Perry Buckberg - Fwd: Entergy Info on Drywell Liner UT Measurements

From: Perry Buckberg
To: Dan Hoang; James Davis
Date: 1/17/2007 8:01:07 AM
Subject: Fwd: Entergy Info on Drywell Liner UT Measurements
CC: Kenneth Chang

Jim/Dan,

Attached is UT data from 1999 and 2001 that was not forwarded with the 1987 UT data last week.

Perry

>>> Glenn Meyer 1/17/2007 7:55 AM >>>
Drywell UT information from Entergy

>>> "Mogolesko, Fred" < fmogole@entergy.com > 01/16/2007 12:11 PM >>>
Attached please find the following:
1. Data Sheet No. 99-U-267: Drywell Liner UT Measurements--5/13/99[1 page]
2. Data Sheet No. 99-U-537: Drywell Liner UT Measurements--5/25/99[2 pages]
3. UT Measurements for IWE Program--4/29/01[4 pages]
4. Memo: UT Measurements of Drywell Liner Plate: NDE-87-20/QAD-87-129--1/27/87[8 pages].

Fred

-----Original Message-----
From: PNP118_DoNotReply@Entergy.com
[mailto:PNP118_DoNotReply@Entergy.com]
Sent: Tuesday, January 16, 2007 6:29 AM
To: Mogolesko, Fred
Subject: Scan from a Xerox WorkCentre Pro

Please open the attached document. It was scanned and sent to you using a Xerox WorkCentre Pro.

Sent by: Guest [PNP118_DoNotReply@Entergy.com]
Number of Images: 15
Attachment File Type: PDF

WorkCentre Pro Location: ESB 3rd Flr Design Services 194.23
Device Name: PNP118

For more information on Xerox products and solutions, please visit
http://www.xerox.com

Mail Envelope Properties (45AE1E13.482 : 9 : 8248)

Subject: Fwd: Entergy Info on Drywell Liner UT Measurements
Creation Date 1/17/2007 8:01:07 AM
From: Perry Buckberg

Created By: PHB1@nrc.gov

Recipients	**Action**	**Date & Time**
nrc.gov		
OWGWPO03.HQGWDO01	Delivered	1/17/2007 8:01:14 AM
JAD (James Davis)		
KXC2 CC (Kenneth Chang)		
nrc.gov		
OWGWPO04.HQGWDO01	Delivered	1/17/2007 8:01:14 AM
DVH (Dan Hoang)		

Post Office	**Delivered**	**Route**
OWGWPO03.HQGWDO01	1/17/2007 8:01:14 AM	nrc.gov
OWGWPO04.HQGWDO01	1/17/2007 8:01:14 AM	nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	2861	1/17/2007 8:01:07 AM
TEXT.htm	1899	
Scan001.PDF	613051	1/17/2007 7:48:55 AM

Options

Auto Delete:	No
Expiration Date:	None
Notify Recipients:	Yes
Priority:	Standard
ReplyRequested:	No
Return Notification:	None
Concealed Subject:	No
Security:	Standard
To Be Delivered:	Immediate
Status Tracking:	Delivered

DATA SHEET NO. 99-U-267

Component or System	Procedure	MR Number	Date
LINER (IWE)	QCI 50.40	19900428	5/13/99

Instrument M&TE No. 00BF6M
Precision .001"

Mechanical Gauge M&TE No. CLP-009
Precision .001"

Preference Samples - Mechanical Measurements: 1. .300 2. .500 3. 1.500

Ultrasonic Measurements:

	1.	2.	3.	Time
Initial: *	.300"	.500"	1.503"	10:30A
~~Verification:~~ *	.301"	.501"	1.503"	10:35A
Verification: *	.299"	.500"	1.502"	2:30P
Verification:				
Verification:				
Verification:				
Verification:				
Verification:				
Verification:				

Maximum Difference .001"

Drift .001"

Maximum Probable Error

Sum of instrument and mechanical precisions, max. difference and drift = + .004"

Examination Data, Sketch or Description of Measured Locations

Examination of (3) zones at 9 ft in dry well. Concrete was chipped out to reveal 1" of liner. Reading were made 3" above floor line and 1" below floor line.

