



**FORM VT-3C**  
 CONTAINMENT INSERVICE INSPECTION  
 RECORD OF VT-3C EXAMINATION

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-05  
 ZONE NUMBER: IWL-043-002 DRAWING NO.: 320842  
 EQUIPMENT USED: Mag-Lite flashlight (see note 4)

Work Order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack			X		
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids			X		
7.1.1.d Scaling			X		
7.1.1.e Spalling	X				1
7.1.1.f Corrosion staining			X		
7.1.1.g Cracks	X				2,3
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel			X		
7.1.1.j Coating deterioration		X			5
Other					

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: C. Sward *Chris Sward* DATE: 6/1/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable: Yes  No  (VT-1C Examination Required)

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature: *BA* Date: 6/30/00

AUTHORIZED NUCLEAR INSPECTOR REVIEW:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**FORM VT-1C**  
 CONTAINMENT INSERVICE INSPECTION  
 RECORD OF VT-1C EXAMINATION

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-05  
 ZONE NUMBER: IWL-043-002 DRAWING NO.: 320842  
 EQUIPMENT USED: Mag-Lite flashlight (see note 4)

Work order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack			X		
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids			X		
7.1.1.d Scaling			X		
7.1.1.e Spalling	X				1
7.1.1.f Corrosion staining			X		
7.1.1.g Cracks	X				2,3
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel			X		
7.1.1.j Coating deterioration		X			5

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: C. Sward DATE: 6/1/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable : Yes  No   
 Engineering Evaluation Required : Yes  No  Evaluation No.: CRS 2000 04138

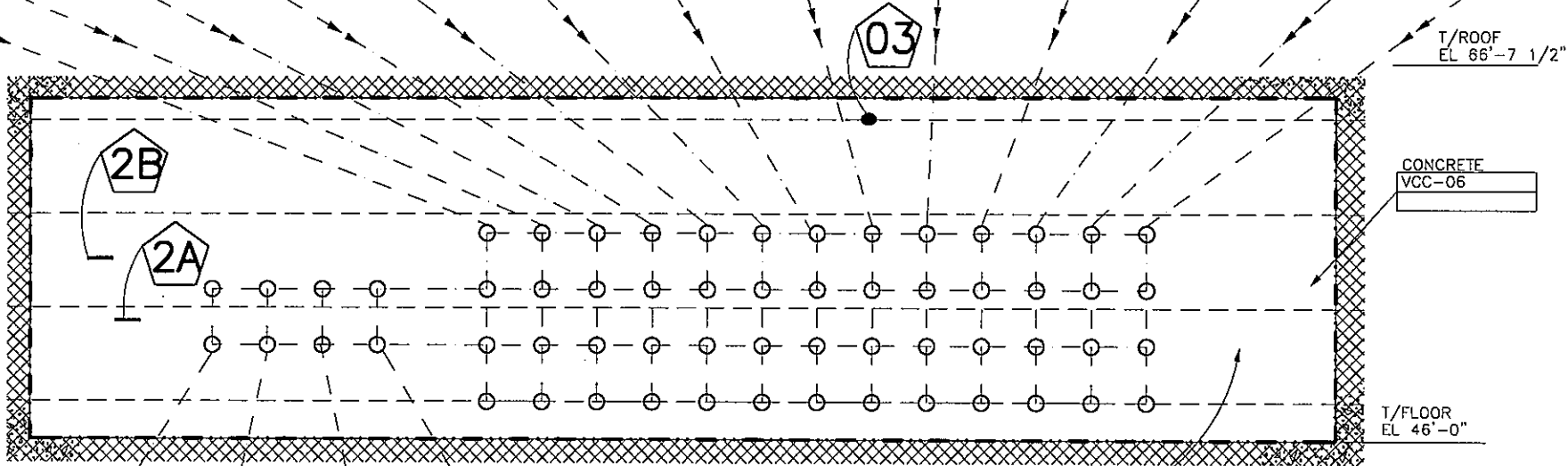
Comments : The areas with coating deterioration (comment #5) do not exhibit any degradation of the concrete substrate and therefore are not significant relative to containment integrity. The spalling and cracking (comments #1, 2, 3) require evaluation.

Signature: [Signature] Date: 6/30/00

AUTHORIZED NUCLEAR INSPECTOR (ANII) REVIEW:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

EP-H19 IWE-DET-017	EP-H20 IWE-DET-014	EP-H21 IWE-DET-017	EP-H22 IWE-DET-017	EP-H23 IWE-DET-014	EP-H24 IWE-DET-017	EP-H25 IWE-DET-014	EP-H26 IWE-DET-017	EP-H27 IWE-DET-014	EP-H28 IWE-DET-014	EP-H29 IWE-DET-017	EP-H30 IWE-DET-014	EP-H31 IWE-DET-016
EP-H32 IWE-DET-015	EP-H33 IWE-DET-017	EP-H34 IWE-DET-017	EP-H35 IWE-DET-015	EP-H36 IWE-DET-017	EP-H37 IWE-DET-016	EP-H38 IWE-DET-016	EP-H39 IWE-DET-017	EP-H40 IWE-DET-015	EP-H41 IWE-DET-017	EP-H42 IWE-DET-016	EP-H43 IWE-DET-016	EP-H44 IWE-DET-016
EP-H45 IWE-DET-016	EP-H46 IWE-DET-015	EP-H47 IWE-DET-016	EP-H48 IWE-DET-016	EP-H49 IWE-DET-016	EP-H50 IWE-DET-016	EP-H51 IWE-DET-016	EP-H52 IWE-DET-017	EP-H53 IWE-DET-017	EP-H54 IWE-DET-016	EP-H55 IWE-DET-016	EP-H56 IWE-DET-016	EP-H57 IWE-DET-016
EP-H58 IWE-DET-016	EP-H59 IWE-DET-016	EP-H60 IWE-DET-016	EP-H61 IWE-DET-016	EP-H62 IWE-DET-019	EP-H63 IWE-DET-016	EP-H64 IWE-DET-016	EP-H65 IWE-DET-019	EP-H66 IWE-DET-019	EP-H67 IWE-DET-016	EP-H68 IWE-DET-016	EP-H69 IWE-DET-016	EP-H70 IWE-DET-016



EP-H11 IWE-DET-018	EP-H12 IWE-DET-018	EP-H13 IWE-DET-018	EP-H14 IWE-DET-018
EP-H15 IWE-DET-018	EP-H16 IWE-DET-018	EP-H17 IWE-DET-018	EP-H18 IWE-DET-018

**CONCRETE INSPECTION ZONE IWL-043-003**  
(EXTERIOR DEVELOPED VIEW, LOOKING FROM OUTSIDE)

**XX** -DENOTES COMMENT NUMBER ON INSPECTION FORM.



**FORM VT-3C**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-3C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-07  
 ZONE NUMBER: IWL-043-004 DRAWING NO.: 320841  
 EQUIPMENT USED: Mag-Lite flashlight (see note 1)

Work order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack			X		
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids		X			2
7.1.1.d Scaling			X		
7.1.1.e Spalling			X		
7.1.1.f Corrosion staining			X		
7.1.1.g Cracks			X		
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel			X		
7.1.1.j Coating deterioration			X		
Other					

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: C. Sward *C. Sward* DATE: 6/1/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable : Yes  No  (VT-1C Examination Required)

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature: *B. A. ...* Date: 6/30/00

AUTHORIZED NUCLEAR INSPECTOR REVIEW:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_





FORM VT-3C (cont.)  
CONTAINMENT INSERVICE INSPECTION  
RECORD OF VT-3C EXAMINATION

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-07

No.	Comment	Initials
1	This area was examined from the catwalk at approx. El. 51' due to radiological contamination throughout the floors in this area. The examination distances were a maximum of 30 feet. While this distance exceeds the limits for direct visual examination, it was too short for use of the binoculars due to their minimum focal length. Lighting levels using the flashlight exceeded the 50 foot-candle requirement. Approximately 50% of the concrete surface was not visible for inspection by direct line of sight due to obstructions.	CAS
2	Several form tie holes were found not filled. These are not significant relative to containment structural integrity.	CAS



**FORM VT-3C**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-3C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-08  
 ZONE NUMBER: IWL-068-001 DRAWING NO.: 320842  
 EQUIPMENT USED: Celestron Giant 20x80 Binoculars (Ser. No. 990176)

Work Order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack	X				2
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids			X		
7.1.1.d Scaling			X		
7.1.1.e Spalling			X		
7.1.1.f Corrosion staining		X			3,4
7.1.1.g Cracks			X		
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel			X		
7.1.1.j Coating deterioration				X	
Other		X			1

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: R. Namperumal *R. Namperumal* DATE: 5/26/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable: Yes  No  (VT-1C Examination Required)

Comments: The indications observed are not significant relative to containment integrity.

Signature: *BAE* Date: 6/20/00

AUTHORIZED NUCLEAR INSPECTOR REVIEW:

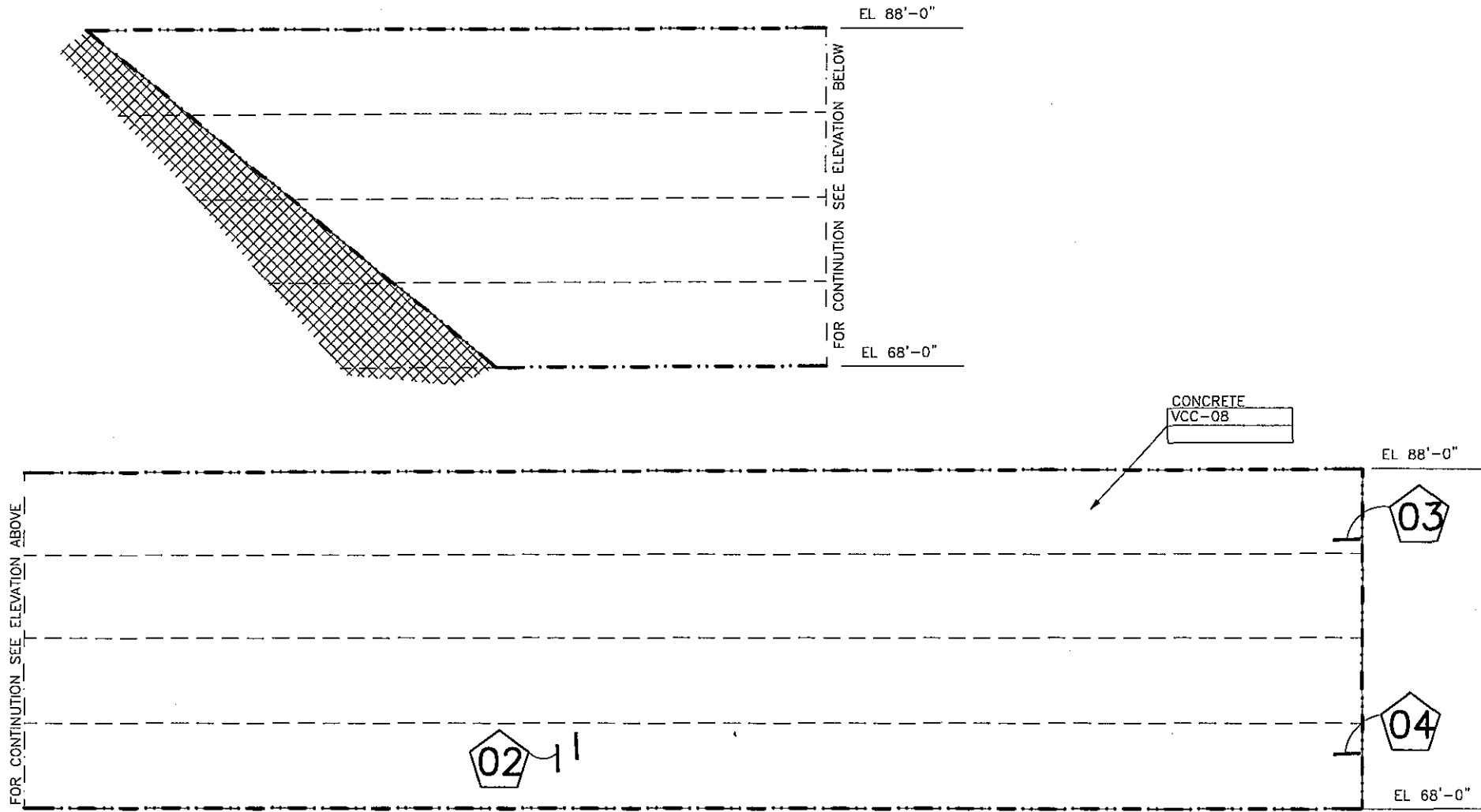
Signature: \_\_\_\_\_ Date: \_\_\_\_\_




FORM VT-3C (cont.)  
CONTAINMENT INSERVICE INSPECTION  
RECORD OF VT-3C EXAMINATION

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-08

No.	Comment	Initials
1	Non-uniformity of surface color and texture observed at various locations in the zone. The condition does not indicate significant material deterioration of the concrete.	RW
2	2' long white deposits (2), 2' apart	RW
3	Rust stain from surface attachment plate	RW
4	Rust stain from surface attachment plate	RW



**CONCRETE INSPECTION ZONE IWL-068-001**  
 (EXTERIOR DEVELOPED VIEW, LOOKING FROM OUTSIDE)

 -DENOTES COMMENT NUMBER ON INSPECTION FORM.

FORM VT-3C  
 CONTAINMENT INSERVICE INSPECTION  
 RECORD OF VT-3C EXAMINATION

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-09  
 ZONE NUMBER: IWL-068-002 DRAWING NO.: 320843  
 EQUIPMENT USED: Mag-Lite flashlight (see note 1)

Work order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack			X		
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids		X			2
7.1.1.d Scaling			X		
7.1.1.e Spalling			X		
7.1.1.f Corrosion staining			X		
7.1.1.g Cracks			X		
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel			X		
7.1.1.j Coating deterioration		X			3
Other					

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: C. Sward *C. Sward* DATE: 6/1/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable: Yes  No  (VT-1C Examination Required)

Comments: The observed conditions are not significant relative to containment integrity.

Signature: *BA Sward* Date: 6/30/00

AUTHORIZED NUCLEAR INSPECTOR REVIEW:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



FORM VT-3C (cont.)  
CONTAINMENT INSERVICE INSPECTION  
RECORD OF VT-3C EXAMINATION

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-09

No.	Comment	Initials
1	This area was examined from the platforms at El. 64'-8" and El. 76'-8". The examination distances were a maximum of 20 feet. While this distance exceeds the limits for direct visual examination, it was too short for use of the binoculars due to their minimum focal length. Lighting levels using the flashlight exceeded the 50 foot-candle requirement. Approximately 5% of the concrete surface was not visible for inspection by direct line of sight due to obstructions.	CAS
2	Several form tie holes were found not patched. These are not significant relative to containment structural integrity.	CAS
3	There are a number of areas within this zone where the coating is flaking and peeling. There is no evidence that this is due to degradation of the concrete substrate. It is a coatings related issue and not containment degradation.	CAS



**FORM VT-3C**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-3C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-10  
 ZONE NUMBER: IWL-068-003 DRAWING NO.: 320844  
 EQUIPMENT USED: Celestron Giant 20x80 Binoculars (Ser. No. 990176)

Work order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack			X		
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids		X			8
7.1.1.d Scaling			X		
7.1.1.e Spalling			X		
7.1.1.f Corrosion staining		X			2,3,4,5,7,9
7.1.1.g Cracks			X		
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel	X				6
7.1.1.j Coating deterioration				X	
Other		X			1

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: C. Sward *Chris Sward* DATE: 5/31/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable: Yes  No  (VT-1C Examination Required)

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature: *[Signature]* Date: 6/30/00

AUTHORIZED NUCLEAR INSPECTOR REVIEW:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**FORM VT-1C**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-1C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-10  
 ZONE NUMBER: IWL-068-003 DRAWING NO.: 320844  
 EQUIPMENT USED: Celestron Giant 20x80 Binoculars (Ser. No. 990176)

Work Order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack			X		
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids		X			8
7.1.1.d Scaling			X		
7.1.1.e Spalling			X		
7.1.1.f Corrosion staining		X			2,3,4,5,7,9
7.1.1.g Cracks			X		
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel	X				6
7.1.1.j Coating deterioration				X	
Other		X			1

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: C. Sward *Chris Sward* DATE: 5/31/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable : Yes  No

Engineering Evaluation Required : Yes  No  Evaluation No.: CRS 2000 04138

Comments : The exposed cadweld (comment #6) requires evaluation. The other observed conditions are not significant relative to containment integrity.

