NONCONFORMANCE - REPORT LOG & STATUS BOOK

12. REPORT DATE [illegible]
PAGE COMPL. 6-2-76
Q.C. ENG. SIGN. [illegible]

1. PROJECT NO. 7220

NCR NO.	3. ORIG. DATE	4. PREPARED BY	5. NONCONFORMANCE DESCRIPTION/REMARKS	STATUS 6. ROUTE	7. DATE XMTD	8. DATE RETD	9. DATE CLOSED	10. CLOSED BY
376	2-4-76	D. L. Osborn	C-208. Flyash Test Frequency, more than 100 tons received w/o user test 1.105, 1.205	Field 2-4-76	2-19-76	5/7/76	5/28/76	E. R. Albert
377	2-5-76	E. Dutton	C-208. Concrete test frequency exceeded, Pour A(633.25)a' 1.205	Field 2-5-76	2-19-76	4-9-76	4-13-76	D. L. Osborn
378	2-5-76	R. A. Moray	C-233A. F-3043 Release #32, Nelson Studs on Back-Up Plates have defective welds 1.202	Field 2-5-76	No	2-5-76	3-31-76	R. A. Moray
379	2-6-76	D. Martin	M-1. Purification Demineralizer opened, ice found inside ASME 4.038	B&W 2-9-76	No	3-25-76	4-27-76	P. M. Pitts
380	2-6-76	E. Dutton	C-231. Concrete curing temperature, pours A(633.25)a' & TT(606)a 1.205	Field 2-9-76	2-12-76	2-25-76	2-25-76	L. R. Albert
381	2-9-76	G. Depew	C-50A. Liner Plate heat number discrepancy 1.109	Field 2-9-76	No	2-17-76	3-9-76	R. G. Lussier
382	2-11-76	D. L. Osborn	C-111. Liner Plate tolerance, Unit #1, Elev. 650'6" to 651'6" 1.109	Field 2-11-76	No	2-17-76	2-27-76	D. L. Osborn
383	2-11-76	D. L. Osborn	C-230. Half yard of high slump concrete, pour A(630.75)a' 1.205	Field 2-12-76	2-19-76	4-16-76	4-21-76	D. L. Osborn
384	2-11-76	H. Boleen	M-104A. Pipe spools with shipping damage and improper painting ASME 4.164, 4.174	Field 2-12-76	4-5-76	6-1-76	6-2-76	R. A. Moray
385	2-13-76	R. A. Moray	WFMC-1. Weld rod heat treatment temperature F-3029. ASME	Field 2-13-76	2-17-76	3-29-76	3-31-76	R. A. Moray
386	2-19-76	R. A. Moray	M-106. Hangers received without C/S plates welded on. ASME 4.131	Field 2-20-76	No	3-2-76	3-26-76	R. A. Moray
387	2-26-76	D. L. Osborn	C-111. Penetration tolerance, Unit #2, Elev. 635'6". 1.109	Field 2-26-76	3-4-76	5-10-76	5-10-76	L. R. Albert

8006180 767

NONCONFORMANCE - REPORT LOG & STATUS BOOK

12. REPORT DATE 3-76 4-5-76 5-5-76
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Q.C. ENG. SIGN ______

1. PROJECT NO 7220

2. NCR NO.	3. ORIG. DATE	4. PREPARED BY	5. NONCONFORMANCE DESCRIPTION/REMARKS	STATUS 6. ROUTE	7. DATE XMTD	8. DATE RETD	9. DATE CLOSED	10. CLOSED BY
388	2-26-76	G. Depew	C-50A. Liner Plate heat number discrepancy S8-1-U1 1.109	Field 2-26-76	No	3-4-76	3-31-76	R. G. Lussier
389	2-26-76	H. Boleen	M-1. CRDM Service Structure Cylinder damaged @ off-loading N/A	B&W 2-27-76	No	3-26-76		
390	2-27-76	H. Boleen	M-104A. Pipe spools with painting and weld end prep discrepancies ASME 4.164 4.174	~~Field 2-27-76~~	4-5-76	6-1-76	6-9-76	R. A. Moray
391	3-2-76	P. M. Pitts	M-104A. Code Data Form and other documents for one spool ASME 4.164	Field 3-3-76	No	3-12-76	6-21-76	P. M. Pitts
392	3-8-76	T. LIEB	C-230. Ninety day concrete strenghts. A(599)m', A(612.5)d' 1.205	~~Field 3-8-76~~	3-16-76	3-19-76	3-22-76	L.R.Albert
393	3-8-76	P. Neiswander	C-304. Embed C-6 not located per DCN #2 to C-287. 1.201	~~Field 3-8-76~~	3-8-76	Dsp 4-1-76 4-6-76	4-6-76	R. G. Lussier
394	3-15-76	E. Dutton	C-230. Flyash content, ticket 075072, Pour A(630.75)b' 1.205	~~Field 3-15-76~~	3-19-76	4-28-76	4-28-76	L. R. Albert
395	3-22-76	R.A.Moray	M-104A. Pipe spools with loose end closures ASME 4.164,4.174	Field 3-22-76	No	3-22-76	6-2-76	R. A. Moray
396	3-22-76	W. Faulkner	C-231. Rebars omitted, Aux Bldg 'A' line wall pour. 1.203	~~Field 3-22-76~~	3-23-76	3-25-76	4-21-76	D. L. Osborn
397	3-22-76	E. Dutton	C-231. Curing temperture, Pour C(624)a' 1.205	~~Field 3-23-76~~	4-2-76	[illegible]	~~4-2-76~~ 4-16-76	~~[illegible]~~ D. L. Osborn
398	3-23-76	R. Revereza	C-231. Rebar omitted, Aux Bldg 'J' &'K' line walls 1.203	~~Field 3-23-76~~	3-23-76	3-25-76		
399	3-23-76	L. R. Albert	C-231. Preplacement FIP signed-off for pour A(630.75)c', rescoped down to A(624)a' 1.203	Field 3-24-76	No	3-25-76	3-26-76	L.R.Albert

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1. PROJECT NO. 7220

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400	3-31-76	H. Boleen	C-233A. Fabrications with improper welding 1.201	Field 3-31-76	No	3-31-76	4-8-76	A. L. Boulden
401	4-1-76	H. Boleen	M-117. Listing of Valves with rust, noted on receipt inspection ASME Varies	Field 4-1-76	No	4-5-76	4-27-76	P. M. Pitts
402	4-2-76	R. Lussier	C-38. Structural Beam 233B9, crack @ angle clip. 1.201	Field 4-2-76	No	4-5-76	4-5-76	R. G. Lussier
403	4-1-76	T. Lieb	C-230, Quality Verification Documents Submitted without G321D. Varies	~~Field 4-2-76~~	5-11-76	6-1-76 6-3-76	6-4-76	L. R. Albert
404	4-5-76	J. P. Betts	C-52. Cadweld sleeve appears to have been cut off. 1.104	Field 4-6-76	No	4-8-76	4-16-76	D. L. Osborn
405	4-8-76	R. Hendricks	M-92. Welding lack of fusion. Girder G-1. Unit #1 4.001	Field 4-12-76				
406	4-13-76	L. P. Wehner	C-304. Column at 5.31 & Fx mislocated at 617-0. 1.201	~~Field 4-13-76~~	5-7-76	6-14-76		
407	4-19-76	H. Boleen	M-106. Hanger Fab sheets approved level 4 4.112	~~Field 4-19-76~~	6-1-76			
408	4-21-76	W. Pardee	C-50A Dome Liner Plate Heat Number Discrepancy 1.109	Field 4-21-76	No	5-6-76		
409	4-21-76	R. Bennett	C-110 Deep gouge in Liner Plate Cont. #1 1.109	4-22-76 Field	No	4-29-76	4-30-76	P. DiCarlo
410	4-23-76	N. Shawl	C-233. Anchor bolts without ASTM A-325 nuts 1.202	~~Field 4-26-76~~	5-3-76			
411	4-26-76	P. Pitts	~~M-177 & M-178~~ Improper Pipe Spools Coverings ASME 4.018 & 4.028	Field 4-26-76	No	6-11-76		

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1. PROJECT NO 7220

NCR NO.	3. ORIG. DATE	4. PREPARED BY	5. NONCONFORMANCE DESCRIPTION/REMARKS	STATUS 6. ROUTE	7. DATE XMTD	8. DATE RETD	9. DATE CLOSED	10. CLOSED BY
412	4-26 -76	T. R. Lieb	C-230. Flyash fineness. User Test 1.105, 1.205	~~Field~~ 4-27-76	4-29 -76			
413	4-26	T.R. Lieb	C-230. Batch Plant Cement Scales broke during calibration 1.105, 1.205	~~Field~~ 4-27-76	4-29 -76	DEX 4-30-76 5-24-76	4-30-76 5-24-76	L. R. Albert.
414	4-29 -76	R. A. Moray	M-104A. Documentation and Code Data Plate 2ea pipe spools. ASME 4.1353	Field & 4-29-76	6-11- 76	7-6- 76		
415	4-29 -76	H. Boleen	M-106. Hangers fabricated and shipped w/o sketches being approved ASME 4.102, 4.112	~~Field~~ 4-29-76	5-28- 76			
416	4-30 -76	A. L. Boulden	ASME Section III, Field Weld, Unit #2 Sump. X-ray requirements violated ASME 4.134	~~Field~~ 4-30-76	6-1- 76			
417	5-4-76	A. L. Boulden	C-111. Unit #1 Sump. weld in need of repair after pressure test 4.128	Field 3-4-76	No	6-11- -76		
418	5-4-76	R. A. Moray	M-104A. Documentation and Code Data Plate on pipe spools ASME 4.164, 4.174, 4.192	~~Field & MS~~ 5-5-76	5-20-76	6-3- -76		
419	5-4-76	H. Boleen	C-233A. Anchor Bolts dimensioned short 1.102	MS 5-5-76	No	5-24-76		
420	5-5-76	H. Boleen	M-120. Valve tagging varies from document marking on MO Valves ASME Varies	MS 6-1-76 Field 5-11-76	No	6-11- 76	6-15 76	H. Boleen
421	5-5-76	C. H. Nelson	C-210. Ramp north of Aux Bldg, moisture content high. 1.004	Field 5-12-76	5-21-76	6-22 -76	6-23- 76	L. R. Alberts
422	5-10-76	P. W. Ratter	M-106. Linear Indications on Hanger Welds 4.102	Field 5-19-76	No	6-11- 76		
423	5-10-76	P. M. Pitts	M-104. Pipe Spools Air Quenched, not Water Quenched. 4.144 ASME	~~Field~~ 5-20-76	5-28 -76	6-16- 76	6-17- 76	P. M. Pitts

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1. PROJECT NO. 7220

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424	5-19-76	P. M. Pitts	M-104; Pipe Spools Air Quenched, not Water Quenched 4.104, 4.114, 4.134	~~Field~~ 5-19-76	5-28-76			
425	5-20-76	R. A. Moray	~~FPC-16, Decay Heat Removal Heat Exchange purge~~ pressure out of req'ments ASME 4.101, 4.111	B&W 5-28-76 Field 5-21-76	No			
426	5-24-76	P. W. Ratter	10-1FCB-35-H3, Incorrect Fillet Weld 4.102	~~Field~~ 5-24-76	6-10-76	6-22-76	6-23-76	P. W. Ratter
427	5-25-76	L. R. Alberts	~~C-275, Rebar Hooks, Elev. 629'± Aux. Bldg.~~ 1.203	~~Field~~ 5-25-76	5-27-76	6-10-76	6-10-76	L. R. Alberts
428	6-2-76	P. M. Pitts	M-106AC; Hanger Material Certifications ASME Varies	Field 6-4-76	& 6-18-76			
429	6-3-76	W. Faulkner	C-231, Reinforcing Steel Slab Dowels 624'0" Broken 1.203	Field 6-3-76	No	6-11-76		
430	6-8-76	R. Hendricks	M-104A. Pipe Spool tagging, spool misidentified ASME 1.114	~~Field~~ 6-8-76	6-10-76			
431	6-10-76	P. M. Pitts	M-104A. Pipe spool Documentation without shop traveler ASME 4.164	MS 6-10-76				
432	6-10-76	L. R. Alberts	C-231 Cadweld Splice Testing 1.104 and 1.204	~~Field~~ 6-11-76	6-23-76			
433	6-11-76	M. E. Foote	C-231 Dowels exceeding accepted tolerances 5.6 & 7.4 @ 624'0" 1.203	~~Field~~ 6-11-76	6-30-76			
434	6-11-76	M. E. Foote	C-231. Incorrect spacing of dowels, Aux. Bldg. 5.6 line wall @ 624'0" 1.203	~~Field~~ 6-11-76	6-23-76			
435	6-11-76	M. E. Foote	C-231. Incorrect spacing of dowels, Aux. Bldg. 'B' Line wall @ 634'0" 1.203	Field 6-11-76	No	6-23-76		

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436	6-11-76	M. E. Foote	C-231, Dowels do not match to slab, Aux. Bldg. 'G' Line wall @ 632'6" 1.203	Field 6-11-76	No	7-6-76		
437	6-11-76	H. Boleen	~~M-104. G-321-D not received with 90° ELL's~~ ASME 4.185	MS 6-14-76	No	6-29-76	7-6-76	H. Boleen
438	6-14-76	R.S. Morrow	M-104A. Incorrect info on code dataplate for pipe spool 1HBC-~~124-S616-6-4~~ ASME 4.164	Field 6-15-76	No	7-6-76		
439	6-14-76	R. S. Morrow	M-104A. Pipe spool delivered w/o venturi assembly 1HBC-123-S616-8-2 ASME 4.164	Field 6-15 76				
440	6-15-76	W. M. Pardee	C-50A. Heat Number discrepencies on Slab #8 HT# 81989 1.109	Field 6-15-76	No	6-23-76		
441	6-15-76	H. Boleen	M-120. Incorrect PO Item # on Valves SN 5206-01-1-17 and 5206-01-1-13 ASME	Field 6-16-76	No	7-1-76	7-2-76	H. Boleen
442	6-15-76	H. Boleen	M-129. G-321-D not traceable to 83 valves ASME	MS 6-17-76				
443	6-15-6	L. R. Albert	C-231. Missing Dowels, Aux. Bldg. at Wall 53 & Kc Line. El. 623'3" & 624'3" 1.203	Field 6-15-76	No	7-6-76		
444	6-15-76	L. R. Albert	C-231 Lack of Reinforcing Diag. Bars on Wall 53, 'H' Line wall, El. 630.75' 1.203	Field 6-15-76				
445	6-16-76	R.S. Morrow	M-106. Hangers fabricated to not-approved Drawings. ASME 4.112, 4.102	Field 6-17-76				
446	6-17-76	H. Boleen	M-104A. No documentation for 26" wrapped & coated piping 20' lnths ASME 4.192	MS 6-17-76	No	6-29-76		
447	6-17-76	H. Boleen	M-104A. No documentation, capping, flanges and coating for 24" &26" Fittings ASME 4.192	Field 6-18 -76				

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448	6-21-76	P. M. Pitts	M-104A. Documentation for 1HBC-133-S616-7-6 misidentified ASME 4.164	Field 6-22-76				
449	6-22-76	R. S. Morrow	M-106. Incorrect Dwg. Rev. sent with Hanger 12-1GCB-25-H14 ASME 4.102	Field 6-23-76				
450	6-22-76	R. S. Morrow	M-106. Incorrect Dwg. Rev. and Bechtel Approval level 4 sent w/ Hangers ASME 4.102,4.112, 4.162	Field 6-23-76				
451	6-23-76	H. Boleen	M-104A. Venturi lacking from spool 2HBC-123-S617-8-4 ASME 4.174	Field 6-24-76				
452	6-23-76	R. S. Morrow	M-106AC. PipeHanger 18-1HBC-133-H6 fabricated to a Bechtel level 4 sketch ASME 4.162	Field 6-28-76				
453	6-23-76	R. S. Morrow	M-106AC. Incorrect Dwg. Rev. sent with pipe hanger assemblies ASME 4.172; 4.191; 4.341	Field 6-28-76				
454	6-24-76	J. R. Behres	M-204. Incorrect stamping of 26" yard piping.. ASME 4.192	Field 6-24-76	No	7-2-76	7-7-76	J. R. Behres
455	6-24-76	W.M.Pardee	C-111. Heat Number discrepancy on Dome Liner Plate assemblies 1.109	Field 6-24-76				
456	6-28-76	W. M. Pardee	C-111. Shop Assembly Untraceable to Documentation Ht#21302 Slab#10 1.109	Field 6-28-76				
457	6-28-76	W. M. Pardee	M-120. Linear indications found on 16" Valve S/N 3N-641 ASME 4.164	Field 6-28-76				
458	7-1-76	R. S. Morrow	M-106AC. Wrong Dwg. Revs. on Hangers fab. to level 4 dwgs. ASME 4.102, 4.112 4.172, 4.191	Field 7-1-76				
459	7-6-76	H. Boleen	M-104A. G-321-D not submitted. Sweepolets not capped. ASME 4.192	Field 7-6-76				

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 2 | 14. NCR NO. 384

2. DRAWING/PART NO.: 7220-M-201 | REV.: 6
3. ITEM DESCRIPTION: Shop Fabricated Pipe Spools
4. SERIAL NUMBER: See Block No. 19
5. PURCHASE ORDER NO.: 7220-M-104A-AC Rev. 2
6. CONTRACTOR/LOCATION: ITT Grinnell/Kernersville, S.C.
7. PROJECT NO.: 7220
8. ITEM LOCATION: QC Hold Area
9. STARTUP SYSTEM NO.: N/A
10. QC FIELD INSPECTION PLAN NO.: M-104A-R-19 Rev. 0
11. ASME CODE ITEM: ☒ YES ☐ NO
12. REPORTED BY: [signature] DATE: 5/11/76
13. VALIDATED BY: [signature] DATE: 5/11/76
15. REPLACEMENT PART NO.: N/A | REV.:
16. REPLACEMENT SERIAL NO.: N/A
17. SOURCE: Supplier

25. DISPOSITION CONCURRENCE

REWORK	REJECT	REPAIR	USE AS IS	DOC
			✓	

PROJECT FIELD ENGINEER: [signature] DATE: 5-28-76
PROJECT ENGINEER: [signature] DATE: 5-26-76
PROJECT FIELD QC ENGINEER: [signature] DATE: 6-1-76
AUTHORIZE INSPECTOR: [signature] DATE: 6-1-76

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

FIM C-5 Rev. 0 Para. 3.3.4/a/3 - States in part: "Preliminary Inspection: This inspection shall be to ascertain freedom from the following: 3) Environmental damage water or oil marks, damp conditions, dirty areas, or salt film (indicating expose to sea water or winter road salt chemicals). 4) Tie down failure - Shifted, broken, loose or twisted shipping ties, and worn material under ties, indicating improper blocking and tie down during shipment."

Continued on Page No. 2

20. ☐ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

Field recommends "Use As Is". Contamination of pipe by weather and winter road conditions was on the pipe coating and has been washed off by recent heavy rains. Loose tie downs rubbed the shop coating and did not penetrate the mill coating. Pipes with ~~loose caps and flange covers have been opened, inspected, secured and sealed.~~ The spools identified as "Not Painted" were painted over 95% of their surface area. (page 3)

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

Bechtel Shop Inspection verifies each load has been properly tied down for shipment prior to release. Loose tie downs, flange covers, and end caps resulting from shipment do not affect acceptability of this material. Engineering concurs with field disposition of all items.

[signature] TWS

23. ENGINEERING DISPOSITION RESULTS:

All welds inspected and found conforming. All caps & covers were securely attached Grinnell Spec P.S. 1236-5 satisfies guide requirements.

24. IS DESIGN CHANGE REQUIRED ☒ NO ☐ YES, SEE ATTACHED:
DRAWING _____ REV. _____ DCN _____
SPEC. _____ REV. _____ ADD. _____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP
REMARKS

27. QC ACCEPTANCE: [signature] DATE: 6-2-76
QC ENGINEER: [signature] DATE: 6/2/76
AUTHORIZED INSPECTOR

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – POAE
Goldenrod Copy – QC

QC-G1-2

Block No. 19 Continued.

7220-M-201)Q) Rev. 6 Para. 6.6.1 Sub. Sec. b - States in part: "A metal cap shall be placed over back opening and sealed to the pipe with at least 3 passes of sealing tape." Para. 6.6.3 - States in part: "Carbon steel flanges shall be sealed with metal or non-metallic disk bolted to the flange." Para. 6.6.6 - States in part: "All external surfaces of carbon steel piping assemblies except machined surfaces, shall be given one shop coat of primer after the ends have been sealed.

Grinnell Spec. PS-1236-4 III/5 - States in part: "The surface shall be grit blasted to near white metal, producing a surface free of all oil, grease, dirt, visible mill scale, rusty corrosion products, oxides, paint or any foreign matter."

Contrary to the above the following was found:

	FILM G 5/0 3.3.4/a/3	FIM G-5/0 3.3.4/a/4	FIM G-5/0 3.3.4/a/4	M-201/2 6.6.1/a	M-201/2 6.6.3/a	M-201/2 6.6.6	Grinnell Spec. PS-1236-4/III/5
	Contamination	Loose Tie Downs	Worn Mat. Under Ties	Loose Caps	Loose Flg. Covers	Not Painted	Not Blasted
2-HBC-131-S617-9-2	X	X	X				X
2-HBC-135-S617-6-1	X	X	X	X			X
2-HBC-135-S617-6-2	X	X	X		X		X
2-HBC-123-S617-6-4	X	X	X		X	X	X
2-HBC-135-S617-8-3	X	X	X				X
0-HBC-50-S617-7-2	X	X	X	X	X		X
0-HBC-50-S617-7-3	X	X	X				X
2-HBC-131-S617-7-3	X	X	X	X		X	X
2-HBC-131-S617-7-4	X	X	X				X
1-HBC-131-S616-9-1	X	X	X		X		X
1-HBC-131-S616-7-2	X	X	X			X	X
1-HBC-123-S616-6-6	X	X	X		X		X
1-HBC-135-S616-6-4	X	X	X			X	X

Noted during receiving inspection, Unit #1, 2 & Common. 13 QC Hold Tags applied. "Q" No. 4.164, 4.174

10098-2

13 hold tags removed [illegible] 6-2-76

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G1-3

Block 20 continued: The area not painted is where the pipe was in contact with the support bucks. The areas not shop painted are protected by mill coating and there is no evidence of corrosion. Supplier has been alerted to insure spools are completely painted in the future. Spools are shop coated with ferralox 1500 which does not require surface preparation. Grinnell has revised spec. P-S-1236 to eliminate the grit blast requirement., Revision approved code #1 by engineering on 3-5-76.

Lon Hendricks 9-5-76
R. Pulito 4-5-76

ORIGINAL

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 3 | 14. NCR NO. 390

2. DRAWING/PART NO.	REV.	7. PROJECT NO.	12. REPORTED BY	DATE
7220-M201	6	7220	[illegible]	2/26/76
3. ITEM DESCRIPTION		**8. ITEM LOCATION**	**13. VALIDATED BY**	**DATE**
Shop Fabricated Pipe Spools		QC Hold Area	[illegible]	2-27-76
4. SERIAL NUMBER		**9. STARTUP SYSTEM NO.**	**15. REPLACEMENT PART NO.**	**REV.**
See Block No. 19		N/A	N/A	
5. PURCHASE ORDER NO.		**10. QC FIELD INSPECTION PLAN NO.**	**16. REPLACEMENT SERIAL NO.**	
7220-M-104A-AC, Rev. 2		M-104A-R-21 Rev. 0	N/A	
6. CONTRACTOR/LOCATION		**11. ASME CODE ITEM** ☒ YES ☐ NO	**17. SOURCE**	
ITT Grinnell, Kernersville, North Carolina			Supplier	

25. DISPOSITION CONCURRENCE

REWORK	REJECT	REPAIR	USE AS IS	OTHER
			✓	

[illegible] 5-28 DATE
PROJECT FIELD ENGINEER
[illegible] 5-20-76 DATE
PROJECT ENGINEER
[illegible] 6-1-76 DATE
PROJECT FIELD QC ENGINEER
[illegible] 6-1-76 DATE
AUTHORIZE INSPECTOR

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

FIM G-5 Rev. 0 Para 3.3.4 /a/3 - States in part: "Preliminary inspection: This inspection shall be to ascertain freedom from the following: 4) Tie Down Failure - Shifted, broken, loose or twisted shipping ties, and worn material under ties, indicating improper blocking and tie down during shipment." 7220-M-201-Q Rev. 6 Para 6.6.3 - States in part: "Carbon steel flanges shall be with metal or non-metallic disc bolted to the flange." Para 6.6.6 - States in part: "All external surfaces of carbon steel piping assemblies except machined surfaces shall be given one shop coat of primer after ends have been sealed."

Continued on Page No. 2

20. ☐ FIELD DISPOSITION ☒ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

Field recommends "Use as is". Loose tie downs rubbed the shop coating and did not penetrate the mill coating. The flange cover has been opened, inspected and found satisfactory, secured and sealed. Paint on end prep is assumed to be deoxaluminate. Engineering is requested to evaluate Grinnell's end prep coating and, if acceptable, revise specifications to include coating. If coating is not acceptable notify Grinnell to discontinue its use and conform (continued pg.3)

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

Bechtel Shop Inspection verifies each load has been properly tied down for shipment prior to release. Worn coatings and loose flange covers resulting from shipment do not affect acceptability of this material. Engineering concurs with field disposition for end prep deviations. Surface prepration requirements for application of Ferralox 1500 has been resolved as noted. Engineering concurs with use of deoxaluminate application to end preps and will revise M-201 accordingly.

23. ENGINEERING DISPOSITION RESULTS:

Engineering network generic change covers this item. Use of S/N 8 Te Spec M201 Rev 6 removes duplicate from Spec PS-1236 since it is now [illegible] Hosting [illegible]

24. IS DESIGN CHANGE REQUIRED ☐ NO ☒ YES, SEE ATTACHED:

DRAWING _____ REV. _____ DCN _____

SPEC. M-201 REV. 6 SCN #8

25. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

[illegible] 6-8-76
QC ENGINEER DATE

[illegible] 6/8/76
AUTHORIZED INSPECTOR DATE

10098-1

ORIGINATOR

QC-G3-2

~~Block No. 19 Continued.~~

Spec. 7220-M-473 Rev. 4 The chart on page 8 of 9 shows that standard wall thickness will use Type 2 $37\frac{1}{2}^{0}$ bevel end preparation. End preparations do not have the required 1/16" land.

Grinnell Spec. PS-1236-4 III 15 - States in part: "The surface shall be grit blasted to near white metal, producing a surface free of all oil, grease, dirt, visible mill scale, rusty corrosion products, oxides, paint or any foreign matter." Contrary to the above the following conditions were found:

	FIM G-5/0 3.3.4 /a/4 (Coatings) Worm Matl Under Ties	M-201/6 6.6.3/a Loose Flg Cover	Grinnell Spec. PS-1236-4/III/5 Not Blasted	M473/4 Pg. 8 of 9 Weld End Prep.	M201/6 6.6.6 Paint on End Prep.
1-HBC-131-S616-7-3	X		X	X	
1-HBC-131-S616-7-4	X		X		X
1-HBC-141-S616-8-3	X		X		X
1-HBC-123-S616-8-1	X		X	X	X
1-HBC-124-S616-6-1	X		X		X
1-HBC-124-S616-6-2	X		X		X
1-HBC-126-S616-6-1			X		X
2-HBC-136-S617-6-1		X	X		
2-HBC-123-S617-6-1A				X	X
2-HBC-124-S617-6-1	X		X		X
2-HBC-141-S617-8-5	X		X	X	X
0-HBC-50-S617-7-4	X		X	X	X

Noted during receipt inspection, Unit 1, 2, and common. 12 QC Hold Tags Applied. "Q" No. 4.164, 4.174

ORIGINAL

NONCONFORMANCE REPORT (CONT'D) 1. PAGE 3 OF 3 14. NCR NO. 390

Block 20 continued: to M-201 Rev. 6 para 6.6.6. Minor deviation of end preps will be inspected and, if necessary, corrected at the time of fit-up and welding. Pipe is shop coated with Ferralox 1500 which does not require surface preparation. Grinnell spec. P-S-1236 has been revised to eliminate grit blast requirement. Revision approved code 1 by engineering on 3-5-76.

Re-Reproduced 4-5-76
R. Pulis 4-5-76

10098-2

ORIGINAL

QC-G3-3

BECHTEL

NONCONFORMANCE REPORT

2. ~~DRAWING/PART NO.~~ M. R. 7220-M-104A	REV. 5	7. PROJECT NO. 7220	12. REPORTED BY P M Pitts	DATE 3-2-76	1. PAGE 1 OF 2
3. ITEM DESCRIPTION Fabricated Spool		8. ITEM LOCATION ~~QC Hold Area~~ Aux Bldg 6-3-76	13. VALIDATED BY [illegible]	DATE 3-2-76	14. NCR NO. 391
4. SERIAL NUMBER 1-HBC-135-S616-6-4		9. STARTUP SYSTEM NO. N/A	15. REPLACEMENT PART NO. N/A	REV.	25. DISPOSITION CONCURRENCE
5. PURCHASE ORDER NO. 7220-M-104A-AC		10. QC FIELD INSPECTION PLAN NO. N/A	16. REPLACEMENT SERIAL NO. N/A		
6. CONTRACTOR/LOCATION ITT Grinnell Industrial Piping Inc., Kernersville, North Carolina		11. ASME CODE ITEM ☒ YES ☐ NO	17. SOURCE Supplier		

REWORK	REJECT	REPAIR	USE AS IS	DOC.
				X

[illegible] 3-12-76 PROJECT FIELD ENGINEER DATE

[illegible] 3-12-76 PROJECT ENGINEER DATE

[illegible] 4/27/76 PROJECT FIELD QC ENGINEER DATE

[illegible] AUTHORIZE INSPECTON DATE

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

Form G-321-D Block 24 (Ref. P. O. 7220-M-104A-AC) states - "This form and the Quality Verfication Documents referenced hereon have been received and their relationship to the hardware items verified." Contrary to the above the following Quality Verification Documents were not furnished by ITT Grinnell Industrial Piping Inc. for pipe spool No. 1-HBC-135-S616-6-4;

Continued on page 2

20. ☐ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

Route to Field Procurement Supervisor. Field Procurement Supervisor to obtain documentation from ITT Grinnell referred to in Block 19 above.

[illegible] Ron Hendricks 3-9-76

21. FIELD DISPOSITION RESULTS:

Documents Received Reviewed and Found Acceptable

P M Pitts 6-23-71

22. ENGINEERING DISPOSITION

Block 21 was not completed as an oversight at the time the documents were rec'd reviewed and accepted. It was completed 2 days after as indicated by the date.

23. ENGINEERING DISPOSITION RESULTS:

[illegible] 6-24-76.

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:

DRAWING _____ REV. _____ DCN _____

SPEC. 55 REV. _____ ADD. _____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

P M Pitts 6-24-76 QC ENGINEER

[illegible] 6/24/76 AUTHORIZED INSPECTOR DATE

0098-1

ORIGINATOR

Block No. 19 Continued.

Documentation	G-321-D Document Category
a) Code Data Report (ASME Form NPP-I)	18.1
b) Certified Material Test Reports	17.1
c) Weld Rod Control Verification Reports	13.0

Noted During Documentation Review. 1 Hold Tag Applied. "Q" No. ~~4.17~~ 4.164
Pittsburgh 5-2-74

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 2 | 14. NCR NO. 395

2. DRAWING/PART NO.	REV.	7. PROJECT NO.	12. REPORTED BY	DATE
Spec. 7220-M-201	6	7220	[signature]	3-11-76
3. ITEM DESCRIPTION		**8. ITEM LOCATION**	**13. VALIDATED BY**	**DATE**
Pipe Spools		QC Hold Area	H. D. Foster	3-12-76
4. SERIAL NUMBER		**9. STARTUP SYSTEM NO.**	**15. REPLACEMENT PART NO.**	**REV.**
See Block 19		N/A	N/A	
5. PURCHASE ORDER NO.		**10. QC FIELD INSPECTION PLAN NO.**	**16. REPLACEMENT SERIAL NO.**	
7220-M-104A-AC Rev. 3		M-104A-R-23 Rev. 0	N/A	
6. CONTRACTOR/LOCATION		**11. ASME CODE ITEM** ☒ YES ☐ NO	**17. SOURCE**	
ITT Grinnell, Kernersville, North Carolina			Supplier	

25. DISPOSITION CONCURRENCE

REWORK	REJECT	REPAIR	USE AS IS	DOC
X				

PROJECT FIELD ENGINEER [signature] DATE 4-23-76

PROJECT ENGINEER [signature] DATE 4-26-76

PROJECT FIELD QC ENGINEER [signature] DATE 4/26/76

AUTHORIZE INSPECTOR

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

Specification 7220-M-201 Rev. 6 Paragraph 6.6.1 States in part: "A metal cap shall be placed over each opening and sealed to the pipe with at least 3 passes of sealing tape." Paragraph 6.6.3 States in part: "Carbon steel flanges shall be sealed with metal or non-metallic disks bolted to the flange." Contrary to the above, the following pipe spools had loose caps or loose flange covers:

Continued on Page 2

20. ☐ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

Subject spool end caps and flange covers will be inspected. If the seal is damaged to the extent to allow foreign material to enter the interior of the pipe, the caps or or covers will be removed, the spool will be inspected and cleaned as required, and the caps or covers replaced in accordance with specification 7220-M-201 Rev. 6 paragraphs 6.6.1 and 6.6.3. If the covers are loose but the seal has not been violated, the caps or covers shall be secured as required by the above specification.

Don Bradycki 4-23-76

H. Pulito 4-23-76

21. FIELD DISPOSITION RESULTS:

All loose caps & flanges were inspected 4-26-76 on F-2-2284. Pipe spools inspected 4-27-76 and all were conforming. [illegible] 6-2-76

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:

DRAWING _____ REV. _____ DCN _____

SPEC. _____ REV. _____ ADD. _____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE [signature] 6-2-76

QC ENGINEER [signature] DATE 6/2/76

AUTHORIZED INSPECTOR

10098-1

ORIGINATOR

QC-G3

BECHTEL

NONCONFORMANCE REPORT (CONT'D) 1. PAGE 2 OF 2 14. NCR NO 395

Page 1 Continued (Block 19)

2-HBC-124-S617-6-4	Loose Caps
2-HBC-135-S617-8-2	Loose Caps
2-HBC-151-S617-8-1	Loose Flange Covers
2-HBC-124-S617-6-3	Loose Flange Covers
2-HBC-151-S617-8-2	Loose Flange Covers
0-HBC-50-S617-7-1	Loose Flange Covers
2-HBC-131-S617-7-7	Loose Flange Covers
1-HBC-141-S616-8-1	Loose Flange Covers
1-HBC-141-S616-8-5	Loose Flange Covers

Units #1, #2, and Common. Q Nos. 4.164 and 4.174. 9 Hold tags attached.

Nonconformance noted during receipt inspection.

9 Hold Tags removed 6-2-76 AMH

6-2-76

10098-2

QC-G3-3

ORIGINAL

KYDC N

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 of 2

14. NCR NO. 403

2. DRAWING/PART NO. Spec. 7220-C-230 | REV. 6

7. PROJECT NO. 7220

12. REPORTED BY [signature] DATE 3-31-76

25. DISPOSITION CONCURRENCE

REWORK	RE. ECT	REPAIR	USE AS IS	O.T.C.
			X	

3. ITEM DESCRIPTION Quality Verification Documents

8. ITEM LOCATION N/A

13. VALIDATED BY [signature] DATE 4-1-76

OOB for
[signature] 6/4/76
PROJECT FIELD ENGINEER DATE

4. SERIAL NUMBER N/A

9. STARTUP SYSTEM NO. N/A

15. REPLACEMENT PART NO. N/A | REV.

[signature] 5/27/76
PROJECT ENGINEER DATE

5. PURCHASE ORDER NO. N/A

10. QC FIELD INSPECTION PLAN NO. N/A

16. REPLACEMENT SERIAL NO. N/A

[signature] 6-7-76
PROJECT FIELD QC ENGINEER DATE

6. CONTRACTOR/LOCATION Champion Inc. Midland, MI

11. ASME CODE ITEM ☐ YES ☒ NO

17. SOURCE Subcontractor

AUTHORIZE INSPECTOR DATE

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION

Specification 7220-C-230 Appendix D states in part, "G-321-D is a multi-purpose form to be used by Buyer/Contractor to specifically identify documents required of the supplier to satisfy specification requirements and is to be used by the Supplier as a cover sheet for Quality Verification Documents when submitting them to the Buyer/Contractor." Contrary to the above, prior to March 31, 1976, Champion Inc. has not used this form as a cover sheet when submitting applicable documents to Bechtel. It should be noted that all Quality Verification Documents required by Specification 7220-C-230 have been submitted by Champion

20. ☐ FIELD DISPOSITION ☒ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

Field recommends "use as is" to date and recommends deleting form G-321-D from specification 7220-C-230. Form G-321-D is more applicable for vendors supplying material with extensive quality verification documents. Only form G-321-D should be deleted, the requirement to submit mill certifications and test results shall remain in specification 7220-C-230

[signature] 5-4-76

21. FIELD DISPOSITION RESULTS:

[signature] 5/5/76

22. ENGINEERING DISPOSITION

See p 2 of 2 for Engineering Disposition

[signature]
[signature]
5/5/76

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☒ NO ☐ YES, SEE ATTACHED:

DRAWING _____ REV. _____ DCN _____

SPEC. _____ REV. _____ ADD _____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

[signature] 6/9/76
QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

BECHTEL

NONCONFORMANCE REPORT (CONT'D)

14. NCR NO. 403

Block 19) and reviewed, signed, dated and properly filed by Bechtel. No Hold Tags Applied. Nonconformance was noted during a review of Specification 7220-C-230, Rev. 6. "Q" No. varies

Block 20-Revised) Field recommends compliance with specification 7220-C-230, Revision 6 requirements pending disposition of QF-93 (Same subject) by Project Engineering.

Gary W. [illegible] 5-5-76

[illegible] 5-11-76

Block 22: Engineering concurs with field recommendation of compliance with Specification 7220-C-230, Revision 6 with modification per SCN C-230-6002. Reference is made to memo dated 5/27/76 from R. L. Castleberry to J. Connolly, for the disposition of QF-93 by Project Engineering. This item has no safety implication.

A. L. Desai 5-28-76

G. A. Iverson 5-28-76

[illegible]

10098-2

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-1

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 2	14. NCR NO. 420

Field	Entry
2. DRAWING/PART NO. Spec.	7220-M-120
REV.	3
3. ITEM DESCRIPTION	12" Gate Valves
4. SERIAL NUMBER	2N-620 & 2N-622
5. PURCHASE ORDER NO.	M-120AC Rev. 5
6. CONTRACTOR/LOCATION	Anchor/Darling Valve Co., Hayward, CA
7. PROJECT NO.	7220
8. ITEM LOCATION	~~QC Hold Area~~ Receiving
9. STARTUP SYSTEM NO.	N/A
10. QCIR No.	R-1.00-60
11. ASME CODE ITEM	☒ YES ☐ NO
12. REPORTED BY	[signature] DATE 5-5-76
13. VALIDATED BY	[signature] DATE 5-5-76
15. REPLACEMENT PART NO.	N/A
16. REPLACEMENT SERIAL NO.	N/A
17. SOURCE	Supplier
18. ROUTING INSTRUCTIONS	☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

25. DISPOSITION CONCURRENCE: REWORK / REJECT / REPAIR / USE AS IS / DOC.

[signature] PROJECT FIELD ENGINEER	5-27-76 / 5-28-76 DATE
[signature] PROJECT ENGINEER	6-1-76 DATE
[signature] PROJECT FIELD QC ENGINEER	6-1-76 DATE
[signature] AUTHORIZED INSPECTOR	6-11-76 DATE

19. NONCONFORMING CONDITION:

Spec. No. 7220-M-120 Para 13.1 states in part, "The following information shall be shown on each tag: (a) Purchase Order Number and Item Number. (b) Valve Identification Number as indicated in the Valve Purchase Orders. (The same number shall appear on any loose or accessory package shipped with the valve.)" Contrary to the above, two 12" Gate Valves (SN# 2N-620 & 2N-622) identity tags from Anchor/Darling's order number 5206-10 did not match the valves documentation package.

Continued on page 2

20. XX FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

~~Route this NCR to Procurement. Field Procurement Supervisor to obtain correct G-321D and documentation from valve manufacturer. Tags attached to valves are correct.~~

[signature] 5-27-76
K. [signature] 5-27-76

Turn to page 2 for Revised Block 20.

21. FIELD DISPOSITION RESULTS:

Work completed as stated in block 20 on pg 2
[signature] 6-15-76

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:
DRAWING ______ REV. ______ DCN ______
SPEC. ______ REV. ______ ADD. ______

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP
REMARKS

27. QC ACCEPTANCE
[signature] QC ENGINEER 6-15-76 DATE
[signature] AUTHORIZED INSPECTOR 6/15/76 DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

BECHTEL

Continuing Block 19 -

Valve Documentation Package Tag No.	Valve Tag No.
12" HBB-GT-2MD-1761A-PR	12" HBB-GT-2MD-1761B-PR
12" HBB-GT-1MD-1661A-PR	12" HBB-GT-1MD-1661B-PR

Discrepancy noted during receipt inspection. "Q" number indeterminate. 2 Hold Tags Applied

BLOCK 20 - Revised

The following is to supersede field disposition dated 5/27/76: Attach revised identity tages received from Vendor. Documentation is correct. Refer to purchase memorandum dated 3/12/74 to 7220-M-120, Rev. 5.

6-8-76

6-9-76

BECHTEL

RYDER

NONCONFORMANCE REPORT

Field	Entry
1. PAGE 1 OF	4 2
14. NCR NO.	421
2. DRAWING/PART NO. Spec.	7220-C-210
REV.	4
3. ITEM DESCRIPTION	Plant Area Backfill
4. SERIAL NUMBER	N/A
5. PURCHASE ORDER NO.	N/A
6. CONTRACTOR/LOCATION	Canonie Construction Co., South Haven, MI
7. PROJECT NO.	7220
8. ITEM LOCATION	Ramp North of Aux. Bldg
9. STARTUP SYSTEM NO.	N/A
10. QC FIELD INSPECTION PLAN NO.	N/A
11. ASME CODE ITEM	☐ YES ☒ NO
12. REPORTED BY	C. H. Lebon — DATE 5/5/76
13. VALIDATED BY	[signature] — DATE 5-10-76
15. REPLACEMENT PART NO.	N/A — REV.
16. REPLACEMENT SERIAL NO.	N/A
17. SOURCE	Subcontractor
18. ROUTING INSTRUCTIONS	☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

25. DISPOSITION CONCURRENCE N/A — REWORK / REJECT / REPAIR / USE AS IS / OCC

SITE/FIELD ENGINEER: DJ Boos for T.C. Valenzano 6/22/76

PROJECT ENGINEER: JK Hurley for RLC 6/18/76

PROJECT FIELD QC ENGINEER: [signature] 6-22-76 DATE

AUTHORIZED INSPECTOR — DATE

19. NONCONFORMING CONDITION:

Specification 7220-C-210, Rev. 4, Para. 12.6.1 states in part, "The water content during compaction . . . shall not be more than 2 percentage points above optimum moisture content . . .". Contrary to the above, during the fall of 1975 a construction access ramp was constructed from material which exceeded the moisture content requirements of Specification C-210. The field forces, including Bechtel Quality Control, were aware that the material exceeded moisture when placed. When the material was placed it was

Q-LIST NO. 1.002 No Hold Tag Applied [initials]

Continued on Page 2

20. ☐ FIELD DISPOSITION ☒ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

Recommend "accept as is," subject to Project Engineering review and evaluation. Backfill material has been compacted to not less than 95% of maximum density in accordance with Specification C-210.

C. H. Lebon 5/14/76 [signature]

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

Discussion of the background to this condition with Field personnel indicated (1) that the ramp was installed as a temporary means for access into adjacent work areas and not as permanent backfill; and (2) that the Field now wishes to use the ramp as part of the permanent backfill. We understand that should the ramp not be suitable as

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☒ NO ☐ YES, SEE ATTACHED:

DRAWING ______ REV. ______ DCN ______

SPEC. ______ REV. ______ ADD. ______

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

QC ENGINEER: [signature] DATE 6/23/76

AUTHORIZED INSPECTOR — DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

Block 19 Continued -

considered temporary fill for construction access. The field now wishes to leave this material in place. With the exception of the moisture content requirement, the material meets all requirements of Specification C-210. The testing frequency was maintained and the compaction test results are as shown on the following list:

Block 22 Continued:

permanent backfill it can readily be removed. Hence Engineering submits that a non-conforming condition does not exist since the ramp is still a temporary facility.

Engineering suggests that if the Field wishes to use the ramp as part of permanent backfill, they request Engineering approval via an FCR.

6-18-76

GA Bowman

Block 19 Continued -

Test No	Date	Location	Elev.	Moisture Content(%)	Optimum Moisture	% Above Optimum	Percent Compaction
MD-490*	10-31-75	356° Cont #1, 76' off wall	631'	14.8	10.6	4.2	95
MD-492*	10-31-75	356° Cont #1, 79' off wall	631'	12.9	10.6	2.3	96
MD-512	11-13-75	45° Cont #2, 95' off wall	610'	14.2	9.8	4.4	98
MD-513	11-13-75	28° Cont #2, 100' off wall	615'	13.5	9.8	3.7	98
MD-514**	11-13-75	356° Cont #1, 76' off wall	631'	12.6	10.6	2.0	100
MD-524	11-17-75	25' E. 4.55 line, 90' N. "A"line	630'	14.4	9.8	4.6	97
MD-525	11-17-75	75' N. "A" line @ 6.5 line	627'	15.2	9.8	5.4	98
MD-526***	11-17-75	85' N. "A" line @ 8.7 line	624'	16.4	9.8	6.6	93
MD-527	11-17-75	28° Cont #2, 110' off wall	619'	14.7	9.8	4.9	97
MD-530	11-18-75	365° Cont #1, 115' off wall	633'	13.9	9.8	4.1	96
MD-531	11-18-75	31' E. 4.55 line, 88' N. "A" line	632'	14.3	9.8	4.5	98
MD-532	11-18-75	108' N. "A" line @ 7.8 line	628'	16.6	13.7	2.9	96
MD-533	11-18-75	87' N. "A" line @ 8.7 line	624'	14.5	9.8	4.7	96
MD-534	11-18-75	68' N. "A" line @ 8.7 line	624'	16.9	13.7	3.2	99
MD-535**	11-18-75	25° Cont #2, 90' off wall	620'	14.8	9.8	5.0	98
MD-536**	11-18-75	45° Cont #2, 95' off wall	615'	15.1	9.8	5.3	94
MD-537	11-18-75	90° Cont #2, 85' off wall	610'	14.9	9.8	5.1	95
MD-539	11-19-75	45° Cont #2, 97' off wall	615'	11.9	9.8	2.1	97

Notes:

* This area reworked and retested: See test No. MD-514

** Moisture and Compaction pass: clears MD-490 and MD-492

*** This area reworked and retested: See test No. MD-533 for passing compaction

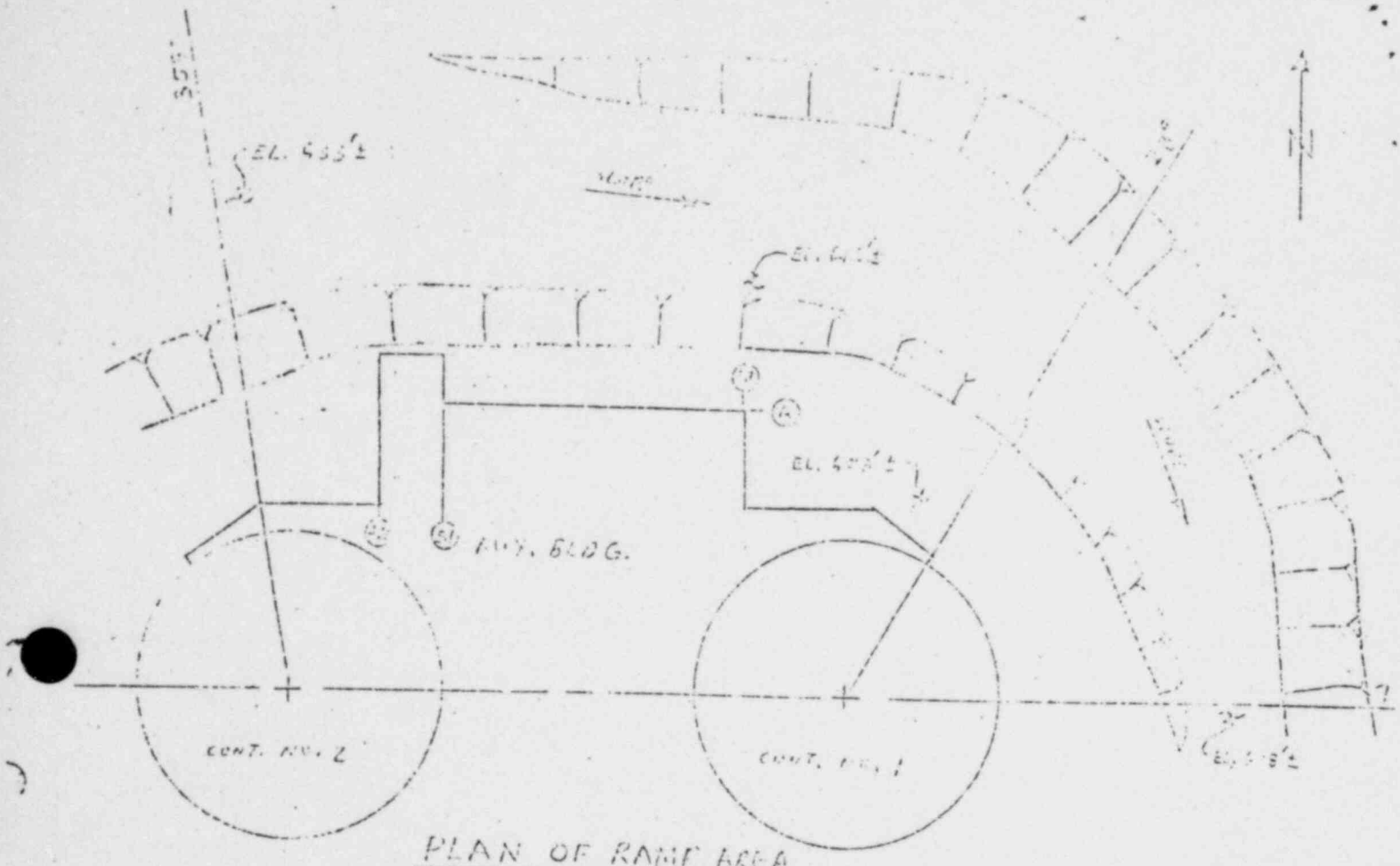
** This area reworked and retested: See test No. MD-539 for passing compaction

See page 3 for location sketch.

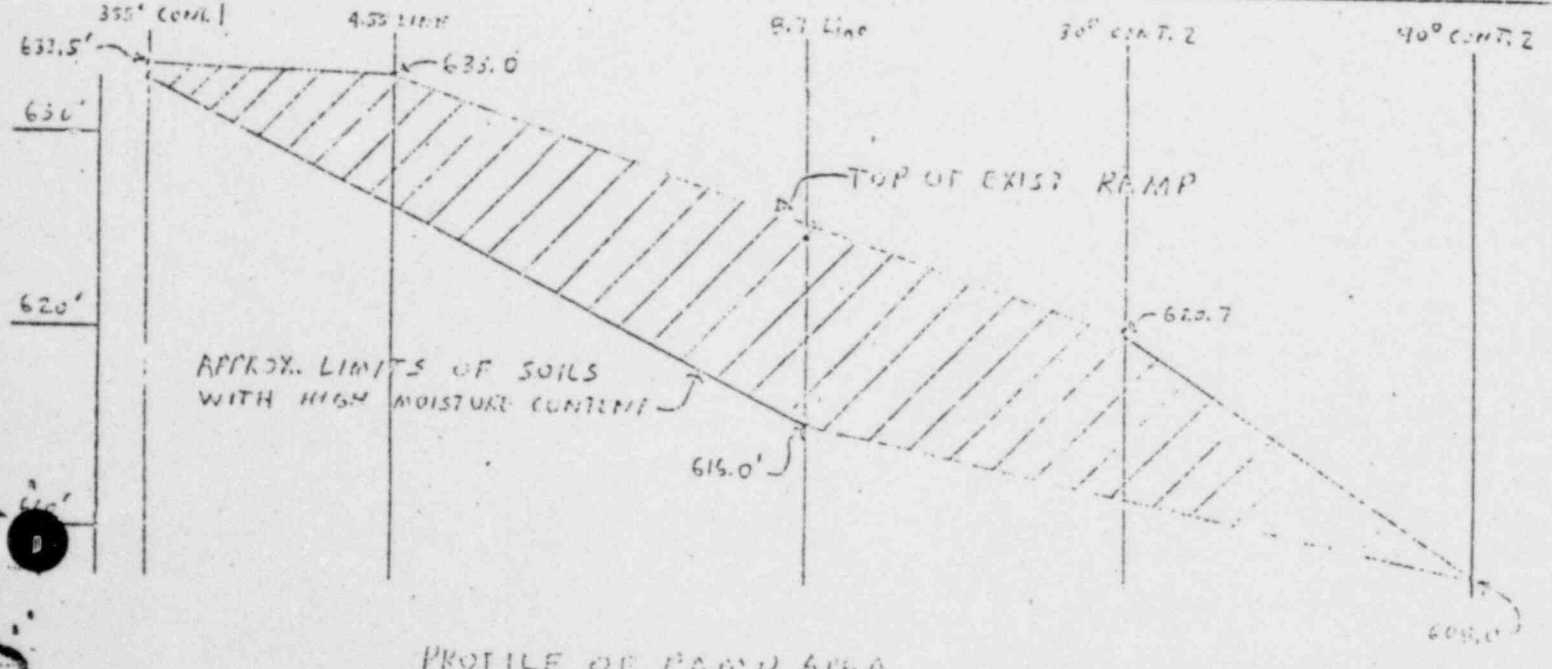
DESIGN BY _____ DATE _____ CHECKED BY _____ SHEET NO 1 of 1

PROJECT _____ NCR # 421 Page 4 of 4 JOB NO _____

SUBJECT _____ FILE NO _____



PLAN OF RAMP AREA
N.T.S.



PROFILE OF RAMP AREA
N.T.S.

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 3	14. NCR NO. 423

2. DRAWING/PART NO. 7220-M-614 Sht. 7 — REV. 3/F1	7. PROJECT NO. 7220	12. REPORTED BY P.M. Pitts — DATE 5-18-76
3. ITEM DESCRIPTION Component Cooling System	8. ITEM LOCATION Embedded Piping, Fuel Pool Area	13. VALIDATED BY — DATE 5-18-76
4. SERIAL NUMBER See Block 19	9. STARTUP SYSTEM NO. N/A	15. REPLACEMENT PART NO. N/A — REV.
5. PURCHASE ORDER NO. 7220-M-104-AC	10. QC FIELD INSPECTION PLAN NO. M-204-2-614-7C Rev. 0	16. REPLACEMENT SERIAL NO. N/A
6. CONTRACTOR/LOCATION ITT Grinnell, Kernersville, NC	11. ASME CODE ITEM ☒ YES ☐ NO	17. SOURCE Engineering

25. DISPOSITION CONCURRENCE

REWORK	REJECT	REPAIR	USE AS IS	DOC.
			✓	

PROJECT FIELD ENGINEER	DATE 6-11-76
PROJECT ENGINEER	DATE 6-11-76
PROJECT FIELD QC ENGINEER	DATE 6-11-76
AUTHORIZED INSPECTOR	DATE 6/17/76

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

SCN #7 to Spec. M-201 Rev. 6 Para 6.2.1.d states in part . . . "All austenitic stainless steel material shall be in the solution heat treated water quenched condition . . ." The following pipe spools were fabricated utilizing an air quenching process prior to the incorporation in the procurement Spec. (M-201) of the water quench requirement (SCN #7 to M-201). Reference to IOM BEBC-1001 attached.

Continued on Page 2

20. ☐ FIELD DISPOSITION ☒ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

Route to Project Engineering for disposition.
Contrary to Block 19 note 1, spools OHCC-15-S614-7-4 and OHCC-12-S614-7-3 are installed but not embedded.

5-18-76
K. Pulto 5-28-76

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

Material as installed is acceptable based on the following:

1. This piping is embedded in Q-listed concrete so a failure by cracking would not prevent the functioning of the system.
2. Even if a failure is assumed to result in complete loss of function of the Fuel Pool Cooling System there would be no adverse effect on the safe operation of the plant. The spent fuel pool is serviced by redundant connections to the Q-listed, seismically qualified Service Water System. These connections will assure proper cooling of any spent fuel stored in the pool.

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☒ NO ☐ YES, SEE ATTACHED:

DRAWING ______ REV. ______ DCN ______

SPEC. ______ REV. ______ ADD. ______

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

R.M. Pitts — QC ENGINEER	DATE 6-17-76
AUTHORIZED INSPECTOR	DATE 6-17-76

10098-1

White Copy — Originator
Canary Copy — Field Engineer
Pink Copy — PQAE
Goldenrod Copy — QC

QC-G3-2

Block 19 Continued -

OHCC-15-S614-7-1
OHCC-15-S614-7-2
OHCC-15-S614-7-3
OHCC-15-S614-7-4
OHCC-12-S614-7-1
OHCC-12-S614-7-2
OHCC-12-S614-7-3

Notes: 1. These pipe spools were installed, tested, insulated and embedded in concrete (See Field Inspection Plan M-204-2-614-7C, Rev. 0)

2. Q. Number is 4.1.4

3. Two QC Hold Tags Applied

4. This condition was discovered and reported by Project Engineering during a generic investigation of the use of air quenched stainless steel materials.

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

Bechtel Associates Professional Corporation

Inter-office Memorandum

To J. F. Newgen

Date May 13, 1976

Subject Midland Plant - Units 1 & 2
Job 7220
Air-Quenched Stainless Steel Piping
File: 0274, 0545 w/a

From R. L. Castleberry

Of Engineering

At Ann Arbor

Copies to

J. Connolly w/a
L. Sokol
T. VanVick w/a

Bech 1001

It has come to our attention that 23 ASME stainless steel pipe spools which have been shipped to the site were fabricated using methods contrary to current revised specification requirements. The spools are listed on the attached draft NCR's. Should you or the PFQCE feel an NCR(s) is appropriate to document the situation and assure control of the spools, Engineering requests that the attached drafts be used.

We are actively pursuing this matter with Grinnell, although we do not as yet have a schedule for resolution. Should there be any questions, please contact Mike Rothwell.

R. L. Castleberry

JLH/ld

attachment

ROUTE QC 07220 INIT.

PFQCE	
A. PFQCE	
CIVIL	
ELECT.	
PIPING	
MECH.	
WELDING	
DOC.	
RECEIVING	

OPEN LOOP
☐ YES ☒ NO
DATE

RECEIVED

MAY 17 1976

QUALITY CONTROL
BECHTEL JOB 7220
SIGNATURE

NCR #423

NONCONFORMANCE REPORT

1. PAGE 1 OF 2 — 14. NCR NO. 426

Field	Entry
2. DRAWING/PART NO.	Grinnell 1-610-6-3
REV.	3
3. ITEM DESCRIPTION	Hanger
4. SERIAL NUMBER	10-1FCB-35-H3
5. PURCHASE ORDER NO.	7220-M-106-AC
6. CONTRACTOR/LOCATION	ITT Grinnell, Providence, Rhode Island
7. PROJECT NO.	7220
8. ITEM LOCATION	580'6" el. Aux. #1 6'6" N of G 12'7" W of 6.2
9. STARTUP SYSTEM NO.	N/A
10. QC FIELD INSPECTION PLAN NO.	QCIR-M-326-11V
11. ASME CODE ITEM	☐ YES ☒ NO
12. REPORTED BY	Paul W. Ratter — DATE 5/21/76
13. VALIDATED BY	[signature] — DATE 5-24-76
15. REPLACEMENT PART NO.	N/A — REV.
16. REPLACEMENT SERIAL NO.	N/A
17. SOURCE	Construction

25. DISPOSITION CONCURRENCE: REWORK / REJECT / REPAIR / USE AS IS / DOC.

	DATE
ORBoos for T.C. Valenzano — PROJECT FIELD ENGINEER	6-22-76
[signature] — PROJECT ENGINEER	6-17-76
[signature] — PROJECT FIELD QC ENGINEER	6-23-76
AUTHORIZE INSPECTOR	

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

Visual inspection by QC of the weld which connects item #1 to item #2 (Grinnell drawing 1-610-6-3) revealed a complete fillet weld all around item #1. The Project Engineering approved drawing calls for a fillet weld only on two (2) sides of item #1. Reference attached drawing. Q Number is 4.102

1 Hold Tag Applied

20. ☐ FIELD DISPOSITION ☒ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

Use as is.

[signature] 6-8-76
[signature] 6-9-76

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

ENG. AGREES WITH THE FIELD DISPOSITION TO "USE AS IS". THE EXTRA FILLET WELD ONLY ADDS ADDITIONAL LOAD CARRYING CAPACITY & GIVES A HIGHER SAFETY FACTOR AT THIS JUNCTION.

[signature] 6/17/76
[signature]

23. ENGINEERING DISPOSITION RESULTS:

Hold tag removed.
P. Ratter 6/23/76

24. IS DESIGN CHANGE REQUIRED ☒ NO ☐ YES, SEE ATTACHED:

DRAWING ______ REV. ______ DCN ______

SPEC. ______ REV. ______ ADD. ______

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

Paul W. Ratter — QC ENGINEER — DATE 6/23/76

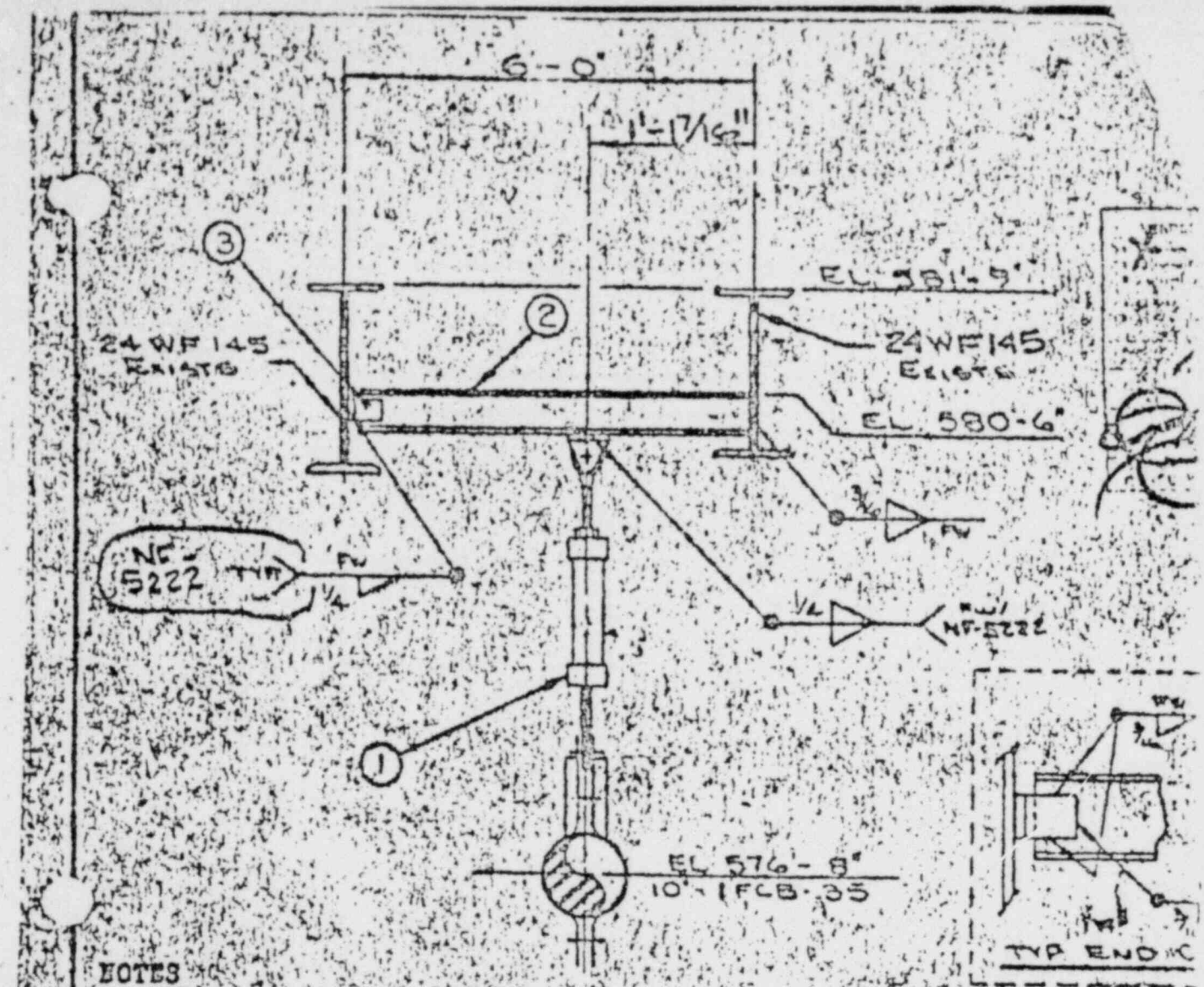
AUTHORIZED INSPECTOR — DATE

10098-1

White Copy — Originator
Canary Copy — Field Engineer
Pink Copy — PQAE
Goldenrod Copy — QC

QC-C3-2

NCR N-
PAGE 2 of 2



NOTES

1) All tolerances in accordance with QCP #2A001 U.N.O.
2) Fab. Procedure is FH-101-[illegible]
3) All products designed in accordance with EPL File No. 1 Rev. 1

HANGER CODE 1	
DISTRIBUTION	
[illegible]	[illegible]
VENDOR	[illegible]
[illegible]	[illegible]
FIELD	[illegible]
ACCT	[illegible]
STRESS	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
RECORD	[illegible]
ARCHITECT	

PIPE ISO. HLK
DATA POINT [illegible]
PIPE MAT'L. SA
INSUL 2"

THIRD PARTY INSPE
CODE CLASS: AN

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 6				14. NCR NO. 427	
2. DRAWING/PART NO. 7220-C-275	REV. 3	7. PROJECT NO. 7220	12. REPORTED BY C.R. Corbett	DATE 5-25-76	25. DISPOSITION CONCURRENCE: REWORK / REJECT / REPAIR / USE AS IS / DCN
3. ITEM DESCRIPTION Reinforcing Bars		8. ITEM LOCATION Aux. Bldg. Elev. 632'6"	13. VALIDATED BY [illegible] SWC	DATE 5-25-76	PROJECT FIELD ENGINEER J.C. Duncan 6-9-76
4. SERIAL NUMBER N/A		9. STARTUP SYSTEM NO. N/A	15. REPLACEMENT PART NO. N/A	REV.	PROJECT ENGINEER [illegible] 6-8-76
5. PURCHASE ORDER NO. N/A		10. QC FIELD INSPECTION PLAN NO. N/A	16. REPLACEMENT SERIAL NO. N/A		PROJECT FIELD QC ENGINEER [illegible] 6-10-76
6. CONTRACTOR/LOCATION N/A		11. ASME CODE ITEM ☐ YES ☒ NO	17. SOURCE Construction		AUTHORIZE INSPECTOR DATE

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION: Drawing 7220-C-275 Rev. 3 in Sections D, E, and L shows certain #11 and #8 reinforcing bars standard hooks oriented down into the wall below the construction joint at Elev. 629' +. Field Construction elected to install these bars with standard hooks extending upinto the slab above. CPCo QA has identified this condition as nonconforming in their NCR QF-100. The identification of this condition as nonconforming was reiterated by CPCo's reply to Bechtel's initial response to QF-100. All reference correspondence is attached. Four Hold Tags applied. "Q" List No. 1.203.

20. ☐ FIELD DISPOSITION ☒ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

By note #5 on Drawing #C-140, Project Engineering has established that detailing & fabrication of reinforcing steel shall be according to the current ACI Manual of Standard Practice. The ACI 315 Manual for Detailing clearly provides that a 90° bend hook indicated without dimensions on the design drawing is a standard hook per ACI 318 sect 7.1. The purpose of these hooks is understood by field civil (contd)

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

For the # 11 and # 8 rebars described in this NCR, the hook orientation to either extend upwards or down into the wall satisfies the design requirements of Section D, E and L of Drawing C-275, Revision 3. This disposition is consistent with the design intent shown in Standard Concrete Detail 2, Drawing C-140 (which is similar to ACI 315-74, figure 2-9) wherein alternate hook end orientations are shown (contd)

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☒ NO ☐ YES, SEE ATTACHED:

DRAWING _____ REV. _____ DCN _____

SPEC. _____ REV. _____ ADD. _____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE C.R. Corbett 6/10/76
QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

Block 20:

engineers to develop the strength of each reinforcing bar which requires them. For some configurations, the design engineer may require specific orientation or special lengths for hooks; however, ACI 315 requires that these special conditions be shown on the design drawings. To assure that design is complying with ACI 315 and to confirm the field engineering interpretation, a telephone call from Field to Project Engineering was made 4/29/76. (See attached memo). Project Engineering stated that special cases have been indicated by dimensions or notes on the design drawings.

The Field Engineering interpretation of the design drawings and decision to orient the hooks to facilitate construction did not violate existing design requirements, and was not an extension of Field Engineering responsibility beyond established guidelines.

Therefore, this is not a nonconforming condition.

[signature] 5/26/76

Block 22: Engineering Disposition (Contd.)

as acceptable. To resolve any doubts as to this design intent, DCN 9 to Drawing C-140, Revision 8 was recently issued adding notes 17 and 18 to Drawing C-140. Engineering holds that the described installation is not non-conforming and hence has no deleterious impact on plant safety. [initials]

[signature] 6-8-76

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

Page Letter NCR #429 3 of 8.

Bechtel Power Corporation

Post Office Box 2167
Midland, Michigan 48640

May 10, 1976

Consumers Power Company
P. O. Box 1963
Midland, Michigan 48640

Attention: J. L. Corley

Ref: CPCo NCR No. QF-100
Dated: 5/4/76
FQCL-070

Dear Mr. Corley:

The Midland Construction Quality Control program for controlling nonconforming items in accordance with criteria XV of 10CFR50, Appendix B is described in FIM Procedure G-3. This procedure defines a nonconformance as:

> "A deficiency in characteristic, documentation or procedure which renders the quality of an item unacceptable or indeterminate".

The condition noted in Block 12 of the activity/task 2.60 on FIP C-231-2-858 is not nonconforming in accordance with the above definition. It is an explanatory note pointing out the option was exercised of installing the bars in the subsequent slab pour rather than in the wall placements below. In other words, it was decided the dowels would be installed with the tails up rather than down. This was a conscious decision made with knowledge beforehand by the responsible field engineer and concurred with by the responsible QC engineer as permitted by paragraph 3.3(a) of FIM Procedure G-1 which states in part:

> "Field engineers . . . have the following responsibilities:
>
> a. Interpretation and clarification of drawings and project specifications through liaison with discipline design engineers."

The Project response to Regulatory Guide 1.55 and associated NRC question 130.5 clearly indicates the propriety of the manner in which Field Engineering handled the rebar in question. At my request Proejct Engineering has reviewed this situation and agrees that the field made a proper interpretation of the design drawing. Further, to prevent future controversy, Project Engineering has revised Drawing C-140 to note that standard hooks may be oriented at the Field's discretion unless otherwise noted.

. . ./. . .

Mr. J. L. Corley
May 10, 1976
Page No. 2

In view of the above, the conditions described in QF-100 do not constitute a nonconforming condition and therefore the recommended corrective action of issuing a NCR is not applicable. We will continue to schedule periodic training sessions covering the implementation of FIM Procedure G-3 as appropriate, just as we have in the past.

Sincerely,

J. P. Connolly
PFQCE

JPC/jmw
cc: T. C. Cooke
bcc: J. Newgen
G. Richardson JPC 5/13/76
R. Hermeston
P. Martinez
R. Castleberry
W. Holub
D. Johnson

Page 9-76-518
NCR # 427
Attachment A

Route To	This Copy For
FMSouthworch	SHHowell
CQHills	GSKeeley
HWSlager	TCCooke
	JMilandin
	WFHolub
	GLRichardson
	ZGTucker

Consumers Power

Nonconformance Report No QF-100

File 16.3.6
Issue Date May 4, 1976
Project Midland 1 & 2

File Title NCR's on Bechtel Quality Control

This Nonconformance Report is Issued To:

J. P. Connolly ✓
Bechtel PFQCE

who is responsible for corrective action.

Prepared By W.R. Becker Date 5-4-76
Approved By [illegible] Date 5/4/76
Written Reply Requested By Date 5/7/76
Corrective Action Requested By Date 6/4/76

Nonconformance Description and Supporting Details:

See Attachment A.

RECEIVED
MAY 04 1976
QUALITY CONTROL
BECHTEL JOB 7220
SIGNATURE [signature]

AEC Reportable Yes ☐ No ☒ See Procedure 9 (For Nuclear Projects Only)

Stop Work Necessary Yes ☐ No ☒ See Procedure 16 - Stop Work No ____

Recommended Corrective Action:

See Attachment A.

[1]Corrective Action Taken:

[1]Verification of Corrective Action Required Yes ☐ No ☐

[1]Method of Verification:

[1]Nonconformance Closure Confirmed By ____
Date ____

[1]To be completed at time of closure by Consumers Power QA Services.

ROUTE QC 07220	INIT.
PFQCE	
A. PFQCE	
CIVIL	
ELECT.	
PIPING	
MECH.	
WELDING	
DOC.	
RECEIVING	

OPEN LOOP
☐ YES ☐ NO
DATE ____

Tag. 50 f. 6 6/6
NCR # 429

File 16.3.6
Issue Date May 4, 1976
Project Midland 1 & 2
File Title NCR's on Bechtel Quality Control

Attachment A to Report No QF-100

Nonconformance Description and Supporting Details:

Criterion XV of 10CFR50(B) states: "Measures shall be established to control materials, parts, or components which do not conform to requirements in order to prevent their inadvertent use or installation. These measures shall include, as appropriate, procedures for identification documentation, segregation, disposition, and notification to affected organizations. Nonconforming items shall be reviewed and accepted, rejected, repaired, or reworked in accordance with documented procedures".

Contrary to these requirements, a nonconforming condition was noted in Block 12 of Activity/Task 2.60 on Field Inspection Plan C-231-2-858 with no nonconformance report written. Furthermore, this condition was not "reviewed and accepted in accordance with documented procedures".

Recommended Corrective Action:

1. Write a nonconformance report to cover the nonconforming condition in the referenced inspection plan.

2. Receive disposition from Project Engineering including engineering rationale for use as is if that is the disposition received.

3. Review all completed Field Inspection Plans for exceptions which have not resulted in NCR's and, if any are found, proceed as in items #1 and #2 above.

4. Instruct all QCE's in the requirements of Criterion XV and the necessity of following it.

Page 606-67-16
NCR # 127

Consumers Power Company

Midland Project: P.O. Box 1963, Midland, Michigan 48640 · Area Code 517 631-0951

May 17, 1976

Mr. J. P. Connolly
Bechtel Power Corp.
P.O. Box 2167
Midland, MI 48640

MIDLAND PROJECT - NCR QF-100
File: 16.3.6 Serial: 52FQA76

Contrary to your letter FQCL-070 dated May 10, 1976, the condition noted in block 12 of Activity/Task 2.60 in Field Inspection Plan C-231-2-858 does represent a nonconforming condition in that the drawings were not followed. Also while the Field Engineer does have the authority to interpret or clarify drawings, he does not have the authority to change them. It should be noted that Webster's New Collegiate Dictionary, copyright 1973, defines interpret as "to explain or determine the meaning of" and defines clarify as "to make clear; to free of confusion; to make understandable". What was done by the Field Engineer in this case did not meet the definition of either clarify or interpret. It should be noted, however, that with the change you reference which was made by Project Engineering to drawing C-140, he would now be allowed to make such a decision within the framework of FIM Procedure G-1.