Between vents D & E
1.09" to 1.10" ABOVE FLOOR
1.15 to 1.20" BELOW FLOOR

Between Vents A & H
1.09" to 1.12" ABOVE FLOOR
1.12" to 1.16" BELOW FLOOR

Between vents B & C
1.16" to 1.20" ABOVE FLOOR
1.17 to 1.20" BELOW FLOOR

Nominal = 1 1/16"

⟹ ALL READINGS ARE ACCEPTABLE B Perkins 5/14/99

Examined by	NDT Level	Date	Approved By	Date
Michael J Perkins	LEVE I	5/13/99	Philip Shanklin Lo III	5-13-99
Charles Tauro	III	5/13/99	B Perkins III	5/13/99

REVIEWED BY: [signature] ANII 5-14-99 DATE

Doc id: utsht-nde library

DATA SHEET NO. 99-U-537

Component or System	Procedure	MR Number	Date
Containment (50)	QL5040	19800428	5/25/99

Instrument M&TE No. 00BF6M
Precision 0.001

Mechanical Gauge M&TE No. CLP009
Precision 0.001

Preference Samples - Mechanical Measurements: 1. 0.300 2. 1.000 3. 1.500

Ultrasonic Measurements:

				Time
Initial:	1.* 0.300	2.* 1.002	3.* 1.503	09:30
Verification:	1.** 0.301	2.** 1.003	3.** 1.517	09:30
Verification:	1. 0.301	2. 1.003	3. 1.505	12:55
Verification:	1. N/A	2. N/A	3. N/A	N/A
Verification:	1. N/A	2. N/A	3. N/A	N/A
Verification:	1. N/A	2. N/A	3. N/A	N/A
Verification:	1. N/A	2. N/A	3. N/A	N/A
Verification:	1. N/A	2. N/A	3. N/A	N/A
Verification:	1. N/A	2. N/A	3. N/A	N/A

Maximum Difference 0.017

Drift 0.002

Maximum Probable Error

Sum of instrument and mechanical precisions, max. difference and drift = + .021"

Examination Data, Sketch or Description of Measured Locations

* CALIBRATION w/out COATING
** CALIBRATION w/ COATING

IWE, UPNW 72-252
83-252
83-288

	Drawing Values Nom	Avg.	Low
AZ 288° 83-89 EL	1.250	1.285	1.265
AZ 252° 83-89 EL	1.250	1.285	1.281
AZ 252° 72-78 EL	0.670	~~0.688~~ 0.690	0.688

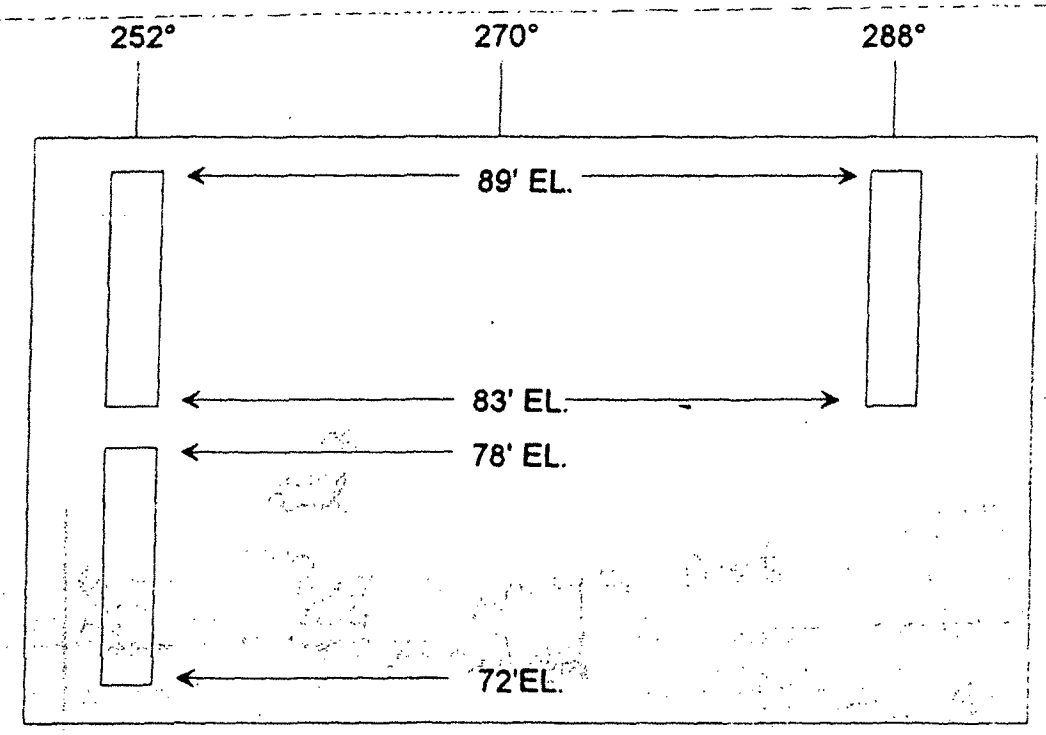
ACCEPTABLE BP

Examined by	NDT Level	Date	Approved By	Date
[signature]	II	5/25/99	B Peeko	5/26/99

"REVIEWED" [signature] 5/26/99
ANII.

