



QEEG Assessment Report

Client Number: **christy_morehouse** Map Date: **3/27/2018**

For this report, EEG was recorded from multiple locations across the scalp, digitally converted and analyzed and then presented in a format providing colored headmaps to indicate levels of deviation from mean reference scores. The dimensions of analysis are Magnitude, Dominant Frequency, Interhemispheric Connectivity, and Interhemispheric Asymmetry. These dimensions were chosen based on clinical relevance and correlation with psychometric and neurocognitive measures. The items chosen for analysis are derived from fMRI research and traditional neurological texts.

The mean reference scores utilized for this report are derived from analysis of both normative and non-normative neurometric databases and significance levels are based on clinical correlations with psychometric instruments. This neurometric system was developed exclusively for clinical purposes relating to the practice of neurofeedback and is not intended for clinical diagnosis.

The initial section of the report provides a simplified presentation for the client and shows a single headmap with the most deviant locations. In addition, sections providing "AT A Glance" meters and an affiliated symptom list showing information on "Cognitive Efficiency" and associated features, CNS "Underactivated" and associated features, "Inhibited" behavior and associated features, and "Overactivated" and associated features are displayed. The meters and dashboard lights reflect a probability weighting relating to the influence of each dimension of the individual and **do not represent feature severity**. Two columns of lights are associated with each feature, one column pertains to the level of client endorsement of an item on a questionnaire that relates to the feature and the other column pertains to the level of probability of the feature being present based on the map analysis alone. When both lights are activated, it suggests a correlation may be present between the item endorsed and the abnormal map feature. False positives and false negatives do occur and often indicate a more complex picture is present that require further analysis.

The next section is a more detailed section that operates in the same manner as the first section. In this section there are detailed head maps presented by dimension of analysis that display the commonly analyzed component bands of delta, theta, alpha, beta and high beta. All locations of the international 10-20 system are rated by colored indicators showing relatively typical ranges of EEG activity or activity levels that are approximately one or two standard deviations too high or too low with respect to the measured populations. It requires considerable training to read this section and it is intended for more detailed analysis by individuals trained in qEEG analysis and Neurofeedback. **It is not intended for client presentation.**

This same section includes a subcomponent analysis section that provides indicators of global significance levels of each component band broken down into small ranges that have demonstrated clinical relevance in the published peer reviewed literature on EEG. This analysis is based on general volume conduction to provide a general overview of spectral relationship between these subcomponent bands. In addition a midline analysis is provided to estimate the degree to which the individual's overall EEG magnitude deviates from a more normative range of operation. This helps to identify the sub population of clients who have very low EEG power that does not provide a useful contrast between component bands when viewed from this more normative range of analysis. The use of the "Magnitude Contrast" feature in the Magnitude section of the map will provide improved contrast for inspection.

Global - Underactivated

Global Measures



Local Measures

| CEC | EEG | Symptom |
|-----|------|------------------------|
| Low | High | Impulsive |
| Low | High | Socially Inappropriate |
| Low | High | Hyperactive |
| Low | High | Easily Distracted |
| Low | High | Excessive Speech |
| Low | Low | Disorganized |
| Low | High | Hyper-emotional |

Probability Legend

Low Moderate High

Global - Inhibited

Global Measures



Local Measures

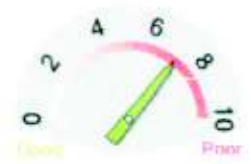
| CEC | EEG | Symptom |
|-----|----------|------------------------|
| Low | High | Victim Mentality |
| Low | High | Excessive Self-concern |
| Low | High | Rumination |
| Low | High | Anger |
| Low | High | Self-Deprecation |
| Low | Moderate | Agitation |
| Low | High | Irritability |
| Low | High | Passive Aggressive |

Probability Legend

Low Moderate High

Global - Overarousal

Global Measures



Local Measures

| CEC | EEG | Symptom |
|-----|----------|-------------------------------|
| Low | Low | Worry |
| Low | High | Hyper-vigilant |
| Low | Moderate | Obsessive Thinking |
| Low | Moderate | Dislike of Change/Novelty |
| Low | High | Excessive Rationalization |
| Low | High | Restless |
| Low | Low | Poor Emotional Self-Awareness |

Probability Legend

Low Moderate High

Report intended for exploratory data analysis only and should not be considered a medical diagnosis.

