

**Sequence III Surveillance Panel
Meeting Minutes
September 8, 2011**

Agenda

1.0) Attendance – Shown in Attachment 1.

2.0) Approval of minutes - The minutes from 08/10/2011 were approved without objection. (J. Bowden, G. Seman).

3.0) Action Item Review

3.1) 03/17/11 - *Panel member solicit oil suppliers for potential replacement reference oil for IIIF (PVIS~275%). OPEN*

Chairman Dave Glaenzer repeated the request for members to consider offering a new oil.

3.2) 06/02/11 – *Labs report accuracy of their camshaft measurement equipment to SP chair.*

General consensus exists that accuracy has always been to 3 decimal places. Rich Grundza was asked to implement the editorial corrections to both IIIG and IIIF with the next information letters.

3.3) 06/02/11 - *Labs to install hour meters on parts washers to determine recommendation for hours to replace soap and water. OPEN*

Rich has received responses from the labs; 4 labs have installed a meter, 2 labs are in the process of installing the meters. This will be revisited once all labs have installed meters.

3.4) 06/02/11 - *Labs to provide photos of combustion chamber and compression data to Patrick Lang. OPEN*

Pat has received photos from two labs and he requested the remaining labs send their photos.

4.) Old Business

4.1) *Report 435-2 results to date. Rich Grundza*

Results are shown in Attachment 2. Rich expects 1 or 2 more tests in the next few months and he recommended that we review the data again once we have ten tests.

4.2) *Review UEB data generated to date. Rich Grundza*

See Attachment 3. No new data have been received since last meeting. Two more tests are expected, one in September, one in October.

4.3) Sequence III Inventory Control Task Force. Jason Bowden

Jason hopes to have participation from all labs and hopes to meet in the next few weeks. Once the TF has reached agreement, Jason will bring it forward to the panel for consideration. Jason is also working on critical and non-critical parts lists.

5.) New Business

5.1) Sourcing of EEE fuel from two locations

Haltermann will soon source fuel from two locations. Mark Overaker stated a new tank has been put in service at their Nixon facility. He stated the same raw material streams and testing facilities are used for the fuel from both locations, which is consistent with past practices. Matt Snider asked if fuel supply to the labs will be traceable and Mark stated that it will. Dwight Bowden asked if the test-by-test fuel information has been available in the past and will it be in the future. It was stated that the fuel batch is a field in the test report packet. Batch size at Nixon will be about 7000 barrels. It seems reasonable that labs will stay on batches longer as a result. After some further question-and-answer, the panel seemed content to allow Haltermann to move forward as planned.

5.2) GM analysis of two soaps for parts washer use.

See Attachment 4. Bruce Matthews of GM had the two soaps analyzed and found that the soaps were essentially the same. As such, Bruce sees no need to change the test procedure.

5.3) Replacement for Mylar (polishing) tape.

The crankshaft mylar polishing tape is no longer available from other than by special order. Charlie moved, Dwight Bowden second, that we allow either the mylar tape or 3M polishing cloth (300 or 400 aluminum oxide grit). Some concerns were raised about the use of aluminum oxide. Both Dwight Bowden and Pat Lang stated that they thought 3M made a mylar product called lapping film. The motion was then tabled until more information becomes available. Afton volunteered to look into this issue further and report back to the panel.

The meeting adjourned at 2:33 p.m.

SEQ III TELECONFERENCE

ASTM Sequence III Surveillance Panel (17 Voting members)





date: 09/08/2011

Name/Address	Phone/Fax/Email		Signature
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Mark Overaker - HALTERMAN

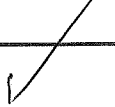

ASTM Sequence III Surveillance Panel (17 Voting members)

date:

Name/Address	Phone/Fax/Email	Non-Voting Member	Signature
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

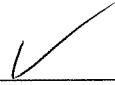
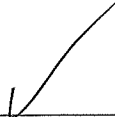

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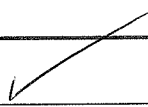


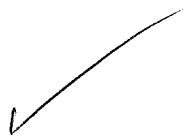
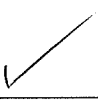
date:

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ASTM Sequence III Surveillance Panel (17 Voting members)

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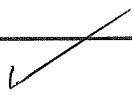
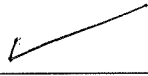
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Tom Wingfield Chevron Phillips Chemical Co.	wingftm@cpchem.com	Non-Voting Member	Present _____



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Sequence IIIG 435-2 Results

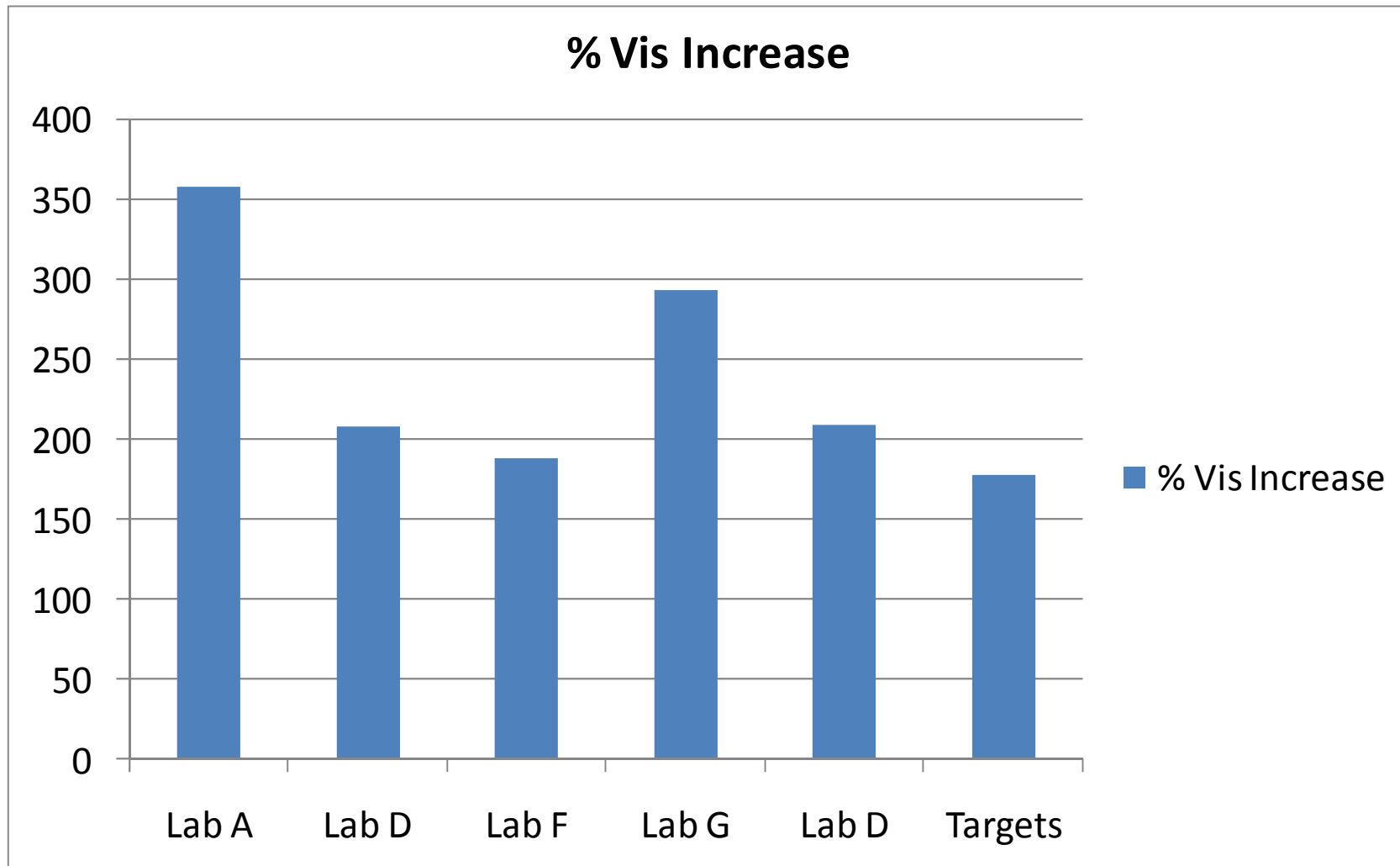
Sequence III Surveillance Panel

September 8, 2011

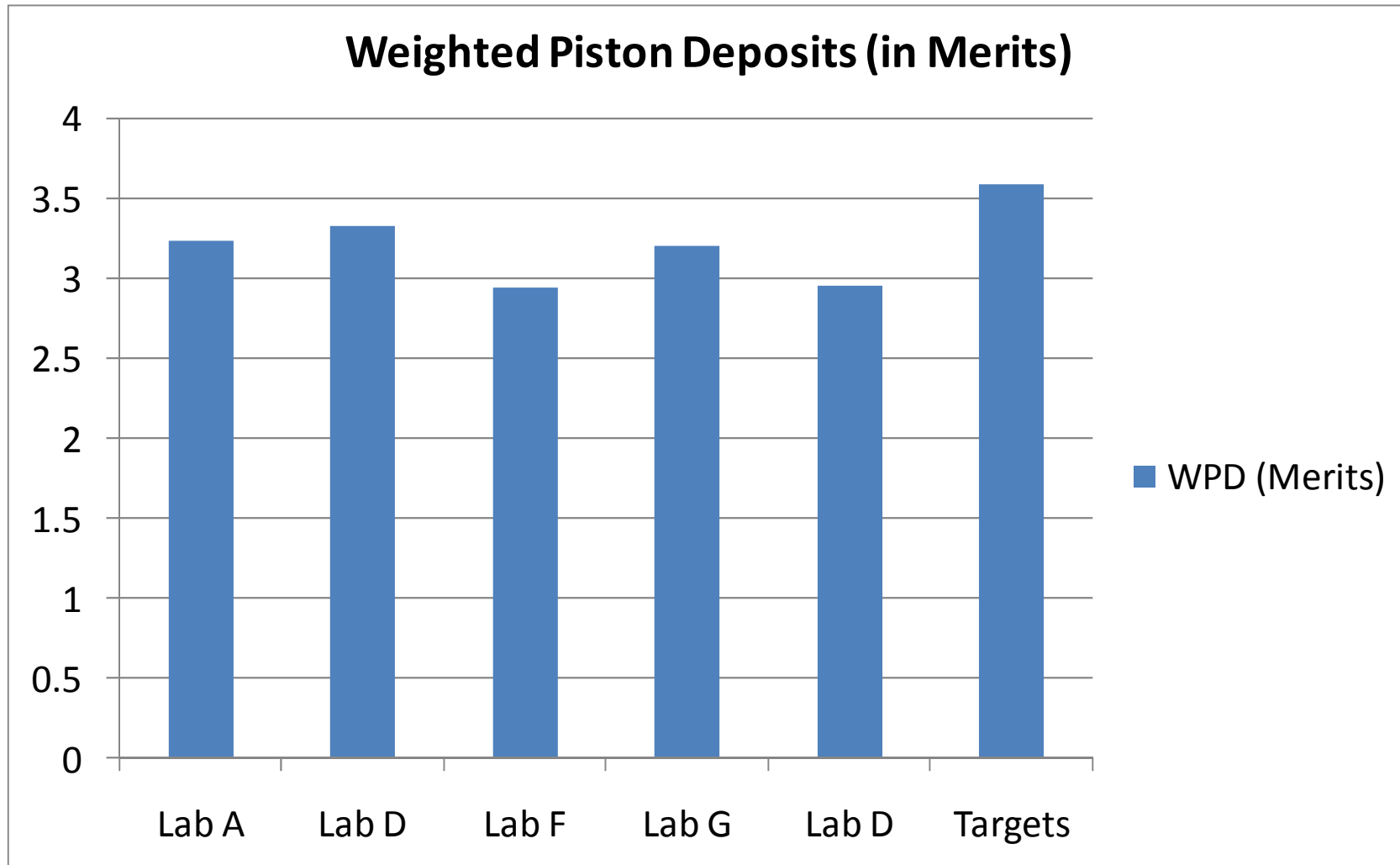
Summary of Results

- 5 tests reported from four labs
- 1-2 additional possible in the next few months
- Summary in next few slides

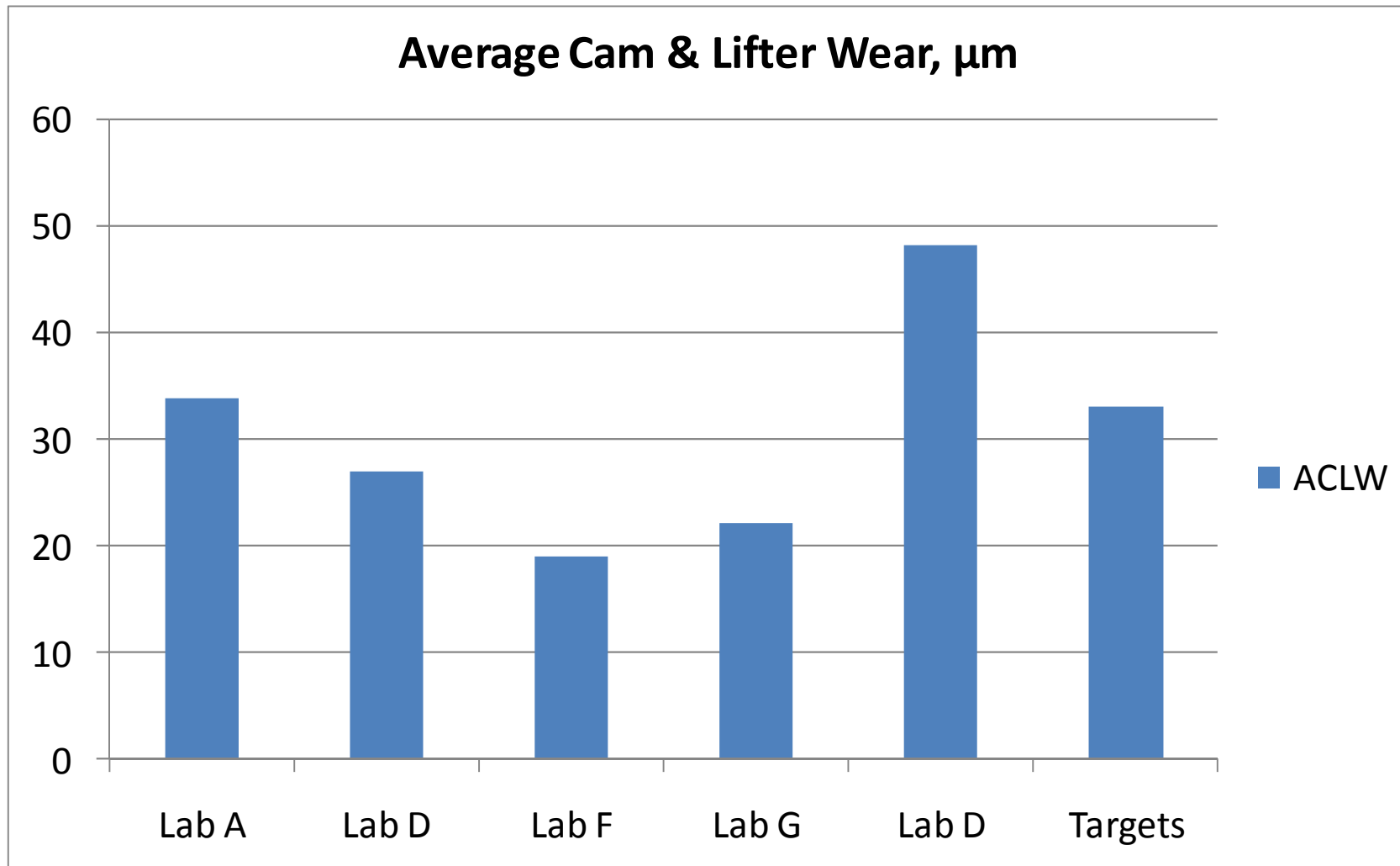
RO 435-2 Results for PVIS



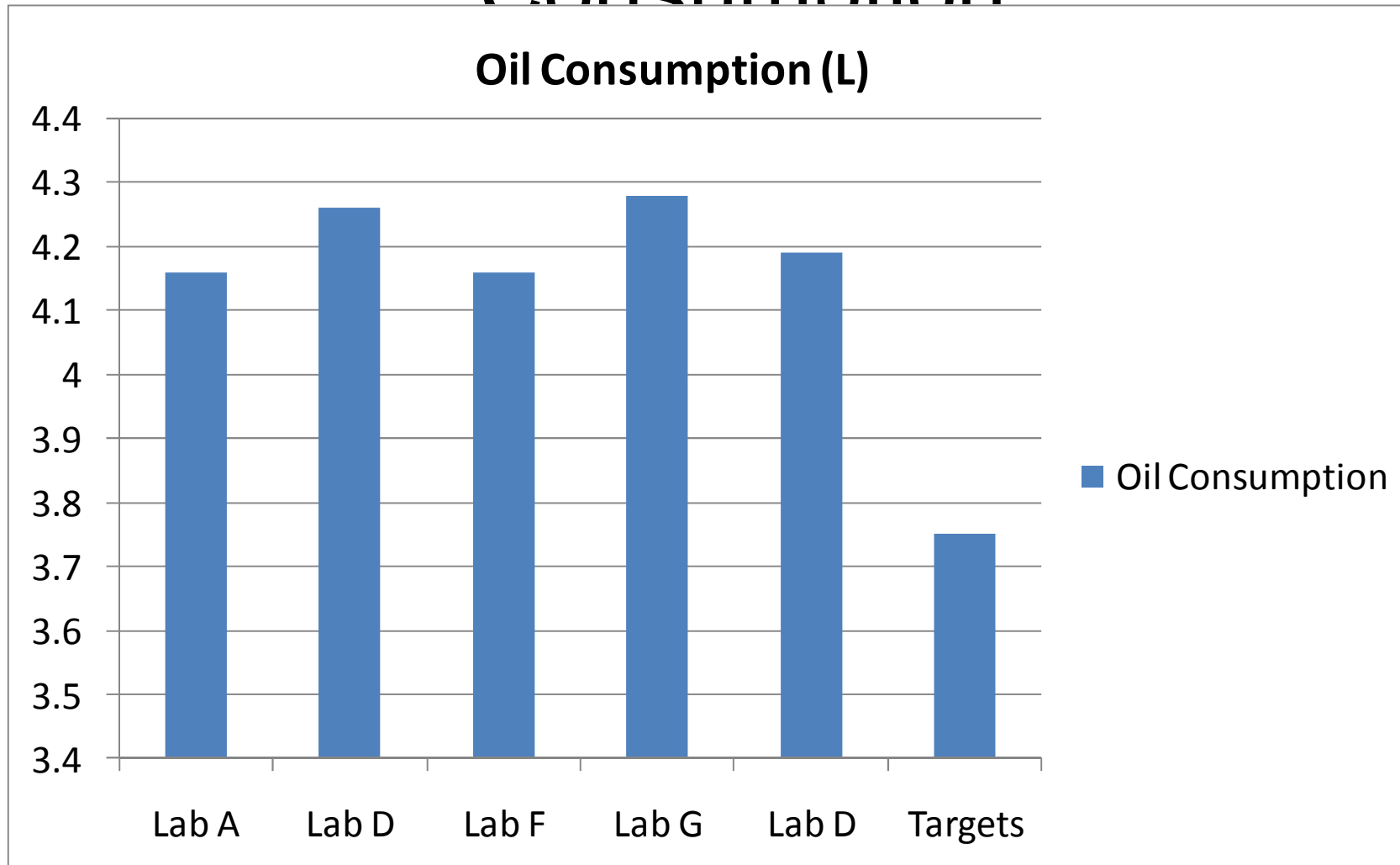
RO 435-2 Results for WPD



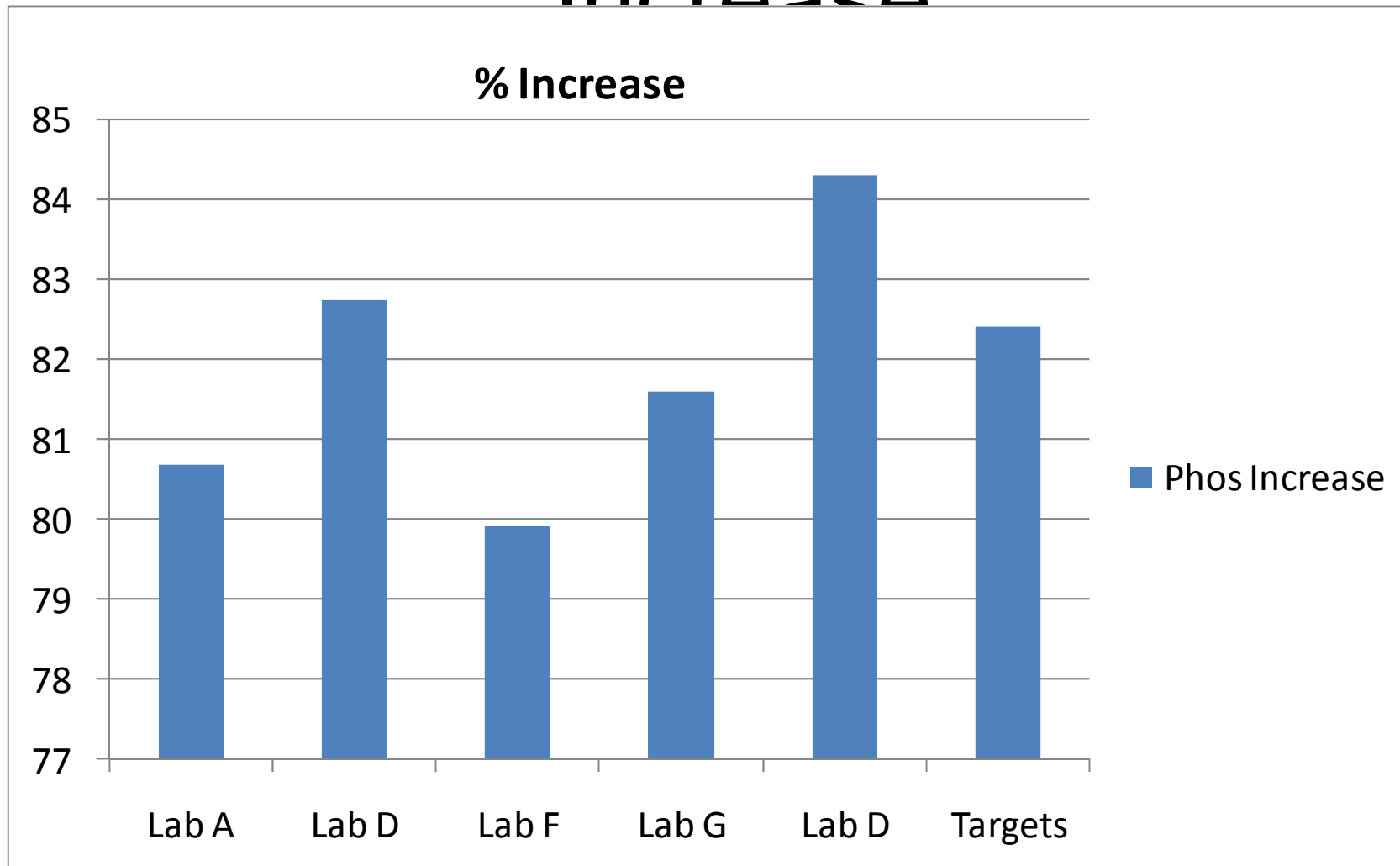
RO 435-2 Results for ACLW



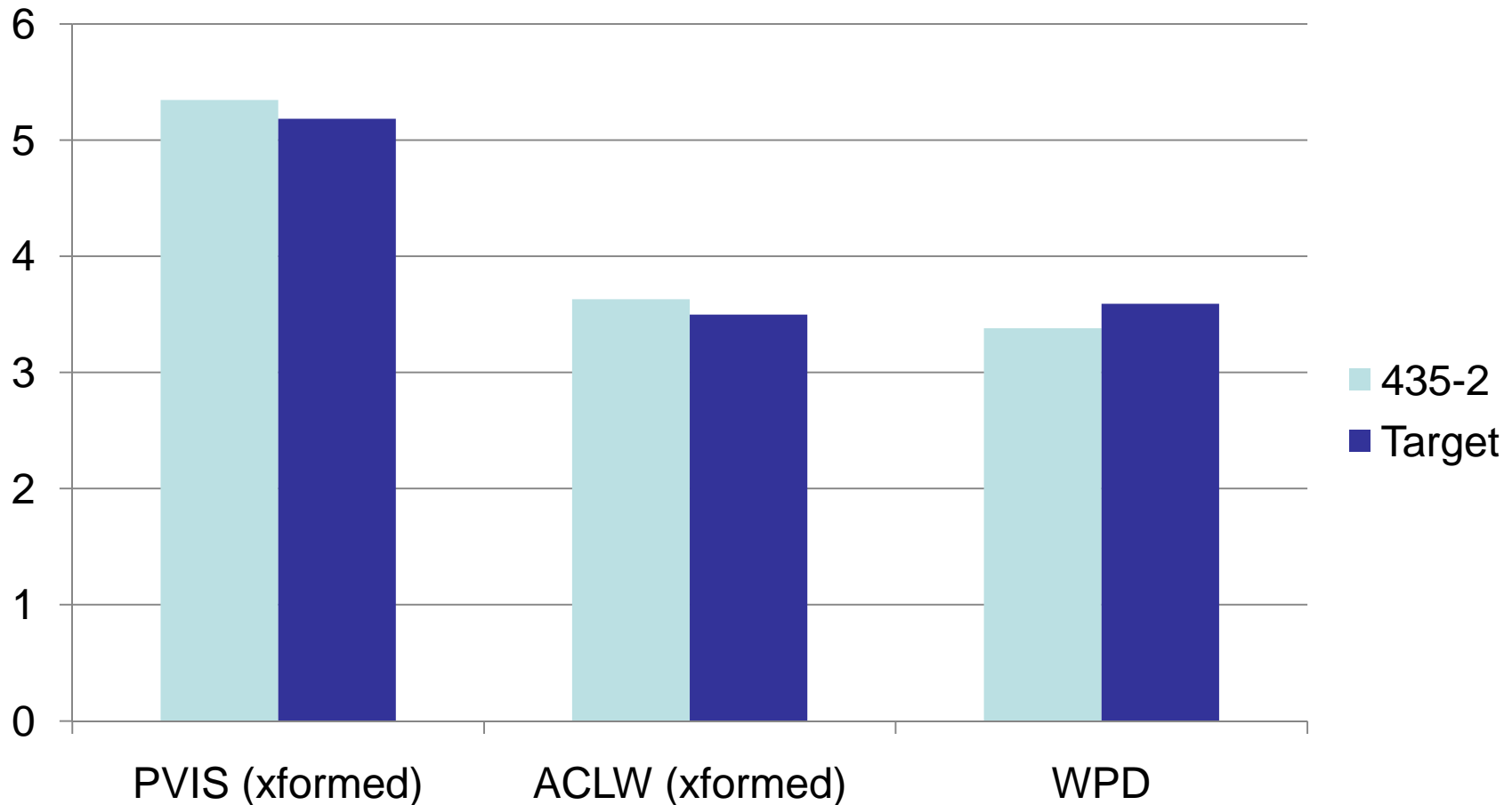
RO 435-2 Results for Oil Consumption



RO 435-2 Results for Phos Increase



Comparison of Mean Performance of 435-2 (n= 5) with 435 targets



All 435-2 results severity adjusted using candidate model, where appropriate.

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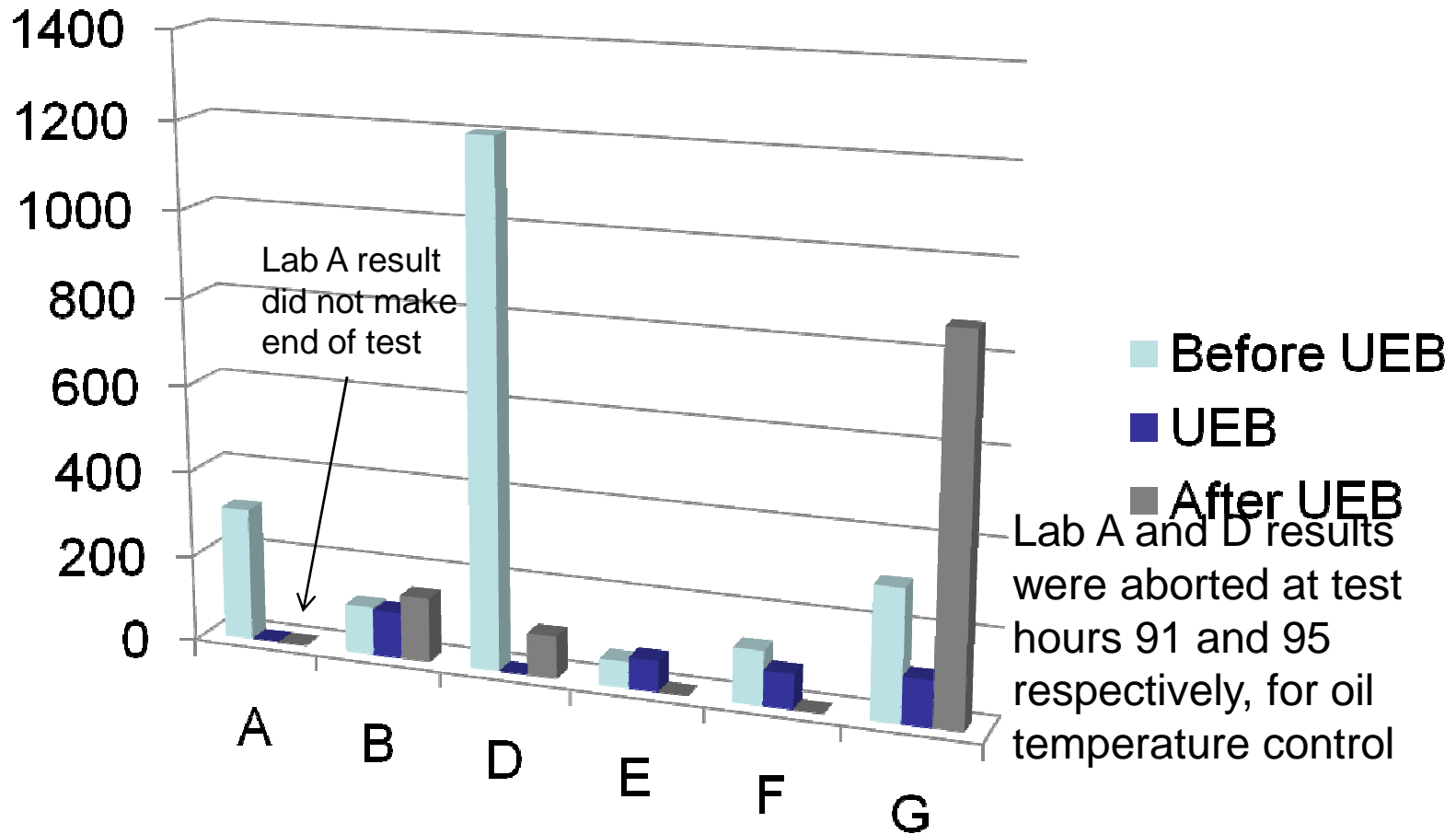
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Sequence IIIG UEB Results

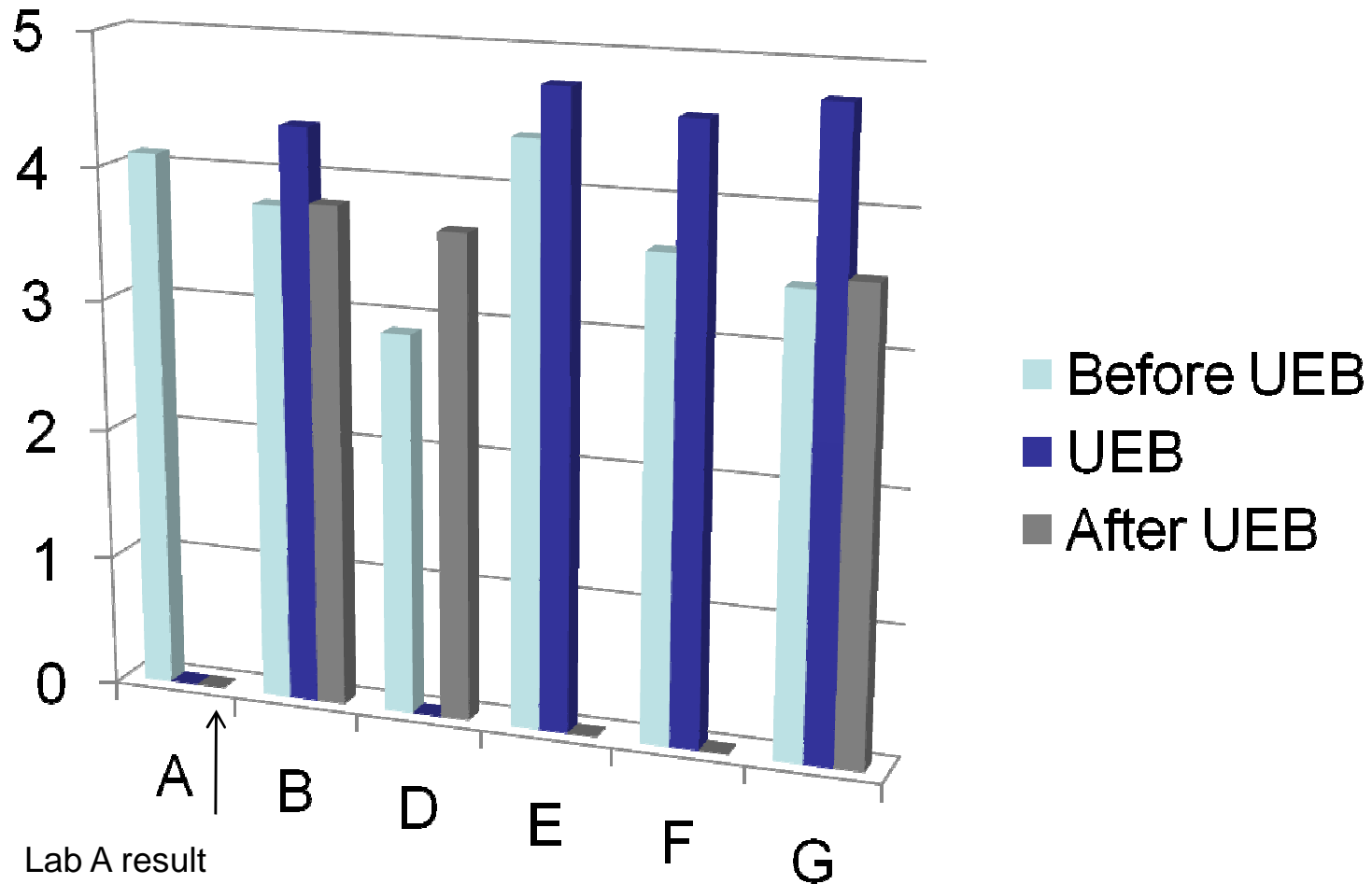
Sequence III Surveillance Panel

August 4, 2011

RO 434-1 Results for PVIS



RO 434-1 Results for WPD



Lab A result
did not make
end of test

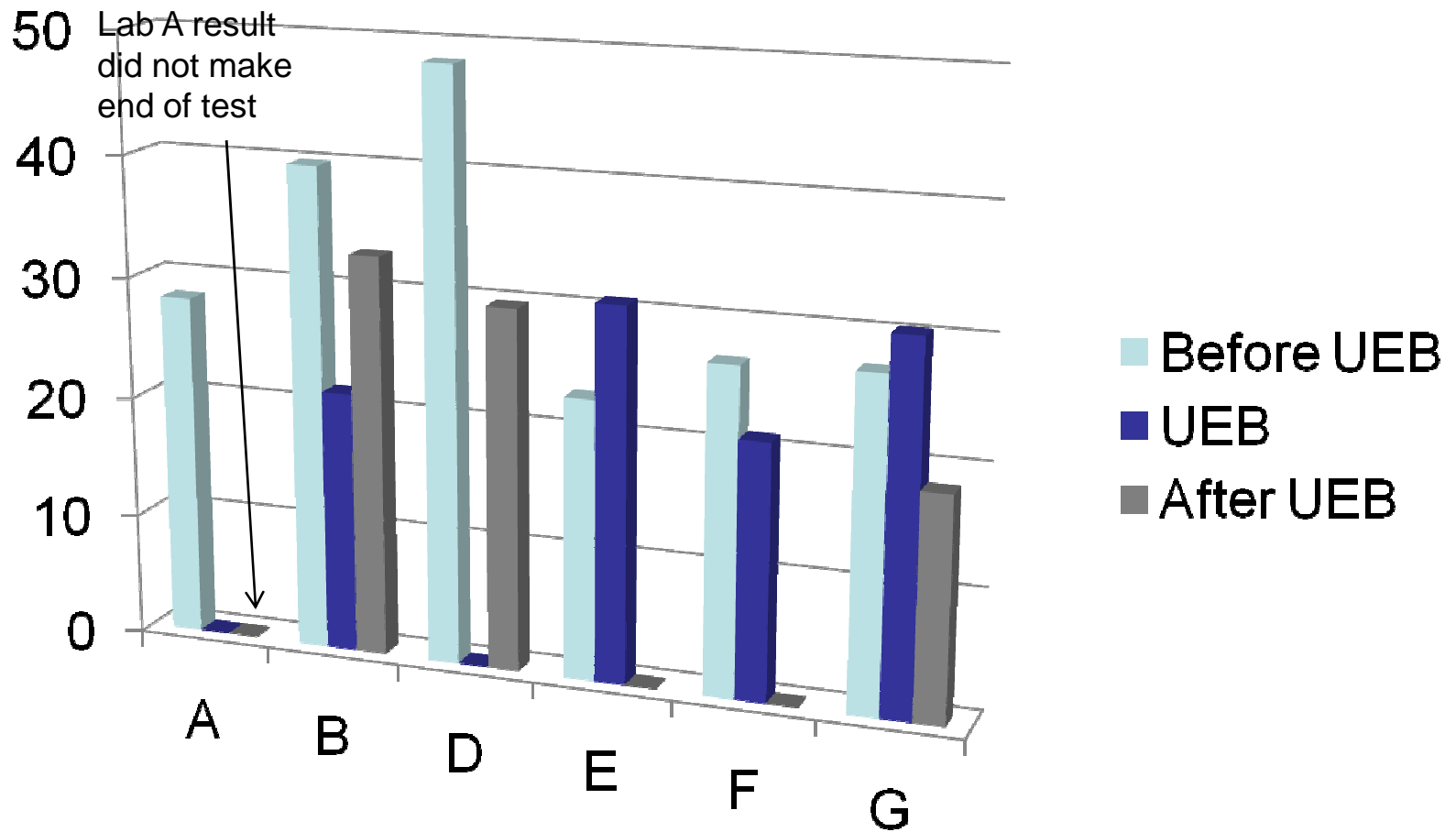
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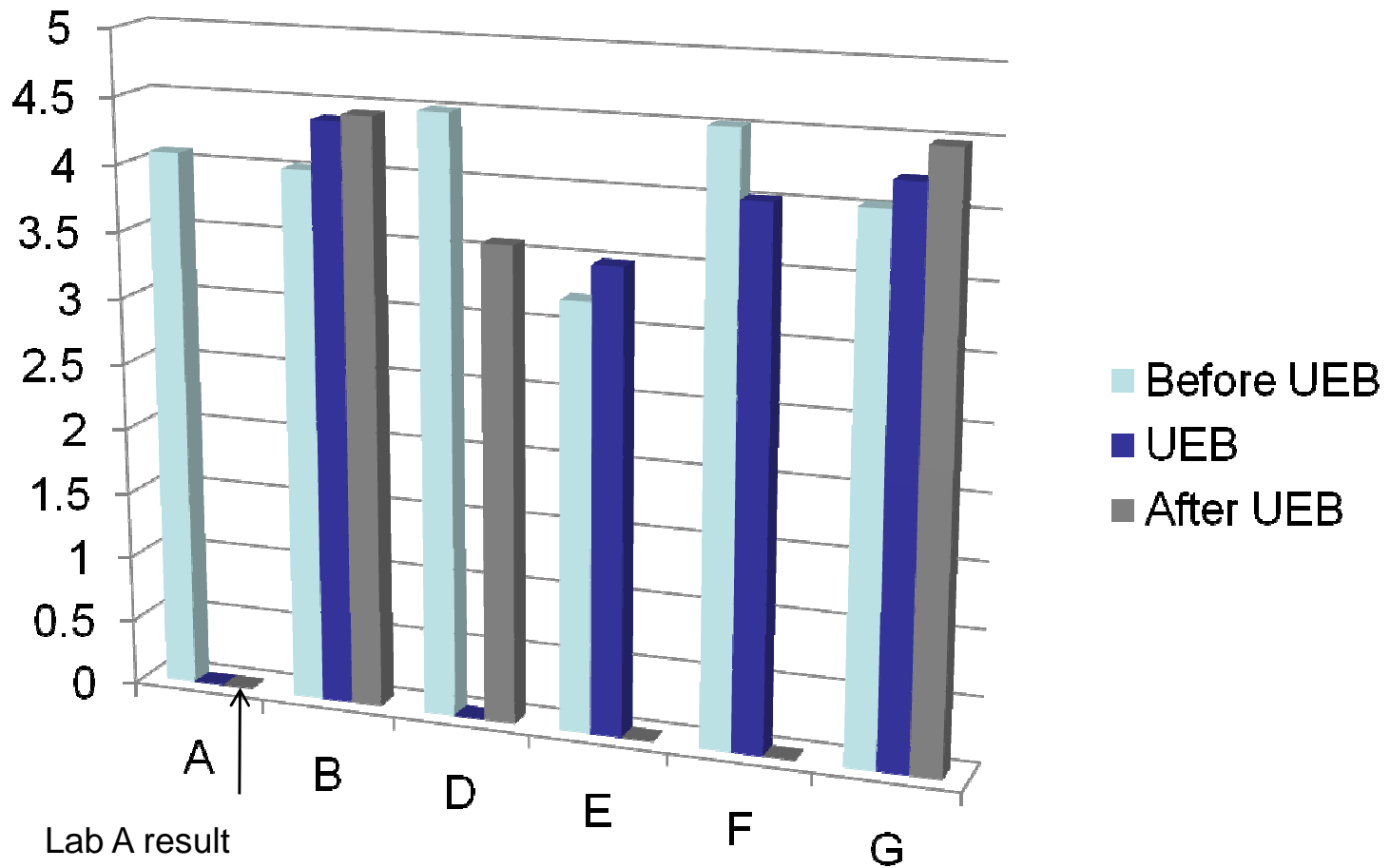
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RO 434-1 Results for ACLW