Doc id: utsht-nde library

99-U-537
Page 2 of 2



ENTERGY - Pilgrim

D.S.N. 01-U-2
18

Component or System	Procedure	MR. Number	Date
LINE-SNOCUSH-305	~~50.44~~ 50.91/50.40	10000538	4/29/01

Instrument M&TE No. A101259/Sonic-136	Mechanical Gauge M&TE No. CLP-009
Precision : ~~0.001"~~ 0.02"	Precision : 0.001"

Preference Samples – Mechanical Measurements 1. .505" 2. 1.006" 3. 4.0"

Ultrasonic Measurements :

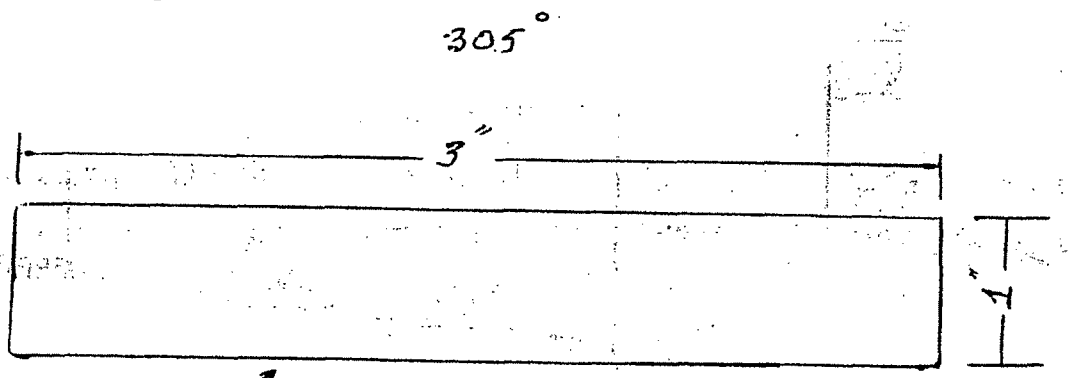
				Time
Initial :	1. .5	2. 1.0	3. 4.0	10:15
Verification :	1. .5	2. 1.0	3. 4.0	13:00
Verification :	1.	2.	3.	
Verification :	1.	2.	3.	
Verification :	1.	2.	3.	
Verification :	1.	2.	3.	

Maximum Difference : N/A .006"
Drift : N/A .000"
'T' Nom. :
'T' Min. :
'T' Scr. :

Maximum Probable Error
Sum of instrument and mechanical precisions , max difference and drift = N/A .009" BP 5/2/01

Point # : _____ **Examination Data , Sketch or Description of Measured Locations**

Accept per ITT 50.91
CG



AREA SCANNED

Min. Reading 1.06" @ various areas

ANII 5/3/01 DATE

Examiner [signature]	Level: II	Date: 4/29/01	Reviewed By [signature]	DATE: 5/3/01
Examiner	Level:	Date:	Approved By [signature]	DATE: 5/3/01

ENTERGY - PILGRIM

Pg 1 of 1

Component or System	Procedure	MR. Number	Date
IWE-UPDW-83-108 83' To 89' by 3"	~~50.44~~ 50.91/50.40	10000538	4/29/01

Instrument M&TE No. A101259/SONIC-136	Mechanical Gauge M&TE No. CLP-009
Precision : ~~0.001"~~ 0.02"	Precision : 0.001"

Preference Samples – Mechanical Measurements 1. .505" 2. 1.006" 3. 4.0"

Ultrasonic Measurements :

				Time
Initial :	1. .5	2. 1.0	3. 4.0	10:15
Verification :	1. .5	2. 1.0	3. 4.0	13:00
Verification :	1.	2.	3.	
Verification :	1.	2.	3.	
Verification :	1.	2.	3.	
Verification :	1.	2.	3.	

Maximum Difference : ~~N/A~~ .006" BP

Drift : ~~N/A~~ .000"

'T' Nom. :

'T' Min. : N/A

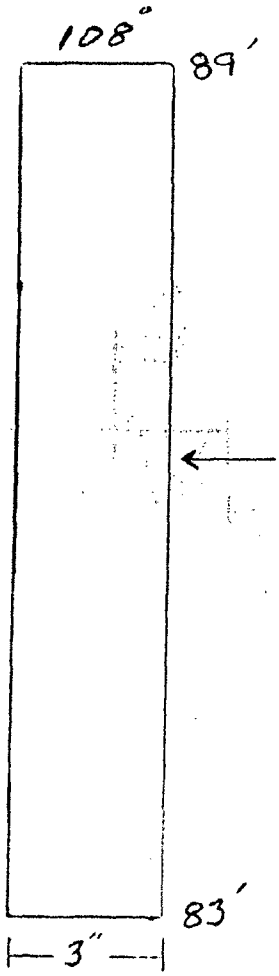
'T' Scr. ~~N~~ A

Maximum Probable Error

Sum of instrument and mechanical precisions , max difference and drift = ~~N/A~~ .009" BP 5/2/01

Point # : _____ **Examination Data , Sketch or Description of Measured Locations**

Accept per ITI 50.91
CQ



ANII 5/3/01 DATE

Examiner [signature]	Level: II	Date: 4/29/01	Reviewed By [signature]	DATE: 5/3/01
Examiner	Level:	Date:	Approved By [signature]	DATE 5/3/01

