Tribunal Arbitral du Sport
Court of Arbitration for Sport

CAS 2010/A/2185 Alberto Blanco v. United States Anti-Doping Agency (USADA)

Arbitral Award

Delivered by the

COURT OF ARBTIRATION FOR SPORT

Sitting in the following composition:

President: Mr. Henri C. Alvarez, Attorney-at-law in Vancouver, Canada

Arbitrators: Mr. John A. Faylor, Attorney-at-law in Frankfurt am Main, Germany
Mr. David W. Rivkin, Attorney-at-law in New York, United States

Ad hoc Clerk: Ms. Samantha Rowe, Attorney-at-law in New York, United States

In the arbitration between

Mr. Alberto Blanco, San Mateo, California, USA
Represented by Mr. Michael Straubel, Attorney-at-law in Valparaiso, Indiana, USA

-the Appellant-

and

United States Anti-Doping Agency (USADA), Colorado Springs, Colorado, USA
Represented by Mr. Stephen Starks, Attorney-at-law in Colorado Springs, Colorado, USA

-the Respondent-

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1. INTRODUCTION

1.1 This matter concerns an appeal by Mr. Alberto Blanco (the "Appellant") from the Award of the Panel issued pursuant to the rules of the American Arbitration Association (the "AAA") on 14 July 2010, sanctioning the Appellant with a two-year period of ineligibility for a doping violation. Mr. Blanco argues that he should be exonerated on the grounds that the test results showing the presence of a prohibited exogenous substance in his urine Samples are unreliable. This unreliability arises from the fact that no negative controls were run by the laboratory during the analyses of his A and B Samples, and the alleged lack of robustness and reproducibility with regard to the test results.

2. THE PARTIES

2.1 The Appellant, Mr. Alberto Blanco, is an amateur cyclist and a member of USA Cycling.

2.2 The Respondent, the United States Anti-Doping Agency ("USADA"), is the independent anti-doping agency for Olympic Sports in the United States of America and is responsible for conducting drug testing and adjudicating positive test results pursuant to the USADA Protocol for Olympic Movement Testing ("USADA Protocol").

3. BACKGROUND FACTS

3.1 The relevant background facts are undisputed. Mr. Blanco was born in Cuba on 7 March 1981. He started his cycling career in Cuba, competing in three National Championships in the period 1995-1999, earning a silver medal in the team pursuit as well as a fourth place finish in the road race. In 2000, Mr. Blanco moved to the United States. He began cycling in the United States in 2004 as a

Category 5 participant (beginner racing events), but quickly climbed the rankings and earned a Category 2 license by the end of 2004.

3.2 In 2005, Mr. Blanco joined the Mike Fraysse, ACT/UMPC team. He finished in the top ten in eight races in that year, winning the New Jersey State Criterium Championship, the New Jersey State Road Race Championship, and the Sussex Criterium. By the summer of 2005, Mr. Blanco was competing in Professional Category 1 races. Mr. Blanco joined the GS Megoni team for the 2006 and 2007 seasons. During this period, Mr. Blanco finished in the top ten in twelve races, winning the Premier Circuit Bank Race in 2006. In 2007, Mr. Blanco took time off from cycling to care for his newborn daughter. In 2008, he returned to cycling, competing in two events during that season. He finished second in the Floyd Benet Field event which took place in New York in April 2008. The second event was the Tour of the South China Sea in December 2008, during which the Samples at issue in the present dispute were collected. Prior to this latter competition, Mr. Blanco was never drug tested.

3.3 The Tour of the South China Sea Competition consisted of eight stages and took place over a week-long period, from 14 December 2008 through 21 December 2008. After the second stage of the competition, which took place on 15 December 2008 in the city of Shenzhen in China, Mr. Blanco provided the Samples that are the subject matter of this dispute. The Samples were sent to the National Anti-Doping Laboratory in Beijing, China (the "Beijing Laboratory"), where they arrived on 22 December 2008. The Beijing Laboratory is accredited by the World Anti-Doping Agency ("WADA").

3.4 The Beijing Laboratory tested Mr. Blanco's A Sample between 22 December 2008 and 29 December 2008. At this point in time, Version 5.0 of the WADA International Standard for Laboratories (the "ISL") was in force. Under Version 5.0, the same analyst was not permitted to perform the analysis on both an athlete's A and B Samples. Dr. Wang Zhanliang, Assistant Chemist at the Beijing

Laboratory, was the Operator for the A Sample, and Dr. Wang Jigzhu, Senior Chemist, was the Examiner. The Operator performs the sample analysis, including chemical preparation, and writes the report containing the results of the sample. The Examiner's role is to ensure that the Operator follows the laboratory's Standard Operating Procedures ("SOPs"). The Beijing Laboratory uses the Isotope Ratio Mass Spectrometry ("IRMS") method to test for prohibited substances in an athlete's urine sample.

3.5 The Beijing Laboratory first screened Mr. Blanco's Sample using the Gas Chromatography/Mass Selective Detector ("GC/MSD") procedure. WADA Technical Document 2004EAAS requires that an IRMS analysis is performed on an athlete's sample only when the screening process reflects the presence of the steroid DHEA in the urine at a concentration greater than 100 ng/ml. The DHEA concentration measured in Mr. Blanco's A Sample was 393 ng/ml which, when corrected for the dilution of the Sample, equals a concentration of approximately 800 ng/ml. Similarly, the WADA Technical Document requires IRMS screening when the concentration of Etiocholanolone ("Etio") is greater than 10,000 ng/ml. The measured value of Etio in Mr. Blanco's A Sample was 19,700 ng/ml which, when corrected for dilution, equals a concentration of 39,000 ng/ml. Both Parties agree that these values are unusually high. The Beijing Laboratory proceeded to run an IRMS analysis on Mr. Blanco's A Sample.

3.6 Athletes can dope with testosterone or its precursors (e.g. DHEA), which are metabolized in the body into testosterone, all of which are prohibited under the WADA and Union Cycliste International ("UCI") rules. IRMS identifies the presence of exogenous testosterone or its precursors by comparing the carbon-13 to carbon-12 ratio of testosterone metabolites to the carbon-13 to carbon-12 ratio of an endogenous reference compound ("ERC") that would not be affected by testosterone administration. The method is based on the fact that there are two groups of plants which contain either more or less carbon-13 as a fixed carbon

dioxide from the atmosphere. Usually, the different compounds in a person's body have roughly the same carbon-13 content, established by diet and metabolism. However, when a person exogenously administers testosterone or its precursors, the carbon composition of the testosterone metabolites differs markedly from the carbon composition of the rest of the body.

3.7 IOC-accredited laboratories began using the IRMS method to test for exogenously administered testosterone and its precursors in the late 1990s. Compounds are extracted from the athlete's urine sample and separated by a gas chromatograph ("GC"). Each separated compound is then burnt in a combustion furnace at a high temperature. The compound is completely combusted, and each carbon atom in the compound is converted to carbon dioxide ("CO2"). The CO2 then enters the IRMS instrument. The mass spectrometer measures only three masses: 44, 45 and 46. From the three signals, the instrument calculates the δ carbon-13 (delta) value, which reflects the carbon-13 to carbon-12 ratio within the molecule. The delta value represents the difference between the carbon-13 to carbon-12 ratio of the sample and that of an ERC such as pregnanediol, pregnanetriol, cholesterol, 11-hydroxyandrosterone or 11-ketoetiocholanolone, all of which have a delta value of zero. For example, if a compound contains 21 parts per thousand less carbon-13 than 11-hydroxyandrosterone, then its delta value is -21 per mil.

3.8 The body naturally metabolizes cholesterol into testosterone via many successive steps and intermediate sterolds. In addition to this metabolic pathway, there are other pathways branching out from cholesterol to other steroids, some of which are not involved in testosterone metabolism. The body also naturally converts testosterone to by-products or "metabolites" with the same carbon framework, but with differences in the number of oxygen and hydrogen atoms in their arrangement. In a drug-free person, natural testosterone might have a delta value of -21 per mil, and the delta value of the natural testosterone metabolites will not be significantly different, since the carbon framework remains the same.

3.9 Pharmaceutical testosterone contains even less carbon-13 than natural testosterone. When an athlete dopes with pharmaceutical testosterone that has a delta value of -34 per mil, its carbon framework remains the same as it is metabolized, and the metabolites will also have a delta value of -34. In real cases, a metabolite in an athlete's urine sample might be a mixture of natural and pharmaceutical material; therefore its overall delta value might be somewhere between -21 per mil and -34 per mil.

3.10 In contrast, the delta values of testosterone precursors, or of endogenous steroids not involved in testosterone metabolism, remain unchanged when an athlete ingests exogenous testosterone; therefore they can be used as ERCs.

3.11 The Beijing Laboratory measured the carbon-13 to carbon-12 ratio of two metabolites of testosterone in Mr. Blanco's urine Sample: Etio and Androsterone ("Andro"). The ERC used was 11-hydroxyandrosterone ("11OH"). The difference between the delta value of the metabolite and the delta value of the ERC is called the delta/delta value.

3.12 WADA Technical Document 2004EAAS provides that an Adverse Analytical Finding ("AAF") should be reported when the IRMS analysis demonstrates that any testosterone metabolite has a delta value more negative than -28 per mil or when the difference between the delta value of the metabolite and the delta value of the ERC is greater than 3 delta units. The Beijing Laboratory's protocol is more generous to the athlete and states that test results are positive if the delta/delta value is greater than 4 delta units. Mr. Blanco's A Sample Andro and Etio delta values were both -32 per mil, and the difference between both metabolites' delta values and the ERC's delta value was 10.1. Again, both Parties agree that these values are unusually high.

3.13 On 14 January 2009, USADA notified Mr. Blanco that the Beijing Laboratory had reported the presence of exogenous testosterone in his A Sample. In response, Mr. Blanco informed USADA that he wanted his B Sample to be opened and

analyzed as soon as possible. The suspension of Mr. Blanco from competition took effect as of 16 January 2009. The Beijing Laboratory tested the B Sample between 12 February 2009 and 16 February 2009, using the same procedure that it had used for the A Sample. This time, Dr. Wang Jigzhu was the Operator, and Dr. Wang Zhanliang was the Examiner. On 1 January 2009, Version 6.0 of the ISL had entered into force. Version 6.0 did not prohibit the same analyst from performing the analysis on an athlete's A and B Samples.

3.14 In summary, Mr. Blanco's IRMS tests showed the following:

Respondent's Samples	Andro	Etio	11OH	11OH – Andro	11OH – Etio
A Sample	-32	-32	-21.9	-10.1	-10.1
B Sample	-33	-33.9	-21.3	-11.7	-12.6

3.15 On 23 February 2009, USADA notified Mr. Blanco that his B Sample had also tested positive for the presence of exogenous testosterone. In April 2009, pursuant to the USADA Protocol for Olympic Movement Testing (the "USADA Protocol"), Mr. Blanco's case was forwarded to a Panel of the Anti-Doping Review Board by USADA for its consideration and recommendation as to whether there was sufficient evidence of doping to proceed to a hearing.

3.16 On 1 May 2009, USADA informed Mr. Blanco that the Panel of the Review Board assigned to his case had determined that there was sufficient evidence of a doping violation and recommended that the adjudication process proceed pursuant to the USADA Protocol and the UCI Anti-Doping Rules. USADA charged Mr. Blanco with an anti-doping rule violation for the presence and / or use of an exogenous anabolic agent pursuant to Articles 2.1 and 2.2 of the World Anti-

Doping Code (the "WADA Code"). USADA proposed a sanction of two years ineligibility from the date of acceptance, less any period of provisional suspension. Mr. Blanco exercised his right to contest the sanction proposed by USADA and requested a hearing before a panel of AAA arbitrators pursuant to the USADA Protocol.

