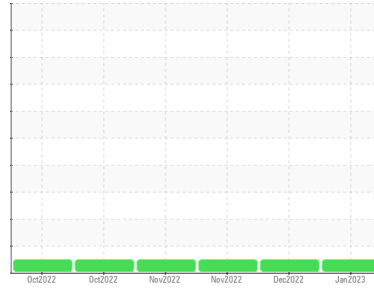


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
LONGHORN A
Machine Id
LONGHORN A UNIT 3 (S/N 1494549)
Component
Natural Gas Engine
Fluid
PETRO CANADA SENTRON LD 8000 (--- GAL)

DIAGNOSIS

Recommendation

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	PCA0080821	PCA0080818	PCA0080815
Sample Date	Client Info	03 Jan 2023	13 Dec 2022	29 Nov 2022
Machine Age	hrs Client Info	2074	1569	1236
Oil Age	hrs Client Info	2074	1569	1236
Oil Changed	Client Info	Not Chngd	Not Chngd	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	12	10	10
Chromium	ppm ASTM D5185m >4	0	0	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	3	2	3
Lead	ppm ASTM D5185m >30	2	1	1
Copper	ppm ASTM D5185m >35	7	8	8
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	0	0	2
Barium	ppm ASTM D5185m	0	<1	0
Molybdenum	ppm ASTM D5185m	2	2	2
Manganese	ppm ASTM D5185m	<1	<1	<1
Magnesium	ppm ASTM D5185m	20	20	23
Calcium	ppm ASTM D5185m 1351	1590	1534	1424
Phosphorus	ppm ASTM D5185m 302	311	309	328
Zinc	ppm ASTM D5185m 358	368	369	365
Sulfur	ppm ASTM D5185m 2758	3071	3184	3114

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	7	7	7
Sodium	ppm ASTM D5185m	3	3	3
Potassium	ppm ASTM D5185m >20	0	0	0
Fuel	% ASTM D3524 >4.0	0.4	0.3	0.3

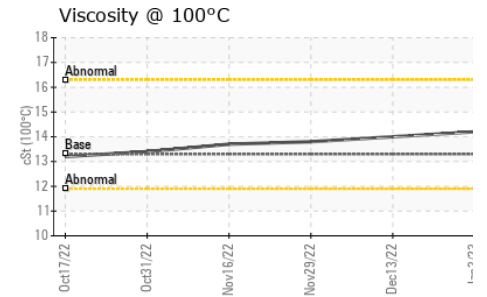
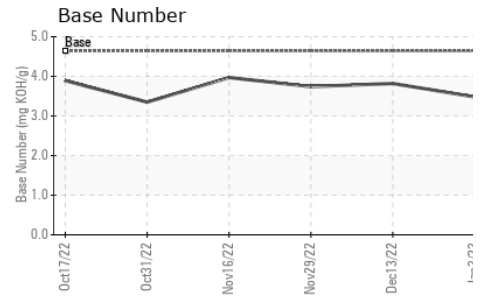
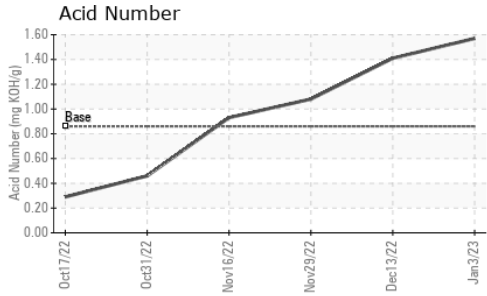
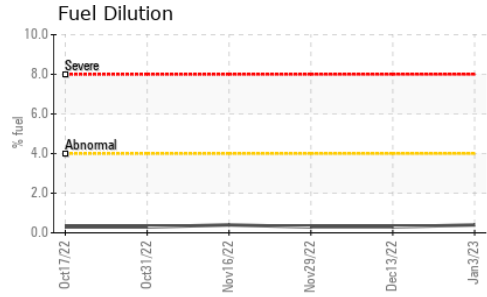
INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	0.1	0.1	0.1
Nitration	Abs/cm *ASTM D7624 >20	8.5	8.4	7.7
Sulfation	Abs/.1mm *ASTM D7415 >30	18.5	19.3	18.9

