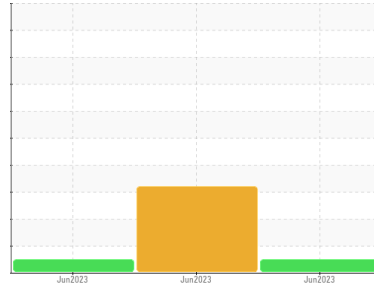


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
PARK ENERGY INVESTIGATION
Machine Id
TANK BULK SAMPLES

Component
Bulk Fluid Tank
Fluid
PETRO CANADA SENTRON LA 2000 (500 GAL)

DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample. Fresh - 100% LA2000 (Customer Sample Comment: Fresh - 100% LA2000)

SAMPLE INFORMATION

method	limit/base	current	history 1	history 2
Sample Number	Client Info	PCA0073686	PCA0073687	PCA0073688
Sample Date	Client Info	30 Jun 2023	30 Jun 2023	30 Jun 2023
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		NORMAL	ATTENTION	---

WEAR METALS

method	limit/base	current	history 1	history 2
Iron	ppm ASTM D5185m	<1	0	0
Chromium	ppm ASTM D5185m	0	0	0
Nickel	ppm ASTM D5185m	<1	<1	<1
Titanium	ppm ASTM D5185m	0	0	0
Silver	ppm ASTM D5185m	<1	<1	2
Aluminum	ppm ASTM D5185m	2	<1	1
Lead	ppm ASTM D5185m	0	0	0
Copper	ppm ASTM D5185m	0	0	<1
Tin	ppm ASTM D5185m	<1	0	<1
Vanadium	ppm ASTM D5185m	0	<1	0
Cadmium	ppm ASTM D5185m	<1	<1	<1

ADDITIVES

method	limit/base	current	history 1	history 2
Boron	ppm ASTM D5185m 2	0	7	4
Barium	ppm ASTM D5185m 1	2	2	2
Molybdenum	ppm ASTM D5185m 1	<1	7	3
Manganese	ppm ASTM D5185m 5	0	0	0
Magnesium	ppm ASTM D5185m 1	4	16	12
Calcium	ppm ASTM D5185m 1237	1215	▲ 124	715
Phosphorus	ppm ASTM D5185m 270	255	▲ 60	165
Zinc	ppm ASTM D5185m 330	327	▲ 70	212
Sulfur	ppm ASTM D5185m 2670	2984	3206	2863

CONTAMINANTS

method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m	3	<1	3
Sodium	ppm ASTM D5185m	0	5	2
Potassium	ppm ASTM D5185m >20	<1	1	1

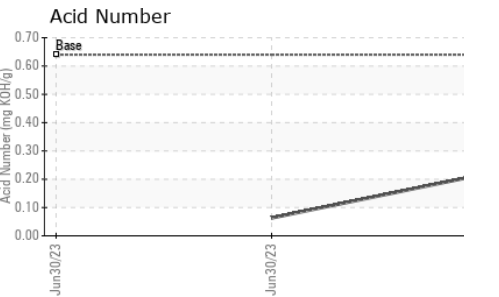
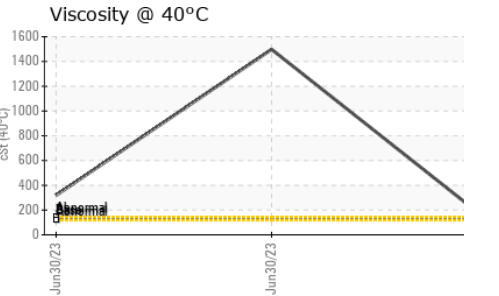
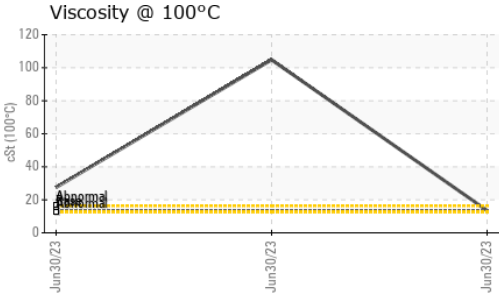
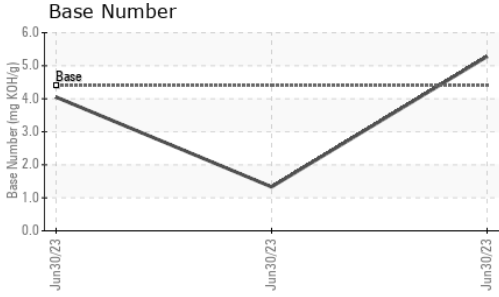
FLUID DEGRADATION

method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g ASTM D8045 0.64	0.22	0.063	---
Base Number (BN)	mg KOH/g ASTM D2896 4.4	5.28	▲ 1.33	4.05

