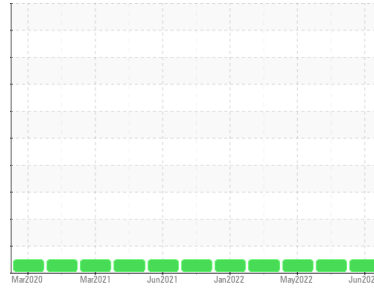


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
EBI DE COSTA RICA
Machine Id
VOLVO A30F A30F04
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (35 LTR)

DIAGNOSIS

Recommendation

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

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PC0073820	PC0063674	PC0055186
Sample Date	Client Info		05 Jun 2023	26 Sep 2022	23 May 2022
Machine Age	hrs	Client Info	15000	13748	13227
Oil Age	hrs	Client Info	500	250	250
Oil Changed	Client Info		N/A	Changed	N/A
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	2	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>200	4	4	3
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>10	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	<1	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>30	1	<1	1
Lead	ppm	ASTM D5185(m)	>40	1	<1	<1
Copper	ppm	ASTM D5185(m)	>20	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>20	0	<1	0
Antimony	ppm	ASTM D5185(m)		0	0	<1
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)	0	1	2	3
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	58	58	58
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	980	959	1009
Calcium	ppm	ASTM D5185(m)	1070	1007	1068	1082
Phosphorus	ppm	ASTM D5185(m)	1150	1076	1079	1078
Zinc	ppm	ASTM D5185(m)	1270	1193	1179	1226
Sulfur	ppm	ASTM D5185(m)	2060	2608	2667	2720
Lithium	ppm	ASTM D5185(m)		<1	<1	0

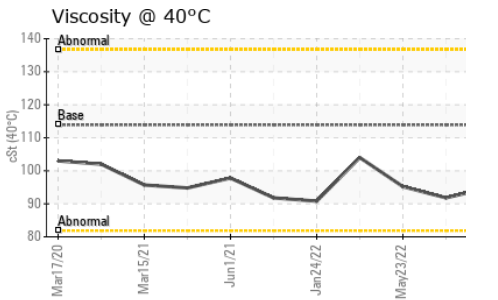
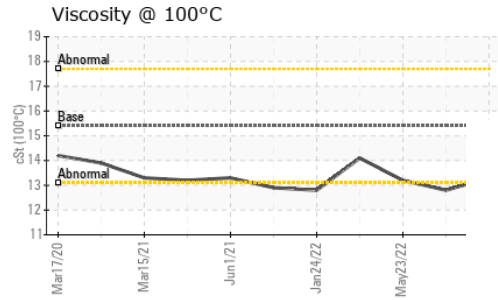
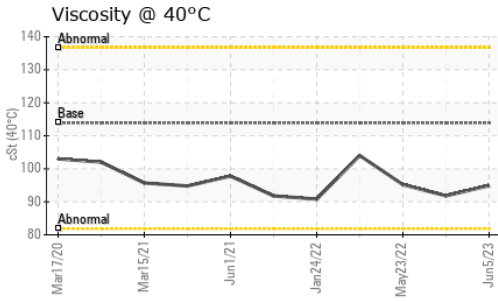
CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	3	3	3
Sodium	ppm	ASTM D5185(m)		1	2	1
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0.1	0	0
Nitration	Abs/cm	ASTM D7624*	>20	6.1	6.4	5.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.3	19.1	20.1

OIL ANALYSIS REPORT

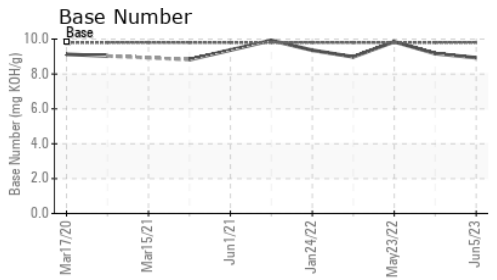
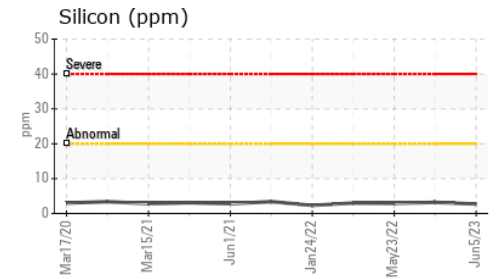
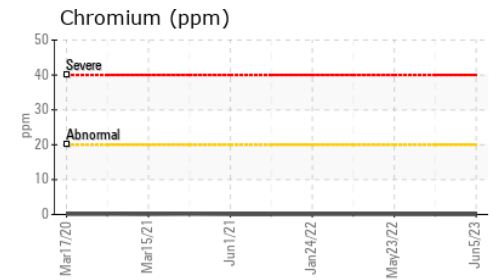
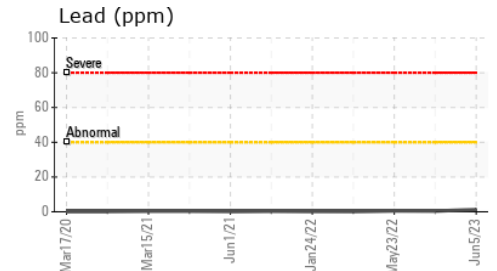
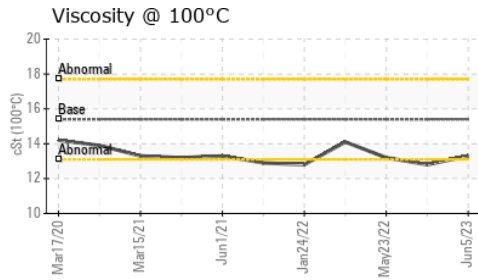
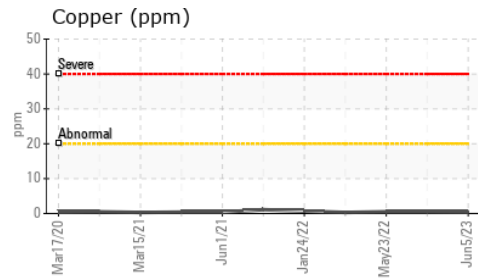
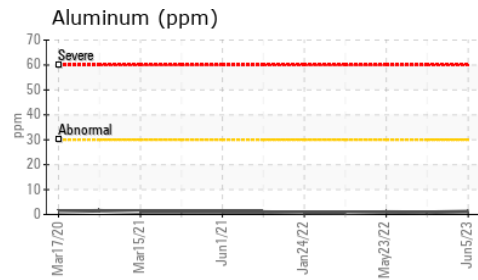
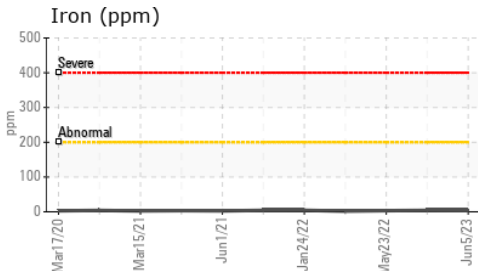


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	13.5	13.8	13.5
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	8.93	9.17	9.85

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	113.9	94.9	91.8	95.2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.3	12.8	13.2
Viscosity Index (VI)	Scale	ASTM D2270*	142	139	136	137

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **INDUSTRIAS del PETROLEO CANAD. SA**
Sample No. : PC0073820 **Received** : 13 Jul 2023
Lab Number : 02569549 **Diagnosed** : 17 Jul 2023
Unique Number : 5606595 **Diagnostician** : Wes Davis
Test Package : MOB 2 (Additional Tests: KV40, VI)

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.

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