Tech Support

Software version:	2.5.2
User name:	UTESE
Time and Date:	2025-08-21 12:55:42
Tray number:	6
Tray name:	COMPASS_RootExclusion_MonMon_NUTR_Apr-May2024

Sulfate

Calibration data

ID	Absorbance	Calc mg SO4/L	Target mg SO4/L	% Error
S1	0.0019	-0.23	0.00	
S90	0.0260	4.42	4.00	10.5683
S91	0.0776	11.99	12.00	-0.0887
S92	0.0996	15.68	16.00	-1.9916
S93	0.1186	19.77	20.00	-1.1417
S94	0.1338	23.95	24.00	-0.2232
S95	0.1464	28.14	28.00	0.4899
S96	0.1586	32.96	32.00	2.9941
S97	0.1721	39.33	40.00	-1.6807
S0	0.0021	-0.19	0.00	

Calibration status

Polynomial order	3
Correlation coefficient	0.9993
RSE (%)	5.68
Carryover(%)	0.1
Calibration equation	y = dx^3 + cx^2 + bx + a
y =	Concentration mg SO4/L
x =	Measured absorbance
a =	-6.803659E-01
b =	2.321813E+02
c =	-1.619833E+03
d =	9.417296E+03
Original Date & Time	2025-08-20 16:00:02

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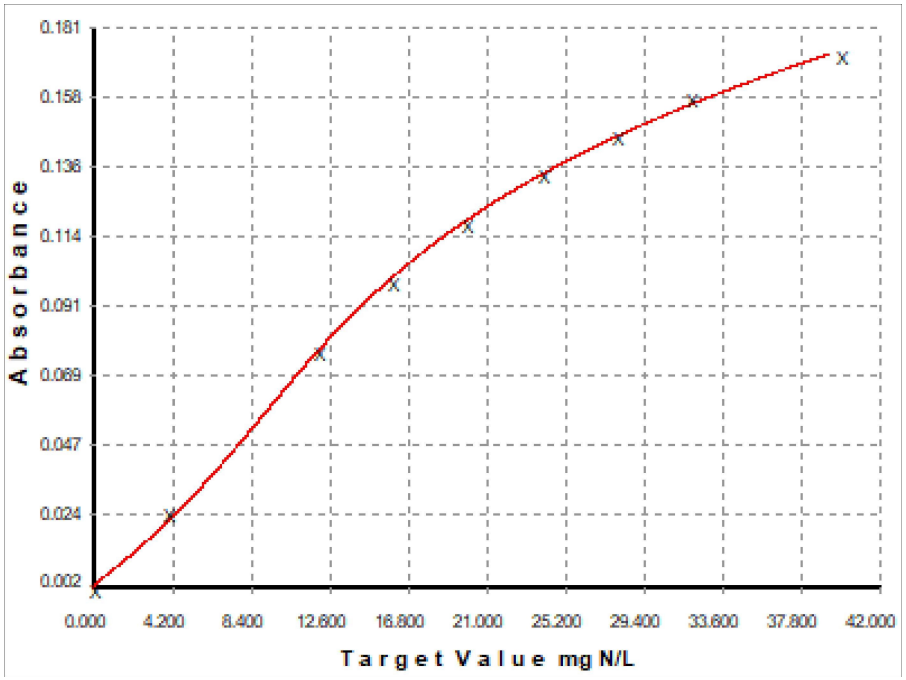
Calibration graph



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Reagents

Number	Reagent name	Batch number	User	Expiry date
4	Turbidimetric reagent (sulfate)		seal	
39	DI Water (Blank)		UTESE	

Test results

Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
	S1	Standard 1		0.00	mg SO4/L	0.001946				UTESE	2025-08-20 15:56:15
	S90	Standard 90		0.03	mg SO4/L	0.025975				UTESE	2025-08-20 15:56:40
	S91	Standard 91		0.08	mg SO4/L	0.077640				UTESE	2025-08-20 15:57:05
	S92	Standard 92		0.10	mg SO4/L	0.099604				UTESE	2025-08-20 15:57:30
	S93	Standard 93		0.12	mg SO4/L	0.118558				UTESE	2025-08-20 15:57:56
	S94	Standard 94		0.13	mg SO4/L	0.133807				UTESE	2025-08-20 15:58:21
	S95	Standard 95		0.15	mg SO4/L	0.146385				UTESE	2025-08-20 15:58:46
	S96	Standard 96		0.16	mg SO4/L	0.158577				UTESE	2025-08-20 15:59:11
	S97	Standard 97		0.17	mg SO4/L	0.172146				UTESE	2025-08-20 15:59:37
	S0	Standard 0		0.00	mg SO4/L	0.002145				UTESE	2025-08-20 16:00:02
	CCV	CCV		16.26	mg SO4/L	0.102205				UTESE	2025-08-20 16:00:27
	CCB	CCB		0.04	mg SO4/L	0.002217				UTESE	2025-08-20 16:00:53
11	U1	1_1_R34_4192024_ch1_trC_cm		10.03	mg SO4/L	0.060683				UTESE	2025-08-20 16:01:18
12	U2	1_2_R35_4192024_ch2_trC_cm		3.23	mg SO4/L	0.016666				UTESE	2025-08-20 16:01:44
13	U3	1_3_R36_4192024_ch3_trC_cm		4.19	mg SO4/L	0.021741				UTESE	2025-08-20 16:02:09
14	U4	1_4_R37_4192024_ch4_trC_cm		2.65	mg SO4/L	0.013816				UTESE	2025-08-20 16:02:34
15	U5	1_5_R38_4192024_ch5_trE_cm		4.00	mg SO4/L	0.020688				UTESE	2025-08-20 16:02:59
16	U6	1_6_R39_4192024_ch6_trE_cm		6.95	mg SO4/L	0.038455				UTESE	2025-08-20 16:03:25
17	U7	1_7_R40_4192024_ch7_trE_cm		3.81	mg SO4/L	0.019680				UTESE	2025-08-20 16:03:50
18	U8	1_8_R41_4192024_ch8_trE_cm		1.98	mg SO4/L	0.010620				UTESE	2025-08-20 16:04:15
19	U9	1_9_R42_5022024_ch1_trC_cm		2.41	mg SO4/L	0.012656				UTESE	2025-08-20 16:04:41
20	U10	1_10_R43_5022024_ch2		5.06	mg SO4/L	0.004142			x10.0000	UTESE	2025-08-20 16:05:06

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Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
21	U11	1_11_R44_5022024_ch3_trC_cm		3.51	mg SO4/L	0.018135				UTESE	2025-08-20 16:06:23
22	U12	1_12_R45_5022024_ch4_trC_cm		2.46	mg SO4/L	0.012889				UTESE	2025-08-20 16:06:48
23	U13	1_13_R46_5022024_ch5_trE_cm		3.80	mg SO4/L	0.019626				UTESE	2025-08-20 16:07:14
24	U14	1_14_R47_5022024_ch7_trE_cm		3.28	mg SO4/L	0.016951				UTESE	2025-08-20 16:07:39
25	U15	1_15_R48_5102024_ch1_trC_cm		4.87	mg SO4/L	0.025510				UTESE	2025-08-20 16:08:04
26	U16	1_16_R49_5102024_ch2_trC_cm		4.10	mg SO4/L	0.021210				UTESE	2025-08-20 16:08:29
27	U17	1_17_R50_5102024_ch3_trC_cm		4.96	mg SO4/L	0.026063				UTESE	2025-08-20 16:08:55
28	U18	1_18_R51_5102024_ch4_trC_cm		3.97	mg SO4/L	0.020520				UTESE	2025-08-20 16:09:20
29	U19	1_19_R52_5102024_ch5_trE_cm		8.00	mg SO4/L	0.005385			x10.0000	UTESE	2025-08-20 16:09:45
30	U20	1_20_R53_5102024_ch6_trE_cm		3.00	mg SO4/L	0.003284			x10.0000	UTESE	2025-08-20 16:10:10
	CCV	CCV		15.89	mg SO4/L	0.100212				UTESE	2025-08-20 16:10:35
	CCB	CCB		0.04	mg SO4/L	0.002240				UTESE	2025-08-20 16:11:02
31	U21	1_21_R54_5102024_ch7_trE_cm		2.88	mg SO4/L	0.014918				UTESE	2025-08-20 16:11:28
32	U22	1_22_R55_5102024_ch8_trE_cm		3.78	mg SO4/L	0.019539				UTESE	2025-08-20 16:11:53
33	U23	1_23_R56_5152024_ch1_trC_cm		4.52	mg SO4/L	0.023549				UTESE	2025-08-20 16:12:19
34	U24	1_24_R57_5152024_ch2_trC_cm		3.75	mg SO4/L	0.019364				UTESE	2025-08-20 16:12:44
35	U25	1_25_R58_5152024_ch3_trC_cm		6.29	mg SO4/L	0.004656			x10.0000	UTESE	2025-08-20 16:13:09
36	U26	1_26_R59_5152024_ch4_trC_cm		4.56	mg SO4/L	0.023759				UTESE	2025-08-20 16:13:34
37	U27	1_27_R60_5152024_ch5_trE_cm		5.41	mg SO4/L	0.028710				UTESE	2025-08-20 16:13:59
38	U28	1_28_R61_5152024_ch6_trE_cm		5.98	mg SO4/L	0.032194				UTESE	2025-08-20 16:14:25

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Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
39	U29	1_29_R62_5152024_ch7_trE_cm		4.00	mg SO4/L	0.020680				UTESE	2025-08-20 16:14:50
40	U30	1_30_R63_5222024_ch1_trC_cm		5.10	mg SO4/L	0.026824				UTESE	2025-08-20 16:15:15
	CCV	CCV		15.82	mg SO4/L	0.099788				UTESE	2025-08-20 16:15:40
	CCB	CCB		0.01	mg SO4/L	0.002081				UTESE	2025-08-20 16:16:07
41	U31	1_31_R64_5222024_ch2_trC_cm		4.65	mg SO4/L	0.024288				UTESE	2025-08-20 16:16:33
42	U32	1_32_R65_5222024_ch3_trC_cm		4.43	mg SO4/L	0.023031				UTESE	2025-08-20 16:16:58
43	U33	1_33_R66_5222024_ch4_trC_cm		4.58	mg SO4/L	0.023903				UTESE	2025-08-20 16:17:24
44	U34	1_34_R67_5222024_ch5_trE_cm		3.76	mg SO4/L	0.019398				UTESE	2025-08-20 16:17:49
45	U35	1_35_R68_5222024_ch6_trE_cm		6.05	mg SO4/L	0.032580				UTESE	2025-08-20 16:18:14
46	U36	1_36_R69_5222024_ch7_trE_cm		4.69	mg SO4/L	0.024494				UTESE	2025-08-20 16:18:39
47	U37	1_37_R70_5222024_ch8_trE_cm		3.03	mg SO4/L	0.015648				UTESE	2025-08-20 16:19:05
48	U38	1_38_R71_5292024_ch1_trC_cm		2.79	mg SO4/L	0.014499				UTESE	2025-08-20 16:19:30
49	U39	1_39_R72_5292024_ch2_trC_cm		6.11	mg SO4/L	0.032977				UTESE	2025-08-20 16:19:56
50	U40	1_40_R73_5292024_ch3_trC_cm		4.83	mg SO4/L	0.025293				UTESE	2025-08-20 16:20:21
	CCV	CCV		15.80	mg SO4/L	0.099689				UTESE	2025-08-20 16:20:46
	CCB	CCB		0.10	mg SO4/L	0.002472				UTESE	2025-08-20 16:21:12
51	U41	1_41_R74_5292024_ch4_trC_cm		7.36	mg SO4/L	0.041240				UTESE	2025-08-20 16:21:38
52	U42	1_42_R75_5292024_ch5_trE_cm		4.61	mg SO4/L	0.003952			x10.0000	UTESE	2025-08-20 16:22:03
53	U43	1_43_R76_5292024_ch6_trE_cm		7.95	mg SO4/L	0.045360				UTESE	2025-08-20 16:22:28
54	U44	1_44_R77_5292024_ch7_trE_cm		6.37	mg SO4/L	0.034612				UTESE	2025-08-20 16:22:53

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Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
55	U45	1_45_R78_5292024_ch8_trE_cm		2.65	mg SO4/L	0.013807				UTESE	2025-08-20 16:23:17
56	U46	1_46_R79_5292024_ch_trStream_cm		2.93	mg SO4/L	0.015156				UTESE	2025-08-20 16:23:42
	CCV	CCV		15.84	mg SO4/L	0.099897				UTESE	2025-08-20 16:24:07
	CCB	CCB		0.05	mg SO4/L	0.002255				UTESE	2025-08-20 16:24:33

