Post Office Box 1020
201 North Berry Street
Brea, California 92621
(714) 529-1951 Telex 655342

Ameron
Protective Coatings
Division

DATE March 9, 1978

REPORT NO. 2509

REPAIRABILITY & MAINTENANCE

DIMETCOTE 6

DIMETCOTE EZ

AMERCOAT 90

AMERCOAT 66

AMERCOAT 71

This evaluation meets the requirements of:

Bechtel Standard CP-956
A.N.S.I. N101.2

DISTRIBUTION NO. _____

NAME _____

Ref: ORNL/Bechtel Spec

PRODUCT IDENTIFICATION

A-1

Product Name Dimetcote 6 Product Number

Generic Description Two component Solvent-based Inorganic Zinc Primer

Weight Per Gallon

Part A Liquid Range From 8.3 To 8.5

Part B Powder Range From 58.6 To 58.8

Part C N.A. Range From N.A. To N.A.

Viscosity - QC Acceptance Range (list method)
Federal Standard 141a Method 4287 Brookfield RVT Viscometer Spindle #2 @ 30 rpm

Part A - Range From 200 To 750 cps

Part B - Range From N.A. To N.A.

Part C - Range From N.A. To N.A.

Total Solids

Part A - 32.1 min. % Weight 18.35 min. % Volu

Part B - 100.0 % Weight 100.0 % Volu

Part C - N.A. % Weight N.A. % Volu

Flash Point Tag Open Cup ASTM D-1310-72

Part A - 65 °F

Part B - NA °F

Part C - NA °F

Mixed Components - 70 °F

Mixing Ratio

Part A 29.7 % By Weight 74.5% By Volume

Part B 70.3% By Weight 25.5% By Volume

Part C NA By Weight NA By Volume

Recoat Time (typical)	D6/D6	D6/ Epoxy Topcoat
at 40°F *		N/A
at 50°F *		24 hrs.
at 70°F *		24 hrs.
at 90°F *		24 hrs.

Full Cure Time** 48 hours At 50 °F
24 hours At 70 °F
15 hours At 90 °F

Service Temperature Limits

Maximum NA °F Wet 750°F °F Dry

Minimum NA °F Wet -100 °F Dry

Storage Life 12 Months or longer from shipment date when stored indoors @40-100°F

Pot Life - @ 50° F 48 hr @70° F 24 hr. @90 °F

Keep moisture out of product.

Compressive strength ASTM C-579-68 7 days @ 73° F NA

Tensile strength ASTM C-307-61 7 days @ 73° F

Modulus of Elasticity ASTM C-580-74 7 days @ 73° F

Flexural strength ASTM C-580-74 7 days @ 73° F

Initial set time ASTM C-308-71 @ 73° F

* When dry to touch
** Coin test - less time at R.H. above 50%

Date 3/19/78 Approved H K Shirer Test Report No.

REPAIRABILITY & MAINTENANCE TESTS

ANSI N101.2

TEST REPORT# 2509

REPAIR PROCEDURE

Front (Side with the Weld):

A 2" x 3/4" area was not primed and allowed to rust. This area and approximately 1/4" of primer was power tool cleaned with a 3M "Clean 'n Strip" Wheel. An area of approximately 1-1/2" x 3" was then repaired with Coat #2 and the bottom half of the panel was topcoated with Coat #3.

Back (Smooth Side):

A 2" x 3/4" area of the primer was damaged to bare metal using the 3M "Clean'n Strip" Wheel. Then an area of approximately 1-1/2" x 3" was repaired with Coat #2 and the bottom half of the panel was then topcoated with Coat #3.

DATE SUBMITTED January 16, 1978

TEST REPORT NO. 2509

REPAIRABILITY & MAINTENANCE

ANSI N101.2

TEST PANEL PREPARATION DATA

1. PRODUCT TO BE TESTED Dimetcote 6/Dimetcote 6/Amercoat 90
2. TYPE OF SUBSTRATE: ASTM A 36 plus Weld SIZE 3" x 5" x 1/4"
3. SURFACE PRAPARATION (describe): Gritblasted to SSPC-SP10 minimum, with G-40 Steel grit. Profile Front: 2G/S 76, Back: 2G/S 76; Keane-Tator Profile Comparator
4. REPAIR PROCEDURE:

   SEE ATTACHED REPAIR PROCEDURE
5. DATE CURING COMPOUND OR PRIMER APPLIED 11/15/77
6. PRODUCT DATA: SAMPLE No. (S) 2-1 RA (1)

SIDE	COAT	PRODUCT	PRODUCT CODES	BATCH #	APPLICATION METHOD	CONDITIONS R/M (°F)	%R.H.	THICKNESS (ins)	DATE APPLIED
F	1	Dimetcote	6	1-710349 1-705215	Suction Gun	75°	42%	0.0032"	11/15/77 4:15 PM
	2	Dimetcote	6	1-710349 1-705215	Suction Gun	66°	64%	0.0022"	1/4/78 4:00 PM
	3	Amercoat	90	1-701069 1-701068	Suction Gun	66°	65%	0.0060"	1/9/78 3:00 PM
B	1	Dimetcote	6	1-710349 1-705215	Suction Gun	76°	40%	0.0027"	11/15/77 4:50 PM
	2	Dimetcote	6	1-710349 1-705215	Suction Gun	66°	64%	0.0020"	1/4/78 4:00 PM
	3	Amercoat	90	1-701069 1-701068	Suction Gun	66°	65%	0.0043"	1/9/78 3:00 PM

F = Front B = Back

7. CURING CONDITIONS: AMBIENT TEMP 70 ± 10 °F REL. HUMIDITY 50 ± 10 %

   MINIMUM CURE 7 DAYS
8. TEST PROCEDURE: ANSI N101.2 and Bechtel CP-956
9. TESTING PERFORMED BY: Oak Ridge National Lab. DATE SUBMITTED January 16, 1978

GValdes HK

Manufacturer: Bechtel Corporation
Norwalk, California

Analytical Chemistry Division
Oak Ridge National Laboratory
Date: February 3, 1978

Table 1. DBA Solution Composition, Distilled Water.

0.28 M boric acid (3,000 ppm boron)
0.064 M sodium thiosulfate
Adjusted to pH 9.5 with sodium hydroxide

ORNL Log Book No. A 7562; A1-26-8

Table 2. DBA Test Conditions.*

Time	Temperature (°F)	Pressure (psig)	Comments
Start	170		Autoclave preheated.
20 seconds	340	70 (10 sec)	Steam injected.
6 hours	340	70	Pressure maintained by relief valve.
20 seconds	270	30	Spray solution added at 75°F.
20 minutes	270-250	30	
4 days	250	30	
20 seconds	170	-15	Fresh spray solution added at 75°F after draining autoclave.
15 minutes	170-200	10	
3 days	200	10	
End of test			

*The above data are taken from recorder charts on permanent file at ORNL.

Evaluated [signature]

Approved [signature]

Manufacturer: Ameron
Brea, Calif.

Analytical Chemistry Division
Oak Ridge National Laboratory
Date: February 3, 1978

System Identification: X Steel ___ Concrete Block

D-6/D-6/A-90

DBA Test Results:

ORNL Master Analytical Manual Method No. 2 0922;
Bechtel Corp. Spec. No. CP-956;
ORNL Log Book No. A 7562; A1-26-8

Sample No.	DBA Phase	Comments**
19	spray	Weld side - primer, repair, topcoat, intact.
		Flat side - primer, repair, topcoat, intact.
20	spray	Weld side - primer, repair, topcoat, intact.
		Flat side - primer, repair, topcoat, intact.

*Irradiated.

**(SA) = sand blast; (SH) = shot blast; (GR) = grit blast.

Evaluated [signature]

Approved L. T. Corbin

WELLS

4599 South Wayside Drive
Houston, Texas 77087
(713) 644-6662 Telex: 775384

Ameron
Protective Coatings
Division

April 10, 1984

Mr. Tom Kelly
Ebasco Services, Inc.
Texas Utilities Generating/Comanche Peak
P. O. Box 1002
Glen Rose, Texas 76043

Dear Tom:

Attached is the Oak Ridge test of Dimetcote 6 inorganic zinc that you requested.

