American Proficiency Institute

1159 Business Park Drive, Traverse City, MI 49686

PROFICIENCY TESTING
PERFORMANCE EVALUATION
2018 Chemistry - Core - 1st 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): [signature], MD Date: 3/9/18

Corrective action taken (if indicated):

HCG quantitative - failure on all 5 levels - Corrective action performed and documented on Corrective action documentation form. All repeats on failed testing were acceptable. No patients affected.

No educational or ungraded samples - All other analytes pass 100% acceptable

Heather S Hall 3-6-18

Evaluation Published: 2/27/2018

American Proficiency Institute

PERFORMANCE REVIEW AND CORRECTIVE ACTION DOCUMENTATION

2018 Chemistry - Core - 1st Event

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

After reviewing the evaluation reports, print this form, complete the information below and **retain this form, along with the evaluation reports, for your records.**

	2017 2nd	2017 3rd	2018 1st
HCG	100%	100%	0%

PERFORMANCE REVIEW

Reviewed by (Lab Director or designee): _____ Date: 3/5/18

Reviewed by (Other): Heather Hall Date: 3-6-18

CORRECTIVE ACTION TAKEN FOR THIS ANALYTE (If Indicated)

Reported results were checked for any clerical errors. At that time, it was noticed that the report indicated the samples should be from the HCG survey material. The Quantitative HCG was originally run on the CH survey material leading to failed results.

The HCG survey material was run with the following results:

HCG-01 - 0	Expected Range 0-10 Mean 0
HCG-02 - 795	Expected Range 690-901 Mean 795.6
HCG-03 - 165	Expected Range 145-185 Mean 164.9
HCG-04 - 167	Expected Range 144-184 Mean 164.3
HCG-05 - 0	Expected Range 0-10 Mean 0

All results were acceptable after repeating on correct sample and comparing to API Expected Results.

In-house API schedule and ordering will be reviewed for steps to avoid this issue in the future.

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Performance Summary

2018 Chemistry - Core - 1st 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 2nd	2017 3rd	2018 1st	Long Term	Notes (2018 1st)
Free Thyroxine **	100%	100%	100%		
HCG **	100%	100%	✓ 0%		
HCG (serum-qual)	100%	100%	100%		
Thyroid Stimulating Hormone **	100%	100%	100%		

CHEMISTRY *Routine Chemistry*	2017 2nd	2017 3rd	2018 1st	Long Term	Notes (2018 1st)
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%	80%		
Urea Nitrogen **	100%	100%	100%		

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Comparative Evaluation

2018 Chemistry - Core - 1st 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) AlereBiositeTriage BNP Test	CM-01	74.6	32.9 - 80.3	56.58	7.88	2.3	Acceptable
	CM-02	1,770.0	782.6 - 1,941.8	1,362.17	193.18	2.1	Acceptable
	CM-03	761.0	415.0 - 1,012.8	713.94	99.62	0.5	Acceptable
	CM-04	447.0	222.0 - 526.4	374.18	50.72	1.4	Acceptable
	CM-05	3,570.0	1,350.0 - 3,638.4	2,494.17	381.39	2.8	Acceptable
CK-MB (ng/mL) ** AlereBiositeTriageCardiac-EDTA	CM-01	2.6	0.0 - 5.0	1.94	0.47	1.4	Acceptable
	CM-02	18.4	9.0 - 28.7	18.86	3.26	-0.1	Acceptable
	CM-03	13.2	4.8 - 16.0	10.41	1.85	1.5	Acceptable
	CM-04	6.2	2.6 - 9.3	5.95	1.11	0.2	Acceptable
	CM-05	44.7	16.4 - 52.4	34.42	5.98	1.7	Acceptable
Troponin I (CM) (ng/mL) AlereBiositeTriageCardiac-EDTA	CM-01	< 0.05	0.00 - 0.35	0.050	0.001		Acceptable
	CM-02	3.76	1.31 - 6.01	3.656	0.782	0.1	Acceptable
	CM-03	2.05	0.38 - 1.96	1.167	0.261	3.4	Unacceptable
	CM-04	0.39	0.09 - 0.70	0.397	0.099	0.0	Acceptable
	CM-05	12.30	4.41 - 13.90	9.155	1.580	2.0	Acceptable

