



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Area

[WO36032]

Machine Id

INTERNATIONAL TRK 156

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0903619	WC0822319	WC0822310
Sample Date		Client Info		06 Jun 2024	13 Jan 2024	18 Nov 2023
Machine Age	mls	Client Info		549055	523721	0
Oil Age	mls	Client Info		25334	0	0
Filter Age	mls	Client Info		25334	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	41	▲ 110	37
Chromium	ppm	ASTM D5185m	>20	1	4	1
Nickel	ppm	ASTM D5185m	>4	<1	1	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	11	41	10
Lead	ppm	ASTM D5185m	>40	0	2	0
Copper	ppm	ASTM D5185m	>330	2	6	2
Tin	ppm	ASTM D5185m	>15	0	2	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

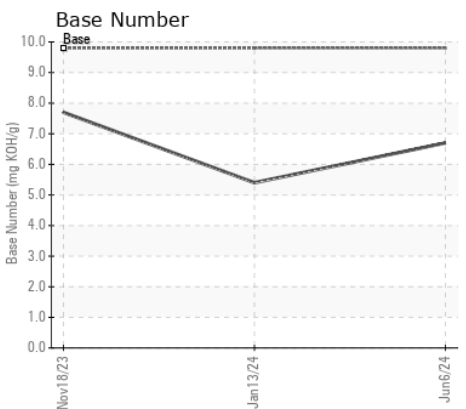
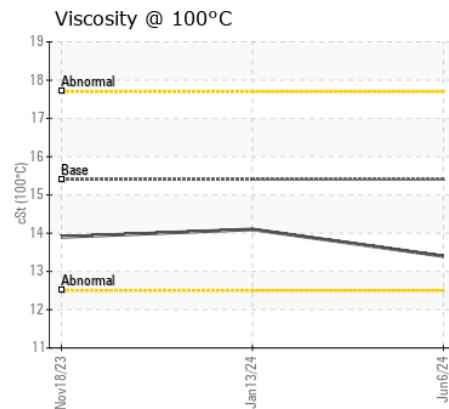
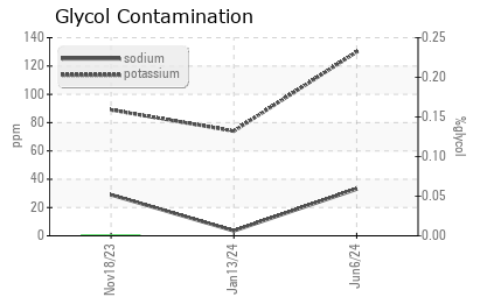
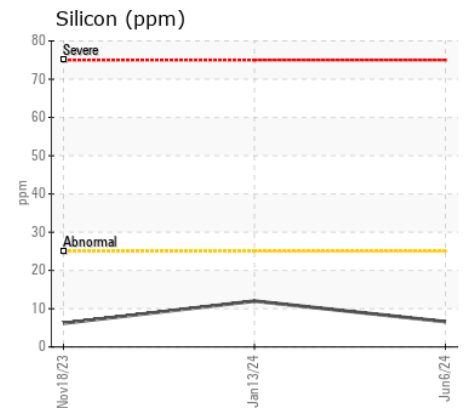
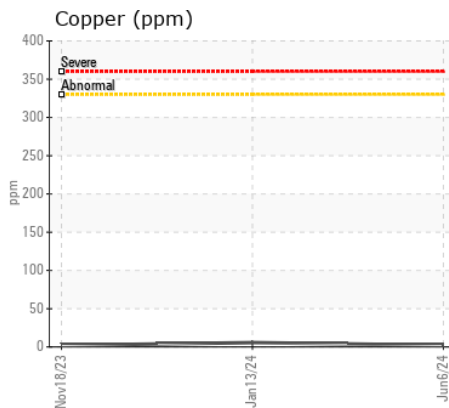
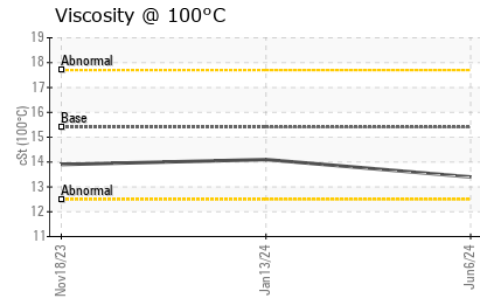
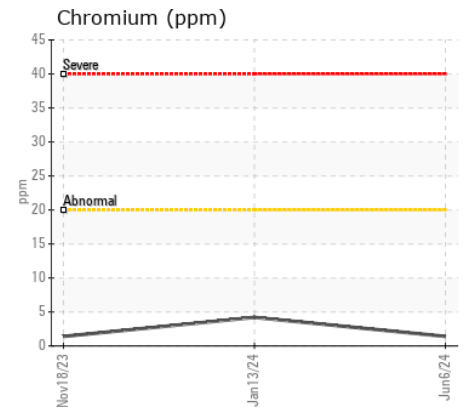
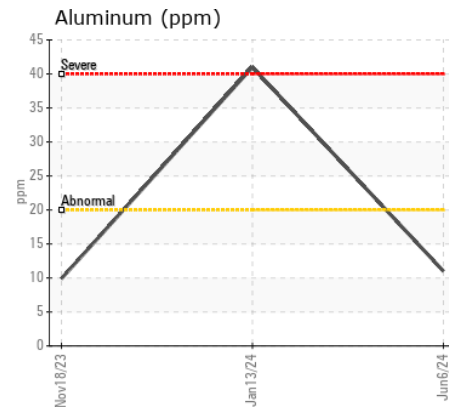
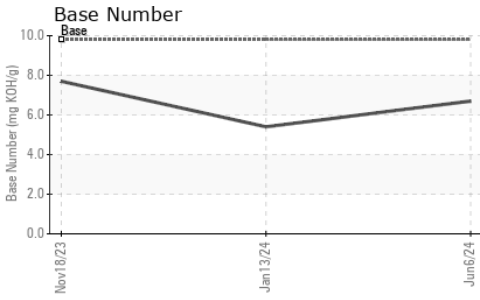
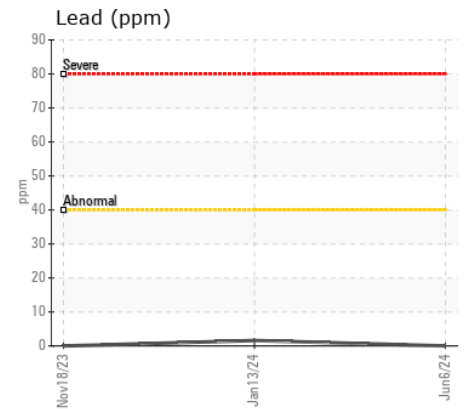
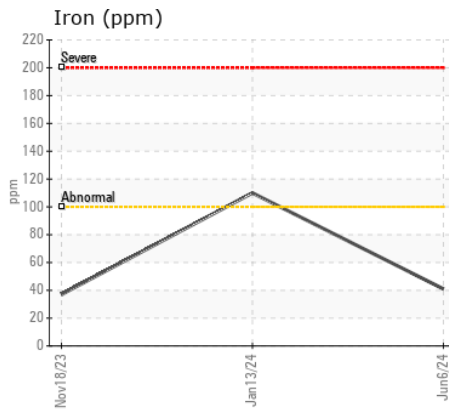
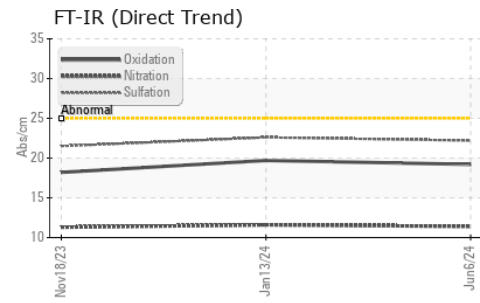
Sodium and/or potassium levels are high.

