KFM
KIEWIT / FCI / MANSON, A JV

P.O. BOX 23223 Oakland, CA 94623
Phone (510) 419-0120 / Fax (510) 839-0666

LETTER OF SUBMITTAL
KFM Skyway Project # 04-012024

Run Date 26-Oct-04
Time 12:13 PM

Dated: 26-Oct-2004

SUBMITTAL No: KFM-SUB-003166 **Rev:** 00

To: Doug Coe
Caltrans-Skyway Project
345 Burma Road
Oakland CA 94607
Phone: Fax:

Co/Job # 364-3726
Contract # 04-012024
Sub/Supplier: USI
Sub/Supplier No:

Subject: USI - KFM NCR #56 (METS #42) Response to CTL #5595 & 5596

Special Provis. (SP) REF: 08-3.01
Standard Spec. (SS) REF:
RESUBMITTAL/SUPPLEMENTAL REF:

We are sending the following attached items: ☑ Attached ☐ Via Fax

☐ Drawing ☑ Plans ☐ Prog. Pmt
☐ Samples ☐ Certificates of Compliance ☐ Calculations
☐ Payroll ☐ Specs ☐ Copy of Letter
☐ Change Order ☐ Schedule ☐ Invoice

Item	Date	Copies	Description	Drawing No	Rev	Status	Pages
01	26-Oct-04	1	USI NCR LTR#56.101404		0	Pending	2
02	26-Oct-04	1	State Letter # 5.03.1-005595		0	Pending	1
03	26-Oct-04	1	State Letter # 5.03.1-005596		0	Pending	1
04	26-Oct-04	1	UT Reports		0	Pending	38

These are transmitted as checked below:

☑ For Approval ☐ For Review/comment ☐ Return For Correction
☐ For Your Use ☐ As Requested ☐ For Information

Remarks:

Enclosed UT Reports have been corrected to indicate that all welds that were tester are marked "not acceptable" as indicated on CTL-5595. Modified UT Reports were reviewed and authorized (signed) by USI's QCM.

Please accept weekly welding reports SUB-2712 R0 that were rejected by CTL-5595 and close NCR-56 (CT NCR-42) which is subject of CTL-5596.

CC:

Please review / approve by : 02-Nov-2004

Submitted By: Rich Bienek
(KFM Staff Member – Originator of Transmittal)

Checked & Sent By: SBurks
Contract Admin/DCS Staff

Copy To: Job Office Files

An Equal Opportunity Employer

UNIVERSAL STRUCTURAL, INC.

[illegible]

October 14, 2004

Kiewit / FCI / Manson, JV (KFM)
220 Burma Road
Oakland, CA 94607
Phone: (510) 419-0120
Fax: (510) 839-0666

Attention: Paul Hegarty / Rich Bienek

Reference: SFOBB Skyway Project
USI #23932 (NCR LTR# 56.101404)

Subject: Response to Caltrans State Letter # 5.03.01-005595 & 005596, DTD 09/21/2004

Mr. Hegarty & Mr. Bienek,

Universal Structural, Inc. received Caltrans State Letter # 5.03.01-005595, dated September 21, 2004. Caltrans stated that:
"Ultrasonic testing (UT) reports for closed ribs on pa47 and pa48 dated 07/13/04, 07/14/04 and 07/15/04 have the comment that the depth of penetration listed is after measuring the thickness of the rib. USI's currently approved UT procedure does not allow for any compensation for thickness in determining the depth of penetration.
Ultrasonic testing (UT) reports for closed ribs on pa18 dated 07/17/04, 07/19/04, 07/20/04, 07/21/04, 07/22//04 and 07/23/04 list lack of penetration (LOP) indications greater than 1.6 mm as acceptable due to the thickness of the rib. USI's currently approved UT procedure does not allow for any compensation for rib thickness in determining the depth of penetration".

Universal Structural, Inc. received Caltrans State Letter # 5.03.01-005596, USI NCR No. 42, dated September 21, 2004. Caltrans stated that:
"During the review of weekly welder reports for weeks, 28, 29 and 30 of 2004, the State QA inspector observed the following: The Ultrasonic Testing (UT) reports for closed ribs on pa47 and pa48 dated 7-13-04, 7-14-04 and 7-15-04 have the comment that the depth of penetration listed is after measuring the thickness of the rib. The Ultrasonic Testing (UT) reports for closed ribs on pa18 dated 7-17-04, 7-19-04, 7-20-04, 7-21-04, 7-22-04 and 7-23-04 list Lack of Penetration (LOP) indications greater than 1.6 mm as acceptable due to the thickness of the rib. USI's currently approved UT procedure, AQP-100 rev. 1 (KFM-SUB-002381) does not allow for any compensation for rib thickness in determining the depth of penetration."

Reports for pages listed have been changed to reflect 8.0 mm thickness. The practice of determining penetration by measuring the rib thickness has stopped.

Category III

UNIVERSAL STRUCTURAL, INC.

SFOBB Skyway Project
USI # 23932

October 14, 2004

Please see the attached correspondence reflecting these changes. Please notify Caltrans and request a letter to close this NCR.

If you have any questions or need further clarification, please contact me at your earliest possible convenience.

Sincerely,
Universal Structural, Inc.

Brad Murphy
Sales Manager

cc: Brad Young - USI
file

BV PTT

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor
DEPARTMENT OF TRANSPORTATION
SFOBB – Skyway Project
345 Burma Road
Oakland, CA 94607
Facsimile Number: (510) 622-5165

Flex Your Power
Be Energy Efficient!

September 21, 2004

KFM, a JV
220 Burma Road
Oakland, CA 94607

Contract: 04-012024
04-SF, Ala-80-13.9/14.3, 0.0/1.6
SFOBB Skyway Project
State Letter # 5.03.1-005595

Subject: Response to KFM-SUB-002712R00: USI Daily Inspection and Production Logs for Weeks 28, 29 and 30

Dear Mr. Skoro,
Attention: Mr. Rich Bienek,

The Engineer has reviewed KFM-SUB-002712R00: USI Daily Inspection and Production Logs for Weeks 28, 29 and 30. The subject submittal is not approved due to the following comments:

1. Ultrasonic testing (UT) reports for closed ribs on pa47 and pa48 dated 07/13/04, 07/14/04 and 07/15/04 have the comment that the depth of penetration listed is after measuring the thickness of the rib. USI's currently approved UT procedure does not allow for any compensation for rib thickness in determining the depth of penetration.
2. Ultrasonic testing (UT) reports for closed ribs on pa18 dated 07/17/04, 07/19/04, 07/20/04, 07/21/04, 07/22/04 and 07/23/04 list lack of penetration (LOP) indications greater than 1.6 mm as acceptable due to the thickness of the rib. USI's currently approved UT procedure does not allow for any compensation for rib thickness in determining the depth of penetration.

Please address the aforementioned comments and resubmit for our review and approval. Should you have any questions, please contact David Wu at (510) 622-5104.

Sincerely,

David Wu
Senior Bridge Engineer

For: Mr. Douglas Coe
Resident Engineer

cc: D. Coe, I. Khinsann, V. Iyer, D. Wu, S. Abbas, B. Chew, H. El-Natur, P. Lowry, I. Kwong

file: 5.03.1, 9.04.8

FL PH
9/23/04

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
SFOBB – Skyway Project
345 Burma Road
Oakland, CA 94607
Facsimile Number: (510) 622-5165

Flex Your Power
Be Energy Efficient!

September 21, 2004

KFM, a JV
220 Burma Road
Oakland, CA 94607

Contract: 04-012024
04-SF, Ala-80-13.9/14.3, 0.0/1.6
SFOBB Skyway Project
State Letter # 5.03.1-005596

Subject: USI NCR No. 42: UT Reports List Lack of Penetration Indications Greater Than 1.6 mm as Acceptable

Dear Mr. Skoro,
Attention: Mr. Rich Bienek,

This Non-Conformance Report (NCR) is issued by the State to KFM as a result of your subcontractor, USI, for the following reason:

1. During the review of weekly welder reports for weeks, 28, 29 and 30 of 2004, the State QA inspector observed the following: The Ultrasonic Testing (UT) reports for closed ribs on pa47 and pa48 dated 7-13-04, 7-14-04 and 7-15-04 have the comment that the depth of penetration listed is after measuring the thickness of the rib. The Ultrasonic Testing (UT) reports for closed ribs on pa18 dated 7-17-04, 7-19-04, 7-20-04, 7-21-04, 7-22-04, and 7-23-04 list Lack of Penetration (LOP) indications greater than 1.6mm as acceptable due to the thickness of the rib. USI's currently approved UT procedure, QAP-100 rev. 1 (KFM-SUB-002381) does not allow for any compensation for rib thickness in determining the depth of penetration.

NCR will be tracked as USI NCR No. 42. KFM was verbally notified of this NCR by Caltrans' METS on 09/20/04. Please review and address how you plan to resolve this NCR and bring your work back into compliance with our contract. Should you have any questions, please contact David Wu at (510) 622-5104.

Sincerely,

David Wu
Senior Bridge Engineer

For: Mr. Douglas Coe
Resident Engineer

cc: D. Coe, I. Khinsann, V. Iyer, D. Wu, S. Abbas, B. Chew, H. El-Natur, P. Lowry, I. Kwong

file: 5.03.1, 9.07.8

Report No. Retest

UNIVERSAL STRUCTURAL INC.

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION	ACCEPTANCE STANDARD	CUSTOMER IDENTIFICATION
JOB NUMBER 23932 DWG. NO. 18 A/B ITEM NO. Pa 18 Equipment: USN 52 SN620296 USN 52L SN00FNXP USN 58L 00Y65Y (50L 00P5L0) 3.5MHz Transducer 70 deg Couplant: Cellulose Material Thickness: 8 mm	UT Procedure: QAP-100 Rev. 001 80% Penetration Required Visual Acceptance: AWS D1.5:96 Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.	PROJECT: OAKLAND BAY CUSTOMER: KFM / A JV. BRIDGE NO. 34-0006 L/R CONTRACT NO. 04-012024 Base metal tested per AWS D1.5 96, section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	Depth of penetration	Length	Comments
Pa 18	30, J	19	7460mm	~~X~~	X	1175	-1.8	70	~~T = 8.47 TG~~
					X	1470	-1.8	10	~~T = 8.14 TG~~
				~~X~~	X	1680	-1.6	Spot	~~T = 8.15 TG~~
					X	2830	-1.75	10	~~T = 8.14 TG~~
				~~X~~	X	2940	-1.65	45	~~T = 8.16 TG~~
					X	3240	-1.75	20	~~T = 8.12 TG~~
					X	4790	-1.85	15	~~T = 8.13 TG~~
				~~X~~	X	5150	-1.70	10	~~T = 8.25 TG~~
				~~X~~	X	5970	-1.80	30	~~T = 8.20 TG~~
					X	6715	-1.75	40	~~T = 8.08 TG~~
Pa 18	30, J	19	7460	~~X~~	X	7070	-1.65	15	~~T = 8.17 TG~~

Welding Process (s) SAW FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale — Date

Level II Technician, Scott Reed — Date

Level II Technician, John Grey — Date

Level II Technician, John Lowengart — Date

W.J. Bellwean

Level II Technician, Bill Bellwean — Date 7-22-04

USI QCM Review, C. Amonson — Date JUL 29 2004

Report No. Retest

UNIVERSAL STRUCTURAL INC.

Pg 1 of 3

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION

JOB NUMBER 23932
DWG. NO. 18 A/B
ITEM NO. Pa 18
Equipment: USN 52 SN620296
USN 52L SN00FNXP
USN 58L 00Y65Y (50L 00P5L0)
3.5MHz Transducer 70 deg
Couplant: Cellulose
Material Thickness: 8 mm

ACCEPTANCE STANDARD

UT Procedure: QAP-100 Rev. 001
80% Penetration Required

Visual Acceptance: AWS D1.5:96
Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.