3.17 During the course of the proceedings before the AAA Panel, the Parties entered into the following stipulation:

STIPULATION OF UNCONTESTED FACTS AND ISSUES BETWEEN THE UNITED STATES ANTI-DOPING AGENCY AND ALBERTO BLANCO

The United States Anti-Doping Agency ("USADA") and Mr. Alberto Blanco stipulate and agree to, for purposes of all proceedings involving Union Cycliste International ("UCI") urine specimen number 961772, the following:

1. That the USADA Protocol for Olympic and Paralympic Movement Testing ("Protocol") governs the hearing for an alleged doping offence involving UCI specimen number 961772;

2. That the mandatory provisions of the World Anti-Doping Code ("Code") including, but not limited to, the definitions of doping, burdens of proof, Classes of Prohibited Substances and Prohibited Methods, and sanctions, and contained in the Protocol at Annex A, the WADA International Standard for Testing ("IST"), the WADA International Standard for Laboratories ("ISL"), and the UCI Anti-Doping Rules are applicable to this hearing for the alleged doping offence involving UCI specimen number 961772;

3. Although the Parties agree that the rules described in Paragraphs 1 and 2 above apply to this hearing for the alleged doping offence involving UCI specimen number 961772, the Parties do not agree as to which versions, the 2008 or 2009, govern this hearing, or how the doctrine of lex mitior may apply;

4. That Mr. Blanco gave the urine sample designated as UCI specimen number 961772 at the Tour of the South China Sea on December 15, 2008;

5. Mr. Blanco will not concede that article 9.3.1 of the 2008 IST, which provides that "the ADO shall authorize a transport system that ensures Sample and documentation will be transported in a manner that protects their integrity, identity and security" was followed inasmuch as Mr. Blanco has not seen documentation related to chain of custody from the time UCI specimen number 961772 was collected and processed to receipt of the sample by the World Anti-Doping Agency accredited laboratory at the China Anti-Doping Center in Beijing, China (the "China Laboratory");

6. However, with the exception of the claimed IST violation described in Paragraph 5 above, Mr. Blanco does not contest that the laboratory results with respect to any claim of irregularities in any aspect of the sample collection and processing for the A and B bottles of UCI specimen number 961772. He may offer testimony related to alleged irregularities in sample collection in sample collection and processing for the A and B bottles of UCI specimen number 961772, however, it is stipulated by this document that any possible irregularity did not cause the Adverse Analytical Finding;

7. That the China Laboratory's chain of custody for UCI specimen number 961772 was conducted appropriately and without error;

8. That Mr. Blanco does not contest that the China Laboratory, through accepted scientific procedures and without error, determined the sample positive for the finding of exogenous (i.e., synthetic or non—natural) testosterone using the IRMS method in both the A and B bottles of UCI specimen number 961772, except as follows:

i. Mr. Blanco contends that the China Laboratory violated article 5.2.4.3.2.2 of the 2008 ISL in that he contends that the same laboratory analyst performed parts of both the A and B analytical procedure during which the Sample or Aliquot was open and accessible;

ii. Mr. Blanco contends that the China Laboratory violated article 5.2.4.3.2.3 and 5.2.6.1 of the 2008 ISL in that he contends that the results of the A and B analyses exceed the acceptable measure of uncertainty;

With respect to the ISL challenges, the Parties have not reached agreement on which version of the ISL applies;

9. That the Parties agree that the period of ineligibility will be a maximum of two (2) years beginning on the date of the hearing panel's decision with credit being given for the time Mr. Blanco has served a provisional suspension beginning on January 16, 2009, until the date of the hearing panel's decision so long as Mr. Blanco does not compete during any period of any provisional suspension.

10. That Mr. Blanco does not contend that there are any exceptional circumstances under the applicable rules present in this case;

11. The above stipulations do not apply to an appeal by WADA or UCI of the final decision reached by the Panel in these proceedings.

3.18 The Parties engaged in a lengthy discovery dispute before the AAA Panel. Mr. Blanco requested a number of documents from USADA, including the Beijing Laboratory's SOPs for the interpretation of IRMS data. USADA argued that WADA Technical Document TD2009LDOC precluded the production of a laboratory's SOPs. The AAA Panel held that this argument was no longer legally viable, given the CAS decision in Vadim Devyatovskiy and Ivan Tsikham v IOC, CAS/2009/A/1752 and CAS/2009/1753 (10 June 10 2010) (the "*D&T Case*").

3.19 USADA pledged to work with Mr. Blanco to resolve any outstanding issues related to discovery. By 9 December 2009, the Beijing Laboratory had agreed to release the SOPs, and the Respondent and the Panel executed a "SOP Confidentiality Agreement." However, the AAA Panel in its Award expressed "some doubt that the Beijing Laboratory produced its entire requested SOPs" and noted its discomfort that "an accredited anti-doping laboratory would withhold production of documents that were subject to a confidentiallty order and otherwise agreed to for production in an arbitration proceeding." However, the Panel concluded that the failure to produce the missing SOPs "did not affect the outcome of this proceeding."

3.20 Following a hearing on the merits in May 2010, the AAA Panel, rendered its Award on 14 July 2010. The Panel found that USADA had sustained its burden of proof in establishing that Mr. Blanco had committed a doping offence, rejecting each of the grounds advanced by Mr. Blanco in support of his attempts to rebut the charges. As a result, the Panel held that Mr. Blanco would be ineligible to compete for a period of two years, running from 15 December 2008 through 14 December 2010.

3.21 The Panel held that the Same Analyst Prohibition contained in Version 5.0 of the ISL was not present in Version 6.0, which entered into force on 1 January 2009. As the ISL Preamble and the WADA Code both provide that the application of Version 6.0 is mandatory as of its effective date, and the analysis of Mr. Blanco's B Sample took place after that date, the fact that the same two chemists analyzed Mr. Blanco's A and B Samples (albeit in different roles) did not violate the ISL. The Panel concluded on this issue that:

> 8.3 [...] It would be untenable and impractical to have in place a rule that interpreted the mandatory provisions of the ISL as requiring a lab technician in a series of A and B Samples spanning two different versions of the ISL to be knowledgeable of and apply

> two different ISLs that might be in place for both parts of the testing, or to determine which of the two might apply or how to merge the two standards. As a result, the Panel is of the view that the only interpretation of the plain reading of the ISL 6.0 version is that it applies to tests that were administered on or after January 1, 2009, irrespective of when the A samples might have been tested.

3.22 Mr. Blanco has not pursued this defense on appeal.

3.23 The Panel also rejected Mr. Blanco's arguments that the Etio results of the A Sample and the B Sample were unreliable and violated ISL 5.2.4.3.2.3 because they fell outside of the "measurement of uncertainty." The Panel agreed with USADA that only one of the following four criteria have to be satisfied for an athlete's sample to be found positive for the presence of exogenous testosterone:

1. Was the 11OH-Andro difference greater than 3 delta units?
2. Was the 11OH-Etio difference greater than 3 delta units?
3. Was the delta value of Andro by itself below -28 units?
4. Was the delta value of Etio by itself below -28 units?

3.24 The answer to each of the questions for both Mr. Blanco's A and B Samples was clearly yes. As Mr. Blanco had not argued that the Andro results fell outside of the measurement of uncertainty, there appeared to be agreement that a positive answer was required to at least two of the questions. Further, because testosterone is a Non-Threshold Substance (i.e. its mere presence is sufficient to found a doping violation, at any concentration), there is no requirement that the results for the A and B Samples satisfy a measurement of uncertainty. Finally, based on the Beijing Laboratory's standard deviation for the measurement of a single delta value of C25 hydrocarbon, the individual measurements for Etio and Andro in Mr. Blanco's Samples were in fact within the appropriate measurement of

uncertainty. The Panel also found that the Beijing Laboratory had provided sufficient information to permit interpretation of the results for the A and B Samples. There was no violation of the International Standard for Laboratories ("ISL").

3.25 Finally, the Panel held that it had no jurisdiction to decide on the significance of the fact that negative controls were not run by the laboratory during the analysis of Mr. Blanco's A and B Samples. In the Panel's view, Paragraph 8 of the Parties' Stipulation limited Mr. Blanco's grounds for challenging the test results to the same analyst and measurement of uncertainty arguments. Mr. Blanco was thus precluded from raising any other issues with regard to the positive test results.

3.26 In making this finding, the Panel referred to the benefits associated with stipulations such as the one entered into by the Parties, including expedition of the hearing process, shortened presentation of evidence and control over costs. Without such stipulations "there could be countless hours wasted ... where parties must prove facts or legal elements not really in dispute." Further, as a matter of basic principle, arbitrators cannot deviate from jointly stipulated facts and issues because their jurisdiction arises from the parties' agreement on the scope of the arbitration. Mr. Blanco was not compelled to enter into a Stipulation, and his counsel admitted that a mistake had been made in agreeing to the Stipulation before discovery was completed. Documents that were produced by USADA demonstrated that negative controls had not been run; indeed neither USADA nor the Beijing Laboratory had made any efforts to conceal this fact. The Panel concluded that:

> 8.23 The Panel recognizes the value of stipulations and absent manifest injustice (which is not present given the lack of concealment and the other scientific evidence available in this case confirming the presence of a prohibited substance) will not disturb the parties' Stipulation. Having said this, the Panel wishes

to note that it is troubled by the lack of negative quality controls being run, especially in light of the testimony from USADA's expert, Dr. Bowers, that he could not recall a case that was upheld where negative quality controls had not been run, the ISL provision that seemingly requires negative quality controls, and Prof. Schänzer's testimony in the *D&T Case* that negative quality controls are "crucial because if they are conducted properly, this avoids the risk of a 'false positive.' The Panel recognizes that the failure to run negative quality controls are not issues of USADA's doing, but go directly to issues with the procedures of the Beijing Laboratory.

4. PROCEDURAL BACKGROUND OF THESE PROCEEDINGS

4.1 On 30 July 2010, the Appellant filed a Statement of Appeal with the Court of Arbitration for Sport ("CAS"), appointing Mr. John A. Faylor as an arbitrator. The Appellant challenged the decision of the AAA Panel and submitted the following request for relief:

Mr. Blanco hereby respectfully requests CAS to rule:

1. The Appeal of Mr. Blanco is admissible;
2. Dismiss the charge filed against Mr. Blanco and declare the lab results unreliable;
3. Award costs to Mr. Blanco.

4.2 On 6 August 2010, CAS acknowledged receipt of the Statement of Appeal and communicated a copy to USADA, the Respondent. The Respondent was requested to nominate an arbitrator within ten days of receipt of the letter.

4.3 On 11 August 2010, the Appellant filed his Appeal Brief.

4.4 On 20 August 2010, USADA nominated Mr. David W. Rivkin as an arbitrator.

4.5 On 7 September 2010, USADA exercised the option available to it under Article R55 of the Code of Sports-Related Arbitration (the "CAS Code"), pursuant to which "the Respondent may request that the time limit for the filing of the answer be fixed after the payment by the Appellant of the advance of costs in accordance with Art. R64.2 of this Code." USADA therefore asked that CAS fix the time for it to file its Answer at a time no earlier than 22 September 2010.

4.6 On 8 September 2010, CAS acknowledged receipt of the Respondent's correspondence, communicated a copy to the Appellant, and extended the time limit for filing the Respondent's answer until after the payment of the advance on costs.

4.7 On 14 September 2010, the Appellant challenged CAS's determination that the Parties must pay the costs of the arbitration on the grounds that (i) Mr. Blanco's appeal was directed against a decision rendered by a national federation acting by delegation of powers from an international federation, and therefore the proceedings should be free pursuant to Articles R65.1 and R65.2 of the CAS Code; or (ii) CAS should waive Mr. Blanco's arbitration costs because of his financial inability to pay them and because of "exceptional circumstances" at the first hearing.

4.8 On 14 September 2010, CAS acknowledged receipt of the Appellant's correspondence and communicated a copy to the Respondent. CAS informed the Parties that (i) pursuant to Article R65.1 of the CAS Code, as USADA was acting by delegation of powers of an international federation, the proceedings would be free of charge (apart from the CAS Court Office fee of 500 Swiss Francs paid by the Appellant); and (ii) pursuant to Article R55 of the CAS Code, the Respondent should submit its Answer within twenty days of receipt of CAS's letter.

