

REGULATORY DOCUMENT COPY



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September 21, 1978  
ALAB-179-78

Director of Office of Inspection  
and Enforcement  
Mr John G Davis, Acting Director  
Nuclear Regulatory Commission  
Washington, DC 20555

MIDLAND NUCLEAR PLANT - ALAB-106  
MONTHLY REPORT FOR AUGUST 1978  
SHEET NOS 50-329 AND 50-330

In accordance with Condition of Memorandum and Order ALAB-106 dated March 26, 1978 and Amendment No 1 of the Midland Plant Construction Permit, enclosed are ten (10) copies of the nonconformance reports for August 1978. The report consists of copies of Bechtel Nonconformance Reports, all sheets from the Bechtel Nonconformance Report Log representing nonconformances open during the month, Bechtel Quality Action Requests, and Consumers Power Company Nonconformance Reports written or closed during the month.

*Stephen H. Howell*

JGKepler, US NRC Region III

THIS DOCUMENT CONTAINS  
POOR QUALITY PAGES

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LOG OF NONCONFORMANCE REPORTS

PROJECT NAME <sup>1</sup> Midland JOB NO. <sup>1</sup> 07220 PAGE <sup>B</sup> 78

2 NCR NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
1143	12-30-77 C	A-13. Aux Bldg block wall with no provisions for rebar or lintel.	Rework		
1144	1-3-78	F-21381. Designation of service rating is not stamped on 1" and 3/8" pipe plugs.	NA	5-8-78	R. Montreuil
1145	1-4-78	M-106. Shop welds on nangers are oversized for E-ME-909, 965, 969, and 919.	Use as is	3-20-78	D. Duff
1146	1-5-78	C-632. Bars should extend 2'-1" below 644'4", but were not installed. Cont. #2 West Sec. Shield Wall.	Use As Is	Telex 1-23-78 2-6-78	A. M. Torres S. Kirker
1147	1-5-78	C-230. Concrete placed having temp. of 52°F, should have been 50°F±10°F. DG(630.5)F	Use As Is	Telex 1-24-78 2-9-78	S. Kirker S. Kirker
1148	1-5-78	C-231. Surface Temperature not maintained. DG(627.5)c	Use As Is	Telex 1-13-78 2-13-78	A. Lemach B. Cheek
1149	1-5-78	F-3106. Random sample not taken on grout rec'd, bags sent to US Testing were not weighed.	N/A Reject	2-16-78	J. Slifer
1150	1-6-78	M-305. Marking on matl. (Heavy Hex Nuts) does Not agree with Verification Documentation sent	Reject	6-2-78	T. Christofferson
1151	1-6-78	M-1.27. Startup Feedwater Control Valve delivered to jobsite with a cracked casing on pressure switch.	N/A	5-25-78	J. R. Slifer
1152	1-6-78	C-230. 96 cu. yd. of concrete was indeterminately placed. CC(647.5)a' (concrete slump)	Use as is	3-6-78	W. Cain
1153	1-10-78	C-230. Concrete did not meet the 90 day compressive strength. Aux. Bldg. A(641.33)c' See NCR 986	Use as is	3-7-78	R. Siple
1154	1-9-78	M-125G. Valve received on site with no verification documentation. S/N 5205-14-1-6, 6"-GCP-GB-XL	Doc. Rework	4-11-78	D. Delaney
1155	1-10-78	M-129A. Identification tags are improperly attached to operators on six valves, G-321D forms incomplete.	Rework	6-1-78	D. Delaney
1156	1-9-78	M-132. (4 12" Valves) radiographic film not sent to jobsite. Code data sheet incorrectly filled out.	Doc.- Rework	3-22-78	D. Delaney
1157	1-10-78	DWG C-625. 1 #7 dowel missing coming out of the fuel transfer wall approx. 6'-0" N. of SW corner.	Use As Is	1-13-78	P. J. Milsovic
1158	1-10-78	5 Star Grout Bulletin 012761. Indeterminate curing of grout.	Use as is	3-23-78	S. Kirker
1159	1-11-78	C-231. SWI(635.5)a surface temperature was not maintained.	Use As Is	Telex 1-31-78 2-13-78	S. Kirker B. Cheek
1160	1-12-78	M-1. Pressurizer Spray Motor Operated Control Valves. Valves stored improperly.	Rework		
1161	1-13-78	M-104A. Quality Verification Documentation not received. (SCCA-18-3611-3-B) mat on spool - (PBB-2-3613-7-5)	Doc. Rework	3-11-78	C. G. G. G.

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2 NCR NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
1219	2-13-78	F-3106. Five Star Grout, Test SP426 failed Compressive strength, location of 32 bags indeterminate	Use as is	2-14-78	R. Montreuil
1220	2-13-78	M-106AC. 16 pc's. 1 3/4" X 5" SA515 Grade 65 Lugs. Quality Documentation package has not been received.	Doc.Rework	2-21-78	D. Duff
1221	2-13-78	M-106AC. Shop Order E-MD-014, E-MD-084, E-ME-211, E-ME-979. welds do not meet criteria of ITT's Procedure	Use as is Rework		
1222	2-15-77	M-326. 80 Hangers consisting of 300 Field Welds, undersize welds/defects. Aux. 1 & 2, Cont. #2	Use as is Rework		
1223	2-15-78	M-305. 11,667' 4" of 2" Sch 80 CS Pipe, delivered to jobsite with partial markings, illegible or none at all.	Reject	5-15-78	H. D. Foster
1224	2-15-78	M-104AC. Pipe Spool 2DBC-9-S634-7-4, received at the jobsite dented.	Rework	8-2-78	K. Roberge
1225	2-15-78	M-75AC. Wrong revision of the G-321D form was received with the Quality Verification Documentation for CP-75B	Doc. Rework	3-9-78	D. Delaney
1225	2-16-78	Grout Cubes. 68 cu. feet of grout placed with only 6 sets of cubes made. Liner Plate Repair El. 672'+	Use as is	2-17-78	B. Check
1227	2-17-78	Dwg. 00-550-01-BT, Anchor Bolt Sleeve, plate & nut was found to be off-center.	Rework	4-12-78	A. Lamach
1228	2-17-78	M-106AC. Shop Orders E-MD-011, 015, 031, & 033 have welds which do not meet the acceptance criteria.	Rework Use as is		
1229	2-17-78	E-20. Six Electrical Penetrations, cable chaffing, no inert gas blanket, Doc. not received, blockage.	Repair		
1230	2-20-78	Dwg. C-416. Embed #638-14-21 is not in correct location as called out by dwg.	Use as is	2-27-78	D. Osborn
1231	2-21-78	M-111AC. Flued Hd I23, heat code does not agree with Doc. rec'd. I218 no impact testing results/w Doc. pkg.	Doc. Rework	3-13-78	J. Slifer
1232	2-22-78	C-233. 2 Tank Support Wall Embeds, received at the jobsite with sheet 3 of the G-321D form missing.	No Nonconformance	2-24-78	J. R. Slifer
1233	2-23-78	C-305. Bundled bars cut without Project or Resident Engineering approval.	Use as is	6-16-78	J. Moyers
1234	2-23-78	C-230. Concrete Air Contens., for pour A(659)p placed with high and indeterminate air	Use as is	Telex 3-16-78 3-24-78	S. Kirker D. Osborn
1235	2-21-78	M-305. ASME SA-193 Grade B7 Studs, mat'l marked ASME SA194. Documentation shows mat'l to be SA193.	Reject	6-2-78	T. Christofferson
1236	2-23-78	M-54AC. RB Spray Pumps, 1 radiographic report missing. Motor Operators on pumps tagged wrong.	NA & Doc.Rework		
1237	2-23-78	J-201. Main Control Boards, test reports sent do not agree with specification, finish print record not certified.	Doc.Rework Use as is		

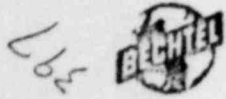
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2 NCR NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
1238	2-24-78	C-230. Concrete-high slump at end of line for pea gravel mix. Pour A(701)a'	Use as is	4-25-78	D.L. Osborn
1239	2-24-78	E-20. Electrical penetrations delivered to the jobsite damaged, no Quality verification Doc. pkgs. received	Repair		
1240	2-27-78	Shop Welds on E-ME-515, 461-01, 856, 924 & 964 do not meet criteria of QA/QC Procedure 02A006 Rev. B	Use as is		
1241	2-27-78	F-24253. Nuclear Pipe Fittings, Purchase Order requires short radius ellts, long radius were delivered.	Reject	5-2-78	D. Duff
1242	2-27-78	Dwg. C-695. Missing Slab Rebar in fuel transfer wall pour to El. 647'-5"	Rework	Telex 4-3-78	F. Milsovic
1243	2-28-78	C-231. Concrete Curing Temp. fell below 50° on Pour A(672.5)a'	Use as is	4-6-78	D. L. Osborn
1244	3-2-78	C-233. Sleeve Embeds, the elongation of shear studs do not meet requirements.	Reject	4-25-78	D.L. Osborn
1245	3-2-78	E-535. 2BC005, 3" PVC Conduit, was filled with grout. Aux. Slab @ Elev. 584'	Rework	3-9-78	J. Slifer
1246	3-2-78	E-19AC. 15 KVA Inverter (2Y20) received on the jobsite with 2 broken meters.	Reject	3-24-78	G. Brown
1247	3-2-78	M-106AC. E-ME-907 & 963 do not meet acceptance criteria, (weld size)	Rework	5-25-78	A. M. Labrovich
1248	3-2-78	C-231. Cadweld, shooter not qualified to shoot verticals. Cont. #1 Refueling Canal Walls	Use as is		
1249	3-3-78	M-106AC. FR #13, delivered to Standish Fab Shop without Quality Verification Documentation Pkg.	Doc. Rework	4-13-78	J. Milsovic
1250	3-6-78	M-132. Valves in Aux Bldg damaged by construction and concrete debris on them.	Rework	3-17-78	D. E. Duff
1251	3-5-78	Dwg. C-226. Beam not placed per requirement of Dwg.	Rework	8-22-78	J. Brown
1252	3-3-78	C-231. Concrete Curing- Aux. Bldg. Slab 5 had a surface temperature drop. A(659)P	Use as is	5-12-78	B. Check
1253	3-3-78	C-231. Concrete Curing- Aux. Wall 4 had a temperature drop. A(672.5)a'	Use as is	3-28-78	D. Osborn
1254	3-6-78	A-41. Paint Storage, Temp. @ Standish Fab. Shop ranged above that called out in Spec. & also below.	N/A	3-16-78	S. Kirker
1255	3-6-78	M-305. the designation of service rating is not stamped on the material.	Use as is	3-8-78	S. Kirker
1256	3-6-78	M-104A-AC. spool 1ELB-9-S631-1-1 has rust scale, 1ELB-10-S631-1-1-rust scale covering 30% of int. surface	Use as is	3-22-78	R. Valentine
			Rework	4-5-78	R. Montreuil



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1257	3-6-78	M-104A-AC. Pipe Spool OHBC-15-S618-1-1 delivered to site with documentation discrepancies.	Doc. Rework	3-28-78	M. Donovan
1258	3-6-78	Dwg. C-109. Dike Embankment Soils, 60' of dike cross-section not documented by OC Records.			
1259	3-7-78	M-1.16. No documentation received for RCS Makeup Pumps. Space heaters in motors are of wrong wattage.	Use as is	3-17-78	D. Osborn
1260	3-7-78	M-1.6. Unit I Steam Generator Feedwater Header. No documentation has been received.			
1261	3-7-78	J-201. Main Control Board, conduit in sections 1C12/1C22, 1C13/1C23. & 2C13/2C23 are not color coded.	Rework		
1262	3-8-78	Dwg. E750. Cable Tray Supports, bracing installed and is not in accordance with dwg.	Use as is	5-11-78	D. Thompson
1263	3-9-78	M-14. Auxiliary Feedwater Pumps 1P05B & 2P05B, missing documentation	Doc. Rework		
1264	3-13-78	C-231 - Service Water Pump Structure, concrete surface out of plumb.	Use as is	3-17-78	D. Osborn
1265	3-10-78	M-106AC. Channel for hanger 2 1/2" - 2CCB-23-H18 delivered to site wrong size.	Rework	5-4-78	D. Duff
1266	3-13-78	C-231. Indeterminate dry concrete. A(673.5)a'	Use as is	3-31-78	S. Kirker
1267	3-13-78	C-248, C-251. Embed Plates omitted, Tilt Pit Fuel Pool. Aux. Bldg.	Rework	8-18-78	S. Kirker
1268	3-13-78	Dwg. M-183. Sluice Gate frames and slides installed @ incorrect locations. Service Water Pump Structure.	Use as is		
1269	3-13-78	M-305. Mat'l received at the jobsite with illegible markings or none at all.	Reject	5-15-78	H. D. Foster
1270	3-15-78	C-24. SWI Sluice Gate Fasteners do not have required identification marking.	Rework		
1271	3-15-78	M-204. Welder not qualified to the applicable welding procedure. FW 5R1, Aux. Bldg.	Use as is	5-19-78	J. Huren
1272	3-16-78	E-20AC. Electrical Penetrations, cable chaffing, No Documentation.	Doc. Rework Repair		
1273	3-17-78	Dwg. C-473. Missing Rebar Cont. //1 Refueling Canal Slab.	Use as is	3-30-78	P. VanderVeer
1274	3-20-78	C-50. Bolts & Studs for Personnel Locks have no markings, vendor dwgs do not specify type to be used.			
1275	3-20-78	C-230. Flyash liner test failed.	Use as is	3-22-78	R.K. Gipe

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2 NCR NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
1295	3-31-78	C-626. Missing Dowels between the south west corner of the south sec. shield wall.	Rework		
1296	4-4-78	E-20. Electrical Penetration Assemblies, received at site with no documentation, 2Z145 chafed inboard box.	Use as is	4-3-78	F. Milsovic
1297	4-4-78	Dwg. C-93. During filling of the cooling water pond Zone 4Z material was partially washed out.	Doc. Rework		
1298	4-6-78	Dwg. C-171, C-826. 4-#6 dowels omitted on slab #4, 4-#6 dowels omitted on slab #5. Aux. El. 674'	Use as is		
1299	4-5-78	Dwg. C-99. #6 dowels incorrectly placed between the ext. wall of the SW Pump Struct and sump walls	Repair	4-5-78	D. Osborn
1300	4-10-78	Dwg. C-1022. #5 Ties were not installed from Elev. 634'-6 to 649'-0", Diesel Generator.	Rework	6-5-78	J. Moyers
1301	4-10-78	M-104C-AC. Pipe Spool 8"-1HBC-98-S619-13-2 has a code data plate with no manufactures name on it.	Std. Repair	4-7-78	D. Osborn
1302	4-10-78	M-104A-AC. Pipe Spool 2HBC-232-S657-4-2 fauled to wrong vendor dwg.	Use as is	4-28-78	A. Lamach
1303	4-13-78	C-230. Concrete Cylinder Strengths - Sets 2981, 2982, and 2985 did not meet 6000 psi at 90 days.	Rework	7-17-78	M. Donovan
1304	4-12-78	E-20. Electrical Penetration Assembly - Module C is leaking and has caused conductor insulation to swell & expand.	Rework		
1305	4-13-78	Dwg. 2-613-4-5. Hanger has incomplete field weld, numbers 4 and 5.	Use as is	8-15-78	T. Lieb
1306	4-13-78	C-304. FAWs were found to be unacceptable due to undersize, oversize and weld defects. El. 646' Unit 2	Std. Repair	6-21-78	F. Ringe
1307	4-14-78	E-20. Electrical Penetrations received @ jobsite without Documentation & had "0" psig pressure reading.	Rework		
1308	4-17-78	C-233. 80 Anchor Bolts - C660-1F, size of bolts sent do not agree with Bechtel approved vendor drawing.	Use as is		
1309	4-17-78	M-14. Aux. Feedwater Pumps, 1P-05A, 2P-05A, documentation does not agree with material sent.	Reject	4-26-78	C. Gwin
1310	4-17-78	M-123B. Quality Verification Documentation required is missing Mat'l Cert. of Compliance & Elec. Test Reports.	Doc. Rework	5-22-78	J. Slifer
1311	4-17-78	Dwg. C186. 480 V. MCC OB45, OB46, face of MCC cabinet intermittently welded to the face of foundation pads.	Doc. Rework	7-11-78	H. D. Foster
1312	4-18-78	F-3091. 8 Anchor Plate Embeds were not inspected for drawing configuration.	Use as is	6-15-78	D. Delaney
1313	4-18-78	C-50B. Air Tanks for Personnel Air Locks received with no shop inspector's release or Documentation.	Repair	8-2-78	J. C. Huron
			Rework	5-19-78	J. Slifer
			Reject		

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2 NCR NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
1314	4-19-78	C-24. Sluice Gate Lifting Plates required to be ASTM-A36, received on site ASTM-A283-75D.	Use as is	6-22-78	S. Gelnett
1315	4-19-78	E-20. Weld Neck Flange. scratches on the machined surface of weld neck flange 2T-124.	Use as is	6-2-78	F. Ringe
1316	4-19-78	M-1.16. Makeup Pump Motors, Vendor Print for Pump Motors calls for heaters to be 400watts, (800watts are installed)	Doc Rework		
1317	4-19-78	C-233. Hatch Cover mk #452 received @ the jobsite with one shear stud broken off.	Rework	7-28-78	G. Yeisley
1318	4-19-78	Dwg. C-186. Anchor Bolts for HVAC Equip. T/Bolt elevations do not agree with dwg.	Use as is Rework		
1319	4-20-78	Scratches and rust on Weld Neck Flanges plus damage to Conductor insulation. (E-20)	Rework	4-28-78	F. Ringe
1320	4-20-78	E-20, Scratches on the surface of Weld Neck Flanges	Rework	6-27-78	F. Ringe
1321	4-21-78	J-202. Auxilliary/Local Control Panels, not primed & finished in accordance with specification.	Doc.Rework Use as is	5-26-78	D. Delaney
1322	4-21-78	M-104A. Pipe Spools received at the jobsite chained down with CS chains, resulting in rust to the spools.	Rework	8-9-78	D. Barrett
1323	4-21-78	F-27380. Grade and process of manufacture is not legibly stamped on 61 pieces of jam nuts.	Reject	5-18-78	R. Montreuil
1324	4-24-78	M-64. Emergency Diesel Oil Storage Tanks - installed in the wrong location. 2T-78A & 2T-78B (locations reversed)	Rework	6-5-78	E. Estes
1325	4-25-78	C-38. Ten(10) ASTM A449 Bolts were received on site without required markings.	Reject	5-23-78	R. Montreuil
1326	4-25-78	C-304. Undersized weld measurement on welded angle iron connection.	Rework		
1327	4-25-78	C-231. 14 cadwelds shot by an unqualified shooter Aux. Bldg. El. 678' + 25' E of 9.4 line	Use as is	5-19-78	J. Moyers
1328	4-27-78	C-304. Clips to W8x17 Beam were welded and released from Combo Shop without QC Documentation Verification or accep.	Use as is		
1329	4-27-78	Dwg. C62/Welded plates were fabricated in lieu of bent plates without Project approved drawings.	N/A	5-5-78	J. Huron
1330	4-27-78	Dwg. C-153. Arc Strike 1" high by 1/2" long by 1/8" deep on structural beam #672B7.	Std.Repair	5-9-78	J. Huron
1331	4-28-78	Dwg. C-695. 2Incore Instrumentation Tank Supports were fabricated in the Combo Shop to an uncontrolled sketch.	Rework		
1332	4-28-78	P-22282. 1611 pcs. of 3/4" nuts have illegible marking.	Reject		

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2 NCR NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
1333	4-28-78	C-233. Hatch Cover MK# 4S1 was received at the jobsite with one shear stud broken off.	Repair	7-28-78	G. Yeisley
1334	4-28-78	C-50. Equipment Hatch s/n 30398 has a charred area on the exterior coating covering approx. 5'.	Repair		
1335	5-2-78	E-20. 12" Weld Neck Flange, 22-111, has scratches on the raised machined surface.	Rework	5-25-78	F. R. Ringe
1336	5-2-78	A-13. Concrete Block Wall #114 - Work on wall was started without QC notification. Elev. 634' "E" & 5.6	Use as is	8-21-78	S. Gelnett
1337	5-3-78	C-208. Cement Users Tests #67 & 66 exceeded test range of 1200 tons.	Use as is	7-25-78	T. Lieb
1338	5-5-78	F-26614. 5" SA-106 GR. B Sch. 80 CS Pipe delivered to jobsite with only the Heat #'s marked on the material.	Use as is	6-12-78	D. Duff
1339	5-8-78	E-20. Elec. Penetration Assembly-pkgs lacking Quality Verification pkg & Qualification Test.	Doc. Rework		
1340	5-8-78	Dwg. E-717. W8x17 Beam & Seismic Tray Hanger enclosed in concrete block wall - The Beam Bolts were not torqued.	Repair Rework		
1341	5-8-78	M-64. Tanks received have excessive rust, loose desiccant cutting slag, weld flux & documentation problems.	Doc. Rework Reject		
1342	5-9-78	M-305. Material did not have heat numbers or heat codes marked on the pipe. Missing G-321-D, Mill Test - no heat #'s.	Doc Rework	5-17-78	H. D. Foster
1343	5-9-78	E-20. Quality Verification Package for Weld Neck Flange P/N50013077-01 has not been received @ the jobsite.	Doc Rework	6-16-78	J. R. Slifer
1344	5-9-78	Dwg. A-20. Block Wall #40 has been constructed with no provisions to accomodate installation of rebar or lintel for opening.	Rework		
1345	5-17-78	F-13440. Structural Embedments, numerous problems noted in a review of the weld inspection records	Rework Use as is Reject	8-9-78	J. C. Huron
1346	5-17-78	Misc. Structural Steel, Numerous PO #'s, numerous problems noted in a review of the weld inspection records.	Use as is	8-9-78	P. VanderVeer
1347	5-11-78	C-231. Grout Pads for Unit 2 RPV Sole Pads have unsound areas. Elev. 602' - 3 1/2"	Reject Repair	7-24-78	K. Fitzgerald
1348	5-12-78	Spool 1HCB-14-8612-6-2. Existing spool identification does not agree with design dwg. 2.8" pieces no heat ID	Rework	8-15-78	L. Brown
1349	5-11-78	C-140, C-174. Concrete coverage for #11 Int. Wall Bars exceeds limits @ Const. joint of temporary opening. AB 685'	Use as is	5-19-78	J. Moyers
1350	5-11-78	C-233. Channel Embeds numbered 1SWBWER-L, 1SWBWER-R & 1SWBWER-2 have welded joints that are neither snug nor flush	N/A	6-2-78	J. W. Miller
1351	5-12-78	Dwg. C-277. One #8 vertical rebar cut @ the temporary penetration in 5.6 line wall. Aux. Wldg. Elev. 642' 6" Uno an in		6-22-78	S. Gelnett



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1352	5-17-78	E-42. Seismic Cable Tray Support - A325 bolts were torqued with wrench found to be out of calibration. Aux.			
1353	5-17-78	E-20. Elec. Penetration Assemblies - Doc. Pkg. not received at jobsite. Pent. 22152 has 0 psig reading.	Doc. Rework Std. Repair		
1354	5-18-78	E-20. Elec. Penetration Assemblies - Doc. Pkg not received at jobsite. s/n AS-131-5 Nameplate discrepancy.	Doc. Rework Std. Repair		
1355	5-18-78	Dwg. C-229. FPGW's shown on Dwg. lack details of groove welded joints and preparation of mat'l's. Aux. El. 704'	Use as is	6-30-78	J. C. Huron
1356	5-18-78	G-27. FSK-MPC-2-2021 - The WR-5 and WR-6s for FSK-MPC-2-2021 Field Weld 4 have been lost during in-process welding.	Use as is	6-7-78	J. C. Huron
1357	5-18-78	C-653. Arc Gouges on Beam, caused by faulty welding cable. Cont. #2 El. 659'	Repair		
1358	5-18-78	M-1.31 & 1.32. B&W QA Data Packages for Instrumentation Cabinets have not been received.	Doc. Rework		
1359	5-18-78	J-202. Welding was begun on Inst. Panel 20150 with no proper authorization. Elev. 685' Aux. 2	Rework	7-19-78	J. C. Huron
1360	5-22-78	C-304. FAW's found to be unacceptable due to undersize oversize, and other weld defects. Aux. Bldg.	Repair Use as is		
1361	5-23-78	M-104A. Pipe Spool 2FCB-14-S604-5-2 cannot be uniquely identified - 2 spools have same number.	Rework Use as is	8-30-78	R. Moray
1362	5-24-78	C-231. Cadweld test splices were lost exceeding test frequency for production and sister splices.	Use as is	8-4-78	S. Kirker
1363	5-25-78	Dwg. C-651. Angle to E-3 #mbd fillet weld undersized Cont. #2 Elev. 626'	Rework		
1364	5-30-78	A-13. Compressive strength of Type M mortar does not meet spec. requirements.	Use as is	6-20-78	T. Lieb
1365	5-26-78	M-215. 10 pcs CS Pipe - 2 pcs removed from receiving without QC inspection, traceable heats not marked, no traceable doc.	Reject		
1366	5-26-78	M-123C. Check Valves 2 $\frac{1}{2}$ -CCB-CK-1 S/N 2N-799 & 2 $\frac{1}{2}$ -CCB-CK-1 S/N 2N-789 are missing the Hinge Pin Covers. Aux. 605'	Rework		
1367	5-31-78	Dwg. C-195. MCC Units Fillet Welds - Distance between welds do not agree with that called out on dwg. Aux.	Use as is	6-22-78	J. C. Huron
1368	5-31-78	C-208. Five concrete curing tanks stored in temperatures exceeding requirements called out by ASTM C-31-69.	Use as is	6-15-78	T. Lieb
1369	6-1-78	M-104A. Two Pipe Spools have the same spool number. 1FCB-14-S603-5-2 - Aux. Elev. 600'	Use as is	8-28-78	K. Nilson
1370	6-2-78	M-336. Nuclear Wye Strainers - Code data plates detached from strainers, incorrectly identified, C-321D incorrect.	Doc. Rework		

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1371	6-5-78	M-204. Flued Head # 272 - Edge of the face on Flued Head has an arc strike approx. 1/2" wide X 5/8" long & .050 deep	Std. Repair		
1372	6-5-78	M-204. Spool 2CCB-10-S604-1-1 - The base metal of the spool has been arc struck. Cont. #2	Rework		
1373	6-6-78	C-306. During relocation of 2 hangers 8-OHCC-50-H10 & 8-OHCC-51-H1 several of the of the grouted holes had voids.	Aux.		
1374	6-6-78	E-20. Cable Penetrations - Documentation pkgs & Qualification Test have not been received for 1Z113, 1Z121 & 2Z154.	Doc. Rework		
1375	6-9-78	BQAM, Stock ASME-Sec. NF Mat'l. POs issued to Supplier w/o Procurement Insp. dept. survey being accomplished.	Use as is	8-22-78	J. Slifer
1376	6-12-78	E-20. Cable Penetrations - Documentation and Qualification Test have not been supplied by the vendor.	Doc. Rework		
1377	6-14-78	Dwg. C-96. Location of Penetration - as-built does not agree with dwg. Service Water Pump Structure.	Use as is	6-23-78	S. Kirker
1378	6-14-78	M-215. Valve Handwheel - G-321D & Quality Documentation for # 104437 12" Handwheel has not been received.	Doc. Rework	7-14-78	D. A. Delaney
1379	6-14-78	M-132. Valve Handwheels - G-321D & Quality Documentation for 2 ea. # 96403 12" Handwheels has not been received.	Doc. Rework	7-14-78	D. A. Delaney
1380	6-15-78	M-305. 2" Sch. 80 ASME SA-160 Pipe - Pipe is not traceable to any certification supplied due to illegible marking.	Reject		
1381	6-15-78	C-305. Three #6 Rebar were cut within a radial distance of ten feet. Aux. Bldg.	Use as is	6-23-78	S. Kirker
1382	6-15-78	BQAM, Stock ASME-Sec. NF Mat'l. POs issued to Supplier w/o Procurement Insp. dept. survey being accomplished.	Reject	8-22-78	J. Slifer
1383	6-15-78	A-41. Surface Temp. of steel fell below dew point requirement of 5°. Cont. 1 & 2 - Cont. #2 Incore Inst. Tunnel.	Use as is	8-24-78	G. Yeisley
1384	6-19-78	C-233 - F-3043 - 286 Nelson Studs received without a mill test.	Reject		
1385	6-19-78	F-26831 - ASME SA 537 Class I Plate - Certified MTR sent does not agree with PO	Rework	7-5-78	K. Deitz
1386	6-20-78	C-231 - Unit #2 Cadweld location Records misplaced.			
1387	6-22-78	E-20. Cable Penetrations - Doc. has not been supplied by the vendor. Cable chaffing on penetration 2Z103	Doc. Rework		
1388	6-22-78	C-230. Concrete placed 3/23/78 in Pour A(672.5)c' failed to meet the min. compressive strength test @ 90 days.	Use as is	7-25-78	T. Lieb
1389	6-23-78	C-233. Misc. Metal under various P anomalies noted in a review of doc O's have numerous pkgs.	Doc. Rework	8-17-78	H. Foster



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1390	6-22-78	BOAM, Stock ASME-Sec. NF Mat'l PO's issued to Supplier w/o Procurement Insp. Dept. survey being accomplished.	Use as is	8-22-78	J. Slifer
1391	6-22-78	E-11. Elec. Test Reports for Battery Chargers do not include Documentation required by Specification.	Doc. Rework		
1392	6-22-78	Dwg. E-750. Cable Tray Hanger is not installed according to the project approved detail. Containment #2	Use as is	8-28-78	D. C. Thompson
1393	6-22-78	Dwg. E-750. Cable Tray Hangers do not have vertical legs installed as detail Dwg. Containment #2	Use as is		
1394	6-26-78	M-163AC - Recirculating Air Cooling Units - Missing & illegible documentation for 2VM-56A & B	Doc. Rework		
1395	6-26-78	M-104A. Pipe Spool 2HCB-2-S611-3-7 - Nipple is not welded to 18" elbow as shown in approved Vendor Print.	N/A	6-28-78	J. Slifer
1396	6-27-78	M-117AC. 1/4 Motor Operated Valves delivered to the jobsite with an accumulation of dirt/rust/loose screws.	Reject		
1397	6-28-78	C-208. Concrete Test Cylinders stored at nonconforming temperature. 8 Tanks on 6/27/78	Use as is		
1398	6-29-78	Dwg. C-95. Anchor Bolts for Panels S-3 & S-4 are 3" off location. SWPS @ 658'6"	Repair Use as is		
1399	6-30-78	F-28915, 28658, 28759 Nuts & Bolts do not meet marking requirements.	Reject	7-20-78	R. A. Montreuil
1400	7-6-78	F-26720. Stock pipe rec'd with no G-321-D. Spool not put into designated receiving area.	No Nonconformance	7-11-78	H. D. Foster
1401	7-7-78	M-204. 1" Sch 160 SS Pipe - heat traceability missing due to improper marking of 2 pcs of pipe.	Reject		
1402	7-10-78	M-1.17 Non-receipt of Recieving documentation Decay Heat Removal Pumps 1p60A and 2P60B	Doc. Rework	7-24-78	J. Slifer
1403	7-10-78	Spec. C-230. Slump @ EOL fell above requirements of specification. Pour A(693.75)'b'			
1404	7-13-78	M-163AC. Doc. supplied w/recirculating Air Cooling Units missing, illigible. Numbers vary.	Doc. Rework		
1405	7-13-78	M-163AC. Some documentation for recirculating air cooling units illegible, not traceable.	Doc. Rework		
1406	7-13-78	M-163AC. No Quality Verification Documentation received for recirculating air cooling units.			
1407	7-14-78	M-104A. Incorrect amounts of documentation rec'd for spools 2FLB-12-S632-3-1 & OHBC-1-S618-1-2	Doc. Rework	8-1-78	M. Donovan
1408	7-17-78	C-230. Sand gradation had 69% passing the #30 sieve thereby exceeding allowable limit by 9%.	Use as is	8-15-78	T. Lieb



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2 NCR NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
1409	7-17-78	Dwg. C-96. Mislocated Anchor Bolts on sluice gate frame extensions.			
1410	7-18-78	M-1.19. Nuclear Power Generation Division QA Hold placed on C of C for Core Flooding Tank - 1T-63A	Doc. Rework		
1411	7-18-78	M-118A. Numerous documentation problems for main steam isolation valve.	Doc. Rework		
1412	7-18-78	C-198. Rebar dowels broken off during installation of foundations for safeguards chilled water pumps	Repair		
1413	7-19-78	M-132AC. Quality Verification Doc. not rec'd for valve returned from the Vendor on NCR 1216	Doc. Rework		
1414	7-19-78	C-24. G-321-D rec'd w/motor operated lifting devices has revisions that vary from the specification.	Doc. Rework	8-8-78	T. Christofferson
1415	7-20-78	C-94. Use of D 1 Concrete in the Service Water Pump Structure	Use as is	9-1-78	B. T. Cheek
1416	7-21-78	J-201. Certification of compliance not available for Control Boards.	Doc. Rework	8-18-78	K. Deitz
1417	7-21-78	E-19. Required documentation is not available for AC Power Supplies.	Doc. Rework		
1418	7-21-78	C-233 Required Documentation is not available for NPS shipment number NPSI-6837/cc	Doc. Rework	8-4-78	R. Montreuil
1419	7-24-78	C-208. 1 1/2" Aggregate failed to meet gradation test			
1420	7-24-78	M-14. Elec. Motor Drivers/Aux. Feedwater Pumps. Seismic calculations have not been supplied to Project prior to shipment release.	Doc. Rework Use as is		
1421	7-25-78	M-104. Missing Documentation for Fabricated Pipe 2HCB-50-S614-3-1.	Rework		
1422	7-25-78	CRDM'S Position Indicator's - Humidity of storage area too high, making quality of items indeterminate.			
1423	7-25-78	C-304. Wireway Support was fabricated without the use of a design drawing. Elev. 646. Aux.	N/A		
1424	7-25-78	M-104A. Spool 2 HCB-54-614-3-1A - Wall thickness is less than minimum allowable thickness. Elev. 605' - 273'			
1425	7-25-78	J-229. Temperature Switch Thermowells - MFR has not been certified by mat'l manufacture as required.	N/A	7-26-78	J. Slifer
1426	7-26-78	FPG -F1-70. Waterstop in storage area not covered - exposed to direct sunlight.	Reject		
1427	7-26-78	M-1.17. Pump stuffing box flange on the same side as the motor coupling-Decay Mt. Rem. Pump, 2P60A	Reject	8-22-78	J. Slifer

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1428	7-26-78	Dwg. M-848. C6x10.5 Mechanical Inserts were installed exceeding the 6" tolerance.			
1429	7-26-78	M-104A. Pipe Spools - 2CCB-24-S604-4-3 radiographic examination not performed, 2GCB-16-S613-2-2 spool dented.	Doc. Rework Std. Repair		
1430	7-26-78	M-104A. Quality Verification Documentation sent is indeterminate. (2 Spools)	N/A	7-31-78	M. Donovan
1431	7-27-78	C-231. Block Wall #18 - Was found with a dry surface Elev. 659'	Use as is	8-30-78	S. Kirker
1432	7-27-78	M-104A. Pipe Spool 1HCB-19-S612-8-4 - No Documentation received for repair work done, rust on the exterior of pipe.	Reject		
1433	7-28-78	M-125C. 3 Nuclear Service Valves - Documentation pkgs contain illegible & untraceable documentation.	Doc. Rework		
1434	7-28-78	J-256AC. Nuclear Service Solenoid Valves - Documentation missing cleaning verification report.	Doc. Rework	8-18-78	D. Delaney
1435	7-28-78	E-7AC. Motor Control Center, MCC-2B23 Sections 1,2,3, 4, & 5 was delivered to the jobsite with the top crushed.	Rework		
1436	7-31-78	Dwg. C-99. AWS W18x55 Beams & Stiffeners - Welded without a Fit up inspection. Ser. Water Pump Struc. Elev. 635'	Use as is	8-7-78	J. C. Huron
1437	7-31-78	M-125C. 2 6" HGC-GT-DL Valves - Actual bore of each valve does not agree with that called out by Vendor Dwg.	Reject		
1438	7-31-78	M-204. Flange Connections - Flanges were torqued up without the use of a lubricant.	N/A	9-8-78	L. Brown
1439	7-31-78	M-305. Certification attached to Albert Pipe Letter does not indicate applicable addendum of the code.	Doc. Rework		
1440	7-31-78	M-104A. Illegible or damaged Code Data Report and associated records- ITT Grinnell	Doc. Rework	8-25-78	K. Deitz
1441	7-31-78	FSK-M-OHCC-72-1. Socket weld made without an IR written or a WR-6 evident.			
1442	7-31-78	BQAM, Stock ASME-Sec. NF Mat'l PO's issued to Supplier w/o Procurement Insp. Dept. survey being accomplished.	Use as is	8-22-78	J. Slifer
1443	8-1-78	J-256AC. Nuclear Service Solenoid Valves - Cleaning Verification Reports not included in Doc. Pkg.	Doc. Rework		
1444	8-1-78	F-22282. 3/4" x 4" and 5/8" x 2 3/4 Stud Bolts - are stamped with the wrong heat code.	Doc Rework		
1445	8-1-78	F-28350. 8 pcs. of 1 1/2" x 1'-6" x 1'-4" Shim Plates - Certified Material Test Reports were not received.	Doc. Rework		
1446	8-1-78	F-28055. 20 pcs SS Nuts Grade 8F - Do not meet marking reqs.	Reject		

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2 NCR NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
1447	8-1-78	F-3107. Piece mark numbers are not visible on material NPS Shipment number NPSI-6845 & NPSI-6842	Rework	9-1-78	R. Montreuil
1448	8-2-78	Spec. C-231. ACI-347 - Formwork for concrete constructed such that concrete is not poured to correct dim. 672'5 to 693'6	Rework & Use as is		
1449	8-2-78	M-18AC. Foundation Equip. for Emer. Diesel Gen. - fillet welds delivered have undersize legs & throats, undercutting, etc.	Use as is Doc. Rework		
1450	8-2-78	M-106AC. Pipe Hangers EMD-060-01, No Quality Verification Documentation received on site for this material.	Doc. Rework	9-1-78	R. Montreuil
1451	8-3-78	J-256AC. Nuclear Service Solenoid Valves - Cleaning Verification Reports were not included in Doc. Pkg.	Doc. Rework		
1452	8-2-78	BOAM, Stock ASME-Sec. NF Mat'l PO's issued to Supplier w/o Procurement Insp. Dept. survey being accomplished.	Use as is	8-22-78	J. Slifer
1453	8-2-78	C-231. Form Removal - Tank Farm Footer forms for the second tank farm footer were broken while removing previous forms.	Use as is	8-25-78 8-11-78	E. Check
1454	8-3-78	C-231. Concrete Curing - 3' of formwork @ construction joint ( pours #4 & 5 ) were stripped after 24 hours. Tank Farm	Use as is	8-23-78	S. Kirker
1455	8-3-78	M-204. Field Weld #18, Dwg. M-618 Sh. 1 was welded on without inspection by FWE or QCWE. SW Bldg. El. 623'	Rework	8-30-78	B. Daly
1456	8-3-78	FSK-M-1HBC-498-2 - Yard Piping-Diesel Gen. Return Line has been bent & is not in accordance with the dwg. Test	Rework #976	8-14-78	L. Brown
1457	8-3-78	M-117AC. Valve 6"-EBB-GT-1Mo-3177A-RP, Shop Inspector did not sign page one of Form G-321-D. ( Item #8.1 )	Doc. Rework	8-7-78	J. Slifer
1458	8-4-78	E-42/ C-305 Expansion anchors not installed with required embedment.			
1459	8-4-78	M-104A. 2 Spools, 1ELEB-9-S631-1-9, 2ELEB-3-S639-13-1, delivered to site with no dessicant/rust scale.			
1460	8-8-78	J-256. Valves, No Cleaning Verification Report was included in the documentation pkg.			
1461	8-7-78	M-14AC. Turbine Drivers for Aux. Feedwater Pumps 1PO5B & 2PO5B. Doc pkgs & Form G-321D do not agree.	Doc. Rework		
1462	8-8-78	M-61. Makeup Filters & Spare Filter Cartridges - Misc. Documentation problems, no radiographic film received.	Doc. Rework	8-25-78	D. Delaney
1463	8-8-78	M-106AC. Pipe Hanger 657-44-10 is required to be painted in accordance with Spec. FC-49, Mat'l received unpainted.			
1464	8-9-78	F-3103. Struc. Steel Beams - delivered to the jobsite with re-entrant corners cut past the point of tangency.	Reject		
1465	8-9-78	M-204. Emer. Diesel Oil Supply Lines - have permanent welded attachments for which mat'l cert. has not been furnished.			

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1466	8-10-78	J-204. Seismic Instrument Rack - tagging of rack does not agree with Bechtel Dwg. J-393.(panel 2C166)	Rework	9-8-78	J. Slifer
1467	8-10-78	J-204. Differential Pressure transmitter - Non-Q documentation was delivered. (1LT-2107A & 2LT-2207A)			
1468	8-14-78	M-305. Material received against M-305 without the required traceability.	Doc.Rework Reject		
1469	8-14-78	F-26182. 2 pcs 2 1/2" 45° CS Elbows - manufactures name and heat number are illegible.	Reject		
1470	8-14-78	M 1.7. Reactor Coolant Pump Motor Flywheel - Data pkg does not have a signed B & W NPGD Cert. of Conformance.	Doc. Rework		
1471	8-15-78	F-18375. Deformed Bar Anchors, do not meet min. tensile strength according to documentation received.			
1472	8-16-78	M-117AC. Nuclear Service Valves - Items # 11.1, 11.2, 11.3, 12.1 have numerous documentation problems.	Doc.Rework		
1473	8-15-78	F-27833. Zone 5A Rip Rap - mat'l received on ticket # 77389 does not meet size requirement called out by PO.	Reject		
1474	8-17-78	M-125C. Numerous documentation problems on Valve s/n 5205-21-1-9, 10"HCB-GT-DRL.	Doc.Rework		
1475	8-17-78	M-125C. Numerous Doc. problems on valves s/n 5205-06-1-1,2,3,4	Doc.Rework		
1476	8-17-78	M-125C. 4 Valves, missing repair verif. reports, paint flaking off valve operator, heat charts not legible/traceable			
1477	8-17-78	M-117AC. Doc. problems on 2 vlaves, s/n 4632-16-1-92 & 4632-16-1-94.	Doc.Rework		
1478	8-17-78	M-117AC. Doc. problems on 4 valves s/n 4632-13-1-90, 88,89,87			
1479	8-17-78	F-28362. Mainstream Anchors & Restraint Supports - 3 Beams delivered to jobsite with numerous Doc. problems.	Rework		
1480	8-18-78	CRD Primary AC Breaker - Relative humidity at which units were stored exceeded 60% requirement.			
1481	8-21-78	Dwg. C-416. Embeds 601-3-12 & 601-3-13 were installed out of Dwg. design elev.			
1482	8-21-78	Civil QC (Survey) Settlement in the Diesel Generator Foundations and Structure			
1483	8-21-78	M-215. 4 pcs 6" Sch. 10 Tees - Heat # on Certified MTR does not agree with that stamped on pipe.	Doc.Rework		
1484	8-21-78	M-215. 6 pcs 12" Flanges - Form G-321D was not included on documentation pkg.	Doc.Rework	8-31-78	T. Christofferson

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2 NCR NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
1485	8-21-78	M-104AC. 3" Flange - Form G-321D sent with material was the incorrect form.	Doc.Rework	9-12-78	M. Donovan
1486	8-21-78	C-231. Form Removal - forms were removed after the 24 hour time period. (Pour # DG(662)d')	Use as is	9-8-78	E. Dutton
1487	8-22-78	F-21895. ASME Fittings, No MTR received, Form NM-1, Data Report required - (NM-2 sent)	Doc.Rework		
1488	8-23-78	F-29536. Nelson Studs - material delivered to the jobsite with no Quality Verification Documentation.	Doc. Rework	8-29-78	M. Donovan
1489	8-23-78	M-1.8. Flywheel for RC Pump Motor - Documentation discrepancies.	Doc.Rework		
1490	8-23-78	M-18. Emergency Diesel Generators - No radiographic film was supplied with the Quality Doc. pkgs./wrong reader sheet.	Doc.Rework		
1491	8-24-78	E-532. 2AC024 3" PVC Conduit has been damaged by drilling the concrete slab for anchors under 2D15, Elev. 614.	Repair		
1492	8-24-78	M-104AC. Spool 1ELB-1-S638-13-5 - radiographic inspection report does not agree with spool received.	Doc.Rework		
1493	8-24-78	F-27310. 10 pc's 6" ELLs - Form G-321D was not completed in accordance with "Supplier Entry Instructions"	Doc.Rework	9-5-78	J. L. Gray
1494	8-24-78	J-201. Main Control Boards - seperation criteria not meet for panel 1C14.			
1495	8-25-78	Dwg. C-666. Stainless Steel Embeds placed in concrete with improper size embeds. Cont. #2 Slab Elev. 619'6'			
1496	8-25-78	F-27310. Pipe Fittings - Form G-321D was not completed in accordance with "Supplier Entry Instructions"	Doc.Rework		
1497	8-28-78	C-230. Low Air Entrainment - Aux. Bldg. Roof Deck Pour "5C" had a total of 14cu yd placed with low air. A(704.54)E			
1498	8-28-78	C-305. Contrary to requirements several locations have more than max. bars cut. Aux. Bldg.			
1499	8-30-78	M-204. Spool piece 1CCB-25-S610-1-5 has depressions resulting in minimum wall thickness.			
1500	8-30-78	M-204. Two Spools - 1HCB-14-612-6-2 & 2HCB-14-613-6-1, wall thickness less than minimum allowable.			
1501	8-30-78	M-305. Nuclear Pipe Fittings - Material is not certified to correct ASME code, G-321D & C of C ref: incorrect spec.	Doc.Rework		
1502	8-30-78	M-305. 319" of 1" Sch. 80 Pipe - Pipe has 100% internal rust coverage.			
1503	8-30-78	M-20. Portable Chain Tension Indicator - No Form G-321D & Quality Verification Doc. received	Doc.Rework		



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2 NCR NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
1504	8-30-78	E-20. Electrical Cable Penetrations - Doc. pkgs & Qualification Test have not been supplied by vendor.	Doc.Rework		
1505	8-30-78	Field Weld #17R2 - Dwg. M612 Sh 8 was excavated & rewelded w/o the W-1.00 being issued to the field.			
1506	8-31-78	M-64. Emergency Diesel Oil Day Tank - Doc. pkgs contain illegible MTR's, Heat number discrepancies.	Doc. Rework		
1507	8-31-78	J-275. Cabinets, Engineered Safety Isolation Sys - Numerous Documentation problems. Aux. Bldg Level 354			
1508	9-1-78	F-29237. Wide Flange Beam - One Beam, Heat # 10647 meets neither yield nor tensile requirements.			
1509	9-1-78	F-29202. 1 1/2" A449 Rod - Material is not marked/certified MTR's do not show required chemical results.			
1510	9-1-78	C-24. Sluice Gates/Stem Guides - Stem Guides received for OM-91 A & B are not correct size.			
1511	9-1-78	C-24. Sluice Gates/Stem Guides - Stem Guides received for OM-96 ABC & D are not correct size.			
1512	9-1-78	J-201. Cable Risers - No Quality Verification Documentation has been received.			
1513	9-1-78	F-222R2. Stud Bolts w/2 nuts - Material received with no G-321D or Quality Verification Documentation.			
1514	9-6-78	C-128. Omitted Rebar in the bottom mat of the "Ring Wall" footer. Tank Farm, Tank # 2T-60.	Std.Repair		
1515	9-6-78	C-384. Struc. Embeds - were moved and are out of tolerance. So. Sec. Shield Wall @ 685', W. Sec. Shield Wall @ 685'			
1516	9-6-78	M-204. FSK-M-2HBC-3-3 - Line has been bent, resulting in approx. 2 degree permanent set.			
1517	9-6-78	M-204 Min Wall Thickness is not in accordance with requirements.			
1518	9-7-78	M-611-5. FW #38 Root Pass was welded with a purge gas flow rate of 45 CFH (10-15 CFH required)			
1519	9-7-78	M-611 sht 7 Fieldwelds #11 & 12 - welder not qualified for the thickness of the material welded. Aux. 605'			
1520	9-6-78	J-275AC. Analog Isolators - G-321D forms were not received.			
1521	9-6-78	J-207AC. Engineered Safety Features Actuation Sys - Panels painted incorrect color/Elec. Test Reports not recd.			
1522	9-7-78	M-104A. 6" 90 L/R Elbows - Documentation & Marking problems			



QUALITY ASSURANCE FINDING

1. PROJECT/DEPARTMENT/SUPPLIER Champion		2. TYPE OF AUDIT/SURVEILLANCE OFFICE <input type="checkbox"/> FIELD <input checked="" type="checkbox"/> Construction		3. AUDIT IDENT. SA-48 25-3-5	
4. AUDITOR A. Axinn		5. DATE OF FINDING 8/18/78		7. DISCUSSED WITH W. Gunn T. Lieb R. Siple	
6. CONTROLLING DOCUMENT, SECTION, PARAGRAPH, ETC. 7220-C-208 Appendix F-7220-G-22, Rev. 1 Section 3.4					
8. REQUIREMENTS "The Subcontractor shall provide a controlled copy of his Quality Assurance Manual (or Program Plan) to the Contractor within thirty (30) days after date of award. Any subsequent revisions to the Quality Assurance Manual (or Program Plan) shall also be submitted to the Contractor for review and approval prior to implementation."					
9. FINDING Revision 12 of the Champion Quality Control Manual has been reviewed and approved for use by Bechtel. Revisions 13, 14 and 15 have not yet been transmitted to Champion with Bechtel approvals. Champion's on-site batch plant has been implementing revisions 13, 14 and 15 since 5/11/78. Also, these revisions are referenced in the index and dated 3/3/77, which is in error.					
10. RECOMMENDED ACTION/S 1. Correct index in Champion Quality Control Manual when Bechtel approval to revisions 13, 14 and 15 is received. 2. Compare manual revisions 13, 14 and 15 with revision 12 and determine work performed to unapproved revisions and correct. 3. Take appropriate corrective action to assure that implementation of unapproved QC manual revisions does not recur.					
11. SCHEDULED COMPLETION DATE 9-22-78		12. RESPONSIBILITY FOR CORRECTIVE ACTION J. E. Nowgen			
13. CORRECTIVE ACTION TAKEN					
14. DATE COMPLETED		15. SUBMITTED BY RESPONSIBLE AUTHORITY		16. CORRECTIVE ACTION	
				ACCEPTED NOT ACCEPTED	
17. VERIFICATION ACTIONS BY QAE					
18. IMPLEMENTATION					DATE
ACCEPTED	NOT ACCEPTED				QAE
19. DISTRIBUTION					

# QUALITY ACTION REQUEST

QA A1405

From: <u>L. Dreisbach</u> <u>LADreisbach</u> <span style="float: right;">①</span>	
To: <u>W. L. Barclay</u> <span style="float: right;">②</span>	Control Document ref.: <u>GWS-Sil Page 14</u> <span style="float: right;">③</span>
QAR Ident. No.: <u>SD-101</u> <span style="float: right;">④</span>	
Action Requested: <u>Monitor M24.2.3 identified three (3) socket welds that do not have fit-up scribe lines to determine depth of pipe engagement as required by welding procedure GWS-Sil page 11. The welds are: FW 2,4 and 5 on pipe spool OHCC-63-2 located on elevation 614 of the Aux. Bldg. Note: QC welding was unable to locate their scribe lines also.</u> <span style="float: right;">⑤</span>	
ACTION REQUESTED: 1. Issue an NCR for the three subject welds to obtain specific resolution of the omitted scribe lines or provide justification for not doing so.	
2. Provide assurance that all other socket welds have been fit-up properly as evidenced by visible scribe lines. (Continued on next page.)	
Signature: <u>LADreisbach</u> <span style="float: right;">⑥</span>	Date: <u>9-21-78</u> <span style="float: right;">⑦</span>
Reply Requested by: <u>9-22-78</u> <span style="float: right;">⑧</span>	
Reply: <span style="float: right;">⑨</span>	
Signature: <span style="float: right;">⑩</span>	Date: <span style="float: right;">⑪</span>
Action Verified: <span style="float: right;">⑫</span>	Date: <span style="float: right;">⑬</span>

8/2/74

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J. L. Corley  
August 21, 1978  
Page 2

3. Take appropriate corrective action to preclude recurrence of this problem.

WAD

# Bechtel Power Corporation

Post Office Box 2167  
Midland, Michigan 48640



August 21, 1978

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

Attention: J. L. Corley

Job 7220 Midland Project  
Project QAR SD-100 Issue  
LAD-405

Dear Mr. Corley:

Attached for your information is a copy of the subject QAR issue.