No matter what surface preparation method is utilized, we changed the specification to be equal to SP-10 in all respects. Hand tool or power tool cleaning that would be equivalent to an SSPC SP-10 or better, is required.

If you have any questions, give me a call.

Very truly yours,

Gene Centofanti

Gene Centofanti, P.E.
Engineering Services
Manager

GC:mh
Att.

6801 Silsbee Avenue
Post Office Box 33327
Houston, Texas 77033
(713) 644-5662 Telex: 775384

Protective Coatings
Division

DBA
Reports.
Site Cont
Engr Eds.
TK

November 8, 1979

Mr. Gordon McPhail
Brown & Root, Inc.
P.O. Box 1001
Glen Rose, Texas 76043

Dear Gordon:

Comanche Peak

Enclosed is a copy of LSR-1842 which DBA testing of the system CZ-11/Dimetcote 6/Amercoat 66 (samples 6a, 6b, 6A1, 6A2, and 6A3). A copy of this LSR had been sent earlier with my letter of August 24, 1979, concerning repair procedures using Amercoat 71.

Very truly yours,

Noel C. Duvic
Area Technical Service Manager

NCD:gf
Enc.

cc: H. H. Kline/Ameron-Brea
R. R. McMurchy/Ameron-Houston
G. Centofanti/Ameron-Houston

Davis Besse - Ohio -

Manufacturer: Amoron
Protective Coatings Division

Amoron Coatings Lab
Date: August 19, 1977

Table 1. DBA Solution Composition, Distilled Water.

13,000 ppm Boric Acid
2,000 ppm Lithium Hydroxide
[illegible] Sodium Thiosulfate
Sodium Hydroxide to pH 9.5 to 10.0 at 80°F

Table 2. DBA Test Conditions.

Time	Temperature (°F)	Pressure (psig)	Comments
Start	70	0	opened automatic steam valve
25 seconds	300	70	Start circulating pump & heaters
100 seconds	290	50-60	Released pressure
16 minutes	250	40	
2.75 hrs.	220	10	Closed steam valve
27.75 hrs.	160	0	
End of Test			

Approved [illegible]

Test Reference No. 1942

Aberon Coatings Lab.

DJR

Date: August 19, 1977

TEST PANEL PREPARATION DATA

1. PRODUCT TO BE TESTED CZ-11, Dimetcote 6, Abercoat 71, Abercoat 90, Abercoat 66

2. TYPE SUBSTRATE Steel SIZE: 2 x 5 x 1/16"

3. SURFACE PREPARATION (describe): Sandblasted SSPC SP-10 or better

4. PRODUCT DATA: SAMPLE NO. (s): as listed

5. DATE AND TIME CURING COMPOUND OR PRIMER APPLIED

SAMPLE NUMBER	COATING SYSTEM	APPLICATION METHOD	CONDITIONS R/H °F/T.A.	THICKNESS TYPE A (Mils.)	THICKNESS TYPE B APPLIED
1842- 1	CZ-11 (aged)/71/66				
1842- 2	CZ-11 (sweep blast)/71/66				
1842- 3	CZ-11/D-6/66				
1842- 4	CZ-11 (sweep blast)/D-6/66				
1842- 5a	CZ-11 (cured 24 hrs.)/71/66				
1842- 5b	CZ-11 (cured 24 hrs.)/71/66				
1842- 5A1	CZ-11 (sweep blast)/71/66				
1842- 5A2	CZ-11 (sweep blast)/71/66				
1842- 5A3	CZ-11 (sweep blast)/71/66				
1842- 6a	CZ-11/D-6/66				
1842- 6b	CZ-11/D-6/66				
1842- 6A1	CZ-11 (sweep blast)/D-6/66				
1842- 6A2	CZ-11 (sweep blast)/D-6/66				
1842- 6A3	CZ-11 (sweep blast)/D-6/66				
1842- 7a	CZ-11/D-6/90				
1842- 7b	CZ-11/D-6/90				
1842- 7A1	CZ-11 (sweep blast)/D-6/90				
1842- 7A2	CZ-11 (sweep blast)/D-6/90				
1842- 7A3	CZ-11 (sweep blast)/D-6/90				
1842- 8a	CZ-11/90				
1842- 8b	CZ-11/90				

Applied according to application instructions for the product to recommended dry film thickness.

TEST REPORT NO. 1842

Ameron Coatings Lab.

DBA

Date: August 10, 197

TEST PANEL PREPARATION DATA

1. PRODUCT TO BE TESTED CZ-11, Dimetcote 6, Amercoat 71, Amercoat 90

2. TYPE SUBSTRATE: Steel SIZE: 2 x 6 x 1/16"

3. SURFACE PREPARATION (describe): Sandblasted SSPC SP-10 or better

4. PRODUCT DATA: SAMPLE No. (s) as listed

5. DATE AND TIME CURING COMPOUND OR PRIMER APPLIED

SAMPLE NUMBER	COATING SYSTEM	APPLICATION METHOD	CONDITIONS A/M (°F) R.H.	THICKNESS TIME APPLIED
1842- 9a	CZ-11/66			
1842- 9b	CZ-11/66			
1842-10a	D-6 (aged)/66			
1842-10b	D-6 (aged)/66			
1842-10c	D-6 (aged)/66			
1842-11a	D-6 (24 hrs.)/66			
1842-11b	D-6 (24 hrs.)/66			
1842-11c	D-6 (24 hrs.)/66			
1842-11d	D-6 (24 hrs.)/66			
1842-12a	D-6 (24 hrs.)/90			
1842-12b	D-6 (24 hrs.)/90			
1842-12c	D-6 (24 hrs.)/90			
1842-12d	D-6 (24 hrs.)/90			

Applied according to application instructions for the products to recommended dry film thickness.

6. CURING CONDITIONS: AMBIENT TEMP * °F REL. HUMIDITY *

MINIMUM CURE 7 DAYS AFTER TOPCOAT APPLICATION

7. TEST PROCEDURE: ANSI N101.2 - per attached DBA conditions

8. TESTING PERFORMED BY: Ameron Protective Coatings Division DATE SUBMITTED 1983

* Typical ambient laboratory conditions. Specific temperature and humidity not recorded.

TEST REPORT NO. 1842

Manufacturer Ameron

Protective Coatings Division

Boston District Office

Date August 19, 1977

SUBSTRATE MATERIAL: X STEEL CONCRETE MASONRY

TEST PROCEDURE: All samples scribed

SAMPLE NO.	COATING SYSTEM	CBA PHASE	COMMENTS
1842- 1	CZ-11 (aged)/71/66	1/2 Spray-1/2 Immersed	Coating intact-no defe
1842- 2	CZ-11 (sweep blast)/71/66	1/2 Spray-1/2 Immersed	Coating intact-no defe
1842- 3	CZ-11/D-6/66	1/2 Spray-1/2 Immersed	One #4 blister at edge
1842- 4	CZ-11 (sweep blast)/D-6/66	1/2 Spray-1/2 Immersed	Few #? blisters both s
1842- 5a	CZ-11 (cured 24 hrs.)/71/66	1/2 Spray-1/2 Immersed	Coating intact-no defe
1842- 5b	CZ-11 (cured 24 hrs.)/71/66	1/2 Spray-1/2 Immersed	Coating intact-no defe
1842- 5A1	CZ-11 (sweep blast)/71/66	1/2 Spray-1/2 Immersed	Coating intact-no defe
1842- 5A2	CZ-11 (sweep blast)/71/66	1/2 Spray-1/2 Immersed	Coating intact-no defe
1842- 5A3	CZ-11 (sweep blast)/71/66	1/2 Spray-1/2 Immersed	Coating intact-no defe
1842- 6a	CZ-11/D-6/66	1/2 Spray-1/2 Immersed	One #2 blister
1842- 6b	CZ-11/D-6/66	1/2 Spray-1/2 Immersed	Two #2 blisters
1842- 6A1	CZ-11 (sweep blast)/D-6/66	1/2 Spray-1/2 Immersed	Coating intact-no defe
1842- 6A2	CZ-11 (sweep blast)/D-6/66	1/2 Spray-1/2 Immersed	Coating intact-no defe
1842- 6A3	CZ-11 (sweep blast)/D-6/66	1/2 Spray-1/2 Immersed	Two #2 blisters
1842- 7a	CZ-11/D-6/90	1/2 Spray-1/2 Immersed	Coating intact-no defe
1842- 7b	CZ-11/D-6/90	1/2 Spray-1/2 Immersed	Coating intact-no defe

Approved

Test Report No. 1842

Manufacturer Amercon
Protective Coatings Division

Amercon Coating Lab

Date August 19, 1977

SYSTEM IDENTIFICATION: X STEEL CONCRETE BLOCK

CEA TEST RESULTS: All samples scribed

SAMPLE NO:	COATING SYSTEM*	CEA PHASE	COMMENTS
1842- 7A1	CZ-11 (sweep blast)/ D-6/90	1/2 Spray-1/2 immersed	Coating intact-no defec
1842- 7A2	CZ-11 (sweep blast)/ D-6/90	1/2 Spray-1/2 immersed	Coating intact-no defec
1842- 7A3	CZ-11 (sweep blast)/ D-6/90	1/2 Spray-1/2 immersed	Coating intact-no defec
1842- 8a	CZ-11/90	1/2 Spray-1/2 immersed	Coating intact-no defec
1842- 8b	CZ-11/90	1/2 Spray-1/2 immersed	Coating intact-no defec
1842- 9a	CZ-11/66	1/2 Spray-1/2 immersed	Coating intact-no defec
1842- 9b	CZ-11/66	1/2 Spray-1/2 immersed	Coating intact-no defec
1842-10a	D-6 (aged)/66	1/2 Spray-1/2 immersed	Coating intact-no defec
1842-10b	D-6 (aged)/66	1/2 Spray-1/2 immersed	Two #6 blisters
1842-10c	D-6 (aged)/66	1/2 Spray-1/2 immersed	Coating intact-no defec
1842-10d	D-6 (aged)/66	1/2 Spray-1/2 immersed	Medium #2 blisters one side
1842-11a	D-6 (24 hrs.)/66	1/2 Spray-1/2 immersed	Coating intact-no defec
1842-11b	D-6 (24 hrs.)/66	1/2 Spray-1/2 immersed	Coating intact-no defec
1842-11c	D-6 (24 hrs.)/66	1/2 Spray-1/2 immersed	Coating intact-no defec
1842-11d	D-6 (24 hrs.)/66	1/2 Spray-1/2 immersed	Coating intact-no defect
1842-12a	D-6 (24 hrs.)/90	1/2 Spray-1/2 immersed	Coating intact-no defec
1842-12b	D-6 (24 hrs.)/90	1/2 Spray-1/2 immersed	Coating intact-no defec
1842-12c	D-6 (24 hrs.)/90	1/2 Spray-1/2 immersed	Coating intact-no defec
1842-12d	D-6 (24 hrs.)/90	1/2 Spray-1/2 immersed	Coating intact-no defec

Approved

Test Report No. 1842

carboline

TEST PANEL PREPARATION DATA

Testing Project #01978

Coating System: 1c Carboline 191 Primer/1c Phenoline 305 Finish

Substrate Type: Steel, Certified ST1 Surface Prep.: SSPC-SP3-63

For: DBA X Radiation X Decon ___Physical ___Chemical ___Other: _____

I. Coating System

1c Carboline 191 Primer	at	5	Mils DFT
1c Phenoline 305 Finish	at	4	Mils DFT
	at		Mils DFT
	at		Mils DFT
	at		Mils DFT
Total		9	Mils DFT

II. Batch Numbers

Product	191 Primer	Part A	OC3362M	Part B	1J2565M
Product	305 Finish	Part A	1F1099M	Part B	1D0315M
Product		Part A		Part B	
Product		Part A		Part B	
Product		Part A		Part B	

III. Application Criteria

Specimen Number	Product	Side	Date Applied	Method Applied	°F Temp.	% Rel.Hum.	Actual Dry Film Thickness DFT/Coat	Total DFT
65	Carboline 191 Pr.	A	1/29/82	Spray	78°F	29%	5.25	5.25
66	"	B	"	"	"	"	5.25	5.25
67	"	A	"	"	"	"	5.25	5.25
68	"	B	"	"	"	"	4.75	4.75
69	"	A	"	"	"	"	5.0	5.0
70	"	B	"	"	"	"	4.5	4.5
65	Phenoline 305 F.	A	2/2/82	Spray	78°F	25%	3.75	9.0
66	"	B	"	"	"	"	3.75	9.0
67	"	A	"	"	"	"	3.75	9.0
68	"	B	"	"	"	"	3.25	8.0
69	"	A	"	"	"	"	4.0	9.0
70	"	B	"	"	"	"	3.5	8.0

Issued: _____

Submitted by: Yuly Korobov

Title: Supervisor, Testing Dept.

jas/test
panel prep data
041982

YULY KOROBOV
SUPERVISOR, TESTING DEPARTMENT
CARBOLINE

Manufacturer: Carboline
St. Louis, Missouri

Analytical Chemistry Division
Oak Ridge National Laboratory
Date: April 7, 1982

SYSTEM IDENTIFICATION x Steel panel ____ Concrete block

Testing project: 01978
Sample number: 65,66,67,68,69,70
System number: 8S
Coating system: Power Tool Cleaning/1c Carboline 191 Primer/1c Phenoline 305 Finish

DBA TEST

ORNL Master Analytical Manual Method No. 2 0922.
ORNL Log Book No. A9675, A3-30-2 .

Sample No.	DBA phase	Dry film thickness (mil)	Test results
65*	spray	5.25/3.75	Blisters, #8 few.
66*	spray	5.25/3.75	Blisters, #8 few.
67*	spray	5.25/3.75	Blisters, #2 few.
68*	spray	4.75/3.25	Blisters, #4 few.
69	spray	5.0/4.0	Single large blister.
70	spray	4.5/3.5	Coatings intact, no defects.

*Irradiated.

Evaluated R. D. Brashears
Approved J. T. Lindsay

carboline

TEST PANEL PREPARATION DATA

Testing Project # 01907

Coating System: Carbo Zinc 11/Repair with Carboline 191 Pr./Phenoline 305 F.

Substrate Type: ASTM A36 Steel Surface Prep.: Gritblasted to SSPC SP10-63

For: DBA X Radiation X Decon ___Physical ___Chemical ___Other:_____

I. Coating System

	Range
Carbo Zinc 11	at 2.5-3.0 Mils DFT
Carboline 191 Primer (repair coating)	at 2.0-3.0 Mils DFT (Theoretical)
Phenoline 305 Finish (repair coating)	at 4.0-6.0 Mils DFT (Theoretical)
	at _____ Mils DFT
	at _____ Mils DFT
Total	8.5-12.0 Mils DFT (Theoretical)

II. Batch Numbers

Product	Carbo Zinc 11	Part A	0J5543M	Part B 9E1683Z
Product	Carboline 191 Pr.	Part A	0C3362M	Part B 0C3361M
Product	Phenoline 305 F.	Part A	0J2000M	Part B 0H1491M
Product	_____	Part A	_____	Part B _____
Product	_____	Part A	_____	Part B _____

III. Application Criteria

Specimen Number	Product	Side	Date Applied	Method Applied	°F Temp.	% Rel.Hum.	Actual & Theoretical Dry Film Thickness DFT/Coat	Total DFT
289	Carbo Zinc 11		2/18/81	Spray	75°	53%		2.5
290								2.5
291								3.0
292								3.0
289	Carboline 191 Pr.		3/25/81	Brush	70°	50%	2.0-3.0	4.5-5.5
290							2.0-3.0	4.5-5.5
291							2.0-3.0	5.0-6.0
292							2.0-3.0	5.0-6.0
	Phenoline 305 F.		3/26/81	Spray	75°	42%	4.0-6.0	8.5-11.5
							4.0-6.0	8.5-11.5
							4.0-6.0	8.5-12.0
							4.0-6.0	8.5-12.0

Issued: _____

Submitted by: Yuly Korobov
Title: Testing Dept. Supervisor

jas/test
panel prep data
041982

YULY KOROBOV
SUPERVISOR, TESTING DEPARTMENT
CARBOLINE

carboline

TEST PANEL PREPARATION DATA

Testing Project #01907

Coating System: Carbo Zinc 11/Repair with Carboline 191 Pr./Phenoline 305 F.

Substrate Type: ASTM A36 Steel Surface Prep.: Gritblasted to SSPC SP10-63

For: DBA X Radiation X Decon ___Physical ___Chemical ___Other:_____

I. Coating System

	Range	
Carbo Zinc 11	at 3.0	Mils DFT
Carboline 191 Primer (Repair Coating)	at 2.0-3.0	Mils DFT(Theoretical)
Phenoline 305 Finish (Repair Coating)	at 4.0-6.0	Mils DFT(Theoretical)
	at	Mils DFT
	at	Mils DFT
Total	9.0-12.0	Mils DFT(Theoretical)

II. Batch Numbers

Product Carbo Zinc 11	Part A QJ5543M	Part B 9E1683Z
Product Carboline 191 Pr.	Part A QC3362M	Part B QC3361M
Product Phenoline 305 F.	Part A QJ2000M	Part B QH1491M
Product	Part A	Part B
Product	Part A	Part B

III. Application Criteria

Specimen Number	Product	Side	Date Applied	Method Applied	°F Temp.	% Rel.Hum.	Actual & Theoretical Dry Film Thickness DFT/Coat	Total DFT
293	Carbo Zinc 11		2/18/81	Spray	75°	53%		3.0
294								3.0
293	Carboline 191 Pr.		3/25/81	Brush	70°	50%	2.0-3.0	5.0-6.0
294							2.0-3.0	5.0-6.0
293	Phenoline 305 F.		3/26/81	Spray	75°	42%	4.0-6.0	9.0-12.0
294							4.0-6.0	9.0-12.0

Issued: _____

Submitted by: Yuly Korobov

Title: Testing Dept. Supervisor

jas/test
panel prep data
041982

YULY KOROBOV
SUPERVISOR, TESTING DEPARTMENT
CARBOLINE

Manufacturer: Carboline
St. Louis, Missouri

Analytical Chemistry Division
Oak Ridge National Laboratory
Date: June 1, 1981

SYSTEM IDENTIFICATION — x Steel panel ____ Concrete block

System 14S
Carbo Zinc 11/Power Tool Cleaning/Carboline 191 Primer (Touchup)/
Phenoline 305 Finish

RADIATION TOLERANCE TEST

ORNL Master Analytical Manual Method No. 2 0921; Bechtel Corporation Specification No. CP-951; ORNL Log Book No. A9675, A4-10-1 .

Initial dose rate: 1×10^7 rad/h

Test conducted in: x air ____ water

Cumulative dose: 1×10^9 rad

Sample No.	Dry film thickness, mil	Test results
289	2.5/2-3/4-6	Coatings intact, no defects.
290	2.5/2-3/4-6	Coatings intact, no defects.
291	3.0/2-3/4-6	Coatings intact, no defects.
292	3.0/2-3/4-6	Coatings intact, no defects.

Evaluated P. T. Cooke for R. D. Brookshier

Approved L. T. Corbin

Manufacturer: Carboline
St. Louis, Missouri

Analytical Chemistry Division
Oak Ridge National Laboratory
Date: June 1, 1981

SYSTEM IDENTIFICATION — x Steel panel — ____Concrete block

System 14S
Carbo Zinc 11/Power Tool Cleaning/Carboline 191 Primer (Touchup)/
Phenoline 305 Finish

DBA TEST

ORNL Master Analytical Manual Method No. 2 0922.
ORNL Log Book No. A9675, A4-29-1 .

Sample No.	DBA phase	Dry film thickness, mil	Test results
289	spray*	2.5/2-3/4-6	Coatings intact, no defects.
290	spray*	2.5/2-3/4-6	Coatings intact, no defects.
291	spray*	3.0/2-3/4-6	Coatings intact, no defects.
292	spray*	3.0/2-3/4-6	Coatings intact, no defects.
293	spray	3.0/2-3/4-6	Large blisters, coated area; no other defects.
294	spray	3.0/2-3/4-6	Large blisters, coated area; no other defects.

*Irradiated.

Evaluated P. T. Crechy & P. D. Frederickson

Approved L. T. Corbin

"DBA Reports - Site Civil
Engr File"