

**TVA**

**WALL THICKNESS  
PROFILE SHEET**

REPORT NO:

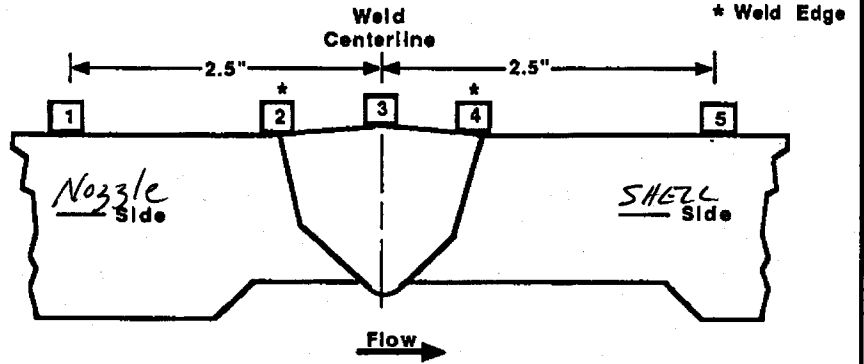
*R.P.1284*

PROJECT: WBN  
UNIT: 2

WELD NO: WP-13  
SYSTEM: PZR

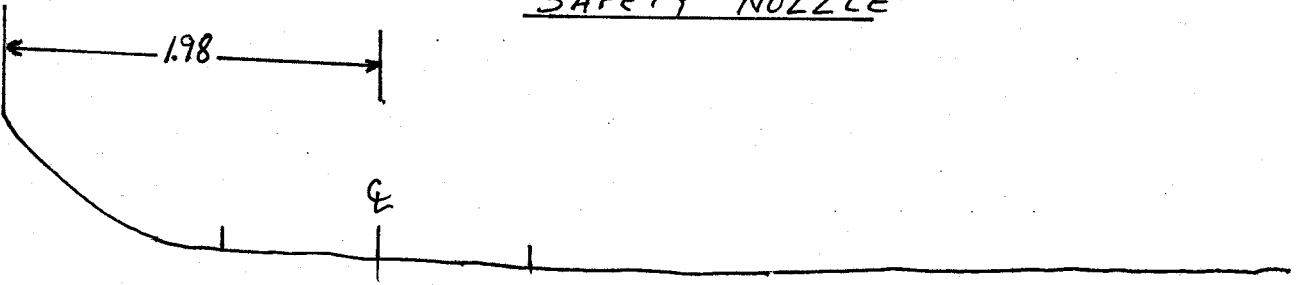
Record Thickness Measurements As Indicated, Including Weld Width, Edge-To-Edge At 0°

Position	0°	90°	180°	270°
1	*	*	*	*
2	3.35	3.44	3.22	3.17
3	3.09	3.29	3.25	3.22
4	2.97	3.24	3.18	3.16
5	2.92	3.14	3.21	3.05



CROWN HEIGHT: FLUSH DIAMETER: 6.0  
CROWN WIDTH: 1.6 WELD LENGTH: 46.7

SAFETY NOZZLE



\* No thickness readings taken on nozzle side.

