



Machine Id
WESTERN STAR T5
Component
Diesel Engine
Fluid
10W30 DURON SEMI (--- 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.

WEAR

All component wear rates are normal.

CONTAMINATION

Sodium and/or potassium levels are high. Test for glycol is positive.

FLUID CONDITION

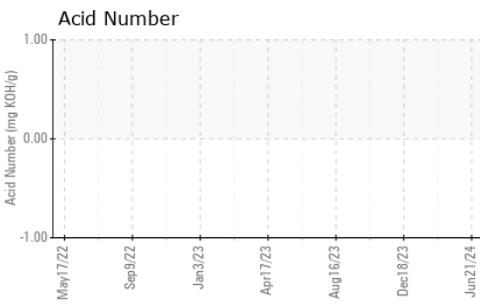
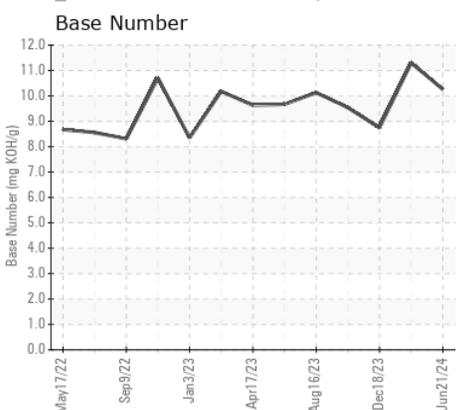
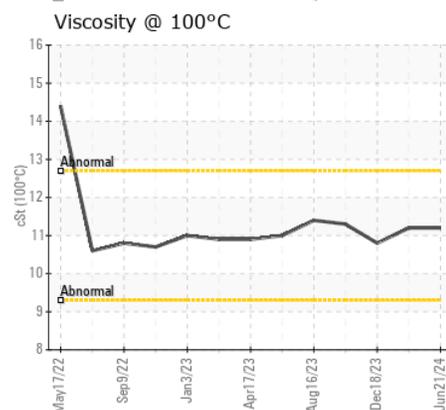
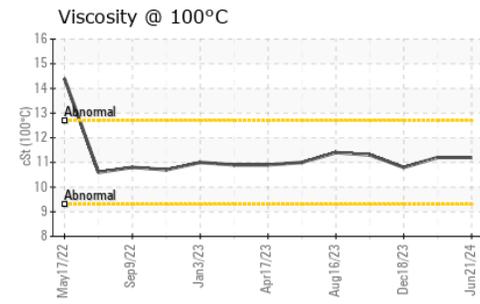
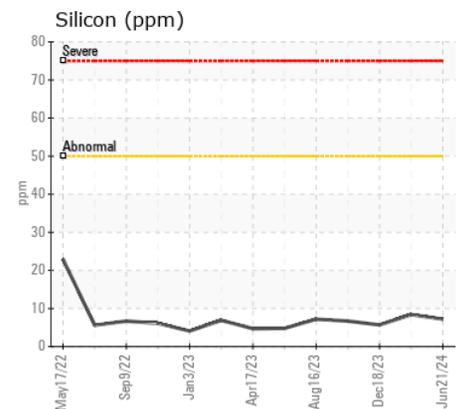
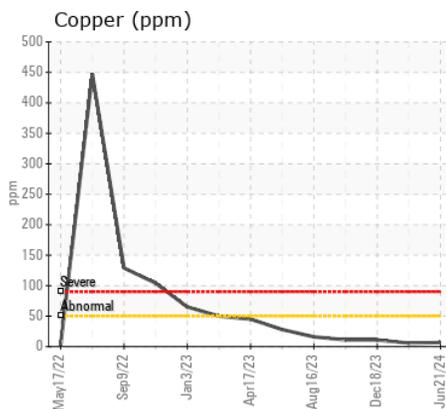
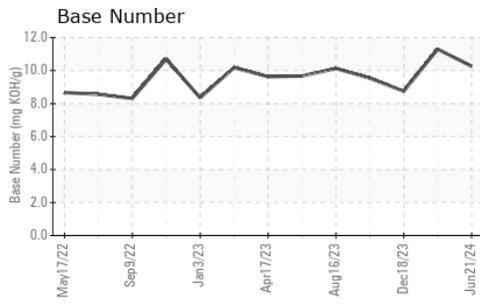
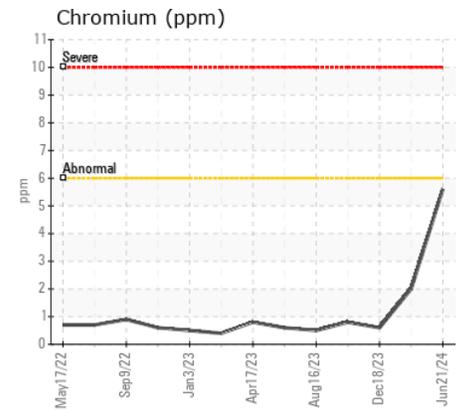
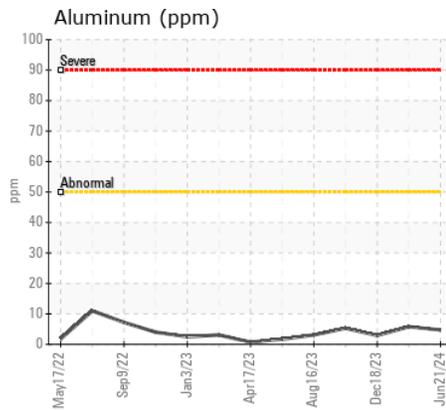
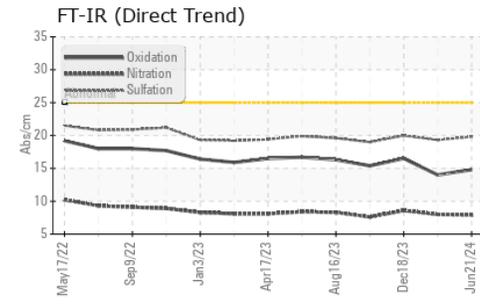
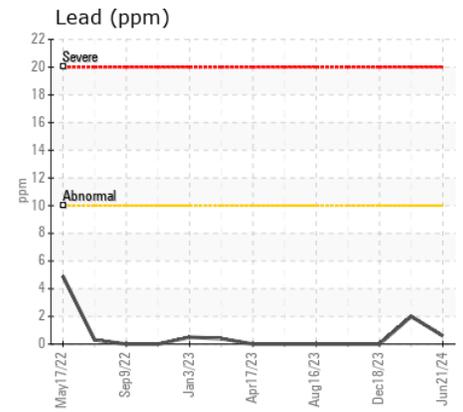
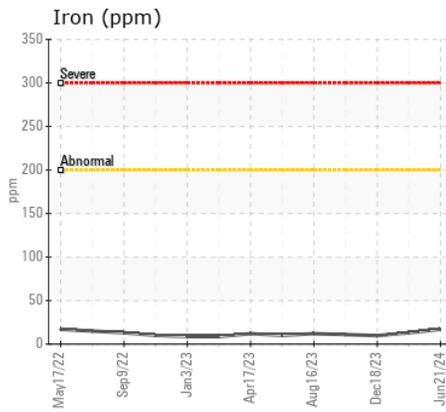
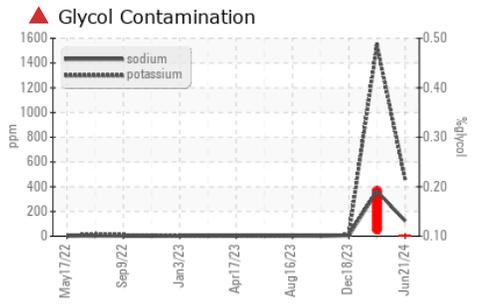
The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LP0001944	LP0001320	LP0001570
Sample Date		Client Info		21 Jun 2024	23 Apr 2024	18 Dec 2023
Machine Age	hrs	Client Info		5742	5392	4796
Oil Age	hrs	Client Info		350	590	400
Filter Age	hrs	Client Info		350	590	400
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				SEVERE	SEVERE	NORMAL

