



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
T00796
 Component
Diesel Engine
 Fluid
CASTROL VECTON 15W40 CK4 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0856243	WC0557534	WC0583886
Sample Date		Client Info		13 Jun 2024	20 Jan 2022	30 Jul 2021
Machine Age	mls	Client Info		115522	71882	59552
Oil Age	mls	Client Info		12000	12000	12000
Filter Age	mls	Client Info		12000	12000	12000
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	MARGINAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	89	92	142
Chromium	ppm	ASTM D5185m	>20	2	2	4
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	9	8
Lead	ppm	ASTM D5185m	>40	0	2	<1
Copper	ppm	ASTM D5185m	>330	4	5	7
Tin	ppm	ASTM D5185m	>15	0	0	<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

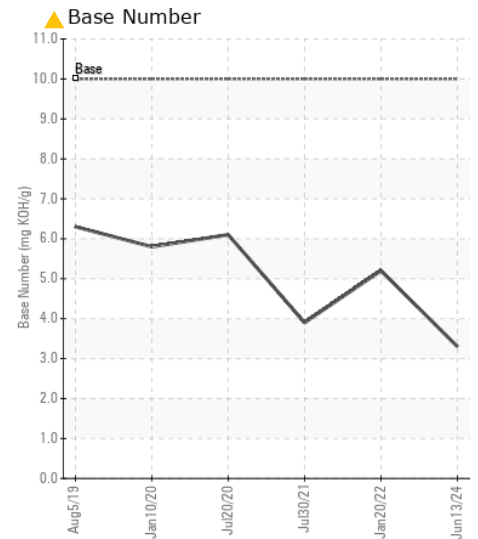
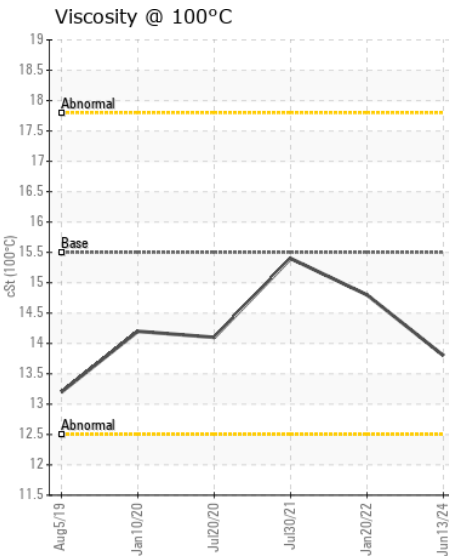
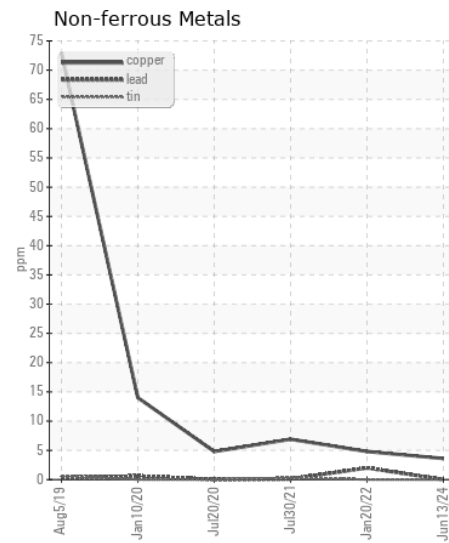
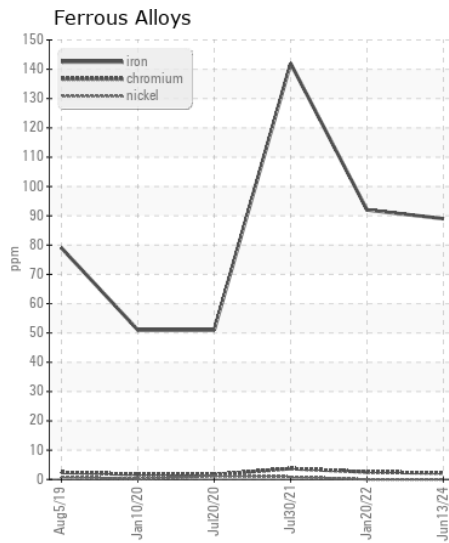
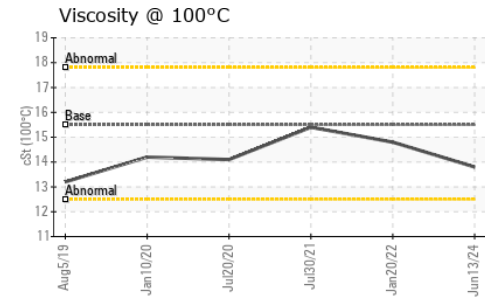
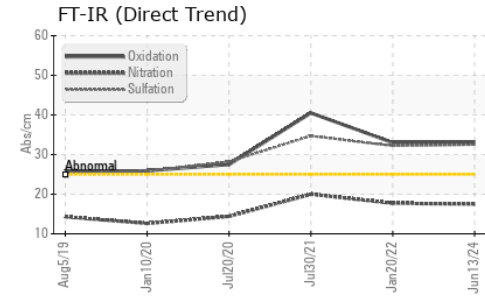
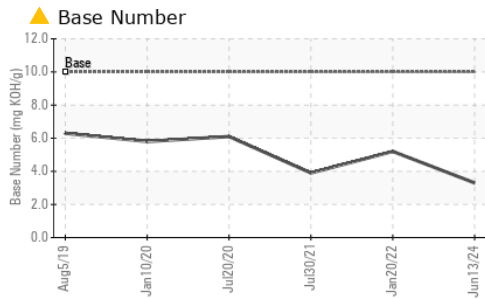
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	21	12	11
Potassium	ppm	ASTM D5185m	>20	6	10	24
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1.3	1.4	1.7
Nitration	Abs/cm	*ASTM D7624	>20	17.5	17.7	20
Sulfation	Abs/.1mm	*ASTM D7415	>30	32.5	32.2	34.7
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. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		8	7	9
Boron	ppm	ASTM D5185m		15	26	32
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		78	81	64
Manganese	ppm	ASTM D5185m		1	1	1
Magnesium	ppm	ASTM D5185m		112	177	372
Calcium	ppm	ASTM D5185m		2151	2038	1886
Phosphorus	ppm	ASTM D5185m		938	999	1007
Zinc	ppm	ASTM D5185m		1147	1174	1150
Sulfur	ppm	ASTM D5185m		3503	2765	2530
Oxidation	Abs/.1mm	*ASTM D7414	>25	33.2	33.0	40.5
Base Number (BN)	mg KOH/g	ASTM D2896	10	▲ 3.3	5.2	▲ 3.9
Visc @ 100°C	cSt	ASTM D445	15.5	13.8	14.8	15.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0856243 **Received** : 09 Jul 2024
Lab Number : 06231354 **Tested** : 10 Jul 2024
Unique Number : 11114847 **Diagnosed** : 10 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: 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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