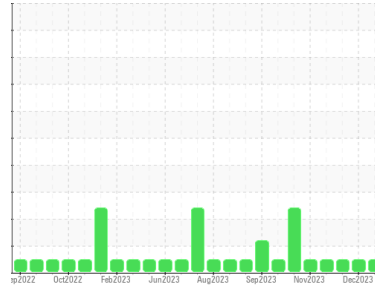


OIL ANALYSIS REPORT

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.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. 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	PCA0096588	PCA0096596	PCA0096597
Sample Date	Client Info	27 Dec 2023	11 Dec 2023	28 Nov 2023
Machine Age	hrs	7334	6989	6766
Oil Age	hrs	1491	1146	923
Oil Changed	Client Info	N/A	N/A	Oil Added
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	4	5	3
Chromium	ppm ASTM D5185m >4	0	<1	0
Nickel	ppm ASTM D5185m >2	0	0	0
Titanium	ppm ASTM D5185m	0	<1	0
Silver	ppm ASTM D5185m >3	0	0	0
Aluminum	ppm ASTM D5185m >9	<1	2	<1
Lead	ppm ASTM D5185m >30	0	0	0
Copper	ppm ASTM D5185m >35	<1	2	1
Tin	ppm ASTM D5185m >4	<1	<1	0
Vanadium	ppm ASTM D5185m	0	0	<1
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	1	1
Manganese	ppm ASTM D5185m 1	<1	0	0
Magnesium	ppm ASTM D5185m 5	11	8	28
Calcium	ppm ASTM D5185m 1220	1284	1384	1303
Phosphorus	ppm ASTM D5185m 298	311	337	293
Zinc	ppm ASTM D5185m 350	366	370	363
Sulfur	ppm ASTM D5185m 1995	2183	2345	2151

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	2	2	2
Sodium	ppm ASTM D5185m	1	0	3
Potassium	ppm ASTM D5185m >20	0	2	<1
Fuel	% ASTM D3524 >4.0	0.3	0.3	0.1

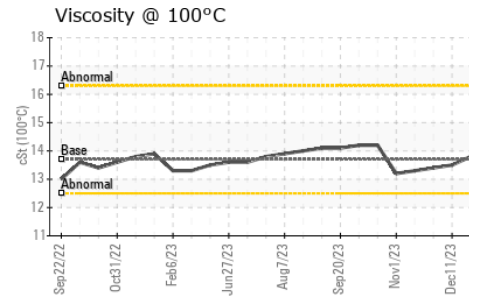
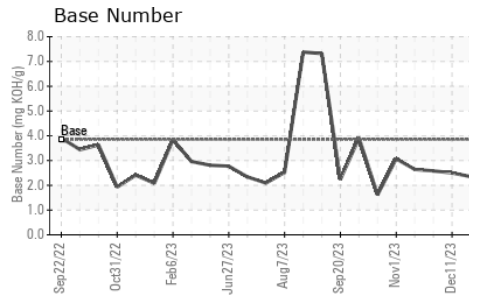
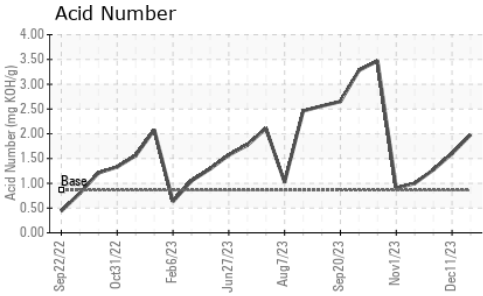
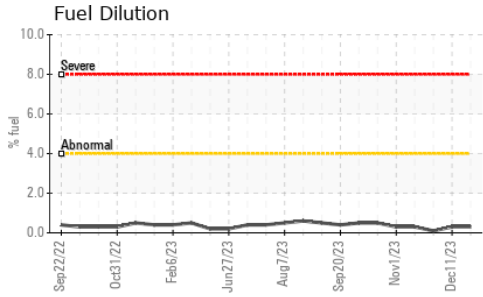
INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	0	0	0
Nitration	Abs/cm *ASTM D7624 >20	10.3	8.9	7.7
Sulfation	Abs/.1mm *ASTM D7415 >30	19.0	17.4	16.4

