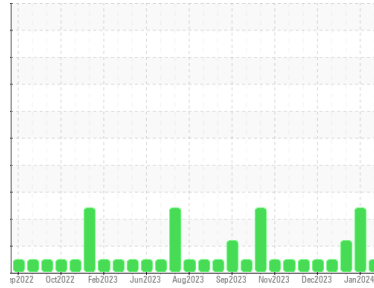


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL


Area
LONGHORN C
Machine Id
LONGHORN C (S/N 1645612)
Component
Natural Gas Engine
Fluid
PETRO CANADA SENTRON LD 3000 (190 GAL)

DIAGNOSIS
Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please note that this is a corrected copy for diagnostic comment updates regarding serviceability. (Customer Sample Comment: Top Up Amount: 10 GAL)

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. 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		PCA0096590	PCA0096589	PCA0096595
Sample Date	Client Info		05 Feb 2024	17 Jan 2024	09 Jan 2024
Machine Age	hrs	Client Info	8261	7812	7633
Oil Age	hrs	Client Info	2418	1969	1790
Oil Changed	Client Info		Oil Added	Oil Added	Oil Added
Sample Status			NORMAL	ABNORMAL	ABNORMAL

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	8	5	4
Chromium	ppm	ASTM D5185m >4	0	<1	0
Nickel	ppm	ASTM D5185m >2	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >9	<1	1	1
Lead	ppm	ASTM D5185m >30	<1	0	<1
Copper	ppm	ASTM D5185m >35	<1	<1	<1
Tin	ppm	ASTM D5185m >4	<1	<1	<1
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	<1	0	0
Manganese	ppm	ASTM D5185m 1	0	0	<1
Magnesium	ppm	ASTM D5185m 5	5	20	7
Calcium	ppm	ASTM D5185m 1220	1297	1186	1292
Phosphorus	ppm	ASTM D5185m 298	289	286	304
Zinc	ppm	ASTM D5185m 350	361	350	358
Sulfur	ppm	ASTM D5185m 1995	2033	1992	2114

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	7	2	4
Sodium	ppm	ASTM D5185m	2	2	1
Potassium	ppm	ASTM D5185m >20	0	0	0
Fuel	%	ASTM D3524 >4.0	0.4	0.4	0.3

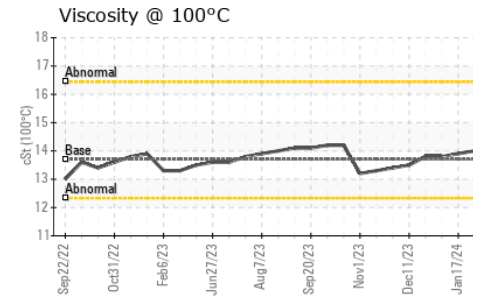
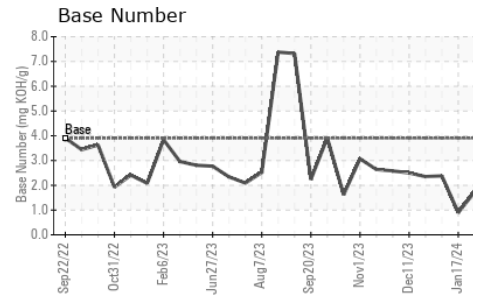
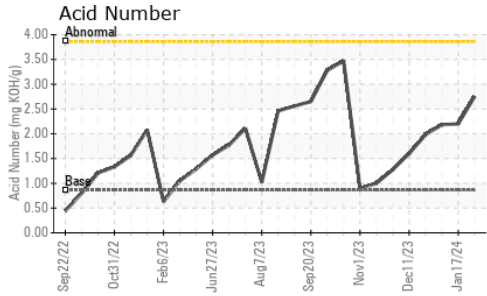
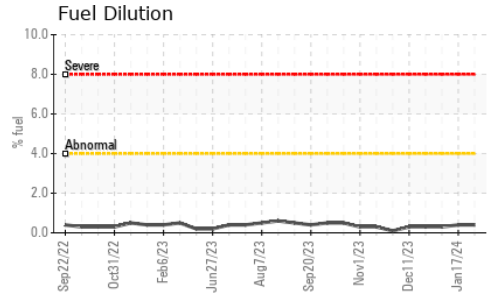
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0	0
Nitration	Abs/cm	*ASTM D7624 >20	12.0	11.0	10.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.7	19.6	19.5