ENTERGY - PILGRIM

Pg 1 of

Component or System	Procedure	MR. Number	Date
IWE-UPDW-72-288	~~50.44~~ 50.91/50.40	10000538	4/29/01

Instrument M&TE No. A101259/Sonic-136	Mechanical Gauge M&TE No. CLP-009
Precision : ~~0.001"~~ 0.02"	Precision : 0.001"

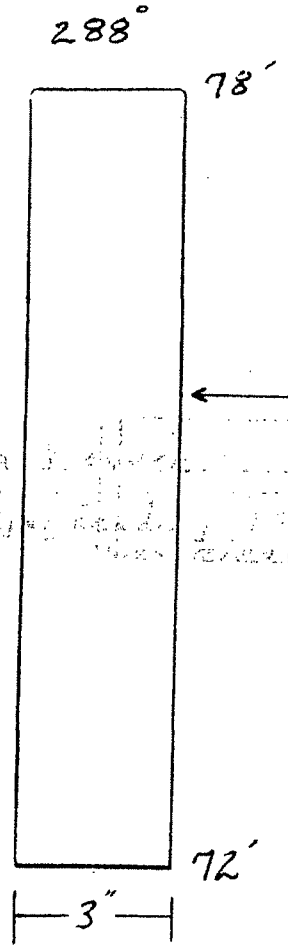
Preference Samples – Mechanical Measurements 1. .505" 2. 1.006" 3. 4.0"

Ultrasonic Measurements :				Time
Initial :	1. .5	2. 1.0	3. 4.0	10:15
Verification :	1. .5	2. 1.0	3. 4.0	13:00
Verification :	1.	2.	3.	
Verification :	1.	2.	3.	
Verification :	1.	2.	3.	
Verification :	1.	2.	3.	

Maximum Difference :
N/A .006"
Drift : N/A .000"
'T' Nom. : N/A
'T' Min. : N/A
'T' Scr. : N/A

Maximum Probable Error
Sum of instrument and mechanical precisions , max difference and drift = N/A .009" BP 5/2/01

Point # : _____ Examination Data , Sketch or Description of Measured Locations



Accept per ITI 50.91
QC

AREA SCANNED

Min. Reading .68" @ various areas

ANII 5/3/01 DATE

Examiner [signature]	Level: II	Date: 4/29/01	Reviewed By [signature]	DATE: 5/3/01
Examiner _____	Level: _____	Date: _____	Approved By [signature]	DATE: 5/3/01

ENTERGY - PILGRIM

Component or System	Procedure	MR. Number	Date
IWE-UPDW-83-072	~~50.44~~ 50.91/50.40	10000538	4/29/01

Instrument M&TE No. A101259/Sonic-136	Mechanical Gauge M&TE No. CLP-009
Precision : ~~0.001"~~ 0.02	Precision : 0.001"

Preference Samples – Mechanical Measurements 1. .505" 2. 1.006" 3. 4.0"

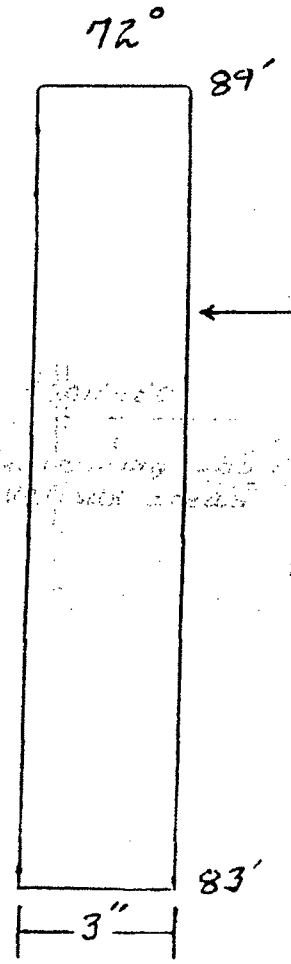
Ultrasonic Measurements :				Time
Initial :	1. .5	2. 1.0	3. 4.0	10:15
Verification :	1. .5	2. 1.0	3. 4.0	13:00
Verification :	1.	2.	3.	
Verification :	1.	2.	3.	
Verification :	1.	2.	3.	
Verification :	1.	2.	3.	

