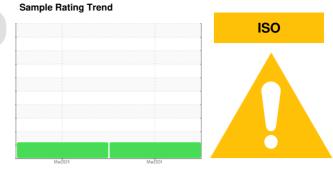


# **OIL ANALYSIS REPORT**

# Area SILVER GS 3C Compressor - TRIAL

Compressor

PETRO CANADA TURBOFLO XL46 (--- GAL)



## DIAGNOSIS

#### Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

All component wear rates are normal.

## Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the sample.

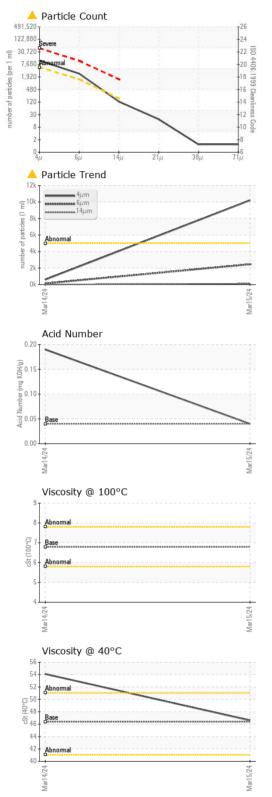
## **Fluid Condition**

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

SAMPLE INFORMATION method limit/base current history1  Sample Number Client Info WC22048588 WC22095495 Sample Date Client Info 15 Mar 2024 14 Mar 2024 Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 N/A N/A Sample Status ABNORMAL ATTENTION	history2
Sample Date         Client Info         15 Mar 2024         14 Mar 2024            Machine Age         hrs         Client Info         0         0            Oil Age         hrs         Client Info         0         0            Oil Changed         Client Info         N/A         N/A            Sample Status         ABNORMAL         ATTENTION	
Machine Age         hrs         Client Info         0         0            Oil Age         hrs         Client Info         0         0            Oil Changed         Client Info         N/A         N/A            Sample Status         ABNORMAL         ATTENTION	
Oil Age hrs Client Info 0 0 Oil Changed Client Info N/A N/A Sample Status ABNORMAL ATTENTION	
Oil Changed Client Info N/A N/A Sample Status ABNORMAL ATTENTION	
Sample Status ABNORMAL ATTENTION	
CONTAMINATION method limit/base current history1	history2
Water WC Method NEG NEG	
WEAR METALS method limit/base current history1	history2
<b>PQ</b> ASTM D8184* <b>0</b> 0	
<b>Iron</b> ppm ASTM D5185(m) <b>0</b> <1	
Chromium         ppm         ASTM D5185(m)         0         0	
Nickel         ppm         ASTM D5185(m)         0         0	
Titanium         ppm         ASTM D5185(m)         0         0	
Silver ppm ASTM D5185(m) 0	
Aluminum ppm ASTM D5185(m) <b>0</b> 0	
<b>Lead</b> ppm ASTM D5185(m) <b>0</b> 0	
Copper         ppm         ASTM D5185(m)         <1         <1	
<b>Tin</b> ppm ASTM D5185(m) <b>0</b> 0	
Antimony ppm ASTM D5185(m) <b>0</b> 0	
Vanadium ppm ASTM D5185(m) 0	
Beryllium ppm ASTM D5185(m) <b>0</b> 0	
Cadmium         ppm         ASTM D5185(m)         0         0	
ADDITIVES method limit/base current history1	history2
<b>Boron</b> ppm ASTM D5185(m) <b>0</b> 0	
<b>Barium</b> ppm ASTM D5185(m) <b>0</b> <1	
Dariani Ppini Normboroojinj	
Molybdenum ppm ASTM D5185(m) 0 0	
1-1-	
Molybdenum         ppm         ASTM D5185(m)         0         0	
Molybdenum         ppm         ASTM D5185(m)         0         0           Manganese         ppm         ASTM D5185(m)         0         0	
Molybdenum         ppm         ASTM D5185(m)         0         0           Manganese         ppm         ASTM D5185(m)         0         0           Magnesium         ppm         ASTM D5185(m)         0         2	
Molybdenum         ppm         ASTM D5185(m)         0         0           Manganese         ppm         ASTM D5185(m)         0         0           Magnesium         ppm         ASTM D5185(m)         0         2           Calcium         ppm         ASTM D5185(m)         <1         163	
Molybdenum         ppm         ASTM D5185(m)         0         0           Manganese         ppm         ASTM D5185(m)         0         0           Magnesium         ppm         ASTM D5185(m)         0         2           Calcium         ppm         ASTM D5185(m)         <1         163           Phosphorus         ppm         ASTM D5185(m)         2         434	
Molybdenum         ppm         ASTM D5185(m)         0         0           Manganese         ppm         ASTM D5185(m)         0         0           Magnesium         ppm         ASTM D5185(m)         0         2           Calcium         ppm         ASTM D5185(m)         <1	
Molybdenum         ppm         ASTM D5185(m)         0         0           Manganese         ppm         ASTM D5185(m)         0         0           Magnesium         ppm         ASTM D5185(m)         0         2           Calcium         ppm         ASTM D5185(m)         <1         163           Phosphorus         ppm         ASTM D5185(m)         2         434           Zinc         ppm         ASTM D5185(m)         0         2         97           Sulfur         ppm         ASTM D5185(m)         672         888	
Molybdenum         ppm         ASTM D5185(m)         0         0           Manganese         ppm         ASTM D5185(m)         0         0           Magnesium         ppm         ASTM D5185(m)         0         2           Calcium         ppm         ASTM D5185(m)         <1         163           Phosphorus         ppm         ASTM D5185(m)         2         434           Zinc         ppm         ASTM D5185(m)         0         2         97           Sulfur         ppm         ASTM D5185(m)         672         888           Lithium         ppm         ASTM D5185(m)         <1         <1	  
Molybdenum         ppm         ASTM D5185(m)         0         0           Manganese         ppm         ASTM D5185(m)         0         0           Magnesium         ppm         ASTM D5185(m)         0         2           Calcium         ppm         ASTM D5185(m)         <1         163           Phosphorus         ppm         ASTM D5185(m)         2         434           Zinc         ppm         ASTM D5185(m)         0         2         97           Sulfur         ppm         ASTM D5185(m)         672         888           Lithium         ppm         ASTM D5185(m)         <1         <1           CONTAMINANTS         method         limit/base         current         history1	   history2



