



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL

Machine Id
FREIGHTLINER 45717
Component
Diesel Engine
Fluid
CHEVRON 15W40 (44 QTS)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

WEAR

All component wear rates are normal.

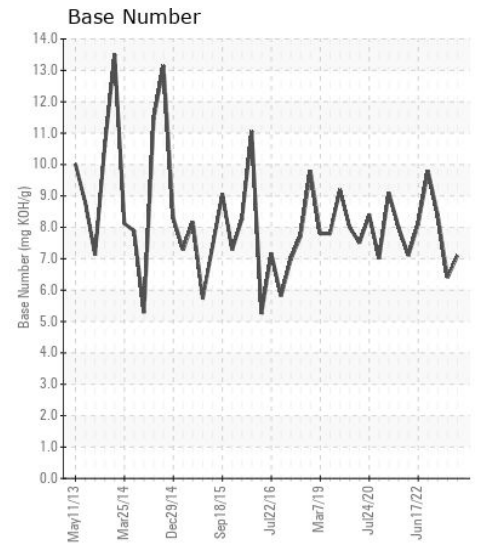
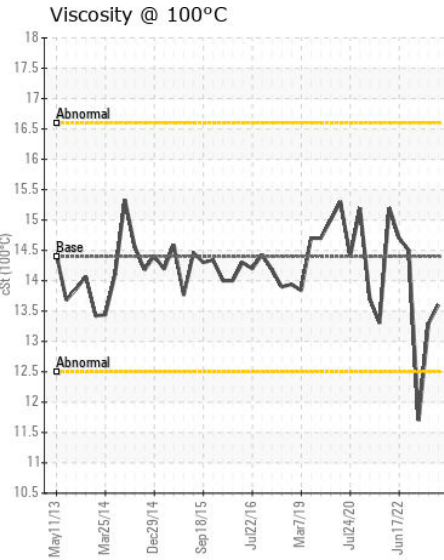
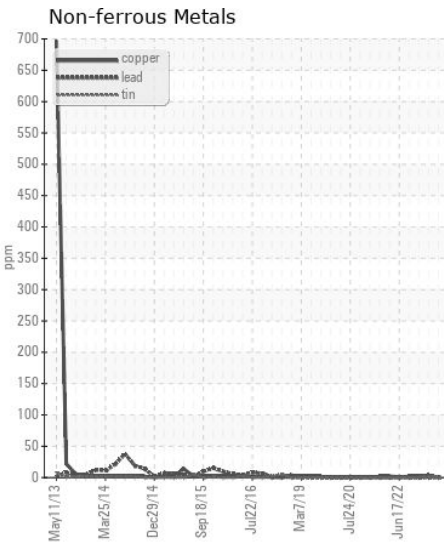
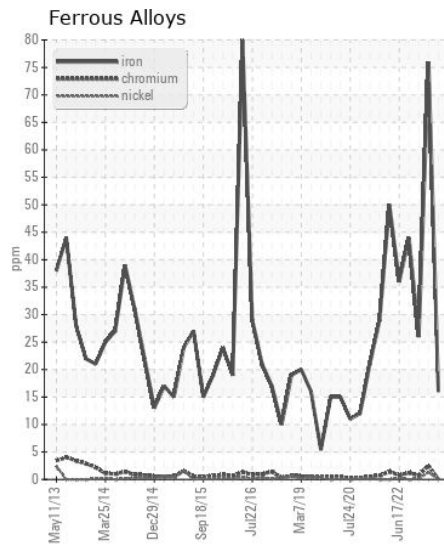
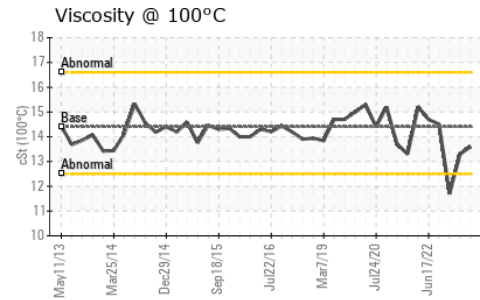
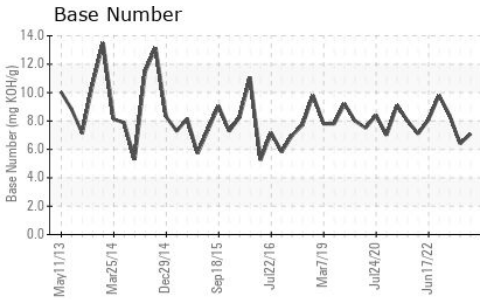
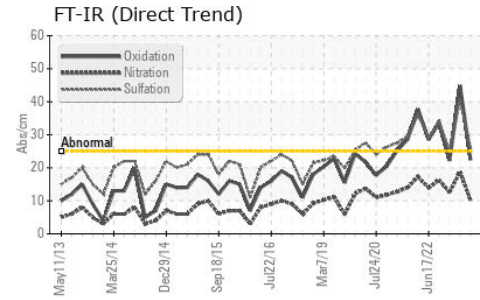
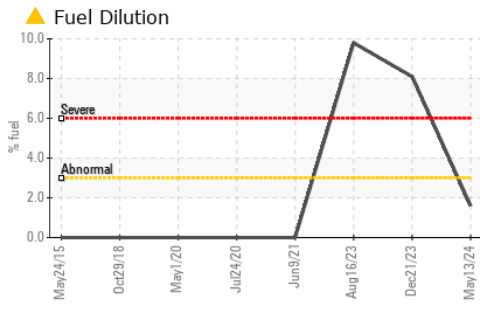
CONTAMINATION