Maximum Difference :
~~N/A~~ .006"
Drift : ~~N/A~~ .000"
'T' Nom. : ~~N~~
'T' Min. : ~~N~~
'T' Scr. : ~~A~~

Maximum Probable Error
Sum of instrument and mechanical precisions , max difference and drift = ~~N/A~~ .009" 5/2/01

Point # : _____ Examination Data , Sketch or Description of Measured Locations

Accept per ITI 50.91
CG



AREA SCANNED
Min. Reading 1.26" @ various areas

AWII DATE 5/3/01

Examiner [signature]	Level: II	Date: 4/29/01	Reviewed By [signature]	DATE: 5/3/01
Examiner	Level:	Date:	Approved By [signature]	DATE: 5/3/01

OFFICE MEMORANDUM

Boston Edison Company

RMC Control Number
98770017c

To: R. N. Swanson

From: H. F. Brannan

Record Type A4.08

Date: January 27, 1987

Dept. Doc. NDE87-20/QAD-87-129 Non-Safety Related

Subject: Ultrasonic Thickness Measurement of Drywell Liner Plate (NESR Number 86-03 and MR 87-50-1)

Distribution:

F. N. Famulari
QC Clerk PNPS
B. Perkins
J. Seery
QA File 1.6.1

Reference: (a) NESR 86-03
(b) QCI 50.40
(c) NRC Information Notice 86-99
(d) RICSIL No.09

Enclosure: (A) Ultrasonic Thickness Measurement Report

Summary

The Nuclear Engineering Department requested that specific areas of the primary containment drywell liner plate be measured for wall thickness (NESR Number 86-03). The request cited the NRC Information Notice 86-99, and the General Electric Company RICSIL No. 09 as alerting utilities of possible corrosion of the drywell liner material. The drywell liner plate was ultrasonically examined, with no degradation by corrosion found.

Discussion

In response to reference (a) a plan was established to:

- Obtain the required measurements.
- Provide additional scanning surface in the event further evaluation was required.
- Optimize the examination technique for both wall thickness and pitting corrosion.

Twelve 6" by 6" areas were prepared for ultrasonic examination at elevation 9' - 2". This area was chosen to allow scanning for pitting and to provide room for other techniques such as angle beam if further evaluation were required. QQC selected the scope ultrasonic instrument, as opposed to a digital instrument, to allow for more detail evaulation of the ultrasonic signal, such as lamination and pitting.

DOCUMENT RELEASED JAN 30 1987 FOR USE CONTROL STATION

CONTROL COPY

Dept. Doc.
To:

Date: January 27, 1987 Page 2

Subject: Ultrasonic Thickness Measurement of Drywell Liner Plate (NESR Number 86-03 and MR 87-50-1)

All twelve areas were ultrasonically examined in accordance with reference (b). The plate thickness appears to be consistent (1.1 inches) which compares with the design thickness of 1.0625 inches. Three small reflectors were found [illegible] at area 9 and 12 of attached report. These reflectors were evaluated as inclusions because they did not reduce the backface signal.

Conclusion

The drywell line plate has not experienced general or localized corrosion.

CG/dmc

BOSTON EDISON COMPANY
QUALITY CONTROL
INSPECTION REPORT

ENCLOSURE (A)

No. IR 87-50-1

TYPE: ( ) INSTALLATION ( ) SURVEILLANCE ( ) SOURCE (X) OTHER

BOSTON EDISON COMPANY DATE(S) PERFORMED: 1/14/87 1/15/87

PILGRIM NUCLEAR POWER STATION, UNIT #1

REFERENCE DOCUMENTS USED FOR INSPECTION PURPOSES:

P.O.# N/A D.W.G.# N/A M.R.# 87-50-1 PROC.# QCI 50-40 OTHER: NFSR 86-03

1. CONTACTS:
NAME: B. PERKINS TITLE: Sr. QC ENGINEER

2. SUBJECT: (OF 50)
UT OF DRYWELL LINER AT 9'-2"

3. FINDINGS: (SUMMARY OF WITNESS/HOLD POINTS AND OTHER INSPECTIONS PERFORMED)

BECO OQC performed an ultrasonic examination for the thickness of the drywell liner plate at 9'-2" elevation per NFSR 86-03.

Twelve areas of 6"-6" were prepared by removing the paint and tested all areas have a consistant thickness of 1.1", with only one reduction to 1.05". There is no evidence of corrosion in any of the areas examined. See attached report.

4. CONDITIONS ADVERSE TO QUALITY: (X) NO ( ) YES

D.R. NO.(S): N/A NCR NO.(S): N/A S.W.O. NO.(S): N/A
Other: N/A

DISTRIBUTION:
OQC Group Leader/IR File
Pilgrim Station - B.C.C. (original)
B PERKINS OQC

Prepared by: C. Gaview
Reviewed by: B Perkins
Date: 1-15-87

Attachment A3.1

BOSTON EDISON COMPANY

ULTRASONIC THICKNESS MEASUREMENT PROJECT

Pg 1 of 5

COMPONENT OR SYSTEM	PROCEDURE	NR NUMBER	DATE
(Containment Liner) 50	QCI 50.40 REV-2	87-50-1	1/14/87

INSTRUMENT M & TE NO. 00053
PRECISION .025"

MECHANICAL GAUGE M & TE NO. QAD-13
PRECISION .001"

PREFERENCE SAMPLES—MECHANICAL MEASUREMENTS: 1. .497 2. .987 3. 2.190

ULTRASONIC MEASUREMENTS: CAL. STD. ST-11

				TIME
INITIAL:	1. .500	2. 1.00	3. 2.20	2:45
VERIFICATION	1. .500	2. 1.00	3. 2.20	3:15
VERIFICATION	1. .500	2. 1.00	3. 2.20	3:45
VERIFICATION	1.	2.	3.	

