FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
3705
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (10 GAL)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

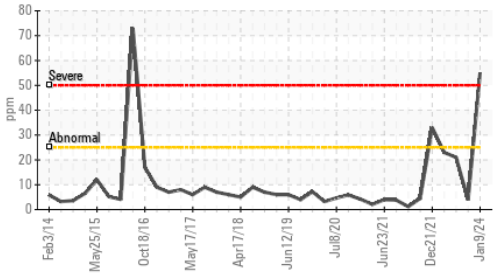
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

FLUID CONDITION

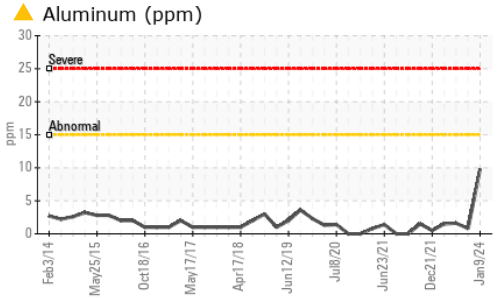
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0101780	PCA0077347	PCA0074727
Sample Date		Client Info		09 Jan 2024	03 Nov 2022	20 Jun 2022
Machine Age	hrs	Client Info		17017	16049	15483
Oil Age	hrs	Client Info		649	566	227
Filter Age	hrs	Client Info		649	566	227
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>75	27	3	7
Chromium	ppm	ASTM D5185m	>5	4	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>15	▲ 10	<1	2
Lead	ppm	ASTM D5185m	>25	5	<1	<1
Copper	ppm	ASTM D5185m	>100	55	1	3
Tin	ppm	ASTM D5185m	>4	2	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	▲ 55	4	21
Potassium	ppm	ASTM D5185m	>20	0	0	0
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.6	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	10.6	5.4	6.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.0	18.8	17.9
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		3	2	2
Boron	ppm	ASTM D5185m	0	25	19	32
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	53	66	65
Manganese	ppm	ASTM D5185m	0	2	<1	<1
Magnesium	ppm	ASTM D5185m	1010	788	829	833
Calcium	ppm	ASTM D5185m	1070	1240	1135	1141
Phosphorus	ppm	ASTM D5185m	1150	789	996	966
Zinc	ppm	ASTM D5185m	1270	1014	1105	1145
Sulfur	ppm	ASTM D5185m	2060	2352	3471	3044
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.7	13.1	12.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.4	10.0	9.1
Visc @ 100°C	cSt	ASTM D445	15.4	13.9	13.5	12.9

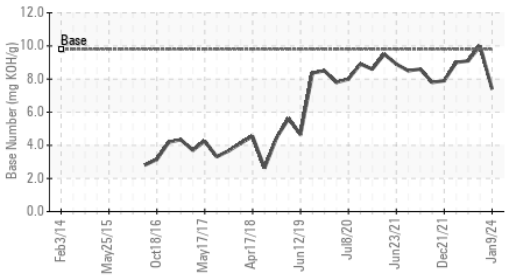
Silicon (ppm)



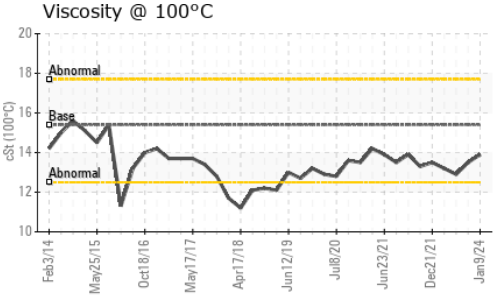
Aluminum (ppm)



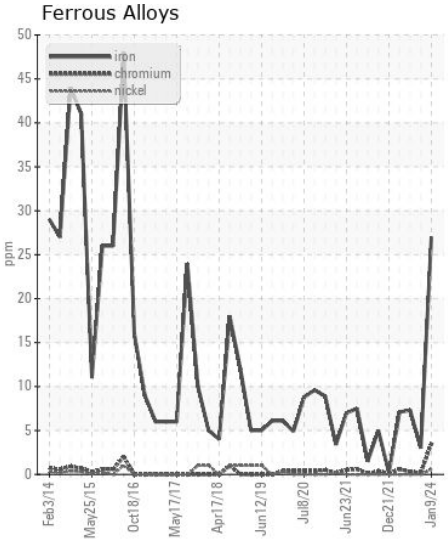
Base Number



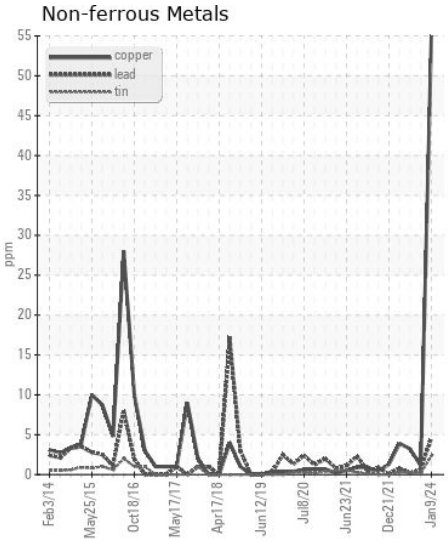
Viscosity @ 100°C



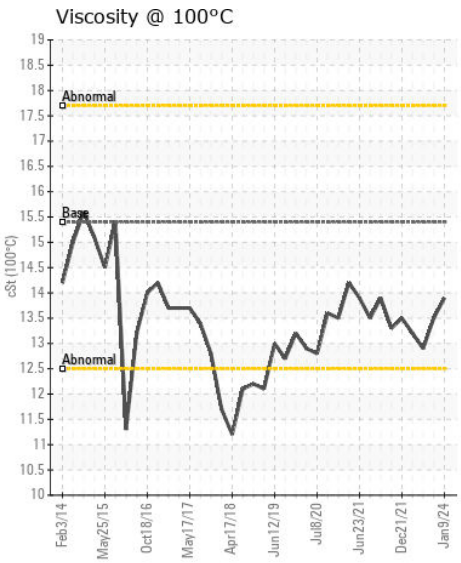
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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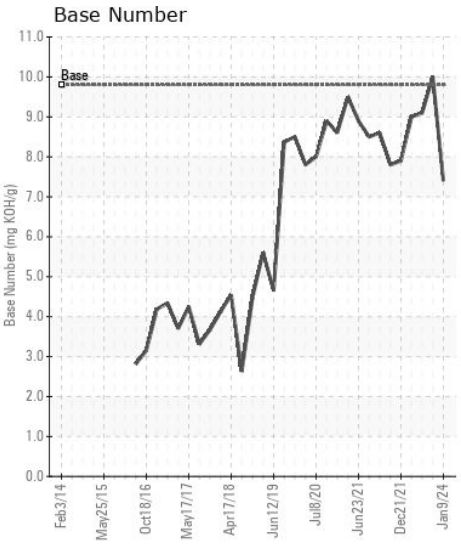

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0101780
Lab Number : 06057880
Unique Number : 10829262
Test Package : FLEET

Recieved : 11 Jan 2024
Diagnosed : 12 Jan 2024
Diagnostician : Don Baldridge

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)

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