

Area

**Aft Machinery Space**

Machine Id

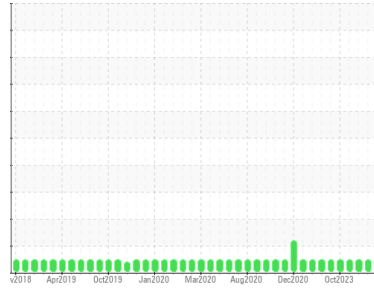
**Compressor Service Air (A) - Crank Case (S/N Sample Tag KA-63201A-S1)**

Component

**Centrifugal Compressor**

Fluid

**PETRO CANADA TURBOFLO XL32 (189 LTR)**



**DIAGNOSIS**

**Recommendation**

Resample at the next service interval to monitor.

**Wear**

All component wear rates are normal.

**Contamination**

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

**Fluid Condition**

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 history2

Sample Number	Client Info	<b>PC</b>	PC0052499	PC
Sample Date	Client Info	<b>14 Apr 2024</b>	23 Feb 2024	23 Jan 2024
Machine Age	hrs	Client Info	<b>0</b>	0
Oil Age	hrs	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

**WEAR METALS** method limit/base current history1 history2

PQ	ASTM D8184*		<b>0</b>	0	0
Iron	ppm	ASTM D5185(m) >50	<b>2</b>	2	3
Chromium	ppm	ASTM D5185(m) >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	<b>0</b>	0	0
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) >25	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185(m) >25	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m) >50	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >15	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	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>&lt;1</b>	0	0
Calcium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185(m) 5	<b>15</b>	14	14
Zinc	ppm	ASTM D5185(m) 0	<b>2</b>	2	2
Sulfur	ppm	ASTM D5185(m) 750	<b>609</b>	648	647
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

**CONTAMINANTS** method limit/base current history1 history2

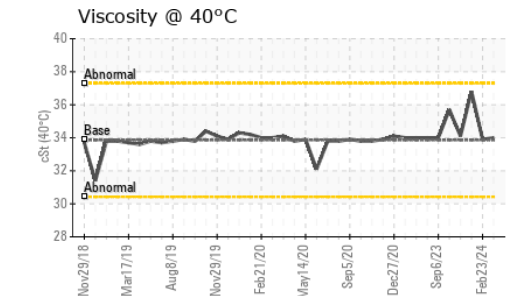
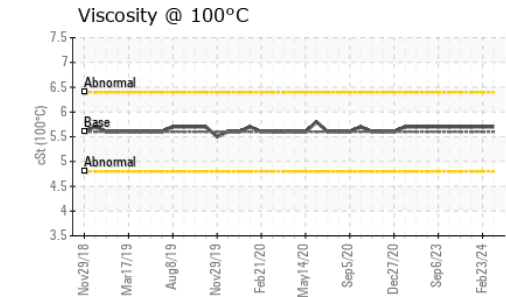
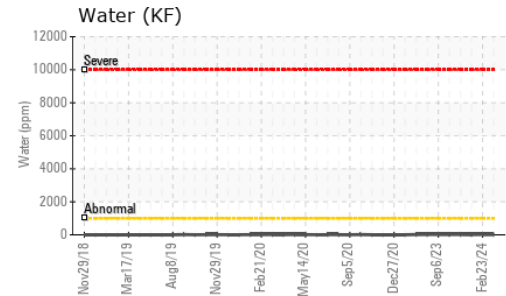
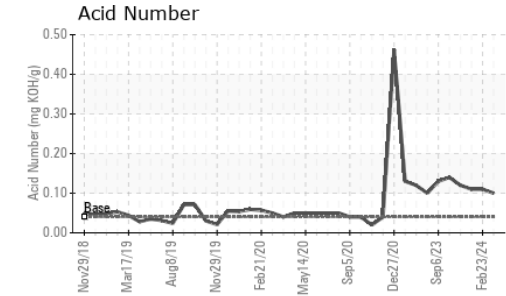
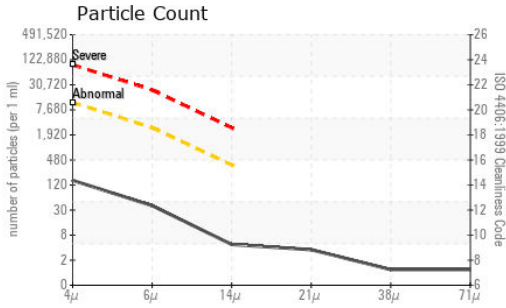
Silicon	ppm	ASTM D5185(m) >25	<b>0</b>	<1	2
Sodium	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Potassium	ppm	ASTM D5185(m) >20	<b>0</b>	1	<1
Water	%	ASTM D6304* >0.1	<b>0.002</b>	0.002	0.001
ppm Water	ppm	ASTM D6304* >1000	<b>19</b>	16	7

**FLUID CLEANLINESS** method limit/base current history1 history2

Particles >4µm	ASTM D7647	>10000	<b>137</b>	1374	274
Particles >6µm	ASTM D7647	>2500	<b>34</b>	304	121
Particles >14µm	ASTM D7647	>320	<b>4</b>	21	10
Particles >21µm	ASTM D7647	>80	<b>3</b>	4	3
Particles >38µm	ASTM D7647	>20	<b>1</b>	1	0
Particles >71µm	ASTM D7647	>4	<b>1</b>	0	0

Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>14/12/9</b>	18/15/12	15/14/10
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# OIL ANALYSIS REPORT

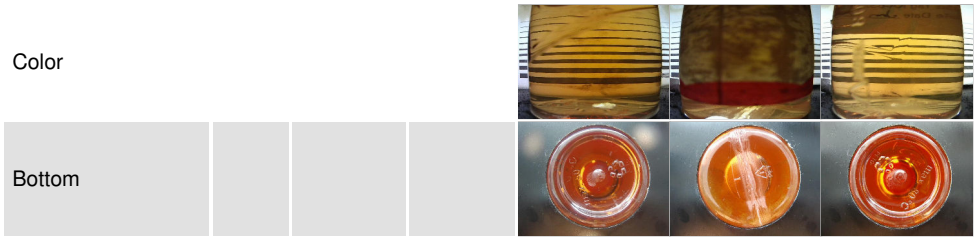


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.04	<b>0.10</b>	0.11	0.11

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*	>0.1	<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>34.0</b>	33.9	36.8
Visc @ 100°C	cSt	ASTM D7279(m)	5.60	<b>5.7</b>	5.7	5.7
Viscosity Index (VI)	Scale	ASTM D2270*	101	<b>107</b>	107	91

## SAMPLE IMAGES



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC  
**Lab Number** : 02634608  
**Unique Number** : 5775761  
**Test Package** : MAR 2 ( Additional Tests: KF, KV100, PQ, PrtCount, TAN Man, VI )

**Suncor - Terra Nova Projects**  
 Scotia Centre, 235 Water Strret  
 St. John`s, NL  
 CA A1C 1B6  
 Contact: Josh Hynes  
 joshynes@suncor.com  
 T: (709)778-3575  
 F: (709)724-2835

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.