Signature: *B A Siler* Date: 6/30/00

AUTHORIZED NUCLEAR INSPECTOR (ANII) REVIEW:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_





**FORM VT-3C (cont.)**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-3C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-10

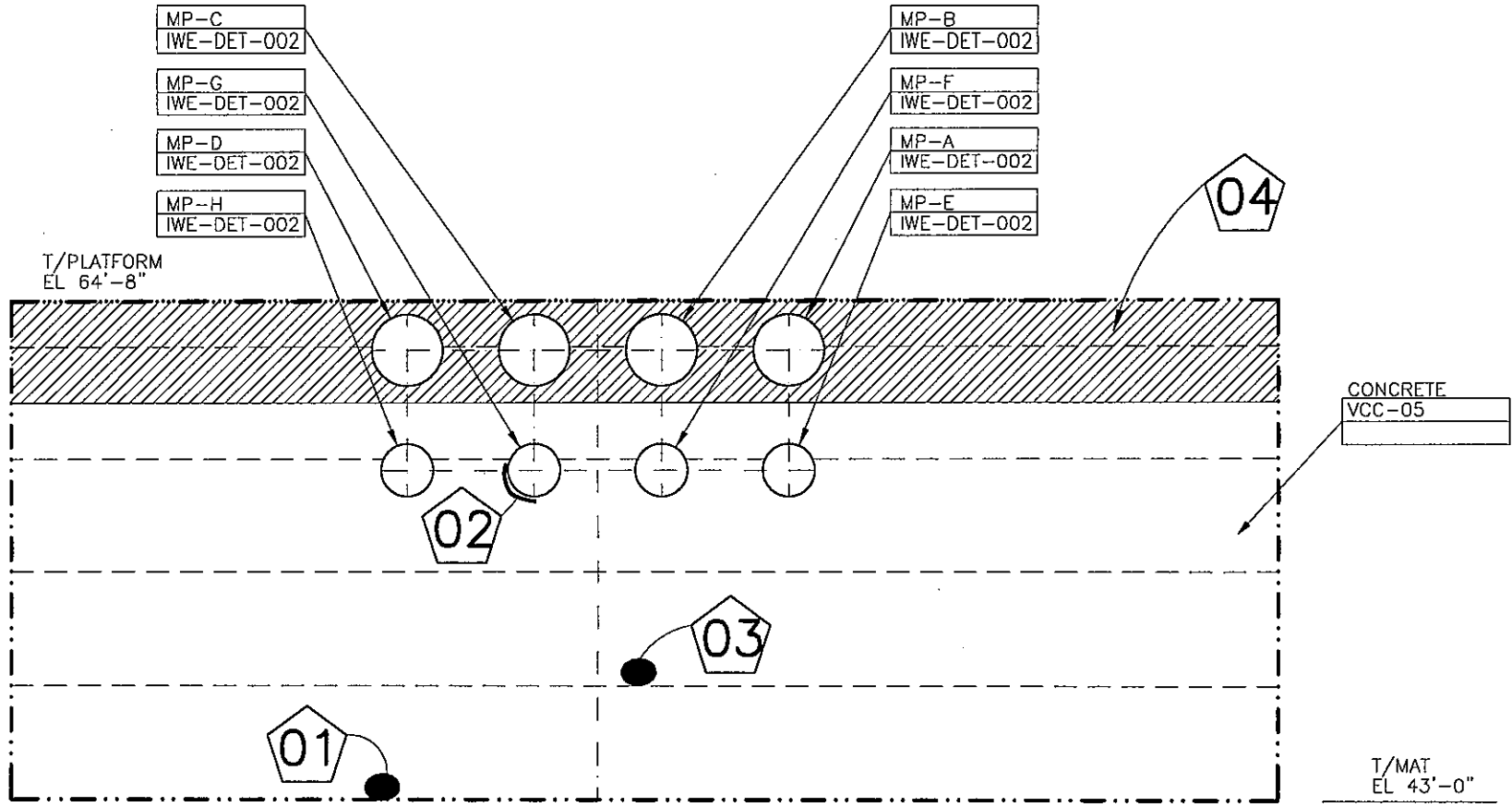
No.	Comment	Initials
1	Non-uniformity of surface color and texture observed at various locations in the zone. The condition does not indicate significant material deterioration of the concrete.	CAS
2	Small rust spot visible on concrete surface. It could be tie wire or other misc. steel but does not appear to be rebar. See photo 00053120	CAS
3	Small rust spot visible on concrete surface. It could be tie wire or other misc. steel but does not appear to be rebar. See photo 00053121	CAS
4	Small rust spot visible on concrete surface. It could be tie wire or other misc. steel but does not appear to be rebar. See photo 00053122	CAS
5	Small rust spot visible on concrete surface. It could be tie wire or other misc. steel but does not appear to be rebar. See photo 00053123	CAS
6	Exposed cadweld with some rusting. See photo 00053124	CAS
7	Small rust spot visible on concrete surface. It could be tie wire or other misc. steel but does not appear to be rebar. See photo 00053125	CAS
8	Form tie hole which was not filled. This is not significant relative to containment structural integrity.	CAS
9	Two small rust spots visible on concrete surface. It could be nails, form ties or other misc. steel but does not appear to be rebar. See photo 00053126	CAS



**FORM VT-3C (cont.)**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-3C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-05

No.	Comment	Initials
1	A spalled area approximately 10" long was found at the floor line directly below penetration MP-H. This area appears to have some unconsolidated concrete ("honeycomb") from the original placement of the concrete. See Photo 00060131	CAS
2	A crack with apparent delamination was found around the lower left edge of penetration MP-G. See Photo 00060132	CAS
3	A delamination was found at approx. El. 49' directly below penetration MP-F. The area was estimated to be 18" wide by 12" high by sounding the concrete (tapping the surface with a metal object). See Photos 00060133 and 00060134.	CAS
4	This area was examined from the floor level at El. 43'. The examination distances were a maximum of 20 feet. While this distance exceeds the limits for direct visual examination, it was too short for use of the binoculars due to their minimum focal length. Lighting levels using the flashlight exceeded the 50 foot-candle requirement. The upper 5 feet of this zone were not visible for inspection by direct line of sight due to piping and structural steel obstructions.	CAS
5	There are a number of areas within this zone where the coating is flaking and peeling. There is no evidence that this is due to degradation of the concrete substrate. It is a coatings related issue and not containment degradation.	CAS



**CONCRETE INSPECTION ZONE IWL-043-002**  
 (EXTERIOR DEVELOPED VIEW, LOOKING FROM OUTSIDE)



—DENOTES COMMENT NUMBER ON INSPECTION FORM.