While we are not saying that the hook bars in question could not have been turned, we are saying that the manner in which you proceeded with respect to them did violate Criterion XV of 10CFR50, Appendix B. Therefore, our position on corrective action remains unchanged.

You have now officially stated your position on this NCR and we have, by this letter, rejected it. We feel it is now time to get on with the corrective action outlined in our NCR. It appears that you still have sufficient time to implement this recommended corrective action. However, if you do not, please let us know so that we may grant you a time extension if warranted.

QC 07220

PFQCE	
A. PFQCE	
CIVIL	
ELECT.	
PIPING	
MECH.	
WELDING	
DOC.	
RECEIVING	

OPEN LOOP
☒ YES ☐ NO
DATE 5-26-76

J. D. Corley
Quality Assurance Superintendent

CC: TCCooke
GSKeeley
HWSlager
FMSouthworth
GLRichardson
ZGTucker

RECEIVED
MAY 17 1976
QUALITY CONTROL
BECHTEL JOB 7220
SIGNATURE

ATTN: G. TUVESON

cc G. Tuveson - A
J.P. Connolly

BECHTEL

8 of 8
NCR 427

Telephone call

ROUTE: O Holman
A. Boos
J. Desmond
H. Mailley

BY: T. Valenzuela OF:

TO: Gordon Tuveson OF: A

DATE: 4.29, 19 76 TIME: am

SUBJECT: Rebar tail orientation. (hook bars) JOB NO. 7220

Called Gordon to verify field approach to rebar dowel tail orientation. That is, unless otherwise noted, standard hooks on rebars could be oriented to facilitate construction efforts. Gordon agreed on this approach.

We then discussed other than std. hooks or orientation requmts, and agreed to evaluate further any need for added notes or dimensions.

Page 1 of 14
P M Pitts 7-9-76 McPitts 7-9-76

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 8 — 14. NCR NO. 428

Field	Entry
2. DRAWING/PART NO.	See Block 19
REV.	
3. ITEM DESCRIPTION	Fasteners for Pipe Hangers, Supports, & Restraints
4. SERIAL NUMBER	See Block 19
5. PURCHASE ORDER NO.	7220-M-106AC
6. CONTRACTOR/LOCATION	ITT Grinnell Corp., Warren, Ohio
7. PROJECT NO.	07220
8. ITEM LOCATION	Various Storage & Installation Locations
9. STARTUP SYSTEM NO.	N/A
10. QC FIELD INSPECTION PLAN NO.	See Block 19
11. ASME CODE ITEM	[X] YES [ ] NO
12. REPORTED BY	P M Pitts — DATE 5-28-76
13. VALIDATED BY	[signature] — DATE 5-28-76
15. REPLACEMENT PART NO.	N/A — REV.
16. REPLACEMENT SERIAL NO.	N/A
17. SOURCE	Supplier

25. DISPOSITION CONCURRENCE: REWORK | REJECT | REPAIR | USE AS IS | DOC.

PROJECT FIELD ENGINEER: [signature] 7-8-76

PROJECT ENGINEER: [signature] 6-28-76

PROJECT FIELD QC ENGINEER: [signature] 7-8-76

AUTHORIZED INSPECTOR: [signature] 7/9/76

18. ROUTING INSTRUCTIONS: [X] ROUTE TO FIELD ENGINEERING [ ] ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

ASME Section III 1974, Para. NA 3767.4(referenced through Specification 7220-M-209 and ASME Section III, Para. NF 2130 and NF 4121.1) states in part. . ."A Material Manufacturers Certificate of Compliance with the material specification, grade, class, and heat treated condition, as applicable, may be provided in lieu of a Certified Materials Test Report for. . . bolting 1 inch diameter and less. Material identification icluding any marking code shall be described in the Certified Materials Test Report or Certificates of Compliance as applicable."

(Continued on Page 2)

20. [X] FIELD DISPOSITION [X] FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

Item 1. Field Disposition: This item is not a nonconformance. Code case 1651 and article NF 4121 applies which covers certificates of compliance furnished by component support manufacturer. ITT Grinnell has furnished certificates of compliance in accordance with code case 1651 & NF 4121.

continued on page 3

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

Item 2 This item is not a nonconformance. The fact that the nuts are unmarked does not constitute a nonconformance. ITT Grinnell's QA-program assures that the nuts conform to those specified by ITT Grinnell engineering department's design. In the case in question, ITT Grinnell's engineering elected to use an SA-307 grade A or B carbon steel nut with an SA-193 B7 (Alloy Steel) stud because of the principal shear loading conditions. (Continued on attached sheet) 3A/8

23. ENGINEERING DISPOSITION RESULTS:

Acceptance per Project Engineering Disposition. P M Pitts 7-9-76

24. IS DESIGN CHANGE REQUIRED [X] NO [ ] YES, SEE ATTACHED:

DRAWING ______ REV. ______ DCN ______

SPEC. ______ REV. ______ ADD. ______

26. REJECTED MATERIAL DISPOSITION [ ] RETURN TO SUPPLIER [ ] SCRAP

REMARKS

27. QC ACCEPTANCE: P M Pitts 7-9-76

QC ENGINEER

AUTHORIZED INSPECTOR: [signature] 7/9/76 DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

Block 19 Continued.

6. The following conditions contrary to the above exist on all assemblies furnished to date under Purchase Order 7220-M-106AC:

a) Material Certificates of Compliance do not specify material specifications, grades, classes or types used in fabrication.

b) Material Certificates of Compliance do not specify the means of material identification including the marking code utilized.

2. Hex nuts furnished with stud-bolts marked 'B-7' (ASME SA-193) are not identified as required by ASME SA-193 para. 13.1 and ASME SA-194 para. 13a and 13b.

3. No material identification marking or description is provided for the following additional types of fastener materials:

a) ~~Retainer clips, 'C' type~~ NOT APPLICABLE H.O. Foster 6-7-76

b) Hex head bolts and nuts for pipe clamps

c) Miscellaneous hex nuts

Page 1, Blocks 2, 4, and 10

Hanger	Field Inspection Plan	Location
10-1FCB-35-H3	M-204-2-GH-610-6	Final Location
10-1FCB-35-H5		
18-1GCB-33-H6	M-204-2-GH-610-3	
12-2GCB-25-H11	M-204-2-GH-611-5	Final Location
18-2GCB-33-H3		
18-2GCB-33-H4		
18-2GCB-33-H6		

Continued on Page 3

NONCONFORMANCE REPORT (CONT'D) PAGE 3 OF 5 NCR NO. 428

Block 19 Continued, Page 1, Blocks 2, 4, and 10

6-1FCB-20-H1 M-204-2-GH-610-4 Final Location
10-1FCB-43-H3
10-1FCB-43-H2
10-1FCB-43-H1

Note: Other nonconforming hanger assemblies located in storage warehouse AND AUXILIARY BUILDING
SEE ATTACHED LIST OF HANGER ASSEMBLIES

Nonconformance noted during installation inspection. Q list number - Various. Hold Tags Applied.

BLOCK 20 continued from page 1

Item #2 & 3 - Route to Project Engineering. ~~ASME III - Para. NA-3766.6 states that bolts and nuts 1" nom. diameter & smaller where the space available for marking is less than 1" in any direction need not be marked, except as required by the material specification.~~

Material specification ASME II Part A. SA-193 requires that the manufacturer's identification marking be stamped on the head of bolts and screws and on one end of studs and stud bolts.

Material Specification ASME II Part A. SA-194 states (a)"all nuts shall bear the manufacturer's identification marking". (b) nuts shall be legibly stamped to indicate grade and process of manufacturer per table V.

Field Recommendation - Project Engineering to notify Itt Grinnell to ship replacement nuts and bolts for all hangers requiring nuts and bolts which have been shipped to date and that all future shipments contain properly marked nuts and bolts. Field requests that replacement nuts and bolts be packaged in a kit form with each kit identified with the appropriate hanger mark number. Field requests a conditional release for installation of nonconforming hangers, based on replacement of the bolting material after receipt at the jobsite. (FIM G-3 paragraph 5.0)

APPROVAL FOR CONDITIONAL RELEASE FOR INSTALLATION OF ASSEMBLIES ON LIST 'A' — for T.R. Valenzuela PFE; [signature] PFQCE; PFQAE; (A.I.)

[signature] 6-14-76
[signature] 6-14-76

10098-2

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-3

Page 4 of 14 [illegible] 7-9-76

NONCONFORMANCE REPORT (CONT'D)

1. PAGE 34 OF 8 14. NCR NO. 428

12. Engineering Disposition - Cont'd

While SA-193 studs require marking, SA-307 nuts do not require marking by Code or specification.

Item 3: There is no evidence that this item is a nonconformance. The fact that the items are unmarked does not constitute a nonconformance. No nonconformance with the Code or the hanger specification exists.

ITT Grinnell's QA-program assures that the items conform to those specified by ITT Grinnell's engineering department's design. A more detailed clarification is set forth in ITT Grinnell's response to NCR 428 of 6/18/76 which is attached.

[illegible] 1/23/76

The identification marking requirement Acc. to NF-4122 applies only until the component support is fabricated or installed.

[illegible] A.I
7/9/76

10098-2

White Copy - Originator
Canary Copy - Field Engineer
Pink Copy - PQAE
Goldenrod Copy - QC

QC-G3-1

MEMORANDUM

To HD FOSTER

From PM Pitts

Date 6-16-76

Subject NCR 428

TAG APPLICATION RECORD

AUX BUILDING

1) 2-611-4-18 10-2FCB-19-H10
2) 2-611-4-26 10-2FCB-43-H1
3) 2-611-4-23 6-2FCB-20-H1
4) 1-610-4-23 6-1FCB-20-H1
5) 1-610-4-27 10-1FCB-43-H2
6) 1-610-4-28 10-1FCB-43-H3
7) 2-611-5-2 10-2GCB-25-H11
8) 2-611-5-18 18-2GCB-33-H3
9) 18-2GCB-33-H6
10) 2-611-5-18 18-2GCB-33-H4
11) 10-HCB-35-H5
12) 1-610-5-3 10-1FCB-35-H3
13) 1-610-5-30 18-1GCB-33-H6
14) 2-611-4-35 2½-2FCC-1-H2
15) 1-610-4-34 3-1FCB-28-H6
16) 2-611-3-21 18-2GCB-32-H6

CLASS A WAREHOUSE

17) 2-611-5-15 24-2HCB-1-H7
18) 2-611-5-14 24-2HCB-1-H6
19) 2-611-5-13 24-2HCB-1-H5
20) 2-611-5-24 18-2HCB-8-H1
21) 2-611-5-17 18-2HCB-1-H11
22) 2-611-5-18 18-2HCB-1-H10
23) 1-619-6-18 1-HBC-100-H4
24) 2-611-4-11 10-2FCB-34-H1
25) 2-611-3-5 24-2HCB-2-H5
26) 2-611-5-22 18-2HCB-1-H14
27) 2-611-3-3 24-2HCB-2-H3
28) 2-611-4-32 3-2FCB-20-H4
29) 1-619-6-17 10-1FCB-100-H3
30) 2-611-4-32 3-2FCB-20-H4
31) 2-611-3-27 12-2GCB-25-H6
32) 2-611-3-29 12-2GCB-25-H8
33) 2-611-4-14 6-2FCB-34-H2
34) 1-610-5-21 18-1HCB-1-H13
35) 2-611-3-24 12-2GCB-25-H3
36) 2-611-3-30 12-2GCB-25-H9
37) 2-611-3-15 18-2HCB-7-H1
38) 2-611-3-18 18-2GCB-32-H3
39) 2-611-3-11 18-2HCB-2-H11
40) 2-611-3-6 24-2HCB-2-H6
41) 2-611-5-11 24-2HCB-1-H3
42) 2-611-3-4 24-2HCB-2-H4
43) 2-611-3-4 24-2HCB-2-H4
44) 2-611-4-3 10-2FCB-34-H3
45) 2-611-4-2 10-2FCB-34-H2

QC HOLD AREA RECEIVING WHSE

46) 10-2FCB-34-H7
47) 2-611-5-3 12-2GCB-25-H12
48) 2-611-3-7 24-2HCB-2-H7
49) 1-610-5-26 18-1GCB-33-H2
50) 2-611-5-7 12-2GCB-25-H16
51) 1-610-5-27 18-1GCB-33-H3
52) 2-611-5-21 18-2HCB-1-H13
53) 1-610-5-20 18-1GCB-33-H4
54) 2-611-5-6 12-2GCB-25-H15

NCR 428 Page 5 of 14 PM Pitts 2-2-[illegible]

MEMORANDUM

TO: HD Foster, J Miller
FROM: PM Pitts
LOCATION:
DATE: 19
SUBJECT: NCR 428, Revision of 6-16-76
JOB NO.
FILE

QC Hold Tags Applied in Class A Warehouse

Tag No	Hanger Number	Description
55	10-2FCB-11-6-5 1-610-5-35-H5	CLAMP
56	SAME	SWAY STRUT
57	24-1HCB-1-H-7	CLAMP
58	SAME 1-610-5-11	SWAY STRUT
59	24-1HCB-1-H6	CLAMP
60	SAME 1-610-3-18	SWAY STRUT
61	18-1GCB-32-H-3	CLAMP
62	SAME 2-611-6-16	SWAY STRUT
63	10-2FCB-22-H13 2-611-6-10	CLAMP
64	10-2FCB-35-H10 2-611-6-16	CLAMP
65	10-2FCB-22-H-13 2-611-6-10	SWAY STRUT
66	10-2FCB-22-H-13	SWAY STRUT
67	6-2FCB-12-H1 2-611-7-28	CLAMP
68	10-2FCB-22-H6 2-611-7-28	SWAY STRUT
69	10-2FCB-22-H6	SWAY STRUT
70	18-1GCB-32-H2 1-610-3-17	CLAMP
71	18-1GCB-32-H2 2-611-7-28	SWAY STRUT
72	10-2FCB-22-H6 1-610-5-24	CLAMP
73	18-1HCB-8-H1 1-610-5-24	CLAMP
74	18-1HCB-9-H1	SWAY STRUT

MEMORANDUM

TO ______ LOCATION ______

FROM ______ DATE ______ 19__

SUBJECT ______ JOB NO. ______ FILE ______

75	18-1HCB-1-H11 (1-610-5-19)	CLAMP
76	SAME	SWAY STRUT
77	2½-2CCB-28-H1 (2-611-6-36 ✓)	CLAMP
78	10-2FCB-35-H3 (2-611-3-3 ✓)	SWAY STRUT
79	SAME	CLAMP
80	24-1HCB-2-H5 (1-610-5-5)	CLAMP
81	18-1HCB-1-H14 (1-610-5-22)	CLAMP
82	10-2FCB-35-H-8 (2-611-6-8)	CLAMP
83	SAME	SWAY STRUT
84	12-1GCB-25-H-16 (1-610-5-7)	CLAMP
85	12-1GCB-25-H-9 (1-610-3-20)	CLAMP
86	SAME	SWAY STRUT
87	2½-2CCB-28-H3 (2-611-6-38 ✓)	CLAMP
88	10-2FCB-42-H1 (2-611-6-26 ✓)	CLAMP
89	18-1FCB-7-H1	SWAY STRUT
90	SAME	CLAMP
91	18-1GCB-32-H-4 (1-610-3-15)	CLAMP
92	SAME	CANNISTER CONNECTOR
93	SAME	EYEBOLT ASSEMBLY
94*	24-1HCB-2-H3 (1-610-3-3)	CLAMP
95	18-1HCB-1-H12 (1-610-5-20)	SWAY STRUT
96	SAME	CLAMP
97	10-2FCB-22-H-17 (2-611-6-30 ✓)	CLAMP
98	24-1HCB-1-H... (1-610-5-13)	CLAM[P]

WCAP4228 Page 6 of 7 [illegible] Attach 7 Rev 4 Phillips 7-22-76

MEMORANDUM

TO:

FROM: LOCATION:

DATE: 19

SUBJECT: JOB NO.

FILE

99	7-610-5-13 24-1HCB-1-H5	CLAMP
100	SAME	SWAY STRUT
101	12-1GCB-25-H18	SWAY STRUT
102	12-1GCB-25-H18	CLAMP
103	10-1FCB-19-H2	SWAY STRUT
104	10-1-FCB-19-H2	CLAMP
105	18-1GCB-33-H2	SWAY STRUT
106	18-1GCB-33-H2	CLAMP
107	12-1GCB-25-H19	CLAMP

NCR 4238 PAGE 7 of 8

NCR 4238 Page 5 of 14

NCR 428 Page 9 of 14 P.M. Pitts 7-7-76

NONCONFORMANCE REPORT (CONT'D)

14. NCR NO. 428

NCR 20 (CONT.) LIST "A".

THE FOLLOWING ARE HANGER ASSEMBLIES REQUESTED TO BE RELEASED FOR INSTALLATION:

HANGER MARK NO.	SKETCH NO.	HANGER MARK NO.	SKETCH NO.
10-2FCB-19-H10	2-611-4-18	24-2HBC-2-H7	2-611-3-7
6-2FCB-[illegible]-H1	2-611-4-23	10-1HBC-100-H31	1-619-6-17
[illegible]-2FCB-28-H4	2-611-4-32	18-2HBC-2-H1	2-611-3-15
10-2FCB-43-H1	2-611-4-26		
2½-2FCC-1-H2	2-611-4-35		
12-2GCB-25-H11	2-611-5-2		
18-2GCB-33-H4	2-611-5-28		
12-1GCB-33-H6	1-610-5-30		
18-1GCB-33-H4	1-610-5-28		
[illegible]-1GCB-33-H3	1-610-5-27		
3-1FCB-28-H6	1-610-4-34		
24-2HCB-2-H6	2-611-3-6		
18-2GCB-32-H3	2-611-3-18		
12-2GCB-25-H3	2-611-3-24		
12-2GCB-25-H9	2-611-3-30		
12-2GCB-25-H12	2-611-5-3		
12-2GCB-33-H3	2-611-5-27		
18-2GCB-33-H6	2-611-5-30		
18-1GCB-32-H3	1-610-3-17		
18-1GCB-32-H3	1-610-3-18		
18-1GCB-32-H4	1-610-3-19		
12-1GCB-25-H9	1-610-3-30		
18-1HCB-1-H12	1-610-5-20		
10-1HBC-100-H4	1-619-6-18		

INSTALLATION WILL BE TO BRING THE BOLTS & NUTS TO A SNUG FIT ONLY.

Approval for conditional release for installation of assemblies listed above

D. L. Richardson for W. Holub PG&E 6/18/76

[illegible] PFGCE 6/18/76

J C Valenzano PFE 6/18/76

Prem Lahoti AI 6/18/76

10098-2

ORIGINAL

QC-G3

313- 777

ITT Grinnell Corporation

Dana & Paige Avenue, N.E.
Warren, Ohio 44481
Telephone (216) 393-7566

June 18, 1976

chtel Associates Professional Corporation
O. Box #1000
21 South State Road
ilding "T"
n Arbor, Michigan 48106

tention: Mr. R. L. Castleberry
Project Engineer

bject: Consumers Power Company
Midland Plant - Job 7220
P.O. #7220-M-106-AC
CL#M-169

ntlemen:

Wednesday, June 16, 1976, the resident Bechtel Inspector, D. McMillin, rwarded a copy of Non-Conformance Report #428 to ITT Grinnell personnel. copy of this Non-Conformance Report is attached. Mr. McMillin stated t until this problem was resolved, there could be no further shipments aterial for the subject project.

e following is ITT Grinnell's response to the three (3) Non-Conformances isted on Page "2" of the Non-Conformance Report:

1) Bechtel Non-Conformance:

The following conditions contrary to the above exist on all assemblies furnished to date under Purchase Order 7220-M-106AC;

a) Material Certificates of Compliance do not specify material specifications, grades, classes or types used in fabrication.

b) Material Certificates of Compliance do not specify the means of material identification including the marking code utilized.

1) ITT Grinnell's Response:

Approximately one year ago, ITT Grinnell detected a conflict in the requirements of NA 3700 versus the requirements of Subsection NF. As it applies to shipments to ITT Grinnell's customers, our interpretation of the certification requirements, is that the rules defined in Sub Article NF 4121 should apply for all materials except those used in Class "1" non-standard supports and those supports requiring impact testing. It is also our opinion that the requirements of NA 3700 and Article NF 2000 apply both within Grinnell's manufacturing facility and on material supplied by ITT Grinnell's vendors. This had been verbally discussed with Bechtel-Ann Arbor personnel early in 1976 and agreed upon.

The Certificates of Compliance submitted in the sample data package, given a Code "1" approval by Bechtel-Ann Arbor on January 26, 1976, reflect ITT Grinnell's position. The actual Certificates of Compliance provided with the material shipped are virtually identical with the sample Certificate of Compliance included in the Bechtel approved data package.

In order to resolve this matter on a formal basis, ITT Grinnell requested that a Code Case be generated to eliminate any potential questions that might arise. This Code Case, #1728, was approved by ASME in November, 1975. It has received formal approval of the U.S. Nuclear Regulatory Commission, and is included in Regulatory Guide 1.85, Revision "6", dated May, 1976.

On December 17, 1975, ITT Grinnell requested Bechtel approval of this Code Case for use on the Midland project. Although ITT Grinnell has followed up on this matter, we have had no response from Bechtel as of this date.

The Bechtel resident inspector has continually verified that ITT Grinnell - Pipe Hanger Division is following the requirements of NA 3700, NA 4000, and Subsection NF during the manufacturing phase at the Warren, Ohio facility. The Coding system utilized by ITT Grinnell is documented in Quality Control Procedure 02A009. A copy of the Code Listing for various Grinnell materials, as defined by this Quality Control Procedure, is attached.

If requested, ITT Grinnell will be pleased to submit a copy of this Quality Control Procedure to Bechtel on a formal basis.

1) ITT Grinnell's Response (Cont'd.):

It may be noted that the materials used in component supports for the subject project, are defined either on ITT Grinnell drawings (for component standard supports) or on Bechtel approved hanger sketches. Verification of material usage for component standard supports must be accomplished at the Warren Plant.

2) Bechtel Non-Conformance:

Hex nuts furnished with stud-bolts marked 'B-7' (ASME SA-193) are not identified as required by ASME SA-193 para. 13.1 and ASME SA-194 para. 13a and 13b.

ITT Grinnell's Response:

The Engineering Departments within ITT Grinnell's Pipe Hanger Division, specify bolting material to satisfy the load requirements of the various designs. In some designs, such as the Figure #200 hydraulic shock and sway suppressor and the Figure #211 sway strut, the loads applied to some bolting material are primarily shear loads. This is particularly true of the bolting materials used as pins in the ball bushings on the aforementioned two (2) products. Accordingly, they have specified alloy studs in accordance with SA 193. Since there are very low tensile loads, the nuts used with these studs are specified as A-307, Grade "A" or A-307, Grade "B". There are no marking requirements for A-307 nuts. The Warren Plant has met the requirements as defined by the Pipe Hanger Division Engineering Departments. This has been verified by the resident Bechtel Inspector.

3) Bechtel Non-Conformance:

No material identification marking or description is provided for the following additional types of fastener materials.

b) Hex head bolts and nuts for pipe clamps.

c) Miscellaneous hex nuts.

ITT Grinnell's Response:

Sub Article NF-7150, states, in part, "Materials for small items shall be controlled during the manufacture of the component supports so that they are identifiable as acceptable materials at all times".

3) ITT Grinnell's Response (Cont'd.):

In implementing this requirement, ITT Grinnell did refer back to NA 3766.6 for a definition. Accordingly, bolts and nuts 1" nominal diameter and smaller are not Coded in accordance with the requirements defined in Quality Control Procedure #02A009. ITT Grinnell's position has been reviewed with the local Bechtel Inspector and his concurrence received. If Bechtel feels that ITT Grinnell should mark the shipping containers with a statement stating that some of the fasteners included, comply with the requirements of A-307, etc., this can be accomplished. However, ITT Grinnell Engineering documents such as component standard support drawings and/or customer approved hanger sketches, define the bolting requirements. It is ITT Grinnell's opinion that no action is required.

We feel that this response should enable you to close out Non-Conformance Report #428.

Prompt response will be given to any questions you may have.

Very truly yours,

D M Sewell

D. M. Sewell
Division Quality Assurance Manager

DMS/jb

Enc.

cc: P. Milman - Providence
J. Boyd - Providence
N. DeCristofaro - Providence
D. McMillin - Bechtel
R. Mulcahey - Providence
M. Plunkett - Providence
A. Roman - Warren
P. Stanish - Providence
H. Strom - Warren

NCR428 Page 13 of 14 [illegible] 7-5-76

ATTACHMENT I
D2A009

MATERIAL	LETTER CODE
SA-36	A
SA-53 Gr. A	YQ
SA-53 Gr. B	H
SA-106 Gr. A	YP
SA-106 Gr. B	K
SA-182 F-22	YR
SA-193 Gr. B7	E
SA-194 Gr. 2H	Y
SA-194 Gr. 7	Z
SA-216 Gr. WCA	YB
SA-216 Gr. WCB	YA
SA-240 Type 304	YE
SA-240 Type 316	YT
SA-266 Cl-1	N
SA-266 Cl-2	P
SA-266 Cl-3	Q
SA-306 Gr. 50	B
SA-306 Gr. 55	D
SA-306 Gr. 60	C
SA-306 Gr. 65	H
SA-306 Gr. 70	U
SA-307 Gr. A	X
SA-307 Gr. B	L
SA-312 Type 304	YJ
SA-312 Type 316	YS
SA-376 Type 304	YU
SA-376 Type 316	YV
SA-387 Gr. 22 CL-1	YC
SA-387 Gr. 22 CL-2	YD
SA-479 Type 304	YH
SA-479 Type 316	YR
A500 Gr. B	YW
A500 Gr. C	YX
A501	YZ
SA-515 Gr. 65	V
A-668 Cl. C	R
A-668 Cl. D	S
A-668 Cl. F	T
1018	J
1020	K
AISI 4140	YL
AISI 41L40	YH
SA306 Gr. 75	XA
A434 Cr Bc	XB
A434 Gr BD	XC
A194 Gr 2	XD
A335 P 22	XE

NCR 4-3, Page 14 of 19

BECHTEL

NONCONFORMANCE REPORT

2. DRAWING/PART NO. 7220-C-288	REV. 4	7. PROJECT NO. 7220	12. REPORTED BY [illegible]	DATE 6/2/76	1. PAGE 1 OF 2 — 14. NCR NO. 429
3. ITEM DESCRIPTION Reinforcing Steel		8. ITEM LOCATION Aux. Bldg 'C' Line	13. VALIDATED BY [illegible] QA	DATE 6-3-76	25. DISPOSITION CONCURRENCE
4. SERIAL NUMBER N/A		9. STARTUP SYSTEM NO. N/A	16. REPLACEMENT PART NO. N/A	REV.	REWORK X; REJECT; REPAIR; USE AS IS; DOC.
5. PURCHASE ORDER NO. N/A		10. QC FIELD INSPECTION PLAN NO. C-231-2-904 Rev. 0	16. REPLACEMENT SERIAL NO. N/A		PROJECT FIELD ENGINEER [illegible] 6-10-76 DATE
6. CONTRACTOR/LOCATION N/A		11. ASME CODE ITEM ☐ YES ☒ NO	17. SOURCE Construction		PROJECT ENGINEER [illegible] DATE 6-11-76
					PROJECT FIELD QC ENGINEER DATE
					AUTHORIZE INSPECTOR DATE

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

Four #6 slab dowels at the intersection of 'C' line wall and roof slab at Elev. 624'0" were broken off at the face of the 'C' line wall during form removal. Broken dowels at the bottom of the slab are located 21" to 40" east of 7.4 line wall. Top dowel broken off 20" east of 7.4 line wall.

Nonconformance noted during QC Surveillance Inspection. Q List #1.203. One tag applied.

20. ☒ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

Block 20 Revised on page 2

Rework as follows: Drill 1 1/2" Diam. holes, fill holes with non-shrink grout (Embeco 636) and set the missing dowels.* Grouting of bars shall be in accordance with the manufacturer's instructions. Embedment lengths shall be in conformance with the prescribed table on Dwg. C-211, Rev. 4. Expected implementation date on or about 6/11/76. [illegible] 6.4.76 [illegible] 6-4-76

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:
DRAWING _____ REV. _____ DCN _____
SPEC. _____ REV. _____ ADD. _____

25. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP
REMARKS

27. QC ACCEPTANCE
QC ENGINEER _____ DATE _____
AUTHORIZED INSPECTOR _____ DATE _____

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

BLOCK 20 Revision

Rework as follows: Drill 1 1/2" diam. holes, fill holes with non-shrink grout (Embeco 636) and set the missing bottom dowels. For the single top bar, drill 2 1/2" diam. hole, set the dowel through the wall and fill the hole with Embeco 636 by funneling through a tube, at the same time providing adequate vent to ensure proper grouting. Grouting of bars shall be in accordance with the manufacturer's instructions. Embedment lengths shall be in conformance with the prescribed table on Dwg. C-211, Rev. 4. Expected implementation date on or about 6/11/76. K. Weinrich 6.9.76

James Desmond 6-9-76

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 1				14. NCR NO. 430	
2. DRAWING/PART NO. See Block 19	REV.	7. PROJECT NO. 7220	12. REPORTED BY [illegible]	DATE 6/3/76	25. DISPOSITION CONCURRENCE: REWORK / REJECT / REPAIR / USE AS IS (X) / QOC
3. ITEM DESCRIPTION Pipe Spools		8. ITEM LOCATION Aux. Bldg. El 584 F & 6.9 line	13. VALIDATED BY [illegible]	DATE 6-8-76	
4. SERIAL NUMBER 2FCB-35-S611-6-7, 2FCB-35-S611-6-8		9. STARTUP SYSTEM NO. NA	15. REPLACEMENT PART NO. NA	REV.	PROJECT FIELD ENGINEER / DATE
5. PURCHASE ORDER NO. 7220 M-104A-AC Rev. 2		10. QC FIELD INSPECTION PLAN NO. NA	16. REPLACEMENY SERIAL NO. NA		PROJECT ENGINEER / DATE
6. CONTRACTOR/LOCATION ITT Grinnell, Kernersville, North Caroline		11. ASME CODE ITEM (X) YES ( ) NO	17. SOURCE Supplier		PROJECT FIELD QC ENGINEER / DATE
18. ROUTING INSTRUCTIONS (X) ROUTE TO FIELD ENGINEERING ( ) ROUTE TO MATERIAL SUPERVISOR					AUTHORIZE INSPECTOR / DATE

19. NONCONFORMING CONDITION

M-411 Rev. 3 and M-480 Rev. 2 show the By-pass line around the decay heat removal heat exchanger 2E-60B to be 2FCB-37. M-611-6 Rev. 5 shows the associated pipe spools to be 2FCB-37-S611-6-7 and 2FCB-37-S611-6-8. Contrary to the above, the code name plates identify the subject spools to be 2FCB-35-S611-6-7 and 2FCB-35-S611-6-8. Nonconformance discovered during drawing/hardware review (Q number 4.114). Two QC hold tags applied.

20 ( ) FIELD DISPOSITION (X) FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

Field recommends that project engineering revise M-411 Rev 3, M-480 Rev 2, and M-611-6 Rev 5 to correspond to existing pipe spool code name plates. Spools are in permanent location (not welded) and documentation is on site.

[illegible] 6-8-76
K. Pulito 6-9-76

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ( ) NO ( ) YES, SEE ATTACHED:
DRAWING _____ REV. _____ DCN _____
SPEC _____ REV. _____ ADD. _____

25. REJECTED MATERIAL DISPOSITION ( ) RETURN TO SUPPLIER ( ) SCRAP
REMARKS

27. QC ACCEPTANCE
QC ENGINEER / DATE
AUTHORIZED INSPECTOR / DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – POAE
Goldenrod Copy – QC

QC-G3-2

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 2				14. NCR NO. 431	
2. DRAWING/PART NO. 7220-M-616 (As-Built)	REV. 2	7. PROJECT NO. 7220	12. REPORTED BY. [illegible]	DATE [illegible]	25. DISPOSITION CONCURRENCE
3. ITEM DESCRIPTION Shop Fabricated Carbon Steel Pipe Spool		8. ITEM LOCATION See Block 19	13. VALIDATED BY [illegible]	DATE [illegible]	REWORK / REJECT / REPAIR / USE AS IS / DOC
4. SERIAL NUMBER IHBC-133-S616-7-7		9. STARTUP SYSTEM NO. N/A	15. REPLACEMENT PART NO. N/A	REV.	PROJECT FIELD ENGINEER — DATE
5. PURCHASE ORDER NO. 7220-M-104AC		10. QC FIELD INSPECTION PLAN NO. N/A	16. REPLACEMENT SERIAL NO. N/A		PROJECT ENGINEER — DATE
6. CONTRACTOR/LOCATION ITT Grinnell, Kernersville, NC		11. ASME CODE ITEM ☐ YES ☐ NO	17. SOURCE Supplier		PROJECT FIELD QC ENGINEER — DATE
					AUTHORIZE INSPECTOR — DATE

18. ROUTING INSTRUCTIONS: ☐ ROUTE TO FIELD ENGINEERING ☒ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

Specification 7220-M-201, referenced by PO 7220-M-104AC, states in part (Paragraph 9.1) "The seller shall establish and maintain a system for the control of quality during fabrication and shipping which will assure that all materials including purchased and subcontracted items, conform to these specifications. This system shall be organized in such a manner that it will be possible to relate every component of the finished spool to its fabrication history."

Contrary to the above, the data furnished with pipe spool IHBC-133-S616-7-7 (PO 7220-M-104AC, MR-69-51,

20. ☐ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:

DRAWING _____ REV. _____ DCN _____

SPEC. _____ REV. _____ ADD. _____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

BECHTEL

NONCONFORMANCE REPORT (CONT'D) PAGE 2 OF 2 14. NCR NO. 431

(Block 19 continued)

Load Sheet 11354) Did not include a traceability matrix or index which identifies the end use location of material and filler material heat numbers and lots for which Material Test Reports are also provided.
NOTE: Such a matrix has, with previous shipments, been provided in the form of a Shop Traveler Form N4.1B (Grinnell)

Location: Storage Area #1

Q-List #: 4.164

Tags applied: \

Nonconformance noted during documentation review.

10095-2

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G1-3

BECHTEL

Book

NONCONFORMANCE REPORT

1. PAGE 1 OF 2				14. NCR NO. 432	
2. DRAWING/PART NO. Spec. 7220-C-231	REV. 6	7. PROJECT NO. 7220	12. REPORTED BY [illegible]	DATE 6/10/76	25. DISPOSITION CONCURRENCE: REWORK / REJECT / REPAIR / USE AS IS / OTC
3. ITEM DESCRIPTION Mechanical Splices		8. ITEM LOCATION Aux Bldg & RB #2	13. VALIDATED BY [illegible]	DATE 6-10-76	
4. SERIAL NUMBER N/A		9. STARTUP SYSTEM NO. N/A	15. REPLACEMENT PART NO. N/A	REV.	PROJECT FIELD ENGINEER — DATE
5. PURCHASE ORDER NO. N/A		10. QC FIELD INSPECTION PLAN NO. N/A	16. REPLACEMENT SERIAL NO. N/A		PROJECT ENGINEER — DATE
6. CONTRACTOR/LOCATION N/A		11. ASME CODE ITEM ☐ YES ☒ NO	17. SOURCE Construction		PROJECT FIELD QC ENGINEER — DATE
					AUTHORIZE INSPECTION — DATE

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

Section 10.13.4 of Specification 7220-C-231 Rev. 6 states in part that "If production and sister splices are tested the sample frequency shall be one production splice of the first ten production splices. . ." Contrary to the above, 42 #11 splices have been made with the use of two sister splices for testing. Review of "As-Built" sketches indicates that all of the above splices were made in areas of extreme congestion or too close to construction joints to obtain a production splice of sufficient length for tensile testing. It is the intent to obtain two production splices within the first 100 splices as required in above referenced section 10.13.4 as

20. ☐ FIELD DISPOSITION ☑ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

The above situation presented problems similar to those encountered when using curved rebar ~~or #~~ "B" series cadwelds (both cases test only sister splices). We have #11 rebar to be cadwelded in the near future where production splices can be taken. It is recommended that two production splices be taken within the first 100 splices (plus one additional sister splice) to insure adequate testing. [illegible] 6/22/76 4/22/76

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:

DRAWING _____ REV. _____ DCN _____

SPEC. _____ REV. _____ ADD. _____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

10088-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

(Block 19 continued)

soon as additional splices are made.

Nonconformance noted during review of QC Records. Q-List #1,104 and 1,204. No Hold Tags applied.

BECHTEL

1-03

NONCONFORMANCE REPORT

1. PAGE 1 OF ___				14. NCR NO. 433	
2. DRAWING/PART NO. Drawing 7220-C-288 (Q)	REV. 4	7. PROJECT NO. 7220	12. REPORTED BY M Fork	DATE 6-11-76	25. DISPOSITION CONCURRENCE: ACCEPT / REJECT / REPAIR / USE AS IS / OTHER
3. ITEM DESCRIPTION Reinforcing Steel		8. ITEM LOCATION Auxiliary Building	13. VALIDATED BY [illegible]	DATE 6-11-76	
4. SERIAL NUMBER N/A		9. STARTUP SYSTEM NO. N/A	15. REPLACEMENT PART NO. N/A	REV.	PROJECT FIELD ENGINEER — DATE
5. PURCHASE ORDER NO. N/A		10. QC FIELD INSPECTION PLAN NO. N/A	16. REPLACEMENT SERIAL NO. N/A		PROJECT ENGINEER — DATE
6. CONTRACTOR/LOCATION N/A		11. ASME CODE ITEM ☐ YES ☒ NO	17. SOURCE Construction		PROJECT FIELD QC ENGINEER — DATE
					AUTHORIZE INSPECTOR — DATE

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION

Drawing 7220-C-140 (Q), Rev. 8 general note 16 states in part, .. in no case shall the tolerance on cover exceed minus one-third of the clear cover stipulated on the design drawings or in the specification." Contrary to the above bottom slab dowels along 5.6 line between C and D line, top of concrete Elev. 624'-0", exceed the allowable tolerance, see Page 2 for existing location. Nonconformance noted during routine QC surveillance. Q-List #1.203. 2 Hold Tags applied.