MAXIMUM DIFFERENCE .026

DRIFT 0

MAXIMUM PROBABLE ERROR

SUM OF INSTRUMENT AND MECHANICAL PRECISIONS, MAX. DIFFERENCE AND DRIFT = ± .052"

EXAMINATION DATA, SKETCH OR DESCRIPTION OF MEASURED LOCATIONS

Containment Liner Thickness Measurements Were Taken At 12 Areas Approx 6"x6" In Size At The Floor El. Minimum & Maximum (Hi-Lo) Thickness Readings Were Recorded For Each Area. The 12 Areas Tested Exhibited No Pitting Or Erosion. Small Inclusions Approx. 1/8" - 1/4" ø Were Noted In Two Of The Areas Tested. These Inclusions Were 1/2 - 5/8" Deep From Sca[illegible] Surface And There Was No [illegible] Of Back Reflection Signal.

Examined Areas 1-4 & 7-12

See Attached Sketch For Results

EXAMINED BY	NDT LEVEL	DATE	APPROVED BY	DATE
Robert [illegible]	II	1/14/87	Bruce [illegible]	1-15-87

Attachment A3.1

BOSTON EDISON COMPANY

ULTRASONIC THICKNESS MEASUREMENT PROJECT

Pg 2 of 5

COMPONENT OR SYSTEM	PROCEDURE	NO. NUMBER	DATE
(CONTAINMENT LINER) 50	QCI 50.40 REV-2	87-50-1	1/15/87

INSTRUMENT M & TE NO. 00053
PRECISION .025"

MECHANICAL GAUGE M & TE NO. QAD-13
PRECISION .001"

PREFERENCE SAMPLES — MECHANICAL MEASUREMENTS: 1. .997 2. .981 3. 2.190

ULTRASONIC MEASUREMENTS: CAL. STD ST-11

				TIME
INITIAL:	1. .500	2. 1.00	3. 2.20	10:00
VERIFICATION	1. .500	2. 1.00	3. 2.20	10:20
VERIFICATION	1.	2.	3.	
VERIFICATION	1.	2.	3.	