Very truly yours,

L. A. Dreisbach  
Project Quality Assurance Engineer

LAD/ES/re

Attachment

QAR ROUTE	INFO	ACT.
LOAE		
CIVIL (1)		
MECH		
PIPING		
ELECT.		
INST.		
TRENDS		
SECY		
FILE NO.		

<u>SPOOL</u>	<u>LOCATION</u>
OHCC-63-2	Nipple at FW 2
OHCC-75-1	Nipple at FW 12
" "	Nipple at FW 2
OHCC-58-1	End of 45° el.
Tank OTE0924E	Bull of Tee
	Penetration #15-620-1 and #16-618-86

- NOTE: (1) All of the pipe ends in this general area are covered only with one layer of tape, much of which has been damaged. Spec. 204, para. 6.4 requires dust proof covers be installed. The durability of 1 layer of tape seems inadequate.
- (2) QC Mechanical/Pipe has reportedly surveyed the area and closed all open ends.

ACTION REQUESTED:

1. Review other areas and provide assurance that all open ended pipes are covered with dust proof covers as required by Spec. 11-204.
2. Evaluate the effectiveness of the QC controls and surveillance inspections of cleanliness closures and take appropriate action.

LAD



Bechtel Power Corporation  
Inter-office Memorandum

To J. F. Newgen  
Subject Bechtel Field Procedures

Date August 16, 1978  
From L. A. Dreisbach  
Of Quality Assurance

Copies to  
A. Boos w/a  
W. Barclay w/a  
W. Moring  
P. Martinez

At Job 7220 Midland Project  
LAD: 395 Action Item: 403

Reference: CPCo letter - Bechtel Field Procedures, dated August 10, 1978.

The reference letter requests a meeting to discuss inclusion of notification to QC for inspection in field procedures.

Please review the attached letter and advise the writer as to when such a meeting could be scheduled.

A response is requested by August 25, 1978.

*LADreisbach*

L. A. Dreisbach  
Project Quality Assurance Engineer

LAD/re

QA ROUTE	NO	ACT.
MEAS		
CIVIL (M)		
PIPE		
ELECT.		
INST.		
TRUSS		
SECTY		
FILE NO.		

SD-99  
AI: 403





Consumers  
Power  
Company

General Offices: 212 West Michigan Avenue, Jackson, Michigan 49201 • Area Code 517 786-0550

August 10, 1978

Mr J M Klacking  
Bechtel Power Corporation  
PO Box 1000  
Ann Arbor, MI 48106

RECEIVED  
AUG 15 1978  
BECHTEL POWER CORP.  
JOB 7130

CA	INFO	ACT.
ROUTE		
LOVE		
TVL (C)		
...		
PIPING		
...		
INSU.		
...		
SECY		
FILE NO.		

BECHTEL FIELD PROCEDURES

Reference: WRBird letter to JMKlacking<sup>185</sup> Serial WRB 94-78 dated June 26, 1978

The referenced letter requested a meeting be set up to discuss the results of the following two actions:

1. CPCo should identify any particular areas where a specific signoff or notification step is required in field procedures.
2. Bechtel should review the scope of field procedures; in particular, work activities versus the present inspection records.

Attached is a matrix for the field procedures covering mechanical and electrical activities for which CPCo has indicated where we feel either in-process or completion of work notification is required to call for inspection. We held off for some time in sending this matrix as it appeared the work going into PIE-1.300 would eliminate the need for specific call out in the procedures. We find, however, that this procedure does not go far enough in that the QPS does not incorporate all the electrical activities.

Consumers is ready for a meeting on the subject as our action item is complete. Please review the attached material and schedule a meeting with the appropriate Bechtel representatives.

*WR Bird*  
W R Bird  
Section Head -  
Quality Assurance Engineering-Midland

CC: RCRauman                      JLCorley                      PAMartinez  
      RLCastleberry                GSKeeley                    JFNewgen  
      TCCooke                        PRKyncer                    MJSchaeffer  
      IADriesbach                    BMMarguglio                File: 5.6

Field Procedure No.	Description	Is QC Notified	Should QC Be Notified	Justification/Notes
FPE-1.000	Raceway, Cable and Termination Document Control	<u>In-Process</u> Yes, para. 4.3	<u>In-Process</u> Yes	Verification of Quality in construction is achieved through inspection, examination, testing, checking and review of work activities and documentation.  Checking and review of work activities can best be made as construction progresses from start to finish.
		<u>Completion of Work</u> Yes, para. 5.2.5	<u>Completion of Work</u> Yes	Notice of completion of work is necessary so QC can complete final inspection as required by SP/PSP G-1.1.
FPE-2.000	Insulation Resistance (Megger) Testing	<u>In-Process</u> Yes, para. 4.4	<u>In-Process</u> Yes	Test procedure and instrument data should be verified at time testing is accomplished.
		<u>Completion of Work</u> No	<u>Completion of Work</u> No	Insulation resistance testing (megger) notification to QC only needed at time testing is in process.
FPE-3.000	Installation of Electrical Tray and Conduit	<u>In-Process</u> Yes, para. 6.4	<u>In-Process</u> Yes	Verification of quality in construction is achieved through inspection, examination, testing, checking and review of work activities and documentation.  Bolting tool calibration and welder qualification can best be checked as work progresses from start to finish.
		<u>Completion of Work</u> No	<u>Completion of work</u> Yes	Notice of compliance of work is necessary so QC can complete final inspection as required by SP/PSP G-1.1.

Field Procedure No.	Description	Is QC Notified	Should QC Be Notified	Justification/Notes
FPE-4.000	Installation of Electrical Cable	<u>In-Process</u> Yes, para. 6.7	<u>In-Process</u> Yes	Checking and review of work activities can best be made as construction progresses from start to finish.
		<u>Completion of Work</u> No	<u>Completion of Work</u> Yes	Notice of completion of work is necessary so QC can complete final inspection as required by SP/PSP G-1.1.
FPE-5.000	Station Ground Grid Testing (Not Issued)	<u>In-Process</u>	<u>In-Process</u> Yes	Some items cannot be checked by QC if this ground grid system has progressed too far before QC notification.
		<u>Completion of Work</u>	<u>Completion of Work</u> Yes	Notice of completion of work is necessary so QC can complete final inspection as required by SP/PSP G-1.1.
FPE-6.000	Installation of Electrical Equipment (Not Issued)	<u>In-Process</u>	<u>In-Process</u> Yes	Checking and review of work activities can best be made as construction progresses from start to finish.
		<u>Completion of Work</u>	<u>Completion of Work</u> Yes	Notice of completion of work is necessary so QC can complete final inspection as required by SP/PSP G-1.1.

Field Procedure No.	Description	Is QC Notified	Should QC Be Notified	Justification/Notes
FPE-7.000	Termination of 600 and Lower Voltage Cable	<u>In-Process</u> Yes, para. 5.18	<u>In-Process</u> Yes	Quality of terminations can only be verified accurately at time work is in progress.
		<u>Completion of Work</u> No	<u>Completion of Work</u> Yes	Notice of completion of work is necessary so QC can complete final inspection as required by SP/PSP G-1.1.
FPE-8.000	Termination of Medium Volt Electrical Cable (Not Issued)	<u>In-Process</u>	<u>In-Process</u> Yes	Quality of terminations can only be verified accurately at time work is in progress.
		<u>Completion of Work</u>	<u>Completion of Work</u> Yes.	Notice of completion of work is necessary so QC can complete final inspection as required by SP/PSP G-1.1.
FPE-9.000	Installation of and Termination of Special Connections Coax and Triax Cable (Not Issued)	<u>In-Process</u>	<u>In-Process</u> Yes	Checking and review of work activities can best be made as construction progresses from start to finish.
		<u>Completion of Work</u>	<u>Completion of Work</u> Yes	Notice of completion of work is necessary so QC can complete final inspection as required by SP/PSP G-1.1.

Field Procedure No.	Description	Is QC Notified	Should QC Be Notified	Justification/Notes
FPG-4.000	Storage/Maintenance/Inspection of Equipment	<u>In-Process</u> Yes, para. 7.1.4	<u>In-Process</u> Yes, para. 5.3	PFQCE is responsible for Quality Contr surveillance requirements of FPG-4.000
		<u>Completion of Work</u> Yes, para. 7.2.1	<u>Completion of Work</u> Yes, para. 5.6	QCE is responsible for verifying the satisfactory completion of storage/maintenance/inspection activities.
FPG-5.000	Maintenance/Inspection of Material and Equipment Released for Construction	<u>In-Process</u> Yes, para. 7.1.3	<u>In-Process</u> Yes, para. 5.3	PFQCE is responsible for Quality Contr surveillance requirements of FPG-5.000
		<u>Completion of Work</u> Yes, para. 7.2.1	<u>Completion of Work</u> Yes, para. 5.6	QCE is responsible for verifying the satisfactory completion of maintenance, inspection activities.

Field Procedure No.	Description	Is QC Notified	Should QC Be Notified	Justification/Notes
FIE-3.100	Class 1E Tray Support Installation	<u>In-Process</u> No	<u>In-Process</u> Yes	Area electrical field engineer or raceway engineer required to verify proper support type and location. At time of installation, before other items block easy access, is the best time to check the quality of the work.
		<u>Completion of Work</u> No	<u>Completion of Work</u> Yes	Notice of completion of work is necessary so QC can complete final inspection as required by SP/PSP G-1.1.
FIE-3.200	Class 1E Tray Support Fabrication	<u>In-Process</u> Yes, refers to FIE-1.300 (Proposed)	<u>In-Process</u> Yes	Verification of calibration of torque wrench, bolts, and washers used should be made while work is in process.
		<u>Completion of Work</u> No	<u>Completion of Work</u> Yes	Notice of completion of work is necessary so QC can complete final inspection as required by SP/PSP G-1.1.
FIE-3.300	Class 1E Conduit Support Installation	<u>In-Process</u> No	<u>In-Process</u> Yes	Verification of calibration of torque wrench and compliance with technical specifications should be made while work is in process.
		<u>Completion of Work</u> No	<u>Completion of Work</u> Yes	Notice of completion of work is necessary so QC can complete final inspection as required by SP/PSP G-1.1.

Field Procedure No.	Description	Is QC Notified	Should QC Be Notified	Justification/Notes
FIE-3.310	Class 1E Conduit Support Fabrication	<u>In-Process</u> No	<u>In-Process</u> Yes	Verification of calibration of torque wrench and compliance with technical specifications should be made while work is in process.
		<u>Completion of Work</u> No	<u>Completion of Work</u> Yes	Notice of completion of work is necessary so QC can complete final inspection as required by SP/PSP G-1.1.
FIE-3.600	Installation of Containment Electrical Penetrations	<u>In-Process</u> No	<u>In-Process</u> Yes	QC should verify that flange surfaces are not damaged at time electrical penetrations are being installed in place.
		<u>Completion of Work</u> No	<u>Completion of Work</u> Yes	Notice of completion of work is necessary so QC can complete final inspection as required by SP/PSP G-1.1.
FIE-4.100	Receiving, Storage, Identification and Issuing of Cable	<u>In-Process</u> Yes, para. 4.2	<u>In-Process</u> Yes	Para. 3.3.1 of G-5 requires QC, upon notification of arrival of material, to perform receiving inspection.
		<u>Completion of Work</u> No	<u>Completion of Work</u> No	QCE will be notified prior to installation of cable.

Field Procedure No.	Description	Is QC Notified	Should QC Be Notified	Justification/Notes
FIE-6.300	Installation of Control Panels and Control Stations	<u>In-Process</u> No	<u>In-Process</u> Yes	Change in storage status should be known by QC at any time a change is made on Q-listed equipment.
		<u>Completion of Work</u> No	<u>Completion of Work</u> Yes	Notice of completion of work is necessary so QC can complete final inspection as required by SP/PSP G-1.1.
FIE-6.400	Installation of 5KV and 8 KV Switchgear	<u>In-Process</u> Yes	<u>In-Process</u> Yes	Change in storage status should be known by QC at any time a change is made on Q-listed equipment.
		<u>Completion of Work</u> No ?	<u>Completion of Work</u> Yes	Notice of completion of work is necessary so QC can complete final inspection as required by SP/PSP G-1.1.
FIE-700	Installation of Large (50HP and Larger) Electric Motors	<u>In-Process</u> No	<u>In-Process</u> Yes	Change in storage status should be known by QC at any time a change is made on Q-listed equipment.
		<u>Completion of Work</u> No ?	<u>Completion of Work</u> Yes	Notice of completion of work is necessary so QC can complete final inspection as required by SP/PSP G-1.1.



Field Procedure No.	Description	Is QC Notified	Should QC Be Notified	Justification/Notes
FPM-9	Installation of Mechanical Equipment	<u>In-Process</u>	<u>In-Process</u>	FPM is being revised and improved by issuance of 3 or 4 separate procedures. Action pending.
		No	Yes	
FPP-4.000	Cleanliness Control of Piping and Mechanical Equipment	<u>Final</u>	<u>Final</u>	
		No	Yes	
FPP-4.100	General Method for Maintaining Cleanliness of Piping and Associated Components During Installation	<u>In-Process</u>	<u>In-Process</u>	Surveillance would be adequate.
		No	Yes	
FPP-5.000	ASME Pipe and Equipment System Testing Requirements	<u>Final</u>	<u>Final</u>	Addressed and required by QCI.
		No	Yes	
FPP-6.000	Non-ASME Section III Pipe and Equipment System Testing Requirements	<u>In-Process</u>	<u>In-Process</u>	QC is in fact notified off as witness on Q tests signs
		Yes	Yes	
FPP-6.000	Non-ASME Section III Pipe and Equipment System Testing Requirements	<u>In-Process</u>	<u>In-Process</u>	QC is in fact notified off as witness on Q tests signs
		Yes	Yes	

Field Procedure No.	Description	Is QC Notified	Should QC Be Notified	Justification/Notes
		<u>Final</u> No	<u>Final</u> Yes	QC is in fact notified and signs off as witness on Q tests.
FIW-9	EMR's on ASME Code Piping Materials	<u>In-Process</u> Yes	<u>In-Process</u> Yes	
		<u>Final</u> Yes	<u>Final</u> Yes	
FIG-1.500	QC Hold Tags	<u>In-Process</u> Yes	<u>In-Process</u> Yes	
		<u>Final</u> NA	<u>Final</u> NA	
FIG-1.600	Preparation of Shop Work Request Form	<u>In-Process</u> Yes	<u>In-Process</u> Yes	
		<u>Final</u> No	<u>Final</u> Yes	Only if final inspection is required.
FIG-1.610	Instruction for Initiating and Processing Work Orders for the Standish Fabrication Shop	<u>In-Process</u> Yes	<u>In-Process</u> Yes	
		<u>Final</u> No	<u>Final</u> Yes	Only if final inspection is required.
FIG-1.620	Control of Structural Material at the Standish Fabrication Shop	<u>In-Process</u> Yes	<u>In-Process</u> Yes	Receipt

Field Procedure No.	Description	Is QC Notified	Should QC Be Notified	Justification/Notes
		<u>Final</u> No	<u>Final</u> No	
FPG-4.000	Storage	<u>In-Process</u> Yes	<u>In-Process</u> Yes	
		<u>Final</u> No	<u>Final</u> No	
FPG-5.000	Storage Maintenance	<u>In-Process</u> Yes	<u>In-Process</u> Yes	
		<u>Final</u> No	<u>Final</u> No	

# QUALITY ACTION REQUEST

From:	G. L. Richardson	Site QA	Job 7220	①
To:	J. F. Newgen	② Control Document ref.: BOAM Rev. 3, para. 4321-4322	③ QAR Ident. No.: SD-90	④
Action Requested:	BACKGROUND: Quality Assurance Flyer 78-F1, dated 5/3/78 reported a problem where a Bechtel project's procurement documents lacked the requirement for suppliers in accordance with the BOAM. 4321 - "The procurement inspection department prepares and maintains a list of acceptable material manufacturers and material suppliers. Material manufacturers and suppliers listed must have and maintain a quality program meeting Bechtel, and ASME Section III, Div. 1, requirements for the material to be purchased." 4322 - "Quality program demonstrations are established through survey of the manufacturer or supplier by the procurement inspection department. Assistance may be requested . . . , or quality assurance." (i.e. sub-tier suppliers were qualified through			⑤
Signature:	<i>R.C. Heltzer for G.L. Richardson</i>	⑥ Date: 6/26/78	⑦ Reply Requested by: 7/26/78	⑧
Reply:	The BOAM Section III- 11 has been changed by Rev. 3-E to delete the BOAM requirement for non WA-8000 applications, thus eliminating the problem.			⑨
Signature:	JFN/GLR IOM dtd. 8/10/78 A/I -301	⑩ Date:		⑪
Action Verified:	<i>R. Smith</i>	⑫ Date:	8/23/78	⑬

8-2/74

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QAR SD-90 continued:

surveys conducted by the prime material supplier in lieu of Bechtel Procurement Inspection Department Survey.)

The flyer directed that QA verify that the Midland procurement documents for ASME code material contain the requirements for suppliers to purchase material only from material suppliers and material manufacturers qualified in accordance with the above BQAM requirement.

To verify this requirement, QA reviewed five field purchase orders with the following results: (P.O. 7220-F-28287Q, F-27314Q, F-27310Q, F-25910Q and F-28731Q).

ASME Pipe Material - The above requirement appears to be adequately addressed by para. 6.0 of Spec. 7220-M-215 which is part of the purchase orders.

ASME Structural Material (for NF materials) - There is no reference in the orders that would impose the BQAM requirement for sub-tier qualifications on the prime supplier. This has resulted in the prime vendor (J.T. Ryerson) purchasing material from sub-tier suppliers that have not been approved by Bechtel.

#### ACTION REQUESTED

1. In conjunction with Project Engineering, include the BQAM Rev. 3, AD.6, para. 4321 and 4322 requirements in existing and future ASME III material purchase orders.
2. Take appropriate action to assure that material previously received complies with the program requirements.

NOTE: Based on A. Boos telecon to P. Herbert (M&QS - SFHO) on 6/16/78 IOM BCBG-2075 has been issued to J. Klacking to exclude subsection NF pipe support material from the NQAM requirement of BQAM compliance.

Bechtel Power Corporation

Interoffice Memorandum

*Per [unclear] with [unclear] 1/20/78*

To: J. M. Klacking

Subject: Job 7220 Midland Project  
NQAM Amendment Request for  
Field Purchase of ASME  
Section III Pipe Support  
Materials  
BCBG-2075

Copies to: P. A. Martinez  
R. Hermeston  
R. L. Castleberry  
G. L. Richardson  
W. L. Barclay  
F. W. Elliott

File No.

Date: June 19, 1978

From: J. F. Newgen

Of: Construction

At: Midland, MI Ext.

This memo is written to request that a NQAM amendment be prepared to Section III, Number II, Paragraph 2.0 "General" of the NQAM for the Midland job. We request that the last paragraph of Paragraph 2.0 be revised to read:

"Procurement of ASME materials (including filler metal but excluding Subsection NF pipe support materials) and services are to be in accordance with BQAM-ASME III Nuclear Components Manual.

The justification for this position is as follows:

- A) The attached telecon points out that the BQAM-ASME III Nuclear Components Manual is not applicable to pipe supports on the Midland job.
- B) The controls established by the NQAM as supplemented by the requirements of the ASME Section III Code are adequate to assure the quality of the field procured material.

Your immediate attention to this request is appreciated as the amendment can significantly improve our ability to procure the subject materials to support construction.

  
J. F. Newgen

JFH/AJB/sa

Attachments

# Bechtel Power Corporation

## Interoffice Memorandum

To Gary Richardson

Date August 10, 1978

Subject QAR Action Item No. 381

From J. F. Newgen

Of Construction

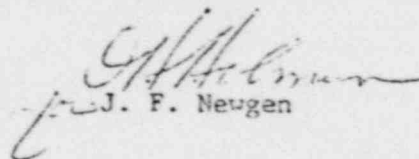
Copies to F. W. Elliott  
A. Boos

At Midland, MI

In response to subject QAR and in addition to our memo dated July 26, 1978, the Purchase Orders placed with J. T. Ryerson for material to be used in the fabrication of pipe hangers and supports is acceptable as purchased based on the following.

J. T. Ryerson, Chicago, Ill., is the holder of a current and valid ASME certificate (MS). The ASME code states that material suppliers who hold a current and valid ASME certificate are responsible for surveying and qualifying the Quality System Program of their applicable Material Manufacturers and to insure that traceability of the material is maintained.


Based on this and revision 3-E to the NQAM (attached), the material purchased on the Ryerson orders is acceptable for use in fabricating hangers and pipe supports to be used in non NAS000 applications.

  
J. F. Newgen

JFN:MEH:jmh

attachment

QA ROUTE	INFO.	ACT.
LOAF	140	
CIVIL (P)		
MECH		
PLUMB		
ELECT		
INSUL		
PAINT		
SCAFF		
STEEL		
WOOD		
CONCRETE		
ASPH/FLY		
PAVEMENT		
WATER		
SEWER		
TELEPHONE		
TELEVISION		
POWER		
WATER SUPPLY		
SEWERAGE		
WATER TREATMENT		
SEWER TREATMENT		
WATER DISTRIBUTION		
SEWER DISTRIBUTION		
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WATER PUMP		
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WATER FITTING		
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WATER GUY		
SEWER GUY		
WATER BRACKET		
SEWER BRACKET		
WATER HANGER		
SEWER HANGER		
WATER SUPPORT		
SEWER SUPPORT		
WATER CLAMP		
SEWER CLAMP		
WATER WELD		
SEWER WELD		
WATER GASKET		
SEWER GASKET		
WATER GROUT		
SEWER GROUT		
WATER ANCHOR		
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WATER BOLT		
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WATER NUT		
SEWER NUT		
WATER WASHER		
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WATER RIVET		
SEWER RIVET		
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CORP  
I-78-314

SD-90  
AI 381

Q 22 00



## FIELD PROCUREMENT

## 1.0 SCOPE

This policy establishes the requirements for initiating and controlling field procurement of materials and services. Field Procurement meets the requirement of ANSI N45.2.13 with the positions described in Section 3.13 of NQAM Appendix C.

The term supplier as used in this policy includes subcontractors.

## 2.0 GENERAL

Field Procurement purchases items as directed by the project material assignment schedule. The Project Engineer is responsible for establishing the technical and quality requirements for all Q-Listed materials and services and for providing these requirements to field construction. Project Field Engineering prepares field material requisitions (FMRs), incorporating appropriate requirements supplied by Project Engineering. Under the direction of the Project Field Quality Control Engineer, field quality control personnel review field purchase order packages to verify inclusion of the quality requirements provided by the Project Engineer.

△ Procurement of ASME materials and services that are subject to the requirements of NAS000 shall be procured in accordance with the BQAM-ASME III Nuclear Components Manual.

## 3.0 REQUIREMENTS

## 3.1 Project Engineering

Project Engineering procedures shall provide for:

3.1.1 Specifying the technical requirements to be met. These requirements may be specified by reference to applicable drawings, specifications, codes, standards and regulations with applicable revision data. The technical requirements specified shall include, where applicable, test, inspection and acceptance criteria and shall include identification, fabrication, cleaning, erecting, packaging, handling, shipping, and extended storage requirements.



Bechtel Power Corporation

Post Office Box 2167  
Midland, Michigan 48640



June 26, 1978

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

Attention: J. L. Corley

Job 7220 Midland Project  
Project QAR SD-90 Issue  
GLR-327  
File: Q2220

Dear Mr. Corley:

Attached for your information is a copy of the subject QAR issue.

Very truly yours,

G. L. Richardson  
LEAD QUALITY ASSURANCE ENGINEER

GLR/ES/sw

Attachment

QA ROUTE	INFO.	ACT.
LQAE		
CIVIL (1)		
MECH		
PIPING	RP	
ELECT.	RG	
INST.		
FOUND		✓
SECY		
FILE NO.	Q2220	

# QUALITY ACTION REQUEST

From: G. L. Richardson		Site QA	Job 7220	①
To: J. F. Newgen		② Control Document ref.: BQAM Rev. 3, para. 4321-4322	③ QAR Ident. No.: SD-90	④
Action Requested: BACKGROUND: Quality Assurance Flyer 78-F4, dated 5/3/78 reported a problem where a Bechtel project's procurement documents lacked the requirement for suppliers in accordance with the BQAM. 4321 - "The procurement inspection department prepares and maintains a list of acceptable material manufacturers and material suppliers. Material manufacturers and suppliers listed must have and maintain a quality program meeting Bechtel, and ASME Section III, Div. 1, requirements for the material to be purchased." 4322 - "Quality program demonstrations are established through survey of the manufacturer or supplier by the procurement inspection department. Assistance may be requested . . . or quality assurance." (i.e. sub-tier suppliers were qualified through				⑤
Signature: <i>R.C. Holler for G.L. Richardson</i>		⑥ Date: 6/26/78	⑦ Reply Requested by: 7/26/78	⑧
Reply:				⑨
Signature:		⑩ Date:	⑪	
Action Verified:		⑫ Date:	⑬	

8/2/78

QAR SD-90 continued:

surveys conducted by the prime material supplier in lieu of Bechtel Procurement Inspection Department Survey.)

The flyer directed that QA verify that the Midland procurement documents for ASME code material contain the requirements for suppliers to purchase material only from material suppliers and material manufacturers qualified in accordance with the above BQAM requirement.

To verify this requirement, QA reviewed five field purchase orders with the following results: (P.O. 7220-F-28287Q, F-27314Q, F-27310Q, F-25910Q and F-28731Q).

ASME Pipe Material - The above requirement appears to be adequately addressed by para. 6.0 of Spec. 7220-M-215 which is part of the purchase orders.

ASME Structural Material (for NF materials) - There is no reference in the orders that would impose the BQAM requirement for sub-tier qualifications on the prime supplier. This has resulted in the prime vendor (J.T. Ryerson) purchasing material from sub-tier suppliers that have not been approved by Bechtel.

#### ACTION REQUESTED

1. In conjunction with Project Engineering, include the BQAM Rev. 3, AD.6, para. 4321 and 4322 requirements in existing and future ASME III material purchase orders.
2. Take appropriate action to assure that material previously received complies with the program requirements.

NOTE: Based on A. Boos telecon to P. Herbert (M&QS - SFHO) on 6/16/78 IOM BCBG-2075 has been issued to J. Klacking to exclude subsection NF pipe support material from the NQAM requirement of BQAM compliance.

# Bechtel Power Corporation

## Interoffice Memorandum

To Gary Richardson

Date August 10, 1978

Subject QAR Action Item No. 381

From J. F. Newgen

Of Construction

Copies to F. W. Elliott  
A. Boos

At Midland, MI

In response to subject QAR and in addition to our memo dated July 26, 1978, the Purchase Orders placed with J. T. Ryerson for material to be used in the fabrication of pipe hangers and supports is acceptable as purchased based on the following.

J. T. Ryerson, Chicago, Ill., is the holder of a current and valid ASME certificate (MS). The ASME code states that material suppliers who hold a current and valid ASME certificate are responsible for surveying and qualifying the Quality System Program of their applicable Material Manufacturers and to insure that traceability of the material is maintained.

Based on this and revision 3-E to the NQAM (attached), the material purchased on the Ryerson orders is acceptable for use in fabricating hangers and pipe supports to be used in non NA8000 applications.

JFN:MEH:jmh

*J. F. Newgen*  
J. F. Newgen

attachment

QA ROUTE	INFO.	ACT.
LQAE	WAD	
CIVIL (1)		
MECH		
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ELECT		
INSTR.		
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SECV		
FILE NO	Q 22 00	AI 381

RECEIVED  
AUG 11 1978  
BECHTEL POWER CORP.  
JOB 7210  
PER *re* I-78-314

SD-90  
AI 381



## FIELD PROCUREMENT

## 1.0 SCOPE

This policy establishes the requirements for initiating and controlling field procurement of materials and services. Field Procurement meets the requirement of ANSI N45.2.13 with the positions described in Section 3.13 of NQAM Appendix C.

The term supplier as used in this policy includes subcontractors.

## 2.0 GENERAL

Field Procurement purchases items as directed by the project material assignment schedule. The Project Engineer is responsible for establishing the technical and quality requirements for all Q-Listed materials and services and for providing these requirements to field construction. Project Field Engineering prepares field material requisitions (FMRs), incorporating appropriate requirements supplied by Project Engineering. Under the direction of the Project Field Quality Control Engineer, field quality control personnel review field purchase order packages to verify inclusion of the quality requirements provided by the Project Engineer.

△ Procurement of ASME materials and services that are subject to the requirements of NAS000 shall be procured in accordance with the EQAM-ASME III Nuclear Components Manual.

## 3.0 REQUIREMENTS

## 3.1 Project Engineering

Project Engineering procedures shall provide for:

3.1.1 Specifying the technical requirements to be met. These requirements may be specified by reference to applicable drawings, specifications, codes, standards and regulations with applicable revision data. The technical requirements specified shall include, where applicable, test, inspection and acceptance criteria and shall include identification, fabrication, cleaning, erecting, packaging, handling, shipping, and extended storage requirements.

# Bechtel Power Corporation

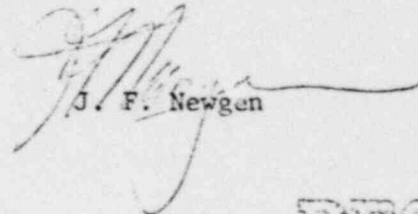
## Interoffice Memorandum

To G. Richardson  
Subject QAF Action Item No. 381  
Copies to F. W. Elliott

Date July 26, 1978  
From J. F. Newgen  
Of Construction  
At Midland, MI

This is an interim response to subject QAR.

Action is proceeding on IOM BCBG-2075. (copy attached) Project engineering and client approval remain to be obtained. Should this approval be received, BOAM requirements of a qualified supplier using only those suppliers qualified by Bechtel survey or by the possession of a current ASME certificate will not apply to the referenced J. T. Ryerson purchase orders. Should approval not be forthcoming, we will advise on an alternate course of action.

  
J. F. Newgen

*7:00 PM*  
JFN:MEH:jmh  
*MEH*  
attachment

RECEIVED

JUL 26 1978  
BECHTEL POWER CORP.  
JOB 7220

PER Ac I-78-292

QA ROUTE	INFO.	ACT.
LQAE	✓	
CIVIL (1)		
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ELECT	<i>WJ</i>	
INDUS.		
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SECTY		
FILE NO.	<i>QAR-5D-90</i>	

*Per [unclear]  
with [unclear]  
[unclear]*

Bechtel Power Corporation  
Interoffice Memorandum

To J. H. Klacking

File No.

Subject Job 7220 Midland Project  
NQAM Amendment Request for  
Field Purchase of ASME  
Section III Pipe Support  
Materials  
BCBG-2075

Date June 19, 1978

From J. F. Newgen

Of Construction

Copies to P. A. Martinez  
R. Hermeston  
R. L. Castleberry  
G. L. Richardson  
W. L. Barclay  
F. W. Elliott

At Midland, MI Ext.

This memo is written to request that a NQAM amendment be prepared to Section III, Number II, Paragraph 2.0 "General" of the NQAM for the Midland job. We request that the last paragraph of Paragraph 2.0 be revised to read:

"Procurement of ASME materials (including filler metal but excluding Subsection NF pipe support materials) and services are to be in accordance with BQAM-ASME III Nuclear Components Manual.

The justification for this position is as follows:

- A) The attached telecon points out that the BQAM-ASME III Nuclear Components Manual is not applicable to pipe supports on the Midland job.
- B) The controls established by the NQAM as supplemented by the requirements of the ASME Section III Code are adequate to assure the quality of the field procured material.

Your immediate attention to this request is appreciated as the amendment can significantly improve our ability to procure the subject materials to support construction.

*[Signature]*  
J. F. Newgen

JFN/AJJ/sa

Attachments

QUALITY ACTION  
REQUEST

From: G. L. Richardson		(1)
To: W. L. Barclay	(2) Control Document ref.: SF/PSP-G7.1 Rev. 4	(3) CAR Ident. No.: SD-93 (4)
Action Requested: SF/PSP-G 7.1 Paragraph 6.2.7 states in part "The "Remarks" column of the records package index sheet shall be utilized to indicate the number of radiograph packages contained in the vault for each unique QCIR/FIR". The results of QA Monitor M-10.3.5 reveal, the use of the records package index sheet (Exhibit 5 of SF/PSP G 7.1 Rev. 4) has not been initiated for radiographs, although the effectivity date of the requirement is 1/30/78.		(5)
Action Requested: 1. Implement the total requirements of SF/PSP G-7.1 for radiographic film received in the vault after 1/30/78 (effectivity date of SF/PSP-G7.1 Rev. 4).		
CONTINUED ON SECOND PAGE		
Signature: <i>R. A. [unclear]</i> <i>G. L. Richardson</i>	(6) Date: 6-22-78	(7) Reply Requested by: 7-22-78 (8)
Reply: ION QCFM 4993 advised records have been corrected for records received subsequent to effectivity date of procedure i.e. 1/30/78. Retro-fitting of requirements are in progress to be completed prior to turnover to client. Perusal of the records in vault confirm this to be the case.		(9)
Signature: ION QCFM-4993 dtd. 7/12/78	(10) Date:	(11)
Action Verified: <i>[Signature]</i>	(12) Date: 8/23/78	(13)

8/2/78

WHITE - Return to sender

CANARY - Addressee's file

PINK - Sender's file



2. Provide assurance that Rev. 4 of SF/PSP-67.1 has been properly implemented in accordance with the Q.C. Program or a schedule of properly approved actions leading to complete implementation.





# QUALITY ACTION REQUEST

From:	G. L. Richardson	①																														
To:	W. L. Barclay	②																														
Control Document ref.:	SF/PSP-G7.1 Rev. #	③																														
CAR Ident. No.:	SD-93	④																														
Action Requested:	<p>SF/PSP-G 7.1 Paragraph 6.2.7 states in part "The "Remarks" column of the records package index sheet shall be utilized to indicate the number of radiograph packages contained in the vault for each unique QCIR/FIR". The results of QA Monitor II-10.3.5 reveal, the use of the records package index sheet (Exhibit 5 of SF/PSP G 7.1 Rev. 4) has not been initiated for radiographs, although the effectivity date of the requirement is 1/30/78.</p>																															
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CONTINUED ON SECOND PAGE																																
Signature:	<i>G. L. Richardson for</i> G. L. Richardson	⑥																														
Date:	6-22-78	⑦																														
Reply Requested By:		⑧																														
Reply:		⑨																														
<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">QA ROUTE</th> <th style="padding: 5px;">INFO</th> <th style="padding: 5px;">ACT.</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">LQAE</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">CIVIL (1)</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">mech</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">PIPING</td> <td style="padding: 5px;"><i>LR</i></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">PIPE</td> <td style="padding: 5px;"><i>RLT</i></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">INDI.</td> <td style="padding: 5px;"><i>✓</i></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">HEND</td> <td style="padding: 5px;"><i>✓</i></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">SEC'Y</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">FILE NO.</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> </tbody> </table>			QA ROUTE	INFO	ACT.	LQAE			CIVIL (1)			mech			PIPING	<i>LR</i>		PIPE	<i>RLT</i>		INDI.	<i>✓</i>		HEND	<i>✓</i>		SEC'Y			FILE NO.		
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E-2/74

WHITE -- Return to sender

CANARY -- Addressee's file

PINK -- Sender's file

BPC 20377  
G10018-10 00

2. Provide assurance that Rev. 4 of SF/PSP-67.1 has been properly implemented in accordance with the Q.C. Program or a schedule of properly approved actions leading to complete implementation.

CCFM 4993

Bechtel Power Corporation

Interoffice Memorandum

To G. L. Richardson  
Subject Midland Project, Units 1&2  
QAR SD 93

File No.  
Date 12 July 1978  
From W. L. Barclay  
Of Quality Control  
At Midland, Mi Ext 204  
Job 07220

Copies to D. R. Johnson

Reference: Bechtel QAR SD 93

This is Quality Control's full response to the above referenced CAR.

1. Radiographs received on and after 30 January 1978 have been reindexed as required by para 6.2.7, PSP G 7.1, Rev 4.
2. All incoming documentation is currently being indexed to PSP G 7.1, Rev. 4.
3. Retrofitting of existing (prior to 30 January 1978) is on going. A specific schedule for the completion of this task is not possible. The only actual established "schedule" is prior to client turnover.

Should you require additional information, please contact this office.

*NY*  
WLB/HDF/EE/RV/rv

QA	
PO	
LEAD	
CHECK	
DATE	
BY	
FILE NO.	89-361
FILE NO.	89250

*W. L. Barclay*  
W. L. Barclay  
Project Field Quality  
Control Engineer

**RECEIVED**  
JUL 26 1978  
BECHTEL POWER CORP.  
JOB 7220

PER 7-78-285

# QUALITY ACTION REQUEST

From:	G. L. Richardson	Site QA	Job 7220	①
To:	J. F. Newgen	② Control Document ref.: SF PSP G-3.2	③ QAR Ident. No.: SD-95	④
Action Requested:	⑤			
<p>BACKGROUND: NCR-1074 identified a carbon steel pipe spool which was noted at receiving inspection to be rusty and pitted. The Field and Project Engineering's disposition required the spool to be chemically cleaned, passivated, dried with gaseous nitrogen, desiccant attached to interior side of end protector caps and caps sealed. Project Engineering further amended the disposition to require the level of cleanness to be in accordance with Specification M-481 and acceptance criteria as stated in Specification M-342, Rev. 2. The disposition was concurred with by PFE, PE, PFQCE, and the AI. To execute the specified disposition the pipe was cleaned etc. by Dowell c/o Dow Chemical, USA - Midland, Michigan on FMR P.O. F-28298, dated 4/5/78.</p>				
Signature:	<i>G. L. Richardson</i>	⑥ Date: 6/29/78	⑦ Reply Requested by: 7/12/78	⑧
Reply:	⑨			
<p>IOH 0-1852 advised the problem to be one of human error which has been corrected by reminding the area Engineer of their responsibility. Also, IOH 0-1853 reiterated to all field Engineers to assure that all of Project Engineer's disposition on an NCR must be included and the final action must be appropriate to correct the problem.</p>				
Signature:	IOH 0-1852	⑩ Date: 7/18/78	⑪	
Action Verified:	<i>[Signature]</i>	⑫ Date: 8/23/78	⑬	

P.O. F-28298 stated, one pipe spool (see attached sketch) to be chemically cleaned, passivated, dried with gaseous nitrogen, desiccant attached to interior side of end protector caps and cap sealed. Vendor to notify Bechtel prior to return of spools so Field Engineering and Quality Control may perform an inspection.

QC Field Inspection Report dated 5/16/78 stated: "Visual inspection to verify spool is free of contaminants and had been cleaned and passivated. The applicable specifications listed were M-481 and M-342.

Dowell letter to Bechtel dated 5/30/78 stated the subject pipe spool was chemically cleaned and passivated to our P.O. 7220-F-28298. After cleaning it was inspected and passed by our inspection at the Dowell facility in Midland, Michigan.

The subject NCR (1074) was closed on 5/19/78 with the following statements for disposition results (25).

"Spool shipped to Dow Chemical Co. for cleaning 5/4/78 on shipping notice #4949".

"Spool received and accepted on 5/17/78 in accordance with Spec. M-481 and M-342."

Quality Assurance reviewed the NCR and associated disposition which resulted in the following questionable areas.

1. The term passivated is generally associated by the American Society of Metals and other recognized technical societies, with the process of producing an enriched Chromium Oxide layer on the surface of stainless steels which offers a high degree of resistance to corrosive attack. Since the mechanisms of the process is not described in either the NCR or referenced specifications the efficacy and acceptability of passivating the carbon steel pipe spool could not be ascertained.
2. Block 23 "Project Engineering Disposition" required the level of cleanness to be in accordance with Spec. M-481. Specification M-481 does not address cleanness levels.
3. P.O. 7220-F-28298 issued to Dowell does not contain any detail requirements for chemical cleaning nor passivating. Neither specification identified in Block 23 of the NCR is referenced or required by the P.O.

QC's review of the purchase order as required by FPG-8.000, Rev. 1 Para. 2.4 could not be ascertained.

4. The letter of certification appears to be meaningless since it stated compliance with the purchase order which did not specify any technical requirements.
5. The QC disposition results are nonconclusive because the stated specification M-481 to determine the level of cleanness does not address the subject. Without a level of cleanness specified, compliance with Spec. M-342 cannot be verified since there are four levels of cleanness.



QAR SD-95 continued  
Page three

The disposition results does not address passivation verification and cannot verify the chemical cleaning was performed in accordance with Spec. M-342-since-the-actual-cleaning-was-not-witnessed-by-Bechtel-QC and the specification was not referenced in the P.O. to Dowell.

ACTION REQUESTED

1. Determine why Project Engineering's disposition was not included in the purchase order to Dow to correct the nonconforming condition and take appropriate corrective action.
2. Determine why QC review of the FMR was not obtained and provide assurance that other such cases do not exist.
3. Provide assurance that Field Engineering dispositions utilize only properly approved processes.

13 Midland  
Action Item - 376

Bechtel Power Corporation

Interoffice Memorandum

To G. L. Richardson  
Subject Job 7220 Midland Project  
QAR-SD95  
0-1852

File No.  
Date July 10, 1978  
From J. F. Newgen  
Of Construction  
At Midland, MI Ext. 200

Copies to J. Gilmartin J. Voris  
R. Ward E. Droulliard  
W. Barclay R. MacGlashan

This memo is written in response to the subject QAR. In response to your action requests we provide the following:

- 1) There is no explanation as to why the Project Engineering disposition was not included in the purchase order. We have attempted to correct this situation via our response to item 3) below.
- 2) We suggest you consult with Bill Barclay and Frank Elliott for their input as to why QC had not approved the FMR. We have reiterated the necessity of obtaining QC sign-off on our Q-listed FMR's to our office engineering staff who is responsible for this function. This is achieved by copy of this memo to J. Voris, E. Droulliard, and R. MacGlashan.
- 3) We have written a memo to all field engineers reminding them of their responsibility to implement all elements of Project Engineering dispositions to nonconformance reports.

*[Handwritten notes and scribbles on the left margin]*

*[Handwritten signature]*  
J. F. Newgen

JFN/AJD/JV/rac

# Bechtel Power Corporation

## Interoffice Memorandum

To All Field Engineers

Subject Job 7220 Midland Project  
Nonconformance Report  
Dispositions  
0-1853

Copies to G. L. Richardson  
W. L. Barclay

File No.

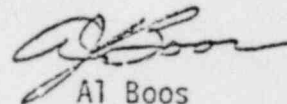
Date July 17, 1978

From Al Boos

or Field Engineering

At Midland, MI Ext. 202

It has been brought to my attention that we had a recent occurrence where a portion of the Project Engineering disposition to a Nonconformance Report was overlooked when correcting the nonconforming condition to the item. This memo is written to reiterate the point that all elements of a Project Engineering disposition (Block 23) to a Nonconformance Report must be complied with. In the event you feel that the disposition (or part thereof) is inappropriate, you should work through your supervisor and the appropriate Lead Discipline Field Engineer to resolve the matter. Resolution may consist of a second dispositioning by Field Engineering (Block 22 of the Nonconformance Report) with concurrence by Project Engineering.

  
Al Boos

AJB/rac

Bechtel Power Corporation

Post Office Box 2167  
Midland, Michigan 48640



June 28, 1978

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

Attention: J. L. Corley

Job 7220 Midland Project  
Project QAR SD-95 Issue  
GLR-332  
File: Q2220; Action Item: 376

Dear Mr. Corley:

Attached for your information is a copy of the subject QAR issue.

Very truly yours,

*R.C. Hill*

G. L. Richardson  
LEAD QUALITY ASSURANCE ENGINEER

GLR/ES/sw

Attachment

QA ROUTE	INFO.	ACT.
LQAE		
CIVIL (1)		
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PIPING	CS	376
ELECT.	KB	
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TEND		
SEC'Y		
FILE NO.	Q22	20



P.O. F-28298 stated, one pipe spool (see attached sketch) to be chemically cleaned, passivated, dried with gaseous nitrogen, desiccant attached to interior side of end protector caps and cap sealed. Vendor to notify Bechtel prior to return of spools so Field Engineering and Quality Control may perform an inspection.

QC Field Inspection Report dated 5/16/78 stated: "Visual inspection to verify spool is free of contaminants and had been cleaned and passivated. The applicable specifications listed were M-481 and M-342.

Dowell letter to Bechtel dated 5/30/78 stated the subject pipe spool was chemically cleaned and passivated to our P.O. 7220-F-28298. After cleaning it was inspected and passed by our inspection at the Dowell facility in Midland, Michigan.

The subject NCR (1074) was closed on 5/19/78 with the following statements for disposition results (25).

"Spool shipped to Dow Chemical Co. for cleaning 5/4/78 on shipping notice #4949".

"Spool received and accepted on 5/17/78 in accordance with Spec. M-481 and M-342."

Quality Assurance reviewed the NCR and associated disposition which resulted in the following questionable areas.

1. The term passivated is generally associated by the American Society of Metals and other recognized technical societies, with the process of producing an enriched Chromium Oxide layer on the surface of stainless steels which offers a high degree of resistance to corrosive attack. Since the mechanisms of the process is not described in either the NCR or referenced specifications the efficacy and acceptability of passivating the carbon steel pipe spool could not be ascertained.
2. Block 23 "Project Engineering Disposition" required the level of cleanness to be in accordance with Spec. M-481. Specification M-481 does not address cleanness levels.
3. P.O. 7220-F-28298 issued to Dowell does not contain any detail requirements for chemical cleaning nor passivating. Neither specification identified in Block 23 of the NCR is referenced or required by the P.O.