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	17.2	14.5	13.0
Acid Number (AN)	mg KOH/g ASTM D8045 0.86	1.98	1.60	1.273
Base Number (BN)	mg KOH/g ASTM D2896 3.85	2.35	2.50	2.58

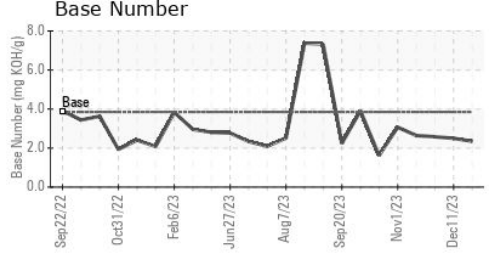
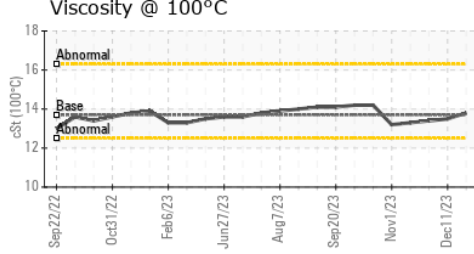
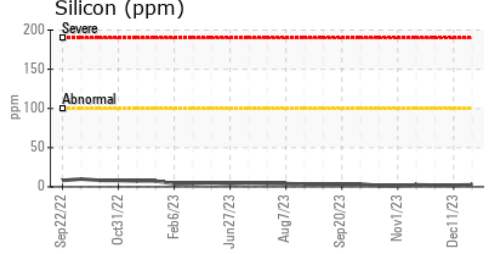
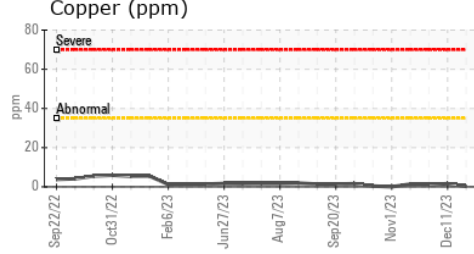
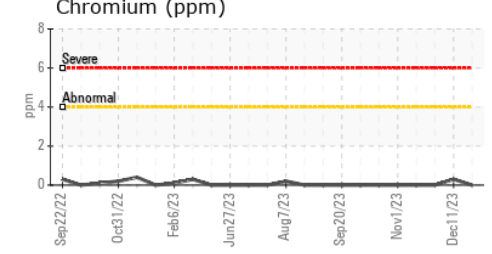
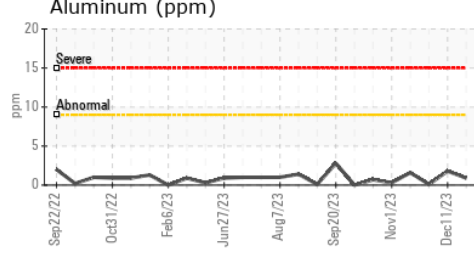
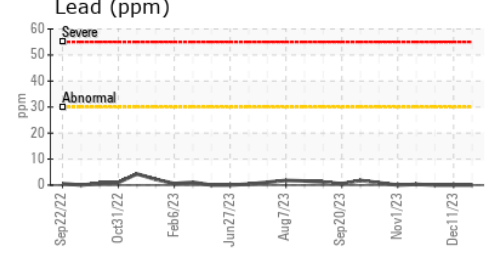
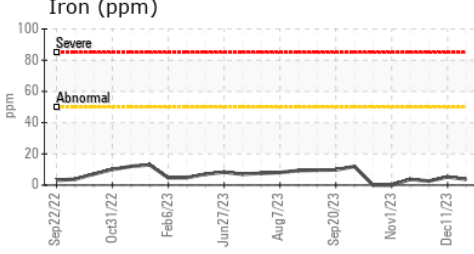
OIL ANALYSIS REPORT



PARAMETER	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	13.8	13.5

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0096588 **Received** : 12 Jan 2024
Lab Number : 06060387 **Tested** : 16 Jan 2024
Unique Number : 10831769 **Diagnosed** : 16 Jan 2024 - Wes Davis
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

Certificate L2367
 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)