

Neuro Visual Rehabilitation Center
Pre-Therapy Summary Report

Patient: **S W**

Age 12 Years 1 Month

Exam Date: 9/5/2012

A) Patient's Eye, Visual, and Performance Symptoms:

Current Eye/Vision Symptoms:

1. Blurred Distant Vision
2. Blurred Near Vision

Performance (Efficiency / Comfort) Symptoms: CISS Score = 43

1. Have Headaches When Reading or Doing Near Work.
2. Feel Sleepy When Reading or Doing Close Work.
3. Feels Like They Read Slowly.
4. Eyes Hurt When Reading or Doing Close Work.
5. Eyes Feel Sore When Reading or Doing Close Work.
6. Feel a "Pulling" Around Eyes When Reading or Doing Close Work.
7. Notice Words Blurring or Coming In and Out of Focus When Reading.
8. Lose Place When Reading or Doing Close Work.
9. Have to Reread the Same Line of Words When Reading.

B) Initial Acceptable, Marginal or Inadequate Visual Skills Levels:

I. Analysis of Visual Performance Skills:

A. General Eye Health:

1. External and Internal Eye Health - Clear Acceptable
2. General Fine Eye Movements - Jerky Marginal

B. Eye Sight Acuity:

1. Right Eye Best Unaided Acuity at Distance 20 / 25 Marginal
2. Left Eye Best Unaided Acuity at Distance 20 / 25 Marginal
3. Right Eye Best Unaided Acuity at Near 20 / 25 Marginal
4. Left Eye Best Unaided Acuity at Near 20 / 25 Marginal

C. Alignment and Fixation:

1. Natural Alignment of Eyes at Distance - 4 Eso Inadequate
2. Natural Alignment of Eyes at Near - 2 Eso..... Inadequate
3. Natural Level Alignment of Eyes - Ortho..... Acceptable
4. Near Point of Alignment - 7" Break 10" Recovery Inadequate
5. Eyes Tracking Ability (Pursuits) - 80%..... Acceptable
6. Central Fixation Ability - Undershoot Inadequate
7. Fixation Accuracy - Outside..... Inadequate
8. Speed /Accuracy Changing Fixation - 0.71 Sec. at 96%Marginal

D. Fusion and Stamina:

1. Simultaneous Perception - Central Suppression > Left EyeMarginal
2. Fusional Stability at Distant - UnstableMarginal
3. Fusional Stability at Near - UnstableMarginal
4. Ability to Maintain Fusion at Distant - BI x/x Inadequate
BO x/x/x Inadequate
5. Ability to Maintain Fusion at Near - BI x/21/13 Inadequate
BO x/30/26 Acceptable

E. Focusing Ranges and Speed:

1. Focusing Flexibility at Near - PRA -x.x Inadequate
NRA +x.x Inadequate
2. Focusing Speed - 13 Cycles Per Minute (CPM) > 65%.....Marginal
PRA 0% Focusing Stimulated (-) 75%
NRA 0% Focusing Relaxed (+) 89%
3. Coordination Between Eye Alignment and Focusing - x/1 Inadequate

II. Analysis of Visual Perceptual Skills:

A. Depth and Color Vision:

1. Depth Perception at Distant - 90% Acceptable
2. Depth Perception at Near - 90%..... Acceptable
3. Color Vision - 100%..... Acceptable

B. Perception and Cognition:

- 1. Visual Discrimination - 50%.....Marginal
- 2. Visual Memory - 9%.....Inadequate
- 3. Visual Spatial Relations - 16%..... Inadequate
- 4. Visual Form Constancy - 2%Inadequate
- 5. Visual Sequential Memory - 2% Inadequate
- 6. Visual Figure Ground - 9%.....Inadequate
- 7. Visual Closure - 5%.....Inadequate
- 8. Visual Percentile Rank - 3% Inadequate
- 9. Chronological / Perceptual Age Difference Inadequate
-4 Years 8 Months
Chronological Age 12 Years 1 Month / Medium Perceptual Age 7 Years 5 Months.

C) Initial Visual Diagnosis: Four Major Medical Conditions

Primary (1) 378.83 Secondary (2) 368.32 (3) 368.10 (4) 368.30

- 1. Binocular Dysfunction 368.30
- 2. Convergence Insufficiency 378.83
- 3. Fusional Vergence Dysfunction 368.32
- 4. Visual Perceptual Disturbances (Unspecified)..... 368.10

D) Initial Management and Treatment Goals:

- 1. Improve General Fine Eye Movements.
- 2. Improve Reduced Eye Sight Acuity Conditions.
- 3. Improve Natural Alignment of Eyes at Distance and/or Near.
- 4. Increase Near Point of Alignment (Convergence).
- 5. Improve Central Fixation Ability.
- 6. Improve Fixation Accuracy.
- 7. Increase Speed and Accuracy While Changing Fixation.
- 8. Eliminate Intermittent Central Suppression of the Left Eye.
- 9. Improve Fusional Stability at Distance.
- 10. Improve Fusional Stability at Near.
- 11. Increase Fusional Ranges (Both B.I. and B.O.) at Distance.
- 12. Increase Fusional Ranges (B.I.) at Near.
- 13. Improve Flexibility to Increase Focus at Near (PRA- Minus Lens Power).
- 14. Improve Flexibility to Decrease Focus at Near (NRA-Plus Lens Power).
- 15. Increase Focusing Speed and Cycles Per Minute (CPM) Percentage.
- 16. Increase Accuracy of Increase (PRA) and Decrease (NRA) Focusing at Near.

