1         Oil Age     yrs     Client Info     0         Oil Changed     Client Info     Client Info         Sample Status     Client Info     Changed		
Sample Date       Client Info       15 Jun 2023           Machine Age       yrs       Client Info       1           Oil Age       yrs       Client Info       0           Oil Changed       Client Info       Changed           Sample Status       Client Info       Changed		
Machine Age         yrs         Client Info         1             Oil Age         yrs         Client Info         0             Oil Changed         Client Info         Changed             Sample Status         ATTENTION		
Oil Age     yrs     Client Info     0         Oil Changed     Client Info     Changed         Sample Status     ATTENTION		
Oil Changed Client Info Changed		
Sample Status		
WEAR METALS method limit/base current history1 h	istory2	
lron ppm ASTM D5185(m) >15 <b>1</b>		
Chromium         ppm         ASTM D5185(m)         >4         0		
Nickel         ppm         ASTM D5185(m)         >2         0		
Titanium         ppm         ASTM D5185(m)         0		
Silver ppm ASTM D5185(m) <b>0</b>		
Aluminum         ppm         ASTM D5185(m)         >10         <1		
Lead ppm ASTM D5185(m) <b>0</b>		
Copper         ppm         ASTM D5185(m)         >5         <1		
Tin         ppm         ASTM D5185(m)         >5         0		
Antimony         ppm         ASTM D5185(m)         0		
Vanadium         ppm         ASTM D5185(m)         0		
Beryllium         ppm         ASTM D5185(m)         0		
Cadmium         ppm         ASTM D5185(m)         0		
ADDITIVES method limit/base current history1 h	istory2	
Boron ppm ASTM D5185(m) 0 0		
Barium         ppm         ASTM D5185(m)         0		
Molybdenum         ppm         ASTM D5185(m)         0         0		
Manganese         ppm         ASTM D5185(m)         <1		
Magnesium         ppm         ASTM D5185(m)         0         <1		
Magnesium         ppm         ASTM D5185(m)         0         <1             Calcium         ppm         ASTM D5185(m)         0         <1		
Magnesium         ppm         ASTM D5185(m)         0         <1             Calcium         ppm         ASTM D5185(m)         0         <1             Phosphorus         ppm         ASTM D5185(m)         120         284		
Magnesium         ppm         ASTM D5185(m)         0         <1             Calcium         ppm         ASTM D5185(m)         0         <1             Phosphorus         ppm         ASTM D5185(m)         120         284             Zinc         ppm         ASTM D5185(m)         .7         8		
Magnesium         ppm         ASTM D5185(m)         0         <1             Calcium         ppm         ASTM D5185(m)         0         <1             Phosphorus         ppm         ASTM D5185(m)         120         284             Zinc         ppm         ASTM D5185(m)         .7         8             Sulfur         ppm         ASTM D5185(m)         0         721		
Magnesium         ppm         ASTM D5185(m)         0         <1             Calcium         ppm         ASTM D5185(m)         0         <1		
Magnesium         ppm         ASTM D5185(m)         0         <1             Calcium         ppm         ASTM D5185(m)         0         <1	istory2	
Magnesium         ppm         ASTM D5185(m)         0         <1             Calcium         ppm         ASTM D5185(m)         0         <1	iistory2	
Magnesium         ppm         ASTM D5185(m)         0         <1             Calcium         ppm         ASTM D5185(m)         0         <1	iistory2	
Magnesium         ppm         ASTM D5185(m)         0         <1             Calcium         ppm         ASTM D5185(m)         0         <1             Phosphorus         ppm         ASTM D5185(m)         120         284             Zinc         ppm         ASTM D5185(m)         7.7         8             Sulfur         ppm         ASTM D5185(m)         0         721             Lithium         ppm         ASTM D5185(m)         0         721             CONTAMINANTS         method         limit/base         current         history1         h           Silicon         ppm         ASTM D5185(m)         >15         2             Sodium         ppm         ASTM D5185(m)         >20         0	istory2	
Magnesium         ppm         ASTM D5185(m)         0         <1             Calcium         ppm         ASTM D5185(m)         0         <1             Phosphorus         ppm         ASTM D5185(m)         120         284             Zinc         ppm         ASTM D5185(m)         7.7         8             Sulfur         ppm         ASTM D5185(m)         0         721             Lithium         ppm         ASTM D5185(m)         0         721             CONTAMINANTS         method         limit/base         current         history1         h           Silicon         ppm         ASTM D5185(m)         >15         2             Sodium         ppm         ASTM D5185(m)         >20         0             Water         %         ASTM D6304*         >0.03         0.00	<mark>istory2</mark>	
Magnesium         ppm         ASTM D5185(m)         0         <1             Calcium         ppm         ASTM D5185(m)         0         <1	istory2	
Magnesium         ppm         ASTM D5185(m)         0         <1             Calcium         ppm         ASTM D5185(m)         0         <1	istory2 istory2	
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Magnesium         ppm         ASTM D5185(m)         0         <1             Calcium         ppm         ASTM D5185(m)         0         <1	istory2	
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Magnesium         ppm         ASTM D5185(m)         0         <1             Calcium         ppm         ASTM D5185(m)         120         284             Phosphorus         ppm         ASTM D5185(m)         120         284             Zinc         ppm         ASTM D5185(m)         0         721             Sulfur         ppm         ASTM D5185(m)         0         721             Lithium         ppm         ASTM D5185(m)         0         721             CONTAMINANTS         method         limit/base         current         history1         h           Silicon         ppm         ASTM D5185(m)         >15         2             Sodium         ppm         ASTM D5185(m)         >20         0             Water         %         ASTM D6304*         >0.03         0.000             FLUID CLEANLINESS         method         limit/base         current         history1         h           Particles >4µm         ASTM D7647	istory2 istory2	

Sample Rating Trend

ISO



Ê 4

1k 0k Jun15/23

0.12 Seve 0.10 0.08 ate 0.0 Ate 0.04 Ab 0.02 0.00 Jun15/23

cSt (100°C) Base Abnormal

cSt (100°C) Base Abnormal

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# **OIL ANALYSIS REPORT**

	Particle Trend	FLUID DEGRA		method	limit/base	current	history1	history2
эк [] 4k	4μm •••••••	Acid Number (AN)	mg KOH/g	ASTM D974*	0.05	0.08		
2 3k	Abarrent	VISUAL		method	limit/base	current	history1	history2
s 2k		White Metal	scalar	Visual*	NONE	NONE		
5 1 k		Yellow Metal	scalar	Visual*	NONE	NONE		
- 11		Precipitate	scalar	Visual*	NONE	NONE		
0k	723	Silt	scalar	Visual*	NONE	NONE		
	Jun15	Debris	scalar	Visual*	NONE	NONE		
	· · · ·	Sand/Dirt	scalar	Visual*	NONE	NONE		
0.12	Water	Appearance	scalar	Visual*	NORML	NORML		
0.10	Severe	Odor	scalar	Visual*	NORML	NORML		
0.08		Emulsified Water	scalar	Visual*	>0.03	NEG		
0.06		Free Water	scalar	Visual*		NEG		
0.04	Abnormal	FLUID PROPE	RTIES	method	limit/base	current	history1	history2
0.02		Visc @ 40°C	cSt	ASTM D7279(m)	46.6	46		
0.00	33	Visc @ 100°C	cSt	ASTM D7279(m)	7.04	7		
	un15/ un15/	Viscosity Index (VI)	Scale	ASTM D2270*	107	109		
	ت Viscosity @ 100°C	SAMPLE IMAG	ES	method	limit/base	current	history1	history2
10								
9		Color					no imago	no imago
2 8	Abnormal	COIOI					no image	no image
10117	Base							
6	Abnormal							
		Bottom					no image	no image
5	5/23 + 5/23 +	-						
	I nul	GRAPHS						
	Additives	Ferrous Alloys				Particle Count		
350		10iron 1			491,520			T <sup>26</sup>
300	calcium hosphorus	E 5			122,880	-		-24
250	www.www.zinc				30,720	Severe		-22
150		5/23	************	*********************	(jn 7,680	Abnormal		-20 4
100		lun1			1.920 g			-18 -18
50		Non-ferrous Metal	s		Hot 480			-16 c
0	23	- 10 copper 1			ja 120		•	+14
	Jun 15.	E 5-			<sup>1</sup> 2 30		\	-12 8
					3	-		-10
10	Viscosity @ 100°C	15/23			5/23			-8
9		Juni			unr (		14. 21.	28
3 0	Abnormal	Viscosity @ 40°C			(B/	Acid Number	1 ija – 2 ija	50µ 11µ
	Base	Abnormal			.10 평	T		
3 7		Base			<u>ال</u> الم	Base	****	
6 - Abnormal		Abnormal			N N N			
5		2/23			5/23 -	5/23		5/23 -
	un 15/2	Jun1			Jun1	Junl		Jun1
L.C. C.	Laboratory Sample No. Lab Number Unique Number Test Package To discuss this sample report, Test denoted (*) outside scope	: WearCheck - C8-11 : PC0076600 : 02568236 : 5605282 : IND 2 ( Additional Tr contact Customer Servi e of accreditation, (m) m	75 Apple Received Diagnose Diagnost ests: KV1 ice at 1-8 icethod mod	by Line, Burl	ington, ON L Jul 2023 Jul 2023 rin Marson f. sted at extern	7L 5H9 INDUSTR Contiguo F/ cotizació nal lab.	I <b>AS del PETRO</b> ANAL, frente a la Aut Contact: Dnes@lubrican T: 1	LEO CANAD. SA topista Bernardo Soto Grecia, A CR Erick Bogantes tescanada.com I (115)062-1598

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