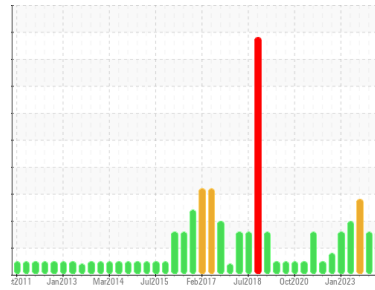




OIL ANALYSIS REPORT

Sample Rating Trend



Area
5 Utilities/030 Boiler House/C Compressor/707 #7 Air Compressor
 Machine Id
N/A 30MC707 IB MOTOR
 Component
Inboard Bearing
 Fluid
PETRO CANADA TURBOFLO 32 (2 LTR)

DIAGNOSIS

Recommendation
 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 an early resample to monitor this condition.

Wear
 All component wear rates are normal.

Contamination
 Elemental level of silicon (Si) above normal indicating ingress of seal material.

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		WC0957472	WC0925276	WC0894087
Sample Date	Client Info		02 Jul 2024	01 Apr 2024	05 Jan 2024
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>20	0	0	<1
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	<1	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	0	0	<1
Lead	ppm	ASTM D5185(m)	>20	0	0	0
Copper	ppm	ASTM D5185(m)	>20	1	<1	<1
Tin	ppm	ASTM D5185(m)	>20	0	0	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	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)		0	0	0
Magnesium	ppm	ASTM D5185(m)	0	<1	<1	<1
Calcium	ppm	ASTM D5185(m)	0	<1	0	11
Phosphorus	ppm	ASTM D5185(m)	120	<1	<1	2
Zinc	ppm	ASTM D5185(m)	0.0	2	2	3
Sulfur	ppm	ASTM D5185(m)	0	650	661	751
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>15	▲ 27	▲ 22	12
Sodium	ppm	ASTM D5185(m)		<1	0	0
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1

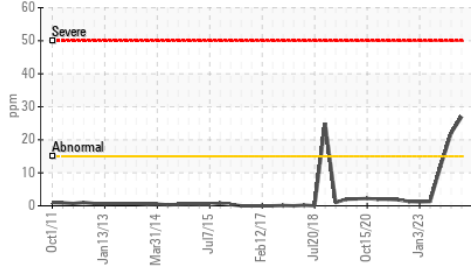
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	5973	4487	▲ 37249
Particles >6µm	ASTM D7647	>2500	1258	556	● 4800
Particles >14µm	ASTM D7647	>160	127	31	● 259
Particles >21µm	ASTM D7647	>40	51	14	▲ 154
Particles >38µm	ASTM D7647	>10	6	3	▲ 29
Particles >71µm	ASTM D7647	>3	1	1	2
Oil Cleanliness	ISO 4406 (c)	>20/18/14	20/17/14	19/16/12	▲ 22/19/15

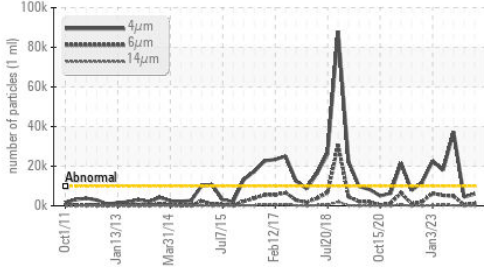


OIL ANALYSIS REPORT

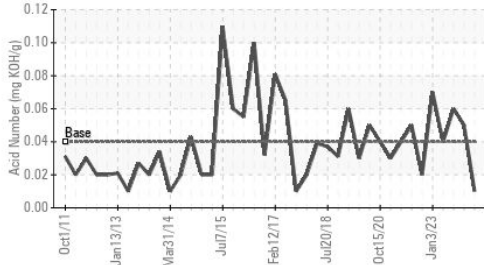
▲ Silicon (ppm)