CUSTOMER IDENTIFICATION

PROJECT: OAKLAND BAY
CUSTOMER: KFM / A JV.
BRIDGE NO. 34-0006 L/R
CONTRACT NO. 04-012024

Base metal tested per AWS D1.5 96,
section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	Depth of penetration	Length	Comments
Pa 18	10,60	9	100%		X	80	> -2.6	40	
					X	1195	-1.90	15	
					X	1335	-2.1	45	
					X	1845	-2.1	135	
					X	2405	-1.8	40	
					X	2605	-1.95	70	
				X	X	2990	-1.95	30	~~T = 8.37 TC~~
				X	X	3045	-1.7	15	~~T = 8.3 TC~~
				X	X	3135	-1.9	35	~~T = 8.42 TC~~
				X	X	3185	-1.75	15	~~T = 8.42 TC~~
				X	X	3280	-1.70	15	~~T = 8.23 TC~~
					X	3380	-2.0	15	
				X	X	3505	-1.75	40	~~T = 8.26 TC~~
Pa 18	10,60	9	100%	X	X	4430	-1.75	75	~~T = 8.26 TC~~

Welding Process (s) SAW FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale — Date

Level II Technician, Scott Reed — Date

Level II Technician, John Grey — Date

Level II Technician, John Lowengart — Date

Level II Technician, W.J. Bellveau Bill Bellveau — Date 7-20-04

USI QCM Review, C. Amonson — Date JUL 29 2004

Date 10/20/04

Report No. Retest

UNIVERSAL STRUCTURAL INC.

Pg 2 of 3

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION

JOB NUMBER 23932
DWG. NO. 18 A/B
ITEM NO. Pa 18
Equipment: USN 52 SN620296
USN 52L SN00FNXP
USN 58L 00Y65Y (50L COPJL0)
3.5MHz Transducer 70 deg
Couplant: Cellulose
Material Thickness: 8 mm

ACCEPTANCE STANDARD

UT Procedure: QAP-100 Rev. 001
80% Penetration Required

Visual Acceptance: AWS D1.5:96
Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.

CUSTOMER IDENTIFICATION

PROJECT: OAKLAND BAY
CUSTOMER: KFM / A JV.
BRIDGE NO. 34-0006 L/R
CONTRACT NO. 04-012024

Base metal tested per AWS D1.5 96,
section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	Depth of penetration	Length	Comments
Pa 18	10, 60	9	100%	~~X~~	X	4920	-1.80	60	~~T=8.26 TG~~
				~~X~~	X	5200	-1.75	Spot	~~T=8.20 TG~~
				~~X~~	X	5230	-1.80	40	~~T=8.20 TG~~
					X	5410	-1.95	35	
				~~X~~	X	5670	-1.75	15	~~T=8.33 TG~~
					X	5760	-2.15	100	
					X	6195	-1.85	85	
					X	6420	-2.1	20	
					X	6585	-2.2	55	
					X	6770	-2.1	60	
				~~X~~	X	6850	-1.8	25	~~T=8.21 TG~~
				~~X~~	X	6905	-1.75	10	~~T=8.21 TG~~
					X	6935	-1.9	80	
Pa 18	10, 60	9	100%		X	7200	-2.0	15	

Welding Process (s) SAW FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale — Date

Level II Technician, Scott Reed — Date

Level II Technician, John Grey — Date

Level II Technician, John Lowengart — Date

Level II Technician, Bill Belleveau — Date 7-20-04

USI QCM Review, C. Armonson — Date JUL 2 9 2004

Report No. Retest

UNIVERSAL STRUCTURAL INC.

Pg 3 of 3

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION

JOB NUMBER 23932
DWG. NO. 18 A/B
ITEM NO. Pa 18
Equipment: USN 52 SN620296
USN 52L SN00FNXP
USN 58L 00Y65Y (50L 00P5L0)
3.5MHz Transducer 70 deg
Couplant: Cellulose
Material Thickness: 8 mm

ACCEPTANCE STANDARD

UT Procedure: QAP-100 Rev. 001
80% Penetration Required

Visual Acceptance: AWS D1.5:96
Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.

CUSTOMER IDENTIFICATION

PROJECT: OAKLAND BAY
CUSTOMER: KFM / A JV.
BRIDGE NO. 34-0006 L/R
CONTRACT NO. 04-012024

Base metal tested per AWS D1.5 96,
section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	Depth of penetration	Length	Comments
Pa 18	10,60	9	100%	X	X	7415	-1.7	10	~~T=8.18 16~~
				X	X	7585	-2.0	10	~~T=8.22 16~~
				X	X	7635	-1.7	Spot	~~T=8.23 16~~
				X	X	7665	-1.85	50	~~T=8.25 16~~
					X	7735	-1.9	75	
					X	7910	-2.15	25	
				X	X	8060	-1.9	30	~~T=8.3 16~~
					X	8820	-1.8	10	
Pa 18	10,60	9	100%		X	10960	≥-2.6	75	

Welding Process (s) SAW FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale — Date

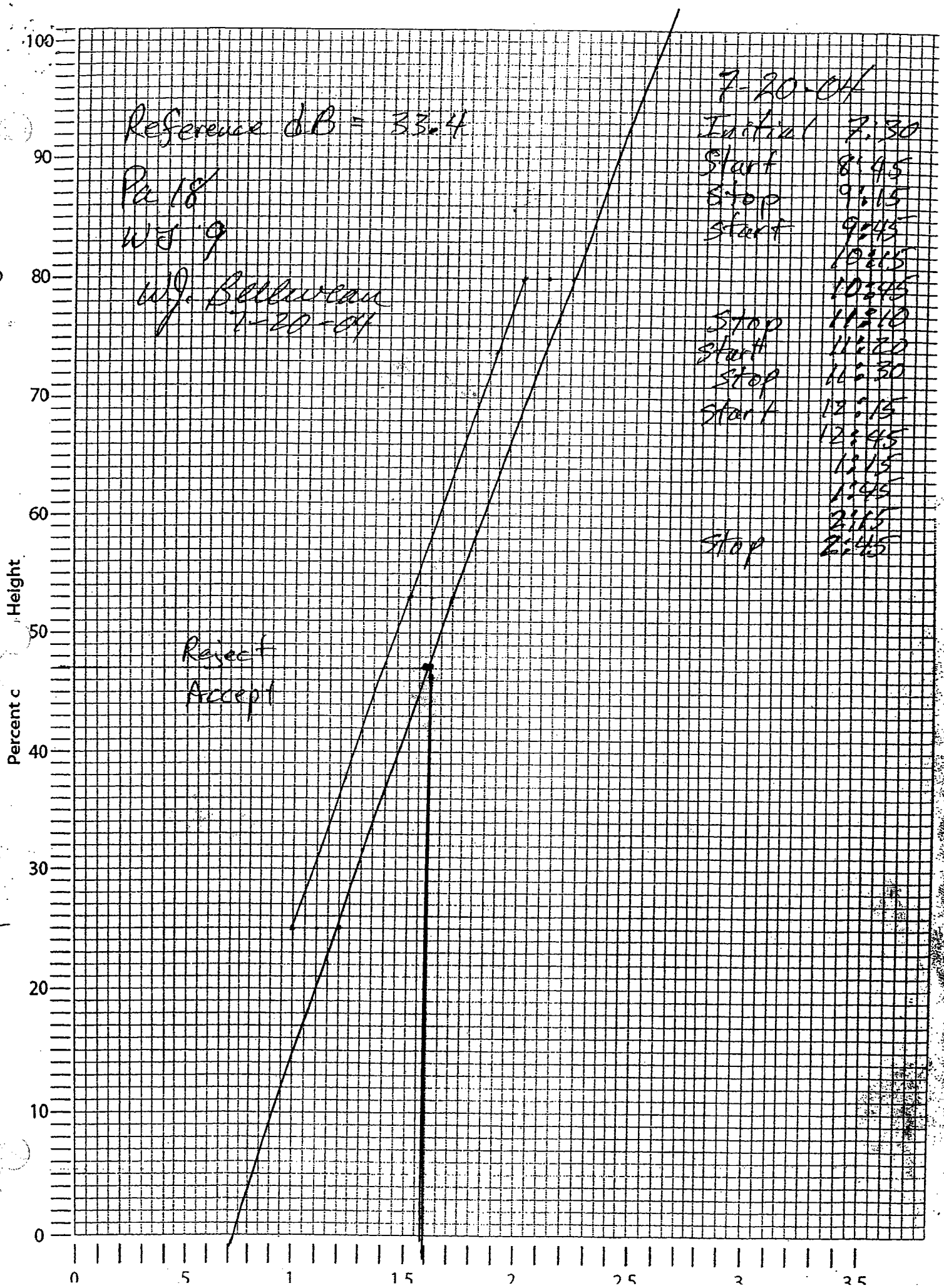
Level II Technician, Scott Reed — Date

Level II Technician, John Grey — Date

Level II Technician, John Lowengart — Date

Level II Technician, Bill Bellevean — Date 7-20-04

USI QCM Review, C. Amonson — Date JUL 29 2004


Reference dB = 33.4
Pa 18
WS 9
W.J. Beckman
1-20-04
7-20-04
Initial 7:30
Start 8:45
Stop 9:15
Start 9:45
10:15
10:45
Stop 11:10
Start 11:20
Stop 11:30
Start 12:15
12:45
1:15
1:45
2:15
Stop 2:45
Reject
Accept
Percent c
Height
100
90
80
70
60
50
40
30
20
10
0
0
5
1
15
2
25
3
35

Report No. Retest

UNIVERSAL STRUCTURAL INC.

Pg 1 of 3

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION

JOB NUMBER 23932
DWG. NO. 18 A/B
ITEM NO. Pa 18
Equipment: USN 52 SN620296
USN 52L SN00FNXP
USN 58L 00Y65Y (50L 00PJL0)
3.5MHz Transducer 70 deg
Couplant: Cellulose
Material Thickness: 8 mm

ACCEPTANCE STANDARD

UT Procedure: QAP-100 Rev. 001
80% Penetration Required

Visual Acceptance: AWS D1.5:96
Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.

CUSTOMER IDENTIFICATION

PROJECT: OAKLAND BAY
CUSTOMER: KFM / A JV.
BRIDGE NO. 34-0006 L/R
CONTRACT NO. 04-012024

Base metal tested per AWS D1.5 96,
section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	Depth of penetration	Length	Comments
Pa 18	3,30	15	100%		X	53	-2,1	Spot	
					X	1220	-1,95	15	
				X	X	1275	-1,70	15	~~T = 8,24 TG~~
				X	X	1490	-1,65	Spot	~~T = 8,25 TG~~
				X	X	1565	-1,65	Spot	~~T = 8,24 TG~~
				X	X	1945	-1,7	15	~~T = 8,21 TG~~
					X	2035	-1,8	90	~~T = 8,30 TG~~
					X	2215	-1,9	310	
					X	2585	-1,75	Spot	~~T = 8,13 TG~~
				X	X	2630	-1,65	Spot	~~T = 8,15 TG~~
				X	X	2945	-1,70	35	~~T = 8,22 TG~~
				X	X	3075	-1,65	5	~~T = 8,19 TG~~
Pa 18	3,30	15	100%		X	3565	-1,95	220	
					X	4180	-1,85	95	

Welding Process (s) (SAW) FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale

Level II Technician, Scott Reed — Date

Level II Technician, John Grey — Date

Level II Technician, John Lowengart — Date

W. Belleveau
Level II Technician, Bill Belleveau — Date 7-21-04

USI QCM Review, C. Amonson — Date 10/20/04

JUL 2 9 2004

Report No. Retest

UNIVERSAL STRUCTURAL INC.

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION

JOB NUMBER 23932
DWG. NO. 18 A/B
ITEM NO. Pa 18
Equipment: USN 52 SN620296
USN 52L SN00FNXP
USN 58L 00Y65Y (SOL 00PJL0)
3.5MHz Transducer 70 deg
Couplant: Cellulose
Material Thickness: 8 mm

ACCEPTANCE STANDARD

UT Procedure: QAP-100 Rev. 001
80% Penetration Required

Visual Acceptance: AWS D1.5:96
Visual Acceptance Prior to N.D.T.:
SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.

