

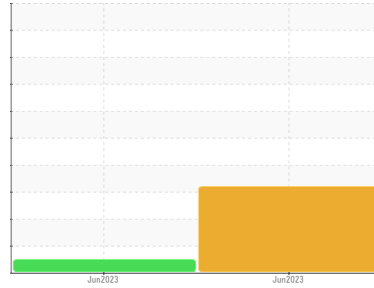
PROBLEM SUMMARY

Sample Rating Trend

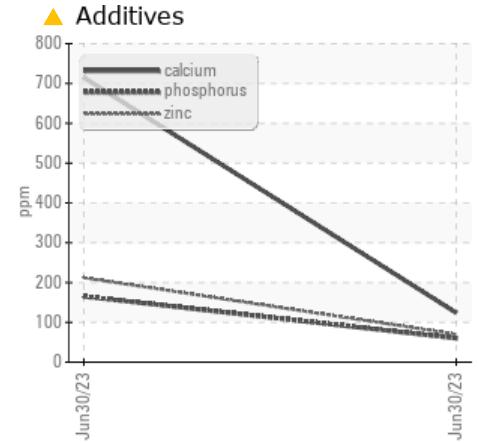
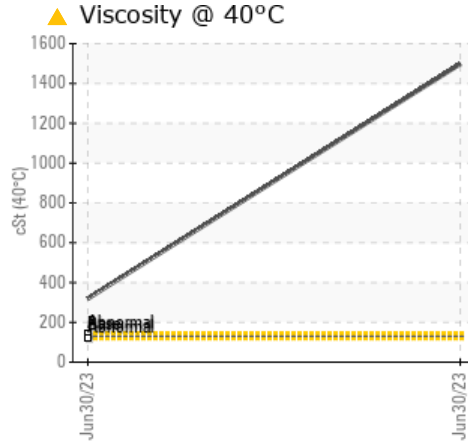
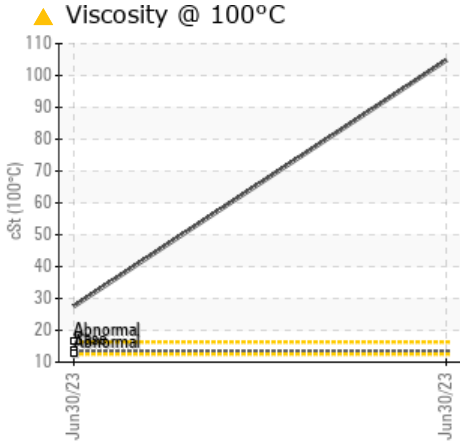
DEGRADATION

Area
PARK ENERGY INVESTIGATION
Machine Id
TANK BULK SAMPLES

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



COMPONENT CONDITION SUMMARY



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	---	---
Calcium	ppm	ASTM D5185m	1237	▲ 124	715	---
Phosphorus	ppm	ASTM D5185m	270	▲ 60	165	---
Zinc	ppm	ASTM D5185m	330	▲ 70	212	---
Base Number (BN)	mg KOH/g	ASTM D2896	4.4	▲ 1.33	4.05	---
Visc @ 40°C	cSt	ASTM D445	130.1	▲ 1498.	319.2	---
Visc @ 100°C	cSt	ASTM D445	13.5	▲ 104.8	27.56	---

Customer Id: PETBRO
Sample No.: PCA0073687
Lab Number: 05894144
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

30 Jun 2023 Diag:

UNKNOWN



view report

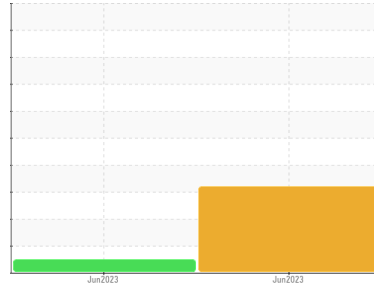


OIL ANALYSIS REPORT

Sample Rating Trend

DEGRADATION

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% Lucas (Customer Sample Comment: Fresh - 100% Lucas)
- Fluid Condition**
 The oil viscosity is higher than normal. An additive depletion is indicated. The BN level is low.

SAMPLE INFORMATION

method	limit/base	current	history 1	history 2
Sample Number	Client Info	PCA0073687	PCA0073688	---
Sample Date	Client Info	30 Jun 2023	30 Jun 2023	---
Machine Age	hrs	0	0	---
Oil Age	hrs	0	0	---
Oil Changed	Client Info	N/A	N/A	---
Sample Status		ATTENTION	---	---