Test parameters Sulfate

Test number	2		
Long test name	Sulfate	**Short test name**	SO4
Units	mg SO4/L	**Decimal places**	2
Test type	End Point		

Main parameters

Sample volume	400	**Water volume**	0	**Number of mixes**	2
Cuvette primes	2	**Cuvette washes**	2	**Baseline on wash**	Yes
Cadmium volume	0	**Reduction time**	10	**Diluent location**	Reagent 24

Math parameters

Reaction time	270	**Wavelength**	405nm	**Polynomial order**	3
Repeat delta check	0.250	**Manual dilution factor**	0.000		
Auto dilution factor 1	1.000	**Auto dilution factor 2**	0.000	**Auto dilution factor 3**	0.000
Linearity Low	0.0019	**Linearity High**	0.1721	**Latest Slope**	1.0000
Alert Low	0.000	**Alert High**	0.000	**Latest Intercept**	0.0000

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Reagent parameters

Number of reagents 1

Reagent	Name	Volume	Delay	Replaced in blank
1	Turbidimetric reagent (sul200)		0	Yes

Standards

Auto Std. Number	8	**Auto Std. Concentration**	40.0000	**Exclude the Blank**	No
Auto Std. Position	Cup 5	**Standard 1 (Blank) Position**	Reagent 24	**Correlation limit**	0.9980

Standard	Value	Standard	Value	Auto Standard	Percentage	Value
1	0.0000			S90	10.0000	4.0000
				S91	30.0000	12.0000
				S92	40.0000	16.0000
				S93	50.0000	20.0000
				S94	60.0000	24.0000
				S95	70.0000	28.0000
				S96	80.0000	32.0000
				S97	100.0000	40.0000

QC PRO

Control	Low value	High value	Location	Frequency	Start before
CCV	16.0000	24.0000	Reagent 11	10	1
CCB	-0.8000	0.8000	Reagent 24	10	1

Control	%% (+ \ -)	Stock Conc.	Spike added	Location
DUP	0.0000			
SPKA	0.0000	0.0000	0.0000	Cup 105
SPKM	0.0000		0.0000	
SPKD	0.0000			

Advanced parameters

Set diagnostic slope & intercept	No	**Extra debubble action**	Yes
Eliminate air from transfer	No	**Eliminate air from cuvette wash**	No
Extra aspiration steps	0	**Smart dilution**	No
Extra wash	Yes	**Separate waste**	Yes
Slow aspiration	No	**Diluent preparation order**	Reagent first

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Diagnostics

Cup	Type	Result	Absorbance	T	W
	S1	0.00	0.001946	0.004914	0.002967
	S90	0.03	0.025975	0.028929	0.002954
	S91	0.08	0.077640	0.080672	0.003031
	S92	0.10	0.099604	0.102738	0.003134
	S93	0.12	0.118558	0.121625	0.003067
	S94	0.13	0.133807	0.136968	0.003161
	S95	0.15	0.146385	0.149618	0.003233
	S96	0.16	0.158577	0.161964	0.003387
	S97	0.17	0.172146	0.175713	0.003567
	S0	0.00	0.002145	0.005678	0.003533
	CCV	16.26	0.102205	0.105693	0.003488
	CCB	0.04	0.002217	0.005667	0.003450
11	U1	10.03	0.060683	0.064538	0.003855
12	U2	3.23	0.016666	0.020506	0.003840
13	U3	4.19	0.021741	0.025609	0.003868
14	U4	2.65	0.013816	0.017616	0.003801
15	U5	4.00	0.020688	0.024477	0.003789
16	U6	6.95	0.038455	0.042260	0.003805
17	U7	3.81	0.019680	0.023521	0.003841
18	U8	1.98	0.010620	0.014434	0.003813
19	U9	2.41	0.012656	0.016470	0.003814
20x10.000	U10	5.06	0.004143	0.007559	0.003416
	CCV	16.19	0.101843	0.105302	0.003459
	CCB	0.02	0.002146	0.005658	0.003512
21	U11	3.51	0.018135	0.021982	0.003847
22	U12	2.46	0.012889	0.016756	0.003867
23	U13	3.80	0.019626	0.023545	0.003918
24	U14	3.28	0.016951	0.020833	0.003882

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Cup	Type	Result	Absorbance	T	W
25	U15	4.87	0.025510	0.029462	0.003952
26	U16	4.10	0.021210	0.025170	0.003960
27	U17	4.96	0.026063	0.029999	0.003936
28	U18	3.97	0.020520	0.024446	0.003926
29x10.000	U19	8.00	0.005385	0.008977	0.003592
30x10.000	U20	3.00	0.003284	0.006854	0.003569
	CCV	15.89	0.100212	0.103836	0.003624
	CCB	0.04	0.002240	0.005861	0.003621
31	U21	2.88	0.014918	0.018809	0.003891
32	U22	3.78	0.019539	0.023446	0.003907
33	U23	4.52	0.023549	0.027480	0.003932
34	U24	3.75	0.019364	0.023363	0.003999
35x10.000	U25	6.29	0.004656	0.008304	0.003648
36	U26	4.56	0.023759	0.027675	0.003916
37	U27	5.41	0.028710	0.032652	0.003942
38	U28	5.98	0.032194	0.036186	0.003992
39	U29	4.00	0.020680	0.024702	0.004022
40	U30	5.10	0.026824	0.030812	0.003988
	CCV	15.82	0.099788	0.103377	0.003588

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Cup	Type	Result	Absorbance	T	W
	CCB	0.01	0.002081	0.005631	0.003549
41	U31	4.65	0.024288	0.028241	0.003953
42	U32	4.43	0.023031	0.027053	0.004023
43	U33	4.58	0.023903	0.027913	0.004010
44	U34	3.76	0.019398	0.023415	0.004017
45	U35	6.05	0.032580	0.036571	0.003992
46	U36	4.69	0.024494	0.028542	0.004048
47	U37	3.03	0.015648	0.019693	0.004045
48	U38	2.79	0.014499	0.018571	0.004072
49	U39	6.11	0.032977	0.036976	0.003999
50	U40	4.83	0.025293	0.029263	0.003969
	CCV	15.80	0.099689	0.103353	0.003664
	CCB	0.10	0.002472	0.006098	0.003627
51	U41	7.36	0.041240	0.045287	0.004047
52x10.000	U42	4.61	0.003952	0.007654	0.003702
53	U43	7.95	0.045360	0.049333	0.003973
54	U44	6.37	0.034612	0.038613	0.004000
55	U45	2.65	0.013807	0.017856	0.004049
56	U46	2.93	0.015156	0.019284	0.004128
	CCV	15.84	0.099897	0.103659	0.003762

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Cup	Type	Result	Absorbance	T	W
	CCB	0.05	0.002255	0.005950	0.003695

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Nitrate (NOx)

Calibration data

ID	Absorbance	Calc mg N/L	Target mg N/L	% Error
S1	0.0559	-0.0026	0.0000	
S90	0.0655	0.0094	0.0111	-15.0505
S91	0.0728	0.0187	0.0222	-15.8938
S92	0.0945	0.0459	0.0444	3.2925
S93	0.0966	0.0485	0.0500	-3.0765
S94	0.1371	0.0992	0.1000	-0.7951
S95	0.2114	0.1924	0.2000	-3.7952
S96	0.3077	0.3131	0.3000	4.3622
S97	0.4497	0.4911	0.5000	-1.7831
S98	0.6876	0.7893	0.7500	5.2342
S99	0.8340	0.9728	1.0000	-2.7204
S0	0.0613	0.0042	0.0000	

Calibration status

Polynomial order	1
Correlation coefficient	0.9989
RSE (%)	8.45
Carryover(%)	0.7
Calibration equation	y = bx + a
y =	Concentration mg N/L
x =	Measured absorbance
a =	-7.260413E-02
b =	1.253470E+00
Original Date & Time	2025-08-20 14:33:16

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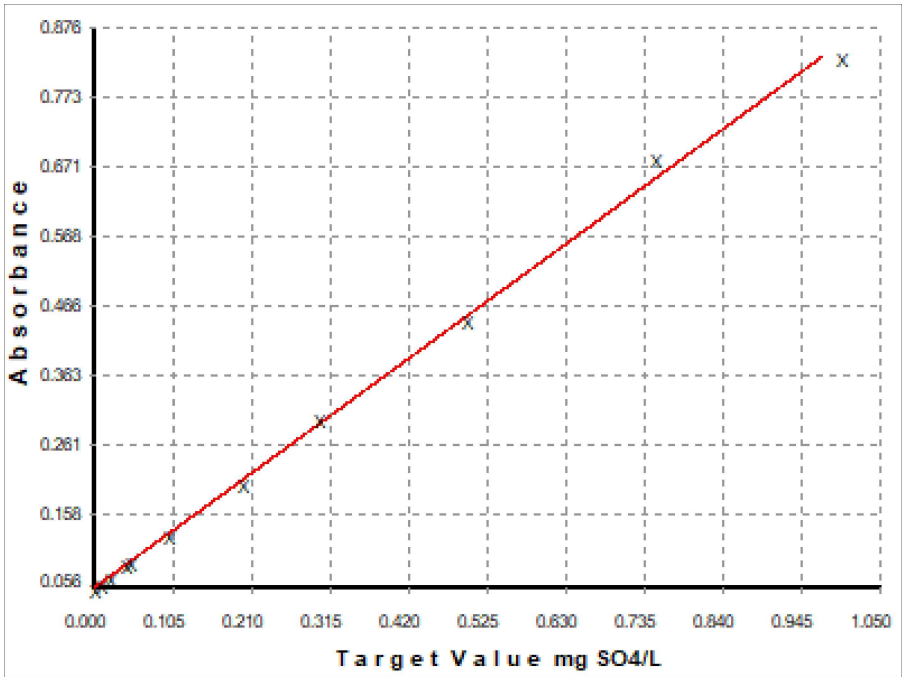
Calibration graph



Tech Support

Reagents

Number	Reagent name	Batch number	User	Expiry date
13	DI Water 2			
5	Working color reagent (nitrate)		UTESE	
39	DI Water (Blank)		UTESE	

Test results

Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
	S1	Standard 1		0.0559	mg N/L	0.055881				UTESE	2025-08-20 14:28:43
	S90	Standard 90		0.0655	mg N/L	0.065453				UTESE	2025-08-20 14:29:08
	S91	Standard 91		0.0728	mg N/L	0.072833				UTESE	2025-08-20 14:29:33
	S92	Standard 92		0.0945	mg N/L	0.094547				UTESE	2025-08-20 14:29:57
	S93	Standard 93		0.0966	mg N/L	0.096585				UTESE	2025-08-20 14:30:22
	S94	Standard 94		0.1371	mg N/L	0.137067				UTESE	2025-08-20 14:30:47
	S95	Standard 95		0.2114	mg N/L	0.211424				UTESE	2025-08-20 14:31:12
	S96	Standard 96		0.3077	mg N/L	0.307698				UTESE	2025-08-20 14:31:37
	S97	Standard 97		0.4497	mg N/L	0.449702				UTESE	2025-08-20 14:32:01
	S99	Standard 99		0.8340	mg N/L	0.834005				UTESE	2025-08-20 14:32:51
	S0	Standard 0		0.0613	mg N/L	0.061251				UTESE	2025-08-20 14:33:16
9	REF1	Nitrate Standard	1 ppm NO3	1.0194	mg N/L	0.853395				UTESE	2025-08-20 14:33:40
10	REF2	Nitrite Standard	1 ppm NO2	0.9742	mg N/L	0.818157	104.64			UTESE	2025-08-20 14:34:06
	CCV	CCV		0.0967	mg N/L	0.134267				UTESE	2025-08-20 14:34:31
	CCB	CCB		-0.0017	mg N/L	0.057556				UTESE	2025-08-20 14:34:56
11	U1	1_1_R34_4192024_ch1_trC_cm		-0.0006	mg N/L	0.058418				UTESE	2025-08-20 14:35:21
12	U2	1_2_R35_4192024_ch2_trC_cm		0.0218	mg N/L	0.075859				UTESE	2025-08-20 14:35:46
13	U3	1_3_R36_4192024_ch3_trC_cm		0.0253	mg N/L	0.078622				UTESE	2025-08-20 14:36:10
14	U4	1_4_R37_4192024_ch4_trC_cm		0.0034	mg N/L	0.061520				UTESE	2025-08-20 14:36:35
15	U5	1_5_R38_4192024_ch5_trE_cm		0.0008	mg N/L	0.059540				UTESE	2025-08-20 14:37:00
16	U6	1_6_R39_4192024_ch6_trE_cm		0.1291	mg N/L	0.159473				UTESE	2025-08-20 14:37:25
17	U7	1_7_R40_4192024_ch7_trE_cm		-0.0018	mg N/L	0.057512				UTESE	2025-08-20 14:37:49

