



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
TIGERCAT 620E 6206992
Component
Diesel Engine
Fluid
BAY 15W40 (5 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0669460	WC0669493	WC0669499
Sample Date		Client Info		05 Jul 2024	19 Mar 2024	16 Feb 2024
Machine Age	hrs	Client Info		11008	10500	10349
Oil Age	hrs	Client Info		231	151	212
Filter Age	hrs	Client Info		231	151	212
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	13	13	16
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	3	3
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	1	1	1
Tin	ppm	ASTM D5185m	>15	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	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.

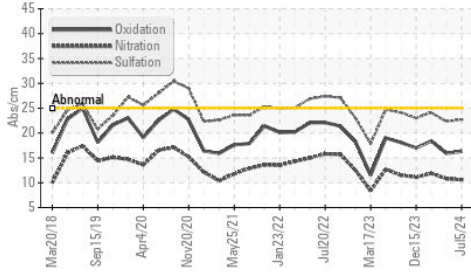
Silicon	ppm	ASTM D5185m	>25	9	9	11
Potassium	ppm	ASTM D5185m	>20	<1	2	0
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.2	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	10.6	10.8	11.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.7	22.3	24.1
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

FLUID CONDITION

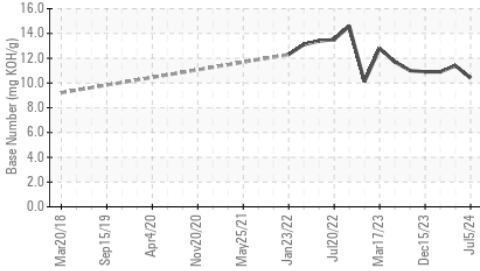
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		3	4	4
Boron	ppm	ASTM D5185m		29	44	42
Barium	ppm	ASTM D5185m		<1	0	<1
Molybdenum	ppm	ASTM D5185m		102	100	104
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		220	237	227
Calcium	ppm	ASTM D5185m		3854	3572	3624
Phosphorus	ppm	ASTM D5185m		1152	1177	1151
Zinc	ppm	ASTM D5185m		1271	1255	1235
Sulfur	ppm	ASTM D5185m		8566	9058	7595
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	15.9	18.4
Base Number (BN)	mg KOH/g	ASTM D2896		10.4	11.4	10.9
Visc @ 100°C	cSt	ASTM D445		15.5	15.2	16.0

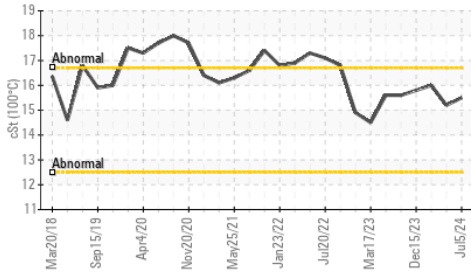
FT-IR (Direct Trend)



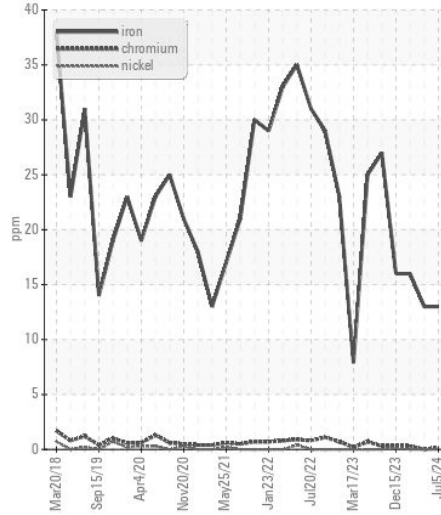
Base Number



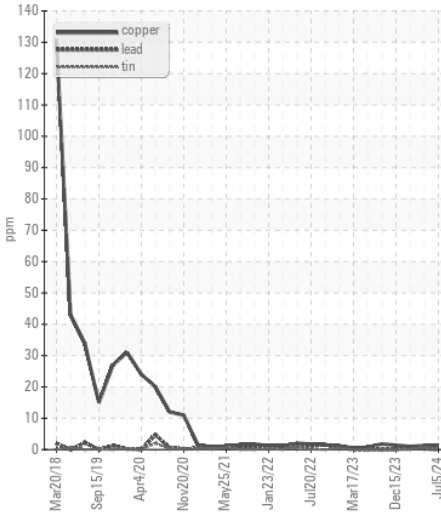
Viscosity @ 100°C



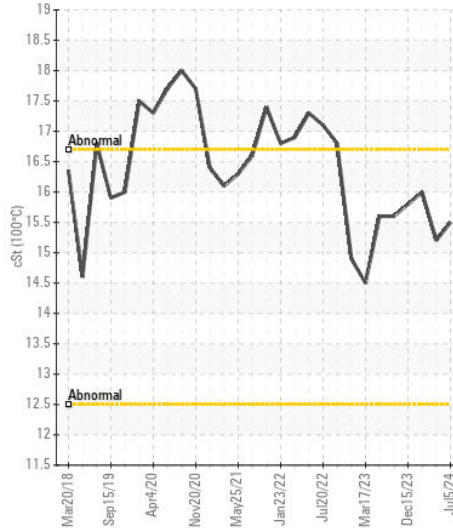
Ferrous Alloys



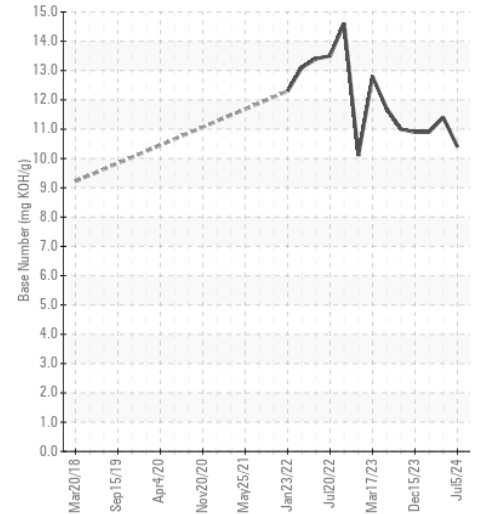
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0669460
Lab Number : 06234323
Unique Number : 11123157
Test Package : FLEET

Received : 11 Jul 2024
Tested : 12 Jul 2024
Diagnosed : 12 Jul 2024 - Wes Davis

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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