QC's review of the purchase order as required by FPG-8.000, Rev. 1 Para. 2.4 could not be ascertained.

4. The letter of certification appears to be meaningless since it stated compliance with the purchase order which did not specify any technical requirements.
5. The QC disposition results are nonconclusive because the stated specification M-481 to determine the level of cleanness does not address the subject. Without a level of cleanness specified, compliance with Spec. M-342 cannot be verified since there are four levels of cleanness.

QAR SD-95 continued  
Page three

The disposition results does not address passivation verification and cannot verify the chemical cleaning was performed in accordance with Spec. M-342 since the actual cleaning was not witnessed by Bechtel QC and the specification was not referenced in the P.O. to Dowell.

ACTION REQUESTED

1. Determine why Project Engineering's disposition was not included in the purchase order to Dow to correct the nonconforming condition and take appropriate corrective action.
2. Determine why QC review of the FMR was not obtained and provide assurance that other such cases do not exist.
3. Provide assurance that Field Engineering dispositions utilize only properly approved processes.

# Bechtel Power Corporation

## Interoffice Memorandum

To: G. L. Richardson

Subject: Job 7220 Midland Project  
QAR-SD95  
O-1852

Copies to: J. Gilmartin J. Voris  
R. Ward E. Droulliard  
W. Barclay R. MacGlashan

File No.

Date: July 18, 1978

From: J. F. Newgen

Of: Construction

At: Midland, MI Ext. 200

This memo is written in response to the subject QAR. In response to your action requests we provide the following:

- 1) There is no explanation as to why the Project Engineering disposition was not included in the purchase order. We have attempted to correct this situation via our response to item 3) below.
- 2) We suggest you consult with Bill Barclay and Frank Elliott for their input as to why QC had not approved the FMR. We have reiterated the necessity of obtaining QC sign-off on our Q-listed FMR's to our office engineering staff who is responsible for this function. This is achieved by copy of this memo to J. Voris, E. Droulliard, and R. MacGlashan.
- 3) We have written a memo to all field engineers reminding them of their responsibility to implement all elements of Project Engineering dispositions to nonconformance reports.

JFN/AJB/JV/rac

QA ROUTE	INFO.	ACT.
LOAE	<i>[initials]</i>	
CIVIL (I)		
MECH		
PIPING	<i>[initials]</i>	376
ELECT.		
INSTR.		
IND		
SECY		
FILE N.O.	2200	

*[Signature]*  
J. F. Newgen

**RECEIVED**  
JUL 19 1978  
BECHTEL POWER CORP.  
JOB 7220  
PER *[initials]* I-78-275



## NONCONFORMANCE REPORT

1. PROJECT NAME Midland		4. JCR NO. 7220				19. NO. <u>1443</u>	20. PAGE <u>1</u> OF <u>2</u>	
2. UNIT(S) Units 1 & 2	3. <del>QTY</del> PART NO. See Block 16	REV N/A	4. ITEM DESCRIPTION Nuclear Service Solenoid Valves			5. ITEM LOCATION Whse #2 OC Hold Area		
6. P.O. # 7220-J256-AC Rev. 3	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV _____ SER NO. _____		9. SOURCE Supplier	10. <del>CONTRACT</del> SUPPLIER Target Rock Corp.			
11. INSPECTION CRITERIA ( ) DWG (X) SPEC (X) OTHER		IR NO. R-1.00-3365 NO. See Blk 16	12. ASME AUTHORIZED INSPECTION REQ'D (X) YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client (X) Eng ( ) FLD		
16. NONCONFORMING CONDITION: Item 1. Specification 7220-J-603 Rev. 5, Appendix A requires Quality Verification Documentation according to Form G-321-D. Form G-321-D, Document Category 15.0 requires Cleaning and Coating Procedures & Verification Reports. Contrary to the above, no Cleaning Verification Reports were included in the documentation packages for the valves as listed in the table below. Item 2. Project Quality Control Instruction R-1.00 Rev. 7, Para 2.1c states in part:					24. DISPOSITION CONCURRENCE			
					rework	reject	repair	use as is
					<i>[Signature]</i> PROJECT FIELD ENGINEER 8/2/78 DATE			
					<i>[Signature]</i> PROJECT ENGINEER 8-3-78 DATE			
					<i>[Signature]</i> PROJ CONSTR QC ENGINEER 8-1-78 DATE			
					<i>[Signature]</i> AUTHORIZED INSPECTOR DATE			
17. REPORTED BY <i>Dean A. Delaney</i>		DATE 8/1/78	18. VALIDATED BY <i>W. J. Barclay</i>		DATE 8-1-78			
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)								
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering Procurement Supervisor to obtain proper documentation.  <i>Deane Matthews 8-2-78</i>								
23. PROJECT ENGINEERING DISPOSITION								
25. QC ACCEPTANCE								
						QC ENGINEER	DATE	
						AUTHORIZED INSPECTOR	DATE	

Block 16 continued

"Review the quality verification documentation required by Form G-321-D for availability, legibility and traceability." Contrary to the above, Quality Verification Documentation packages for the valves listed in the table below have the following problems: A. Certified Material Test Reports are illegible. B. Incorrect tag no. on Hydro & Electrical Property Reports. C. Discrepancy in Part No. between (Inspection Data Sheet, Dimensional Check List) and (Quality Control Documentation Check List).

Valve Tag No's	Item 1	Item 2A	Item 2B	Item 2C				
1SV-2125	↓	↓	↓	↓				
2SV-2226								
1SV-2126								
2SV-2226								
1SV-2139								
2SV-2239								
1SV-2140								
2SV-2240								
1SV-0151								
2SV-0251								
1SV-0127								
2SV-0227								
1SV-0128								
2SV-0228								
1SV-2131					↓	↓	↓	↓
2SV-2231								
1SV-2137								
2SV-2237								
1SV-2109								
2SV-2209								
1SV-2110								
2SV-2210								
1SV-0123								
2SV-0223								

"Q" number is 5,023. Hold pending final disposition. 24 hold tag(s) applied to the nonconforming item(s).

NOTE: The illegible pages in question are clearly marked in the documentation package.

### NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. <u>1444</u>	20. PAGE <u>1</u> OF <u>1</u>		
2. UNIT(S) Indeter- minate	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION See Block 16	5. ITEM LOCATION CC Hold, Whse. # 1			
6. P.O. OR SPEC. NO. 7220-F-22282 Rev. 1	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N <u>N/A</u> REV. _____ SER NO. _____		9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER Coast Industrial Supply Company		
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (X) OTHER		IR NO. <u>R-1,00-3387</u> <u>NOE-22282</u> Rev.	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'd ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD	
16. NONCONFORMING CONDITION: Purchase Order F-22282 requires certification and marking of material in accordance with Spec. M-305 Rev. 2. M-305, Section 8.4, states in part: "The marking of fittings, bolting, and pipe shall be identifiable to the applicable certification and shall be 100% traceable..." Contrary to the above, (1) 1600 Pcs. of 3/4" x 4" stud bolts are stamped with the wrong heat code, (2) 400 Pcs. of 5/8" x 2 3/4" stud bolts are stamped with the wrong heat code. Hold pending final disposition. "Q" number is indeterminate. 8 hold tag(s) applied to the nonconforming item(s).				24. DISPOSITION CONCURRENCE			
				rework	reject	repair	use as is
				<i>[Signature]</i> PROJECT FIELD ENGINEER		8-10-78 DATE	
				<i>[Signature]</i> PROJECT ENGINEER		8-16-78 DATE	
				<i>[Signature]</i> PROJ CONSTR QC ENGINEER		DATE	
				AUTHORIZED INSPECTOR		DATE	
17. REPORTED BY <i>[Signature]</i>		DATE 7-31-78		18. VALIDATED BY <i>[Signature]</i>		DATE 8-1-78	
21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)							
22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering		Procurement supervisor to inform vendor of discrepancy and expedite documentation to validate heat codes in items 1 and 2.					
23. PROJECT ENGINEERING DISPOSITION		<i>[Signature]</i> 8/9/78 <i>[Signature]</i> 8/9/78					
				26. QC ACCEPTANCE			
				QC ENGINEER		DATE	
				AUTHORIZED INSPECTOR		DATE	

6

### NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 1145	20. PAGE 1 OF 1		
2. UNIT(S) Indeterminate	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION 8 Pcs. of 1 1/2" x 1'-6" x 1'-4" A-36 Shim Plates	5. ITEM LOCATION OC Hold, Waco, TX			
6. P.O. NUMBER 7220-F-28350 Rev. 0	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV _____ SER NO. _____		9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER Mid State Bolt & Screw		
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (x) OTHER		11. R NO. R-1.00-3286 NO. F-28350 Rev. 0	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (x) NO	13. SKETCH ATTACHED ( ) YES (x) NO	14. Discovered During (x) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (x) FLD	
16. NONCONFORMING CONDITION: Purchase Order 7220-F-28350 requires Certified Material Test Reports for the above listed material. Contrary to the above, Certified Material Test Reports were not received. Hold pending final disposition. "Q" number is indeterminate. 1 hold tag(s) applied to the nonconforming item(s).				24. DISPOSITION CONCURRENCE			
				rework	reject	repair	use as is
				<i>[Signature]</i> 8-9-78 PROJECT FIELD ENGINEER DATE			
				<i>[Signature]</i> 8-9-78 PROJECT ENGINEER DATE			
				AUTHORIZED INSPECTOR DATE			
17. REPORTED BY <i>Rick A. Montford</i>		DATE 7-31-78		18. VALIDATED BY <i>W. Barclay</i>		DATE 8-1-78	
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)							
22. <input checked="" type="checkbox"/> Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering							
Procurement supervisor to obtain proper documentation. <i>F. Ward 8/4/78</i>							
23. PROJECT ENGINEERING DISPOSITION							
26. QC ACCEPTANCE							
QC ENGINEER						DATE	
AUTHORIZED INSPECTOR						DATE	

### NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 1146	20. PAGE 1 OF 1
2. UNIT(S) Indeterminate	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION ASTM A-194 Stainless Steel Nuts Grade 8F	5. ITEM LOCATION O.C. Hold, Wags. #1	
6. P.O. OR SPEC. NO. 7220-F-28055 Rev. 0	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV _____ SER NO. _____	9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER North Central Fasteners	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (X) OTHER	IR NO. R-1,00-3271 NO. F-28055 Rev. 0	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD
16. NONCONFORMING CONDITION: Purchase Order F-28055 requires marking of material as specified in ASTM A-194. A-194-1977 requires nuts to be marked with the manufacturer's identity and grade and process of manufacturer. Contrary to the above, 20 pieces of A-194 grade 8F nuts do not meet any marking requirements. Hold pending final disposition. "0" number is indeterminate. 1 hold tag(s) applied to the non-conforming item(s).			24. DISPOSITION CONCURRENCE		
			rework	reject	repair
				X	use as is
			PROJECT FIELD ENGINEER <i>[Signature]</i> 8-10-78 DATE		
			PROJECT ENGINEER PROJ CONSTR QC ENGINEER <i>[Signature]</i> 8-15-78 DATE		
			AUTHORIZED INSPECTOR	DATE	
17. REPORTED BY Rick A. Mathew			18. VALIDATED BY J. Barclay		
DATE 7-31-78			DATE 8-1-78		
21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)					
22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering					
Procurement supervisor to return nonconforming material.					
J. Barclay 8/9/78 R. Ward 8/9/78					
23. PROJECT ENGINEERING DISPOSITION					
26. QC ACCEPTANCE					
QC ENGINEER _____ DATE _____					
AUTHORIZED INSPECTOR _____ DATE _____					

NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 1448	20. PAGE 1 OF 2		
2. UNIT(S) Aux. Bldg.	3. DRAWING/PART NO. C-241 & C-208	REV. N/A	4. ITEM DESCRIPTION Concrete Wall	5. ITEM LOCATION 24'-0" East of 9.4 line, El. 672-6 to 693-6			
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE Construction	10. CONTRACTOR/SUPPLIER N/A		
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER		IR NO. N/A	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Cast ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD	
16. NONCONFORMING CONDITION: Specification C-231 Rev. 16 references ACI-347 for formwork construction. ACI-347 allows for 1/4" per 10 ft. variation from the p-line and 1/2" variation of the linear building lines in any bay or 20 ft. max. Contrary to the above, the end wall of the Unit 2 penetration area is aprox. 2 3/8" east of its planned location at a point 6'0" North of J line at Elev. 693-0. This wall is in its proper location at its intersection with K-line wall and also with its intersection with the slab at Elev. 674'6". Q list #1, 205				24. DISPOSITION CONCURRENCE			
				rework	reject	repair	use as is
				PROJECT FIELD ENGINEER DATE 8-23-78 PROJECT ENGINEER DATE 8-23-78 PROJECT CONSTR QC ENGINEER DATE 8-23-78			
17. REPORTED BY Larry P. Wilson 7-31-78				18. VALIDATED BY M. J. Borelly 8-1-78			
21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)							
22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering Disposition Requested by 8-14-78							
The field recommends "use as is" for the concrete portion of the wall and that the structural steel be reworked as follows: 1. The W18 x 114 be extended and connected to the C-5 embed as shown by Sections A-A and B-B; 2. The anchor bolt holes in the bottom flange of the W18 x 50 be slotted to allow fit-up of the anchor bolts. This will result in							
23. PROJECT ENGINEERING DISPOSITION (cont.)							
Project Engineering has evaluated the conditions described in Block 16 and concurs with the Field Engineering recommended disposition to use the concrete wall as is, and to rework the structural steel as described in Block 22.							
				26. QC ACCEPTANCE			
M. J. Borelly 8-22-78				R. Schuman 8/23/78			
REM C-1461				QC ENGINEER DATE			
				AUTHORIZED INSPECTOR DATE			

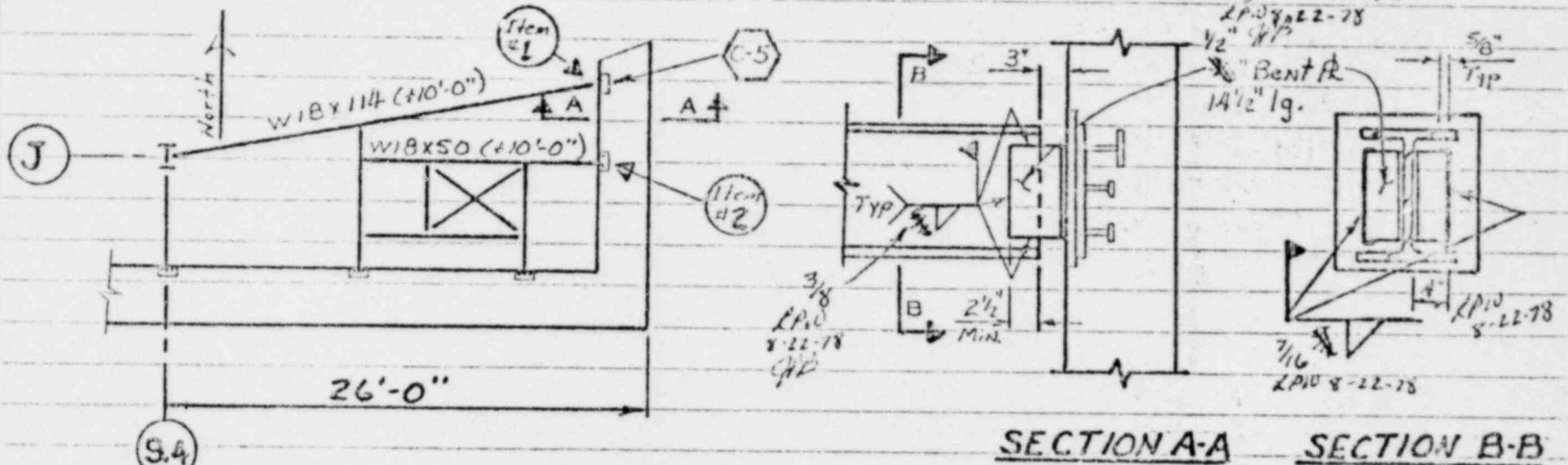
BLOCK #16 CONTINUED:

Hold for Engineering Disposition. 1 Hold Tag Applied.

TAGGED approx. 6' North of 'J'  
LINE. J.E.M. 8-3-78

BLOCK #22 CONTINUED:

6 3/4" embedment of the beam into the beam pocket. The slot shall not interfere with the stiffener plate or it's welds (Refer to Typical Beam Pocket Details on Dwg. C-244).



STEEL FRAMING AT EL 685.0 U.N.

TOS. EL 683.6" U.N.

LPW 8-22-78  
 JEB  
 8-22-78  
 L.P. 8-9-78  
 J.P. Betts 8-9-78

NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 1119	20. PAGE 1 of 2	
2. UNIT(S) Unit I & II	3. DRAWING/PART NO. See Block 16	REV N/A	4. ITEM DESCRIPTION Foundation Equipment for Emergency Diesel Gen.	5. ITEM LOCATION Phase 1, CC Hold		
6. P.O. OR SPEC NO. 7220-M-18AC Rev. 5	7. SERIAL NO. See Blk. 16	8. REPLACEMENT PART P/N N/A REV _____ SER NO. _____	9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER Delaval Engine and Compressor Division		
11. INSPECTION CRITERIA <input checked="" type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC <input checked="" type="checkbox"/> OTHER AMS Bl. 1-1972		IR NO. R-1.00-3553 No Spec. M-18 Rev. 4	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input checked="" type="checkbox"/> Rec'g <input type="checkbox"/> Const <input type="checkbox"/> Test	15. Equip Furnished By <input type="checkbox"/> Client <input checked="" type="checkbox"/> Eng <input type="checkbox"/> FLD
16. NONCONFORMING CONDITION: 1. Bechtel approved vendor print 7220-M-18-314-1 requires that the 1" nut <del>is</del> welded to the 1" rod and 7" Dia. plate with a 1/4" all around weld. Contrary to the above, the fillet welds for all 56 Pcs. of 02-550-01-AG delivered showed indications of under size legs and throats, under cutting, weld splatter and porosity.				24. DISPOSITION CONCURRENCE rework <input type="checkbox"/> reject <input type="checkbox"/> repair <input type="checkbox"/> use as is <input checked="" type="checkbox"/> PROJECT FIELD ENGINEER <i>[Signature]</i> 8-3-78 PROJECT ENGINEER <i>[Signature]</i> 8-3-78 PROJ CONSTR QC ENGINEER <i>[Signature]</i> 2-7-78 AUTHORIZED INSPECTOR _____ DATE _____		
Cont. on Page 2						
17. REPORTED BY <i>John R. Alfaro Jr</i>		DATE 8-2-78	18. VALIDATED BY <i>[Signature]</i>		DATE 8-2-78	
21. ROUTING: <input type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)						
22. <input type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering Field Engineering request Item 1, 2, 3, "use as is" Item 4 - procurement Supervisor to obtain proper documentation. <i>[Signature]</i> 8-2-78 <i>[Signature]</i> 8-2-78						
23. PROJECT ENGINEERING DISPOSITION Item 1, 2 & 3. Project engineering has obtained vendor concurrence to "use as is" because welds are not for structural purposes. Item 4. Field responsibility to obtain proper documentation in accordance with Form G-321-D <i>[Signature]</i> for S. Emerson 4/3/78 AS-						
25. DISPOSITION RESULTS Item 1, 2, 3 - Use as is with Project Engineering. <i>[Signature]</i> 8-2-78						
26. QC ACCEPTANCE QC ENGINEER _____ DATE _____				AUTHORIZED INSPECTOR _____ DATE _____		



Block 16 Continued

2. Bechtel approved vendor print 7220-M-18-203-1 requires the 1 $\frac{1}{2}$ " nut to be welded to the 8" dia. plate with a 3/8" all around fillet weld. Contrary to the above, the fillet welds on 79 Pcs. of 02-550-01-0V show indications of undersize legs and throats, undercutting and weld splatter.
3. Bechtel approved vendor print 7220-M-18-198-1 requires the 1" nut to be welded to the 1" rod and 8" dia. plate with a 1/2" all around fillet weld. Contrary to the above, 16 Pcs. of 02-550-01-0X show indications of poor general workmanship with weld splatter surrounding the welding area.
4. Traceability of G-321-D Form is through the packing list of the equipment delivered. Contrary to the above, the packing list for Box # 18 indicates the item # 81 to be Part No. 02-550-01-0S, however 02-550-01-0S-A were delivered. Also the packing list for Box # 21 indicates the item # 87 to be part no. 02-550-01-07 and item # 88 to be Part No. 00-550-02-AC, however 02-550-01-0T and 00-550-02-ACD were delivered, respectively.

"Q" numbers are 4.521 and 4.522. Hold pending final disposition. <sup>4</sup>hold tag(s) applied to the nonconforming item(s).  
*5/21 8-7-78*

A conditional release is granted for all items on this NCR up to placing concrete. Items are retrieveable at any time during construction.

PFE

*[Signature]*8-2-78  
Date

LQAE

*[Signature]* WAD received by Pichay Lian 8-2-78  
Date

PFQCE

*[Signature]**[Signature]*  
Date

### NONCONFORMANCE REPORT

1. PROJECT NAME Holland		JOB NO. 7220		19. NO. 1150	20. PAGE 1 OF 2	
2. UNIT(S) 2	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION ITT Grinnell Pipe Hangers	5. ITEM LOCATION QC Hold, Whse. # 2		
6. P.O. OR SPEC NO. 7220-M-106AC Rev. 7	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV _____ SER NO. _____	9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER ITT Grinnell, Warren, Ohio		
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (x) OTHER		IR NO. R-1.00-3320 NO. M-106AC	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (x) NO	13. SKETCH ATTACHED ( ) YES (x) NO	14. Discovered During (x) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client (x) Eng ( ) FLD
16. NONCONFORMING CONDITION: Purchase Order M-106AC Revision 7 requires documentation in accordance with Form G-321-D. Contrary to the above, no Quality Verification documentation was received on the jobsite for ITT Grinnell's Shop Order EMD-060-01. Hold pending final disposition. "Q" number is 4.045. 6 hold tag(s) applied to the nonconforming item(s).				24. DISPOSITION CONCURRENCE		
				rework	repair	use as is
				DOF		
				<i>[Signature]</i>		8-4-78
				PROJECT FIELD ENGINEER		DATE
				<i>[Signature]</i>		8-8-78
				PROJECT ENGINEER		DATE
				PROJ CONSTR. ENGINEER		DATE
				AUTHORIZED INSPECTOR		DATE
17. REPORTED BY <i>Rick G. Montross</i>		DATE 8-2-78	18. VALIDATED BY <i>R. W. Barclay</i>		DATE 8-2-78	
25. DISPOSITION RESULTS						
DOCUMENTATION						
is received and						
reviewed.						
<i>Rick G. Montross</i> 9-1-78						
26. QC ACCEPTANCE						
<i>[Signature]</i> 9-1-78						
QC ENGINEER DATE						
AUTHORIZED INSPECTOR DATE						
23. PROJECT ENGINEERING DISPOSITION						
Procurement supervisor to obtain correct documentation.						
<i>R. Ward</i> 8/4/78						

10098-2

Block 16 continued:

A conditional release is granted to install pipe hangers on shop order EMD-060-01. Corrections or removal can be accomplished without causing damage or contamination to the associated plant equipment or structure.

*[Signature]*  
PFE 8-11-78  
Date

*[Signature]* for W.L.P.  
PFQCE 8-11-78  
Date

*[Signature]*  
LQAE 8-11-78  
Date  
*See Richardson*

BECHTEL MIDL

100  
1450  
BGBC8096



WU INFOMASTER 1-0161554121 05/01/78  
TRK BECHTEL A SFO  
649 SAN FRANCISCO CA CHG:7220 JMB5240  
TRK 5102659497 BECHTEL MIDL

E L CASTLES RAY/L D SKOL/C S BUEL/ SPO, ANN ARBOR, MI  
7220-M-106-AC 7

SUPPLIER CITY STATE  
ITT GRINNELL WARREN OH

P.O. ITEM	QTY	DESCRIPTION	ID NUMBER
1	1	PIPE HANGER ASSEMBLY	E-MD-076
1	5	PIPE HANGER ASSEMBLIES	E-MD-060-01
1	6	PIPE HANGER ASSEMBLIES	E-MD-060
1	1	PIPE HANGER ASSEMBLY	E-MD-105
1	7	PIPE HANGER ASSEMBLIES	E-MD-119
1	8	PIPE HANGER ASSEMBLIES	E-MD-120
1	32	PIPE HANGER ASSEMBLIES	E-MD-139
1	6	PIPE HANGER ASSEMBLIES	E-MD-147-01
1	1	PIPE HANGER ASSEMBLY	E-MD-160
1	2	PIPE HANGER ASSEMBLIES	E-MD-174
1	19	PIPE HANGER ASSEMBLIES	E-MD-190
1	6	PIPE HANGER ASSEMBLIES	E-MD-192
1	2	PIPE HANGER ASSEMBLIES	E-MD-222
1	1	PIPE HANGER ASSEMBLY	E-MD-230
1	10	PIPE HANGER ASSEMBLIES	E-MD-235
1	3	PIPE HANGER ASSEMBLIES	E-MD-249
1	6	PIPE HANGER ASSEMBLIES	E-MD-251
1	20	PIPE HANGER ASSEMBLIES	E-MD-261
1	4	PIPE HANGER ASSEMBLIES	E-MD-271
1	2	PIPE HANGER ASSEMBLIES	E-MD-273
1	10	PIPE HANGER ASSEMBLIES	E-MD-279
1		HANGER MATERIAL PER FR-21	E-MD-319-04
1	5	PIPE HANGER ASSEMBLIES	E-MD-913
1	1	PIPE HANGER ASSEMBLY	E-ME-965-01

NOTE: QUANTITIES ON BULK MATERIAL  
PER PACKING LIST

DATE RELEASED FOR SHIPMENT: 4-29-78

WITH THE FOLLOWING EXCEPTIONS: 1. CARBO ZINC #11 PAINTING WAIVED  
BY T. TROUTMAN TELEX TO A. DECRISTOFARO ON 1-26-77 FOR SHOP ORDER  
#E-MD-076, E-MD-119, E-MD-139, E-MD-174, E-MD-192, E-MD-235, E-MD-249,  
E-MD-251, E-MD-271. 2. SHOP ORDER #E-ME-965-01 PARTIAL ASSEMBLY MISS-  
ING FIG. #11 SHIPPED ON ORIGINAL ORDER.  
3. SUPPLIER'S STATEMENT OF CONFORMANCE FOLLOWS BY MAIL.

ROBERT W MARSHALL  
4-21-78/1241

1547 EST

BECHTEL MIDL

NONCONFORMANCE REPORT

1. PROJECT NAME Middland		JOB NO. 7220		19. NO. 1451	20. PAGE 1 OF 1
2. UNIT(S) Units 1 & 2	3. DRAWING PART NO. See Block 16	REV N/A	4. ITEM DESCRIPTION Nucleon Service Solenoid Valves	5. ITEM LOCATION OC No. 1 - 10100 70	
6. P.O. OR PROJECT NO. 7220-J-100-AC REV. 3	7. SERIAL NO. N/A	8. REPLACEMENT PART PIN N/A REV	9. SOURCE Supplier	10. DRAWING OR SUPPLIER Target Rock Corp.	
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER	IR NO. V-1, 00-3365 NO J-603 Rev. 5	12. ASME AUTHORIZED INSPECTION RECD ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. Discovered During Const ( ) Test	15. Equip. Furnished By ( ) Cheat ( ) Log ( ) Field
16. NONCONFORMING CONDITION: Specification 7220-J-603 Rev. 5, Appendix A requires quality Verification Documentation according to Form G-321-D. Item 1. Form G-321-D, Document Category 15.0 requires Cleaning and Coating Procedures and Verification Reports. Contrary to the above, no Cleaning Verification Reports were included in the documentation packages for the valves as listed in the table below.					
17. REPORTED BY Dean A. Dolaney	DATE 8/3/78	18. VALIDATED BY A. W. Barnsley	DATE 8/2/78	24. DISPOSITION CURRENTLY Project Engineer: [Signature] DATE: 8-3-78 Authorized Inspector: [Signature] DATE: 8-3-78	
22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering Procurement supervisor to obtain correct documentation. Bease Malheur 8-3-78					
23. PROJECT ENGINEERING DISPOSITION					
				25. DISPOSITION RESULTS	
				26. QC ACCEPTANCE	DATE
				QC ENGINEER	DATE
				AUTHORIZED INSPECTOR	DATE

Block 16 continued

Item 2. Form G-321-D, Document Category 18.0 requires Code Compliance. The NPV-1 Form supplied for the valves listed in the table below does not list the Manufacturers' Serial No. for the valves to which the NPV-1 Form pertains (See Attachment "A").

Item 3. The Pressure Tests and Electrical Property Reports for the valve listed in the table below are identified with the wrong valve tag number.

Valve Tag No's	Item 1	Item 2	Item 3	
23V-1127A	↓			
23V-1127B				
13V-0122				
23V-0222				
13V-1005A				
13V-1005B				
23V-1105A				
23V-1105B				
13V-0316			↓	
23V-0316				
13V-0335				
23V-0435				
13V-0334				
23V-0434				
13V-0302A				
13V-0302B				
23V-0402A				
23V-0402B				
13V-0303A				
23V-0403A				
13V-1027A			↓	
13V-1027B				

"Q" number is 5.023. Hold pending final disposition. 52 hold tag(s) applied to the nonconforming item(s).

FORM NPV-1 MANUFACTURERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES\*  
 (As Required by the Provisions of the ASME Code, Section III, Div. 1)

1. Manufactured by Target Rock Corp., 1966E., Broadhollow Rd., E. Farmingdale, N.Y.  
(Name and Address of Manufacturer)  
 2. Manufactured for Bechtel Power Corp., P.O. Box 1000, Ann Arbor, Mich.  
(Name and Address of Purchaser or User)  
 3. Location of Installation Consumers Power Co., Midland, Mich.  
(Name and Address)  
 4. Pump or Valve Valve Nominal Inlet Size 2" (inch) Outlet Size 2"

	(a) Model No., Series No., L. Type	(b) Manufacturers' Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Std. No.	(g) Year Built
(1)	<u>2" S.W. Sch. 160</u>		<u>---</u>	<u>76B-019</u>	<u>2</u>	<u>---</u>	<u>1978</u>
(3)	<u>Globe</u>						
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							

5. H.P. Injection and Make-up Supply  
(Brief description of service for which equipment was designed)

6. Design Conditions 3200 (Pressure) psi 200 (Temperature) °F or Valve Pressure Class --- (1)  
 7. Cold Working Pressure --- psi at 100°F.  
 8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
(b) Forgings			
<u>Body</u>	<u>ASME-SA182, F316</u>	<u>Carpenter Tech.</u>	

(1) For manually operated valves only.  
 \* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11", (2) information in items 1, 2 and 5 on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.  
 (1/76) This form (E00037) may be obtained from the Order Dept., ASME, 345 E. 47 St., New York, N.Y. 10017

### NONCONFORMANCE REPORT

1. PROJECT NAME <i>Alkali</i>		JOB NO. <i>7220</i>		19. NO. <i>3158</i>	20. PAGE <i>1</i> OF <i>23</i>		
2. UNIT(S)	3. DRAWING/PART NO. <i>6-7.5/2 600</i>	REV <i>D/B</i>	4. ITEM DESCRIPTION <i>Science Cable Tray &amp; Conduit Supports</i>	5. ITEM LOCATION <i>See block #16</i>			
6. P.O. OR SPEC NO. <i>N/A</i>	7. SERIAL NO. <i>N/A</i>	8. REPLACEMENT PART P/N <i>N/A</i> REV <i>N/A</i> SER NO. <i>N/A</i>		9. SOURCE <i>Constr.</i>	10. CONTRACTOR/SUPPLIER <i>N/A</i>		
11. INSPECTION CRITERIA <input type="checkbox"/> DWG <input type="checkbox"/> SPEC <input type="checkbox"/> OTHER		IR NO. <i>1.50 ES-93</i> NO. <i>E-42, C-305</i>	12. ASME AUTHORIZED INSPECTION REC'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input type="checkbox"/> Rec'g <input checked="" type="checkbox"/> Const <input type="checkbox"/> Test	15. Equip Furnished By <input type="checkbox"/> Client <input type="checkbox"/> Eng <input checked="" type="checkbox"/> FLD	
16. NONCONFORMING CONDITION: <i>Drawing E-42 Rev 32 sheet 151 Note 3e states that all expansion anchors shall be furnished and installed in accordance with specification 7220/C-305. Specification C-305 Rev 5 SCM 1005 dated 6-14-78, requires the use of stud or wedge anchors unless specified on the design drawings or approved by Project Engineering. Drawing E-42 Rev 32 sheet 132 requires the use of 5/8"Ø expansion anchors with minimum embedment length of 2 3/4". (Cont. page 2)</i>				24. DISPOSITION CONCURRENCE			
				rework	reject	repair	use as is
				PROJECT FIELD ENGINEER _____ DATE _____			
				PROJECT ENGINEER _____ DATE _____			
				PROJ CONSTR QC ENGINEER _____ DATE _____			
				AUTHORIZED INSPECTOR _____ DATE _____			
17. REPORTED BY <i>[Signature]</i>				18. VALIDATED BY <i>[Signature]</i>			
DATE <i>8-7-78</i>				DATE <i>8/7/78</i>			
21. ROUTING: <input type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)							
22. <input type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering							
23. PROJECT ENGINEERING DISPOSITION							
26. QC ACCEPTANCE							
				QC ENGINEER _____ DATE _____			
				AUTHORIZED INSPECTOR _____ DATE _____			





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# NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO.		19. NO.	20. PAGE 1 OF 2
2. UNITS	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION	
6. P.O. OR SPEC NO. 7220-1044-1	7. SERIAL NO. 15	8. REPLACEMENT PART P/N H/A REV	9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER	IR NOR 1 CO-347	12. ASME AUTHORIZED INSPECTION RECD ( ) YES ( ) NO	13. SKETCH ATTACHED YES NO	14. Discovered During ( ) Const ( ) Test	
15. Equip Furnished By ( ) Client ( ) Eng ( ) FLD					
16. NONCONFORMING CONDITION: Specification 7220-1044 Rev. 3 requires cleaning for Class 1 & 2 carbon steel piping, and to have brazed fill and decalant attached to the interior side of the end protector caps. Contingency to the above, wire-weld repair 3-5539-13-1 Eng. no. NP-4-39 Rev. 2, Sub. 3 was delivered to the job site with decalant attached to the interior side of the end protector cap and special 1474-9-5531-1-9 Eng. NP-6-137 Rev. 5 Sub. 5 was delivered with the decalant attached to the					
17. REPORTED BY	DATE	18. VALIDATED BY	DATE	24. DISPOSITION CONCURRENCE	
<i>Maria D...</i>	8-3-78	<i>A. ...</i>	Cont. on Page 2	rework	reject
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)		25. DISPOSITION RESULTS			
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering		PROJECT FIELD ENGINEER DATE			
23. PROJECT ENGINEERING DISPOSITION		PROJECT ENGINEER DATE			
		PROJ CONSTR QC ENGINEER DATE			
		AUTHORIZED INSPECTOR DATE			
		26. QC ACCEPTANCE			
		QC ENGINEER DATE			
		AUTHORIZED INSPECTOR DATE			



### NONCONFORMANCE REPORT

1. PROJECT NAME <i>Milner 1</i>		JOB NO. <i>7220</i>			19. NO. <i>1100</i>	20. PAGE OF <i>3</i>
2. UNIT(S) <i>1 &amp; 2</i>	3. DRAWING/PART NO. <i>Spec. Block 16</i>	REV <i>N/A</i>	4. ITEM DESCRIPTION <i>In place Service Solenoid Valves</i>		5. ITEM LOCATION <i>O. H. Field No. 1</i>	
6. P.O. OR SPEC. NO. <i>7220-J-250-RC</i>	7. SERIAL NO. <i>N/A</i>	8. REPLACEMENT PART P/N <i>E/A</i> REV <i>5</i> SER NO.		9. SOURCE <i>Supplier</i>	10. CONTRACTOR/SUPPLIER <i>Tarvac Truck Corporation</i>	
11. INSPECTION CRITERIA <input type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC <input type="checkbox"/> OTHER		IR NO. <i>J-60-5503</i> NO. <i>J-603 Rev. 5</i>	12. ASME AUTHORIZED INSPECTION REQ'D <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input checked="" type="checkbox"/> Rec'g <input type="checkbox"/> Const <input type="checkbox"/> Test	
15. Equip. Furnished By <input type="checkbox"/> Client <input type="checkbox"/> Eng <input type="checkbox"/> FLD				15. Equip. Furnished By		
16. NONCONFORMING CONDITION: <i>Item 1. Specification 7220-J-603 Rev. 5, Appendix A requires Quality Verification Documentation according to Form C-321-D. Form C-321-D Document Category 15.0 requires Cleaning and Coating Procedures and Verification Reports. Contrary to the above, no Cleaning Verification Report was included in the documentation package for valves 18V-0150, 28V-0250, 18V-0155 and 28V-0255.</i>				24. DISPOSITION CONCURRENCE		
				<input type="checkbox"/> rework	<input type="checkbox"/> reject	<input type="checkbox"/> repair
				<input type="checkbox"/> use as is		
17. REPORTED BY <i>Kevin A. Delaney</i>		DATE <i>8/8/78</i>	18. VALIDATED BY <i>A. J. [Signature]</i>		DATE <i>8/8/78</i>	
21. ROUTING: <input checked="" type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)						
22. <input type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering						
23. PROJECT ENGINEERING DISPOSITION						
25. DISPOSITION RESULTS						
26. QC ACCEPTANCE						
					QC ENGINEER	DATE
					AUTHORIZED INSPECTOR	DATE

... also on active ...  
... only ...

... not pending final disposition ... (S) ...

# NONCONFORMANCE REPORT

1. PROJECT NAME <u>Illland</u>		JOB NO. <u>7220</u>		19. NO. <u>1461</u>	20. PAGE <u>1</u> OF <u>1</u>
2. UNIT(S) <u>I &amp; II</u>	3. DRAWING/PART NO. <u>7220-11-14-5-B, 16-7, 109-1</u>	REV <u>N/A</u>	4. ITEM DESCRIPTION <u>Feedwater Pumps 1F05B &amp; 2F05B</u>		
6. P.O. OR SPEC NO. <u>7220-11-14AC</u>	7. SERIAL NO. <u>1105B &amp; 2105B</u>	B. REPLACEMENT PART <u>P/N N/A</u>	9. SOURCE <u>Supplier</u>	10. CONTRACTOR/SUPPLIER <u>Pincham-Flannette Company</u>	5. ITEM LOCATION <u>CC Field, 11-14-5-B</u>
11. INSPECTION CRITERIA <input type="checkbox"/> DWG <input type="checkbox"/> SPEC <input type="checkbox"/> OTHER	IR NO. <u>R-1-00-3376</u>	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input type="checkbox"/> NO	14. Discovered During <input type="checkbox"/> Rec'd <input type="checkbox"/> Const <input type="checkbox"/> Test	15. Equip Furnished By <input type="checkbox"/> Const <input type="checkbox"/> Eng <input type="checkbox"/> FLD
16. NONCONFORMING CONDITION: <u>Specification 7220-11-14 Rev. 3 para. 14.5 requires Quality Verification Documentation as summarized on Form G-321-D. Contrary to the above, the documentation packages supplied for 1F05B &amp; 2F05B and the Form G-321-D do not agree in the number of pages actually present in each package for each documentation category itemized on Form G-321-D.</u>					
17. REPORTED BY <u>John P. Phillips</u>		DATE <u>8-3-78</u>	18. VALIDATED BY <u>W. J. Barlow</u>		
21. ROUTING: <input type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)		22. <input checked="" type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering			
1. Procurement supervisor to obtain proper documentation <u>8-5-78</u>					
2. This is not a non-conforming item-pipes are not bent. This is the original configuration. <u>Attached 8/11/78</u>					
23. PROJECT ENGINEERING DISPOSITION					
24. DISPOSITION					
25. DISPOSITION RESULTS					
26. QC ACCEPTANCE					
QC ENGINEER					
AUTHORIZED INSPECTOR					
DATE					
DATE					

Continued on Page 2

Block 16 Continued

2. Specification 7220-N-14 Rev. 3 para. 11.1 states: "Manufacturer shall prepare all articles for shipment in such a manner that they will be protected from any damage in handling and transit." Contrary to the above, various pieces of tubing shipped with Turbine Driver 2P05B are bent out of their original configuration.

Damage tubing shipped loose attached to skid.

"Q" numbers are 4.382 and 4.392. Held pending final disposition. 2 hold tag(s) applied to the nonconforming item(s).

A conditional release is granted to install feedwater pumps 1P05B and 2P05B. These pumps are retrievable at any time during construction.

J. Brown  
PFE

8-9-78  
Date

J. Barclay  
PFOCE

8-9-78  
Date

L. D. ...  
LOAE

8-15-78  
Date

H. W. Kethron Jr.  
AI

8-15-78  
Date



## NONCONFORMANCE REPORT

1. PROJECT NAME			JOB NO.			19. NO. <u>1153</u>		20. PAGE <u>1</u> OF <u>1</u>						
2. UNIT(S)	3. DRAWING/PART NO.		REV	4. ITEM DESCRIPTION			5. ITEM LOCATION							
6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N _____ REV _____ SER NO. _____		9. SOURCE		10. CONTRACTOR/SUPPLIER								
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER		IR NO. _____ NO. _____	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES ( ) NO		13. SKETCH ATTACHED ( ) YES ( ) NO		14. Discovered During ( ) Rec'g ( ) Const ( ) Test		15. Equip Furnished By ( ) Client ( ) Eng ( ) FLD					
16. NONCONFORMING CONDITION:							24. DISPOSITION CONCURRENCE							
<p><i>[Faint handwritten text describing nonconforming condition]</i></p>							rework	reject	repair	use as is				
							PROJECT FIELD ENGINEER		DATE					
							PROJECT ENGINEER		DATE					
							PROJ CONSTR QC ENGINEER		DATE					
							AUTHORIZED INSPECTOR		DATE					
17. REPORTED BY			DATE	18. VALIDATED BY			DATE		25. DISPOSITION RESULTS					
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)														
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering														
23. PROJECT ENGINEERING DISPOSITION														
							26. QC ACCEPTANCE							
							QC ENGINEER		DATE					
							AUTHORIZED INSPECTOR		DATE					

### NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO.		19. NO.	20. PAGE
		7220		1104	1 OF 2
2. UNIT(S)	3. DRAWING/PART NO.	REV.	4. ITEM DESCRIPTION	5. ITEM LOCATION	
	See Block 16		Structural Steel Beams	Poseyville Grid, L16S	
6. P.D. DATE	7. SERIAL NO.	8. REPLACEMENT PART		9. SOURCE	
8-1-78	N/A	P/N N/A REV SER NO.		Supplier	
11. INSPECTION CRITERIA			12. ASME AUTHORIZED	10. CONTRACTOR/SUPPLIER	
<input type="checkbox"/> DWG <input type="checkbox"/> SPEC <input type="checkbox"/> OTHER IR NO. R-1.00-3202 NO. C-233 Rev. 13			INSPECTION RECD <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	Wiltse & Company	
13. SKETCH ATTACHED			14. Discovered During		15. Equip Furnished By
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			<input checked="" type="checkbox"/> Rec'y <input type="checkbox"/> Const <input type="checkbox"/> Test		<input type="checkbox"/> Chem <input type="checkbox"/> Eng <input checked="" type="checkbox"/> FLD
16. NONCONFORMING CONDITION:				24. DISPOSITION CONCURRENCE	
Specification 7220-C-233 Rev. 13 Paragraph 4.0 codes and standards; references AWS D1.1 72 Section 3, Paragraph 3.2.4 states: "Re-entrant corners, except for the corners of weld access cope holes adjacent to the flange, shall be filleted to a radius of not less than 1/2 in. for buildings and tubular structures and 3/4 in. for bridges. The fillet and its adjacent cuts shall meet without effort or cutting past the point of tangency."				<input type="checkbox"/> Rework <input checked="" type="checkbox"/> Reject <input type="checkbox"/> Repair <input type="checkbox"/> Use as Is	
				PROJECT ENGINEER <i>[Signature]</i> 8-14-78 DATE	
				PROJECT ENGINEER <i>[Signature]</i> 8-16-78 PROJ CONSTR QC ENGINEER DATE	
17. REPORTED BY		DATE		25. DISPOSITION RESULTS	
<i>[Signature]</i>		8-8-78			
18. VALIDATED BY		DATE			
<i>[Signature]</i>		8-9-78			
21. ROUTING: <input type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)					
22. <input checked="" type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering					
Return fabrication to Vendor for rework.					
<i>[Signature]</i> 8-14-78 <i>[Signature]</i> 8/14/78					
23. PROJECT ENGINEERING DISPOSITION					
26. QC ACCEPTANCE					
QC ENGINEER				DATE	
AUTHORIZED INSPECTOR				DATE	

Cont. on Page 2

March 16 Continued

Continued to the above, the following beams were delivered to the jobsite with re-entrant corners which are cut at the point of tangency: MA # 634-6-12B, 634-6-11, 634-8-3.

"Q" number is 1.20C. Hold pending final disposition. 3 hold tag(s) applied.

NONCONFORMING CONDITION REPORT

1. PROJECT NAME Midland		19. NO. _____	20. PAGE 1 OF 2
2. UNITS T.C.I.		3. ITEM LOCATION Fac. Site of Turbine Bldg.	
6. P.O. OR SPEC'G. N/A		9. SOURCE Construction	
7. SERIAL NO. N/A		10. CONTRACTOR/SUPPLIER N/A	
8. REPLACEMENT PART N/A		14. Discovered During ( ) Proc. (X) Const ( ) Test	
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER		15. Equip Furnished By ( ) Client (X) Eng ( ) FLD	
16. NONCONFORMING CONDITION: Specification of materials by the manufacturer shell be furnished in accordance with Nuclear Power Plant Components Code, paragraph NB-1130. Contrary to the above, the base described in paragraph 4.1.1 Diesel Oil Supply has not been furnished. (Continued pg. 2)		24. DISPOSITION CONCURRENCE rework _____ reject _____ repair _____ use as is _____	
17. REPORTED BY Dan Banti		PROJECT FIELD ENGINEER _____ DATE _____	
DATE 8-1-78		PROJECT ENGINEER _____ DATE _____	
21. ROUTING: N/A TO FIELD ENGINEERING		AUTHORIZED INSPECTOR _____ DATE _____	
22. ( ) Field Engineering Recommended Disposition to Project Engineering		25. DISPOSITION RESULTS	
23. PROJECT ENGINEERING DISPOSITION		25. QC ACCEPTABLE _____ DATE _____	
		QC ENGINEER _____ DATE _____	
		AUTHORIZED INSPECTOR _____ DATE _____	

Block 16 continued

Line No. Q218 No. Description Location & Disposition of Intraceable Material

12"-HBC-3 P110-FSK-M-HBC-3-1-1 FSK-M-2-HBC-3-1-1/Rev.0 A) F.W.#19 - Closure Plate, EME 470, has no traceable heat number.  
 B) F.W.#20 - Vault Wall (Tank IT-78A) has no traceable heat number.

12"-HBC-4 P110-FSK-M-HBC-4-1-1 FSK-M-2-HBC-4-1-1/Rev.0 A) F.W.#19 - Closure Plate, EME 470, has no traceable heat number.  
 B) F.W.#20 - Vault Wall (Tank IT-78B) has no traceable heat number.

12"-2-HBC-3 P110-FSK-M-2-HBC-3-1-1 FSK-M-2-HBC-3-1-1/Rev.0 A) F.W.#19 - Closure Plate, EME 470, has no traceable heat number.  
 B) F.W.#20 - Vault Wall (Tank IT-78A) has no traceable heat number.

12"-2-HBC-4 P110-FSK-M-2-HBC-4-1-1 FSK-M-2-HBC-4-1-1/Rev.0 A) F.W.#19 - Closure Plate, EME 470, has no traceable heat number.  
 B) F.W.#20 - Vault Wall (Tank IT-78B) has no traceable heat number.

"Q" Line No. 4.5LS F.A.C. Hold Tags Applied on pipe at Tank locations.  
 Hold for Engineering Disposition.

Block 16 continued:

A condition release is granted to CGR-100 and base according to Section III of the SME Code the line 1 -/2 -143C-4 from the final copy to the Diesel Gen. Eide will correct copy of R-1000000

Can be completely released without causing damage to the system. The release is granted to CGR-100 and base according to Section III of the SME Code the line 1 -/2 -143C-4 from the final copy to the Diesel Gen. Eide will correct copy of R-1000000

8-11-78

Date

PFQCE

W. D. ...

8-11-78

Date

W. D. ...

LOAE

AI

8-11-78

Date

# NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220			19. NO. 1466	20. PAGE 1 OF 2
2. UNIT(S) Unit II	3. DRAWING/PART NO. Bechtel J-393 Sht. 1	REV 0	4. ITEM DESCRIPTION Seismic Instrument Rack		5. ITEM LOCATION Hhse. 11, O.G. Hold	
6. P.O. OR SPEC NO. 7220-J-204 Rev. 9	7. SERIAL NO. 20166	8. REPLACEMENT PART P/N N/A REV _____ SER NO. _____		9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER Foxboro Company	
11. INSPECTION CRITERIA (x) DWG ( ) SPEC ( ) OTHER		IR NO. R-1.00-3477 NO. See B11. 16	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (x) NO	13. SKETCH ATTACHED ( ) YES (x) NO	14. Discovered During ( ) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng ( ) FLD
16. NONCONFORMING CONDITION: Bechtel DWG. J-393 Sht. 1 Rev. 0 indicates that Channel A of Panel 20166 is to be divided into Rack Bay A1 and A2. Contrary to the above, both rack bays are tagged A1. "O" number is 5.011. Hold pending final disposition. hold tag applied to the panel 20166.					24. DISPOSITION CONCURRENCE	
					rework	reject
					repair	release
					<i>[Signature]</i>	DATE
					PROJECT FIELD ENGINEER	DATE
					<i>[Signature]</i>	DATE
					PROJECT ENGINEER	DATE
					<i>[Signature]</i>	DATE
					PROJ CONSTR QC ENGINEER	DATE
					AUTHORIZED INSPECTOR	DATE
17. REPORTED BY <i>[Signature]</i> DATE 8-9-78					18. VALIDATED BY <i>[Signature]</i> DATE 8-10-78	
21. ROUTING: (x) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)						
22. ( ) Field Engineering Disposition (x) Field Engineering Recommended Disposition to Project Engineering Disposition Requested by: 8-25-78 Project Engineering to resolve this NCR. <i>[Signature]</i> 8-23-78 <i>[Signature]</i> 8-23-78						
23. PROJECT ENGINEERING DISPOSITION NAME PLATE HAS BEEN CHANGED FROM A1 TO A2 IN ACCORDANCE WITH SE-T-65 DATED 7/24/76. HENCE USE AS IS. <i>[Signature]</i> 8/25/76						
					25. DISPOSITION RESULTS	
26. QC ACCEPTANCE						
					QC ENGINEER	DATE
					AUTHORIZED INSPECTOR	DATE

Block 16 Cont.

4-2-78

A Conditional Release is Granted to install Panel 16166. Corrections or removal can be accomplished without causing damage or contamination to the associated plant equipment or structure.

*[Signature]* 5-16-78 W.L.S. for W.L.S. 8-10-78  
PTE Date FQCE Date

Ref LAD Newcomb 8-11-78  
ICAE Sa Richardson Date



# NONCONFORMANCE REPORT

1. PROJECT NAME FIELD NO. 1111		JOB NO. 7000		19. NO. 1111	20. PAGE 1 OF 1
2. UNIT(S) 1111-1-2		3. DRAWING/PART/NO. 1111-2107A		5. ITEM LOCATION Process # 3, Column A	
4. ITEM DESCRIPTION Field installed procedure transmitter		9. SOURCE Supplier		10. CONTRACTOR/SUPPLIER Fidelity Company	
8. REPLACEMENT PART P/N REV. SER NO.		12. ASME AUTHORIZED INSPECTION RECD ( ) YES ( ) NO		15. Equip Furnished By ( ) Rec'g ( ) Const ( ) Test	
7. SERIAL NO. 1111-2107A		13. SKETCH ATTACHED ( ) YES ( ) NO		24. DISPOSITION CONCURRENCE	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER		14. DISCOVERED DURING ( ) Rec'g ( ) Const ( ) Test		25. DISPOSITION RESULTS	
16. NONCONFORMING CONDITION: Specification J-200 Rev. E para. 12.1 states: "Documentation requirements for Q-listed items are defined in Table K-200-B, sheet 1 of 2, attached to the material requisition." Contrary to the above, Req-Q documentation was delivered for differential pressure transmitter 1111-2107A & 211-2207A. Note: Batched Instrument Index J-700 states that these are "Q" list transmitters for "Q" listed tanks 1111A & 2111A however table K-200-B for Material Requisition 17. REPORTED BY R. A. [Signature] DATE 8-8-78 18. VALIDATED BY M. [Signature] DATE 8-10-78					
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)					
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering					
23. PROJECT ENGINEERING DISPOSITION					
26. QC ACCEPTANCE					
QC ENGINEER				DATE	
AUTHORIZED INSPECTOR				DATE	



### NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO. 7220		19. NO. 1168	20. PAGE 1 OF 2	
2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION See Blk. 16 Poseyville Laydown		
6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N N/A REV SER NO.		9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER Liberty Equipment & Supply	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER		IR NO. See Blk. 16 NO. M-305 Rev. 3	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD
16. NONCONFORMING CONDITION:				24. DISPOSITION CONCURRENCE		
Specification 7220-M-305 Rev. 3 requires 'Marking of material according to ASME Section III. ASME Section III requires identifying material with the applicable Specification and Grade of material heat number or h/d code... to facilitate traceability of the reports of results of tests performed on the material.' Contrary to the above, material as listed below is not traceable in accordance with the Specification:				rework #3 Doc #14#2		
				reject #14#2 repair use as is		
PROJECT ENGINEER <i>[Signature]</i> 8-29-78 DATE				PROJECT ENGINEER <i>[Signature]</i> 9-1-78 DATE		
PROJ CONSTR QC ENGINEER <i>[Signature]</i> AUTHORIZED INSPECTOR DATE				AUTHORIZED INSPECTOR DATE		
17. REPORTED BY				25. DISPOSITION RESULTS		
K. Deitz DATE 8/14/78		B. Brelvy DATE 8/14/78				
21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)						
22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering						
Remove item 1 and item 2 from Q stock and place in Non "Q" stock for Non "Q" usage. (5440')						
On item 3 Procurement Supervisor to obtain correct documentation.						
R. D. Mac Donald 8-29-78 R. Ward 8/29/78						
23. PROJECT ENGINEERING DISPOSITION						
26. QC ACCEPTANCE						
QC ENGINEER				DATE		
AUTHORIZED INSPECTOR				DATE		

Item 15 Continued

(No legible Ht. Number, Code or Tag, marked on or attached to the Pipe).

Item 1. 83 Pcs. 1" Sch. 80 C/S Pipe ASME SA-106 Gr. B Area M8S. (1660')

Item 2. 189 Pcs. 1 1/2" Sch. 80 C/S Pipe ASME SA-106 Gr. B Area K2N & K3N. (3780')

Item 3. 376 Pcs. 1 1/2" Sch. 80 C/S Pipe ASME SA-106 Gr. B Area C15N, C16N, & C17N. (6,720')

(Note: Item 3 Documentation indicates Heat No. reads D47096. Pipe is marked Ht. No. D47906.

"a" number is indeterminate. Hold pending final disposition. 3 hold tag(s) applied to the nonconforming item(s).

NONCONFORMANCE REPORT

1. PROJECT NAME		4. ITEM DESCRIPTION		19. NO.	PAGE	1 OF 1
2. DRAWING/PART NO.		REV 4. ITEM DESCRIPTION 2 Pcs. 2 1/2" dia		5. ITEM LOCATION		
3. SERIAL NO.		8. REPLACEMENT PART		9. SOURCE		
6. P.O. OR SEC. NO.		P/N REV SER NO.		10. CONTRACTOR/SUPPLIER		
7. SERIAL NO.		11. INSPECTION CRITERIA		14. Discovered During		
IR NO. R-1,00-3444		NO. M-215 Rev. 1		15. Equip Furnished By		
12. ASME AUTHORIZED INSPECTION REQ'D		13. SKETCH ATTACHED		16. DISPOSITION CONCURRENCE		
( ) YES (X) NO		( ) YES (X) NO		24. DISPOSITION CONCURRENCE		
16. NONCONFORMING CONDITION:		Specification M-215 Rev. 1 Para. 3.0 requires marking in accordance with ASME B 3.1V code Section III. ASME Section III requires the manufacturer's name and heat number to be marked on each piece. Contrary to the above, manufacturer's name and heat number are illegible. "0" number is indeterminate. Hold pending final disposition. 2 hold tag(s) applied to the nonconforming item(s).		25. DISPOSITION RESULTS		
17. REPORTED BY		DATE		AUTHORIZED INSPECTOR		
Tim Christopher		8/11/78		8-17-78		
21. ROUTING:		18. VALIDATED BY		DATE		
( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)		D. J. Sweeney		8-14-78		
22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering		Procurement Supervisor to return Non-conforming material.		26. QC ACCEPTANCE		
23. PROJECT ENGINEERING DISPOSITION		K. Ward 8/17/78		QC ENGINEER		
				AUTHORIZED INSPECTOR		
				DATE		
				DATE		

PROJECT FIELD ENGINEER  
 PROJECT QC ENGINEER  
 AUTHORIZED INSPECTOR

DATE  
 DATE  
 DATE

DATE  
 DATE  
 DATE

## NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO.		19. NO. 1470	20. PAGE 1 OF 1																				
2. UNIT(S)		3. DRAWING/REV. NO.		4. ITEM DESCRIPTION																					
		REV. H/A		Reactor Coolant Pump Motor Flywheel																					
5. P.O. OR SPEC. NO.		7. SERIAL NO.		8. REPLACEMENT PART																					
		100-PLB2		H/A																					
		SER. NO.		9. SOURCE																					
				Supplier																					
				10. CONTRACTOR/SUPPLIER																					
				Babcock & Wilcox																					
11. INSPECTION CRITERIA		12. ASME AUTHORIZED INSPECTION RLV'D		13. SKETCH ATTACHED																					
<input type="checkbox"/> DWG <input type="checkbox"/> SPEC <input checked="" type="checkbox"/> OTHER IR NO. R-2,20-21 2 NOCCI R-2,20 Rev. 4		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO																					
16. NONCONFORMING CONDITION:		14. Discovered During		15. Equip Furnished By																					
OCI R-2,20 Rev. 4 requires review of the B & W		<input checked="" type="checkbox"/> Rec'y <input type="checkbox"/> Const <input type="checkbox"/> Test		<input checked="" type="checkbox"/> Client <input type="checkbox"/> Eng <input type="checkbox"/> FLD																					
Data Packages for availability, legibility and traceability in accordance with the requirements of the B & W Quality Requirements Matrix (QRM). Contrary to the above, the Data Package for RC Pump Motor Flywheel for Motor IRC-PLB2 does not have a signed B & W HQMS certificate of conformance and the QA Data Index indicates that this material has been placed on B & W QA Hold status. "Q" number is 4.017. Hold pending final disposition. 1 hold tag(s) applied to the R.C. Pump Motor.		24. DISPOSITION CONCURRENCE																							
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">rework</td> <td style="width: 25%;">reject</td> <td style="width: 25%;">repair</td> <td style="width: 25%;">use as is</td> </tr> <tr> <td>DCC</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="3"> <i>[Signature]</i> 8-22-78                  PROJECT FIELD ENGINEER DATE             </td> <td></td> </tr> <tr> <td colspan="3"> <i>[Signature]</i> 8-25-78                  PROJECT ENGINEER DATE             </td> <td></td> </tr> <tr> <td colspan="3">                 AUTHORIZED INSPECTOR             </td> <td>DATE</td> </tr> </table>				rework	reject	repair	use as is	DCC				<i>[Signature]</i> 8-22-78 PROJECT FIELD ENGINEER DATE				<i>[Signature]</i> 8-25-78 PROJECT ENGINEER DATE				AUTHORIZED INSPECTOR			DATE
		rework	reject	repair	use as is																				
		DCC																							
<i>[Signature]</i> 8-22-78 PROJECT FIELD ENGINEER DATE																									
<i>[Signature]</i> 8-25-78 PROJECT ENGINEER DATE																									
AUTHORIZED INSPECTOR			DATE																						
25. DISPOSITION RESULTS																									
17. REPORTED BY		DATE		18. VALIDATED BY																					
<i>[Signature]</i>		8-11-78		<i>[Signature]</i>																					
21. ROUTING: <input type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)																									
22. <input checked="" type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering																									
Mr. Walter Lee, B&W technical site representative, will insure that the required documentation and B&W QA release is obtained.																									
<i>[Signature]</i> 8/21/78 <i>[Signature]</i> 8/21/78 Concerned W. Lee B&W 8/24/78																									
23. PROJECT ENGINEERING DISPOSITION																									
26. QC ACCEPTANCE																									
QC ENGINEER				DATE																					
AUTHORIZED INSPECTOR				DATE																					

# NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO.		19. NO. 1471	20. PAGE 1 OF 1
2. UGTHS	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION	
6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N M/A REV	9. SOURCE	10. CONNECTION/SUBPLIER	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER	IR NO. 0-1, CO-3601 NO 6-53 Rev. 1	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. Discovered During ( ) Rec'g ( ) Const ( ) Test	
16. NONCONFORMING CONDITION: Maximum Order 7220-2-1037; Note 1 requires ability to have minimum tensile strength of 80,000 psi. Company to the above, AMF Nelson Division present certificate sheet, for Certificate of Compliance and Statement of Compliance and tensile strength to be 75,725 psi - 50% higher in following item. All pending final disposition. Will hold tag(4) until we have received item.					
17. REPORTED BY		DATE	18. VALIDATED BY	DATE	
Joe (Signature)		8/15/78	(Signature)	8-15-78	
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)					
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering					
23. PROJECT ENGINEERING DISPOSITION					
24. DISPOSITION CONCURRENCE					
rework		reject	repair	use as is	
PROJECT FIELD ENGINEER		PROJECT ENGINEER		DATE	
PROJECT ENGINEER		PROJECT ENGINEER		DATE	
PROJ CONSTR QC ENGINEER		PROJ CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		AUTHORIZED INSPECTOR		DATE	
25. DISPOSITION RESULTS					
26. QC ACCEPTANCE					
QC ENGINEER		QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		AUTHORIZED INSPECTOR		DATE	

## NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO. 7220		19. NO. 1172	20. PAGE 1 OF 3
2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION	
6. P.O. OR SPEC NO. 7220-11-117 AC	7. SERIAL NO. 67-2	H/A	Nuclear Service Valve	Misc. # 1, Q.S. Hold	
8. REPLACEMENT PART P/N H/A REV 3107	SER NO.	9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER Anchor-Berlin Valve Company		
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER	IR NO. R-1-00-3403 NON-117 Rev C	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. Discovered During ( ) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng ( ) FLD
16. NONCONFORMING CONDITION: Purchase Order 7220-11-117 AC Rev. 12 and Specification 7220-11-117 Rev. B requires Quality Verification documentation to be supplied in accordance with Form G-321-B. Contrary to the above, a. P.O. item # 11.1 Valve # G-1220-07-110-3070A-RV b. The documentation present in the Quality Verification Documentation Package does not agree with the summary supplied on the G-321-B for Documentation				24. DISPOSITION CONCURRENCE	
				rework	reject
				repair	use as is
				PROJECT FIELD ENGINEER	DATE
				PROJECT ENGINEER	DATE
				PROJ CONSTR QC ENGINEER	DATE
				AUTHORIZED INSPECTOR	DATE
17. REPORTED BY <i>Richard L. [Signature]</i> 8-7-78				18. VALIDATED BY <i>[Signature]</i> 8-11-78 Cont. on Page 2	
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)				25. DISPOSITION RESULTS	
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering					
23. PROJECT ENGINEERING DISPOSITION					
				26. QC ACCEPTANCE	
				QC ENGINEER	DATE
				AUTHORIZED INSPECTOR	DATE



1. The test results for the  
 2. The test results for the  
 3. The test results for the

In addition, hold testing shall also include  $\frac{3}{4}$  hold test(s) applied to the valve.



## NONCONFORMANCE REPORT

1. PROJECT NAME Holland		JOB NO. 7220		19. NO. 1473	20. PAGE 1 OF 2																								
2. UNIT/ITEM minutes	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION Zone 5A Rip Rap	5. ITEM LOCATION Q.C. Hold Batch Plant Laydown																									
6. P.O. OR SPECIFICATION 7220-F-27833 Rev. 1	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV _____ SER NO. _____		9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER Wirt Transport Company																								
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (X) OTHER		IR NO. R-1.00-3563 NOF-27833 Rev. 1	12. ASME AUTHORIZED INSPECTION REC'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test																								
15. Equip Furnished By ( ) Client ( ) Eng (X) FLD																													
16. NONCONFORMING CONDITION: Purchase Order F-27833 Revision 1, for Zone 5A Rip Rap, states in part: "Average size of particles: 8 inch to 12 inch, Maximum size of any particles-18 inches. No more than 20% (by weight) of the material with particle sizes smaller than 6 inches. At least 40% (by weight) of the material shall have particle sizes of 10 inches or larger."					24. DISPOSITION CONCURRENCE																								
					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">rework</td> <td style="width: 25%;">reject</td> <td style="width: 25%;">repair</td> <td style="width: 25%;">use as is</td> </tr> <tr> <td colspan="3" style="text-align: center;"><i>J. W. [Signature]</i></td> <td style="text-align: center;"><i>8/23/78</i></td> </tr> <tr> <td colspan="3" style="text-align: center;">PROJECT ENGINEER</td> <td style="text-align: center;">DATE</td> </tr> <tr> <td colspan="3" style="text-align: center;"><i>A. W. [Signature]</i></td> <td style="text-align: center;"><i>8-25-78</i></td> </tr> <tr> <td colspan="3" style="text-align: center;">PROJ CONSTR QC ENGINEER</td> <td style="text-align: center;">DATE</td> </tr> <tr> <td colspan="3" style="text-align: center;">AUTHORIZED INSPECTOR</td> <td style="text-align: center;">DATE</td> </tr> </table>	rework	reject	repair	use as is	<i>J. W. [Signature]</i>			<i>8/23/78</i>	PROJECT ENGINEER			DATE	<i>A. W. [Signature]</i>			<i>8-25-78</i>	PROJ CONSTR QC ENGINEER			DATE	AUTHORIZED INSPECTOR			DATE
rework	reject	repair	use as is																										
<i>J. W. [Signature]</i>			<i>8/23/78</i>																										
PROJECT ENGINEER			DATE																										
<i>A. W. [Signature]</i>			<i>8-25-78</i>																										
PROJ CONSTR QC ENGINEER			DATE																										
AUTHORIZED INSPECTOR			DATE																										
Continued on Page 2																													
17. REPORTED BY <i>Rob A. [Signature]</i>		DATE <i>8-11-78</i>	18. VALIDATED BY <i>A. B. [Signature]</i>		DATE <i>8-15-78</i>																								
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)																													
22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering																													
"Reject" - The unacceptable zone 5A Rip Rap will be removed from site.																													
<i>R. S. [Signature] 8-23-78</i>																													
<i>J. H. [Signature] 8-23-78</i>																													
23. PROJECT ENGINEERING DISPOSITION																													
26. QC ACCEPTANCE																													
QC ENGINEER					DATE																								
AUTHORIZED INSPECTOR					DATE																								

Sheet 16 (continued)

Quantity to the above, approximately 50% (by weight) of the material received on Vint Stone Lock Ticket Number 74382 has multiple sizes of 6" or less. Hold pending final disposition. "Q" number is indeterminate.  
(Hold tag(s) applied to the nonconforming item(s).)

## NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO.		19. NO. 11/74	20. PAGE 1 OF 12
2. UNIT(S)		3. PART NO.		4. ITEM DESCRIPTION	
10"-INCH-PIPE-VALVE		REV H/A		Nuclear Service Valve	
6. P.O. ORDER NO.		7. SERIAL NO.		8. REPLACEMENT PART	
7220-1125C Rev. 5		5205-21-1-2		P/N W/A REV SER NO.	
9. SOURCE		10. MANUFACTURER/SUPPLIER			
Supplier		Anchor/Darling Valve Co.			
11. INSPECTION CRITERIA		12. ASME AUTHORIZED INSPECTION REQ'D		13. SKETCH ATTACHED	
( ) DWG ( ) SPEC ( ) OTHER		IR NO. R-1, 00-3511 NO. H-125C Rev. 5		( ) YES ( ) NO	
14. Discovered During		15. Equip Furnished By			
( ) Rec'g ( ) Const ( ) Test		( ) Client ( ) Eng ( ) FLD			
16. NONCONFORMING CONDITION:				24. DISPOSITION CONCURRENCE	
Specification 7220-M-125C Rev. 5 requires Quality Verification Documentation according to Form G-321-D. Contrary to the above;				rework	
				reject	
1. Form G-321-D Pages 1 & 2 of 3, Document Category 12.0, 21.0 & 22.0 are incorrectly filled out. (Note: Doc. Cat. 21.0, MT Verification Reports should not be required, but Doc. Cat. 22.0, PT Verification Reports should be required. See Attachment "A" - Pages 1 & 2 of 2).				repair	
				use as is	
17. REPORTED BY				18. VALIDATED BY	
Dean A. Delaney		DATE		DATE	
8/17/78		8-17-78		8-17-78	
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)					
22. <input checked="" type="checkbox"/> Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering					
Procurement supervisor to expedite missing and corrected documentation per specification 7220-M-125 C Rev. 5.					
J. J. [Signature] 8/24/78 K. [Signature] 8/28/78					
23. PROJECT ENGINEERING DISPOSITION				26. QC ACCEPTANCE	
				QC ENGINEER	
				DATE	
				AUTHORIZED INSPECTOR	
				DATE	

PROJECT FIELD ENGINEER: [Signature] 8-28-78  
 PROJECT ENGINEER: [Signature] 8-31-78  
 PROJ CONSULTING ENGINEER: [Signature] 8-31-78  
 AUTHORIZED INSPECTOR: [Signature] 8-31-78

Con't Pg. 2

Block 16 continued

2. There is no traceability on a PT Verification Report, on three Repair Verification Reports and on three Heat Treatment Charts. See Attachment "B" - Pages 1 thru 7 of 7.
3. The Certified Material Test Report for studs, Heat No. 646171, Code 8B is illegible. See Attachment "C" - Page 1 of 1.
4. Form G-321-D, Document Category 12.0 (Welding Verification Reports) requires 40 Verification Reports. Only 22 reports were submitted in the Quality Verification Documentation Package. Doc. Cat. 14.0 (Repair Verification Reports) requires 57 Verification Reports. Only 42 reports were submitted in the Quality Verification Documentation Package.

"Q" number is indeterminate until installation. Hold pending final disposition. 1 hold tag(s) applied to the nonconforming item(s).

READ INSTRUCTIONS ON BACK BEFORE FILLING IN FORM

These requirements for Engineering and Quality Verification Documents are to be fulfilled in accordance with the schedule set forth below. Supplier's failure to comply with these requirements may result in price cancellation or withholding of payment until compliance is established.

1. Document Category Number	2. Specification Paragraph Reference	3. Kind of Copies	ENGINEERING DOCUMENTS				QUALITY VERIFICATION DOCUMENTS						12. Remarks	
			4. Quantity Prepared		5. Pages Approved		6. Quantity required for Review	7. Distribution Code	8. Supplier's Confirmation Check	9. Inspection Items	10. Engineering Review	11. Field QCE Check In		
			Initial	Final	Yes	No								
10.1		Reproducible Microfilm	1	1			X							Package of sample Quality Verification Documents showing format and typical contents.
1.1	15.3	Reproducible Microfilm	3	3			X							REVISIONS SET FORWARDED FOR REVIEW
1.2	15.3	Reproducible Microfilm	3	3			X							REVISIONS SET FORWARDED FOR REVIEW
1.3	15.3	Reproducible Microfilm	3	3			X							FILE AT THE END OF WORK ORDER NUMBER 715-
1.4	A7.9.2	Reproducible Microfilm	3	3			X							1286-59-1 (MCM) BY CONTRACT FILE STATE CONTRACT ON 8-4-76.
2.0	M/R	Reproducible Microfilm	3	3										
3.0	15.3	Reproducible Microfilm	3	3			X							
4.0	A7.9.0	Reproducible Microfilm		20										
4.0	3	Reproducible Microfilm	3	3										SCDR-71R
5.0	M/R	Reproducible Microfilm	3	3			X							
6.0	14.0	Reproducible Microfilm	3	3			X							
7.0	3.1	Reproducible Microfilm	3	3			X							
8.0	3.11	Reproducible Microfilm	3	3			X							
11.0	A1.9	Reproducible Paper	3	3			X							Paint description approval not recd. before file
12.0	6.3	Reproducible Paper	3	3			X							40 WL

13. Supplier's Order No. 5205-21	14. Supplier's Part No. 5205-21-1-9	15. Supplier's Part Name 10' 150" Gate	16. Quantity
17. Buyer's Req. Item No. 39.2	18. Buyer's Line/Equip. Tag or Code No. 10-HCB-GT-D&L	19. Buyer's Part Name 10' 150" Gate	20. Traceability 5205-21-1-9

21. Supplier's Conformity Statement: We certify that the listed work and required documents meet the requirements of the procuring documents. Supplier: B. J. Johnson P. J. Johnson Date: 6-20-78

22. Inspection Review Statement: Work was reviewed based on satisfactory completion of inspection and review of documentation. Authorized Organization:  YES, listed under 12, Remarks:  NONE. Inspector: William J. Jett Date: 6-20-78

23. Engineering Review Statement: The Quality Verification Documents submitted to Engineering with this form have been reviewed for conformance to the specified requirements and are acceptable. Engineer: \_\_\_\_\_ Date: \_\_\_\_\_

24. QCE Check-In Statement: This form and the Quality Verification Documents mentioned herein have been received and their relevancy to the business item verified. CONTROL NO. \_\_\_\_\_ FILE NO. \_\_\_\_\_ QCE: \_\_\_\_\_ Date: \_\_\_\_\_

Also QCE Check-In Distribution to: Procurement Manager, Field & Plant Offices, District Supervisors

**MIDLAND PLANTS - UNITS 1 & 2**  
**CONSUMERS POWER COMPANY**

62110  
A3 REV 2  
1/76

ENGINEERING AND QUALITY VERIFICATION DOCUMENT REQUIREMENTS

FORM NO. 7220  
P.O. SPEC. NUMBER  
7220-1-125C

SHEET 1 OF 3

REV. 4

READ INSTRUCTIONS ON BACK BEFORE FILLING IN FORM												
These requirements for Engineering and Quality Verification Documents are to be followed in accordance with the schedule set forth below. Supplier's failure to comply with these requirements may result in order cancellation or withholding of payment until compliance is established.												
1. Document Category Number	2. Specification Paragraph Reference	3. Kind of Copies	ENGINEERING DOCUMENTS				QUALITY VERIFICATION DOCUMENTS					12. Remarks
			4. Quantity Required	5. Price Applied Required	6. Quantity Required for Release	7. Distribution Code	8. Supplier's Conformance Check	9. Inspection Release	10. Engineering Review	11. Field QCE Check In		
		Reproducible Microfilm	Initial Final	Yes	No							
13.0	6.3	Reproducible Microfilm	3 3	X		1	c	35	WL			
14.0	6.3.1	Reproducible Microfilm	3 3	X		1	c	57	WL			
15.0		Reproducible Microfilm	3 3			1	c	1	WL			
16.0	4.2 7.0	Reproducible Microfilm	3 3		X	1	c	19	WL			
17.1	4.0	Reproducible Microfilm			N/A	1	c	30	WL			
17.3	4.2 6.2.6	Reproducible Microfilm			N/A	1	c	15	WL			
17.4	4.0	Reproducible Microfilm			N/A	1	c	3	WL			
18.0	12.0 10.2	Reproducible Microfilm			N/A	1	c	2	WL			Distribution in accordance with para. A10.1
19.0	8.5	Microfilm	3 3	X				N/A	WL			
20.0	8.2	Reproducible Microfilm	3 3		X	1	c	7	WL			Radiographic film to be sent to Code C only
21.0	8.3	Reproducible Microfilm	3 3	X		1	c	5	WL			
22.0	8.4	Repro	3 3	X		1	c	N/A	WL			
24.0	A1.5 9.0	Repro	3 3	X		1	c	1	WL			
25.0	8.6	Repro	3 3	X		1	c	31	WL			


  

13. Supplier's Order No. 5205-21	14. Supplier's Part No. 5205-21-19	15. Supplier's Part Name 10" 150# Gate	16. Quantity 1
17. Buyer's Req. Item No. 39.2	18. Buyer's Line/Equip. Tag or Code No. 10-HCB-GT-DRL	19. Buyer's Part Name 10" 150# Gate	20. Traceability 5205-21-19

21. Supplier's Conformance Statement	We certify that the listed work and required documents meet the requirements of this processing document.	Supplier: <u>P. J. Tillman</u> <u>DALYN</u> <u>6-20-78</u>
22. Inspection Review Statement	Work was released based on satisfactory completion of inspection and review of documentation.	Authorized Decision: <input type="checkbox"/> YES, Note # on 12, Remarks <input checked="" type="checkbox"/> NONE Checked Inspector: <u>William L. ...</u> <u>6-20-78</u>
23. Engineering Review Statement	The Quality Verification Documents submitted to Engineering with this form have been reviewed for conformance to the specified requirements and are acceptable.	Engineer: _____ Date: _____
24. QCE Check In Statement	This form and the Quality Verification Documents mentioned herein have been reviewed and their relationship to the hardware items verified.	CONTROL NO. _____ FILE NO. _____ QCE: _____ Date: _____

 C-3710 AA REV 2 574	MIDLAND PLANTS - UNITS 1 & 2 CONSUMERS POWER COMPANY	JOB NO. 7220 P.O./SPEC. NUMBER 7220-M-125C
	ENGINEERING AND QUALITY VERIFICATION DOCUMENT REQUIREMENTS	



LIQUID PENETRANT REPORT

P.O.  
DESCRIPTION

ITEM

ANCHOR JOB

FIGURE 71

PART # 9	ACC	REJ	IND	TYP	RPR	LOC	INS	DATE	PART	ACC	REJ	IND	TYP	RPR	LOC	INS	DATE
BODY SEAT (INTEGRAL)	2	0					WU	6.278	BODY SEAT (INTEGRAL)								
BODY P/S AREA	1	0					WU	6.278	BODY P/S AREA								
BODY B.W. ENDS	2	0					WU	6.278	BODY B.W. ENDS								
BONNET BACKSEAT # 23	1	0					WU	6.178	BONNET BACKSEAT								
DISC FACE(S) + 8	2	0					WU	4.278	DISC FACE(S)								
SEAT RING(S)	2	0					WU	6.278	SEAT RING(S)								
STEM(S) # 3	1	0					WU	12.170	STEM(S)								
BYPASS PIPING									BYPASS PIPING								
Disc Guides	2	0					WU	6.278									

PART	ACC	REJ	IND	TYP	RPR	LOC	INS	DATE	PART	ACC	REJ	IND	TYP	RPR	LOC	INS	DATE
									BODY SEAT (INTEGRAL)								
									BODY P/S AREA								
									BODY B.W. ENDS								
									BONNET BACKSEAT								
									DISC FACE(S)								
									SEAT RING(S)								
									STEM(S)								
									BYPASS PIPING								

COMMENTS AND REPAIR SECTION ON REVERSE.  
COMMENTS = C-1, ETC.

ABOVE LIQUID PENETRANT TESTS CONDUCTED IN ACCORDANCE WITH:

PAGE \_\_\_\_\_ OF \_\_\_\_\_ PAGES

QC FORM 2/14/77

S.M.I. LEVEL III

1034-1- Rev H Add 9

1413-1-

ANCHOR/DARLING VALVE CO.  
QUALITY CONTROL MANAGER

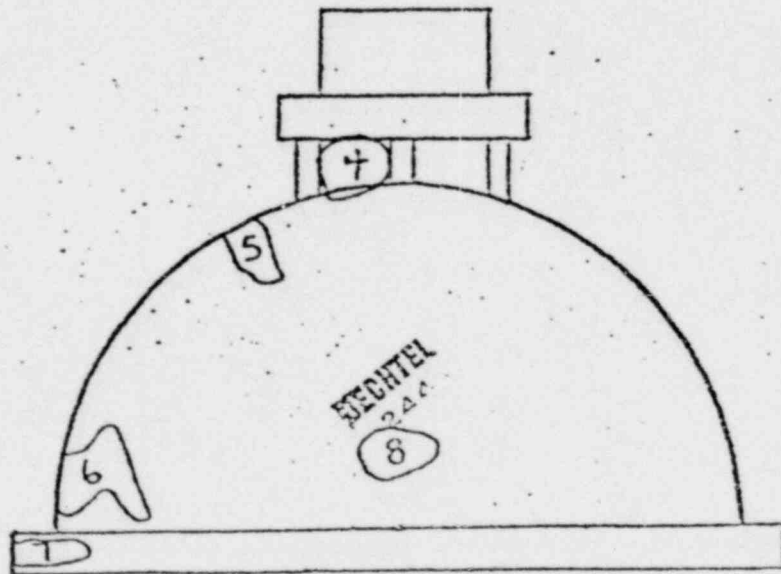
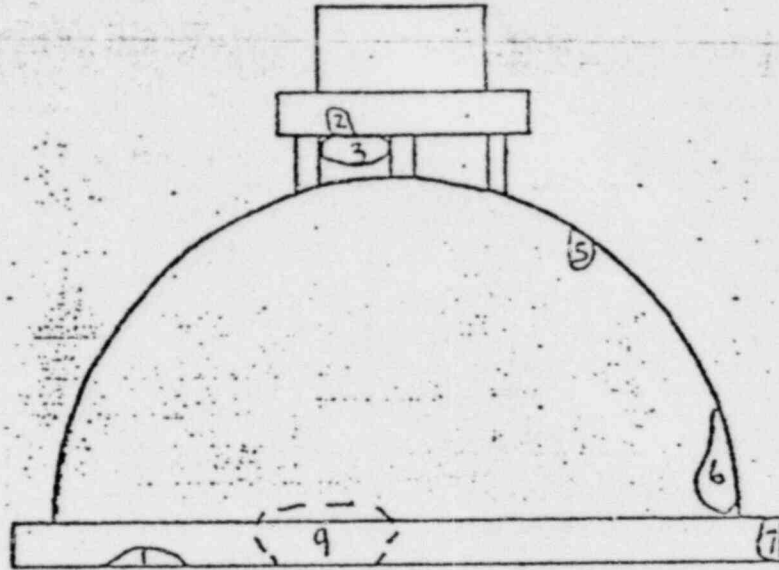
REVIEWED BY

JUN 19 1978

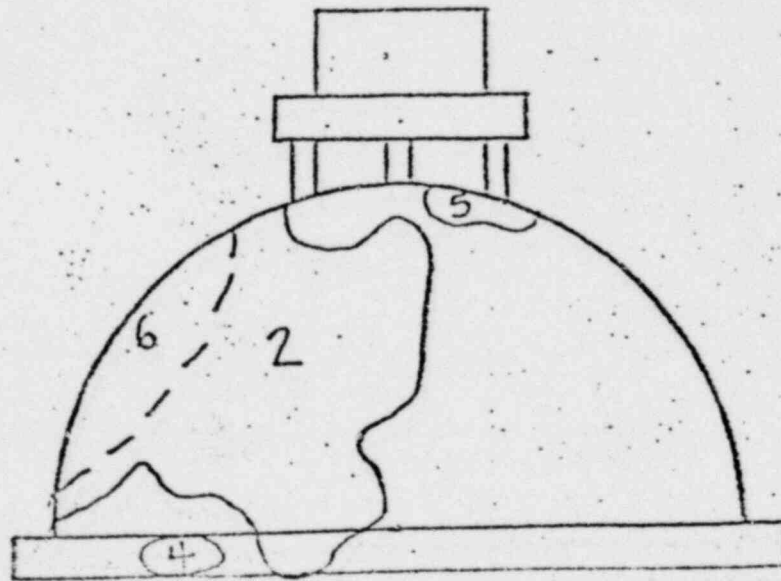
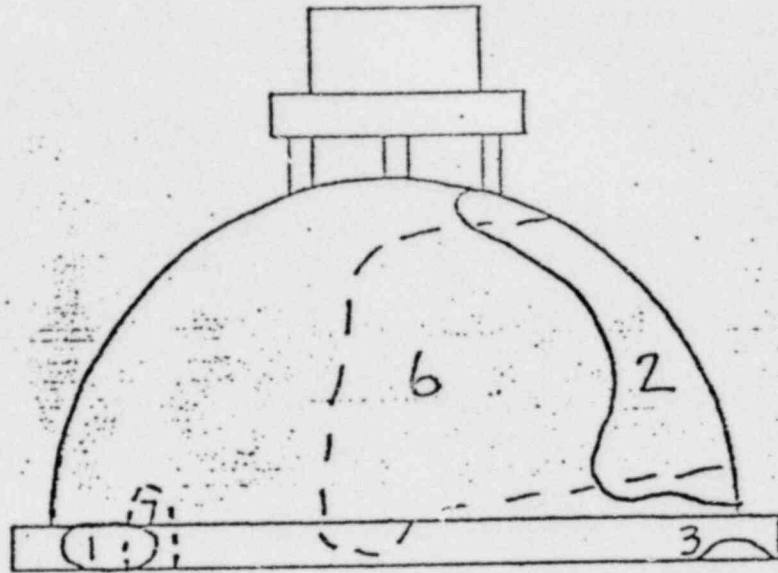
BECHTEL 242

NCR # 1474 Page 5 of 12  
 Attachment "B" Page 1 of 7

PATTERN NO. VIEW  
(PRL S/N)

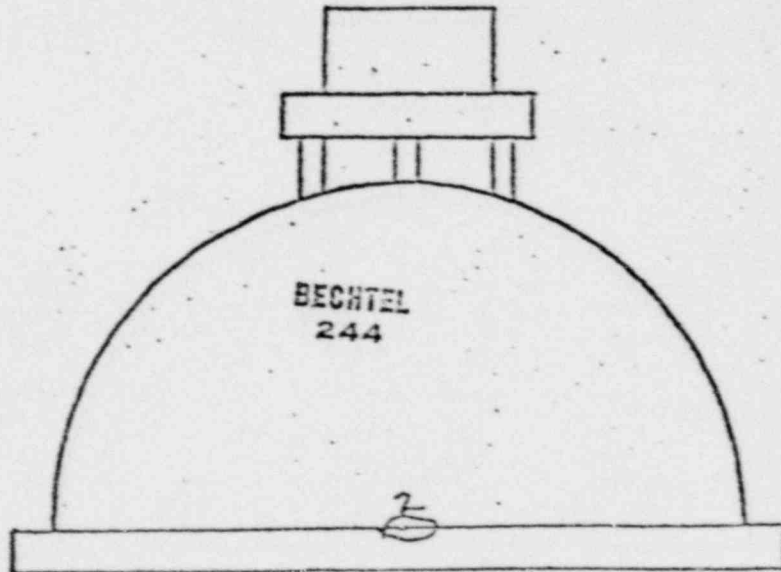
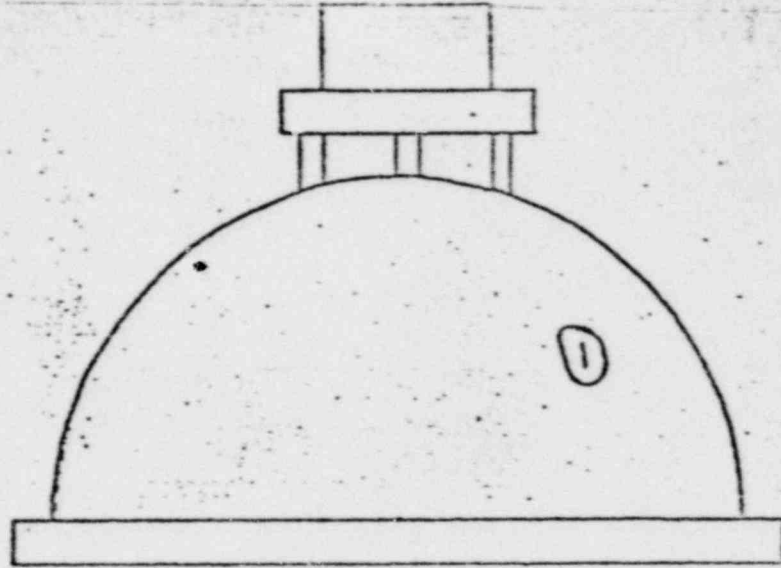


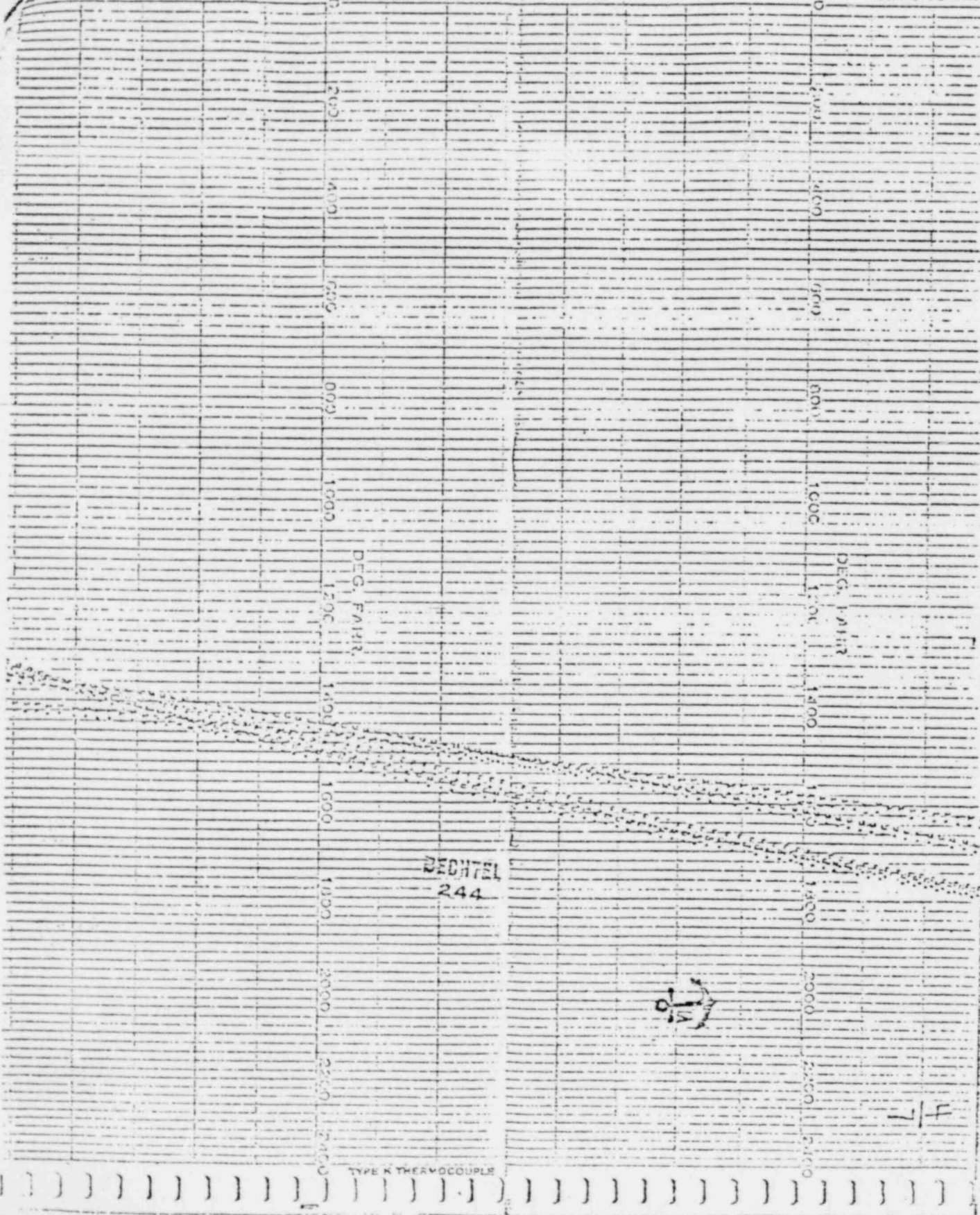
PATTERN NO. VIEW  
(PRL S/N)



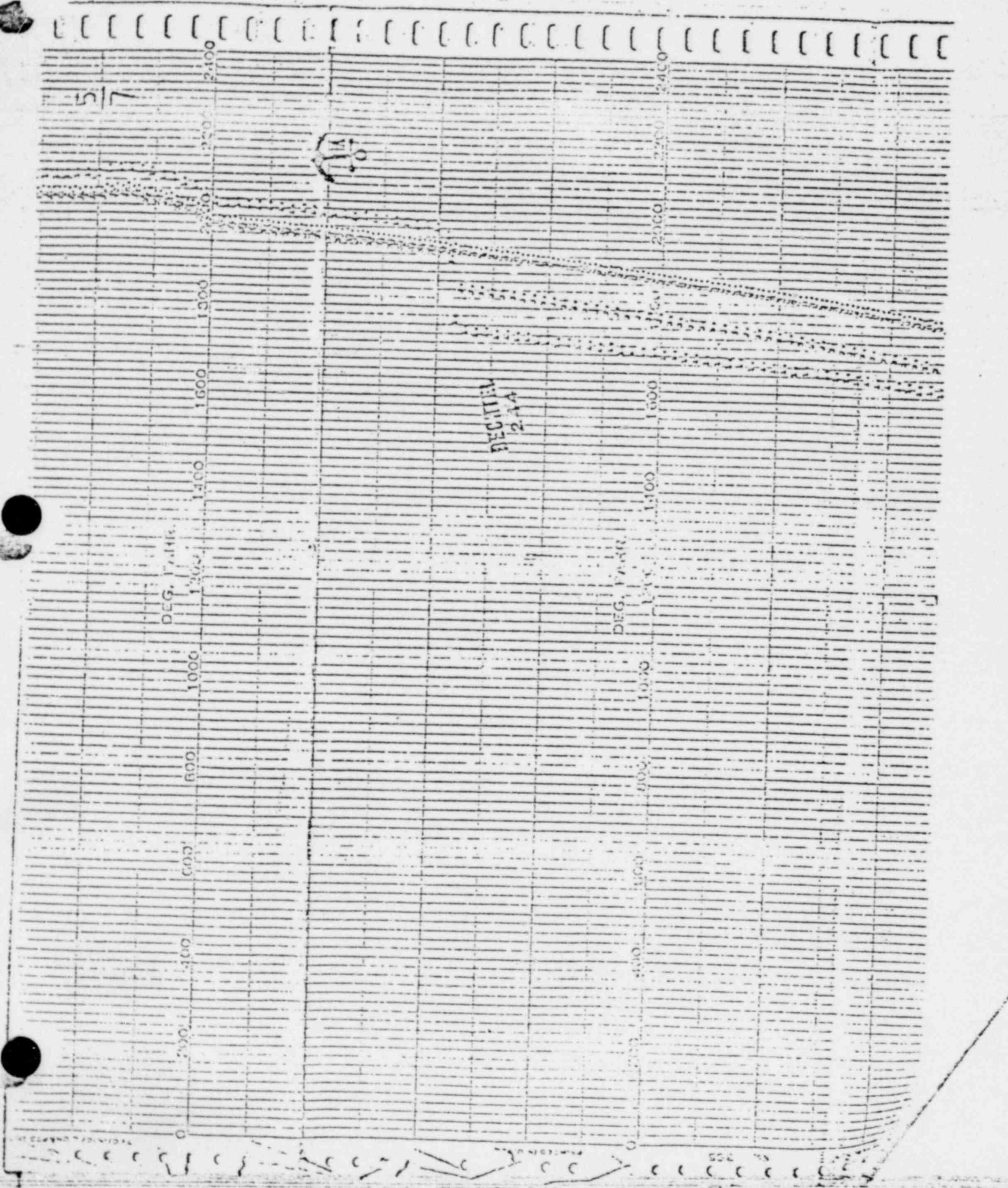
BECHTEL  
244

PATTERN NO. VIEW  
(PRL S/W)





a



TYPE K THERMOCOUPLE

2250 2400

200

1000

1000

1400

1200

1000

600

600

600

400

2000

1000

300

1000

1000

1000

1400

1200

1000

600

600

600

400

2000

0

0

DEG. FAHR.

CLG. FAHR.

11

11

TEMP

REVISIONS

NO. 505

A. ARCO ARMCO Armco Steel Corp.

Armco Steel Corp.

PO BOX 1000

PACKING SLIP A

CERTIFICATE OF CHEMICAL ANALYSIS AND TESTS

10152277-1043 3/10/76 54-24354

88001-10 04/22/76 P T

ARMCO STEEL  
PUB DEPT PG BOX 10128  
PORTLAND, OR 97216

MASTER

SHIPPED TO  
C/O BABY STEEL CO.  
EMERYVILLE, OH 44009

OR 1737 BP BT2007 4747 67602

SHIPPED FROM BALTIMORE, MD

NO.	QTY	UNIT	DESCRIPTION	WEIGHT	MARKS

NO.	QTY	UNIT	DESCRIPTION	WEIGHT	MARKS
645171	1		3 3/4 RD X 10 1/4 FT RL	1,000	SA193-B8M CODE 8B

OF BAR STEEL TYPE 315 CARBIDE FREE 7680 COND A MIL S 7720 A BEND 1  
 BY COMP 315 OR COND A SURF COND F ANG 56420 ASTM A275-75 COND A  
 MIL I 45200A MIL C 9650A BY PART 2.5 WVD ASTM A475-74 1 ASME SA 475  
 1974 EDITION BY CONT XNG AND ALL SPEC

NO.	QTY	UNIT	DESCRIPTION	WEIGHT	MARKS
645171	1		3 3/4 RD X 10 1/4 FT RL	1,000	SA193-B8M CODE 8B

REVIEWED BY  
 JUN 19 1978  
 BECHTEL 242

HEAT NO.	AS-SHIPED PARTS	LOT TEN STR FSI	TD STR 021 SET 9.5	TENSILE TMT OR TMT	YIELD ST AREA	COND.	HARDNESS
645171	BHN 155	55,000	45,000	55.0	75.0		

FREE FROM CONTINUOUS CARBIDE NETWORK INTERGRANULAR CORROSION CAPABILITY OR MICRO ETCH TESTS SATISFACTORY

ARMCO STEEL CORP. TO BE FORWARDED TO THE BUYER BY THE DAY OF APR 19 75

THE CHEMICAL ANALYSIS AND PHYSICAL OR MECHANICAL TESTS REPORTED ARE CONTAINED IN THE RECORDS OF THE CORPORATION.

THIS CERTIFIED TEST REPORT WAS PREPARED BY A CONSULTANT OF NATIONAL BUREAU OF STANDARDS (NBS) UNDER THE SUPERVISION OF THE NBS CHEMICAL ANALYSIS DIVISION. TO AVOID THE POSSIBILITY OF MISUSE OF THIS REPORT, IT IS REPORT TO A THIRD PARTY MUST BE REQUESTED BY AND UNDER THE NAME OF SUCH PARTY.





21.2 x 21.2 x 21.2 mm. The material is a white, semi-transparent, non-crystalline plastic. The material is not suitable for applications requiring high strength and stiffness. The material is not suitable for applications requiring high impact resistance. The material is not suitable for applications requiring high chemical resistance.

22.2 x 22.2 x 22.2 mm. The material is a white, semi-transparent, non-crystalline plastic. The material is not suitable for applications requiring high strength and stiffness. The material is not suitable for applications requiring high impact resistance. The material is not suitable for applications requiring high chemical resistance.

23.2 x 23.2 x 23.2 mm. The material is a white, semi-transparent, non-crystalline plastic. The material is not suitable for applications requiring high strength and stiffness. The material is not suitable for applications requiring high impact resistance. The material is not suitable for applications requiring high chemical resistance.

24.2 x 24.2 x 24.2 mm. The material is a white, semi-transparent, non-crystalline plastic. The material is not suitable for applications requiring high strength and stiffness. The material is not suitable for applications requiring high impact resistance. The material is not suitable for applications requiring high chemical resistance.

25.2 x 25.2 x 25.2 mm. The material is a white, semi-transparent, non-crystalline plastic. The material is not suitable for applications requiring high strength and stiffness. The material is not suitable for applications requiring high impact resistance. The material is not suitable for applications requiring high chemical resistance.

26.2 x 26.2 x 26.2 mm. The material is a white, semi-transparent, non-crystalline plastic. The material is not suitable for applications requiring high strength and stiffness. The material is not suitable for applications requiring high impact resistance. The material is not suitable for applications requiring high chemical resistance.

27.2 x 27.2 x 27.2 mm. The material is a white, semi-transparent, non-crystalline plastic. The material is not suitable for applications requiring high strength and stiffness. The material is not suitable for applications requiring high impact resistance. The material is not suitable for applications requiring high chemical resistance.

28.2 x 28.2 x 28.2 mm. The material is a white, semi-transparent, non-crystalline plastic. The material is not suitable for applications requiring high strength and stiffness. The material is not suitable for applications requiring high impact resistance. The material is not suitable for applications requiring high chemical resistance.

CHEMICAL - ANALYTICAL TYPE K														
DEC F	490	560	630	700	770	840	910	980	1050	1120	1190	1260	1330	1400
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
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50														

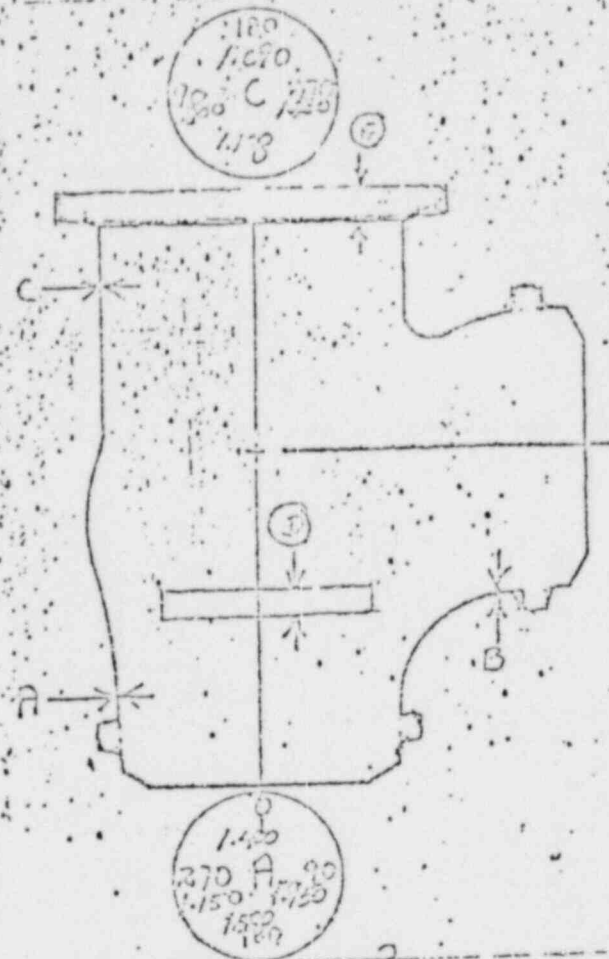
5/20/50  
1111  
5205



DATE	DESCRIPTION	AMOUNT	BALANCE
12/01	DEPOSIT	10000	10000
12/02	DEPOSIT	500	10500
12/03	DEPOSIT	500	11000
12/04	DEPOSIT	500	11500
12/05	DEPOSIT	500	12000
12/06	DEPOSIT	500	12500
12/07	DEPOSIT	500	13000
12/08	DEPOSIT	500	13500
12/09	DEPOSIT	500	14000
12/10	DEPOSIT	500	14500
12/11	DEPOSIT	500	15000
12/12	DEPOSIT	500	15500
12/13	DEPOSIT	500	16000
12/14	DEPOSIT	500	16500
12/15	DEPOSIT	500	17000
12/16	DEPOSIT	500	17500
12/17	DEPOSIT	500	18000
12/18	DEPOSIT	500	18500
12/19	DEPOSIT	500	19000
12/20	DEPOSIT	500	19500
12/21	DEPOSIT	500	20000
12/22	DEPOSIT	500	20500
12/23	DEPOSIT	500	21000
12/24	DEPOSIT	500	21500
12/25	DEPOSIT	500	22000
12/26	DEPOSIT	500	22500
12/27	DEPOSIT	500	23000
12/28	DEPOSIT	500	23500
12/29	DEPOSIT	500	24000
12/30	DEPOSIT	500	24500
12/31	DEPOSIT	500	25000

CHROMEAL - ALUMINUM TYPE K

CHROMEAL - ALUMINUM TYPE K



DRAWING: 2051-3, REV. A, JOB-5205-06  
 24" 150° ANGLE STOP  
 PROCEDURE: 1437-1-RWB PWB

ZONE	SPECIFICATION MINIMUM	ACTUAL MINIMUM		INSP	DATE	CUSTOMER INSP	DATE
		MEASURED	LOCATION				
A	9/16	1.150	270°	AB	3/21/75		
B	9/16	1.050	90°	AB	3/21/75		
C	9/16	1.090	180°	AB	3/21/75		
D	9/16	1.14	90°	AB	3/21/75		
E	1.78	1.900	180°	AB	3/21/75		

NOTES: (1) Survey each zone (inspect in a grid pattern of approximately 1/8 inch) and record thickness and location of area found to be minimum.  
 (2) Additional measurement taken at repaired, ground or machined surfaces; selected for dimensional inspection by visual inspection (applicable when indicated by asterisk).

PAINTING INSPECTION REPORT

CUSTOMER: Bechtel CONTRACT NO: 7220-M-125CC  
 ITEM NO. 17.12 SJO NO: 5205-06  
 VALVE SERIAL NO: 5205-06-1-4 DWG. NO: 3051-3  
 VALVE TAG NO: 24-H40ANG-1MO-1208B-RL

REQUIREMENTS

- A. HIGH TEMPERATURE X
- B. PRIME COAT MFG. Carbo Zinc NO: II

OPERATION	MIL THICKNESS	INSPECTED BY	DATE
SURFACE FINISH	—	ETA	5-15-78
PRIME COAT #1	3 MILS	LL	5-15-78
PRIME COAT #2			
		REVIEWED BY	
		MAY 25 1978	
		BECHTEL 242	

WE CERTIFY THAT THE SURFACE PREPARATION AND APPLICATION OF PRIME COAT OF PAINT ARE IN ACCORDANCE WITH ANCHOR/DARLING VALVE COMPANY PROCEDURE NO. 1581-1, REV —, ADDENDA 2A.

May 15, 1978  
(DATE)

[Signature]  
(SIGNATURE)

(PROC. 1581-1, 4-30-74)

CHROMIUM - ALUMINUM TYPE X		CHROMIUM - ALUMINUM TYPE K	
Wavelength (nm)	Intensity	Wavelength (nm)	Intensity
260	200	260	200
300	200	300	200
360	200	360	200
400	200	400	200
450	200	450	200
500	200	500	200
550	200	550	200
600	200	600	200
650	200	650	200
700	200	700	200
750	200	750	200
800	200	800	200
850	200	850	200
900	200	900	200
950	200	950	200
1000	200	1000	200
1100	200	1100	200
1200	200	1200	200
1300	200	1300	200
1400	200	1400	200
1500	200	1500	200
1600	200	1600	200
1700	200	1700	200
1800	200	1800	200
1900	200	1900	200
2000	200	2000	200

RECEIVED BY  
MAY 25 1978  
ECHTEL 242

Disc





PAINING INSPECTION REPORT

CUSTOMER: Bechtel CONTRACT NO: 7220-M-12.5cc  
 ITEM NO. 17.11 SJO NO: 5205-06  
 VALVE SERIAL NO: 5205-06-1-3 DWG. NO: 3051-3  
 VALVE TAG NO: 24-HCB-RNG-200-1308B-RL

REQUIREMENTS

- A. HIGH TEMPERATURE X
- B. PRIME COAT MFG. Carbo Zinc NO: II

OPERATION	MIL THICKNESS	INSPECTED BY	DATE
SURFACE FINISH	—	ETA	5-15-78
PRIME COAT #1	3 MILS	LL	5-15-78
PRIME COAT #2			

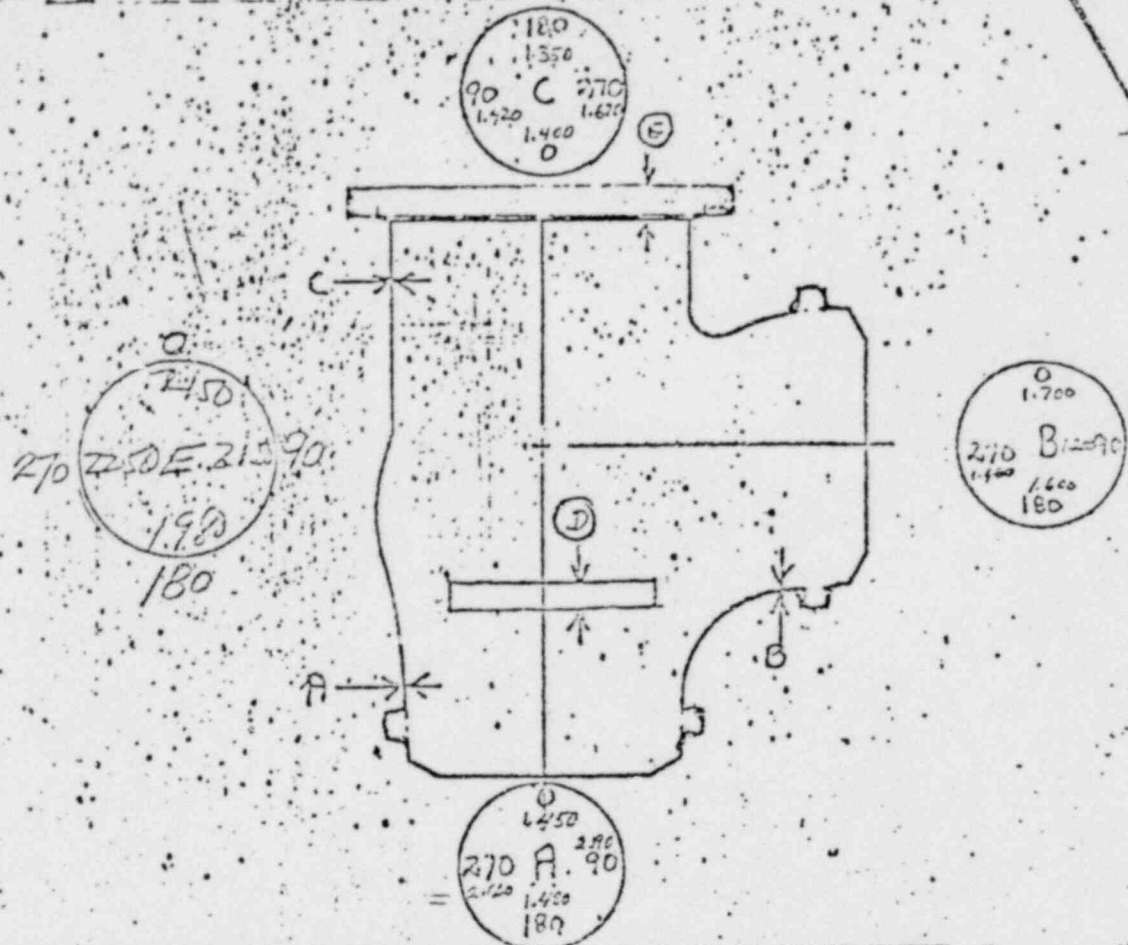
WE CERTIFY THAT THE SURFACE PREPARATION AND APPLICATION OF PRIME COAT OF PAINT ARE IN ACCORDANCE WITH ANCHOR/DARLING VALVE COMPANY PROCEDURE NO. 1581-1, REV —, ADDENDA 2A.

May 15, 1978  
(DATE)

REVIEWED BY  
MAY 25 1978  
BECHTEL 24

[Signature]  
(SIGNATURE)

(PROC. 1581-1, 4-30-74)



DRAWING 3051-3, REV. \_\_\_\_\_ JOB# 5205-06  
 24"-150" ANGLE STOP  
 PROCEDURE 1437-1 REV.B ADD B:

ZONE	SPECIFICATION MINIMUM	ACTUAL MINIMUM		INSP	DATE	CUSTOMER INSP	DATE
		MEASURED	LOCATION				
A	9/16	1.450	20°	✓	4-22-70		
D	9/16	1.100	270°	✓	4-22-70		
C	9/16	1.110	15°	✓	4-22-70		
D	7/16	2 1/2	180°	✓	4-22-70		REMOVED BY MAR 25 1976
E	1-7/8	1.980	180°	✓	5-2-70		BECHTEL 242

- NOTES: (1) Survey each zone (inspect in a grid pattern of approximately \_\_\_\_\_ inches) and record thickness and location of area found to be minimum.  
 (2) Additional measurement taken at repaired, ground or machined surfaces; selected for dimensional inspection by visual inspection (applicable when indicated by asterisk).  
 (3) Zone "D" does not include seat ring counterbore dimension.

CHROMAL - ALUMEL TC TYPE K		CHROMAL - ALUMEL TC TYPE K	
DEG F	200	DEG F	200
	250		250
	300		300
	350		350
	400		400
	450		450
	500		500
	550		550
	600		600
	650		650
	700		700
	750		750
	800		800
	850		850
	900		900
	950		950
	1000		1000
	1050		1050
	1100		1100
	1150		1150
	1200		1200
	1250		1250
	1300		1300
	1350		1350
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	1850		1850
	1900		1900
	1950		1950
	2000		2000
	2050		2050
	2100		2100
	2150		2150
	2200		2200
	2250		2250
	2300		2300

REVIEWED BY  
MAY 29 1978  
LECHTEL 242

NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO.		19. NO. 1476		20. PAGE 1 OF 25	
2. DRAWING NO.		REV. 4. ITEM DESCRIPTION		5. ITEM LOCATION			
3. PART NO.		7/A		10. HOLD - 1833			
4. BLOCK 16		8. REPLACEMENT PART		10. EXHIBIT 138/SUPPLIER			
5. SERIAL NO.		P/N 8/A REV SER NO.		Supplier Anchor/Valving Valve Co.			
6. 10/17/78		IR NO. 888 16		13. SKETCH ATTACHED		14. Discovered During	
7. 10/17/78		NO. 202 16		( ) YES ( ) NO		( ) Const ( ) Her ( ) Equip ( ) HLD	
8. 10/17/78		12. ASME AUTHORIZED		24. DISPOSITION CONCURRENCE			
9. 10/17/78		INSPECTION REQ'D		rework		reject	
10. 10/17/78		( ) YES ( ) NO		repair		use as is	
16. NONCONFORMING CONDITION: Specification 7220-44-125 Rev. 5 requires Quality Verification documentation according to Form G-321-D. Project Quality Control Instructions G-1-CO Rev. 7 requires documentation required by Form G-321-D to be available, legible and traceable. Contrary to the above: 1. Item 34.k, valve tag no. 12"-HEP-511-R1, 2/1-5205-CO-1-117, QCIP-R-1-CO-2433 shows; a) Repair verification sketches and a hand-drawn not traceable. (See Attachment "A" Pages 1 thru 5 of 27.)							
17. REPORTED BY		DATE		18. VALIDATED BY		DATE	
Tim Christofferson		8/17/78		M. J. D. [Signature]		8-17-78	
21. ROUTING: TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)							
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering							
23. PROJECT ENGINEERING DISPOSITION							
25. DISPOSITION RESULTS							
PROJECT FIELD ENGINEER DATE							
PROJECT ENGINEER DATE							
PROJ CONSTR QC ENGINEER DATE							
AUTHORIZED INSPECTOR DATE							
26. QC ACCEPTANCE							
QC ENGINEER DATE							
AUTHORIZED INSPECTOR DATE							

10/10/77

1. The first two items listed in the report are the same as those listed in the report of 10/10/77. The third item is a new one, which is a nonconformance with the specification for the material used in the construction of the structure.

2. The first two items listed in the report are the same as those listed in the report of 10/10/77. The third item is a new one, which is a nonconformance with the specification for the material used in the construction of the structure.

3. The first two items listed in the report are the same as those listed in the report of 10/10/77. The third item is a new one, which is a nonconformance with the specification for the material used in the construction of the structure.

4. The first two items listed in the report are the same as those listed in the report of 10/10/77. The third item is a new one, which is a nonconformance with the specification for the material used in the construction of the structure.

5. The first two items listed in the report are the same as those listed in the report of 10/10/77. The third item is a new one, which is a nonconformance with the specification for the material used in the construction of the structure.

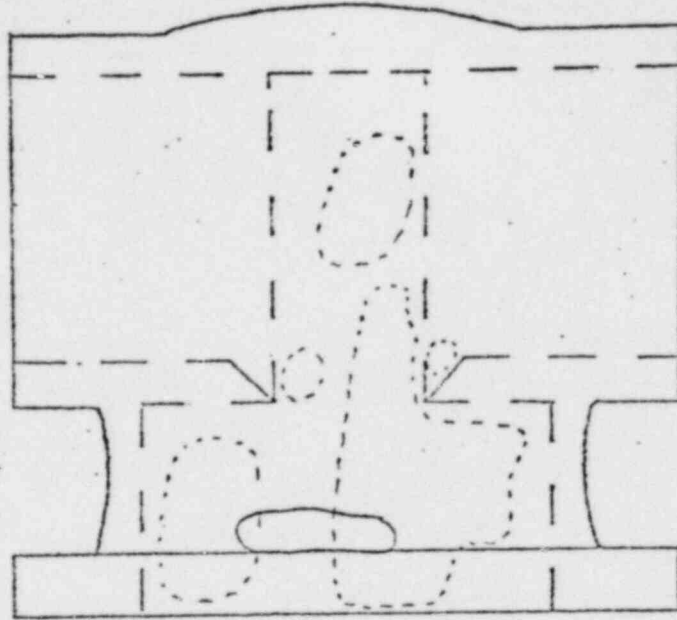
6. The first two items listed in the report are the same as those listed in the report of 10/10/77. The third item is a new one, which is a nonconformance with the specification for the material used in the construction of the structure.

7. The first two items listed in the report are the same as those listed in the report of 10/10/77. The third item is a new one, which is a nonconformance with the specification for the material used in the construction of the structure.

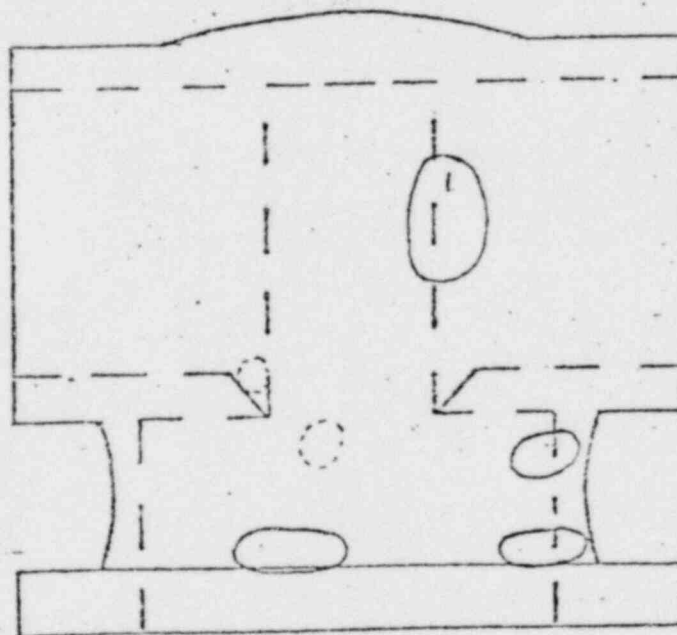
8. The first two items listed in the report are the same as those listed in the report of 10/10/77. The third item is a new one, which is a nonconformance with the specification for the material used in the construction of the structure.

9. The first two items listed in the report are the same as those listed in the report of 10/10/77. The third item is a new one, which is a nonconformance with the specification for the material used in the construction of the structure.

DRAG  
(PRL S/H)



COPE

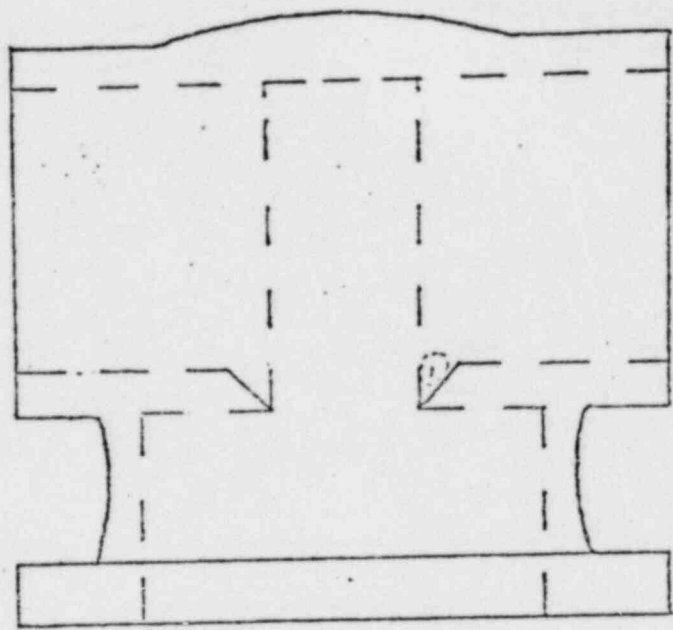


BECHTEL  
136

Item 34.4 \*

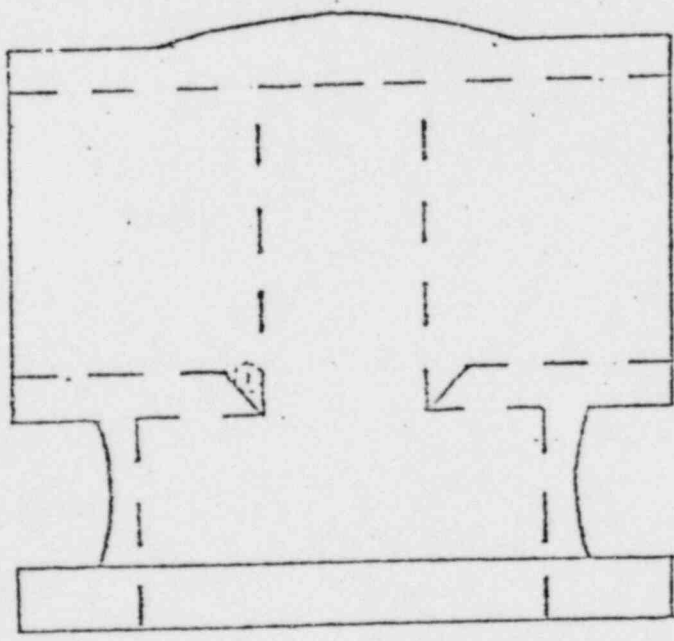
\* These Item Numbers added to NCR copy to indicate which Quality Verification Documentation Package this data is from.

DRAG  
(PRL S/H)



COPE

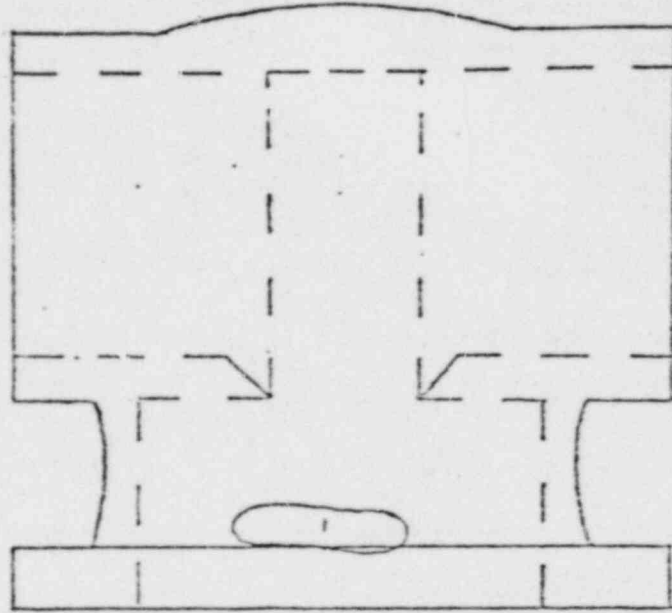
DECHTEL  
136



Item 34.4 \*

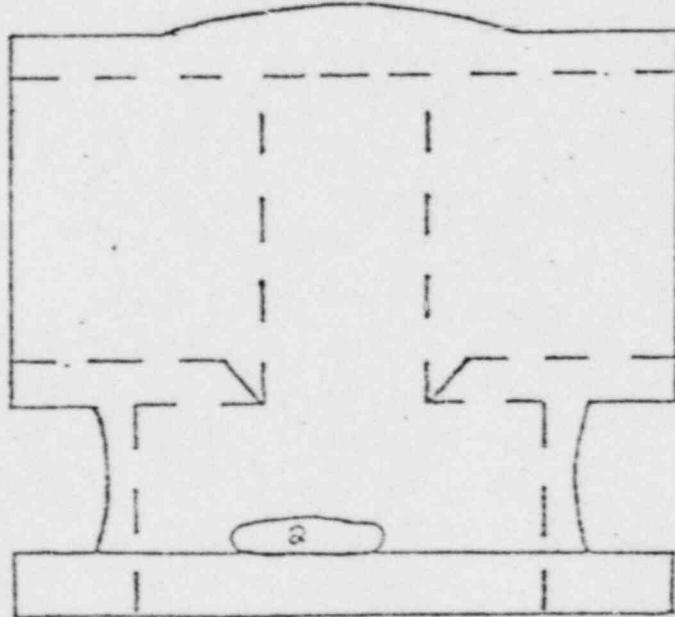


DRAG  
(PRL S/N)



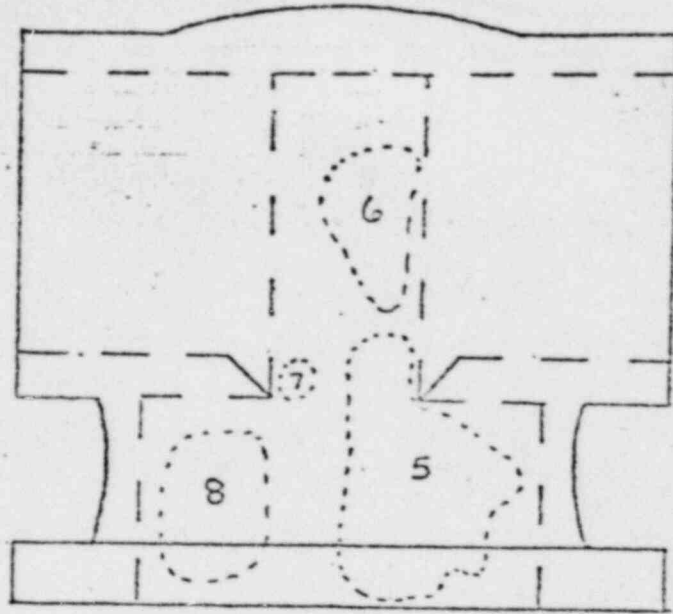
MECHTEL  
136

COPE



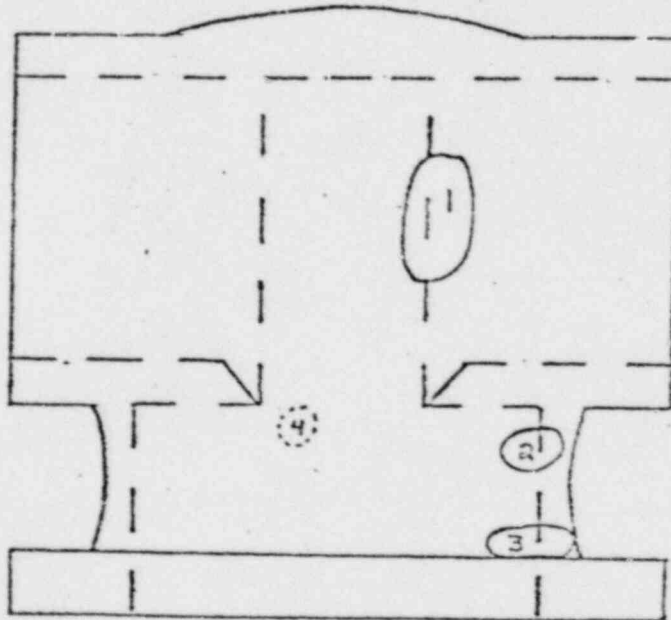
Item 31.1 x

DRAG  
(PRL S/N)

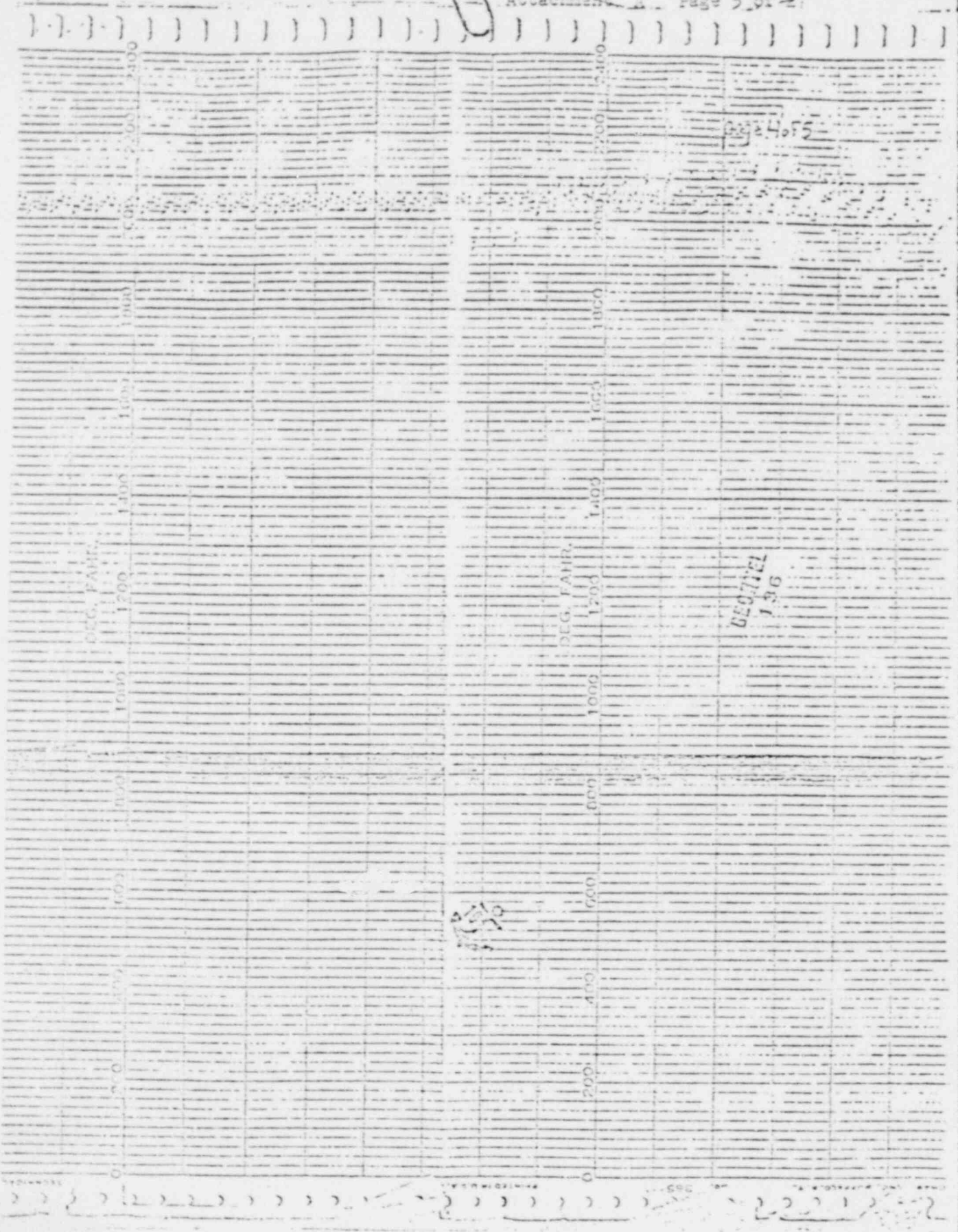


DECHTEL  
136

COPE



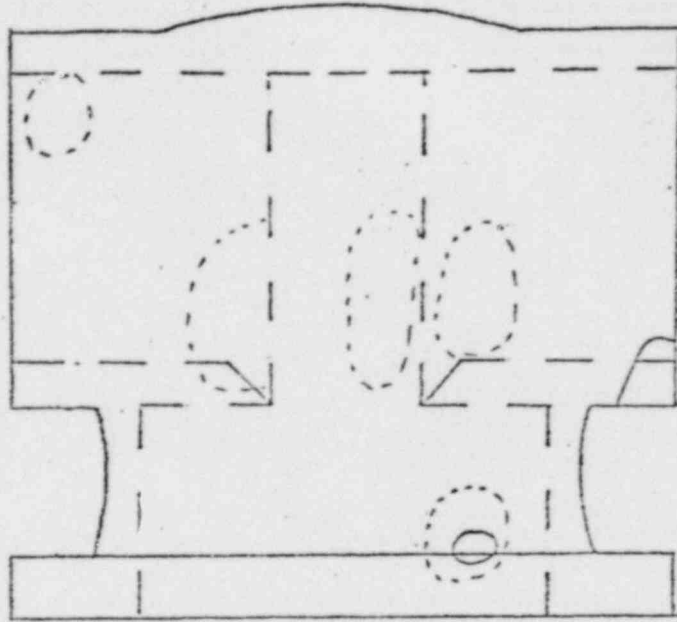
Item 34.4 y



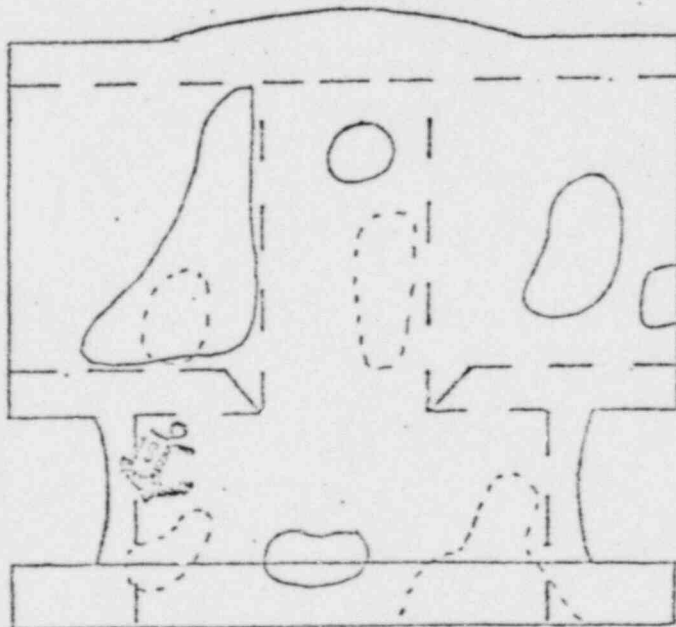
Page 4 of 5

BESTTEL  
136

DRAG  
(PRL S/11)



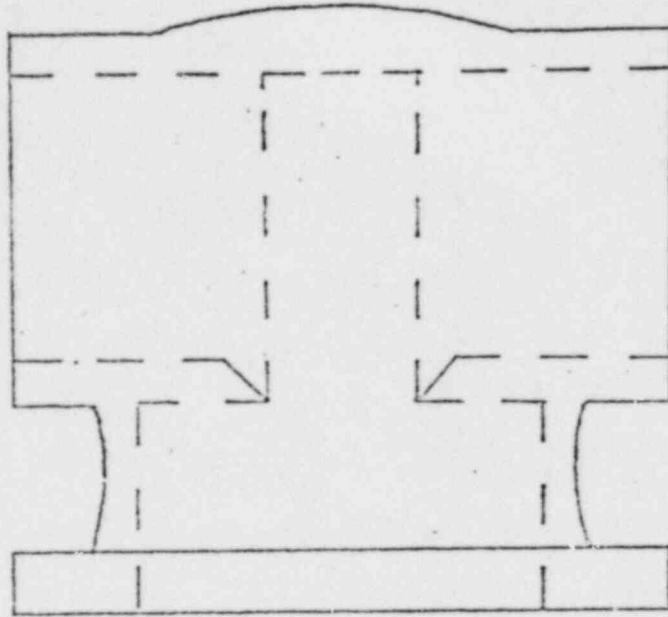
COPE  
=



SECUTEL  
136

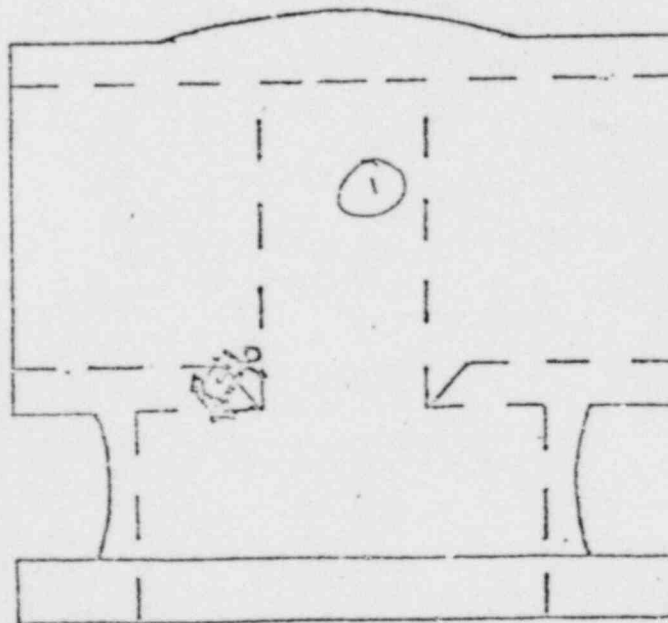
Item 35.3 \*

DRAG  
(PRL S/II)



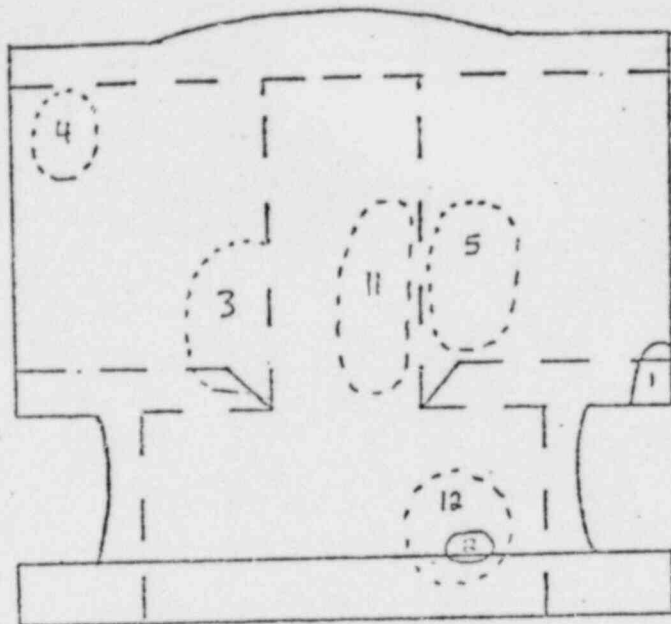
BECHTEL  
136

COPE

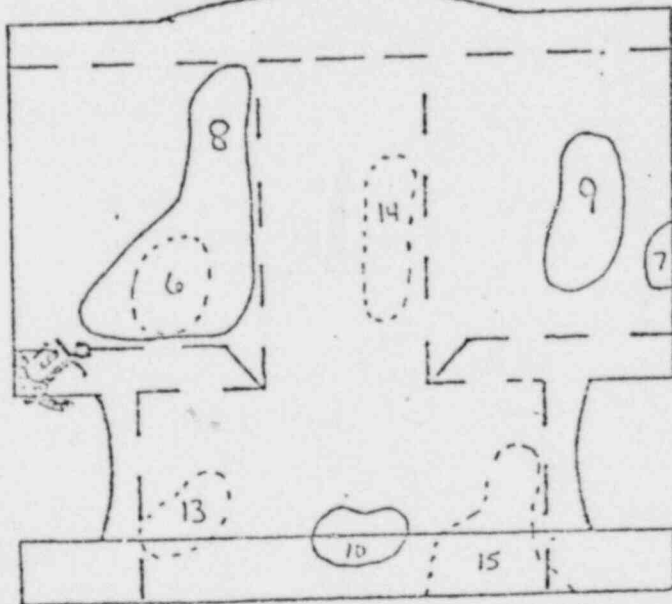


Item 35.3 \*

DRAG  
(PRL S/H)



COPE



SECNTEL  
136

Item 35.3 \*

ARMCO Armco Steel Corporation  
Advanced Materials Division  
P O Box 1697 Baltimore, MD

PACKING SLIP &  
CERTIFICATE OF CHEMICAL ANALYSIS AND TESTS

30150077-3043 3/30/6 54-94964

0001410 04/22/75 P 1 74579

TO ESCO CORP  
PUR DEPT PO BOX 16123  
PORTLAND, OR 97210

MASTER

TO SAME  
C/O GARY STEEL BLDG  
EMERYVILLE, CA 94542

OR ATSF SP STOPOFF ATSF 57802

SHIPPED FROM  
BALTIMORE, MD

FORM  
100A

ITEM NO	QUANTITY	GRADE	DESCRIPTION	SIZE	WEIGHT	MARKS	ANALYSIS		REMARKS
							C	MN	
320020	1	645171	HEAT - BDL	3/4 RD X 10/14 FT RL	1,000	SA 193-B8M			CODE 8B
			ID 210237 BURLAP YELLOW SHEET 1 CONC						

CF BAR STNLS TYPE 316 ENTRELESS 6 QRS 763D COND A MIL S 7720 AMENS I  
EX COND 516 OK COND A SURF COND FAMS 5648D ASTM A275-75 COND A  
MIL I .4520EA MIL & 9858A EX PAR: 3.5 WVD ASTM A 479-74 & ASME SA 479  
1974 EDITION EX COND MK6 WVD ALL SPECS

645171.051	1.69	.017	.023	.61	17.9	713.14
645171.050	2.25	CU	.45	00	.15	

A SAMPLE TAKEN FROM A BAR OF THE ABOVE HEAT WAS ANALYZED

645171.059	1.91	.015	.020	.52	17.9	715.23
	X02.25	CU	.44	00.17		

HEAT NO	ASSIGNED HARDNESS	ULT TENS STRENGTH	YLD STR 0.2% OFFSET	ELONG IN 2" GAGE	REDUCED AREA	COND	HARDNESS
645171	DHN 156	35,000	46,000	55.0	75.6		

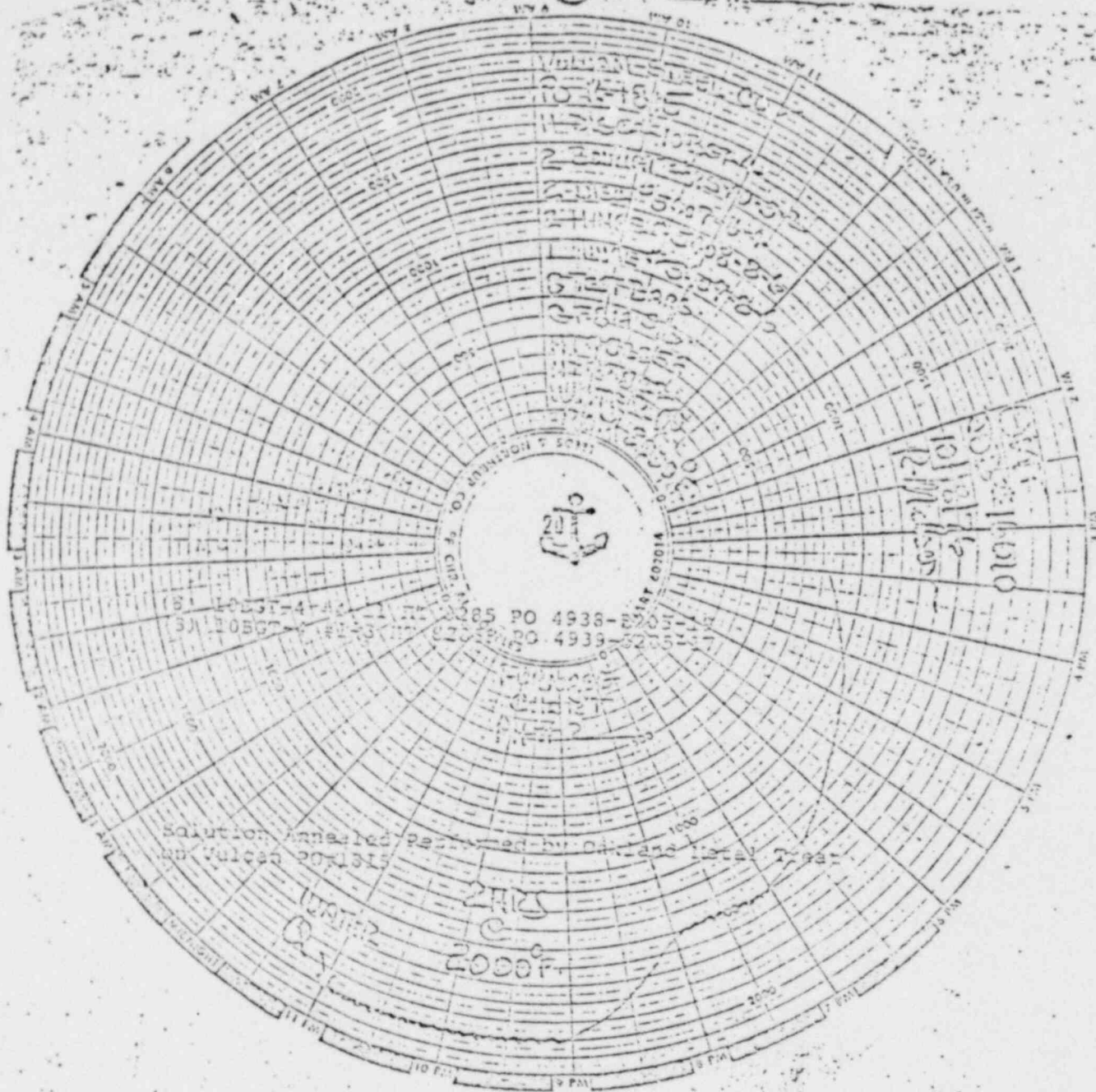
FREE FROM CONTINUOUS CARBIDE NETWORK INTERGRANULAR CORROSION CAPABILITY OK  
MACRO ETCH TESTS SATISFACTORY

BECHTEL  
381

APPROVED TO SHIP ON THIS DAY OF APR 19 75

THE CHEMICAL ANALYSIS AND MECHANICAL TESTS REPORTED ARE CORRECT AS FAR AS KNOWN IN THE RECORDS OF THE COMPANY.

THIS CERTIFIED COPY HAS BEEN DELIVERED TO A CONSULTEE OF MATERIALS AND WILL BE MAINTAINED IN THE RECORDS OF THE COMPANY. IT IS THE POLICY OF THE COMPANY TO REPORT TO A THIRD PARTY ONLY IF REQUESTED BY AND UNDER THE NAME OF THE COMPANY.



BECHTEL  
881

Item 41.2 \*





PRL Industries, Inc.  
CORNWALL, PENNSYLVANIA 17016

FORM 100  
RADIATION REPORT

113

CUSTOMER: ANCHOR/DARLING PRL SER NO: 112

PATT. No: 10 BGT 2 ORDER No: 7325 DESCRIPTION: 10" 150# BONE

RSSS No: 907 REV: 0 HEAT NO: 5038

X-RAY CLASS: CL#2

SPEC. No: ADD1 STANDARD: 2770 TYPE OF MATERIAL: 54351 CF

PRL RT2 RT1

POSITION NO.	CYCLE	ACCEPT	REJECT	DEFECTS											BRIEFLY DESCRIBE		
				GAS & BUBBLES	SLAG INCLUSIONS	INTERNAL SHRIFFAGE	100 YEARS	MISSING CHARACTERS	INTERNAL CRACKS	CRACKS	POROUS	SLAG INCLUSIONS	OTHER DEFECTS	SURFACE DEFECTS		SURFACE DEFECTS	FILM DEFECTS
1-2	ORIG	X															
2-3	"	X															
3-4	"	X															
4-5	"		X	X													
5-6	"		X	X													
6-7	"	X		X													
7-8	ORIG		X	X	X												
8-9	"		X	X	X												
9-10	"		X	X													
10-11	"		X	X													
11-12	"		X	X	X												
12-7	"		X	X	X												
13-14	ORIG	X												X			
14-15	"	X												X			
16-17	ORIG	X	(X)														ASK for material

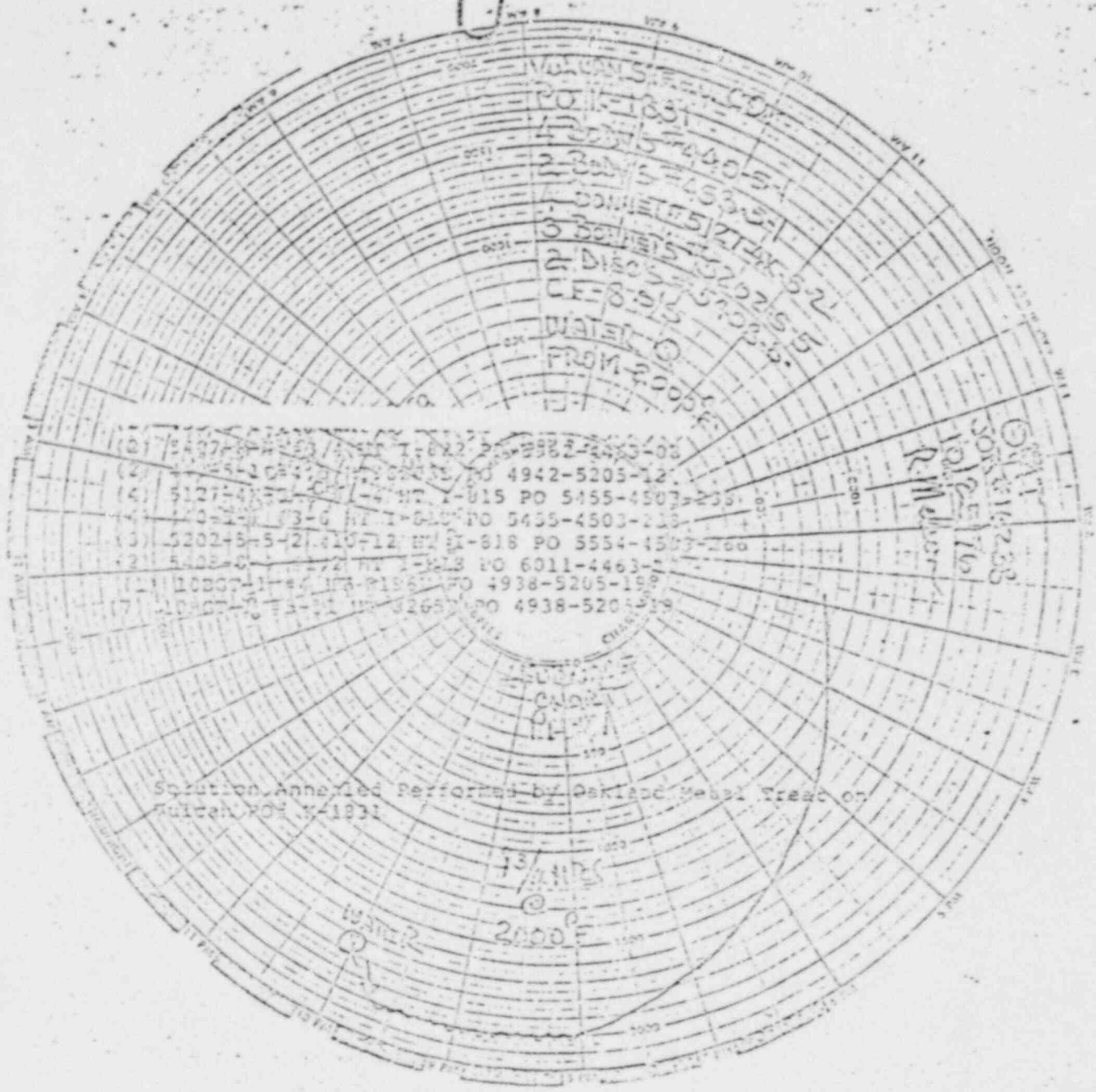
NAME: ...  
NL: ...

5208-11-9:10

RECHT  
362

PRL INDUSTRIES, INC. CUSTOMER REVIEWER: RA 73 DATE: 11/13/88

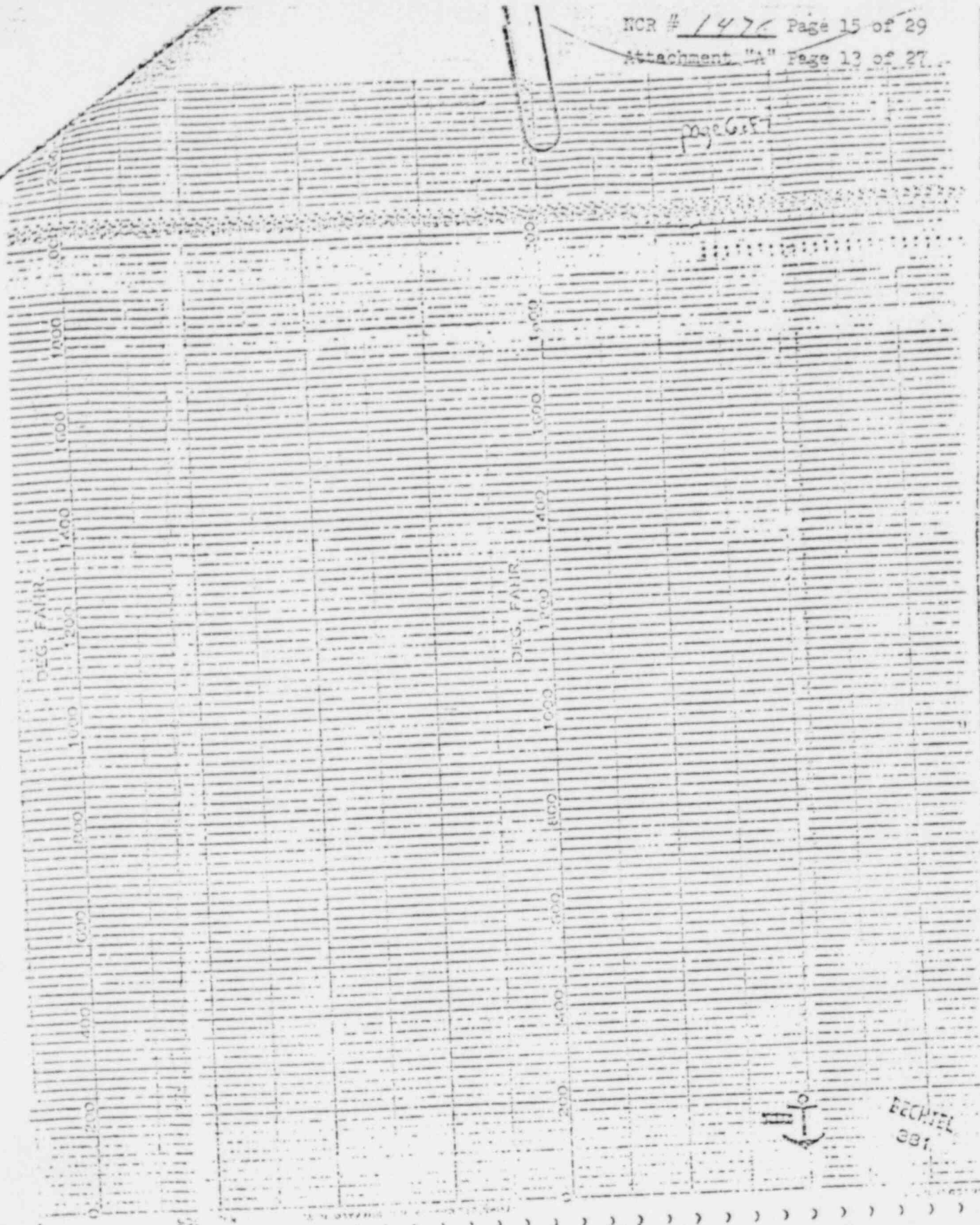
Item 41.2 X



Item 41.2 \*

BECHTEL  
381

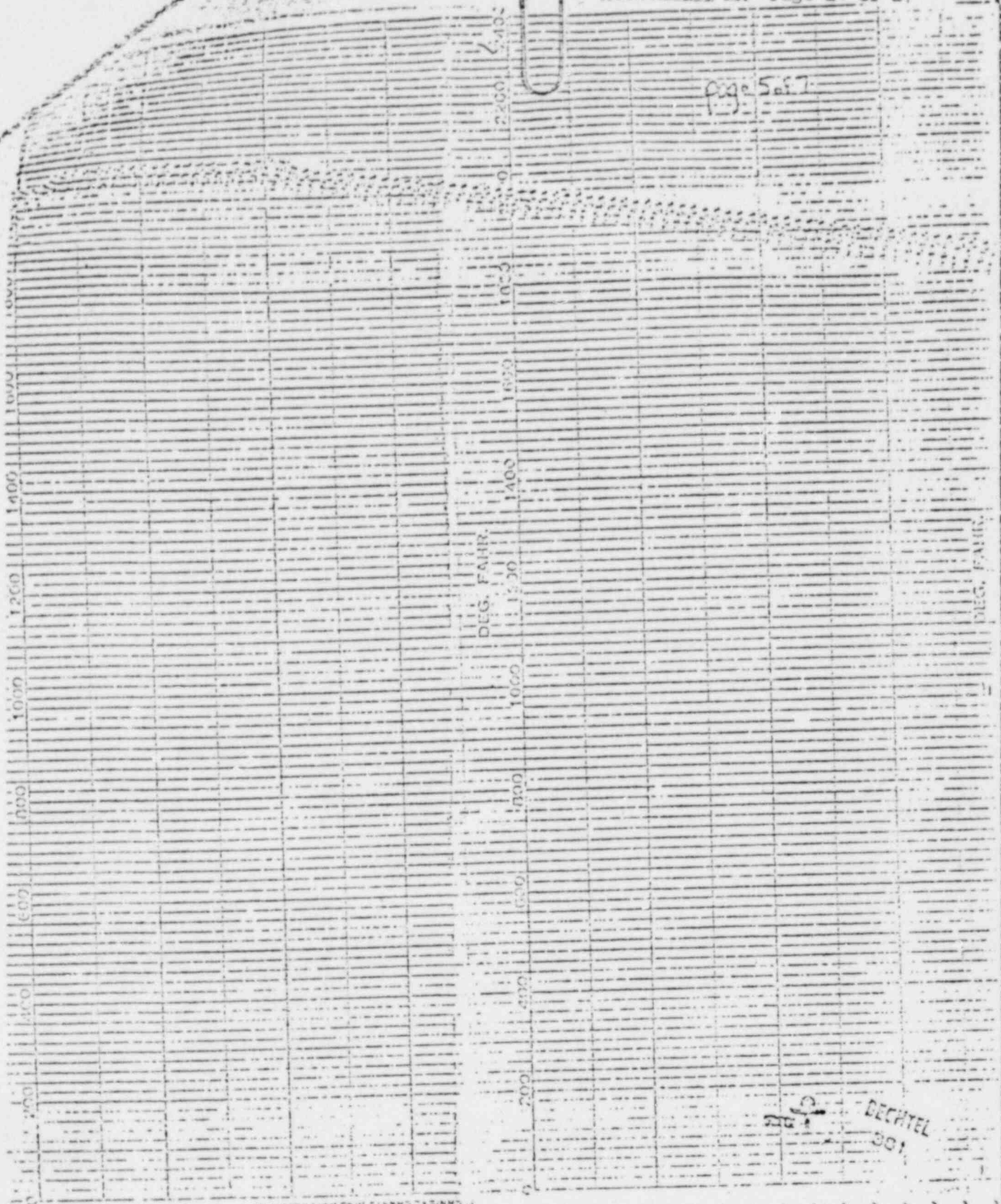
page 6 of 7



BECHTEL  
331

Item 41.2 \*

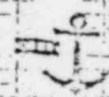
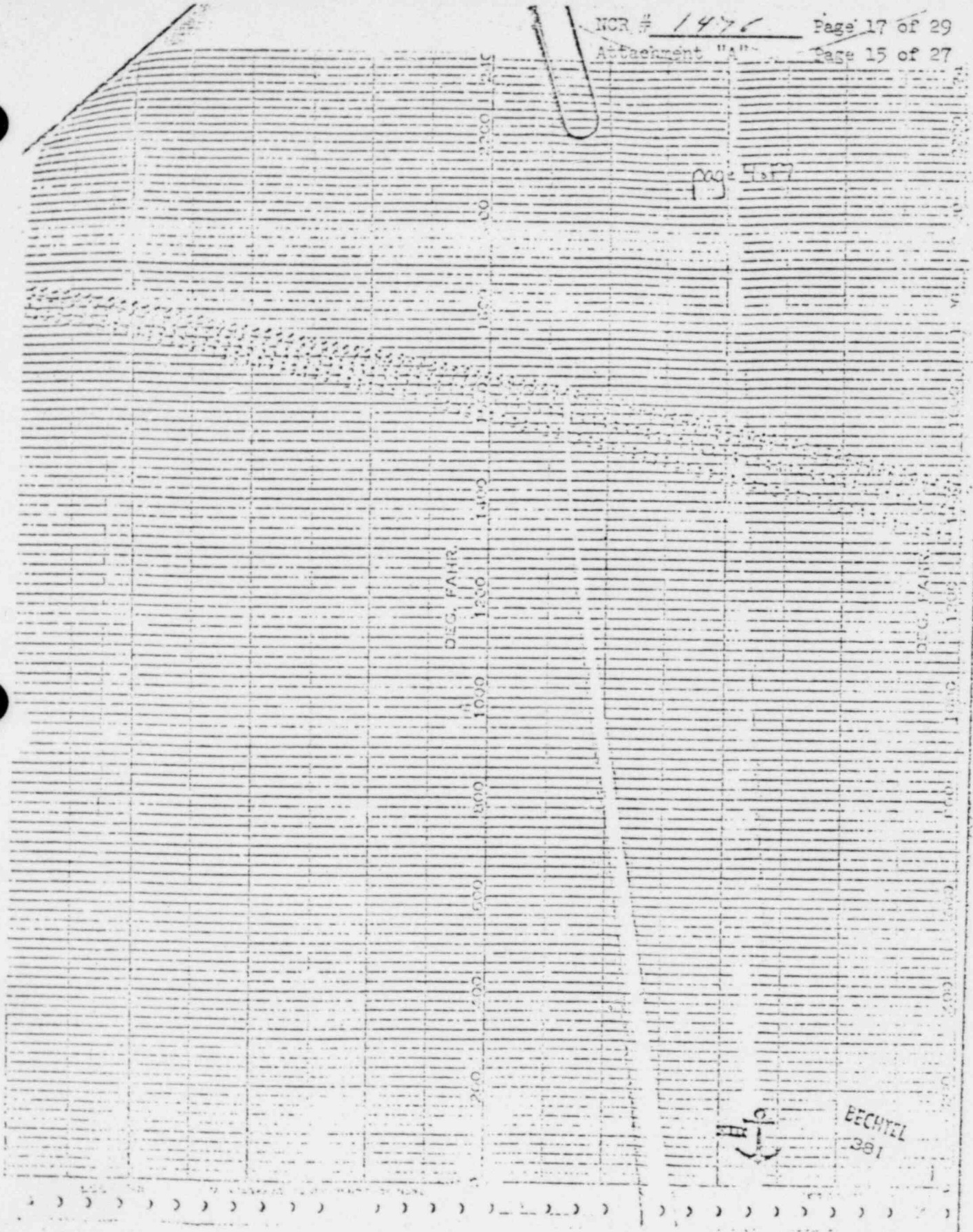
page 5 of 7



DECHTEL 881

Item #1.2 \*

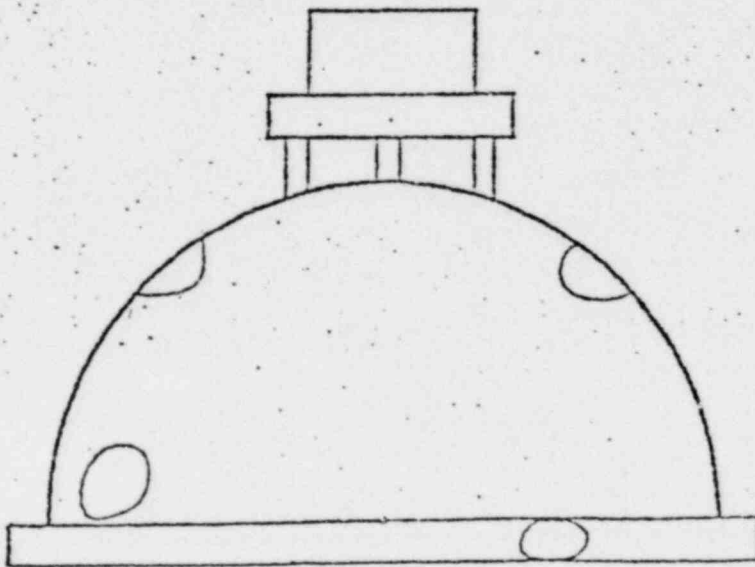
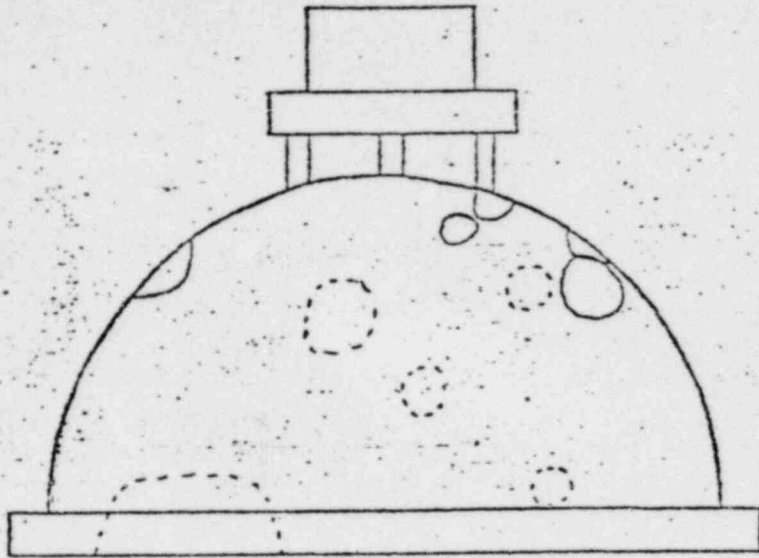
Page 537



BECHTEL  
381

Item 4F.2 \*

PATTERN NO. VIEW  
(PRL S/W)



BECHTEL  
364



Item 41.2 \*

Write A (Schaeffler diagram) = -2

WELDER'S QUALIFICATION TEST	
WELD MANUFACTURER'S CERTIFICATE	
RT SHOOTING SHEETS & TECH.	
RT FILM & READER SHEETS	
CLEANING CERTIFICATION	
CERTIFICATE OF COMPLIANCE	
MERCURY EXCLUSION CERTIFICATE	
HEAT TREATMENT CHART	
HEAT TREATMENT CAR LOADING RECORD	

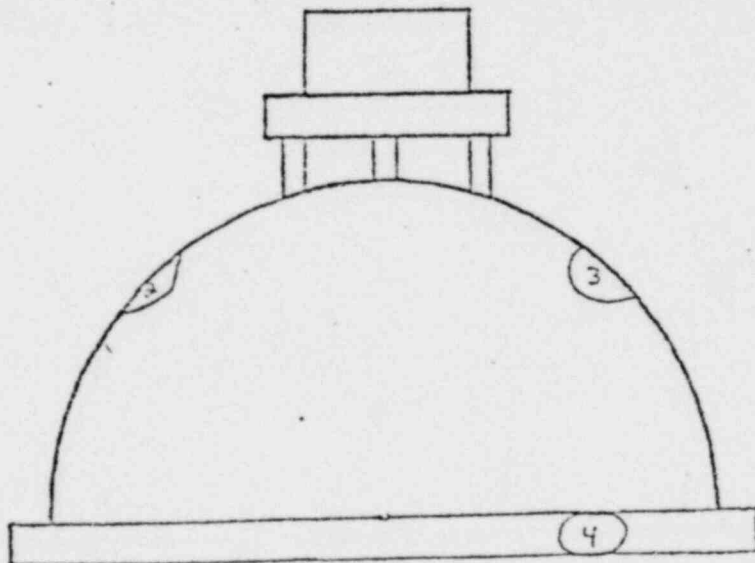
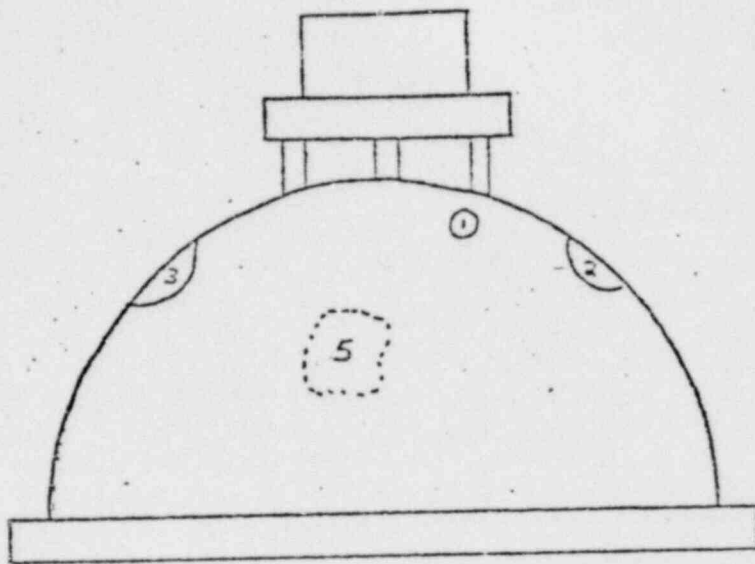
We hereby certify that the above material has been tested in accordance with the listed specifications and conforms to all applicable requirements thereof.

*Don Peabody* 12/30/77  
DODGE COUNTY & MACHINE CO.

RECEIVED  
364

Item 41.2 \*

PATTERN NO. VIEW  
(PRL S/N)

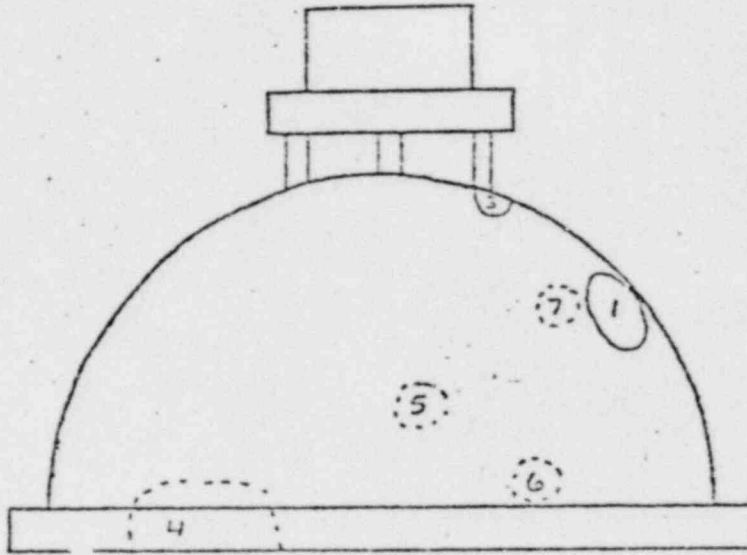


DECHIEL  
364

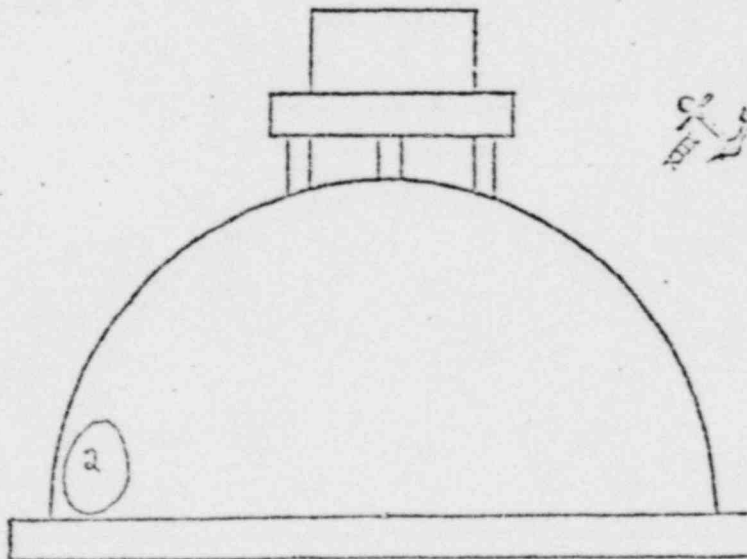




PATTERN NO. VIEW  
(PRL S/N)

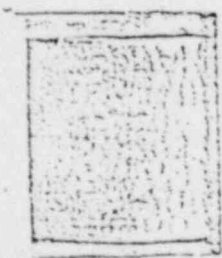
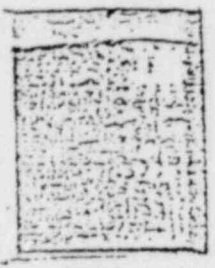


=



DESMEL  
264

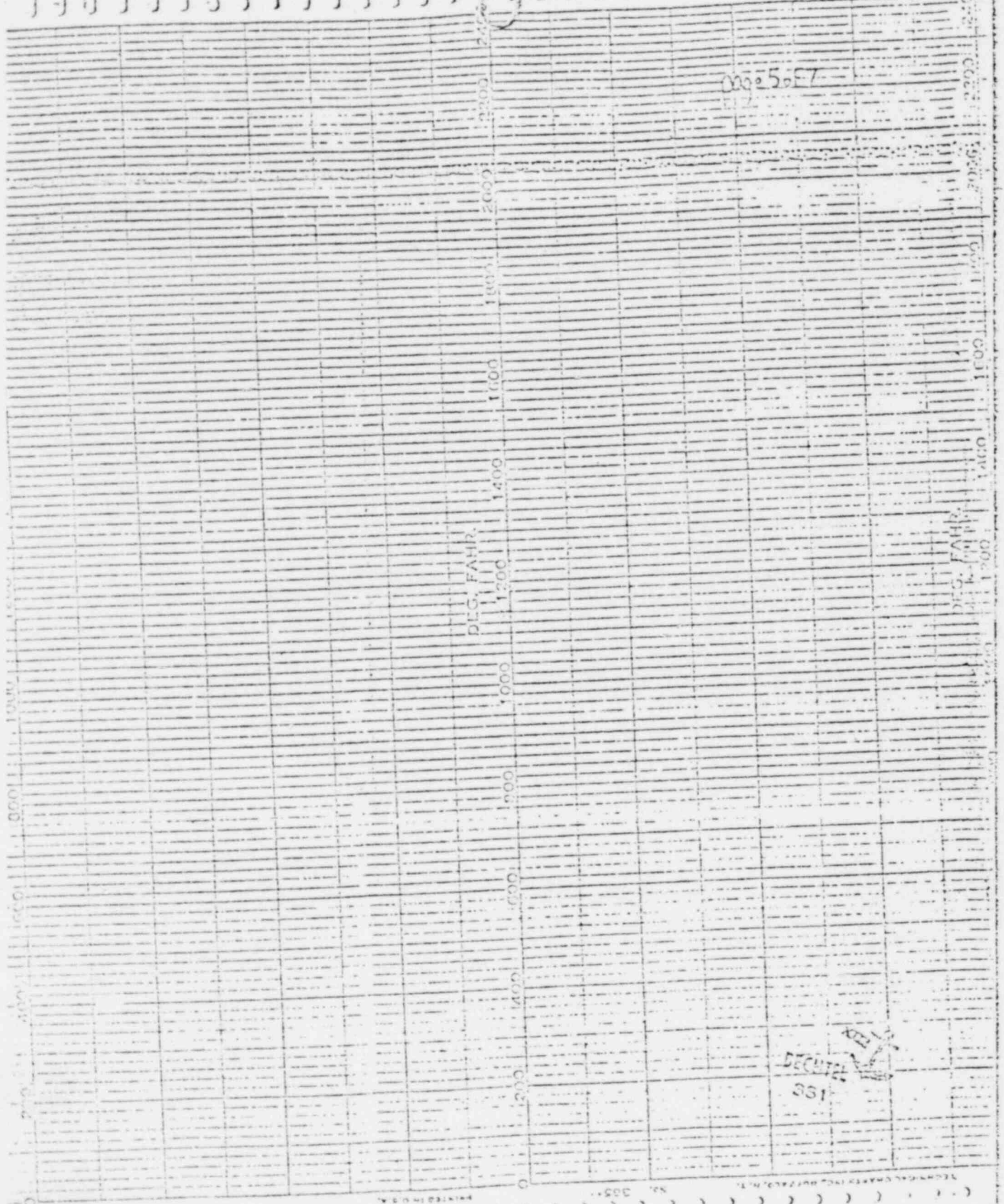
Item 41.2 X

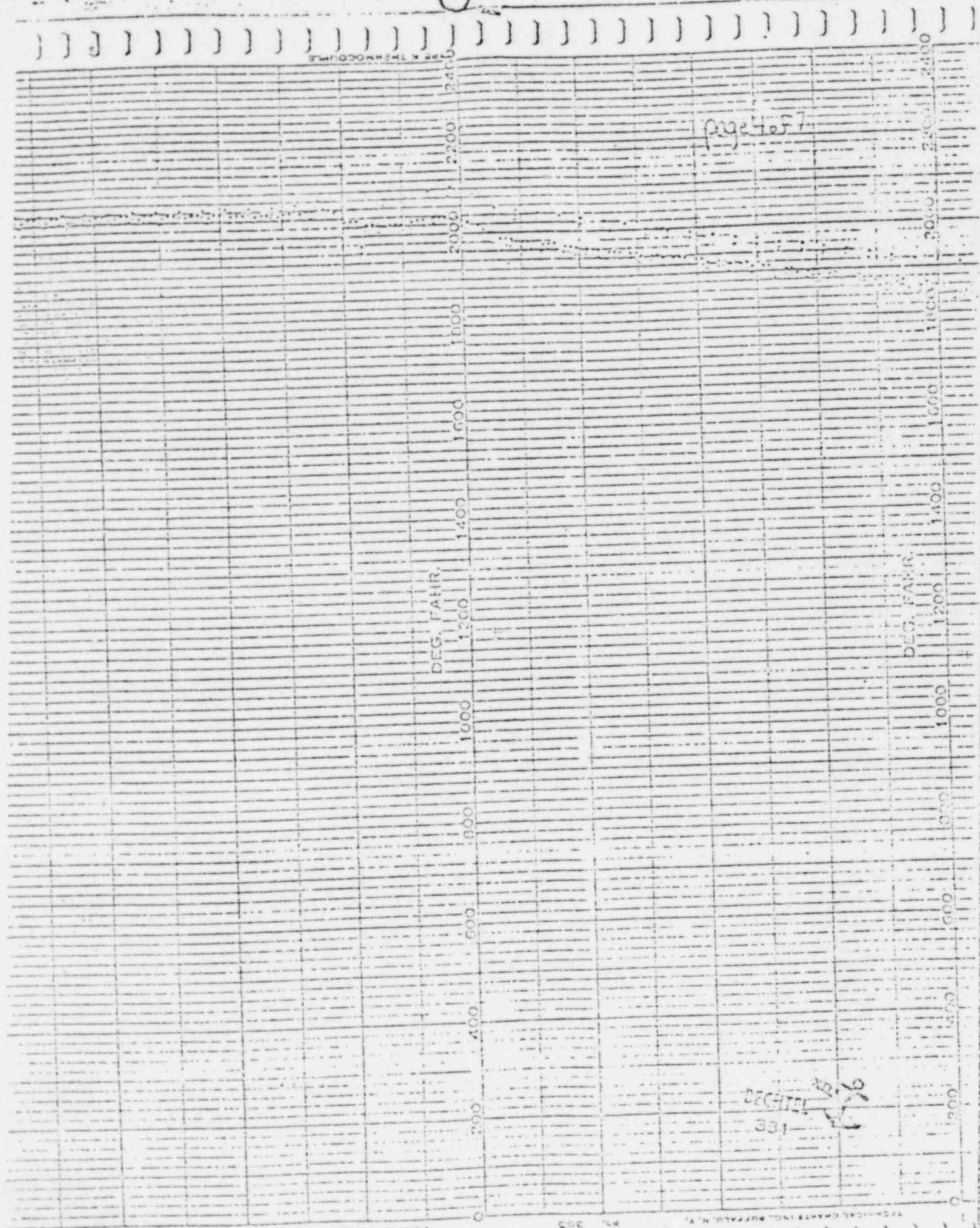


DATE	DESCRIPTION	AMOUNT	CHECK NO.	ACCOUNT
12/15/77	...	...	...	...
12/16/77	...	...	...	...
12/17/77	...	...	...	...
12/18/77	...	...	...	...
12/19/77	...	...	...	...
12/20/77	...	...	...	...
12/21/77	...	...	...	...
12/22/77	...	...	...	...
12/23/77	...	...	...	...
12/24/77	...	...	...	...
12/25/77	...	...	...	...
12/26/77	...	...	...	...
12/27/77	...	...	...	...
12/28/77	...	...	...	...
12/29/77	...	...	...	...
12/30/77	...	...	...	...
12/31/77	...	...	...	...

Item 41.3 \*

DECHTEL  
381





Item 41.3 \*

12

OTHER  
Prite 2 (Schaeffler diagram) = -2.  
CATALOG:

WELDERS QUALIFICATION TEST	
WELD MANUFACTURERS CERTIFICATE	
RT SHIPPING SKETCH & TECH.	
RT FILM & READER SHEETS	
CLEANING CERTIFICATION	
CERTIFICATE OF COMPLIANCE	
MERCURY EXCLUSION CERTIFICATE	
HEAT TREATMENT CHART	
HEAT TREATMENT CAR LOADING RECORD	

We hereby certify that the above material has been tested in accordance with the listed specifications and conforms to all applicable requirements thereof.

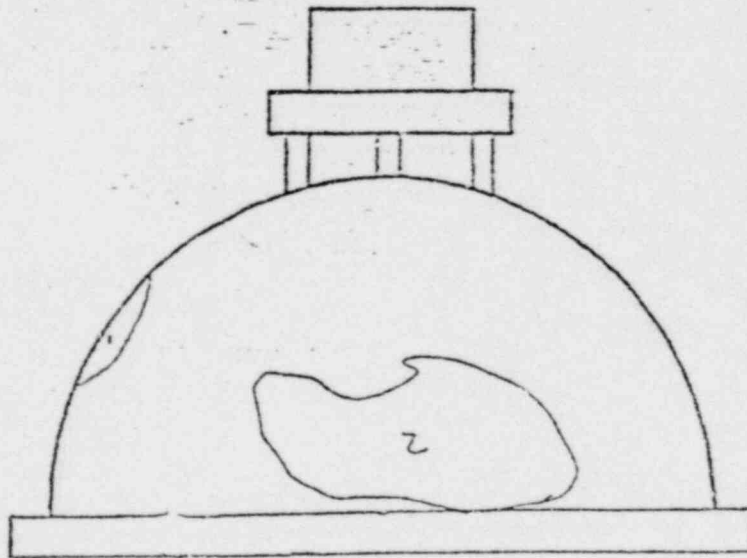
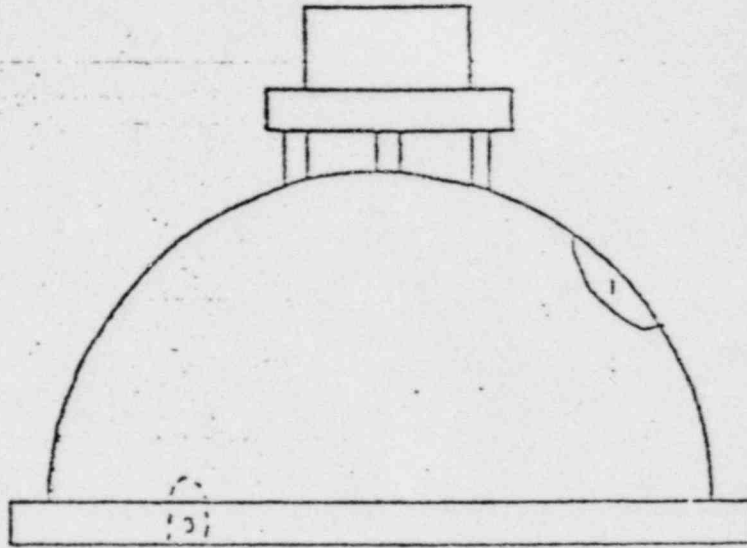
*Don Peabody* 11/30/77  
Quality Assurance Date

ODDGE BOUNDRY & MACHINE CO.

DECNTEL  
364



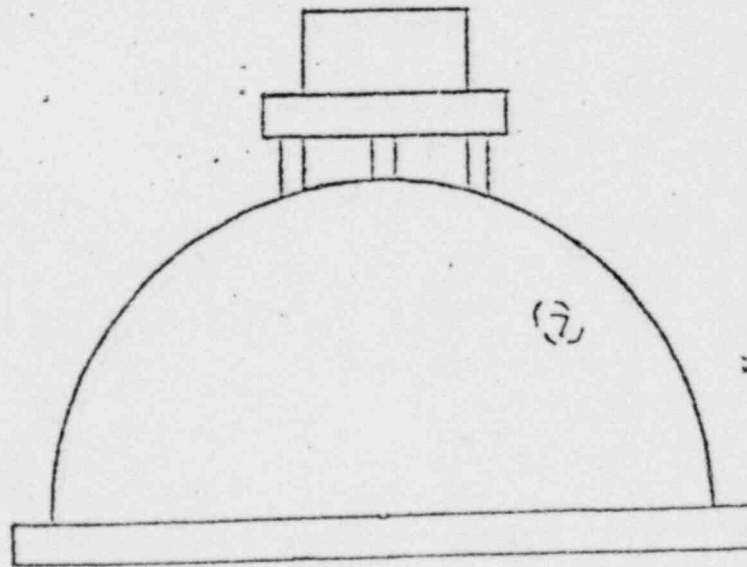
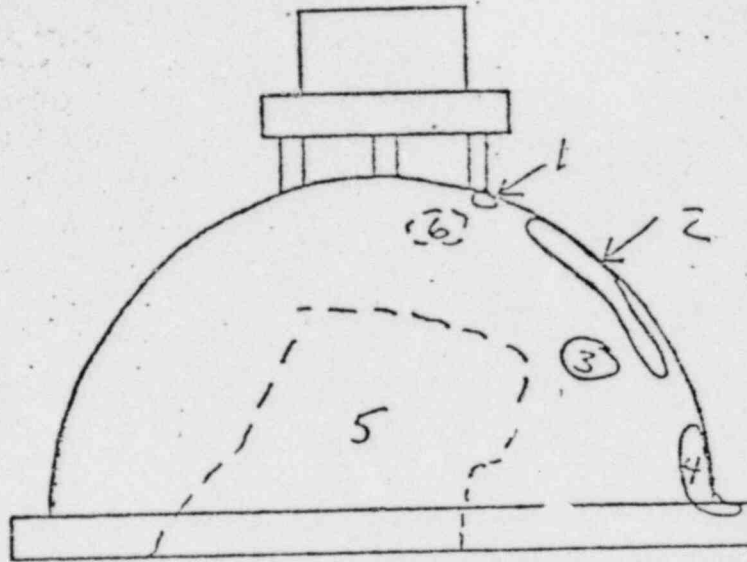
PATTERN NO. VIEW  
(PRL S/N)



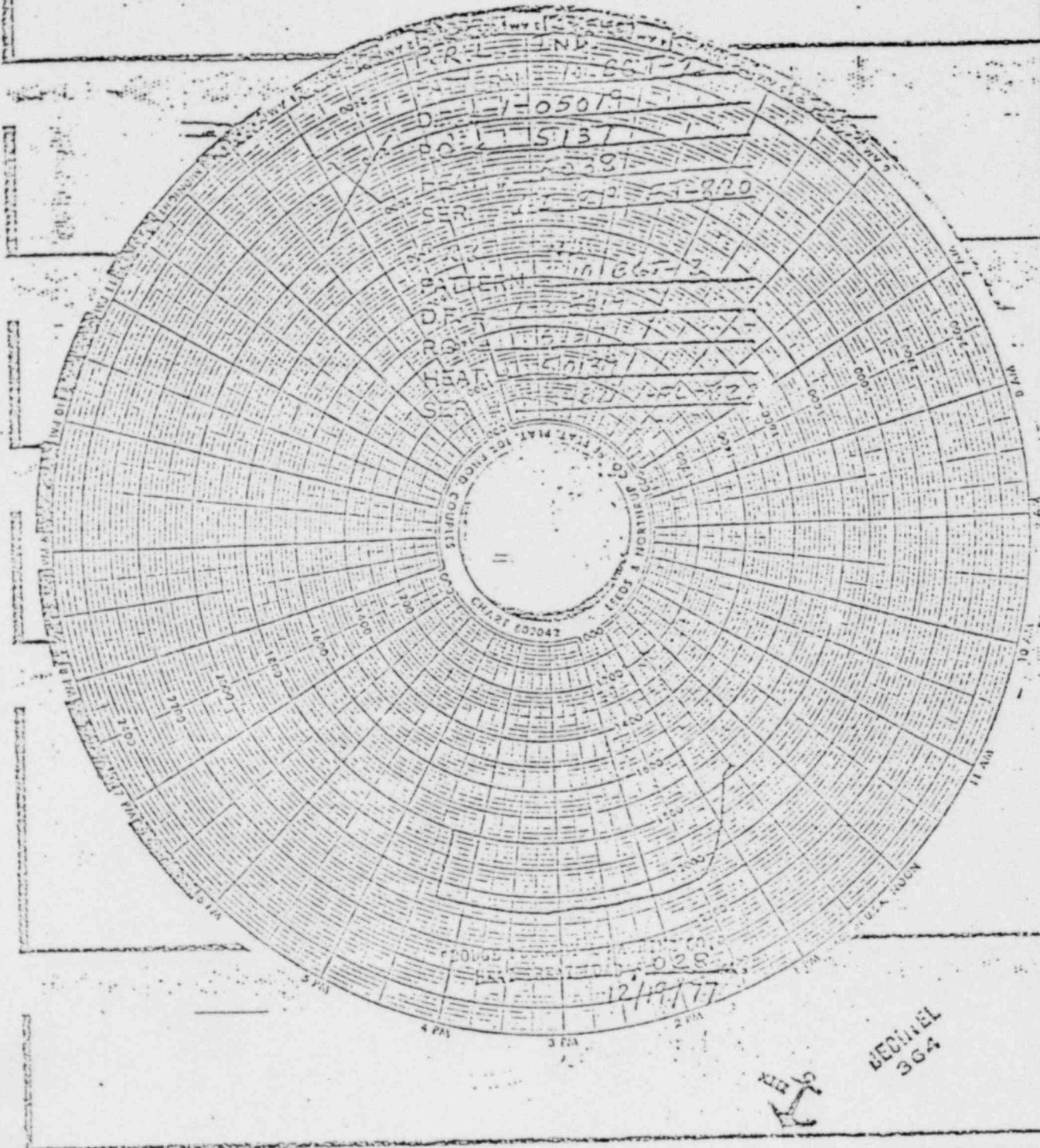
DEC 10 1964



PATTERN NO. VIEW  
(PRL S/N)



RECITEL  
364



Item 41.3 X



Advanced Materials Division  
P O Box 1697 Baltimore V.

PACKING SLIP &  
CERTIFICATE OF CHEMICAL ANALYSIS AND TESTS

30155077-3043 3/30/6 54-94964

30155077-3043 3/22/75 P 7 28575

TO ESCO CORP  
PUR DEPT PO BOX 16123  
PORTLAND, OR 97210

**MASTER**

SHIPPED SAME  
C/O GARY STEEL BLDG  
EMERYVILLE, CA 94540

CR ATSF SP STOPOFF ATSF 57302

SHIPPED FROM  
BALTIMORE, MD

QTY	UNIT	DESCRIPTION	WEIGHT	PRICE	TOTAL
1	ROLL	HEAT # BDL	2.25	117.97	262.23

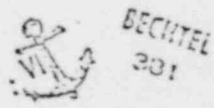
QTY	UNIT	DESCRIPTION	WEIGHT	PRICE	TOTAL
1	ROLL	HEAT # BDL	2.25	117.97	262.23
ID 210237 BURLAP YELLOW SHEET 1 CONE SA 193-B8M CODE 8B					

CF BAR STPLS TYPE 316 CNTRLSS 6 GR5 7630 COND A MIL S 7720 AGENS I  
 EX COMP 316 OK COND A SURF COND F ANS 56400 ASTH A275-75 COND A  
 MIL T 4520EA MIL & 9359A EX PAR: E.S WVD ASTH A 479-74 B ASNE SA 473  
 1974 EDITION EX CONT NKG WVD ALL SPECS

HEAT NO	ASSIGNED HARDNESS	EST TEN STRENGTH	YD STR ELONGAT	ELONG IN 2 OR EQY	AS	COND	HARDNESS
545171.051	156	35,000	46,000	55.0	75.0		
545171.052	156	35,000	46,000	55.0	75.0		

A SAMPLE TAKEN FROM A BAR OF THE ABOVE HEAT WAS ANALYZED  
 545171.059 1.91.015.020 .5217.9715.23 X02.25 CU.44 CO.17

FREED FROM CONTINUOUS CARBIDE NETWORK INTERGRANULAR CORROSION CAPABILITY OK  
 MICRO ETCH TESTS SATISFACTORY



THIS REPORT WAS PREPARED BY THE METHOD OF APR 19 75  
 [Signature]

THE CHEMICAL ANALYSIS AND PHYSICAL OR MECHANICAL TESTS REPORTED ARE CORRECT AND  
 DATED IN THE RECORD OF THE CORPORATION  
 [Signature]

# NONCONFORMANCE REPORT

1. PROJECT NAME			20. PAGE 1 OF 1		
2. URT(S) 3. DRAWING PART NO.			19. NO. 1177		
6. P.C. CR. SPEC. NO. 7. SERIAL NO.			5. ITEM LOCATION		
8. REPLACEMENT PART P/N			10. SOURCE		
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER			13. SKETCH ATTACHED ( ) YES ( ) NO		
16. NONCONFORMING CONDITION:			14. DISCOVERED DURING ( ) Receiving ( ) Const ( ) Test		
12. ASME AUTHORIZED INSPECTION REPORT NO. ( ) YES ( ) NO 15. EQUIP FURNISHED BY ( ) Client ( ) Field			24. DISPOSITION CONCURRENCE		
			PROJECT FIELD ENGINEER DATE PROJECT ENGINEER DATE PROJ CONSTR QC ENGINEER DATE AUTHORIZED INSPECTOR DATE		
17. REPORTED BY			25. DISPOSITION RESULTS		
DATE 8/17/70			18. VALIDATED BY		
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)			DATE 8-17-70		
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering					
23. PROJECT ENGINEERING DISPOSITION					
26. QC ACCEPTANCE			DATE		
QC ENGINEER			DATE		
AUTHORIZED INSPECTOR			DATE		

Block 16 continued.

## Quality Verification Documentation Package.

2. Form G-321-D, column B, Document Category Number 18.0 (Code Compliance) shows 16 pages of Code Compliance required, however, only 4 pages are applicable and included in the Quality Verification Documentation Package.
3. Form G-321-D, column B, Document Category Number 19.0 (Ultrasonic Verification Report) shows 4 reports required, however, none are applicable or included in the Quality Verification Documentation Package.

"O" number is indeterminate until installation. Hold pending final disposition. 2 hold tag(s) applied to the nonconforming item(s).

A conditional release is granted to install the 2 nuclear ~~service~~ service valves on this NCR. Corrections or removal can be accomplished without causing damage or contamination to the associated plant equipment or structure.

<i>[Signature]</i>	8/28/78	<i>[Signature]</i>	8-28-78
PHR	Date	PHR	Date
<i>[Signature]</i>	8-30-78	<i>[Signature]</i>	8-30-78
QA	Date	AI	Date

# NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO.		19. NO. 11478	20. PAGE 1 OF 3
2. URS (S)		4. ITEM DESCRIPTION		5. ITEM LOCATION	
3. DRWG PART NO.	REV	8. REPLACEMENT PART		9. SOURCE	
10. 117AC Rev. See Block 15	H/A	Nuclear Service Valves		Anchor/Warling Valve Co.	
11. INSPECTION CRITERIA	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED		14. Discovered During	
( ) DWG ( ) SPEC ( ) OTHER	NO. 1-00-3570	( ) YES ( ) NO		( ) Const ( ) Test	
16. NONCONFORMING CONDITION:					
Specification 7220-15-117 Rev. 8 requires Quality Verification Documentation according to Form G-321-D. Project Quality Control Instructions P-1.0 Rev. 7 requires the Quality Verification Documentation required by Form G-321-D to be available, legible and traceable. Contrary to the above: Item 1a. Valve Item no. 11.5, valve tag no. 6"-DBE-GI-110-3865A-RMV, S/H 1632-13-1-87; Form G-321-D, page 2 of 2, Blocks 17, 18 & 17 are incorrectly completed. See Attachment "A" page 1 of 1.					
17. REPORTED BY	DATE	18. VALIDATED BY		DATE	
Ann. A. Delaney	8/17/78	Ann. A. Delaney		8-17-78	
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)					
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering					
23. PROJECT ENGINEERING DISPOSITION					
24. DISPOSITION CONCURRENCE					
PROJECT FIELD ENGINEER	DATE	PROJECT ENGINEER	DATE	PROJECT INSPECTOR	DATE
25. DISPOSITION RESULTS					
26. QC ACCEPTANCE					
QC ENGINEER					
AUTHORIZED INSPECTOR					
DATE					

Block 16 continued

b. Valve item no. 11.6, valve tag no. 6"-DBB-GT-210-3865B-RAV, S/N 4632-13-1-90; Form C-321-B, page 2 of 2. Block 11, 14 & 17 are incorrectly completed. A painting Inspection Report is identified with the wrong valve tag no. See Attachment "B" Page 1 & 2 of 2.

c. Valve item no. 11.7, valve tag no. 6"-DBB-GT-210-3865A-RAV, S/N 4632-13-1-88; Form C-321-D, page 2 of 2, Block 18 is incorrectly completed. There is no traceability for a Plasma Hardfacing Report. See Attachment "C" Page 1 & 2 of 2.

d. Valve item no. 11.8, valve tag no. 6"-DBB-GT-210-3865B-RAV, S/N 4632-13-1-89; There is no traceability for a Minimum Thickness Measurement Record. See Attachment "D" Page 1 of 1.

Item 2. Specification 7290-1117 Rev. 0, Para 13.2 states: "All valves shall be boxed, crated or secured to skids and protected against damage during shipment, storage and handling." Contrary to the above, valve item no. 11.6, valve tag no. 6"-DBB-GT-210-3865B-RAV, S/N 4632-13-1-90 was received on site with the hand wheel broken off the motor operator.

"Q" numbers are indeterminate until installation. Held pending final disposition. // hold tag(s) applied to the nonconforming item(s).

A conditional Release is granted to install the 4 Nuclear Service valves on this NCR. Corrections or removal can be accomplished without causing damage or contamination to the associated plant equipment or structure.

DATE 8/28/78 DATE 8/28/78  
BY [Signature] BY [Signature]  
FIVE FIVE  
Date Date

Ed. M. P. [Signature] Date 8-28-78  
Date 8-28-78  
Date 8-28-78  
Date

READ INSTRUCTIONS ON BACK BEFORE FILING IN FORM

These requirements for Engineering and Quality Verification Documents are to be followed in accordance with the schedule set forth below. Suppliers failure to comply with these requirements may result in rejection of work or delay of shipment of material and completion of this form.

1. Drawing Number	2. Specification Reference	3. Kind of Copy	4. ENGINEERING DOCUMENTS		5. QUALITY VERIFICATION DOCUMENTS						11. Remarks
			Quantity	Price Appropriate	1. Inspection	2. Design	3. Approval	4. Material	5. Assembly	6. Field	
			Yes	No	1. Inspected	2. Checked	3. Approved	4. Material	5. Assembly	6. Field	
		Reproducible									
		Miscellim									
16.0	7.0	Reproducible	1	1				6	18		
		Miscellim			X						
17.1	4.0	Reproducible	1	1				14	18		
		Miscellim			X						
17.4		Reproducible						7	18		
		Miscellim			X						
18.0	12	Reproducible						2	18		DISTRIBUTION IN ACCORDANCE WITH para. A1.2
	A10.2	Miscellim									
19.0	8.0	Reproducible	1	1				N/A	18		
		Miscellim			X						
20.0	8.0	Reproducible	1	1				5	18		
		Miscellim			X						
21.0	8.0	Reproducible	1	1				2	18		
		Miscellim			X						
22.0	8.0	Reproducible	1	1				4	18		
		Miscellim			X						
24.0	9.0	Reproducible	1	1				1	18		
		Miscellim			X						
25.0	8.6, 10.0	Reproducible	1	1				20	18		
		Miscellim			X						
26.0	2.2, A7	Reproducible	1	1				2	18		
		Miscellim			X						
27.0	3.1, A1.12	Reproducible	1	1				N/A	18		
		Miscellim			X						
28.0		Reproducible	1	1							
		Miscellim			X						

13. Supplier's Order No. <b>4632-16</b>	14. Supplier's Part No. <b>4632-16-187</b>	15. Supplier's Part Name <b>6" 900<sup>th</sup> GT</b>	16. Quantity <b>1</b>
17. Buyer's Req. Item No. <b>11.</b>	18. Buyer's Line/Equip. Tag or Code No. <b>6" DBB-GT-1M03</b>	19. Buyer's Part Name <b>6" 900<sup>th</sup> GT</b>	20. Traceability <b>4632-16-1-87</b>


21. Supplier's Performance Statement: We certify that the work and required documents meet the requirements of the procuring documents. **665A-RAV**  
 Supplier: *John Williams* Date: *6-21-78*  
 Signature: *John Williams*

22. Inspection Release Statement: Work was released based on satisfactory completion of inspection and review of documents.  YES, noted under 12, Remarks  NONE  
 Inspected by: *W. J. Franke* Date: *6-21-78*  
 Signature: \_\_\_\_\_

23. Engineering Review Statement: The Quality Verification Documents submitted to Engineering with this form have been reviewed for conformance to the specified requirements and are acceptable. Engineer: \_\_\_\_\_ Date: \_\_\_\_\_

24. CCE Check In Statement: This form and the Quality Verification Documents referenced herein have been received and their retention to the hardware items verified. CONTROL NO. \_\_\_\_\_ FILE NO. \_\_\_\_\_  
 CCE: \_\_\_\_\_ Date: \_\_\_\_\_

After CCE Check in Distribute to: Procurement Manager, Field Office Manager, Material Supervisor

 C 211 B APR 2 1978	MIDLAND PLANTS - UNITS 1 & 2 CONSUMERS POWER COMPANY	JOB NO. 7220 P.O. NO. NUMBER 7220-M-117
	ENGINEERING AND QUALITY VERIFICATION DOCUMENT REQUIREMENTS	

READ INSTRUCTIONS ON BACK BEFORE FILLING IN FORM

These requirements for Engineering and Quality Verification Documents are to be followed in accordance with the whole set forth herein. Supplier's failure to comply with these requirements may result in order cancellation or withholding of payment until compliance is achieved.

1. Document Catalog Number	2. Specification Paragraph Reference	3. Kind of Cases	4. ENGINEERING DOCUMENTS		5. QUALITY VERIFICATION DOCUMENTS						11. Field CCE Date	12. Remarks
			Quantity Required	Phase Approved	Quantity Required	Other	Quantity	Inspection	Release	Review		
16.0	7.0	Reproducible	1		1		9	WF				
17.1	4.0	Reproducible	1		1		9	WF				
17.4		Macrofilm		X	1		4	WF				
18.0	12	Reproducible			1		2	WF				DISCREPANCY IN QUANTITY WITH PARAGRAPH 12.
19.0	10.2	Reproducible	1		1		N/A	WF				
20.0	8.0	Macrofilm		X	1		5	WF				
21.0	8.0	Reproducible	1		1		2	WF				
22.0	8.0	Macrofilm		X	1		4	WF				
24.0	9.0	Reproducible	1		1		1	WF				
25.0	8.6, 10.0	Macrofilm		X	1		20	WF				
26.0	9.2, A7	Reproducible	1		1		2	WF				
27.0	3.1, 1.12	Macrofilm		X	2		N/A	WF				
28.0		Macrofilm		X								

13. Supplier's Order No. 4632-16 14. Supplier's Part No. 4632-16-1-90 15. Supplier's Part Name 6" 900<sup>mm</sup> GT 16. Quantity 1

17. Buyer's Req. Form No. 11 18. Buyer's Unit/Equip. Tag or Code No. 6" DBB-GT-1M03 19. Buyer's Part Name 6" 900<sup>mm</sup> GT 20. Traceability 4632-16-1-90

21. Supplier's Compliance Statement: We certify that the listed work and required documents meet the requirements of the procuring documents. Supplier: D. J. Johnson Signature: D. J. Johnson Date: 6-21-78

22. Inspection Release Statement: Work was released based on satisfactory completion of inspection and review of documentation. Inspected Inspector: W. J. Franzen Signature: W. J. Franzen Date: 6-21-78

23. Engineering Review Statement: The Quality Verification Documents submitted to Engineering with this form have been reviewed for conformance to the specified requirements and are acceptable. Engineer: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

24. CCE Checkin Statement: This form and the Quality Verification Documents referenced herein have been received and their relationship to the hardware item verified. CONTROL NO. \_\_\_\_\_ FILE NO. \_\_\_\_\_ CCE: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

After CCE Checkin Distribute to: Procurement Manager, Field Office Manager, Material Supervisor

MIDLAND PLANTS - UNITS 1 & 2  
CONSUMERS POWER COMPANY

63210  
AA REV 2  
5/74

FORM NO. 7236  
FORM NO. 7220-M-117

ENGINEERING AND QUALITY VERIFICATION DOCUMENT REQUIREMENTS

Sheet 2 of 2

PAINTING INSPECTION REPORT

CUSTOMER: Bechtel CONTRACT NO: 7220-M-113-PC  
 ITEM NO. 11.6 SIO NO: 4632-15  
 VALVE SERIAL NO: 4632-15-1-90 Dwg. NO: 3829-3  
 VALVE TAG NO: 6"-DBB-GFIMO-3863-B-RAY

REQUIREMENTS

- A. HIGH TEMPERATURE X
- B. PRIME COAT MFG. Carbo Zinc NO: 11

OPERATION	MIL THICKNESS	INSPECTED BY	DATE
SURFACE FINISH	---	ETA	6-1-75
PRIME COAT #1	3 MILS	LL	6-1-75
PRIME COAT #2			

WE CERTIFY THAT THE SURFACE PREPARATION AND APPLICATION OF PRIME COAT OF PAINT ARE IN ACCORDANCE WITH ANCHOR/DARLING VALVE COMPANY PROCEDURE NO. 1581-1, REV ---, ADDENDA 2A.

June 2, 1975  
(DATE)

[Signature]  
(SIGNATURE)

(PROC. 1581-1, 4-30-74)

BECHTEL  
301



These requirements for Engineering and Quality Verification Documents to be fulfilled in accordance with the schedule set forth below. Supplier's failure to comply with these requirements may result in order cancellation or withholding of payment until compliance is established.

1. Item/Category Number	2. Specification Paragraph Reference	3. Kind of Copies	ENGINEERING DOCUMENTS		QUALITY VERIFICATION DOCUMENTS						12. Remarks	
			4. Quantity Required	5. Price Approval Required	6. Quantity Required for Release	7. Distribution Code	8. Supplier Conform Check	9. Inspection Release	10. Engineering Review	11. Field UCC Check In		
												Initial
		Reproducible Microfilm										
16.0	7.0	Reproducible Microfilm	1		X	1		9	WF			
17.1	4.0	Reproducible Microfilm	1			X	1		10	WF		
17.4		Reproducible Microfilm	1			X	1		4	WF		
18.0	12 A10.2	Reproducible Microfilm	1				1		2	WF		Distribution in accordance with para. A10.2
19.0	8.0	Reproducible Microfilm	1			X	1		1A	WF		
20.0	8.0	Reproducible Microfilm	1			X	1		4	WF		
21.0	8.0	Reproducible Microfilm	1			X	1		2	WF		
22.0	8.0	Reproducible Microfilm	1			X	1		4	WF		
24.0	9.0	Reproducible Microfilm	1			X	1		7	WF		
25.0	8.6, 10.0	Reproducible Microfilm	1			X	1		18	WF		
25.0	9.2, A7	Reproducible Microfilm	1			X	1		2	WF		
27.0	3.1, A1.12		1				X	1	N/A	WF		
28.0			1				X					

13. Supplier's Order No. 4632-13 14. Supplier's Part No. 4632-13-1-88 15. Supplier's Part Name 6" 900# GT 16. Quantity 1

17. Buyer's Req. Item No. 11. 7 18. Buyer's Line/Equip., Tag or Code No. 6" DBB-GT M03 19. Buyer's Part Name 6" 900# GT 20. Traceability 4632-13-1-88


21. Supplier's Compliance Statement: We certify that the listed work and required documents meet the requirements of the procuring documents. 9657-RAY Supplier: B. J. Tillman Signature: [Signature] Title: [Title] Date: 6-21-78

22. Inspection Release Statement: Work was released based on satisfactory completion of inspection and review of documentation. Authorized Release:  YES, Noted under 12, Remarks: 12 NONE Inspector: Wann Franzen Signature: [Signature] Date: 6-21-78

23. Engineering Review Statement: The Quality Verification Documents submitted to Engineering with this form have been reviewed for conformance to the specified requirements and are acceptable. Engineer: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

24. UCC Check-In Statement: This form and the Quality Verification Documents referenced hereon have been received and their relationship to the hardware items verified. CONTROL NO. \_\_\_\_\_ FILE NO. \_\_\_\_\_ UCC: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

After UCC Check-In Distribute to: Procurement Manager, Field Office Manager, Material Supervisor

 03710 AS REV 2 4/01	INDLAND PLANTS - UNIT 3 1 & 2 CONSUMERS POWER COMPANY	JOB NO. 7220 P.O./SPEC. NUMBER 7220-M-117
	ENGINEERING AND QUALITY VERIFICATION DOCUMENT REQUIREMENTS	

Dr.

DEFINITION OF WELD \_\_\_\_\_  
 PROCEDURE NO. \_\_\_\_\_  
 WELD ROD TYPE \_\_\_\_\_  
 SIZE \_\_\_\_\_  
 HEAT NO. \_\_\_\_\_ LOT NO. \_\_\_\_\_  
 WELDER \_\_\_\_\_  
 QUANTITY OF RODS ISSUED \_\_\_\_\_  
 QUANTITY OF RODS RETURNED \_\_\_\_\_  
 QUANTITY OF STUBS RETURNED \_\_\_\_\_  
 ISSUED BY \_\_\_\_\_  
 VERIFICATION OF RETURN BY \_\_\_\_\_  
 DATE \_\_\_\_\_  
 TIME ISSUED \_\_\_\_\_ TIME RETURNED \_\_\_\_\_

DEFINITION OF WELD Plasma Arc  
 PROCEDURE NO. 1098-1-4  
 WELD ROD TYPE Powder 156  
 SIZE \_\_\_\_\_  
 HEAT NO. \_\_\_\_\_ LOT NO. 2516  
 WELDER 319  
 QUANTITY OF RODS ISSUED 3 lbs  
 QUANTITY OF RODS RETURNED \_\_\_\_\_  
 QUANTITY OF STUBS RETURNED \_\_\_\_\_  
 ISSUED BY [Signature]  
 VERIFICATION OF RETURN BY \_\_\_\_\_  
 DATE 4-19-78  
 TIME ISSUED \_\_\_\_\_ TIME RETURNED \_\_\_\_\_

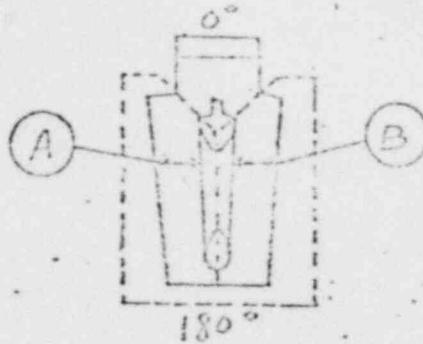
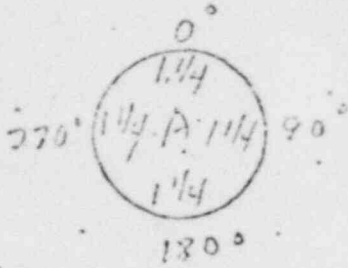
DEFINITION OF WELD \_\_\_\_\_  
 PROCEDURE NO. \_\_\_\_\_  
 WELD ROD TYPE \_\_\_\_\_  
 SIZE \_\_\_\_\_  
 HEAT NO. \_\_\_\_\_ LOT NO. \_\_\_\_\_  
 WELDER \_\_\_\_\_  
 QUANTITY OF RODS ISSUED \_\_\_\_\_  
 QUANTITY OF RODS RETURNED \_\_\_\_\_  
 QUANTITY OF STUBS RETURNED \_\_\_\_\_  
 ISSUED BY \_\_\_\_\_  
 VERIFICATION OF RETURN BY \_\_\_\_\_  
 DATE \_\_\_\_\_  
 TIME ISSUED \_\_\_\_\_ TIME RETURNED \_\_\_\_\_

DEFINITION OF WELD \_\_\_\_\_  
 PROCEDURE NO. \_\_\_\_\_  
 WELD ROD TYPE \_\_\_\_\_  
 SIZE \_\_\_\_\_  
 HEAT NO. \_\_\_\_\_ LOT NO. \_\_\_\_\_  
 WELDER \_\_\_\_\_  
 QUANTITY OF RODS ISSUED \_\_\_\_\_  
 QUANTITY OF RODS RETURNED \_\_\_\_\_  
 QUANTITY OF STUBS RETURNED \_\_\_\_\_  
 ISSUED BY \_\_\_\_\_  
 VERIFICATION OF RETURN BY \_\_\_\_\_  
 DATE \_\_\_\_\_  
 TIME ISSUED \_\_\_\_\_ TIME RETURNED \_\_\_\_\_

REC'D TEL 337

MINIMUM THICKNESS MEASUREMENT RECORD

GATE VALVE DISC



HEAT # \_\_\_\_\_

SERIAL # \_\_\_\_\_

"A" STAMPED SIDE

DRAWING 3829-3 REV. = JOB 4632-13  
6" 900" GATE VALVE P.S.  
Procedure 1437-1-REV. B-ADD. B

ZONE	SPECIFICATION MINIMUM	ACTUAL MINIMUM		INSP	DATE	CUSTOMER INSP	DATE
		MEASURED	LOCATION				
A	N/A	1 1/4	180°	AL	2/19/78		
B	N/A	1 5/16	180°	AL	2/19/78		
C							
D							
E							381

- NOTES: (1) Survey each zone (inspect in a grind pattern of approx 3" inches) and record thickness & location of area found to be minimum.  
 (2) Additional measurement taken at repaired, ground or machined surfaces; selected for dimensional inspection by visual inspection (applicable when indicated by asterisk).

# NONCONFORMANCE REPORT

1. PROJECT NAME <i>Edgemoor</i>		JOB NO. <b>7220</b>		19. NO. <b>1479</b>	20. PAGE <b>1</b> OF <b>3</b>
2. URT/ISI <i>7220-02334-1-20362-30-4</i>	3. DRAWING PART NO. <i>7220-02334-1-20362-30-4</i>	REV <i>11/A</i>	4. ITEM DESCRIPTION <i>Wingbeam Anchors &amp; Restraint Supports</i>	5. ITEM LOCATION <i>Posseville, Grid L93</i>	
6. P.O. Q# <i>87599</i>	7. SERIAL NO. <i>7220-02334-1-20362-30-4</i>	8. REPLACEMENT PART <i>PIN-3775</i>	9. SOURCE <i>Supplier</i>	10. CONTRACTOR/SUPPLIER <i>Schreiber Manufacturing Company, Inc.</i>	
11. INSPECTION CRITERIA <input type="checkbox"/> DWG <input type="checkbox"/> SPEC <input type="checkbox"/> OTHER	IR NO. <i>R-1.60-3274</i>	12. ASME AUTHORIZED INSPECTION REC'D <input type="checkbox"/> YES <input type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input type="checkbox"/> NO	14. Discovered During <input type="checkbox"/> Const <input type="checkbox"/> Test	15. Equip Furnished By <input type="checkbox"/> Client <input type="checkbox"/> Eng <input type="checkbox"/> FLD
16. NONCONFORMING CONDITION Specification 7220-C-233 Rev. 13 para. 7.2 states in part: "Details, fabrication, shall be in accordance with the drawings. . . . . Welded joints shall be made in accordance with Code for Welding in Building Construction, AWS D1.1-72, and Section on Welded Joints of AISC Manual of Steel Construction." Contrary to the above, these beams were delivered to jobsite in the condition described in Attachment "A".					
17. REPORTED BY <i>John R. Adams</i>		DATE <i>8-14-78</i>	18. VALIDATED BY <i>A. D. F. Adams</i>		
21. ROUTING: <input type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)		22. (C) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering			
2. Supplier Quality Representative to obtain correct documentation from Vendor.					
1. Field to repair the welds and weld splatter in accordance with Specification C-304. <i>John Adams 8-21-78</i>					
23. PROJECT ENGINEERING DISPOSITION					
24. DISPOSITION CONCURRENCE					
work		reject	repair	use as is	
<i>John Adams</i>				<i>8-22-78</i>	
PROJECT FIELD ENGINEER		DATE			
<i>John Adams</i>		<i>8-22-78</i>			
PROJECT ENGINEER		DATE			
<i>John Adams</i>		<i>8-22-78</i>			
PROJECT CONSTRUCTION ENGINEER		DATE			
<i>John Adams</i>		<i>8-22-78</i>			
AUTHORIZED INSPECTOR		DATE			
25. DISPOSITION RESULTS <i>Item 3: Corrected</i>					
<i>Quality Verification</i>					
<i>Documentation has been received and reviewed for all beams.</i>					
<i>John Adams 8-22-78</i>					
26. QC ACCEPTANCE					
QC ENGINEER					
DATE					
AUTHORIZED INSPECTOR					
DATE					

Continue Block 16

2. Specification 7220-C-233 Rev. 13 Appendix A para. 3.0 states in part: "The Seller/Subcontractor shall furnish documentation in accordance with the specification as summarized and directed by Form G-321-D." Contrary to the above, the Quality Verification Documentation Packages have been supplied in the following conditions:

A. Data Package for Beams B2-1, B2-2, 2B2-1, 2B2-2, 2B1-1, 2B3-1.

- 1.) The documentation present in the Data Package does not agree with the summary supplied on the G-321-D for document categories 17.1, 17.4, 25.0.
- 2.) MPR's for Heat No. IT 7872-3W1 and IT 7872-4W1 are illegible.
- 3.) Document category 17.2 on Form G-321-D was initial in Column 9 by the Shop Inspector, but in Column 8 the supplier has left it blank.
- 4.) The Certificate of Conformance for Nondestructive Examination states that Ultrasonic and Magnetic Particle tests are in accordance with Bechtel Specification 7220-C-233 Rev. 14. However the Purchase Order 7220-F-28362 Rev. 5 requires the work to be done in accordance with Specification C-233 Rev. 13 with SCN C-233-8002.

B. Data Package for Beams B1-1, 2B1-2, B3-1, B3-2, 2B3-2.

- 1.) The documentation present in the Data Package does not agree with the summary supplied on the G-321-D for document categories 17.1 and 17.4.
- 2.) Document Category 17.2 on G-321-D was not filled out by supplier or initialed by the Shop Inspector.
- 3.) MPR's for Heat No. IT 7872-3W1 and IT 7872-4W1 are illegible.
- 4.) The certificate of conformance for Nondestructive Examination references Bechtel Specification C-233 Rev. 14 where as the Purchase Order F-28362 Rev. 5 requires only Spec. C-233 Rev. 13 with SCN C-233-8002.

C. Data Package for Beams B1-2, B1-3, B4-1, B4-2, B4-3, B4-4, 2B4-1, 2B4-2, 2B4-3, 2B4-4.

- 1.) This Data Package has the discrepancies noted for the Data Package itemized under paragraph B.

"Q" numbers are 4.311 and 4.321. Hold pending final disposition. 21 hold tag(s) applied to the nonconforming beams.

FIELD INSPECTION REPORT

RECORD CONTROL
CONTROL NO.
FILE NO.
PAGE _____ OF _____

BECHTEL

1. PROJECT NO. 07220 2. DATE 8/12/78

4. ITEM INSPECTED THREE SHIPMENTS OF STRUCTURAL STEEL BEAMS AND MISCELLANEOUS STRUCTURAL SHAPES FABRICATED BY SCHREIBER MANUFACTURING CO. INC. AND DELIVERED TO THE POSSEYVILLE LAYDOWN RECEIVING AREA (F-28362-9) ON SHIPPER'S ORDER NO. 11972. DELIVERY DATE 8/7/78 FOR TOM HENDERSON.

5. LOCATION POSSEYVILLE LAYDOWN AREA

6. TYPE OF INSPECTION VISUAL AND MEASUREMENT ICCR,

7. STANDARD / CODE / PROCEDURE / DRAWING / SPECIFICATION G-27, C-304 AND A615-D1

8. INSPECTION EQUIPMENT USED FILLET WELD GAGE

9. RESULTS OF INSPECTION: SATISFACTORY  UNSATISFACTORY  (3 BEAMS ONLY)

10. ACTION TAKEN IF UNSATISFACTORY

BEAM NO. 2B1-1 ① Two (2) FPCUS ARE NOT FLOSH WITH THE PARENT METAL ON THE GUSSETS. EACH UNACCEPTABLE WELD IS 1/2" LONG.

② WELD SPLATTER WAS NOT REMOVED IN AREAS SURROUNDING 2 GUSSETS PRIOR TO PAINTING.

BEAM NO. 2B1-2 ① WELD SPLATTER WAS NOT REMOVED IN AREAS SURROUNDING 2 GUSSETS PRIOR TO PAINTING.

BEAM NO. 2B3-1 ① ONE (1) VERTICAL WELD 2-8" LONG HAD WELD SPLATTER THAT WAS NOT REMOVED PRIOR TO PAINTING.

B. C. RECEIVING IS IN THE PROCESS OF TAKING CORRECTIVE ACTION.

Distribution: White - OC Files  
Canary - Originator

11. ENGINEER A.C. Wilson  
J.C. Widdings, Jr.

## NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO.		19. NO. 7100	20. PAGE 1 OF 1		
2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION			
6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N _____ REV _____ SER NO. _____		9. SOURCE	10. CONTRACTOR/SUPPLIER		
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER		IR NO. _____ NO. _____	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. Discovered During ( ) Insp'g ( ) Const ( ) Test	15. Equip. Furnished By ( ) Client ( ) Eng ( ) FLD	
16. NONCONFORMING CONDITION:				24. DISPOSITION CONCURRENCE			
<p><i>See P-13 for details of this nonconformance. The unit was found to be defective during inspection. The unit was replaced with a new unit. The unit was inspected and found to be satisfactory. The unit was inspected and found to be satisfactory. The unit was inspected and found to be satisfactory. The unit was inspected and found to be satisfactory.</i></p>				rework	reject	repair	use as is
				PROJECT FIELD ENGINEER		DATE	
				PROJECT ENGINEER		DATE	
				PROJ CONSTR QC ENGINEER		DATE	
				AUTHORIZED INSPECTOR		DATE	
				17. REPORTED BY		DATE	
18. VALIDATED BY		DATE					
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)							
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering							
23. PROJECT ENGINEERING DISPOSITION							
26. QC ACCEPTANCE							
QC ENGINEER				DATE			
AUTHORIZED INSPECTOR				DATE			

NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 1481	20. PAGE 1 OF 1		
2. UNIT(S) 1	3. DRAWING/PART NO. C-416	REV 6	4. ITEM DESCRIPTION Pipe Restraint Embeds #601-3-12, #601-3-13	5. ITEM LOCATION Cont. 1 West SSW			
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE Co:                      tion	10. CONTRACTOR/SUPPLIER N/A		
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER		IR NO. N/A NO. C-416	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SH. ( )	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD	
16. NONCONFORMING CONDITION: Pipe restraint embeds #601-3-12 and #601-3-13 located on the inside face of the West Secondary Shield Wall have design elevations given on drawing C-416 Rev 6 of 669'-6". Contrary to design elevation, both of these embeds were placed at elevation 667'-8 3/4". These embeds are completely embedded in concrete. Q List #1.102. No Hold Tags Applied.				24. DISPOSITION CONCURRENCE			
				rework	reject	repair	use as is
				PROJECT FIELD ENGINEER                      DATE			
				PROJECT ENGINEER                                      DATE			
				PROJ CONSTR QC ENGINEER                      DATE			
				AUTHORIZED INSPECTOR                      DATE			
17. REPORTED BY A.S. Thomas Napoli		DATE 8/16/78	18. VALIDATED BY W. H. L. Foster		DATE 8/1/78		
21. ROUTING: <input checked="" type="checkbox"/> TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)							
22. ( ) Field Engineering Disposition <input checked="" type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering <i>Disposition Recommended by: 2-6-78</i>							
Field Engineering's recommended disposition is to "use as is". The restraint can be modified to use the embeds in their embedded positions.							
Thomas Napoli 8/21/78							
J. B. L. 5/21/78							
23. PROJECT ENGINEERING DISPOSITION							
26. QC ACCEPTANCE							
QC ENGINEER                      DATE							
AUTHORIZED INSPECTOR                      DATE							



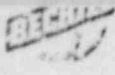
NONCONFORMANCE REPORT

1. PROJECT/CLIENT Midland Units 1 & 2		JOB NO. 7220		19. NO. 1482	20. PAGE 1 OF 2
2. DEDS COMMON		3. DRAWING PART NO. E/A		5. ITEM LOCATION Diesel Gen. Bldg.	
5. P.O. OR SPEC. NO. N/A		7. SERIAL NO. N/A		10. CONTRACTOR/SUPPLIER N/A	
8. REPLACEMENT PART P/N N/A - REV N/A - SER NO. N/A		9. SOURCE Construction		14. Discovered During ( ) Rec'g (X) Const ( ) Test ( ) Field ( ) MFLD	
11. INSPECTION CRITERIA ( ) DNG ( ) SPEC (X) OTHER		12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO		24. DISPOSITION CONCURRENCE	
16. NONCONFORMING CONDITION: The attached sketch identifies settlement of the Diesel Generator Foundations and Structure. In addition the mud mat between the E/Well and Generator has spalled and has been displaced. "Q"-List #1.40. Hold for Engineering Disposition. 4 Hold Tags Applied.					
17. REPORTED BY A.P. Clark		DATE 8-21-78		18. VALIDATED BY M.C. [Signature]	
21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)		DATE 8-21-78			
22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering PROJECT FOUNDATIONS TO FOUNDATION AND STRUCTURE REGULATIONS AND OTHER INVESTIGATION REGULATIONS TO RESOLVE THIS INVESTIGATION [Signature]					
23. PROJECT ENGINEERING DISPOSITION					
26. OC ACCEPTANCE					
OC ENGINEER					
AUTHORIZED INSPECTOR					
DATE					
DATE					

Request Conditional Release to allow continuation of construction up to but excluding the placement of concrete. Corrections or removal can be accomplished without causing damage or contamination to the associated plant equipment or structure.

*J.P. Scanlon* 8-22-78 *W.D. Gish* 8-22-78  
PPE Date PPGC Date

*W.D. Gish* 8-22-78  
IQAS Date



DATE \_\_\_\_\_

DESIGN BY *ACM*

DATE *8-21-78*

CHECKED BY \_\_\_\_\_

SHEET NO. \_\_\_\_\_

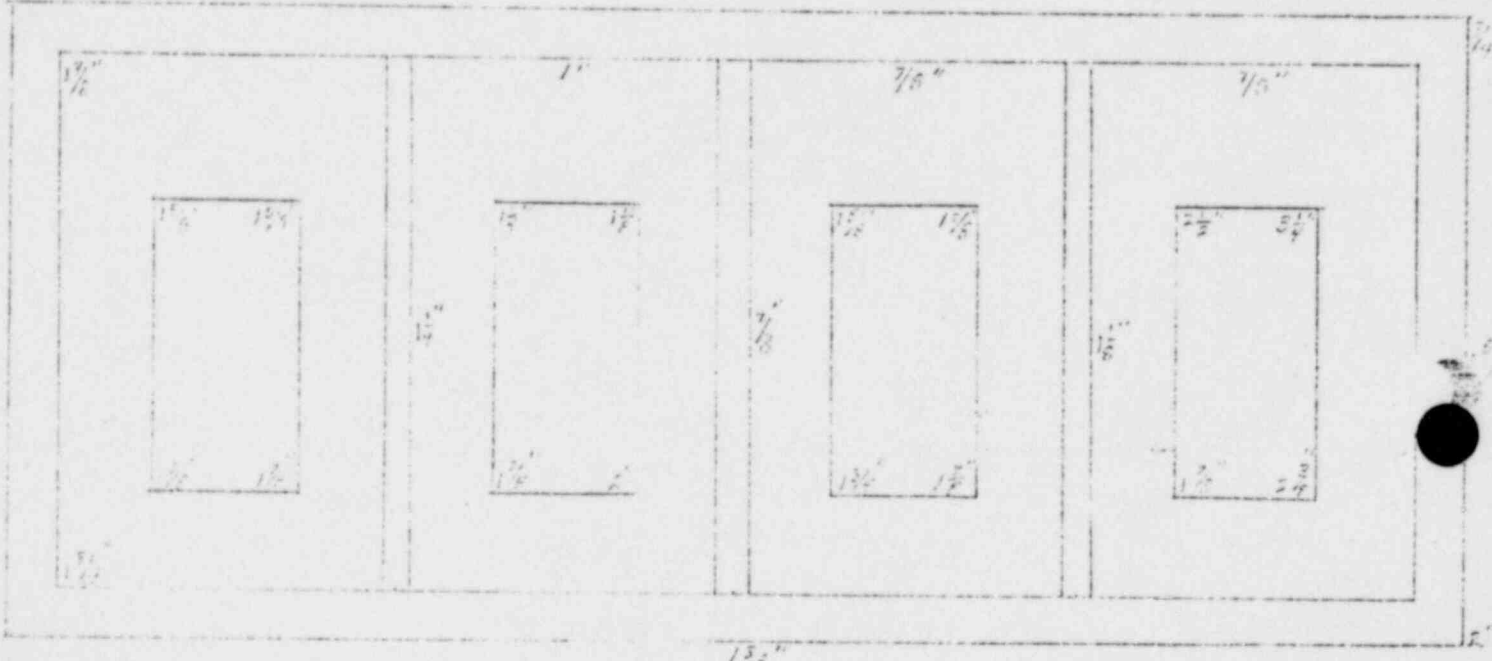
PROJECT \_\_\_\_\_

JOB NO. \_\_\_\_\_

SUBJECT \_\_\_\_\_

CALCULATION NO. \_\_\_\_\_

FILE NO. \_\_\_\_\_



*interference shown are total dimensions  
for theoretical plate condition.*

# NONCONFORMANCE REPORT

1. PROJECT NAME  2. LOCATION  3. DESCRIPTION OF ITEM  4. ITEM DESCRIPTION 5. REPLACEMENT PART 6. REPLACEMENT PART NO. / REV 7. SERIAL NO. / SER NO. 8. REPLACEMENT PART NO. / REV	9. SOURCE Supplier: Chicago Tube & Iron Company 10. CONTRACTOR/SUPPLIER 11. ASME AUTHORIZED INSPECTION RECD ( ) YES ( ) NO 12. ASME AUTHORIZED NO. R-1.00-3566 NO. S&S ILL. 16	13. SKETCH ATTACHED ( ) YES ( ) NO 14. DISCOVERED DURING ( ) RECON ( ) TEST 15. EQUIP FURNISHED BY ( ) CLIENT ( ) FLD	19. NO. 1483 20. PAGE 1 OF 1 5. ITEM LOCATION Phase 1, O.C. Field
16. NONCONFORMING CONDITION: Specification 7220-M-215 Rev. 1 Para. 7.0 states in part: "All submittals and documentation will conform to the procedures and quantities specified by Form G-321-D." "Minimum documentation shall include the following: a. Certified Material Test Report." Project Quality Control Instructions R-1.00 b. Para. 2.1.1 states in part: "Review the quality verification documentation required by Para. G-321-D for availability, legibility and traceability." Cont. on Page 2			
17. REPORTED BY William Duncanson 8-21-78		18. VALIDATED BY [Signature] 8-21-78	
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)			
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering Procurement supervisor to expedite documentation per Specification 7220-M-215, Rev. 1. [Signature] 8/21/78 [Signature] 8/21/78			
23. PROJECT ENGINEERING DISPOSITION			
24. DISPOSITION CONCURRENCE favora: _____ reject: _____ repair: _____ use as is: _____ PROJECT FIELD ENGINEER: [Signature] 8-21-78 PROJECT FIELD ENGINEER DATE PROJECT ENGINEER: [Signature] 8-21-78 PROJECT ENGINEER DATE AUTHORIZED INSPECTOR: _____ DATE 25. DISPOSITION RESULTS			
26. QC ACCEPTANCE QC ENGINEER: _____ DATE: _____ AUTHORIZED INSPECTOR: _____ DATE: _____			

Continued Block 16

Contrary to the above; <sup>M.D. 8-23-78</sup> the Certified Material Test Report for the material listed above shows heat no. as JJMI but the material is stamped with heat no. JKMI.

"Q" number is indeterminate until installation. Hold pending final disposition. <sup>3 M.D. 8-23-78</sup> ~~1~~ hold tag(s) applied to the nonconforming item(s).

(See Attachment "A")

2. The C-321-D form for the above listed material was improperly completed: A) Block 8 (Supplier Conform Check) is not filled out as required by Attachment "B". B) Blocks 16 through 20 do not have the required information per Attachment "B". <sup>M.D. 8-23-78</sup>

READ INSTRUCTIONS ON BACK BEFORE FILING IN FORM

These requirements for Engineering and Quality Verification Documents are to be fulfilled in accordance with the schedule set forth below. Supplier's failure to comply with these requirements may result in order cancellation or withholding of payment until compliance is achieved.

1. Document Category Number	2. Specification Paragraph Reference	3. Kind of Copies	4. ENGINEERING DOCUMENTS		5. QUALITY VERIFICATION DOCUMENTS						12. Remarks	
			4. Quantity Required	5. Price Assumed Required	6. Quantity Required for Release	7. Distribution Code	8. Supplier Conform Check	9. Inspection Release	10. Engineering Review	11. Field OCE Check In		
												Initial
		Reproducible Microfilm		N/A								
Pipe, Fittings & Flanges		Reproducible Microfilm										
17.1V	7.3	Reproducible Microfilm			1	C						NA-3767, A(b)
18.0V	7.3	Reproducible Microfilm			1	C						NC-2561 for welded filler metal tubular products
20.0V	7.3	Reproducible Microfilm			1	C						NC-2551 for seamless and welded without filler metal
19.0V	7.3	Reproducible Microfilm			1	C						If repairs have been done
14.0V	7.3	Reproducible Microfilm			1	C						If repair tested material is purchased
17.2V	7.3	Reproducible Microfilm			1	C						Conformance to requirements
17.4V	7.3	Reproducible Microfilm			1	C						

12. Supplier's Order No. **785385**      14. Supplier's Part No. **N/A**      15. Supplier's Part Name **Misc. Pipe Fittings**      16. Quantity **See Attached**

17. Buyer's Req. Item No. **7220-M-215**      18. Buyer's Location, Tag or Case No. **See Attached**      19. Buyer's Part Name **See Attached**      20. Traceability **See Attached**

21. Supplier's Statement: We certify that the listed work and required documents meet the requirements of the purchasing documents. Supplier: Thomas C. Murphy Date: 7-14-74

22. Inspector's Statement: Work was reviewed found satisfactory completion of inspection and review of documents. Inspected by: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

23. Engineering Review: The Quality Verification Documents submitted to Engineering with the form have been reviewed for conformance to the specified requirements and are acceptable. Engineer: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

24. OCE Check-in Statement: The form and the Quality Verification Documents referenced herein have been received and their reference to the hardware items verified. CONTROL NO. \_\_\_\_\_ FILE NO. \_\_\_\_\_ OCE: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

After OCE Check-in Documents to: Procurement Manager, Field Office Manager, Material Supervisor

MIDLAND PLANTS - UNITS 1 & 2  
CONSUMERS POWER COMPANY

ENGINEERING AND QUALITY VERIFICATION DOCUMENT REQUIREMENTS

JOB NO. 7220-M-215  
PAGE 2 OF 3

NCR # 1483 Page 2 of 4 Attachment "A" Page 1 of 1

Controlled Copy

- A. PURPOSE: This 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 these to the Buyer/Contractor.
- B. GENERAL INFORMATION: Engineering (E) and Quality Verification (V) Documents shall be identified by Category number and title in section H, below.

NOTE: A copy of the front of this form shall be completed by the supplier and provided to the Buyer's/Contractor's Inspector along with the applicable Quality Verification Documents for his review prior to release of the unit(s).

- C. DISTRIBUTION: All Engineering (E) Documents are to sent to the Project Engineer at the address shown below (Code A).

When inspection release is completed, the Verification (V) Documents are to be distributed to the respective addresses shown below in accordance with the distribution code identified in Column 7. A copy of the completed Form G-321-G must accompany each "package" of Verification Documents to its destination. Also, a copy of completed Form G-321-G is to be retained with the hardware shipment and a copy sent separately to the Project Field Quality Control Engineer at the jobsite.

Code A	Code B, With hardware shipment	Code C
Bachtel Associates Professional Corp, P. O. Box 1000 Ann Arbor, Michigan 48106 Attn: Project Engineer, Job 7220	Bachtel Power Corp, 2500 E. Miller Road Midland, Michigan 48643	Bachtel Power Corp, P. O. Box 2167 Midland, Michigan 48640 Attn: Quality Control Engineer

D. DEFINITIONS OF TERMS: (See also Document Category Definitions G-321-GUP A)

- Supplier - This is a generic term and is synonymous with the terms seller, vendor, contractor, subcontractor, subcontractor, etc.
- Reproduction - can be primary duplication by other means (reproduction or electrostatic dry process).
- Material - Items material conforming to the requirements of the procurement documents. When not specified, supplier shall submit his standard for approval.
- Final Approval Required - Bachtel approval required prior to use of documents in the design, fabrication, installation, or other work process.
- Issue - the final submitted of a document or record and with the schedule mutually agreed to by the Buyer and the supplier.
- Final - the submitted that reflects the completion of review comments, or the completion submitted required. This are to be accepted prior to rendering final payment. Drawings submitted as final must be full size reproductions made from original documents. Advertis to the title block, each drawing must be certified and show Buyer's job code, job number, purchase order number, size, quantity, tray or code number, and the manufacturer's serial number.
- Certificate - the dated Signature and Title of an authorized and responsible employee of the supplier.
- N/A - Not applicable - can be used for individual entries, columns and lines by Project engineer, and for individual entries by the supplier.

H. BUYER ENTRY INSTRUCTIONS

- | Entry No. | Information Required  |
|-----------|---|
| 1         | Enter Document Category Number.   |
| 2         | Enter Specification paragraph reference.  |
| 3         | Make no entry. Reserve to kind of copies required.  |
| 4         | Enter the number of each kind of copy for "Final" or "Final" submittals of Engineering Documents.                         |
| 5         | Enter approval requirement by X under "Yes" or "No" column.   |
| 6         | Enter the number of each kind of copy of Quality Verification Documents required for release of the item or installation. |
| 7         | Enter Quality Verification Document distribution code letter in accordance with paragraph D above.                        |
| 8         | Make no entry. For supplier use only.   |
| 9         | Enter Inspector to complete upon release. Sign on line 22.  |
| 10        | Enter Bachtel Engineering review confirmation. Sign on line 23.   |
| 11        | Enter GCE to complete checkoff. Sign on line 24.  |
| 12        | Enter remarks as appropriate.   |

I. SUPPLIER ENTRY INSTRUCTIONS

- | Entry No.  | Information Required   |
|------------|--|
| 8          | Enter number of pages of each type of Quality Verification Documents being submitted for the unit(s) being reviewed. Sign Statement of Performance on line 21.   |
| 12         | Enter remarks as appropriate. When a deviation has occurred, reference the deviation(s) and Buyer/Contractor's authorization in the column, and include the authorization document(s) in the Verification Document Package.            |
| 13, 14, 15 | Enter information as required.   |
| 16         | Enter the number of units covered by the Quality Verification Documents being submitted. For each regulation item no. being reviewed provide a separate copy of this completed form and the supporting Quality Verification Documents. |
| 17, 18, 19 | Enter information as required.   |
| 20         | Enter identification number(s) traceable to the unit(s) being reviewed, e.g. serial no., part no. of major component, cable reel no. or other unique designator.   |

H. DOCUMENT CATEGORY NUMBERS: Engineering (E) and Quality Verification (V) Document Requirements as entered in Column 1, and defined in G-321-GUP A Document Category Definitions. For entries, see specification paragraph(s) referenced in Column 2.

1.0 DRAWINGS (E)	10.2 Typical Material Used	28.0	RT - RADIOGRAPHIC EXAMINATION PROCEDURES (E), AND VERIFICATION REPORTS (V)
1.1 Curve Dimensions, Services and Four-Point/Mounting Details	11.0 MATERIAL DESCRIPTION (E)	29.0	MT - MAGNETIC PARTICLE EXAMINATION PROCEDURES (E), AND VERIFICATION REPORTS (V)
1.2 Assembly Drawings	12.0 WELDING PROCEDURES AND QUALIFICATIONS (E), AND VERIFICATION REPORTS (V)	30.0	PT - LIQUID PENETRANT EXAMINATION PROCEDURES (E), AND VERIFICATION REPORTS (V)
1.3 Shop Detail Drawings	13.0 WELD ROD CONTROL PROCEDURES (E), AND VERIFICATION REPORTS (V)	31.0	EDDY CURRENT EXAMINATION PROCEDURES (E), AND VERIFICATION REPORTS (V)
1.4 Mounting Drawings	14.0 REPAIR PROCEDURES (E), AND MAJOR REPAIR VERIFICATION REPORTS (V)	32.0	PRESSURE TEST - HYDRO, AIR, LEAK, BUBBLE OR VACUUM TEST PROCEDURES (E), AND VERIFICATION REPORTS (V)
1.5 Control Logic Diagrams	15.0 CLEANING AND COATING PROCEDURES (E), AND VERIFICATION REPORTS (V)	33.0	INSPECTION PROCEDURE (E), AND VERIFICATION REPORTS (V)
1.6 P&ID's	16.0 HEAT TREATMENT PROCEDURES (E), AND VERIFICATION REPORTS (V)	34.0	PERFORMANCE TEST PROCEDURES (E), AND VERIFICATION REPORTS (V)
2.0 PARTS LIST AND COST (E)	17.0 CERTIFIED MATERIAL PROPERTY REPORTS (V)	35.0	Mechanical Tests
3.0 COMPLETED BUYER DATA SHEETS (E)	17.1 MTR (Control Material Test Reports)	36.0	Electrical Tests
4.0 INSTRUCTIONS (E)	17.2 Insect Test Data	37.0	PROTOTYPE TEST REPORTS (E & V)
4.1 Installation	17.3 Form Data	38.0	SUPPLIER SHIPPING PREPARATION PROCEDURE (E)
4.2 Coasting	17.4 Material Certificate of Compliance		
4.3 Maintenance	17.5 Electrical Property Reports		
4.4 Site Storage and Handling	18.0 CODE COMPLIANCE (V)		
5.0 SPECIFICATIONS: ENGINEERING AND FABRICATION (E)	19.0 UT - ULTRASONIC EXAMINATION PROCEDURES (E), AND VERIFICATION REPORTS (V)		
6.0 QUALITY ASSURANCE MANUAL PROCESSED (E)			
7.0 TESTING DATA REPORT (E)			
8.0 ANALYSIS AND DESIGN REPORT (E)			
9.0 ADDITIONAL DATA REPORT (E)			
10.0 SAMPLES (E)			
10.1 Typical Quality Verification Documents			

# NONCONFORMANCE REPORT

1. PROJECT NAME 7220		JOB NO. 7220		19. NO. <u>1495</u>	20. PAGE <u>1</u> OF <u>4</u>
2. UNIT(S) 1000-10110	3. DRAWING/PART NO. 1/A	4. ITEM DESCRIPTION H/A Type 304 L.S. 3" 150# Sch. 10 V.H. Flange	5. ITEM LOCATION Whse. # 1, O.C. Hold		
6. P.O. OR SPEC. NO. 720-10110	7. SERIAL NO. 1/A	8. REPLACEMENT PART P/N <u>1/A</u> REV. <u>1</u>	9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER ITT Grinnell, Kernersville, N.C.	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER	IR NO. <u>R-90-3209</u> NO. <u>M-R-104A</u> REV. <u>7</u>	12. ASME AUTHORIZED INSPECTION P'Y'D ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. Discovered During ( ) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng ( ) FLID
16. NONCONFORMING CONDITION: Material Requisition 7220-M-104A Rev. 7, Documentation 3209 Part 3 states in part: "The Seller shall complete Form G-321-D in detail with the list of documentation which verifies the use of required materials." Contrary to the above, the G-321-D Form sent for the material listed above was the incorrect form (see Attachment "A"). The G-321-D required by M/R 7220-M-104A is as shown on Attachment "B" Pages 1 & 2 of 2. "0" number is indeterminate until installation. Hold pending final disposition. Hold tag(s) applied to the nonconforming item(s).					
17. REPORTED BY <i>Marvin Demond</i>	DATE <i>8-21-78</i>	18. VALIDATED BY <i>John J. Jones</i>	DATE <i>8/31/78</i>	24. DISPOSITION CONCURRENCE rework <input checked="" type="checkbox"/> reject <input type="checkbox"/> repair <input type="checkbox"/> use as is <input type="checkbox"/> <i>Project Field Engineer</i> <i>8-28-78</i> DATE PROJECT FIELD ENGINEER DATE PROJECT ENGINEER <i>8-31-78</i> DATE PROJ CONSTR OC ENGINEER DATE AUTHORIZED INSPECTOR DATE 25. DISPOSITION RESULTS	
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)					
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering Procurement supervisor to obtain corrected documentation per requisition 7220-M-104A Rev. 7.					
23. PROJECT ENGINEERING DISPOSITION					
26. OC ACCEPTANCE OC ENGINEER DATE AUTHORIZED INSPECTOR DATE					

*John J. Jones*  
*8/24/78*



**READ INSTRUCTIONS ON BACK BEFORE FILLING IN FORM**

FORM 11857014  
Attachment B Page 2

These requirements for Engineering and Quality Verification Documents are to be fulfilled in accordance with the schedule set forth below. Supplier's failure to comply with these requirements may result in order cancellation or withholding of payment until compliance is established.