Silicon	ppm	ASTM D5185m	>25	7	12	6
Potassium	ppm	ASTM D5185m	>20	▲ 130	74	89
Fuel		WC Method	>2.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	0.0
Soot %	%	*ASTM D7844	>3	1	1.5	1.1
Nitration	Abs/cm	*ASTM D7624	>20	11.4	11.6	11.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.2	22.6	21.5
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

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		▲ 33	4	29
Boron	ppm	ASTM D5185m	0	0	2	4
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	68	64	62
Manganese	ppm	ASTM D5185m	0	<1	2	<1
Magnesium	ppm	ASTM D5185m	1010	996	823	881
Calcium	ppm	ASTM D5185m	1070	1243	1126	1054
Phosphorus	ppm	ASTM D5185m	1150	1043	939	1009
Zinc	ppm	ASTM D5185m	1270	1273	1192	1229
Sulfur	ppm	ASTM D5185m	2060	3273	3048	2798
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.2	19.7	18.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.7	5.4	7.7
Visc @ 100°C	cSt	ASTM D445	15.4	13.4	14.1	13.9



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0903619 **Received** : 11 Jul 2024
Lab Number : 06233128 **Tested** : 15 Jul 2024
Unique Number : 11116621 **Diagnosed** : 15 Jul 2024 - Jonathan Hester
Test Package : MOB 1 (Additional Tests: Glycol, TBN)

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Certificate L2367
 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)