20. ☐ FIELD DISPOSITION ☒ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

Raise all dowels in question by bending to meet the required clear cover. 2" to 3" of concrete around each dowel shall be chipped out to allow proper bending. Bending shall be in accordance with Sec. 8.10 of Spec. C-231, Rev. 9. Implementation Date -- July 16, 1976.

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:
DRAWING ___ REV. ___ DCN ___
SPEC ___ REV. ___ ADD. ___

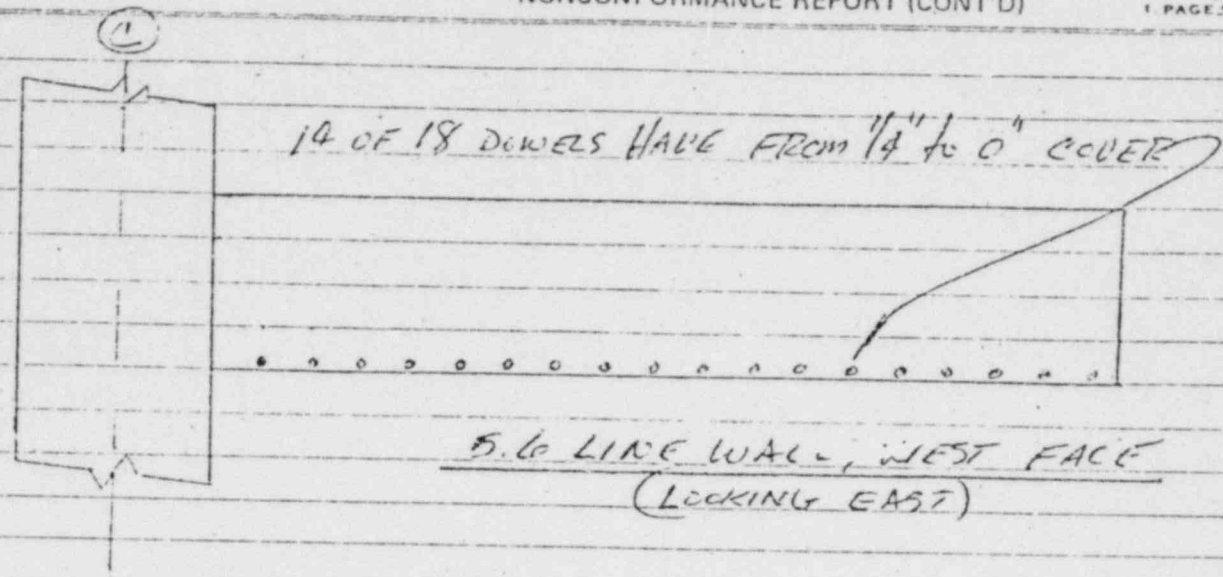
26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP
REMARKS

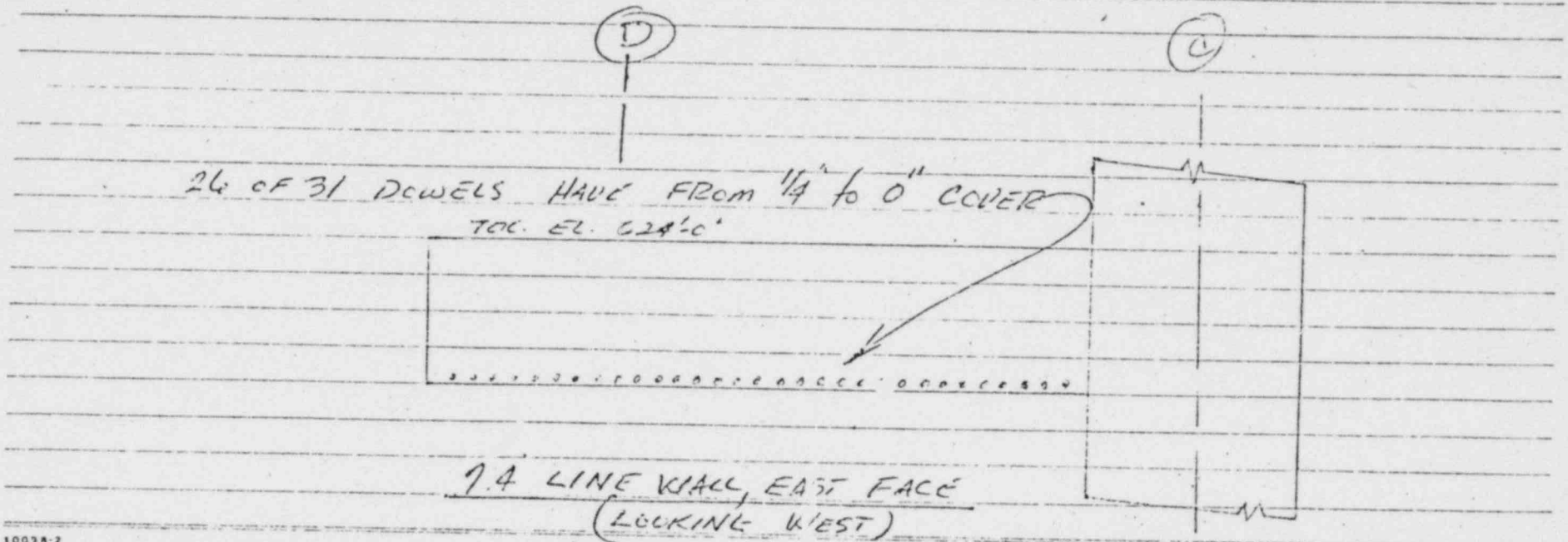
27. QC ACCEPTANCE
QC ENGINEER — DATE
AUTHORIZED INSPECTOR — DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC G3-2





10038-2

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PGAE
Goldenrod Copy – QC

QC-G3-3

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF —	14. NCR NO 434

Field	Entry
2. DRAWING/PART NO.	Dwg. 7220-C-288 (Q)
REV.	4
7. PROJECT NO.	7220
12. REPORTED BY	M E Cook
DATE	6-11-76
3. ITEM DESCRIPTION	Reinforcing Steel
8. ITEM LOCATION	Auxiliary Building
13. VALIDATED BY	[illegible signature]
DATE	6-11-76
4. SERIAL NUMBER	N/A
9. STARTUP SYSTEM NO.	N/A
15. REPLACEMENT PART NO.	N/A
REV.	
5. PURCHASE ORDER NO.	N/A
10. QC FIELD INSPECTION PLAN NO.	N/A
16. REPLACEMENT SERIAL NO.	N/A
6. CONTRACTOR/LOCATION	N/A
11. ASME CODE ITEM	☐ YES ☒ NO
17. SOURCE	Construction
18. ROUTING INSTRUCTIONS	☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

25. DISPOSITION CONCURRENCE

REWORK	REJECT	REPAIR	USE AS IS	

PROJECT FIELD ENGINEER ______ DATE ______

PROJECT ENGINEER ______ DATE ______

PROJECT FIELD QC ENGINEER ______ DATE ______

AUTHORIZED INSPECTOR ______ DATE ______

19. NONCONFORMING CONDITION

Drawing 7220-C-202, Rev. 5 General Note #5 states "Slab dowels to match slab reinforcing unless otherwise noted." Drawing 7220-C-288 (Q), Rev. 4, indicates 12" spacing for slab reinforcing. Contrary to the above, the first top and bottom dowels are located 34" from the face of the wall. See Page 2 for sketch of existing dowel location. Nonconformance noted during routine QC surveillance. Q-List #1.203. One Hold Tag applied.

20. FIELD DISPOSITION ☒ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

Repair [illegible] 6-23-76

rework as follows: Drill 1½" diam. holes, fill holes with non-shrink grout (Embeco 636) and set the following bars: a) 2-#6 bottom bars and b) 3-#5 top bars at 9" O.C. in lieu of 2-#6 bars at 12" O.C. Embedment lengths and lap splices of bars shall be in accordance with the prescribed table on Dwg. C-211, Rev. 4. Manufacturer's instructions on grouting shall be followed. Expected implementation date-7/16/76.

R. Kinerija [illegible] 6-23-76

[illegible signature] 6/24/76

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:

DRAWING ______ REV. ______ DCN ______

SPEC ______ REV. ______ ADD. ______

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

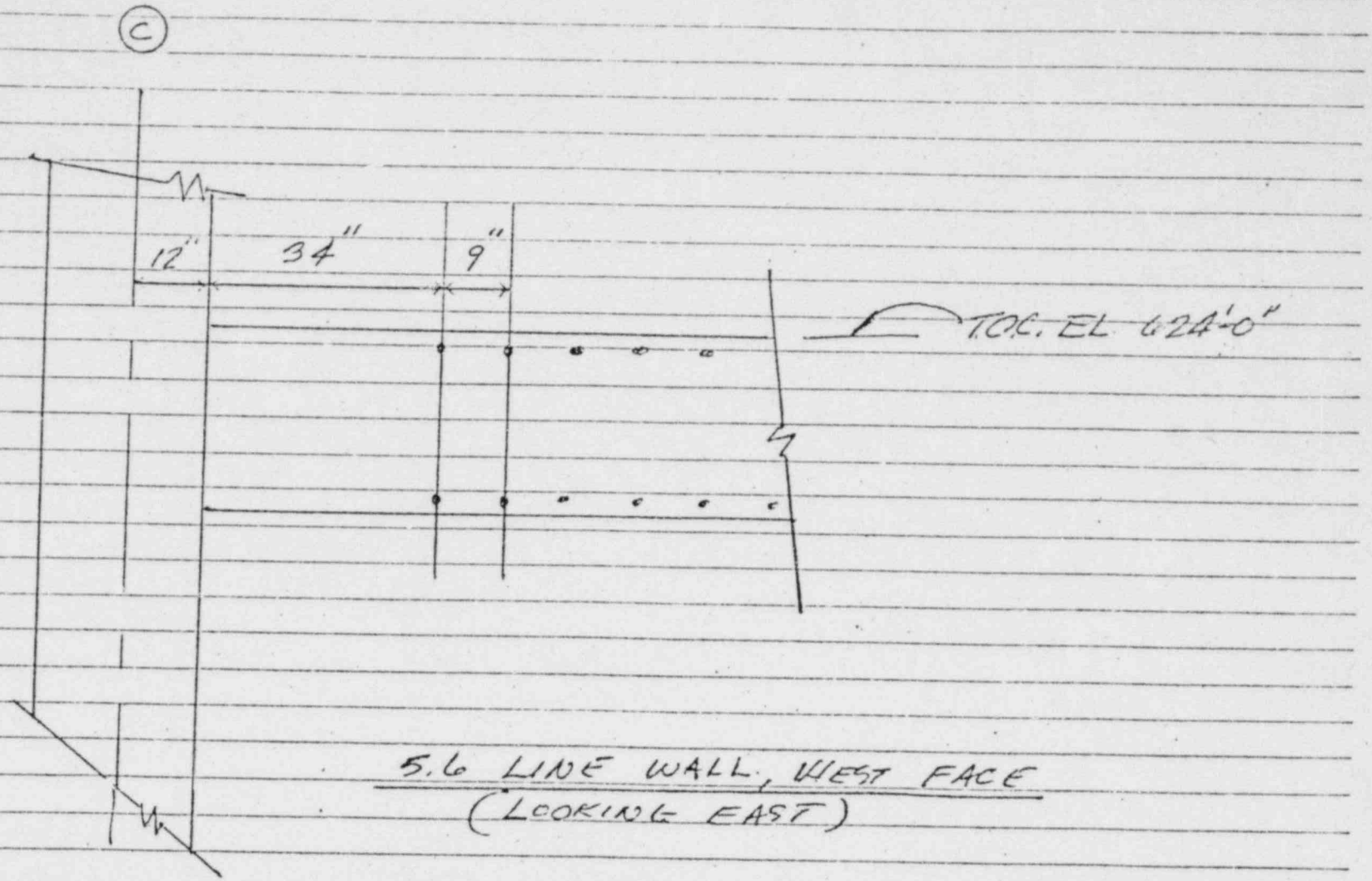
QC ENGINEER ______ DATE ______

AUTHORIZED INSPECTOR ______ DATE ______

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G-3-2



5.6 LINE WALL, WEST FACE
(LOOKING EAST)

BECHTEL

NONCONFORMANCE REPORT

2. DRAWING/PART NO.: Drawing 7220-C-288 (Q) — REV. 4	7. PROJECT NO.: 7220	12. REPORTED BY: [signature] — DATE 6-11-76
3. ITEM DESCRIPTION: Reinforcing Steel	8. ITEM LOCATION: Auxiliary Bldg	13. VALIDATED BY: [signature] — DATE 6-11-76
4. SERIAL NUMBER: N/A	9. STARTUP SYSTEM NO.: N/A	15. REPLACEMENT PART NO.: N/A — REV.
5. PURCHASE ORDER NO.: N/A	10. QC FIELD INSPECTION PLAN NO.: N/A	16. REPLACEMENT SERIAL NO.: N/A
6. CONTRACTOR/LOCATION: N/A	11. ASME CODE ITEM: ☐ YES ☒ NO	17. SOURCE: Construction

1. PAGE 1 OF 3 — 14. NCR NO. 435

25. DISPOSITION CONCURRENCE: REWORK X | REJECT | REPAIR | USE AS IS | DOC.

[signature] for J.F.C. Valinzyans — PROJECT FIELD ENGINEER	6-24-76 DATE
PROJECT ENGINEER	DATE
PROJECT FIELD QC ENGINEER	DATE
AUTHORIZE INSPECTOR	DATE

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

Drawing 7220-C-202 (Q) Rev 5, general note states: "Slab dowels to match slab reinforcing unless otherwise noted.", and drawing 7220-C-288 (Q) Rev 4 indicates 12" spacing for slab reinforcing. Contrary to the above, the first slab dowels top and bottom are located 18" from the face of the support. See page 2 for sketch of existing dowels. Non conformance noted during ~~routine~~ QC. ~~surveillance~~ INSPECTION. Q list number 1.203. One hold tag applied.

20. ☒ FIELD DISPOSITION — FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

~~The above situation presented problems similar to those encountered when using curved rebar or "B" series cadwelds (both cases test only sister splices). We have #11 rebar to be cadwelded in the near future where production splices can be taken. It is recommended that two production splices be taken within the first 100 splices (plus one additional sister splice) to insure adequate testing.~~

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:

DRAWING ______ REV. ______ DCN ______

SPEC. ______ REV. ______ ADD. ______

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

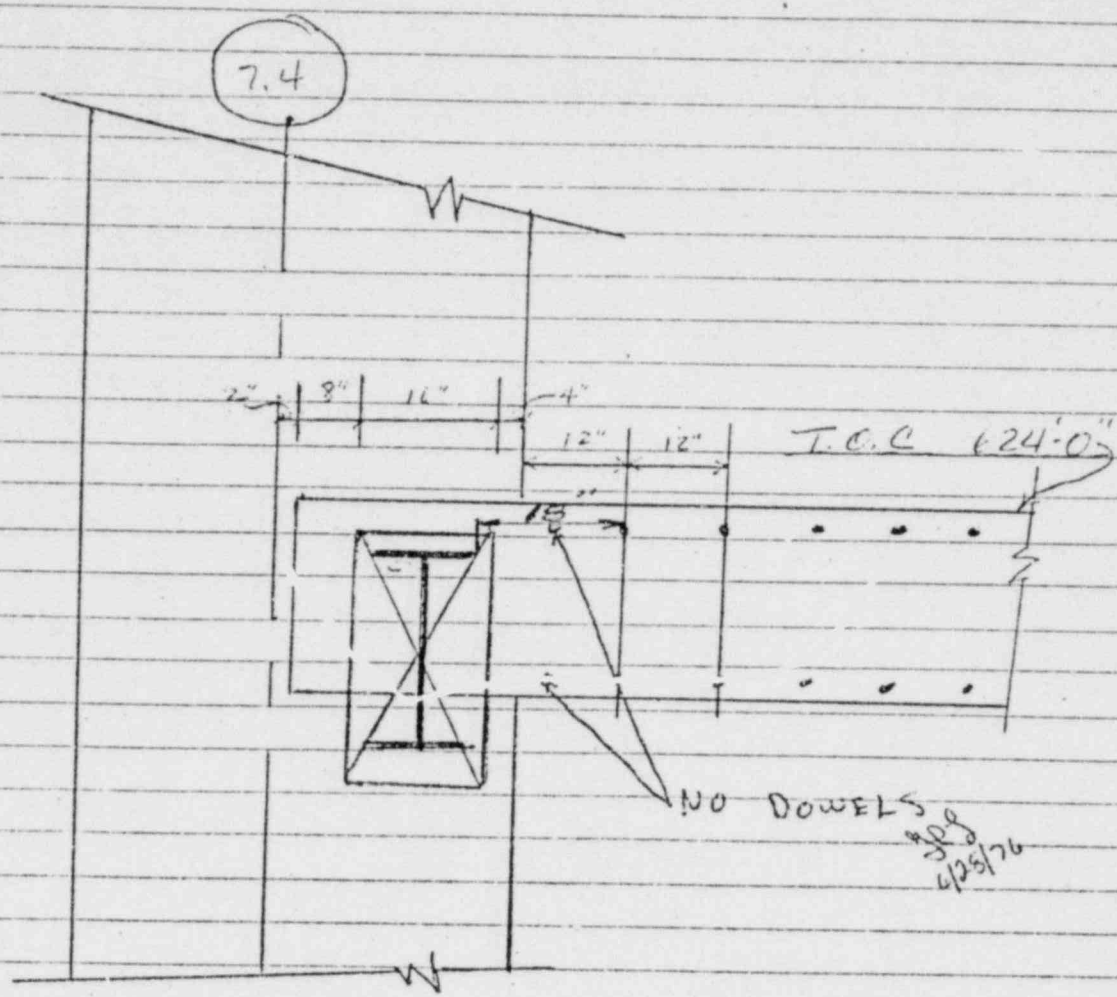
QC ENGINEER ______ DATE

AUTHORIZED INSPECTOR ______ DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2



B-LINE WALL @ 7.4 LINE, SOUTH FACE
(LOOKING NORTH)

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-3

BECHTEL

NONCONFORMANCE REPORT (CONT'D)

1. PAGE 3 OF 3 — 14. NCR NO. 435

BLOCK 20 REVISED

Rework asfollows: For the single bottom bar, drill 1½" diam. hole, fill hole with non-shrink grout (Emneco 636) and set the missing bar. For the single top bar, drill 2½" diam. hole thru the wall, set the bar thru the wall, and fill the hole with Embeco 636 by funneling thru a tube at the same time providing adequate vent to ensure proper grouting. Grouting of bars shall be in accordance with the manufacturer's instructions. Embedment lengths and lap splices of bars shall conform to the prescribed table on DWG. C-211, Rev. 4. Expected implementation date - 7/16/76.

6.23.76

6/23/76

10098-2

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-3

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 2				14. NCR NO. 436	
2. DRAWING/PART NO. Drawing 7220-C-214 (Q)	REV. 3	7. PROJECT NO. 7220	12. REPORTED BY [signature]	DATE 6.11.76	25. DISPOSITION CONCURRENCE: REWORK X; REJECT; REPAIR; USE AS IS; DOC
3. ITEM DESCRIPTION: Reinforcing Steel		8. ITEM LOCATION Aux. Bldg.	13. VALIDATED BY [signature] QA	DATE 6-11-76	[signature] 6/24/76 PROJECT FIELD ENGINEER DATE
4. SERIAL NUMBER N/A		9. STARTUP SYSTEM NO. N/A	15. REPLACEMENT PART NO. N/A	REV.	PROJECT ENGINEER DATE
5. PURCHASE ORDER NO. N/A		10. QC FIELD INSPECTION PLAN NO. N/A	16. REPLACEMENT SERIAL NO. N/A		[signature] 7-6-76 PROJECT FIELD QC ENGINEER DATE
6. CONTRACTOR/LOCATION N/A		11. ASME CODE ITEM ☐ YES ☒ NO	17. SOURCE Construction		AUTHORIZE INSPECTOR DATE

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

Drawing 7220-C-202 Rev. 5 general note 5 states "Slab dowels to match slab reinforcing unless otherwise noted." And drawing 7220-C-214 (Q) Rev. 3 indicates 12" spacing for slab reinforcing. Contrary to the above, slab dowels do not match slab reinforcing in three (3) areas along G-line between 5.6 line and 7.4 line at El. 632'6". See page 2 for sketch of existing dowel locations. Nonconformance noted during ~~routine~~ QC ~~surveillance.~~ "Q" list number 1.203. Two hold tags applied. [signature] 6/25/76

INSPECTION [signature] 6/24/76

20. ☒ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

Rework as follows: Drill 1½" diam. holes, fill holes with non-shrink grout (Embeco 636) and set the missing 7-#8 horizontal dowels. Grouting of bars shall be in accordance with the grout manufacturer's instructions. Embedment lengths and lap splices of bars shall conform to the prescribed table on Dwg. C-211, Rev. 4.

Expected implementation date: 7/16/76.

[signature] 6.25.76

[signature] 6/25/76

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:

DRAWING _____ REV. _____ DCN _____

SPEC _____ REV. _____ ADD. _____

25. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

QC ENGINEER _____ DATE _____

AUTHORIZED INSPECTOR _____ DATE _____

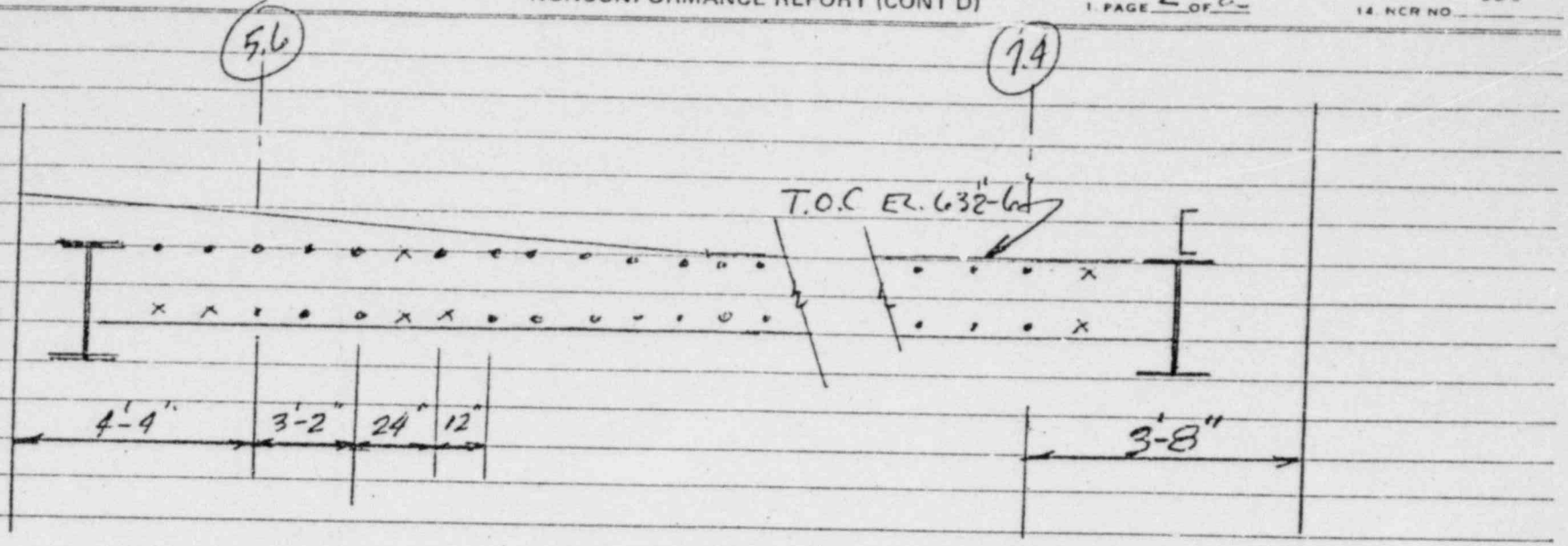
10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

BECHTEL

NONCONFORMANCE REPORT (CONT'D) 1. PAGE 2 OF 2 14. NCR NO. 436



G-LINE WALL, SOUTH FACE
(LOOKING NORTH)

NOTE: "X" DENOTES "NO DOWEL"
E.R. Allen
6/24/76

10098-2

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G1-3

BECHTEL

NONCONFORMANCE REPORT

Field	Entry
1. PAGE 1 OF	1
14. NCR NO.	437
2. DRAWING/PART NO.	Spec 7220-M-201
REV.	6
7. PROJECT NO.	7220
12. REPORTED BY	[signature]
DATE	6-11-76
3. ITEM DESCRIPTION	14-26" 90° LR ELLS
8. ITEM LOCATION	CLASS "A" WHSE
13. VALIDATED BY	[signature]
DATE	6-11-76
4. SERIAL NUMBER	YN3B
9. STARTUP SYSTEM NO.	N/A
15. REPLACEMENT PART NO.	N/A
REV.	
5. PURCHASE ORDER NO.	7220-M104 AC
10. QC FIELD INSPECTION PLAN NO.	IR-R-1.00-109
16. REPLACEMENT SERIAL NO.	N/A
6. CONTRACTOR/LOCATION	ITT Grinnell Kernersville, NC.
11. ASME CODE ITEM	☑ YES ☐ NO
17. SOURCE	Supplier

25. DISPOSITION CONCURRENCE

REWORK	REJECT	REPAIR	USE AS IS	DOC.
				X

Signature	Title	Date
[signature] for [signature]	PROJECT FIELD ENGINEER	6-23-76
[signature]	PROJECT ENGINEER	6-25-76
[signature]	PROJECT FIELD QC ENGINEER	
[signature]	AUTHORIZED INSPECTOR	6/29/76

18. ROUTING INSTRUCTIONS: ☐ ROUTE TO FIELD ENGINEERING ☒ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

Material Requisition 7220-M-104A Rev. 5, Paragraph Documentation Submittal Sub Paragraph 3 states in part "Form G-321-D shall be used and submitted" Contrary to the above documentation for 14-26" 90° LR ELL Code #YN3B Heat #N32851 did not contain the G-321-D forms.

Noted during receipt inspection . "Q" No 4.185

14 Hold tags applied

20. ☒ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

Material Supv. to obtain documentation. M. [signature] 6/22/76

21. FIELD DISPOSITION RESULTS:

Received required documentation [signature] 6-29-76

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:

DRAWING ______ REV. ______ DCN ______

SPEC. ______ REV. ______ ADD. ______

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

Signature	Title	Date
[signature]	QC ENGINEER	7-6-76
[signature]	AUTHORIZED INSPECTOR	7/6/76

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 3	14. NCR NO. 438		
2. DRAWING/PART NO. Spec. 7220-M-201	REV. 6	7. PROJECT NO. 7220	12. REPORTED BY Robert S. Morrow — DATE 6/14/76
3. ITEM DESCRIPTION Pipe Spool		8. ITEM LOCATION QC Hold Area	13. VALIDATED BY H. V. Foster — DATE 6-14-76
4. SERIAL NUMBER 1HBC-124-S616-6-4		9. STARTUP SYSTEM NO. N/A	15. REPLACEMENT PART NO. N/A — REV.
5. PURCHASE ORDER NO. M-104AC		10. QC FIELD INSPECTION PLAN NO. IR/R-1.00-87	16. REPLACEMENT SERIAL NO. N/A
6. CONTRACTOR/LOCATION ITT Grinnell, Kernersville, N.C.		11. ASME CODE ITEM ☒ YES ☐ NO	17. SOURCE Supplier

25. DISPOSITION CONCURRENCE

REWORK	REJECT	REPAIR	USE AS IS	DOC.
X				

PROJECT FIELD ENGINEER: F.C. Valenzano — DATE 6-28-76

PROJECT ENGINEER: [signature] — DATE 7-6-76

PROJECT FIELD QC ENGINEER: [signature] — DATE 7/6/76

AUTHORIZED INSPECTOR: — DATE

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

Specification 7220-M-201, Rev. 6, Para. 6.2.2 states in part: "All materials shall be marked with the information required by the applicable manufacturing specifications and the Nuclear Power Plant Components Code, Paragraph NB-2150. Certification of materials by the manufacturers in accordance with the Nuclear Power Plant Components Code, Paragraph NB-2130 is required." Contrary to the above pipe spool 1HBC-124-S616-6-4 was delivered to the jobsite with the code dataplate marked 1HRC-124-S616-6-4. (See attached rubbing).

Continued on page 2

20. ☒ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

Material Supervisor to contact ITT Grinnell and obtain written field instructions for changing spool mark number on code data plate and arrange for ITT Grinnell authorized Inspector to witness re-stamping of code data plate at the jobsite. Field will change code data plate spool mark number from 1HRC-124-S616-6-4 to 1HBC-124-S616-6-4 after receiving the above instructions. C.R. Daugherty 6-28-76 HP 6-28-76

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:

DRAWING ______ REV. ______ DCN ______

SPEC. ______ REV. ______ ADD. ______

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

QC ENGINEER ______ DATE ______

AUTHORIZED INSPECTOR ______ DATE ______

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

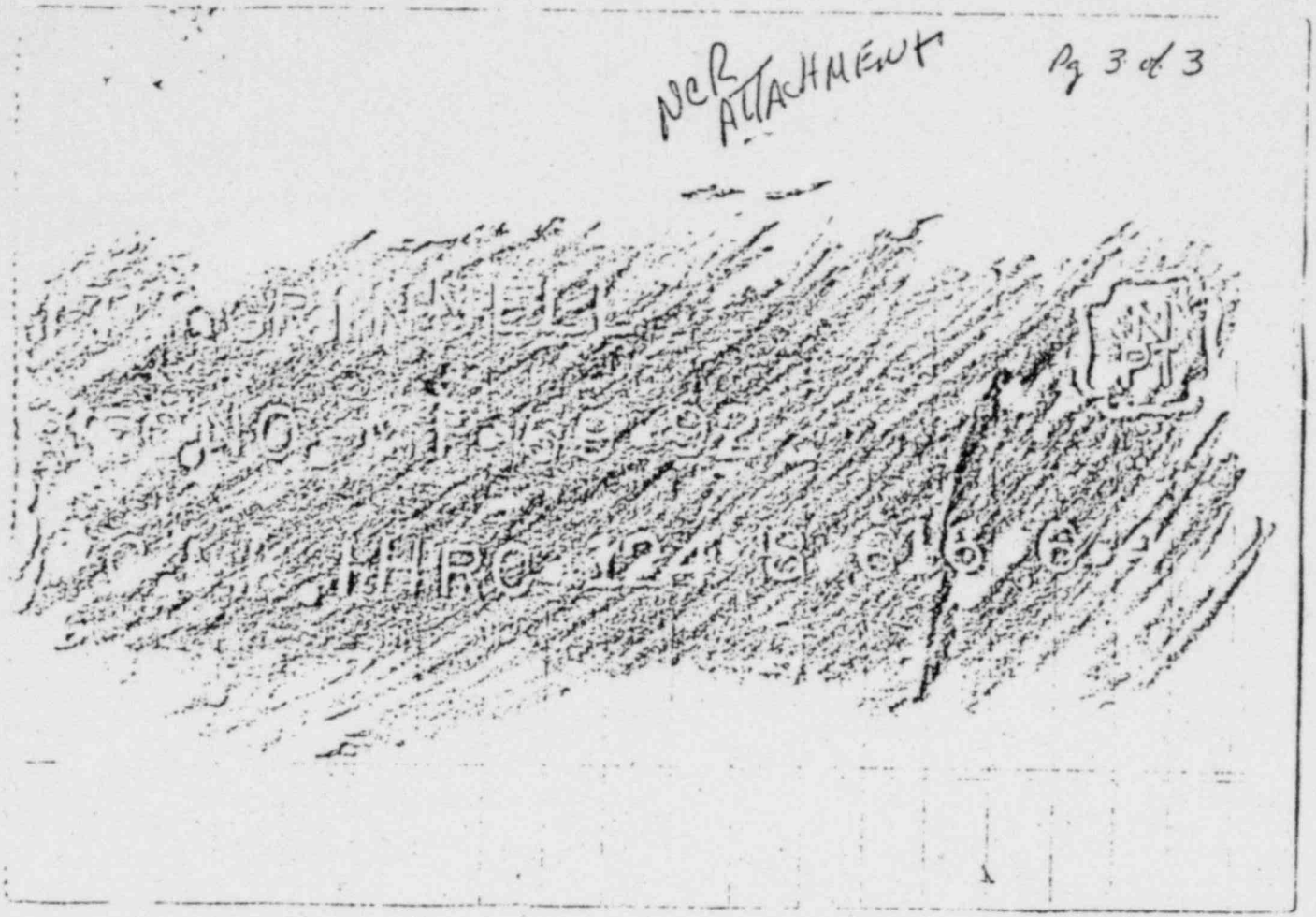
QC-G3-2

Block 19 continued.

Nonconformance noted during receipt inspection. 'Q' number is 4.164. / Hold Tags applied.

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – POAE
Goldenrod Copy – QC

NCR ATTACHMENT Pg 3 of 3



BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 2				14. NCR NO. 439	
2. DRAWING/PART NO. 7220-M-201	REV 6	7. PROJECT NO. 7220	12. REPORTED BY [illegible]	DATE 6-15-76	25. DISPOSITION CONCURRENCE: REWORK / REJECT / REPAIR / USE AS IS / OTHER
3. ITEM DESCRIPTION Pipe Spool		8. ITEM LOCATION QC Hold Area	13. VALIDATED BY [illegible]	DATE 6-15-76	
4. SERIAL NUMBER 1HBC-123-S616-6-2		9. STARTUP SYSTEM NO. N/A	15. REPLACEMENT PART NO. N/A	REV.	PROJECT FIELD ENGINEER / DATE
5. PURCHASE ORDER NO. 7220-M-104AC		10. QC FIELD INSPECTION PLAN NO. IR/R-1.00-108	16. REPLACEMENT SERIAL NO. N/A		PROJECT ENGINEER / DATE
6. CONTRACTOR/LOCATION ITT Grinnell, Kernersville, NC		11. ASME CODE ITEM ☒ YES ☐ NO	17. SOURCE Supplier		PROJECT FIELD QC ENGINEER / DATE
					AUTHORIZE INSPECTOR / DATE

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

Specification 7220-M-201, Rev. 6, Para. 8.7 states in part: "Isometric line drawings will be furnished by the Buyer and will show overall dimensions of each line, branch connections, flanges, valve orientation, bypasses, instrument points, vents, drains, and connections to equipment." Contrary to the above, the pipe spool 1HBC-123-S616-6-2 was delivered without the venturi assembly as noted on the applicable drawing. Nonconformance noted during receipt inspection, 'Q' number is 4.164. 1 Hold tags applied (See Attached Drawing.)

20. ☐ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:
DRAWING _____ REV. _____ DCN _____
SPEC _____ REV. _____ ADD. _____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP
REMARKS

27. QC ACCEPTANCE
QC ENGINEER / DATE
AUTHORIZED INSPECTOR / DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

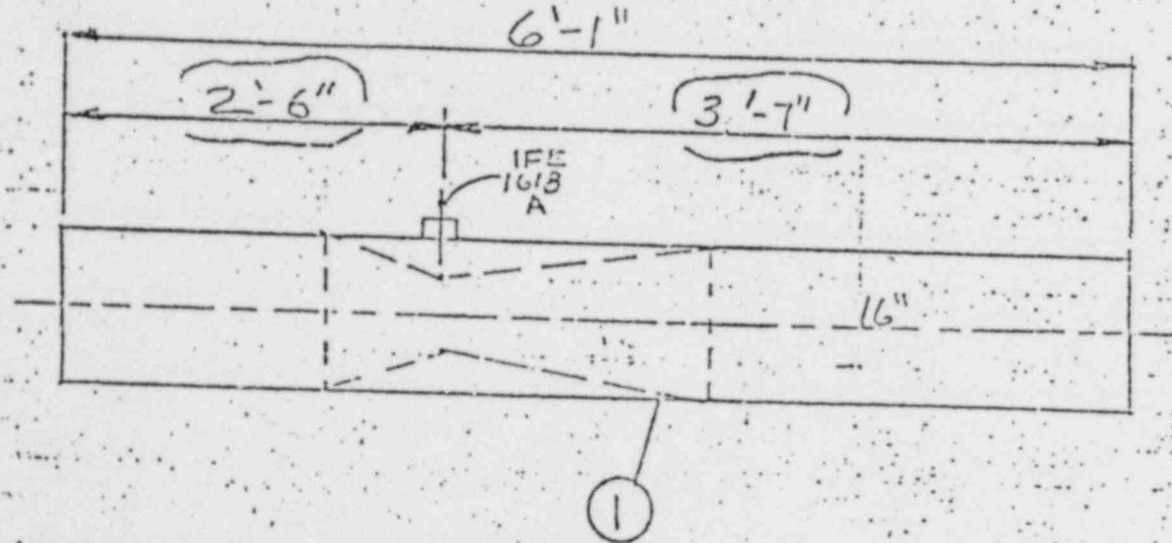
QC-G3-2

NCK AU...

CNT. NO. 7091
CONSUMERS POWER COMPANY
MIDLAND, MICHIGAN

DEPT. ___
DRW'N ___ CHK'D ___
(1) REDRAWN ... 10/13/75 CHK'D DAD
(2) REV. DAD 12/17/75 CHK'D CWF
(3) REV. DAD 1/8/76 CHK'D [illegible]
(4) REV. Nowell 2/6/76 CHK'D DAD
(5) REV. DAD 4/8/76 CHK'D CWF

cl-1



NCR 439 Pg 2 of 2

NOTE: SHIP DIRECTLY TO VENTURI MANUFACTURER

Reviewed 5-24-76
[illegible] (R. H. Tinsley)
Bechtel Corp

USE 600°F SPEC PAINT

37½° BEVEL ENDS

PIPE: STD. WT, SA-106B

ASME CODE APPROVED

CARBON STEEL

CLASS: Nuc. Cl. 2 LINE SPEC. 1HBC APP. CODE ASME Sec. III NO. REQ. 1

RADIOGRAPHY (RT)		SPECIAL MARKING		PREHEAT		CERT. of COMPLIANCE	
PARTICLE (MT)		SPECIAL CLEANING		HEAT TREAT		MILL TEST REPORTS	✓
PENETRANT (PT)		PAINTING	✓	CODE STAMP		DATA REPORTS	

SYSTEM Comp. Cooling Wtr. FAB. SPECS. ES-101N, ES-KV-19
DRW'G NO. M-616 SHT. 6A PRESS. 150 PSI. TEMP. 180 °F. WT. 320 LBS.
MP-67-80

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 1				14. NC NO. 440	
2. DRAWING/PART NO. FSK-C-34A(Rollout)	REV. 1	7. PROJECT NO. 7220	12. REPORTED BY William M Parker	DATE 6-14-76	25. DISPOSITION CONCURRENCE: REWORK / REJECT / REPAIR / USE AS IS / QOC (X)
3. ITEM DESCRIPTION 1/4" Dome Liner Plate Assembly		8. ITEM LOCATION Unit #1 Dome Erection Jig	13. VALIDATED BY [signature]	DATE 6-14-76	
4. SERIAL NUMBER D-3-6		9. STARTUP SYSTEM NO. N/A	15. REPLACEMENT PART NO. N/A	REV.	PROJECT FIELD ENGINEER — DATE
5. PURCHASE ORDER NO. 7220-C-50A		10. QC FIELD INSPECTION PLAN NO. IR C-111-15W	16. REPLACEMENT SERIAL NO. N/A		PROJECT ENGINEER [signature] DATE 6-15-76
6. CONTRACTOR/LOCATION Southern Boiler & Tank Works, Memphis, Tennessee		11. ASME CODE ITEM ☐ YES ☒ NO	17. SOURCE Vendor		PROJECT FIELD QC ENGINEER — DATE
					AUTHORIZE INSPECTOR — DATE

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

A discrepancy exists between mill slab number documentation and the vendor transferred stamp number. Documentation slab number is HT# 81989 Slab #8, the vendor transferred stamp is HT# 81982 Slab #8. Discrepancy detected during QC field review. Q List #1.109. 1 Hold Tag applied.

20. ☒ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

The field will contact vendor and verify correct heat and slab number. Documentation will then be corrected. Work may proceed.

[signature] 6/22/76

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:

DRAWING _____ REV. _____ DCN _____

SPEC. _____ REV. _____ ADD. _____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 3
14. NCR NO. 441

2. DRAWING/PART NO. Spec. 7220-M-120
REV. 3
7. PROJECT NO. 7220
12. REPORTED BY [signature] DATE 6-15-76
3. ITEM DESCRIPTION 16" HBC-CK-Z Valves
8. ITEM LOCATION ~~Temporary Receiving~~ QC HOLD WHSE #B 6-16-76
13. VALIDATED BY [signature] DATE 6-15-76
4. SERIAL NUMBER 5206-01-1-17 ~~15,16~~
9. STARTUP SYSTEM NO N/A
15. REPLACEMENT PART NO. N/A REV.
5. PURCHASE ORDER NO. 7220-M-120AC
10. QC FIELD INSPECTION PLAN NO. IR/R-1.00-84
16. REPLACEMENT SERIAL NO. N/A
6. CONTRACTOR/LOCATION Anchor/Darling Valve Co., Hayward CA
11. ASME CODE ITEM [X] YES [ ] NO
17. SOURCE Supplier

25. DISPOSITION CONCURRENCE: REWORK / REJECT / REPAIR / USE AS IS / DOC X
[signature] for F.C. Valenzano 7-1-76 PROJECT FIELD ENGINEER DATE
[signature] 6-21-76 PROJECT ENGINEER DATE
[signature] 6/21/76 PROJECT FIELD QC ENGINEER DATE
[signature] 7/1/76 AUTHORIZED INSPECTOR

18. ROUTING INSTRUCTIONS: [X] ROUTE TO FIELD ENGINEERING [ ] ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

The Purchase Order Item number on the manufacturer's valve identification tag does not agree with the Purchase Order Item number as shown on the Code Data Reports for the following valves: (1) The manufacturer's valve identification tag for the 16" HBC-CK-Z Valve with body serial No. 5206-01-1-17 shows Purchase Order Item 2.2. The Code Data Report for the 16" HBC-CK-Z Valve with serial No. 5206-01-1-17 shows Purchase Order Item 2.1.

Continued on Page 2

20. [X] FIELD DISPOSITION [ ] FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

~~Route this NCR to Procurement. Field Procurement Supervisor to Obtain corrected code data reports from valve manufacturer.~~

~~[signature] 6-21-76~~ [initials] 6-29-76
[signature] 6-21-76

Page 2 for Block 20 revised

21. FIELD DISPOSITION RESULTS:
Correct tags applied [signature] 7-2-76

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED [ ] NO [ ] YES, SEE ATTACHED:
DRAWING ______ REV. ______ DCN
SPEC. ______ REV. ______ ADD.

26. REJECTED MATERIAL DISPOSITION [ ] RETURN TO SUPPLIER [ ] SCRAP
REMARKS

27. QC ACCEPTANCE: [signature] 7-2-76
QC ENGINEER DATE
[signature] 7/2/76
AUTHORIZED INSPECTOR DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

Block 19 Cont.

(2) The manufacturer's valve identification tag for the 16" HBC-CK-Z Valve with body serial No. 5206-01-1-~~13~~ 15 NB 6-16-76 ~~shows Purchase Order Item 2.1~~ The Code Data Report for the 16" HBC-CK-Z valve with body serial No. 5206-01-1-~~12~~ 15 shows Purchase Order Item 2.2.

Nonconformance noted during Receipt Inspection. Q List No. is indeterminate, 2 Hold Tags applied.

Block 20 revised:

Field to install correct valve identification tags supplied by vendor (see attached letter from Anchor Darling dated 6-25-76). Installation to be witnessed by QCE, AI, and field engineer. Removed tags shall be destroyed.

Carl Hendricks 7-1-76
R. Pulato 7-1-76

10098-2

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-C1-3

ANCHOR/DARLING VALVE COMPANY 24747 CLAWITER ROAD • HAYWARD, CALIFORNIA 94545 • (415) 785-2430
CABLE: ANCORCO • TELEX: 335451

June 25, 1976

BECHTEL POWER CORPORATION
PO Box 2167
Midland, Michigan 48640

Attention: Quality Control Engineer

Subject: Bechtel PO 7220-M-120-AC
Bechtel Itesm 2.1 and 2.2

Gentlemen:

Enclosed please find new Anchor/Darling nameplates to replace incorrect plates shipped on the two valves.

Sincerely,

ANCHOR/DARLING VALVE COMPANY

M. A. Solyan

M.A. Solyan/se
Project Engineer

encl/ack

cc J.P. Punch
M.L. Acker, Bechtel Expediter
S. Ghose, Bechtel

RECEIVED
JUN 28 1976
QUALITY CONTROL
BECHTEL JOB 7220
SIGNATURE

ROUTE QC 07220 UNIT

PFQCE	
A. PFQCE	
CIVIL	
ELECT.	
PIPING	
MECH.	
WELDING	
DOC.	
RECEIVING	X

OPEN NO
☐ YES ☐ NO
DATE

NCR 441 Pg. 3 of 3

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 4 | 14. NCR NO. 442

2. DRAWING/PART NO.	REV.	7. PROJECT NO.	12. REPORTED BY	DATE
~~PURCHASE~~ Spec. 7220-M-129A	2	7220	[illegible]	[illegible]
3. ITEM DESCRIPTION		**8. ITEM LOCATION**	**13. VALIDATED BY**	**DATE**
Valves		QC Hold Area	[illegible]	
4. SERIAL NUMBER		**9. STARTUP SYSTEM NO.**	**15. REPLACEMENT PART NO.**	**REV.**
See pg. 2,3, & 4 of 4		N/A	N/A	
5. PURCHASE ORDER NO.		**10. QC FIELD INSPECTION PLAN NO.**	**16. REPLACEMENT SERIAL NO.**	
7220-M-129A AC		IR/R-1.00-112	N/A	
6. CONTRACTOR/LOCATION		**11. ASME CODE ITEM** ☒ YES ☐ NO	**17. SOURCE**	
Kerotest Manufacturing Corp. Pittsburgh, PA			Supplier	

25. DISPOSITION CONCURRENCE

REWORK	REJECT	REPAIR	USE AS IS	OTHER

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT FIELD QC ENGINEER — DATE

AUTHORIZE INSPECTOR — DATE

18. ROUTING INSTRUCTIONS: ☐ ROUTE TO FIELD ENGINEERING ☑ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION: Specification 7220-M-129A, Rev. 2, Appendix A3, Instructions for preparing G-321-D, Para. 'G', Item 20, states: "Enter identification number(s) traceable to the unit(s) being released, e.g. serial no., heat no. of major component, cable reel no., or other unique designator." Contrary to the above, the G-321-D is not traceable to the following 83 valves: See pg. 2, 3, & 4 of 4. Nonconformance noted during receipt inspection. 'Q' number is indeterminate. [illegible] 6-17-74 Hold Tags applied.

20. ☐ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:

DRAWING _____ REV. _____ DCN _____

SPEC. _____ REV. _____ ADD. _____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

MATERIAL RECEIVING REPORT

Q. C. DISTRIBUTION

P.O. NO. 7220-M-129A-AC JOB NO. 7220

SPEC. NO.

MRR NO. AEO - 1521 DATE 6/8/76

VENDOR Kerotest Manufacturing Corporation

REF. DWG.

SHIPPED BY Vendor

SHIPPING POINT Pittsburgh, PA

SERVICE

O. ITEM NO. / Q. NO.	QUANTITY RECEIVED	Page 1 of 3 COMPLETE DESCRIPTION
13.1	3	2" Globe valve ECC-YGB-R 600# S.S. s/n TEC 1-1, 1-3, 1-2
13.4	6	2" Globe valve ECC-YGB-RD 600# S.S. s/n TEB 1-11, 1-4, 1-7 1-6, 1-2, 1-5
13.6	2	2" Globe valve ECC-YGB-R 600# S.S. s/n TEC 1-4, 1-5
13.9	4	2" Globe valve ECC-YGB-RD 600# S.S. s/n TPB-19, TEB 1-17, 1-12, 1-13
27.1	4	2" Globe valve ECC-YGB-RD 600# S.S. s/n TEB 1-25, 1-21, 1-24, 1-23
	13	2" Globe valve ECC-YGB 600# S.S. s/n TEC 1-16, 1-15, 1-7, 1-17, 1-6, 1-11, 1-10, 1-14, 1-8, 1-13, 1-12, 1-9, 1-18
17.0	4	2" Globe valve ECC-YGB-R 600# S.S. s/n TEC 1-21, 1-19, 1-2 1-20
7.1	2	2" Globe valve ECC-YGB-R 600# S.S. s/n TEC 1-23, 1-24

SHOP INSPECTION RELEASE REC'D YES ( ) N.R. ( ) NO ( )

QC RECORDS RECEIVED YES ( ) N.R. ( ) NO ☐

NON CONFORMANCE TAG NO. ( )

PECTION PROCESS

D. COMMENT/INSTRUCTION

PECTED BY Butler MS/FLD ENG	DATE	APPROVED BY PFE/QC	DATE

NCR 442

IVERING RIER GLX

F.B. NO. 15-224099 CAR NO.

6/4/76 WEIGHT 5000# CHARGES NA PREPAID (X) COLLECT ( )

NG SLIP NO. 56700 (8 pages) PARTIAL (X) COMPLETE ( ) OSD NO.

DELIVERED TO/LOCATION Bechtel Power Corp., agents for Consumers Power Co.

CHKD & COUNTED BY THIS REPORT BY

Pg. 2 of 4

MATERIAL RECEIVING REPORT

Q. C. DISTRIBUTION

P. O. NO. 7220-M-129A-AC JOB NO. 7220

MRR NO. AEO - 1521 DATE 6/8/76

VENDOR Kerotest Manufacturing Corporation

SHIPPED BY Vendor

SHIPPING POINT Pittsburgh, PA

SPEC. NO.

REF. DWG.

SERVICE

O. ITEM NO. / O. NO.	QUANTITY RECEIVED	COMPLETE DESCRIPTION
		Page 2 of 3
0.1	5	2" Globe valve CCB-YGB-R 1500# S.S. s/n MC-11-6, 11-2, 11-11, 11-5, 11-10
1.2	3	2" Globe valve CCC-YGB-R 1500# S.S. s/n MC-11-14, 11-7, JU 4-25
1.5	1	2" Globe valve CCC-YGB-R 1500# S.S. s/n MC-11-20
1.3	2	2" Globe valve ECB-YGB-R 600# S.S. s/n TEE 1-21, 1-22
0.3	3	2" Globe valve CCB-YGB-R 1500# S.S. s/n MC-11-21, 11-23, 11-24
	2	2" Globe valve ECB-YGB-R 600# S.S. s/n MC 9-18, 6-1
2.3	1	2" Globe valve ECB-YGB-R 600# S.S. s/n TEE 1-9
1.1	3	2' Globe valve ECB-YGB-R 600# S.S. s/n TEE 1-12, 1-11, 1-17
1.6	25	3/4" Globe valve ECB-YGB-PR 600# S.S. s/n SXE 3-22, OW 22-5 22-11, 22-15, 22-23, 22-10, 22-19, 22-12, 22-6, 22-1, 22-3, 22-9

SHOP INSPECTION RELEASE REC'D YES ( ) N.R. ( ) NO ( )

QC RECORDS RECEIVED YES ( ) N.R. ( ) NO ☐

NON CONFORMANCE ( )
TAG NO. ( )

SPECTION PROCESS

ED. COMMENT/INSTRUCTION

PECTED BY		APPROVED BY	
MS/FLD ENG	DATE	PE/QC	DATE

NCR 442

IVERING
IER _____ F.B. NO. _____ CAR NO. _____

_____ WEIGHT _____ CHARGES _____ PREPAID ( ) COLLECT ( )

ING SLIP NO. _____ PARTIAL ( ) COMPLETE ( ) OSD NO. _____

DELIVERED TO/LOCATION
Bechtel Power Corp., agents for Consumers Power Co.

CHKD & COUNTED BY

MATERIAL RECEIVING REPORT

Q. C. DISTRIBUTION

P. O. NO. 7220-M-129A-AC JOB NO. 7220 SPEC. NO.

MRR NO. AEO - 1521 DATE 6/8/76

VENDOR Kerotest Manufacturing Corporatior REF. DWG.

SHIPPED BY Vendor

SHIPPING POINT Pittsburgh, PA SERVICE

O. ITEM NO. Q. NO.	QUANTITY RECEIVED	COMPLETE DESCRIPTION
41.6		Page 3 of 3
		22-18, 22-25, 22-21, 22-22, 22-13, 22-2, 22-8, 22-14, 22-24,
		22-16, 22-4, 22-7, 22-17

SHOP INSPECTION RELEASE REC'D YES ( ) N.R. ( ) NO ( )

QC RECORDS RECEIVED YES ( ) N.R. ( ) NO ☐

NON CONFORMANCE TAG NO. ( ) ( )

PECTION PROCESS

D. COMMENT/INSTRUCTION

PECTED BY		APPROVED BY	
MS/FLD ENG	DATE	PFE/QC	DATE

NCR 442

IVERING RIER F.B. NO. CAR NO.

WEIGHT CHARGES PREPAID ( ) COLLECT ( )

KING SLIP NO. PARTIAL ( ) COMPLETE ( ) OSO NO.

DELIVERED TO/LOCATION Bechtel Power Corp., agents for Consumers Power Co.

CHKD & COUNTED BY THIS REPORT IN

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 2			14. NCR NO. 443	
2. DRAWING/PART NO. C-204/4, C-282/6, C-284/3	REV.	7. PROJECT NO. 7220	12. REPORTED BY [illegible]	DATE 6/15/76
3. ITEM DESCRIPTION Reinforcing Steel		8. ITEM LOCATION Auxiliary Building	13. VALIDATED BY [illegible]	DATE
4. SERIAL NUMBER N/A		9. STARTUP SYSTEM NO. N/A	15. REPLACEMENT PART NO. N/A	REV.
5. PURCHASE ORDER NO. N/A		10. QC FIELD INSPECTION PLAN NO. N/A	16. REPLACEMENT SERIAL NO. N/A	
6. CONTRACTOR/LOCATION N/A		11. ASME CODE ITEM ☐ YES ☒ NO	17. SOURCE Construction	

25. DISPOSITION CONCURRENCE

REWORK	REJECT	REPAIR	USE AS IS	SOC
X				

[illegible] 6/14/76
PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER [illegible] — DATE 7-2-76

PROJECT FIELD QC ENGINEER — DATE

AUTHORIZE INSPECTOR — DATE

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION: Drawing 7220-C-282, Revision 6 requires that Wall 53 be reinforced with horizontal #6 bars at 12" spacing. Contrary to the above two #6 dowels are missing at Elev. 623'-3" & 624'-3" at intersection of Wall 53 with K_c Line. See Sections & Plan on attached Drilling Permit for exact location. "Q"-List No. 1.203. One Hold Tag applied.

20. ☒ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

Rework as follows: Drill 1½" diam. holes, fill holes with non-shrink grout (Embeco 636) and set the missing 2-#6 horizontal bars. Grouting of bars shall be in accordance with the grout manufacturer's instructions. Embedment lengths and lap splices of dowels shall conform to the prescribed table of Dwg. C-211, Rev. 4. Expected implementation date: 7/16/76. K. Kinman 6-23-76 [illegible] 6/24/76

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:
DRAWING _____ REV. _____ DCN _____
SPEC _____ REV. _____ ADD. _____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP
REMARKS

27. QC ACCEPTANCE
QC ENGINEER — DATE
AUTHORIZED INSPECTOR — DATE

10093-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC G3-2

CONCRETE DRILLING PERMIT

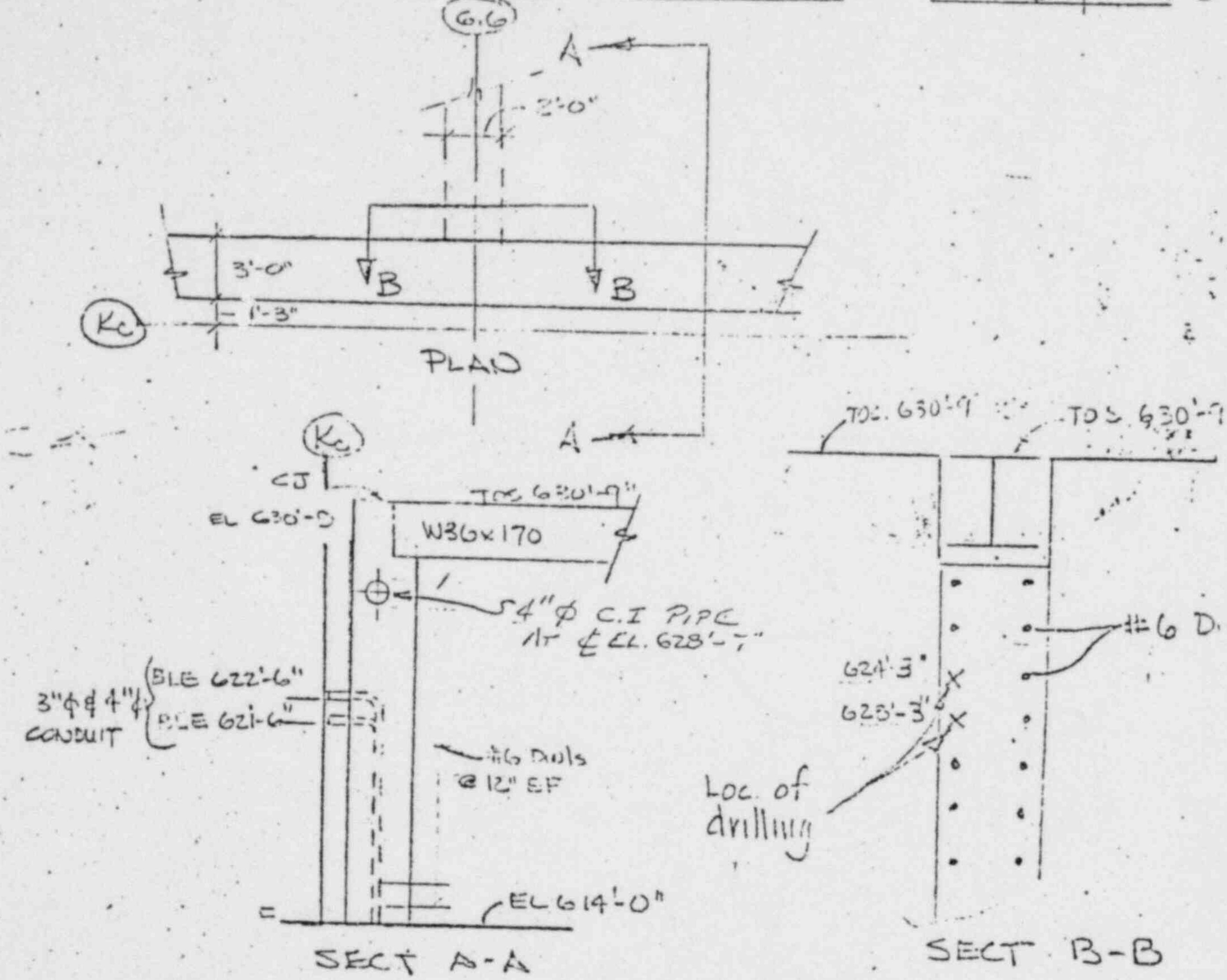
NCR ATTACHMENT

Project 7220

Permit No. 3

Prepared By: G. CLARK Discipline: CIVIL Date: APRIL 20, 1976

Unit ______ Bldg. AUX. Area ______ Ele. 623'-3 & 624'-3



Specific Instructions: Drill 2 - 1¼" ϕ (or Larger) holes 2'-2" Deep 1¼" W. of E. Face of Wall 53 for #6 Dowels @ Location shown on Sect BB

Reference Drawings C-204/4; C-282/6; C-284/3; M-218/2 SHT 1

Approved By:

Civil R.R. Kurera Date ______

Elect F.K. Kirkstein Date 4-22-76

Mech. G. Butler Date 4-26-76

Piping G Butler Date 4-26-76

Instru NA Date ______

Uncontrolled

NCR 443 pg. 2 of 2

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 2			14. NCR NO. 444
2. DRAWING/PART NO. C-204/4, C-140/8, C-282/4 C-284/3 REV.	7. PROJECT NO. 7220	12. REPORTED BY [illegible] DATE [illegible]	25. DISPOSITION CONCURRENCE: REWORK / REJECT / REPAIR / USE AS IS / VOC
3. ITEM DESCRIPTION: Reinforcing Steel	8. ITEM LOCATION: Auxiliary Building	13. VALIDATED BY [illegible] DATE [illegible]	
4. SERIAL NUMBER: N/A	9. STARTUP SYSTEM NO.: N/A	15. REPLACEMENT PART NO.: N/A REV.	PROJECT FIELD ENGINEER — DATE
5. PURCHASE ORDER NO.: N/A	10. QC FIELD INSPECTION PLAN NO.: N/A	16. REPLACEMENT SERIAL NO.: N/A	PROJECT ENGINEER — DATE
6. CONTRACTOR/LOCATION: A/M.	11. ASME CODE ITEM ☐ YES ☑ NO	17. SOURCE: Construction	PROJECT FIELD QC ENGINEER — DATE
			AUTHORIZE INSPECTOR — DATE

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

Drawing C-284, Revision 3 shows openings in North Ends of Walls 52, 53, & 54 one foot south of South Face of "H" Line Wall. The openings in Walls 52 & 54 are provided for water tight doors. Drawing C-282, Revision 6 shows typical detail for reinforcing around water tight door openings indicating diagonal bars are required on each side at the top of the opening. Contrary to the above, "H" Line Wall and the north one foot of Walls 52 & 54 have been placed to Elev. 630.75' without providing diagonal bars above the north side of the opening. The opening in the north end of Wall 53 requires reinforcing to be provided in accordance with Detail 7 of Drawing

20. ☐ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:
DRAWING _____ REV. _____ DCN _____
SPEC. _____ REV. _____ ADD. _____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP
REMARKS

27. QC ACCEPTANCE
QC ENGINEER — DATE
AUTHORIZED INSPECTOR — DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

BECHTEL

NONCONFORMANCE REPORT (CONT'D) 13. PAGE 2 OF 2 14. NCR NO. 444

7220-C-140, Revision 8, contrary to the above "H" Line Wall and the north one foot of Wall 53 have been placed to Elev. 630.75' without providing diagonal bars above the north side of the opening. Nonconformance noted during Q.C. Inspection. "Q"-List No. 1.203. Three Hold Tags Attached.

10098-2

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PL&F
Goldenrod Copy – QC

QC-G3-3

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 2

14. NCR NO. 445

2. DRAWING/PART NO.: Spec. 7220-M-209 — REV. 3

3. ITEM DESCRIPTION: Pipe Support

4. SERIAL NUMBER: See Block 19

5. PURCHASE ORDER NO.: 7220-M-106AC Rev. 2

6. CONTRACTOR/LOCATION: ITT Grinnell, Warren, Ohio

7. PROJECT NO.: 7220

8. ITEM LOCATION: QC Hold

9. STARTUP SYSTEM NO.: N/A

10. QC FIELD INSPECTION PLAN NO.: R-1.00-58

11. ASME CODE ITEM ☐ YES ☐ NO

12. REPORTED BY: [signature] DATE

13. VALIDATED BY: [signature] DATE 6-11-?

15. REPLACEMENT PART NO.: N/A REV.

16. REPLACEMENT SERIAL NO.: N/A

17. SOURCE: Supplier

25. DISPOSITION CONCURRENCE

REWORK	REJECT	REPAIR	USE AS IS	DOC.

PROJECT FIELD ENGINEER ____ DATE

PROJECT ENGINEER ____ DATE

PROJECT FIELD QC ENGINEER ____ DATE

AUTHORIZE INSPECTOR ____ DATE

18. ROUTING INSTRUCTIONS: ☐ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

(1)Purchase order 7220-M-106AC, Rev. 2, Documentation Submittal, Para. 2 states in part: "All engineering documents marked in column 5 of Form G-321-D must be submitted for Buyer approved. Those engineering documents marked Yes in column 5 require approval prior to commencement of fabrication." Contrary to the above, the Quality Documentation for the hangers show that they were fabricated to sketches that had a Bechtel approved level 4 "Not approved-Correct and resubmit."

Cont. pg 2

20. ☐ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:

DRAWING ____ REV. ____ DCN ____

SPEC. ____ REV. ____ ADD. ____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

QC ENGINEER ____ DATE

AUTHORIZED INSPECTOR ____ DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

BECHTEL

NONCONFORMANCE REPORT (CONT'D) 1. PAGE ___ OF ___ 14. NCR NO. 445

Cont. Block 19

Hanger MK#	Drawing	Shop Order
10-1FCB-22-H18	1-610-6-21	E-ME-057

(2) Purchase order 7220-M-106AC Rev. 2 Item A states in part: "Parts lists required shall contain the name and number of every part for the equipment and its auxiliaries including drawings in sufficient detail to locate and identify each part." Contrary to the above, the G-321-D for this shipment references the packing list as the traceable document. The packing list does not agree with the drawings sent with the shipment on the following listed hanger pipe support assemblies.

Packings List Dwgs Referenced	Dwgs Sent With Shipment	Hanger No.	Hanger Shipping Order
2-611-6-10 Rev. 1	Rev. 2	10-2FCB-35-H10	E-ME-004
2-611-6-20 Rev. 1	Rev. 2	10-2FCB-22-H17	"
2-611-6-26 Rev. 1	Rev. 2	10-2FCB-42-H1	"
2-611-6-38 Rev. 1	Rev. 2	2 1/2-2CCB-28-H3	"
1-610-3-3 Rev. 0	Rev. 1	24-1HCB-2-H3	E-ME-024
1-610-3-5 Rev. 0	Rev. 1	24-1HCB-2-H5	"
1-610-3-6 Rev. 0	(Did not send dwg or hanger assembly)		"
1-610-3-18 Rev. 1	Rev. 2	18-1GCB-32-H3	"
1-610-3-19 Rev. 0	Rev. 1	18-1GCB-32-H4	"
1-610-5-11 Rev. 0	Rev. 1	24-1HCB-1-H3	E-ME-047
1-610-5-22 Rev. 0	Rev. 2	18-1HCB-1-H14	"

Nonconformance noted during receipt inspection. 'Q' Number is 4.102 and 4.112 11 Hold Tags applied

10098-2

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-3

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 2	14. NCR NO. 446	

2. DRAWING/PART NO.: Spec. 7220-M-201 — REV.: 6

7. PROJECT NO.: 7220

12. REPORTED BY: [signature] — DATE: 6-16-76

3. ITEM DESCRIPTION: 26" Coated & Wrapped Pipe

8. ITEM LOCATION: Sasse Road

13. VALIDATED BY: [signature] — DATE: 6-17-76

4. SERIAL NUMBER: TF106706-60-1 thru 25

9. STARTUP SYSTEM NO.: N/A

15. REPLACEMENT PART NO.: N/A — REV.:

5. PURCHASE ORDER NO.: 7220-M104A-AC

10. QC FIELD INSPECTION PLAN NO.: IR-R-100-122 AB 6-17-76

16. REPLACEMENT SERIAL NO.: N/A

6. CONTRACTOR/LOCATION: ITT Grinnell, Kernersville, ~~SC~~ NC AB 6-17-76

11. ASME CODE ITEM: ☒ YES ☐ NO

17. SOURCE: Supplier

25. DISPOSITION CONCURRENCE: REWORK ☐ REJECT ☐ REPAIR ☐ USE AS IS ☐ DOC ☒

For F. C. Valinzano 6-29-76 — PROJECT FIELD ENGINEER — DATE

[signature] 6-29-76 — PROJECT ENGINEER — DATE

PROJECT FIELD QC ENGINEER — DATE

[signature] 6/29/76 — AUTHORIZED INSPECTOR — DATE

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING J 6-22-76 ☒ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

(1) FIM G-5, Rev. 0, Para. 3.3.4 states in part: "A preliminary inspection shall be preformed by the QCE at the time of unloading to identify damage that may have occurred during loading or shipment." (2) M/R 7220-M104A, Rev. 5, Para. 3 states in part: "Form G-321-D shall be used and submitted in accordance with items C and D given on the form. Specification paragraphs references on Form G-321-D are to specification 7220-M-201 unless otherwise noted."

Cont. pg 2

20. ☒ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

Item 1 - Coating & wrapping damage will be repaired and tested in the field in accordance with Spec. 7220-G-8 at the time of installation. (Non-Q) JAP

Item 2 - Material ~~superv sion~~ supervisor JAP will secure required documentation.

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

R M Ealey 6-24-76

K. Pulito 6-24-76

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:

DRAWING ______ REV. ______ DCN ______

SPEC. ______ REV. ______ ADD. ______

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

QC ENGINEER ______ DATE ______

AUTHORIZED INSPECTOR ______ DATE ______

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

BECHTEL

NONCONFORMANCE REPORT (CONT'D) PAGE 2 OF 2 14. NCR NO 446

Block 19 cont.

(1) Damage was noted to the coating and wrapping on the following spools: S/N TF106706-601-3
TF106706-601-12
TF106706-601-18
TF106706-601-21

(2) Contrary to the above we have not received a G-321-D or A documentation package for the following spools:
S/N TF106706-601-1 thru 25 noted during receipt inspection. "Q" No. 4.192 25 Hold tags applied

10098-2

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G1-3

RECEIVED

NONCONFORMANCE REPORT

1. PAGE 1 OF 2				14. NCR NO. 447	
2. DRAWING/PART NO. Spec. 7220-M-201	REV. 6	7. PROJECT NO. 7220	12. REPORTED BY [signature]	DATE 6-17-76	25. DISPOSITION CONCURRENCE: REWORK / REJECT / REPAIR / USE AS IS / OTHER
3. ITEM DESCRIPTION Pipe Fittings		8. ITEM LOCATION Sasse Road	13. VALIDATED BY [signature]	DATE 6-17-76	
4. SERIAL NUMBER WO 3344		9. STARTUP SYSTEM NO. N/A	15. REPLACEMENT PART NO. N/A	REV.	PROJECT FIELD ENGINEER — DATE
5. PURCHASE ORDER NO. 7220-M-104A-AC		10. QC FIELD INSPECTION PLAN NO. IR/R-1.00-120	16. REPLACEMENT SERIAL NO. N/A		PROJECT ENGINEER — DATE
6. CONTRACTOR/LOCATION ITT Grinnell, Kernersville, NC		11. ASME CODE ITEM ☑ YES ☐ NO	17. SOURCE Supplier		PROJECT FIELD QC ENGINEER — DATE
					AUTHORIZE INSPECTOR — DATE

18. ROUTING INSTRUCTIONS: ☑ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

~~(1) Form G-321-D requires quality documentation to be submitted to the jobsite. Contrary to the above, the documentation package has not been received.~~ HOLD 6-21-76 RELEASED 6-21-76

(2) Specification 7220-M-201, Rev. 6, Para. 6.6.1, Section b. states: "A metal cap shall be placed over each opening and sealed to the pipe with at least 3 passes of sealing tape."

Contrary to the above, lea 26" 45° ELL did not have a cap on either end.

(3) Specification 7220-M-201, Rev. 6, Para. 6.6.3 states in part: "Carbon steel flanges shall be sealed with

20. ☐ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:
DRAWING _____ REV. _____ DCN _____
SPEC. _____ REV. _____ ADD. _____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP
REMARKS

27. QC ACCEPTANCE
QC ENGINEER — DATE
AUTHORIZED INSPECTOR — DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

Block 19 continued.

metal or non-metallic disc bolted to the flange."

Contrary to the above, all 12 of the 24" flange covers were not bolted to the flanges and the flange covers are all broken.

(4) Specification 7220-M-201, Rev. 6, Para. 6.6.6 states: "All external surfaces of carbon steel piping assemblies except machined surfaces shall be given one shop coat of primer after ends have been sealed."

Contrary to the above, none of the 20ea 26" 45°ELL's have been coated.

Nonconformances noted during receipt inspection. Q-List #4.192. 26 Hold Tags applied.

BECHTEL

NONCONFORMANCE REPORT

2. DRAWING/PART NO.: 7220-M-616 sh-7 (As Built)	REV.: 2	7. PROJECT NO.: 7220	12. REPORTED BY: [illegible]	DATE: 8-21-74	1. PAGE 1 OF 2
3. ITEM DESCRIPTION: Shop Fabricated Carbon Steel Pipe Spool		8. ITEM LOCATION: See Block 19	13. VALIDATED BY: [illegible]	DATE: 8-21-74	14. NCR NO.: 443
4. SERIAL NUMBER: 1HBC-133-S615-7-6		9. STARTUP SYSTEM NO.: N/A	15. REPLACEMENT PART NO.: N/A	REV.	25. DISPOSITION CONCURRENCE: REWORK / REJECT / REPAIR / USE AS-IS / DOC.
5. PURCHASE ORDER NO.: 7220-M-104AC		10. QC FIELD INSPECTION PLAN NO.: N/A	16. REPLACEMENT SERIAL NO.: N/A		PROJECT FIELD ENGINEER — DATE
6. CONTRACTOR/LOCATION: ITT Grinnell, Kernersville, NC		11. ASME CODE ITEM ☒ YES ☐ NO	17. SOURCE: Supplier		PROJECT ENGINEER — DATE
					PROJECT FIELD QC ENGINEER — DATE
					AUTHORIZE INSPECTOR — DATE

18. ROUTING INSTRUCTIONS: ☐ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

Specification 7220-M-201, referenced by PO 7220-M-104AC, states in part (Paragraph 9.1) "The seller shall establish and maintain a system for the control of quality during fabrication and shipping which will assure that all materials including purchased and subcontracted items, conform to these specifications. This system shall be organized in such a manner that it will be possible to relate every component of the finished spool to its fabrication history."

Cont. pg 2

20. ☐ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:
DRAWING _____ REV. _____ DCN _____
SPEC. _____ REV. _____ ADD. _____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP
REMARKS

27. QC ACCEPTANCE
QC ENGINEER — DATE
AUTHORIZED INSPECTOR — DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

Cont. Block 19

Contrary to the above, the data furnished with pipe spool 1HBC-133-S616-7-6 (PO 7220-M-104AC, MR-69-50, Load Sheet #69) included a Materials Record listing Base and Filler Materials which was incorrectly identified with spool number 1-HBC-133-161-7-6.

Nonconformance noted during Documentation Review. Q List No. 4.164. One Hold tag applied.

Location: Locked Storage Area

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 2				14. NCR NO. 449	
2. DRAWING/PART NO. Spec. 7220-M-209	REV. 3	7. PROJECT NO. 7220	12. REPORTED BY [illegible]	DATE [illegible]	25. DISPOSITION CONCURRENCE: REWORK / REJECT / REPAIR / USE AS IS / MDC
3. ITEM DESCRIPTION Pipe Supports		8. ITEM LOCATION QC Hold	13. VALIDATED BY [illegible]	DATE 1-21-82	
4. SERIAL NUMBER See Block 19		9. STARTUP SYSTEM NO. N/A	15. REPLACEMENT PART NO. N/A	REV.	PROJECT FIELD ENGINEER — DATE
5. PURCHASE ORDER NO. 7220-M-106AC Rev. 2		10. QC FIELD INSPECTION PLAN NO. IR/R-1.00-124	16. REPLACEMENT SERIAL NO. N/A		PROJECT ENGINEER — DATE
6. CONTRACTOR/LOCATION ITT Grinnell, Warren, Ohio		11. ASME CODE ITEM ☒ YES ☐ NO	17. SOURCE Supplier		PROJECT FIELD QC ENGINEER — DATE
					AUTHORIZE INSPECTOR — DATE

18. ROUTING INSTRUCTIONS: ☐ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

Purchase Order 7220-M-106AC, Rev. 2 Item A states in part: "Parts lists required shall contain the name and number of every part for the equipment and its auxiliaries including drawings in sufficient detail to locate and identify each part." Contrary to the above, the G-321-D for this shipment references the packing list as the traceable document. The packing list does not agree with the drawing sent with the shipment on hanger 12-1GCB-25-H14.

Cont. pg 2

20. ☐ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:

DRAWING _____ REV. _____ DCN _____

SPEC. _____ REV. _____ ADD. _____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G1-2

NONCONFORMANCE REPORT (CONT'D)

 14. NCR NO. 449

Cont. Block 19

Packing List	Dwg sent with shipment	Hanger Number	Hanger Shipping Order
1-610-5-5 Rev. 1	Rev. 2	12-1-GCB-24-H14 (5 written over 4; initialed, dated)	E-ME-080

Nonconformance noted during receipt inspection. Q-List No. 4.102 ___/___ Hold tags applied.

10098-2

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-03-3

BECHTEL

NONCONFORMANCE REPORT

2. DRAWING/PART NO. Spec. 7220-M-209	REV. 3	7. PROJECT NO. 7220	12. REPORTED BY [illegible]	DATE [illegible]	1. PAGE 1 OF 3
3. ITEM DESCRIPTION Pipe Supports		8. ITEM LOCATION QC Hold	13. VALIDATED BY [illegible]	DATE 6-24-81	14. NCR NO. 450
4. SERIAL NUMBER See Block 19		9. STARTUP SYSTEM NO. N/A	15. REPLACEMENT PART NO. N/A	REV.	25. DISPOSITION CONCURRENCE
5. PURCHASE ORDER NO. 7220-M-106AC		10. QC FIELD INSPECTION PLAN NO. IR/R-1.00-81	16. REPLACEMENT SERIAL NO. N/A		PROJECT FIELD ENGINEER — DATE
6. CONTRACTOR/LOCATION ITT Grinnell, Warren, Ohio		11. ASME CODE ITEM ☒ YES ☐ NO	17. SOURCE Supplier		PROJECT ENGINEER — DATE
					PROJECT FIELD QC ENGINEER — DATE
					AUTHORIZE INSPECTOR — DATE

REWORK	REJECT	REPAIR	USE AS IS	QDC

18. ROUTING INSTRUCTIONS: ☐ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

Purchase Order 7220-M-106AC, Rev. 2, Documentation Submittal, Para. 2, states in part: "All engineering documents marked in column 5 of Form G-321-D must be submitted for Buyer approval. Those engineering documents marked Yes in column 5 require approval prior to commencement of fabrication." Contrary to the above, the Quality Documentation for the hangers show that they were fabricated to sketches that had a Bechtel approval level 4 "Not approved - Correct and resubmit."

Cont. on Pg. 2

20. ☐ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:

DRAWING _____ REV. _____ DCN _____

SPEC. _____ REV. _____ ADD. _____

25. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

Block 19 Continued

Hanger MK#	Drawing	Shop Order
18-1HBC-131-H1	1-616-7-5 Rev. 1	E-ME-061
12-1HBC-316-H1	1-616-7-10 Rev. 1	E-ME-061
16-1HBC-423-H2	1-616-6-6 Rev. 1	E-ME-086

(2) Purchase Order 7220-M-106AC, Rev. 2, Item A states in part: "Parts lists required shall contain the name and number of every part for the equipment and its auxiliaries including drawings in sufficient detail to locate and identify each part."
Contrary to the above, the G-321-D for this shipment references the packing list as the traceable document. The packing list does not agree with the drawings sent with the shipment on the following listed hanger pipe support assemblies.

Packing List Dwgs Referenced	Dwgs sent with Shipment	Hanger Number Number	Hanger Shipping Order
2-611-4-31 Rev. 1	Rev. 2	3-2FCB-28-H3	E-ME-036
1-610-6-10 Rev. 0	Rev. 1	10-1FCB-35-H10	E-ME-048
1-610-6-20 Rev. 0	Rev. 1	10-1FCB-22-H17	"
1-610-6-26 Rev. 0	Rev. 1	10-1FCB-42-H1	"
1-610-4-6 Rev. 0	Rev. 1	10-1FCB-34-H6	E-ME-056
1-610-4-11 Rev. 0	Rev. 1	10-1FCB-34-H11	"
1-610-4-14 Rev. 0	Rev. 1	6-1FCB-36-H2	"
1-610-4-22 Rev. 0	Rev. 1	10-1FCB-19-H14	"
1-616-7-1 Rev. 0	Rev. 1	18-1HBC-133-H1	E-ME-061
2-611-4-6 Rev. 2	Rev. 3	10-2FCB-34-H6	E-ME-065
2-611-6-2 Rev. 3	Rev. 2 (Sheet 2)	10-2FCB-35-H2	E-ME-090

NONCONFORMANCE REPORT (CONT'D) 1. PAGE 3 OF 3 14. NCR NO 450

Block 19 Continued

Nonconformance noted during receipt inspection 'Q' Numbers are 4.102, 4.112, & 4.162
14 Hold Tags Applied

10098-2

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G1-3

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 1				14. NCR NO. 451	
2. DRAWING/PART NO. Spec. 7220-M-201	REV. 6	7. PROJECT NO. 7220	12. REPORTED BY	DATE 4-22-76	25. DISPOSITION CONCURRENCE: REWORK / REJECT / REPAIR / USE AS IS / OTHER
3. ITEM DESCRIPTION Pipe Spool		8. ITEM LOCATION QC Hold	13. VALIDATED BY [illegible]	DATE 4-23-76	
4. SERIAL NUMBER 2HBC-123-S617-8-4		9. STARTUP SYSTEM NO. N/A	15. REPLACEMENT PART NO. N/A	REV.	PROJECT FIELD ENGINEER / DATE
5. PURCHASE ORDER NO. 7220-M-104A-AC		10. QC FIELD INSPECTION PLAN NO. IR/R-1.00-130	16. REPLACEMENT SERIAL NO. N/A		PROJECT ENGINEER / DATE
6. CONTRACTOR/LOCATION ITT Grinnell, Kernersville, NC		11. ASME CODE ITEM ☐ YES ☐ NO	17. SOURCE Supplier		PROJECT FIELD QC ENGINEER / DATE
					AUTHORIZE INSPECTOR / DATE

18. ROUTING INSTRUCTIONS: ☐ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

~~ITT Grinnell approved Spool Sketch 2HBC-123-S617-8-4 requires that a venturi be installed~~ in the spool piece. Contrary to the above there was not a venturi in the spool piece.

Nonconformance noted during receipt inspection. 'Q' Number is 4,174 4-23-76 Hold tags applied.

20. ☐ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:

DRAWING _____ REV. _____ DCN _____

SPEC _____ REV. _____ ADD. _____

25. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

QC ENGINEER / DATE

AUTHORIZED INSPECTOR / DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 2				14. NCR NO. 452	
2. DRAWING/PART NO. Spec. 7220-M-209	REV. 3	7. PROJECT NO. 7220	12. REPORTED BY [illegible]	DATE [illegible]	25. DISPOSITION CONCURRENCE: REWORK / REJECT / REPAIR / USE AS IS / OTHER
3. ITEM DESCRIPTION Pipe Supports		8. ITEM LOCATION QC Hold	13. VALIDATED BY [illegible]	DATE [illegible]	
4. SERIAL NUMBER See Block 19		9. STARTUP SYSTEM NO. N/A	15. REPLACEMENT PART NO. N/A	REV.	PROJECT FIELD ENGINEER / DATE
5. PURCHASE ORDER NO. 7220-M-106AC Rev. 2		10. QC FIELD INSPECTION PLAN NO. IR/R-1.00-59	16. REPLACEMENT SERIAL NO. N/A		PROJECT ENGINEER / DATE
6. CONTRACTOR/LOCATION ITT Grinnell, Warren, Ohio		11. ASME CODE ITEM ☒ YES ☐ NO	17. SOURCE Supplier		PROJECT FIELD QC ENGINEER / DATE
					AUTHORIZE INSPECTOR / DATE

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

Purchase Order 7220-M-106AC Rev. 2, Documentation Submittal, Paragraph 2 states in part: "All engineering documents marked in column 5 of Form G-321-D must be submitted for Buyer approval. Those engineering documents marked Yes in column 5 require approval prior to commencement of fabrication." Contrary to the above, the Quality Documentation for Hanger 18-1HBC-133-H6 shows that it was fabricated to sketches that had a Bechtel approved Level 4 "Not approved-correct and resubmit."

Cont. pg 2

20. ☐ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:
DRAWING _____ REV. _____ DCN _____
SPEC. _____ REV. _____ ADD. _____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP
REMARKS

27. QC ACCEPTANCE
QC ENGINEER / DATE
AUTHORIZED INSPECTOR / DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

BECHTEL

NONCONFORMANCE REPORT (CONT'D) 1. PAGE 2 OF 2 14. NCR NO. 452

Cont. Block 19

Hanger MK#	Drawing	Shop Order
18-1HBC-133-H6	1-616-9-1 Rev. 1	E-ME-085

Nonconformance noted during receipt inspection. 'Q' Number is 4.162. ___/___ Hold tags applied.

10098-2

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-3

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 2				14. NCR NO. 453	
2. DRAWING/PART NO. Spec. 7220-M-209	REV. 3	7. PROJECT NO. 7220	12. REPORTED BY [illegible]	DATE 4/5/82	25. DISPOSITION CONCURRENCE: REWORK / REJECT / REPAIR / USE AS IS / DDC
3. ITEM DESCRIPTION Pipe Supports		8. ITEM LOCATION QC Hold	13. VALIDATED BY [illegible]	DATE 4/23/82	
4. SERIAL NUMBER See Block 19		9. STARTUP SYSTEM NO. N/A	15. REPLACEMENT PART NO. N/A	REV.	PROJECT FIELD ENGINEER / DATE
5. PURCHASE ORDER NO. 7220-M-106AC, Rev. 2		10. QC FIELD INSPECTION PLAN NO. IP/ R-1.00-121	16. REPLACEMENT SERIAL NO. N/A		PROJECT ENGINEER / DATE
6. CONTRACTOR/LOCATION ITT Grinnell, Warren, Ohio		11. ASME CODE ITEM ☒ YES ☐ NO	17. SOURCE Supplier		PROJECT FIELD QC ENGINEER / DATE
					AUTHORIZED INSPECTOR / DATE

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

Purchase Order 7220-M-106AC Rev. 2 Item A states in part: "Parts list required shall contain the name and number of every part for the equipment and its auxiliaries including drawings in sufficient detail to locate and identify each part." Contrary to the above the G-321-D for this shipment references the packing list as the traceable document. The packing list does not agree with the drawings sent with the shipment on the following listed hanger pipe support assemblies.

Cont. pg 2

20. ☐ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:
DRAWING _____ REV. _____ DCN _____
SPEC. _____ REV. _____ ADD. _____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP
REMARKS

27. QC ACCEPTANCE
QC ENGINEER / DATE
AUTHORIZED INSPECTOR / DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

Packing List Dwgs Referenced	Dwgs Sent With Shipment	Hanger No.	Hanger Shipping Order
1-634-3-12 Rev. 1	Rev. 2	8-1HBC-23-H2	E-ME-018
1-634-3-16 Rev. 1	Rev. 2 (Sheet 3)	8-1HBC-23-H6	E-ME-019
0-619-7-12 Rev. 1	Rev. 2	26-0HBC-20-H12	E-ME-042
0-619-7-24 Rev. 1	Rev. 2	10-1HBC-101-H4	E-ME-042
1-610-3-9 Rev. 0	Rev. 1	18-1HBC-2-H9	E-ME-055
1-610-3-12 Rev. 0	Rev. 1	18-1HBC-2-H12	"
1-610-3-13 Rev. 0	Rev. 1	18-1HBC-2-H13	"
1-610-3-28 Rev. 0	Rev. 1	12-1CCB-25-H7	"
1-616-8-2 Rev. 1	Rev. 2	16-1HBC-150-H2	E-ME-068
1-616-8-6 Rev. 1	Rev. 2	16-1HBC-135-H3	"
1-616-8-12 Rev. 0	Rev. 1	16-0HBC-51-H2	"
1-616-8-14 Rev. 0	Rev. 1	16-1HBC-123-H5	"
1-616-8-19 Rev. 1	Rev. 2	12-1HBC-141-H3	"
2-617-6-10 Rev. 0	Rev. 1	16-2HBC-123-H2	E-ME-110

Nonconformance noted during receipt inspection. 'Q' Numbers are 4.102, 4.162, 4.172, 4.191, and 4.341.

14 Hold tags applied.

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 23	14. NCR NO. 454

2. DRAWING/PART NO.	REV.	7. PROJECT NO.	12. REPORTED BY	DATE
7220-M-166	0/F1	7220	(signature)	6-23-76

3. ITEM DESCRIPTION: 26"Coated Pipe(Yard)	8. ITEM LOCATION: Combination Shop	13. VALIDATED BY: (signature) DATE 6-23-76
4. SERIAL NUMBER: 0HBC-15 & 0HBC-16	9. STARTUP SYSTEM NO.: N/A	15. REPLACEMENT PART NO.: N/A REV.
5. PURCHASE ORDER NO.: 7220-M-104A-AC	10. QC FIELD INSPECTION PLAN NO.: M-204-2-166 Rev. 0	16. REPLACEMENT SERIAL NO.: N/A
6. CONTRACTOR/LOCATION: N/A	11. ASME CODE ITEM: [X] YES [ ] NO	17. SOURCE: Construction

25. DISPOSITION CONCURRENCE

REWORK	REJECT	REPAIR	USE AS IS	DOC.
X				

PROJECT FIELD ENGINEER	(signature) for T.C. (signature)	6-25-76
PROJECT ENGINEER	(signature)	7-1-76
PROJECT FIELD QC ENGINEER		
AUTHORIZED INSPECTOR	(signature)	7/2/76

18. ROUTING INSTRUCTIONS: [XX] ROUTE TO FIELD ENGINEERING [ ] ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

Markings and transfer of Heat Numbers and identification markings shall be accomplished using a steel indentation stamp with a round nose or interrupted dot die, reference Specification 7220-M-204, Paragraph 4.13.

Contrary to the above, during fabrication and cutting of the 26" yard piping, stamps other than the required round nose or interrupted dot dies were used and noted after fabrication and QC acceptance.

Q-List #4.192. Nine QC Hold Tags applied.

20. [XX] FIELD DISPOSITION [ ] FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

Piece I.D. Numbers shall be imprinted 6" or more laterally from nonconforming imprints. Round nose or interrupted dies shall be used. Non-conforming impressions then to be removed by grinding. Minimum wall thickness of .375 inch shall be maintained. Completed ground surfaces shall be dye checked for any cracking from removed impressions.

(signature) 6-28-76 K. Pulito 6-28-76

21. FIELD DISPOSITION RESULTS:

See attached FIR + NDE REPORT (signature) 7-7-76.

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED [ ] NO [ ] YES, SEE ATTACHED:

DRAWING ______ REV. ______ DCN ______

SPEC. ______ REV. ______ ADD. ______

26. REJECTED MATERIAL DISPOSITION [ ] RETURN TO SUPPLIER [ ] SCRAP

REMARKS

27. QC ACCEPTANCE

QC ENGINEER	(signature)	7-7-76
AUTHORIZED INSPECTOR	(signature)	7-7-76

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

BECHTEL

FIELD INSPECTION REPORT

3. RECORD CONTROL
CONTROL NO.
FILE NO. M 204.5

1. PROJECT NO. 7220
2. DATE 7-6-76
PAGE 1 OF 1

4. ITEM INSPECTED 26" OHBC 15 + 16 COATED PIPE (YARD) NCR 454
OHBC-16-1 .392, 397, .400 .401 WALL THICKNESS OHBC-15-7 .411, .404
OHBC-16-3 .396, .396, .400, .402 " " .408, .406
OHBC-16-4 .404, .403, .403 .405 " "
OHBC-16-7 .406, .403, .404, .411 " " SPARE .410 .406
OHBC-15-1 .393, .392, .396, .389 " " SN 106-A19 .412 .407
OHBC-15-3 .398, .404, .395, .404 " " HEAT# EACN
OHBC-15-4 .405, .390, .400, .401 " "

5. LOCATION Combo Shop.

6. TYPE OF INSPECTION Measured.

7. STANDARD / CODE / PROCEDURE / DRAWING / SPECIFICATION NCR 454 Spec M-204
Ref dwg M-166 QCFIP # M-204-2-166 REV 0.

8. INSPECTION EQUIPMENT USED 0-1 Autocola MIC
BPC M-279 Date Calib. 7-6-76
Date due 1-6-77

9. RESULTS OF INSPECTION: SATISFACTORY [✓] UNSATISFACTORY [ ]

10. ACTION TAKEN IF UNSATISFACTORY

NCR 454 2/13

Distribution:
White – QC Files
Canary – Originator

11. ENGINEER [signature]

2514 (7-73)

QC-G1-1

Number 1675

NONDESTRUCTIVE EXAMINATION REPORT

Job No. and Project Location		Date
7220 Midland, Michigan		7-6-76
Surface Condition	**Time of Examination**	**Iso/Dwg Number**
GROUND Smooth	AFTER GRINDING REPAIR Before PWHT N/A After PWHT N/A	M-166 O/FL
Type of Examination	**Type and Temp. of Material**	**NDE Procedure No.**
PT (X) MT ( ) UT ( ) Other ( )	80°F C/S	PT-SR-1,2 REV. 1
Specification Standard	**Acceptance Standard**	
PT-SR-1,2 REV. 1	PT-SR-1,2 REV 1	

Defect Code

C–Cracks P–Porosity NF–Nonfusion S–Slag R–Rounded L–LINEAR Other–Specify

Part or Weld Number	ACC	REJ	Defect Code	Remarks
6" COATED YARD				
PIPE				
HCB-15 AND				
HCB-16, NINE				
7) SPOOL PCS				
REMOVAL OF				
SHARP NOSE STAMPS	X			REFERENCE NCR.# 454

NOTES:
BPC-M-269
EXPIRATION DATE 11-4-76

Enclosure Added: Yes ( ) No (✓)

Richard N. Plummer II
Examiner

Witnessed by

NCR 454

343

G.P.C. 8

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 1 | 14. NCR NO. 455

2. DRAWING/PART NO. FSK-C-34A (rollout) | REV. 1
3. ITEM DESCRIPTION 4" Dome Liner Plate Assembly C-111-122
4. SERIAL NUMBER D-9-16 and D-10-16
5. PURCHASE ORDER NO. 7220-C-50A
6. CONTRACTOR/LOCATION Memphis, Tennessee Southern Boiler & Tank Works
7. PROJECT NO. 7220
8. ITEM LOCATION Unit #1 Dome Erection Jig
9. STARTUP SYSTEM NO. N/A
10. QC FIELD INSPECTION PLAN NO. IR/C-111-18W
11. ASME CODE ITEM ☐ YES ☒ NO
12. REPORTED BY William M Pardue | DATE 6-24-77
13. VALIDATED BY [illegible] | DATE 6-24-77
15. REPLACEMENT PART NO. N/A | REV.
16. REPLACEMENT SERIAL NO. N/A
17. SOURCE Vendor

25. DISPOSITION CONCURRENCE

REWORK	REJECT	REPAIR	USE AS IS	D/C

PROJECT FIELD ENGINEER ____ DATE ____
PROJECT ENGINEER ____ DATE ____
PROJECT FIELD QC ENGINEER ____ DATE ____
AUTHORIZE INSPECTOR ____ DATE ____

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION:

A discrepancy exists between mill slab number documentation and the vendor transferred stamp number on two shop fabricated assemblies. Documentation for D-9-16 shows HT#81989 slab #47; the vendor transferred stamp is HT#81982 slab #47. D-10-16 documentation shows HT#81989 slab #28; the vendor transferred stamp is HT#81989 slab #26. Nonconformance noted during Q.C. Review. 'Q' Number is 1.109. __/__ Hold tags applied.

20. ☐ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:
DRAWING ____ REV. ____ DCN ____
SPEC. ____ REV. ____ ADD. ____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP
REMARKS

27. QC ACCEPTANCE
QC ENGINEER ____ DATE ____
AUTHORIZED INSPECTOR ____ DATE ____

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

BECHTEL

NONCONFORMANCE REPORT

2. DRAWING/PART NO. FSK-C-34A(Rollout)	REV. 1	7. PROJECT NO. 7220	12. REPORTED BY William M Purdue	DATE 6-28-76	1. PAGE 1 OF 1 — 14. NCR NO. 456
3. ITEM DESCRIPTION 1/4" Liner Plate Assy C-111-130		8. ITEM LOCATION Unit #1 Dome Erection Jig	13. VALIDATED BY	DATE 6-28-76	25. DISPOSITION CONCURRENCE
4. SERIAL NUMBER D-4-7		9. STARTUP SYSTEM NO. N/A	15. REPLACEMENT PART NO. N/A	REV.	REWORK / REJECT / REPAIR / USE AS IS / OTHER
5. PURCHASE ORDER NO. 7220-C-50A		10. QC FIELD INSPECTION PLAN NO. IR/ C-111-30W	16. REPLACEMENT SERIAL NO. N/A		PROJECT FIELD ENGINEER — DATE
6. CONTRACTOR/LOCATION Southern Boiler and Tank Works, Memphis, Tenn.		11. ASME CODE ITEM ☐ YES ☒ NO	17. SOURCE Vendor		PROJECT ENGINEER — DATE
					PROJECT FIELD QC ENGINEER — DATE
					AUTHORIZE INSPECTOR — DATE

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION: Shop Assembly D-4-7 has a shop installed hanger pad welded over the heat and slab stamping that obliterates all but two numbers making the material untraceable to the documentation. The documentation shows the numbers should be Heat #21302 Slab #10.

Nonconformance noted during QC surveillance. C List #1.109. One Hold Tag applied.

20. ☐ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:

DRAWING _____ REV. _____ DCN _____

SPEC. _____ REV. _____ ADD. _____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

BECHTEL

NONCONFORMANCE REPORT

1. PAGE 1 OF 2	14. NCR NO. 457	
2. DRAWING/PART NO. M-616 Sheet 8 (C)	REV. 5/F1	7. PROJECT NO. 7220
3. ITEM DESCRIPTION 16" Check Valve		8. ITEM LOCATION Combination Shop
4. SERIAL NUMBER 16-HBC-CK-Z SN 3N-641		9. STARTUP SYSTEM NO. N/A
5. PURCHASE ORDER NO. 7220-M-120AC		10. QC FIELD INSPECTION PLAN NO. N/A M-214.7-616-8
6. CONTRACTOR/LOCATION Anchor/Darling Valve Co., Hayward, CA		11. ASME CODE ITEM ☒ YES ☐ NO

12. REPORTED BY [signature]	DATE [illegible]	
13. VALIDATED BY [signature] Connolly	DATE [illegible]	
15. REPLACEMENT PART NO. N/A	REV.	
16. REPLACEMENT SERIAL NO. N/A		
17. SOURCE Vendor		

25. DISPOSITION CONCURRENCE

REWORK	REJECT	REPAIR	USE AS IS	DOC.

PROJECT FIELD ENGINEER ____ DATE ____

PROJECT ENGINEER ____ DATE ____

PROJECT FIELD QC ENGINEER ____ DATE ____

AUTHORIZE INSPECTOR ____ DATE ____

18. ROUTING INSTRUCTIONS: ☒ ROUTE TO FIELD ENGINEERING ☐ ROUTE TO MATERIAL SUPERVISOR

19. NONCONFORMING CONDITION: During a Quality Control required Magnetic Particle inspection of M-613, Sheet 8, Field Weld #8, linear indications were found in the valve body adjacent to the field weld. Reference Nondestructive Examination Report #1662, attached for locations. 'Q' number 4.164. One Hold Tag Applied

20. ☐ FIELD DISPOSITION ☐ FIELD RECOMMENDATION/ROUTE TO PROJECT ENGINEERING

21. FIELD DISPOSITION RESULTS:

22. ENGINEERING DISPOSITION

23. ENGINEERING DISPOSITION RESULTS:

24. IS DESIGN CHANGE REQUIRED ☐ NO ☐ YES, SEE ATTACHED:

DRAWING ____ REV. ____ DCN ____

SPEC. ____ REV. ____ ADD. ____

26. REJECTED MATERIAL DISPOSITION ☐ RETURN TO SUPPLIER ☐ SCRAP

REMARKS

27. QC ACCEPTANCE

QC ENGINEER ____ DATE ____

AUTHORIZED INSPECTOR ____ DATE ____

10098-1

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-2

Number 1662

Page 1 of 2

NONDESTRUCTIVE EXAMINATION REPORT

Job No. and Project Location

7220 Midland, Michigan

Date: 6-24-76

urface Condition: Is Welded

Time of Examination: FINAL

Before PWHT: N/A After PWHT: N/A

Iso/Dwg Number: M-616 SH8(Q) 5/E1

ype of Examination: BPC-IM-287 CAL EXP 7-30-76

T( ) MT(X) UT( ) Other( )

Type and Temp. of Material: C/S Temp N/A

NDE Procedure No.: MT-P-1,2 Rev1

pecification Standard: M-204

Acceptance Standard: MT-P-1,2 Rev1 & ASME Sec III

fect Code

C–Cracks P–Porosity NF–Nonfusion S–Slag R–Rounded L–LINEAR Other–Specify

Part or Weld Number	ACC	REJ	Defect Code	Remarks
FW#8		X	L	REJECT DUE TO LINEAR INDICATIONS IN THE VALVE CASTING (See ATTACHED SKT

S:

Enclosure Added: Yes (X) No ( )

William M Pardue

Examiner Level II

Witnessed by

NCR #457

BECHTEL

NDE REPORT ENCLOSURE

DATE

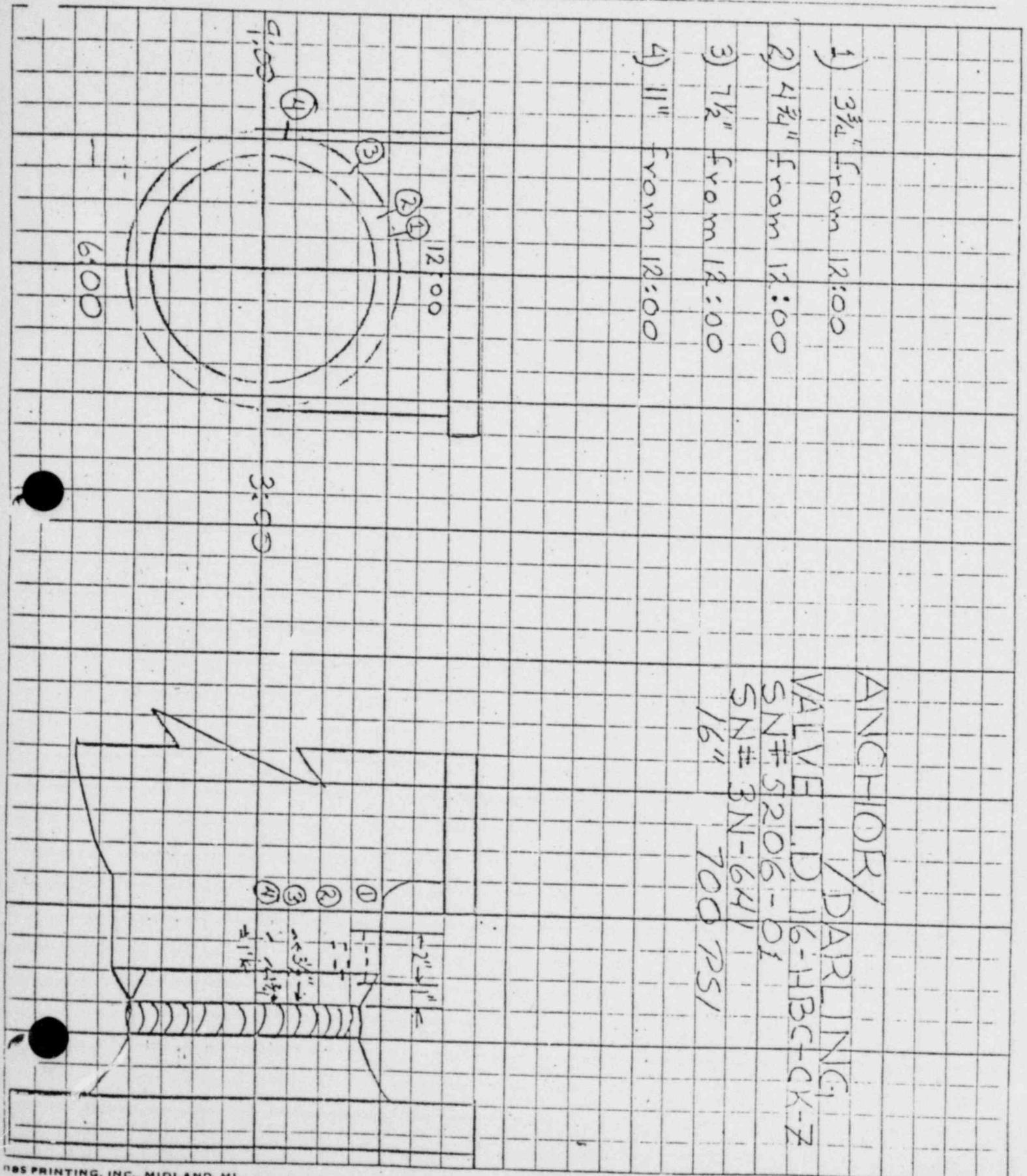
PROJECT Midland, Michigan

JOB NO. 07220

SHEET 2 OF 2

NDE REPORT NO. 1662

COMMENTS



QUALITY AUDIT FINDING

093 (25-3-2)

April 14, 1976

N/A

PROJECT/DEPARTMENT/TRADE		TYPE OF AUDIT	AUDITOR
Land 1 & 2 Job No. 7220		Construction [X] Field [ ] Office	B. T. Stojkov
AUDIT ITEM	CHECKLIST ITEM	AREA FOUND	DISCUSSED WITH
25-3-P-2	9.3	Champion, Inc. Office Files	K. Holman
CONTROLLING DOCUMENT, SECTION, PARAGRAPH, ETC.		SAME AS:	
Champion, Inc. QAM, Rev. 11, Article XIII			

QUOTATION

Champion QAM, Article XIII states inpart: "Champion, Inc. Quality Control Procedure provide for the calibration of measuring equipment used in production of concrete. This includes . . . . scales, meters, admix dispensers.

. . . . . .

The scales and meters are calibrated . . . with traceability to the standards of the National Bureau of Standards."

FINDING

The calibration records for admix dispenser No. 1 do not provide traceability of the standard used to calibrate to the National Bureau of Standards.

NOTE: Admix dispensers are calibrated by US Testing on site.

CORRECTIVE ACTION Recommended.

1. Establish traceability of calibration standard used to calibrate admix dispensers to the National Bureau of Standards.

2. Remind cognizant Champion, Inc. personnel of the requirement for documented traceability of calibration standards.

SCHEDULE COMPLETION DATE	RESPONSIBILITY FOR CORRECTIVE ACTION
May 14, 1976	PFQCE

CORRECTIVE ACTION TAKEN

1. Champion Inc. purchased a Volumetric Flask (Champion Equipment No. 1). U.S. Testing calibrated it using Nationally Recognized Standards, U.S. Tesing recalibrated all admix vials.

2. Champion Inc. was reminded of the requirement for documenting traceability of calibration standards. (J.F. DeWolf letter 5/25/76)

DATE COMPLETED	SUBMITTED BY RESPONSIBLE AUTHORITY
5-24-76	"J.F. DeWolf" PFQCE

CORRECTIVE ACTION VERIFIED BY/ON: Brent T. Stojkov DATE: 6/4/76

QUALITY AUDIT FINDING

AUDIT IDENT. 19	094 (25-1-2)
AUDIT DATE	04/12/76
AAS ITEM 20	N/A

PROJECT/DEPARTMENT/SELLER 1	TYPE OF AUDIT 2		AUDITOR 4
N land 1 & 2 Job 7220	Construction	[X] FIELD [ ] OFFICE	B. T. Stojkov
AGENCY ITEM 3	CHECKLIST ITEM 4	WHERE FOUND 5	DISCUSSED WITH 7
25-1-P-1	2.3	Subcontracotr's Office Files	G. M. Williams
CONTROLLING DOCUMENT, SECTION, PARAGRAPH, ETC. 6		SAME AS 8. 8	
Peabody QA Program Requirements, Rev. 3, Paragraph 1.5.1			

QUOTATION 10

Paragraph 1.5.1 states in part: "The purpose of the Quality Assurance Indoctrination Program is to familiarize the new or transferred employee with the Quality Assurance Program requirement stressing the importance and meaning of Quality Assurance/Quality Control as it applies to the employee's position".

FINDING 11

Neither of the subcontractor's personnel currently at the site have received Quality Assurance indoctination.

CORRECTIVE ACTION Recommended 12

Provide Quality Assurance indoctrination for all currently acting site personnel. Retain records of this indoctination on the site. Based on the number of discrepancies uncovered, indoctrination should emphasize program implementation.

SCHEDULE COMPLETION DATE 13	RESPONSIBILITY FOR CORRECTIVE ACTION 14
JUNE 28, 1976	PFQCE

CORRECTIVE ACTION TAKEN 15

DATE COMPLETED 16	SUBMITTED BY RESPONSIBLE AUTHORITY 17	
CORRECTIVE ACTION VERIFIED BY QAE 18		DATE

QUALITY AUDIT FINDING

QDS (25-1-2)

04/12/76

N/A

PROJECT/DEPARTMENT/SECTION		TYPE OF AUDIT		AUDITOR
Midland 1 & 2 Job No. 7220		Construction	[X] FIELD [ ] OFFICE	B. T. Stojkov
QA/QC ITEM	CHECKLIST ITEM	AREA FOUND		DISCUSSED WITH
25-1-P-1	Item 13.3	Subcontractor's Office Files		G. M. Williams
CONTROLLING DOCUMENT, SECTION, PARAGRAPH, ETC.			SAME AS	
Peabody QA Program Requirements, Rev. 3, Paragraph 16			2.1.3	

QUOTATION

Paragraph 16.2.1.3 states in part: "A Log of Nonconformance Reports and their status shall be maintained for each project or facility."

FINDING

No Log of Nonconformances is being maintained.

CORRECTIVE ACTION Recommended

Prepare and maintain a Log of Nonconformances. Include previously issued nonconformances where necessary information is available.

SCHEDULE COMPLETION DATE	RESPONSIBILITY FOR CORRECTIVE ACTION
May 28, 1976	PFOCE

CORRECTIVE ACTION TAKEN

Requested responsible action by X-Ray Engineering Co. Response transmitted as attachment to X-Ray Engineering Co. Project Managere Memo to J. Newgen PRT-206-3 dated 5/20/76. No nonconformances have been issued to date. When nonconformances are issued, a log will be maintained.

DATE COMPLETED	SIGNATURE OF RESPONSIBLE AUTHORITY
5-24-76	J. Connelly PFOCE

CORRECTIVE ACTION VERIFIED BY QA

Brent T. Stojkov

DATE 6/23/76

Ident.: QAF 96

Project Quality Assurance
Midland Units 1 & 2 - 7220

Verification of Corrective Action

Method:

X 1. Verify action of response as implemented.
___ 2. Review of documentation or attachments to resolve finding.
___ 3. Requirement removed or finding withdrawn.
___ 4. Other: _____

Items Checked: VERIFIED "NONCONFORMANCE AND CORRECTIVE ACTION REPORT LOG" IN X-RAY ENGR'G / PEABODY TESTING OFFICE FILES

Closeout Documentation (list or attach) NONE

☒ Verified ☐ Not Verified (explain)

P.T. Shiu
QAE

6/23/76
Date

QUALITY AUDIT FINDING

028 (25-1-2)

04/12/76

N/A

FACILITY/DEPARTMENT/SECTION		TYPE OF AUDIT	AUDITOR
Midland 1 & 2 Job No. 7220		Construction ☒ FIELD ☐ OFFICE	B. T. Brajkov
AGENDA ITEM	CHECKLIST ITEM	WHERE FOUND	DISCUSSED WITH
25-1-P-1	Item 15.0	Subcontractor's Office Files	G. M. Williams

CONTROLLING DOCUMENT, SECTION, PARAGRAPH, ETC.

Peabody QA Program Requirements, Rev. 3, Paragraph 18.5.3

QUOTATION

Paragraph 18.5.3 states in part: "A written report will be prepared . . .. The report shall be distributed to the Client (or designated representative), the president of Peabody Testing, the chief executive office of the organizational unit audited and the manager of the project or facility audited.

FINDING

The audit report of the internal audit performed on October 29, 1976 was not completed (not signed by Peabody Director of Quality Assurance) or distributed.

CORRECTIVE ACTION

1. Complete and distribute the report of the internal audit performed on October 29, 1975.
2. Reinstruct internal auditors on required audit reporting procedures.

SCHEDULE COMPLETION DATE	RESPONSIBILITY FOR CORRECTIVE ACTION
1 & 2: May 28, 1976	PFQCE

CORRECTIVE ACTION TAKEN

Requested responsible action by X-Ray Engineering Co. A response was transmitted as attachment to X-Ray Engineering Co. Project Manager memo to C. Newgen PBT-206-3 dated 5/20/76. Internal audit report has been submitted and filed. QC verification of X-Ray Engineering made 5/24/76 by A. L. Boulden.

DATE COMPLETED	SUBMITTED BY RESPONSIBLE AUTHORITY
5-24-76	J. Connolly PFQCE

CORRECTIVE ACTION VERIFIED BY QAR: Brent T. Brajkov

DATE

Ident.: BAF 93

Project Quality Assurance
Midland Units 1 & 2 - 7220

Verification of Corrective Action

Method:

X 1. Verify action of response as implemented.
___ 2. Review of documentation or attachments to resolve finding.
___ 3. Requirement removed or finding withdrawn.
___ 4. Other: _____

Items Checked: CHECKED AUDIT REPORT DATED 10/29/75 - NOW SIGNED BY S.E. KENNEDY, A.C. MGR - DESIGNATED RESPONSIBILITIES AND DISPOSITION TO BECHTEL IS INDICATED. AUDIT REPORT TRANSMITTED TO BECHTEL VIA R.M. WILLIAMS LTR TO J. NEWGARD 5/25/76

Closeout Documentation (list or attach)

1. R.M. WILLIAMS LTR TO J. NEWGARD 5/25/76
2. S.E. KENNEDY LTR TO M. WILLIAMS 5/5/76
3. AUDIT REPORT DATED 10/29/75

X Verified ☐ Not Verified(explain)

E.T. Stiles
QAE

6/1/76
Date

Brent

QUALITY AUDIT FINDING

AUDIT NUMBER: 100 (14-1-3)
AUDIT DATE: April 27-30, 1976
CAR ITEM NO.: N/A

PROJECT/DEPARTMENT/SELLER: dland 1 & 2
TYPE OF AUDIT: [X] FIELD [ ] OFFICE
AUDITOR: B. T. Stojkov
NQA ITEM: 14-1-P-2
CHECKLIST ITEM: 12
WHERE FOUND: Quality Control Storage Records
DISCUSSED WITH: D. Martin, H. Boleer
CONTROLLING DOCUMENT, SECTION, PARAGRAPH, ETC.: PG-3, Rev. 4, Paragraphs 5.2 & 7.0; SF/PSP G-5.1, Rev. 1 Paragraph 4.2
QUOTATION:
SAME AS:

PG-3, 5.2 says in part: "The performance of the storage requirements . . . is the responsibility of the MSS. The maintenance require ts are performed by the MSS or is representative . . ."

