

Entering an EQAS result

ADAMS Release 7 May 2019 - What's new?

- point 7:
 - Labs are able to specify the **Sample Specific Gravity (Confirmation Procedure)** for Urine samples; this field is different from and functionally NOT related to the existing field *Confirmed specific gravity* that is exclusively associated with the Steroid Profile.
 - The existing field *Specific Gravity* is renamed into **Sample Specific Gravity (Initial Testing Procedure)**

ADAMS Release June 2018

- point 18: Labs are able to provide the **LH-Analysis** details for Urine samples

ADAMS 4.7.0 - What's new?

- point 8: Labs are able to indicate a dedicated **Overall IRMS conclusion** irrespective and independent from the overall Lab test result.

ADAMS 4.1/4.1.1 - What's new?

- point 8: new tab "IRMS details" to facilitate the IRMS-reporting on Target compounds and Endogenous Reference compounds
- point 12: Steroid Profiling data - also provide information on the Microbial contamination and the Confounding factors
- point 12: Allowing the value '-2' for the steroid variable *epitestosterone*, if the date received of the sample is after 1 January 2016

1. Click on **New EQAS** in the search area

Search EQAS

2. The EQAS results page will appear

Proficiency Tests cancel save

Sample Code * Step 4
 Sample Collection Date **Step 15**
Lab Reference # Step 6
Sample Type * Urine
Country
PT No. * Step 3
Sample A/B Sample A Step 5
Region
City

Specific gravity
pH Step 7
Screen T/E Ratio

Date Received by Lab * Step 8a
Creator WADA - World Anti-Doping Agency
Send Notification of Results to :
Date Results Reported 02-Oct-2008
Lab LAB-Montreal-CAD-INRS - Laborat
Analysis Date and Time
Result Management Authority * WADA - World Anti-Doping Agency

Test type * In competition
Sport * Step 8b
Gender X(Unknown) Step 8c
Competition name

Status * Not Submitted Step 14
Text Result * Negative Step 13
Status Reason * New record
Test Result Reason

Laboratory comments Step 9

Step 10

Analysis Results
Monitored Substances
Quantitative Results Step 12
WADA Only Activities
 EPD
 GC/C/IRMS
 OTHER

Analysis Details/Explanation/Opinion

Analytical Finding

Class
Date Results Reported 02-Oct-2008

Metabolite
Limit of detection
Concentration/Ratio

add metabolite

Substance
Limit of detection

Details concerning Finding

add substance

Step 11

Steroid Parameters

5 α -androstenediol		ng/mL
5 β -androstenediol		ng/mL
androsterone		ng/mL
dehydroepiandrosterone (DHEA)		ng/mL
epitestosterone		ng/mL
etiocholanolone		ng/mL
testosterone		ng/mL

cancel save

ADAMS 4.0

As of Release 4.0, in pursuance of the International Standard for Laboratories 2015 (ISL) clause 5.2.6.6, the field Result Management

Authority is to be added on the Lab pages in ADAMS (Lab result/EQAS/BPLR) as an **optional** field and the Testing authority as a **mandatory** field to allow Labs to report this information. In addition, the IST 2015 dictates that the RMA should become a mandatory field on the Doping control form (DCF). The TA is already a mandatory field on the DCF.

3. Select **EQAS number**: this is at all times a mandatory field
4. Enter the **Sample code** (mandatory at all times). The system will automatically check on duplicate sample codes (per PT number per Lab)
5. Verify the **Sample type** (mandatory at all times) and **Sample A/B** fields

ADAMS 4.0

Since ADAMS 4.0 the SampleAB can assume the values A, B, B1 and B2. In conformance with the Code 2015 - clause 2.1.2, ADAMS needs to account for the possibility of splitting an athlete's B sample into two bottles – a B1 & B2 sample – and to allow the Labs to differentiate and to report the results accordingly after their analysis.

6. Enter a **Lab Reference #** if desired (e.g. Lab's internal sample code)
7. Complete the *mandatory* **Sample Specific Gravity (Initial Testing Procedure)** (4 significant digits), **Sample Specific Gravity (Confirmation Procedure)**, and **pH** (2 significant digits). (The **Validity** field is blanked out)

ADAMS Release 7 May 2019:

- the field **Specific gravity** is renamed into **Sample Specific Gravity (Initial Testing Procedure)**
 - the field **Sample Specific Gravity (Confirmation Procedure)** is added: when a Urine Lab/EQAS result is Saved in the Submitted or Partially submitted status with a date_received that is *equal to or greater than 1 March 2019* with a *Test result = AAF/ATF*, it is **mandatory** to provide a value in the field Sample Specific Gravity (Confirmation Procedure) for that result. In all other cases it is optional to provide a value in the field Sample Specific Gravity (Confirmation Procedure). This applies to all Urine A/B/B1/B2 samples.
8. Fill in:
 1. the **Date** the Samples were **received** by your laboratory
 2. **Sport/discipline**
 3. Any other information: **Gender**; (**Test type** is by default In-competition);
 4. A specific **analysis attribute**. *Note that in Release 4.1.1 for IRMS further details on Target Compounds and Endogenous Reference Compounds can be provided:*

ADAMS 4.1 and 4.1.1

Labs are able to provide more information on the IRMS-reporting for samples with a date received *after 1 Jan 2016*:

- *values of IRMS Target Compounds, and associated uc*: this information is **mandatory** for at least one Target Compound

- *values of Endogenous Reference Compounds, and associated uc*: one is **mandatory** (preferentially PDiol)

- *IRMS Comments*: free text (optional); if as a TC the option "Other (specify in comments)" is selected, the description can be stated here

-  TC = ERC – TC: is automatically calculated and displayed

Analysis Results	IRMS details	Monitored Substances	Batch Summary	Activities(2)
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Target Compounds

TC	δ (‰)	uc (‰)	$\Delta \delta$ (‰)
Epitestosterone (E)	<input type="text"/>	<input type="text"/>	<input type="text"/>
Testosterone (T)	<input type="text"/>	<input type="text"/>	<input type="text"/>
Etiocolanolone (Etio)	<input type="text"/>	<input type="text"/>	<input type="text"/>
Androsterone (A)	<input type="text"/>	<input type="text"/>	<input type="text"/>
5 α -androstane-3 α , 17 β	<input type="text"/>	<input type="text"/>	<input type="text"/>
5 β -androstane-3 α , 17 β	<input type="text"/>	<input type="text"/>	<input type="text"/>
19-NA	<input type="text"/>	<input type="text"/>	<input type="text"/>
Formestane	<input type="text"/>	<input type="text"/>	<input type="text"/>
Boldenone	<input type="text"/>	<input type="text"/>	<input type="text"/>
Boldenone metabolites	<input type="text"/>	<input type="text"/>	<input type="text"/>
Other (specify in Com)	<input type="text"/>	<input type="text"/>	<input type="text"/>

Endogenous Reference Compound

ERC	δ (‰)	uc (‰)
Pregnenolone (PD)	<input type="text"/>	<input type="text"/>

Comments on IRMS

ADAMS 4.7.0

Labs are able to indicate a dedicated **Overall IRMS conclusion** irrespective and independent from the overall Lab test result.

This to address the following problem cases: Lab has detected a prohibited substance (eg. S1.1A Exogenous AAS/closterbol) and intends to report this finding as an AAF in ADAMS. In addition, an IRMS analysis was performed and values for the TC/ERC were determined. The IRMS-conclusion however was Negative or ATF (inconclusive). Similar for other combinations such as Negative or ATF for the Lab result, whereas the IRMS proves to be an AAF.

Analysis Results	IRMS details	Monitored Substances
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Overall IRMS Conclusion

- Negative - The GC/C/IRMS results do not confirm an exogenous origin of the target compound(s).
- AAF - The GC/C/IRMS results are consistent with the exogenous administration of the target compound(s).
- ATF - The GC/C/IRMS results are inconclusive for the target compound(s).
- ATF - The GC/C/IRMS results are inconclusive because they do not meet the positivity criteria, but in the Laboratory's opinion they are not consistent with the endogenous origin of the target compound(s).
- ATF - The GC/C/IRMS results are inconclusive due to technical limitations (insufficient sample volume, very low concentrations of TCs or ERCs, presence of interfering compounds, etc.).

If one of the first three options (Negative, AAF, ATF) is ticked, it becomes **mandatory** for the user to enter at least one TC/ERC value in the dedicated section. When the Lab result is Saved in the (Partially) submitted status, the system will check if the selected Overall IRMS-conclusion matches the 'highest level' of result inferred from the TC/ERC (precedence of severity is AAF>ATF>Negative).

Otherwise an error message will be prompted.