# **OIL ANALYSIS REPORT**



	1500		11 11 11			
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>10203</b>	596	
Particles >6µm		ASTM D7647	>1300	<b>2456</b>	136	
Particles >14μm		ASTM D7647	>160	112	11	
Particles >21μm		ASTM D7647	>40	16	3	
Particles >38μm		ASTM D7647	>10	1	1	
Particles >71µm		ASTM D7647	>3	1	1	
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<u>21/18/14</u>	16/14/11	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.04	0.04	0.19	
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
Precipitate	scalar	Visual*	NONE	NONE	NONE	
Silt	scalar	Visual*	NONE	NONE	NONE	
Debris	scalar	Visual*	NONE	NONE	NONE	
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	
Appearance	scalar	Visual*	NORML	NORML	NORML	
Odor	scalar	Visual*	NORML	NORML	NORML	
Emulsified Water	scalar	Visual*		NEG	NEG	
Free Water	scalar	Visual*		NEG	NEG	
FLUID PROPERT	IFS	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46.39	46.6	54.1	
Visc @ 40 C	cSt	ASTM D7279(III) ASTM D7279(m)	6.79	6.9	J4. I	
Viscosity Index (VI)	Scale	ASTM D7273(III) ASTM D2270*	100	103		
SAMPLE IMAGES		method	limit/base	current	history1	history2
SAMPLE IMAGES	)	memod	IIIIIIVDase	Current	History	HIStory2
Color				146		no image
Bottom						no image



CALA ISO 17025:2017 Accredited Laboratory

Report Id: ONT167THU [WCAMIS] 02623719 (Generated: 06/11/2024 08:01:59) Rev: 2

Laboratory Sample No.

Lab Number : 02623719 Unique Number : 5748838

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

: WC22048588

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Received **Tested** Diagnosed

: 21 Mar 2024 : 22 Mar 2024 : 22 Mar 2024 - Kevin Marson Test Package : IND 2 ( Additional Tests: KV100, PrtCount, VI )

**Ontario Power Generation** 

167 BURWOOD RD, P.O. BOX 10159 THUNDER BAY, ON **CA P7B 6T7** 

Contact: Bruce Davidson bruce.davidson@opg.com T: (807)346-3919

Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

Contact/Location: Bruce Davidson - ONT167THU

F: (807)343-4223