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	16.3	16.5	15.0
Acid Number (AN)	mg KOH/g ASTM D8045 0.86	1.57	1.41	1.08
Base Number (BN)	mg KOH/g ASTM D2896 4.64	3.48	3.82	3.74

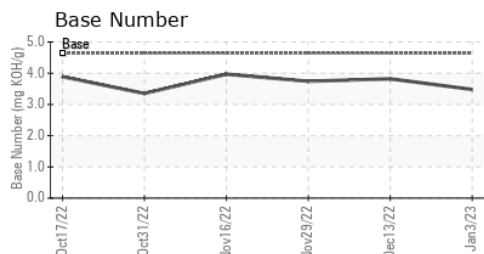
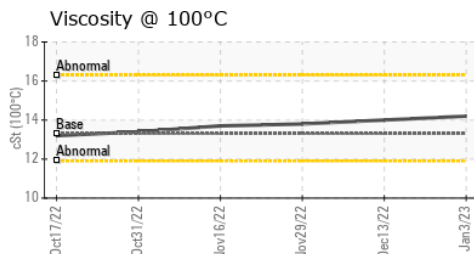
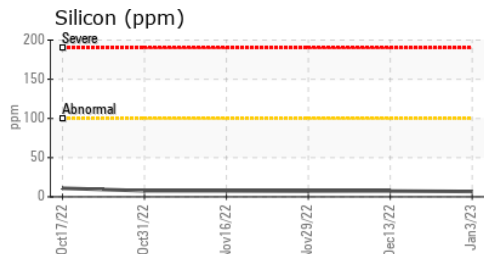
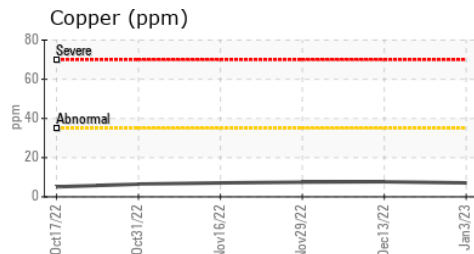
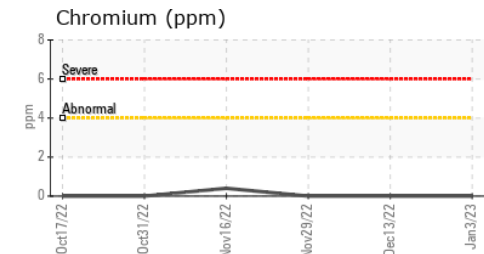
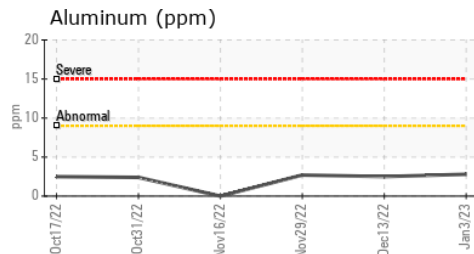
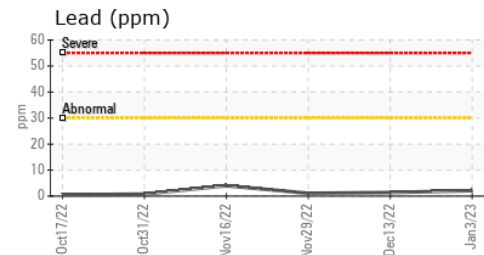
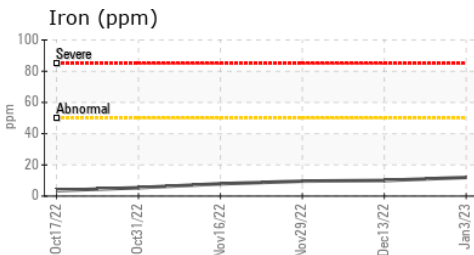
OIL ANALYSIS REPORT



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	13.3	14.2	14.0	13.8

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0080821 **Received** : 05 Jan 2023
Lab Number : **05731687** **Tested** : 06 Jan 2023
Unique Number : 10281285 **Diagnosed** : 06 Jan 2023 - Don Baldrige
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)