



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
1438
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. We advise that you check the fuel injection system. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

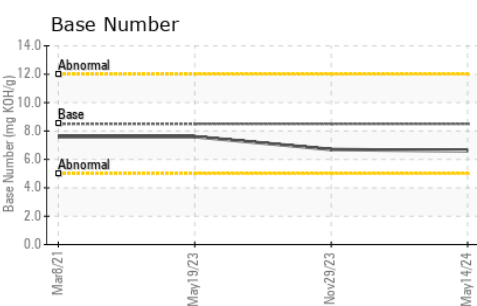
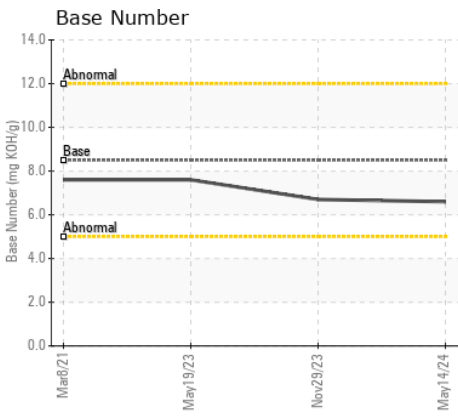
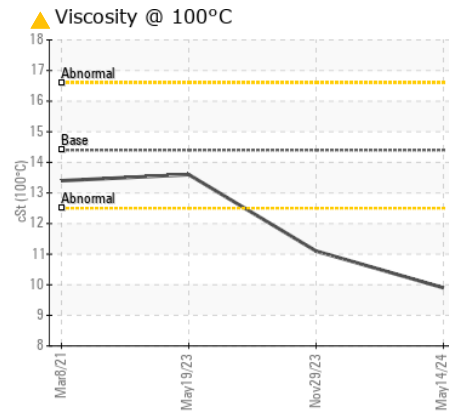
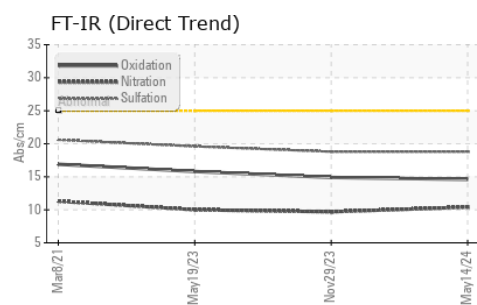
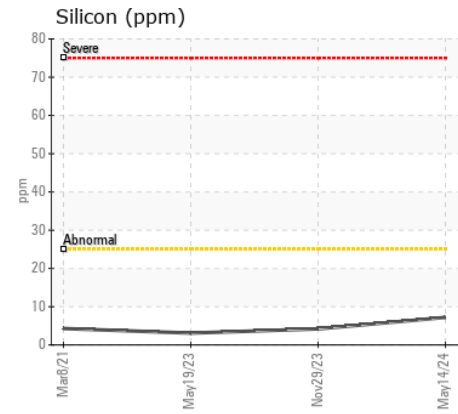
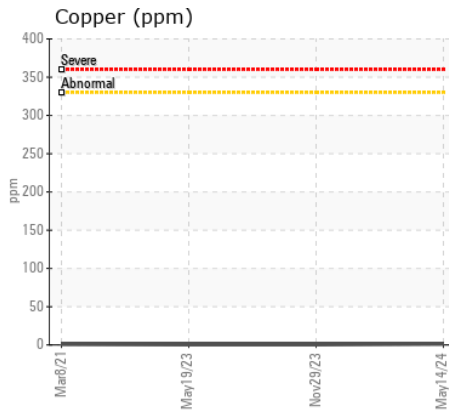
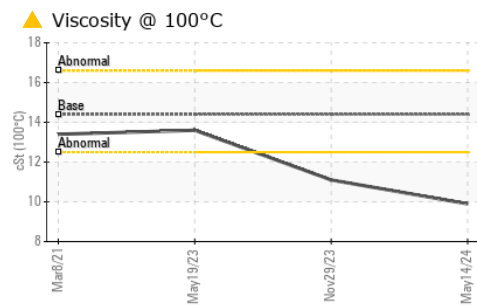
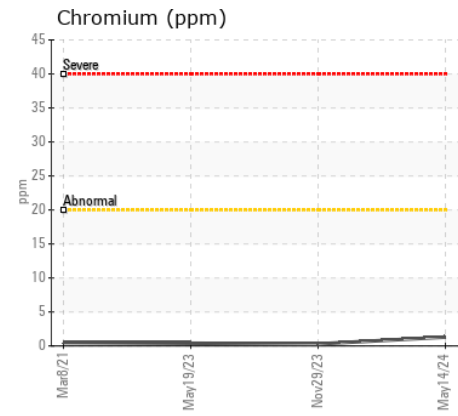
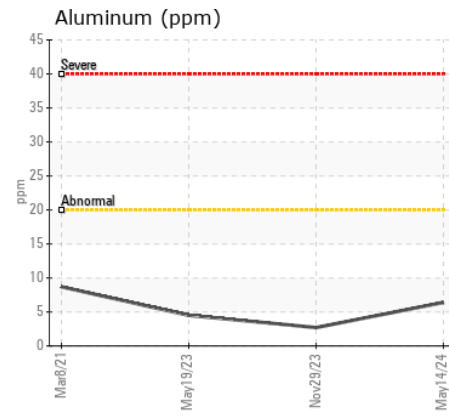
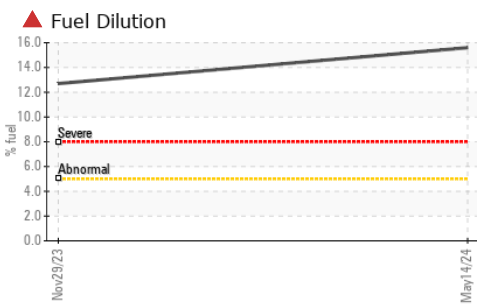
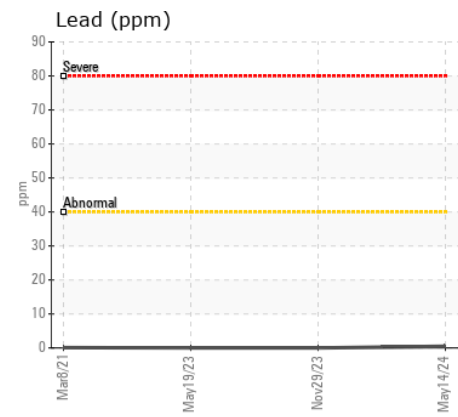
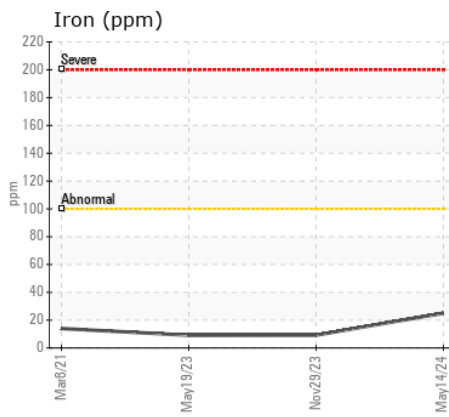
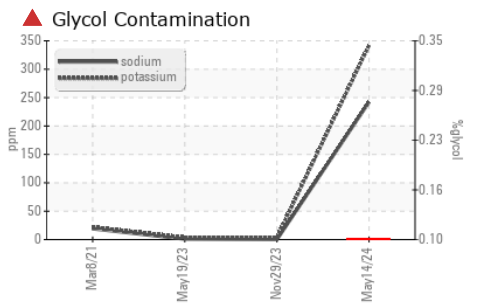
CONTAMINATION

