



Tigercat Fluid Analysis (TFA) offers a wide range of hydraulic, gear and fuel test packages that turn valuable data into meaningful, actionable information to ensure maximum component life and machine uptime. TFA is able to provide you with precise determination of problems within 24 hours of receipt.

TIGERCAT FLUID ANALYSIS



TFA AT A GLANCE

Continuation of Tigercat warranty coverage on machine powertrain components in all new Tigercat loaders, skidders and wheel feller bunchers sold in the U.S.A. and Canada is contingent on regular component fluid sampling and laboratory analysis as per the schedule below.

Powertrain Component	First Sample	Follow-Up Samples
Hydraulic System	125 hours	Every 1000 Hours or 6 Months
Axles – Front & Rear	125 hours	Every Oil Change (1000 Hours or 6 Months)
Bogies, Differentials and Planetaries	125 hours	Every Oil Change (1000 hours or 6 Months)
Pump Drive Gearbox	125 hours	Every Oil Change (500 hours or 3 Months)
Swing Drive Gearbox(es)	125 hours	Every Oil Change (500 hours or 3 Months)
Track Drive Gearboxes	125 hours	Every Oil Change (1000 hours or 6 Months)
Transfer Case Gearbox	125 hours	Every Oil Change (500 Hours or 3 Months)
Engines Diesel Fuel	As required	As required

First Sample is Free!

As part of the 125 hour inspection service, there will be no charge to the machine owner for the first sample taken from each component as well as the fluid analysis work completed in the laboratory. All of this work will be scheduled and performed by the Tigercat dealer. The machine owner will be advised of the fluid analysis results should any concerns arise.

Follow-Up Samples

All follow-up samples must be taken as per the schedule above. The costs of this sampling as well as the laboratory analysis work are the responsibility of the machine owner.

If required, arrangements can be made with your Tigercat dealer to supply and perform all of the required follow-up samples.

- If samples are submitted using the Tigercat Fluid Analysis (TFA) program, analysis results will automatically be available for review by both the dealer and the Tigercat Warranty Department both on the TFA website and via an email report within 24 hours of receipt of the fluid sample at the laboratory.
- Results obtained from fluid analysis programs other than the TFA program must be forwarded to the Tigercat Warranty Department for review in order for the full powertrain warranty coverage to remain in effect.

Once the results are reviewed, the machine owner will be advised should any concerns arise.

Hydraulic System

Note that continuation of Tigercat warranty coverage on all machine hydraulic pumps and motors including hydrostatic drives, all hydraulic control valves and cylinders as well as any rotary manifold is contingent on the regular completion of the hydraulic system fluid sampling and laboratory analysis work as per the schedule above.

INSIDE THE TFA KITS

Tigercat fluid sample kits are available from your Tigercat dealer.

The oil sampling kit consists of 1 TFA shipping box which contains 10 fluid sample bottles, 10 sample shipment bottles, 10 region and language specific sample cards and TFA program instructions. All sample bottles in the oil sampling kit are identical and each can be used for any type of powertrain component fluid sampling other than diesel fuel.

The diesel fuel kit contains 1 TFA shipping box which contains 2 diesel fuel sample bottles, 2 individual sample boxes, 2 fuel certified shipping boxes, 2 region and language specific sample information cards (SIF) and TFA program instructions. All sample bottles in the diesel fuel kit are identical and each can be used to retrieve a sample directly from the engine, the on-site fuel storage tanks or from the supplier.

Each region specific sample card has a peel and stick shipping label to ensure that samples are returned to the proper laboratory for immediate analysis and reporting of results.

Peel and stick shipping labels can be affixed to individual shipment bottles or to the TFA shipping box for bottles shipped in bulk.

Your Region within North America	Sample Card Included in Kit	TFA Oil sampling kit # to order	TFA Diesel fuel kit # to order
English Canada	English language card with Brantford, Ontario laboratory peel and stick shipping label	DA025	DA031
USA	English language card with Bloomington, Minnesota laboratory peel and stick shipping label	DA028	DA030
French Canada	French language card with Brantford, Ontario laboratory peel and stick shipping label	DA026	DA032

TFA COLLECTION PROCEDURES

The accuracy of the laboratory analysis is very dependent on the quality of the fluid sample taken. Collection of clean fluid samples that are representative of the main body of fluid are essential if meaningful lab results are to be obtained. Erroneous readings may result if proper collection, handling, packaging and shipping practices are not followed prior to the sample being tested by the lab.

To accurately compare and trend lab results over time, all follow-up samples should be consistently taken from the same location using the same techniques as all previous samples.

- Remove the sample bottle cap only when ready to take the sample. Keep the cap clean. Do not put it in your pocket or let it get contaminated in any way.
- Do not allow any airborne dirt, etc. to enter the sample bottle.
- Avoid contamination of the sample. Replace the sample bottle cap immediately after filling the bottle approximately $\frac{3}{4}$ full.
- All samples taken should be immediately forwarded to the lab for processing.
- Ensure that all sampling valves and drain plugs are clean and free of debris before taking a fluid sample.
- Refer to the applicable Tigercat machine Service Manual for sample valve and drain plug locations.
- Contact your Tigercat dealer to purchase additional or replacement hydraulic sample valves or drain plugs.
- In cases where fluid samples must be pumped or otherwise drawn out of a component reservoir or housing, a hand operated fluid suction pump is also available from your Tigercat dealer.

