



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Machine Id
TIGERCAT 822 82213473
Component
Diesel Engine
Fluid
BAY 15W40 (5 QTS)

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		WC0669519	WC0669474	WC0669540
Sample Date		Client Info		21 May 2024	10 Jan 2024	12 Sep 2023
Machine Age	hrs	Client Info		3721	3521	3305
Oil Age	hrs	Client Info		200	216	242
Filter Age	hrs	Client Info		200	216	242
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	ATTENTION	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>125	24	23	26
Chromium	ppm	ASTM D5185m	>8	<1	<1	1
Nickel	ppm	ASTM D5185m	>5	0	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>15	5	6	7
Lead	ppm	ASTM D5185m	>30	<1	<1	<1
Copper	ppm	ASTM D5185m	>125	2	3	2
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

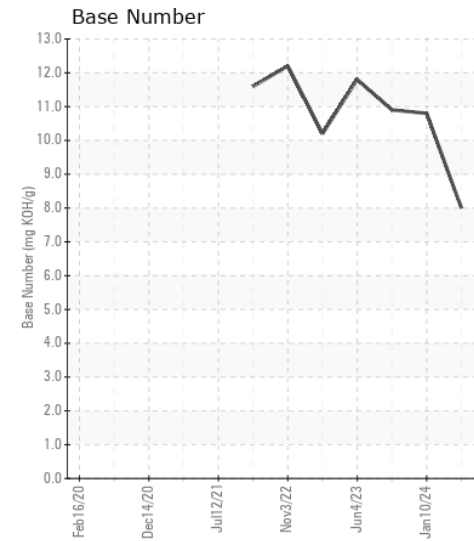
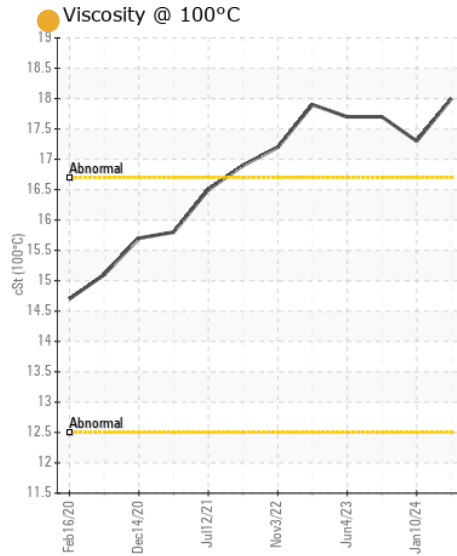
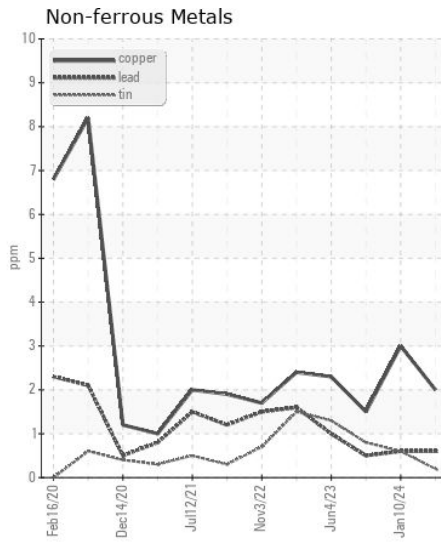
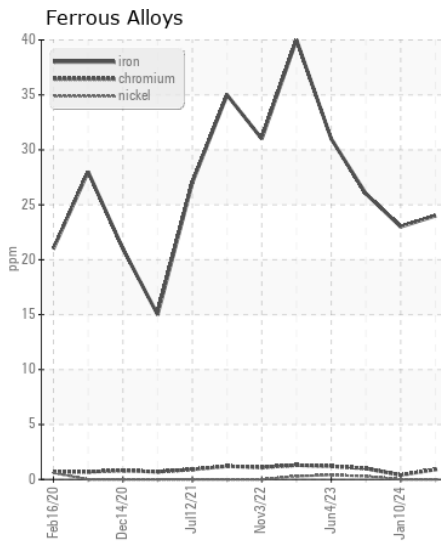
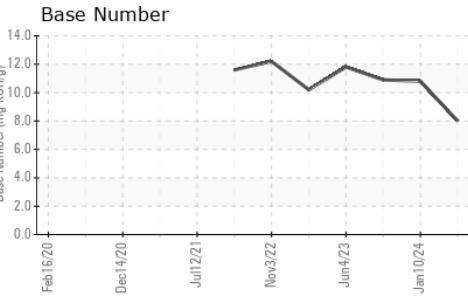
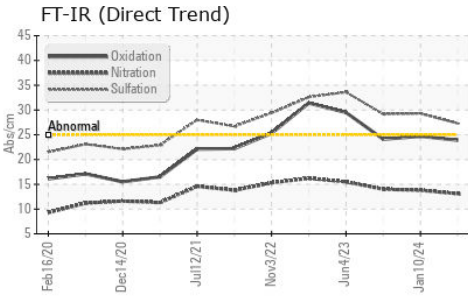
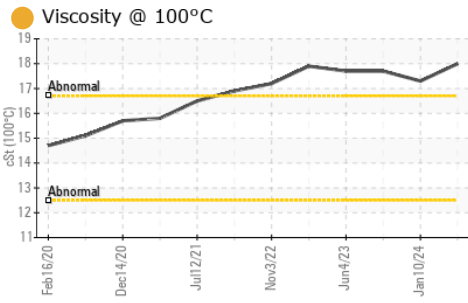
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	14	13	16
Potassium	ppm	ASTM D5185m	>20	<1	4	2
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	0.2	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	13.1	13.8	14.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.3	29.3	29.2
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 oil viscosity is higher than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		3	0	3
Boron	ppm	ASTM D5185m		30	34	40
Barium	ppm	ASTM D5185m		<1	4	0
Molybdenum	ppm	ASTM D5185m		113	118	124
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		274	255	298
Calcium	ppm	ASTM D5185m		4452	4360	4751
Phosphorus	ppm	ASTM D5185m		1299	1202	1304
Zinc	ppm	ASTM D5185m		1494	1373	1509
Sulfur	ppm	ASTM D5185m		9327	9144	8977
Oxidation	Abs/.1mm	*ASTM D7414	>25	23.9	24.7	24.1
Base Number (BN)	mg KOH/g	ASTM D2896		8.0	10.8	10.9
Visc @ 100°C	cSt	ASTM D445		18.0	17.3	17.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0669519 **Received** : 14 Jun 2024
Lab Number : 06211088 **Tested** : 19 Jun 2024
Unique Number : 11083952 **Diagnosed** : 19 Jun 2024 - Sean Felton
Test Package : FLEET

TWIN STATE FORESTRY

PO BOX 269
 ASCUTNEY, VT
 US 05030

Contact: STEVE GALBREATH
 forestry@comcast.net

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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