- 17. Increase Coordination Between Eye Alignment and Focusing (AC/A Ratio).
- 18. Improve Depth Perception at Distance and/or Near.
- 19. Increase Visual Discrimination.
- 20. Increase Visual Memory.
- 21. Increase Visual Spatial Relations.
- 22. Increase Visual Form Constancy.
- 23. Increase Visual Sequential Memory.
- 24. Increase Visual Figure Ground.
- 25. Increase Visual Closure.
- 26. Increase Visual Perceptual Percentile Rank.
- 27. Increase Medium Visual Perceptual Age.

E) Pre-Therapy Management and Treatment Notations:

1. Case Type Summary:

Oculomotor Skills Inadequate
 Binocular Vision..... Inadequate
 Visual Perception..... Inadequate

2. Major Case Problem: This Patient Has

Convergence Insufficiency (378.83)
 Binocular Fusional Problem (368.32) Inadequate
 Binocular Visual Dysfunction (368.30) Inadequate
 Visual Perceptual Awareness (368.10) Inadequate

To be successful you must build a solid balanced Monocular Skills foundation before good efficient Binocular Skills can be established. Work to develop and expand all Lens and Prism Power Ranges (Plus, Minus, Base In and Base Out) with amounts and speeds.

3. Special Case or Health Conditions: Patient's Non-Visual Score (TVPS) was 42 and the Visual Score (Berry) was 100, with the difference between the two being 58. The patient's Visual Perceptual Index is 71 and there is a Visual Perceptual Age Lag of 4 Years and 8 Months. Patient has a problem solving approach style which is Reflective which means that you want to speed up their response time and have them work on the reaction time. Patient is not taking ADD or ADHD medication at the present time.

4. Therapy Case Approach should to be: Slow

5. Glasses Rx was Written and is to be used with Therapy Regiment.

6. Rx Prescription: O.D. -0.50 -0.25 x 062 O.S. -0.75 -0.50 x 034

7. **Prognosis for Case is:** Good

8. **Case Disposition:** Acceptable > Office

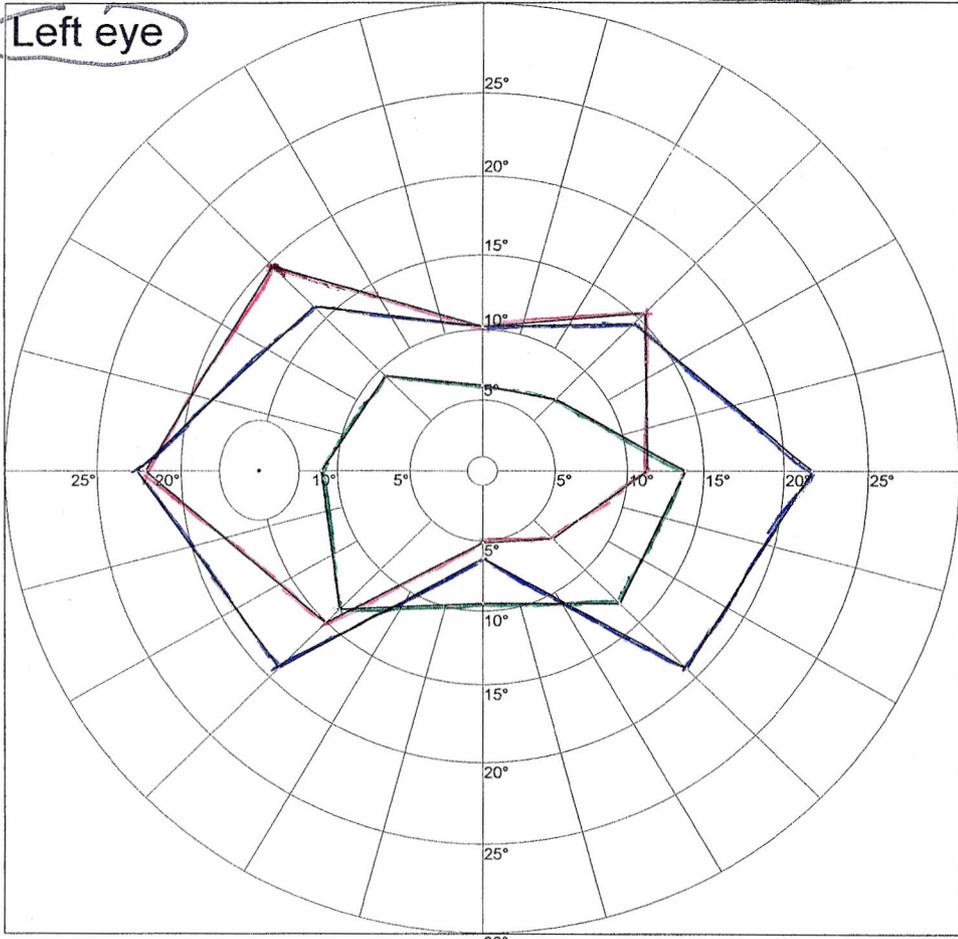
9. **Approximate Therapy Time:** Between 48 to 56 Session Hours.