Executive Processing



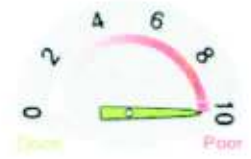
| CEC | EEG | Symptom |
|-----|-----|---------------------------------|
| ● | ● | Attention |
| ● | ● | Categorization |
| ● | ● | Decision Making |
| ● | ● | Filtering Difficulties |
| ● | ● | Motivation |
| ● | ● | Problem Solving |
| ● | ● | Socio-Emotional Decision Making |

Memory Processing



| CEC | EEG | Symptom |
|-----|-----|-------------------------|
| ● | ● | Declarative |
| ● | ● | Episodic |
| ● | ● | Procedural |
| ● | ● | Sequential |
| ● | ● | Short Term |
| ● | ● | Short Term (Digit Span) |
| ● | ● | Working |

Math Comprehension



| CEC | EEG | Symptom |
|-----|-----|--------------------|
| ● | ● | Math Comprehension |

Verbal Processing



| CEC | EEG | Symptom |
|-----|-----|-----------------------|
| ● | ● | Dialogue Organization |
| ● | ● | Short Term Verbal |
| ● | ● | Tone Sequencing |
| ● | ● | Verbal Sequencing |

Visual Processing



| CEC | EEG | Symptom |
|-----|-----|-------------------------------|
| ● | ● | Event Sequencing |
| ● | ● | Facial Decoding & Recognition |
| ● | ● | Figure Memory |
| ● | ● | Short Term Visual Memory |
| ● | ● | Spatial Sequence |

Reading Comprehension



| CEC | EEG | Symptom |
|-----|-----|-----------------------|
| ● | ● | Processing Speed |
| ● | ● | Reading Comprehension |