4.9 Subsequently, CAS appointed Mr. Henri Alvarez as the President of the Panel in this matter.

4.10 On 28 September 2010, CAS advised the Parties of the appointment of the President and the constitution of the Panel. CAS also informed the Parties that the File had been transferred to the Panel pursuant to Article R59 of the CAS Code.

4.11 On 1 October 2010, USADA submitted its Answer, with the following request for relief:

> Based on the foregoing, as well as the record below and the evidence submitted in these proceedings, USADA respectfully requests that Mr. Blanco's appeal be denied.

4.12 Moreover, the Respondent considered that "an award of costs is appropriate."

4.13 Two preliminary issues arose from the Appellant's Appeal Brief and the Respondent's Answer: the continued validity of the Stipulation and the Appellant's discovery requests. Given the importance of those issues to the dispute, they are dealt with separately below.

4.14 On 12 October 2010, the Appellant informed CAS that it would request a hearing to be held in Chicago, Illinois.

4.15 On 13 October 2010, the Respondent informed CAS that it would request that the case be resolved on the briefs and the record in the case below. However, the Respondent also noted that such an approach would require either a narrowing of the issues, or the submission of additional evidence on issues that were not raised during the AAA hearing.

4.16 On 29 October 2010, following a request for reply briefs from the Appellant, the Panel accepted such request and fixed the procedural calendar for the remaining written submissions, and a meeting of the Parties' experts in order to identify the

areas in respect of which they agreed and disagreed. The Parties were also required to submit a joint report, prepared by their respective experts, to the Panel.

4.17 On 15 November 2010, the Appellant filed his reply brief.

4.18 Following the Parties' agreement on extending the Respondent's deadline to submit its reply brief, USADA filed its response to the Appellant's reply brief on 8 December 2010.

4.19 Also on 8 December 2010, the Panel issued a general procedural order that was agreed and signed by the Parties, with copies returned to CAS.

4.20 On 1 January 2011, the Parties filed a joint expert summary regarding the areas of agreement of the experts with respect to the science in the present procedure. The summary provided that:

> 1. We agree that the Beijing Laboratory did not run a negative control sample in either the A or the B confirmation. We disagree on the weight of that omission with regard to the reliability of results.
>
> 2. The Westgard rules were brought up for the very narrow purpose of giving an example where a difference between two samples run consecutively could be as large as four standard deviations and still be acceptable as an element in that control scheme. We agree that other than as this limited example, the Westgard rules are not applicable to this case.
>
> 3. If we assume that the data reported by the Beijing laboratory is reliable, we agree that the results would be the result of a doping violation. We have disagreements as to the reliability of the results.

4.21 A hearing was held on 24 and 25 January 2011 in New York, USA. All the members of the Panel were present. The parties did not raise any objection as to the constitution and composition of the Panel.

4.22 Mr. Blanco and his counsel, Mr. Michael Straubel, attorney-at-law at Valparaiso Sports Law Clinic, assisted by Mr. Joe D'Onofrio, Mr. Adam Miller, Mr. Chris

Nunley, and Mr. George Catanzarite, all of Valparaiso University Sports Law Clinic, attended the hearing on behalf of the Appellant.

4.23 Mr. Stephen Starks, attorney-at-law at USADA, and Mr. Richard Young, attorney-at-law of Holme, Roberts & Owen LLP, attended the hearing on behalf of the Respondent. Mr. Starks and Mr. Young were assisted by Ms. Jenny Van and an interpreter during the testimony of Dr. Wang Jingzhu.

4.24 The Panel heard evidence from the following witnesses:

Mr. Paul Scott;

Dr. David Black;

Dr. Linda Collins;

Dr. Wang Jingzhu;

Dr. Larry Bowers.

4.25 Dr David Black, Dr Linda Collins and Dr Wang Jingzhu were heard via teleconference, with the agreement of the Panel and pursuant to Article R44.2 ¶4 of the CAS Code. Mr. Scott and Dr. Bowers testified in person.

4.26 Each witness was invited by the President of the Panel to tell the truth subject to the consequences provided by the law. Each witness was examined and cross-examined by the Parties and questioned by the Panel.

4.27 The Panel heard the detailed submissions of the Parties. After the Parties' final arguments, the hearing was closed and the Panel announced that its award would be rendered in due course. At the conclusion of the hearing, all Parties accepted that their rights before the Panel had been fully respected. The Panel reserved its award, which takes account of all the arguments and material admitted before it including, but not restricted to, those summarized below.

5. PRELIMINARY ISSUES

5.1 Rule 44.3 of the CAS Code relates to the production of documents and provides:

> A party may request the Panel to order the other party to produce documents in its custody or under its control. The party seeking such production shall demonstrate that the documents are likely to exist and to be relevant. If it deems it appropriate to supplement the presentations of the parties, the Panel may at any time order the production of additional documents or the examination of witnesses, appoint and hear experts, and proceed with any other procedural act. The Panel may order the parties to contribute to any additional costs related to the hearing of witnesses and experts.
>
> The Panel shall consult the parties with respect to the appointment and terms of reference of such expert. The expert appointed by the Panel shall be and remain independent of the parties and shall immediately disclose any circumstances likely to affect his independence with respect to any of the parties.

5.2 The Appellant, in his Appeal Brief, requested two categories of discovery. The first consisted of "discovery requests to which USADA has previously responded inadequately":

> 1. The Appellant requests production of the Beijing Laboratory's measure of uncertainty for IRMS testing, specifically the Lab's method of calculating the delta and delta/delta values.
> 2. The Appellant requests the linearity runs of the IRMS instruments used to test the Appellant's sample.

3. The Appellant requests production of the Beijing Lab's validation of its IRMS assay.

5.3 The second category was contained in the following paragraphs:

In order to preserve procedural fairness and protect the Appellant's ability to defend himself, the Appellant respectfully requests that the Panel order the production of YYB-104 (also known as Procedure IV-Steroid and Other Drug Standard Analysis Methods), in its entirety and especially including Subsection IVa.

The Appellant also respectfully requests that the Panel order the production of all IRMS standards and procedures followed by the Beijing Laboratory, yet not listed in the SOPs.

5.4 The Appellant also requested that "the Panel provide the Appellant the opportunity to seek additional discovery if necessary."

5.5 In support of these requests, the Appellant argued that the SOPs produced by USADA during the AAA arbitration were "incomplete and inadequate," and that, as a result, Mr. Blanco's ability to defend himself had been "critically damaged." For example, production of the complete SOPs would allow the Appellant to determine whether the discrepancies in his test results or the failure to run positive and negative controls violated the SOPs. The Appellant cited to the *D&T Case*, in which the Beijing Laboratory's failure to provide Section YYB-104, Subsection IVa, led the panel to rule that "in consequence of the Laboratory's refusal ... the Panel cannot place the Appellants at a procedural disadvantage in bearing their burden of proof, where the evidence requested is critical to their defense and the laboratory remains in exclusive control of its disclosure." The Appellant asked the Panel to draw a similar inference in this case should the Beijing Laboratory continue to refuse to provide Subsection IVa.

5.6 The Appellant also requested that the Panel provide for additional discovery following the production of the documents requested in its Appeal Brief due to the difficulties he had experienced "receiving complete and adequate responses to discovery requests throughout this arbitration process."

5.7 The Appellant also requested in his Appeal Brief that the Panel not limit his defenses and arguments until after the conclusion of discovery.

5.8 USADA, in its Answer, argued that the Stipulation governed all proceedings related to Mr. Blanco's Samples, including the present proceedings before the CAS. Specifically, USADA argued that the de novo nature of the CAS proceedings does not trump a prior agreement of the parties, such as the Stipulation, to limit the issues in dispute. The Stipulation on its face states that it applies to "all proceedings" involving Mr. Blanco's Sample; as the USADA results management process consists of only two proceedings (i.e. the AAA arbitration and the CAS appeal), it is clear that the Stipulation was meant to apply equally to the CAS appeal proceedings. USADA also referred to the AAA Panel's findings that the Stipulation precluded it from exercising jurisdiction over certain issues. Finally, USADA argued that Mr. Blanco was attempting to undermine the fundamental principle that an arbitral panel is bound by the agreements of the parties with respect to jurisdiction and issues to be decided. In terms of relief, USADA asked the Panel to exclude all of the Appellant's defenses that were not preserved in the Stipulation.

5.9 On 12 October 2010, CAS informed the Parties that the Panel's decision on the question of the scope and effect of the Stipulation would be dealt with as a preliminary issue. The Appellant was given until 18 October 2010 to address this issue in writing. CAS also informed the Respondent of the Panel's request that it file, by 18 October 2010, a detailed response on the Appellant's requests for disclosure. The Parties were informed that they would be given the opportunity to

discuss these issues with the Panel by way of a conference call, scheduled for 28 October 2010.

5.10 On 18 October 2010, the Respondent submitted its Response to the Appellant's Request for Additional Documents. USADA resisted the requested document production on three general grounds: (i) WADA Technical Document TD2009LDOC makes clear that the documentation package that must be provided by a laboratory in support of an AAF does not include its SOPs, and a CAS panel is not entitled to disregard this rule; (ii) a laboratory's SOPs are proprietary and highly confidential; and (iii) the appropriate time for critical scrutiny of a laboratory's SOPs is during the International Organization for Standardization ("ISO") accreditation process, and not before a CAS panel as the result of an athlete's "fishing expedition."

5.11 In response to the Appellant's specific allegations and document requests, the Respondent argued that (i) it had not disregarded any discovery order of the AAA Panel; (ii) the Appellant's requests were "muddled"; (iii) the Appellant has already received the section of the Beijing Laboratory's SOPs dealing with IRMS, the SOP it now seeks, SOP YYB-104 IV(a), deals with a different method and instrumentation; (iv) the Beijing Laboratory and USADA had already produced all of the written standards and procedures that deal specifically with IRMS, which are contained in the relevant SOP and the laboratory documentation package; (v) it would be unreasonable to ask the Beijing Laboratory to produce any procedures that may tangentially relate to IRMS; (vi) the Beijing Laboratory has not calculated a measurement of uncertainty for any of the values in the Appellant's A and B Samples, and USADA has already produced the measurement of uncertainty for C25; (vii) the Appellant has no basis to assert a defense based on lack of instrument linearity, and in any case, USADA has already provided the applicable linearity data; (viii) the Appellant is not entitled to

seek IRMS method validation documentation to look behind a laboratory's ISO certification; and (ix) the Appellant has already received the data used to calculate the delta and delta/delta values in his case.

5.12 Despite its objections to further document production, the Respondent informed the Panel that it had requested the Beijing Laboratory to provide SOP YYB-104 IV(a), subject to a Protective Order, although it noted that it expected the Appellant to find the document "irrelevant."

5.13 On 18 October 2010, the Appellant submitted his Stipulation Argument, advancing three reasons as to why the Stipulation is not applicable to the proceedings before CAS. First, the appeal before CAS is de novo pursuant to Article R57 of the CAS Code. Limiting Mr. Blanco's appeal to the terms of the Stipulation would undermine the fundamental purpose of this de novo review, which seeks to cure procedural errors, conflicts of interest and other flaws that may have tainted the proceedings at first instance. Second, as this is a disciplinary hearing, and not a commercial dispute, the athlete must be allowed to present his full defense in order to ensure that the truth is found and justice is done. Justice cannot be done if an important and viable defense is excluded. Third, when analyzed under contract theory, the ambiguous language of the stipulation must be construed against the drafter, i.e. USADA, and set aside due to mistake of fact. The language of the Stipulation is ambiguous because it does not specifically state that it applies to CAS appeal proceedings. The material mistake of fact lies in the belief of Mr. Blanco at the time the Stipulation was drafted that negative controls had been used by the Beijing Laboratory. Further, enforcing the Stipulation would be unconscionable because enforcement would cause great harm to Mr. Blanco, whereas non-enforcement would not harm USADA.