WEAR METALS

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

ADDITIVES

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

CONTAMINANTS

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

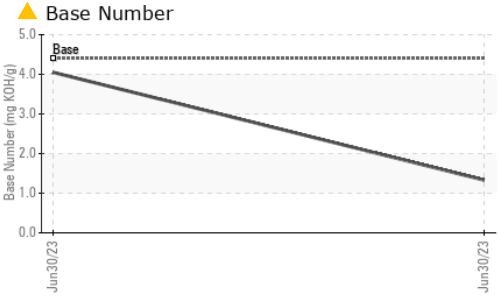
FLUID DEGRADATION

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

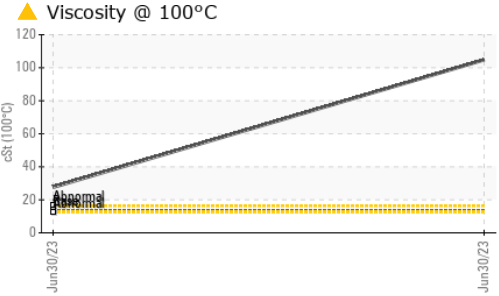
VISUAL

method	limit/base	current	history 1	history 2		
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	---

OIL ANALYSIS REPORT

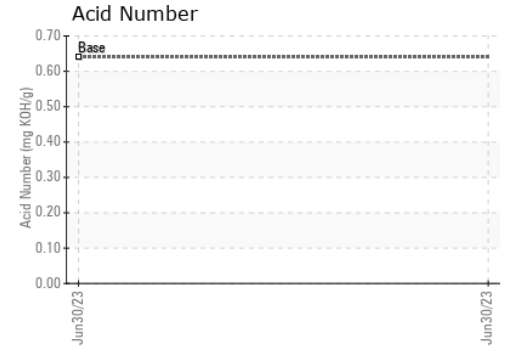
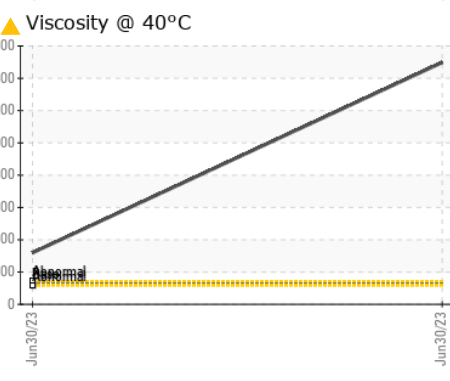
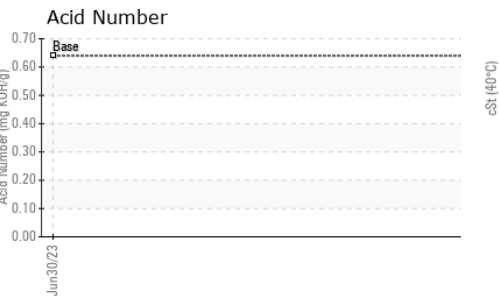
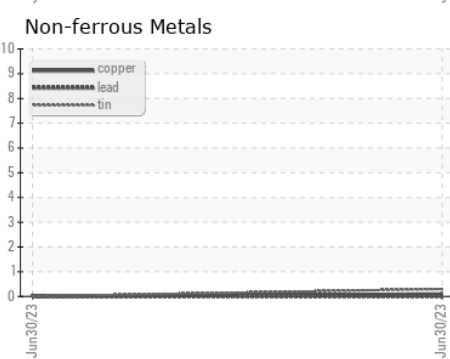
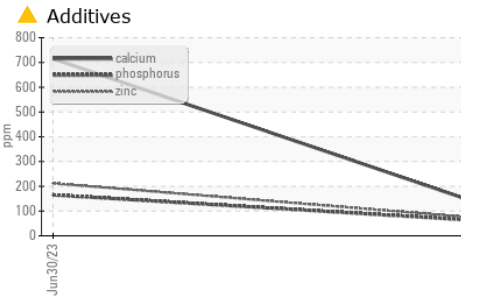
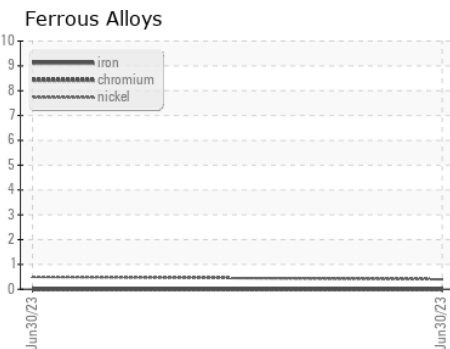
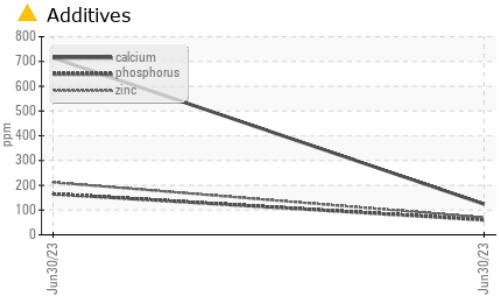


FLUID PROPERTIES		method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	130.1	▲ 1498.	319.2	---
Visc @ 100°C	cSt	ASTM D445	13.5	▲ 104.8	27.56	---
Viscosity Index (VI)	Scale	ASTM D2270	99	157	115	---



SAMPLE IMAGES		method	limit/base	current	history 1	history 2
Color						
Bottom						

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0073687
Lab Number : 05894144
Unique Number : 10549954
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: