

October 4, 2021

Linh Kieu
Bureau of Safe Drinking Water
Nevada Division of Environmental Protection
901 South Stewart, Suite 4001
Carson City, NV 89701

Dear Mr. Kieu,

Enclosed you will find the Water Treatment and Water Distribution Summary Reports for the certification examinations that took place on September 23, 2021 at various sites throughout the State.

The individual results have been sent in a separate email to you and your staff. Should you have any questions or need further information, please contact me at 909.291.2100 or by email genriquez@ca-nv-awwa.org. You are also welcome to contact Steven Garner, Certification Manager at 916.798.0220 or by email sgarner@ca-nv-awwa.org.

Sincerely,



Gina Enriquez
Certification Specialist
CA-NV AWWA

cc:

Crystel Montecinos
Rachel Weingart
Yan Zhang
Will Raymond
Steven Garner
Sue Mosburg

Examination Summary Reports

September 23, 2021 Examination

Prepared for
Bureau of Safe Drinking Water, Nevada Division of Environmental Protection

Prepared By
California – Nevada Section of the American Water Works Association
October 4, 2021

Overall Exam Results

Exam Analysis Pass/Failure Rate

Water Distribution - Entire State:

14 Passed the Exam
09 Failed the Exam

Water Treatment - Entire State:

04 Passed the Exam
05 Failed the Exam

By Region:

Northern NV: 16 Testers

Passing Rate of 63%
Failure Rate of 37%

By Region:

Northern NV: 03 Testers

Passing Rate of 67%
Failure Rate of 33%

Southern NV: 07 Testers

Passing Rate of 57%
Failure Rate of 43%

Southern NV: 06 Testers

Passing Rate of 33%
Failure Rate of 67%

Analysis Pass/Failure Rate

by Grade Level/Discipline

Water Distribution - Entire State:

14 Passed the Exam
09 Failed the Exam

Water Treatment - Entire State:

04 Passed the Exam
05 Failed the Exam

By Discipline Pass/Failure:

Distribution Grade 1 (D1)

09 Passed
04 Failed

Distribution Grade 2 (D2)

04 Passed
03 Failed

Distribution Grade 3 (D3)

01 Passed
01 Failed

Distribution Grade 4 (D4)

00 Passed
01 Failed

By Discipline Pass/Failure:

Treatment Grade 1 (T1)

04 Passed
02 Failed

Treatment Grade 2 (T2)

00 Passed
02 Failed

Treatment Grade 3 (T3)

00 Passed
01 Failed

Treatment Grade 4 (T4)

00 Passed
00 Failed

DISTRIBUTION OPERATOR CERTIFICATION

The Topics Identified Below Had a "Partial Mastering" Rate of More Than 20%

Grade I – Distribution

- System Components
- Equipment IOM
- SSA & Public Interactions

Grade II – Distribution

- System Components
- Disinfection MEA & Lab
- SSA & Public Interactions
- Equipment IOM

Grade III – Distribution

- System Components
- Disinfection MEA & Lab

Grade IV – Distribution

- System Components
- Disinfection MEA & Lab
- SSA & Public Interactions
- Equipment IOM

Treatment Operator Certification

The Topics Identified Below Had a "Partial Mastering" Rate of More Than 20%

Grade I – Treatment

- Lab
- Equipment O & M

Grade II – Treatment

- Treatment
- Lab
- Equipment O & M

Grade III – Treatment

- Treatment
- Equipment O & M
- Source Water

Grade IV – Treatment

- N/A

MASTERY SUMMARY REPORT

Test: ABC1669D - Nevada DEP Water Distribution Operator Grade 1

Scoring Date: 10/1/2021

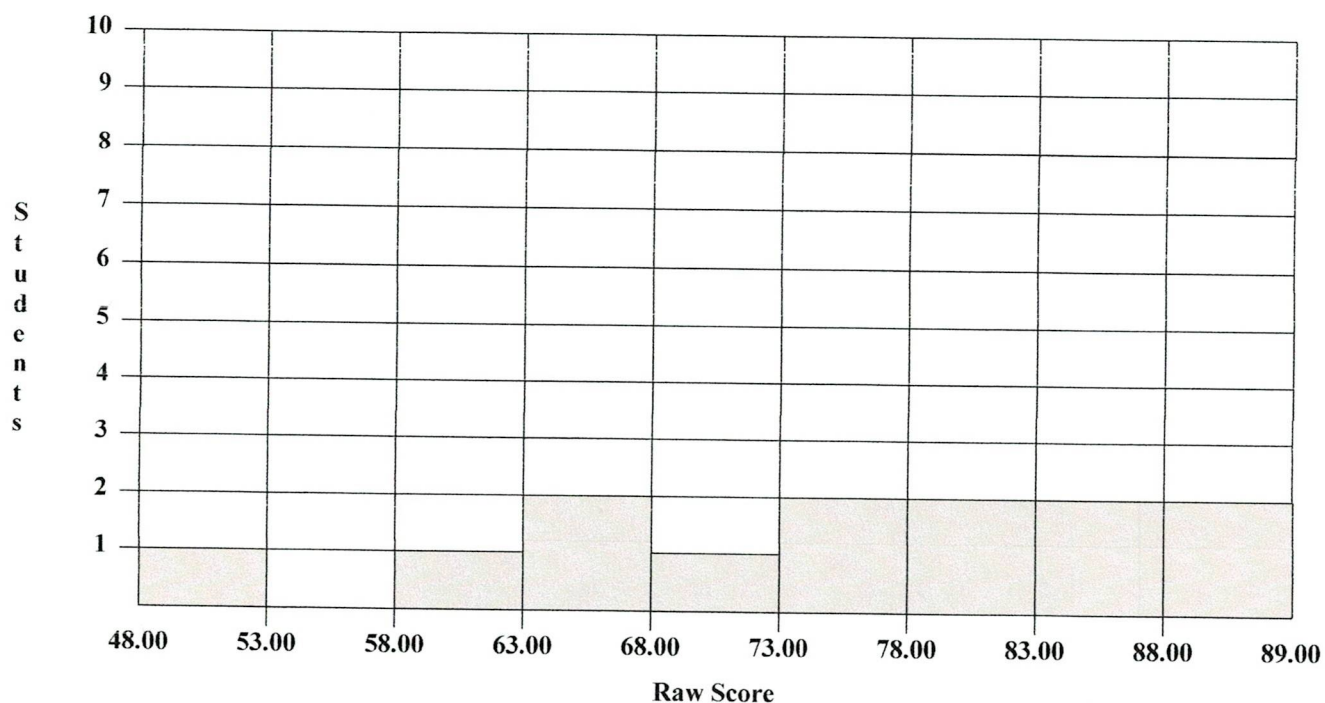
of Candidates: 13

| # M | Number Mastering | % M | % Mastering | PTS | Possible Points | | | | | |
|------------------------------------|--------------------------|------|---------------------|-------|-----------------|------|-------|-------|-------|-------|
| # PM | Number Partial Mastering | % PM | % Partial Mastering | HIGH | Highest Points | | | | | |
| # NM | Number Not Mastering | % NM | % Not Mastering | LOW | Lowest Points | | | | | |
| | | | | AVG | Average Points | | | | | |
| Objective | # M | # PM | # NM | % M | % PM | % NM | PTS | HIGH | LOW | AVG |
| Area 1 - System Components | 6 | 6 | 1 | 46.15 | 46.15 | 7.69 | 25.00 | 22.00 | 8.00 | 17.31 |
| Area 2 - Equipment IOM | 8 | 5 | 0 | 61.54 | 38.46 | 0.00 | 24.00 | 21.00 | 10.00 | 17.46 |
| Area 3 - Disinfection MEA & Lab | 11 | 2 | 0 | 84.62 | 15.38 | 0.00 | 27.00 | 26.00 | 18.00 | 21.54 |
| Area 4 - SSA & Public Interactions | 8 | 5 | 0 | 61.54 | 38.46 | 0.00 | 24.00 | 23.00 | 10.00 | 17.77 |

TEST STATISTICS REPORT

Test: ABC1669D - Nevada DEP Water Distribution Operator Grade 1

Scoring Date: 10/1/2021



| | | |
|--------------------------------|-----------|---------|
| Test Name: | ABC1669D | |
| Test Date: | 12/9/2019 | |
| Number of Examinees: | 13 | |
| Number of Items: | 110 | |
| Maximum Possible Points: | 100.00 | |
| Highest Score: | 89.00 | (89.00) |
| Lowest Score: | 48.00 | (48.00) |
| Median: | 75.00 | (75.00) |
| Mean: | 74.08 | (74.08) |
| Standard Deviation: | 12.11 | |
| Test Reliability: | 0.89 | |
| Standard Error of Measurement: | 4.01 | |

MASTERY SUMMARY REPORT

Test: ABC1670D - Nevada DEP Water Distribution Operator Grade 2

Scoring Date: 10/1/2021

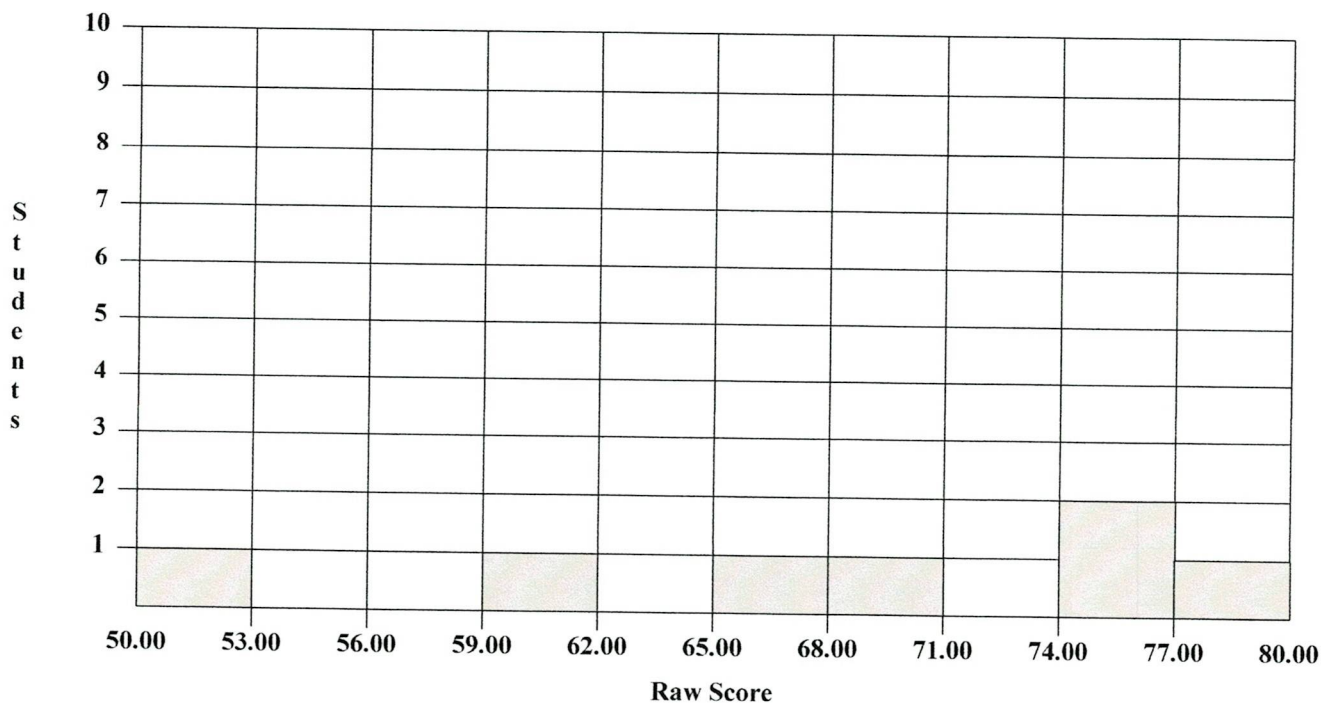
of Candidates: 7

| # M | Number Mastering | % M | % Mastering | PTS | Possible Points | | | | | |
|------------------------------------|--------------------------|------|---------------------|-------|-----------------|------|-------|-------|-------|-------|
| # PM | Number Partial Mastering | % PM | % Partial Mastering | HIGH | Highest Points | | | | | |
| # NM | Number Not Mastering | % NM | % Not Mastering | LOW | Lowest Points | | | | | |
| | | | | AVG | Average Points | | | | | |
| Objective | # M | # PM | # NM | % M | % PM | % NM | PTS | HIGH | LOW | AVG |
| Area 1 - System Components | 3 | 4 | 0 | 42.86 | 57.14 | 0.00 | 26.00 | 22.00 | 12.00 | 17.14 |
| Area 2 - Equipment IOM | 5 | 2 | 0 | 71.43 | 28.57 | 0.00 | 24.00 | 20.00 | 14.00 | 17.43 |
| Area 3 - Disinfection MEA & Lab | 2 | 5 | 0 | 28.57 | 71.43 | 0.00 | 26.00 | 20.00 | 12.00 | 17.00 |
| Area 4 - SSA & Public Interactions | 4 | 3 | 0 | 57.14 | 42.86 | 0.00 | 24.00 | 20.00 | 12.00 | 16.14 |

TEST STATISTICS REPORT

Test: ABC1670D - Nevada DEP Water Distribution Operator Grade 2

Scoring Date: 10/1/2021



| | |
|--------------------------------|---------------|
| Test Name: | ABC1670D |
| Test Date: | 12/10/2019 |
| Number of Examinees: | 7 |
| Number of Items: | 110 |
| Maximum Possible Points: | 100.00 |
| Highest Score: | 77.00 (77.00) |
| Lowest Score: | 50.00 (50.00) |
| Median: | 70.00 (70.00) |
| Mean: | 67.71 (67.71) |
| Standard Deviation: | 9.52 |
| Test Reliability: | 0.81 |
| Standard Error of Measurement: | 4.16 |