Tech Support

Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
18	U8	1_8_R41_4192024_ch8_trE_cm		0.0080	mg N/L	0.065088				UTESE	2025-08-20 14:38:14
19	U9	1_9_R42_5022024_ch1_trC_cm		0.0043	mg N/L	0.062234				UTESE	2025-08-20 14:38:39
20	U10	1_10_R43_5022024_ch2_trC_cm		0.0272	mg N/L	0.061006			x10.0000	UTESE	2025-08-20 14:39:04
	CCV	CCV		0.0861	mg N/L	0.125996				UTESE	2025-08-20 14:39:28
	CCB	CCB		-0.0020	mg N/L	0.057336				UTESE	2025-08-20 14:39:54
21	U11	1_11_R44_5022024_ch3_trC_cm		0.0163	mg N/L	0.071586				UTESE	2025-08-20 14:40:19
22	U12	1_12_R45_5022024_ch4_trC_cm		0.0126	mg N/L	0.068736				UTESE	2025-08-20 14:40:44
23	U13	1_13_R46_5022024_ch5_trE_cm		-0.0019	mg N/L	0.057418				UTESE	2025-08-20 14:41:09
24	U14	1_14_R47_5022024_ch7_trE_cm		-0.0004	mg N/L	0.058564				UTESE	2025-08-20 14:41:33
25	U15	1_15_R48_5102024_ch1_trC_cm		0.1372	mg N/L	0.165817				UTESE	2025-08-20 14:41:58
26	U16	1_16_R49_5102024_ch2_trC_cm		0.0049	mg N/L	0.062725				UTESE	2025-08-20 14:42:23
27	U17	1_17_R50_5102024_ch3_trC_cm		-0.0001	mg N/L	0.058830				UTESE	2025-08-20 14:42:48
28	U18	1_18_R51_5102024_ch4_trC_cm		0.0014	mg N/L	0.059964				UTESE	2025-08-20 14:43:13
29	U19	1_19_R52_5102024_ch5_trE_cm		-0.0380	mg N/L	0.055925			x10.0000	UTESE	2025-08-20 14:43:37
30	U20	1_20_R53_5102024_ch6_trE_cm		0.2103	mg N/L	0.075276			x10.0000	UTESE	2025-08-20 14:44:02
	CCV	CCV		0.0851	mg N/L	0.125237				UTESE	2025-08-20 14:44:27
	CCB	CCB		-0.0034	mg N/L	0.056259				UTESE	2025-08-20 14:44:53
31	U21	1_21_R54_5102024_ch7_trE_cm		0.1336	mg N/L	0.163014				UTESE	2025-08-20 14:45:18
32	U22	1_22_R55_5102024_ch8_trE_cm		0.0943	mg N/L	0.132353				UTESE	2025-08-20 14:45:43
33	U23	1_23_R56_5152024_ch1_trC_cm		0.1834	mg N/L	0.201826				UTESE	2025-08-20 14:46:08

Tech Support

Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
34	U24	1_24_R57_5152024_ch2_trC_cm		0.0120	mg N/L	0.068260				UTESE	2025-08-20 14:46:33
35	U25	1_25_R58_5152024_ch3_trC_cm		-0.0254	mg N/L	0.056906			x10.0000	UTESE	2025-08-20 14:46:57
36	U26	1_26_R59_5152024_ch4_trC_cm		0.0120	mg N/L	0.068247				UTESE	2025-08-20 14:47:22
37	U27	1_27_R60_5152024_ch5_trE_cm		-0.0032	mg N/L	0.056426				UTESE	2025-08-20 14:47:47
38	U28	1_28_R61_5152024_ch6_trE_cm		0.1038	mg N/L	0.139789				UTESE	2025-08-20 14:48:12
39	U29	1_29_R62_5152024_ch7_trE_cm		-0.0012	mg N/L	0.057969				UTESE	2025-08-20 14:48:36
40	U30	1_30_R63_5222024_ch1_trC_cm		0.3010	mg N/L	0.293490				UTESE	2025-08-20 14:49:01
	CCV	CCV		0.0903	mg N/L	0.129267				UTESE	2025-08-20 14:49:26
	CCB	CCB		-0.0024	mg N/L	0.057043				UTESE	2025-08-20 14:49:52
41	U31	1_31_R64_5222024_ch2_trC_cm		0.1056	mg N/L	0.141181				UTESE	2025-08-20 14:50:18
42	U32	1_32_R65_5222024_ch3_trC_cm		-0.0021	mg N/L	0.057236				UTESE	2025-08-20 14:50:42
43	U33	1_33_R66_5222024_ch4_trC_cm		0.0087	mg N/L	0.065685				UTESE	2025-08-20 14:51:07
44	U34	1_34_R67_5222024_ch5_trE_cm		-0.0019	mg N/L	0.057403				UTESE	2025-08-20 14:51:32
45	U35	1_35_R68_5222024_ch6_trE_cm		0.6822	mg N/L	0.590589				UTESE	2025-08-20 14:51:59
46	U36	1_36_R69_5222024_ch7_trE_cm		0.0032	mg N/L	0.061349				UTESE	2025-08-20 14:52:24
47	U37	1_37_R70_5222024_ch8_trE_cm		0.0160	mg N/L	0.071335				UTESE	2025-08-20 14:52:51
48	U38	1_38_R71_5292024_ch1_trC_cm		0.0029	mg N/L	0.061162				UTESE	2025-08-20 14:53:16
49	U39	1_39_R72_5292024_ch2_trC_cm		0.1287	mg N/L	0.159203				UTESE	2025-08-20 14:53:43
50	U40	1_40_R73_5292024_ch3_trC_cm		-0.0007	mg N/L	0.058372				UTESE	2025-08-20 14:54:09

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Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
	CCV	CCV		0.0870	mg N/L	0.126722				UTESE	2025-08-20 14:54:36
	CCB	CCB		-0.0043	mg N/L	0.055516				UTESE	2025-08-20 14:55:05
51	U41	1_41_R74_5292024_ch4_trC_cm		0.0466	mg N/L	0.095215				UTESE	2025-08-20 14:55:32
52	U42	1_42_R75_5292024_ch5_trE_cm		-0.0266	mg N/L	0.056809			x10.0000	UTESE	2025-08-20 14:55:58
53	U43	1_43_R76_5292024_ch6_trE_cm		0.4893	mg N/L	0.440247				UTESE	2025-08-20 14:56:25
54	U44	1_44_R77_5292024_ch7_trE_cm		-0.0048 ELL	mg N/L	0.055117				UTESE	2025-08-20 14:56:50
55	U45	1_45_R78_5292024_ch8_trE_cm		0.0085	mg N/L	0.065519				UTESE	2025-08-20 14:57:17
56	U46	1_46_R79_5292024_ch_trStream_cm		3.1222	mg N/L	0.533363		x5.0000		UTESE	2025-08-20 19:18:38
56	U46	1_46_R79_5292024_ch_trStream_cm		0.0000		0.000000				UTESE	
57	REF1	Nitrate Standard	1 ppm NO3	1.0100	mg N/L	0.846085				UTESE	2025-08-20 14:58:10
58	REF2	Nitrite Standard	1 ppm NO2	0.9982	mg N/L	0.836886	101.18			UTESE	2025-08-20 14:58:38
	CCV	CCV		0.0938	mg N/L	0.131963				UTESE	2025-08-20 14:59:06
	CCB	CCB		-0.0033	mg N/L	0.056318				UTESE	2025-08-20 14:59:33

Test parameters Nitrate (NOx)

Test number	3		
Long test name	Nitrate (NOx)	**Short test name**	NOx_NO3
Units	mg N/L	**Decimal places**	4
Test type	End Point		

Main parameters

Sample volume	180	**Water volume**	0	**Number of mixes**	1
Cuvette primes	2	**Cuvette washes**	2	**Baseline on wash**	Yes
Cadmium volume	0	**Reduction time**	10	**Diluent location**	Reagent 24

Tech Support

Math parameters

Reaction time	1825	**Wavelength**	520nm	**Polynomial order**	1
Repeat delta check	0.250	**Manual dilution factor**	0.000		
Auto dilution factor 1	1.000	**Auto dilution factor 2**	0.000	**Auto dilution factor 3**	0.000
Linearity Low	0.0559	**Linearity High**	0.8340	**Latest Slope**	1.2535
Alert Low	0.000	**Alert High**	0.000	**Latest Intercept**	-0.0726

Reagent parameters

Number of reagents 2

Reagent	Name	Volume	Delay	Replaced in blank
1	DI Water 2	10	0	No
2	Working color reagent (nit310)		27	No

Standards

Auto Std. Number	10	**Auto Std. Concentration**	1.0000	**Exclude the Blank**	No
Auto Std. Position	Cup 3	**Standard 1 (Blank) Position**	Reagent 24	**Correlation limit**	0.9980

Standard	Value	Standard	Value	Auto Standard	Percentage	Value
1	0.0000			S90	1.1111	0.0111
				S91	2.2222	0.0222
				S92	4.4444	0.0444
				S93	5.0000	0.0500
				S94	10.0000	0.1000
				S95	20.0000	0.2000
				S96	30.0000	0.3000
				S97	50.0000	0.5000
				S98	75.0000	0.7500
				S99	100.0000	1.0000

Tech Support

QC PRO

Control	Low value	High value	Location	Frequency	Start before
CCV	0.4000	0.6000	Reagent 12	10	1
CCB	-0.0200	0.0200	Reagent 24	10	1
Control	**%% (+ \ -)**	**Stock Conc.**	**Spike added**	**Location**	
DUP	0.0000				
SPKA	0.0000	3.0000	0.2500	Cup 103	
SPKM	0.0000		0.0000		
SPKD	0.0000				

Advanced parameters

Set diagnostic slope & intercept	No	**Extra debubble action**	No
Eliminate air from transfer	No	**Eliminate air from cuvette wash**	No
Extra aspiration steps	0	**Smart dilution**	No
Extra wash	Yes	**Separate waste**	Yes
Slow aspiration	No	**Diluent preparation order**	Reagent first

Diagnostics

Cup	Type	Result	Absorbance	T	W
	S1	0.0559	0.055881	0.057876	0.001995
	S90	0.0655	0.065453	0.067414	0.001961
	S91	0.0728	0.072833	0.074765	0.001931
	S92	0.0945	0.094547	0.096423	0.001876
	S93	0.0966	0.096585	0.098519	0.001935
	S94	0.1371	0.137067	0.138911	0.001845
	S95	0.2114	0.211424	0.213274	0.001850
	S96	0.3077	0.307698	0.309552	0.001854
	S97	0.4497	0.449702	0.451578	0.001876
	S99	0.8340	0.834005	0.835916	0.001912
	S0	0.0613	0.061251	0.063150	0.001899
9	REF1	1.0194	0.853395	0.855283	0.001888
10	REF2	0.9742	0.818157	0.820092	0.001934
	CCV	0.0967	0.134267	0.136096	0.001830
	CCB	-0.0017	0.057556	0.059332	0.001776
11	U1	-0.0006	0.058418	0.060254	0.001836

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Cup	Type	Result	Absorbance	T	W
12	U2	0.0218	0.075859	0.077633	0.001774
13	U3	0.0253	0.078622	0.080443	0.001821
14	U4	0.0034	0.061520	0.063341	0.001822
15	U5	0.0008	0.059540	0.061427	0.001887
16	U6	0.1291	0.159473	0.161384	0.001911
17	U7	-0.0018	0.057512	0.059344	0.001832
18	U8	0.0080	0.065088	0.066918	0.001830
19	U9	0.0043	0.062234	0.064102	0.001868
20x10.000	U10	0.0272	0.061006	0.062856	0.001850
	CCV	0.0861	0.125996	0.127847	0.001851
	CCB	-0.0020	0.057336	0.059177	0.001841
21	U11	0.0163	0.071586	0.073498	0.001912
22	U12	0.0126	0.068736	0.070627	0.001891
23	U13	-0.0019	0.057418	0.059275	0.001857
24	U14	-0.0004	0.058564	0.060430	0.001866
25	U15	0.1372	0.165817	0.167651	0.001834
26	U16	0.0049	0.062725	0.064543	0.001818
27	U17	-0.0001	0.058830	0.060720	0.001890
28	U18	0.0014	0.059964	0.061818	0.001854

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Cup	Type	Result	Absorbance	T	W
29x10.00(	U19	-0.0380	0.055925	0.057734	0.001809
30x10.00(	U20	0.2103	0.075276	0.077208	0.001932
	CCV	0.0851	0.125237	0.127136	0.001899
	CCB	-0.0034	0.056259	0.058119	0.001860
31	U21	0.1336	0.163014	0.164971	0.001957
32	U22	0.0943	0.132353	0.134294	0.001941
33	U23	0.1834	0.201826	0.203752	0.001925
34	U24	0.0120	0.068260	0.070204	0.001944
35x10.00(	U25	-0.0254	0.056906	0.058856	0.001949
36	U26	0.0120	0.068247	0.070235	0.001987
37	U27	-0.0032	0.056426	0.058354	0.001928
38	U28	0.1038	0.139789	0.141777	0.001988
39	U29	-0.0012	0.057969	0.059916	0.001947
40	U30	0.3010	0.293490	0.295467	0.001977
	CCV	0.0903	0.129267	0.131224	0.001957
	CCB	-0.0024	0.057043	0.059102	0.002059
41	U31	0.1056	0.141181	0.143208	0.002027
42	U32	-0.0021	0.057236	0.059288	0.002051
43	U33	0.0087	0.065685	0.067770	0.002084
44	U34	-0.0019	0.057403	0.059430	0.002027

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Cup	Type	Result	Absorbance	T	W
45	U35	0.6822	0.590589	0.592648	0.002059
46	U36	0.0032	0.061349	0.063382	0.002033
47	U37	0.0160	0.071335	0.073503	0.002167
48	U38	0.0029	0.061162	0.063187	0.002026
49	U39	0.1287	0.159203	0.161321	0.002118
50	U40	-0.0007	0.058372	0.060504	0.002132
	CCV	0.0870	0.126722	0.128853	0.002131
	CCB	-0.0043	0.055516	0.057614	0.002098
51	U41	0.0466	0.095215	0.097335	0.002120
52x10.000	U42	-0.0266	0.056809	0.058893	0.002083
53	U43	0.4893	0.440247	0.442429	0.002182
54	U44	-0.0048 ELL	0.055117	0.057260	0.002142
55	U45	0.0085	0.065519	0.067695	0.002176
56	U46	3.1222	0.533363	0.537423	0.004060
57	REF1	1.0100	0.846085	0.848302	0.002217
58	REF2	0.9982	0.836886	0.839178	0.002292
	CCV	0.0938	0.131963	0.134121	0.002158
	CCB	-0.0033	0.056318	0.058485	0.002166

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Phosphate

Calibration data

ID	Absorbance	Calc mg P/L	Target mg P/L	% Error
S1	0.0029	-0.002	0.000	
S90	0.0109	0.019	0.020	-4.5581
S91	0.0179	0.037	0.040	-6.6628
S92	0.0258	0.058	0.060	-3.0358
S93	0.0411	0.098	0.100	-1.7693
S94	0.0815	0.204	0.200	1.9237
S95	0.1184	0.301	0.300	0.2026
S96	0.1579	0.404	0.400	0.9687
S97	0.2380	0.614	0.600	2.2731
S98	0.3043	0.787	0.800	-1.6229
S99	0.3857	1.000	1.000	0.0113
S0	0.0067	0.008	0.000	

Calibration status

Polynomial order	1
Correlation coefficient	0.9998
RSE (%)	3.35
Carryover(%)	1.0
Calibration equation	y = bx + a
y =	Concentration mg P/L
x =	Measured absorbance
a =	-9.442646E-03
b =	2.617675E+00
Original Date & Time	2025-08-20 15:07:19

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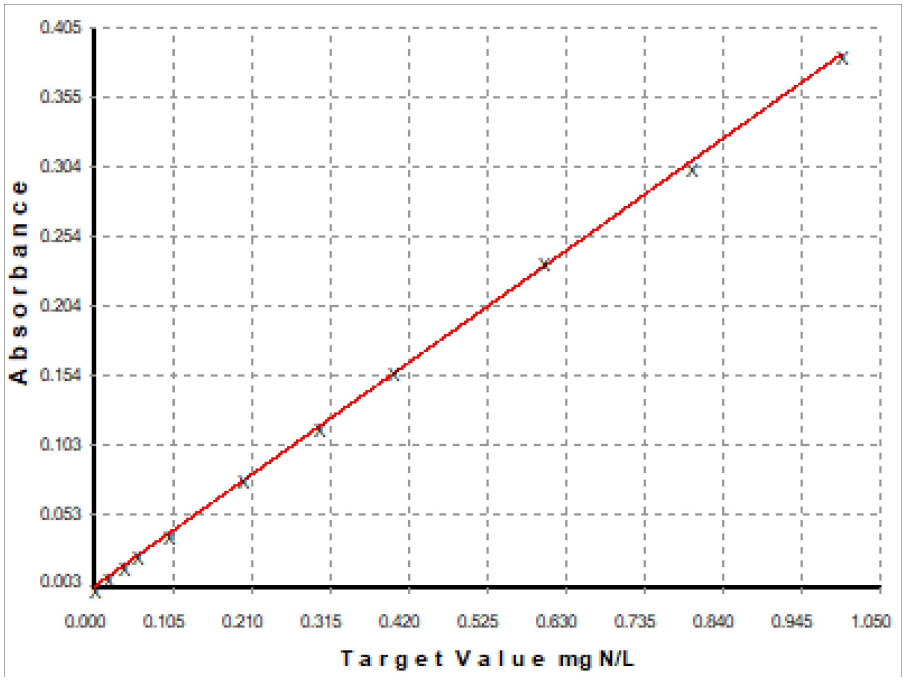
Calibration graph



Tech Support

Reagents

Number	Reagent name	Batch number	User	Expiry date
6	Working color reagent (fosfate)		UTESE	
7	Working ascorbic acid (fosfate)		UTESE	
39	DI Water (Blank)		UTESE	

Test results

Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
	S1	Standard 1		0.003	mg P/L	0.002870				UTESE	2025-08-20 15:02:34
	S90	Standard 90		0.011	mg P/L	0.010899				UTESE	2025-08-20 15:03:00
	S91	Standard 91		0.018	mg P/L	0.017870				UTESE	2025-08-20 15:03:26
	S92	Standard 92		0.026	mg P/L	0.025833				UTESE	2025-08-20 15:03:52
	S93	Standard 93		0.041	mg P/L	0.041133				UTESE	2025-08-20 15:04:18
	S94	Standard 94		0.081	mg P/L	0.081481				UTESE	2025-08-20 15:04:44
	S95	Standard 95		0.118	mg P/L	0.118445				UTESE	2025-08-20 15:05:11
	S96	Standard 96		0.158	mg P/L	0.157895				UTESE	2025-08-20 15:05:36
	S97	Standard 97		0.238	mg P/L	0.238028				UTESE	2025-08-20 15:06:03
	S98	Standard 98		0.304	mg P/L	0.304262				UTESE	2025-08-20 15:06:28
	S99	Standard 99		0.386	mg P/L	0.385669				UTESE	2025-08-20 15:06:54
	S0	Standard 0		0.007	mg P/L	0.006738				UTESE	2025-08-20 15:07:19
	CCV	CCV		0.082	mg P/L	0.034828				UTESE	2025-08-20 15:07:45
	CCB	CCB		0.003	mg P/L	0.004692				UTESE	2025-08-20 15:08:12
11	U1	1_1_R34_4192024_ch1_trC_cm		0.090	mg P/L	0.038060				UTESE	2025-08-20 15:08:39
12	U2	1_2_R35_4192024_ch2_trC_cm		0.041	mg P/L	0.019218				UTESE	2025-08-20 15:09:05
13	U3	1_3_R36_4192024_ch3_trC_cm		0.082	mg P/L	0.034881				UTESE	2025-08-20 15:09:32
14	U4	1_4_R37_4192024_ch4_trC_cm		0.021	mg P/L	0.011554				UTESE	2025-08-20 15:09:58
15	U5	1_5_R38_4192024_ch5_trE_cm		0.005	mg P/L	0.005379				UTESE	2025-08-20 15:10:24
16	U6	1_6_R39_4192024_ch6_trE_cm		0.042	mg P/L	0.019660				UTESE	2025-08-20 15:10:50
17	U7	1_7_R40_4192024_ch7_trE_cm		0.019	mg P/L	0.010852				UTESE	2025-08-20 15:11:16
18	U8	1_8_R41_4192024_ch8_		0.007	mg P/L	0.006235				UTESE	2025-08-20 15:11:42

Tech Support

Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
19	U9	1_9_R42_5022024_ch1_trC_cm		0.002	mg P/L	0.004536				UTESE	2025-08-20 15:12:09
20	U10	1_10_R43_5022024_ch2_trC_cm		0.017	mg P/L	0.004263			x10.0000	UTESE	2025-08-20 15:12:35
	CCV	CCV		0.082	mg P/L	0.034918				UTESE	2025-08-20 15:13:01
	CCB	CCB		0.006	mg P/L	0.005737				UTESE	2025-08-20 15:13:27
21	U11	1_11_R44_5022024_ch3_trC_cm		0.022	mg P/L	0.012150				UTESE	2025-08-20 15:13:54
22	U12	1_12_R45_5022024_ch4_trC_cm		0.008	mg P/L	0.006576				UTESE	2025-08-20 15:14:19
23	U13	1_13_R46_5022024_ch5_trE_cm		0.006	mg P/L	0.005819				UTESE	2025-08-20 15:14:46
24	U14	1_14_R47_5022024_ch7_trE_cm		0.002	mg P/L	0.004363				UTESE	2025-08-20 15:15:12
25	U15	1_15_R48_5102024_ch1_trC_cm		0.042	mg P/L	0.019790				UTESE	2025-08-20 15:15:39
26	U16	1_16_R49_5102024_ch2_trC_cm		0.028	mg P/L	0.014423				UTESE	2025-08-20 15:16:04
27	U17	1_17_R50_5102024_ch3_trC_cm		0.002	mg P/L	0.004534				UTESE	2025-08-20 15:16:31
28	U18	1_18_R51_5102024_ch4_trC_cm		0.017	mg P/L	0.009991				UTESE	2025-08-20 15:16:57
29	U19	1_19_R52_5102024_ch5_trE_cm		0.107	mg P/L	0.007703			x10.0000	UTESE	2025-08-20 15:17:23
30	U20	1_20_R53_5102024_ch6_trE_cm		0.011	mg P/L	0.004035			x10.0000	UTESE	2025-08-20 15:17:49
	CCV	CCV		0.080	mg P/L	0.034332				UTESE	2025-08-20 15:18:15
	CCB	CCB		0.005	mg P/L	0.005585				UTESE	2025-08-20 15:18:42
31	U21	1_21_R54_5102024_ch7_trE_cm		0.011	mg P/L	0.007794				UTESE	2025-08-20 15:19:09
32	U22	1_22_R55_5102024_ch8_trE_cm		0.011	mg P/L	0.007669				UTESE	2025-08-20 15:19:35
33	U23	1_23_R56_5152024_ch1_trC_cm		0.025	mg P/L	0.013277				UTESE	2025-08-20 15:20:02
34	U24	1_24_R57_5152024_ch2_trC_cm		-0.004 AVF	mg P/L	0.007043				UTESE	2025-08-20 19:22:22
34	U24	1_24_R57_5152024_ch2_trC_cm		0.000		0.000000				UTESE	