Sodium and/or potassium levels are high. Test for glycol is positive. There is a high amount of fuel present in the oil.

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0932750	WC0870720	WC0821269
Sample Date		Client Info		14 May 2024	29 Nov 2023	19 May 2023
Machine Age	mls	Client Info		199517	184107	174001
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				SEVERE	SEVERE	NORMAL
Iron	ppm	ASTM D5185m	>100	25	9	9
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	6	3	4
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	2	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	7	4	3
Potassium	ppm	ASTM D5185m	>20	342	4	4
Fuel	%	ASTM D3524	>5	15.6	12.7	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		0.10	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.6	0.4
Nitration	Abs/cm	*ASTM D7624	>20	10.4	9.7	10.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.8	18.8	19.6
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	>158	242	0	<1
Boron	ppm	ASTM D5185m	250	27	35	31
Barium	ppm	ASTM D5185m	10	0	5	0
Molybdenum	ppm	ASTM D5185m	100	113	78	79
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	450	50	103	136
Calcium	ppm	ASTM D5185m	3000	1830	1838	2192
Phosphorus	ppm	ASTM D5185m	1150	933	913	1074
Zinc	ppm	ASTM D5185m	1350	1059	1062	1315
Sulfur	ppm	ASTM D5185m	4250	3517	3291	4559
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.6	14.9	15.8
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.6	6.7	7.6
Visc @ 100°C	cSt	ASTM D445	14.4	9.9	11.1	13.6



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0932750 **Received** : 23 May 2024
Lab Number : 06189047 **Tested** : 29 May 2024
Unique Number : 11045799 **Diagnosed** : 29 May 2024 - Jonathan Hester
Test Package : MOB 1 (Additional Tests: Glycol, PercentFuel, TBN)
 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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