MASTERY SUMMARY REPORT

Test: ABC1671D - Nevada DEP Water Distribution Operator Grade 3

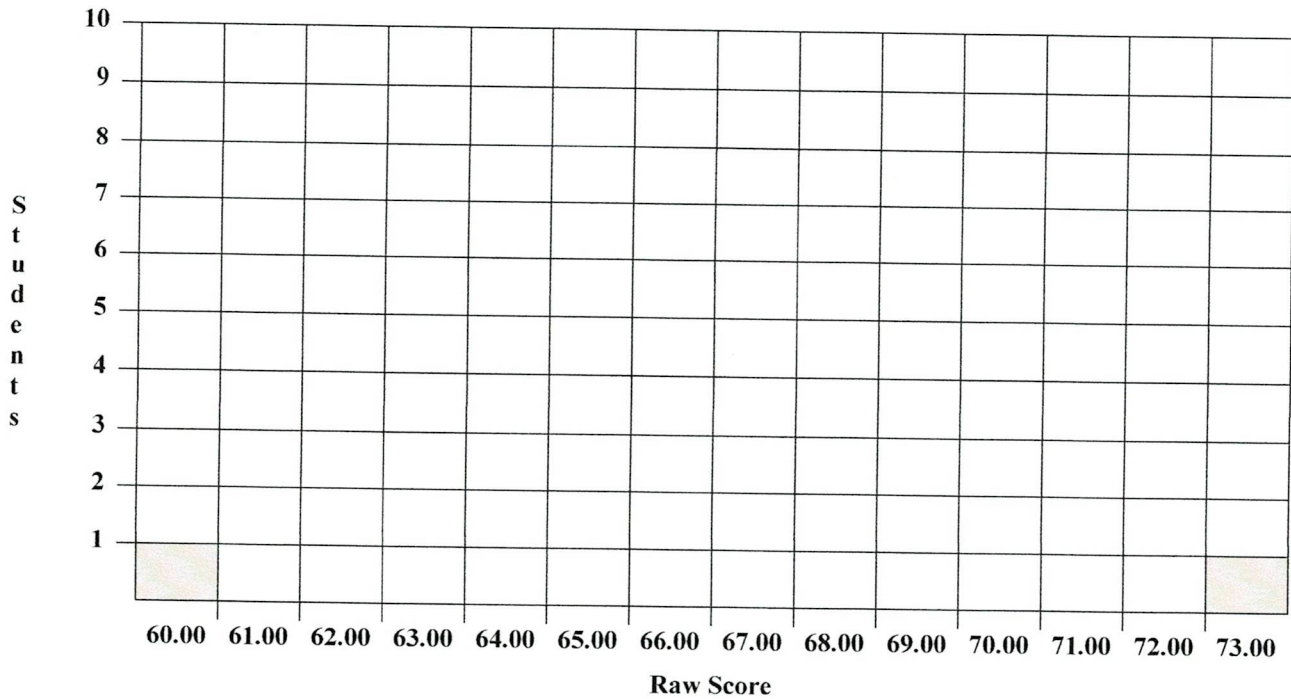
Scoring Date: 10/1/2021

of Candidates: 2

| # M | Number Mastering | % M | % Mastering | PTS | Possible Points | | | | | |
|------------------------------------|--------------------------|------|---------------------|-------|-----------------|------|-------|-------|-------|-------|
| # PM | Number Partial Mastering | % PM | % Partial Mastering | HIGH | Highest Points | | | | | |
| # NM | Number Not Mastering | % NM | % Not Mastering | LOW | Lowest Points | | | | | |
| | | | | AVG | Average Points | | | | | |
| Objective | # M | # PM | # NM | % M | % PM | % NM | PTS | HIGH | LOW | AVG |
| Area 1 - System Components | 1 | 1 | 0 | 50.00 | 50.00 | 0.00 | 26.00 | 21.00 | 15.00 | 18.00 |
| Area 2 - Equipment IOM | 0 | 2 | 0 | 0.00 | 100.00 | 0.00 | 24.00 | 16.00 | 15.00 | 15.50 |
| Area 3 - Disinfection MEA & Lab | 1 | 1 | 0 | 50.00 | 50.00 | 0.00 | 27.00 | 20.00 | 15.00 | 17.50 |
| Area 4 - SSA & Public Interactions | 0 | 2 | 0 | 0.00 | 100.00 | 0.00 | 23.00 | 16.00 | 15.00 | 15.50 |