10. **Additional Case Considerations and/or Commits:** VEP Flipped Between 32 and 64 –
Watch and Follow

S W

Test executed on 05/09/2012 at 15.23

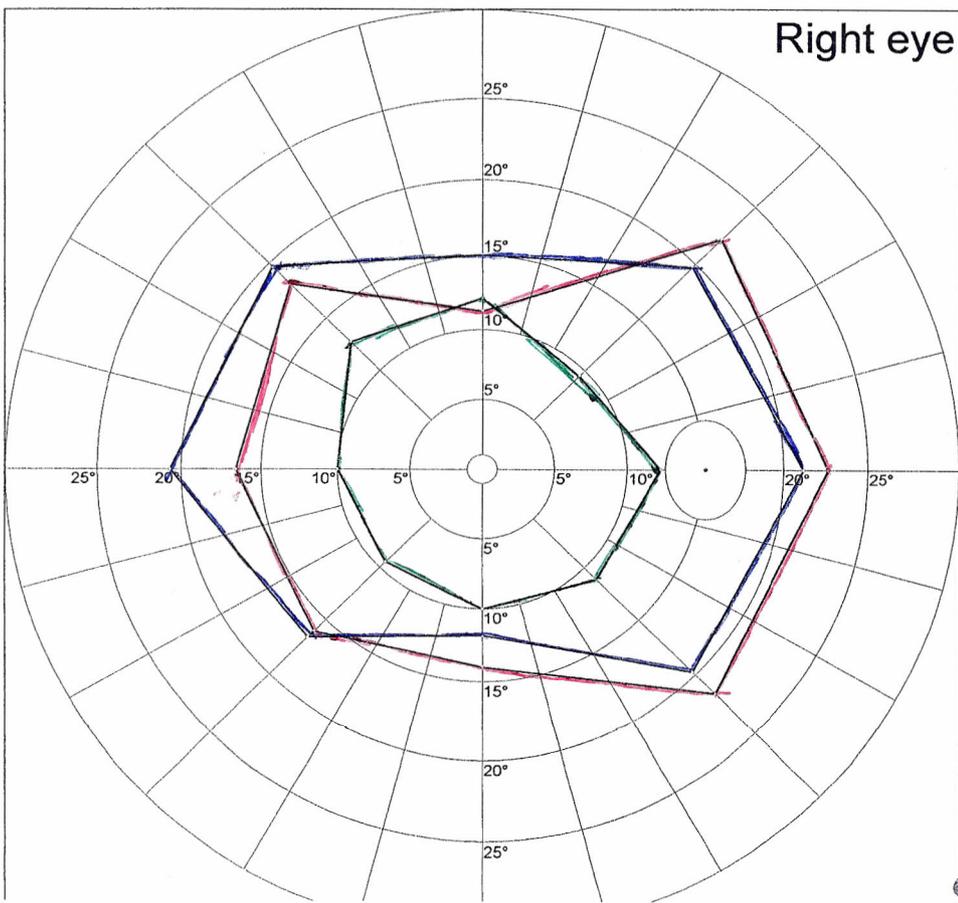
Left eye



	Red	Green	Blue
0°	11°	14°	22°
15°			
30°			
45°	16°	7°	15°
60°			
75°			
90°	10°	6°	10°
105°			
120°			
135°	20°	9°	16°
150°			
165°			
180°	22°	11°	23°
195°			
210°			
225°	15°	14°	19°
240°			
255°			
270°	5°	9°	6°
285°			
300°			
315°	7°	13°	19°
330°			
345°			
ave	13.2°	10.5°	16.2°
error	0%	0%	0%

assisted - small - speed: 275 - no gray dots - numbers - lines: 15° - F 202 R 177 G 107 B 165 sheet 144