CHEMISTRY

Analyte / Method	Sample	Reported Result	Expected Result	Mean	SD	SDI	Grade
Albumin (g/dL) ** Siemens Dimension / Siemens Dimension reagent	CH-01	5.8	5.1 - 6.4	5.77	0.12	0.3	Acceptable
	CH-02	1.6	1.4 - 1.9	1.64	0.06	-0.7	Acceptable
	CH-03	3.4	3.0 - 3.8	3.42	0.08	-0.3	Acceptable
	CH-04	2.4	2.1 - 2.7	2.37	0.06	0.5	Acceptable
	CH-05	2.7	2.4 - 3.0	2.72	0.07	-0.3	Acceptable
Alkaline Phosphatase (U/L) ** Siemens Dimension / S Dimension ALPI (DF150)	CH-01	96	68 - 127	97.2	3.3	-0.4	Acceptable
	CH-02	40	27 - 52	39.4	2.6	0.2	Acceptable
	CH-03	348	250 - 465	357.2	10.7	-0.9	Acceptable
	CH-04	171	121 - 227	173.9	6.0	-0.5	Acceptable
	CH-05	229	165 - 308	236.6	8.1	-0.9	Acceptable
ALT / SGPT (U/L) ** Siemens Dimension / S Dimension ALTI-new (DF143)	CH-01	35	26 - 41	33.7	2.3	0.6	Acceptable
	CH-02	20	14 - 23	18.7	1.8	0.7	Acceptable
	CH-03	276	216 - 326	271.2	6.1	0.8	Acceptable
	CH-04	126	96 - 146	121.1	3.1	1.6	Acceptable
	CH-05	174	137 - 206	171.6	4.0	0.6	Acceptable
Amylase (U/L) ** Siemens Dimension / Siemens Dimension reagent	CH-01	77	54 - 102	77.8	1.5	-0.5	Acceptable
	CH-02	15	10 - 19	14.6	0.9	0.4	Acceptable
	CH-03	206	144 - 269	206.4	3.6	-0.1	Acceptable
	CH-04	91	64 - 120	92.1	1.7	-0.6	Acceptable
	CH-05	131	91 - 170	130.4	2.4	0.2	Acceptable
AST / SGOT (U/L) ** Siemens Dimension / Siemens Dimension reagent	CH-01	33	25 - 39	32.0	1.9	0.5	Acceptable
	CH-02	103	84 - 127	105.1	3.0	-0.7	Acceptable
	CH-03	297	239 - 360	299.5	7.2	-0.3	Acceptable
	CH-04	181	147 - 221	183.8	4.9	-0.6	Acceptable
	CH-05	220	178 - 268	222.9	5.9	-0.5	Acceptable

CHEMISTRY - continued

Analyte / Method	Sample	Reported Result	Expected Result	Mean	SD	SDI	Grade
Bilirubin, Direct (mg/dL)	CH-01	0.1	0.0 - 0.5	0.10	0.00		Acceptable
Siemens Dimension / Siemens Dimension	CH-02	0.1	0.0 - 0.5	0.10	0.00		Acceptable
reagent	CH-03	1.0	0.5 - 1.4	0.93	0.10	0.7	Acceptable
	CH-04	0.5	0.0 - 0.9	0.44	0.06	1.0	Acceptable
	CH-05	0.7	0.2 - 1.1	0.61	0.08	1.1	Acceptable
Bilirubin, Total (mg/dL) **	CH-01	0.5	0.0 - 0.9	0.44	0.05	1.2	Acceptable
Siemens Dimension / Siemens Dimension	CH-02	0.4	0.0 - 0.9	0.41	0.06	-0.2	Acceptable
reagent	CH-03	3.5	2.5 - 3.9	3.18	0.28	1.1	Acceptable
	CH-04	1.6	1.0 - 1.9	1.46	0.14	1.0	Acceptable
	CH-05	2.2	1.6 - 2.5	2.07	0.19	0.7	Acceptable
Calcium, Total (mg/dL) **	CH-01	7.0	5.9 - 8.0	6.98	0.19	0.1	Acceptable
Siemens Dimension / Siemens Dimension	CH-02	7.0	5.9 - 8.0	6.95	0.19	0.3	Acceptable
reagent	CH-03	13.6	12.5 - 14.5	13.50	0.30	0.3	Acceptable
	CH-04	9.6	8.5 - 10.6	9.52	0.22	0.4	Acceptable
	CH-05	10.8	9.8 - 11.9	10.81	0.24	0.0	Acceptable
Chloride (mmol/L) **	CH-01	85	78 - 88	82.9	1.0	2.1	Acceptable
Siemens Dimensn QuikLYTE- EXL	CH-02	84	77 - 86	81.9	1.0	2.1	Acceptable
	CH-03	123	115 - 129	122.0	1.6	0.6	Acceptable
	CH-04	99	93 - 104	98.1	1.1	0.8	Acceptable
	CH-05	107	100 - 112	105.9	1.2	0.9	Acceptable
Cholesterol, HDL (mg/dL) **	CH-01	66	44 - 84	64.1	2.1	0.9	Acceptable
Siemens Dimension / Siemens Dimension	CH-02	29	20 - 39	29.4	1.1	-0.4	Acceptable
AHDL DF48B	CH-03	130	93 - 174	133.6	5.4	-0.7	Acceptable
	CH-04	70	50 - 94	71.9	2.8	-0.7	Acceptable
	CH-05	90	64 - 121	92.4	3.6	-0.7	Acceptable
Cholesterol, Total (mg/dL) **	CH-01	240	217 - 266	241.3	5.6	-0.2	Acceptable
Siemens Dimension / Siemens Dimension	CH-02	56	52 - 64	58.0	2.9	-0.7	Acceptable
reagent	CH-03	241	222 - 273	247.7	5.5	-1.2	Acceptable
	CH-04	132	120 - 148	133.9	3.6	-0.5	Acceptable
	CH-05	170	154 - 189	171.7	4.2	-0.4	Acceptable
CO2 (mmol/L)	CH-01	17	9 - 20	14.9	1.7	1.2	Acceptable
Siemens Dimension enzymatic	CH-02	16	10 - 19	14.2	1.4	1.3	Acceptable
	CH-03	40	32 - 48	40.1	2.5	0.0	Acceptable
	CH-04	26	19 - 31	25.1	1.8	0.5	Acceptable
	CH-05	31	24 - 36	30.2	1.9	0.4	Acceptable
Creatinine (mg/dL) **	CH-01	0.50	0.24 - 0.84	0.540	0.041	-1.0	Acceptable
Siemens Dimension / Siemens Dimension	CH-02	0.38	0.14 - 0.75	0.444	0.041	-1.6	Acceptable
CRE2	CH-03	5.05	4.44 - 6.02	5.234	0.120	-1.5	Acceptable
	CH-04	2.21	2.02 - 2.75	2.386	0.065	-2.7	Acceptable
	CH-05	3.11	2.84 - 3.86	3.352	0.080	-3.0	Acceptable
Glucose (mg/dL) **	CH-01	63	55 - 69	61.9	1.6	0.7	Acceptable
Siemens Dimension / Siemens Dimension	CH-02	54	46 - 59	52.3	1.5	1.1	Acceptable
reagent	CH-03	248	224 - 275	249.9	4.8	-0.4	Acceptable
	CH-04	133	118 - 145	131.8	2.6	0.5	Acceptable
	CH-05	171	153 - 189	171.1	3.3	0.0	Acceptable
Lipase (U/L)	CH-01	217	183 - 244	213.4	6.4	0.6	Acceptable
Siemens Dimension / Siemens Dimension	CH-02	66	31 - 92	61.9	3.0	1.4	Acceptable
LIPL	CH-03	234	204 - 265	234.7	6.1	-0.1	Acceptable
	CH-04	138	104 - 165	134.2	3.9	1.0	Acceptable
	CH-05	171	138 - 199	168.8	4.4	0.5	Acceptable
Potassium (mmol/L) **	CH-01	2.5	1.9 - 3.0	2.42	0.04	2.0	Acceptable
Siemens Dimensn QuikLYTE- EXL	CH-02	2.4	1.8 - 2.9	2.38	0.04	0.5	Acceptable
	CH-03	6.7	6.0 - 7.1	6.56	0.07	2.0	Acceptable
	CH-04	4.1	3.5 - 4.6	4.04	0.05	1.2	Acceptable
	CH-05	5.0	4.3 - 5.4	4.88	0.06	2.0	Acceptable

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Comparative Evaluation
2018 Chemistry - Core - 1st Event

CHEMISTRY - continued

Analyte / Method	Sample	Reported Result	Expected Result	Mean	SD	SDI	Grade
Sodium (mmol/L) **	CH-01	130	123 - 132	127.9	1.4	1.5	Acceptable
Siemens Dimensn QuikLYTE- EXL	CH-02	120	113 - 122	117.9	1.2	1.7	Acceptable
	CH-03	164	156 - 165	160.5	1.5	2.3	Acceptable
	CH-04	137	130 - 139	134.8	1.3	1.7	Acceptable
	CH-05	145	139 - 148	143.2	1.4	1.3	Acceptable
Total Protein (g/dL) **	CH-01	10.2	9.1 - 11.2	10.12	0.17	0.5	Acceptable
Siemens Dimension / Siemens Dimension reagent	CH-02	2.6	2.4 - 3.0	2.67	0.08	-0.9	Acceptable
	CH-03	8.7	7.8 - 9.6	8.71	0.15	0.0	Acceptable
	CH-04	5.1	4.5 - 5.7	5.11	0.10	-0.1	Acceptable
	CH-05	6.3	5.6 - 7.0	6.30	0.11	0.0	Acceptable
Triglycerides (mg/dL) **	CH-01	131	100 - 167	133.5	2.7	-0.9	Acceptable
Siemens Dimension / Siemens Dimension TGL	CH-02	86	66 - 111	88.5	2.3	-1.1	Acceptable
	CH-03	230	180 - 301	240.8	4.9	-2.2	Acceptable
	CH-04	147	112 - 189	150.5	3.3	-1.1	Acceptable
	CH-05	176	135 - 227	180.9	3.8	-1.3	Acceptable
Urea Nitrogen / BUN (mg/dL) **	CH-01	7	4 - 9	6.5	0.8	0.6	Acceptable
Siemens Dimension / Siemens Dimension reagent	CH-02	6	4 - 9	6.1	0.8	-0.1	Acceptable
	CH-03	43	40 - 49	44.9	1.4	-1.4	Acceptable
	CH-04	20	19 - 24	21.6	0.9	-1.8	Acceptable
	CH-05	27	26 - 33	29.4	1.1	-2.2	Acceptable

CHEMISTRY (ENDOCRINOLOGY)

Analyte / Method	Sample	Reported Result	Expected Result	Mean	SD	SDI	Grade
Free Thyroxine (ng/dL) **	CH-01	1.1	0.9 - 1.3	1.10	0.05	0.0	Acceptable
Siemens Dimension EXL / Siemens Dimension EXL LOCI	CH-02	5.2	4.4 - 6.4	5.41	0.32	-0.7	Acceptable
	CH-03	4.4	3.6 - 5.1	4.35	0.22	0.2	Acceptable
	CH-04	4.8	4.0 - 5.4	4.69	0.22	0.5	Acceptable
	CH-05	4.6	3.8 - 5.2	4.48	0.22	0.5	Acceptable
Thyroid Stimulating Hormone (uU/mL) **	CH-01	2.42	2.22 - 2.95	2.581	0.120	-1.3	Acceptable
Siemens Dimension EXL / Siemens Dimension EXL LOCI	CH-02	0.47	0.43 - 0.61	0.517	0.028	-1.7	Acceptable
	CH-03	6.93	6.41 - 8.48	7.448	0.343	-1.5	Acceptable
	CH-04	3.51	3.05 - 4.09	3.571	0.171	-0.4	Acceptable
	CH-05	4.94	4.24 - 5.65	4.945	0.232	0.0	Acceptable

GLYCOHEMOGLOBIN

Analyte / Method	Sample	Reported Result	Expected Result	Mean	SD	SDI	Grade
Glycated Hemoglobin (%)	GLY-01	11.7	9.5 - 14.3	11.91	0.33	-0.6	Acceptable
Siemens Dimension / Siemens Dimension (HB1C)	GLY-02	5.5	4.5 - 6.9	5.67	0.22	-0.8	Acceptable

SERUM HCG

Analyte / Method	Sample	Reported Result	Expected Result	Grade
HCG (serum-qual)	HCG-01	Negative	Negative	Acceptable
Quidel QuickVue OS HCG Combo	HCG-02	Positive	Positive	Acceptable
	HCG-03	Positive	Positive	Acceptable
	HCG-04	Positive	Positive	Acceptable
	HCG-05	Negative	Negative	Acceptable

Analyte / Method	Sample	Reported Result	Expected Result	Mean	SD	SDI	Grade

SERUM HCG - continued

Analyte / Method	Sample	Reported Result	Expected Result	Mean	SD	SDI	Grade
HCG (serum-quant) (mIU/mL) **	HCG-01	53	0 - 10	0.0	0.0		Unacceptable
Siemens Dimension	HCG-02	56	690 - 901	795.6	34.9	-21.2	Unacceptable
	HCG-03	1,537	145 - 185	164.9	6.5	211.1	Unacceptable
	HCG-04	657	144 - 184	164.3	6.5	75.8	Unacceptable
	HCG-05	929	0 - 10	0.0	0.0		Unacceptable