IWL-043-002

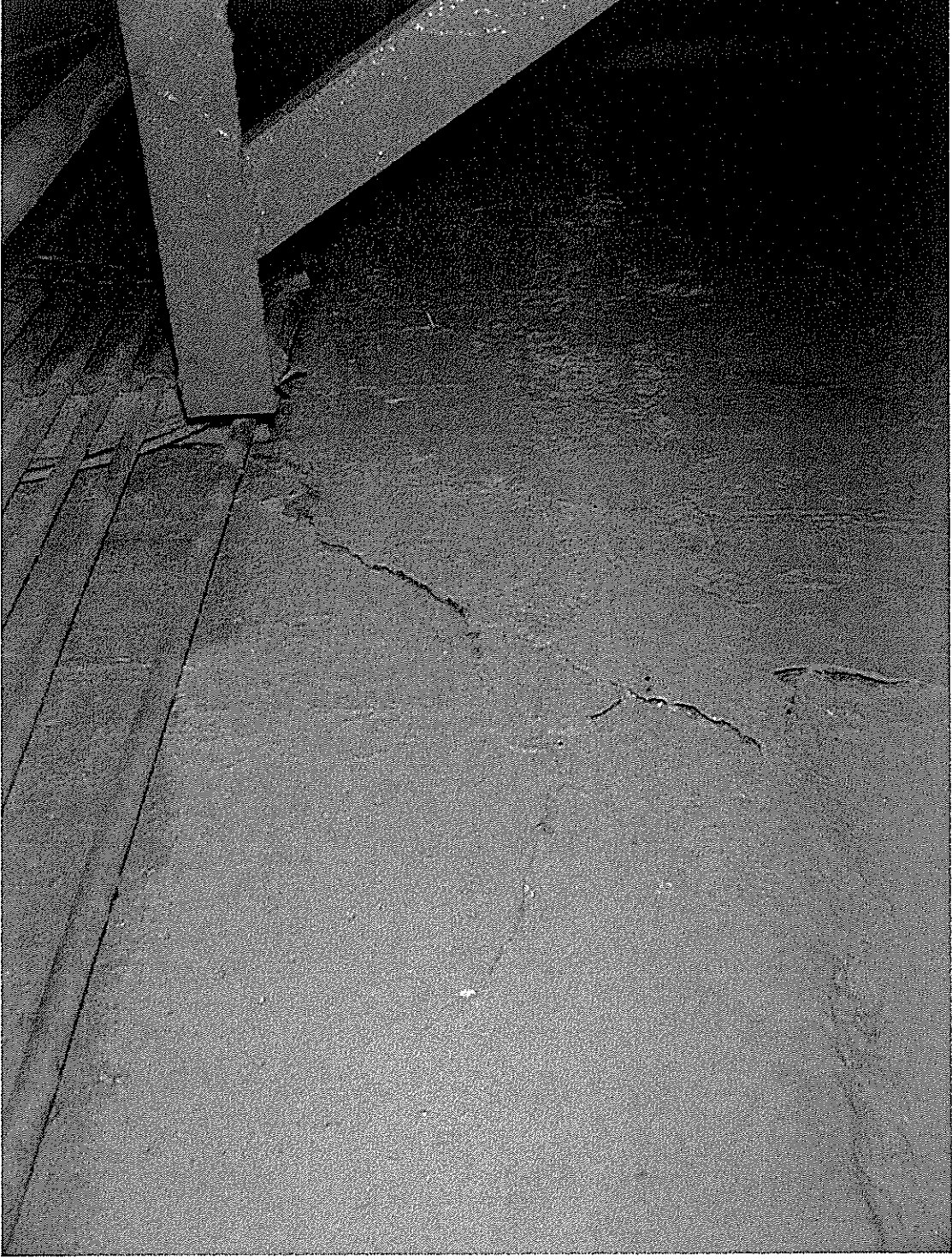
00060131.jpg



00060132.jpg

IWL-043-002





IWL-043-002

00060133.jpg



00060134.jpg

IWL-043-002

**FORM VT-3C**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-3C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-06  
 ZONE NUMBER: IWL-043-003 DRAWING NO.: 320840  
 EQUIPMENT USED: Mag-Lite flashlight (see note 4)

Work order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack			X		
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids		X			3
7.1.1.d Scaling			X		
7.1.1.e Spalling			X		
7.1.1.f Corrosion staining			X		
7.1.1.g Cracks	X				1
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel	X				2
7.1.1.j Coating deterioration				X	
Other					

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: C. Sward *C. Sward* DATE: 6/1/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable: Yes  No  (VT-1C Examination Required)

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature: *J.R. Eiten* Date: 6/30/00

AUTHORIZED NUCLEAR INSPECTOR REVIEW:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**FORM VT-1C**  
 CONTAINMENT INSERVICE INSPECTION  
 RECORD OF VT-1C EXAMINATION

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-06  
 ZONE NUMBER: IWL-043-003 DRAWING NO.: 320840  
 EQUIPMENT USED: Mag-Lite flashlight (see note 4)

Work Order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack			X		
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids		X			3
7.1.1.d Scaling			X		
7.1.1.e Spalling			X		
7.1.1.f Corrosion staining			X		
7.1.1.g Cracks	X				1
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel	X				2
7.1.1.j Coating deterioration				X	
Other					

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: C. Sward *C. Sward* DATE: 6/1/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable: Yes  No   
 Engineering Evaluation Required: Yes  No  Evaluation No.: CRS 2000 04138  
 Comments: The exposed steel (comment #2) requires evaluation. The items mentioned in comment #3 are not significant relative to containment integrity. The delamination in comment #1 was previously identified & has been addressed.  
 Signature: *[Signature]* Date: 6/30/00

AUTHORIZED NUCLEAR INSPECTOR (ANII) REVIEW:

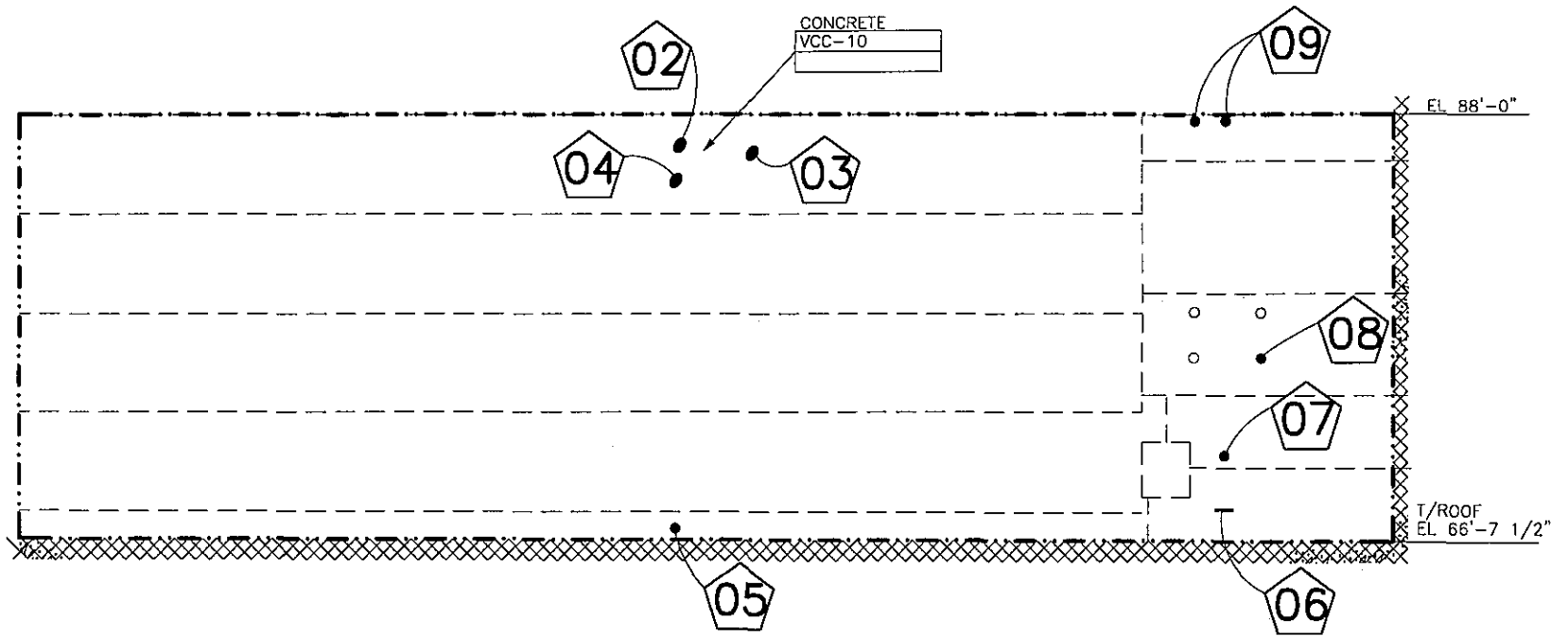
Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**FORM VT-3C (cont.)**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-3C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-06

No.	Comment	Initials
1	A large delamination exists in the lower right hand side of this zone. This item was previously identified by Con Edison and is being addressed via the condition reporting system.	CAS
2	Two pieces of embedded steel appearing to be cadweld splices are exposed at the surface of the concrete. Slight corrosion is evident but no streaking or staining of the concrete.	CAS
3	A small surface defect (approx. 2' dia.) and several unfilled form tie holes were noted but are insignificant relative to containment structural integrity.	CAS
4	This area was examined from the floor level at El. 46'. The examination distances were a maximum of 20 feet. While this distance exceeds the limits for direct visual examination, it was too short for use of the binoculars due to their minimum focal length. Lighting levels using the flashlight exceeded the 50 foot-candle requirement. Approximately 10% of this zone was not visible for inspection by direct line of sight due to various obstructions.	CAS