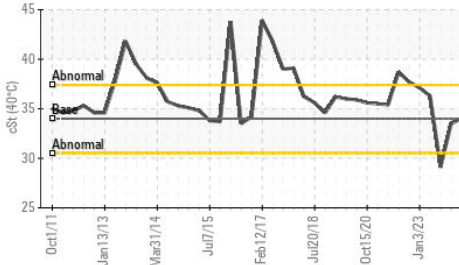
Particle Trend



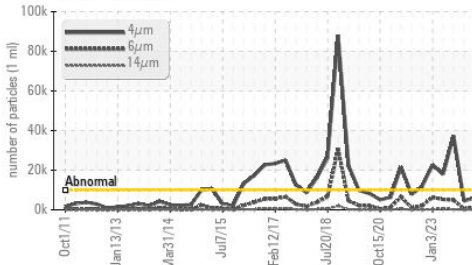
Acid Number



Viscosity @ 40°C



Particle Trend



FLUID DEGRADATION method limit/base current history1 history2

Acid Number (AN) mg KOH/g ASTM D974* 0.04 **0.01** 0.05 0.06

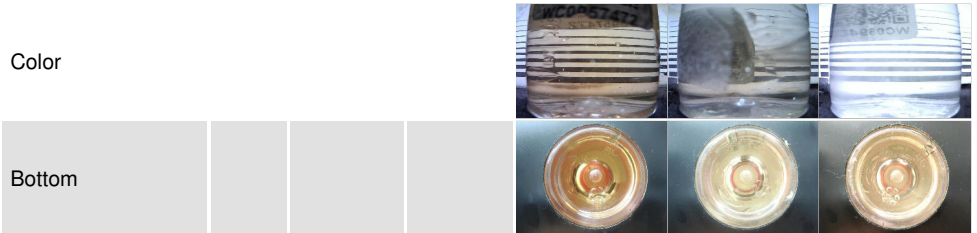
VISUAL method limit/base current history1 history2

White Metal	scalar	Visual*	NONE	VLITE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	LIGHT
Sand/Dirt	scalar	Visual*	NONE	NONE	VLITE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES method limit/base current history1 history2

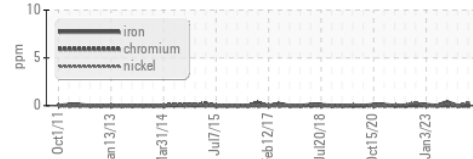
Visc @ 40°C cSt ASTM D7279(m) 34.0 **34.0** 33.5 ▲ 29.1

SAMPLE IMAGES method limit/base current history1 history2

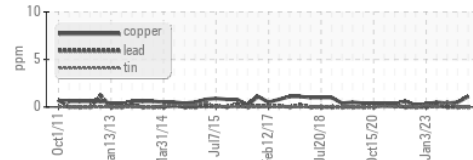


GRAPHS

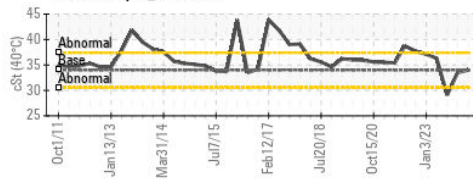
Ferrous Alloys



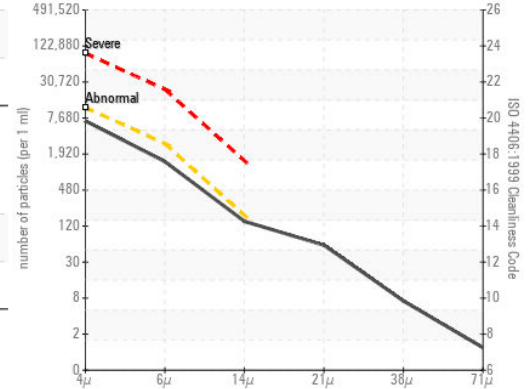
Non-ferrous Metals



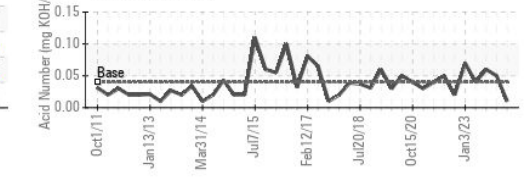
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0957472 **Received** : 09 Jul 2024
Lab Number : **02646732** **Tested** : 10 Jul 2024
Unique Number : 5812284 **Diagnosed** : 10 Jul 2024 - Kevin Marson
Test Package : IND 2 (Additional Tests: TAN Man)

Petro Canada Lubricants Inc.
 385 Southdown Road
 Mississauga, ON
 CA L5J 2Y3
 Contact: Kyle Blezard
 kyle.blezard@HFSinclair.com
 T: (905)403-6768
 F: (905)822-6025

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.