TEST STATISTICS REPORT

Test: ABC1671D - Nevada DEP Water Distribution Operator Grade 3
Scoring Date: 10/1/2021



| | | |
|--------------------------------|------------|---------|
| Test Name: | ABC1671D | |
| Test Date: | 12/10/2019 | |
| Number of Examinees: | 2 | |
| Number of Items: | 110 | |
| Maximum Possible Points: | 100.00 | |
| Highest Score: | 73.00 | (73.00) |
| Lowest Score: | 60.00 | (60.00) |
| Median: | 66.50 | (66.50) |
| Mean: | 66.50 | (66.50) |
| Standard Deviation: | 9.19 | |
| Test Reliability: | 0.76 | |
| Standard Error of Measurement: | 4.46 | |

MASTERY SUMMARY REPORT

Test: ABC1672D - Nevada DEP Water Distribution Operator Grade 4

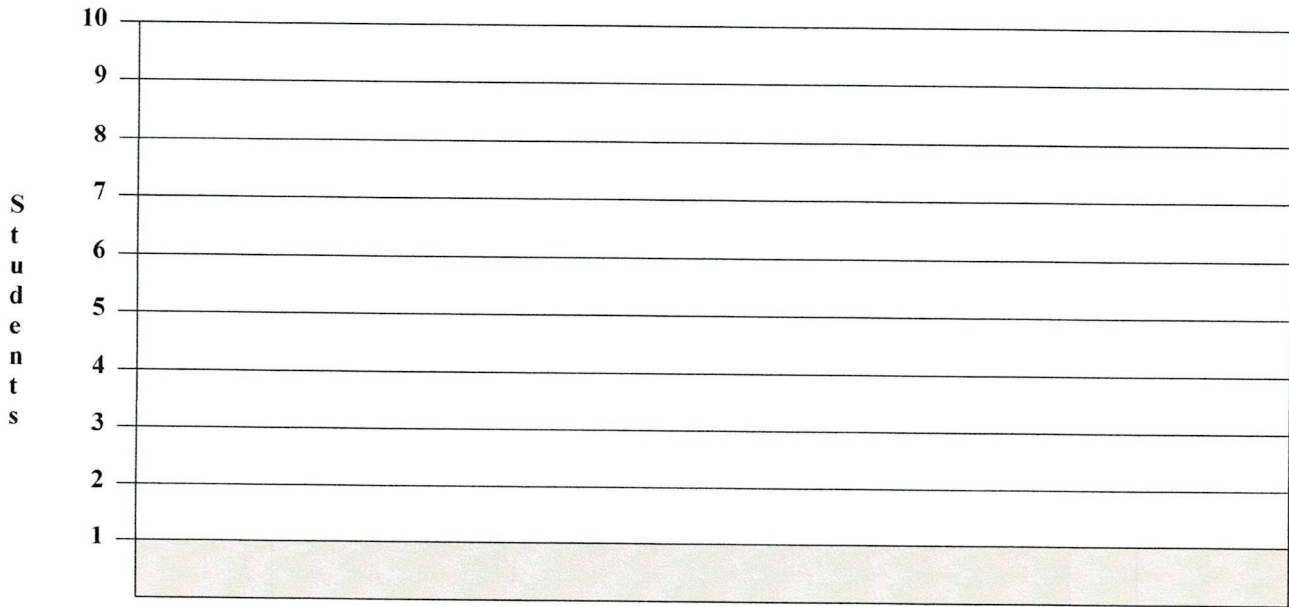
Scoring Date: 10/1/2021

of Candidates: 1

| # M | Number Mastering | % M | % Mastering | PTS | Possible Points | | | | | |
|------------------------------------|--------------------------|------|---------------------|------|-----------------|------|-------|-------|-------|-------|
| # PM | Number Partial Mastering | % PM | % Partial Mastering | HIGH | Highest Points | | | | | |
| # NM | Number Not Mastering | % NM | % Not Mastering | LOW | Lowest Points | | | | | |
| | | | | AVG | Average Points | | | | | |
| Objective | # M | # PM | # NM | % M | % PM | % NM | PTS | HIGH | LOW | AVG |
| Area 1 - System Components | 0 | 1 | 0 | 0.00 | 100.00 | 0.00 | 25.00 | 11.00 | 11.00 | 11.00 |
| Area 2 - Equipment IOM | 0 | 1 | 0 | 0.00 | 100.00 | 0.00 | 25.00 | 13.00 | 13.00 | 13.00 |
| Area 3 - Disinfection MEA & Lab | 0 | 1 | 0 | 0.00 | 100.00 | 0.00 | 25.00 | 12.00 | 12.00 | 12.00 |
| Area 4 - SSA & Public Interactions | 0 | 1 | 0 | 0.00 | 100.00 | 0.00 | 25.00 | 16.00 | 16.00 | 16.00 |