**CONCRETE INSPECTION ZONE IWL-068-003**  
 (EXTERIOR DEVELOPED VIEW, LOOKING FROM OUTSIDE)

**XX** -DENOTES COMMENT NUMBER ON INSPECTION FORM.



IWL-068-003

00053120.jpg



00053121.jpg

IWL-068-003





IWL-068-003

00053122.jpg



IWL-068-003

00053123.jpg





IWL-068-003

00053124.jpg





IWL-068-003

00053125.jpg



IWL-068-003

00053126.jpg

FORM VT-3C  
 CONTAINMENT INSERVICE INSPECTION  
 RECORD OF VT-3C EXAMINATION

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-11  
 ZONE NUMBER: IWL-068-004 DRAWING NO.: 320845  
 EQUIPMENT USED: Mag-Lite flashlight (See note 1)

Work order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack			X		
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids			X		
7.1.1.d Scaling			X		
7.1.1.e Spalling			X		
7.1.1.f Corrosion staining			X		
7.1.1.g Cracks			X		
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel			X		
7.1.1.j Coating deterioration			X		
Other					

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: C. Sward *C. Sward* DATE: 6/1/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable : Yes  No  (VT-1C Examination Required)

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature: *Bar Sward* Date: 6/30/00

AUTHORIZED NUCLEAR INSPECTOR REVIEW:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**FORM VT-3C (cont.)**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-3C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-11

No.	Comment	Initials
1	An area approx. 20' x 8' was not visible for direct visual examination due to obstruction by electrical cabinets.	



**FORM VT-3C**  
 CONTAINMENT INSERVICE INSPECTION  
 RECORD OF VT-3C EXAMINATION

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-12  
 ZONE NUMBER: IWL-088-001 DRAWING NO.: 320846  
 EQUIPMENT USED: Celestron Giant 20x80 Binoculars (Ser. No. 990176)

Work Order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a. Leaching or chemical attack			X		
7.1.1.b. Abrasion or corrosion			X		
7.1.1.c. Popouts or voids			X		
7.1.1.d. Scaling			X		
7.1.1.e. Spalling			X		
7.1.1.f. Corrosion staining			X		
7.1.1.g. Cracks			X		
7.1.1.h. Settlement or deflection			X		
7.1.1.i. Exposed reinforcing steel			X		
7.1.1.j. Coating deterioration				X	
Other		X			1

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: R. Namperumal *R. Namperumal* DATE: 5/26/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable: Yes  No  (VT-1C Examination Required)

Comments: The observed condition remains from original construction  
and does not reflect ongoing degradation.

Signature: *[Signature]* Date: 6/20/00

AUTHORIZED NUCLEAR INSPECTOR REVIEW:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**FORM VT-3C (cont.)**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-3C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-12

No.	Comment	Initials
1	Non-uniformity of surface color and texture observed at various locations in the zone. The condition does not indicate significant material deterioration of the concrete.	RW



**FORM VT-3C**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-3C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-13

ZONE NUMBER: IWL-088-002 DRAWING NO.: 320847

EQUIPMENT USED: Celestron Giant 20x80 Binoculars (Ser. No. 990176)

Work Order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack			X		
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids			X		
7.1.1.d Scaling	X				2
7.1.1.e Spalling			X		
7.1.1.f Corrosion staining			X		
7.1.1.g Cracks			X		
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel			X		
7.1.1.j Coating deterioration				X	
Other		X			1

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: C. Sward *Chris Sward* DATE: 5/31/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable: Yes  No  (VT-1C Examination Required)

Comments: The observed conditions remain from the original concrete placement and do not reflect any ongoing degradation.

Signature: *BA Sward* Date: 6/20/00

AUTHORIZED NUCLEAR INSPECTOR REVIEW:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



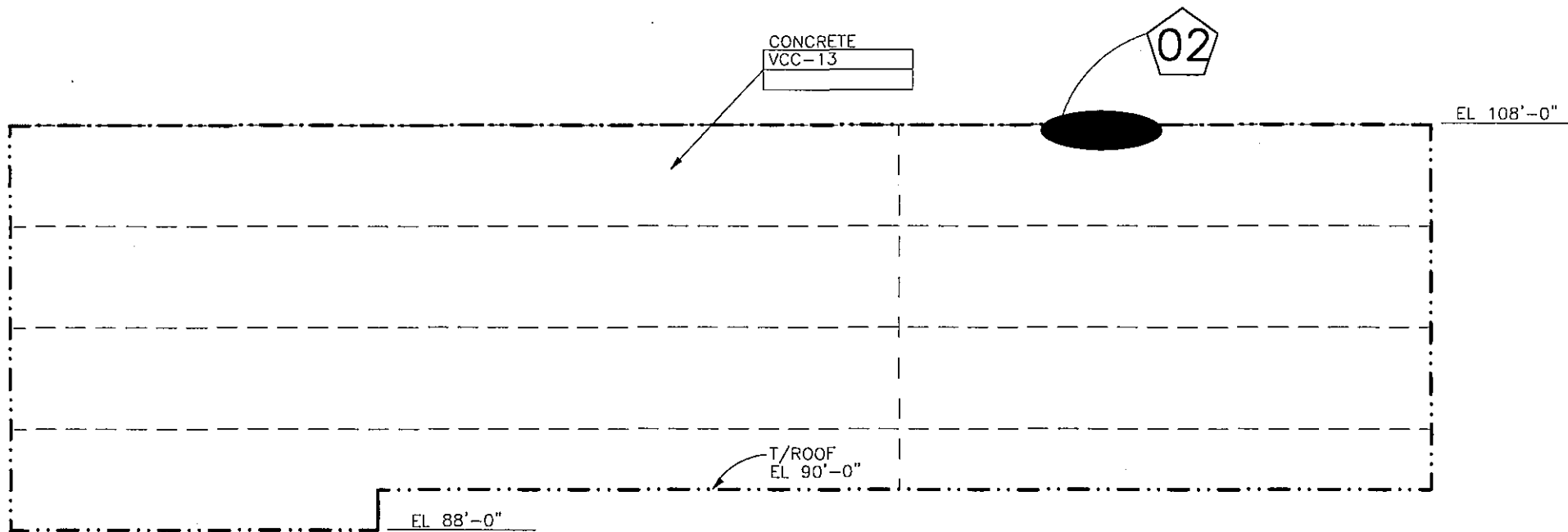


**FORM VT-3C (cont.)**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-3C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-13

No.	Comment	Initials
1	Non-uniformity of surface color and texture observed at various locations in the zone. The condition does not indicate significant material deterioration of the concrete.	CAS
2	An area approximately 4' long by 1' high near the top of the zone & in line with the southern most relief valve silencer has aggregate exposed due to loss of surface paste. See photo 00053135	CAS





**CONCRETE INSPECTION ZONE IWL-088-002**  
 (EXTERIOR DEVELOPED VIEW, LOOKING FROM OUTSIDE)



-DENOTES COMMENT NUMBER ON INSPECTION FORM.



IWL-088-002

00053135.jpg



**FORM VT-3C**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-3C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-14  
 ZONE NUMBER: IWL-088-003 DRAWING NO.: 320848  
 EQUIPMENT USED: Celestron Giant 20x80 Binoculars (Ser. No. 990176)

Work order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack			X		
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids			X		
7.1.1.d Scaling			X		
7.1.1.e Spalling			X		
7.1.1.f Corrosion staining			X		
7.1.1.g Cracks			X		
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel	X				2,3
7.1.1.j Coating deterioration				X	
Other		X			1

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: C. Sward *C. Sward* DATE: 5/31/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable : Yes  No  (VT-1C Examination Required)

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature: *B. A. Eder* Date: 6/30/00

AUTHORIZED NUCLEAR INSPECTOR REVIEW:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**FORM VT-1C**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-1C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-14  
 ZONE NUMBER: IWL-088-003 DRAWING NO.: 320848  
 EQUIPMENT USED: Celestron Giant 20x80 Binoculars (Ser. No. 990176)

Work order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack			X		
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids			X		
7.1.1.d Scaling			X		
7.1.1.e Spalling			X		
7.1.1.f Corrosion staining			X		
7.1.1.g Cracks			X		
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel	X				2,3
7.1.1.j Coating deterioration				X	
Other		X			1

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: C. Sward *Chris Sward* DATE: 5/31/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable : Yes  No

Engineering Evaluation Required : Yes  No  Evaluation No.: CRS 2000 04138

Comments : The exposed bars require further evaluation. The condition described in comment #1 originated from original construction and does not reflect degradation.