Tech Support

Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
35	U25	1_25_R58_5152024_ch3 _trC_cm		0.021	mg P/L	0.004421			x10.0000	UTESE	2025-08-20 15:20:53
36	U26	1_26_R59_5152024_ch4 _trC_cm		0.017 AVF	mg P/L	0.014455				UTESE	2025-08-20 19:22:47
36	U26	1_26_R59_5152024_ch4_trC_cm		0.000		0.000000				UTESE	
37	U27	1_27_R60_5152024_ch5 _trE_cm		0.007	mg P/L	0.006412				UTESE	2025-08-20 15:21:45
38	U28	1_28_R61_5152024_ch6 _trE_cm		-0.000	mg P/L	0.003470				UTESE	2025-08-20 15:22:11
39	U29	1_29_R62_5152024_ch7 _trE_cm		0.000	mg P/L	0.003755				UTESE	2025-08-20 15:22:37
40	U30	1_30_R63_5222024_ch1 _trC_cm		0.009	mg P/L	0.006983				UTESE	2025-08-20 15:23:03
	CCV	CCV		0.082	mg P/L	0.034956				UTESE	2025-08-20 15:23:29
	CCB	CCB		0.003	mg P/L	0.004694				UTESE	2025-08-20 15:23:56
41	U31	1_31_R64_5222024_ch2 _trC_cm		0.033	mg P/L	0.016040				UTESE	2025-08-20 15:24:22
42	U32	1_32_R65_5222024_ch3 _trC_cm		0.000	mg P/L	0.003694				UTESE	2025-08-20 15:24:47
43	U33	1_33_R66_5222024_ch4 _trC_cm		0.015	mg P/L	0.009378				UTESE	2025-08-20 15:25:12
44	U34	1_34_R67_5222024_ch5 _trE_cm		-0.002 ELL	mg P/L	0.002773				UTESE	2025-08-20 15:25:36
45	U35	1_35_R68_5222024_ch6 _trE_cm		0.134	mg P/L	0.054933				UTESE	2025-08-20 15:26:01
46	U36	1_36_R69_5222024_ch7 _trE_cm		0.004	mg P/L	0.005277				UTESE	2025-08-20 15:26:26
47	U37	1_37_R70_5222024_ch8 _trE_cm		0.014	mg P/L	0.008997				UTESE	2025-08-20 15:26:51
48	U38	1_38_R71_5292024_ch1 _trC_cm		0.006	mg P/L	0.005750				UTESE	2025-08-20 15:27:16
49	U39	1_39_R72_5292024_ch2 _trC_cm		0.183	mg P/L	0.073608				UTESE	2025-08-20 15:27:41
50	U40	1_40_R73_5292024_ch3 _trC_cm		0.004	mg P/L	0.005016				UTESE	2025-08-20 15:28:05

Tech Support

Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
	CCV	CCV		0.081	mg P/L	0.034626				UTESE	2025-08-20 15:28:30
	CCB	CCB		0.005	mg P/L	0.005435				UTESE	2025-08-20 15:28:56
51	U41	1_41_R74_5292024_ch4_trC_cm		0.106	mg P/L	0.044136				UTESE	2025-08-20 15:29:22
52	U42	1_42_R75_5292024_ch5_trE_cm		-0.017	mg P/L	0.002955			x10.0000	UTESE	2025-08-20 15:29:47
53	U43	1_43_R76_5292024_ch6_trE_cm		0.155	mg P/L	0.062877				UTESE	2025-08-20 15:30:12
54	U44	1_44_R77_5292024_ch7_trE_cm		0.030	mg P/L	0.015029				UTESE	2025-08-20 15:30:37
55	U45	1_45_R78_5292024_ch8_trE_cm		0.007	mg P/L	0.006430				UTESE	2025-08-20 15:31:01
56	U46	1_46_R79_5292024_ch_trStream_cm		0.050	mg P/L	0.022745				UTESE	2025-08-20 15:31:26
	CCV	CCV		0.080	mg P/L	0.034065				UTESE	2025-08-20 15:53:14
	CCV	CCV		0.000		0.000000				UTESE	
	CCB	CCB		0.001	mg P/L	0.004061				UTESE	2025-08-20 15:32:18
	CCV	CCV		0.079	mg P/L	0.033937				UTESE	2025-08-20 15:52:19
	CCB	CCB		0.004	mg P/L	0.005055				UTESE	2025-08-20 15:52:46
	CCV	CCV		0.082	mg P/L	0.035018				UTESE	2025-08-20 15:53:41
	CCB	CCB		0.004	mg P/L	0.004962				UTESE	2025-08-20 15:54:08
	CCV	CCV		0.071	mg P/L	0.034151				UTESE	2025-08-20 19:21:30
	CCB	CCB		-0.004	mg P/L	0.007019				UTESE	2025-08-20 19:21:56
	CCV	CCV		3.259	mg P/L	1.191385				UTESE	2025-08-20 19:23:12
	CCB	CCB		-0.005	mg P/L	0.006522				UTESE	2025-08-20 19:23:38

Tech Support

Test parameters Phosphate

Test number	4		
Long test name	Phosphate	**Short test name**	PO4
Units	mg P/L	**Decimal places**	3
Test type	End Point		

Main parameters

Sample volume	400	**Water volume**	0	**Number of mixes**	2
Cuvette primes	4	**Cuvette washes**	2	**Baseline on wash**	Yes
Cadmium volume	0	**Reduction time**	10	**Diluent location**	Reagent 24

Math parameters

Reaction time	480	**Wavelength**	880nm	**Polynomial order**	1
Repeat delta check	0.250	**Manual dilution factor**	0.000		
Auto dilution factor 1	1.000	**Auto dilution factor 2**	0.000	**Auto dilution factor 3**	0.000
Linearity Low	0.0029	**Linearity High**	0.3857	**Latest Slope**	2.6177
Alert Low	0.000	**Alert High**	0.000	**Latest Intercept**	-0.0094

Reagent parameters

Number of reagents 2

Reagent	Name	Volume	Delay	Replaced in blank
1	Working color reagent (fo	140	0	No
2	Working ascorbic acid (fo	45te)	27	No

Tech Support

Standards

Auto Std. Number	10	**Auto Std. Concentration**	1.0000	**Exclude the Blank**	No
Auto Std. Position	Cup 4	**Standard 1 (Blank) Position**	Reagent 24	**Correlation limit**	0.9980

Standard	Value	Standard	Value	Auto Standard	Percentage	Value
1	0.0000			S90	2.0000	0.0200
				S91	4.0000	0.0400
				S92	6.0000	0.0600
				S93	10.0000	0.1000
				S94	20.0000	0.2000
				S95	30.0000	0.3000
				S96	40.0000	0.4000
				S97	60.0000	0.6000
				S98	80.0000	0.8000
				S99	100.0000	1.0000

QC PRO

Control	Low value	High value	Location	Frequency	Start before
CCV	0.0000	0.2000	Reagent 13	10	1
CCB	-0.0200	0.0200	Reagent 24	10	1

Control	%% (+ \ -)	Stock Conc.	Spike added	Location
DUP	0.0000			
SPKA	10.0000	5.0000	0.2500	Cup 104
SPKM	0.0000		0.0000	
SPKD	0.0000			

Advanced parameters

Set diagnostic slope & intercept	No	**Extra debubble action**	No
Eliminate air from transfer	No	**Eliminate air from cuvette wash**	No
Extra aspiration steps	0	**Smart dilution**	No
Extra wash	Yes	**Separate waste**	Yes
Slow aspiration	No	**Diluent preparation order**	Reagent first

Tech Support

Diagnostics

Cup	Type	Result	Absorbance	T	W
	S1	0.003	0.002870	0.005793	0.002923
	S90	0.011	0.010899	0.013059	0.002160
	S91	0.018	0.017870	0.019656	0.001786
	S92	0.026	0.025833	0.027461	0.001628
	S93	0.041	0.041133	0.042787	0.001654
	S94	0.081	0.081481	0.083696	0.002216
	S95	0.118	0.118445	0.120786	0.002341
	S96	0.158	0.157895	0.160801	0.002906
	S97	0.238	0.238028	0.241507	0.003479
	S98	0.304	0.304262	0.308256	0.003994
	S99	0.386	0.385669	0.390040	0.004371
	S0	0.007	0.006738	0.008914	0.002176
	CCV	0.082	0.034828	0.037003	0.002174
	CCB	0.003	0.004692	0.006235	0.001542
11	U1	0.090	0.038060	0.039607	0.001547
12	U2	0.041	0.019218	0.020513	0.001295
13	U3	0.082	0.034881	0.036360	0.001480
14	U4	0.021	0.011554	0.012810	0.001257
15	U5	0.005	0.005379	0.006169	0.000790
16	U6	0.042	0.019660	0.020569	0.000909
17	U7	0.019	0.010852	0.011673	0.000822
18	U8	0.007	0.006235	0.006889	0.000654
19	U9	0.002	0.004536	0.005112	0.000576
20x10.000	U10	0.017	0.004263	0.004568	0.000305
	CCV	0.082	0.034918	0.035790	0.000872
	CCB	0.006	0.005737	0.005874	0.000137

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Cup	Type	Result	Absorbance	T	W
21	U11	0.022	0.012150	0.012701	0.000551
22	U12	0.008	0.006576	0.007283	0.000707
23	U13	0.006	0.005819	0.006466	0.000648
24	U14	0.002	0.004363	0.004963	0.000600
25	U15	0.042	0.019790	0.020494	0.000704
26	U16	0.028	0.014423	0.015146	0.000724
27	U17	0.002	0.004534	0.005136	0.000602
28	U18	0.017	0.009991	0.010445	0.000454
29x10.00(	U19	0.107	0.007703	0.008183	0.000480
30x10.00(	U20	0.011	0.004035	0.004129	0.000094
	CCV	0.080	0.034332	0.035046	0.000714
	CCB	0.005	0.005585	0.005808	0.000223
31	U21	0.011	0.007794	0.008358	0.000564
32	U22	0.011	0.007669	0.008360	0.000691
33	U23	0.025	0.013277	0.014007	0.000730
34	U24	-0.004 AVF	0.007043	0.009973	0.002930
35x10.00(	U25	0.021	0.004421	0.004950	0.000528
36	U26	0.017 AVF	0.014455	0.017425	0.002970
37	U27	0.007	0.006412	0.006881	0.000470
38	U28	-0.000	0.003470	0.003768	0.000297

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Cup	Type	Result	Absorbance	T	W
39	U29	0.000	0.003755	0.003997	0.000242
40	U30	0.009	0.006983	0.007346	0.000363
	CCV	0.082	0.034956	0.035624	0.000668
	CCB	0.003	0.004694	0.005228	0.000534
41	U31	0.033	0.016040	0.016650	0.000610
42	U32	0.000	0.003694	0.004147	0.000453
43	U33	0.015	0.009378	0.009890	0.000512
44	U34	-0.002 ELL	0.002773	0.003129	0.000356
45	U35	0.134	0.054933	0.055946	0.001012
46	U36	0.004	0.005277	0.005930	0.000653
47	U37	0.014	0.008997	0.009700	0.000703
48	U38	0.006	0.005750	0.006223	0.000473
49	U39	0.183	0.073608	0.074879	0.001271
50	U40	0.004	0.005016	0.005853	0.000838
	CCV	0.081	0.034626	0.035642	0.001016
	CCB	0.005	0.005435	0.005823	0.000388
51	U41	0.106	0.044136	0.045323	0.001187
52x10.000	U42	-0.017	0.002955	0.003813	0.000858
53	U43	0.155	0.062877	0.064303	0.001427
54	U44	0.030	0.015029	0.016127	0.001098

Tech Support

Cup	Type	Result	Absorbance	T	W
55	U45	0.007	0.006430	0.007280	0.000850
56	U46	0.050	0.022745	0.023680	0.000935
	CCV	0.080	0.034065	0.034336	0.000271
	CCB	0.001	0.004061	0.006422	0.002362
	CCV	0.079	0.033937	0.034028	0.000091
	CCB	0.004	0.005055	0.005009	-0.000045
	CCV	0.082	0.035018	0.035481	0.000463
	CCB	0.004	0.004962	0.005154	0.000192
	CCV	0.071	0.034151	0.038481	0.004330
	CCB	-0.004	0.007019	0.010368	0.003349
	CCV	3.259	1.191385	1.197678	0.006293
	CCB	-0.005	0.006522	0.010734	0.004213

