



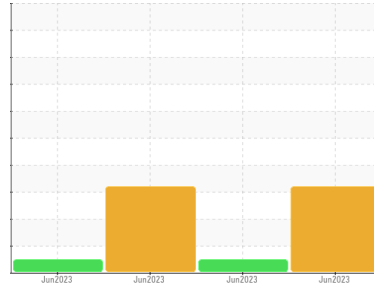
PROBLEM SUMMARY

Sample Rating Trend

DEGRADATION

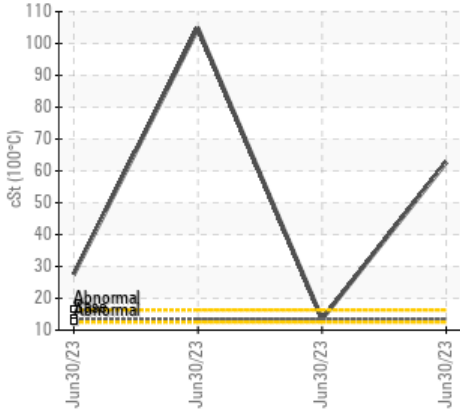
Area PARK ENERGY INVESTIGATION Machine Id TANK BULK SAMPLES

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

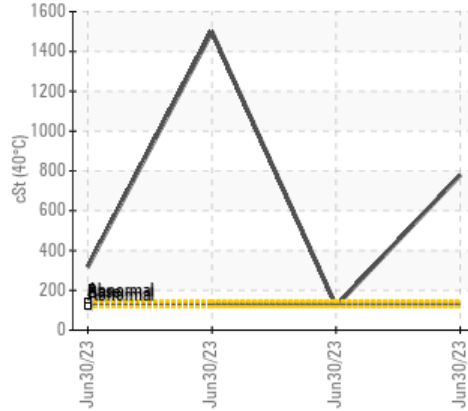


COMPONENT CONDITION SUMMARY

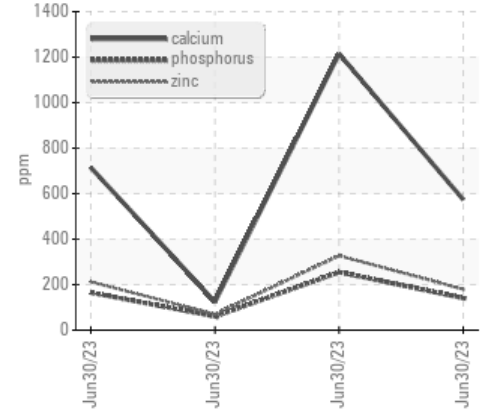
▲ Viscosity @ 100°C



▲ Viscosity @ 40°C



▲ Additives



RECOMMENDATION

This is a baseline read-out on the submitted sample.
Fresh - 50% LA2000 / 50% Lucas (Customer
Sample Comment: Fresh - 50% LA2000 / 50%
Lucas)

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	NORMAL	ATTENTION
Calcium	ppm	ASTM D5185m	1237	▲ 574	1215	▲ 124
Phosphorus	ppm	ASTM D5185m	270	▲ 141	255	▲ 60
Zinc	ppm	ASTM D5185m	330	▲ 180	327	▲ 70
Base Number (BN)	mg KOH/g	ASTM D2896	4.4	▲ 2.95	5.28	▲ 1.33
Visc @ 40°C	cSt	ASTM D445	130.1	▲ 779.0	121.0	▲ 1498.
Visc @ 100°C	cSt	ASTM D445	13.5	▲ 62.71	13.5	▲ 104.8

Customer Id: PETBRO
Sample No.: PCA0073685
Lab Number: 05894146
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: Doug Bogart

NORMAL



This is a baseline read-out on the submitted sample. Fresh - 100% LA2000

view report



30 Jun 2023 Diag: Doug Bogart

DEGRADATION



This is a baseline read-out on the submitted sample. Fresh - 100% Lucas The oil viscosity is higher than normal. An additive depletion is indicated. The BN level is low.

view report



30 Jun 2023 Diag:

UNKNOWN

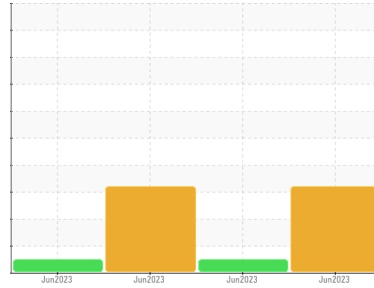


view report



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 - 50% LA2000 / 50% Lucas (Customer Sample Comment: Fresh - 50% LA2000 / 50% 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			PCA0073685	PCA0073686	PCA0073687
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				ATTENTION	NORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m		0	<1	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		0	<1	<1
Aluminum	ppm	ASTM D5185m		1	2	<1
Lead	ppm	ASTM D5185m		0	0	0
Copper	ppm	ASTM D5185m		0	0	0
Tin	ppm	ASTM D5185m		0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		<1	<1	<1