CUSTOMER IDENTIFICATION

PROJECT: OAKLAND BAY
CUSTOMER: KFM / A JV.
BRIDGE NO. 34-0006 L/R
CONTRACT NO. 04-012024

Base metal tested per AWS D1.5 96,
section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	Depth of penetration	Length	Comments
Pa 18	3,30	15	100%	~~X~~	X	4405	-1.65	Spot	~~T=8.21 TG~~
					X	4450	-1.9	Spot	
				~~X~~	X	4560	-1.70	75	~~T=8.22 TG~~
				~~X~~	X	4765	-1.70	15	~~T=8.23 TG~~
					X	4965	-1.85	30	
				~~X~~	X	5065	-1.8	105	~~T=8.24 TG~~
					X	5200	-2.0	180	
				~~X~~	X	5510	-1.6	Spot	~~T=8.19 TG~~
					X	5575	-2.1	135	
				~~X~~	X	5740	-1.6	Spot	~~T=8.18 TG~~
				~~X~~	X	5820	-1.75	75	~~T=8.21 TG~~
					X	5995	2.1	125	
					X	6335	2.05	140	
Pa 18	3,30	15	100%	~~X~~	X	6545	-1.65	40	~~T=8.28 TG~~

Welding Process (s) (SAW) FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale — Date

Level II Technician, Scott Reed — Date

Level II Technician, John Grey — Date

Level II Technician, John Lowengart — Date 7-21-04

Level II Technician, Bill Bellevean — Date JUL 29 2004

USI QCM Review, C. Amonson — Date 10/20/04

Report No. Retest

UNIVERSAL STRUCTURAL INC.

Pg 3 of 3

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION	ACCEPTANCE STANDARD	CUSTOMER IDENTIFICATION
JOB NUMBER 23932 DWG. NO. 18 A/B ITEM NO. Pa 18 Equipment: USN 52 SN620296 USN 52L SN00FNXP USN 58L 00Y65Y (50L 00P5L0) 3.5MHz Transducer 70 deg Couplant: Cellulose Material Thickness: 8 mm	UT Procedure: QAP-100 Rev. 001 80% Penetration Required Visual Acceptance: AWS D1.5:96 Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.	PROJECT: OAKLAND BAY CUSTOMER: KFM / A JV. BRIDGE NO. 34-0006 L/R CONTRACT NO. 04-012024 Base metal tested per AWS D1.5 96, section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	Depth of penetration	Length	Comments
Pa 18	3,30	15	100%		X	6665	-1.9	880	
Pa 18	3,30	15	100%		X	7795	-1.9	205	

Welding Process (s) SAW FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale — Date

Level II Technician, Scott Reed — Date

Level II Technician, John Grey — Date

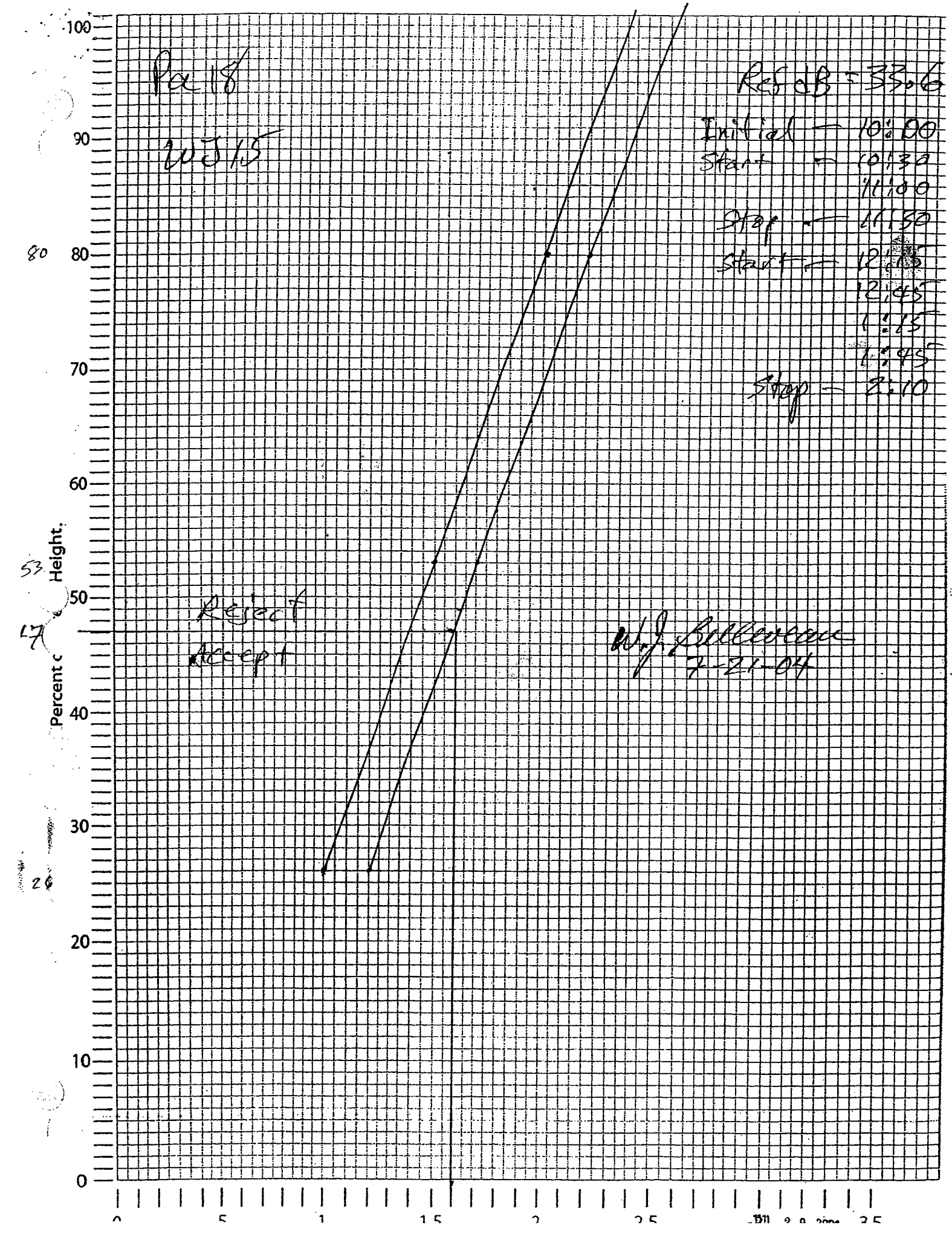
Level II Technician, John Lowengart — Date 7-21-04

W.J. Belleveau

Level II Technician, Bill Belleveau — Date JUL 2 9 2004

USI QCM Review, C. Amonson — Date

10/20/04



Pa 18
WJ 15
Ref dB = 33.6
Initial — 10:00
Start — 10:30
11:00
Stop — 11:30
Start — 12:15
12:45
1:15
1:45
Stop — 2:10
Reject
Accept
W.J. Belleveau
7-21-04
Percent of Height
100
90
80
70
60
50
40
30
20
10
0
0
.5
1
1.5
2
2.5
3.5

Report No. _____

07-15-04

UNIVERSAL STRUCTURAL INC.

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION

JOB NUMBER 23932
DWG. NO. 48 A/B
ITEM NO. Pa 48
Equipment: USN 52 SN620296
USN 52L SN00FNXP
USN 58L 00Y65Y
3.5MHz Transducer 70 deg
Couplant: Cellulose
Material Thickness: 8 mm

ACCEPTANCE STANDARD

UT Procedure: QAP-100 Rev. 001
80% Penetration Required

Visual Acceptance: AWS D1.5:96
Visual Acceptance Prior to N.D.T.:
SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.

CUSTOMER IDENTIFICATION

PROJECT: OAKLAND BAY
CUSTOMER: KFM / A JV.
BRIDGE NO. 34-0006 L/R
CONTRACT NO. 04-012024

Base metal tested per AWS D1.5 96,
section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	Depth of penetration	Length	Comments
Pa 48	3	15	15%		✓	1830	6.19	5	~~DEPTH OF PENETRATION THICK MEAS.~~
					✓	1980	6.33	30	
					✓	2110	6.39	50	
					✓	2180	6.23	70	
					✓	2370	6.04	30	
					✓	2440	6.13	130	
					✓	2830	6.34	135	
					✓	3030	6.23	10	
					✓	3210	6.21	140	

Welding Process (s) SAW FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale _____ Date _____

Level II Technician, Scott Reed _____ Date _____

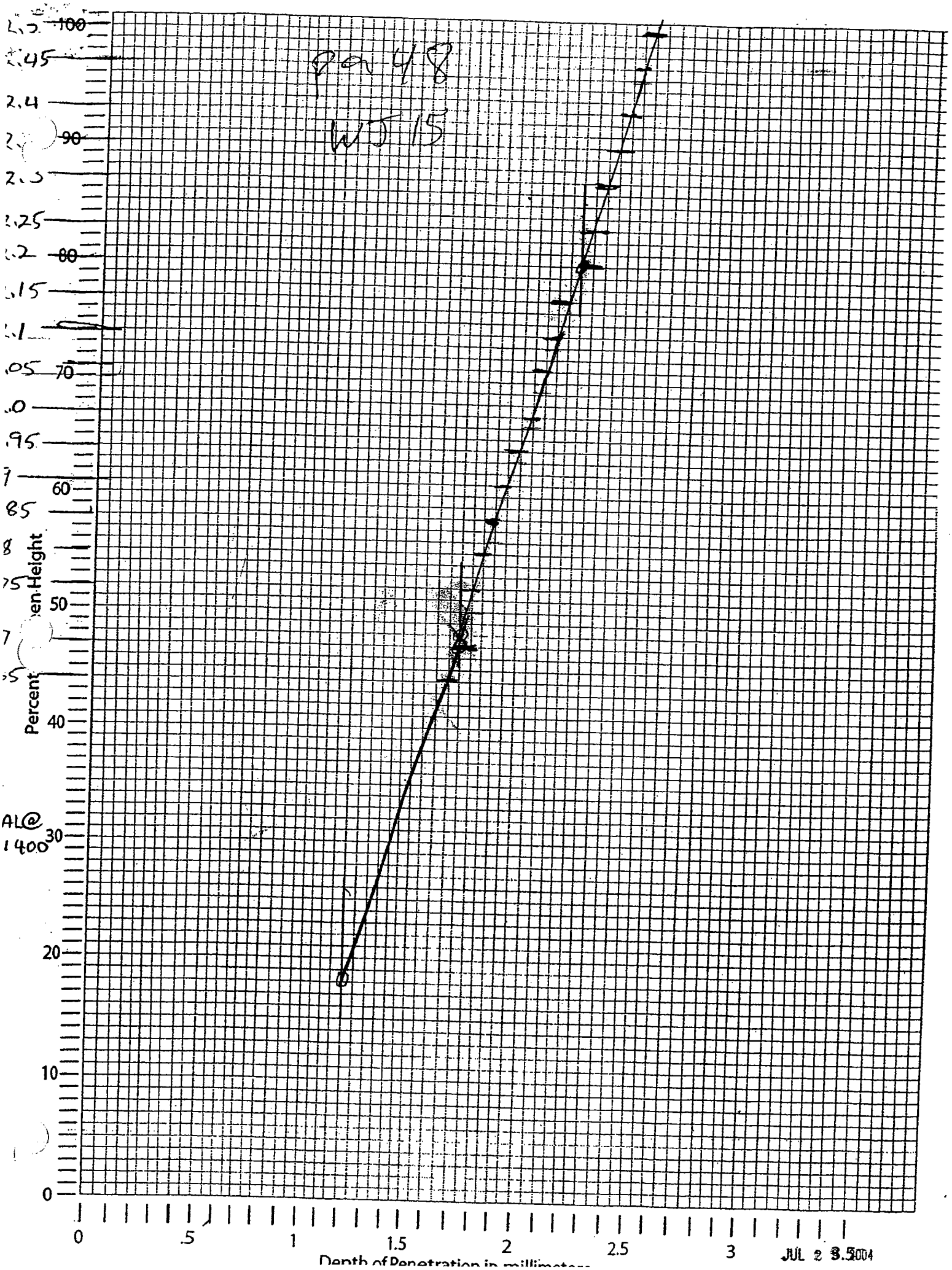
Level II Technician, John Grey _____ Date _____

Level II Technician, John Lowengart _____ Date _____

Level II Technician, Doug LOFTESNESS _____ Date 07-15-04

USI QCM Review, C. Amonson _____ Date JUL 29 2004

10/20/04



Pa 48
WJ 15
Percent Height
Depth of Penetration in millimeters
0
.5
1
1.5
2
2.5
3
10
20
30
40
50
60
70
80
90
100
JUL 2 3 2004

