



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
9013
 Component
Diesel Engine
 Fluid
VALVOLINE PREMIUM BLUE 2000 15W40 (--- QTS)

RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0863927	WC0811892	WC0712605
Sample Date		Client Info		13 Nov 2023	14 Aug 2023	12 May 2023
Machine Age	mls	Client Info		0	0	0
Oil Age	mls	Client Info		15000	15000	15000
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	23	28	21
Chromium	ppm	ASTM D5185m	>20	1	1	1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	4	0
Lead	ppm	ASTM D5185m	>40	17	8	4
Copper	ppm	ASTM D5185m	>330	1	<1	1
Tin	ppm	ASTM D5185m	>15	3	3	4
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

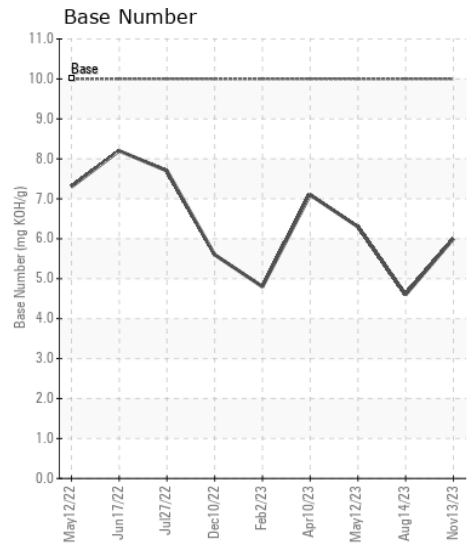
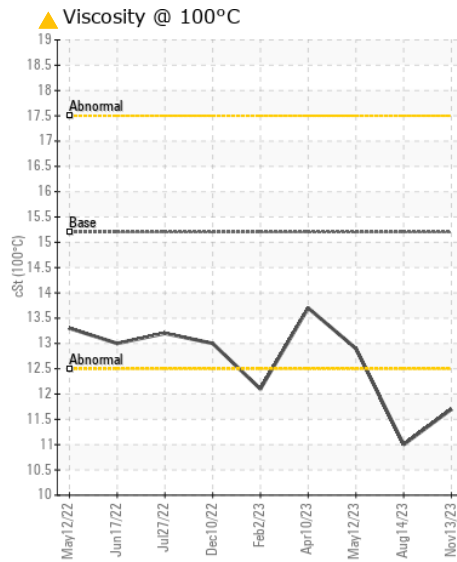
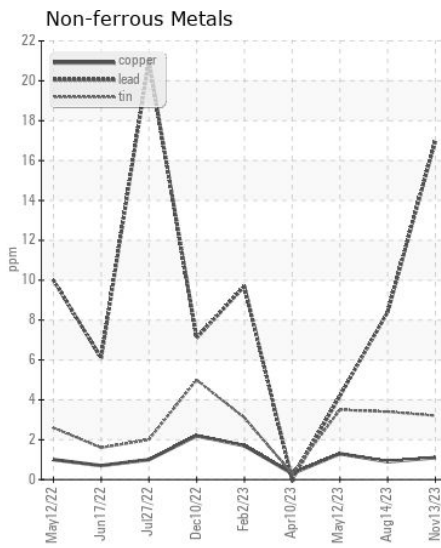
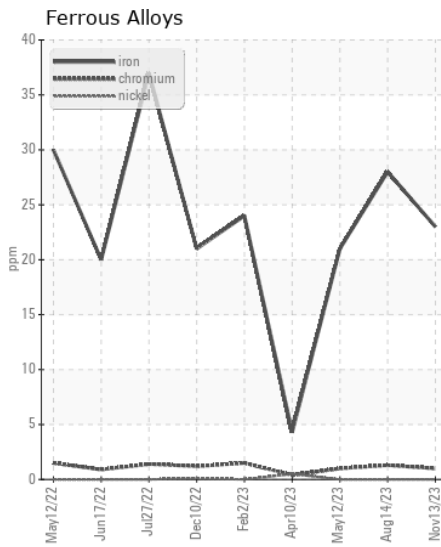
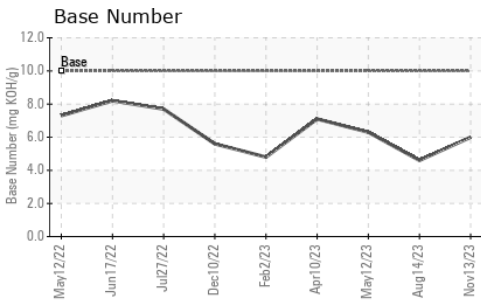
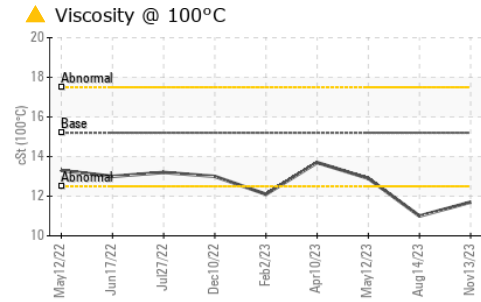
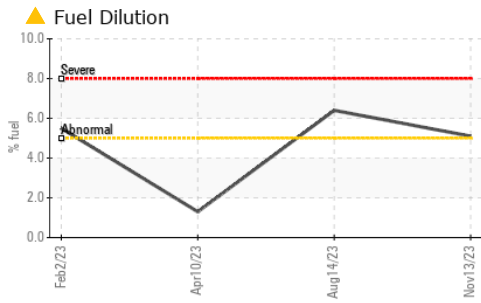
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185m	>25	4	4	3
Potassium	ppm	ASTM D5185m	>20	<1	2	7
Fuel	%	ASTM D3524	>5	▲ 5.1	▲ 6.4	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	10.1	10.8	10.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.7	24.7	24.5
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. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		3	3	3
Boron	ppm	ASTM D5185m		31	28	90
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		61	77	12
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		680	722	145
Calcium	ppm	ASTM D5185m		1189	1345	1972
Phosphorus	ppm	ASTM D5185m		636	727	847
Zinc	ppm	ASTM D5185m		838	901	1082
Sulfur	ppm	ASTM D5185m		2210	2836	3384
Oxidation	Abs/.1mm	*ASTM D7414	>25	24.3	26.5	22.4
Base Number (BN)	mg KOH/g	ASTM D2896	10.0	6.0	4.6	6.3
Visc @ 100°C	cSt	ASTM D445	15.2	▲ 11.7	▲ 11.0	12.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0863927 **Received** : 19 Dec 2023
Lab Number : 06039907 **Tested** : 27 Dec 2023
Unique Number : 10795136 **Diagnosed** : 27 Dec 2023 - Wes Davis
Test Package : FLEET (Additional Tests: PercentFuel)

TALLEN TRANSPORT
 262 COUNTY ROAD 580
 MADISONVILLE, TN
 US 37303
 Contact: COBY JOHNSON
 tallenttransport@gmail.com

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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F: