American Proficiency Institute

1169 Business Park Drive, Traverse City, MI 49686

PROFICIENCY TESTING
PERFORMANCE EVALUATION

2017 Chemistry - Core - 3rd Event

Please check the reports carefully and notify API within 30 days of any corrections that must be made to your evaluation.

Customer Information

Heather Hall - Laboratory
Brown Clinic Northridge
511 14th Avenue NE
Watertown, SD 57201

API Customer Number: **39004** CLIA Number: **43D0974321**
These reports have also been prepared for:
COLA (0016467)

The American Proficiency Institute evaluation reports consist of three parts: Performance Summary, Comparative Evaluation, and Participant Data Summary. The Performance Summary and Comparative Evaluation are enclosed, and the Participant Data Summary is available on our website. Click on 'Participant Data Summaries' on the left side of the screen, choose a Test Event, and select an analyte and peer group to view the statistics.

Laboratories should review the Performance Summary and Comparative Evaluation thoroughly for failures or 'not graded' analytes. Laboratories are responsible for documenting and performing corrective action for failures and must perform a self-evaluation using statistics presented in the Participant Data Summary for samples that have not been graded.

PERFORMANCE REVIEW AND CORRECTIVE ACTION

After reviewing the evaluation reports, complete the information below and return this form along with the enclosed reports for your records.

Reviewed by (Lab Director or designee): _____ Date: 10/6/17

Corrective action taken (if indicated):

100% acceptable on all analytes

No ungraded or educational samples

Heather S Hall

Evaluation Published: 10/4/2017

American Proficiency Institute
1159 Business Park Drive, Traverse City, MI 49686

Customer No: 39004
CLIA No: 43D0974321
Address: Heather Hall - Laboratory
Brown Clinic Northridge
511 14th Avenue NE
Watertown, SD 57201

Performance Summary
2017 Chemistry - Core - 3rd Event

This is a summary of your proficiency testing performance for the last three test events. It is divided into sections according to specialty/sub-specialty. Unsuccessful long-term performance, where indicated, is based on unsatisfactory scores for two of three test events.

The scores for individual analytes are defined as the ratio of acceptable responses to the number of samples tested, expressed as a percentage. Unsatisfactory performance (denoted by ✓) is indicated for any analyte with less than 80%. Analytes that are scored for CMS are designated by (**).

CHEMISTRY *Endocrinology*	2017 1st	2017 2nd	2017 3rd	Long Term	Notes (2017 3rd)
Free Thyroxine **	100%	100%	100%		
HCG **	100%	100%	100%		
HCG (serum-qual)	100%	100%	100%		
Thyroid Stimulating Hormone **	100%	100%	100%		

CHEMISTRY *Routine Chemistry*	2017 1st	2017 2nd	2017 3rd	Long Term	Notes (2017 3rd)
Albumin **	100%	100%	100%		
Alkaline Phosphatase **	100%	100%	100%		
ALT / SGPT **	100%	100%	100%		
Amylase **	100%	100%	100%		
AST / SGOT **	100%	100%	100%		
Bilirubin, Direct	100%	100%	100%		
Bilirubin, Total **	100%	100%	100%		
BNP (CM)	100%	100%	100%		
Calcium, Total **	100%	100%	100%		
Chloride **	100%	100%	100%		
Cholesterol, HDL **	100%	100%	100%		
Cholesterol, Total **	100%	100%	100%		
CO2	100%	100%	100%		
Creatine Kinase, Isoenzyme **	100%	100%	100%		
Creatinine **	100%	100%	100%		
Glucose **	100%	100%	100%		
Glycated Hemoglobin	100%	100%	100%		
Lipase	100%	100%	100%		
Potassium **	100%	100%	100%		
Sodium **	100%	100%	100%		
Total Protein **	100%	100%	100%		
Triglycerides **	100%	100%	100%		
Troponin I (CM)	100%	100%	100%		
Urea Nitrogen **	100%	100%	100%		

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Customer No: 39004 Kit No 1
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Comparative Evaluation

2017 Chemistry - Core - 3rd Event

This report shows the result you reported, expected result, mean, SD (Standard Deviation), SDI (Standard Deviation Interval), and your grade for each sample tested. The SDI compares your laboratory's result to the comparison group's mean and is defined as follows:

$$SDI = \frac{\text{Reported Result - Comparison Group Mean}}{\text{Comparison Group Standard Deviation}}$$

Analytes that are scored for CMS are designated by (**).

CARDIAC MARKERS

Analyte / Method	Sample	Reported Result	Expected Result	Mean	SD	SDI	Grade
BNP (CM) (pg/mL)	CM-11	1,910.0	932.2 - 2,034.6	1,483.44	183.72	2.3	Acceptable
AlereBiositeTriage BNP Test	CM-12	398.0	257.4 - 529.2	393.28	45.28	0.1	Acceptable
	CM-13	47.4	31.5 - 66.7	49.13	5.85	-0.3	Acceptable
	CM-14	769.0	482.7 - 1,048.5	765.60	94.29	0.0	Acceptable
	CM-15	3,160.0	1,534.8 - 3,838.2	2,686.49	383.89	1.2	Acceptable
CK-MB (ng/mL) **	CM-11	24.5	10.6 - 33.5	22.05	3.80	0.6	Acceptable
AlereBiositeTriageCardiac-EDTA	CM-12	8.8	3.7 - 11.2	7.45	1.25	1.1	Acceptable
	CM-13	3.9	0.0 - 5.8	2.78	0.55	2.0	Acceptable
	CM-14	10.7	5.9 - 19.0	12.48	2.17	-0.8	Acceptable
	CM-15	46.3	17.8 - 59.9	38.84	7.00	1.1	Acceptable
Troponin I (CM) (ng/mL)	CM-11	4.83	1.26 - 8.32	4.790	1.176	0.0	Acceptable
AlereBiositeTriageCardiac-EDTA	CM-12	0.54	0.14 - 0.94	0.539	0.131	0.0	Acceptable
	CM-13	< 0.05	0.00 - 0.35	0.050	0.001		Acceptable
	CM-14	0.79	0.28 - 2.97	1.624	0.446	-1.9	Acceptable
	CM-15	8.80	4.05 - 17.88	10.966	2.302	-0.9	Acceptable

CHEMISTRY

Analyte / Method	Sample	Reported Result	Expected Result	Mean	SD	SDI	Grade
Albumin (g/dL) **	CH-11	2.7	2.5 - 3.1	2.78	0.07	-1.1	Acceptable
Siemens Dimension / Siemens Dimension	CH-12	3.1	2.7 - 3.5	3.10	0.07	0.0	Acceptable
reagent	CH-13	2.1	1.8 - 2.4	2.10	0.06	0.0	Acceptable
	CH-14	1.9	1.7 - 2.2	1.93	0.06	-0.5	Acceptable
	CH-15	2.6	2.3 - 2.9	2.62	0.07	-0.3	Acceptable
Alkaline Phosphatase (U/L) **	CH-11	238	169 - 316	242.8	7.6	-0.6	Acceptable
Siemens Dimension / S Dimension ALPI	CH-12	308	216 - 402	309.0	8.8	-0.1	Acceptable
(DF150)	CH-13	108	77 - 144	110.7	4.3	-0.6	Acceptable
	CH-14	73	52 - 99	75.5	3.4	-0.7	Acceptable
	CH-15	206	148 - 276	212.3	7.0	-0.9	Acceptable
ALT / SGPT (U/L) **	CH-11	197	154 - 232	192.8	3.6	1.2	Acceptable
Siemens Dimension / S Dimension	CH-12	257	198 - 299	248.6	4.3	2.0	Acceptable
ALTI-new (DF143)	CH-13	82	63 - 95	79.1	2.1	1.4	Acceptable
	CH-14	51	40 - 61	50.2	1.8	0.4	Acceptable
	CH-15	164	132 - 198	165.0	3.2	-0.3	Acceptable
Amylase (U/L) **	CH-11	134	94 - 176	135.2	2.5	-0.5	Acceptable
Siemens Dimension / Siemens Dimension	CH-12	175	121 - 227	174.0	3.1	0.3	Acceptable
reagent	CH-13	55	38 - 72	54.9	1.3	0.1	Acceptable
	CH-14	35	24 - 45	34.4	1.0	0.6	Acceptable
	CH-15	116	80 - 151	115.4	2.2	0.3	Acceptable
AST / SGOT (U/L) **	CH-11	200	157 - 237	197.4	5.4	0.5	Acceptable
Siemens Dimension / Siemens Dimension	CH-12	260	205 - 309	257.0	6.8	0.4	Acceptable
reagent	CH-13	78	62 - 94	77.9	2.7	0.0	Acceptable
	CH-14	47	38 - 58	47.6	2.2	-0.3	Acceptable
	CH-15	167	134 - 203	168.4	4.8	-0.3	Acceptable

10/04/2017

CHEMISTRY - continued

Analyte / Method	Sample	Reported Result	Expected Result	Mean	SD	SDI	Grade
Bilirubin, Direct (mg/dL)	CH-11	0.7	0.2 - 1.1	0.62	0.07	1.1	Acceptable
Siemens Dimension / Siemens Dimension	CH-12	0.9	0.4 - 1.2	0.80	0.08	1.3	Acceptable
reagent	CH-13	0.4	0.0 - 0.7	0.29	0.05	2.2	Acceptable
	CH-14	0.2	0.0 - 0.7	0.21	0.04	-0.2	Acceptable
	CH-15	0.6	0.1 - 1.0	0.53	0.07	1.0	Acceptable
Bilirubin, Total (mg/dL) **	CH-11	3.1	2.3 - 3.5	2.90	0.17	1.2	Acceptable
Siemens Dimension / Siemens Dimension	CH-12	4.1	3.0 - 4.6	3.76	0.22	1.5	Acceptable
reagent	CH-13	1.3	0.8 - 1.7	1.22	0.10	0.8	Acceptable
	CH-14	0.9	0.4 - 1.3	0.82	0.08	1.0	Acceptable
	CH-15	2.6	1.9 - 3.0	2.48	0.15	0.8	Acceptable
Calcium, Total (mg/dL) **	CH-11	10.7	9.8 - 11.9	10.88	0.24	-0.8	Acceptable
Siemens Dimension / Siemens Dimension	CH-12	12.3	11.2 - 13.3	12.22	0.27	0.3	Acceptable
reagent	CH-13	8.2	7.2 - 9.3	8.26	0.19	-0.3	Acceptable
	CH-14	7.5	6.6 - 8.7	7.61	0.18	-0.6	Acceptable
	CH-15	10.1	9.2 - 11.3	10.24	0.23	-0.6	Acceptable
Chloride (mmol/L) **	CH-11	105	99 - 111	105.0	1.1	0.0	Acceptable
Siemens Dimensn QuikLYTE- EXL	CH-12	112	104 - 116	110.3	1.2	1.4	Acceptable
	CH-13	95	89 - 99	93.8	0.9	1.3	Acceptable
	CH-14	93	86 - 96	90.9	0.9	2.3	Acceptable
	CH-15	103	97 - 108	102.2	1.0	0.8	Acceptable
Cholesterol, HDL (mg/dL) **	CH-11	109	74 - 139	106.7	2.9	0.8	Acceptable
Siemens Dimension / Siemens Dimension	CH-12	120	83 - 156	119.3	3.3	0.2	Acceptable
AHDL DF48B	CH-13	79	56 - 105	80.7	2.3	-0.7	Acceptable
	CH-14	73	52 - 97	74.3	2.2	-0.6	Acceptable
	CH-15	98	70 - 132	100.8	2.8	-1.0	Acceptable
Cholesterol, Total (mg/dL) **	CH-11	179	158 - 195	176.5	4.3	0.6	Acceptable
Siemens Dimension / Siemens Dimension	CH-12	202	178 - 219	198.4	4.7	0.8	Acceptable
reagent	CH-13	132	117 - 144	130.7	3.6	0.4	Acceptable
	CH-14	122	107 - 132	119.1	3.4	0.9	Acceptable
	CH-15	166	148 - 182	164.8	4.3	0.3	Acceptable
CO2 (mmol/L)	CH-11	31	23 - 34	28.5	1.8	1.4	Acceptable
Siemens Dimension enzymatic	CH-12	36	26 - 39	32.4	1.9	1.9	Acceptable
	CH-13	22	14 - 25	19.5	1.6	1.6	Acceptable
	CH-14	19	12 - 22	17.2	1.5	1.2	Acceptable
	CH-15	29	20 - 32	26.0	1.8	1.7	Acceptable
Creatinine (mg/dL) **	CH-11	3.38	2.89 - 3.92	3.403	0.079	-0.3	Acceptable
Siemens Dimension / Siemens Dimension	CH-12	4.31	3.66 - 4.96	4.313	0.096	0.0	Acceptable
CRE2	CH-13	1.58	1.29 - 1.90	1.591	0.054	-0.2	Acceptable
	CH-14	1.16	0.84 - 1.45	1.143	0.045	0.4	Acceptable
	CH-15	2.90	2.49 - 3.38	2.939	0.070	-0.6	Acceptable
Glucose (mg/dL) **	CH-11	186	171 - 210	190.4	3.5	-1.3	Acceptable
Siemens Dimension / Siemens Dimension	CH-12	232	210 - 258	233.9	4.3	-0.4	Acceptable
reagent	CH-13	99	91 - 112	101.8	2.1	-1.3	Acceptable
	CH-14	80	71 - 88	79.5	1.7	0.3	Acceptable
	CH-15	164	151 - 186	168.5	3.2	-1.4	Acceptable
Lipase (U/L)	CH-11	186	158 - 219	188.4	5.6	-0.4	Acceptable
Siemens Dimension / Siemens Dimension	CH-12	225	193 - 254	223.4	6.5	0.2	Acceptable
LIPL	CH-13	115	86 - 147	116.2	4.3	-0.3	Acceptable
	CH-14	97	67 - 128	97.4	3.8	-0.1	Acceptable
	CH-15	169	141 - 202	171.3	5.4	-0.4	Acceptable
Potassium (mmol/L) **	CH-11	5.7	5.1 - 6.2	5.62	0.06	1.3	Acceptable
Siemens Dimensn QuikLYTE- EXL	CH-12	6.6	6.0 - 7.1	6.57	0.07	0.4	Acceptable
	CH-13	3.7	3.1 - 4.2	3.67	0.05	0.6	Acceptable
	CH-14	3.2	2.6 - 3.7	3.18	0.05	0.4	Acceptable
	CH-15	5.2	4.6 - 5.7	5.13	0.06	1.2	Acceptable

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Comparative Evaluation
2017 Chemistry - Core - 3rd Event

CHEMISTRY - continued

Analyte / Method	Sample	Reported Result	Expected Result	Mean	SD	SDI	Grade
Sodium (mmol/L) **	CH-11	146	140 - 149	144.5	1.4	1.1	Acceptable
Siemens Dimensn QuikLYTE- EXL	CH-12	155	149 - 158	153.7	1.5	0.9	Acceptable
	CH-13	126	120 - 129	124.7	1.2	1.1	Acceptable
	CH-14	121	115 - 124	119.8	1.2	1.0	Acceptable
	CH-15	141	135 - 144	139.4	1.3	1.2	Acceptable
Total Protein (g/dL) **	CH-11	6.5	5.7 - 7.1	6.42	0.12	0.7	Acceptable
Siemens Dimension / Siemens Dimension	CH-12	7.6	6.7 - 8.3	7.50	0.14	0.7	Acceptable
reagent	CH-13	4.2	3.7 - 4.7	4.22	0.10	-0.2	Acceptable
	CH-14	3.6	3.3 - 4.1	3.67	0.09	-0.8	Acceptable
	CH-15	5.9	5.3 - 6.5	5.89	0.11	0.1	Acceptable
Triglycerides (mg/dL) **	CH-11	107	79 - 132	105.5	2.2	0.7	Acceptable
Siemens Dimension / Siemens Dimension	CH-12	131	95 - 160	127.8	2.3	1.4	Acceptable
TGL	CH-13	58	44 - 74	59.0	2.2	-0.5	Acceptable
	CH-14	48	35 - 59	46.7	2.2	0.6	Acceptable
	CH-15	94	70 - 118	94.3	2.3	-0.1	Acceptable
Urea Nitrogen / BUN (mg/dL) **	CH-11	32	28 - 34	30.8	1.1	1.1	Acceptable
Siemens Dimension / Siemens Dimension	CH-12	41	35 - 43	38.7	1.3	1.8	Acceptable
reagent	CH-13	15	12 - 17	14.7	0.8	0.4	Acceptable
	CH-14	12	8 - 13	10.6	0.8	1.8	Acceptable
	CH-15	27	24 - 30	26.7	1.0	0.3	Acceptable

CHEMISTRY (ENDOCRINOLOGY)

Analyte / Method	Sample	Reported Result	Expected Result	Mean	SD	SDI	Grade
Free Thyroxine (ng/dL) **	CH-11	3.1	2.5 - 3.4	2.92	0.13	1.4	Acceptable
Siemens Dimension EXL / Siemens	CH-12	3.0	2.5 - 3.4	2.96	0.13	0.3	Acceptable
Dimension reagent	CH-13	2.9	2.5 - 3.3	2.89	0.13	0.1	Acceptable
	CH-14	2.9	2.4 - 3.3	2.88	0.13	0.2	Acceptable
	CH-15	3.0	2.5 - 3.3	2.89	0.13	0.8	Acceptable
HCG (serum-quan) (mIU/mL) **	CH-11	984	807 - 1,030	918.7	37.0	1.8	Acceptable
Siemens Dimension	CH-12	1,316	903 - 1,574	1,238.7	111.6	0.7	Acceptable
	CH-13	408	346 - 439	392.5	15.5	1.0	Acceptable
	CH-14	255	219 - 278	248.8	9.7	0.6	Acceptable
	CH-15	834	695 - 893	793.8	32.8	1.2	Acceptable
Thyroid Stimulating Hormone (uU/mL) **	CH-11	5.27	4.77 - 6.20	5.483	0.236	-0.9	Acceptable
Siemens Dimension EXL / Siemens	CH-12	6.31	5.80 - 7.52	6.664	0.285	-1.2	Acceptable
Dimension reagent	CH-13	2.85	2.52 - 3.25	2.886	0.120	-0.3	Acceptable
	CH-14	2.20	1.89 - 2.51	2.198	0.102	0.0	Acceptable
	CH-15	4.76	4.20 - 5.52	4.860	0.217	-0.5	Acceptable

GLYCOHEMOGLOBIN

Analyte / Method	Sample	Reported Result	Expected Result	Mean	SD	SDI	Grade
Glycated Hemoglobin (%)	GLY-11	9.2	7.2 - 10.9	9.02	0.25	0.7	Acceptable
Siemens Dimension / Siemens Dimension (HB1C)	GLY-12	11.7	9.1 - 13.8	11.45	0.32	0.8	Acceptable

SERUM HCG

Analyte / Method	Sample	Reported Result	Expected Result	Grade
HCG (serum-qual)	HCG-11	Negative	Negative	Acceptable
Quidel QuickVue OS HCG Combo	HCG-12	Positive	Positive	Acceptable
	HCG-13	Negative	Negative	Acceptable
	HCG-14	Positive	Positive	Acceptable
	HCG-15	Positive	Positive	Acceptable