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Theta Beta Ratios

Theta Beta Ratio
eyes OPEN

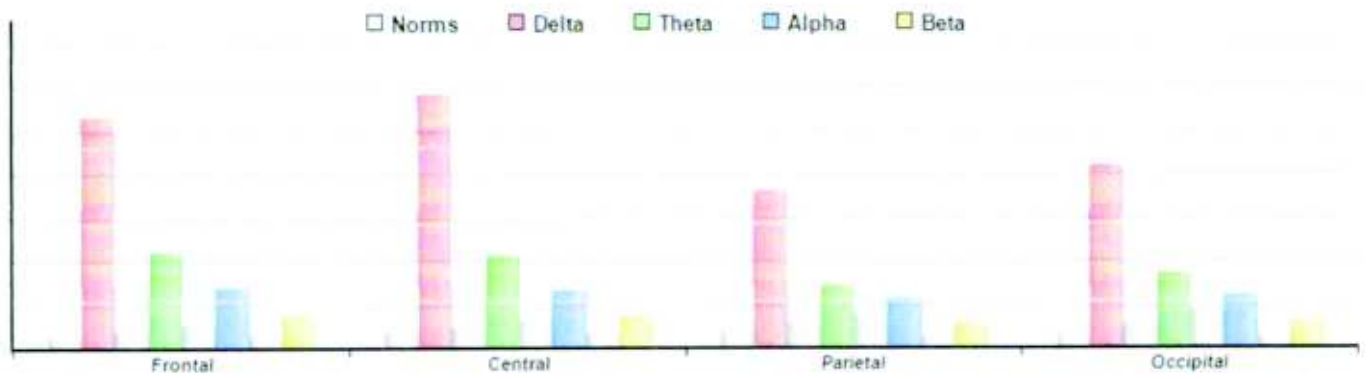
4.48

Severe
Moderate
Normal

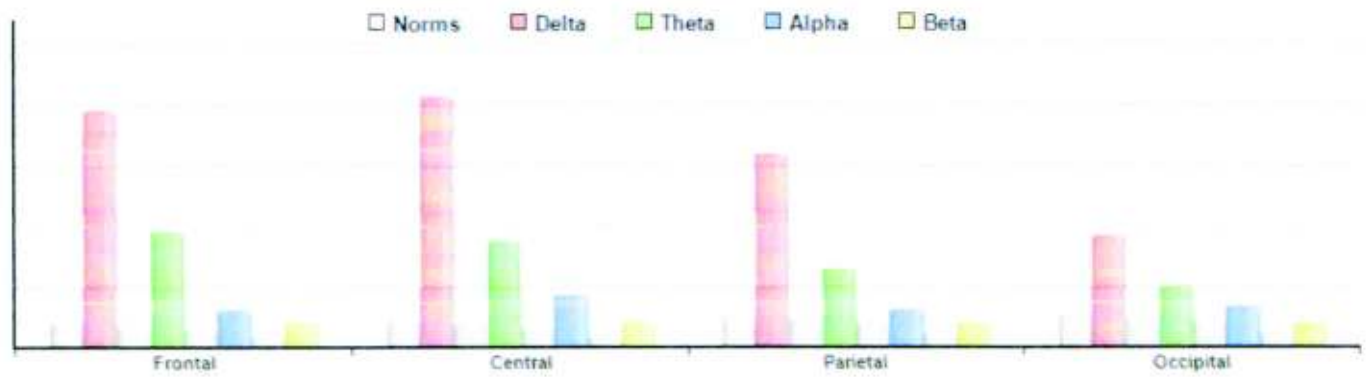
Theta Beta Ratio
eyes CLOSED

1.63

Eyes Closed Midline Analysis



Eyes Open Midline Analysis



Subcomponent Analysis

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LoHi Alpha valid only if Gamma filter was set for 8-10hz and User filter was set for 10-12hz when doing map