5.14 On 28 October 2010, the Panel held a hearing by conference call with the Parties on the preliminary issues.

5.15 On 29 October 2010, the Panel reached a decision on the preliminary issues in the following terms:

> Having reviewed the parties' submissions in respect of the applicability of the *Stipulation of Uncontested Facts and Issues* between the United State Anti-Doping Agency and Alberto Blanco (the "Stipulation") and the Appellant's request for the production of additional documents (the Appellant's "Production Request"), I inform you that the Panel has reached the decisions and gives the relevant directions set out below:
>
> a) The Panel recognizes the important and useful role that a joint Stipulation or agreement in respect of relevant facts, the scope of matters in dispute submitted to arbitration and related procedural matters can have in arbitration proceedings pursuant to the WADA Code and the anti-doping rules of international sports federations as well as the CAS Arbitration Rules. Such stipulations serve to define the issues truly in dispute between the parties and thereby expedite the proceedings and help achieve the goals of a timely and cost effective process. In principle, all parties should be held to the terms of such agreements provided these are validly concluded.
>
> In this case, the Stipulation addressed, *inter alia*, the grounds upon which the Appellant sought to challenge the decision of the USADA to impose a two-year suspension for an anti-doping rule violation. The parties disagree as to whether, on an appeal de novo under the CAS arbitration rules, the Stipulation should apply to restrict the grounds of appeal to the grounds set out in the Stipulation as those upon which the challenging of the initial USADA decision was based. The parties also disagree as to the

meaning and effect of the Stipulation and the interpretation given it by the AAA Panel below.

In this Panel's view, the Stipulation is not without ambiguity and the circumstances in which the Stipulation was reached may have given rise to a misunderstanding as to the intended scope of the Stipulation. Specifically, while the introduction to the Stipulation refers to "all proceedings" and paragraph 11 contemplates an appeal, the remainder of the Stipulation entered during the AAA arbitration repeatedly refers to the "hearing" in the singular. In the particular circumstances of this case, the Panel therefore cannot conclude that the parties definitively agreed that the Stipulation would also apply to any CAS hearings, and the Appellant should not be deprived of the right to rely upon the additional grounds of appeal he wishes to raise. Accordingly, the Appellant is entitled to raise and proceed with the appeal grounds set out in his Appeal Brief of 14 August 2010. The Panel wishes to confirm that these are the only grounds of appeal and that no new grounds may be introduced. Finally, the Panel confirms Counsel for the Appellant's statement at the hearing held by conference call on 28 October 2010 that the Appellant will not be advancing as grounds for appeal questions relating to the chain of custody or collection of the sample issue.

b) With respect to the Appellant's production requests, additional information was provided and certain agreements were reached between the parties at the hearing held on 28 October 2010. These are reflected in the following directions:

i. The Respondent has agreed to produce SOP YYB-104, including part IV(a), to the Appellant, subject to agreement and execution of an appropriate confidentiality order. The parties are directed to prepare a suitable confidentiality order to proceed to its execution as quickly as possible. The Respondent shall then promptly provide a copy of the SOP to the Appellant.

ii. In the event the Appellant seeks to introduce any part of the SOP in question as evidence in these proceedings, he shall provide a translation into English of the relevant portion of the document. Such translation must include any relevant portions of the SOP required for a proper understanding of the portion of the document relied upon and necessary to provide any relevant context.

iii. With respect to the Appellant's request for information of confirmation of certain unwritten standards or procedures which apply to the IRMS method utilized by the Beijing Laboratory, the Appellant may provide to the Respondent focused questions seeking information which is material and relevant to the issues in dispute. The Respondent has agreed to attempt to provide any responsive information which may exist. The Panel confirms that this is not intended to permit questions or interrogatories for a broad range of methods or procedures conducted by the Beijing Laboratory. Rather, any requests must be limited to specific, focused questions relating to information relevant and material to the issues in dispute. Any disputes related to the Appellant's written questions shall be referred promptly to the Panel for resolution.

c) The Appellant's request for IRMS method validation documentation is denied.

5.16 On 12 January 2011, USADA provided CAS with a copy of the Stipulated Protective Order covering SOP YYB-104, including part IV(a), which had been signed by both Parties. USADA requested that the Order be executed by the Panel. On 14 January 2011 the CAS informed the Parties that the Panel would not sign an order drafted by the Parties, but that it considered itself bound by the confidential nature of the SOPs.

5.17 On 14 January 2011, the Appellant received the remaining SOPs pursuant to the Tribunal's order. The Appellant did not seek to introduce the SOPs into evidence and did not rely on them at the hearing.

6. SUMMARY OF THE PARTIES' POSITIONS

6.1 Mr. Blanco

6.1.1 Burden of Proof

6.1.1.1 The Appellant began by noting that the presumption under the WADA and UCI rules is that laboratory results demonstrating an AAF are reliable. However, he contended that, once an ISL violation has been established, the 2003 version of WADA Code Article 3.2.1, which governed in 2008 (the "2003 WADA Code"), applies and the burden of proof shifts to USADA to prove that the ISL violation did not cause the AAF.

6.1.1.2 The Appellant argued that the 2009 version of the WADA Code (the "2009 WADA Code"), which requires the athlete to establish that the ISL violation "could reasonably have caused" the AAF before the burden is shifted back to USADA, does not apply in this case. The amended rule, which took effect as of 1 January 2009, imposes a much heavier burden on the athlete because he now has to prove a causal link between the ISL violation and the AAF. This burden

is rendered all the heavier by the fact that the evidence of such a link will often be in the possession of the laboratory or no longer in existence.

6.1.1.3 Further, the Appellant argued that ISL 5.4.4.2.1 and 5.4.7.3 are unique, because they speak to the reliability of the laboratory's results. A breach of these ISLs means that it can never be known if the analysis that resulted in the AAF was performed properly or if the results are reliable. This renders any requirement on the athlete to prove a causal link between the ISL violation and the AAF inapplicable.

6.1.1.4 In response to the contention of the Respondent that a rule governing burden of proof is procedural or evidential in nature, the Appellant argued that Article 3.2.1 speaks to an important right of the athlete, and therefore must be viewed as substantive in nature. The Appellant further submitted that the burden of proof borne by a party is a matter of legal proof, not procedural or scientific. The Appellant relied on the *D&T Case*, arguing that the panel in that case had held that the burden of proof is substantive. Applying the 2009 version of Article 3.2.1 would breach the principle that prohibits the retroactive application of law. The 2009 WADA Code itself, at Article 24.5, states that it does not apply to matters pending before its entry into force, such as in Mr. Blanco's case. The burden of proof that was controlling at the time of the alleged violation must be applied.

6.1.1.5 Pursuant to the 2003 WADA Code, Article 3.2.1, the Appellant stated that USADA could not meet its burden in this case, and demonstrate that the ISL violations did not cause the AAF, because proving a negative is impossible. The Beijing Laboratory's tests were not robust, no negative controls were run, and allowing the results to stand would set a "dangerous precedent." In sum, the Panel cannot be comfortably satisfied that the test results were reliable.

6.1.1.6 Of course, the Appellant's arguments on the burden of proof are only relevant if he has managed to establish a violation of the ISL.

6.1.2 Robustness and Reproducibility

6.1.2.1 The Appellant relies on the principle of "robustness" to argue both that the Beijing Laboratory violated the ISL, and more generally that the test results are not reliable. The principle of robustness requires that similar results should be reached when measuring the same substance, from the same source, at different times. Similar results are evidence of the reliability and quality of the analyses performed, whereas significantly different results evidence unreliability. Further, robustness provides an essential check against random error, and gives meaning to the idea that the B Sample "confirms" the results of the A Sample.

6.1.2.2 The Appellant applied the principle to Mr. Blanco's test results through the science of measurement error, or the "measurement of uncertainty," which provides a statistical analysis to determine whether the results are reliable. The starting point is the idea that the difference between two measurements of the same substance from the same source should be zero. However, variations in, inter alia, analytical conditions, estimation, rounding, and reader preferences mean that the difference is unlikely actually to be zero. Therefore, statistics calculates an acceptable range of difference between the measurements, within which the results are considered to be reliable ("acceptable area of deviation").

6.1.2.3 The requirement that the tests run on an athlete's sample be "robust" or within the "measurement of uncertainty" is found in ISL 5.4.4.2.1, which should be read as a mandatory requirement applicable to each test run by a laboratory. This interpretation of ISL 5.4.4.2.1 derives in part from reading the provision in light of the introduction to ISL 5, which provides at ISL 5.1 that ISL 5 "focuses on the specific parts of the process that are critical with regard to the quality of the laboratory's performance as a WADA-accredited laboratory," and ISL 1.0, which states that the main purpose of the ISL "is to ensure laboratory production of valid test results and evidentiary data." The fact that the requirement is not explicitly mentioned in ISL 5.2.4.3.2.3 does not mean that it is excluded.

Robustness is such a fundamentally important principle of reliable science that it must be presumed to be required for each set of results produced by the laboratory, unless it is expressly stated that results need not be robust.

6.1.2.4 In response to the Respondent's argument that robust results are only required under the ISL in relation to the ISO accreditation process, the Appellant contended that such a state of affairs would be illogical; a more logical reading is that robustness is required when the athletes' samples are actually being tested by the laboratory. The Respondent's interpretation is an antithesis to the very purpose of the ISL, which is to provide the standards by which reliable results are obtained. Such an illogical rule would need to be expressly stated. In any event, if there is evidence that the laboratory is producing results that are not robust, its very validation is called into question.

6.1.2.5 The Appellant referred to the *D&T Case*, where the panel noted that "robustness means that the method must be capable of providing the reliable repetition of the results at different times and with different operators performing the assay, i.e. the range of the sample analysis to be conducted on the aliquot samples."

6.1.2.6 The principle of "reproducibility" relies on the concept of "standard deviation." A standard deviation is the typical distance that a measurement is expected to be from the "true value" of the subject of the test. The laboratory determines the standard deviation for a given measurement by undertaking a four-step process: (i) the laboratory repeats the same test many times on known subjects; (ii) the difference between each test result and the known true value of the test subject is determined; (iii) the average of the square of the difference between each result and the true value is calculated; and (iv) the square root of the average is then calculated. The result is the standard deviation for the results of a particular test at the laboratory in question.

6.1.2.7 As the Beijing Laboratory does not have, or at least did not disclose, a standard deviation for the measurement of Etio and Andro delta values during IRMS, the

Appellant had to use the "next best thing": the Beijing Laboratory's standard deviation for the measurement of C25 delta values during IRMS. The Beijing Laboratory ran twenty-one measurements of C25 delta values over a period of eight months, and determined that the standard deviation for the C25 delta value is 0.5. Applying the four-step process outlined above, the standard deviation of the difference between two independent delta unit measurements is equal to 0.707. ISL 5.4.4.3.2.2 provides that the "expression of uncertainty" shall reflect a confidence level of 95%, which is found by multiplying the standard deviation by two. Therefore, 95% of the time, the difference between two independently-measured delta values taken from the same substance from the same source will be no more than 2 x 0.707, or 1.414 delta units.

6.1.2.8 The difference between the Mr. Blanco's A Sample Etio delta value and his B Sample Etio delta value is far greater than this standard deviation, at 1.9 delta units. Two independent tests on the same substance from the same source would give rise to such different results less than 1% of the time by chance. Likewise, the difference between Mr. Blanco's A Sample Etio delta/delta value and his B Sample delta/delta value is 2.5 delta units; a difference that would occur by chance only 4/10,000 times.

6.1.2.9 In other words, the results are not robust, they are not reproducible and they are not reliable. Indeed, the principle of reproducibility acts as a quality control on the process; requiring that the A Sample and the B Sample have a "rational relationship" to each other. While the WADA Code does not expressly state that a rational relationship is required between the A and B Samples, it does say that results must be "reproducible"; this means that "similar results must be reached."

6.1.2.10 The fact that the Etio values derived from the tests performed on Mr. Blanco's Samples were neither robust nor reproducible casts doubt on the entire analysis. Even if the Andro results did not fall foul of either principle, this does not mean

that the AAF can survive on the basis of the Andro results alone. They are equally unreliable as a product of a tainted process. In any event, the difference between the Andro delta/delta values is 1.6 delta units. These results would occur by chance only 2.4% of the time. Again, this is not reliable enough for the Panel to be comfortably satisfied with the test results.