Report No. _____

07-14-04 **UNIVERSAL STRUCTURAL INC.** PAGE 1 OF 2

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION	ACCEPTANCE STANDARD	CUSTOMER IDENTIFICATION
JOB NUMBER 23932 DWG. NO. 147A/B ITEM NO. Pa 47 Equipment: USN 52 SN620296 USN 52L SN00FNXP USN 58L 00Y65Y 3.5MHz Transducer 70 deg Couplant: Cellulose Material Thickness: 8 mm	UT Procedure: QAP-100 Rev. 001 80% Penetration Required Visual Acceptance: AWS D1.5:96 Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.	PROJECT: OAKLAND BAY CUSTOMER: KFM / A JV. BRIDGE NO. 34-0006 L/R CONTRACT NO. 04-012024 Base metal tested per AWS D1.5 96, section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	Depth of penetration	Length	Comments
Pa 47	10	15	100%		✓	2990	6.1	20	~~DEPTH OF PEN. AFT. THICK MEAS.~~
					✓	2820	6.29	10	
					✓	2680	6.17	10	
					✓	2510	6.07	40	
					✓	2290	6.39	20	
					✓	2160	6.24	60	
					✓	2060	6.29	45	
					✓	1180	6.04	110	
					✓	1040	5.95	100	
					✓	830	6.22	150	
					✓	570	6.32	90	
					✓	280	6.32	20	
					✓	1320	6.39	40	
					✓	1420	6.24	25	

Welding Process (s) (SAW) FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale _____ Date _____

Level II Technician, Scott Reed _____ Date _____

Level II Technician, John Grey _____ Date _____

Level II Technician, John Lowengart _____ Date _____

Level II Technician, Doug LOFTESNESS _____ Date 07-14-04

USI QCM Review, C. Amonson _____ Date JUL 29 2004

10/20/04

Report No._____

07-14-04 **UNIVERSAL STRUCTURAL INC.** PAGE 2 of 2

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION	***ACCEPTANCE STANDARD***	***CUSTOMER IDENTIFICATION***
JOB NUMBER 23932 DWG. NO. 47 A/B ITEM NO. Pa 47 Equipment: USN 52 SN620296 USN 52L SN00FNXP USN 58L 00Y65Y 3.5MHz Transducer 70 deg Couplant: Cellulose Material Thickness: 8 mm	UT Procedure: QAP-100 Rev. 001 80% Penetration Required Visual Acceptance: AWS D1.5:96 Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.	PROJECT: OAKLAND BAY CUSTOMER: KFM / A JV. BRIDGE NO. 34-0006 L/R CONTRACT NO. 04-012024 Base metal tested per AWS D1.5 96, section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	Depth of penetration	Length	Comments
Pa 47	10	15	100%		✓	1510	6.24	50	~~DEPTH OF PEN AFTER FINISH AREAS~~
					✓	1660	6.14	35	
					✓	1670	6.34	220	
					✓	3030	6.28	80	
					✓	3680	6.19	70	
					✓	3790	6.18	140	
					✓	4740	6.29	5	

Welding Process (s) SAW FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale _____ Date _____

Level II Technician, Scott Reed _____ Date _____

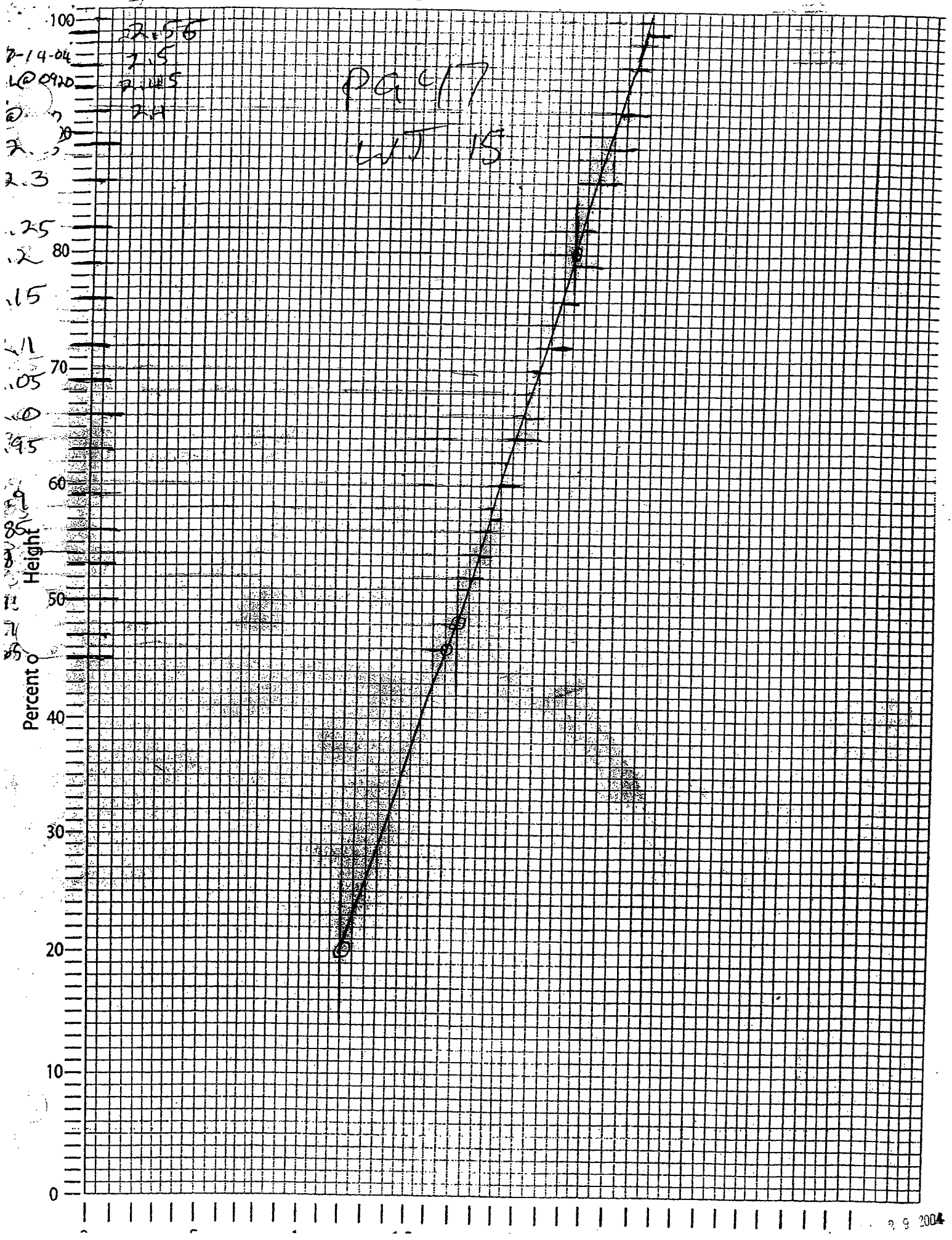
Level II Technician, John Grey _____ Date _____

Level II Technician, John Lowengart _____ Date _____

Level II Technician, Doug LOFTGSNESS _____ Date 07-14-04

USI QCM Review, C. Amonson _____ Date JUL 2 9 2004

10/20/04



PG 47
WT 15
Percent of Height
100
80
70
60
50
40
30
20
10
0
2.56
2.5
2.45
2.4
2.3
.25
.2
.15
.1
.05
.0
.95
.9
.85
2004

Report No. _____

07-13-04 **UNIVERSAL STRUCTURAL INC.** PAGE 1 OF 2

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION	*ACCEPTANCE STANDARD*	*CUSTOMER IDENTIFICATION*
JOB NUMBER 23932 DWG. NO. 47A/B ITEM NO. Pa 47 Equipment: USN 52 SN620296 USN 52L SN00FNXP USN 58L 00Y65Y 3.5MHz Transducer 70 deg Couplant: Cellulose Material Thickness: 8 mm	UT Procedure: QAP-100 Rev. 001 80% Penetration Required Visual Acceptance: AWS D1.5:96 Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.	PROJECT: OAKLAND BAY CUSTOMER: KFM / A JV. BRIDGE NO. 34-0006 L/R CONTRACT NO. 04-012024 Base metal tested per AWS D1.5 96, section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	Depth of penetration	Length	Comments
Pa 47	3	2	15%	✓					15% = 1650mm
	30	3		✓					
	60/3	8		✓					
	10/30	9		✓					
	10	13		✓					
	60	14	—	✓					—
	60/30	12	100%		✓	270	6.3	60	~~DEPTH OF PEN. AFTER T MEAS.~~
					✓	695	6.38	10	
					✓	860	6.02	50	
					✓	940	6.2	40	
					✓	1060	5.6	130	
					✓	3680	6.39	20	
					✓	4230	6.37	10	
					✓	5000	6.34	20	

Welding Process (s) (SAW) FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale _____ Date _____

Level II Technician, Scott Reed _____ Date _____

Level II Technician, John Grey _____ Date _____

Level II Technician, John Lowengart _____ Date _____

Level II Technician, Doug LOFTESNESS _____ Date 07-13-04

USI QCM Review, C. Amonson _____ Date JUL 29 2004

10/20/04

Report No. _____

07-13-04 **UNIVERSAL STRUCTURAL INC.** PAGE 2 OF 2

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION	ACCEPTANCE STANDARD	CUSTOMER IDENTIFICATION
JOB NUMBER 23932 DWG. NO. 47 A/B ITEM NO. Pa 47 Equipment: USN 52 SN620296 USN 52L SN00FNXP USN 58L 00Y65Y 3.5MHz Transducer 70 deg Couplant: Cellulose Material Thickness: 8 mm	UT Procedure: QAP-100 Rev. 001 80% Penetration Required Visual Acceptance: AWS D1.5:96 Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.	PROJECT: OAKLAND BAY CUSTOMER: KFM / A JV. BRIDGE NO. 34-0006 L/R CONTRACT NO. 04-012024 Base metal tested per AWS D1.5 96, section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	Depth of penetration	Length	Comments
Pa 47	110	15	100%		✓	10260	6.07	550	~~DEPTH OF PEN AFT. THICKNESS MEAS.~~
					✓	9880	6.3	20	
					✓	7580	6.38	5	
					✓	5860	6.32	40	
					✓	5520	5.97	15	
					✓	5250	5.74	50	
					✓	5200	6.19	15	
					✓	6000	6.28	95	
					✓	6300	6.39	10	
					✓	6380	6.04	50	
					✓	6670	6.27	5	
					✓	6800	6.32	20	

Welding Process (s) (SAW) FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale _____ Date _____

Level II Technician, Scott Reed _____ Date _____

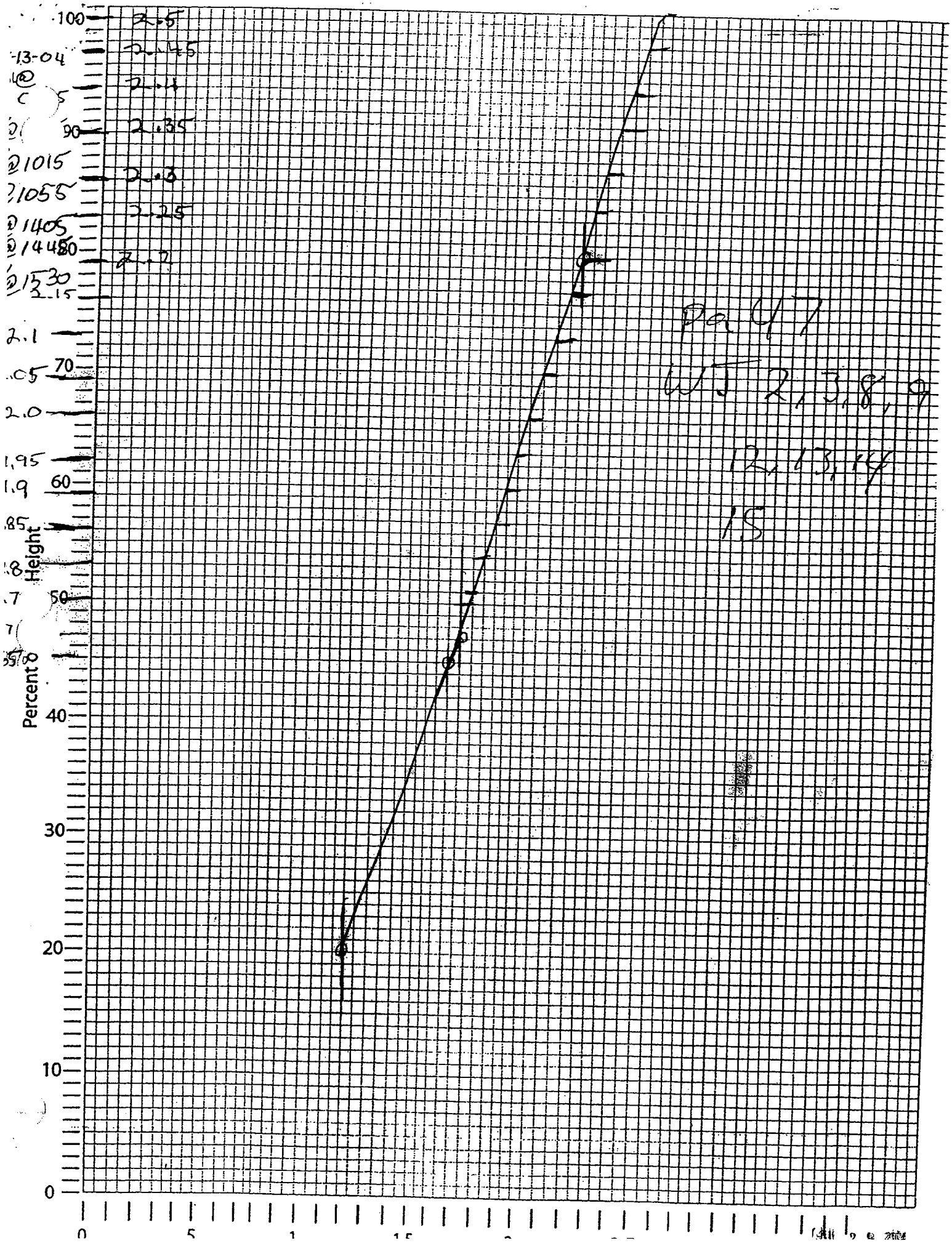
Level II Technician, John Grey _____ Date _____