Hydraulic Oil Samples:

- Samples should be taken from the circulating oil flow at operating temperature, with no functions actuated, using sampling valves that are permanently located on the machine.
- To obtain a representative oil sample, sampling valves must be purged before the actual oil sample is taken. Drain a minimum of 3 or 4 ounces of fluid into a separate container and discard this fluid using an approved recycling method.
- Replace the dust cover on the sampling valve immediately after taking the oil sample and sealing the sample bottle.

Axle, Bogie, Differential, Gearbox and Planetary Oil Samples:

- Samples from these components are to be taken during the oil change process.
- To obtain a representative oil sample, ensure the oil is warm and has not settled for longer than 30 minutes after shutdown.
- Place the required drain container under the machine component to capture the used oil. This oil should be discarded using approved recycling methods.
- Remove the drain plug and allow approximately 50% of the oil to drain. Then place the oil sample bottle into the stream of draining oil to obtain a representative sample.

Diesel Fuel Samples:

- Samples taken from the machine should be from the fuel tank filler neck at operating temperature. Further sample taking may be required from the on-site bulk storage tank or directly from the supplier if further samples are requested by the dealer or Tigercat.
- To obtain a representative fuel sample from the machine fuel tank, clean/remove all debris around fuel cap then remove cap, remove the fuel neck strainer and use a clean fuel syphon pump (for diesel fuel only) to fill sample bottle.

Fill out the Sample Information Form (SIF) completely and accurately. When taking multiple fluid samples, fill out all of the required SIF forms in their entirety, prior to taking any fluid samples. Then, immediately package each completed SIF form together with the matching fluid sample in the outer shipping container as each individual sample is taken. This will reduce the possibility of mixing up or incorrectly identifying the SIF forms and fluid samples. Incorrectly identified samples could result in a false warning alarm.

TFA WEBSITE INSTRUCTIONS

1. Setting up samples on already registered equipment, see flow chart on last page.

2. Setting up samples on new equipment, follow the instructions listed below.

(All newly registered Tigercat equipment must be moved from the Tigercat unregistered account into the customer account before samples can be properly setup.)

1. Go to TFA website at <https://mylab2.fluidlife.com/mylab/tigercat.html>
2. Sign in using your TFA Username and Password
3. Click on 'Move / Copy / Merge'
4. Click on 'Customer' TFA – MACHINES NOT YET REGISTERED
5. Click on 'Unit Type' being moved
6. Check box on 'Unit(s)' Serial #s being moved to your specific dealer location
7. Check box for 'Customer' TFA – Specific dealer name and location
8. Click on 'Click to Move' section
9. Confirm information is correct and then click on 'Move' button
10. Check box for 'Unit(s) being moved if moving additional machines of the same 'Unit Type' or Click on TFA – MACHINES NOT YET REGISTERED to select another 'Unit Type'
11. Repeat steps 6 through 11 for each additional machine serial # newly registered to your dealership
12. Click 'Sign Out' to properly exit the TFA website



HOW TO SEND A FLUID SAMPLE

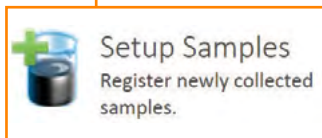
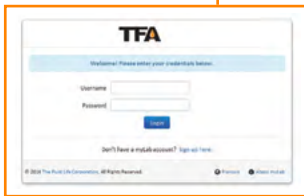
Machine owner takes a fluid sample.

Machine owner has website access?

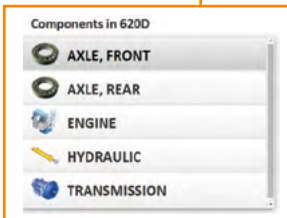
1 Yes

Machine owner records key sample info on bottle

Machine owner logs into TFA Website and registers samples by clicking on **Setup Samples**.



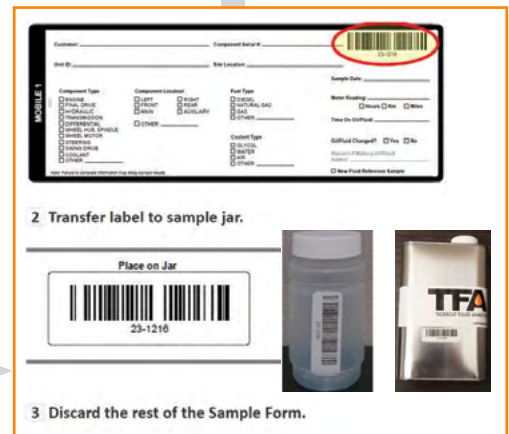
After selecting the appropriate piece of equipment/component customer types the Barcode Number into the required field and clicks apply. Once all Barcodes are registered click save at bottom of screen to register samples.



No **1**

Machine owner manually fills out Form Info (Step 1) and attaches barcode label (Step 4) to jar. Customer can use Steps 2 and 3 to tell lab if the fluid being used is different.

Sample form is included in box.



2

Peel barcode sticker off and attach to bottle.
*Blank sample form can be thrown away.

Place clear bottle back inside black outer shell or fuel bottle back in individual fuel certified shipping boxes and prepare for shipping.

3

Ship samples to TIGERCAT Laboratory
Address indicated at bottom of form.

EMAIL	comments@tiger.cat.com
PHONE	1519.753.2000
WEBSITE	www.tiger.cat.com
ADDRESS	54 Morton Ave. East, Brantford, Ontario Canada, N3R 7J7
MAIL	Box 637 N3T 5P9

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