



Corporate Accreditation No 63
Accredited for compliance with ISO/IEC 17025 - Testing



Analytical Report 291 878

Issue Date: 30/09/2023
Issued By : Sydney Water Laboratory Services

Delivery Address: Sydney Water Corporation
51 Hermitage Rd
West Ryde NSW 2114
Telephone: (02) 9800 6935
Email: analyticalservices@sydneywater.com.au

Attention: Victor Papierniak-Wojtowicz
Customer: Cobar Shire Council
Customer ID: ZCSC

Address: PO Box 223, Cobar NSW 2835
Telephone: 6836 5800
Email: victor.papierniak@cobar.nsw.gov.au

CONTENTS

1. Sydney Water Approved Signatory
2. Sample Summary
3. Analytical results
4. Comments
5. Laboratory QC results

Sydney Water Approved Signatory

Abhilasha Bhandari, Organics Analyst

Where a result is required to meet a compliance limit or specification the associated uncertainty must be considered. Uncertainty estimates are available for all accredited test results.

SAMPLE SUMMARY

<u>Client Sample ID</u>	<u>Sample Number</u>	<u>Sampling Procedure</u>	<u>Date Sampled</u>	<u>Date Received</u>	<u>Date Authorised</u>	<u>Description</u>
COBAR STP 1	L23072732	1	06/09/2023	07/09/2023	29/09/2023	(WW)
COBAR STP 2	L23072733	1	06/09/2023	07/09/2023	28/09/2023	(WW)
COBAR STP 3	L23072734	1	06/09/2023	07/09/2023	28/09/2023	(WW)
COBAR STP 4	L23072735	1	06/09/2023	07/09/2023	28/09/2023	(WW)
COBAR STP 5	L23072736	1	06/09/2023	07/09/2023	28/09/2023	(WW)
COBAR STP 6	L23072737	1	06/09/2023	07/09/2023	29/09/2023	(WW)

Sampling procedures

- 1 Samples analysed as received.
- 2 Samples collected as per FS procedures SAWI 070, Excluding Oil & Grease which is collected as per clients instructions.
- 3 Samples collected as per FS procedures SAWI 070.
- 4 Results reported as received from WNSW.

ANALYTICAL RESULTS

Client Sample ID		COBAR STP 1	COBAR STP 2	COBAR STP 3	COBAR STP 4	COBAR STP 5	COBAR STP 6		
Sampled Date		06/09/2023 07:20:00 AM	06/09/2023 07:25:00 AM	06/09/2023 07:30:00 AM	06/09/2023 07:33:00 AM	06/09/2023 07:38:00 AM	06/09/2023 07:40:00 AM		
Sample Number		L23072732	L23072733	L23072734	L23072735	L23072736	L23072737		
ORGANICS									
TC0050WLL : Pharmaceutical and Estrogenic Coumpounds									
Caffeine	ng/L	<10	<10	13	282	306	286		
Atenolol	ng/L	<5	<5	<5	7	<5	6		
Carbamazepine	ng/L	82	69	109	324	443	349		
Dilantin	ng/L	<5	<5	<5	<5	<5	<5		
Ibuprofen	ng/L	<10	<10	<10	<10	<10	<10		
Naproxen	ng/L	<10	<10	<10	<10	<10	<10		
TCEP	ng/L	<10	<10	<10	28	19	28		
Estrone	ng/L	<5	<5	<5	<5	<5	<5		
Estriol	ng/L	<5	<5	<5	<5	<5	<5		
Ethinylestradiol	ng/L	<5	<5	<5	<5	<5	<5		
Mestranol	ng/L	<10	<10	<10	<10	<10	<10		
b-Estradiol	ng/L	<10	<10	<10	<10	<10	<10		

Client Sample ID		COBAR STP 1	COBAR STP 2	COBAR STP 3	COBAR STP 4	COBAR STP 5	COBAR STP 6		
Sampled Date		06/09/2023 07:20:00 AM	06/09/2023 07:25:00 AM	06/09/2023 07:30:00 AM	06/09/2023 07:33:00 AM	06/09/2023 07:38:00 AM	06/09/2023 07:40:00 AM		
Sample Number		L23072732	L23072733	L23072734	L23072735	L23072736	L23072737		
ORGANICS									
TC0050WLL : Pharmaceutical and Estrogenic Coumpounds(Continued)									
4-acetamidophenol	ng/L	<5	<5	<5	<5	25	<5		
Atorvastatin	ng/L	<10	<10	<10	<10	<10	<10		
Diclofenac	ng/L	<10	<10	<10	<10	<10	<10		
Fluoxetine	ng/L	<5	<5	<5	<5	<5	<5		
Gemfibrozil	ng/L	<10	<10	<10	33	31	35		
Ketoprofen	ng/L	<10	<10	<10	<10	<10	<10		
Triclosan	ng/L	<10	<10	<10	<10	<10	<10		
Trimethoprim	ng/L	<5	<5	<5	33	43	34		
Date of Performance	DD/MM/YY	20/09/23	20/09/23	20/09/23	20/09/23	20/09/23	20/09/23		

COMMENTS

LABORATORY QC RESULTS

N/A - Not Applicable

PQL - Practical Quantitation Limit

LOQ - Limit of Quantification

RPD - Relative Percent Difference

SPIKE/Positive Control - Addition of a known amount and concentration

Duplicate Precision = Accepted - Result 2 within 95% confidence limits of result 1

Duplicate Precision = Outlier - Result 2 outside 95% confidence limits of result 1

Duplicate Precision = Not calculated - Result is outside test range

LOQ	Blank	Control <i>Acceptance Criteria</i>	Spike <i>Acceptance Criteria</i>	Duplicate1	Duplicate2	RPD <i>Acceptance Criteria</i>
TC0050WLL 4-acetamidophenol						
<5 ng/L	<5	99 70.0 - 130.0 ng/L	46 % Recovery 30.0 - 150.0 % Recovery	<5	<5	B 0.0 - 0.0 %
TC0050WLL Atenolol						
<5 ng/L	<5	101 70.0 - 130.0 ng/L	94 % Recovery 30.0 - 150.0 % Recovery	<5	<5	B 0.0 - 0.0 %
TC0050WLL b-Estradiol						
<10 ng/L	<10	95 70.0 - 130.0 ng/L	70 % Recovery 30.0 - 150.0 % Recovery	<10	<10	B 0.0 - 0.0 %
TC0050WLL Caffeine						
<10 ng/L	<10	100 70.0 - 130.0 ng/L	96 % Recovery 30.0 - 150.0 % Recovery	<10	<10	B 0.0 - 0.0 %
TC0050WLL Carbamazepine						
<5 ng/L	<5	108 70.0 - 130.0 ng/L	93 % Recovery 30.0 - 150.0 % Recovery	82	70	15.79 % 0.0 - 50.0 %
TC0050WLL Diclofenac						
<10 ng/L	<10	101 70.0 - 130.0 ng/L	77 % Recovery 30.0 - 150.0 % Recovery	<10	<10	B 0.0 - 0.0 %

LOQ	Blank	Control <i>Acceptance Criteria</i>	Spike <i>Acceptance Criteria</i>	Duplicate1	Duplicate2	RPD <i>Acceptance Criteria</i>
TC0050WLL Dilantin						
<5 ng/L	<5	106 <i>70.0 - 130.0 ng/L</i>	94 % Recovery <i>30.0 - 150.0 % Recovery</i>	<5	<5	B <i>0.0 - 0.0 %</i>
TC0050WLL Estriol						
<5 ng/L	<5	97 <i>70.0 - 130.0 ng/L</i>	87 % Recovery <i>30.0 - 150.0 % Recovery</i>	<5	<5	B <i>0.0 - 0.0 %</i>
TC0050WLL Estrone						
<5 ng/L	<5	98 <i>70.0 - 130.0 ng/L</i>	76 % Recovery <i>30.0 - 150.0 % Recovery</i>	<5	<5	B <i>0.0 - 0.0 %</i>
TC0050WLL Ethynylestradiol						
<5 ng/L	<5	92 <i>70.0 - 130.0 ng/L</i>	72 % Recovery <i>30.0 - 150.0 % Recovery</i>	<5	<5	B <i>0.0 - 0.0 %</i>
TC0050WLL Fluoxetine						
<5 ng/L	<5	100 <i>70.0 - 130.0 ng/L</i>	48 % Recovery <i>30.0 - 150.0 % Recovery</i>	<5	<5	B <i>0.0 - 0.0 %</i>
TC0050WLL Gemfibrozil						
<10 ng/L	<10	90 <i>70.0 - 130.0 ng/L</i>	<10 % Recovery <i>30.0 - 150.0 % Recovery</i>	<10	<10	B <i>0.0 - 0.0 %</i>
TC0050WLL Ibuprofen						
<10 ng/L	<10	100 <i>70.0 - 130.0 ng/L</i>	109 % Recovery <i>30.0 - 150.0 % Recovery</i>	<10	<10	B <i>0.0 - 0.0 %</i>

LOQ	Blank	Control <i>Acceptance Criteria</i>	Spike <i>Acceptance Criteria</i>	Duplicate1	Duplicate2	RPD <i>Acceptance Criteria</i>
TC0050WLL Ketoprofen						
<10 ng/L	<10	102 <i>70.0 - 130.0 ng/L</i>	44 % Recovery <i>30.0 - 150.0 % Recovery</i>	<10	<10	B <i>0.0 - 0.0 %</i>
TC0050WLL Mestranol						
<10 ng/L	<10	107 <i>70.0 - 130.0 ng/L</i>	<10 % Recovery <i>30.0 - 150.0 % Recovery</i>	<10	<10	B <i>0.0 - 0.0 %</i>
TC0050WLL Naproxen						
<10 ng/L	<10	105 <i>70.0 - 130.0 ng/L</i>	94 % Recovery <i>30.0 - 150.0 % Recovery</i>	<10	<10	B <i>0.0 - 0.0 %</i>
TC0050WLL TCEP						
<10 ng/L	<10	88 <i>70.0 - 130.0 ng/L</i>	<10 % Recovery <i>30.0 - 150.0 % Recovery</i>	<10	<10	B <i>0.0 - 0.0 %</i>
TC0050WLL Triclosan						
<10 ng/L	<10	104 <i>70.0 - 130.0 ng/L</i>	<10 % Recovery <i>30.0 - 150.0 % Recovery</i>	<10	<10	B <i>0.0 - 0.0 %</i>
TC0050WLL Trimethoprim						
<5 ng/L	<5	104 <i>70.0 - 130.0 ng/L</i>	79 % Recovery <i>30.0 - 150.0 % Recovery</i>	<5	<5	B <i>0.0 - 0.0 %</i>

Extra Note:

DUPLICATE 4-acetamidophenol B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ
DUPLICATE Atenolol B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ
DUPLICATE b-Estradiol B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ
DUPLICATE Caffeine B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ
DUPLICATE Diclofenac B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ
DUPLICATE Dilantin B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ
DUPLICATE Estriol B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ
DUPLICATE Estrone B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ
DUPLICATE Ethynylestradiol B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ
DUPLICATE Fluoxetine B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ
DUPLICATE Gemfibrozil B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ
DUPLICATE Ibuprofen B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ
DUPLICATE Ketoprofen B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ
DUPLICATE Mestranol B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ
DUPLICATE Naproxen B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ
DUPLICATE TCEP B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ
DUPLICATE Triclosan B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ
DUPLICATE Trimethoprim B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