PG-3, 7.0 says in part: "Upon task completion, the issued F-2 Form, . . . shall be forwarded to the PFQCE for vault storage."

F/PSP G-5.1, 4.2 s , s in part: "(The responsible Quality Control Engineer shall) verify that . . . required maintenance activities are performed in accordance with the storage nd storage maintenance requirements . . ."

FINDING

-1-203, Rev. 1 for "B" series Cadweld Sleeves requires storage maintenance activity at 0 day intervals. Dates on successive forms F-2-1277 and F-2-2211 were 10/8/75 and 3/1/76 espectively. It was confirmed with the Assistant Material Supervisor for material Control hat no unreported storage maintenance activity had occurred in the approximately 150 day erval. Form F-2-2211 was reviewed and signed by the responsible Quality Control Engineer.

CORRECTIVE ACTION

. Reinstruct the Material Storage Supervisor and his representatives on the neccessity for imely completion of the required storage maintenance activities.

. Reinstruct the responsible Quality Control Engineers to check F-2 Form for timely ompletion of required storage maintenance activities.

SCHEDULE COMPLETION DATE: & 2 June 4, 1976
RESPONSIBILITY FOR CORRECTIVE ACTION: 1 - Project Superintendent, 2 - PFQCE

CORRECTIVE ACTION TAKEN

Item No. 2 - The checking of F-2 and F-20 Forms for timely completion of required activities has been re-emphasized to the responsible Quality Control Engineers.

DATE COMPLETED: 6-28-76
SUBMITTED BY RESPONSIBLE AUTHORITY: A Connolly PFQCE
CORRECTIVE ACTION VERIFIED BY QAR: Brent Tu Stojkov
DATE: 7/1/76

QUALITY AUDIT FINDING

AUDIT IDENT. 108 (9-2-3)
AUDIT DATE 5/19/76 - 6/1/76
AAS ITEM N/A

CT/DEPARTMENT/SKILLER	TYPE OF AUDIT	AUDITOR
Midland 1 & 2	Construction [X] FIELD [ ] OFFICE	B. T. Stojkov

AGENDA ITEM	CHECKLIST ITEM	WHERE FOUND	DISCUSSED WITH
9-2-P-1	7	Document Control/Field	T. J. Behres A. Boos

CONTROLLING DOCUMENT, SECTION, PARAGRAPH, ETC.
SF/PSP #4, Rev. 1, Para 3.2.2.1 & 5.0

SAME AS #

QUOTATION

Para. 3.2.2.1 states: "Prints of new Engineering Drawings and revisions shall be distributed in accordance with the Drawing Distribution List. Old drawings will be destroyed or marked void in accordance with Paragraph 5.0."

Para. 5.0 states in part: "---the Document Controller is responsible for removing and replacing superseded prints on the office sticks."

FINDING

The following drawings were found in the field on the sticks listed, but distribution t... those sticks was not noted on the Drawing Control Cards.

Continued on Page 2

CORRECTIVE ACTION

1. Revise/update the Master Distribution List
2. Perform review of Drawing Control Cards and drawing sticks, and bring them into agreement.
3. Remove superseded drawings from the field or mark them void.

SCHEDULE COMPLETION DATE	RESPONSIBILITY FOR CORRECTIVE ACTION
8/31/76	Project Superintendent

CORRECTIVE ACTION TAKEN

DATE COMPLETED	SUBMITTED BY RESPONSIBLE AUTHORITY

CORRECTIVE ACTION VERIFIED BY QAE — DATE

D 50003

Drawing	Stick
7220-C-94, Rev. 1	Office #2, Survey, Resident Engineer
7220-C-184, Rev. 0	Office #2
7220-C-245, Rev. 4	Office #1, Office #2, Survey, Aux. #1
7220-E-527, Rev. 2	Aux. #1
7220-E-539, Rev. 6	Survey, QC, Aux. #1, Aux. #3
7220-E-651, Rev. 1	Office #2, QC
7220-M-613 Sht 3, Rev. 4	Office #1, Office #2
7220-M-619 Sht 1, Rev. 1	Office #1, Office #2
7220-M-656 Sht 24, Rev. 2	Office #1

The following drawings were marked on their Drawing Control Card as being distributed to the sticks listed, but were not found on these sticks.

Drawing	Stick
7220-C-184, Rev. 0	Resident Engineer
7220-C-320, Rev. 4	Boilermakers
7220-E-527, Rev. 6	Electrical Shack

The following superseded drawings were found on the sticks listed, but were not marked void.

Drawing	Stick
7220-C-94, Rev. 0	QC
7220-E-527, Rev. 1	Office #2

QUALITY AUDIT FINDING

1 109 (9-2-3)

AUDIT DATE 5/19/76-6/1/76

ASSIGN 10 N/A

1 PROJECT/DEPARTMENT/SELLER	2 TYPE OF AUDIT		4 AUDITOR
dland 1 & 2 Job 7220	Construction	☒ FIELD ☐ OFFICE	B. T. Stojkov
3 QA ITEM	**4 CHECKLIST ITEM**	**5 WHERE FOUND**	**7 DISCUSSED WITH**
9-2-P-1	8	Document Control	T. J. Behres A. Boos
8 CONTROLLING DOCUMENT, SECTION, PARAGRAPH, ETC.		**9 SAME AS #**	
SF/PSP #4, Rev. 1 Paragraph 3.2.2.2			

10 QUOTATION

Para 3.2.2.2 states: "A controlled copy shall be placed at a designated area for a period of three working days for review by designated engineers and superintendents who acknowledge review by signing the New Drawing Sign-Off Sheet."

11 FINDING

Engineers and Superintendents who review drawings at the review table are not signing the New Drawirg Sign-Off Sheet.

Note: In accordance with paragraph 3.2.2.3 another copy of the New Drawing Sign-Off Sheet is being routed to designated Engineers and Superintendents with an additional print of the drawing. This copy is being signed.

12 CORRECTIVE ACTION

Remove the redundant requirement of Engineer and Superintendent sign-off of the New Drawing Sign-Off Sheet at the review table.

13 SCHEDULE COMPLETION DATE	14 RESPONSIBILITY FOR CORRECTIVE ACTION
7/16/76	PFQCE

15 CORRECTIVE ACTION TAKEN

16 DATE COMPLETED	17 SUBMITTED BY RESPONSIBLE AUTHORITY

18 CORRECTIVE ACTION VERIFIED BY QAR — DATE

D 50003

QUALITY AUDIT FINDING

AUDIT IDENT. 10: 110 (9-2-3)

AUDIT DATE: 5/19/76-6/1/76

AUDITOR ASSIGNED 19: N/A

PROJECT/DEPARTMENT/SELLER 1		TYPE OF AUDIT 2		AUDITOR 4
Iland 1 & 2 Job 7220		Construction	[X] FIELD [ ] OFFICE	B. T. Stojkov
AUDIT ITEM 3	CHECKLIST ITEM 6	WHERE FOUND 5		DISCUSSED WITH 7
9-2-P-1	10	Document Control		T. J. Behres A. Boos
CONTROLLING DOCUMENT, SECTION, PARAGRAPH, ETC. 8		SAME AS 9.		
SF/PSP #4, Rev. 1, Paragraph 6.1 & 6.2				

QUOTATION 10

Paragraph 6.1 states in part: "The Document Controller shall check the Field Drawing Log against the Drawing Control Register to assure that the latest drawings have been received, and inform the Project Field Engineer of any omissions or discrepancies."

Paragraph 6.2 states: "The Project Field Engineer shall resolve discrepancies with Project Engineering."

FINDING 11

The Document Controller is not informing the Project Field Engineer of omisssions or discrepancies. Any discrepancies occuring are being resolved by the Document Controller.

CORRECTIVE ACTION 12

Have Project Field Engineer make formal delegation of responsibility for Field Drawing Log/ Drawing Control Register discrepancies to Document Controller.

SCHEDULE COMPLETION DATE 13	RESPONSIBILITY FOR CORRECTIVE ACTION 14
6/18/76	Project Superintendent

CORRECTIVE ACTION TAKEN 15

DATE COMPLETED 16	SUBMITTED BY RESPONSIBLE AUTHORITY 17

CORRECTIVE ACTION VERIFIED BY QAE 18 — DATE

D 50004

QUALITY AUDIT FINDING

AUDIT IDENT. 19: 111 (24-1-1)
AUDIT DATE: 6/3-14 & 15/76
NAS ITEM 20: N/A

PROJECT/DEPARTMENT/SELLER 1	TYPE OF AUDIT 2	AUDITOR 4
Midland 1 & 2	Construction [X] FIELD [ ] OFFICE	G. A. Waldrop

AGENDA ITEM 3	CHECKLIST ITEM 6	WHERE FOUND 5	DISCUSSED WITH 7
24-1-P-0	6	Welding Department	D. Mathews, A.Boos

CONTROLLING DOCUMENT, SECTION, PARAGRAPH, ETC. 8: Specification 7220-M-204 (Q) Rev. 0

SAME AS 8. 9:

QUOTATION 10:

Paragraph 5.1.4 states: "A detailed written report of major weld repairs shall be made and a copy furnished to the Project Engineer in accordance with the procedures described in the Nuclear Quality Assurance Manual. This report shall state the nature and location of the defect, how repaired, subsequent heat treatment and include copies of all examination records".

FINDING 11:

Reports of major weld repairs are made weekly on Bechtel Form WR-9 to the distribution stated in the BQAM Appendix 3 Paragraph 11.1. The Project Engineer is not on distribution for the report nor does he receive copies of all examination records.

CORRECTIVE ACTION 12: Recommended

Bring actual Field practice and the provisions of Specification 7220-M-204 (Q) Rev. 0, Paragraph 5.1.1 into agreement.

SCHEDULE COMPLETION DATE 13	RESPONSIBILITY FOR CORRECTIVE ACTION 14
July 15, 1976	Project Superintendent

CORRECTIVE ACTION TAKEN 15:

DATE COMPLETED 16	SUBMITTED BY RESPONSIBLE AUTHORITY 17

CORRECTIVE ACTION VERIFIED BY QAE 18:

DATE:

Q 50008

QUALITY ASSURANCE DISCREPANCY REPORT

3. QAD IDENT. NO.: 089 Rev. 1

4. ISSUE DATE: 5/11/76 (1)

1. PROJECT/DEPT./CONTRACTOR: Midland 1 & 2

2. POINT OF ORIGIN: [X] FIELD [ ] OFFICE

5. QAD PREPARED BY: B. T. Stojkov

6. WORK PLAN DATE: 3/27/76 - 4/9/76

7. CHECKLIST ITEM: 9.2

8. WHERE FOUND: Document Control

9. DISCUSSED WITH: J. Voris (1), D. Palmer

10. CONTROLLING DOCUMENT, SECTION, PARAGRAPH, ETC.

SF/PSP #4, Rev. 1, 8/1/74, Section 3.2.3 & 5.1

11. QUOTATION

Para. 3.2.3.1.2: "Distribution (of drawings) shall be individually determined by the Project Field Engineer. Drawings may be included on the drawing distribution list for his instructions." Para 3.2.3.2.3: "Distribution of those drawings (reviewed directly from supplier) shall be in accordance with 3.2.3.1." Para. 5.1.b" . . . any superseded drawings must be marked "VOID" and destroyed, or if required by the Lead Engineers, drawings will be marked "VOID" and an appropriate reason for retention added . . .".

12. DISCREPANCY DESCRIPTION

Distribution shown on the Drawing Control Cards does not match the Drawing Distribution List for the following Vendor Drawings:

(1)

7220-C-2-24	Q. C. Stick added to Drawing Control Card
7220-C-2-34	" "
7220-C-2-106	" "
7220-C-2-122	" "

Continued

13. RECOMMENDED CORRECTIVE ACTION

1. Bring Drawing Distribution List, Drawing Control Cards and Drawing Distribution into agreement.

2. Remove void drawings from field.

14. SCHEDULED COMPLETION DATE 6/4/76 (1)

15. RESPONSIBILITY FOR CORRECTIVE ACTION: Project Superintendent

16. CORRECTIVE ACTION TAKEN: SEE T.F. NEWGEN LETTER DATED 6/2/76 - #0-1097 ATTACHED.

17. DATE COMPLETED

18. SUBMITTED BY RESPONSIBLE AUTHORITY

19. CORRECTIVE ACTION VERIFIED BY QAE: Robert T. Stojkov

20. DATE: 6/10/76

AA0-86 9/17/74

Block No. 12 Continued. QADR No. 089 Rev. 1

7220-C-2-147	Q. C. Stick added to Drawing Control Card
7220-C-38-4	Q. C. Stick omitted from Drawing Control Card
7220-C-38-56	" "
7220-C-38-144	Aux. #2, Aux. #3 and Ironworkers Sticks omitted from Drawing Control Card
7220-C-38-159	Office #2 and Q. C. Sticks omitted from Drawing Control Card
7220-M-73-10	Office #2 Stick omitted from Control Card
7220-M-73-13	" "
7220-M-73-14	" "

2. Actual Drawing Distribution does not match the Drawing Control Card for the following Vendor Drawings:

7220-C-38-4	Distribution made to Q. C. Stick
7220-C-38-32	" "
7220-C-38-56	" "
7220-C-38-159	" "
7220-C-38-144	Distribution made to Aux. #2 Stick

3. Obsolete Vendor Drawing not marked "VOID" found in the field:

7220-C-38-144	Rev. 9 found on Aux. #2 and Ironworkers Sticks

Brent Glynn

Bechtel Power Corporation

Interoffice Memorandum

To G. L. Richardson

Date June 2, 1976

Subject Job 7220 Midland Project
O.A. Discrepancy Report No. 089
Rev. 1 Drawing Control
0-1097

From J. F. Newgen

Of Construction

Copies to

At Midland, Michigan

In response to subject QADR, Rev. 1, dated 5-11-76 the following clarification of corrective action is submitted:

Block 12 - Discrepancy Description:

Vendor Drawings 7220-C-2-24, C-2-34, C-2-106 and C-2-122 (Q.C. stick added to control card:) The Specification Register indicated these drawings as being both "Q and Non-Q". Drawings falling within this area in the register with Non-Q indication shown on actual drawing are not placed on automatic controlled distribution but are handled on a request basis from Q.C. For these drawings the Master Distribution Book has been corrected to indicate distribution to Q.C. of these and all future revisions. The control cards, Master Distribution Book and Q.C. Stick are in agreement.

Vendor Drawings: 7220-C-2-147 (Q.C. Stick added to control card)
7220-C-38-4 (Q.C. Stick omitted from control card)
7220-C-38-56 (Q.C. Stick omitted from control card)
7220-C-38-144 (Aux. 3 and Ironworker sticks omitted from control card)

The above discrepancies were corrected during a Document Control In-house Audit held on 4-30-76. The Master Distribution Book, Control Cards, and sticks are in agreement.

Vendor Drawing 7220-C-38-159 (office #2 and Q.C. Sticks omitted from drawing control card):

The Q.C. Stick was updated and logged on control card during the D.C. Audit of 4-30-76. The office #2 stick location was not initiated until Jan. 1976 (the original date of receipt at site and distribution of this drawing was Sept.1975). This drawing has been added to the Master Distribution Book indicating office #2 placement, logged on control cards and placed on the appropriate stick.

Vendor Drawings 7220-M-73-10, 7220-M-73-13, 7220-M-73-14 (office #2 omitted from control card):

These drawings were received on site and distributed in May 1975. (There were no office #2 sticks until Jan. 1976). A "hold" was placed on all Bechtel Mechanical and Vendor Mechanical Drawings in March 1976 for placement on office #2 sticks in order for a study to be conducted on what actually would be required on office #2 sticks as a complete set of sticks are available

in office #1. This particular drawing (Liquid Waste Receiver Tank) will only be located on office #1 stick. Office #2 has been deleted from the Master Distribution Book.

2. Vendor Drawings 7220-C-38-4, 7220-C-38-32, 7220-C-38-56, 7220-C-38-159 and 7220-C-38-144

   The discrepancies noted regarding these drawings were corrected during the D.C. Audit of 4-30-76. The Master Distribution Book, Control Cards, and Sticks are in agreement.

3. Vendor Drawing 7220-C-38-144, Rev. 9:

   (Obsolete drawing not marked "Void" found in the field on Aux. #2 and Ironworker Sticks).

   These discrepancies were corrected during D.C. Audit of 4-30-76. Master distribution book, Control Cards, (indicating latest revision) and sticks (with latest revision) are in agreement.

J. F. Newgen

JFN/TJB/sw

QUALITY ASSURANCE DISCREPANCY REPORT

3. QAD IDENT. NO.	103
4. ISSUE DATE	5-13-76

1. PROJECT/DEPT./CONTRACTOR: Midland Units 1 & 2	2. POINT OF ORIGIN: [X] FIELD [ ] OFFICE		5. QAD PREPARED BY: G. Richardson
6. WORK PLAN DATE: N/A	7. CHECKLIST ITEM: N/A	8. WHERE FOUND: Q.C. Records (NCR's)	9. DISCUSSED WITH

10. CONTROLLING DOCUMENT, SECTION, PARAGRAPH, ETC.

Spec. 7220-M-201, Rev. 5 (P.O. 7220-M-104A-AC)

11. QUOTATION

paragraph 6.2.2a, "All materials shall be marked with the information required by the applicable manufacturing specification, and the Nuclear Power Plant Components Code, paragraph NB-2150.

12. DISCREPANCY DESCRIPTION

Contrary to the above Bechtel NCR's 263, 278, 418 identify code data name plates incorrectly marked with a "5" instead of an "S" and Bechtel NCR's 304 and 308 identify verification reports with a 5 instead of an S.

NOTE: All of these NCR's except No. 418 were identified to C. Buhl in W. Holubs letter dated 4/15/76.

13. RECOMMENDED CORRECTIVE ACTION

1. Identify this recurring problem to ITT Grinnell and assure affective corrective action by their organization.

2. Based on this finding and the problems identified by W. Holubs letter to C. Buhl

14. SCHEDULED COMPLETION DATE 6-14-76	15. RESPONSIBILITY FOR CORRECTIVE ACTION Dotterer (continued page 2)

16. CORRECTIVE ACTION TAKEN SEE K.R. DOTTERER I.O.M. TO G.L. RICHARDSON #PID 285-76 DATED JUNE 7, 1976 & P.H. TINSLEY I.O.M. TO K.R. POTTERER DATED MAY 27, 1976

17. DATE COMPLETED	18. SUBMITTED BY RESPONSIBLE AUTHORITY

19. CORRECTIVE ACTION VERIFIED BY QAE Brent T. Stephenson — 20. DATE 6/23/76

AA0-86 9/17/74

Forent Glynn

I 76-36
709.1

Bechtel Power Corporation

Inter-office Memorandum

To	G. L. Richardson	Date	June 7, 1976
Subject	QADR 103 for 7220-M-104A-AC PED 285-76	From	K. R. Dotterer
		Of	Inspection
Copies to	W. Holub w/a R. Castleberry w/a P. Martinez w/a J. Milandin w/a J. Newgen w/a J. Connolly w/a L. Sokol w/a	At	Ann Arbor, Mich.

The subject QADR addressed only NCRs that pertain to incorrect identification on name plates and accompanying verification reports.

Attached is a consolidated summary and review of fourteen NCRs which includes the subject QADR. The review and corrective action recommended and taken by the assigned inspector is adequate. Additional training for the responsible inspector is not necessary or appropriate. Contract requirements are for random or selected inspection. Bechtel inspection exceeds that type, however, all material is not 100% inspected. The only positive solution is to provide enough coverage to inspect each and every piece of material. That type of inspection coverage would require additional inspectors and a significant increase of man hours.

BETWEEN CPCo & BECHTEL P.J.F.R.

K. R. Dotterer

K. R. Dotterer

KRD/nar
Attachment

RECEIVED
JUN 08 1976
BECHTEL POWER CORP.
JOB 7220
PER GW

Bechtel Power Corporation

Inter-office Memorandum

To K. R. Dotterer

Subject 7220-M-104A-AC

Copies to

Date May 27, 1976

From R. H. Tinsley

Of Inspection

At Central Region

The following is my response to the 14 NCR's listed in G. L. Richardson's letter dated March 18, 1976 as requested by your letter dated May 6, 1976. I will not take time to restate each NCR but will instead focus my comments on the five (5) questions posed in your above mentioned letter. In answering these five questions, I will list each NCR in numerical order and explain how it occurred. After covering all 14 NCR's in this manner, I will then describe what Grinnell and Bechtel inspection can and are doing to prevent re-occurrence, what trends, if any, the NCR's indicate, and then give my comments or suggestions as applicable. In doing this, I will note which statements are applicable to which NCR's making sure that all 14 NCR's are covered in each topic of discussion.

NCR #261

Item #1 - field in error, no response necessary.
Item #2 & #3 occurred due to poor legibility of piece mark numbers on shop detail sketches, extremely close resemblance of hand written 5's and s's (note), and a lack of general knowledge by shop personnel that the letter S always precedes the isometric drawing number on all piece mark numbers on the assignment.
Item #4 & #5 "a" and "c" were typographical errors and "b" was caused by a lack of knowledge by the supplier on how to complete the G-321-D form in order to meet the job's requirements.

NCR #263

Item #0 occurred because the supplier did not list the five spools on loading sheets. Loading sheets are the means by which Bechtel Inspection verifies which spools are being released for shipment and are the means by which Grinnell's Q.C. knows to send documentation. The incorrect piece mark number on the code plates occurred due to the poor legibility of piece mark numbers on shop detail sketches, extremely close resemblance of hand written 5's and S's and a lack of general knowledge by shop personnel that the letter S always precedes the isometric drawing number on all piece mark numbers on this assignment.
Item #1 was an error made by Bechtel Inspection when filling out the BPI-361 form.
Item #2 A-1 was caused by a lack of knowledge by the supplier on how to complete the G-321-D form in order to meet the job's requirements.
Item #2 A-2 was a typographical error.
Item #2 B-1 - There is no weld A on spool tagged 2HCB-21-S613-6-4; Field in error, no response necessary.
Item #2 B-2-1 - The radiographer who shot this weld was not familiar at the time with the requirement of having the Bechtel order number on the film. Bechtel Inspection failed to pick this up on this spool during the review of the radiograph.
Item #2 B-2-2 - Bechtel Engineering stated that use of Grinnell's register number is satisfactory for the piping system; no response necessary.

NCR #263 (cont.)
Item #2 C-1 occurred due to typographical errors arising from poor legibility of piece mark numbers on shop detail sketches as previously described.
Item #2 B-1 Rev. 1 - Approval of Rev. 2 to sketch 2HCB-21-S613-6-4 is not required since Rev. 1 has a code 1 approval and Rev. 2 was only cosmetic. This is per Bechtel Engineer R. L. Castleberry's TWX dated 12/6/74; Field in error, no response necessary.

NCR #275
Radiographer who shot this weld was not familiar with the requirement of having the Bechtel order number on the film. Bechtel Inspection failed to pick this up on spool during the review of the radiograph.

NCR #277
Items #1 A and #2 A - Caused by a lack of knowledge by the supplier on how to complete the G-321-D form in order to meet the job requirements.
Items #2 B and #1 B - Typographical errors.

NCR #278
Item #1 A - Lack of knowledge by the supplier on how to complete the G-321-D form in order to meet the job's requirements.
Item #1 B - Typographical errors.
Item #2 - Due to poor legibility of piece mark numbers on shop detail sketches as previously described.
Item #3 - Radiographic verification reports were numbered incorrectly and this was missed by both Grinnell and Bechtel inspection.
Item #4 - Grinnell radiographed the welds in error. However, since the radiographs were satisfactory, Grinnell decided to document them. The writer saw no problem with this since Grinnell did not bill for performing or documenting the radiographs.

NCR #297
Grinnell Engineering incorrectly identified Register Number MR-66-23 as 2GCB-15-5613-4-1 on their spool detail sheet. This spool detail sheet was approved by Bechtel Engineering (Code #1) with the incorrect piece mark number and was, therefore, not caught by Bechtel Inspection as being incorrectly identified.

NCR #303
Revisions 1 and 2 made to spool 2HCB-21-S613-6-4 after Revision 0 dated 8/23/74 were cosmetic and editorial and, therefore, according to the TWX dated 12/6/74 from Bechtel Engineer R. L. Castleberry, the spool could be released using the code 1 approval on Revision 0 dated 8/23/74; Field in error, no response necessary.

NCR #304
Occurred due to poor legibility of piece mark numbers on shop detail sketches as previously described.

NCR #308
Occurred due to poor legibility of piece mark numbers on shop detail sketches as previously described.

NCR #340
This NCR occurred due to a difference in the requirements of the field's inspection procedures and Bechtel specification 7220-M-201Q, the difference being that Bechtel specification 7220-M-201Q makes no requirements for protection of stainless steel spools against environmental damage on the O.D. during shipment. Also, Grinnell

NCR #340 (cont.)
was not required to submit any shipping procedures to Bechtel Engineering for approval.

NCR #367
Spool tagged 1HBC-18-S610-3-4 was prepared for shipment on 2nd shift when they were out of rubber gaskets. This fact was missed during inspection of the load prior to release for shipment. Trucks are tied down for shipment by the driver when he picks up the load. Since this is done at any time day or night seven days a week, it is impossible for either Grinnell or Bechtel to assure a proper tie down. Also, with the bulk and configuration of the spools being shipped, it would be a near impossibility to eliminate all of the type "damages" listed in this NCR. See also Inspection Report #51 on this assignment. (Note that piece mark number given for the stainless steel spool is 1HBC-18-S610-3-4, which would be a carbon steel spool. Piece mark number should read 1HCB-18-S610-3-4.)

NCR #384
Contamination - Due to difference in field inspection procedures and Bechtel specification 7220-M-201Q which makes no requirements for protection of carbon steel spools against environmental damage on the O.D. during shipment.
Loose Tie Down & Worn Material under Ties - Tie down done by driver of load any time day or night seven days a week; impossible for either Grinnell or Bechtel to assure a proper tie down.
Loose Caps & Flange Covers - Caps and covers were not loose upon inspection of loads prior to shipment; this must have occurred during shipping.
Not Painted - Spools identified as not painted were painted with the exception of small areas where the spool rested on bucks during painting and inspection.
Not Blasted - The requirement for blasting the O.D. in specification PS-1236-4 was put in by error and is not a required surface preparation for Ferralox 1500 paint. Due to these facts, neither the shop personnel nor the Bechtel inspectors were inspecting for this type of surface preparation (See Inspection Report #58).

NCR #390
Worn Material under Ties, Loose Flange Cover, Not Blasted - Same as NCR #384 above.
Weld End Preparation - 1/16" land is either filed or ground on the end preparation after the pipe is cut. This must not have been performed on these spools.
Paint on End Preparations - The paint on the end preparation is weldaluminite as required by Grinnell's approved code 1 procedure SS-KU19-8 Section VII 43, Paragragh 6.6.6 of specification 7220-M-201Q states that machined end surfaces shall not be painted with primer; it does not state that the ends shall not be painted with weldaluminite.

NCR #391
The quality verification documents for spool 1HBC-135-S616-6-4 were reviewed by Bechtel inspection, zeroxed for shipment to the field, reinspected by Bechtel for completeness and legibility, and then boxed for shipment. Due to these facts, I do not know how this NCR occurred unless the documentation was somehow left out of the box and overlooked by both Grinnell and Bechtel inspection, or somehow lost in the field when the documentation was unpackaged (See Inspection Report #61).

The following measures have been taken by both Grinnell and Bechtel inspection in an effort to alleviate the problems indicated by the NCR's listed in this memorandum. Both parties are making a special effort to ensure that the piece mark number of each spool is legible and correct on all documentation, on the spool itself, and on

May 27, 1976

...e code plates (the third party inspection agency, Hartford, has also been made aware of the problem of substituting 5's for the required S's and is checking for this problem) This will help prevent the reoccurrence of NCR's #261, 278, 304 and 308. The purchase order number on the G-321-D form has been corrected and the supplier has been instructed on the proper technique for filling it out - this will help prevent the reoccurrence of NCR's #261, 263, 277, 278. Loads are being inspected more closely by both Grinnell and Bechtel to ensure the correct number of pieces are being shipped, that they are completely painted, and that the ends and flanges are properly protected; this will help prevent the reoccurrence of NCR's #263, 367, 384, 390. All radiographers have been made aware of and are following the requirement for putting the purchase order number on all radiographs; this will help prevent the reoccurrence of NCR's #263, 275. Grinnell engineering revised procedure PS-1236-4 eliminating the surface preparation by grit blasting and the revised procedure PS-1236-5 was approved by Bechtel Project Engineer, R. L. Castleberry on 2/26/76 - this will prevent the reoccurrence of NCR's #384 and #390. Grinnell and Bechtel inspection review the completed zeroxed documentation packages immediately prior to packaging for shipment to the field to ensure completness. This will help prevent the reoccurrence of NCR #391. Bechtel inspection is performing a random check of piece mark numbers shown on sketches used for inspection with those shown on the isometric drawing to verify their correctness. Also, Grinnell engineering is performing a check between piece mark numbers on sketches and on isometrics. This will help prevent the reoccurrence of NCR #297. No preventative action has been taken for NCR #303 since the writer's research found it to be written in error. No preventative action can be taken on NCR #340 and NCR #384 (contamination) until either Bechtel's specification 7220-M-201Q is revised to incorporate protection against environmental damage on the O.D. during shipment or Grinnell is requested to have a shipping procedure covering this requirement submitted and approved.

The writer does not feel, after researching the cause of the 14 NCR's and after initiating and monitoring the preventative measures to eliminate the nonconformances, that a "trend" of poor quality or lack of quality is developing at Grinnell. What does appear to the writer from these 14 NCR's is the image of a new job beginning with its inherent problems, misunderstandings and unintentionally overlooked requirements, without an efficient line of communication between the jobsite and the supplier, other than through NCR's to try to correct the problems.

The writer suggests that if possible both Bechtel inspection and the supplier, ITT Grinnell, should be put on the distribution lists for NCR's; at the present time, the writer only receives NCR's sporadically and the supplier's only source of NCR's is from the writer. This immediate distribution of the NCR to those at the source of the commodity would help to bring fast preventative measures to that particular problem and perhaps uncover other potential areas prior to fabrication or release.

The writer would also suggest that Grinnell be requested to submit for approval a shipping procedure so that Grinnell, Bechtel inspection and the jobsite will know how loaded spools are to be protected from the various types of damage receivable during shipment. Also, the writer would like to suggest that someone within the Bechtel organization review and compare Bechtel's specifications, Grinnell's procedures and the Field's inspection procedures for any potential conflicts in requirements (if supplied with the field's inspection procedures, the writer would be willing and happy to do this).

May 27, 1976

In conclusion, the writer would like to point out several things:

1) The spool listed in Table I of G. L. Richardson's letter to W. F. Holub dated March 8, 1976 as having a configuration inconsistent with the drawings was not fabricated with an incorrect configuration, but was tagged incorrectly due to an Engineering error (See NCR #297).

2) The 2 spools listed in Table II of G. L. Richardson's letter to W. F. Holub dated March 8, 1976 as not having been approved by Project Engineering were approved and acceptable for release for shipment in accordance with the TWX dated 12/6/74 from Bechtel Project Engineer, R. L. Castleberry.

3) After research by the writer, NCR's #261 (item 1), NCR #263 (item 2 B-1 2 B-1 Rev. 1), and NCR #303 were found to be in error.

If I can be of further assistance in answering these NCR's, please call me.

R. H. Tinsley

cc: D. Moore

Attachments: IOM from K. R. Dotterer April 20/1976 w/a
IOM from K. R. Dotterer May 6, 1976
NCR's #261, 263, 275, 277, 278, 297, 303, 304, 308, 340, 367, 384, 390 and 391.

NOTE:

This memorandum was typed by Ann Arbor Procurement Inspection Department from R. H. Tinsley's handwritten memorandum.

QUALITY ASSURANCE DISCREPANCY REPORT

3. QAD IDENT. NO. 105

4. ISSUE DATE 5-21-76

1. PROJECT/DEPT./CONTRACTOR: Midland 1 & 2

2. POINT OF ORIGIN: [X] FIELD [ ] OFFICE

5. QAD PREPARED BY: G. A. Waldrop

6. WORK PLAN DATE: N/A

7. CHECKLIST ITEM: N/A

8. WHERE FOUND: Auxiliary Building

9. DISCUSSED WITH: A. Boos, J. P. Connolly

10. CONTROLLING DOCUMENT, SECTION, PARAGRAPH, ETC.

Field Instruction FIW-1, Rev. 0 "Bechtel Welder Guidelines"

11. QUOTATION

FIW-1 Page 4, Item 8. "DO NOT weld or burn unless all exposed material is adequately protected. Particular attention shall be provided in the area below your weld."

FIW-1 Page 5, Item 9. "DO protect facility equipment from sparks or slag by covering or removing it before cutting or welding."

12. DISCREPANCY DESCRIPTION

Contrary to the foregoing, welding operations for pipe hanger installation were observed in-process in the Auxiliary Building above Decay Heat Removal Heat Exchanger 1E-60A with no protective cover used to protect the equipment from sparks and slag.

13. RECOMMENDED CORRECTIVE ACTION

See Attached Sheet

14. SCHEDULED COMPLETION DATE: June 4, 1976

15. RESPONSIBILITY FOR CORRECTIVE ACTION: 1 & 3: PFOCE 2: Project Superintendent

16. CORRECTIVE ACTION TAKEN

See Attached Sheet

17. DATE COMPLETED: 6-21-76

18. SUBMITTED BY RESPONSIBLE AUTHORITY: (ITEMS 1 & 3) (ITEM 2)

19. CORRECTIVE ACTION VERIFIED BY QAE

20. DATE: 6-30-76

AAO-86 9/17/74

QAD #105
G. A. Waldrop
Block #13

1. QC - Inspect 1E-60A to determine if damage or contamination has occurred. Document this inspection and initiate remedial action as required.

2. Project Superintendent - Reinstruct Field Personnel and Welders in the requirements of the procedure.

3. QC - Determine why procedure was not enforced by QC. Take appropriate training action to ensure QC Engineers are familiar with the required protective practices.

106

QUALITY ASSURANCE DISCREPANCY REPORT

4. ISSUE DATE: May 21, 1976

1. PROJECT/DEPT./CONTRACTOR: Midland 1 & 2 Job 7220

2. POINT OF ORIGIN: ☒ FIELD ☐ OFFICE

5. QAD PREPARED BY: B. T. Stojkov

6. WORK PLAN DATE: 5/15/76 - 5/28/76

7. CHECKLIST ITEM: N/A

8. WHERE FOUND: Auxiliary Building

9. DISCUSSED WITH: J. Miller

10. CONTROLLING DOCUMENT, SECTION, PARAGRAPH, ETC.

FPG-16, Rev. 0, Paragraphs 5.3 and 8.0

11. QUOTATION

Paragraph 5.3 says in part: "The performance of the maintenance requirements (as directed on the F-10 form) is the responsibility of the MMS."

Paragraph 8.0 says in part: "If a deficiency occurs, the MMS shall obtain technical direction and appropriate corrective time limits from the MME."

12. DISCREPANCY DESCRIPTION

NCR 425 describes the nonconforming condition of the nitrogen purge pressures on Decay Heat Removal Heat Exchangers 1E-60A, 1E-60B, 2E-60A and 2E-60B being out of specified range on nine out of ten consecutive days from 5/10/76 to 5/20/76. A subsequent check on 5/21/76 showed the purge pressures still out of the specified range (below 2 psig).

13. RECOMMENDED CORRECTIVE ACTION

See Attached Sheet

14. SCHEDULED COMPLETION DATE: 6/11/76

15. RESPONSIBILITY FOR CORRECTIVE ACTION: Project Superintendent

16. CORRECTIVE ACTION TAKEN

See attached letter 0-1100 dated June 3, 1976.

17. DATE COMPLETED: 6-3-76

18. SUBMITTED BY RESPONSIBLE AUTHORITY: [signature]

19. CORRECTIVE ACTION VERIFIED BY QAE: Brent Fisher

20. DATE: 6/18/76

AA0-86 9/17/74

QAD #106
May 21, 1976
B. T. Stojkov
Block #13

1. Determine the cause of the continued failure to comply with the Decay Heat Removal Heat Exhangers maintenance requirements as stated (on the F-10 form).

2. Develop a plan of action to prevent the recurrence of the failure to comply with maintenance requirements for equipment not in the storage program.

Grant SBJS
Glynn

Bechtel Power Corporation

Interoffice Memorandum

To G. L. Richardson

Subject Job 7220 Midland Project
Response to QADR No. 106
Q-1100

Copies to

Date June 3, 1976

From J. F. Newgen

Of Construction

At Midland, Michigan

The nonconformance outlined in the subject QADR was an indirect result of the present strike. Failure to comply with maintenance requirements per the F-10 form was due to the unavailability of pipe fitters and laborers that normally replace nitrogen cylinders when they are empty.

A temporary solution has been accomplished by placing a nitrogen cylinder outside the building and hooking up with a rubber hose. Except for one day, this has resulted in a conforming condition for the week ending 5/27/76. This arrangement will provide conformance until a permanent solution can be accomplished.

J. F. Newgen

JFN/JV/sw

RECEIVED
JUN 08 1976
BECHTEL POWER CORP.
JOB 7220
PER

5024 (10-72)

QUALITY ASSURANCE DISCREPANCY REPORT

3. QAD IDENT. NO.: 107

4. ISSUE DATE: 6/1/76

1. PROJECT/DEPT./CONTRACTOR: Midland 1 & 2

2. POINT OF ORIGIN: [X] FIELD [ ] OFFICE

5. QAD PREPARED BY: G. Richardson

6. WORK PLAN DATE: N/A

7. CHECKLIST ITEM: N/A

8. WHERE FOUND: QC/QA Records

9. DISCUSSED WITH: J. Connolly

10. CONTROLLING DOCUMENT, SECTION, PARAGRAPH, ETC.

RT-XG-1, Rev. 1 and RT-XG-2, Rev. 1

11. QUOTATION

Para 3.9.3 "The Bechtel Level II individual shall interpret and accept all radiographs . . .".