EXAMINER: *Joe C...*  
LEVEL: II  
DATE: 10-19-10

REVIEWED BY: *Dorena D...*  
LEVEL: III DATE: 10-31-10

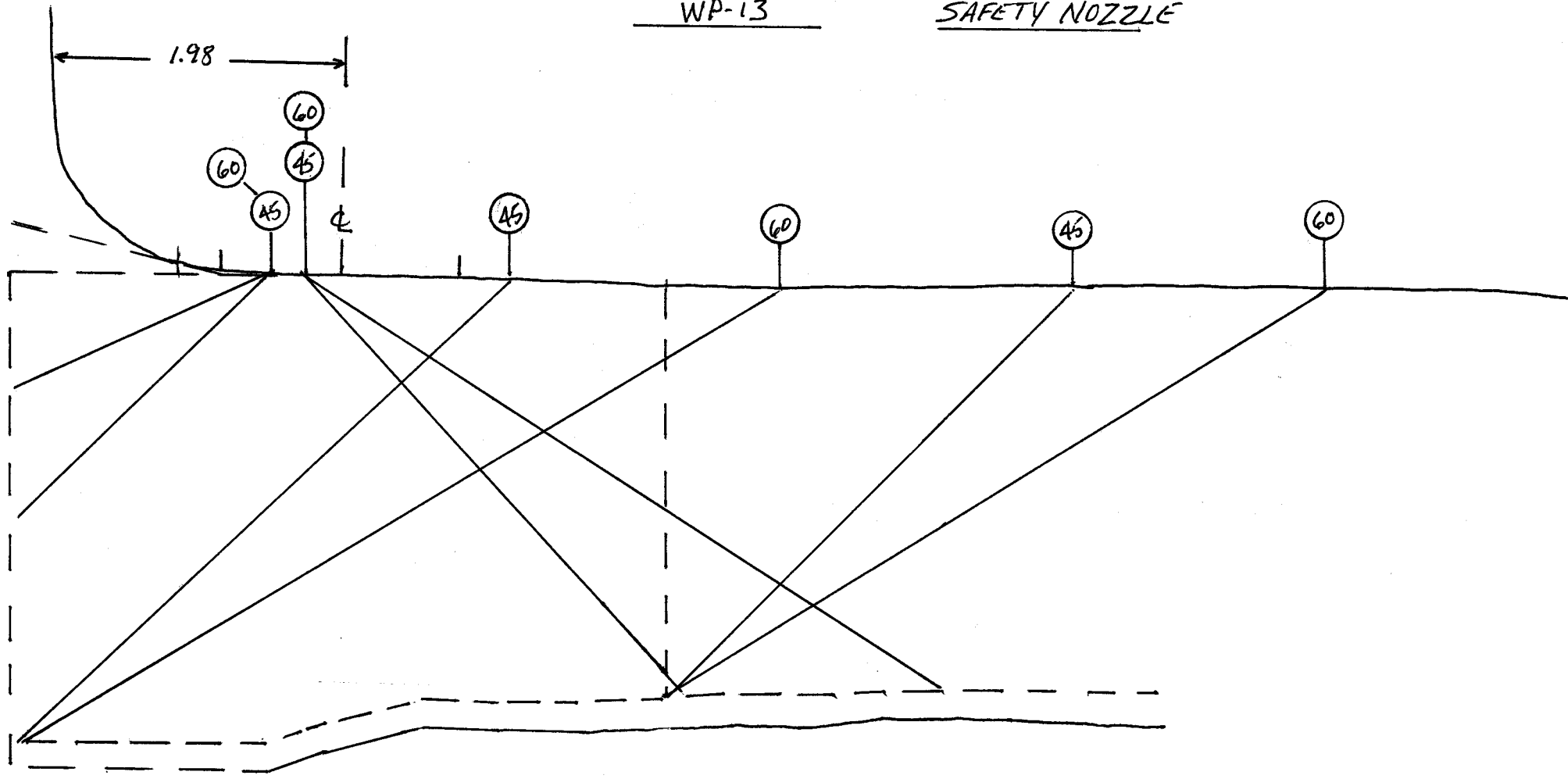
ANII: *[Signature]*  
DATE: 1-6-11  
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WBN 2

PZR

WP-13

SAFETY NOZZLE



# Watts Bar Unit 2

R.D1284

TVA Procedure N-GP-31  
Attachments 3 & 4

Measured Fields	Calculated Fields
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Worksheet Version 1.0 dated 07/01/09

**WELD NUMBER**

WP-13 ( 45 Deg )

Item 1	Required examination Volume in sq. in. (width x height)	4.4	2.7	11.88	sq. in.
Item 2	Number of scan directions			4	directions
Item 3	Total Scan volume in sq. in.			47.52	sq. in.
Item 4	Total length of weld			46.7	inches
Item 5	Total required exam volume in cubic inches			2219.184	cu. in.
Item 6	Exam volume acheived (sq. in.) in direction 1 X length of weld achieved	10.23	46.7	477.741	cu. In.
Item 7	Exam volume acheived (sq. in.) in direction 2 X length of weld achieved	3.24	46.7	151.308	cu. In.
Item 8	Exam volume acheived (sq. in.) in direction 3 X length of weld achieved	6.48	46.7	302.616	cu. In.
Item 9	Exam volume acheived (sq. in.) in direction 4 X length of weld achieved	6.48	46.7	302.616	cu. In.
Item 10	Determined the acheived exam volume add 6, 7, 8 & 9			1234.281	cu. In.
Item 11	Exam volume percentage item 10/item 5 x 100			55.62	%

Scan limitation due to Nozzle configuration

**Initials**  
JA

**Date**  
10/25/2010

*8 of 10*

## Watts Bar Unit 2

TVA Procedure N-GP-31  
Attachments 3 & 4

Measured Fields	Calculated Fields
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Worksheet Version 1.0 dated 07/01/09

**WELD NUMBER**

WP-13 ( 60 Deg )

Item 1	Required examination Volume in sq. in. (width x height)	4.4	2.7	11.88	sq. in.
Item 2	Number of scan directions			4	directions
Item 3	Total Scan volume in sq. in.			47.52	sq. in.
Item 4	Total length of weld			46.7	inches
Item 5	Total required exam volume in cubic inches			2219.184	cu. in.
Item 6	Exam volume acheived (sq. in.) in direction 1 X length of weld achieved	10.3225	46.7	482.06075	cu. In.
Item 7	Exam volume acheived (sq. in.) in direction 2 X length of weld achieved	0.365	46.7	17.0455	cu. In.
Item 8	Exam volume acheived (sq. in.) in direction 3 X length of weld achieved	6.48	46.7	302.616	cu. In.
Item 9	Exam volume acheived (sq. in.) in direction 4 X length of weld achieved	6.48	46.7	302.616	cu. In.
Item 10	Determined the acheived exam volume add 6, 7, 8 & 9			1104.3383	cu. In.
Item 11	Exam volume percentage item 10/item 5 x 100			<b>49.76</b>	%

Scan limitation due to Nozzle configuration

**Initials**

JA

**Date**

10/25/2010

R.P1284

# Watts Bar Unit 2

**TVA Procedure N-GP-31  
Attachments 3 & 4**

Measured Fields	Calculated Fields
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Worksheet Version 1.0 dated 07/01/09

**WELD  
NUMBER**

WP-13 (0 Deg)

Item 1	Required examination Volume in sq. in. (width x height)	4.4	2.7	11.88	sq. in.
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Item 2	Number of <b>scan directions</b>	4 directions			
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Item 3	Total Scan <b>volume</b> in sq. in.	47.52 sq. in.			
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Item 4	Total <b>length</b> of weld	46.7 inches			
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Item 5	Total required <b>exam volume</b> in cubic inches	2219.184 cu. in.			
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Item 6	Exam volume acheived (sq. in.) in direction 1 X <b>length of weld achieved</b>	8.64	46.7	403.488	cu. In.
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Item 7	Exam volume acheived (sq. in.) in direction 2 X <b>length of weld achieved</b>	8.64	46.7	403.488	cu. In.
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Item 8	Exam volume acheived (sq. in.) in direction 3 X <b>length of weld achieved</b>	8.64	46.7	403.488	cu. In.
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Item 9	Exam volume acheived (sq. in.) in direction 4 X <b>length of weld achieved</b>	8.64	46.7	403.488	cu. In.
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Item 10	Determined the <b>acheived exam volume</b> add 6, 7, 8 & 9	1613.952 cu. In.			
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Item 11	Exam <b>volume percentage</b> item 10/item 5 x 100	<b>72.73</b> %			
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Scan limitation due to Nozzle configuration

**Initials**

JA

**Date**

10/25/2010

*Wof10*