6.1.3 Negative Controls

6.1.3.1 Negative controls are required by the ISL because they act as a check on the reliability of the entire process, thus ensuring a laboratory's compliance with ISL 5.4.7.2, which provides that a laboratory must have in place a quality control system that "challenges the entire scope of the analytical process."

6.1.3.2 ISL 5.4.7.3, which lists quality controls that should be included in a laboratory's quality controls system, including negative controls, is also relevant. WADA did not draft individual ISLs for each test that a laboratory could perform, which explains why, assuming arguendo that "should" is never mandatory in the ISL, the chapeau to this list states that "the range of quality control activities should include." However, while a laboratory is not required to run an inappropriate control for a given test, where a given control would be appropriate for the analysis in question, the laboratory must use it. In other words, the best interpretation of that provision is that the controls listed are mandatory for the tests for which they appropriate. Adopting this interpretation, negative controls are absolutely appropriate and therefore mandatory for an IRMS analysis. Positive and negative controls are first on the list of quality controls in ISL 5.4.7.3, demonstrating that they are the "gold standard" and should be used in all tests. In any event, it is not the case that "should" is never mandatory in the ISL; the evidence shows that "should" is used in the imperative in other ISLs.

6.1.3.3 ISL 5.4.7.2 also influences how we should read ISL 5.4.7.3. The former ISL requires quality control procedures to be in place from start to finish. As negative controls are the only controls that operate from start to finish, it is clear

that they must be used. The consequences of not using negative controls are clear from this case, where five of the six steps in the analytical process were left unchecked. Negative controls are simply good science.

6.1.3.4 No other quality controls run during the IRMS analysis on Mr. Blanco's samples fulfilled the role of a negative control. The internal reference standard was not added until five of the six steps in the analysis had been completed; other athletes' samples could not serve the same purpose because they were not known before use; and the Beijing Laboratory's procedure whereby it runs negative controls only when the delta/delta value of a substance does not exceed 7 delta units raises red flags because it would be impossible to apply this criterion to an athlete's A Sample.

6.1.3.5 The result of the Beijing Laboratory's failure to use negative controls is that false positives cannot be ruled out. The Appellant also pointed to the AAA Panel's grave concern over the absence of negative controls in this case.

6.1.4 Failure to Comply with ISL 5.2.6.1

6.1.4.1 The Appellant argued that the Beijing Laboratory failed to provide him with all of the information to which he was entitled, and he was therefore forced to ask for it through discovery. He was also denied access to the Laboratory's SOPs, which went to the heart of his defense.

6.1.4.2 Mr. Blanco appeared to have abandoned this argument at the hearing, by which point he had been provided with the requested SOPs.

6.1.5 Costs

6.1.5.1 The Appellant rejected USADA's request that costs be assessed against Mr. Blanco. He was not permitted to present his full defense at the AAA hearing due to USADA's failure to produce necessary documents, such as the SOPs, and the Panel's erroneous reliance on the Stipulation to exclude some of Mr. Blanco's defenses. The process before the AAA Panel was drawn out because

of USADA's failure to supply the information requested by Mr. Blanco. Further, Mr. Blanco engaged in no litigation misconduct, nor did he allege bad faith on the part of USADA or the Beijing Laboratory. His defenses did not lack merit, for example, the AAA Panel took judicial notice of the importance of controls, and he eliminated those defenses that were found to lack merit by the AAA Panel. Finally, the Appellant also asked the Panel to take account of Mr. Blanco's limited resources.

6.2 USADA

6.2.1 Burden of Proof

6.2.1.1 USADA accepts that it has the burden of establishing that a doping violation occurred to the comfortable satisfaction of the Panel under the WADA Code. In satisfying this burden, both the 2008 and the 2009 versions of the UCI ADR provide that WADA-accredited laboratories are presumed to have conducted the relevant analysis and custodial procedures in accordance with the ISL. The reason for this presumption relates to WADA's core responsibilities, which include providing accreditation to laboratories whose methods are used to determine the presence of prohibited substances; ensuring those laboratories maintain their accreditation; and ensuring that they are also certified ISO.

6.2.1.2 USADA argues that the 2009 versions of the UCI ADR and WADA Code apply in this case with regard to the Parties' respective burdens of proof. In other words, Mr. Blanco must prove not only that the Beijing Laboratory has violated an ISL, but that the violation "could reasonably have caused" the AAF, before the burden shifts back to USADA.

6.2.1.3 USADA relied on Susin v. Fédération Internationale de Natation, CAS 2000/A/274 (19 October 2000), where the Panel held that "laws and rules relating to procedural matters apply immediately upon entering into force and regardless of when the facts at issue occurred," arguing that the ex post facto doctrine simply does not apply to procedural rules such as those governing the

burden of proof. A substantive rule is one that affects the athlete's behavior. In other words, for a rule to be substantive, it must be shown that the athlete would have behaved differently had the later rule been in effect at the time of the facts giving rise to the dispute. This is not the case with regard to rules governing burden of proof.

6.2.2 Reproducibility and Reliability

6.2.2.1 USADA argued that according to WADA Technical Document TD2004EAAS, there are only four relevant questions in establishing whether the results of an IRMS analysis conducted on an athlete's sample constitute an AAF:

1. Was the 11OH-Andro difference greater than 3 delta units?
2. Was the 11OH-Etio difference greater than 3 delta units?
3. Was the delta value of Andro by itself below -28 units?
4. Was the delta value of Etio by itself below -28 units?

6.2.2.2 Further, only one of these questions must be answered in the affirmative for an AAF to be reported.

6.2.2.3 There is absolutely no requirement in the ISL or the WADA Code that an athlete's A and B Samples test positive for the same amount of a Non-Threshold Substance, or that the two Samples bear any quantitative relationship to one another. If good science required such a match, then it would be in the rules. While the "measurement of uncertainty" does apply to threshold substances under the ISL, with regard to Non-Threshold Substances, the only requirement is that they test positive for the same substance, which they overwhelmingly did. As the WADA Code makes clear: "sufficient proof of a anti-doping rule violation under Article 2.1 is established by ... the presence of a Prohibited Substance or its Metabolites or Markers in the Athlete's A Sample ... and the

analysis of the Athlete's B Sample confirms the presence of the Prohibited Substance or its Metabolites or Markers found in the Athlete's A Sample."

6.2.2.4 USADA referred to the case of International Association of Athletics Federations v. Confederação Brasileira de Atletismo and Dos Santos, CAS 2002/A/383 (27 January 2003), as authority for the proposition that no relationship is required between the A and B Samples with regard to Non-Threshold Substances, except that they must test positive for the same substance. In that case, the panel rejected the argument advanced by the athlete that he should be exonerated of an anti-doping violation where his A Sample analysis indicated a corrected average T/E ration of 37.82 and the B Sample indicated a corrected average T/E ratio of 79.31 (the threshold for an AAF was 25).

6.2.2.5 USADA points out that the Appellant relies mostly on ISL 5.4.4.2 in making its robustness arguments, which applies to "Validation of Methods." The ISL thus makes clear that "robustness" is not a criterion to be applied to the confirmation process of individual samples; rather, it is for the ISO to assess as part of the accreditation process. In this case, ISO accreditation has certified that the IRMS method used by the Beijing Laboratory produces "robust" results, and those results are deemed robust until the ISO accreditation is no longer valid.

6.2.2.6 With regard to the *D&T Case*, only Mr. Devyatovskiy was exonerated on reproducibility and robustness grounds, on very different facts to the present case. Mr. Devyatovskiy's values were extremely close to the threshold set by WADA Technical Document TD2004EAAS. Two thirds of those values showed significant variation between the A Sample test results and the B Sample test results, and those values were the sole criteria on which the AAF and the anti-doping charge were based. On the other hand, the facts of Mr. Tisikhan's case were much closer to the present set of facts, in that his test results showed Etio and Andro values that were significantly higher than the threshold set by the WADA Technical Document. Mr. Tisikhan was not exonerated. Here, both

Parties agree that Mr. Blanco's results were unusually high and nowhere near the WADA Technical Document threshold. Further, in the *D&T Case*, the parties' experts agreed that Mr. Devyatovskiy's results were problematic, whereas here USADA's experts are adamant that Mr. Blanco's test results evidence doping. Dr. Bower's, USADA's expert, testified before the AAA Panel that Mr. Blanco's results are "so far from normality" that the differences between the A and B Sample values simply are not meaningful.

6.2.2.7 USADA also argued that the Appellant was fundamentally mistaken in relying on the Beijing Laboratory's C25 acceptance criteria to calculate the standard deviation that forms the basis of its argument. This criterion has nothing to do with the Andro and Etio delta/delta measurements.

6.2.2.8 USADA made its own calculation of the applicable measurement of uncertainty in this case, and submitted that, assuming arguendo that robust results are required by the ISL, the values in fact fall within an acceptable range of uncertainty. First, with regard to threshold substances, the ISL dictates the application of a measurement of uncertainty to A and B samples separately to ensure that each, when adjusted for uncertainty, is over the threshold. That is quite clearly the case here. Second, even if the ISL did require the application of the concept of uncertainty in comparative terms to the values of Mr. Blanco's A and B Sample, the results are reliable. The range of uncertainty extends in both directions from the true value, therefore, the range must allow for 1.4 delta units below the true value, and 1.4 delta units above the true value. The real range of uncertainty is therefore 2.8 delta units, and that range must be applied to the both the A and B Sample test results. For example, applying the correct uncertainty range to the Etio delta/delta value of Mr. Blanco's B Sample (12.6 delta units) means that the value could be as low as 11.2delta units. The range of uncertainty for the B Sample, takes the Etio delta/delta value within the uncertainty range of Mr. Blanco's A Sample Etio delta/delta value (10.1 delta

units, with an uncertainty range of 8.7 to 11.5 delta units). In sum, the Appellant's analysis miscalculates the applicable range of uncertainty for Mr. Blanco's A and B Sample results; applying the correct analysis demonstrates that the Etio values are within an acceptable range of uncertainty.

6.2.2.9 Finally, the Appellant has not been able to point to any reason as to why there was a variation between his results, and is far from establishing a convincing case that he should be exonerated.

6.2.3 Negative controls

6.2.3.1 Negative controls are not required by the ISL; ISL 5.4.7.2 simply says that a laboratory must have a quality control system in place. The Beijing Laboratory does have such a system in place, which is provided for in its SOPs. Negative controls are not required by the SOPs. These SOPs formed the basis of the Laboratory's WADA accreditation; therefore WADA obviously does not view negative controls as being required under the rules.

6.2.3.2 USADA relied heavily on the *D&T Case*, where the panel found that no adequate positive control had been run, but held that "ISL 5.4.7.3 cites a range of quality control activities for monitoring analytical performance," and that "WADA requirements with regard to the implementation of quality controls have been met."

6.2.3.3 The Appellant's argument that, without negative controls, there is no check on the entire IRMS process at the Beijing Laboratory is incorrect. WADA does send blank samples to accredited laboratories, which run a control check on the entire analytical process. Negative controls are not alone in performing this function. It is notable that there is no reference to the "entire process" in ISL 5.4.7.3.

6.2.3.4 Further, there were several factors present during the IRMS analysis of Mr. Blanco's Samples that demonstrate the reliability of the results, even in the

absence of negative controls. They fulfilled the three-fold purpose of negative controls, which is to: (i) ensure that, based on sample analyses conducted on the autosampler, the laboratory is not reporting false positives; (ii) make sure that the laboratory is not experiencing carryover from one sample run to the next; and (iii) ensure the autosampler is functioning properly.

6.2.3.5 USADA contended that these other factors, or "indicia of reliability," performed the functions required from a negative control. The fact that other athletes' samples tested negative in the same run demonstrates that there is no false positive issue because the Beijing Laboratory was reporting negative samples as such. The results of the injection sequence demonstrate that there was no problem with carry-over. The C25 delta value constitutes an independent measure to ensure that the IRMS machinery is functioning properly, and Mr. Blanco's laboratory documentation package demonstrates that the C25 measurement was within an acceptable range, thus demonstrating that the machine was functioning properly.

6.2.3.6 Finally, USADA contended that the Appellant had failed to point to anything that went wrong or unchecked as a result of the failure to use negative controls. Its best attempt was to point to random error, but negative controls do not protect against random errors.

6.2.4 The Standard Operating Procedures

6.2.4.1 USADA pointed out that, in the *D&T Case*, the panel drew an adverse inference against the IOC because the Beijing Laboratory had refused to produce its SOPs in violation of two orders issued by the panel. The panel had warned that it would exclude submission of the SOPs after the Laboratory's non-compliance with the panel's orders, and proceeded to do so. The panel further cited the "reluctance of the Laboratory to disclose relevant sections of its SOPs" as a factor in finding results outside of the laboratory's range, and it concluded that "it cannot place the Appellants at a procedural disadvantage in bearing their

burden of proof, where the evidence requested is critical to their defense and the laboratory remains in exclusive control of its disclosure."

6.2.4.2 In this case, no such adverse inference is warranted. Mr. Blanco was provided with the SOPs, and none of them have been introduced into evidence or otherwise relied on.

6.2.5 Failure to Comply with ISL 5.2.6.1

6.2.5.1 USADA rejected the Appellant's arguments, and pointed to the AAA Panel's findings that "sufficient information was provided by the Beijing Laboratory to permit interpretation of the results in this case."

6.2.6 Costs

6.2.6.1 USADA asked the Panel to assess costs against Mr. Blanco. It argued that Mr. Blanco had no good reason to appeal because his sanction, a two-year period of ineligibility, had come to an end. USADA claimed that Mr. Blanco only pursued his appeal because he didn't have to pay for any part of the proceedings; this was an abuse of the system.

7. JURISDICTION AND APPLICABLE LAW

7.1 The jurisdiction of CAS in this matter is undisputed and derives from Article 15(b) and (c) of the USADA Protocol, which provides, in relevant part, as follows:

> (b) The final award by the AAA/CAS arbitrator(s) may be appealed to the CAS within twenty-one (21) days of issuance of the final reasoned award or when the award is deemed final as set forth below. If the AAA/CAS arbitrators issue a partial, interim or non-final award or an award without reasons such award shall be deemed final for purposes of appeal to CAS on the earlier of (a) issuance of the final reasoned award by the

> AAA/CAS panel, or (b) thirty (30) days from issuance of the partial, interim or non-final award. The appeal procedure set forth in Article 13.2 of Annex A shall apply to all appeals not just appeals by International-Level Athletes or other Persons. A CAS appeal shall be filed with the CAS Administrator, the CAS hearing will automatically take place in the U.S. and CAS shall conduct a review of the matter on appeal which, among other things, shall include the power to increase, decrease or void the sanctions imposed by the previous AAA/CAS Panel regardless of which party initiated the appeal. The regular CAS Appeal Arbitration Procedures apply. The decision of CAS shall be final and binding on all parties and shall not be subject to further review or appeal.
>
> (c) In all hearings conducted pursuant to the USADA Protocol, subject to paragraphs 3(c) and 3(d) of this Protocol, the IF anti-doping rules, the USOC NADP and the USADA Protocol shall apply. If the foregoing rules are silent any applicable provisions of the Code shall be controlling.

7.2 With respect to the scope of the Panel's Review, Article R57 of the CAS Code provides:

> The Panel shall have full power to review the facts and the law. It may issue a new decision which replaces the decision challenged or annul the decision and refer the case back to the previous instance. Upon transfer of the file, the President of the Panel shall issue directions in connection with the hearing for the examination of the parties, the witnesses and the experts, as well as for the oral arguments. He may also request communication of the file of the federation, association or sports-related body,

> whose decision is the subject of the appeal. Articles R44.2 and R44.3 shall apply.

7.3 The rules applicable to determine the merits of the dispute are the mandatory provisions of the WADA Code and the UCI Anti-Doping Rules. Revised versions of the WADA Code and UCI Anti-Doping Code Rules entered into force on 1 January 2009. With regard to the effect of the revisions on matters pending prior to 1 January 2009, UCI Anti-Doping Rule 373 (2009) provides as follows:

> This version of the Anti-Doping Rules shall not apply retrospectively to matters pending before the 1st January 2009; provided, however, that:
>
> a) Any case pending prior to the 1st January 2009, or brought after the 1st January 2009 based on an anti-doping rule violation that occurred prior to the 1st January 2009, shall be governed by the predecessor to these Anti-Doping Rules in force at the time of the anti-doping rule violation, subject to any application of the principle of lex mitior by the hearing panel determining the case.

7.4 Article 25.2 of the 2009 WADA Code similarly provides that a case "shall be governed by the substantive anti-doping rules in effect at the time the alleged anti-doping rules violation occurred unless the panel hearing the case determines the principle of 'lex mitior' appropriately applies under the circumstances of the case." The relevant UCI and WADA provisions remained largely unchanged as a result of the 2009 revisions, and reference will be made to the prior version of the rules unless stated otherwise.

7.5 Mr. Blanco was charged with violating WADA Code Articles 2.1 and 2.2, which provides:

The following constitute anti-doping rule violations:

> 2.1 The presence of a Prohibited Substance or its Metabolites or Markers in an Athlete's Bodily Specimen.
>
> 2.1.1 It is each Athlete's personal duty to ensure that no Prohibited Substance enters his or her body. Athletes are responsible for any Prohibited Substance or its Metabolites or Markers found to be present in their bodily Specimens. Accordingly, it is not necessary that intent, fault, negligence or knowing Use on the Athlete's part to be demonstrated in order to establish an anti-doping violation under Article 2.1.
>
> 2.1.2 Excepting those substances for which a quantitative reporting threshold is specifically identified in the Prohibited List, the detected presence of any quantity of a Prohibited Substance or its Metabolites or Markers in an Athlete's Sample shall constitute an anti-doping violation.
>
> 2.2 Use or Attempted Use of a Prohibited Substance or a Prohibited Method.
>
> 2.2.1 The success or failure of the Use of a Prohibited Substance or Prohibited Method is not material. It is sufficient that the Prohibited Substance or Prohibited Method was Used or Attempted to be Used for an anti-doping rule violation to be committed.

7.6 In terms of establishing whether or not an athlete has committed a violation of an anti-doping rule, WADA Code Articles 3.1 and 3.2 deal with burdens of evidence, standards of proof, and the methods for establishing facts and presumptions. The 2003 WADA Code provides:

3.1 Burdens and Standards of Proof.

The Anti-Doping Organization shall have the burden of establishing that an anti-doping rule violation has occurred. The standard of proof shall be whether the Anti-doping Organization has established an anti-doping rule violation to the comfortable satisfaction of the hearing body bearing in mind the seriousness of the allegation which is made. This standard of proof in all cases is greater than a mere balance of probability but less than proof beyond a reasonable doubt. Where the Code places the burden of proof upon the Athlete or other Person alleged to have committed an anti-doping rule violation to rebut a presumption or establish specified facts or circumstances, the standard of proof shall be by a balance of probability.

3.2 Methods of Establishing Facts and Presumptions.

Facts related to anti-doping rule violations may be established by any reliable means, including admissions. The following rules of proof shall be applicable in doping cases:

3.2.1 WADA-accredited laboratories are presumed to have conducted Sample analysis and custodial procedures in accordance with the International Standard for laboratory analysis. The Athlete may rebut this presumption by establishing that a departure from the International Standard occurred.

If the Athlete rebuts the preceding presumption by showing that a departure from the International Standard occurred, then the Anti-doping Organization shall have the burden to establish that such departure did not cause the Adverse Analytical Finding.

> 3.2.2 Departures from the International Standard for Testing which did not cause an Adverse Analytical Finding or other anti-doping rule violation shall not invalidate such results. If the Athlete establishes that departures from the International Standard occurred during Testing then the Anti-Doping Organization shall have the burden to establish that such departures did not cause the Adverse Analytical Finding or the factual basis for the anti-doping rule violation.

7.7 The 2009 WADA Code version is identical in all relevant respects, except for Article 3.2.1, which provides:

> 3.2.1 WADA-accredited laboratories are presumed to have conducted Sample analysis and custodial procedures in accordance with the *International Standard* for Laboratories. The *Athlete* or other *Person* may rebut this presumption by establishing that a departure from the *International Standard* for Laboratories occurred which could reasonably have caused the Adverse Analytical Finding. If the *Athlete* or other *Person* rebuts the preceding presumption by showing that a departure from the *International Standard* for Laboratories occurred which could reasonably have caused the Adverse Analytical Finding, then the *Anti-Doping Organization* shall have the burden to establish that such departure did not cause the Adverse Analytical Finding.
>
> (emphasis added)

7.8 WADA Code Article 10 makes provision for sanctions on athletes found to have committed a doping violation:

10.1 Sanctions on Individuals

Disqualification of Results in Event During which an Anti-doping Rule Violation Occurs

An anti-doping rule violation occurring during or in connection with an Event may, upon the decision of the ruling body of the Event, lead to Disqualification of all of the Athlete's individual results obtained in the Event with all consequences, including forfeiture of all medals, points and prizes, except as provided in Article 10.1.1. ...

10.2 Imposition of Ineligibility for Prohibited Substances and Prohibited Methods

Except for specified substances identified in Article 10.3, the period of Ineligibility imposed for a violation or Article 2.1 (Presence of Prohibited Substance or its Metabolites or Markers), 2.2 (Use or Attempted Use of Prohibited Substance or Prohibited Method) and 2.6 (Possession of Prohibited Substances and Methods) shall be:

First Violation: Two (2) years' Ineligibility

Second Violation: Lifetime Ineligibility ...

10.7 Disqualification of Results in Competitions Subsequent to Sample Collection

In addition to the automatic Disqualification of the Results in the Competition which produced the positive Sample under Article 9 (Automatic Disqualification of Individual Results), all other competitive results obtained from the date a positive Sample was collected (whether In-Competition or Out-of-Competition), or other doping violation occurred, through the commencement of

any Provisional Suspension or Ineligibility period, shall, unless fairness requires otherwise, be Disqualified with all of the resulting consequences including forfeiture of any medals, points and prizes.

10.8 Commencement of Ineligibility Period

The period of Ineligibility shall start on the date of the hearing decision providing for Ineligibility or, if the hearing is waived, on the date Ineligibility is accepted or otherwise imposed. Any period of Provisional Suspension (whether imposed or voluntarily accepted) shall be credited against the total period of Ineligibility to be served. Where required by fairness, such as delays in the hearing process or other aspects of Doping Control not attributable to the Athlete, the body imposing the sanction may start the period of Ineligibility at an earlier date commencing as early as the date of Sample collection.

7.9 There are also provisions of the ISL that are relevant to this dispute. They are as follows:

ISL 5.2.4.3.2.3 If the "B" *Sample* confirmation proves negative, the entire test shall be considered negative.

ISL 5.2.4.3.2.9 If the "B" *Sample* confirmation proves negative, the *Sample* shall be considered negative and the Testing Authority, WADA and the International Federation notified of the new analytical finding.

ISL 5.2.6.1 The Laboratory shall have documented procedures to ensure that it maintains a coordinated record related to each Sample analyzed. In the case of an *Adverse Analytical Finding* or

Atypical Finding, the record shall include the data necessary to support the conclusions reported. In general, the record should be such that in the absence of the analyst, another competent analyst could evaluate what tests had been performed and interpret the data.

ISL 5.4.4.2.1 Confirmation methods for Non-Threshold Substances shall be validated. Factors to be investigated to demonstrate that a method is Fit-for-purpose include but are not limited to:

• Specificity. The ability of the assay to detect only the substance of interest shall be determined and documented. The assay shall be able to discriminate between compounds of closely related structures;

• Identification capability. Since the results for Non-Threshold Substances are not quantitative, the Laboratory should establish criteria for ensuring that a substance representative of the class of Prohibited Substances can be repeatedly identified and detected as present in the Sample at the MRPL;

• Robustness. The method shall be determined to produce similar results with respect to minor variations in analytical conditions. Those conditions that are critical to reproducible results shall be controlled;

• Carryover. The conditions required to eliminate carryover of the substance of interest from Sample to Sample during processing or instrumental analysis shall be determined and implemented;

• Matrix interferences. The method should avoid interference in the detection of *Prohibited Substances* or their *Metabolites* or *Markers* by components of the *Sample* matrix;

• Standards. *Reference Materials* should be used for identification, if available. If there is no reference standard available, the use of data or *Sample* from a validated *Reference Collection* is acceptable.

ISL 5.4.7.2 The Laboratory shall have in place a quality control system, including the submission of blind quality control samples that challenges the entire scope of the analytical process (i.e., *Sample* receipt and accessioning through result reporting).

ISL 5.4.7.3 Analytical performance shall be monitored by operating quality control schemes appropriate to the type and frequency of testing performed by the Laboratory. The range of quality control activities should include:

• Positive and negative controls analyzed in the same analytical run as the Presumptive Adverse Analytical Finding *Sample*;

• The use of deuterated or other internal standards or standard addition;

• Comparison of mass spectra or ion ratios from selected ion monitoring (SIM) to a Reference Material or Reference Collection *Sample* analyzed in the same analytical run;

• Confirmation of the "A" and "B" Split *Samples*;

- For Threshold Substances, quality control charts referring to appropriate control limits depending on the analytical method employed (e.g., ± 10 % of the target value; +/- 3SD), should be used;

- The quality control procedures shall be documented by the Laboratory.

8. ADMISSIBILITY

8.1 The admissibility of Mr. Blanco's appeal is undisputed. The procedural background set out above indicates that the applicable time limits were met.

9. DISCUSSION

9.1 Introduction

9.1.1 The question for this Panel is whether USADA has established, to the Panel's comfortable satisfaction, that an anti-doping rule violation has occurred. In this case, if the Panel is "comfortably satisfied" that exogenously administered testosterone was present in Mr. Blanco's urine Samples, USADA will have satisfied its burden of proof.

9.1.2 With regard to the means by which USADA establishes a doping violation, WADA-accredited laboratories are presumed to have conducted Sample analysis and custodial procedures in accordance with the ISL. The Beijing Laboratory is a WADA-accredited laboratory and is therefore presumed to have conducted the IRMS analysis of Mr. Blanco's Samples in accordance with the ISL. As the Appellant rightly noted during his opening presentation, the presumption under the rules is that WADA-accredited laboratory results are reliable. The Panel agrees with the conclusion of the Parties' experts in their joint report: if "the data reported by the Beijing laboratory is reliable ... the results would be the result of a doping violation."

9.1.3 The Appellant can rebut the presumption that the test results generated by the Beijing Laboratory are reliable by establishing that a departure from the ISL

occurred during the analysis of his Samples. How that rebuttal must be made depends upon which WADA Code applies here. If Mr. Blanco does establish that a departure from the ISL occurred during the analysis of his urine Samples, then under the 2003 WADA Code, the burden shifts to USADA to prove that this departure did not cause the positive test results. Under Article 3.2.1 of the 2009 WADA Code, if it applies, Mr. Blanco must also prove that the laboratory's departure from the ISL "could reasonably have caused" the AAF before the burden of proof shifts to the Respondent.

9.1.4 Before considering which burden of proof rule applies in the present case, the Panel must determine whether Mr. Blanco has established that a departure from the ISL occurred at the Beijing Laboratory.

9.1.5 Mr. Blanco argued to this Panel that the failure of the Beijing Laboratory to run negative controls and the lack of reproducibility and robustness in the A and B Sample test results constituted departures from the ISL.

9.2 Production of the Standard Operating Procedures

9.2.1 Before proceeding to determine whether there has been a departure from the ISL, the Panel finds it necessary to address the controversy surrounding the production of the Beijing Laboratory's SOPs during these proceedings.

9.2.2 The SOPs were vigorously pursued by the Appellant both before the AAA Panel and before this CAS Panel. During the AAA proceedings, USADA provided the Appellant with a copy of SOP YYB-104 IV(b), the section of the Beijing Laboratory's SOPs that relates to IRMS, together with a translation of that section. During these proceedings, the Appellant continued to pursue the production of SOP YYB-104 IV(a), despite USADA's representations that this section of the SOPs deals with a different method and instrumentation. The Panel dealt with this request as a preliminary issue, and in its decision dated 29 October 2010 noted that USADA had agreed to produce SOP YYB-104,

including part IV(a), to the Appellant. The Panel directed the Parties to execute a suitable confidentiality order and the Respondent to provide a copy of the SOP to the Appellant promptly. USADA did so on 14 January 2011. During the Appellant's opening presentation at the hearing, the Appellant explained that his examination of the SOPs produced on 14 January had been "difficult" because they were produced in Chinese. However, the Appellant had concluded from this review that the SOPs were "minimal" and missing many of things that the Appellant had expected to find therein. As such, because the Appellant was "unable to identify any relevant SOPs," he informed the Panel that he would not rely on SOP YYB-104 IV(a), or any of the other SOPs produced by USADA, during the hearing. Further, the SOPs produced on 14 January were not introduced into evidence.

9.2.3 While the Appellant offered various reasons for his failure to rely on the SOPs – particularly that they were "minimal" – the fact is that USADA has provided the Appellant with all of the relevant documentation requested for the preparation of his defense. Therefore, the Panel does not need to consider an adverse inference or any other remedy for non-production of evidence.

9.3 Has USADA Established an Anti-Doping Rule Violation to the Comfortable Satisfaction of the Panel?

9.3.1 The first question for this Panel is whether USADA "has established an anti-doping rule violation to the comfortable satisfaction of the hearing body bearing in mind the seriousness of the allegation which is made." In other words, the Panel must determine whether USADA has established that exogenously administered testosterone was present in Mr. Blanco's urine Samples. In meeting its burden, USADA is entitled to the initial presumption that the Beijing Laboratory, as a WADA accredited laboratory, conducted Mr. Blanco's Sample analysis and custodial procedures in accordance with the ISL.

9.3.2 Accordingly, since the Beijing Laboratory reported that Mr. Blanco's Samples tested positive for the presence of exogenously administered testosterone, the starting point for this Panel's analysis is the presumption that the Beijing Laboratory's sample analysis and custodial procedures were in accordance with the ISL and establish an AAF. The Appellant can rebut that presumption by

establishing, on a balance of probabilities, that in fact the Beijing Laboratory departed from the ISL. In this regard, the Appellant relies on two alleged departures from the ISL: (i) the absence of negative controls during the IRMS analysis of his A and B Samples; and (ii) the deviation between the Etio and Andro values in his A and B Samples.

9.4 Did the Absence of Negative Controls Constitute a Departure from the ISL?

9.4.1 It is not disputed that the Beijing Laboratory failed to run negative controls during the analysis of Mr. Blanco's A and B Samples. The Appellant argues that this failure constitutes a departure from the ISL. USADA claims that the ISL does not require a laboratory to run negative controls when using the IRMS method to analyze athletes' samples.

9.4.2 The Panel accepts Dr. Bowers' testimony that, when drafting the ISL, WADA used the term "shall" to mean "must" and the term "should" to mean "may." As the list of quality controls in ISL 5.4.7.3 is headed "the range of quality control activities should include," it is clear that none of the controls listed therein is mandatory for a laboratory running an IRMS analysis on an athlete's sample. This interpretation is not affected by ISL 5.4.7.2, which requires that a laboratory "shall have in place a quality control system, including the submission of blind quality control samples that challenges the entire scope of the analytical process." The Panel notes USADA's submission that WADA sends blank samples to the laboratories, which acts as a quality control on the whole process. The Panel also notes that there is no reference to "the entire scope of the analytical process" in ISL 5.4.7.3.

9.4.3 The Panel also accepts USADA's argument and Dr. Bowers' testimony that, while ISL 5.4.7.2 and 5.4.7.3 do require that a laboratory have a quality control system in place, the time for assessment of that quality control system is during a laboratory's accreditation process. However, the Panel recognizes that ISL 4.4 also sets out rules for maintaining WADA accreditation to ensure ongoing compliance with ISO/IEC standards. ISL 4.4.9 sets out WADA's right to

"inspect and assess the Laboratory at any time," and the procedures for re-assessment and surveillance assessments. WADA-accredited laboratories are subject to periodic assessments and inspections, which include the operation of quality control systems. Ongoing maintenance of the ISO/IEC standard is also implied in ISL 5.4.7.3 by requiring that "analytical performance shall be monitored by operating quality control schemes[.]" The term "monitoring" implies the operation of a continuing control scheme.

9.4.4 The Appellant has not sought to challenge the fact that the Beijing Laboratory is a WADA and ISO-accredited laboratory. Nor has he sought to challenge that the Laboratory was accredited on the basis of the SOPs that it currently has in place. Dr. Wang testified that the Beijing Laboratory's SOP for IRMS was reviewed by the assessor who accredited the Laboratory, and that the failure to run negative controls during the IRMS process has never been raised as a failure to comply with the ISL. There has been no argument that the Beijing Laboratory's SOP for the IRMS process requires that a negative control form part of the quality control process. Indeed, Dr. Wang testified to the contrary. There has been no argument that the Beijing Laboratory failed to comply with its own SOPs, and Dr. Wang testified that the Laboratory in fact complied with the SOPs when analyzing Mr. Blanco's Samples.

9.4.5 In these circumstances, the Panel is not persuaded that the absence of negative controls constitutes a departure from the ISL, although it recognizes that negative controls, as pointed out by Dr. Bowers, are important in the testing process to avoid the risk of a "false positive." This point was also made by Professor Schänzer during his testimony in the *D&T Case*. See *D&T Case*, ¶ 5.129.

9.4.6 The Panel has taken note of the Appellant's argument that the quality controls listed in ISL 5.4.7.3 are mandatory when appropriate for a given test. While the Panel does find that this argument has some appeal, it believes that such an

interpretation would give rise to difficulties and cloud the provision with uncertainty. This is especially the case because CAS panels, without consulting experts, lack the relevant expertise to determine whether a particular control is appropriate and therefore mandatory with regard to any given test. WADA and the ISO are the bodies possessing the expertise necessary to determine which controls are required for a given procedure, and the accreditation process is the appropriate forum for this assessment.

9.4.7 In light of the above, the Panel finds that there has been no violation of the ISL with regard to the Beijing Laboratory's failure to run negative controls during the analyses of Mr. Blanco's Samples.

9.5 Did the Deviation Between the Etio and Andro Values in Mr. Blanco's A and B Samples Constitute a Departure from the ISL?

9.5.1 The Appellant argues that the differences in the results generated by the Beijing Laboratory's analyses of Mr. Blanco's A and B Samples constitute a deviation from the ISL, because these differences demonstrate that the results are neither robust nor reproducible. USADA argues that neither robustness nor reproducibility are required with regard to individual test results under the ISL.

9.5.2 Exogenous testosterone is a Non-Threshold Substance, meaning that its mere presence in an athlete's sample constitutes an anti-doping violation. Because testosterone can be generated endogenously or exogenously, it is the confirmation of the exogenous origin of the testosterone that is the task of IRMS testing. The confirmation procedure does not end, however, with the determination that the exogenous testosterone is also present in the urine of the controlled athlete. WADA Technical Document TD2004EAAS prescribes that the results of an IRMS test will be reported as consistent with the exogenous administration of a steroid when the carbon-13 to carbon-12 value measured for the metabolite(s) differs significantly, i.e., by 3 delta units or more, from that of the chosen ERC. In addition, the ratio measured for the metabolite must lie

below -28‰ of that ERC. Even the Beijing Laboratory in applying these thresholds works with varying uncertainty factors in evaluating the results of IRMS testing. It is clear, therefore, on the basis of TD2004EAAS that thresholds are indeed present and must be taken into account in the IRMS testing for the presence of Non-Threshold Substances.

9.5.3 The IRMS analysis of Mr. Blanco's A Sample measured its Etio content at -32 per mil, while the same measurement for his B Sample was -33.9, a difference of 1.9 units. The difference between Mr. Blanco's 110H – Etio delta / delta value was even greater, at 2.5 delta units. The difference between the Andro delta values was smaller, at 1 unit, with the difference between the 110H – Andro delta / delta values measuring 1.6 delta units. According to the Mr. Blanco these values, especially the Etio and the 11H-Etio values fall outside the "measurement of uncertainty" and constitute a departure from the ISL. This position has been refuted by USADA.

9.5.4 The Panel agrees with USADA that there is no requirement in the ISL that the results generated by an IRMS analysis of an athlete's A Sample must lie within a certain range of the results generated by the analysis of his B Sample. Indeed, with regard to Non-Threshold Substances as defined in the ISL 3.2 -- testosterone being such a Non-Threshold Substance -- the focus of the confirmation procedure is upon qualitative aspects rather than quantitative differences. This should not imply, however, that quantitative thresholds do not play a role in evaluating the results from an IRMS test. ISL 5.4.4.3 deals with "estimates of uncertainty" in the testing of both Non-Threshold Substances and Threshold Substances and provides in ISL 5.4.4.3.2.3 with regard to both substances that "uncertainty may be further addressed in Technical Documents in order to reflect the purpose of analysis for the specific substances."

9.5.5 In such situations of uncertainty, Technical Document TD2004EAAS proposes actions which should be requested by the Testing Authority to deal with those

cases where "the IRMS study does not readily indicate exogenous administration." Uncertainty is furthermore addressed in Section 4 of Technical Document TD2004EAAS with regard to IRMS testing, for example, where the assessment of the athlete's historical steroid profile data is recommended. Unfortunately, however, the Technical Document provides no quantitative parameters for determining when the borderline case has emerged. This deficiency was cited in the *D&T Case* where the panel, supported by the testimony of the experts, noted at paragraph 5.56 that in evaluating inconsistencies in the IRMS test results "neither the ISL nor the technical documents provide help."

9.5.6 The problem confronting the athlete, the anti-doping authorities and any adjudicative body called upon to resolve a doping dispute is, therefore, the absence of quantitative parameters either in the ISL, in the relevant technical documents or even, as in the case of the Beijing Laboratory, in the laboratory's SOPs which might have permitted the identification of borderline cases resulting from IRMS test results.

9.5.7 In contrast to the Beijing Laboratory's refusal to provide the requested Section YYB-104 IV(a) in the *D&T Case*, Mr. Blanco received this entire section from the Beijing Laboratory before the hearing date. He has, however, apparently determined that nothing of relevance relating to uncertainties in evaluating the variances in IRMS delta and delta/delta values is contained therein. Unlike the athletes in the *D&T Case* where the production of the YYB-104 IV(a) document was withheld, Mr. Blanco cannot be said to have been placed at a procedural disadvantage in bearing his burden of proof, where the evidence requested is critical to his defense and the laboratory remains in exclusive control of its disclosure.

9.5.8 Dr. Bowers testified that WADA is concerned with the robustness of results. However, in the view of Dr. Bowers, it has chosen to deal with this requirement

as part of the validation of a laboratory's methods under ISL Section 5.4.4.1 (Non-Threshold Substances) and ISL Section 5.4.4.2 (Threshold Substances), rather than impose a robustness requirement with regard to individual athletes' test results. Although the Panel recognizes certain merit in Dr. Bowers' statement, it also takes the view that Dr. Bowers may be overstating his point. It would be entirely illogical for the validation procedures set out in ISL 4.0, which involve the determination of whether the laboratory meets the requirements of ISO/IEC 17025:2005, to focus exclusively on the date upon which the laboratory is granted accreditation. As noted above in paragraph 9.4.3, it would also render the laboratory's participation in WADA/accreditation body periodic assessments and re-assessments without meaning and purpose. The Panel takes the view that the factors determining whether a confirmation method is fit-for-purpose must continue to be present and maintained at the same qualitative level throughout the duration of the accreditation. This also includes the application of those methods in the evaluation of the individual athlete's test results.

9.5.9 ISL 5.4.4.2.1, which relates, among other factors, to the requirement of "robustness" with regard to Non-Threshold Substances such as testosterone provides that "[t]he method shall be determined to produce similar results with respect to minor variations in analytical conditions. Those conditions that are critical to reproducible results shall be controlled." After evaluating Mr. Blanco's IRMS test results and weighing the opinions of the parties' respective experts, the Panel does not take the view that the variances between his A Sample and B Sample results are of such a nature and dimension as to constitute a demonstrated lack of robustness or reproducibility. To this extent, the Panel rejects the view that the variances cited by Mr. Blanco constitute conditions or circumstances which place the confirmation of his A Sample results into question. In the view of the Panel, his B Sample analysis has succeeded in confirming the A Sample results.

9.5.10 In this regard, the Panel accepts USADA's argument and Dr. Bowers' testimony that the closer the measurements of a Sample's Etio and Andro content are to the thresholds set for reporting a positive test result by WADA Technical Document TD2004EAAS, the greater the concern regarding the robustness of the test results. Where, as in this case, both Samples generate test results for 110H - Andro and 110H - Etio values approximating 10 delta units (whereas the threshold is 3 delta units), and Andro and Etio values of approximately -32 or -33 units each (whereas the threshold is -28 units), those concerns are significantly diminished.

9.5.11 The Panel further accepts Dr. Bowers' testimony that, if Mr. Blanco's Samples had generated results closer to 3 delta units, instead of the much higher figures, he would have been much more concerned about the discrepancies between the test results, and potentially would not have recommended that USADA charge Mr. Blanco with a doping violation.

9.5.12 In contrast to the IRMS test results established in the *D&T Case*, the variances determined between Mr. Blanco's A Sample and B Sample test results are consistent, are not countervailing in their direction and intensity, and are clearly over the threshold. Mr. Blanco's A Sample Andro value was measured at -32 delta units and was well below the -28 delta units prescribed in WADA Technical Document TD2004EAAS. His B Sample value for Andro came in at -1 delta unit lower (-33). Similarly low values, although of greater variance, were measured for Etio in Mr. Blanco's A Sample and B Sample: -32 delta units for his A Sample; -33.9 delta units for his B Sample. Even taking into account an uncertainty factor of +/-1.0, the ratios measured for both substances lie well below -28‰. Dr. Bowers confirmed a "small amount" of concern for variance in the Etio value, but given the high concentrations represented by the values determined for both substances, he had no doubt that the Samples contained a prohibited Substance.

9.5.13 With regard to the delta/delta values, even these showed consistency in direction and intensity, all of the values greatly surpassing the 3 delta unit margin set out in WADA Technical Document TD2004EAAS and the 4 delta unit margin applied by the Beijing Laboratory.

9.5.14 In the *D&T Case*, the panel was confronted with variances in the delta values measured for Mr. Devyatovskiy's testosterone levels, namely 4.63‰ in the A Sample and 5.07‰ in the B Sample. Even Professor Schänzer, the IOC's expert witness in that case, considered them to be "borderline", as noted by the panel in that decision. See *D&T Case*, ¶ 5.73. Moreover, the panel held that, given the significant variances in the delta values of his Testosterone, 5-β-androstanediol and pregnanediol values (1.55, 2.32 and 1.99, respectively), the reproducibility of these values and their delta-delta values was placed into question. Prof. Schänzer stated that he would not have released these values as positive without further investigation into the athlete's steroid profile. The athlete's steroid profile was, however, never provided to the Beijing Laboratory and its subsequent submission to the panel during the hearing was deemed to be too late.

9.5.15 As noted above, there has been no argument that the Beijing Laboratory's SOP for the IRMS process provides a measurement of uncertainty or standard deviation with regard to Andro and Etio measurements generated during an IRMS analysis. Nor has it been argued that there is a requirement in the IRMS SOP that the results of the B Sample fall within a certain range of the A Sample results. Dr. Wang testified to the contrary. There has also been no argument that the Beijing Laboratory failed to comply with its own SOPs, and Dr. Wang testified that the Laboratory in fact complied with the SOPs when analyzing Mr. Blanco's Samples.

9.5.16 Finally, the Panel accepts Dr. Bowers and Dr. Wang's testimony that the standard deviation for the measurement of C25 does not provide a proxy

standard deviation for Etio and Andro measurements because standard deviations are unique to the substance, test and laboratory in question.

9.5.17 In conclusion and after consideration of the above factors, the Panel is not persuaded that the Beijing Laboratory has deviated from the ISL on robustness or reproducibility grounds. As a result, having reviewed all of the evidence and the Parties' respective arguments, the Panel confirms that it is comfortably satisfied that USADA has established that a doping violation occurred. However, the Panel takes note of, and is sympathetic to, the Appellant's arguments that requiring robustness during the validation process and not with regard to an athlete's specific test results is somewhat illogical, and that an athlete's A and B Sample results should be required to fall within a given measurement of uncertainty in order to be considered sufficiently reliable to found an AAF. However, this is not what the rules currently require.

9.6 Concluding Remarks

9.6.1 Mr. Blanco's appeal is therefore denied.

9.6.2 As held above, on the specific facts of this case, there are no grounds to exonerate the athlete.

9.6.3 However, it is clear to this Panel that, as Dr. Bowers testified, good practice requires a laboratory to establish an acceptable range of uncertainty for each measurement of each substance that it undertakes, and that at some point a discrepancy between results could be too large for an anti-doping agency or a CAS panel to be comfortably satisfied that an anti-doping violation has occurred. Neither this Panel nor other CAS panels are qualified to opine on what that range of uncertainty might be, whether for the measurement of Andro and Etio during the IRMS process or for any other measurement. This is the task of technicians, and the results of their efforts should be placed in the relevant Technical Documents as already foreseen in ISL 5.4.4.3.2.3 The Panel

wishes to invite WADA to take the findings of this Panel into account, and to amend the ISL either to formulate such measurements of uncertainty itself or to impose a requirement on laboratories that they formulate such measurements. Evaluating a laboratory's measurements of uncertainty would then form part of the accreditation process, both at its inception and throughout the term of the accreditation, ensuring the ISO and WADA's satisfaction with the robustness of the test results generated by the laboratory. It appears to this Panel that incorporating such a requirement into the ISL would increase the reliability of test results, and it could avoid the limits of uncertainty eventually being set by a CAS panel deciding a future appeal of an anti-doping violation..

9.6.4 This Panel also shares the AAA Panel's concern with regard to the absence of negative controls in the IRMS analyses of Mr. Blanco's Samples and, more pressingly, the absence of a requirement that negative controls be in place in the Beijing Laboratory's SOPs, the ISL, and the WADA and ISO accreditation processes. The Panel accepts that not all quality controls are appropriate for all tests. However, it has heard testimony, and accepts that negative controls are appropriate for an IRMS analysis. Again, the Panel invites WADA to provide more guidance as to those controls that are appropriate for the test in question, and to require laboratories to use those controls. Failure to accept this invitation may lead CAS panels to formulate their own judgment as to the quality control processes required with regard to the tests at issue before them. This would, again, not be the appropriate solution.

10. COSTS

10.1 The Panel has considered USADA's request for costs. While the Panel is sympathetic to the fact that the financial burden in this case, as in many others, is on USADA, it feels that the protection of the rights of athletes to challenge doping violations is entitled to significant weight. In some cases, the decision to pursue an unsuccessful appeal is rightly met by an award of costs against the athlete.

However, in this case, there were reasonable arguments to be made and serious issues to be tried. Mr. Blanco and his team made those arguments diligently and rightly dropped those arguments that showed no chance of success after the AAA Panel's decision. Further, Mr. Blanco did not engage in the behavior that has previously been met with an award of costs, such as accusations of bad faith or fraud, or litigation misconduct.

10.2 USADA's request for costs is therefore denied.

ON THESE GROUNDS

The Court of Arbitration for Sport hereby rules:

1. The appeal filed by Mr. Alberto Blanco against the Award dated 14 July 2010 rendered by the AAA Panel is dismissed.
2. Each party bears its own costs.
3. The present award is rendered without costs, with the exception of the Court office fee of CHF 500, paid by the Appellant and to be retained by the CAS.
4. Any further claim is dismissed.

Lausanne, 1 April 2011

THE COURT OF ARBITRATION FOR SPORT

Henri C. Alvarez
President