

Service Bulletin

Types | General

Subject | Oil Analyses by GE Jenbacher Partner Laboratory

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Oil Analyses Performed by Co. Spectrolab

Professional oil management in the form of periodic oil analyses and oil changes in time is a key to safeguard the reliability of your GE Jenbacher Gas Engine.

With immediate effect we offer you to have your oil samples analyzed by the GE Jenbacher partner laboratory Spectrolab to an outstanding price.

Advantages:

- The high-quality analyses include the determination of all elements relevant for the evaluation of oil- and engine condition. For instance sulfur and additives, which are also relevant for the determination of fresh oil quality. The elements limit values comply with those of the GE Jenbacher technical instruction 1000-0099B. The evaluation is according to the GE Jenbacher guidelines.
- All analyses data are stored at the Spectrolab database. With your password all data can be retrieved from there at any time. In addition you will be immediately informed by e-mail in case limit values are exceeded.
- Data from the same laboratory can be compared easier. Oil products, engines, oil change intervals and the effects of different gases can be evaluated quicker and more precisely. Consequently improvements and adaptations related with lube oil can be implemented more efficiently and effectively, to your benefit.

Procedure:

The analysis kits with all necessary components to take the samples can be sourced through GE Jenbacher. With the purchase of the sample boxes the analyses are pre-paid already. The following description includes a list of the respective part numbers, guides you through the process of taking the samples correctly, informs you which information has to be added onto a data sheet and how to register to the internet to view your data.

There are four addresses to send your samples:

 SPECTRO Palace Gate Odiham Hampshire RG29 1NP, UK	 SPECTRO Rinaustrasse 452 4303 Kaiseraugst Switzerland	 JET-CARE 3 Saddle Road Cedar Knolls NJ 07927 USA
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----- **NEW** -----

With immediate effect oil samples may also be mailed direct to the address below:

**Spectro Oil AG
C/o. Fortex Kurierdienst-Spedition
Bahnhofstraße 66
D-79618 Rheinfelden-Herten**

This address is a German-based post office box being located a few steps from the Swiss border. It is daily emptied by the neighbouring Spectrolab Kaiseraugst. Thereby our customers, partners and subsidiaries, especially those from EU states, are provided a faster and cheaper opportunity to send their oil samples to a GE Jenbacher partner laboratory.

Labels with these addresses are part of the analysis kit and are to be added onto the sample boxes and sent together with the data sheet.

After registration the analyses results can be viewed at <http://www.spectro-oil.com/gej> or <http://www.jet-care.com/gej>. In addition you will find a link at the GE Jenbacher Webportal at <https://information.jenbacher.com/> under » Products+Services » Oil Management.



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1. Applicability:

The sampling instructions (extracts from Technical Instructions (TIs)) are for information only and are not part of the automatic updating service.

Only the TIs from the site-specific documentation for the engine description concerned are valid.

The revision applicable when the contract was signed is valid!

The following TIs should be complied with:

TI No.: 1000-0112	Sampling lubricating oil
TI No.: 1000-0099B	Scope of analysis and limiting values for used oil analyses
TI No.: 1000-0099C	Testing the site-specific oil service life

2. Analysis kits:

The starter pack contains:

Part number	Description
510132	Hard plastic case with 20 sample containers, including sample labels and mailing pouches
506605	30m sampling hose
506606	Sampling pump

Refill packs can be ordered from Jenbacher quoting the following part numbers:

Part number	Description
506605	30m sampling hose
506606	Sampling pump
506602	Refill pack with 5 sample containers
506603	Refill pack with 10 sample containers
506604	Refill pack with 20 sample containers

3. Oil sampling instructions (extract from TI No.: 1000-0112):

3.1 Procedure for taking oil samples:

- Oil samples must be filled into the sample containers supplied by Spectro-Lab/Jet Care for the purpose.
- Oil samples must be taken when the engine is running completely normally.
- Taking oil samples when the engine is at standstill is only allowed when the engine has not been provided with an oil sampling location.
- Only up-to-the-minute oil analyses can help to prevent problems. It is therefore recommended that oil samples be despatched by express mail. Spectro/Jet-Care guarantees to complete the analysis, prepare the analysis report and send the report to a specified e-mail address within 48 hours of receipt of the oil sample.



3.1.1 Taking oil samples with the engine running:

To obtain a representative oil sample, ~ 0.3 litre of oil must be drawn off and rejected before the actual sample is taken.



Threaded joint



Taking oil samples by screwing in the sampling line into the threaded joint (TI No. 460134).



Taking oil samples from Mechanical Drive with threaded joint in pressure oil line upstream of oil filter.



Taking oil samples from type 2 and 3 engines with threaded joint in pressure oil line upstream of oil filter.



Taking oil samples from type 4 engines with threaded joint in pressure oil line upstream of oil filter.



Taking oil samples from type 6 engines with threaded joint in pressure oil line upstream of oil filter.

3.1.2 Taking oil samples with the engine at a standstill:

When the engine is at a standstill the oil sample is taken using a clean hose inserted into the dip stick opening.

The hose must not be longer than the dip stick to ensure that the sample is not adulterated by sludge and sediment.

If a hose section is re-used, the hose must be flushed by being pumped through 3 times.



4. Completing the sample report sheet:

Only sample report sheets completed correctly and in full will ensure that the analysis is clearly allocated to the right engine.

