



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
85ENTERPRISE
Component
Diesel Engine
Fluid
PETRO CANADA XR 4 SAE 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as PETRO CANADA XR 4 SAE 15W40, however, a fluid match indicates that this fluid is SAE 30 Diesel Engine Oil. Please confirm the oil type and grade on your next sample. Please specify the component make and model with your next sample.

WEAR

Metal levels are typical for a new component breaking in.

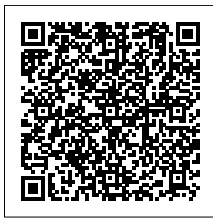
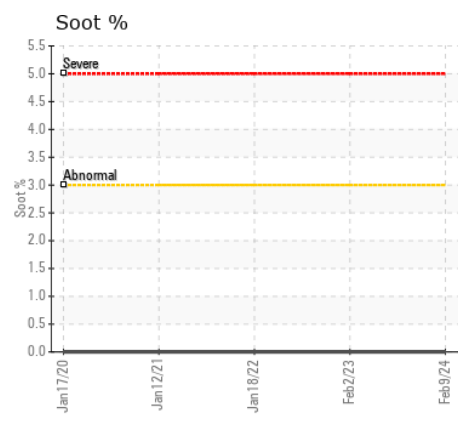
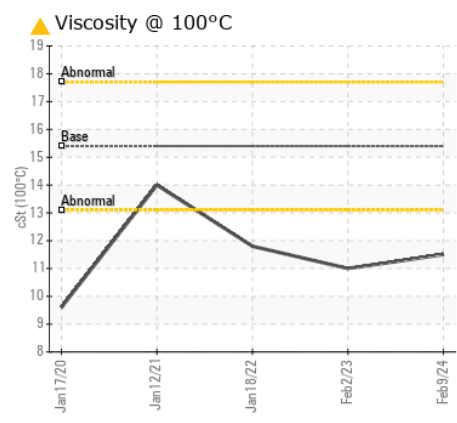
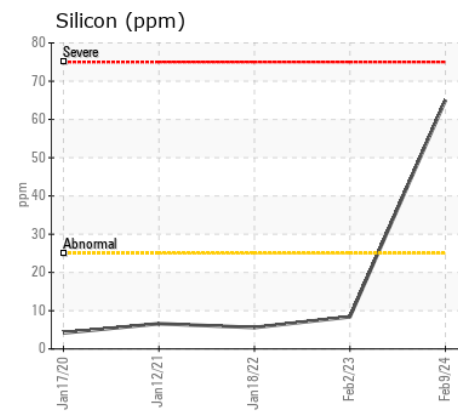
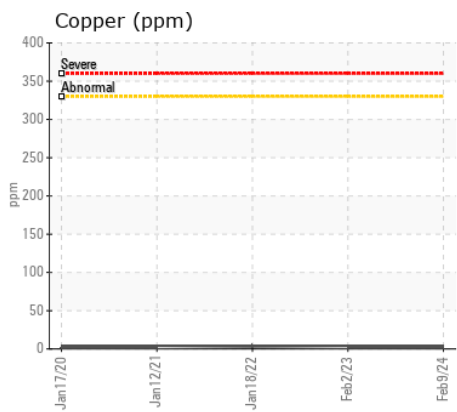
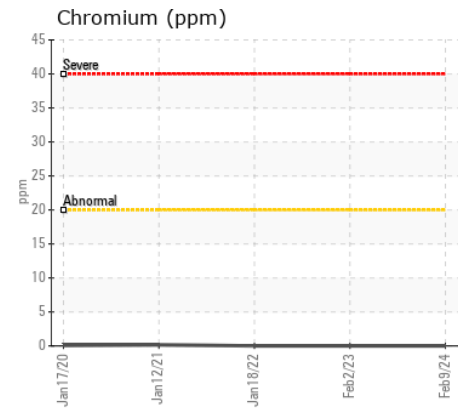
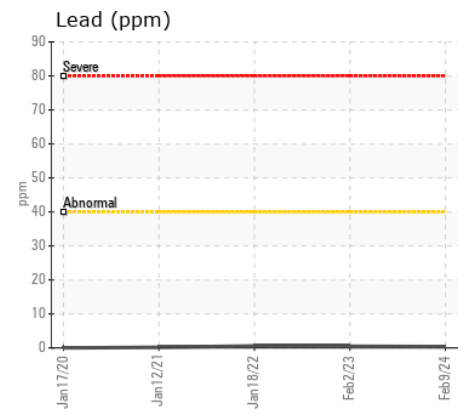
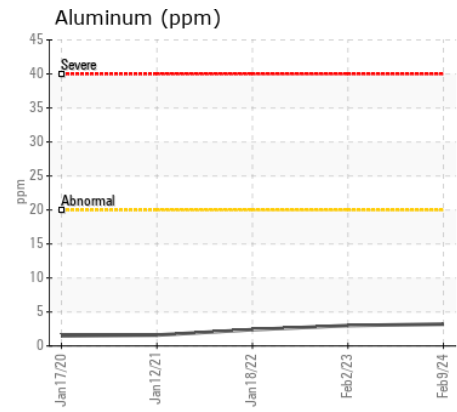
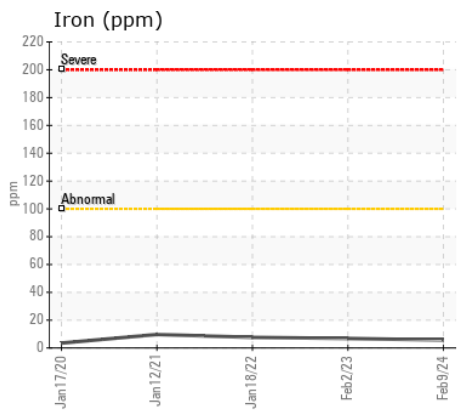
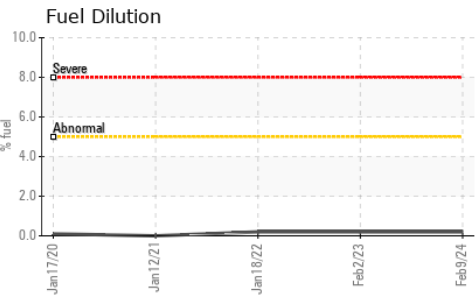
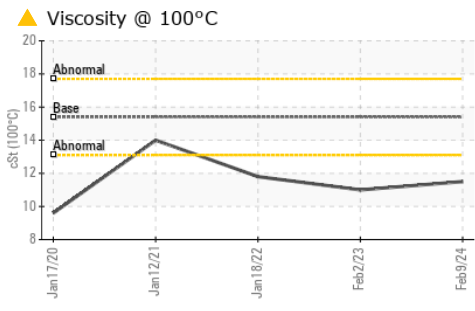
CONTAMINATION