VISUAL

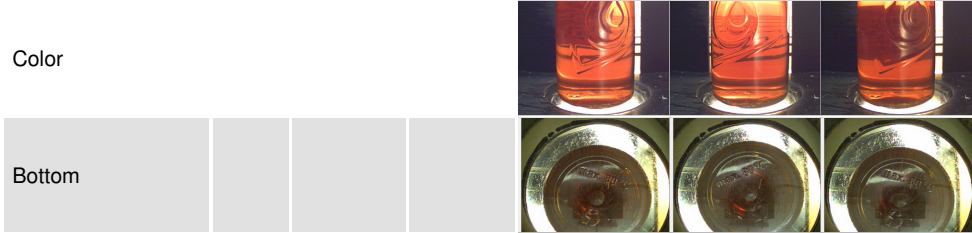
method	limit/base	current	history 1	history 2
White Metal	scalar *Visual NONE	NONE	NONE	NONE
Yellow Metal	scalar *Visual NONE	NONE	NONE	NONE
Precipitate	scalar *Visual NONE	NONE	NONE	NONE
Silt	scalar *Visual NONE	NONE	NONE	NONE
Debris	scalar *Visual NONE	NONE	NONE	NONE
Sand/Dirt	scalar *Visual NONE	NONE	NONE	NONE
Appearance	scalar *Visual NORML	NORML	NORML	NORML
Odor	scalar *Visual NORML	NORML	NORML	NORML
Emulsified Water	scalar *Visual	NEG	NEG	NEG
Free Water	scalar *Visual	NEG	NEG	NEG

OIL ANALYSIS REPORT

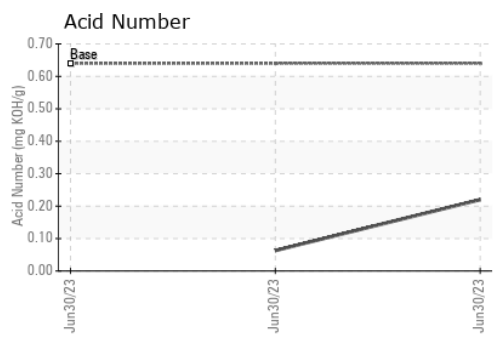
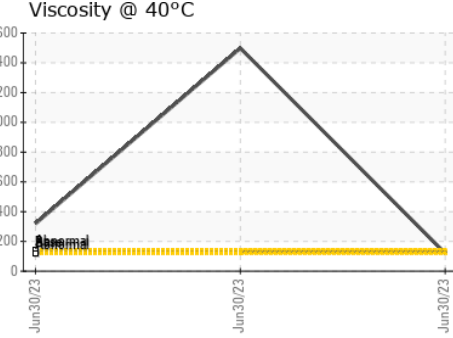
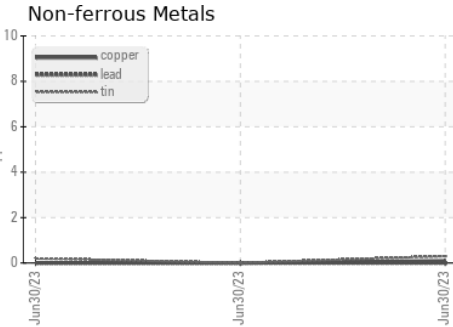
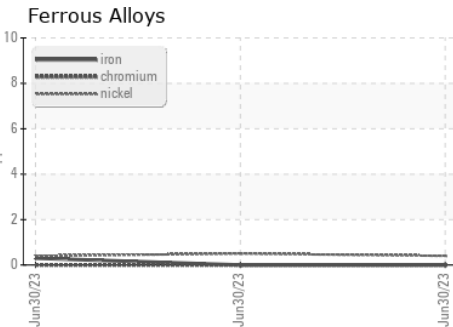


FLUID PROPERTIES		method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	130.1	121.0	▲ 1498.	319.2
Visc @ 100°C	cSt	ASTM D445	13.5	13.5	▲ 104.8	27.56
Viscosity Index (VI)	Scale	ASTM D2270	99	107	157	115

SAMPLE IMAGES		method	limit/base	current	history 1	history 2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0073686 **Received** : 10 Jul 2023
Lab Number : **05894145** **Diagnosed** : 12 Jul 2023
Unique Number : 10549955 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: FT-IR, KV100, TBN, VI)

PETRO-CANADA LUBRICANTS - GARRETT BAPP
 2416 N 12TH ST
 BROKEN ARROW, OK
 US 74012
 Contact: GARRETT BAPP

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T:
F: