SGS AXYS

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SGS AXYS Client No.: 4972

Client Address: AECOM
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The SGS AXYS contact for these data is Sean Campbell.

BATCH SUMMARY

Batch ID: WG67276	***Date:*** 10-Apr-2019
Analysis Type: PCB Congener	***Matrix Type:*** XAD

BATCH MAKEUP

Contract: 4972

Samples:

L30772-1	PDI-RB-XD-190127
L30772-2	PDI-WS-T04-1902
L30772-3	PDI-WS-T05-1902
L30772-4	PDI-WS-T06-1901
L30772-5	PDI-WS-T07-1901
L30772-6	PDI-WS-T01-1902
L30772-7	PDI-WS-T02-1902
L30772-8	PDI-WS-T03-1902

Blank:
WG67276-101

Reference or Spike:
WG67276-102
WG67276-103

Comments:

1. Data are considered final.
2. Data are not blank corrected. Blank data should be taken into consideration when evaluating sample data.
3. Blank data should be evaluated against specifications using the same blank sample size as the size of the client samples.
4. The percent recoveries of several quantification standards in the OPR and OPR duplicate (AXYS IDs: WG67276-102 & -103, respectively) did not meet the method criteria; the affected standards have been flagged with 'V'. Native targets spiked into the OPRs, that are quantified using the aforementioned ^{13}C-labeled congeners, recovered within method specifications and data are not considered affected by this variance.
5. The percent recoveries of several quantification and cleanup standards in the Lab Blank, WG67276-101, and all client samples did not meet the method criteria; the affected standards have been flagged with 'V'. As the isotope dilution method of quantification produces data that are recovery corrected, the slight variances from method acceptance criteria are deemed not to affect the quantification of these analytes. Percent recoveries are used as a general method performance indicator only.
6. The relative retention times (RRT) for some PCB congeners were slightly outside of the nominal RRT acceptance window in samples 'PDI-WS-T07-1901', 'PDI-WS-T01-1902' and 'PDI-WS-T02-1902' (AXYS IDs: L30772-5, -6, & -7, respectively). However, all congeners were determined to be present based on a detailed inspection of sample and calibration chromatogram patterns.

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
PDI-RB-XD-190127
Sample Collection:
27-Jan-2019 15:50

SGS AXYS ANALYTICAL SERVICES
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Project No.	PORTLAND HARBOR PDI AND BASELINE WATER		
Contract No.:	4972	**Lab Sample I.D.:**	L30772-1
Matrix:	XAD	**Sample Size:**	1 sample
Sample Receipt Date:	22-Feb-2019	**Initial Calibration Date:**	15-Jan-2019
Extraction Date:	07-Mar-2019	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Mar-2019 **Time:** 03:11:29	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB9C_116 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB9C_116 S: 7
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB9C_116 S: 1
Concentration Units:	pg/sample		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1			198	1.22 (S)	3.19	1.001
3-MoCB	2			34.5	1.18 (S)	3.23	0.988
4-MoCB	3			146	1.26 (S)	3.30	1.001
2,2'-DiCB	4			107	3.00 (S)	1.76	1.001
2,3-DiCB	5		U		2.17 (S)		
2,3'-DiCB	6			20.5	1.94 (S)	1.50	1.175
2,4-DiCB	7			12.7	1.98 (S)	1.46	1.158
2,4'-DiCB	8			85.9	1.77 (S)	1.55	1.207
2,5-DiCB	9			8.29	1.87 (S)	1.44	1.145
2,6-DiCB	10		K J	3.74	1.86 (S)	2.53	1.013
3,3'-DiCB	11			145	2.15 (S)	1.74	0.969
3,4-DiCB	12	12 + 13	C K	8.17	2.16 (S)	2.74	0.984
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		2.05 (S)		
4,4'-DiCB	15			28.2	2.63 (S)	1.58	1.001
2,2',3-TriCB	16			17.0	0.840 (Q)	1.18	1.166
2,2',4-TriCB	17			70.1	0.840 (Q)	1.00	1.138
2,2',5-TriCB	18	18 + 30	C	39.0	0.840 (Q)	1.09	1.113
2,2',6-TriCB	19		K	12.9	0.840 (Q)	0.65	1.000
2,3,3'-TriCB	20	20 + 28	C	56.7	0.840 (Q)	1.00	0.847
2,3,4-TriCB	21	21 + 33	C	245	0.840 (Q)	1.01	0.854
2,3,4'-TriCB	22		K	17.3	0.840 (Q)	0.78	0.872
2,3,5-TriCB	23		U		0.840 (Q)		
2,3,6-TriCB	24		K J	0.883	0.840 (Q)	0.59	1.159
2,3',4-TriCB	25			219	0.840 (Q)	1.02	0.824
2,3',5-TriCB	26	26 + 29	C	8.58	0.840 (Q)	1.04	1.303
2,3',6-TriCB	27		K J	5.73	0.840 (Q)	0.73	1.152
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			36.9	0.840 (Q)	1.01	0.836
2,4',6-TriCB	32			13.2	0.840 (Q)	0.91	1.198
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		U		0.840 (Q)		
3,3',4-TriCB	35		J	3.80	0.840 (Q)	0.98	0.985
3,3',5-TriCB	36		K J	4.96	0.840 (Q)	1.45	0.933
3,4,4'-TriCB	37		K	10.4	0.853 (S)	1.41	1.001
3,4,5-TriCB	38		U		0.840 (Q)		
3,4',5-TriCB	39		J	4.73	0.840 (Q)	1.02	0.945