



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
9018
 Component
Diesel Engine
 Fluid
VALVOLINE PREMIUM BLUE 2000 15W40 (--- QTS)

RECOMMENDATION

The oil is near the end of it's useful service life, recommend schedule an oil change. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0712600	WC0758843	WC0712610
Sample Date		Client Info		25 Jul 2023	07 Mar 2023	04 Oct 2022
Machine Age	mls	Client Info		0	0	15000
Oil Age	mls	Client Info		15000	15000	0
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	ATTENTION	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	101	25	25
Chromium	ppm	ASTM D5185m	>20	2	1	1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	13	4	5
Lead	ppm	ASTM D5185m	>40	2	<1	1
Copper	ppm	ASTM D5185m	>330	1	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

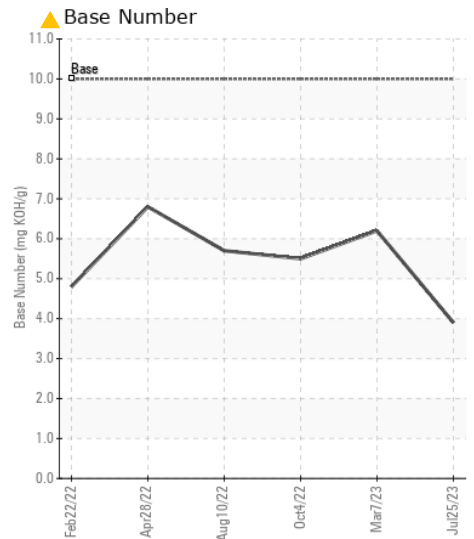
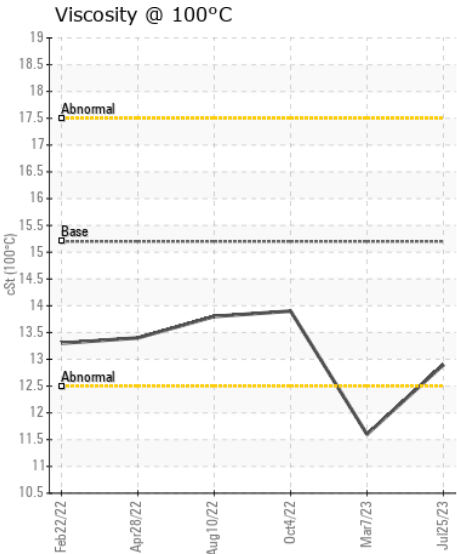
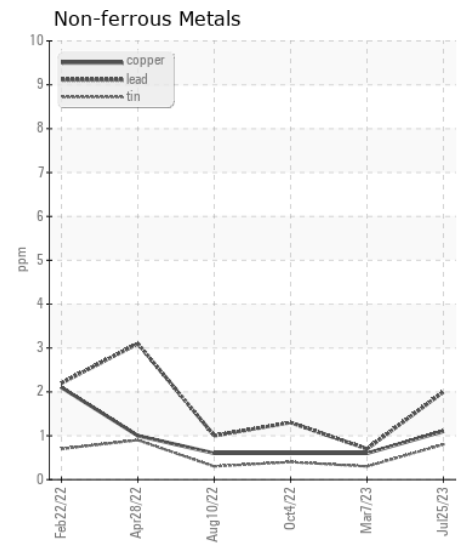
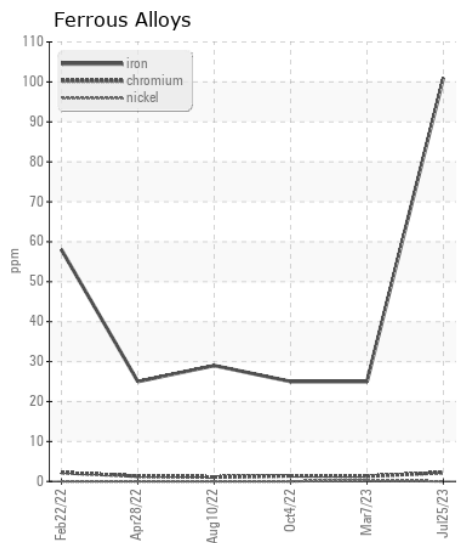
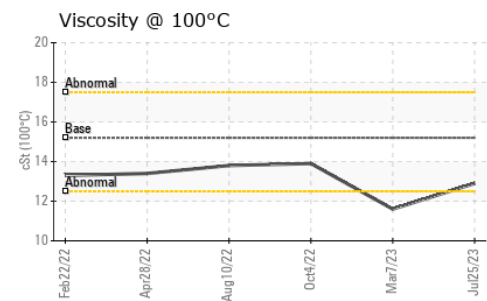
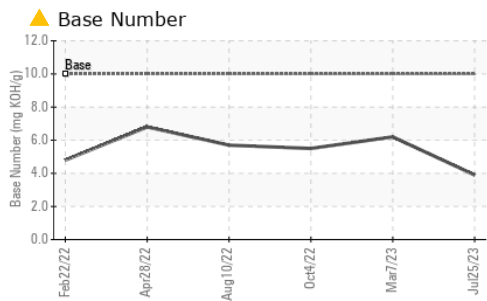
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	6	6
Potassium	ppm	ASTM D5185m	>20	8	5	8
Fuel		WC Method	>5	<1.0	▲ 2.2	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.5	0.5
Nitration	Abs/cm	*ASTM D7624	>20	14.4	11.7	14.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.7	24.6	28.0
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

FLUID CONDITION

The BN level is low.

Sodium	ppm	ASTM D5185m		4	3	3
Boron	ppm	ASTM D5185m		21	48	16
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		74	55	56
Manganese	ppm	ASTM D5185m		2	<1	<1
Magnesium	ppm	ASTM D5185m		829	387	818
Calcium	ppm	ASTM D5185m		1542	1766	1262
Phosphorus	ppm	ASTM D5185m		875	944	737
Zinc	ppm	ASTM D5185m		1061	1155	944
Sulfur	ppm	ASTM D5185m		3145	2923	3036
Oxidation	Abs/.1mm	*ASTM D7414	>25	30.1	21.8	29.9
Base Number (BN)	mg KOH/g	ASTM D2896	10.0	▲ 3.9	6.2	5.5
Visc @ 100°C	cSt	ASTM D445	15.2	12.9	● 11.6	13.9



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0712600 **Received** : 24 Aug 2023
Lab Number : 05934130 **Tested** : 25 Aug 2023
Unique Number : 10619401 **Diagnosed** : 26 Aug 2023 - Don Baldrige
Test Package : FLEET

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

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)