Tech Support

Nitrite

Calibration data

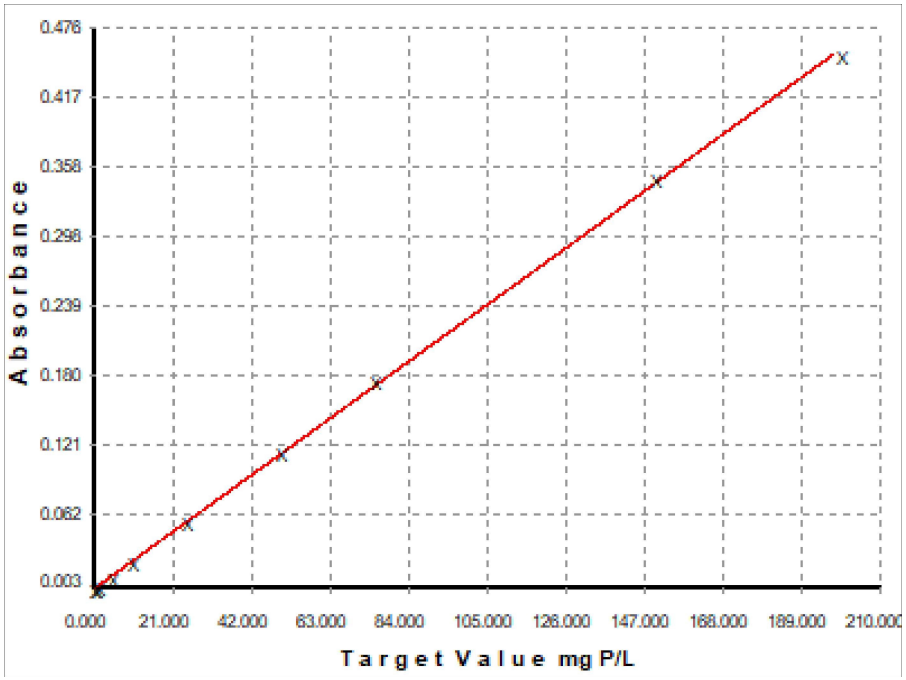
ID	Absorbance	Calc ug N/L	Target ug N/L	% Error
S1	0.0026	0.08	0.00	
S90	0.0032	0.31	0.89	-65.4013
S91	0.0051	1.16	1.78	-34.8930
S92	0.0124	4.36	4.89	-10.7180
S93	0.0250	9.87	10.22	-3.4140
S94	0.0589	24.76	24.89	-0.5043
S95	0.1180	50.64	50.22	0.8266
S96	0.1783	77.09	75.11	2.6403
S97	0.3499	152.29	150.22	1.3778
S98	0.4533	197.65	200.00	-1.1747
S0	0.0088	2.78	0.00	

Calibration status

Polynomial order	1
Correlation coefficient	0.9998
RSE (%)	28.37
Carryover(%)	1.4
Calibration equation	y = bx + a
y =	Concentration ug N/L
x =	Measured absorbance
a =	-1.076614E+00
b =	4.383695E+02
Original Date & Time	2025-08-20 13:24:48

Tech Support

Calibration graph



Tech Support

Reagents

Number	Reagent name	Batch number	User	Expiry date
14	Sulfa-NEDD (NO2)			

Test results

Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
	S1	Standard 1		0.00	ug N/L	0.002642				UTESE	2025-08-20 13:20:47
	S90	1ppb NO2-N		0.00	ug N/L	0.003158				UTESE	2025-08-20 13:21:11
	S91	2ppb NO2-N		0.01	ug N/L	0.005096				UTESE	2025-08-20 13:21:35
	S92	5ppb NO2-N		0.01	ug N/L	0.012413				UTESE	2025-08-20 13:21:59
	S93	10ppb NO2-N		0.02	ug N/L	0.024979				UTESE	2025-08-20 13:22:23
	S94	25ppb NO2-N		0.06	ug N/L	0.058946				UTESE	2025-08-20 13:22:47
	S95	50ppb NO2-N		0.12	ug N/L	0.117969				UTESE	2025-08-20 13:23:11
	S96	75ppb NO2-N		0.18	ug N/L	0.178322				UTESE	2025-08-20 13:23:35
	S97	150ppb NO2-N		0.35	ug N/L	0.349862				UTESE	2025-08-20 13:24:00
	S98	200ppb NO2-N		0.45	ug N/L	0.453333				UTESE	2025-08-20 13:24:24
	S0	Standard 0		0.01	ug N/L	0.008789				UTESE	2025-08-20 13:24:48
	CCV	CCV		4.72	ug N/L	0.013227				UTESE	2025-08-20 13:25:12
	CCB	CCB		-0.28	ug N/L	0.001823				UTESE	2025-08-20 13:25:36
11	U1	1_1_R34_4192024_ch1_trC_cm		3.02	ug N/L	0.009353				UTESE	2025-08-20 13:26:00
12	U2	1_2_R35_4192024_ch2_trC_cm		1.90	ug N/L	0.006798				UTESE	2025-08-20 13:26:25
13	U3	1_3_R36_4192024_ch3_trC_cm		1.65	ug N/L	0.006213				UTESE	2025-08-20 13:26:49
14	U4	1_4_R37_4192024_ch4_trC_cm		0.53	ug N/L	0.003672				UTESE	2025-08-20 13:27:13
15	U5	1_5_R38_4192024_ch5_trE_cm		0.57	ug N/L	0.003747				UTESE	2025-08-20 13:27:37
16	U6	1_6_R39_4192024_ch6_trE_cm		1.79	ug N/L	0.006547				UTESE	2025-08-20 13:28:01
17	U7	1_7_R40_4192024_ch7_trE_cm		0.50	ug N/L	0.003595				UTESE	2025-08-20 13:28:25
18	U8	1_8_R41_4192024_ch8_trE_cm		0.58	ug N/L	0.003783				UTESE	2025-08-20 13:28:49
19	U9	1_9_R42_5022024_ch1_trC_cm		0.45	ug N/L	0.003491				UTESE	2025-08-20 13:29:13
20	U10	1_10_R43_5022024_ch2		7.06	ug N/L	0.004066			x10.0000	UTESE	2025-08-20 13:29:37

Tech Support

Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
	CCB	CCB		-0.64	ug N/L	0.000990				UTESE	2025-08-20 13:30:26
21	U11	1_11_R44_5022024_ch3_trC_cm		0.75	ug N/L	0.004159				UTESE	2025-08-20 13:30:50
22	U12	1_12_R45_5022024_ch4_trC_cm		1.82	ug N/L	0.006608				UTESE	2025-08-20 13:31:14
23	U13	1_13_R46_5022024_ch5_trE_cm		0.44	ug N/L	0.003461				UTESE	2025-08-20 13:31:38
24	U14	1_14_R47_5022024_ch7_trE_cm		0.25	ug N/L	0.003031				UTESE	2025-08-20 13:32:02
25	U15	1_15_R48_5102024_ch1_trC_cm		8.17	ug N/L	0.021084				UTESE	2025-08-20 13:32:26
26	U16	1_16_R49_5102024_ch2_trC_cm		0.69	ug N/L	0.004020				UTESE	2025-08-20 13:32:50
27	U17	1_17_R50_5102024_ch3_trC_cm		0.74	ug N/L	0.004140				UTESE	2025-08-20 13:33:14
28	U18	1_18_R51_5102024_ch4_trC_cm		0.57	ug N/L	0.003763				UTESE	2025-08-20 13:33:38
29	U19	1_19_R52_5102024_ch5_trE_cm		-1.11 ELL	ug N/L	0.002202			x10.0000	UTESE	2025-08-20 13:34:03
30	U20	1_20_R53_5102024_ch6_trE_cm		-0.49 ELL	ug N/L	0.002344			x10.0000	UTESE	2025-08-20 13:34:27
	CCV	CCV		3.96	ug N/L	0.011480				UTESE	2025-08-20 13:34:51
	CCB	CCB		-0.63	ug N/L	0.001017				UTESE	2025-08-20 13:35:15
31	U21	1_21_R54_5102024_ch7_trE_cm		4.82	ug N/L	0.013446				UTESE	2025-08-20 13:35:40
32	U22	1_22_R55_5102024_ch8_trE_cm		1.65	ug N/L	0.006225				UTESE	2025-08-20 13:36:04
33	U23	1_23_R56_5152024_ch1_trC_cm		5.64	ug N/L	0.015327				UTESE	2025-08-20 13:36:28
34	U24	1_24_R57_5152024_ch2_trC_cm		1.02	ug N/L	0.004777				UTESE	2025-08-20 13:36:52
35	U25	1_25_R58_5152024_ch3_trC_cm		-1.68 ELL	ug N/L	0.002072			x10.0000	UTESE	2025-08-20 13:37:16
36	U26	1_26_R59_5152024_ch4_trC_cm		0.84	ug N/L	0.004377				UTESE	2025-08-20 13:37:40
37	U27	1_27_R60_5152024_ch5_trE_cm		0.52	ug N/L	0.003647				UTESE	2025-08-20 13:38:04

Tech Support

Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
38	U28	1_28_R61_5152024_ch6 _trE_cm		1.45	ug N/L	0.005759				UTESE	2025-08-20 13:38:29
39	U29	1_29_R62_5152024_ch7 _trE_cm		0.41	ug N/L	0.003398				UTESE	2025-08-20 13:38:53
40	U30	1_30_R63_5222024_ch1 _trC_cm		4.82	ug N/L	0.013442				UTESE	2025-08-20 13:39:17
	CCV	CCV		4.10	ug N/L	0.011818				UTESE	2025-08-20 13:39:41
	CCB	CCB		-0.70	ug N/L	0.000848				UTESE	2025-08-20 13:40:06
41	U31	1_31_R64_5222024_ch2 _trC_cm		2.75	ug N/L	0.008739				UTESE	2025-08-20 13:40:32
42	U32	1_32_R65_5222024_ch3 _trC_cm		0.46	ug N/L	0.003509				UTESE	2025-08-20 13:40:56
43	U33	1_33_R66_5222024_ch4 _trC_cm		0.72	ug N/L	0.004109				UTESE	2025-08-20 13:41:20
44	U34	1_34_R67_5222024_ch5 _trE_cm		0.28	ug N/L	0.003103				UTESE	2025-08-20 13:41:44
45	U35	1_35_R68_5222024_ch6 _trE_cm		5.27	ug N/L	0.014482				UTESE	2025-08-20 13:42:08
46	U36	1_36_R69_5222024_ch7 _trE_cm		0.55	ug N/L	0.003711				UTESE	2025-08-20 13:42:32
47	U37	1_37_R70_5222024_ch8 _trE_cm		0.85	ug N/L	0.004389				UTESE	2025-08-20 13:42:55
48	U38	1_38_R71_5292024_ch1 _trC_cm		0.35	ug N/L	0.003248				UTESE	2025-08-20 13:43:19
49	U39	1_39_R72_5292024_ch2 _trC_cm		3.35	ug N/L	0.010087				UTESE	2025-08-20 13:43:43
50	U40	1_40_R73_5292024_ch3 _trC_cm		0.76	ug N/L	0.004191				UTESE	2025-08-20 13:44:07
	CCV	CCV		4.01	ug N/L	0.011611				UTESE	2025-08-20 13:44:31
	CCB	CCB		-0.66	ug N/L	0.000950				UTESE	2025-08-20 13:44:56
51	U41	1_41_R74_5292024_ch4 _trC_cm		1.92	ug N/L	0.006845				UTESE	2025-08-20 13:45:21
52	U42	1_42_R75_5292024_ch5 _trE_cm		-2.60 ELL	ug N/L	0.001864			x10.0000	UTESE	2025-08-20 13:45:45
53	U43	1_43_R76_5292024_ch6 _trE_cm		4.30	ug N/L	0.012258				UTESE	2025-08-20 13:46:09

Tech Support

Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
54	U44	1_44_R77_5292024_ch7_trE_cm		0.81	ug N/L	0.004296				UTESE	2025-08-20 13:46:33
55	U45	1_45_R78_5292024_ch8_trE_cm		0.56	ug N/L	0.003733				UTESE	2025-08-20 13:46:57
56	U46	1_46_R79_5292024_ch_trStream_cm		27.63	ug N/L	0.065475				UTESE	2025-08-20 13:47:21
	CCV	CCV		4.58	ug N/L	0.012906				UTESE	2025-08-20 13:47:45
	CCB	CCB		-0.49	ug N/L	0.001335				UTESE	2025-08-20 13:48:09

Test parameters Nitrite

Test number	8		
Long test name	Nitrite	**Short test name**	NO2
Units	ug N/L	**Decimal places**	2
Test type	End Point		

Main parameters

Sample volume	450	**Water volume**	0	**Number of mixes**	2
Cuvette primes	1	**Cuvette washes**	2	**Baseline on wash**	Yes
Cadmium volume	0	**Reduction time**	10	**Diluent location**	Reagent 24

