



VHG Labs/LGC Standards Wear Metals Performance Testing Program (PTP)

Featuring Real-Time On-Line Result Evaluation

General Instructions

Table of Contents

Introduction.....	3
PTP Test options.....	4
Ordering a test.....	4
Register online to the VHG Labs/LGC Standards website.....	5
Logging in to the PTP.....	6
Entering and submitting your data.....	7
Interpreting your results.....	8
Frequently asked questions.....	9

Introduction

The VHG Labs/LGC Standards Wear Metals Performance Testing Program (PTP) is designed to provide analytical laboratories with a method of monitoring their analytical performance as measured against Certified Reference Materials (CRM's). Currently, the types of instrumentation included in the program are ICP, viscosity, and particle counting systems.

When you participate in the PTP, you have six program options from which to choose: Wear Metals, Viscosity, Particle Count, a complete Used Oil Set (consisting of all three of the above), Sulfur or Sulfur and Metals in Lube Oil. There are different lots for all unknowns, so it is important that you enter the correct number for your sample when logging in. (See "Logging in to the PTP," Page 6.)

Wear Metals:

You may analyze the sample for up to 23 common elements (Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Si, Sn, Ti, V and Zn) and report the concentrations in $\mu\text{g/g}$ (ppm). You may enter all, or only those that you are interested in. However, the sample provided to you will have 23 elements.

Viscosity:

You may analyze the sample for kinematic viscosity and report the results in mm^2/s (cSt) at 40°C and/or 100°C.

Particle Count (for ISO 11171 only):

You may analyze the sample and report the number of particles per mL for particle diameters $>4\mu\text{m}(c)$, $>6\mu\text{m}(c)$, $>8\mu\text{m}(c)$, $>14\mu\text{m}(c)$, $>21\mu\text{m}(c)$, $>38\mu\text{m}(c)$, $>50\mu\text{m}(c)$, $>70\mu\text{m}(c)$.

Note: $\mu\text{m}(c)$ indicates NIST certified ISO MTD size

Sulfur:

Analyze the sample for ultra-low sulfur content in one of three matrices (#2 Diesel Fuel, Isooctane, or Mineral Oil) and report the concentration in $\mu\text{g/g}$ (ppm). Rough range: 32

Sulfur and Metals in Lube Oil:

Analyze the sample for up to 9 common elements (Ba, Ca, Cl, Mg, Mo, P, S, Si and Zn) and report the concentrations in $\mu\text{g/g}$ (ppm).

PTP Test Samples Ordering Information

You may order any of the following test samples:

Wear Metals:

1 bottle, 23 elements, wear metals PTP test sample in 75 cSt. hydrocarbon oil, 25g.
Part No. VTPMO-25G

Viscosity:

1 bottle, viscosity PTP test sample, 40° C and/or 100° C, 50mL.
Part No. VTPVISC-50

Particle Count:

1 bottle, particle count PTP test sample, 6 channels [4, 6, 8, 14, 21, 38, 50 and 70 $\mu\text{m(c)}$], 125mL.
Part No. VTPPC-125

Complete Used Oil Set:

1 bottle each VTPMO-25G, VTPVISC-50 and VTPPC-125
Part No. VTPSET1

Sulfur:

1 bottle, sulfur PTP test sample in the matrix of your choice (#2 Diesel Fuel, Mineral Oil or Isooctane), 25g
Part No. VTPSDSL-25, VTPS20M-25 or VTPSISO-25

Sulfur and Metals in Lube Oil:

1 bottle, 9 elements, sulfur and metals PTP test sample in Lube Oil, 25g
Part No. VTPPLUBEMO-25

You can call, fax, e-mail, or order directly from our website. Please specify a part number when ordering.

Telephone: (+1) 888.622.7660 (Toll-Free U.S. Only)
 (+1) 603.622.7660

Fax: (+1) 603.622.5180

E-mail: custsvc@vhglabs.com

Website: www.vhglabs.com

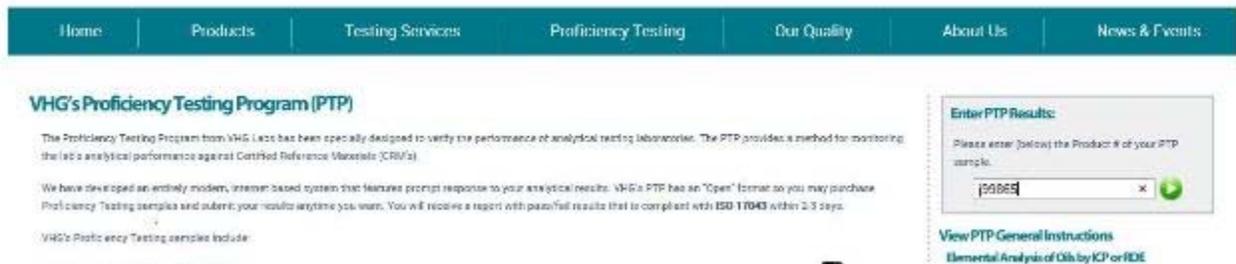
Register on to the VHG Labs website

To access the PTP program, please follow these easy steps:

1. **Returning users** – access www.vhglabs.com. When you click on the Proficiency Testing tab, you are entering a different website. The VHG Labs/LGC website moved to a new home in March 2015. Our proficiency testing program has remained on the original site so the password that you set up on the original site will still work. If you have logged into the new site (March 2015 or later) and changed your password, the new password will not be recognized on the PTP site. You can either maintain two passwords or change the one used on the PTP site to match the one you use on the main VHG Labs/LGC Standards site.
2. **New users** – there is no need to register on the VHG Labs/LGC Standards site to enter PTP data (although you may). Access www.vhglabs.com and click on the Proficiency Testing tab.