Iron	ppm	ASTM D5185m	>200	17	13	10
Chromium	ppm	ASTM D5185m	>6	6	2	<1
Nickel	ppm	ASTM D5185m	>3	0	<1	0
Titanium	ppm	ASTM D5185m	>2	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>50	5	6	3
Lead	ppm	ASTM D5185m	>10	<1	2	0
Copper	ppm	ASTM D5185m	>50	6	6	11
Tin	ppm	ASTM D5185m	>6	<1	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

Silicon	ppm	ASTM D5185m	>50	7	8	6
Potassium	ppm	ASTM D5185m	>20	460	1545	11
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		0.10	0.20	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.2	0.4
Nitration	Abs/cm	*ASTM D7624	>20	7.9	8.0	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.8	19.3	20.0
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		124	362	5
Boron	ppm	ASTM D5185m		6	3	7
Barium	ppm	ASTM D5185m		0	1	0
Molybdenum	ppm	ASTM D5185m		117	185	65
Manganese	ppm	ASTM D5185m		1	1	<1
Magnesium	ppm	ASTM D5185m		1050	913	951
Calcium	ppm	ASTM D5185m		1207	1144	1089
Phosphorus	ppm	ASTM D5185m		1148	1145	1048
Zinc	ppm	ASTM D5185m		1434	1247	1270
Sulfur	ppm	ASTM D5185m		3792	4108	2564
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.8	14.0	16.5
Base Number (BN)	mg KOH/g	ASTM D2896		10.26	11.30	8.75
Visc @ 100°C	cSt	ASTM D445		11.2	11.2	10.8



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LP0001944 **Received** : 28 Jun 2024
Lab Number : 06224088 **Tested** : 02 Jul 2024
Unique Number : 11102285 **Diagnosed** : 02 Jul 2024 - Jonathan Hester
Test Package : MOB 2 (Additional Tests: KV40, TAN Man)
 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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