Signature: *J A Ester* Date: 6/30/01

AUTHORIZED NUCLEAR INSPECTOR (ANII) REVIEW:

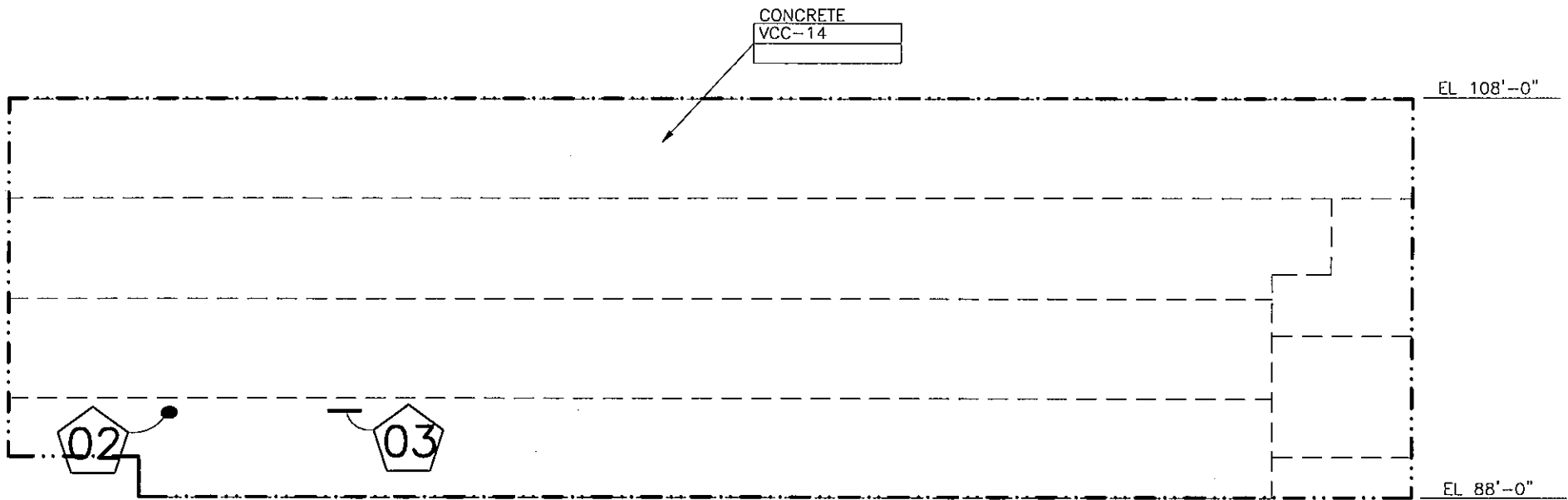
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FORM VT-3C (cont.)  
CONTAINMENT INSERVICE INSPECTION  
RECORD OF VT-3C EXAMINATION

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-14

No.	Comment	Initials
1	Non-uniformity of surface color and texture observed at various locations in the zone. The condition does not indicate significant material deterioration of the concrete.	CAS
2	A small section of reinforcing steel is exposed and is corroded. Based on its size and orientation it does not appear to be main reinforcing steel but could be a shear bar. See photo 00053130	CAS
3	A small section of reinforcing steel is exposed and is corroded. Based on its size and orientation it does not appear to be main reinforcing steel but could be a shear bar. See photo 00053131	CAS



**CONCRETE INSPECTION ZONE IWL-088-003**  
(EXTERIOR DEVELOPED VIEW, LOOKING FROM OUTSIDE)



-DENOTES COMMENT NUMBER ON INSPECTION FORM.





IWL-088-003

00053130.jpg



IWL-088-003

00053131.jpg





**FORM VT-3C**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-3C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-15  
 ZONE NUMBER: IWL-088-004 DRAWING NO.: 320849  
 EQUIPMENT USED: Celestron Giant 20x80 Binoculars (Ser. No. 990176)

Work order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack	X				2
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids			X		
7.1.1.d Scaling			X		
7.1.1.e Spalling	X				3
7.1.1.f Corrosion staining			X		
7.1.1.g Cracks			X		
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel	X				3,4,5
7.1.1.j Coating deterioration				X	
Other		X			1

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: R. Namperumal *R. Namperumal* DATE: 5/25/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable : Yes  No  (VT-1C Examination Required)

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature: *R. Namperumal* Date: 6/20/00

AUTHORIZED NUCLEAR INSPECTOR REVIEW:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**FORM VT-1C**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-1C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-15  
 ZONE NUMBER: IWL-088-004 DRAWING NO.: 320849  
 EQUIPMENT USED: Celestron Giant 20x80 Binoculars (Ser. No. 990176)

Work order No, NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack	X				2
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids			X		
7.1.1.d Scaling			X		
7.1.1.e Spalling	X				3
7.1.1.f Corrosion staining			X		
7.1.1.g Cracks			X		
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel	X				3,4,5
7.1.1.j Coating deterioration				X	
Other		X			1

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: R. Namperumal *R. Namperumal* DATE: 5/25/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable: Yes  No

Engineering Evaluation Required: Yes  No  Evaluation No.: CRS 2000 04138

Comments: Engineering evaluation IS required for the conditions noted in comments #3 #4 & #5. The other conditions are not significant relative to containment integrity.

Signature: *RA Site* Date: 6/30/00

AUTHORIZED NUCLEAR INSPECTOR (ANII) REVIEW:

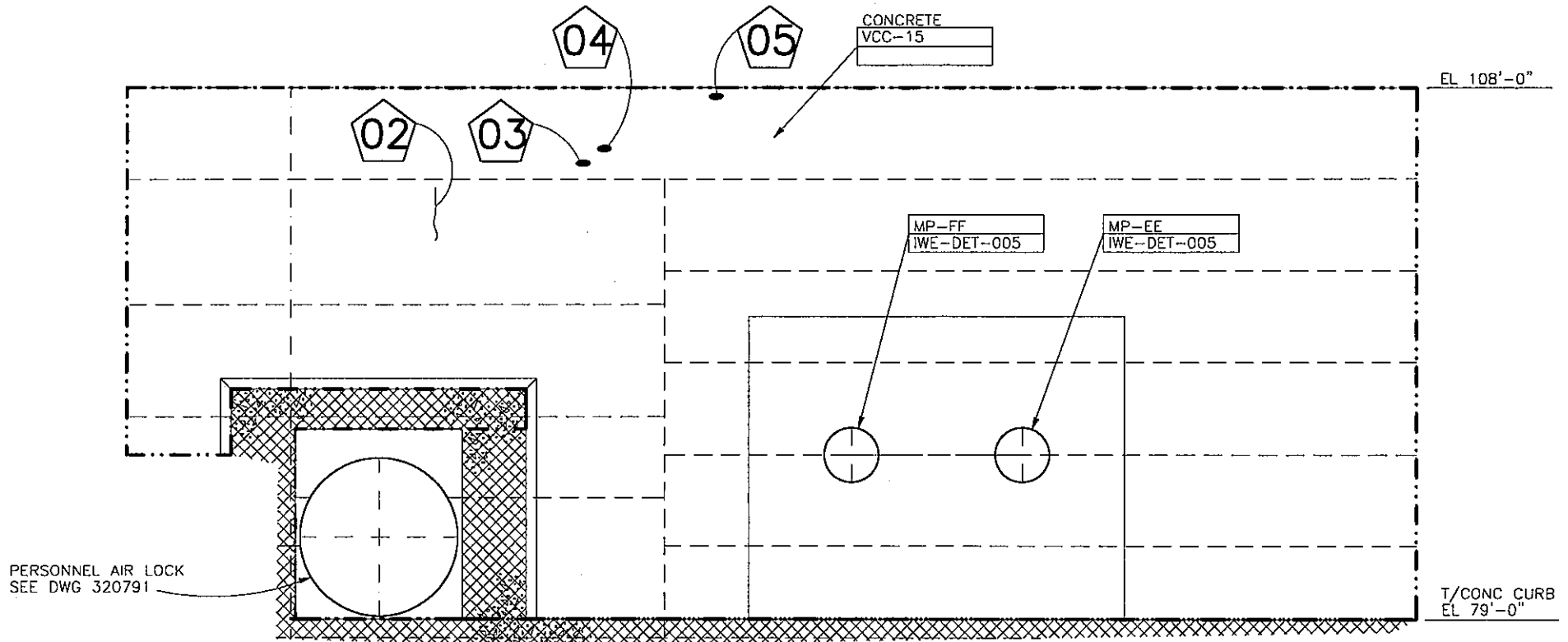
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**FORM VT-3C (cont.)**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-3C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-15

No.	Comment	Initials
1	Non-uniformity of surface color and texture observed at various locations in the zone. The condition does not indicate significant material deterioration of the concrete.	RW
2	2' long white deposit from top of construction opening closure grout. See photo 00052616	RW
3	Concrete spall about 8" square area about to popout. See photo 00052613	RW
4	Rebar exposure accompanied by 4" concrete spall. See photo 00052613	RW
5	10"x4" concrete spall exposing 8" length of cadweld sleeve. Only 1/2" concrete cover in this area. See photo 00052615	RW



**CONCRETE INSPECTION ZONE IWL-088-004**  
 (EXTERIOR DEVELOPED VIEW, LOOKING FROM OUTSIDE)



-DENOTES COMMENT NUMBER ON INSPECTION FORM.