Level II Technician, John Lowngart _____ Date _____

Level II Technician, Doug Loftesness _____ Date 07-13-04

USI QCM Review, C. Amonson _____ Date JUL 29 2004

10/20/04 _____ Date _____



Pa 47
WJ 2, 3, 8, 9
12, 13, 14
15
Height
Percent
100
90
80
70
60
50
40
30
20
10
0
2.5
2.45
2.4
2.35
2.3
2.25
2.2
2.15
2.1
2.0
1.95
1.9
.85
.8
.7

Report No._____

UNIVERSAL STRUCTURAL INC.

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION

JOB NUMBER 23932
DWG. NO. 18A6
ITEM NO. Pa 18
Equipment: USN 52 SN620296
USN 52L SN00FNXP
USN 58L 00Y65Y
3.5MHz Transducer 70 deg
Couplant: Cellulose
Material Thickness: 8 mm

ACCEPTANCE STANDARD

UT Procedure: QAP-100 Rev. 001
80% Penetration Required

Visual Acceptance: AWS D1.5:96
Visual Acceptance Prior to N.D.T.:
SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.

CUSTOMER IDENTIFICATION

PROJECT: OAKLAND BAY
CUSTOMER: KFM / A JV.
BRIDGE NO. 34-0006 L/R
CONTRACT NO. 04-012024

Base metal tested per AWS D1.5 96,
section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	Depth of penetration	Length	Comments
Pa 18	3	12	15%	X					NO INDICATIONS

Welding Process (s) SAW FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale _____ Date _____

Level II Technician, Scott Reed _____ Date _____

Level II Technician, John Grey _____ Date _____

Level II Technician, John Lowengart _____ Date _____

Level II Technician, STEFAN Holmes _____ Date 7/20/04

USI QCM Review, C. Amonson _____ Date JUL 2 9 2004

10/20/04 _____ Date _____

Report No._____

UNIVERSAL STRUCTURAL INC.

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION

JOB NUMBER 23932
DWG. NO. 18Ab
ITEM NO. Pa 18
Equipment: USN 52 SN620296
USN 52L SN00FNXP
USN 58L 00Y65Y
3.5MHz Transducer 70 deg
Couplant: Cellulose
Material Thickness: 8 mm

ACCEPTANCE STANDARD

UT Procedure: QAP-100 Rev. 001
80% Penetration Required

Visual Acceptance: AWS D1.5:96
Visual Acceptance Prior to N.D.T.:
SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.

CUSTOMER IDENTIFICATION

PROJECT: OAKLAND BAY
CUSTOMER: KFM / A JV.
BRIDGE NO. 34-0006 L/R
CONTRACT NO. 04-012024

Base metal tested per AWS D1.5 96,
section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	Depth of penetration	Length	Comments
Pa 18	3	13	15%	X					NO INDICATIONS

Report No._____

UNIVERSAL STRUCTURAL INC.

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION	***ACCEPTANCE STANDARD***	***CUSTOMER IDENTIFICATION***
JOB NUMBER 23932 DWG. NO. 18Ab ITEM NO. Pa18 Equipment: USN 52 SN620296 USN 52L SN00FNXP USN 58L 00Y65Y 3.5MHz Transducer 70 deg Couplant: Cellulose Material Thickness: 8 mm	UT Procedure: QAP-100 Rev. 001 80% Penetration Required Visual Acceptance: AWS D1.5:96 Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.	PROJECT: OAKLAND BAY CUSTOMER: KFM / A JV. BRIDGE NO. 34-0006 L/R CONTRACT NO. 04-012024 Base metal tested per AWS D1.5 96, section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	~~Depth~~ LACK of penetration	Length	Comments
PA18	3	15	100%	~~SH~~	X	300	1.7	25	~~F=8.23~~ SH
				~~SH~~	X	440	1.7	35	~~F=8.20~~ SH
					X	495	1.9	65	~~F=8.22~~ SH
					X	630	2.0	95	~~F=8.23~~ SH
					X	890	1.9	30	~~F=8.21~~ SH
				~~SH~~	X	930	1.7	40	~~F=8.24~~ SH
				~~SH~~	X	980	1.7	30	~~F=8.25~~ SH
					X	1020	1.95	35	~~F=8.25~~ SH
					X	1085	2.05	45	~~F=8.38~~ SH
					X	1145	2.05	90	~~F=8.29~~ SH
				~~SH~~	X	1260	1.75	30	~~F=8.25~~ SH
					X	1305	2.0	95	~~F=8.24~~ SH
				~~SH~~	X	1410	1.8	75	~~F=8.26~~ SH
CONTINUED ON NEXT PAGE									

Welding Process (s) (SAW) FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale _____ Date _____

Level II Technician, Scott Reed _____ Date _____

Level II Technician, John Grey _____ Date _____

Level II Technician, John Lowengart _____ Date 11/20/04

Level II Technician, Stefan Holmes _____ Date JUL 29 2004

USI QCM Review, C. Ammonson _____ Date 10/20/04

Report No._____

UNIVERSAL STRUCTURAL INC.

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION	***ACCEPTANCE STANDARD***	***CUSTOMER IDENTIFICATION***
JOB NUMBER 23932 DWG. NO. 18Ab ITEM NO. Pa 18 Equipment: USN 52 SN620296 USN 52L SN00FNXP USN 58L 00Y65Y 3.5MHz Transducer 70 deg Couplant: Cellulose Material Thickness: 8 mm	UT Procedure: QAP-100 Rev. 001 80% Penetration Required Visual Acceptance: AWS D1.5:96 Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.	PROJECT: OAKLAND BAY CUSTOMER: KFM / A JV. BRIDGE NO. 34-0006 L/R CONTRACT NO. 04-012024 Base metal tested per AWS D1.5 96, section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	~~Depth~~ LACK of penetration	Length	Comments
Pa 18	3	15	100%	~~SH~~ X	X	2100	1.75	35	~~F=8.22~~ SH
				~~SH~~ X	X	2150	1.7	20	~~F=8.22~~ SH
				~~SH~~ X	X	2410	1.8	170	~~F=8.23~~ SH
				~~SH~~ X	X	2605	1.7	20	~~F=8.23~~ SH
					X	2640	1.95	120	~~F=8.23~~ SH
				~~SH~~ X	X	2780	1.75	25	~~F=8.24~~ SH
					X	2840	1.9	95	~~F=8.21~~ SH

Welding Process (s) (SAW) FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale _____ Date _____

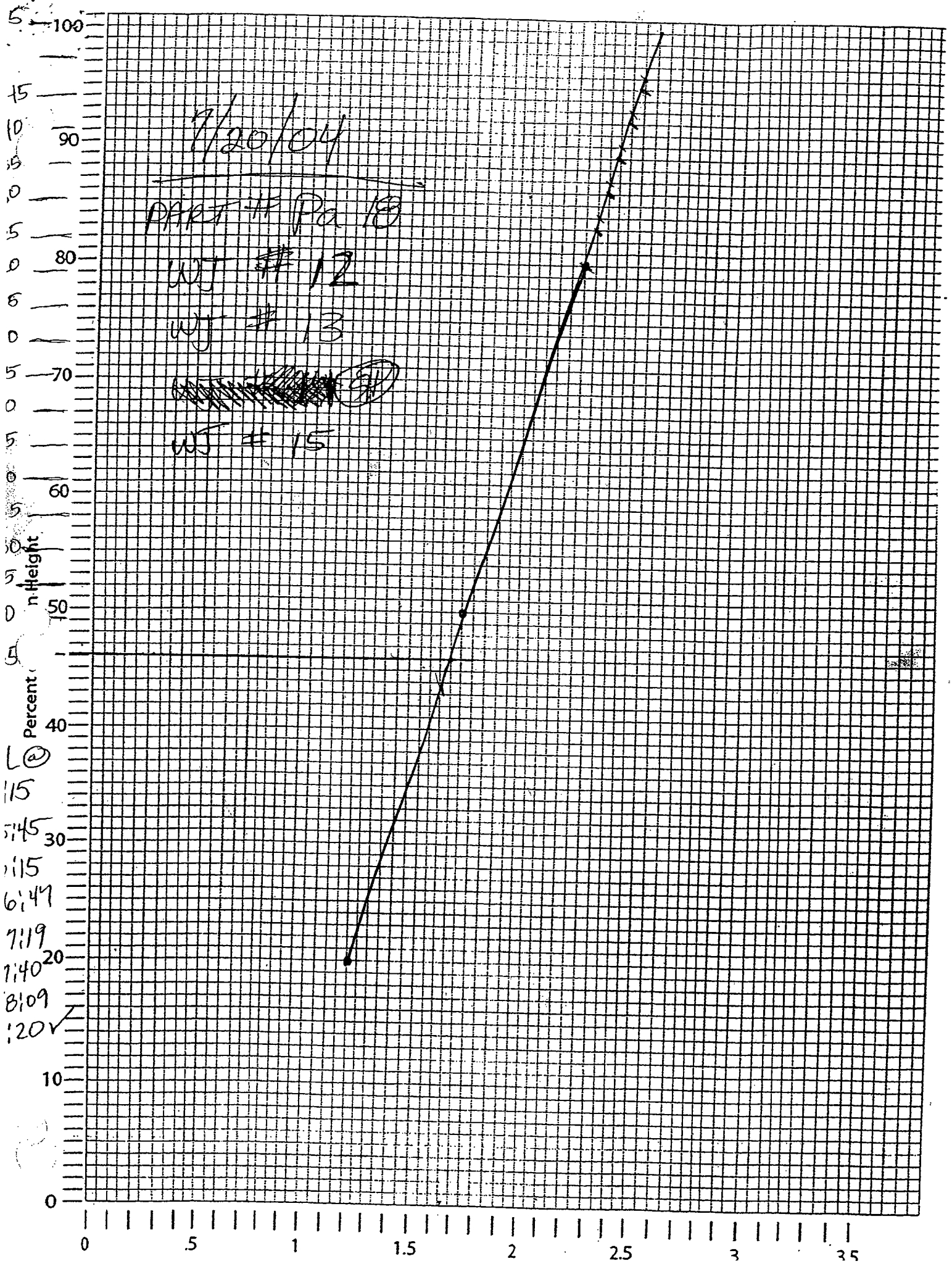
Level II Technician, Scott Reed _____ Date _____

Level II Technician, John Grey _____ Date _____

Level II Technician, John Lowengart _____ Date 7/20/04

Level II Technician, Stefan Holmes _____ Date JUL 2 9 2004

USI QCM Review, C. Ammonson _____ Date _____


7/20/04
PART II Pg 18
WJ # 12
WJ # 13
WJ # 15
Percent Height
100
90
80
70
60
50
40
30
20
10
0
0
.5
1
1.5
2
2.5
3
3.5

Report No._____

UNIVERSAL STRUCTURAL INC.