Right eye

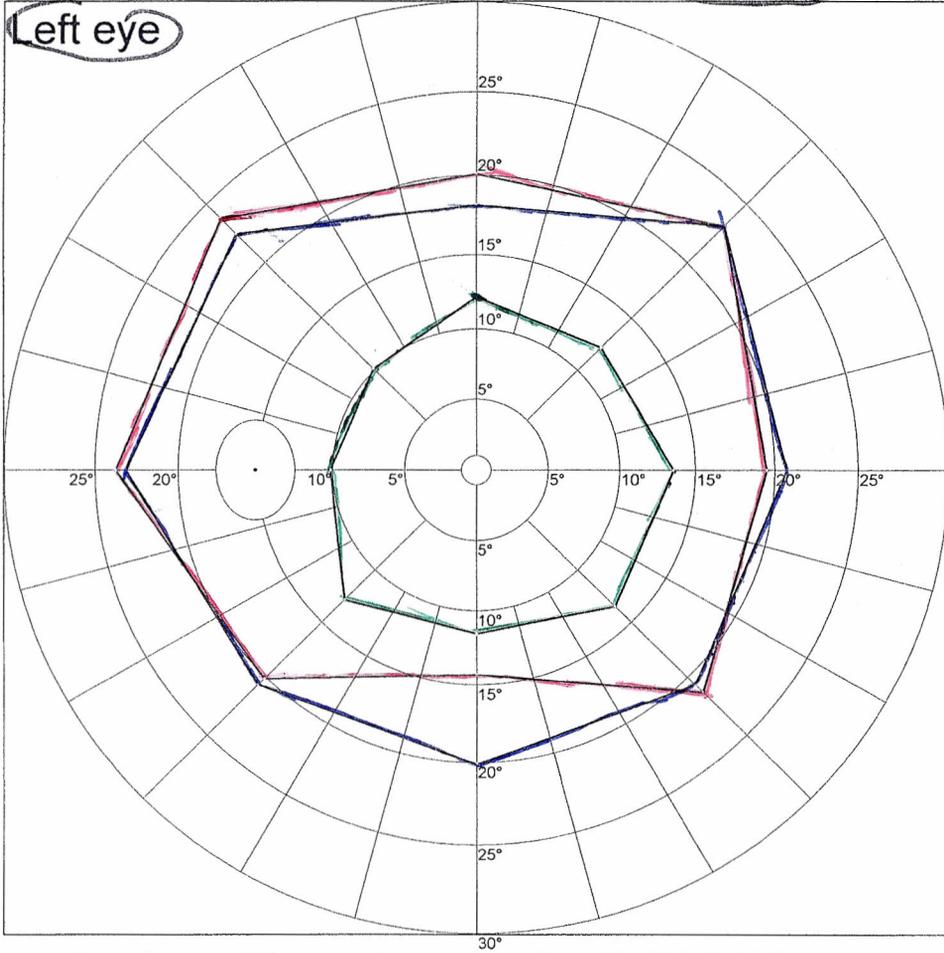


	Red	Green	Blue
0°	23°	12°	21°
15°			
30°			
45°	22°	9°	20°
60°			
75°			
90°	11°	12°	15°
105°			
120°			
135°	18°	13°	20°
150°			
165°			
180°	17°	10°	21°
195°			
210°			
225°	16°	9°	17°
240°			
255°			
270°	14°	10°	12°
285°			
300°			
315°	22°	11°	20°
330°			
345°			
ave	17.8°	10.9°	18.1°

Handwritten note: Red 15.5 / Green 14.7 / Blue 17.1

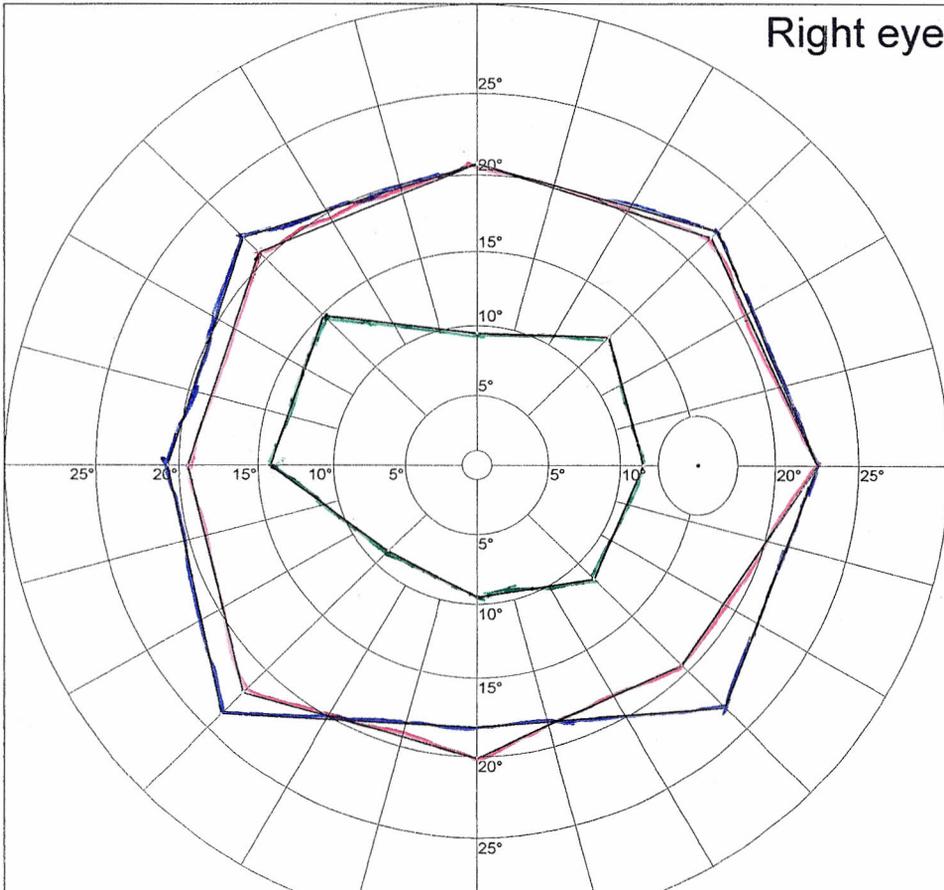
SW

Test executed on 10/06/2013 at 11.01



	Red	Green	Blue
0°	19°	14°	21°
15°			
30°			
45°	23°	12°	23°
60°			
75°			
90°	20°	12°	18°
105°			
120°			
135°	24°	10°	22°
150°			
165°			
180°	24°	10°	23°
195°			
210°			
225°	20°	13°	21°
240°			
255°			
270°	14°	12°	20°
285°			
300°			
315°	21°	13°	21°
330°			
345°			
ave	20.7°	12.0°	21.1°
error	0%	0%	0%

assisted - small - speed: 275 - no gray dots - numbers - lines: 15° - F 202 R 177 G 107 B 165 sheet 144



	Red	Green	Blue
0°	23°	12°	23°
15°			
30°			
45°	22°	13°	22°
60°			
75°			
90°	21°	9°	21°
105°			
120°			
135°	21°	15°	22°
150°			
165°			
180°	19°	14°	21°
195°			
210°			
225°	22°	9°	24°
240°			
255°			
270°	20°	9°	18°
285°			
300°			
315°	19°	11°	23°
330°			
345°			
ave	20.8°	11.6°	21.7°

KEYSTONE VISUAL SKILLS PROFILE

Doctor's Cumulative Profile Form No. 3A

For Use with Keystone Ophthalmic Telebinocular

Order No. 5506

Name SW Age 12 Date 8/29/12 Wearing Glasses: Yes No

	Left Only	Right Only	Underconvergence Low Usable Vision					EXPECTED				Overconvergence High Usable Vision										
Test 1 (DB-10A) Simultaneous Vision (Far Point)																						
Test 2 (DB-8C) Vertical Posture (Far Point)	only	only																				
Test 3 (DB-9) Lateral Posture (Far Point)	only	15-14-13 - - 3-2-1 Numbers Only	15	14	13	12	11	10½	10	9	8½	8	7	6	5	4	3	2	1			
Test 4 (DB-4K) Fusion (Far Point)	only	only	Four, widely separated	Four, near each other	Four, then three	Four, then three	Four, then three	Four, then three	Four, then three	Four, then three	Four, then three	Four, then three										
Test 4½ (DB-1D) Usable Vision, Both Eyes (Far Point)			1 49%	2 70%	3 84%	4 88%	5 92%	6 96%	7 98%	8 100%	9 103%	10 105%										
Test 5 (DB-3D) Usable Vision, Right Eye (Far Point)		No Dots Seen Unless Left Eye Is Occluded	1 49%	2 70%	3 84%	4 88%	5 92%	6 96%	7 98%	8 100%	9 103%	10 105%										
Test 6 (DB-2D) Usable Vision, Left Eye (Far Point)		No Dots Seen Unless Right Eye Is Occluded	1 49%	2 70%	3 84%	4 88%	5 92%	6 96%	7 98%	8 100%	9 103%	10 105%										
Test 7 (DB-6D) Stereopsis (Far Point)	only	only																				
Test 8 (DB-13A) Color Perception (Far Point)		32		79			23		ALL CORRECT													
Test 9 (DB-14A) Color Perception (Far Point)		63		92			56		ALL CORRECT													
Test 10 (DB-9B) Lateral Posture (Near Point)	only	10-9 - - - 4-3-2 Numbers Only	10	9	8	7	6½	6	5	4½	4	3	2									
Test 11 (DB-5K) Fusion (Near Point)	only	only	Four, widely separated	Four, near each other	Four, then three	Four, then three	Four, then three	Four, then three	Four, then three	Four, then three	Four, then three	Four, then three										
Test 12 (DB-15) Usable Vision, Both Eyes (Near Point)	1 10%	2 20%	3 30%	4 40%	5 50%	6 50%	7 60%	8 60%	9 70%	10 70%	11 80%	12 80%	13 90%	14 90%	15 100%	16 100%	17 102%	18 102%	19 103%	20 103%	21 105%	22 105%
Test 13 (DB-16) Usable Vision, Right Eye (Near Point)	1 10%	2 20%	3 30%	4 40%	5 50%	6 50%	7 60%	8 60%	9 70%	10 70%	11 80%	12 80%	13 90%	14 90%	15 100%	16 100%	17 102%	18 102%	19 103%	20 103%	21 105%	22 105%
Test 14 (DB-17) Usable Vision, Left Eye (Near Point)	1 10%	2 20%	3 30%	4 40%	5 50%	6 50%	7 60%	8 60%	9 70%	10 70%	11 80%	12 80%	13 90%	14 90%	15 100%	16 100%	17 102%	18 102%	19 103%	20 103%	21 105%	22 105%

NOTES:
CISS 43 NPC ATC
Possible V.T. Candidate Yes No

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KEYSTONE VISUAL SKILLS PROFILE

Doctor's Cumulative Profile Form No. 3A

For Use with Keystone Ophthalmic Telebinocular

Order No. 5506

Name SW Age 6/12/13 Date 6/12/13 Wearing Glasses: Yes No

Set at Far Point	Left Only		Right Only		Underconvergence Low Usable Vision					EXPECTED					Overconvergence High Usable Vision							
	Test 1 (DB-10A) Simultaneous Vision (Far Point)																					
Test 2 (DB-8C) Vertical Posture (Far Point)	only	only																				
Test 3 (DB-9) Lateral Posture (Far Point)	only	15-14-13 . . . 3-2-1 Numbers Only	15	14	13	12	11	10 1/2	10	9	8 1/2	8	7	6	5	4	3	2	1			
Test 4 (DB-4K) Fusion (Far Point)	only	only	Four, widely separated	Four, near each other	Four, then three	Four, then three	Four, near each other	Four, widely separated	Four, then three	Four, then three	Four, near each other	Four, widely separated	Four, then three	Four, then three	Four, near each other	Four, widely separated	Four, then three	Four, then three	Four, near each other			
Test 4 1/2 (DB-1D) Usable Vision, Both Eyes (Far Point)			L 49%	B 70%	T 84%	L 88%	R 92%	T 96%	L 98%	B 100%	B 103%	R 105%										
Test 5 (DB-3D) Usable Vision, Right Eye (Far Point)		No Dots Seen Unless Left Eye Is Occluded	T 49%	R 70%	L 84%	T 88%	B 92%	B 96%	L 98%	R 100%	T 103%	R 105%										
Test 6 (DB-2D) Usable Vision, Left Eye (Far Point)		No Dots Seen Unless Right Eye Is Occluded	B 49%	L 70%	R 84%	R 88%	T 92%	L 96%	B 98%	L 100%	R 103%	T 105%										
Test 7 (DB-6D) Stereopsis (Far Point)	only	only	+	○	*	○	□	□	○	+	*	+	○	○	100%							
Test 8 (DB-13A) Color Perception (Far Point)		32		79		23		ALL CORRECT														
Test 9 (DB-14A) Color Perception (Far Point)		63		92		56		ALL CORRECT														
Test 10 (DB-9B) Lateral Posture (Near Point)	only	10-9 4-3-2 Numbers Only	10	9	8	7	6 1/2	6	5	4 1/2	4	3	2									
Test 11 (DB-5K) Fusion (Near Point)	only	only	Four, widely separated	Four, near each other	Four, then three	Four, then three	Four, near each other	Four, widely separated	Four, then three	Four, then three	Four, near each other	Four, widely separated	Four, then three	Four, then three	Four, near each other	Four, widely separated	Four, then three	Four, then three	Four, near each other			
Test 12 (DB-15) Usable Vision, Both Eyes (Near Point)	1 D 10%	2 L 20%	3 D 30%	4 D 40%	5 L 50%	6 D 50%	7 D 60%	8 L 60%	9 D 70%	10 D 70%	11 G 80%	12 L 80%	13 L 90%	14 D 90%	15 D 100%	16 D 100%	17 L 102%	18 D 102%	19 G 103%	20 D 103%	21 D 105%	22 L 105%
Test 13 (DB-16) Usable Vision, Right Eye (Near Point)	1 D 10%	2 D 20%	3 L 30%	4 D 40%	5 L 50%	6 D 50%	7 D 60%	8 L 60%	9 D 70%	10 D 70%	11 L 80%	12 G 80%	13 L 90%	14 L 90%	15 D 100%	16 D 100%	17 L 102%	18 D 102%	19 L 103%	20 D 103%	21 D 105%	22 L 105%
Test 14 (DB-17) Usable Vision, Left Eye (Near Point)	1 L 10%	2 D 20%	3 D 30%	4 D 40%	5 L 50%	6 D 50%	7 L 60%	8 D 60%	9 D 70%	10 D 70%	11 L 80%	12 L 80%	13 G 90%	14 D 90%	15 L 100%	16 D 100%	17 L 102%	18 D 102%	19 L 103%	20 G 103%	21 D 105%	22 L 105%

NOTES:

Best CO eye or eye MPC nose

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NAME

SW

[Handwritten Name]

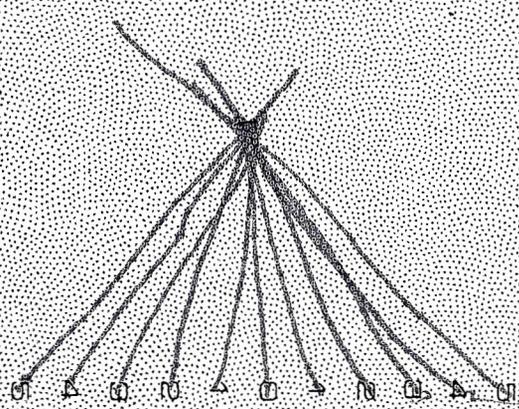
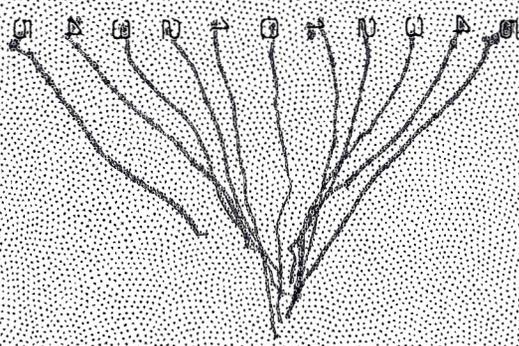
DATE

9/5/12

COMMENTS

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BINOCLULAR VISION SPACE TESTING