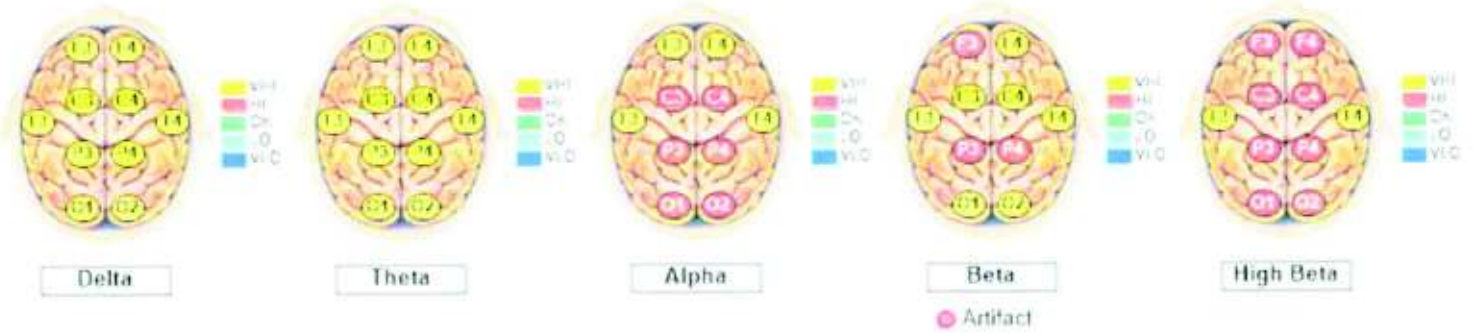


■ = Low ■ = OK ■ = High

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Eyes Closed Brain Maps

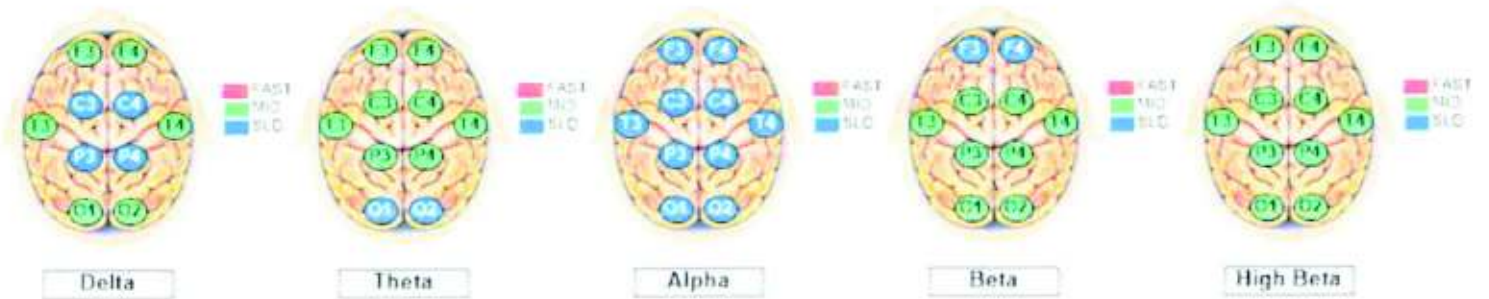
Magnitude



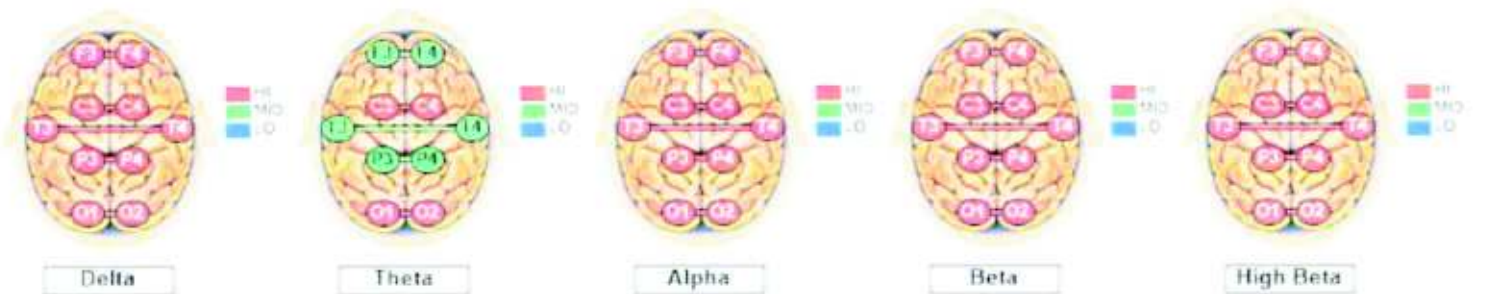
Magnitude Contrast



Dominant Frequency



Inter-Connectivity



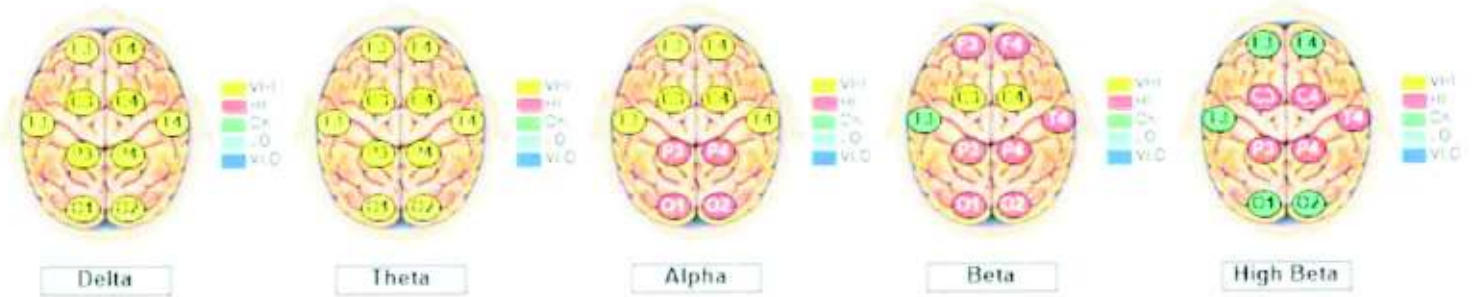
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Asymmetry



Eyes Open Brain Maps

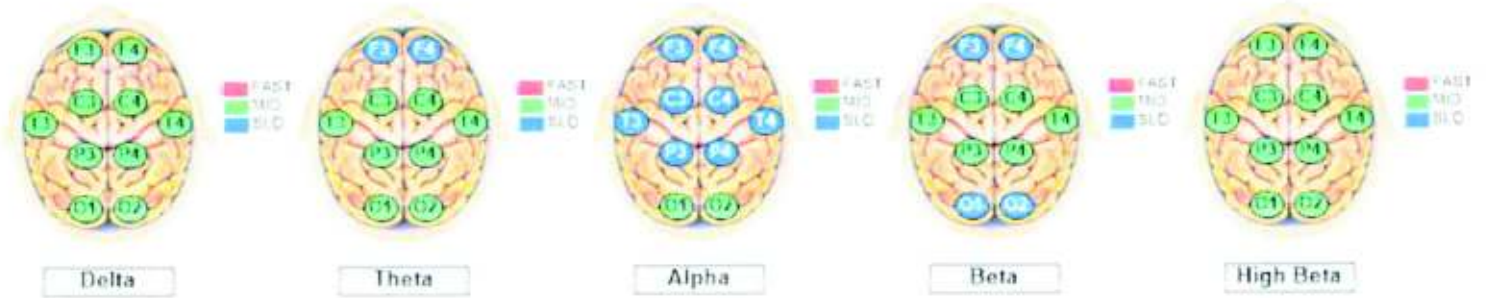
Magnitude



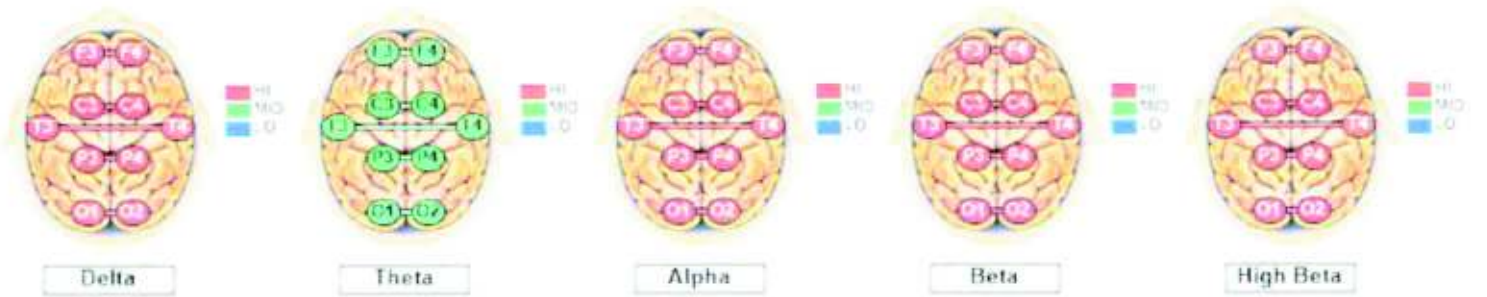
Magnitude Contrast



Dominant Frequency



Inter-Connectivity



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Asymmetry



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Two Channel Protocol Suggestions - Based on Eyes Open Map

| Protocol # | Left Protocol | Right Protocol | Sites | Entrainment Frequency | Entrainment Color |
|------------|---------------|----------------|-------|------------------------|-------------------|
| 3 | 2-12d 15-20u | 2-12d 13-15u | C3/C4 | 14Hz Left / 18Hz Right | Yellow |
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IMPORTANT NOTE: If a patients has a history of epileptic seizures or photic sensitivity you should avoid using the photic lights. You may still run treatment protocols without the photic lights. If a protocol suggests that you use yellow glasses on a client and they have reported symptoms of anxiety use green instead of yellow. Protocol suggestions should not be considered as treatment or cure for any medical conditions.

Supplements Analysis

Suggested Supplements

Acetyl L-Carnitine
Alpha-linolenic Acid
Alpha-lipoic Acid
Calcium
Choline
GABA
Inositol
L-Tyrosine
Magnesium
Omega-3s
Pantothenic Acid
Phosphorus
Potassium
Selenium
Vitamin Bs
Vitamin C
Vitamin E
Zinc

EEG Readings

| Eyes Open EEG Readings | | | | |
|------------------------|--------|--------|--------|-------|
| Site | Delta | Theta | Alpha | Beta |
| C3 | 81.385 | 34.302 | 16.765 | 8.846 |
| C4 | 84.049 | 35.930 | 17.619 | 8.937 |
| Cz | 63.825 | 30.891 | 12.334 | 6.900 |
| F3 | 77.714 | 38.372 | 12.307 | 7.697 |
| F4 | 78.705 | 38.278 | 12.448 | 8.103 |
| Fz | 71.922 | 34.936 | 12.149 | 7.204 |
| O1 | 36.583 | 19.810 | 13.282 | 8.185 |
| O2 | 36.716 | 20.007 | 13.245 | 8.080 |
| P3 | 64.924 | 26.213 | 12.839 | 8.388 |
| P4 | 63.132 | 25.143 | 12.368 | 8.152 |
| T3 | 61.222 | 30.582 | 12.740 | 6.268 |
| T4 | 62.626 | 31.518 | 13.290 | 6.828 |

