

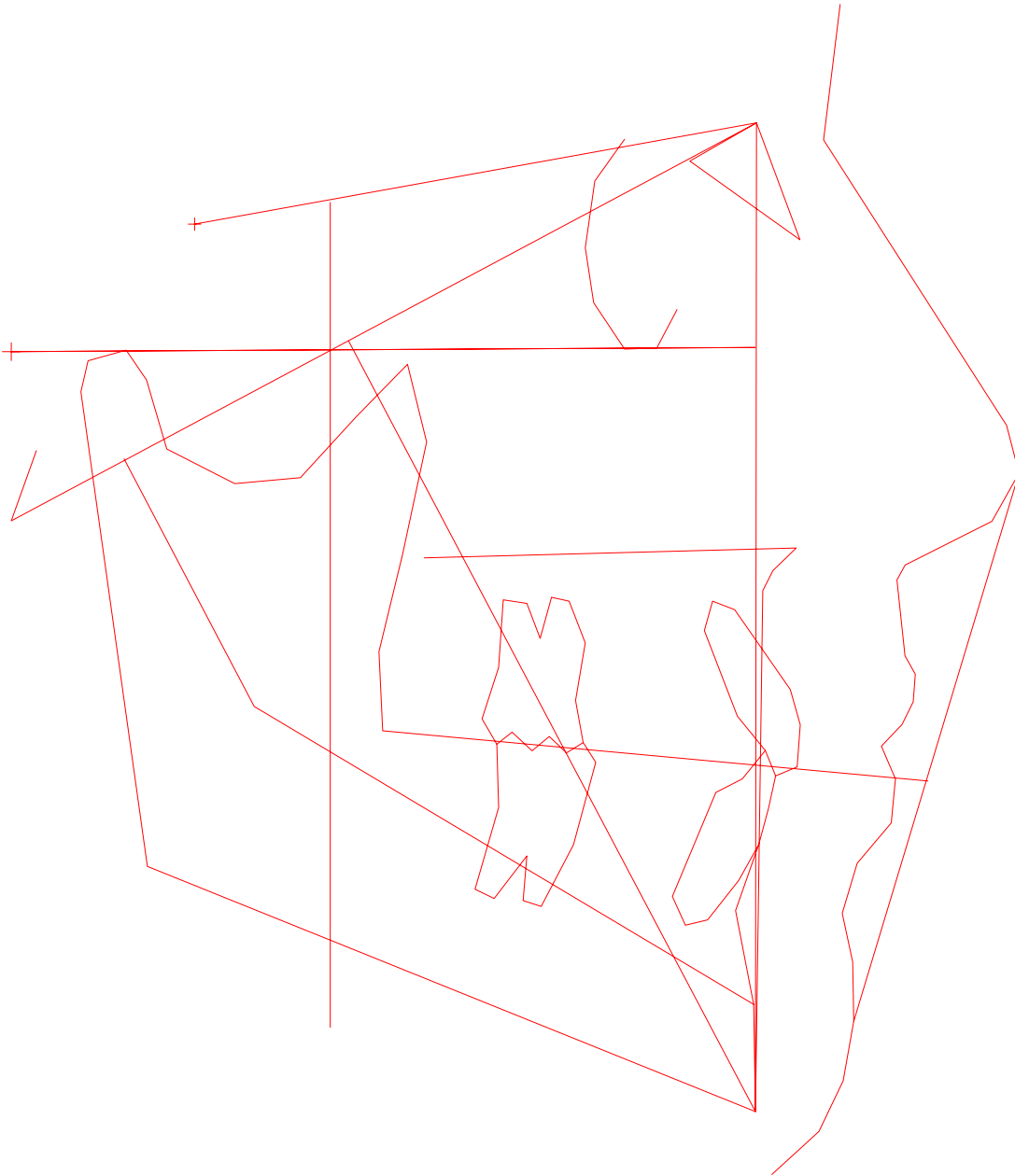
CASE: 0000 0040 1
ADULT MALE
Dr. TRAINING
M (CA) Caucasian
AGE: 30.7

VISUAL NORMS

RMO®

X: 01/14/2003 - R: 02/21/2003
MISSING PERMANENT TEETH

R $\frac{8}{8}$ | $\frac{8}{8}$ L



ADULT MALE
Dr. Training

RMO Case Number: 0000 0040 1
RMO Run date: 02/21/2003

X-Ray date: 01/14/2003 Age: 30.7
Birthdate: 05/16/1972 Sex: Male 1

Reference: C C D 1

C C D - O R T H O D O N T I C C O N D I T I O N S

LATERAL BEFORE TREATMENT

FACTOR	MEASURED VALUE	CLINICAL NORM	CLINICAL DEVIATIONS FROM NORM
# - Appears on tracing			

===== DENTAL RELATIONS =====

01 Molar Relation	-1.0 mm	-3.0 mm	0.7
03 Canine Relation	-0.2 mm	-2.0 mm	0.6
05 Incisor Overjet	3.8 mm	2.5 mm	0.5
07 Incisor Overbite	2.8 mm	2.5 mm	0.1
09 Mand Incisor Extrusion	3.0 mm	1.3 mm	0.9
#11 Interincisal Angle	131.2 dq	130.0 dq	0.2

