

Area  
**Gas Compression**  
Machine Id  
**Compressor (MP)- Lubrication System (S/N Sample Tag XX-23002-S1)**  
Component  
**Lube System**  
Fluid  
**PETRO CANADA TURBOFLO XL32 (10350 LTR)**

**DIAGNOSIS**

**Recommendation**  
We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.

**Wear**  
Component wear rates appear to be normal (unconfirmed).

**Contamination**  
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

**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 INFORMATION**

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>PC</b>	PC	PC0080656
Sample Date	Client Info	<b>24 Jun 2024</b>	28 May 2024	28 May 2024
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	NORMAL

**CONTAMINATION**

method	limit/base	current	history1	history2
Water	WC Method >0.05	<b>NEG</b>	NEG	NEG

**WEAR METALS**

method	limit/base	current	history1	history2
PQ	ASTM D8184*	<b>0</b>	0	0
Iron	ppm ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Chromium	ppm ASTM D5185(m) >10	<b>0</b>	0	0
Nickel	ppm ASTM D5185(m) >10	<b>&lt;1</b>	<1	<1
Titanium	ppm ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm ASTM D5185(m)	<b>0</b>	0	0
Aluminum	ppm ASTM D5185(m) >10	<b>0</b>	<1	<1
Lead	ppm ASTM D5185(m) >20	<b>0</b>	0	0
Copper	ppm ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Tin	ppm ASTM D5185(m) >10	<b>0</b>	0	0
Antimony	ppm ASTM D5185(m)	<b>0</b>	<1	0
Vanadium	ppm ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm ASTM D5185(m)	<b>0</b>	0	0

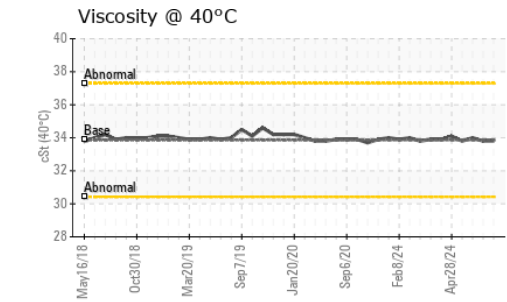
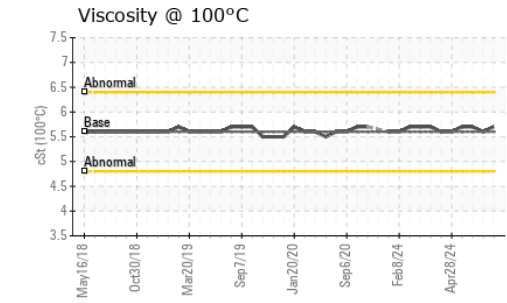
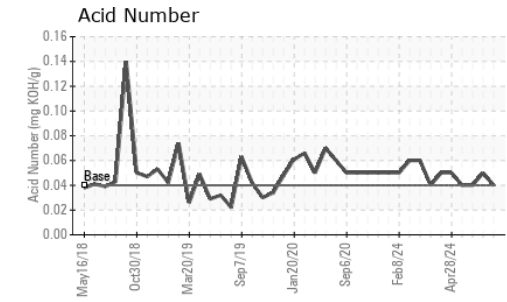
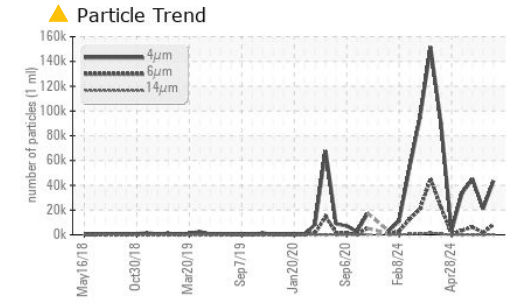
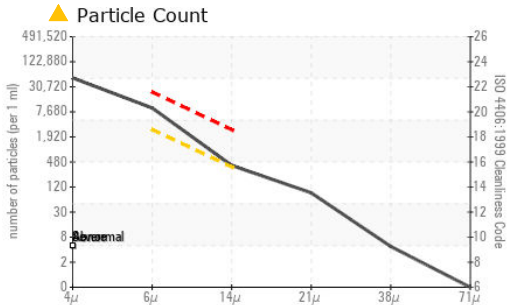
**ADDITIVES**

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Barium	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Magnesium	ppm ASTM D5185(m) 0	<b>2</b>	<1	<1
Calcium	ppm ASTM D5185(m) 0	<b>2</b>	<1	<1
Phosphorus	ppm ASTM D5185(m) 5	<b>60</b>	60	61
Zinc	ppm ASTM D5185(m) 0	<b>3</b>	1	1
Sulfur	ppm ASTM D5185(m) 750	<b>490</b>	469	469
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1

**CONTAMINANTS**

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >15	<b>1</b>	1	1
Sodium	ppm ASTM D5185(m)	<b>0</b>	1	1
Potassium	ppm ASTM D5185(m) >20	<b>0</b>	<1	<1

# OIL ANALYSIS REPORT



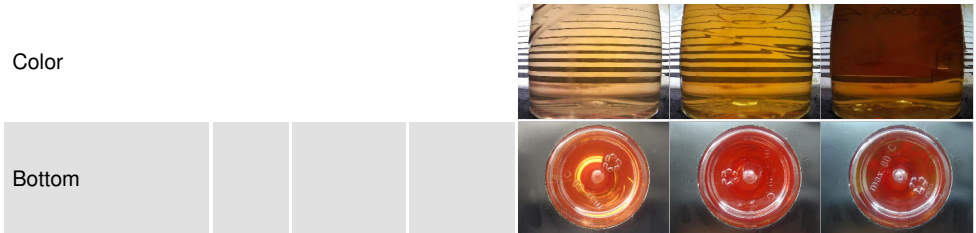
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>43561</b>	44875	20839
Particles >6µm	ASTM D7647	>2500	<b>▲ 8294</b>	▲ 6258	1679
Particles >14µm	ASTM D7647	>320	<b>● 349</b>	88	17
Particles >21µm	ASTM D7647	>80	<b>77</b>	7	5
Particles >38µm	ASTM D7647	>20	<b>4</b>	1	1
Particles >71µm	ASTM D7647	>4	<b>0</b>	1	0
Oil Cleanliness	ISO 4406 (c)	>--/18/15	<b>▲ 23/20/16</b>	▲ 23/20/14	22/18/11

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	0.04	<b>0.04</b>	0.05	0.04

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar Visual*	>0.05	<b>NEG</b>	NEG	NEG
Free Water	scalar Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D7279(m)	33.86	<b>33.8</b>	33.8	34.0
Visc @ 100°C	cSt ASTM D7279(m)	5.60	<b>5.7</b>	5.6	5.7
Viscosity Index (VI)	Scale ASTM D2270*	101	<b>108</b>	102	107

## SAMPLE IMAGES



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC  
**Lab Number** : 02648139  
**Unique Number** : 5813691  
**Test Package** : MAR 2 ( Additional Tests: KV100, PQ, TAN Man, VI )

**Suncor - Terra Nova Projects**  
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To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 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.