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION	***ACCEPTANCE STANDARD***	***CUSTOMER IDENTIFICATION***
JOB NUMBER 23932 DWG. NO. 18Ab ITEM NO. Pa 18 Equipment: USN 52 SN620296 USN 52L SN00FNXP USN 58L 00Y65Y 3.5MHz Transducer 70 deg Couplant: Cellulose Material Thickness: 8 mm	UT Procedure: QAP-100 Rev. 001 80% Penetration Required Visual Acceptance: AWS D1.5:96 Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.	PROJECT: OAKLAND BAY CUSTOMER: KFM / A JV. BRIDGE NO. 34-0006 L/R CONTRACT NO. 04-012024 Base metal tested per AWS D1.5 96, section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	~~Depth~~ Lack of penetration	Length	Comments
Pa 18	10	5	100%	~~SH~~ X	X	4600	1.85	55	~~T = 8.37~~ SH
				~~SH~~ X	X	4680	1.65	25	~~8.43~~ SH
				~~SH~~ X	X	4750	1.85	25	~~8.40~~ SH
				~~SH~~ X	X	4780	1.9	55	~~8.36~~ SH
					X	4970	2.0	70	~~8.35~~ SH
				~~SH~~ X	X	5070	1.9	30	~~8.36~~ SH
				~~SH~~ X	X	5380	1.75	50	~~8.37~~ SH
				~~SH~~ X	X	5450	1.75	15	~~8.36~~ SH
				~~SH~~ X	X	5745	1.9	80	~~8.39~~ SH
				~~SH~~ X	X	5845	1.95	25	~~8.43~~ SH
	12				X	9950	2.45	35	~~8.33~~ SH

Welding Process (s) (SAW) FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale _____ Date _____

Level II Technician, Scott Reed _____ Date _____

Level II Technician, John Grey _____ Date _____

Level II Technician, John Lowengart _____ Date 7/17/04

Level II Technician, STEFAN Holmes _____ Date _____

USI QCM Review, C. Amonson _____ Date JUL 29 2004

10/20/04

Report No._____

UNIVERSAL STRUCTURAL INC.

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION	***ACCEPTANCE STANDARD***	***CUSTOMER IDENTIFICATION***
JOB NUMBER 23932 DWG. NO. 18Ab ITEM NO. Pa 18 Equipment: USN 52 SN620296 USN 52L SN00FNXP USN 58L 00Y65Y 3.5MHz Transducer 70 deg Couplant: Cellulose Material Thickness: 8 mm	UT Procedure: QAP-100 Rev. 001 80% Penetration Required Visual Acceptance: AWS D1.5:96 Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.	PROJECT: OAKLAND BAY CUSTOMER: KFM / A JV. BRIDGE NO. 34-0006 L/R CONTRACT NO. 04-012024 Base metal tested per AWS D1.5 96, section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	~~Depth~~ LACK of penetration	Length	Comments
Pa 18	3	20	100%	SH	X	5285	1.7	25	~~F= 8.22~~ SH
				SH	X	6365	1.7	20	~~F= 8.36~~ SH
				SH	X	7155	1.65	30	~~F= 8.27~~ SH
				SH	X	7200	1.65	65	~~F= 8.27~~ SH
				SH	X	7610	1.65	25	~~F= 8.27~~ SH
				SH	X	7985	1.65	20	~~F= 8.19~~ SH
				SH	X	9325	1.67	25	~~F= 8.23~~ SH
					X	9665	1.65	25	~~F= 8.03~~ SH
				SH	X	10145	1.75	25	~~F= 8.19~~ SH

Welding Process (s) (SAW) FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale _____ Date _____

Level II Technician, Scott Reed _____ Date _____

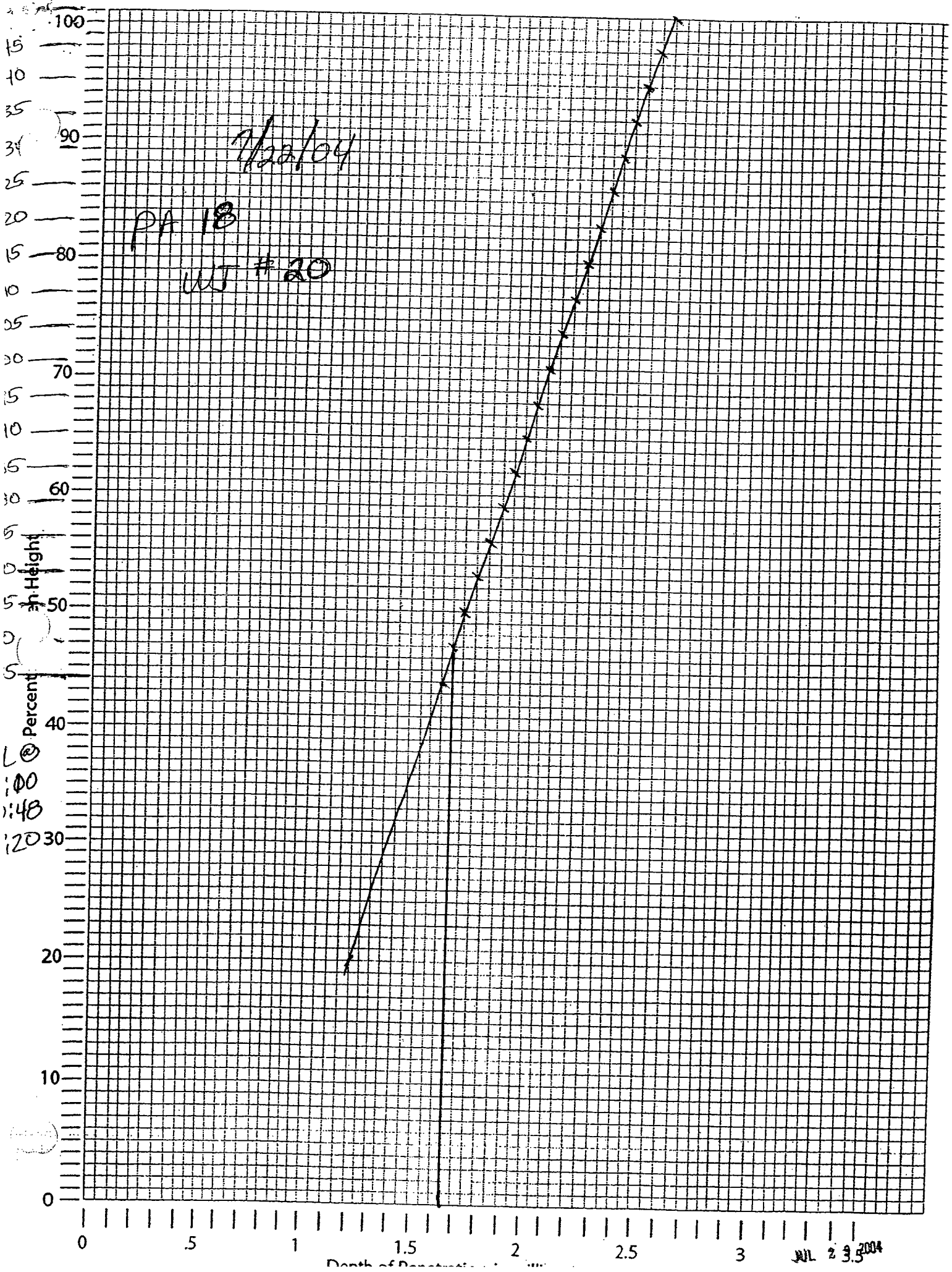
Level II Technician, John Grey _____ Date _____

Level II Technician, John Lowengart _____ Date 7/22/04

Level II Technician, STEFAN Holmes _____ Date _____

USI QCM Review, C. Amonson _____ Date JUL 2 9 2004

10/29/04


100
90
80
70
60
50
40
30
20
10
0
Percent Height
0
.5
1
1.5
2
2.5
3
3.5
7/28/04
PA 18
WJ #20

Report No._____

UNIVERSAL STRUCTURAL INC.

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION

JOB NUMBER 23932
DWG. NO. 18Ab
ITEM NO. Pa 18
Equipment: USN 52 SN620296
USN 52L SN00FNXP
USN 58L 00Y65Y
3.5MHz Transducer 70 deg
Couplant: Cellulose
Material Thickness: 8 mm

ACCEPTANCE STANDARD

UT Procedure: QAP-100 Rev. 001
80% Penetration Required

Visual Acceptance: AWS D1.5:96
Visual Acceptance Prior to N.D.T.:
SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.

CUSTOMER IDENTIFICATION

PROJECT: OAKLAND BAY
CUSTOMER: KFM / A JV.
BRIDGE NO. 34-0006 L/R
CONTRACT NO. 04-012024

Base metal tested per AWS D1.5 96,
section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	~~Depth~~ LACK of penetration	Length	Comments
Pa 18	30	14	100%	~~SH~~ X	X	4090	1.8	20	~~T= 8.24~~ SH
	30				X	5205	2.05	50	~~T= 8.29~~ SH
	30			~~SH~~ X	X	7110	1.7	20	~~T= 8.29~~ SH
	30				X	7590	1.95	30	~~T= 8.27~~ SH
	3				X	9730	1.95	25	~~T= 8.10~~ SH
	3			~~SH~~ X	X	10575	1.65	20	~~T= 8.23~~ SH
	3			~~SH~~ X	X	10815	1.7	20	~~T= 8.22~~ SH

Welding Process (s) (SAW) FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale _____ Date _____

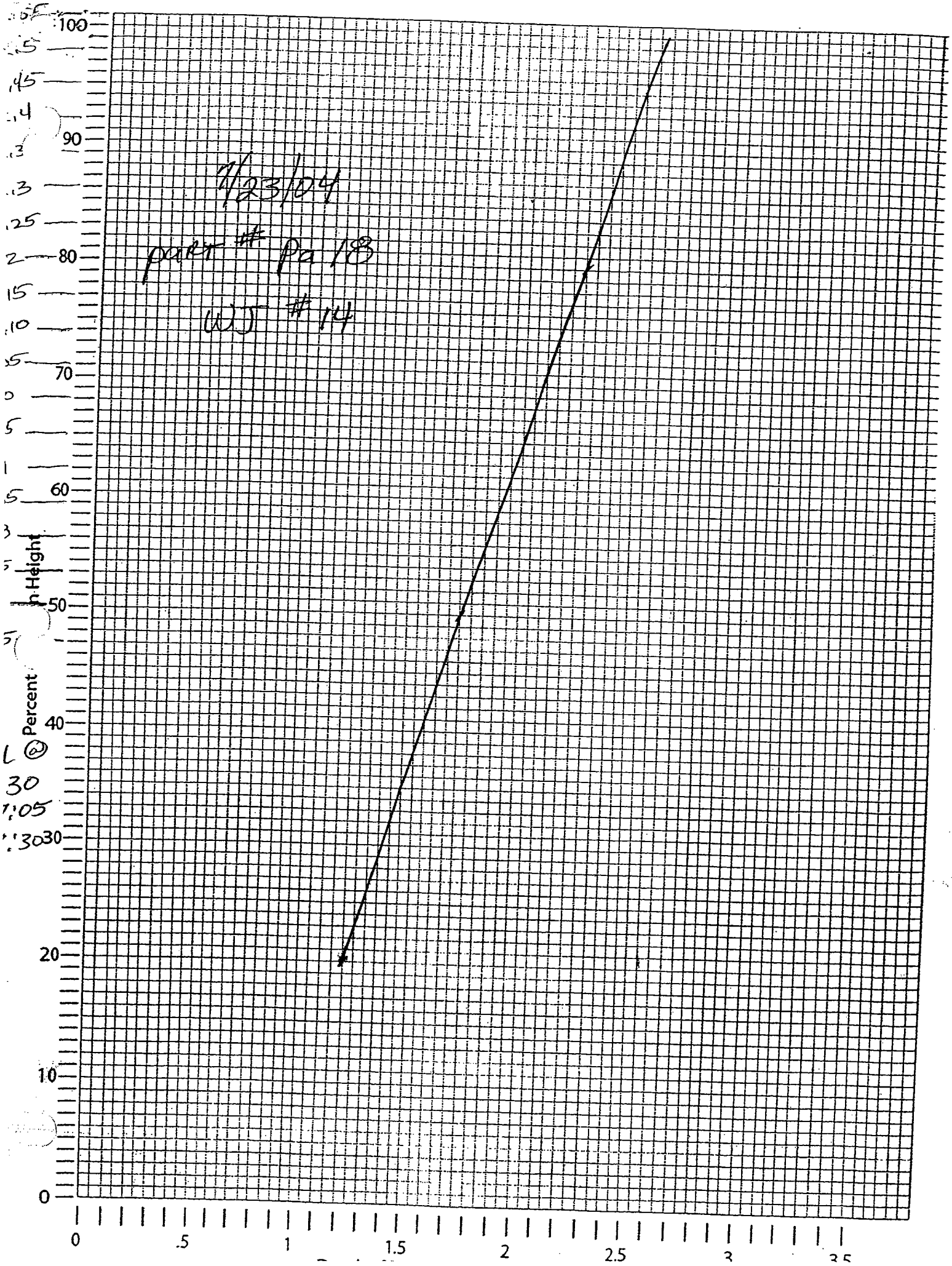
Level II Technician, Scott Reed _____ Date _____

Level II Technician, John Grey _____ Date _____

Level II Technician, John Lowengart _____ Date 7/23/04

Level II Technician, STEFAN Holmes _____ Date JUL 2 9 2004

USI QCM Review, C. Amonson _____ Date 10/20/04


7/23/04
part # Pa 18
WJ # 14
Percent
Height
100
90
80
70
60
50
40
30
20
10
0
0
.5
1
1.5
2
2.5
3

Report No._____

UNIVERSAL STRUCTURAL INC.