00052613.jpg

IWL-088-004



00052615.jpg

IWL-088-004





IWL-088-004

00052616.jpg





**FORM VT-3C**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-3C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-16  
 ZONE NUMBER: IWL-088-005 DRAWING NO.: 3208850  
 EQUIPMENT USED: None (see note 2)

Work Order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack			X		
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids			X		
7.1.1.d Scaling			X		
7.1.1.e Spalling			X		
7.1.1.f Corrosion staining			X		
7.1.1.g Cracks			X		
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel			X		
7.1.1.j Coating deterioration				X	
Other		X			1

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: C. Sward *Chris Sward* DATE: 6/1/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable : Yes  No  (VT-1C Examination Required)

Comments: The condition noted in comment #1 resulted from original construction and does not reflect ongoing degradation.

Signature: *BA Sward* Date: 6/30/00

AUTHORIZED NUCLEAR INSPECTOR REVIEW:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**FORM VT-3C (cont.)**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-3C EXAMINATION.**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-16

No.	Comment	Initials
1	Non-uniformity of surface color and texture observed at various locations in the zone. The condition does not indicate significant material deterioration of the concrete.	CAS
2	This area was examined from the concrete slab at El. 79'. The examination distances were a maximum of 25 feet. While this distance exceeds the limits for direct visual examination, it was too short for use of the binoculars due to their minimum focal length. Ambient (outdoor) lighting levels exceeded the 50 foot-candle requirement.	CAS



**FORM VT-3C**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-3C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-17  
 ZONE NUMBER: IWL-088-006 DRAWING NO.: 320857  
 EQUIPMENT USED: Celestron Giant 20x80 Binoculars (Ser. No. 990176)

Work order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack			X		
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids			X		
7.1.1.d Scaling			X		
7.1.1.e Spalling			X		
7.1.1.f Corrosion staining			X		
7.1.1.g Cracks			X		
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel			X		
7.1.1.j Coating deterioration				X	
Other		X			1

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: R. Namperumal *R. Namperumal* DATE: 5/25/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable: Yes  No  (VT-1C Examination Required)

Comments: The condition noted in comment #1 resulted from original construction and does not reflect ongoing degradation.

Signature: *R. Namperumal* Date: 6/30/01

AUTHORIZED NUCLEAR INSPECTOR REVIEW:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



FORM VT-3C (cont.)  
CONTAINMENT INSERVICE INSPECTION  
RECORD OF VT-3C EXAMINATION

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-17

No.	Comment	Initials
1	Non-uniformity of surface color and texture observed at various locations in the zone. The condition does not indicate significant material deterioration of the concrete.	RN



**FORM VT-3C**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-3C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-18  
 ZONE NUMBER: IWL-108-001 DRAWING NO.: 320852  
 EQUIPMENT USED: Celestron Giant 20x80 Binoculars (Ser. No. 990176)

Work order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack	X				2,3
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids			X		
7.1.1.d Scaling			X		
7.1.1.e Spalling			X		
7.1.1.f Corrosion staining			X		
7.1.1.g Cracks			X		
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel			X		
7.1.1.j Coating deterioration				X	
Other		X			1

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: R. Namperumal *R. Namperumal* DATE: 5/26/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable: Yes  No  (VT-1C Examination Required)

Comments: The observed conditions are not significant relative to containment integrity.

Signature: *R. Namperumal* Date: 6/30/00

AUTHORIZED NUCLEAR INSPECTOR REVIEW:

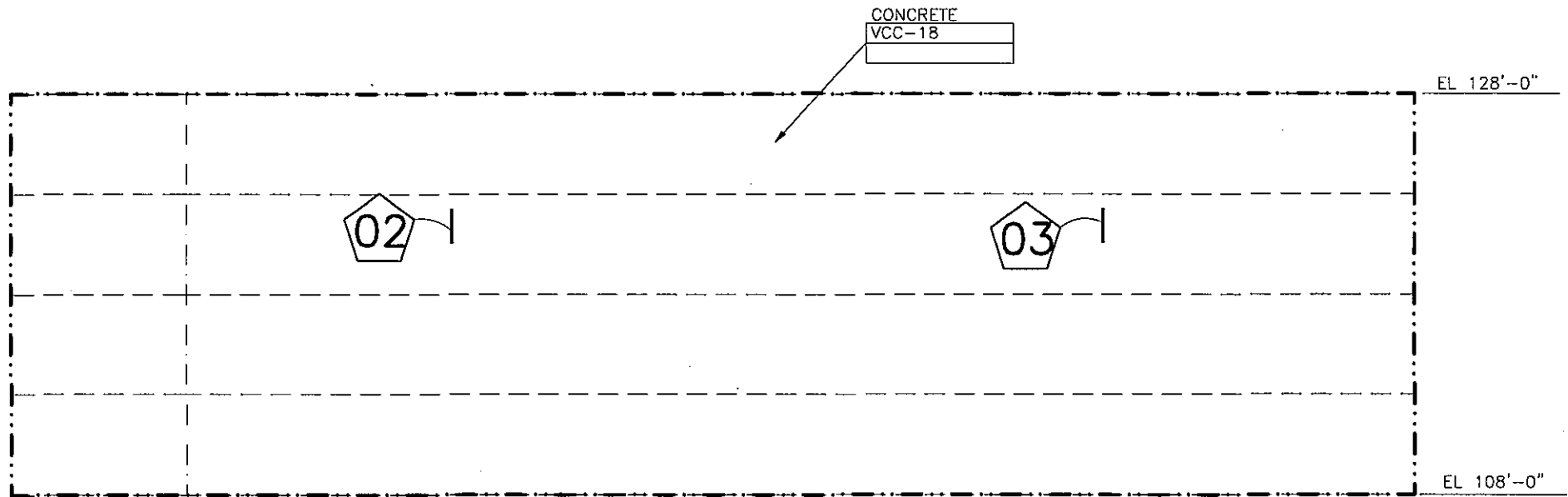
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**FORM VT-3C (cont.)**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-3C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-18

No.	Comment	Initials
1	Non-uniformity of surface color and texture observed at various locations in the zone. The condition does not indicate significant material deterioration of the concrete.	RN
2	18" long leaching from the construction joint down to the form tie hole mortar patch	RN
3	leaching about the same length as in item 2	RN



**CONCRETE INSPECTION ZONE IWL-108-001**  
(EXTERIOR DEVELOPED VIEW, LOOKING FROM OUTSIDE)



-DENOTES COMMENT NUMBER ON INSPECTION FORM.