12. DISCREPANCY DESCRIPTION

The following qulaity findings describe instances when Level II Bechtel Quality Control Engineers have accepted radiographs that did not meet the technique requirements of the above referenced procedures. These appear to be recurring problems as indicated by the following dates:

CPCo NCR QF-51	Dated 6/23/76	Bechtel QAF-088 dated 3/25/76
Bechtel QAF-086	Dated 3/25/76	CPCo NCR QA-97 dated 5/24/76
Bechtel QAF-087	Dated 3/25/76	

13. RECOMMENDED CORRECTIVE ACTION

Develop a training module that will describe past problems and emphasize technique requirements. Present this to onsite Level II RT personnel. Also, retain this training module for presentation to all future Level II RT personnel that are assigned to this site.

14. SCHEDULED COMPLETION DATE: 7/30/76

15. RESPONSIBILITY FOR CORRECTIVE ACTION: PFQCE

16. CORRECTIVE ACTION TAKEN

17. DATE COMPLETED

18. SUBMITTED BY RESPONSIBLE AUTHORITY

19. CORRECTIVE ACTION VERIFIED BY QAE

20. DATE

AA0-86 9/17/74

QUALITY ASSURANCE DISCREPANCY REPORT

3. QAD IDENT. NO. ~~108~~ 112

4. ISSUE DATE June 16, 1976

1. PROJECT/DEPT./CONTRACTOR: Midland 1 & 2

2. POINT OF ORIGIN: [X] FIELD [ ] OFFICE

5. QAD PREPARED BY: G. A. Waldrop

6. WORK PLAN DATE: N/A

7. CHECKLIST ITEM: N/A

8. WHERE FOUND: Aux. Bldg.

9. DISCUSSED WITH: A. Boos, D. Mathews

10. CONTROLLING DOCUMENT, SECTION, PARAGRAPH, ETC.

Specification 7220-M-204 Rev. 0 Paragraph 6.3.3d

11. QUOTATION

"Jigs, fixtures and lifting devices used in contact with surfaces of stainless steel shall be stainless steel, aluminum or approved non-metallic material".

12. DISCREPANCY DESCRIPTION

The gounding fixture observed in use on pipe spool 1GCB-25-5-6 consisted of a welding ground cable with the insulating end-boot pulled back and the brass coupling held in surface contact with the stainless steel pipe using adhesive backed tape.

13. RECOMMENDED CORRECTIVE ACTION

1. Remove grounding fixture and inspect contact point on pipe surface for evidence of arc striking. Take remedial action if required.
2. Issue instructions to Field for proper method of grounding to stainless steel components.
3. Indoctrinate welding personnel in correct grounding methods.

14. SCHEDULED COMPLETION DATE July 15, 1976

15. RESPONSIBILITY FOR CORRECTIVE ACTION: Project Supt.

16. CORRECTIVE ACTION TAKEN

17. DATE COMPLETED

18. SUBMITTED BY RESPONSIBLE AUTHORITY

19. CORRECTIVE ACTION VERIFIED BY QAE

20. DATE

AA0-86 9/17/74

QUALITY ASSURANCE DISCREPANCY REPORT

3. QAD IDENT. NO.: 113

4. ISSUE DATE: 6/24/76

1. PROJECT/DEPT./CONTRACTOR	2. POINT OF ORIGIN	5. QAD PREPARED BY:
Midland 1 & 2	[X] FIELD [ ] OFFICE	G. A. Waldrop

6. WORK PLAN DATE	7. CHECKLIST ITEM	8. WHERE FOUND	9. DISCUSSED WITH
N/A	N/A	Fabrication Shop	R. Dougherty

10. CONTROLLING DOCUMENT, SECTION, PARAGRAPH, ETC.

Specification 7220-M-204 (Q) Rev. 4 and ASME Section III, 1971

11. QUOTATION

Specification 7220-M-204 (Q) Paragraph 4.1.3 states:

"Steel indentation stamping shall be done with a round nose or interrupted dot die".

ASME Section III, 1971, Paragraph NB-2151.1 states:

"Stamping, when used, shall be done with blunt-nosed-continuous or blunt-nosed-interruped-dot die stamps".

12. DISCREPANCY DESCRIPTION

1. The millerfalls No. 1500-05 and 1550-05 1/4 inch dies being used to identify the shop fabricated 26 inch OHCB Piping (ASME III, Class 3) are not round-nose or blunt-nose dies, but appear to be standard sharp nose dies. The vendor has verified through field procurement that these dies are not low stress dies.

13. RECOMMENDED CORRECTIVE ACTION

See attached sheet

14. SCHEDULED COMPLETION DATE	15. RESPONSIBILITY FOR CORRECTIVE ACTION
7/23/76	1. Proj. Supt. 2&4. Quality Control. 3. Proj. Supt & Quality Control

16. CORRECTIVE ACTION TAKEN

17. DATE COMPLETED	18. SUBMITTED BY RESPONSIBLE AUTHORITY

19. CORRECTIVE ACTION VERIFIED BY QAE	20. DATE

Attachment A

Route To	This Copy For
FMSouthworth	SHHowell
CQHills	GSKeeley
HWSlager	TCCooke
	JMilandin
	WFHolub
	GLRichardson
	File

Consumers Power

Nonconformance Report No QE-82

File 16.3.4
Issue Date March 3, 1976
Project Midland 1 & 2

File Title NCR's on Bechtel Construction

This Nonconformance Report is Issued To:

Mr. J. F. Newgen
Project Superintendent

who is responsible for corrective action.

Prepared By DKKeating Date 3-3-76
Approved By [signature] Date 3/3/76
Written Reply Requested By Date 3-17-76
Corrective Action Requested By Date 3-31-

Nonconformance Description and Supporting Details: WFMC-1, Rev. 1, "Welding Filler Material Control Procedure Specification" controls weld rod on liner plate (per Section 7.4 of Specification C-111) and ASME Section III piping per the Bechtel Quality Assurance Manual (BQAM).

Section 6.3 of WFMC-1 states that, "The LFWE is responsible for designating the correct filler materials to be used for each weld or group of welds through the use of WR-5 and WR-6 Forms. Bechtel Standard Procedure WD-1 covers the use of both forms in detail." Bechtel Welding Standard WD-1, Rev. 3, "Quality Control and Documentation Procedure for Welding and Nondestructive Examination for ASME Code, (Contd on Attachm

AEC Reportable Yes ☐ No ☒ See Procedure 9 (For Nuclear Projects Only)

Stop Work Necessary Yes ☐ No ☒ See Procedure 16 - Stop Work No _____
No hold tags applied.

Recommended Corrective Action:

1) Provide assurance that Revision 3 of Form WR-6 addresses the requirements of Revisions 0 and 8.
2) Use the revisions of the form that are required by the procedures or, if Revision 3 of the procedure is acceptable for use, amend the procedures contained in the BQAM to allow use of the form.

[1] Corrective Action Taken:

See Attachment.

[1] Verification of Corrective Action Required Yes ☒ No ☐

[1] Method of Verification:
See Attachment.

[1] Nonconformance Closure Confirmed By DKKeating
Date 6-23-76

[1] To be completed at time of closure by Consumers Power QA Services.

File 16.3.4
Issue Date March 3, 1976
Project Midland 1 & 2
File Title NCR's on Bechtel Construction

Attachment to Report No QF-82

Nonconformance Description and Supporting Details: (Contd)

Section III, Division 1 Applications, "covers the use of the WR-6 "Filler Material Withdrawal Authorization", under Section 9.0. Section 9.2 of WD-1 states in part that, "Two versions of Form WR-6 are approved for use. These are specifically: WR-6, Revision 0 (for manual data input); and WR-6, Revision 8 (for manual or computer data input)." Revision 0 is dated May, 1973 and Revision 8 is not dated.

Contrary to the above, WR-6, Revision ~~0~~ 3, dated April 1, 1971 is in use for liner plate and ASME Section III welding.

[1]Corrective Action Taken:

1) Bechtel has compared revision 3 of the WR-6 to Rev, 0 of the WR-6 and concluded that the two revisions of the form are equivalent,

2) Bechtel has determined that a comparison of revision 3 and revision 8 is not appropriate as revision 8 is used for computer data input and is not in use at Midland.

3) Bechtel has ordered and received the proper revision (revision 0) of form WR-6. As Bechtel had determined that revisions 0 and 3 are equivalent, revision 3 was used in the interim until the proper revision was received.

[1]Method of Verification:

1) Revisions 0 and 3 of form WR-6 were compared and found to be equivalent.

2) CPCo QA concurred that a comparison of revisions 3 and 8 is not appropriate.

3) Verified that the proper revision (revision 0) of WR-6 has been received and distributed to the point of use.

Attachment A

Route To	This Copy For
FMSouthworth	SHHowell
HWSlager	GSKeeley
CQHills	TCCooke
	GLRichardson
	JMilandin
	WFHolub
	File

Consumers Power

Nonconformance Report No QF-88

File 16.3.4
Issue Date March 23, 1976
Project Midland 1 & 2

File Title NCR's on Bechtel Construction

This Nonconformance Report is Issued To:

J. F. Newgen
Bechtel Project Superintendent

who is responsible for corrective action.

Prepared By R E Whitaker Date 3/23/76
Approved By [signature] Date 3/23/76
Written Reply Requested By Date 4/26/76
Corrective Action Requested By Date 4/26/76

Nonconformance Description and Supporting Details:
On March 10, 1976, tendon sheathing was found open back of the condenser storage area and near the paint and sandblast building. The Material Storage Supervisor was notified at that time of the problem. On 3/17/76 during the NRC visit the problem was again identified. At that time the MSE was contacted and he said he would have the sheathing covered by 3/18/76. A portion of the open ends were covered, but some of them are still open.

AEC Reportable Yes ☐ No ☒ See Procedure 9 (For Nuclear Projects Only)

Stop Work Necessary Yes ☐ No ☒ See Procedure 16 - Stop Work No _____
No hold tags applied.

Recommended Corrective Action:
1. Inspect, clean if necessary and document all of the sheathing that is now open.
2. Recap or cover all of the sheathing that is now open.
3. Instruct personnel with storage responsibilities in proper techniques for storage maintenance to preclude repetition of this or similar problems.

[1] Corrective Action Taken:
SCN C-2-6001 was issued April 19, 1976 eliminating the requirement to keep semirigid sheathing capped or covered and adding the requirement to thoroughly clean the interior of the sheathing just prior to installation. The storage requirement form F-1-199 was changed to reflect the change in the specification.

[1] Verification of Corrective Action Required Yes ☒ No ☐

[1] Method of Verification:
The revised form F-1-199 and SCN C-2-6001 were reviewed. Master Inspection Plan C-2-1 Rev. FC-2 which picks up the inspection of the cleaning of the semirigid sheathing was reviewed.

[1] Nonconformance Closure Confirmed By R E Whitaker
Date 6/7/76

[1] To be completed at time of closure by Consumers Power QA Services.

Attachment A

Route To	This Copy For
FMSouthworth	SHHowell
HWSlager	GSKeeley
CQHills	TCCooke
	GLRichardson
	JMilandin
	WFHolub
	File ✓

Consumers Power

Nonconformance Report No QF-89

File 16.3.4
Issue Date April 6, 1976
Project Midland 1 & 2

File Title NCR's on Bechtel Construction

This Nonconformance Report is Issued To:

J. F. Newgen
Bechtel Project Superintendent

who is responsible for corrective action.

Prepared By R E Whitaker Date 4/6/76
Approved By [signature] Date 4/6/76
Written Reply Requested By Date 4/20/76
Corrective Action Requested By Date 5/04/76

Nonconformance Description and Supporting Details:
At the present time a tag with the following information is attached to the upper internals shipping container. "DO NOT REMOVE THIS TAG, Refer to FPG-3, F-1-207, F-2-1872 Dated 1/8/76 and letter from Babcock and Wilcox to Bechtel dated 3/19/76..." There is not a provision in FPG-3 for tagging material until a problem is corrected. The only existing procedure for tagging an item to identify a problem that needs correcting is FIM G-3 for nonconforming items.

AEC Reportable Yes ☐ No ☒ See Procedure 9 (For Nuclear Projects Only)

Stop Work Necessary Yes ☐ No ☒ See Procedure 16 - Stop Work No _____
One Hold Tag applied.

Recommended Corrective Action:

1. Issue a nonconformance report to document the problem that exists in the upper internals shipping container.

2. Hold a training session to inform the appropriate personnel how to handle situations that do not conform to specified requirements.

[1]Corrective Action Taken:

See Attachment.

[1]Verification of Corrective Action Required Yes ☒ No ☐

[1]Method of Verification:
The form F-1-207 Rev. 3 was reviewed and the removal of the tag was visually confirmed.

The notes and charts from the training session were reviewed.

[1]Nonconformance Closure Confirmed By R E Whitaker
Date 6/21/76

[1]To be completed at time of closure by Consumers Power QA Services.

File 16.3.4
Issue Date April 6, 1976
Project Midland 1 & 2
File Title NCR's on Bechtel Construction

Attachment to QF-89

[1]Corrective Action Taken:

1. The F-1-207 form has been changed to require restoration of the internals cannister to its original condition (replace belts in cannister) by September 1, 1976. The improper tag has been removed from the upper internals shipping container.

2. Field Procedure FPG-3 has been revised (Rev. 5) to clarify the procedure to be used when a storage deficiency occurs. Training sessions were held on April 26 and 27, 1976 to explain the revisions to FPG-3, 6, 16 and 17 which covers the entire range of material storage both Q and non-Q. This training included what to do if a problem occurs.

Attachment A

Route To	This Copy For
FMSouthworth	SHHowell
CQHills	GSKeeley
HWSlager	TCCooke
	PAMartinez
	JMilandin
	WFHolub
	GLRichardson
	ZGTucker

Consumers Power

Nonconformance Report No QF-95

File 16.3.6
Issue Date April 30, 1976
Project Midland 1 & 2

File Title NCR's on Bechtel Quality Control

This Nonconformance Report is Issued To:

J. P. Connolly
Bechtel PFQCE

who is responsible for corrective action.

Prepared By _____ Date _____
Approved By [signature] Date 4/30/76
Written Reply Requested By Date 5/11/76
Corrective Action Requested By Date 6/1/76

Nonconformance Description and Supporting Details:
A copy of Field Inspection Plan C-231-2-827 obtained on or about 3/27/76 has only a signature and date of 3/2/76 at the bottom of Block 12 for Activity 2.60. However, a copy of the same plan obtained 4/29/76 has a lengthy exception added with no date, signature, nor initials. Obviously, an inspection record has been changed. This is unacceptable to Consumers Power Company without a controlling mechanism.

AEC Reportable Yes ☐ No ☒ See Procedure 9 (For Nuclear Projects Only)

Stop Work Necessary Yes ☐ No ☒ See Procedure 16 - Stop Work No _____

Recommended Corrective Action:
1. Develop a mechanism for changing and controlling the changes to completed inspection plans.
   or
2. Decide that such changes will not be made.
3. Train all QC personnel in the alternative chosen.

[1]Corrective Action Taken:
1. PSP G-7.1 was revised to include a mechanism for changing quality records and controlling those changes.

2. Training on the revised PSP was given on 6/8/76.

[1]Verification of Corrective Action Required Yes ☒ No ☐

[1]Method of Verification:
1. Revision 1 to PSP G-7.1 was reviewed for content.
2. Reviewed QCFM 2068 which was written to document that training.

[1]Nonconformance Closure Confirmed By [signature]
Date 6/16/76

[1]To be completed at time of closure by Consumers Power QA Services.

Attachment A

Route To	This Copy For		
FMSouthworth CQHills HWSlager	SHHowell GSKeeley TCCooke PAMartinez JMilandin WFHolub GLRichardson ZGTucker	Consumers Power Nonconformance Report No OF-96	File 16.3.6 Issue Date May 3, 1976 Project Midland 1 & 2 File Title NCR's on Bechtel Quality Control

This Nonconformance Report is Issued To:

J. P. Connolly
Bechtel PFQCE

who is responsible for corrective action.

Prepared By W A Bird/[illegible] Date 5/3/76
Approved By [signature] Date 5/3/76
Written Reply Requested By Date 5/07/
Corrective Action Requested By Date 5/17/

Nonconformance Description and Supporting Details:
Field Inspection Plans C-231-2-827 and C-231-2-858 have notes in Block 12 of Activity Task 2.60 which, in essence, are exceptions to the QCE's acceptance. However, Block 5.10 is signed off indicating that there are no exceptions open.

Also, the exceptions on these plans indicate a total of twenty bars left out (fourtee in the first and six in the latter) when actually fifty-two bars were left out (twent six in each case). The second of these was after the additional corrective action wa started in response to FSW-7.

AEC Reportable Yes ☐ No ☒ See Procedure 9 (For Nuclear Projects Only)

Stop Work Necessary Yes ☐ No ☒ See Procedure 16 - Stop Work No ______
Consumers Power Company will continue inspections of all rebar placement.
Recommended Corrective Action:
1. Reinstruct QCE's in completion of Field Inspection Plans.
2. Correct the referenced plans.
3. Since the additional corrective action after FSW-7 still did not result in all missing bars being accounted for, develop additional corrective action in this area.

[1]Corrective Action Taken:

See Attachment.

[1]Verification of Corrective Action Required Yes ☒ No ☐

[1]Method of Verification:

See Attachment.

[1]Nonconformance Closure Confirmed By W W Burkert
Date 6-11-76

[1]To be completed at time of closure by Consumers Power QA Services.

File 16.3.6
Issue Date May 3, 1976
Project Midland 1 & 2
File Title NCR's on Bechtel Quality Control

Attachment to
Report No QF-96

[1]Corrective Action Taken:

1. A response letter from J. P. Connolly stated that the Lead Quality Control Engineers were instructed in the method of changing completed inspection plans and later were instructed on Section 3.5 of PSP G-7.1 which was issued for portion of the corrective action of QF-95.

2. Bechtel NCR-427 was issued and an Engineering disposition stated that, "The Field installation satisfies the design requirements and was acceptable". In addition, a DCN No 9 to Drawing C-140 was recently issued allowing for rebar hooks to be turned in any direction to facilitate construction and all Field Inspection Plans were reviewed, evaluated and review results documented by a letter from L. R. Albert to the QC file which indicated that the Lead QCE reviewed and evaluated the entries made in Block No 9 not pertaining to NCR's which was related to this NCR.

3. There was no additional corrective action after Field Stop Work-7 required since Bechtel's letter of response stated in part that, "The problem then was not that Bechtel QC was unaware of requirements for these bars but rather that the omitted bars were improperly documented. The reference to the bars in question should have been changed to the scope of the inspection plan rather than an exception to activity 2.60. The decision not to include the bars in the subject placements was a change to the scope of the placement rather than an exception or nonconformance to the placement".

[1]Method of Verification:

1. The response letter from Bechtel QC was reviewed and accepted.

2. Bechtel NCR-427 and the Engineering disposition was reviewed and found acceptable. Also, DCN 9 to Drawing C-140 was reviewed for content.

3. The response letter from Bechtel QC was reviewed for content.

Attachment A

Route To	This Copy For
FMSouthworth	SHHowell
CQHills	GSKeeley
HWSlager	TCCooke
	JMilandin
	WFHolub
	GLRichardson
	File

Consumers Power

Nonconformance Report No OF-99

File 16.3.4
Issue Date May 4, 1976
Project Midland 1 & 2

File Title NCR's on Bechtel Construction

This Nonconformance Report is Issued To:

J. F. Newgen
Bechtel Project Superintendent

who is responsible for corrective action.

Prepared By D R Keating Date 5-6-76
Approved By [signature] Date 5/6/76
Written Reply Requested By Date 5-18-7
Corrective Action Requested By Date 6-01-7

Nonconformance Description and Supporting Details:
Bagwell procedure 3232 BCPØ1B "Application Procedure Phenoline 305 Finish" requires in section III D that for airless application, a Graco 30:1 Bulldog pump and Graco Golden Gun with a .015 tip be used.

Contrary to the above, Bagwell has used a Speed Flo pump and H gun for the application of the intermediate coat of Phenoline 305.

AEC Reportable Yes ☐ No ☒ See Procedure 9 (For Nuclear Projects Only)

Stop Work Necessary Yes ☐ No ☒ See Procedure 16 - Stop Work No _____
No hold tags applied.

Recommended Corrective Action:

1) Assure that the use of the different equipment has not affected the quality of the coating.

2) Comply with the procedure or revise the procedure to allow the use of alternate equipment.

[1]Corrective Action Taken:

See Attachment.

[1]Verification of Corrective Action Required Yes ☒ No ☐

[1]Method of Verification:
The manufacturer's (Carboline) latest written recommendation for Phenoline 305 application was reviewed and it was verified that the equipment used met the manufacturer's recommendation.

[1]Nonconformance Closure Confirmed By D R Keating
Date 6-10-76

[1]To be completed at time of closure by Consumers Power QA Services.

File 16.3.4
Issue Date May 4, 1976
Project Midland 1 & 2
File Title NCR's on Bechtel Construction

Attachment to Report No QF-99

[1]Corrective Action Taken:

Specification C-110 "Recoating Work of the Containment Building Liner Plate" governs over the Bagwell QA Manual per a statement in the QA Manual. The specification requires that the "Application shall be in accordance with the manufacturer's latest written recommendations governing..., airless or air spray equipment;..." The equipment used was in accord with the manufacturer's recommendation and thus the liner plate was coated in accordance with the specification and meets the required quality. As it is stated that the specification governs, a revision of the procedure is not considered mandatory.

Attachment A

Route To	This Copy For
FMSouthworth CQHills HWSlager	SHHowell GSKeeley TCCooke JMilandin WFHolub GLRichardson ZGTucker

Consumers Power

Nonconformance Report No QF-100

File 16.3.6
Issue Date May 4, 1976
Project Midland 1 & 2

File Title NCR's on Bechtel Quality Control

This Nonconformance Report is Issued To:

J. P. Connolly
Bechtel PFQCE

who is responsible for corrective action.

Prepared By W. R. Benkert Date 5-4-76
Approved By [illegible] Date 5/4/76.
Written Reply Requested By Date 5/7/76
Corrective Action Requested By Date 6/1/76

Nonconformance Description and Supporting Details:

See Attachment A.

AEC Reportable Yes ☐ No ☒ See Procedure 9 (For Nuclear Projects Only)

Stop Work Necessary Yes ☐ No ☒ See Procedure 16 - Stop Work No _____

Recommended Corrective Action:

See Attachment A.

[1]Corrective Action Taken:

See Attachment A.

[1]Verification of Corrective Action Required Yes ☒ No ☐

[1]Method of Verification:

See Attachment A.

[1]Nonconformance Closure Confirmed By W. R. Benkert
Date 6-14-76

[1]To be completed at time of closure by Consumers Power QA Services.

File 16.3.6
Issue Date May 4, 1976
Project Midland 1 & 2
File Title NCR's on Bechtel Quality Control

Attachment A to Report No QF-100

Nonconformance Description and Supporting Details:

Criterion XV of 10CFR50(B) states: "Measures shall be established to control materials, parts, or components which do not conform to requirements in order to prevent their inadvertent use or installation. These measures shall include, as appropriate, procedures for identification documentation, segregation, disposition, and notification to affected organizations. Nonconforming items shall be reviewed and accepted, rejected, repaired, or reworked in accordance with documented procedures".

Contrary to these requirements, a nonconforming condition was noted in Block 12 of Activity/Task 2.60 on Field Inspection Plan C-231-2-858 with no nonconformance report written. Furthermore, this condition was not "reviewed and accepted in accordance with documented procedures".

Recommended Corrective Action:

1. Write a nonconformance report to cover the nonconforming condition in the referenced inspection plan.

2. Receive disposition from Project Engineering including engineering rationale for use as is if that is the disposition received.

3. Review all completed Field Inspection Plans for exceptions which have not resulted in NCR's and, if any are found, proceed as in items #1 and #2 above.

4. Instruct all QCE's in the requirements of Criterion XV and the necessity of following it.

Corrective Action Taken:

1. Bechtel NCR 427 was issued stating that the design drawings showed certain No 11 and No 8 reinforcing bars standard hooks oriented down into the wall at elevation 629' and that the Field construction elected to install these bars with standard hooks extending up into the slab instead.

2. Project Engineering disposition was received and indicated that the Field decision was acceptable and, therefore, the installation was not a nonconforming condition.

3. All Field Inspection Plans were reviewed and evaluated for entries made in Block No 9 not pertaining to NCR's and the review results were documented by the Lead Discipline Engineers in a letter from L. R. Albert to the QC file.

4. Quality Control Engineers and QC personnel reviewed all field inspection plans as a result of this NCR QF-100 as well as other NCR's and deficiencies. A training session was conducted by Bechtel QC on the overall results of the field inspection plan review. This training session was documented in the letter from L. R. Albert on June 10, 1976 to the QC files.

Attachment A to Report No QF-100 (Contd)

[1]Method of Verification:

1. Bechtel NCR 427 was reviewed for content and found acceptable for closure of NCR's QF-96 and 100.

2. The engineering disposition for NCR 427 was reviewed and found acceptable for closure of QF-96 and 100.

3. The cover letter from L. R. Albert to the QC file written on June 10, 1976 was reviewed for the specific items pertaining to QF-100 that were reviewed by Bechtel QC.

4. Reviewed letter from L. R. Albert on June 10, 1976 which indicated that a training session was presented.

Attachment A

Route To	This Copy For
FMSouthworth	SHHowell
CQHills	GSKeeley
HWSlager	TCCooke
	JMilandin
	WFHolub
	GLRichardson
	File

Consumers Power

Nonconformance Report No QF-102

File 16.3.6
Issue Date May 17, 1976
Project Midland 1 & 2

File Title NCR's on Bechtel Quality Control

This Nonconformance Report is Issued To:

Mr. J. P. Connolly
Bechtel Project Field Quality Control Engineer

who is responsible for corrective action.

Prepared By DKKeating Date 5-17-76
Approved By [signature] Date 5/17/76
Written Reply Requested By Date 6-1-76
Corrective Action Requested By Date 6-1-76

Nonconformance Description and Supporting Details: Bechtel Field Inspection Plan (FIP) C-110-b-64, "Recoating Work of the Reactor Building Liner Plate," contains an inspecti point under Act/Task No. 3.00 which requires that the liner plate be inspected for dee pits and gouges prior to coating.
The inspection on liner plate assembly C-111-64 failed to identify a deep gouge. The gouge was subsequently identified by Bechtel during the hold point for liner plate requalification and documented on Bechtel NCR 409. NCR 409 states that the gouge was prime coated indicating that the gouge did not occur during handling subsequent to the prime coating. The gouge has been repaired in accordance with the disposition on NCR 409 and the coating repair has been addressed through corrective action on Bechtel Quality Assurance Discrepancy report 099 and there is no further hardware repair requi
AEC Reportable Yes ☐ No ☒ See Procedure 9 (For Nuclear Projects Only)

Stop Work Necessary Yes ☐ No ☒ See Procedure 16 - Stop Work No _____
No hold tags applied.

Recommended Corrective Action:

1) Instruct personnel in proper requirements for surface inspection of the reactor building liner plate.

[1]Corrective Action Taken:
Cognizant personnel received instruction on liner plate surface inspection.

[1]Verification of Corrective Action Required Yes ☒ No ☐

[1]Method of Verification:
Reviewed documentation of the instruction that was given (letter QCFM-1065). The instruction was given prior to the issuance of this NCR in response to NCR QF-91. All liner plate will be reinspected for surface defects under the C-111-4 inspection plan.

[1]Nonconformance Closure Confirmed By DKKeating
Date 6-10-76

[1]To be completed at time of closure by Consumers Power QA Services.

Attachment A

Route To	This Copy For
FMSouthworth	SHHowell
CQHills	GSKeeley
HWSlager	TCCooke
	JMilandin
	WFHolub
	GLRichardson
	DRJohnson

Consumers Power

Nonconformance Report No QF-104

File 16.3.6
Issue Date May 25, 1976
Project Midland 1 & 2

File Title NCR's on Bechtel Quality Control

This Nonconformance Report is Issued To:

J. P. Connolly
Bechtel Project Field Quality Control Engineer

who is responsible for corrective action.

Prepared By W. H. Benkert Date 5-24-7
Approved By [illegible] Date 5/24/76
Written Reply Requested By Date 6-15-7
Corrective Action Requested By Date 6-30-7

Nonconformance Description and Supporting Details:
Project Special Provisions notice SF/PSP #16, Rev. 0, section 3.1 states in part, "The Lead Field Quality Control Engineers (LFQCE) shall submit written requests to the Field Inspection Planning Coordinator for the preparation of the required Field Inspection Plans".

Contrary to the above, only one of four Field Inspection Plan Request forms asked for was presented. The one presented did not show documented evidence of submittal by LFQCE.

AEC Reportable Yes ☐ No ☒ See Procedure 9 (For Nuclear Projects Only)

Stop Work Necessary Yes ☐ No ☒ See Procedure 16 - Stop Work No _____

Recommended Corrective Action:
1. Revise procedure to conform to field practice.
2. Provide a system for control of written request forms or specifically state these forms are not to be retained. If the written requests are not retained, the FQCE who submitted the request should have the person's name and date of request appear in Block No. 5 of QC-G6-1A form.
3. Train QC personnel on revised procedure.

[1]Corrective Action Taken:

See Attachment.

[1]Verification of Corrective Action Required Yes ☒ No ☐

[1]Method of Verification:

See Attachment

[1]Nonconformance Closure Confirmed By W. H. Benkert
Date 6-22-76

[1]To be completed at time of closure by Consumers Power QA Services.

File 16.3.6
Issue Date May 25, 1976
Project Midland 1 & 2
File Title NCR's on Bechtel Quality Control

Attachment to QF-104

[1]Corrective Action Taken:

1. & 2. The Project Special Provisions Notices (PSP) No. 16 was canceled which supplemented the FIM G-6. Now the Quality Control Engineer with responsibility for preparing the Field Inspection Plan is required to make an entry in block #5 of the QC G-6 1A form and sign and date it.

[1]Method of Verification:

1. Review the Project Special Provision Notices table of contents which indicated that the PSP No. 16 supplemental requirement was deleted.

Attachment A

Route To	This Copy For
FMSouthworth	SHHowell
CQHills	GSKeeley
HWSlager	TCCooke
	JMilandin
	WFHolub
	GLRichardson
	DRJohnson

Consumers Power

Nonconformance Report No QF-105

File 16.3.6
Issue Date May 25, 1976
Project Midland 1 & 2

File Title NCR's on Bechtel Quality Control

This Nonconformance Report is Issued To:

J. P. Connolly
Bechtel Project Field Quality Control Engineer

who is responsible for corrective action.

Prepared By W H Beckert Date 5-24-76
Approved By [signature] Date 5/24/76
Written Reply Requested By Date 6-22-76
Corrective Action Requested By Date 6-22-76

Nonconformance Description and Supporting Details:
FIM G-6, Block No. 6 states, "The Lead Discipline Quality Control Engineer shall revie the plan for content, adherence to this procedure and completeness and shall signify approval by entering his signature and the date before the plan is utilized for inspec tion by the Quality Control Engineer".

Contrary to the above, two inspection plans C-231-4-632, Rev. 0 and C-231-3-631, Rev. were found with documentation missing in Block No. 6. (No approval signature and date

AEC Reportable Yes ☐ No ☒ See Procedure 9 (For Nuclear Projects Only)

Stop Work Necessary Yes ☐ No ☒ See Procedure 16 - Stop Work No _____

Recommended Corrective Action:
1. Review all inspection plans from September of 1975* to present for entry informatio in required blocks.
2. Document this review and evaluate.
3. Based on results, state in written reply the corrective action taken to preclude repetition.

[1]Corrective Action Taken:

See Attachment.

[1]Verification of Corrective Action Required Yes ☒ No ☐

[1]Method of Verification:

See Attachment.

[1]Nonconformance Closure Confirmed By W H Beckert
Date 6-14-76

[1]To be completed at time of closure by Consumers Power QA Services.

*Time of increase in construction activities.

File 16.3.6
Issue Date May 25, 1976
Project Midland 1 & 2
File Title NCR's on Bechtel Quality Control

Attachment To
Report No QF-105

[1]Corrective Action Taken:

1. Bechtel QC reviewed and evaluated all Field Inspection Plans for signatures and dates relating to the implementation and close out of Field Inspection Plans.

2. The review of the results were documented by cover letter on June 10, 1976 (attached to NCR in file) which outlines the items reviewed and documented by Lead QCE's. The cover letter and review package are filed in the QC vault at Midland. (Audit file No 206.)

3. A written reply letter from Bechtel (FQCL-081) describing the corrective action taken to preclude repetition was received. Training class was held on June 8, 1976 on the new change to Bechtel Procedure G-7.1, Section 5.3 that requires the file clerk to review newly received records for completeness. In addition, the PFQCE has instructed the Assitant PFQCE to review all newly completed Field Inspection Plans and IR's for completeness until further notice.

[1]Method of Verification:

1. Reviewed Bechtel QC FIP review cover letter for the review package to assure for legibility and completeness.

2. Reviewed Bechtel FIP review cover letter and response letter (FQCL-081) for content and applicability.

3. Reviewed letter (FQCL-081) and FIP review letter outlining review requirements of the package and for signature of the Lead Discipline QCE's concurrence.

Attachment A

Route To	This Copy For
FMSouthworth	SHHowell
HWSlager	GSKeeley
CQHills	TCCooke
	JMilandin
	WFHolub
	GLRichardson
	File

Consumers Power

Nonconformance Report No QF-107

File 16.3.4
Issue Date June 1, 1976
Project Midland 1 & 2

File Title NCR's on Bechtel Construction

This Nonconformance Report is Issued To:

Mr. J. F. Newgen
Bechtel Project Superintendent

who is responsible for corrective action.

Prepared By DKKeating Date 6-1-76
Approved By [signature] Date 6/1/76
Written Reply Requested By Date 6-15-76
Corrective Action Requested By Date 6-29-76

Nonconformance Description and Supporting Details:
WFMC-1, Rev. 1, "Welding Filler Material Control Procedure Specification" requires under section 6.4 7) that, "Where physically possible, low hydrogen type electrodes shall be used directly from the rod warmer".

Contrary to the above, an ironworker welder in the Auxiliary Building was observed to be drawing low hydrogen weld rod (E7018) from a stub bucket where it was physically possible for him to be using directly from the rod warmer. Discrepancy was observed on May 26, 1976.

NCR's QF-78, QF-81, and QF-86, issued relative to weld rod control, will be held open until this NCR is closed.

AEC Reportable Yes ☐ No ☒ See Procedure 9 (For Nuclear Projects Only)

Stop Work Necessary Yes ☐ No ☒ See Procedure 16 - Stop Work No _____
No hold tags applied.

Recommended Corrective Action:

1) Revise General Specification G-27 to incorporate WFMC-1, Rev. 2 and issue for use. Rev. 1 will currently remain in effect for ASME Section III work.

2) Instruct cognizant personnel of new requirements and document the instruction.

[1]Corrective Action Taken:

[1]Verification of Corrective Action Required Yes ☐ No ☐

[1]Method of Verification:

[1]Nonconformance Closure Confirmed By _____
Date _____

[1]To be completed at time of closure by Consumers Power QA Services.

Attachment A

Route To	This Copy For
FMSouthworth	SHHowell
HWSlager	GSKeeley
CQHills	TCCooke
	JMilandin
	WFHolub
	GLRichardson
	File

Consumers Power

Nonconformance Report No QF-108

File 16.3.4
Issue Date June 21, 1976
Project Midland 1 & 2

File Title NCR's on Bechtel Construction

This Nonconformance Report is Issued To:

Mr. J. F. Newgen
Bechtel Project Superintendent

who is responsible for corrective action.

Prepared By DR Keating Date 6-21-76
Approved By [signature] Date 6/21/76
Written Reply Requested By Date 7-06-76
Corrective Action Requested By Date 7-19-76

Nonconformance Description and Supporting Details:

See Attachment.

AEC Reportable Yes ☐ No ☒ See Procedure 9 (For Nuclear Projects Only)

Stop Work Necessary Yes ☐ No ☒ See Procedure 16 - Stop Work No _____
No hold tags applied.

Recommended Corrective Action:

See Attachment.

[1]Corrective Action Taken:

[1]Verification of Corrective Action Required Yes ☐ No ☐

[1]Method of Verification:

[1]Nonconformance Closure Confirmed By _____
Date _____

[1]To be completed at time of closure by Consumers Power QA Services.

File 16.3.4
Issue Date June 21, 1976
Project Midland 1 & 2
File Title NCR's on Bechtel Construction

Attachment to Report No QF-108

Nonconformance Description and Supporting Details:

10CFR50(B), Criterion XIII, "Handling, Storage and Shipping," states that "Measures shall be established to control the handling, storage, shipping, cleaning, and preservation of material in accordance with work and inspection instructions to prevent damage or deterioration". Criterion V, "Instructions, Procedures and Drawings" requires that activities affecting quality be prescribed by documented instructions, procedures, or drawings.

Contrary to those requirements, maintenance of Reactor Building liner plate was not covered by procedure between the time it was released from storage and the time it was erected. There is no mechanism to assure that items requiring post storage maintenance are covered under the maintenance procedure (FPG-16).

The following was observed on the liner plate:

1) Unit 1, second lift liner plates C-111-55, 58, 59, 60, 61, 63, 65, 66, 69, 70, 71, and 72 had open leak chase nipples.

2) Dome liner plate sections D-9-18 and D-7-17 were in contact with the ground.

Recommended Corrective Action:

1) The leak chase nipples have been plugged and dome section D-7-17 has been moved onto the jig. Further hardware correction requires that dome section D-9-18 be lifted from contact with the ground. Required material evaluation will be done under liner plate requalification. D-9-18 is located east of the dome jig buildings.

2) Issue an F-10 form on liner plate in accordance with procedure FPG-16.

3) Institute a method to assure that items that require FPG-16 maintenance coverage do obtain the coverage.