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION	***ACCEPTANCE STANDARD***	***CUSTOMER IDENTIFICATION***
JOB NUMBER 23932 DWG. NO. 18Ab ITEM NO. Pa 18 Equipment: USN 52 SN620296 USN 52L SN00FNXP USN 58L 00Y65Y 3.5MHz Transducer 70 deg Couplant: Cellulose Material Thickness: 8 mm	UT Procedure: QAP-100 Rev. 001 80% Penetration Required Visual Acceptance: AWS D1.5:96 Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.	PROJECT: OAKLAND BAY CUSTOMER: KFM / A JV. BRIDGE NO. 34-0006 L/R CONTRACT NO. 04-012024 Base metal tested per AWS D1.5 96, section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	~~Depth~~ LACK of penetration	Length	Comments
PA18	10	7	100%		X	695	2.1	50	~~T= 8.30~~ SH
	10			~~X~~	X	1085	1.76	20	~~T= 8.22~~ SH
	60				X	10320	2.1	30	~~T= 8.32~~ SH
	60				X	10900	2.5	45	~~T= 8.37~~ SH

Welding Process (s) (SAW) FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale _____ Date _____

Level II Technician, Scott Reed _____ Date _____

Level II Technician, John Grey _____ Date _____

Level II Technician, John Lowengart _____ Date 7/19/04

Level II Technician, STEFAN Holmes _____ Date JUL 2 9 2004

USI QCM Review, C. Amonson _____ Date 10/20/04

Report No._____

UNIVERSAL STRUCTURAL INC.

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION

JOB NUMBER 23932
DWG. NO. 18AB
ITEM NO. PA18
Equipment: USN 52 SN620296
USN 52L SN00FNXP
USN 58L 00Y65Y
3.5MHz Transducer 70 deg
Couplant: Cellulose
Material Thickness: 8 mm

ACCEPTANCE STANDARD

UT Procedure: QAP-100 Rev. 001
80% Penetration Required

Visual Acceptance: AWS D1.5:96
Visual Acceptance Prior to N.D.T.:
SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.

CUSTOMER IDENTIFICATION

PROJECT: OAKLAND BAY
CUSTOMER: KFM / A JV.
BRIDGE NO. 34-0006 L/R
CONTRACT NO. 04-012024

Base metal tested per AWS D1.5 96,
section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	Depth of penetration	Length	Comments
Pa 18	60	8	15%	X					NO INDICATIONS

Welding Process (s) SAW FCAW Remarks: Calibration Graph Attached

Level II Technician, Peter Hale _____ Date _____

Level II Technician, Scott Reed _____ Date _____

Level II Technician, John Grey _____ Date _____

Level II Technician, John Lowengart _____ Date _____

Level II Technician, STEFAN Holmes _____ Date 7/19/04

USI QCM Review, C. Amonson _____ Date JUL 2 9 2004

10/20/04

Report No._____

UNIVERSAL STRUCTURAL INC.

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION	ACCEPTANCE STANDARD	CUSTOMER IDENTIFICATION
JOB NUMBER 23932 DWG. NO. 18Ab ITEM NO. PA18 Equipment: USN 52 SN620296 USN 52L SN00FNXP USN 58L 00Y65Y 3.5MHz Transducer 70 deg Couplant: Cellulose Material Thickness: 8 mm	UT Procedure: QAP-100 Rev. 001 80% Penetration Required Visual Acceptance: AWS D1.5:96 Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.	PROJECT: OAKLAND BAY CUSTOMER: KFM / A JV. BRIDGE NO. 34-0006 L/R CONTRACT NO. 04-012024 Base metal tested per AWS D1.5 96, section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	~~Depth~~ LACK of penetration	Length	Comments
Pa18	10	9	100%		X	2205	1.8	10	~~T= 8.09~~ SH
				SH X	X	2950	1.9	30	~~8.30~~ SH
					X	3110	2.11	25	~~8.13~~ SH
					X	3235	1.9	75	~~8.13~~ SH
				SH X	X	3330	1.85	55	~~8.25~~ SH
				SH X	X	3410	1.7	5	~~8.23~~ SH
					X	3450	2.0	10	~~8.22~~ SH
				SH X	X	3620	1.7	10	~~8.18~~ SH
					X	3835	2.0	10	~~8.20~~ SH
					X	4030	1.9	85	~~8.21~~ SH
				SH X	X	4130	1.75	15	~~8.21~~ SH
				SH X	X	4170	1.8	30	~~8.21~~ SH
					X	4215	2.1	60	~~8.21~~ SH

CONTINUED ON NEXT PAGE

Welding Process (s) (SAW) FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale _____ Date _____

Level II Technician, Scott Reed _____ Date _____

Level II Technician, John Grey _____ Date _____

Level II Technician, John Lowengart _____ Date 7/19/04

Level II Technician, STEFAN Holmes _____ Date JUL 2 9 2004

USI QCM Review, C. Amonson _____ Date 10/20/04

Report No._____

UNIVERSAL STRUCTURAL INC.

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION	*ACCEPTANCE STANDARD*	*CUSTOMER IDENTIFICATION*
JOB NUMBER 23932 DWG. NO. 18A6 ITEM NO. PA18 Equipment: USN 52 SN620296 USN 52L SN00FNXP USN 58L 00Y65Y 3.5MHz Transducer 70 deg Couplant: Cellulose Material Thickness: 8 mm	UT Procedure: QAP-100 Rev. 001 80% Penetration Required Visual Acceptance: AWS D1.5:96 Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.	PROJECT: OAKLAND BAY CUSTOMER: KFM / A JV. BRIDGE NO. 34-0006 L/R CONTRACT NO. 04-012024 Base metal tested per AWS D1.5 96, section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	~~Depth~~ LACK of penetration	Length	Comments
PA18	10	9	100%		X	4400	2.2	65	~~T=8.21~~ SH
					X	4600	2.1	25	~~8.16~~ SH
					X	4775	1.85	80	~~8.19~~ SH
					X	5185	2.15	105	~~8.31~~ SH
				SH X	X	5360	1.75	15	~~8.33~~ SH
					X	5595	1.95	40	~~8.29~~ SH
				SH X	X	5775	1.8	45	~~8.20~~ SH
				SH X	X	5840	1.75	10	~~8.20~~ SH
				SH X	X	6060	1.80	70	~~8.26~~ SH
					X	6540	1.9	75	~~8.26~~ SH
				SH X	X	7500	1.75	40	~~8.26~~ SH
					X	7650	2.0	15	~~8.22~~ SH
				SH X	X	7750	1.7	20	~~8.23~~ SH
CONTINUED ON NEXT PAGE									

Welding Process (s) SAW FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale _____ Date _____

Level II Technician, Scott Reed _____ Date _____

Level II Technician, John Grey _____ Date _____

Level II Technician, John Lowengart _____ Date 7/19/04

Level II Technician, Stefan Holmes _____ Date JUL 2 9 2004

USI QCM Review, C. Amonson _____ Date _____

10/20/04

Report No._____

UNIVERSAL STRUCTURAL INC.

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION	***ACCEPTANCE STANDARD***	***CUSTOMER IDENTIFICATION***
JOB NUMBER 23932 DWG. NO. 18Ab ITEM NO. Pa-18 Equipment: USN 52 SN620296 USN 52L SN00FNXP USN 58L 00Y65Y 3.5MHz Transducer 70 deg Couplant: Cellulose Material Thickness: 8 mm	UT Procedure: QAP-100 Rev. 001 80% Penetration Required Visual Acceptance: AWS D1.5:96 Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.	PROJECT: OAKLAND BAY CUSTOMER: KFM / A JV. BRIDGE NO. 34-0006 L/R CONTRACT NO. 04-012024 Base metal tested per AWS D1.5 96, section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	~~Depth~~ LACK of penetration	Length	Comments
Pa 18	10	9	100%	~~SH~~ X	X	7850	1.75	15	~~F=8.42~~ SH
				~~SH~~ X	X	7875	1.9	40	~~F=8.42~~ SH
				~~SH~~ X	X	7990	1.7	15	~~F=8.30~~ SH
				~~SH~~ X	X	8020	1.95	40	~~F=8.37~~ SH
					X	8370	1.95	70	~~F=8.24~~ SH
					X	8600	1.8	40	~~F=8.14~~ SH
					X	9065	2.1	140	~~F=8.12~~ SH
					X	9665	2.1	50	~~F=8.20~~ SH
					X	9835	2.0	15	~~F=8.12~~ SH
					X	10925	2.6	45	~~F=8.00~~ SH

Welding Process (s) SAW FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale — Date

Level II Technician, Scott Reed — Date

Level II Technician, John Grey — Date

Level II Technician, John Lowengart — Date 7/19/04

Level II Technician, STEFAN Holmes — Date JUL 29 2004

USI QCM Review, C. Amonson — Date

7/29/04

Report No._____

UNIVERSAL STRUCTURAL INC.

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION	***ACCEPTANCE STANDARD***	***CUSTOMER IDENTIFICATION***
JOB NUMBER 23932 DWG. NO. 18Ab ITEM NO. PA 18 Equipment: USN 52 SN620296 USN 52L SN00FNXP USN 58L 00Y65Y 3.5MHz Transducer 70 deg Couplant: Cellulose Material Thickness: 8 mm	UT Procedure: QAP-100 Rev. 001 80% Penetration Required Visual Acceptance: AWS D1.5:96 Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.	PROJECT: OAKLAND BAY CUSTOMER: KFM / A JV. BRIDGE NO. 34-0006 L/R CONTRACT NO. 04-012024 Base metal tested per AWS D1.5 96, section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	~~Depth~~ Lack of penetration	Length	Comments
PA 18	60	10	100%	~~SH~~	X	2070	1.75	15	~~T=8.17~~ SH

Welding Process (s) SAW FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale _____ Date _____

Level II Technician, Scott Reed _____ Date _____

Level II Technician, John Grey _____ Date _____

Level II Technician, John Lowengart _____ Date 7/19/04

Level II Technician, STEFAN Holmes _____ Date JUL 2 9 2004

USI QCM Review, C. Amonson _____ Date 10/20/04

Report No._____

UNIVERSAL STRUCTURAL INC.

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION	ACCEPTANCE STANDARD	CUSTOMER IDENTIFICATION
JOB NUMBER 23932 DWG. NO. 18A5 ITEM NO. Pa 18 Equipment: USN 52 SN620296 USN 52L SN00FNXP USN 58L 00Y65Y 3.5MHz Transducer 70 deg Couplant: Cellulose Material Thickness: 8 mm	UT Procedure: QAP-100 Rev. 001 80% Penetration Required Visual Acceptance: AWS D1.5:96 Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.	PROJECT: OAKLAND BAY CUSTOMER: KFM / A JV. BRIDGE NO. 34-0006 L/R CONTRACT NO. 04-012024 Base metal tested per AWS D1.5 96, section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	~~Depth~~ Back of penetration	Length	Comments
Pa 18	30	11	15%	X					NO INDICATIONS

Welding Process (s) SAW FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale _____ Date _____

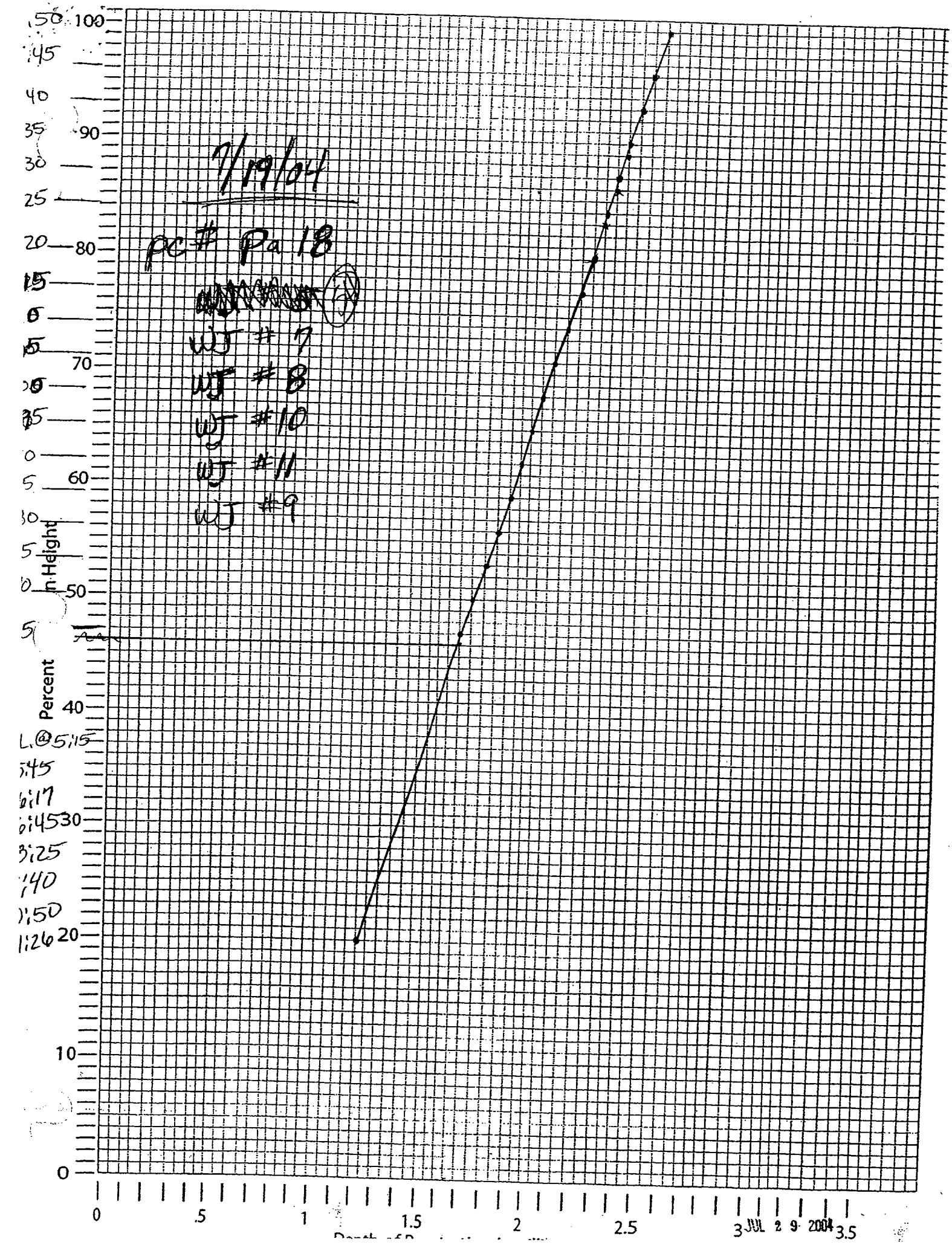
Level II Technician, Scott Reed _____ Date _____

Level II Technician, John Grey _____ Date _____

Level II Technician, John Lowengart _____ Date 7/19/04

Level II Technician, STEFAN Holmes _____ Date JUL 2 9 2004

USI QCM Review, C. Amonson _____ Date 10/20/04


7/19/04
PC# Pa 18
WJ # 7
WJ # 8
WJ # 10
WJ # 11
WJ # 9
Percent
Height
JUL 2 9 2004

Report No._____

UNIVERSAL STRUCTURAL INC.

ULTRASONIC TEST REPORT/ PARTIAL PENETRATION RIB WELDS, T JOINT

REPORT IDENTIFICATION	***ACCEPTANCE STANDARD***	***CUSTOMER IDENTIFICATION***
JOB NUMBER 23932 DWG. NO. 18Ab ITEM NO. Pa 18 Equipment: USN 52 SN620296 USN 52L SN00FNXP USN 58L 00Y65Y 3.5MHz Transducer 70 deg Couplant: Cellulose Material Thickness: 8 mm	UT Procedure: QAP-100 Rev. 001 80% Penetration Required Visual Acceptance: AWS D1.5:96 Visual Acceptance Prior to N.D.T.: SCOTT REED, PETER HALE, JOHN GREY, JOHN LOWENGART.	PROJECT: OAKLAND BAY CUSTOMER: KFM / A JV. BRIDGE NO. 34-0006 L/R CONTRACT NO. 04-012024 Base metal tested per AWS D1.5 96, section 6.19.5 with a 2.25 MHz longitudinal wave transducer

Piece Mark	Welder ID	WJ #	Area	Acc	Rej	Distance from Y	~~Depth~~ LACK of penetration	Length	Comments
Pa 18	3	19	27 of 100%		X	340	1.95	75	~~F= 8.28~~ SH
				SH X	X	430	1.75	30	~~F= 8.24~~ SH
				SH X	X	475	1.75	35	~~F= 8.27~~ SH
					X	520	1.9	55	~~F= 8.29~~ SH
					X	585	1.95	35	~~F= 8.29~~ SH
					X	630	1.95	55	~~F= 8.32~~ SH
				SH X	X	760	1.85	25	~~F= 8.31~~ SH
				SH X	X	800	1.70	20	~~F= 8.30~~ SH
				SH X	X	1610	1.75	20	~~F= 8.20~~ SH
				SH X	X	1830	1.8	50	~~F= 8.27~~ SH
					X	1925	2.0	70	~~F= 8.24~~ SH
					X	2030	1.95	30	~~F= 8.19~~ SH
				SH X	X	2230	1.75	25	~~F= 8.15~~ SH
					X	2320	1.95	60	~~F= 8.12~~ SH

Welding Process (s) SAW FCAW

Remarks: Calibration Graph Attached

Level II Technician, Peter Hale _____ Date _____

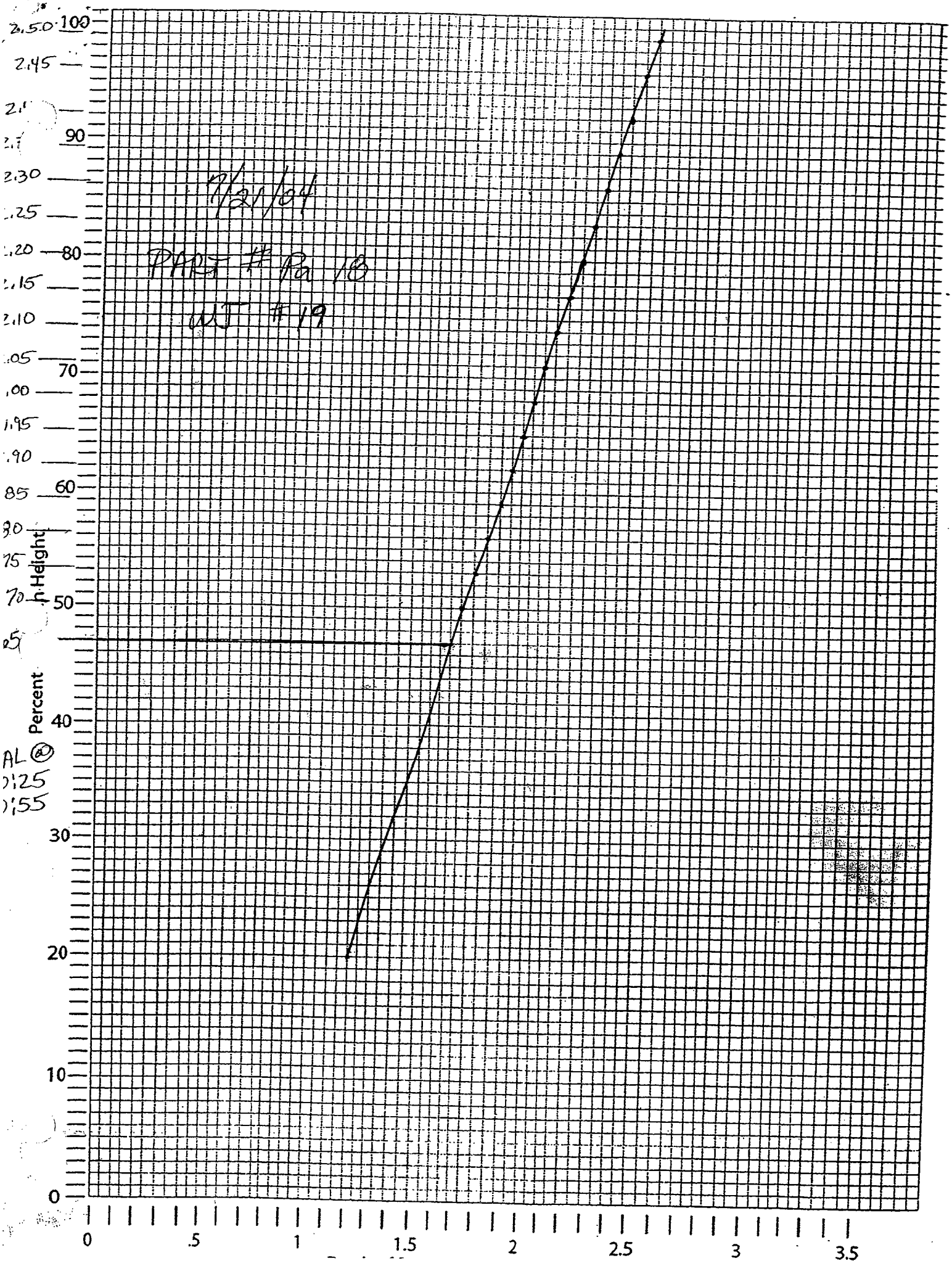
Level II Technician, Scott Reed _____ Date _____

Level II Technician, John Grey _____ Date _____

Level II Technician, John Lowengart _____ Date 7/21/04

Level II Technician, STEFAN Holmes _____ Date JUL 2 9 2004

USI QCM Review, C. Amonson _____ Date 10/20/04


7/21/04
PART # Pa 18
WJ # 19
Percent
Height
100
90
80
70
60
50
40
30
20
10
0
0
.5
1
1.5
2
2.5
3
3.5

DEPARTMENT OF TRANSPORTATION
SFOBB – Skyway Project
345 Burma Road
Oakland, CA 94607
Facsimile Number: (510) 622-5165

Flex Your Power
Be Energy Efficient!

January 03, 2005

KFM, a JV
220 Burma Road
Oakland, CA 94607

Contract: 04-012024
04-SF, Ala-80-13.9/14.3, 0.0/1.6
SFOBB Skyway Project
State Letter # 5.03.1-006499

Subject: Response to KFM-SUB-003166R00: USI KFM NCR #56 (METS #42) Response to CTL #5595 & 5596

Dear Mr. Skoro,
Attention: Mr. Rich Bienek,

The Engineer has reviewed KFM-SUB-003166R00: USI KFM NCR #56 (METS #42) Response to CTL #5595 & 5596. The Engineer agrees the Contractor has sufficiently addressed this NCR. As a result, USI NCR No. 42 is resolved.

Should you have any questions, please contact David Wu at (510) 622-5104.

Sincerely,

<<< ORIGINAL SIGNED >>>

David Wu
Senior Bridge Engineer

For: Mr. Douglas Coe
Resident Engineer

cc: D. Coe, I. Khinsann, V. Iyer, D. Wu, S. Abbas, B. Chew, H. El-Natur, P. Lowry, I. Kwong

file: 5.03.1, 9.07.8