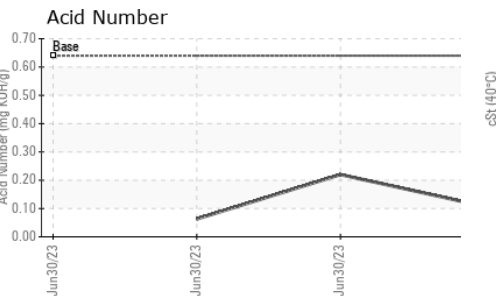
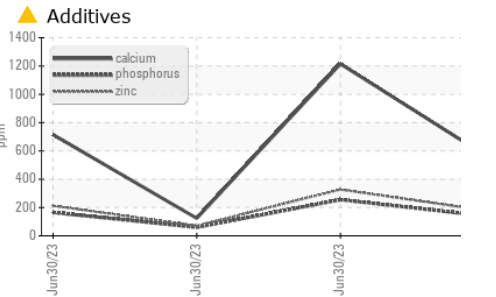
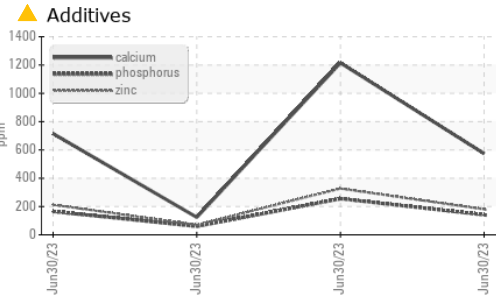
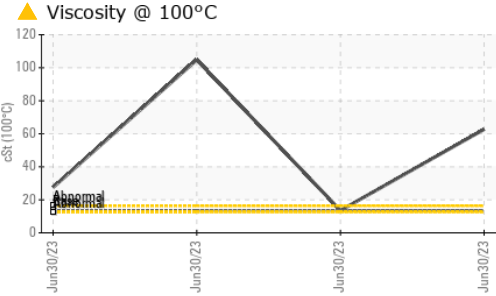
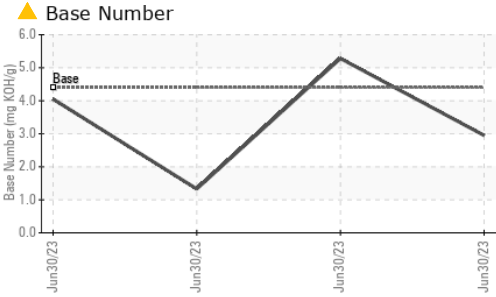
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	2	4	0	7
Barium	ppm	ASTM D5185m	1	2	2	2
Molybdenum	ppm	ASTM D5185m	1	4	<1	7
Manganese	ppm	ASTM D5185m	5	0	0	0
Magnesium	ppm	ASTM D5185m	1	13	4	16
Calcium	ppm	ASTM D5185m	1237	▲ 574	1215	▲ 124
Phosphorus	ppm	ASTM D5185m	270	▲ 141	255	▲ 60
Zinc	ppm	ASTM D5185m	330	▲ 180	327	▲ 70
Sulfur	ppm	ASTM D5185m	2670	3304	2984	3206

CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m		3	3	<1
Sodium	ppm	ASTM D5185m		2	0	5
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	0.108	0.22	0.063
Base Number (BN)	mg KOH/g	ASTM D2896	4.4	▲ 2.95	5.28	▲ 1.33

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

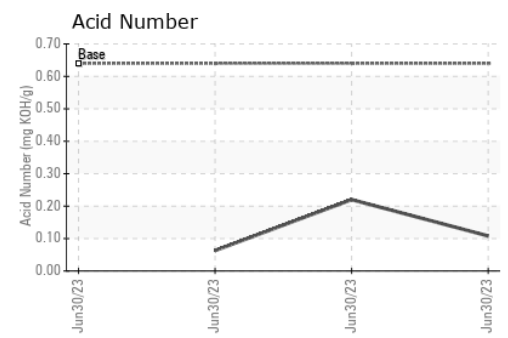
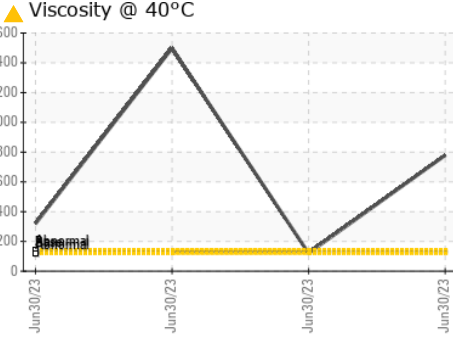
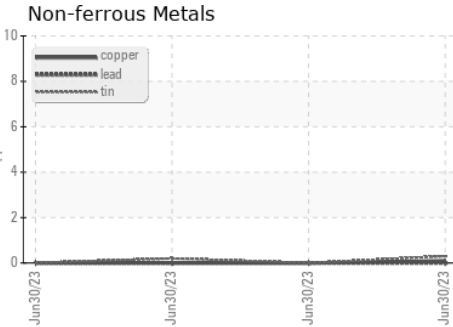
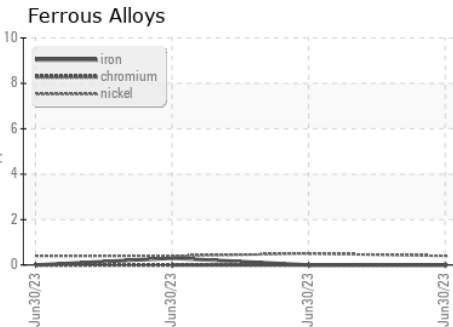
OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	130.1	▲ 779.0	121.0	▲ 1498.
Visc @ 100°C	cSt	ASTM D445	13.5	▲ 62.71	13.5	▲ 104.8
Viscosity Index (VI)	Scale	ASTM D2270	99	146	107	157

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0073685
Lab Number : 05894146
Unique Number : 10549956
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

Received : 10 Jul 2023
Diagnosed : 12 Jul 2023
Diagnostician : Doug Bogart

*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)*

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