TEST STATISTICS REPORT

Test: ABC1672D - Nevada DEP Water Distribution Operator Grade 4
Scoring Date: 10/1/2021



52.00

Raw Score

| | |
|--------------------------------|---------------|
| Test Name: | ABC1672D |
| Test Date: | 12/10/2019 |
| Number of Examinees: | 1 |
| Number of Items: | 110 |
| Maximum Possible Points: | 100.00 |
| Highest Score: | 52.00 (52.00) |
| Lowest Score: | 52.00 (52.00) |
| Median: | 52.00 (52.00) |
| Mean: | 52.00 (52.00) |
| Standard Deviation: | - |
| Test Reliability: | - |
| Standard Error of Measurement: | - |

MASTERY SUMMARY REPORT

Test: ABC1673W - Nevada DEP Water Treatment Operator Grade 1

Scoring Date: 10/1/2021

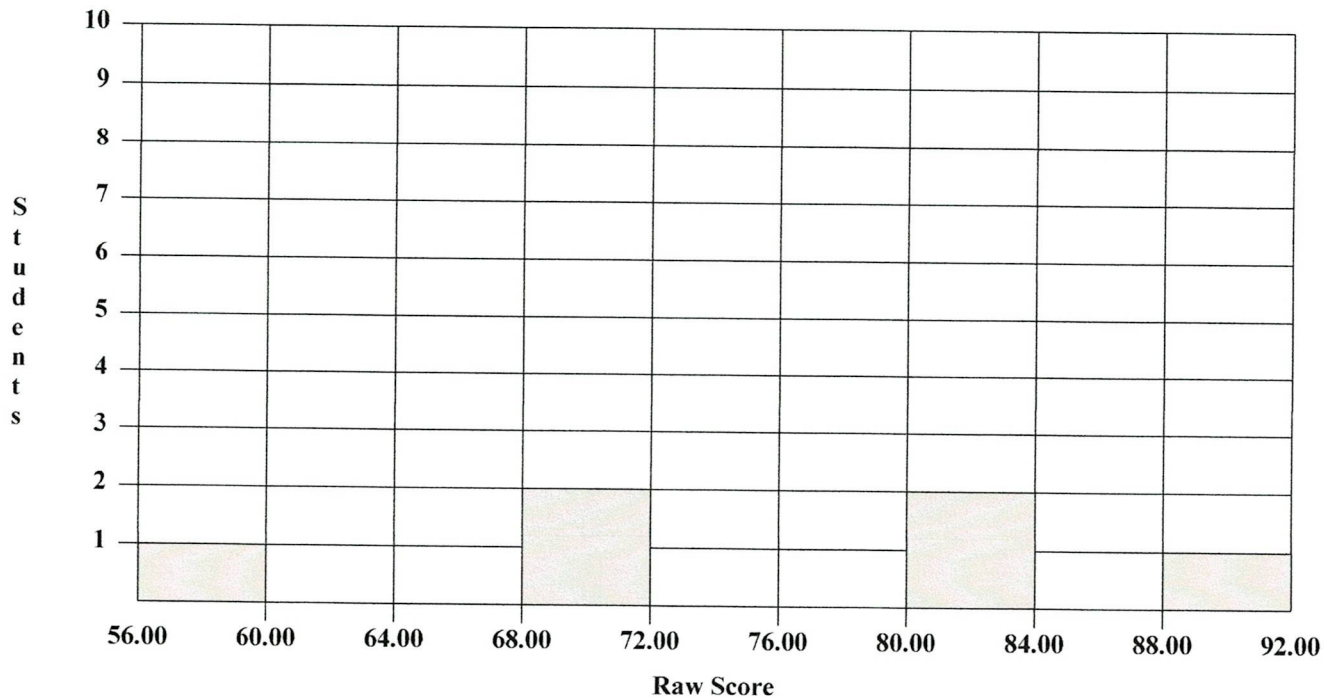
of Candidates: 6

| # M | Number Mastering | % M | % Mastering | | | | PTS | Possible Points | | | |
|------------------------------|--------------------------|------|---------------------|------|--------|-------|-------|-----------------|-------|-------|-------|
| # PM | Number Partial Mastering | % PM | % Partial Mastering | | | | HIGH | Highest Points | | | |
| # NM | Number Not Mastering | % NM | % Not Mastering | | | | LOW | Lowest Points | | | |
| | | | | | | | AVG | Average Points | | | |
| Objective | | # M | # PM | # NM | % M | % PM | % NM | PTS | HIGH | LOW | AVG |
| Area 1 - Treatment | | 4 | 1 | 1 | 66.67 | 16.67 | 16.67 | 30.00 | 26.00 | 11.00 | 20.67 |
| Area 2 - Lab | | 3 | 3 | 0 | 50.00 | 50.00 | 0.00 | 13.00 | 11.00 | 7.00 | 9.33 |
| Area 3 - Equipment O&M | | 3 | 3 | 0 | 50.00 | 50.00 | 0.00 | 27.00 | 24.00 | 16.00 | 19.50 |
| Area 4 - Source Water | | 5 | 1 | 0 | 83.33 | 16.67 | 0.00 | 10.00 | 10.00 | 6.00 | 8.33 |
| Area 5 - Safety, Admin, Etc. | | 6 | 0 | 0 | 100.00 | 0.00 | 0.00 | 20.00 | 19.00 | 15.00 | 16.33 |

TEST STATISTICS REPORT

Test: ABC1673W - Nevada DEP Water Treatment Operator Grade 1

Scoring Date: 10/1/2021



| | | |
|--------------------------------|------------|---------|
| Test Name: | ABC1673W | |
| Test Date: | 12/12/2019 | |
| Number of Examinees: | 6 | |
| Number of Items: | 110 | |
| Maximum Possible Points: | 100.00 | |
| Highest Score: | 88.00 | (88.00) |