Light fuel dilution occurring. No other contaminants were detected in the oil.

FLUID CONDITION

Sulfur ppm levels are abnormally high. 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		WC0904522	WC0861085	WC0815372
Sample Date		Client Info		13 May 2024	21 Dec 2023	16 Aug 2023
Machine Age	mls	Client Info		347659	10000	0
Oil Age	mls	Client Info		10000	10000	30000
Filter Age	mls	Client Info		10000	10000	30000
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	SEVERE	SEVERE
Iron	ppm	ASTM D5185m	>165	16	76	26
Chromium	ppm	ASTM D5185m	>5	0	2	<1
Nickel	ppm	ASTM D5185m	>4	0	1	<1
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	4	4
Lead	ppm	ASTM D5185m	>150	0	<1	0
Copper	ppm	ASTM D5185m	>90	<1	3	2
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>35	6	9	7
Potassium	ppm	ASTM D5185m	>20	2	6	13
Fuel	%	ASTM D3524	>3.0	▲ 1.6	▲ 8.1	▲ 9.8
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>7.5	0.3	0.8	0.4
Nitration	Abs/cm	*ASTM D7624	>20	10.1	18.8	12.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.3	40.3	25.1
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	>50	2	0	7
Boron	ppm	ASTM D5185m		248	27	4
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		101	111	76
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m		546	1588	▲ 1004
Calcium	ppm	ASTM D5185m		1600	1676	▲ 1171
Phosphorus	ppm	ASTM D5185m		1210	1440	1106
Zinc	ppm	ASTM D5185m		1475	1977	1350
Sulfur	ppm	ASTM D5185m		▲ 3593	3379	3532
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.4	44.8	22.2
Base Number (BN)	mg KOH/g	ASTM D2896		7.1	6.4	8.4
Visc @ 100°C	cSt	ASTM D445	14.4	13.6	13.3	▲ 11.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0904522

Lab Number : 06196440

Unique Number : 11058563

Test Package : FLEET (Additional Tests: PercentFuel)

Received : 31 May 2024

Tested : 05 Jun 2024

Diagnosed : 05 Jun 2024 - Wes Davis

SALEM NATIONALEASE CORPORATION

198 PARK PLAZA DRIVE

WINSTON SALEM, NC

US 27105

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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)