Bennett Corp
VSA

NAME

SW

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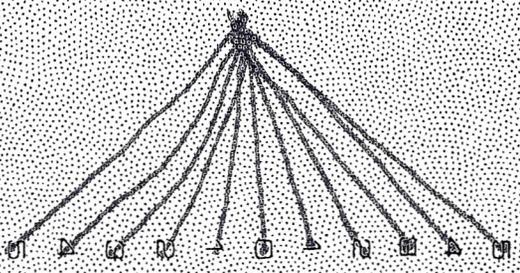
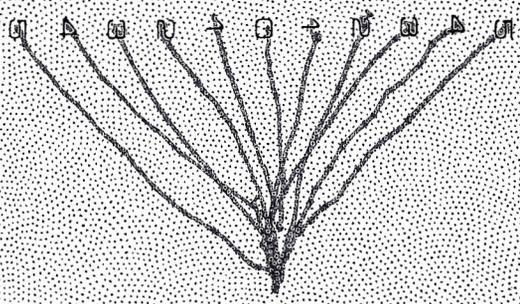
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6-10-13

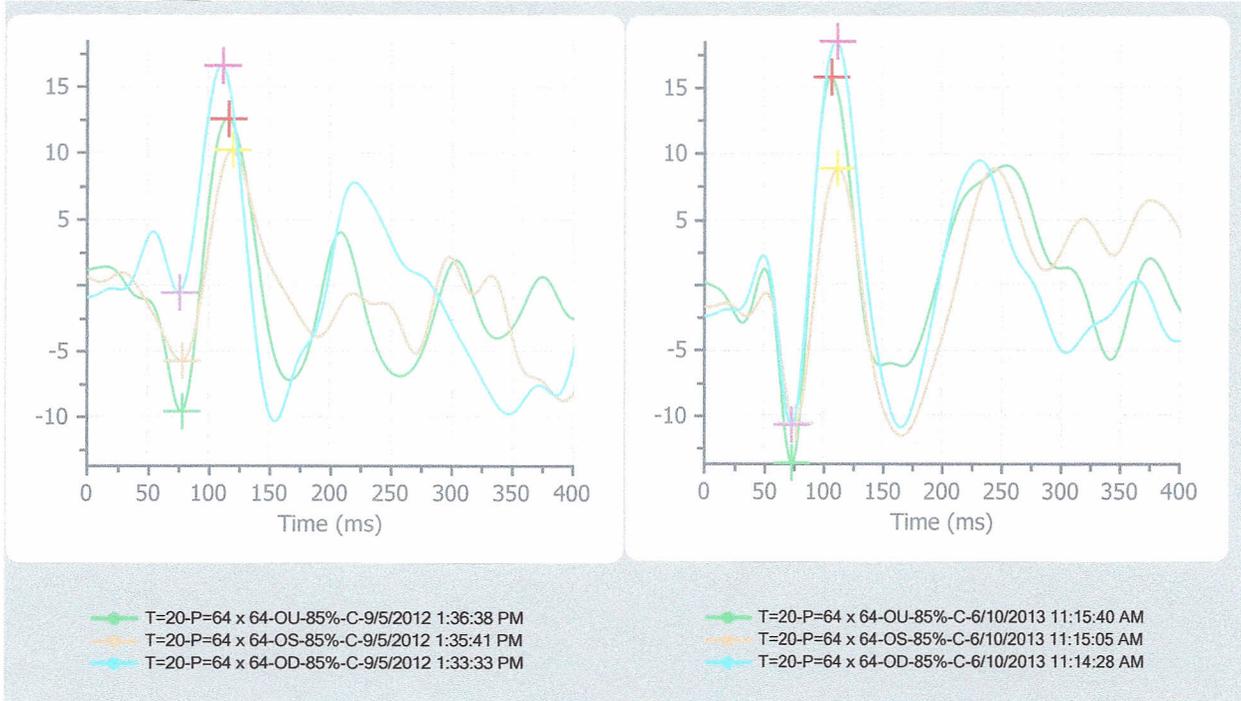
COMMENTS

40 not test

BINOCLULAR VISION SPACE TESTING



Patient: **SW** Sandy DOB: Aug 30, 2000



	T=20-P=64 x 64- OU-85%- C-9/5/2012 1:36:38 PM	T=20-P=64 x 64- OS-85%- C-9/5/2012 1:35:41 PM	T=20-P=64 x 64- OD-85%- C-9/5/2012 1:33:33 PM	T=20-P=64 x 64- OU-85%- C-6/10/2013 11:15:40 AM	T=20-P=64 x 64- OS-85%- C-6/10/2013 11:15:05 AM	T=20-P=64 x 64- OD-85%- C-6/10/2013 11:14:28 AM
Left Cursor Lat	78.0 ms	78.0 ms	76.1 ms	74.1 ms	77.0 ms	74.1 ms
Amp	-9.56 uV	-5.76 uV	-0.54 uV	-13.64 uV	-10.58 uV	-10.77 uV
Right Cursor Lat	116.0 ms	119.9 ms	111.2 ms	106.3 ms	112.1 ms	111.2 ms
Amp	12.54 uV	10.13 uV	16.57 uV	15.74 uV	8.85 uV	18.45 uV
Delta Lat	38.0 ms	41.9 ms	35.1 ms	32.2 ms	35.1 ms	37.1 ms
Amp	22.10 uV	15.90 uV	17.11 uV	29.39 uV	19.43 uV	29.23 uV
Eye	OU	OS	OD	OU	OS	OD
Test Duration	20 sec	20 sec	20 sec	20 sec	20 sec	20 sec
Contrast	85%	85%	85%	85%	85%	85%
Pattern	Checkerboa rd	Checkerboa rd	Checkerboa rd	Checkerboa rd	Checkerboa rd	Checkerboa rd
CheckSize	64 x 64	64 x 64	64 x 64	64 x 64	64 x 64	64 x 64
Binasal	N	N	N	N	N	N
Correction	N	N	N	N	N	N
SWVersion	2.11.1107	2.11.1107	2.11.1107	2.14.2513	2.14.2513	2.14.2513
Filtered	N	Y	Y	Y	Y	Y
Sensor Value				110	110	110
Sensor Threshold				130	130	130
VEP Extractor				Y	Y	Y
BCVA					20/20	20/20

PRE and POST VISUAL PERCEPTUAL SKILLS PROFILE CHARTS

Patient's Name SW Williams Age 12-10 Exam Date 6/10/13
 VPS Profile Before - Solid , After - Dotted Therapy - 9/18/12 - 5/15/13

% Rank	VD	VM	VSR	VFC	VSM	VFG	VC	% Rank
99.9	19	19	19	19	19	19	19	99.9
99.6	18	18	18	18	18	18	18	99.6
99	17	17	17	17	17	17	17	99
98	16	16	16	16	16	16	16	98
95	15	15	15	15	15	15	15	95 <i>POST</i>
91	14	14	14	14	14	14	14	91
84	13	13	13	13	13	13	13	84 <i>88%</i>
75	12	12	12	12	12	12	12	75 <i>(12-11)</i>
63	11	11	11	11	11	11	11	63
50	10	10	10	10	10	10	10	50
37	9	9	9	9	9	9	9	37
25	8	8	8	8	8	8	8	25
16	7	7	7	7	7	7	7	16
9	6	6	6	6	6	6	6	9
5	5	5	5	5	5	5	5	5 <i>pre 30% (7-5)</i>
2	4	4	4	4	4	4	4	2
1	3	3	3	3	3	3	3	1
0.4	2	2	2	2	2	2	2	0.4
0.1	1	1	1	1	1	1	1	0.1

- VD > Visual Discrimination - The ability to match or determine exact characteristics of two forms when one of the forms is among similar forms.
- VM > Visual Memory - The ability to remember from immediate recall all of the characteristics of a given form, and being able to find this form from an array of similar forms.
- VSR > Visual-Spatial Relations - The ability to determine, from among five forms of identical configuration, the one single form that is going in a different direction from the other forms.
- VFC > Visual Form Constancy - The ability to see a form, and being able to find that form, even though the form may be smaller, larger, rotated, reversed, and/or hidden.
- VSM > Visual Sequential Memory - The ability to remember for immediate recall a series of forms from among four separate series of forms.
- VFG > Visual Figure-Ground - The ability to perceive a form visually, and to find this form hidden in a conglomerated ground of matter.
- VC > Visual Closure - The ability to determine, from among four incomplete forms, the one that is the same as the completed form.

U.S. GOVERNMENT
 PRINTING OFFICE: 1967

Convergence Insufficiency Symptoms Survey

Pne - 8/29/2012 (X)
PurT - 6/10/2013 (V)

Patients Name: SW Date: ___/___/___

Please Answer (Check) the Following Questions About How Your Eyes Feel When Reading or Doing Near Work.

	Possible Subjective Symptoms	Never	(Not Very Often) Infrequently	Sometimes	Fairly Often	Always		
1.	Do your eyes feel tired when reading or doing close work?		✓	X				
2.	Do your eyes feel uncomfortable when reading or doing close work?	✓		X				
3.	Do you have headaches when reading or doing near work?	✓			X			
4.	Do you feel sleepy when reading or doing close work?			✓		X		
5.	Do you lose concentration when reading or doing close work?	✓		X				
6.	Do you have trouble remembering what you have read?		✓	X				
7.	Do you have double vision when reading or doing close work?		✓	X				
8.	Do you see words move, jump, swim or appear to float on the page when reading or doing close work?	X ✓						
9.	Do you feel like you read slowly?		✓			X		
10.	Do your eyes ever hurt when reading or doing close work?	✓				X		
11.	Do your eyes ever feel sore when reading or doing close work?		✓			X		
12.	Do you feel a "pulling" feeling around your eyes when reading or doing close work?	✓			X			
13.	Do you notice the words blurring or coming in and out of focus when reading or doing near work?		✓		X			
14.	Do you lose your place while reading or doing close work?			✓		X		
15.	Do you have to reread the same line of words when reading?		✓			X		
Total Score =		X = 43	✓ = 11	___ x 0	___ x 1	___ x 2	___ x 3	___ x 4

Fixation Test	Subjective			Objective		
	Acc.	Marg.	Inadeq.	Acc.	Marg.	Inadeq.
Break	✓ (1-3)	X (4-7)	(> 8)	✓ (1-3)	X (4-7)	(> 8)
Recovery	✓ (3-6)	X (7-10)	(> 11)	✓ (3-6)	X (7-10)	(> 11)

Color Test	Subjective		
	Acc.	Marg.	Inadeq.
Break	✓ (1-3)	X (4-7)	(> 8)
Recovery	✓ (3-6)	X (7-10)	(> 11)

NPC - Pne 7/10
PurT 1/3