| Lowest Score: | 56.00 | (56.00) |
| Median: | 75.50 | (75.50) |
| Mean: | 74.17 | (74.17) |
| Standard Deviation: | 11.30 | |
| Test Reliability: | 0.88 | |
| Standard Error of Measurement: | 3.99 | |

MASTERY SUMMARY REPORT

Test: ABC1674W - Nevada DEP Water Treatment Operator Grade 2

Scoring Date: 10/1/2021

of Candidates: 2

| # M | Number Mastering | % M | % Mastering | | | | PTS | Possible Points | | | |
|------------------------------|--------------------------|------|---------------------|------|--------|--------|------|-----------------|-------|-------|-------|
| # PM | Number Partial Mastering | % PM | % Partial Mastering | | | | HIGH | Highest Points | | | |
| # NM | Number Not Mastering | % NM | % Not Mastering | | | | LOW | Lowest Points | | | |
| | | | | | | | AVG | Average Points | | | |
| Objective | | # M | # PM | # NM | % M | % PM | % NM | PTS | HIGH | LOW | AVG |
| Area 1 - Treatment | | 0 | 2 | 0 | 0.00 | 100.00 | 0.00 | 31.00 | 17.00 | 17.00 | 17.00 |
| Area 2 - Lab | | 0 | 2 | 0 | 0.00 | 100.00 | 0.00 | 14.00 | 7.00 | 6.00 | 6.50 |
| Area 3 - Equipment O&M | | 1 | 1 | 0 | 50.00 | 50.00 | 0.00 | 24.00 | 17.00 | 15.00 | 16.00 |
| Area 4 - Source Water | | 2 | 0 | 0 | 100.00 | 0.00 | 0.00 | 11.00 | 11.00 | 8.00 | 9.50 |
| Area 5 - Safety, Admin, Etc. | | 2 | 0 | 0 | 100.00 | 0.00 | 0.00 | 20.00 | 17.00 | 14.00 | 15.50 |

TEST STATISTICS REPORT

Test: ABC1674W - Nevada DEP Water Treatment Operator Grade 2
Scoring Date: 10/1/2021

| | | | |
|--------------------------------------|----|-------|-------|
| S t u d e n t s | 10 | | |
| | 9 | | |
| | 8 | | |
| | 7 | | |
| | 6 | | |
| | 5 | | |
| | 4 | | |
| | 3 | | |
| | 2 | | |
| | 1 | | |
| | | 64.00 | 65.00 |
| Raw Score | | | |

| | |
|--------------------------------|---------------|
| Test Name: | ABC1674W |
| Test Date: | 12/12/2019 |
| Number of Examinees: | 2 |
| Number of Items: | 110 |
| Maximum Possible Points: | 100.00 |
| Highest Score: | 65.00 (65.00) |
| Lowest Score: | 64.00 (64.00) |
| Median: | 64.50 (64.50) |
| Mean: | 64.50 (64.50) |
| Standard Deviation: | 0.71 |
| Test Reliability: | -42.39 |
| Standard Error of Measurement: | 4.66 |