The following is mandatory information to be included on the sample report sheet:

Dates	Comments	Where to find
Site name	Project name, address	Supplied by the operator
Engine number	7-digit number	On the system type plate – see appendix. The system type plate is located on the frame of the module.
UZ number (design number, ID number)	J XXXX	On the cover sheet of the site documentation – see appendix.
Customer ID number		Supplied by the customer
Module type	JMS XXX GS – X.X	On the system type plate – see appendix. The system type plate is located on the frame of the module.
Engine operating hours	Total operating hours since commissioning	On the DIA.NE display
Operating hours since last oil change		Must be recorded in operational data sheet E0101 – refer to maintenance manual for site concerned.
Brand of lubricating oil	Consists of the name of the oil manufacturer and the name of the specific product, e.g. Mobil Pegasus 705	Oil drum
Oil capacity	Total quantity of oil available for engine lubrication. Oil capacity = capacity of oil pan + capacity of oil cooler + capacity of additional tank (if any)	In the engine documentation
Top up since last oil change		In operator's own records
Sample date		



5. Registration of Engine Sites and Engines:

It is essential that you register your Site and Engine for Used Oil Analysis during commissioning, this procedure will ensure that our Laboratory recognizes your samples when they arrive.

Step 1:

With Internet Explorer open, enter the Spectro or (North America) Jet-Care site address <http://www.spectro-oil.com/gej> or <http://www.jet-care.com/gej> and this will take you to the first page of our Oil Analysis Web Site.

SPECTRO JET-CARE GE

Partner
Jenbacher gas engines

[Register Site](#) | [Register Engine](#) | [Account](#) | [ECHO](#) | [Program](#) | [Reports](#) | [Logout](#)

[Spectro](#)
[Jet-Care](#)
[GE](#)

[Industrial services](#)
[Analysis tests](#)
[Questions](#)
[Spectro - contact us](#)
[Jet-Care - contact us](#)

User Name :

Password:

[Log in](#)

Click on Register Site



Step 2:
Site Registration:

Submit button

This new Page will allow the details of both the site and the reporting addresses to be entered – on receipt of this data a password will be returned to the principle addressee allowing full access and the entry of Engine Data. Complete all details and then Click on the **“Submit button”**.

Your Reports can be delivered as either .pdf files or as “ECHO™” Data files readable by the ECHO™ program which is downloadable from this web site under “program”. The reporting method can either be by “E”Mail or by download from your password protected section of this site.



Step 3:

On receipt, a User name and password will be generated. Return to the original sign in page and enter these new details.

Spectro
Jet-Care
GE

Industrial services
Analysis tests
Questions
Spectro - contact us
Jet-Care - contact us

User Name :

Password:

[Log in](#)

Step 4:

The next page you will see allows full access and in particular the ability to register your engines for the site which the password was issued against. Click on **“Register Engine”**

Spectro
Jet-Care
GE

Industrial services
Analysis tests
Questions
Spectro - contact us
Jet-Care - contact us

User : don
Total Files : 0
Total Size : 0 KB
Site : Site1

File (click to download)	Size (KB)	Date
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Step 5:

Complete one registration form for each engine on your site clicking the “**Submit**” details button when each is completed – you will receive an acknowledgement – you may now enter the details of additional engines for your site. Submit each engine until registration is complete. You will then be ready to send samples for analysis using the labels enclosed in the Kit.

Submit button

The screenshot shows the ECHO web interface. At the top, there is a navigation bar with buttons: Register Site, Register Engine, Account, ECHO, Program, Reports, and Logout. The 'Program' button is circled and labeled 'Program button'. Below the navigation bar, on the left, are links for Spectro, Jet-Care, GE, Industrial services, Analysis tests, Questions, Spectro - contact us, and Jet-Care - contact us. In the center, there is a form with fields for: User (don), Site (Site1), A. Engine model, B. Serial number, C. UZ / Design / Identification number, D. Engine oil grade, E. Gearbox serial number, and F. Gearbox oil grade. At the bottom of the form is a blue 'Submit' button, which is circled and labeled 'Submit button'.

Program button

Once you have submitted your first samples for analysis, please refer to the document, “How to use the ECHO reporting programe.pdf” which will be found at the “**Program button**” on the task bar and within the file list found there.



Appendix:

System type plate

Generating Set ISO 8528		CE
Jenbacher gas engines		GE Jenbacher GmbH & Co OHG A-6200 Jenbach (Austria)
Type	JMS XXX GS-X.X	
Serial No.	XXXXXXX X	
Year of manufacture	2007	
Rated power	COP	3048 kW
Rated power factor	1	
Maximum site altitude of installation	500 m	
Max. ambient temperature (intake air)	30 °C	
Rated frequency	50 Hz	
Rated voltage	690 / 398 V	
Rated current	2550 A	
Mass	30200 kg	
Performance class	G2	
J XXXX		

Cover sheet of engine description

GE Energy

Jenbacher
Description / Operation

CHP-Module: JMS XXX GS-X.X
XXXX Hospital

J XXXX

Module Number: XXXXXXXX
Engine Number: XXXXXXXX

2007-01

Sample report sheet n

Site name	
Serial number	
UZ / Design / Identification number	
Type	
Customer Identification	
Engine operating hours	
Hours since the last oil change	
Oil brand	
Oil capacity	
Top up since last oil change	
Sample date (dd/mm/yy)	