Math parameters

Reaction time	360	**Wavelength**	520nm	**Polynomial order**	1
Repeat delta check	0.250	**Manual dilution factor**	0.000		
Auto dilution factor 1	1.000	**Auto dilution factor 2**	0.000	**Auto dilution factor 3**	0.000
Linearity Low	0.0026	**Linearity High**	0.4533	**Latest Slope**	438.3695
Alert Low	0.000	**Alert High**	0.000	**Latest Intercept**	-1.0766

Tech Support

Reagent parameters

Number of reagents 1

Reagent	Name	Volume	Delay	Replaced in blank
1	Sulfa-NEDD (NO2)	50	0	No

Standards

Auto Std. Number	9	**Auto Std. Concentration**	200.0000	**Exclude the Blank**	No
Auto Std. Position	Cup 2	**Standard 1 (Blank) Position**	Reagent 24	**Correlation limit**	0.9980

Standard	Value	Standard	Value	Auto Standard	Percentage	Value
1	0.0000			S90	0.4444	0.8889
				S91	0.8889	1.7778
				S92	2.4444	4.8889
				S93	5.1111	10.2222
				S94	12.4444	24.8889
				S95	25.1111	50.2222
				S96	37.5556	75.1111
				S97	75.1111	150.2222
				S98	100.0000	200.0000

QC PRO

Control	Low value	High value	Location	Frequency	Start before
CCV	1.0000	9.0000	Reagent 17	10	1
CCB	-4.0000	4.0000	Reagent 24	10	1

Control	%% (+ \ -)	Stock Conc.	Spike added	Location
DUP	0.0000			
SPKA	0.0000	0.0000	0.0000	Cup 102
SPKM	0.0000		0.0000	
SPKD	0.0000			

Tech Support

Advanced parameters

Set diagnostic slope & intercept	No	**Extra debubble action**	Yes
Eliminate air from transfer	Yes	**Eliminate air from cuvette wash**	No
Extra aspiration steps	0	**Smart dilution**	No
Extra wash	Yes	**Separate waste**	Yes
Slow aspiration	No	**Diluent preparation order**	Reagent first

Diagnostics

Cup	Type	Result	Absorbance	T	W
	S1	0.00	0.002642	0.003830	0.001188
	S90	0.00	0.003158	0.004334	0.001176
	S91	0.01	0.005096	0.006363	0.001266
	S92	0.01	0.012413	0.013678	0.001265
	S93	0.02	0.024979	0.026281	0.001303
	S94	0.06	0.058946	0.060245	0.001299
	S95	0.12	0.117969	0.119335	0.001366
	S96	0.18	0.178322	0.179730	0.001408
	S97	0.35	0.349862	0.351266	0.001405
	S98	0.45	0.453333	0.454802	0.001469
	S0	0.01	0.008789	0.010186	0.001397
	CCV	4.72	0.013227	0.014635	0.001408
	CCB	-0.28	0.001823	0.003206	0.001384
11	U1	3.02	0.009353	0.010841	0.001487
12	U2	1.90	0.006798	0.008215	0.001417
13	U3	1.65	0.006213	0.007646	0.001433
14	U4	0.53	0.003672	0.005119	0.001447
15	U5	0.57	0.003747	0.005198	0.001451
16	U6	1.79	0.006547	0.008097	0.001550
17	U7	0.50	0.003595	0.005096	0.001502
18	U8	0.58	0.003783	0.005318	0.001535
19	U9	0.45	0.003491	0.004995	0.001503
20x10.000	U10	7.06	0.004066	0.005666	0.001600

Tech Support

Cup	Type	Result	Absorbance	T	W
	CCV	4.06	0.011728	0.013179	0.001451
	CCB	-0.64	0.000990	0.002476	0.001486
21	U11	0.75	0.004159	0.005680	0.001521
22	U12	1.82	0.006608	0.008162	0.001554
23	U13	0.44	0.003461	0.005023	0.001563
24	U14	0.25	0.003031	0.004741	0.001710
25	U15	8.17	0.021084	0.022653	0.001569
26	U16	0.69	0.004020	0.005497	0.001477
27	U17	0.74	0.004140	0.005675	0.001536
28	U18	0.57	0.003763	0.005217	0.001453
29x10.00(	U19	-1.11 ELL	0.002202	0.003712	0.001510
30x10.00(	U20	-0.49 ELL	0.002344	0.003784	0.001440
	CCV	3.96	0.011480	0.012951	0.001471
	CCB	-0.63	0.001017	0.002521	0.001504
31	U21	4.82	0.013446	0.014943	0.001498
32	U22	1.65	0.006225	0.007704	0.001479
33	U23	5.64	0.015327	0.016806	0.001479
34	U24	1.02	0.004777	0.006245	0.001468
35x10.00(	U25	-1.68 ELL	0.002072	0.003545	0.001473
36	U26	0.84	0.004377	0.005878	0.001501

Tech Support

Cup	Type	Result	Absorbance	T	W
37	U27	0.52	0.003647	0.005128	0.001481
38	U28	1.45	0.005759	0.007271	0.001512
39	U29	0.41	0.003398	0.004948	0.001550
40	U30	4.82	0.013442	0.015031	0.001589
	CCV	4.10	0.011818	0.013367	0.001549
	CCB	-0.70	0.000848	0.002466	0.001618
41	U31	2.75	0.008739	0.010312	0.001574
42	U32	0.46	0.003509	0.005002	0.001493
43	U33	0.72	0.004109	0.005701	0.001592
44	U34	0.28	0.003103	0.004626	0.001523
45	U35	5.27	0.014482	0.016065	0.001583
46	U36	0.55	0.003711	0.005283	0.001571
47	U37	0.85	0.004389	0.005869	0.001480
48	U38	0.35	0.003248	0.004848	0.001600
49	U39	3.35	0.010087	0.011646	0.001559
50	U40	0.76	0.004191	0.005812	0.001621
	CCV	4.01	0.011611	0.013170	0.001559
	CCB	-0.66	0.000950	0.002560	0.001611
51	U41	1.92	0.006845	0.008474	0.001629

Tech Support

Cup	Type	Result	Absorbance	T	W
52x10.00(	U42	-2.60 ELL	0.001864	0.003510	0.001646
53	U43	4.30	0.012258	0.013866	0.001608
54	U44	0.81	0.004296	0.005961	0.001665
55	U45	0.56	0.003733	0.005290	0.001557
56	U46	27.63	0.065475	0.067104	0.001629
	CCV	4.58	0.012906	0.014547	0.001641
	CCB	-0.49	0.001335	0.002948	0.001612

Tech Support

Ammonia (PPS)

Calibration data

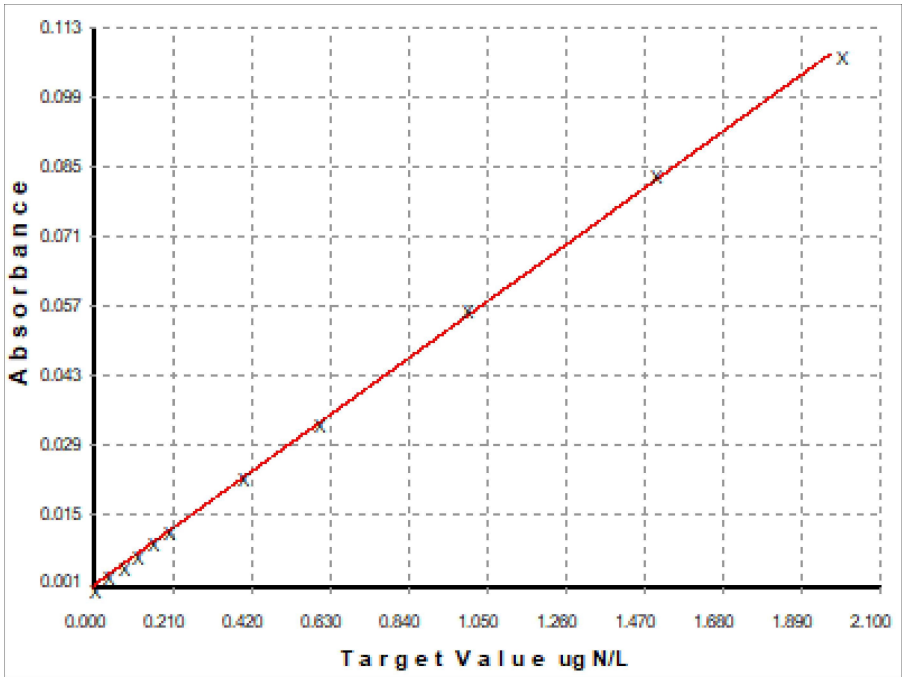
ID	Absorbance	Calc mg N/L	Target mg N/L	% Error
S1	0.0012	-0.0108	0.0000	
S90	0.0038	0.0375	0.0400	-6.2574
S91	0.0056	0.0718	0.0800	-10.2677
S92	0.0080	0.1159	0.1200	-3.4389
S93	0.0103	0.1583	0.1600	-1.0898
S94	0.0125	0.2010	0.2000	0.4937
S95	0.0235	0.4050	0.4000	1.2599
S96	0.0341	0.6038	0.6000	0.6291
S97	0.0568	1.0271	1.0000	2.7113
S98	0.0833	1.5221	1.5000	1.4743
S99	0.1072	1.9684	2.0000	-1.5808
S0	0.0017	-0.0015	0.0000	

Calibration status

Polynomial order	1
Correlation coefficient	0.9997
RSE (%)	4.63
Carryover(%)	0.5
Calibration equation	y = bx + a
y =	Concentration mg N/L
x =	Measured absorbance
a =	-3.327144E-02
b =	1.866971E+01
Original Date & Time	2025-08-20 12:32:27

Tech Support

Calibration graph



Tech Support

Reagents

Number	Reagent name	Batch number	User	Expiry date
1	Citrate reagent (NH4)		UTESE	
2	PPS (NH4)		UTESE	
3	Hypochorite reagent (NH4)		UTESE	
39	DI Water (Blank)		UTESE	

Test results

Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
	S1	Standard 1		0.0012	mg N/L	0.001202				UTESE	2025-08-20 12:24:00
	S90	Standard 90		0.0038	mg N/L	0.003791				UTESE	2025-08-20 12:24:24
	S91	Standard 91		0.0056	mg N/L	0.005627				UTESE	2025-08-20 12:25:36
	S92	Standard 92		0.0080	mg N/L	0.007989				UTESE	2025-08-20 12:26:01
	S93	Standard 93		0.0103	mg N/L	0.010259				UTESE	2025-08-20 12:27:13
	S94	Standard 94		0.0125	mg N/L	0.012548				UTESE	2025-08-20 12:27:38
	S95	Standard 95		0.0235	mg N/L	0.023477				UTESE	2025-08-20 12:28:50
	S96	Standard 96		0.0341	mg N/L	0.034122				UTESE	2025-08-20 12:29:14
	S97	Standard 97		0.0568	mg N/L	0.056797				UTESE	2025-08-20 12:30:26
	S98	Standard 98		0.0833	mg N/L	0.083311				UTESE	2025-08-20 12:30:51
	S99	Standard 99		0.1072	mg N/L	0.107214				UTESE	2025-08-20 12:32:03
	S0	Standard 0		0.0017	mg N/L	0.001702				UTESE	2025-08-20 12:32:27
	CCV	CCV		0.0949	mg N/L	0.006865				UTESE	2025-08-20 12:33:40
	CCB	CCB		-0.0080	mg N/L	0.001354				UTESE	2025-08-20 12:34:04
11	U1	1_1_R34_4192024_ch1_trC_cm		0.5704	mg N/L	0.032336				UTESE	2025-08-20 12:35:17
12	U2	1_2_R35_4192024_ch2_trC_cm		0.4737	mg N/L	0.027157				UTESE	2025-08-20 12:35:41
13	U3	1_3_R36_4192024_ch3_trC_cm		0.5393	mg N/L	0.030669				UTESE	2025-08-20 12:36:54
14	U4	1_4_R37_4192024_ch4_trC_cm		0.5158	mg N/L	0.029407				UTESE	2025-08-20 12:37:18
15	U5	1_5_R38_4192024_ch5_trE_cm		0.6109	mg N/L	0.034505				UTESE	2025-08-20 12:38:30
16	U6	1_6_R39_4192024_ch6_trE_cm		1.0195	mg N/L	0.056390				UTESE	2025-08-20 12:38:54
17	U7	1_7_R40_4192024_ch7_trE_cm		0.7345	mg N/L	0.041125				UTESE	2025-08-20 12:40:06