MAXIMUM DIFFERENCE .026

DRIFT 0

MAXIMUM PROBABLE ERROR

SUM OF INSTRUMENT AND MECHANICAL PRECISIONS, MAX. DIFFERENCE AND DRIFT = .052

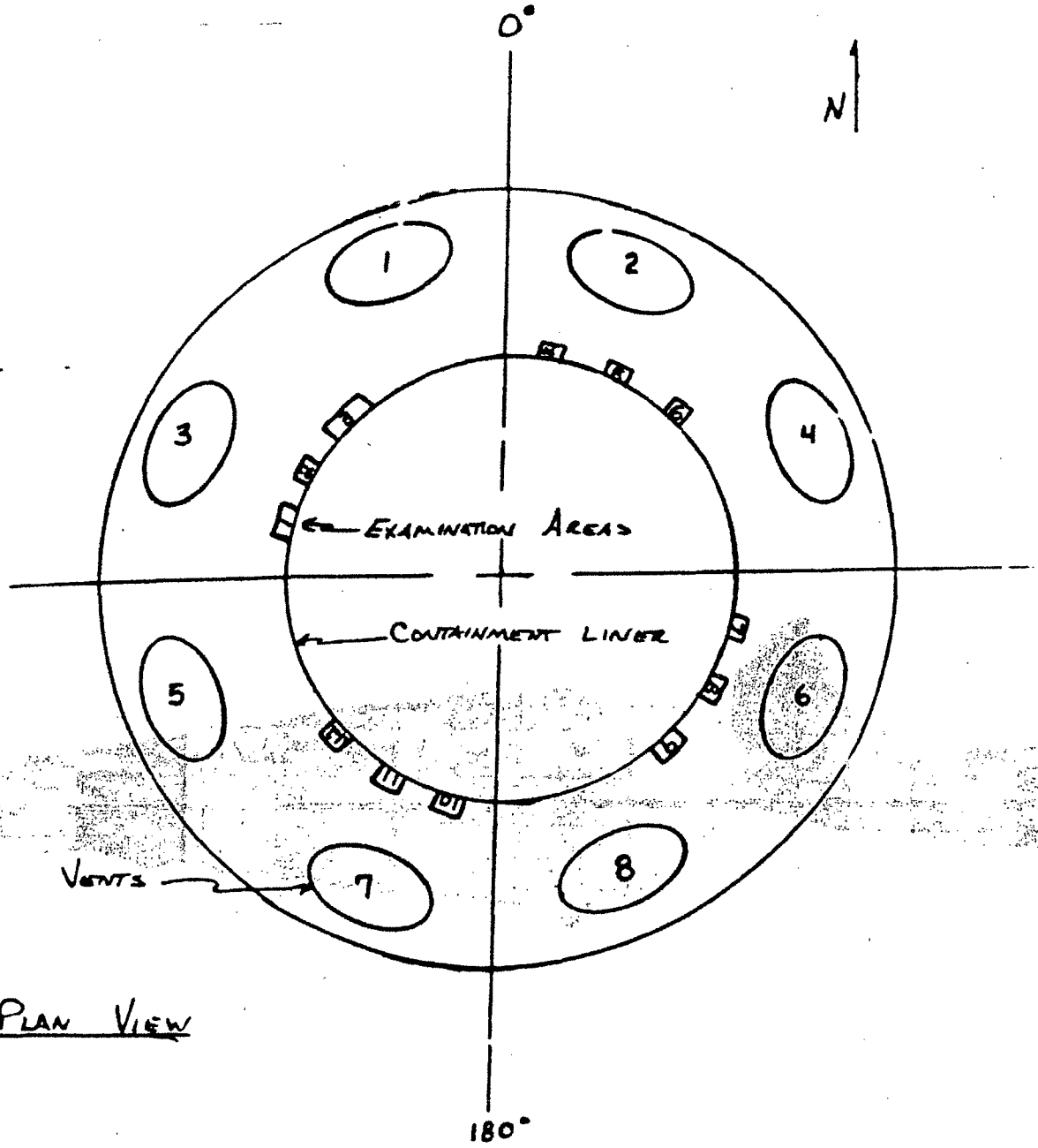
EXAMINATION DATA, SKETCH OR DESCRIPTION OF MEASURED LOCATIONS

LOCATIONS EXAMINED - #5 / #6

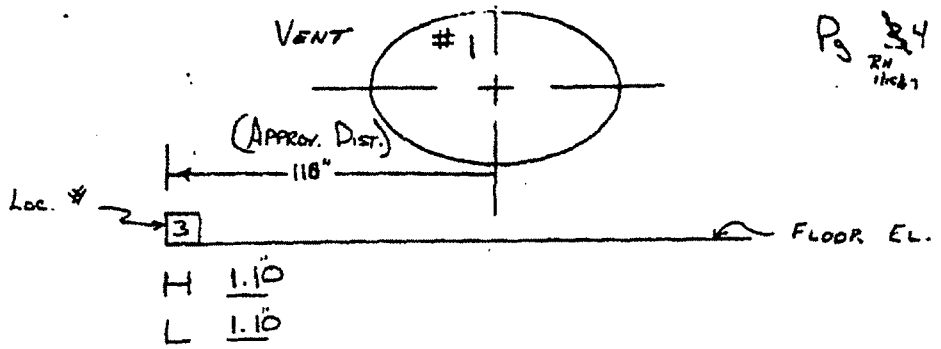
SEE ATTACHED SKETCH FOR RESULTS

EXAMINED BY	NDT LEVEL	DATE	APPROVED BY	DATE
Robert Newell	II	1/15/87	R Bruce Perkins	1-15-87