RO 434-1 Results for Oil Consumption



Lab A result
did not make
end of test

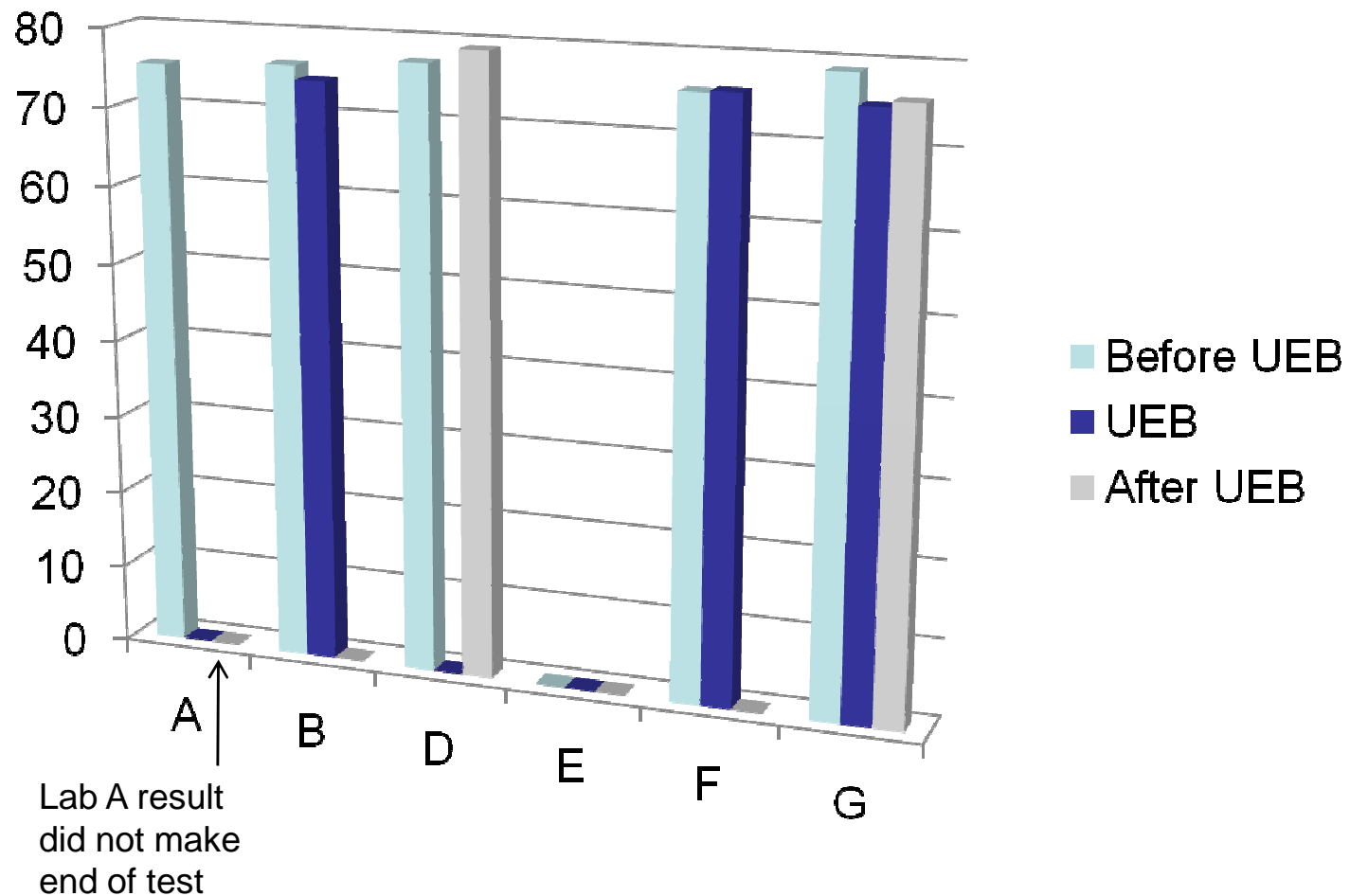
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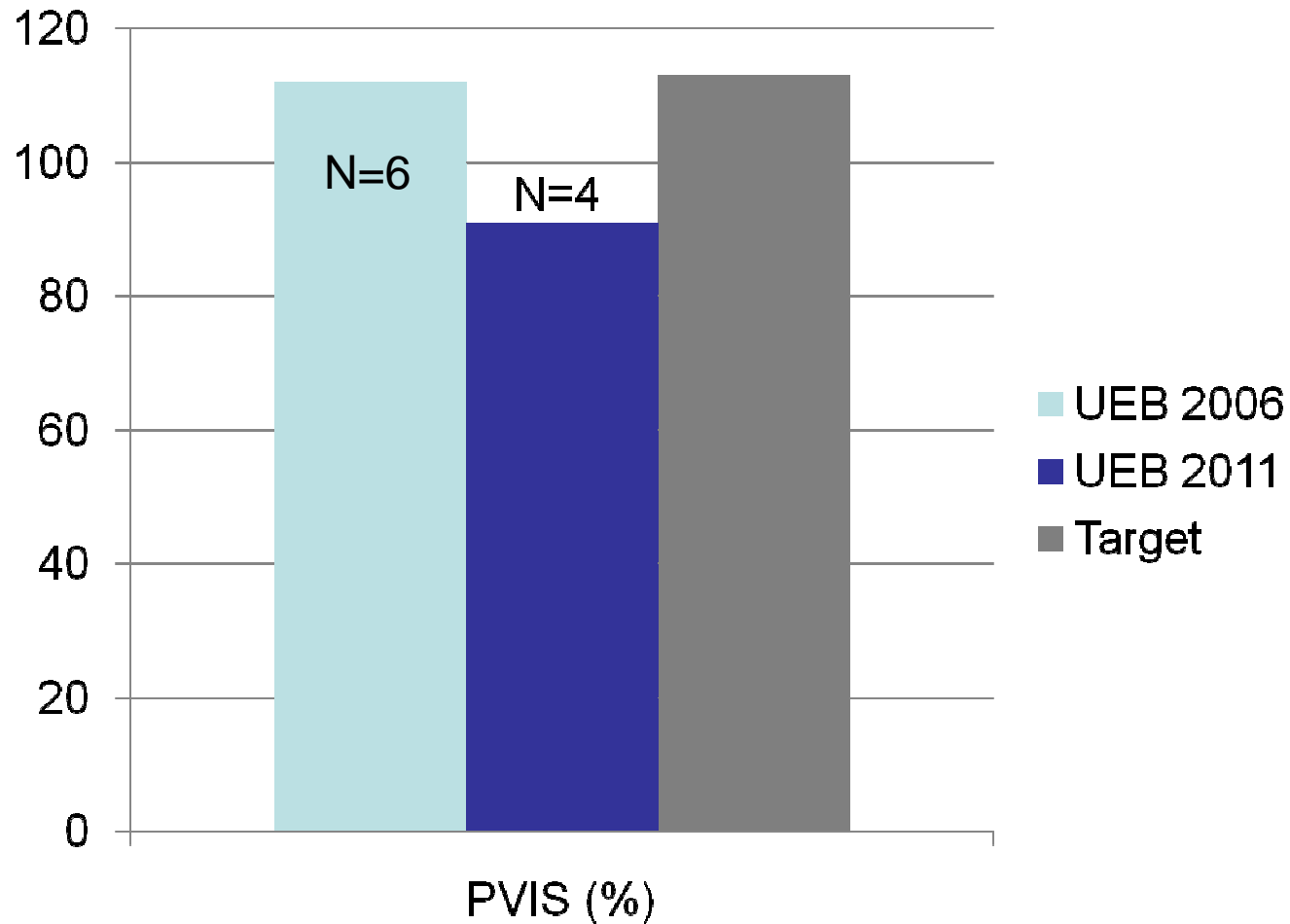
RO 434-1 Results for Phos Retention



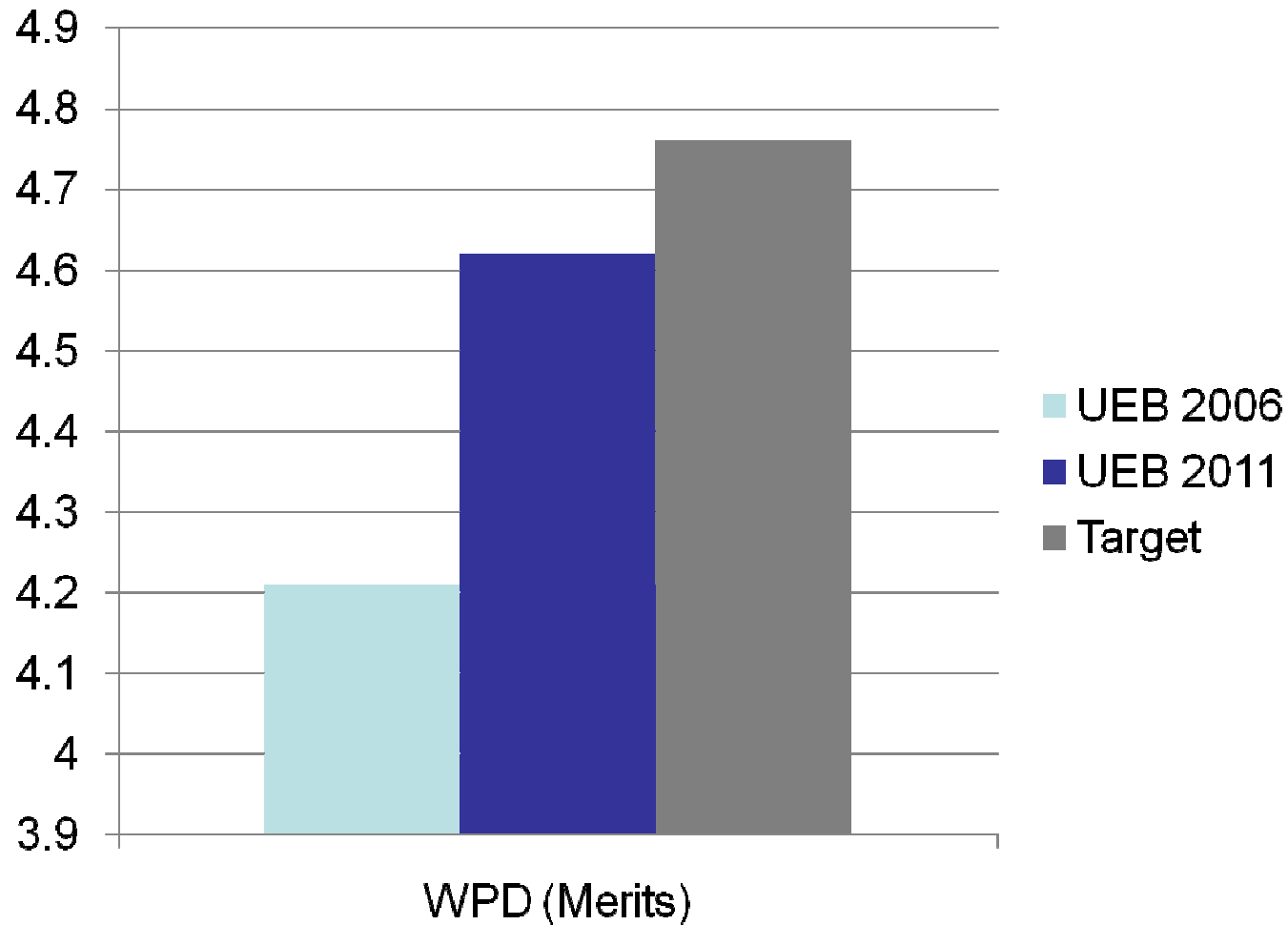
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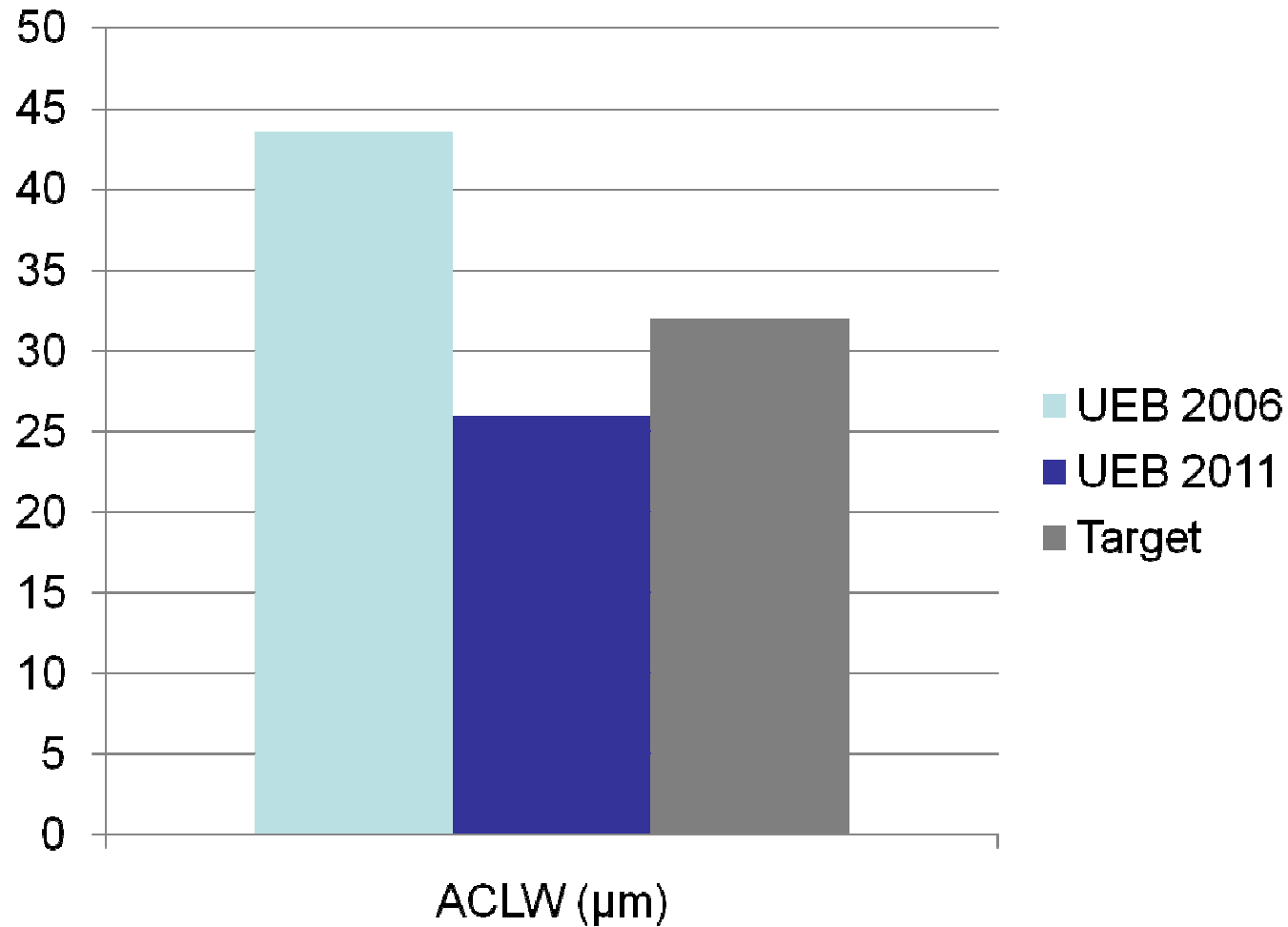
Comparison of Means between 2006 and 2011 UEB



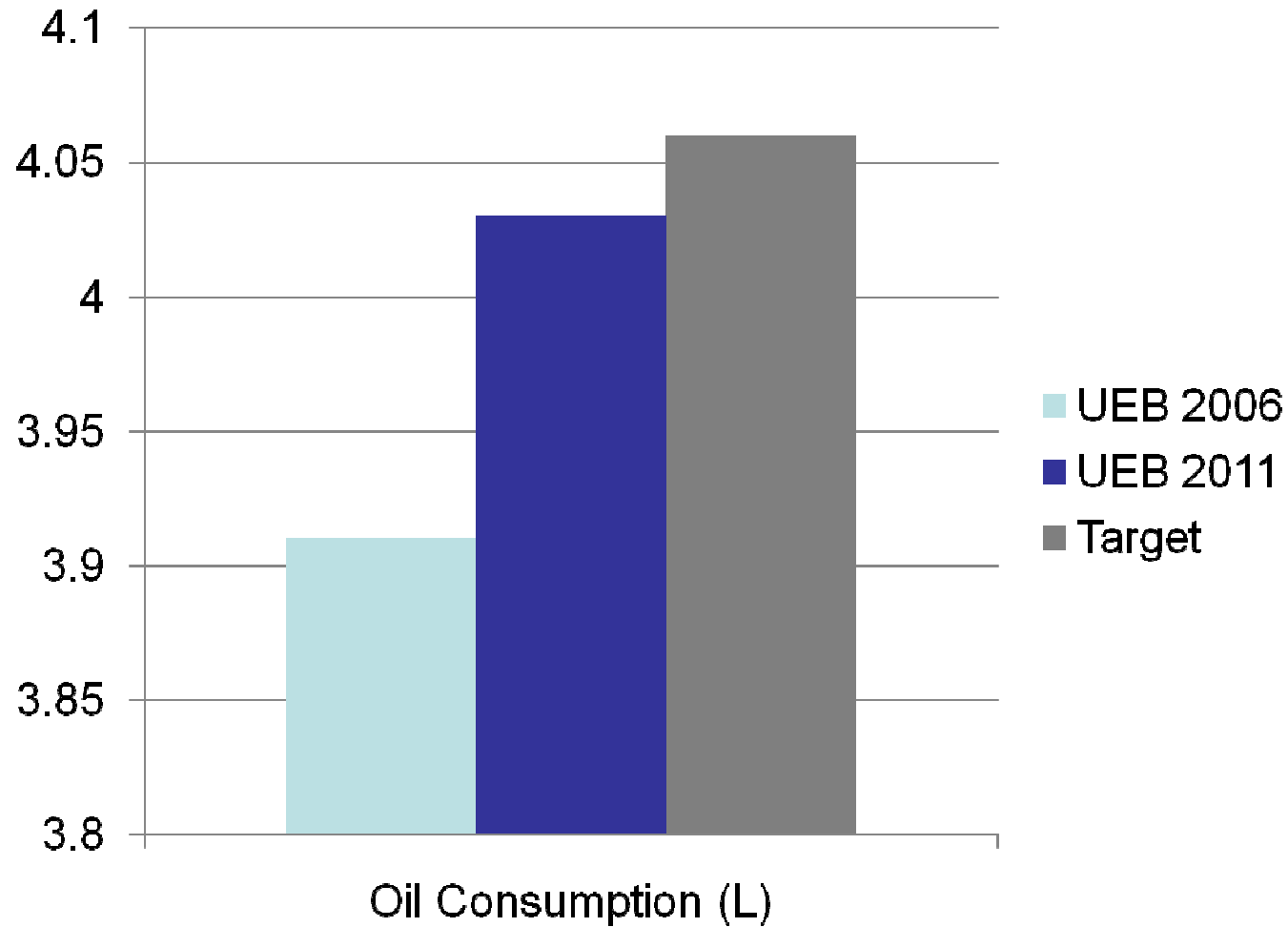
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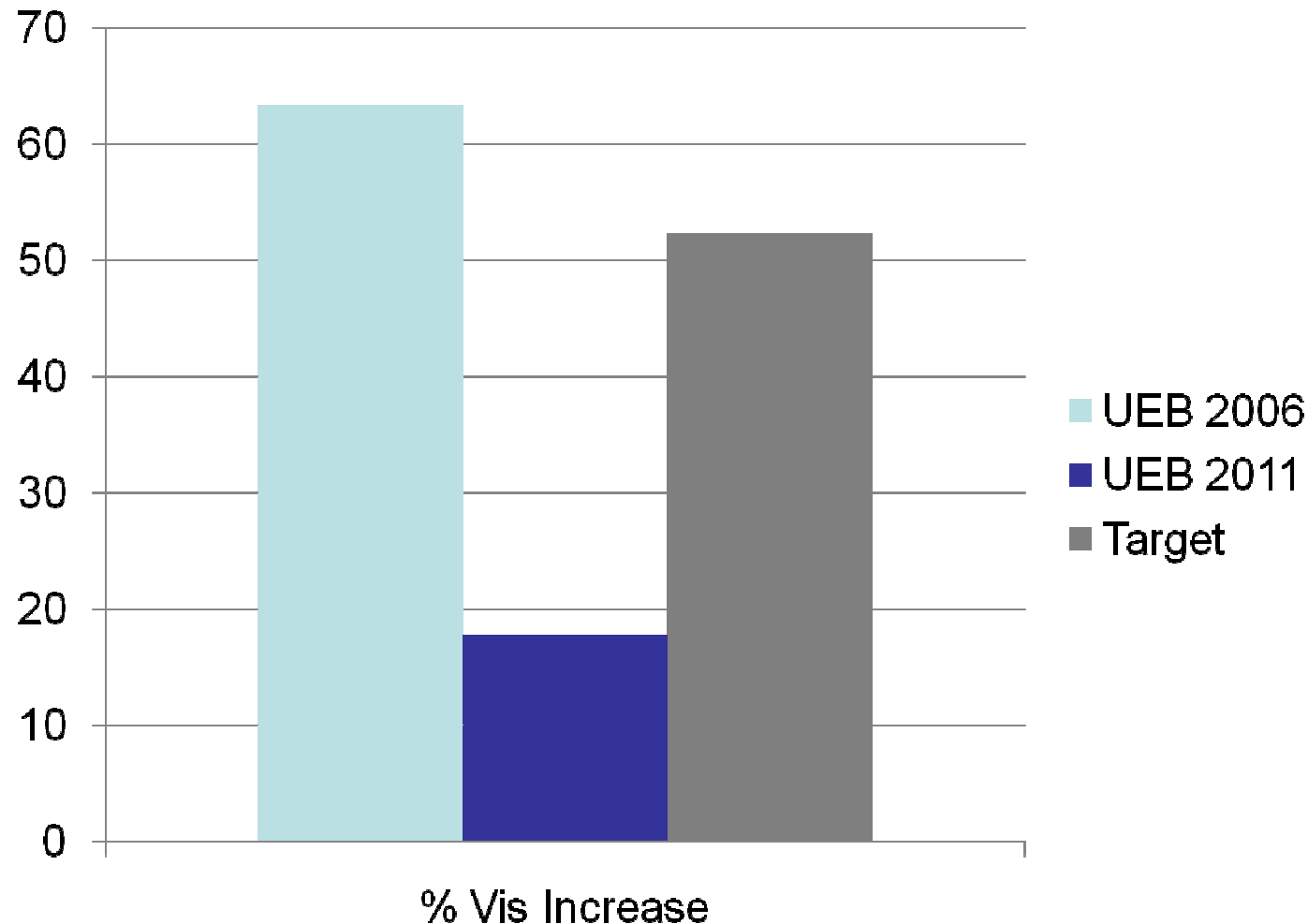
Comparison of Means between 2006 and 2011 UEB



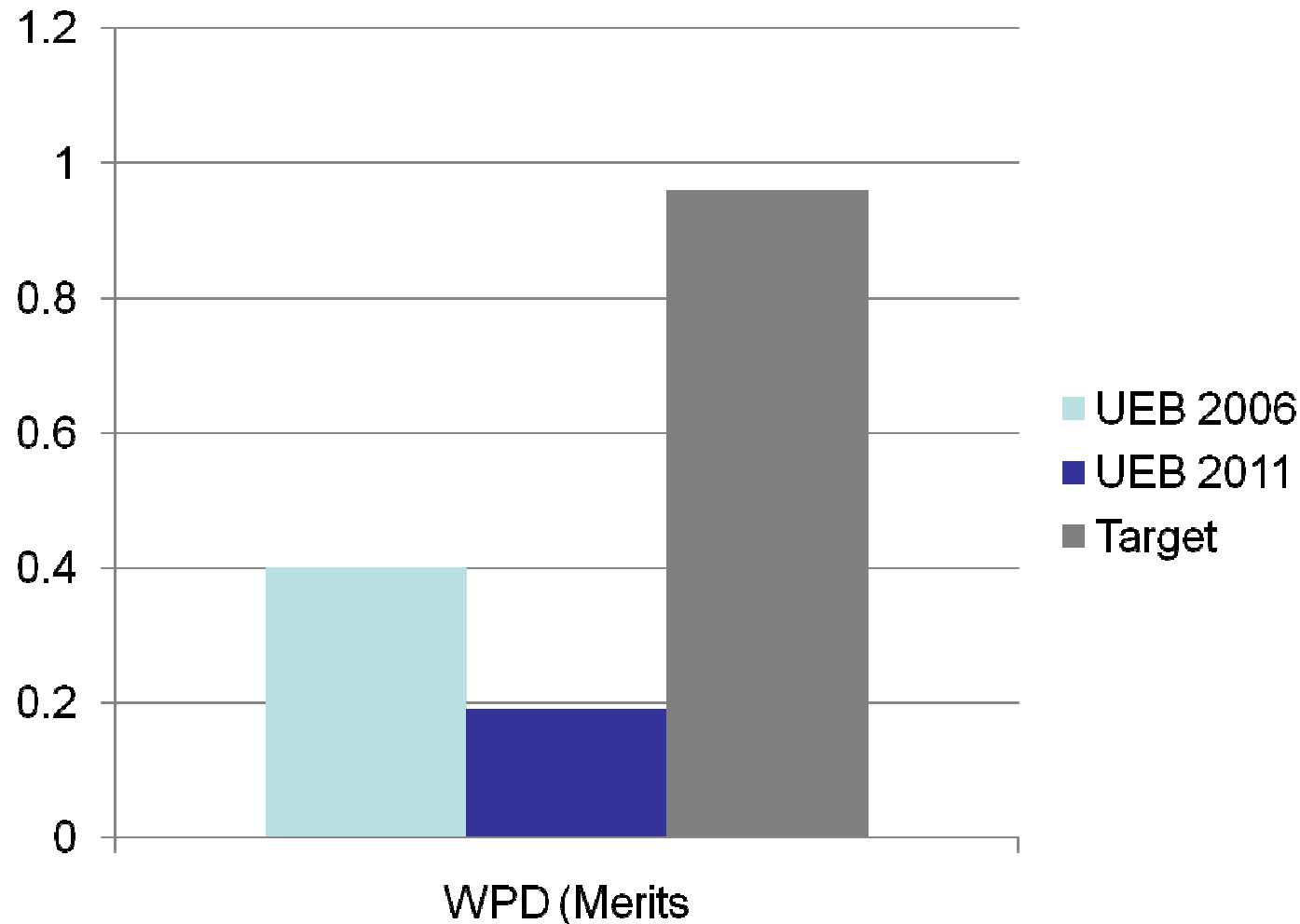
Comparison of Means between 2006 and 2011 UEB



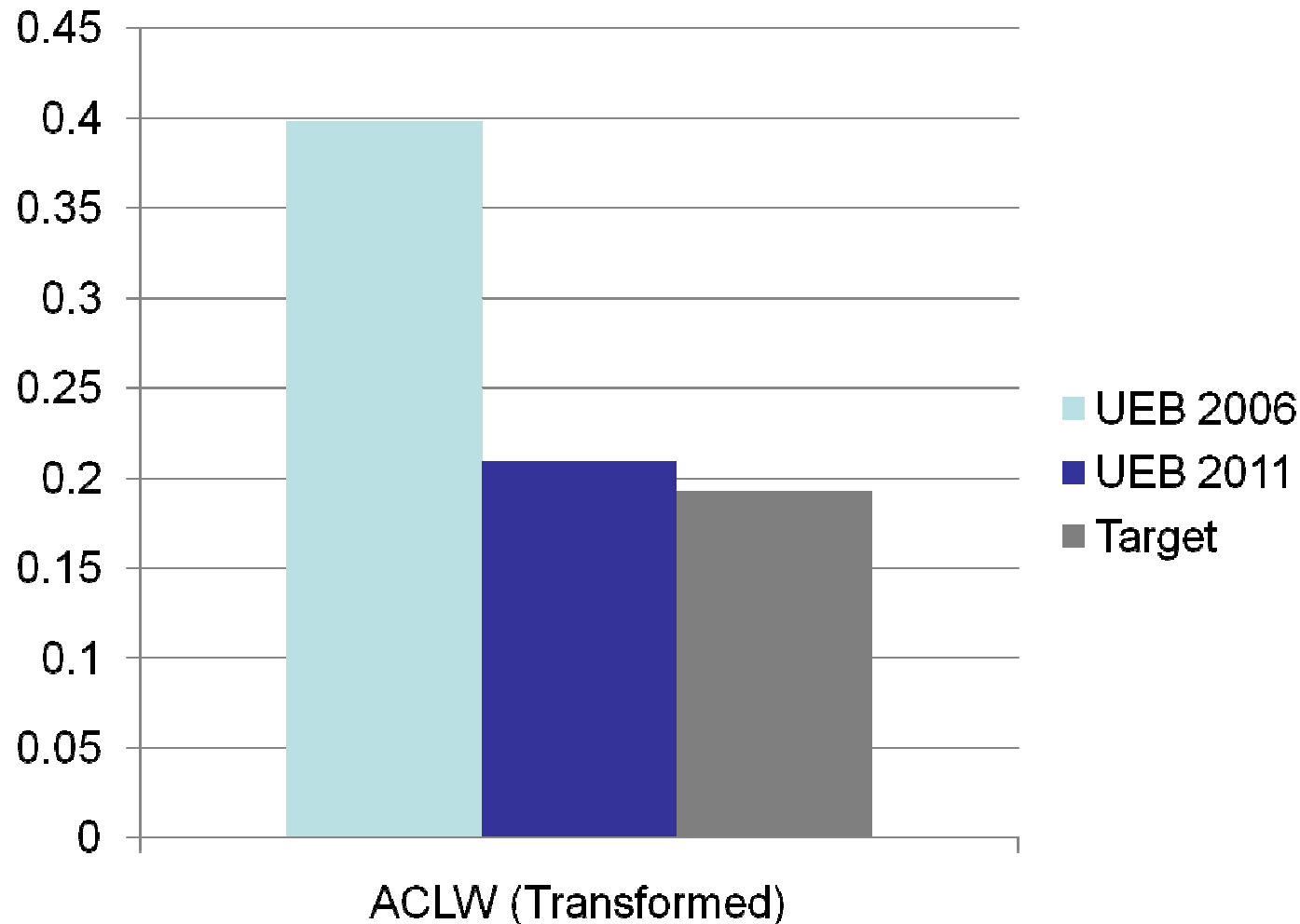
Comparison of Standard Deviations between 2006 and 2011 UEB



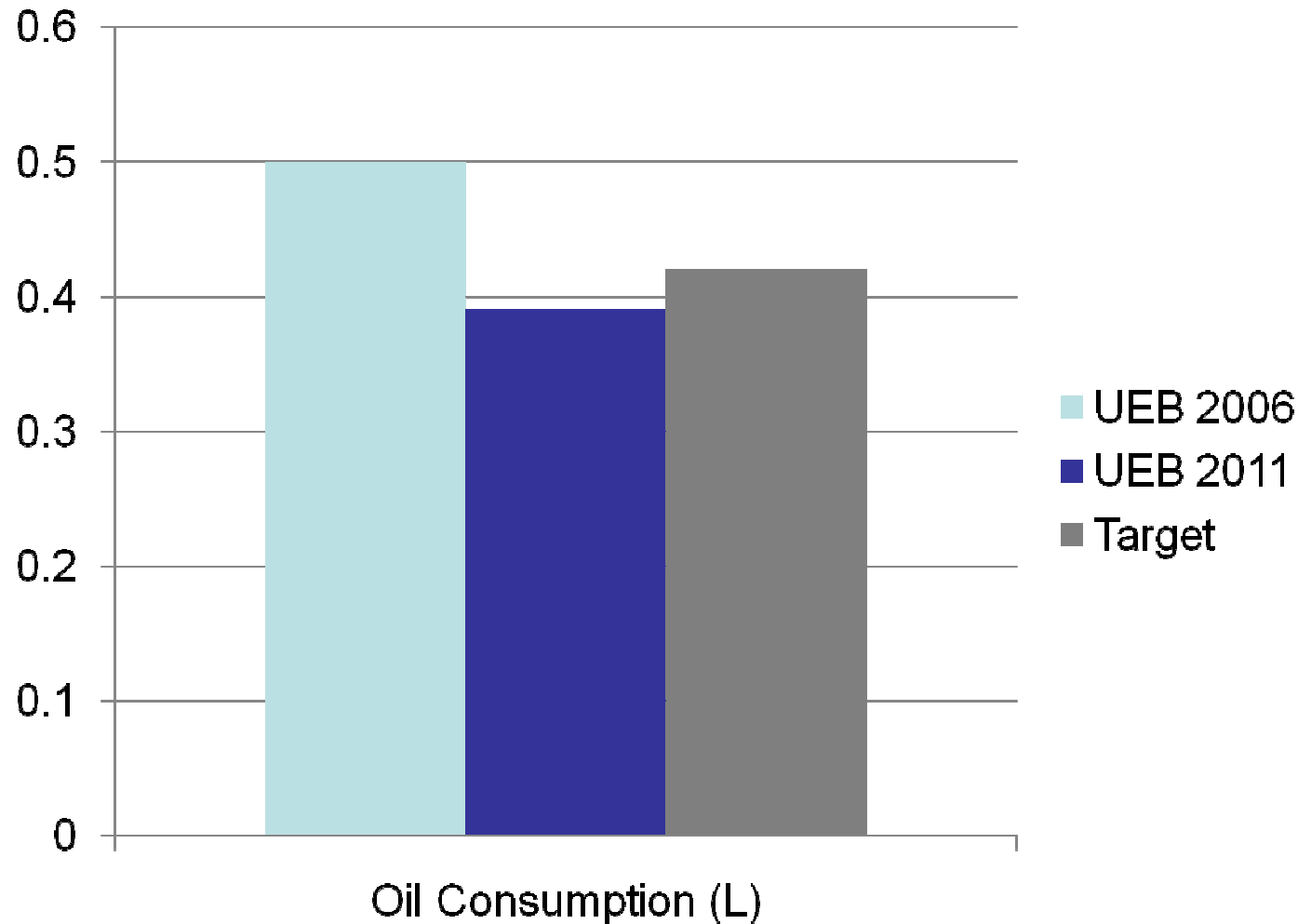
Comparison of Standard Deviations between 2006 and 2011 UEB



Comparison of Standard Deviations between 2006 and 2011 UEB



Comparison of Standard Deviations between 2006 and 2011 UEB



Semi Quantitative X-ray Fluorescence (UniQuant)***STR39618 see assumptions/limitations**

The two soaps/detergents were examined directly (mounted in plastic cups with 6um x-ray transparent film) with x-ray fluorescence spectrometry to identify elements and estimate amounts:

39742	Estimated Normalized Concentration, wt% (see assumptions/limitations)			
Valve	Na	P	K	Si
NAT-50	65	28	4	3
PDN-50	67	27	2	4

Based on x-ray intensities about 10-20% is the inorganic portion for both, the other 80 or 90% is the soap/stearates/etc.

Conclusions:

Elemental suggests both soaps/detergents are TSP based (trisodium phosphate, ratio of Na to P for TSP is 69/31 on wt. basis), virtually identical. Si is most likely the anti-foam agent.