Tech Support

Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
19	U9	1_9_R42_5022024_ch1_trC_cm		0.3179	mg N/L	0.018807				UTESE	2025-08-20 12:41:43
20	U10	1_10_R43_5022024_ch2_trC_cm		0.0288	mg N/L	0.001936			x10.0000	UTESE	2025-08-20 12:42:08
	CCV	CCV		0.0965	mg N/L	0.006948				UTESE	2025-08-20 12:43:20
	CCB	CCB		-0.0032	mg N/L	0.001609				UTESE	2025-08-20 12:43:44
21	U11	1_11_R44_5022024_ch3_trC_cm		0.5129	mg N/L	0.029253				UTESE	2025-08-20 12:44:57
22	U12	1_12_R45_5022024_ch4_trC_cm		0.1802	mg N/L	0.011433				UTESE	2025-08-20 12:45:22
23	U13	1_13_R46_5022024_ch5_trE_cm		0.3281	mg N/L	0.019355				UTESE	2025-08-20 12:46:34
24	U14	1_14_R47_5022024_ch7_trE_cm		0.3581	mg N/L	0.020960				UTESE	2025-08-20 12:46:58
25	U15	1_15_R48_5102024_ch1_trC_cm		0.5874	mg N/L	0.033244				UTESE	2025-08-20 12:48:10
26	U16	1_16_R49_5102024_ch2_trC_cm		0.6575	mg N/L	0.037000				UTESE	2025-08-20 12:48:35
27	U17	1_17_R50_5102024_ch3_trC_cm		0.5772	mg N/L	0.032700				UTESE	2025-08-20 12:49:47
28	U18	1_18_R51_5102024_ch4_trC_cm		0.4715	mg N/L	0.027034				UTESE	2025-08-20 12:50:12
29	U19	1_19_R52_5102024_ch5_trE_cm		0.3116	mg N/L	0.003451			x10.0000	UTESE	2025-08-20 12:51:24
30	U20	1_20_R53_5102024_ch6_trE_cm		0.1141	mg N/L	0.002393			x10.0000	UTESE	2025-08-20 12:51:48
	CCV	CCV		0.0946	mg N/L	0.006847				UTESE	2025-08-20 12:53:01
	CCB	CCB		0.0006	mg N/L	0.001812				UTESE	2025-08-20 12:53:27
31	U21	1_21_R54_5102024_ch7_trE_cm		0.4516	mg N/L	0.025972				UTESE	2025-08-20 12:54:40
32	U22	1_22_R55_5102024_ch8_trE_cm		0.6707	mg N/L	0.037706				UTESE	2025-08-20 12:55:04
33	U23	1_23_R56_5152024_ch1_trC_cm		0.4633	mg N/L	0.026600				UTESE	2025-08-20 12:56:16
34	U24	1_24_R57_5152024_ch2_trC_cm		0.2999	mg N/L	0.017846				UTESE	2025-08-20 12:56:41

Tech Support

Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
35	U25	1_25_R58_5152024_ch3_trC_cm		0.0913	mg N/L	0.002271			x10.0000	UTESE	2025-08-20 12:57:53
36	U26	1_26_R59_5152024_ch4_trC_cm		0.5780	mg N/L	0.032740				UTESE	2025-08-20 12:58:17
37	U27	1_27_R60_5152024_ch5_trE_cm		0.7237	mg N/L	0.040544				UTESE	2025-08-20 12:59:29
38	U28	1_28_R61_5152024_ch6_trE_cm		0.5903	mg N/L	0.033403				UTESE	2025-08-20 12:59:53
39	U29	1_29_R62_5152024_ch7_trE_cm		0.8233	mg N/L	0.045878				UTESE	2025-08-20 13:01:05
40	U30	1_30_R63_5222024_ch1_trC_cm		0.4855	mg N/L	0.027788				UTESE	2025-08-20 13:01:29
	CCV	CCV		0.0989	mg N/L	0.007079				UTESE	2025-08-20 13:02:41
	CCB	CCB		-0.0062	mg N/L	0.001452				UTESE	2025-08-20 13:03:05
41	U31	1_31_R64_5222024_ch2_trC_cm		0.3963	mg N/L	0.023010				UTESE	2025-08-20 13:04:18
42	U32	1_32_R65_5222024_ch3_trC_cm		0.3728	mg N/L	0.021749				UTESE	2025-08-20 13:04:42
43	U33	1_33_R66_5222024_ch4_trC_cm		0.1699	mg N/L	0.010881				UTESE	2025-08-20 13:05:54
44	U34	1_34_R67_5222024_ch5_trE_cm		0.5954	mg N/L	0.033674				UTESE	2025-08-20 13:06:18
45	U35	1_35_R68_5222024_ch6_trE_cm		0.3844	mg N/L	0.022372				UTESE	2025-08-20 13:07:30
46	U36	1_36_R69_5222024_ch7_trE_cm		0.8552	mg N/L	0.047591				UTESE	2025-08-20 13:07:54
47	U37	1_37_R70_5222024_ch8_trE_cm		0.5655	mg N/L	0.032073				UTESE	2025-08-20 13:09:06
48	U38	1_38_R71_5292024_ch1_trC_cm		0.5281	mg N/L	0.030067				UTESE	2025-08-20 13:09:30
49	U39	1_39_R72_5292024_ch2_trC_cm		0.3679	mg N/L	0.021490				UTESE	2025-08-20 13:10:41
50	U40	1_40_R73_5292024_ch3_trC_cm		0.6444	mg N/L	0.036297				UTESE	2025-08-20 13:11:06
	CCV	CCV		0.0931	mg N/L	0.006768				UTESE	2025-08-20 13:12:18

Tech Support

Tech Support

Math parameters

Reaction time	1200	**Wavelength**	660nm	**Polynomial order**	1
Repeat delta check	0.250	**Manual dilution factor**	0.000		
Auto dilution factor 1	1.000	**Auto dilution factor 2**	0.000	**Auto dilution factor 3**	0.000
Linearity Low	0.0012	**Linearity High**	0.1072	**Latest Slope**	18.6697
Alert Low	0.000	**Alert High**	0.000	**Latest Intercept**	-0.0333

Reagent parameters

Number of reagents 3

Reagent	Name	Volume	Delay	Replaced in blank
1	Citrate reagent (NH4)	100	0	No
2	PPS (NH4)	100	300	No
3	Hypochorite reagent (NH450		350	No

Standards

Auto Std. Number	10	**Auto Std. Concentration**	2.0000	**Exclude the Blank**	No
Auto Std. Position	Cup 1	**Standard 1 (Blank) Position**	Reagent 24	**Correlation limit**	0.9980

Standard	Value	Standard	Value	Auto Standard	Percentage	Value
1	0.0000			S90	2.0000	0.0400
				S91	4.0000	0.0800
				S92	6.0000	0.1200
				S93	8.0000	0.1600
				S94	10.0000	0.2000
				S95	20.0000	0.4000
				S96	30.0000	0.6000
				S97	50.0000	1.0000
				S98	75.0000	1.5000
				S99	100.0000	2.0000

Tech Support

QC PRO

Control	Low value	High value	Location	Frequency	Start before
CCV	0.0000	0.2000	Reagent 10	10	1
CCB	-0.0400	0.0400	Reagent 24	10	1
Control	**%% (+ \ -)**	**Stock Conc.**	**Spike added**	**Location**	
DUP	0.0000				
SPKA	10.0000	10.0000	0.5000	Cup 101	
SPKM	0.0000		0.0000		
SPKD	0.0000				

Advanced parameters

Set diagnostic slope & intercept	No	**Extra debubble action**	Yes
Eliminate air from transfer	Yes	**Eliminate air from cuvette wash**	No
Extra aspiration steps	0	**Smart dilution**	No
Extra wash	Yes	**Separate waste**	Yes
Slow aspiration	No	**Diluent preparation order**	Reagent first

Diagnostics

Cup	Type	Result	Absorbance	T	W
	S1	0.0012	0.001202	0.002002	0.000800
	S90	0.0038	0.003791	0.004648	0.000857
	S91	0.0056	0.005627	0.006463	0.000836
	S92	0.0080	0.007989	0.008883	0.000895
	S93	0.0103	0.010259	0.011137	0.000878
	S94	0.0125	0.012548	0.013504	0.000956
	S95	0.0235	0.023477	0.024363	0.000886
	S96	0.0341	0.034122	0.035057	0.000935
	S97	0.0568	0.056797	0.057791	0.000994
	S98	0.0833	0.083311	0.084240	0.000929
	S99	0.1072	0.107214	0.108264	0.001049
	S0	0.0017	0.001702	0.002707	0.001005
	CCV	0.0949	0.006865	0.007922	0.001057
	CCB	-0.0080	0.001354	0.002337	0.000983
11	U1	0.5704	0.032336	0.033366	0.001030
12	U2	0.4737	0.027157	0.028114	0.000957
13	U3	0.5393	0.030669	0.031740	0.001071

Tech Support

Cup	Type	Result	Absorbance	T	W
14	U4	0.5158	0.029407	0.030383	0.000975
15	U5	0.6109	0.034505	0.035530	0.001025
16	U6	1.0195	0.056390	0.057431	0.001041
17	U7	0.7345	0.041125	0.042039	0.000914
18	U8	0.4396	0.025329	0.026418	0.001089
19	U9	0.3179	0.018807	0.019866	0.001059
20x10.000	U10	0.0288	0.001936	0.003044	0.001108
	CCV	0.0965	0.006948	0.008059	0.001111
	CCB	-0.0032	0.001609	0.002731	0.001123
21	U11	0.5129	0.029253	0.030295	0.001042
22	U12	0.1802	0.011433	0.012507	0.001075
23	U13	0.3281	0.019355	0.020426	0.001071
24	U14	0.3581	0.020960	0.022080	0.001119
25	U15	0.5874	0.033244	0.034364	0.001120
26	U16	0.6575	0.037000	0.038080	0.001080
27	U17	0.5772	0.032700	0.033752	0.001052
28	U18	0.4715	0.027034	0.028114	0.001079
29x10.000	U19	0.3116	0.003451	0.004727	0.001276
30x10.000	U20	0.1141	0.002393	0.003564	0.001170

Tech Support

Cup	Type	Result	Absorbance	T	W
	CCV	0.0946	0.006847	0.008075	0.001227
	CCB	0.0006	0.001812	0.002986	0.001174
31	U21	0.4516	0.025972	0.027226	0.001254
32	U22	0.6707	0.037706	0.038852	0.001146
33	U23	0.4633	0.026600	0.027841	0.001241
34	U24	0.2999	0.017846	0.019097	0.001251
35x10.000	U25	0.0913	0.002271	0.003523	0.001251
36	U26	0.5780	0.032740	0.033993	0.001252
37	U27	0.7237	0.040544	0.042234	0.001689
38	U28	0.5903	0.033403	0.034681	0.001278
39	U29	0.8233	0.045878	0.047165	0.001288
40	U30	0.4855	0.027788	0.029035	0.001247
	CCV	0.0989	0.007079	0.008368	0.001289
	CCB	-0.0062	0.001452	0.002755	0.001302
41	U31	0.3963	0.023010	0.024297	0.001287
42	U32	0.3728	0.021749	0.023048	0.001299
43	U33	0.1699	0.010881	0.012172	0.001290
44	U34	0.5954	0.033674	0.034881	0.001207
45	U35	0.3844	0.022372	0.023656	0.001284
46	U36	0.8552	0.047591	0.048847	0.001257

Tech Support

Cup	Type	Result	Absorbance	T	W
47	U37	0.5655	0.032073	0.033415	0.001342
48	U38	0.5281	0.030067	0.031357	0.001290
49	U39	0.3679	0.021490	0.022813	0.001323
50	U40	0.6444	0.036297	0.037452	0.001156
	CCV	0.0931	0.006768	0.008152	0.001384
	CCB	0.0002	0.001790	0.003156	0.001366
51	U41	0.4584	0.026335	0.027675	0.001340
52x10.000	U42	0.1979	0.002842	0.004231	0.001389
53	U43	0.1312	0.008811	0.010179	0.001368
54	U44	1.1178	0.061652	0.063070	0.001418
55	U45	0.7632	0.042660	0.044026	0.001366
56	U46	0.3311	0.019514	0.020927	0.001413
	CCV	0.0986	0.007064	0.008524	0.001460
	CCB	-0.0059	0.001465	0.002973	0.001508