

# Tech Support



Software version:

2.5.2

User name:

UTESE

Time and Date:

2025-09-03 15:14:19

Tray number:

2

Tray name:

COMPASS\_RootExclusion\_MonMon\_PO4redo\_Mar-Apr2024.Aug2024\_1-33.101-105

## Phosphate

### Calibration data

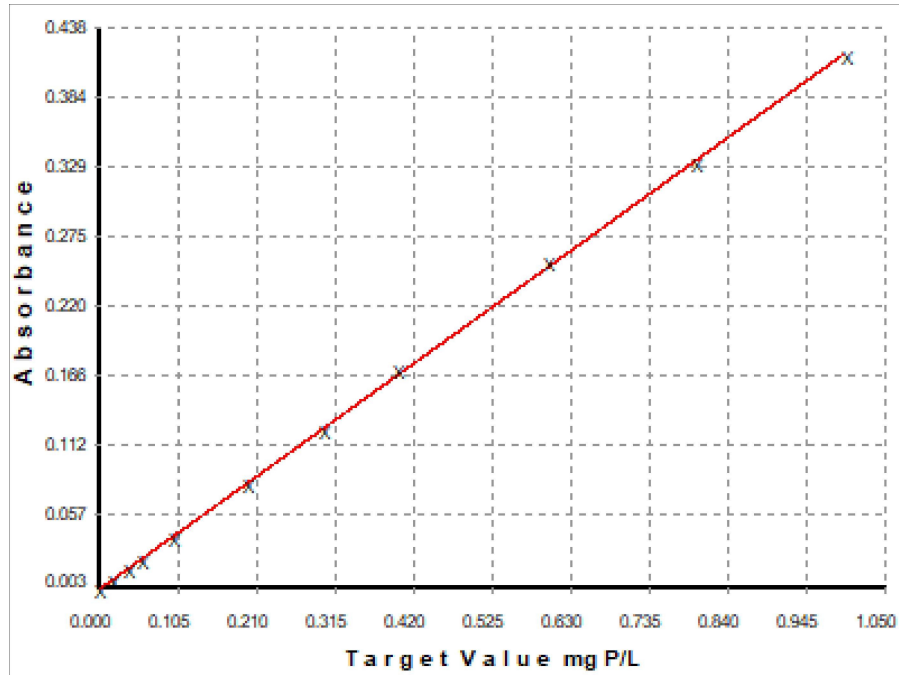
ID	Absorbance	Calc mg P/L	Target mg P/L	% Error
S1	0.0026	0.002	0.000	
S90	0.0097	0.020	0.020	-1.9148
S91	0.0176	0.038	0.040	-3.9551
S92	0.0249	0.056	0.060	-6.9633
S93	0.0419	0.097	0.100	-3.4108
S94	0.0840	0.197	0.200	-1.3441
S95	0.1263	0.299	0.300	-0.4666
S96	0.1730	0.410	0.400	2.5718
S97	0.2570	0.611	0.600	1.8727
S98	0.3335	0.794	0.800	-0.6972
S99	0.4174	0.995	1.000	-0.4774
S0	0.0041	0.006	0.000	

### Calibration status

Polynomial order	1
Correlation coefficient	0.9999
RSE (%)	3.40
Carryover(%)	0.4
Calibration equation	y = bx + a
y =	Concentration mg P/L
x =	Measured absorbance
a =	-3.685306E-03
b =	2.392975E+00
Original Date & Time	2025-09-03 14:23:22



## Calibration graph



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## 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	0.002572				UTESE	2025-09-03 14:18:34
		S90	Standard 90	0.010	mg P/L	0.009738				UTESE	2025-09-03 14:19:01
		S91	Standard 91	0.018	mg P/L	0.017595				UTESE	2025-09-03 14:19:27
		S92	Standard 92	0.025	mg P/L	0.024868				UTESE	2025-09-03 14:19:52
		S93	Standard 93	0.042	mg P/L	0.041904				UTESE	2025-09-03 14:20:19
		S94	Standard 94	0.084	mg P/L	0.083995				UTESE	2025-09-03 14:20:45
		S95	Standard 95	0.126	mg P/L	0.126322				UTESE	2025-09-03 14:21:12
		S96	Standard 96	0.173	mg P/L	0.172995				UTESE	2025-09-03 14:21:38
		S97	Standard 97	0.257	mg P/L	0.256969				UTESE	2025-09-03 14:22:04
		S98	Standard 98	0.334	mg P/L	0.333521				UTESE	2025-09-03 14:22:30
		S99	Standard 99	0.417	mg P/L	0.417435				UTESE	2025-09-03 14:22:56
		S0	Standard 0	0.004	mg P/L	0.004096				UTESE	2025-09-03 14:23:22
		CCV	CCV	0.089	mg P/L	0.038815				UTESE	2025-09-03 14:23:49
		CCB	CCB	0.004	mg P/L	0.003062				UTESE	2025-09-03 14:24:15
5	U1	Nanopure	H2O	0.002	mg P/L	0.002573				UTESE	2025-09-03 14:24:42
6	U2	Nanopure	H2O	0.003	mg P/L	0.002825				UTESE	2025-09-03 14:25:08
7	U3	Nanopure	H2O	0.002 ELL	mg P/L	0.002546				UTESE	2025-09-03 14:25:35
8	U4	HPLC	H2O	0.003	mg P/L	0.002761				UTESE	2025-09-03 14:26:00
9	U5	HPLC	H2O	0.003	mg P/L	0.002647				UTESE	2025-09-03 14:26:27
10	U6	HPLC	H2O	0.002 ELL	mg P/L	0.002492				UTESE	2025-09-03 14:26:53
11	U7	1	_1_R1_3292024_ch1_trC_20 cm	0.003	mg P/L	0.002807				UTESE	2025-09-03 14:27:20
12	U8	2	_2_R2_3292024_ch1_trC_40 cm	0.010	mg P/L	0.005810				UTESE	2025-09-03 14:27:45
13	U9	3	_3_R3_3292024_ch3_trC_40 cm	0.003	mg P/L	0.002960				UTESE	2025-09-03 14:28:11

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Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
14	U10	4	_4_R4_3292024_ch3_trC_40cm	0.003	mg P/L	0.002746				UTESE	2025-09-03 14:28:38
	CCV	CCV		0.087	mg P/L	0.037924				UTESE	2025-09-03 14:29:04
	CCB	CCB		0.003	mg P/L	0.002948				UTESE	2025-09-03 14:29:31
15	U11	5	_5_R5_3292024_ch4_trC_20cm	0.005	mg P/L	0.003808				UTESE	2025-09-03 14:29:57
16	U12	6	_6_R6_3292024_ch4_trC_40cm	0.003	mg P/L	0.002783				UTESE	2025-09-03 14:30:23
17	U13	7	_7_R7_3292024_ch5_trE_40cm	0.004	mg P/L	0.003139				UTESE	2025-09-03 14:30:49
18	U14	8	_8_R8_3292024_ch6_trE_20cm	0.004	mg P/L	0.003293				UTESE	2025-09-03 14:31:14
19	U15	9	_9_R9_3292024_ch6_trE_40cm	0.003	mg P/L	0.002985				UTESE	2025-09-03 14:31:40
20	U16	10	_10_R10_3292024_ch7_trE_40cm	0.006	mg P/L	0.004017				UTESE	2025-09-03 14:32:06
21	U17	11	_11_R11_3292024_ch8_trE_20cm	0.004	mg P/L	0.003140				UTESE	2025-09-03 14:32:33
22	U18	12	_12_R12_3292024_ch8_trE_40cm	0.003	mg P/L	0.002841				UTESE	2025-09-03 14:32:59
23	U19	13	_13_R13_4052024_ch1_trC_10cm	0.013	mg P/L	0.007006				UTESE	2025-09-03 14:33:26
24	U20	14	_14_R14_4052024_ch1_trC_20cm	0.007	mg P/L	0.004559				UTESE	2025-09-03 14:33:51
	CCV	CCV		0.086	mg P/L	0.037488				UTESE	2025-09-03 14:34:17
	CCB	CCB		0.003	mg P/L	0.002798				UTESE	2025-09-03 14:34:44
25	U21	15	_15_R15_4052024_ch1_trC_40cm	0.004	mg P/L	0.003181				UTESE	2025-09-03 14:35:11
26	U22	16	_16_R16_4052024_ch2_trC_cm	0.019	mg P/L	0.009656				UTESE	2025-09-03 14:35:38
27	U23	17	_17_R17_4052024_ch2_trC_20cm	0.005	mg P/L	0.003626				UTESE	2025-09-03 14:36:04
28	U24	18	_18_R18_4052024_ch2_trC_40cm	0.004	mg P/L	0.003179				UTESE	2025-09-03 14:36:30
29	U25	19	_19_R19_4052024_ch3_trC_cm	0.004	mg P/L	0.003241				UTESE	2025-09-03 14:36:56

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Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
30	U26	20	_20_R20_4052024_ch3_trC_40cm	0.004	mg P/L	0.003239				UTESE	2025-09-03 14:37:22
31	U27	21	_21_R21_4052024_ch3_trC_40cm	0.005	mg P/L	0.003435				UTESE	2025-09-03 14:37:48
32	U28	22	_22_R22_4052024_ch4_trC_cm	0.008	mg P/L	0.004931				UTESE	2025-09-03 14:38:13
33	U29	23	_23_R23_4052024_ch4_trC_40cm	0.006	mg P/L	0.003924				UTESE	2025-09-03 14:38:39
34	U30	24	_24_R24_4052024_ch5_trE_10cm	0.009	mg P/L	0.005182				UTESE	2025-09-03 14:39:06
	CCV	CCV		0.088	mg P/L	0.038312				UTESE	2025-09-03 14:39:30
	CCB	CCB		0.003	mg P/L	0.002719				UTESE	2025-09-03 14:39:56
35	U31	25	_25_R25_4052024_ch5_trE_20cm	0.003	mg P/L	0.002655				UTESE	2025-09-03 14:40:21
36	U32	26	_26_R26_4052024_ch5_trE_40cm	0.004	mg P/L	0.003244				UTESE	2025-09-03 14:40:46
37	U33	27	_27_R27_4052024_ch6_trE_cm	0.019	mg P/L	0.009548				UTESE	2025-09-03 14:41:11
38	U34	28	_28_R28_4052024_ch7_trE_10cm	0.006	mg P/L	0.004121				UTESE	2025-09-03 14:41:36
39	U35	29	_29_R29_4052024_ch7_trE_20cm	0.003	mg P/L	0.002677				UTESE	2025-09-03 14:42:00
40	U36	30	_30_R30_4052024_ch7_trE_40cm	0.003	mg P/L	0.002796				UTESE	2025-09-03 14:42:25
41	U37	31	_31_R31_4052024_ch8_trE_cm	0.005	mg P/L	0.003546				UTESE	2025-09-03 14:42:50
42	U38	32	_32_R32_4052024_ch8_trE_20cm	0.003	mg P/L	0.002962				UTESE	2025-09-03 14:43:15
43	U39	33	_33_R33_4052024_ch8_trE_40cm	0.006	mg P/L	0.003878				UTESE	2025-09-03 14:43:39
44	U40	101	2_101_R134_8142024_ch5_trE_cm	0.036	mg P/L	0.016448				UTESE	2025-09-03 14:44:04
	CCV	CCV		0.089	mg P/L	0.038675				UTESE	2025-09-03 14:44:29
	CCB	CCB		0.003	mg P/L	0.002933				UTESE	2025-09-03 14:44:55
45	U41	102	2_102_R135_8142024_ch6_trE_cm	0.046	mg P/L	0.020672				UTESE	2025-09-03 14:45:20

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Cup	Type	ID	Details	Result	Units	Raw data	QC Pro	Auto dil.	Man dil.	User	Time & Date
46	U42	103	2_103_R136_8212024_ch5_t rE_cm	0.029	mg P/L	0.013837				UTESE	2025-09-03 14:45:45
47	U43	104	2_104_R137_8212024_ch6_t rE_cm	0.066	mg P/L	0.029085				UTESE	2025-09-03 14:46:10
48	U44	105	2_105_R138_8212024_ch7_t rE_cm	0.008	mg P/L	0.005006				UTESE	2025-09-03 14:46:35
	CCV	CCV		1.882	mg P/L	0.788200				UTESE	2025-09-03 14:46:59
	CCB	CCB		0.003	mg P/L	0.002762				UTESE	2025-09-03 14:47:25

## 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	0.0026	Linearity High	0.4174	Latest Slope	2.3930
Alert Low	0.000	Alert High	0.000	Latest Intercept	-0.0037

## Reagent parameters

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

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## 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

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## Diagnostics

Cup	Type	Result	Absorbance	T	W
	S1	0.003	0.002572	0.001637	-0.000936
	S90	0.010	0.009738	0.008741	-0.000997
	S91	0.018	0.017595	0.016666	-0.000929
	S92	0.025	0.024868	0.024034	-0.000833
	S93	0.042	0.041904	0.041329	-0.000575
	S94	0.084	0.083995	0.083710	-0.000284
	S95	0.126	0.126322	0.126225	-0.000097
	S96	0.173	0.172995	0.173017	0.000022
	S97	0.257	0.256969	0.257183	0.000213
	S98	0.334	0.333521	0.334106	0.000585
	S99	0.417	0.417435	0.418156	0.000721
	S0	0.004	0.004096	0.003899	-0.000197
	CCV	0.089	0.038815	0.038781	-0.000034
	CCB	0.004	0.003062	0.002606	-0.000456
5	U1	0.002	0.002573	0.002060	-0.000513
6	U2	0.003	0.002825	0.002142	-0.000683
7	U3	0.002 ELL	0.002546	0.001914	-0.000631
8	U4	0.003	0.002761	0.001936	-0.000825
9	U5	0.003	0.002647	0.001801	-0.000847
10	U6	0.002 ELL	0.002492	0.001621	-0.000870
11	U7	0.003	0.002807	0.001986	-0.000822
12	U8	0.010	0.005810	0.004942	-0.000868
13	U9	0.003	0.002960	0.002009	-0.000951
14	U10	0.003	0.002746	0.001881	-0.000865
	CCV	0.087	0.037924	0.037345	-0.000580
	CCB	0.003	0.002948	0.002325	-0.000623
15	U11	0.005	0.003808	0.003003	-0.000805
16	U12	0.003	0.002783	0.001963	-0.000820



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Cup	Type	Result	Absorbance	T	W
17	U13	0.004	0.003139	0.002381	-0.000759
18	U14	0.004	0.003293	0.002461	-0.000832
19	U15	0.003	0.002985	0.002028	-0.000957
20	U16	0.006	0.004017	0.003098	-0.000919
21	U17	0.004	0.003140	0.002158	-0.000981
22	U18	0.003	0.002841	0.001796	-0.001046
23	U19	0.013	0.007006	0.006038	-0.000968
24	U20	0.007	0.004559	0.003469	-0.001090
	CCV	0.086	0.037488	0.036902	-0.000586
	CCB	0.003	0.002798	0.001853	-0.000945
25	U21	0.004	0.003181	0.002156	-0.001024
26	U22	0.019	0.009656	0.008745	-0.000911
27	U23	0.005	0.003626	0.002583	-0.001043
28	U24	0.004	0.003179	0.002060	-0.001119
29	U25	0.004	0.003241	0.002179	-0.001063
30	U26	0.004	0.003239	0.002032	-0.001206
31	U27	0.005	0.003435	0.002211	-0.001224
32	U28	0.008	0.004931	0.003791	-0.001141
33	U29	0.006	0.003924	0.002753	-0.001171

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Cup	Type	Result	Absorbance	T	W
34	U30	0.009	0.005182	0.003986	-0.001195
	CCV	0.088	0.038312	0.037541	-0.000771
	CCB	0.003	0.002719	0.001906	-0.000814
35	U31	0.003	0.002655	0.001600	-0.001055
36	U32	0.004	0.003244	0.002005	-0.001239
37	U33	0.019	0.009548	0.008332	-0.001216
38	U34	0.006	0.004121	0.002926	-0.001195
39	U35	0.003	0.002677	0.001347	-0.001330
40	U36	0.003	0.002796	0.001440	-0.001356
41	U37	0.005	0.003546	0.002213	-0.001332
42	U38	0.003	0.002962	0.001675	-0.001287
43	U39	0.006	0.003878	0.002452	-0.001426
44	U40	0.036	0.016448	0.015154	-0.001293
	CCV	0.089	0.038675	0.037586	-0.001089
	CCB	0.003	0.002933	0.001633	-0.001300
45	U41	0.046	0.020672	0.019443	-0.001229
46	U42	0.029	0.013837	0.012558	-0.001280
47	U43	0.066	0.029085	0.027845	-0.001239
48	U44	0.008	0.005006	0.003683	-0.001323
	CCV	1.882	0.788200	0.788713	0.000513
	CCB	0.003	0.002762	0.001984	-0.000778

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