**FORM VT-3C**  
 CONTAINMENT INSERVICE INSPECTION  
 RECORD OF VT-3C EXAMINATION

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-19  
 ZONE NUMBER: IWL-108-002 DRAWING NO.: 320853  
 EQUIPMENT USED: Celestron Giant 20x80 Binoculars (Ser. No. 990176)

Work Order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack	X				5
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids			X		
7.1.1.d Scaling			X		
7.1.1.e Spalling			X		
7.1.1.f Corrosion staining		X			3,4
7.1.1.g Cracks			X		
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel	X				2
7.1.1.j Coating deterioration				X	
Other		X			1

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: C. Sward *C. Sward* DATE: 6/1/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable: Yes  No  (VT-1C Examination Required)

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature: *[Signature]* Date: 6/30/00

AUTHORIZED NUCLEAR INSPECTOR REVIEW:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**FORM VT-1C**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-1C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-19  
 ZONE NUMBER: IWL-108-002 DRAWING NO.: 320853  
 EQUIPMENT USED: Celestron Giant 20x80 Binoculars (Ser. No. 990176)

Work order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack	X				5
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids			X		
7.1.1.d Scaling			X		
7.1.1.e Spalling			X		
7.1.1.f Corrosion staining		X			3,4
7.1.1.g Cracks			X		
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel	X				2
7.1.1.j Coating deterioration				X	
Other		X			1

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: C. Sward *[Signature]* DATE: 6/1/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable: Yes  No

Engineering Evaluation Required: Yes  No  Evaluation No.: CRS 2000 04/38

Comments: Engineering evaluation is required for the exposed reinforcing steel (comment #2, #3 & #4). The leaching (comment #5) is not significant. The surface texture (comment #1) results from original construction and does not reflect degradation.

Signature: *[Signature]* Date: 6/30/00

AUTHORIZED NUCLEAR INSPECTOR (ANII) REVIEW:

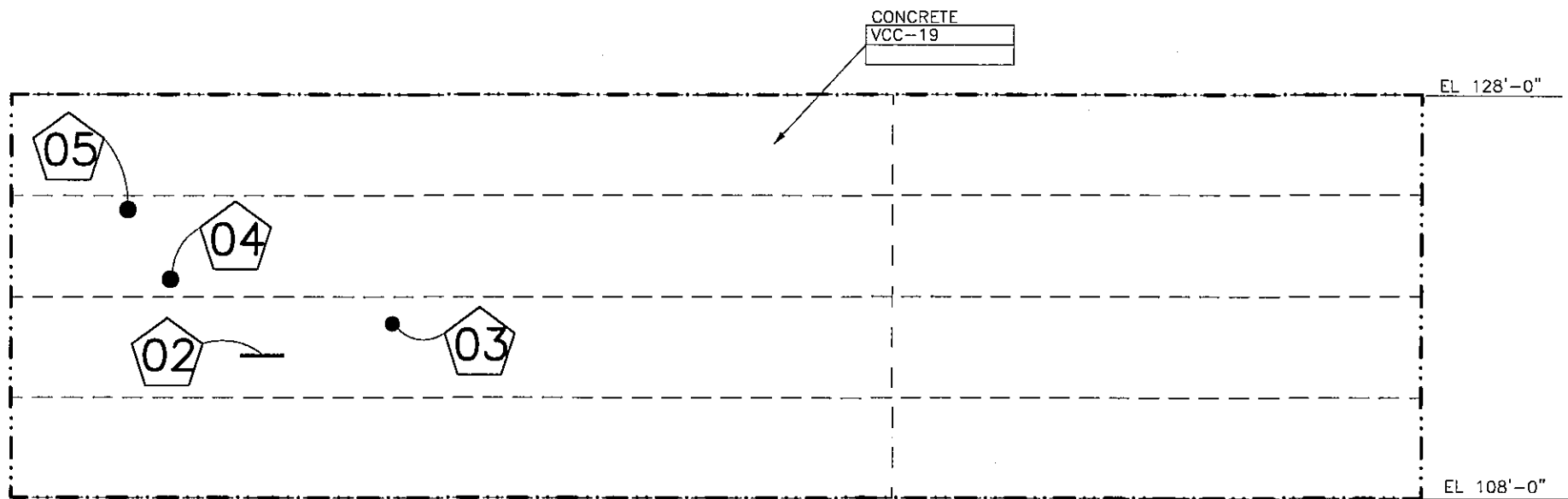
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FORM VT-3C (cont.)  
CONTAINMENT INSERVICE INSPECTION  
RECORD OF VT-3C EXAMINATION

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-19

No.	Comment	Initials
1	Non-uniformity of surface color and texture observed at various locations in the zone. The condition does not indicate significant material deterioration of the concrete.	CAS
2	Exposed cadweld (approx. 9" long) with corrosion apparently due to inadequate cover. See photo 00060116	CAS
3	A small spot of corrosion appears on the concrete surface. It is not apparent whether this is reinforcing steel, a cadweld or miscellaneous steel. See photo 00060117.	CAS
4	A small spot of corrosion appears on the concrete surface. It is not apparent whether this is reinforcing steel, a cadweld or miscellaneous steel. See photo 00060118	CAS
5	Leaching is evident approximately 18" long extending downward from the construction joint.	CAS



**CONCRETE INSPECTION ZONE IWL-108-002**  
 (EXTERIOR DEVELOPED VIEW, LOOKING FROM OUTSIDE)

 -DENOTES COMMENT NUMBER ON INSPECTION FORM.



IWL-108-002

00060116.jpg



IWL-108-002

00060117.jpg





IWL-108-002

00060118.jpg





**FORM VT-3C**  
 CONTAINMENT INSERVICE INSPECTION  
 RECORD OF VT-3C EXAMINATION

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-20  
 ZONE NUMBER: IWL-108-003 DRAWING NO.: 320854  
 EQUIPMENT USED: Celestron Giant 20x80 Binoculars (Ser. No. 990176)

Work Order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack			X		
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids		X			6,7
7.1.1.d Scaling			X		
7.1.1.e Spalling	X				2,4,5,8,9
7.1.1.f Corrosion staining	X				6
7.1.1.g Cracks		X			7
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel	X				
7.1.1.j Coating deterioration				X	
Other		X			1

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: R. Namperumal *R. Namperumal* DATE: 5/26/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable: Yes  No  (VT-1C Examination Required)

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature: *BCA Sule* Date: 6/30/00

AUTHORIZED NUCLEAR INSPECTOR REVIEW:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**FORM VT-1C**  
**CONTAINMENT INSERVICE INSPECTION**  
**RECORD OF VT-1C EXAMINATION**

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-20  
 ZONE NUMBER: IWL-108-003 DRAWING NO.: 320854  
 EQUIPMENT USED: Celestron Giant 20x80 Binoculars (Ser. No. 990176)

Work Order No. NP-99-11274

Recording Conditions	RI	NRI	NI	NA	Comments
7.1.1.a Leaching or chemical attack			X		
7.1.1.b Abrasion or corrosion			X		
7.1.1.c Popouts or voids		X			6,7
7.1.1.d Scaling			X		
7.1.1.e Spalling	X				2,4,5,8,9
7.1.1.f Corrosion staining	X				6
7.1.1.g Cracks		X			7
7.1.1.h Settlement or deflection			X		
7.1.1.i Exposed reinforcing steel	X				
7.1.1.j Coating deterioration				X	
Other		X			1

(Note: Sketches may be attached to clarify inspection areas and locations of indications.)

EXAMINED BY: R. Namperumal *R. Namperumal* DATE: 5/26/00

RESPONSIBLE ENGINEER REVIEW:

Acceptable: Yes  No   
 Engineering Evaluation Required: Yes  No  Evaluation No.: CRS 2000 04138

Comments: The surface texture (comment #1) resulted from original construction and does not reflect degradation of the containment. Engineering evaluation is needed for all of the other observed conditions.

Signature: *R. Namperumal* Date: 6/30/00

AUTHORIZED NUCLEAR INSPECTOR (ANII) REVIEW:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



FORM VT-3C (cont.)  
CONTAINMENT INSERVICE INSPECTION  
RECORD OF VT-3C EXAMINATION

STATION/UNIT: Indian Point 2 COMPONENT NO.: VCC-20

No.	Comment	Initials
1	Non-uniformity of surface color and texture observed at various locations in the zone. The condition does not indicate significant material deterioration of the concrete.	RW
2	6" diameter of concrete about to spall. See photo 00053113	RW
3	cadweld sleeve exposure, 6" long accompanied by concrete spall. See photo 00053113	RW
4	6" concrete spall. See photo 00053114	RW
5	6" concrete about to spall. See photo 00053115	RW
6	corrosion staining from 1 1/2" void hole. See photo 00053116	RW
7	4 bug holes along a minor horizontal crack about 20 mils wide. See photo 00053117	RW
8	3" concrete hole (spall) and 6" more concrete about to spall and expose reinforcing steel. See photo 00053118	RW
9	8" concrete about to spall. See photo 00053119 and 00053132	RW