| Eyes Closed EEG Readings | | | | |
|--------------------------|---------|--------|--------|--------|
| Site | Delta | Theta | Alpha | Beta |
| C3 | 117.141 | 42.564 | 26.492 | 14.431 |
| C4 | 117.712 | 42.578 | 26.903 | 14.633 |
| Cz | 48.902 | 17.561 | 20.524 | 10.803 |
| F3 | 106.685 | 43.821 | 27.513 | 15.301 |
| F4 | 106.086 | 44.087 | 27.829 | 15.501 |
| Fz | 49.563 | 18.233 | 21.443 | 10.377 |
| O1 | 84.231 | 34.327 | 24.035 | 12.922 |
| O2 | 84.192 | 34.367 | 24.030 | 12.909 |
| P3 | 72.857 | 28.758 | 22.486 | 11.756 |
| P4 | 72.119 | 28.649 | 22.853 | 11.749 |
| T3 | 119.540 | 44.378 | 30.055 | 17.126 |
| T4 | 119.191 | 44.397 | 30.284 | 17.436 |

| Eyes Open Dominant Frequency | | | | |
|------------------------------|-------|-------|-------|--------|
| Site | Delta | Theta | Alpha | Beta |
| C3 | 1.708 | 4.925 | 9.121 | 17.173 |
| C4 | 1.683 | 4.932 | 9.106 | 17.246 |
| Cz | 1.723 | 5.095 | 9.248 | 17.085 |
| F3 | 1.699 | 4.816 | 9.048 | 17.083 |
| F4 | 1.687 | 4.776 | 9.080 | 17.041 |
| Fz | 1.757 | 5.069 | 9.161 | 17.114 |
| O1 | 1.557 | 4.945 | 9.654 | 17.041 |
| O2 | 1.573 | 4.928 | 9.642 | 17.010 |
| P3 | 1.639 | 5.067 | 9.299 | 17.260 |
| P4 | 1.626 | 5.019 | 9.405 | 17.311 |
| T3 | 1.747 | 4.994 | 9.107 | 17.141 |
| T4 | 1.718 | 4.973 | 9.228 | 17.150 |

| Eyes Closed Dominant Frequency | | | | |
|--------------------------------|-------|-------|-------|--------|
| Site | Delta | Theta | Alpha | Beta |
| C3 | 1.433 | 5.029 | 9.406 | 17.267 |
| C4 | 1.424 | 5.042 | 9.425 | 17.194 |
| Cz | 1.401 | 5.163 | 9.483 | 17.086 |
| F3 | 1.510 | 4.966 | 9.277 | 17.032 |
| F4 | 1.510 | 4.997 | 9.303 | 17.084 |
| Fz | 1.423 | 5.134 | 9.478 | 17.001 |
| O1 | 1.558 | 4.843 | 9.335 | 17.245 |
| O2 | 1.562 | 4.843 | 9.344 | 17.233 |
| P3 | 1.485 | 5.169 | 9.520 | 17.341 |
| P4 | 1.487 | 5.177 | 9.558 | 17.312 |
| T3 | 1.587 | 5.057 | 9.496 | 17.153 |
| T4 | 1.589 | 5.069 | 9.486 | 17.174 |

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christy morehouse

Age: 51 | Female

Client Number: christy_morehouse

Client Status: A

Profile Physiology ISI CEC Cognitive Performance **Brain Maps** Progress Tracking Client Login

Map reports

Current list of QEEG Assessments. Use this screen to manage, add, view, and delete QEEG/Brainmap reports.

christy_morehouse_3-27

EC Map Date: **3/27/2018** CEC Used: **NONE** [Edit](#)

EO Map Date: **3/27/2018**

Client Summary Dashboard EC Maps EO Maps **Reports** Supplements Narrative EEG Readings

Protocols from Eyes Open Brain Map

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The Clear Mind Maps QEEG database system is intended for use by neurofeedback practitioners for experimental data analysis purposes only and should not be used as a medical assessment. Please send all inquiries and suggestions to: Support@Neuro-Map.com