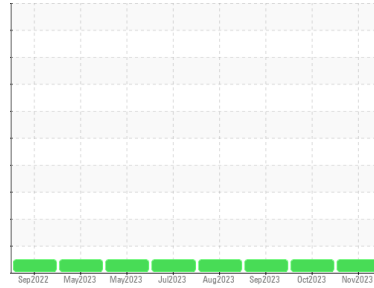# OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Machine Id
Liberty 2
Component
Compressor
Fluid
PETRO CANADA SENTRON LD 3000 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is no indication of any contamination in the oil.

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	**PCA0103434**	PCA0091325	PCA0091321
Sample Date		Client Info	**02 Nov 2023**	04 Oct 2023	06 Sep 2023
Machine Age	hrs	Client Info	**91816**	91078	90456
Oil Age	hrs	Client Info	**9635**	8897	8275
Oil Changed		Client Info	**N/A**	N/A	N/A
Sample Status			**NORMAL**	NORMAL	NORMAL

CONTAMINATION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**0**	5	1
Chromium	ppm	ASTM D5185m	>10	**0**	<1	0
Nickel	ppm	ASTM D5185m		**0**	<1	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**0**	0	0
Lead	ppm	ASTM D5185m	>25	**0**	<1	0
Copper	ppm	ASTM D5185m	>50	**0**	<1	0
Tin	ppm	ASTM D5185m	>15	**0**	<1	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	**0**	0	0
Barium	ppm	ASTM D5185m	1	**0**	0	0
Molybdenum	ppm	ASTM D5185m	2	**0**	<1	0
Manganese	ppm	ASTM D5185m	1	**0**	0	<1
Magnesium	ppm	ASTM D5185m	5	**0**	<1	0
Calcium	ppm	ASTM D5185m	1220	**7**	4	7
Phosphorus	ppm	ASTM D5185m	298	**11**	17	9
Zinc	ppm	ASTM D5185m	350	**0**	2	0
Sulfur	ppm	ASTM D5185m	1995	**854**	1197	1031

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**0**	2	0
Sodium	ppm	ASTM D5185m		**0**	0	<1
Potassium	ppm	ASTM D5185m	>20	**0**	<1	0

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.86	**0.086**	0.115	0.088

360 TECHNICAL EXPERTISE | OIL DIAGNOSTICS

Fuel Dilution

Viscosity @ 40°C

Fuel Dilution
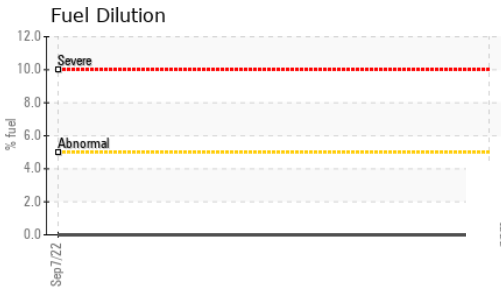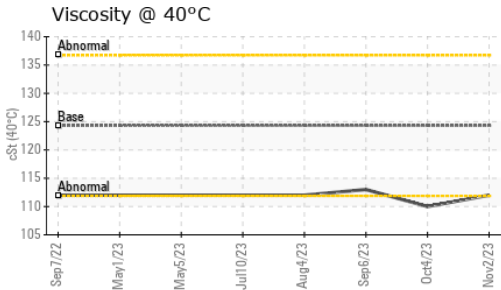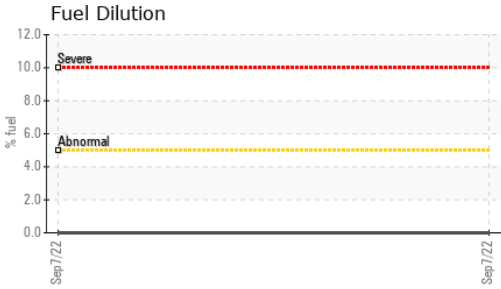
VISUAL

VISUAL	method	limit/base	current	history1	history2
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	>0.1	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	124.3	**112**	110	113

SAMPLE IMAGES

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			*no image*	*no image*	*no image*
Bottom			*no image*	*no image*	*no image*

GRAPHS

Iron (ppm)

Lead (ppm)

Aluminum (ppm)

Chromium (ppm)

Copper (ppm)

Silicon (ppm)

Viscosity @ 40°C

Acid Number
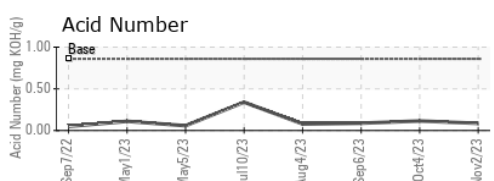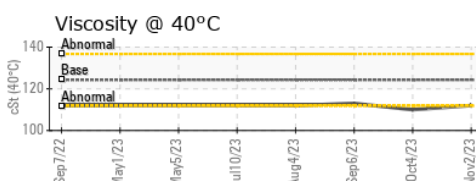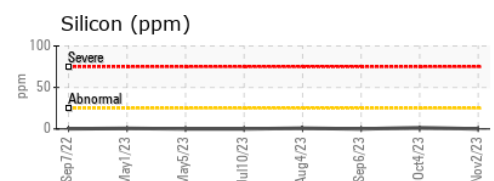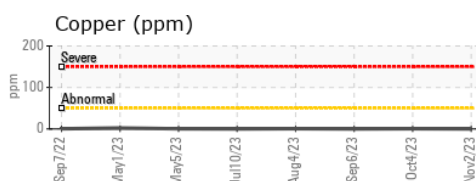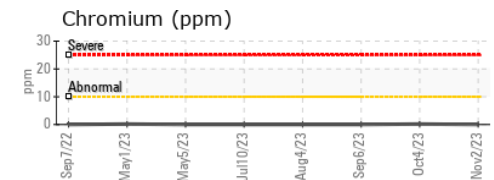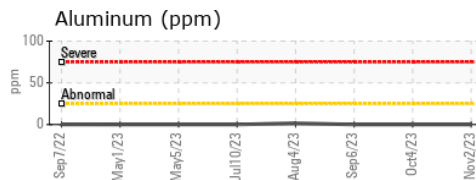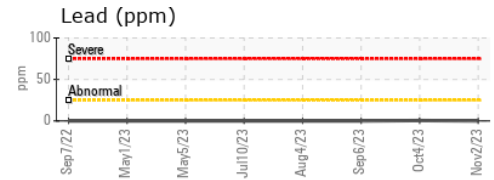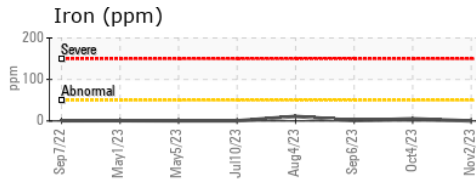
ANAB ACCREDITED TESTING LABORATORY — Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513			**ENERVEST OPERATING - LIBERTY**
Sample No.	: PCA0103434	**Received**	: 16 Nov 2023	318 SINGLETON ROAD
Lab Number	: 06010221	**Diagnosed**	: 20 Nov 2023	NORA, VA
Unique Number	: 10749365	**Diagnostician**	: Don Baldridge	US 24272
Test Package	: MOB 2 (Additional Tests: FuelDilution)			Contact: Service Manager

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:
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