===== DENTAL TO SKELETON =====

#18 A6 Molar Position to PTV	28.4 mm	21.0 mm	2.5 **
#20 B1 to A-Po Plane	3.0 mm	1.0 mm	0.8
22 A1 to A-Po Plane	6.5 mm	3.5 mm	1.4 *
#24 B1 Inclination to A-Po	23.3 dg	22.0 dg	0.3
26 A1 Inclination to A-Po	25.5 dg	28.0 dg	-0.6
27 Occlusal Plane to Xi	0.7 mm	-3.7 mm	1.5 *
28 Inclination of Occl Plane	21.2 dq	27.2 dq	-1.5 *
54 B1 Inclination to FH	63.3 dg	65.0 dg	-0.3

===== ESTHETICS =====

29 Lower Lip to Esthetic Plane	-4.9 mm	-2.9 mm	-1.0 *
30 Upper Lip Length	30.9 mm	29.4 mm	0.8
31 Lip Embrasure to Occl Plane	-4.9 mm	-3.0 mm	-0.9
58 NasoLabial Angle	109.1 dg	115.0 dg	-1.2 *

===== NASOPHARYNGEAL AIRWAY =====

62 N-S-Ba	124.1 dg	129.6 dg	-1.1 *
63 Ba-S-PNS	53.2 dg	63.0 dg	-3.9 ***
85 Airway Percent	85.0 %	66.1 %	1.3
86 Linder-Aronson AD1	30.7 mm	27.8 mm	0.6
87 Linder-Aronson AD2	27.0 mm	23.6 mm	0.9
88 Distance PTV to Adenoid	18.2 mm	16.2 mm	0.3

C C D - S K E L E T A L C O N D I T I O N S

LATERAL BEFORE TREATMENT

FACTOR	MEASURED VALUE	CLINICAL NORM	CLINICAL DEVIATIONS FROM NORM
# - Appears on tracing			

===== SKELETAL RELATIONS =====

#13 Convexity	2.9 mm	0.0 mm	1.4 *
#15 Lower Facial Height	45.4 dg	45.0 dg	0.1
84 Present Patient Height	NOT AVAILABLE		
91 Posterior face height	95.7 mm		
92 Anterior face height	138.1 mm		
93 Posterior/Anterior ratio	69.3 %		
94 Saddle Angle	114.6 dg	123.0 dg	-2.8 **
96 Condylion-A point	103.2 mm	98.8 mm	1.0 *
97 Condylion-Gnathion	135.7 mm	128.2 mm	1.8 *
95 Max-Mand Differential	32.5 mm	30.0 mm	0.6
98 Menton-ANS	78.0 mm	72.0 mm	2.0 **

===== JAW TO CRANIUM =====

#32 Facial Depth	89.6 dg	89.6 dg	0.0
#34 Facial Axis	89.4 dg	90.0 dg	-0.2
#36 Maxillary Depth	92.0 dg	90.0 dg	0.7
37 Maxillary Height	58.4 dg	56.7 dg	0.6
38 Palatal Plane to FH	5.3 dg	1.0 dg	1.2 *
#39 Mandibular Plane to FH	19.0 dg	23.3 dg	-1.0 *
77 Ba-N-A	64.9 dg	63.0 dg	0.6
76 S-N-A	81.9 dg	82.0 dg	0.0
78 S-N-B	79.1 dg	80.0 dg	-0.3
69 A-N-B Difference	2.8 dg	2.0 dg	0.3
75 Total Facial Height	58.6 dg	60.0 dg	-0.5

===== INTERNAL STRUCTURE =====

40 Cranial Deflection	29.4 dg	27.0 dg	0.8
42 Cranial Length Anterior	68.9 mm	70.1 mm	-0.5
44 Ramus Height (CF-Go)	81.5 mm	72.2 mm	2.8 **
46 Ramus Xi Position	78.3 dg	76.0 dg	0.8
48 Porion Location (Por to PTV)	-44.8 mm	-47.3 mm	1.1 *
#50 Mandibular Arc	36.4 dg	30.7 dg	1.4 *
51 Corpus Length	81.4 mm	84.6 mm	-1.2 *

ADULT MALE
Dr. TrainingRMO Case Number: 0000 0040 1
RMO Run date: 02/21/2003X-Ray date: 01/14/2003 Age: 30.7
Birthdate: 05/16/1972 Sex: Male 1

Reference: I N F O

P A T I E N T I N F O R M A T I O N

NAME

Patient name: ADULT MALE
Doctor name: TRAINING
Age: 30.7
X-Ray date: 01/14/2003
RMO Case Number:
RMO Run date: 02/21/2003

MISSING PERMANENT TEETH

8		
R	-----+	L
8		8

HEIGHT PREDICTION

Patient has reached adult height

AIRWAY ANALYSIS

If the patient is clinically diagnosed
as a mouthbreather, observed mouthbreathing
is probably not caused by adenoid blockage
of the airway.

BOLTON ANALYSIS

Not Available - Upper and lower arch not analyzed

S I G N I F I C A N T C O N S I D E R A T I O N S

CONDITION

CCD FACTORS

HORIZONTAL

Skeletal Class II
due to the maxilla13
32,36

VERTICAL

TRANSVERSE

SYMMETRY

SPECIAL CONSIDERATIONS

COMMENTS

Lat rt 6's used for measurement
No analysis of frontal x-ray. Upper and lower arch
expansion decisions based on available data only.

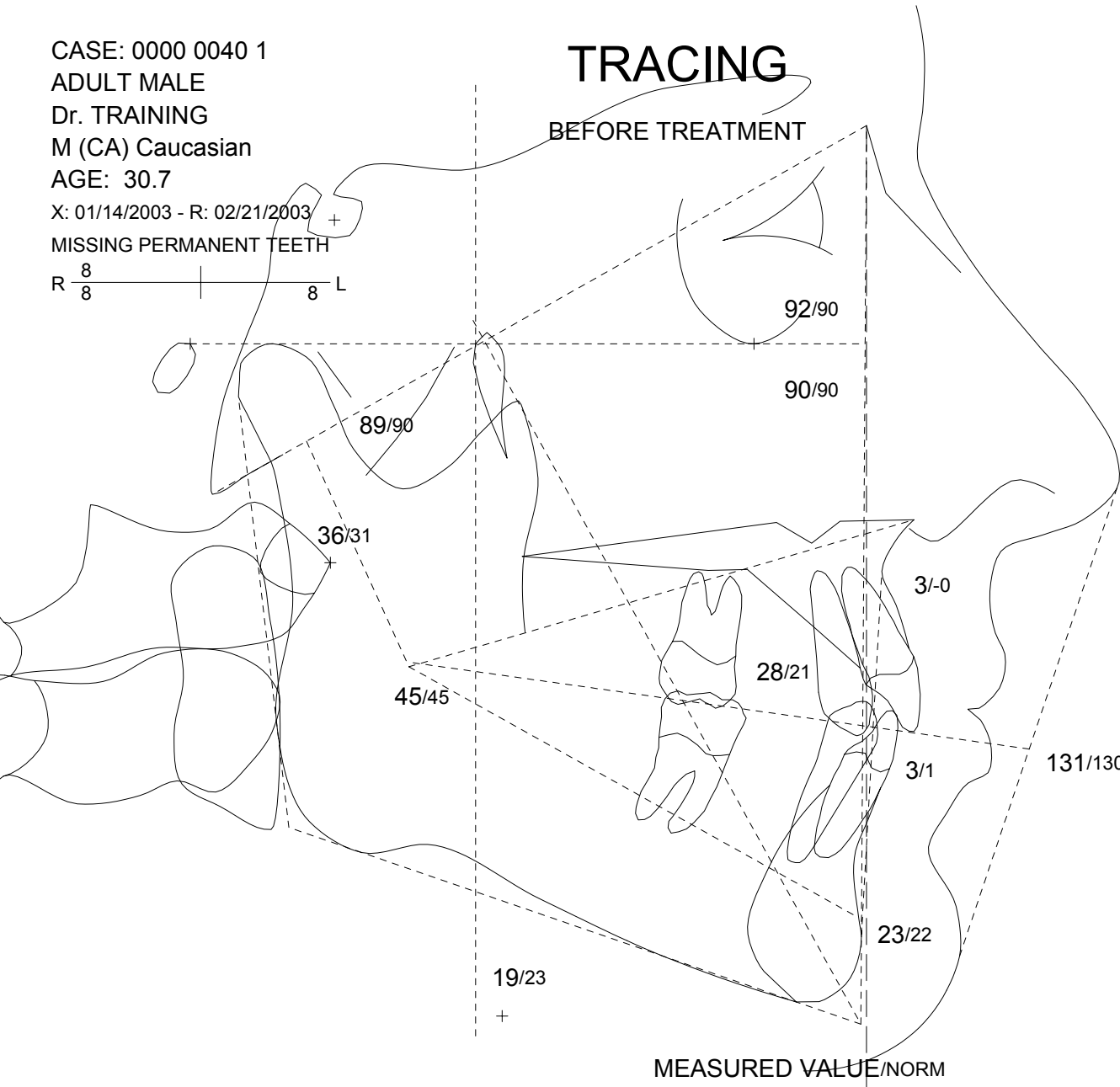
CASE: 0000 0040 1
 ADULT MALE
 Dr. TRAINING
 M (CA) Caucasian
 AGE: 30.7

X: 01/14/2003 - R: 02/21/2003 +
 MISSING PERMANENT TEETH
 R $\frac{8}{8}$ L

TRACING

RMO®

BEFORE TREATMENT

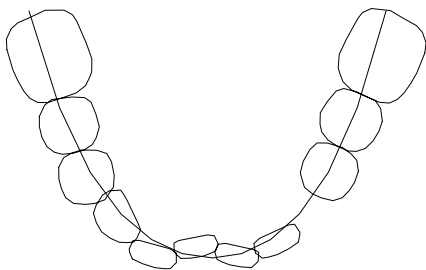


MEASURED VALUE/NORM

SIGNIFICANT CONSIDERATIONS

CONDITION	REASON
Skeletal Class II Adenoid blockage of the airway?	due to the maxilla Probably not

R L



SHORTAGE 6.6 MM
 LEEWAY 0.0 MM

FACIAL PATTERN: MILD BRACHYFACIAL

# FACTORS	MEASURED VALUE	NORM	CLINICAL DEVIATION
Interincisal Angle	131.2 dg	130.0 dg	0.2
Convexity	2.9 mm	-0.0 mm	1.4 *
Lower Facial Height	45.4 dg	45.0 dg	0.1
A6 Molar Position to PTV	28.4 mm	21.0 mm	2.5 **
B1 to A-Po Plane	3.0 mm	1.0 mm	0.8
B1 Inclination to A-Po	23.3 dg	22.0 dg	0.3
Facial Depth	89.6 dg	89.6 dg	0.0
Facial Axis	89.4 dg	90.0 dg	-0.2
Maxillary Depth	92.0 dg	90.0 dg	0.7
Mandibular Plane to FH	19.0 dg	23.3 dg	-1.0 *
Mandibular Arc	36.4 dg	30.7 dg	1.4 *

ADULT MALE
Dr. Training

RMO Case Number: 0000 0040 1 X-Ray date: 01/14/2003 Age: 30.7
RMO Run date: 02/21/2003 Birthdate: 05/16/1972 Sex: Male 1

Reference: G T U

===== G U I D E T O A L T E R N A T I V E T R E A T M E N T P L A N N I N G =====

Facial Pattern	1.0 C.D.	Probability of Lower Third Molar
Vertical Description	MILD BRACHYFACIAL	(based on space available)
		Not Applicable
		3rd Molars Missing
Auxiliary Appliances		
Headgear	NOT INDICATED	
Activator	NOT INDICATED	
Palate Separation	N/A - No Arch and Frontal data	
Convexity Objective	Reduce 1.5 mm	

Lower Arch Length Discrepancy (original arch) 6.6 mm Shortage
Including useable leeway (E) space

* * * L O W E R A R C H * * *	Required Tooth Movement	Effect on Arch Length	Resulting Discrepancy

Lower Incisor to Ideal	Lt: 0.0 mm Fwd. Rt: 1.2 mm Fwd.	0.8 mm Increase	5.8 mm Shortage
Buccal Expansion to Ideal Arch Form		0.5 mm Increase	5.3 mm Shortage
Incisors & Convexity to Cephalometric Limit	1.7 mm Fwd.	3.4 mm Increase	1.9 mm Shortage
Lower Molar Distal Movement	2.0 mm	4.0 mm Increase	2.1 mm Excess

* * * U P P E R A R C H * * *

Movement of First Molar (non-ext.)	
Required for Class I	3.7 mm Distal
Clinical Limit	1.5 mm Distal
Resulting Expected Space for 2nd & 3rd Molars at Maturity (non-ext.)	25.6 mm
Required Space for 2nd Molars	9.0 mm to 11.0 mm
Required Space for 2nd & 3rd Molars	18.0 mm to 22.0 mm

*** Indicated Treatment using Dr's Personalized Decision Program ***

Upper Arch	EXTRACTION
Lower Arch	NON-EXTRACTION
Lower Incisor	Forward 0.6 mm
Buccal Expansion	Gain 0.5 mm
Lower Molar Movement	Backward 1.6 mm

Teeth Sizes:	L6	L5	L4	L3	L2	L1	R1	R2	R3	R4	R5	R6	TOTAL	SUM OF INCISOR	NORM
Lower Arch :	11.7	7.6	7.3	7.5	6.5	5.9	5.9	6.5	7.5	7.3	7.4	11.7	92.8	24.8 MM	23.5

ADULT MALE
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Reference: W R U

W O R K U P

R A T I O N A L E

===== ORIGINAL CONDITION =====

Facial pattern: 1.0 CD - Mild Brachyfacial
 Lower arch form: Normal

Missing permanent teeth: R 8 | 8 L

Lower arch length discrepancy (ALD) 6.6 mm SHORTAGE
 Leeway space 0.0 mm ---
 Maximum use of leeway space 0.0 mm
 Total arch length discrepancy 6.6 mm SHORTAGE

===== COMPUTER DECISION =====

based on Dr. Training's individualized standards

UPPER ARCH: EXTRACTION

Convexity change REDUCE 1.5 mm

LOWER ARCH: NON-EXTRACTION

Lower incisor FORWARD 0.6 mm

Buccal Expansion GAIN 0.5 mm

Lower molar BACKWARD 1.6 mm

Extracted teeth
4 | 4

===== AUXILIARY APPLIANCES =====

Activator: NOT INDICATED
 Palate separation: N/A - No Arch and Frontal data
 Headgear: NOT INDICATED

===== POST TREATMENT =====

Pentamorphic arch form: Normal

===== REASONS FOR LOWER ARCH DECISION =====

Mandibular Arch Length Analysis

1. Initial Conditions
 - A. Original Arch Length 6.6 mm shortage
 - B. Useable Leeway Space 0.0 mm
 - C. Total Initial Discrepancy (A+B) 6.6 mm shortage
2. Maximum Permissible Arch Length Increase (Within Doctor Limits)
 Due To:
 - D. Lower Incisor Repositioning 4.2 mm increase
 - E. Buccal Expansion 0.5 mm increase
 - F. Lower Molar Distal Movement 4.0 mm increase
 - G. Total Possible Increase (D+E+F) 8.7 mm increase
3. Resultant Arch Length Discrepancy Considering All Possible Arch Length Increases (C+G) 2.1 mm excess
4. Resultant Computer Decision Non-Extraction
5. Work-Up Presented Is NON-EXTRACTION

===== REASONS FOR UPPER ARCH DECISION =====

1. Convexity change 1.5 mm reduce
2. Upper incisor tip movement for overbite/overjet ideal to lower 0.2 mm backward
3. First molar movement required 3.3 mm forward
4. First molar movement clinical limit 1.5 mm backward
5. Work-Up Presented Is EXTRACTION

===== COMMENTS =====

Lat rt 6's used for measurement

ADULT MALE
0000 0040 1

M 30.7

SEQUENCES WORKSHEET

02/21/2003
UA EXTRACTION

RMO®

UPPER ARCH				LOWER ARCH			
ACTIVITY	DESCRIPTION	MONTHS	NOTES	ACTIVITY	DESCRIPTION	MONTHS	NOTES
	EXTRACT	0				0	
		1				1	
	CORRECT CONVEXITY INTRUDE 1	0			RETRACT 4 AND/OR 5 INTRUDE 1	0	
		2				2	
		3				3	
		4			DISTAL 6 RETRACT 3	0	
		5				5	
	PROGRESS RECORDS	0			PROGRESS RECORDS	0	
		6				6	
	RETRACT 3	0				7	
		7				8	
		8				9	
	ADVANCE 6	0				0	
		1				1	
		2				2	
		3			ALIGN/LEVEL BUCCAL SEGS INTRUDE 3 ALIGN INCISORS	1	
	ALIGN/LEVEL BUCCAL SEGS	1				3	
		4				4	
		5			IDEAL ARCH	1	
		6				6	
	IDEAL ARCH	1				7	
		7				8	
		8				9	
	FINAL ARCH	1			FINAL ARCH	1	
		2				2	
	POST TX RECORDS	2			POST TX RECORDS	2	
		3				3	
		4				4	

0000 0040 1
ADULT MALE
M 30.7

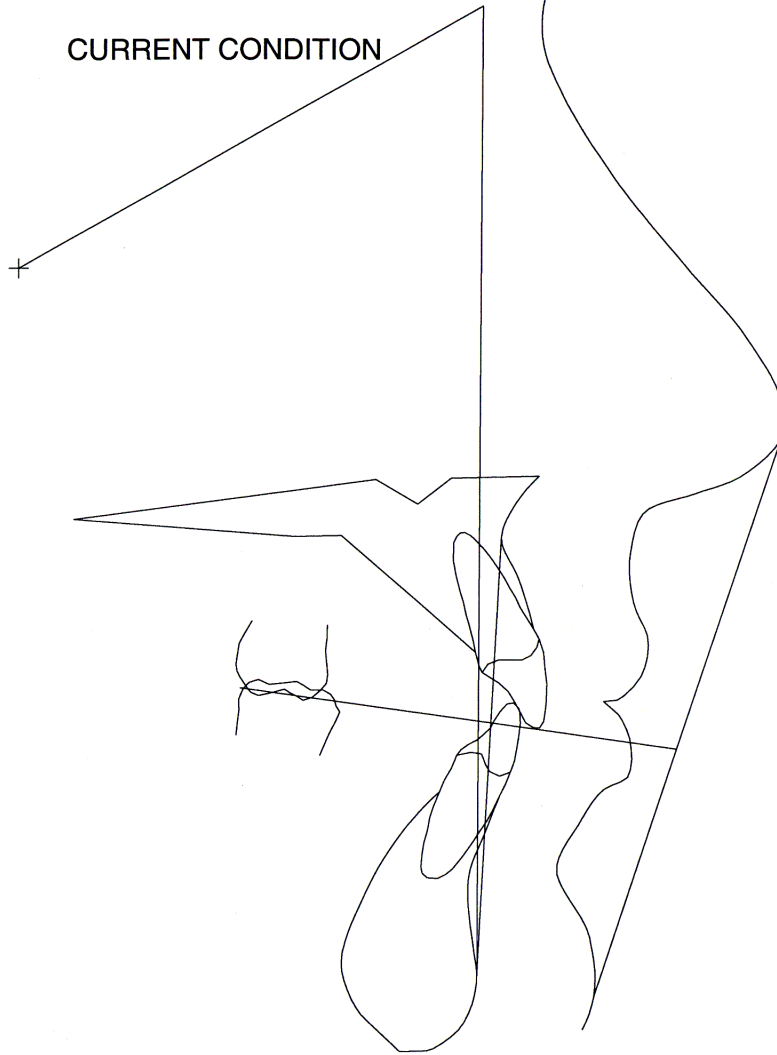
VISUAL TREATMENT GOAL COMPARISON

RMO®

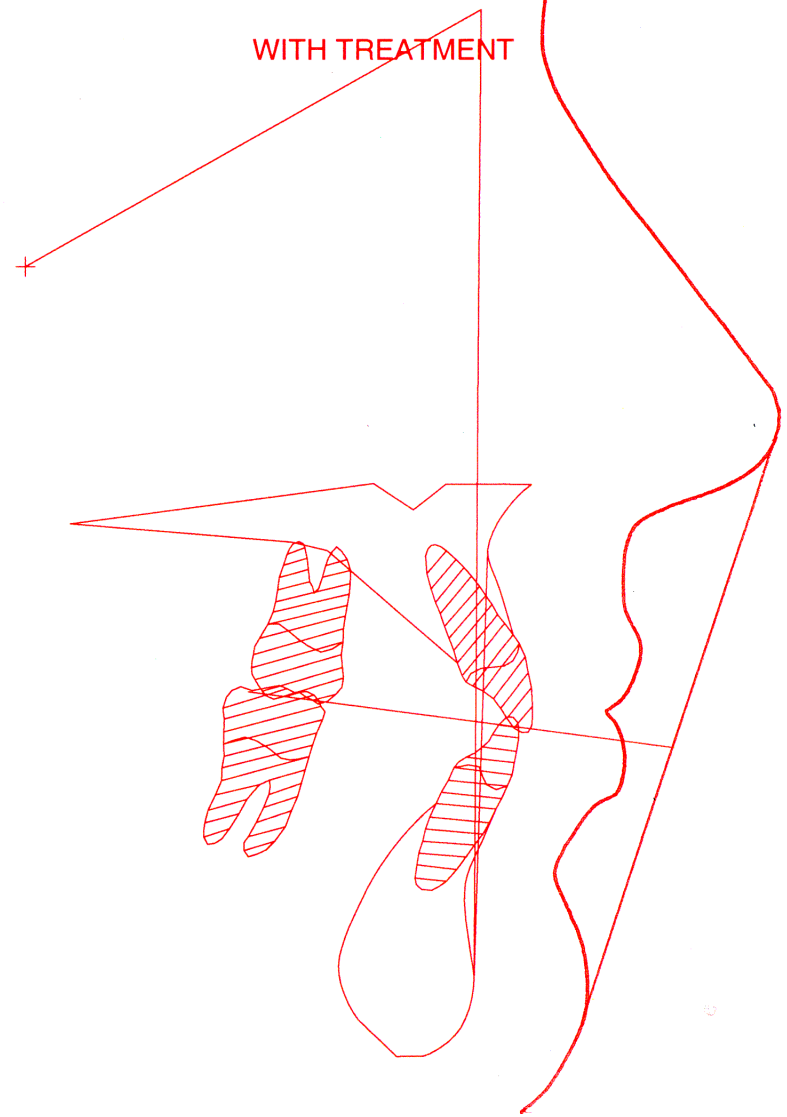
02/20/2003

UA EXTRACTION

CURRENT CONDITION



WITH TREATMENT



CASE: 0000 0040 1

ADULT MALE

Dr. TRAINING

M (CA) Caucasian

AGE: 30.7

X: 01/14/2003 - R: 02/20/2003

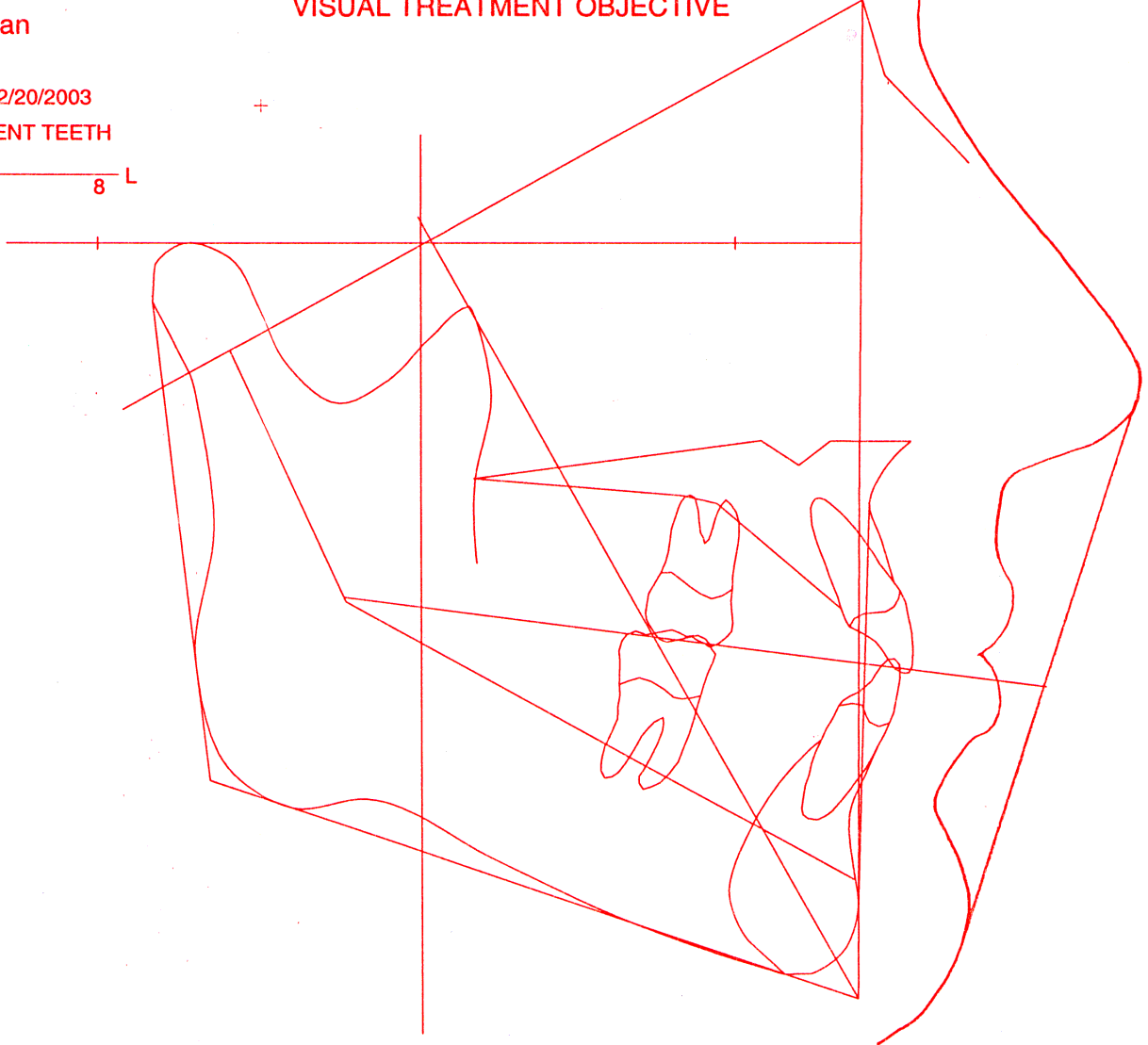
MISSING PERMANENT TEETH

R $\frac{8}{8}$ | L

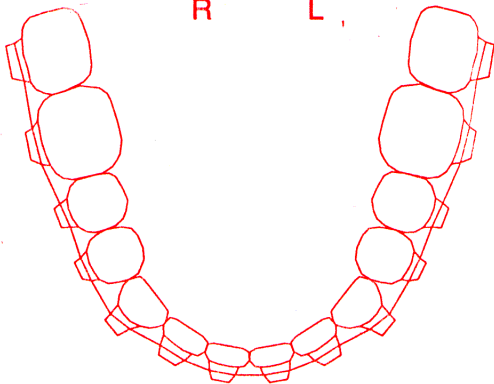
UA EXTRACTION VTO

RMO®

VISUAL TREATMENT OBJECTIVE



SUGGEST
 NORMAL
 RMO PREFORMED
 PENTAMORPHIC ARCHWIRE
 R L



ESPECIALLY PREPARED FOR Dr. TRAINING

WORKUP PERFORMED

Upper: EXTRACTION

Lower: NON-EXTRACTION

EXTRACTED TEETH

R $\frac{4}{4}$ | L

PREDICTION PERIOD

24.0 months

GROWTH UNITS

24.0 months: 0.0

HEIGHT PREDICTION

Reached adult height

COMMENTS

Lat rt 6's used for measurement

0000 0040 1
 ADULT MALE
 M 30.7

UA EXTRACTION TREATMENT DESIGN

RMO®

02/21/2003

EXTRACT R



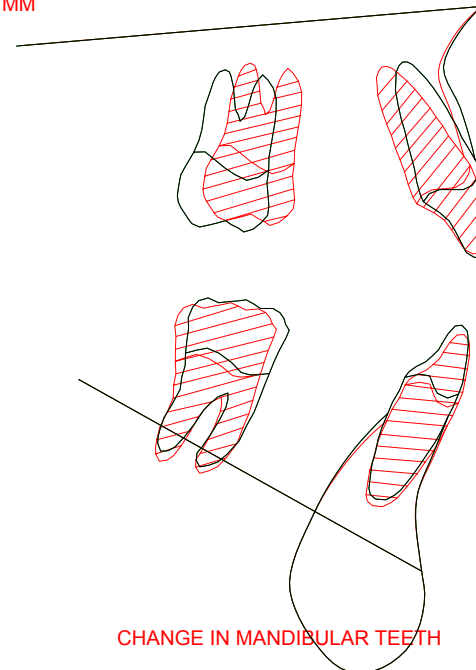
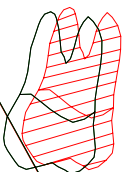
MAXILLARY CHANGE

CHANGE IN MAXILLARY TEETH

PT. A MOVEMENT

BACKWARD 1.5 MM

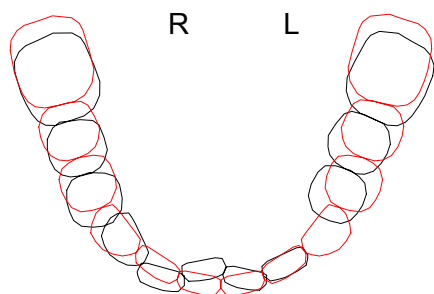
UPPER MOLAR CHANGE



CHANGE IN MANDIBULAR TEETH

LOWER INCISOR	FWD(LT)	0.6	MM
LOWER MOLAR	BWD	1.6	MM

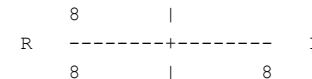
MANDIBULAR GROWTH



WORKUP PRESENTED

Upper arch: EXTRACTION
 Lower arch: NON-EXTRACTION

MISSING PERMANENT TEETH



COMMENTS

Lat rt 6's used for measurement

— ORIGINAL
 — GROWTH W/O TREATMENT
 — TREATMENT OBJECTIVE

ADULT MALE
Dr. TrainingRMO Case Number: 0000 0040 1
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Birthdate: 05/16/1972Age: 30.7
Sex: Male 1

Reference: S A

S T E I N E R A N A L Y S I S

===== BEFORE TREATMENT =====

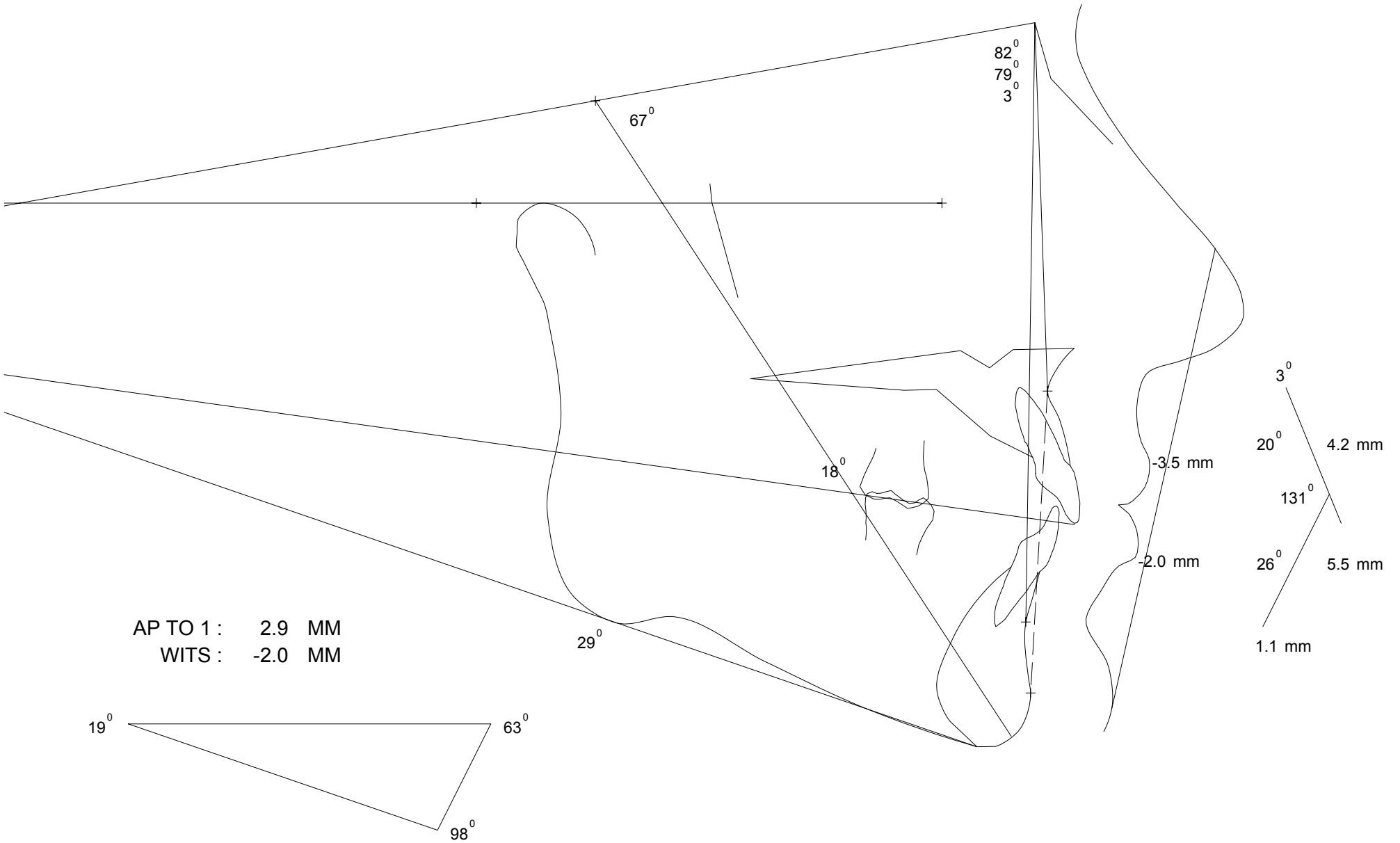
Factor	Measured Value	Clinical Norm	Clinical Deviations From Norm
SNA	81.9 dg	82.0 dg	0.0
SNB	79.1 dg	80.0 dg	-0.3
ANB	2.8 dg	2.0 dg	0.3
SND	75.6 dg	76.0 dg	-0.1
A1 to NA	4.2 mm	4.0 mm	0.1
A1 to NA	20.2 dg	22.0 dg	-0.2
B1 to NB	5.5 mm	4.0 mm	0.6
B1 to NB	25.8 dg	25.0 dg	0.1
A1 to B1	131.2 dg	131.0 dg	0.0
OCC.PL/SN	18.0 dg	14.0 dg	0.9

0000 0040 1
ADULT MALE
M 30.7

02/21/2003

STEINER ANALYSIS

RMO[®]



February 21, 2003

RMODS Case #: 0000 0040 1
Patient: ADULT MALE

Extraction
Letter: (33)

Dear Dr. TRAINING:

The enclosed workup shows extraction in the upper arch only.

The reason for this is that after predicting growth to maturity, eliminating arch length discrepancy, placing the incisors in an ideal overjet and overbite and attempting to position the upper molar in a Class I relationship, the program has identified a possible contraindication.

The procedures mentioned above would call for distalizing the upper molar beyond the limits you have indicated you use, or would position the upper molar such that there would be insufficient resulting space for upper second and third molars.

An alternative method of treatment may be possible by planning to treat the anterior teeth further forward than is shown on the VTO.

We appreciate the opportunity to be of service to you. If you have any questions or alternative methods of treatment that you wish to share with us, please contact one of our technical representatives.