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

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0897599	WC0768103	WC0606470
Sample Date		Client Info		09 Feb 2024	02 Feb 2023	18 Jan 2022
Machine Age	hrs	Client Info		333	0	275
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185(m)	>100	6	7	8
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>20	3	3	2
Lead	ppm	ASTM D5185(m)	>40	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>330	2	2	4
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>25	65	8	6
Potassium	ppm	ASTM D5185(m)	>20	2	6	27
Fuel	%	ASTM D7593*	>5	0.2	0.2	0.2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	0.0
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	7.1	8.1	6.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.7	22.1	19.3
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	▲.2%
Sodium	ppm	ASTM D5185(m)		5	9	35
Boron	ppm	ASTM D5185(m)	1	27	61	17
Barium	ppm	ASTM D5185(m)	1	0	0	0
Molybdenum	ppm	ASTM D5185(m)	1	73	75	63
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)	10	683	758	748
Calcium	ppm	ASTM D5185(m)	3032	1187	1230	1296
Phosphorus	ppm	ASTM D5185(m)	1054	802	741	810
Zinc	ppm	ASTM D5185(m)	1332	923	821	985
Sulfur	ppm	ASTM D5185(m)	3985	2156	1768	2258
Oxidation	Abs/.1mm	ASTM D7414*	>25	12.4	14.0	13.3
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ 11.5	▲ 11.0	▲ 11.8



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0897599 **Received** : 01 Mar 2024
Lab Number : 02619232 **Tested** : 04 Mar 2024
Unique Number : 5736342 **Diagnosed** : 04 Mar 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

NORTHERN GENERATOR CO. LTD.
 80 ASHBRIDGE CIRCLE., UNIT #1 & 2
 WOODBRIDGE, ON
 CA L4L 3R5
 Contact: Selome Afework
 selome@northerngenerator.com
 T: (905)264-9744
 F: (905)264-9714

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.