Logging in to the PTP area

1. PTP Results Entry Web Page. In the box provided, enter the Product number from your sample bottle. Click the green arrow button.



You will be brought to the screen below. Enter your Sample ID and click the green arrow button.



After you have typed in your Sample ID Password, you'll be prompted to enter your shipping and contact information. All fields with asterisks (*) are required. Once you've

done this once, the program will remember your information, so you won't have to do it again unless you wish to change something.

2. Entering and Submitting your PTP Sample Results. Once you've run your samples, you're ready to enter your data. If you've purchased the Wear Metals Test, you may enter as many elements as you'd like, up to a total of 23. If you've purchased the Viscosity Test, you may enter one or two values, at 40° C and/or 100° C. For the Particle Count Test, you should enter 6 sets of channel data at 4, 6, 14, 21, 38, and 70 µm(c). For any of the Sulfur Tests, you will enter one value. For the Sulfur and Metals in Lube Oil, you will enter as many elements as you'd like, up to a total of 9. If you do not wish to report an element, leave it blank, and the element will be reported as a "pass" value.

Analyte	Name/Test	Units	Results
Ba	Barium		Select: ▾
Ca	calcium		Select: ▾
Cl	chlorine		Select: ▾
Mg	magnesium		Select: ▾
Mn	manganese		Select: ▾

Submit Results

When you're ready, click on:

Be sure that you have reviewed your entries before clicking on **Submit Results**. If you wish to enter results for a different PTP sample, click on the link "Record/View a Different Sample ID >>" shown at the top right of the screen.

PTP Results: Online interpretation

With the new VHG PTP real-time on-line result evaluation, data interpretation is easy. You'll receive a green, yellow, or red value for your results, letting you know how closely your results compare to the VHG Labs certified values.

Your Current PTP Sample ID: 041415N [Record/View a Different Product ID >>](#)

Performance Testing Program: VPTPMO 25G

User Shipping Information:		User Billing Information:	
Mary Casakal LGC Standards 276 Abby Road Manchester, NH, 03103 USA		Mary Casakal LGC Standards 276 Abby Road Manchester, NH, 03103 USA 603 622.7660	
Date: April 20, 2015, 1:05 pm		Update User Information >>	

Instrument/Techniques: ICP-OES

Analyte	Name/Test	Lab Analytical Results	Units	Certified Values	Difference	% Difference
Ag	silver	31	µg/g	31	0.00	0%
Al	aluminum	16	µg/g	16	0.00	0%
B	boron	94.2	µg/g	94.2	0.00	0%
Ba	barium	975	µg/g	985	-10.0	1.0%
Ca	calcium	2700.00	µg/g	2966	-266.0	9.0%
Cd	cadmium	100	µg/g	1	99.0	9900.0%

Color Coding interpretation:

In the “% Difference” column shown are:

Green = within +/- 10%; Yellow = +/- 10.01% to +/-15%; Red = greater than +/-15%, for all certified values >20 ppm.

If certified <20 ppm, Green = within +/- 1ppm; Yellow = within +/-2ppm; Red >2ppm. Color feature not active for Viscosity or Particle Size tests.

Note: ppm units refer to ppm by weight, i.e. µg/g

If you'd like a printout of your results, click the “Print This Page” button located at the bottom of the test results screen. You may return to review your data on-line at any time, by simply re-entering the sample ID number on the test login page. (You will not be able to change or re-enter the results, however.)

Frequently Asked Questions

1. Who can join the PTP?

Any laboratory interested in tracking their analytical results.

The general PTP program is a closed program in that data is reported, pooled by us, but not otherwise distributed. Participants may view their own data, however, not the reported data submitted by other labs.

We also offers a corporate PTP program. In the corporate program, only members of the corporate parent, or companies specifically approved by that corporate parent, may submit data. All of this data is kept completely separate and secure from any other participation or examination of the results, except by the parent company and by VHG Labs/LGC Standards.

VHG Labs ensures the confidentiality of all data submitted under both general and corporate systems. Under the corporate system, the data is never revealed, even anonymously, to anyone outside of the parent or VHG Labs.

Under the general PTP system, companies may participate openly worldwide, and have the ability to view their performance against the certified values.

2. How often should I participate in the PTP?

The short answer is, "It's up to you." However, it's a good idea to participate on a regular basis, either monthly, or at minimum, quarterly. This provides you with a consistent method of tracking your performance, and gives you statistics that you can use for QC verification purposes.

3. What happens if I report the wrong results or make a mistake?

Once you submit your numbers and receive a response from the PTP master computer, you cannot change your entries or re-submit. Please be sure of your numbers prior to hitting the "Submit" button. If you do encounter a problem or wish to re-submit, please call VHG Labs directly for assistance.

4. Do I need to calibrate my ICP with VHG Labs standards to run a PTP test? No, you do not. However, if you're not calibrating with VHG Labs standards, you're probably paying too much and missing a higher level of service. We provide the highest possible quality products, a knowledgeable and friendly staff, and extremely competitive pricing for standards and consumables for all sorts of laboratory equipment.

We invite you to see the difference that our proficiency testing program can make for you and your lab.

5. What if I need help?

Call us! We are here to help you.

VHG Labs/LGC Standards
276 Abby Rd.
Manchester, NH 03865 USA

T. (U.S.) (+1) 888.622.7660 (Toll-Free)

T. (Intl.) (+1) 603.622.7660

F. (+1) 603.622.5180

E-mail: ptp@vhqlabs.com

Website: www.vhqlabs.com

04202015 PTP