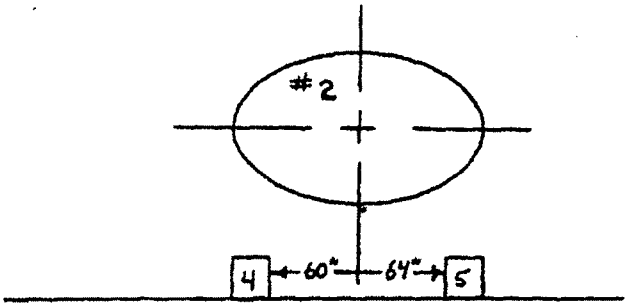
0 3 2 9 1 7 5 9


0°
N
1
2
3
4
5
6
7
8
EXAMINATION AREAS
CONTAINMENT LINER
VENTS
180°

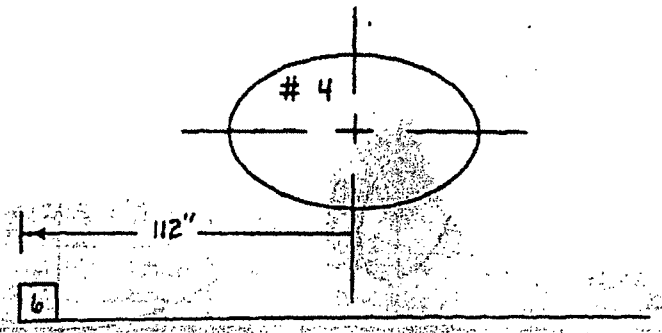
PLAN VIEW



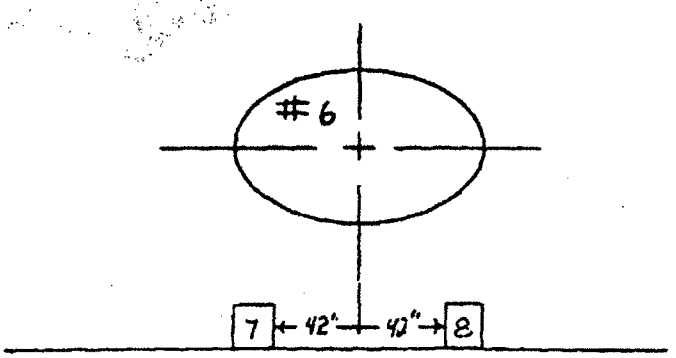
H 1.10"
L 1.10"



H 1.10" H 1.10"
L 1.10" L 1.10"



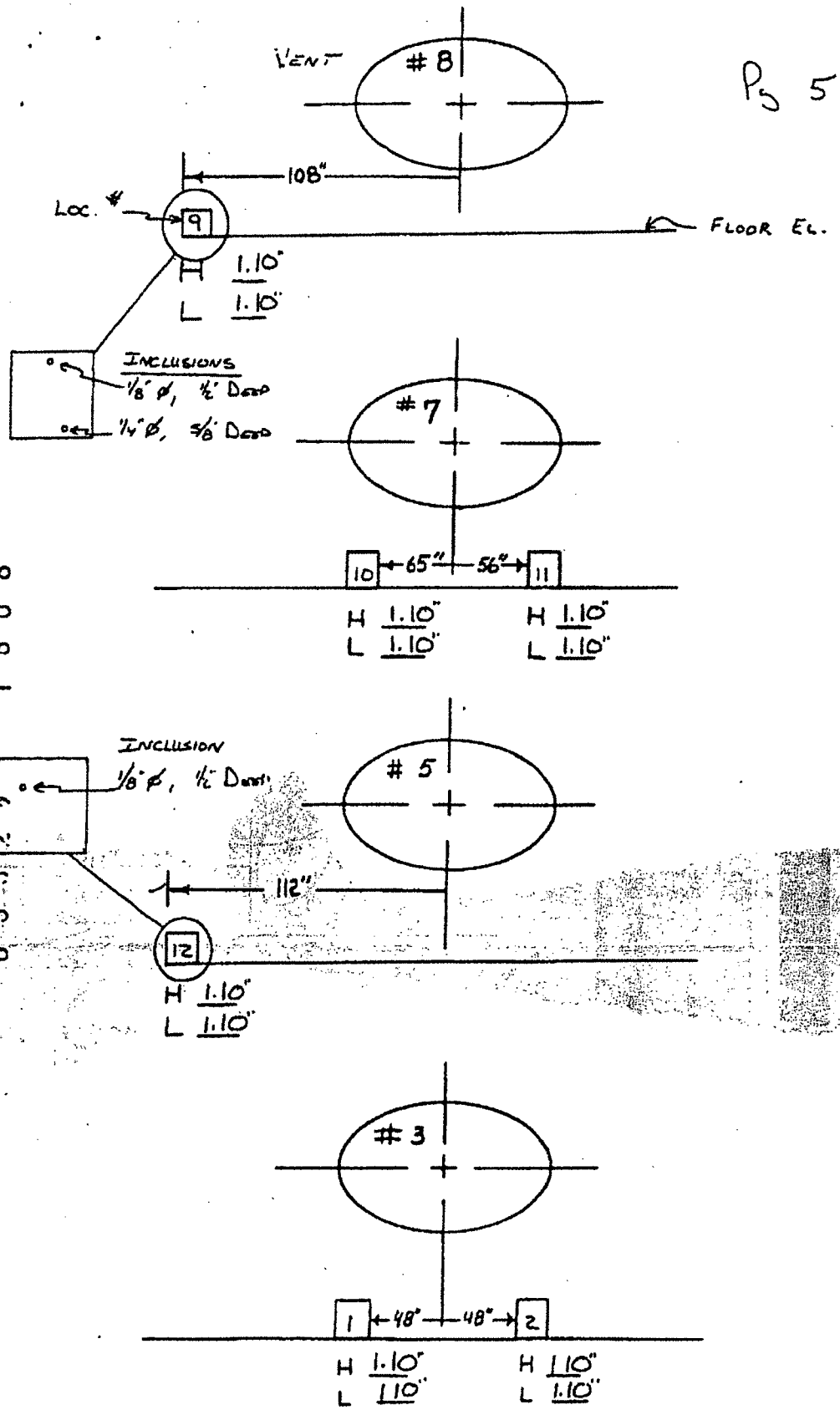
H 1.10"
L 1.10"



H 1.10" H 1.10"
L 1.10" L 1.05"

0 3 2 9 1 3 0 5

332900.1605



1606

332900.1606