If one of the last two options (ATF-Lab's opinion, ATF-technical limitations) is ticked, it is **not required** for the user to enter TC/ERC values in the dedicated section. This is optional, so the error message will not appear when the result is saved.

9. For *Urine* samples the details regarding the **LH-Analysis** can be provided:

Release June 2018

According to the section 5.2 of WADA's Technical documents for Labs - **TD2018CG/LH** - "The Laboratory shall report the measured concentration of total LH when the Initial Testing Procedure produces a Presumptive Adverse Analytical Finding (PAAF), i.e. if the total LH concentration (after adjustment if urine SG is greater than 1.020) is greater than 60 IU/L when using the Immulite assay or greater than 40 IU/L when applying the Delfia assay. In cases when LH is not detectable, the Laboratory shall report the finding as "the concentration of LH was less than the limit of detection (LOD)" and specify the applicable LOD".

This LH-reporting takes effect on 1 March 2018 for the Labs (in ADAMS as per Release June 2018).

The screenshot shows the 'Monitored Substances' tab in the ADAMS system. It features several checkboxes for substance classes: ESAs (including recombinant EPOs and analogues), GC/C/IRMS, OTHER, Insulins, GHRF (GHRH/GHS/GHRP), GnRH, and IGF-1 analogues. Below these is a text area for 'Analysis Details/Explanation/Opinion', a 'select' button for 'Capability and method(s) used', and a text area for 'The sample was analysed using Laboratory test method(s)'. The 'Analytical Finding' section is highlighted with a red box and contains a dropdown for 'LH-Analysis' (set to 'No LH-Analysis performed'), input fields for 'Concentration (iU/L)' and 'LOD (iU/L)', and an 'add substance' button.

- The default value is *No LH-Analysis performed*.
- If *Negative* is selected, either the 'Concentration (iU/L)' or the 'LOD (iU/L)' can be entered or none
- If *PAAF* is selected, a 'Concentration (iU/L)' is mandatory when the result is saved in the Partially submitted or Submitted status
- If *ATF* is selected, a 'Concentration (iU/L)' is mandatory when the result is saved in the Partially submitted or Submitted status
- The input value for concentration or LOD has to be numeric: a positive integer or a number with 1 digit after decimal point. E.g. 3 , 2.0
- Applicable to *Urine samples* of all Sample AB types A, B, B1 and B2
- Locked results: LH-Analysis details can be added on locked results if they didn't exist before (existing details however can not be modified)

10. To add a metabolite and/or prohibited substance click on the **AddSubstance** button, and select the required Class. *The substance is mandatory* when a substance class is selected. Click on the **Add Metabolite** to detail possible associated metabolite(s), and enter the appropriate information. If more than one prohibited substance and/or metabolite is to be reported, then click on the **Add Substance** and/or **Add Metabolite** button to detail each finding.

The **Only metabolite(s)** checkbox can be checked to indicate that only metabolite(s) were detected during the analysis (not the parent). This will be explicitly reflected as such and clearly stated in the pdf Test report (produced by dint of the *Print analysis result record- button*). When the box is checked, at least one metabolite in combination with a substance/class has to be specified at the time of (partial)

Submission.

The screenshot shows a form with the following fields:

- Class:** M3. Oxygen Transfer Enhancement
- Only metabolite(s):**
- Date Results Reported:** 13-Mar-2011
- Metabolite:** Metabolite 1
- Estimated:** 2
- Concentration/Ratio:** 10%
- Substance:** Blood doping (Other)
- Estimated:** 1
- Unit:** 10/L
- Details Concerning Finding:** (empty text area)
- add substance** (button)

11. If a specific so-called **Threshold substance** (e.g. "epitestosterone > DL of 240 ng/mL") is selected when Adding a substance in the previous step, then automatically a new section for **Quantitative Results** appears, which may be completed:

Data must include Mean value (with units), the Combined standard uncertainty details, triplicate sample results (with units), the Standard Deviation (SD), and Details concerning finding – if any.

The screenshot shows a form with the following fields:

- Class:** S1B. Endogenous AAS
- Only metabolite(s):**
- Date Results Reported:** 20-Jul-2011
- add metabolite** (button)
- Substance:** epitestosterone > DL of 240 ng/mL
- Limit of detection:** (empty)
- The mean concentration measured is:** (empty)
- The combined standard uncertainty (uc) estimated by the Laboratory at the threshold is +/-:** (empty)
- Quantitative Results:**
 - Aliquot 1:** (empty)
 - Aliquot 2:** (empty)
 - Aliquot 3:** (empty)
 - Standard deviation:** (empty)
- Details Concerning Finding:** (empty text area)
- add substance** (button)

12. For the reporting of **Steroid Profiling** data (endogenous steroids) on Urine samples a dedicated section can be used.