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	20.9	18.4	18.2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.86	2.75	▲ 2.20	▲ 2.18
Base Number (BN)	mg KOH/g	ASTM D2896 3.9	1.73	▲ 0.9	2.38

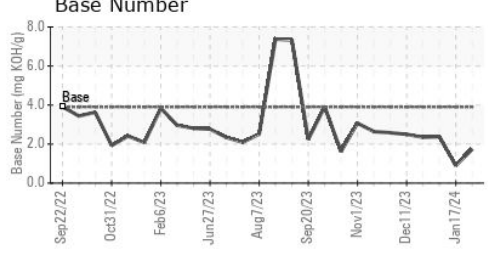
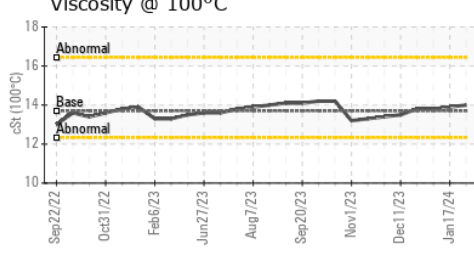
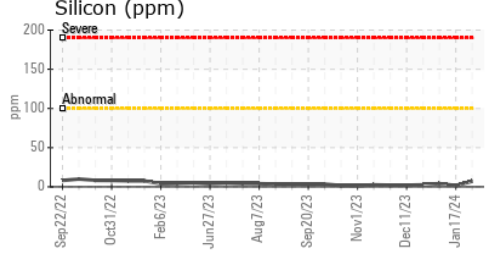
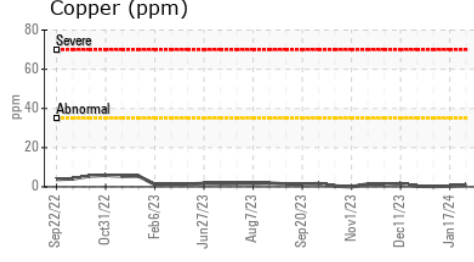
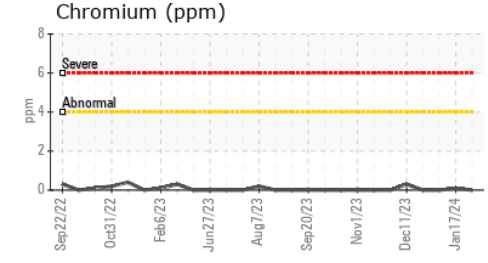
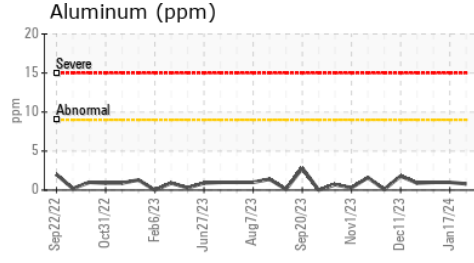
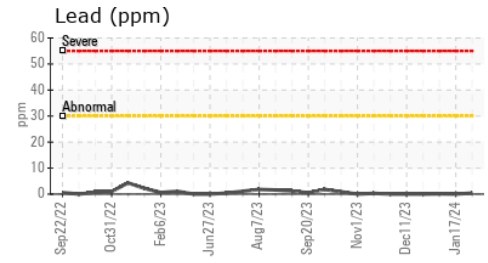
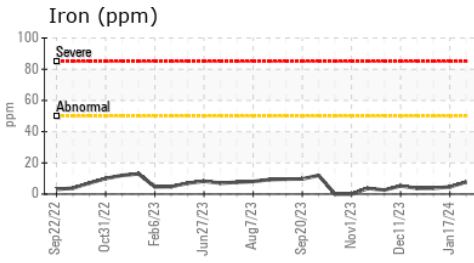
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	13.7	14.0	13.9	13.8

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0096590 **Received** : 07 Feb 2024
Lab Number : **06083124** **Tested** : 08 Feb 2024
Unique Number : 10870569 **Diagnosed** : 23 Feb 2024 - Doug Bogart
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

DIVERSIFIED ENERGY - CURWENSVILLE
 325 WALNUT ST FL2
 CURWENSVILLE, PA
 US 16833
 Contact: ZACH MCGARY
 zmcgary@dgoc.com

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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F: