

# **OIL ANALYSIS REPORT**

## Sample Rating Trend







Machine Id 9944 Component Diesel Engine Fluid

PETRO CANADA DURON-E XL 15W40 (--- LTR)

## DIAGNOSIS Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. 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.

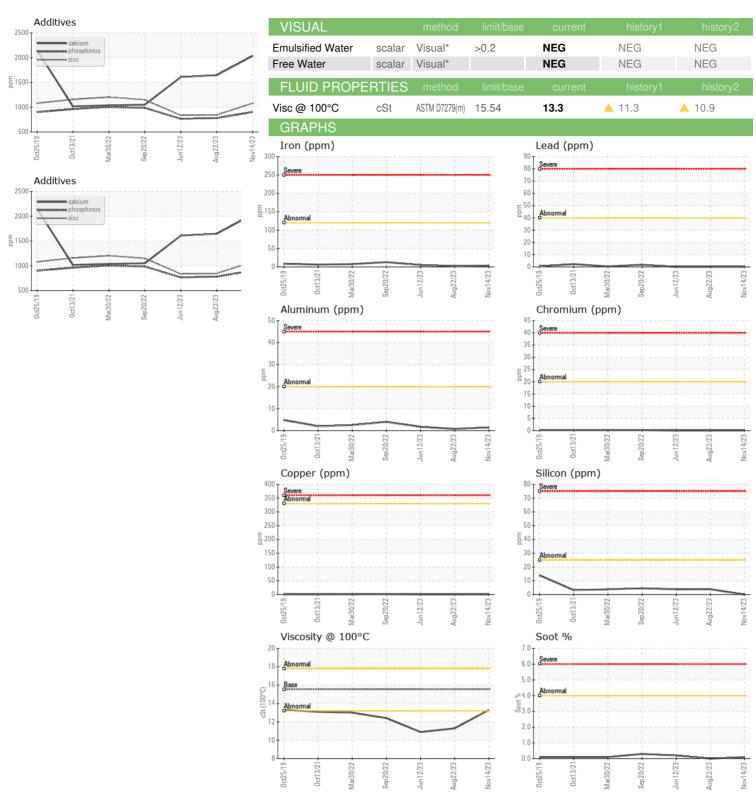
### **Fluid Condition**

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

N-E XL 15W4U (	[ 111)	Oct2019	Oct2021 Mar2022	Sep2022 Jun2023 Aug2023	Nov2023	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0097320	GFL0090842	GFL0082545
Sample Date		Client Info		14 Nov 2023	22 Aug 2023	12 Jun 2023
Machine Age	hrs	Client Info		0	18685	0
Oil Age	hrs	Client Info		192311	0	293318
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	ABNORMAL	ABNORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	2	<b>▲</b> 3.5
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	_S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>120	3	2	5
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	<1	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>20	1	<1	2
Lead	ppm	ASTM D5185(m)	>40	0	0	0
Copper	ppm	ASTM D5185(m)	>330	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Antimony	ppm	ASTM D5185(m)		0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	1	107	60	35
Barium	ppm	ASTM D5185(m)	0	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	60	4	35	41
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	51	454	482
Calcium	ppm	ASTM D5185(m)	1070	2036	1645	1608
Phosphorus	ppm	ASTM D5185(m)	1150	905	780	765
Zinc	ppm	ASTM D5185(m)	1270	1079	844	835
Sulfur	ppm	ASTM D5185(m)	2060	2728	2161	2156
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINAN	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	0	4	4
Sodium	ppm	ASTM D5185(m)		5	2	2
Potassium	ppm	ASTM D5185(m)	>20	4	<1	<1
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>4	0.1	0	0.2
Nitration	Abs/cm	ASTM D7624*	>20	8.4	5.4	9.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.9	22.7	21.0
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.1	19.0	19.3



## **OIL ANALYSIS REPORT**





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number Test Package : MOB 1

: GFL0097320 : 02596449 : 5681529

Received Diagnosed Diagnostician

: 15 Nov 2023 : 15 Nov 2023

: Wes Davis

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 246 - Windsor 2700 Deziel Dr Windsor, ON CA N8W 5H8 Contact: Dave Varga dvarga@gflenv.com T: (519)944-8009

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

Validity of results and interpretation are based on the sample and information as supplied.