It allows for reporting on the:

- Presence of **microbial contamination**
- **Steroid Profile Variables:** androsterone, etiocholanolone, testosterone, epitestosterone, 5 α -androstane-3 β -diol, 5 β -androstane-3 β -diol. Fill in the estimated concentrations and units for each of the measured analytes from the Initial Testing Procedure.
- Presence of **Confounding Factors**

Steroid Profile Data

Microbial contamination

	Initial values
5 α AND/A	<input type="text"/>
5 β AND/Etio	<input type="text"/>

Steroid Profile Variables

	Initial values	
5 α -androstenediol	<input type="text"/>	ng/mL
5 β -androstenediol	<input type="text"/>	ng/mL
androsterone	<input type="text"/>	ng/mL
epitestosterone	<input type="text"/>	ng/mL
etiocholanolone	<input type="text"/>	ng/mL
T/E	<input type="text"/>	
testosterone	<input type="text"/>	ng/mL

Presence Confounding Factors

	Initial values	Est. concentration
Ethyl Glucuronide	<input type="radio"/> Y <input type="radio"/> N	
Ketoconazole or similar	<input type="radio"/> Y <input type="radio"/> N	
5 α -reductase inhibitors	<input type="radio"/> Y <input type="radio"/> N	
Heterodimetric hCG	<input type="radio"/> Y <input type="radio"/> N	
Anabolic Steroids	<input type="radio"/> Y <input type="radio"/> N	
Masking agents and diuretics	<input type="radio"/> Y <input type="radio"/> N	

ADAMS 4.1 and 4.1.1

- The Urine lab results validity is automatically calculated based on *microbial contamination markers 5 α AND/A and 5 β AND/Etio*: these fields are **mandatory** if the date received of the sample is after 16 March 2016
- As per ITP, the *presence/absence of confounding factors* can be indicated; this information is **mandatory** for Urine samples if the date received of the sample is after 1 January 2016. When mandatory, the information has to be indicated for *all* confounding factors. If the Estimated concentration of the confounding factor *Ethyl Glucuronide* is above 5 ug/mL, this concentration value should be stated

13. Laboratory Test result value:

1. Negative: The analysis did not reveal the presence of a prohibited substance or T/E ratio greater than four.
2. AAF: Adverse Analytical Finding. A prohibited substance or metabolite or marker was found
3. ATF: Atypical Finding. Substances for which further investigation is needed (e.g. TE greater than 4 without a GC/C/IRMS result indicating an exogenous source)
4. Not analyzed

14. Change the lab result Status:

1. *Not submitted*: This means that the result can be saved in ADAMS, but is not yet available to WADA. E.g. in case you would like to have the option of printing and verifying the analysis record before submitting. *Mandatory fields can be left blank when saving, except for EQAS number field, sample code/type.*
2. *Submitted*: Once all analyses are complete and result is ready to be submitted to WADA. All mandatory fields need to be filled out.
3. *Partially Submitted*: For your EQAS-reporting this status is not directly relevant. However, once you have submitted your EQAS-results, it will not be possible to modify the details, unless WADA upon request unlocks the record by resetting the status to 'Partially submitted'. In the status 'Partially submitted' everything is still editable.
4. *Cancelled*: nothing can be changed (only Activities can be added/modified)

15. If you are ready to record the result into ADAMS, **DO NOT FORGET** to click on the **Save** button.

16. Before a status is changed to *Submitted*, verify that the entered information is correct, i.e. one way to do this is to use the **Print Analysis Results Record** button to review a hardcopy prior to submission.

17. If desired, use the **Print**-button to create a hardcopy of the EQAS result record (page being displayed, related data in the database including data under the Tabs). It is recommended to print in View-mode and not the Edit-mode.

18. Once an EQAS-result is *Saved with the Submitted* status, the record will be locked for modification. If a change is necessary after submission, WADA has to be contacted in order to allow (change the status of an EQAS-result back to Partially Submitted) a Lab-user (not WADA!) to edit and re-submit the record.