MASTERY SUMMARY REPORT

Test: ABC1675W - Nevada DEP Water Treatment Operator Grade 3

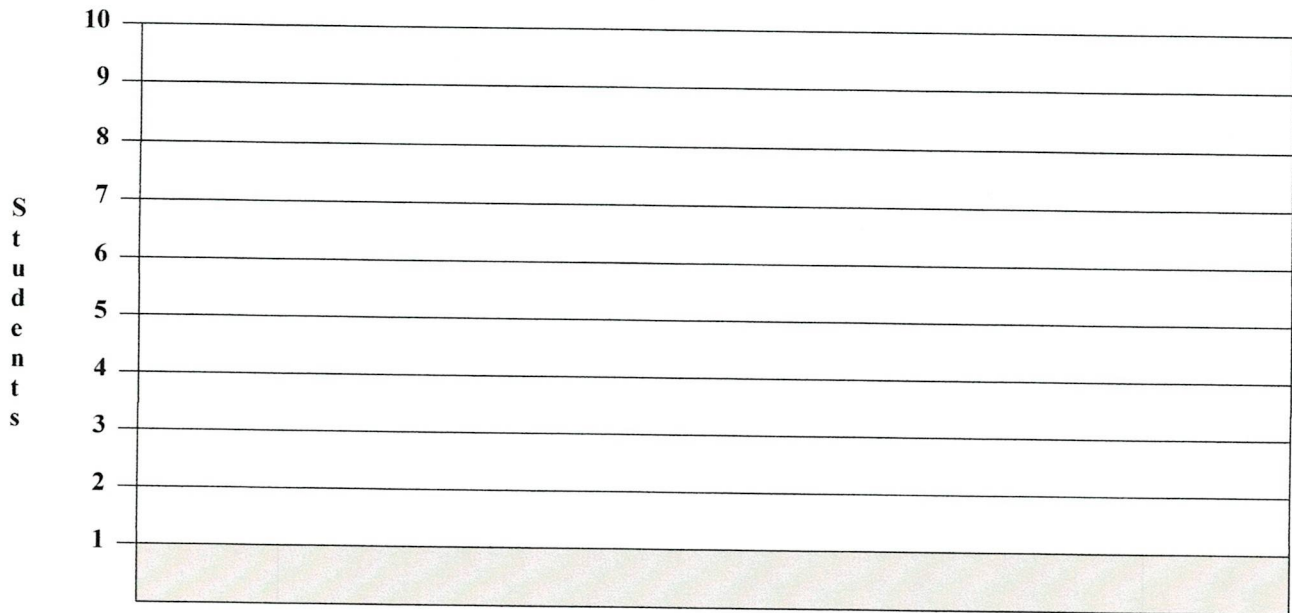
Scoring Date: 10/1/2021

of Candidates: 1

| # M | Number Mastering | % M | % Mastering | PTS | Possible Points | | | | | |
|------------------------------|--------------------------|------|---------------------|--------|-----------------|------|-------|-------|-------|-------|
| # PM | Number Partial Mastering | % PM | % Partial Mastering | HIGH | Highest Points | | | | | |
| # NM | Number Not Mastering | % NM | % Not Mastering | LOW | Lowest Points | | | | | |
| | | | | AVG | Average Points | | | | | |
| Objective | # M | # PM | # NM | % M | % PM | % NM | PTS | HIGH | LOW | AVG |
| Area 1 - Treatment | 0 | 1 | 0 | 0.00 | 100.00 | 0.00 | 30.00 | 19.00 | 19.00 | 19.00 |
| Area 2 - Lab | 1 | 0 | 0 | 100.00 | 0.00 | 0.00 | 13.00 | 10.00 | 10.00 | 10.00 |
| Area 3 - Equipment O&M | 0 | 1 | 0 | 0.00 | 100.00 | 0.00 | 22.00 | 9.00 | 9.00 | 9.00 |
| Area 4 - Source Water | 0 | 1 | 0 | 0.00 | 100.00 | 0.00 | 11.00 | 5.00 | 5.00 | 5.00 |
| Area 5 - Safety, Admin, Etc. | 1 | 0 | 0 | 100.00 | 0.00 | 0.00 | 24.00 | 21.00 | 21.00 | 21.00 |

TEST STATISTICS REPORT

Test: ABC1675W - Nevada DEP Water Treatment Operator Grade 3
Scoring Date: 10/1/2021



64.00

Raw Score

| | |
|--------------------------------|---------------|
| Test Name: | ABC1675W |
| Test Date: | 12/12/2019 |
| Number of Examinees: | 1 |
| Number of Items: | 110 |
| Maximum Possible Points: | 100.00 |
| Highest Score: | 64.00 (64.00) |
| Lowest Score: | 64.00 (64.00) |
| Median: | 64.00 (64.00) |
| Mean: | 64.00 (64.00) |
| Standard Deviation: | - |
| Test Reliability: | - |
| Standard Error of Measurement: | - |