1. Document Category Number	2. Specification Paragraph Reference	3. Kind of Copies	ENGINEERING DOCUMENTS				QUALITY VERIFICATION DOCUMENTS						12. Remarks	
			4. Quantity Required		5. Prior Approval Required		6. Quantity Required for Release	7. Date Submit Code	8. Inspection Check	9. Inspection Remarks	10. Engineering Review	11. Field OCE Check In		
			Initial	Final	Yes	No								
20.0	7.3.1	Reproducible	2	2	X		1	C						
		Microfilm												
21.0	7.3.2	Reproducible	2	2	X		1	C						
		Microfilm												
22.0	7.3.4	Reproducible	2	2			1	C						
		Microfilm			X									
28.0	6.6	Reproducible	2	2		X								
		Microfilm												
		Reproducible												
		Microfilm												
		Reproducible												
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		Reproducible												
		Microfilm												
		Reproducible												
		Microfilm												
		Reproducible												
		Microfilm												
		Reproducible												
		Microfilm												

13. Supplier's Order No.	14. Supplier's Part No.	15. Supplier's Part Name	16. Quantity
17. Buyer's Req. Item No.	18. Buyer's Line/Equip. Tag or Code No.	19. Buyer's Part Name	20. Traceability

21. Supplier's Conformance Statement: We certify that the listed work and required documents meet the requirements of the procuring documents. Supplier: \_\_\_\_\_ Signature \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_


22. Inspection Release Statement: Work was released based on satisfactory completion of inspection and review of documentation. Authorized Deviations:  YES, Noted under 12, Remarks  NONE. Inspector: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

23. Engineering Review Statement: The Quality Verification Documents submitted to Engineering with this form have been reviewed for conformance to the specified requirements and are acceptable. Engineer: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

24. OCE Check-In Statement: This form and the Quality Verification Documents referenced herein have been received and their relationship to the hardware items verified. OCE: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

25. IIAE Audit Statement: The Quality Verification Documents included with this form have been audited. IIAE: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

ATTN: OCE Check-In Distribute to: Procurement Manager, Field Office Manager, Material Supervisor

 G-321-D	MIDLAND PLANT UNITS 1 & 2 CONSUMERS POWER COMPANY	JOB NO. #7220 PROJECT NUMBER (C) 7220-M-104A
	ENGINEERING AND QUALITY VERIFICATION DOCUMENT REQUIREMENTS	REV. 2 OF 2 2

**READ INSTRUCTIONS ON BACK BEFORE FILLING IN FORM**

The requirements for Engineering and Quality Verification Documents are to be fulfilled in accordance with the schedule set forth below. Supplier's failure to comply with these requirements may result in design cancellation or withholding of payment until compliance is established.

1. Document Category Number	2. Specification To which Reference	3. Kind of Copy	ENGINEERING DOCUMENTS				QUALITY VERIFICATION DOCUMENTS						12. Remarks
			4. Quantity Required		5. Price Approved Required		6. Quantity Required for Release	7. Drawn/Noted/Ende	8. Complete/Not Complete (Date)	9. Inspection/Release	10. Engineering Review	11. Field GCE Check In	
			Initial	Final	Yes	No							
1.1	2.12	Reproducible	2	2	X								
	8.0	Microfilm											
1.3	2.12	Reproducible	2	2	X								
	8.0	Microfilm											
6.0	9.1	Reproducible	2	2	X								
	G-23	Microfilm											
12.0	6.4	Reproducible	2	2	X								
		Microfilm											
13.0	6.4	Reproducible	2	2	X	1	C						
		Microfilm											
14.0	6.45	Reproducible	2	2	X	1	C						
		Microfilm											
15.0	6.5	Reproducible	2	2	X	1	C						
		Microfilm											
16.0	6.4.4	Reproducible	2	2	X	1	C						
		Microfilm											
17.1	9.0	Reproducible				1	C						
		Microfilm											
17.2	9.0	Reproducible				1	C						
		Microfilm											
17.3	9.0	Reproducible				1	C						
		Microfilm											
17.4	9.0	Reproducible				1	C						
		Microfilm											
18.0	9.0				1	C							
19.0	7.3.2		2	2	X	1	C						

13. Supplier's Code No.	14. Supplier's Part No.	15. Supplier's Part Name	16. Quantity
17. Buyer's Req. Item No.	18. Buyer's Equipment, Tag or Code No.	19. Buyer's Part Name	20. Traceability

21. Supplier's Certificate Statement: We certify that the listed work and required documents meet the requirements of the preceding documents. Supplier Signature: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

22. Inspection Release Statement: Work was released based on satisfactory completion of inspection and review of documentation. Authorized Inspection:  YES, Noted under 12, Remarks: \_\_\_\_\_  NONE. E-Check Inspector: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

23. Engineering Review Statement: The Quality Verification Documents submitted to Engineering with this form have been reviewed for conformance to the specified requirements and are acceptable. Engineer: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

24. GCE Check In Statement: This form and the Quality Verification Documents referenced herein have been received and their relationship to the hardware items verified. CONTROL NO.: \_\_\_\_\_ FILE NO.: \_\_\_\_\_ GCE: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

25. GCE Audit Statement: The Quality Verification Documents furnished with this form have been checked. GCE: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

After GCE Check In Deliver to: Department Manager, Field Office Manager, Material Supervisor

HIGHLAND PLANT UNITS 1 & 2  
CONSUMERS POWER COMPANY

ISSUED 7 7220  
FORM NUMBER  
7220-M-104A (Rev. 11-72)

ENGINEERING AND QUALITY VERIFICATION DOCUMENT REQUIREMENTS

3" & SMALLER ASME III CLASS 2 & 3 MATERIAL Attachment A Page 1 of 1

READ INSTRUCTIONS ON BACK BEFORE FILLING IN FORM

These requirements for Engineering and Quality Verification Documents are to be fulfilled in accordance with the schedule set forth below. Supplier's failure to comply with these requirements may result in order cancellation or withholding of payment until compliance is established.

1. Customer Order Number	2. Specification Paragraph Reference	3. Kind of Copies	ENGINEERING DOCUMENTS				QUALITY VERIFICATION DOCUMENTS						12. Remarks
			4. Quantity Required (Initial Final)	5. For Approval		6. Quantity Required for Release	7. Class Code	8. Supplier's Custom Check	9. Inspection Release	10. Engineering Review	11. Field QCC Check In		
				Yes	No								
PIPE, FITTINGS & FLANGES		Reproducible Microfilm											Per applicable class sheet
17.1M	7.0	Reproducible Microfilm	NA NA	NA NA	1	c							2" thru 1" NA 3767.4.b
17.4M	7.0	Reproducible Microfilm	NA NA	NA NA	1	c							3/4" and smaller NA 3767.4.b
17.4M	6.2	Reproducible Microfilm	NA NA	NA NA	1	c							Conformance to QA Requirements As per applicable Class Sheet
Bolting		Reproducible Microfilm											
17.1M	7.0	Reproducible Microfilm	NA NA	NA NA	1	c							Larger than 1" up to 2" NA 3767.4b
17.4M	7.0	Reproducible Microfilm	NA NA	NA NA	1	c							1" and smaller NA 3767.4b
17.2M	7.0	Reproducible Microfilm	NA NA	NA NA	1	c							Larger than 1" up to 2" NC 2311, Class EL3

13. Supplier's Order No. F46173D	14. Supplier's Part No. 10-065-335-ONR	15. Supplier's Part Name 3" 150 S/10s WNF	16. Quantity 1
17. Buyer's Req. Item No. 93919	18. Buyer's Line Equip. Tag or Code No. 601-18 ZHCC MR-62	19. Buyer's Part Name 3" 150 RF WN FLG	20. Trade Name 4PAWH


21. Supplier's Conformance Statement: We certify that the final work and released documents meet the requirements of the procuring documents. Supplier: Henry R. H. [Signature] (3-10s) O.A. CLERK 04/12/78

22. Inspection Release Statement: Work was released based on satisfactory completion of inspection and review of documentation. Authorized Director:  YES, listed under 12, Remarks  NONE. Signature: \_\_\_\_\_ Date: \_\_\_\_\_

23. Engineering Review Statement: The Quality Verification Documents submitted to Engineering with this form have been reviewed for conformance to the specified requirements and are acceptable. Engineer: \_\_\_\_\_ Date: \_\_\_\_\_

24. QCC Check-in Statement: This form and the Quality Verification Documents referenced herein have been received and their responsibility to the customer is being verified. CONTROL NO. \_\_\_\_\_ FILE NO. \_\_\_\_\_ QCC: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

After QCC Check-in Direct to: Procurement Manager, Field Office Manager, Material Supervisor

 0321-0 2A REV 5/74	MIDLAND PLANTS - UNITS 1 & 2 APPENDIX A1 CONSUMERS POWER COMPANY ENGINEERING AND QUALITY VERIFICATION DOCUMENT REQUIREMENTS	JOB NO. 7220
		P.O. SPEC. NUMBER 7220-M-305
		SHEET 2 OF 2   REV. 3

# NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO.		19. NO. <u>3116</u>		20. PAGE 1 OF 2	
2. UNIT/ 3. DRAWING/PART NO.		4. ITEM DESCRIPTION		5. ITEM LOCATION			
6. P.O. OR SPEC NO.		7. SERIAL NO.		9. SOURCE		10. CONTRACTOR/SUPPLIER	
8. REPLACEMENT PART		11. INSPECTION CRITERIA		12. ASME AUTHORIZED INSPECTOR RECEIVED		14. Discoveries During	
13. SKETCH ATTACHED		15. Equip Furnished By		24. DISPOSITION CONCURRENCE			
16. NONCONFORMING CONDITION:		17. REPORTED BY		18. VALIDATED BY		25. DISPOSITION RESULTS	
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)		22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering		26. CC ACCEPTANCE			
23. PROJECT ENGINEERING DISPOSITION		OC ENGINEER		AUTHORIZED INSPECTOR			
		DATE		DATE		DATE	

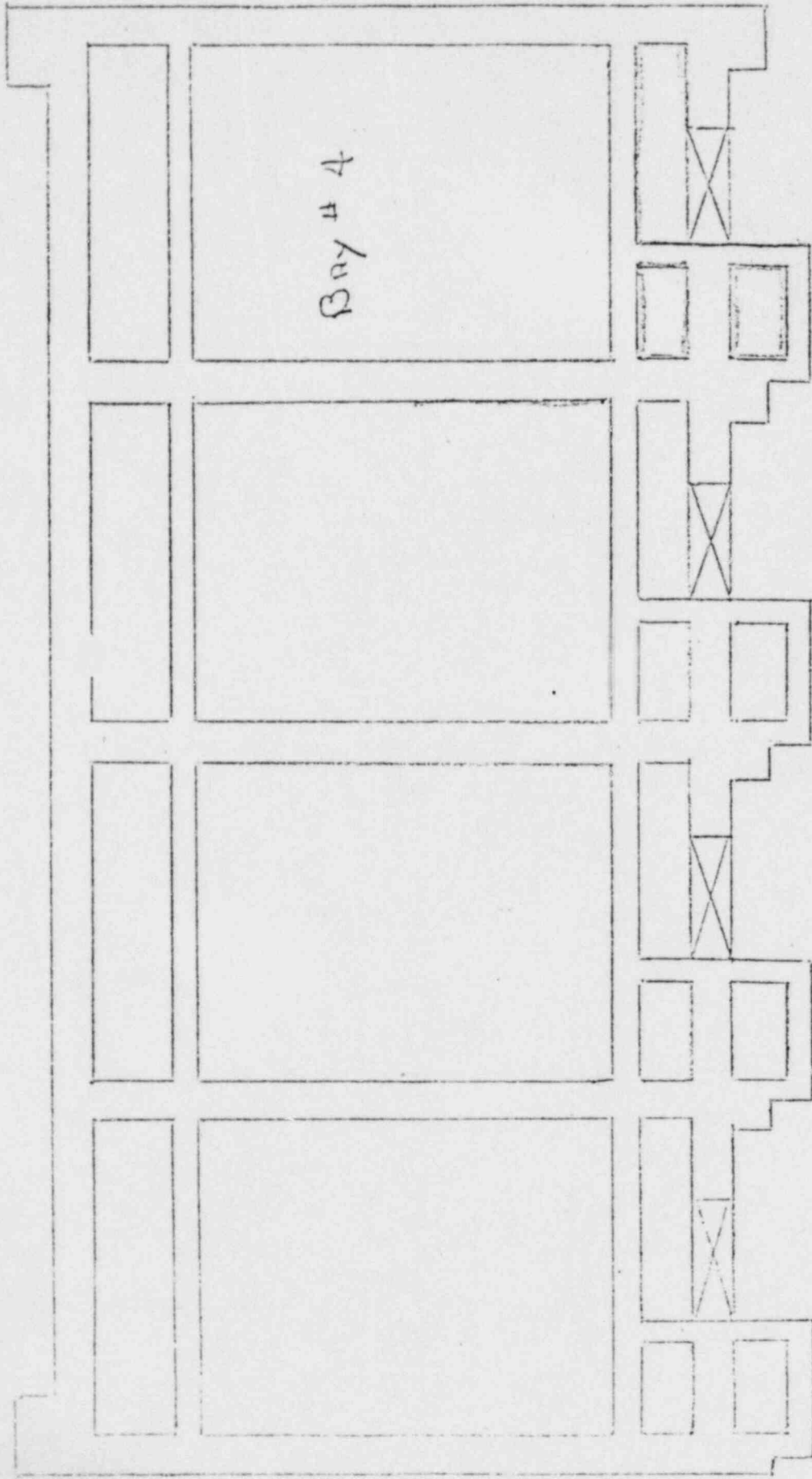
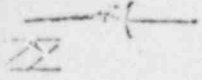
13. SKETCH ATTACHED ( ) YES ( ) NO  
 14. Discoveries During ( ) Rec'g ( ) Cont'd ( ) Inst  
 15. Equip Furnished By ( ) Client ( ) Eng ( ) FLD  
 24. DISPOSITION CONCURRENCE  
 received \_\_\_\_\_ reject \_\_\_\_\_ repair \_\_\_\_\_ use as is \_\_\_\_\_  
 PROJECT FIELD ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_  
 PROJECT ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_  
 PROJECT ENSTR CC ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_  
 AUTHORIZED INSPECTOR \_\_\_\_\_ DATE \_\_\_\_\_  
 25. DISPOSITION RESULTS  
 26. CC ACCEPTANCE  
 OC ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_  
 AUTHORIZED INSPECTOR \_\_\_\_\_ DATE \_\_\_\_\_

16. NONCONFORMING CONDITION: Ground Condition 7220-C-231, Rev. 16, Void, 5.4 inches to  
depth. If found any old equipment or located within 24 inch, 2409 limit  
within 16 place for 7 days min. equipment approved. Company to be above,  
found referenced on the attached sketch were removed after the 24 hours  
period (Per Reference), "01-11-18 21,405. Held for Engineering Disposition."  
Hold tags applied.

17. REPORTED BY: Scotty... DATE: 10/17/18  
 18. VALIDATED BY: Scotty... DATE: 10/18/18

21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)  
 22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION  
 26. CC ACCEPTANCE  
 OC ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_  
 AUTHORIZED INSPECTOR \_\_\_\_\_ DATE \_\_\_\_\_



\* FORMS REMOVED AFTER 24 HRS

WALLS TO 662'-0"



... ..  
... ..  
... ..

GRS

JAN	ASST TO MGR	100-301	100-301
FEB	"	"	100-301
MAR	"	"	100-301
APR	"	"	100-301

... ..  
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### NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO.		19. NO. 11489	20. PAGE 1 OF 4	
2. UNITS	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION		
6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART F/N <u>11/4</u> REV <u>REV</u> SER NO.	9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER Habecock & Wilcox		
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER	IR NO. <u>1-2, 20-13</u> NO. <u>OCT 8-2-80</u> REV. <u>1</u>	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. Discovered During ( ) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng ( ) FLD	
16. NONCONFORMING CONDITION: <u>REV 3-2-80 Rev. 4 requires review of the B &amp; W Data Packages</u>			24. DISPOSITION CONCURRENCE			
<p>For availability, legibility, and traceability in accordance with the requirements of the B &amp; W Quality Requirements Matrix (ORM). Contrary to the above, the QA Data Packages for A.C. Pump Motor Flywheel for Motors 1RC-PLA1 (S/N 8384579), 1RC-PLA2 (S/N 8384580) and 1RC-PLA3 (S/N 8384580) were delivered with the following discrepancies:</p>			rework	reject	repair	use as is
			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			PROJECT FIELD ENGINEER <i>[Signature]</i>		DATE 8-25-78	
			PROJECT ENGINEER PROJ CONSTR QC ENGINEER <i>[Signature]</i>		DATE 8-31-78	
17. REPORTED BY			18. VALIDATED BY			
DATE 8-22-78			DATE 8-7-78			
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)						
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering						
Procurement Supervisor to obtain proper documentation. <i>R. Ward 8/25/78</i>						
23. PROJECT ENGINEERING DISPOSITION						
25. DISPOSITION RESULTS						
26. QC ACCEPTANCE						
QC ENGINEER				DATE		
AUTHORIZED INSPECTOR				DATE		

Continued on Page 2



continues Block 16

1. LRC-PLA2 3/11 8304578

a. Supplier Certificate of Conformance is illegible.

2. LRC-PLA1

a. B & W Nuclear Power Generation Division Certificate of Conformance has a NPGD QA Hold placed on this Motor. (See Attachment "A")

3. LRC-PLB1

a. B & W Nuclear Power Generation Division Certificate of Conformance has a NPGD QA Hold placed on this Motor. (See Attachment "B")

"Q" number is 4.017. Hold pending final disposition. 3 hold tag(s) applied to the motors.

CERTIFICATE OF CONFORMANCE

1159

DOC. I.D. S/N. REV. NO. 23-1607  
EMI NO. \_\_\_\_\_  
P.O. NO. 020796LN

MANUFACTURER: General Electric Co.

CONTRACT NO. 620-0013 ITEM NO.: 1 MARK NO.: 18C-21A1

SPECIFICATION NUMBERS: 08-1016000007-01

EQUIPMENT DESCRIPTION: R.C.P. Motors

EQUIPMENT SAFETY CLASS: II-2 EQUIPMENT CODE CLASS: N/A

EXCEPTIONS: 87-0089-00 87-0066-00

For purposes of Quality Assurance requirements, the item of equipment identified above meets the requirements of the above listed specification including the codes, standards, test requirements, and quality assurance requirements invoked therein except as noted in Non Conformance Statement below\*. Any exceptions to the specifications, codes, or purchase order requirements of this contract known to the undersigned are listed above and have been reported to and approved in writing by The Babcock & Wilcox Company. Documentation is available at the manufacturer's plant and/or at NPGD, Lynchburg and documentation as required by the attached QA Data Sheet(s) or Quality Requirements Matrix (cs)

48-1218-02  
When reviewed and found to be acceptable.

The item of EQUIPMENT identified above ~~does not~~ does not conform to all requirements and is ~~maintained~~ in a QA HOLD status by B&W NPGD QA Department.

Equipment was made because: Error in seismic report was unknown at time of motor shipment

Specific Non Conformance to requirements are: Error found in seismic & LOCA Analysis Report

When will be resolved as follows: A new corrected Seismic & LOCA Analysis completed by 3-15-77

The undersigned is the senior Quality Assurance executive in Babcock & Wilcox NPGD

**NPGD**  
**QA**  
**HOLD**

*C. L. Mackay*  
Authorized Signature

Manager, Quality Assurance  
Title

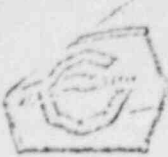
Feb 7, 1977  
Date



NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO.		19. NO. 1190	20. PAGE 1 OF 4
2. UNIT#	3. DRAWING PART NO.	REV.	4. ITEM DESCRIPTION	5. ITEM LOCATION	
6. P.O. OR SPEC. NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. DISCOVERED DURING ( ) CONST ( ) TEST	15. Equip Furnished By ( ) Client ( ) Eng ( ) FLD	
16. NONCONFORMING CONDITION: Specification H-13 Rev. 4 Para. 1.0.e.7 required drawings and specifications as required by the specification and listed on Form G-321-D. The drawings for the above, as radiographic film was supplied with the Quality Verification Report (see attached) for Generators 1011 (3/H 17703193), 1012 (3/H 17703194) and 2002 (3/H 17703195). Radiographic reader sheets are attached. Wrong reader sheet (see 17703191) was applied for 2012. "9" numbers are 4,521 and 4,522. Hold number sheet attached. 3 hold tag(s) applied to nonconforming item(s).					
17. REPORTED BY	DATE	18. VALIDATED BY	DATE	24. DISPOSITION CONCURRENCE	
<i>M. C. ...</i>	8-21-78	<i>M. C. ...</i>	8-23-78	reject	repair
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)		25. DISPOSITION RESULTS			
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering		AUTHORIZED INSPECTOR			
Procurement Supervisor to obtain proper documentation.					
		26. OC ACCEPTANCE			
		OC ENGINEER			
		AUTHORIZED INSPECTOR			
		DATE			
		DATE			

X



CRUCIBLE STEEL CASTING CO.  
 Almira Avenue & West 84th Street  
 Cleveland, Ohio 44102  
 (216) 651-1155

17703191 SPIDER R14 WELD

File - 60184  
 CI 3.5  
 3.1

FORM 101037

KLV-C  
 H10

Radiographic Inspection Report

CUSTOMER NORTHERN BOILER		X-RAY SER. 3.1 N/A	CUSTOMER INSPECTION	
PATT. NO. S.O. 7202-2		DESCRIPTION 70 1/4 O.D. X 4 1/2" wall X 36" lg.		RESS NO. 7202-2
ORDER NO. S.O. 7202-2		HEAT NO. N/A		
X-RAY CLASS OR ACCEPTANCE STANDARD ASME SEC VIII UW51		TYPE OF MATERIAL		DATE RT COMP. 12/13/77
CUST. SPEC. NO. N/A	SPEC. NO. N/A			NO. OF EXPOS 3 EXP.

FILM NO. OR VIEW	ACCEPT REJECT	GAS & BLOWHOLES	SAND INCLUSION	INTERNAL SHRINKAGE	HOT TEARS	UNFUSED CHARPLETS	INTERNAL CHILLS	COLD SHRITS	CRACKS	POROSITY	SLAG INCLUSIONS	THICKENED INCLUSIONS	INCOMPLETE FUSION	INADEQUATE PENETRATION	UNDERCUT	BURN THROUGH	FILM ARTIFACTS	NO APPARENT DEFECTS	TIME	
																			11:20	Page 2 of 3
Weld Seam																				
1-2	X									X							X			
2-3	X																X	X		
3-1	X																X	(S)		

RECORDED  
 548

ETI  
 TELING

CI 3.5

Serial 17705193

CUSTOMER NORTHERN BOILER		X-RAY SER. N/A	CUSTOMER INSPECTION
PART NO. S.O. 7202-3		DESCRIPTION 70" O.D. X 4 1/2" wall X 36" lg. green from label	ASSN NO. 7202-3
ORDER NO. S.O. 7202-3		HEAT NO. N/A	
X-RAY CLASS OR ACCEPTANCE STANDARD ASME SEC VIII UN51		TYPE OF MATERIAL	DATE RT COMP. 12/03/77
CURT. SPEC. NO. N/A	SPEC. NO. N/A		NO. OF TESTS 3 EXP.

FILM NO. OR VIEW	ACCEPT REJECT	GAS & BLOWHOLES	SAND INCLUSION	INTERNAL SHRINKAGE	HOT TEARS	UNFUSED CRACKETS	INTERNAL CHILLS	COLD SHOTS	CRACKS	POROSITY	SLAG INCLUSIONS	TUNGSTEN INCLUSIONS	INCOMPLETE FUSION	IMADEQUATE PENETRATION	UNDERCUT	BURN THROUGH	FILM ARTIFACTS	NO APPARENT DEFECTS	1190	(S) SURFACE (I) METAL STAMP
Weld Seam																				
1-2	X																			X (S)
2-3	X																			X
3-4	X																			X (S)

BECHTEL  
1-20

Serial # 17703194

NORTHERN BOILER

3.1

X-RAY STR.

N/A

CUSTOMER INSPECTION

DND

WATE. NO.

S.O. 7202-4

DESCRIPTION

70 1/2" O.D. X 1/2" wall X 36" lg.

ORDER NO.

S.O. 7202-4

SPIDER RIM WELD

RESS NO.

7202-4

X-RAY CLASS OR ACCEPTANCE STANDARD

ASME SEC VIII UW51

HEAT NO.

N/A

CUST. SPEC. NO.

N/A

SPEC. NO.

N/A

TYPE OF MATERIAL

DATE RT COMP.

12/13/77

NO. OF EX.

3 EXP.

1190

(S) SURFACE  
(I) METAL STAMP

FILM NO.  
OR  
VIEW

ACCEPT

REJECT

GAS & BLOWHOLES

SAND INCLUSION

INTERNAL STRIKAGE

HOT TEARS

UNFUSED CHAPLETS

INTERNAL CHILLS

COLD SHOTS

CRACKS

POROSITY

SLAG INCLUSIONS

TUNGSTEN INCLUSIONS

INCOMPLETE FUSION

IRREGULAR PENETRATION

UNDERCUT

BURN THROUGH

FILM ARTIFACTS

NO APPARENT DEFECTS

Weld Scan

1-2

X

X

X

2-3

X

X

3-4

X

X

(S)

RECEIVED  
120

CRUCIFER STEEL REVIEWER

R. H. [Signature]

DATE

12-13-77

LEVEL

II

SHEET OF

1 1

PAGE OF

1 3

Corrected Copy

NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 1191	20. PAGE 1 OF 1		
2. UNIT(S) 1&2	3. DRAWING/PART NO. E-532	REV 12	4. ITEM DESCRIPTION 2AC024 3" PVC Conduit	5. ITEM LOCATION Aux Bldg, el. 614'			
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE Constr.	10. CONTRACTOR/SUPPLIER N/A		
11. INSPECTION CRITERIA () DWG ( ) SPEC ( ) OTHER		IR NO. N/A NOE-532 Rev 12	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD	
16. NONCONFORMING CONDITION: Conduit 2AC024 has been damaged by drilling the concrete slab for anchors under 2D15 on el. 614'. Approximate location 10' east of 6.6 and 11' north of H line. During concrete removal operations, conduit 2AC023 was damaged. Q-list #3.006. 1 Hold tag applied near item. Hold for engineering disposition.				24. DISPOSITION CONCURRENCE			
				rework	reject	repair STD	USE AS IS
				PROJECT FIELD ENGINEER <i>[Signature]</i> 8-25-78		DATE	
				PROJECT ENGINEER <i>[Signature]</i> 8-25-78		DATE	
				PROJ CONSTR QC ENGINEER <i>[Signature]</i> 8-25-78		DATE	
				AUTHORIZED INSPECTOR		DATE	
17. REPORTED BY <i>[Signature]</i>		DATE 8/22/78		18. VALIDATED BY <i>[Signature]</i>		DATE 8-28-78	
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)				25. DISPOSITION RESULTS			
22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering							
		Repair in accordance with Dwg. 7220-E-42 Sht. 11B Para. 27.					
		Repair both conduits 2AC023 & 2AC024					
		<i>[Signature]</i> 8-25-78					
23. PROJECT ENGINEERING DISPOSITION				26. QC ACCEPTANCE			
				QC ENGINEER		DATE	
				AUTHORIZED INSPECTOR		DATE	



# NONCONFORMANCE REPORT

1. PROJECT NAME	JOB NO.	19. NO. 31	20. PAGE 1 OF 1
2. DRAWING PART NO.	3. ITEM DESCRIPTION	4. ITEM LOCATION	
5. P.O. ORDER NO.	6. REPLACEMENT PART	7. SOURCE	10. CONTRACTOR/SUPPLIER
8. SERIAL NO.	9. REV. SER. NO.	11. ASME AUTHORIZED INSPECTOR FIELD ( ) YES ( ) NO	12. SKETCH ATTACHED ( ) YES ( ) NO
13. DEFLECTION CRITERIA ( ) FOWG ( ) SPEC ( ) OTHER	14. DISCOVERED DURING ( ) PREP ( ) INST ( ) TEST ( ) CHEM ( ) CNG ( ) FLD	15. EQUIP FURNISHED BY ( ) CHEM ( ) CNG ( ) FLD	
16. NONCONFORMING CONDITION:			
<p>boards installed in the area of the boiler. The boards are not supported by the boiler structure and are loose. The boards are not supported by the boiler structure and are loose. The boards are not supported by the boiler structure and are loose.</p>			
17. REPORTED BY	18. VALIDATED BY	DATE	DATE
		9/20/78	9/20/78
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)			
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering			
23. PROJECT ENGINEERING DISPOSITION			
24. DISPOSITION CONCURRENCE			
APPROVED	REJECT	REFER	USE AS IS
PROJECT FIELD ENGINEER	DATE	PROJECT ENGINEER	DATE
PROJ CONSTR QC ENGINEER	DATE	AUTHORIZED INSPECTOR	DATE
25. DISPOSITION RESULTS			
26. QC ACCEPTANCE			
QC ENGINEER	DATE	AUTHORIZED INSPECTOR	DATE

# NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO. 7220		19. NO. 1193	20. PAGE 1 OF 4
2. URT(S)	3. DRAWING/PART NO.	REV. H/A	4. ITEM DESCRIPTION	5. ITEM LOCATION	
9. P.O. NO. 98574	7. SERIAL NO.	8. REPLACEMENT PART P/N	10. ITEM TYPE	C.C. Hold, Whse. #1	
11. INSPECTION CRITERIA	12. ASME AUTHORIZED INSPECTION REQ'D	9. SOURCE	10. CONTRACTOR/SUPPLIER		
( ) DWG ( ) SPEC ( ) OTHER	III NO. R-1, 00-3551	Supplier	Chicago Tube and Iron Company		
16. NONCONFORMING CONDITION:					
Specification 7220-M-215 Rev. 1 Para. 7.1 states "All sub- mitted documentation will conform to the procedure and quantities specified in Form G-321-D." Contrary to the above, Column B of Form G-321-D was not completed in accordance with "Supplier Entry Instructions" (See Attachment "B") for entry number 5. Also, blocks 16 thru 20 (See Attachment "A") were incorrectly filled and since traceability has not been maintained.					
17. REPORTED BY	DATE	18. VALIDATED BY	DATE	24. DISPOSITION CONCURRENCE	
George A. Wood	8-22-78	[Signature]	8/28/78	reject	repair
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)		25. DISPOSITION RESULTS			
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering		AUTHORIZED INSPECTION			
Encouraging Supervisor to obtain correct documentation per specification 7220-4-215 Rev. 1.		PROJECT FIELD ENGINEER: [Signature] DATE: 8-28-78 PROJECT ENGINEER: [Signature] DATE: 8-31-78			
23. PROJECT ENGINEERING DISPOSITION					
26. OC ACCEPTANCE					
OC ENGINEER					
AUTHORIZED INSPECTOR					
DATE					

X

Contains Block 16

"Supplier Key Instructions" (See Attachment "B") lists instructions for completion of blocks 16 thru 20.

"B" number is indeterminate until installation. Hold pending final disposition.      hold tag(s) applied to the nonconforming item(s).

READ INSTRUCTIONS ON BACK BEFORE FILLING IN FORM

These requirements for Engineering and Quality Verification Documents are to be followed in accordance with the schedule set forth below. Supplier's failure to comply with these requirements may result in order cancellation or withholding of payment until compliance is established.

1. Document Category Number	2. Specification Paragraph Reference	3. Kind of Copies	ENGINEERING DOCUMENTS				QUALITY VERIFICATION DOCUMENTS					12. Remarks	
			4. Quantity Received		5. Prior Applied Required		6. Quantity Required for Release	7. Dist. Code	8. Supplier's Custom Check	9. Inspection Release	10. Engineering Review		11. Field QCE Check In
			Initial	Final	Yes	No							
		Reproducible Microfilm			N/A								NCR 1193
Pipe, Fittings & Flanges		Reproducible Microfilm											
17.1V	7.3	Reproducible Microfilm					1	c					NA-3767, 4(4)
		Reproducible Microfilm											
18.0V	7.3	Reproducible Microfilm					1	c					NC-2551 for welded w/ filler; metal tubular products
20.0V	7.3	Reproducible Microfilm					1	c					
19.0V	7.3	Reproducible Microfilm					1	c					NC-2551 for seamless and welded without filler metal
		Reproducible Microfilm											
14.0V	7.3	Reproducible Microfilm					1	c					If repairs have been done
		Reproducible Microfilm											
17.2V	7.3	Reproducible Microfilm					1	c					If impact tested material is purchased
		Reproducible Microfilm											
17.4V	7.3	REPRO MICRO					1	c					Conformance to requirements

12. Supplier's Draw No. **785385**      14. Supplier's Part No. **N/A**      15. Supplier's Part Name **Misc. Pipe Fittings**      16. Quantity **See Attached**

17. Buyer's Proc. Item No. **7220-M-215**      18. Buyer's Lot, Equip. Tag or Code No. **See Attached**      19. Buyer's Part Name **See Attached**      20. Tolerance **See Attached**

21. Supplier's Statement: We certify that the listed work and required documents conform to the requirements of the preceding documents. Supplier: **Thomas C. Murphy** QA Mgr. **7-14-78** Date

22. Inspection Statement: Work was reviewed based on preliminary completion of procedures and review of documents. Authorized Deviations:  YES, Noted under 12, Remarks  NONE. Inspector: \_\_\_\_\_ Date \_\_\_\_\_

23. Engineering Statement: The Quality Verification Documents submitted to Engineering with the lot have been reviewed for conformance to the specified requirements and are acceptable. Engineer: \_\_\_\_\_ Date \_\_\_\_\_

24. QCE Check Statement: The form and the Quality Verification Documents referenced herein have been reviewed and their relationship to the hardware items verified. CONTROL NO. \_\_\_\_\_ FILE NO. \_\_\_\_\_ QCE: \_\_\_\_\_ Date \_\_\_\_\_

APPROVED BY: \_\_\_\_\_  
**MIDLAND PLANTS - UNITS 1 & 2**  
**CONSUMERS POWER CO. COMPANY**  
 JOB NO. **7220**  
 P.O./SPEC **7220-M**  
**ENGINEERING AND QUALITY VERIFICATION DOCUMENT REQUIREMENTS**  
 SHEET 2 OF 3

This is a standard form to be used by Buyer/Contractor to specifically identify documents required of the supplier to satisfy specification requirements, and to be used by the supplier for Quality Verification Documents when submitting them to the Buyer/Contractor.

FORMATS: Engineering (E) and Quality Verification (V) Documents are identified by Category number and title in section H, below.

Copy of the front of the form shall be completed by the supplier and provided to the Buyer's Contractor's Inspector along with the applicable Quality Verification Documents for the release of the unit(s).

NOV 11 1993

Form A-1 Engineering (E) Documents are to be sent to the Project Engineer at the address shown below (Code a).

Once release is completed, the Verification (V) Documents are to be distributed to the respective addresses shown below in accordance with the distribution code specified in A. A copy of the completed Form G-321-0 must accompany such "package" of Verification Documents to its destination. Also, a copy of completed Form G-321-0 is to be in the hardware shipment and a copy sent separately to the Project Field Quality Control Engineer at the job site.

Code a.  
 Associates Professional Corp.  
 41000  
 Nor, Michigan 48106  
 Project Engineer, Job 7220

Code b. With hardware shipment  
 Bechtel Power Corp.  
 3500 E. Miller Road  
 Midland, Michigan 48640

Code c.  
 Bechtel Power Corp.  
 P. O. Box 2167  
 Midland, Michigan 48640  
 Attn: Quality Control Engineer

UNSCERTAINS: (See also Document Category Definition G-321-SUP A)

This is a generic term and is synonymous with the terms seller, vendor, contractor, subcontractor, sub-supplier, etc.

— can be a copy duplicated by either microreproduction or electrostatic dry process.

— 35mm microfilm conforming to the requirements of the procurement documents. When not specified, supplier shall submit his standard for approval.

— Required — Bechtel approval required prior to use of documents in the design, fabrication, installation, or other work process.

— The first submission of a document in accordance with the schedule mutually agreed to by the Buyer and the supplier.

— A submittal that reflects the resolution of review comments, or the complete submittal required. Both are to be accepted prior to rendering final payment. Drawings submitted as such must be full size reproducible made from original document. Adjacent to the title block, each drawing must be certified and show Buyer's job title, job number, purchase order number, line, equipment, tag or code number, and the manufacturer's serial number(s).

— The dated signature and title of an authorized and responsible employee of the supplier.

— Applicable — can be used for individual entries, columns and lines by Project engineering, and for individual entries by the supplier.

**ENTRY INSTRUCTIONS**

**Information Required**

- 1. Enter Document Category Number.
- 2. Enter Specification paragraph reference.
- 3. Enter entry. Relates to kind of copies required.
- 4. Enter the number of each kind of copy for "Initial" or "Final" originals of Engineering Documents.
- 5. Enter approval requirement by X under "Yes" or "No" column.
- 6. Enter the number of each kind of copy of Quality Verification Documents required for release of the item or installation.
- 7. Enter Quality Verification Document distribution code letter in accordance with paragraph D above.
- 8. No line entry. For supplier use only.
- 9. For Inspector to complete upon release. Sign on line 22.
- 10. For Bechtel Engineering review confirmation. Sign on line 23.
- 11. For QCE to complete checkin. Sign on line 24.
- 12. Enter remarks as appropriate.

**G. SUPPLIER ENTRY INSTRUCTIONS**

**Entry No. Information Required**

- 8 Enter number of pages of each type of Quality Verification Documents being submitted for the unit(s) being released. Sign Statement of Conformance on line 21.
- 12 Enter remarks as appropriate. When a deviation has occurred, reference the deviation(s) and Buyer/Contractor's authorization in this column, and include the authorization document(s) in the Verification Document Package.
- 10, 14, 15 Enter information as required.
- 16 Enter the numbers of units covered by the Quality Verification Documents being submitted. For each requisition item not being released, provide a separate copy of the completed form and the supporting Quality Verification Documents.
- 17, 18, 19 Enter information as required.
- 20 Enter identification number(s) traceable to the unit(s) being released, e.g. serial no., heat no. of major component, cable number, or other unique designator.

UNIT CATEGORY NUMBERS: Engineering (E) and Quality Verification (V) Document Requirements as entered in Column 1, and defined in G-321-SUP A Document Category List. For details, see specification paragraph(s) referenced in Column 2.

**RAWINGS (E)**

- 1. Outline Dimensions, Services and Foundation/Mounting Details
- 2. Assembly Drawings
- 3. Shop Detail Drawings
- 4. Wiring Diagrams
- 5. Control Logic Diagrams
- 6. P & ID's

**ARTS LIST AND COST (E)**

**COMPLETED SECHEL DATA SHEETS (E)**

**INSTRUCTIONS (E)**

- 1. Fabrication/Installation
- 2. Operation
- 3. Maintenance
- 4. Site Storage and Handling

**MODULES: ENGINEERING AND FABRICATION/ERECTION (E)**

**QUALITY ASSURANCE MANUAL PROCEDURES (E)**

**SCHEMATIC DATA REPORT (E)**

**ANALYSIS AND DESIGN REPORT (E)**

**ACOUSTIC DATA REPORT (E)**

**WATERS (E)**

**11. Typical Quality Verification Documents**

- 10.2 Typical Material Used
- 11.0 MATERIAL DESCRIPTION (E)
- 12.0 WELDING PROCEDURES AND QUALIFICATIONS (E), AND VERIFICATION REPORTS (V)
- 13.0 WELD ROD CONTROL PROCEDURES (E), AND VERIFICATION REPORTS (V)
- 14.0 REPAIR PROCEDURES (E), AND MAJOR REPAIR VERIFICATION REPORTS (V)
- 15.0 CLEANING AND COATING PROCEDURES (E), AND VERIFICATION REPORTS (V)
- 16.0 HEAT TREATMENT PROCEDURES (E), AND VERIFICATION REPORTS (V)
- 17.0 CERTIFIED MATERIAL PROPERTY REPORTS (V)
- 17.1 MTR (Certified Material Test Reports)
- 17.2 Impact Test Data
- 17.3 Ferrous Data
- 17.4 Nonferrous Certification of Compliance
- 17.5 Mechanical Property Reports
- 18.0 CODE COMPLIANCE (V)
- 19.0 UT - ULTRASONIC EXAMINATION PROCEDURES (E), AND VERIFICATION REPORTS (V)

- 20.0 RT - RADIOGRAPHIC EXAMINATION PROCEDURES (E), AND VERIFICATION REPORTS (V)
- 21.0 MT - MAGNETIC PARTICLE EXAMINATION PROCEDURES (E), AND VERIFICATION REPORTS (V)
- 22.0 PT - LIQUID PENETRANT EXAMINATION PROCEDURES (E), AND VERIFICATION REPORTS (V)
- 23.0 EDDY CURRENT EXAMINATION PROCEDURES (E), AND VERIFICATION REPORTS (V)
- 24.0 PRESSURE TEST - HYDRO AIR LEAK, BUBBLE OR VACUUM TEST PROCEDURE (E), AND VERIFICATION REPORTS (V)
- 25.0 INSPECTION PROCEDURE (E), AND VERIFICATION REPORTS (V)
- 26.0 PERFORMANCE TEST PROCEDURES (E), AND VERIFICATION REPORTS (V)
- 26.1 Mechanical Tests
- 26.2 Electrical Tests
- 27.0 PROTOTYPE TEST REPORT (E & V)
- 28.0 SUPPLIER SHIPPING PREPARATION PROCEDURE (E)

NONCONFORMANCE REPORT

T-44 8-23-78

1. PROJECT NAME		JOB NO.		19. NO. 1194	20. PAGE 1 OF 2		
2. REVISED 3. DRAWING/PART NO.		REV	4. ITEM DESCRIPTION	5. ITEM LOCATION			
1111 Mechanical Rev. J-720, J-720		4	Main Control Boards	Area 11, D.C. Hold			
6. P.O. OR SPEC. NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N. 1111 REV. SER. NO.		9. SOURCE	10. CONTRACTOR/SUPPLIER		
Rev. 0	1016/1004			Supplier	Magnetics Inc.		
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER		IR NO. R-1.0-2634 NO. J-201 Rev. 4	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. Discovered During ( ) Rec'y ( ) Const ( ) Test	15. Equip. Furnished By ( ) Cheat ( ) Eng ( ) FLD	
16. NONCONFORMING CONDITION: Specification J-201 Rev. 4 para. 7.8.9 states "The minimum separation distance between redundant class IE equipment and circuits internal to the control board can be established by analysis of the proposed installation. This analysis shall be based on tests performed to determine the flame retardant characteristics of the wiring, wiring materials, equipment and other materials internal to the control board. Where the control board materials are flame retardant and				24. DISPOSITION CONCURRENCE			
Cont. on Page 2				rework	reject	repair	use as is
				PROJECT FIELD ENGINEER		DATE	
17. REPORTED BY		DATE	18. VALIDATED BY		DATE		
John R. Allport		8-22-78	A. Hill		8-24-78		
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)							
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering Disposition Requested by: 8-1-78 Barrier to be installed between non-conforming wire bundles. Project Engineering to provide suitable barrier design. Blaine Matthews 8-24-78							
23. PROJECT ENGINEERING DISPOSITION							
25. DISPOSITION RESULTS							
26. QC ACCEPTANCE							
QC ENGINEER				DATE			
AUTHORIZED INSPECTOR				DATE			

Block 16 Continued

analysis is not performed, the minimum separation distance shall be six inches. If the above separation distances are not maintained, barriers shall be installed between redundant Class IE wiring. " Contrary to the above, separation criteria was not kept between Ground (black wire bundle) and Channel A (red wire bundle) for panel 1C14.

"C" number is 5.021. Hold pending final disposition. 2 hold tags applied to nonconforming item(s).

Block 16 EXEM Continued

A conditional release is granted to allow installation of panels 1C14 and 1C24. Corrections or removal can be accomplished without causing damage or contamination to the associated plant equipment or structure.

PIE *[Signature]* 8/24/78 Date

PIQEE *[Signature]* 8-25-78 Date

ed IQAE *[Signature]* 8-25-78 Date

## NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO.		19. NO.	20. PAGE OF 1	
2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION		
6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N _____ REV _____ SER NO. _____		9. SOURCE	10. CONTRACTOR/SUPPLIER	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER		IR NO. _____ NO. _____	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. Discovered During ( ) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng ( ) FLD
16. NONCONFORMING CONDITION:					24. DISPOSITION CONCURRENCE	
Detail 3 of drawing 0100 calls for 3 positions steel 1/2" x 2 1/2" x 1/4" to have 3 threaded studs, 3/8" x 0'-4" long, or equal, in line with ltr. One (1) detail 3 studs have been placed in concrete footing 1/2" x 2 1/2" x 1/4" low strength steel. CP is 1.102					<input type="checkbox"/> rework <input type="checkbox"/> reject <input type="checkbox"/> repair <input type="checkbox"/> use as is	
					PROJECT FIELD ENGINEER	DATE
					PROJECT ENGINEER	DATE
					PROJ CONSTR QC ENGINEER	DATE
17. REPORTED BY					AUTHORIZED INSPECTOR	
DATE		18. VALIDATED BY		DATE		
3-24-78		[Signature]		3-25-78		
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)						
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering						
23. PROJECT ENGINEERING DISPOSITION						
26. QC ACCEPTANCE						
QC ENGINEER					DATE	
AUTHORIZED INSPECTOR					DATE	



# NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO. 7236		19. NO. 1426	20. PAGE 1 OF 2
2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION	
		H/A	Nuclear Pipe Fittings (See Block 16)	O.C. Hold, Inspec. # 1	
6. P.O. ORDER NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N	9. SOURCE	10. CONTRACTOR/SUPPLIER	
			Supplier	Chicago Tube & Iron Company	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER	IR NC 11-1.00-3139 NO. 11-215 Rev. 1	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. Discovered During ( ) Rec'g ( ) Const ( ) Test ( ) Eng ( ) Field	
16. NONCONFORMING CONDITION					
nuclear pipe fittings as per attachment "A". Specification 11-215 Rev. 1 Part, 7.1 states "All submittals and documentation will conform to the requirements and quantities specified by Form G-31-B." Contrary to the above, a portion of Form G-31-B was not completed in accordance with "Supplier Entry Instructions" for entry under B. (See Attachment "B") Also, blocks 16 thru 20 were not properly filled out since traceability has not been maintained.					
17. REPORTED BY	DATE	18. VALIDATED BY	DATE	24. DISPOSITION CONCURRENCE	
<i>John R. ...</i>	8-24-78	<i>W.D. ...</i>	8-25-78	rework	repair
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)		PROJECT FIELD ENGINEER PROJECT FIELD ENGINEER PROJECT FIELD ENGINEER AUTHORIZED INSPECTOR AUTHORIZED INSPECTOR AUTHORIZED INSPECTOR			
22. Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering					
Procurement supervisor to expedite documentation per specification 7220-11-215 Rev. 1.					
23. PROJECT ENGINEERING DISPOSITION					
26. QC ACCEPTANCE					
QC ENGINEER					
AUTHORIZED INSPECTOR					
DATE					
DATE					

For further instructions see the instructions for completion of blocks 16 thru 20 (See

number in instructions until installation. Hold pending final disposition. hold tag(s) affixed to the  
pertaining item(s).

All fittings are ASME 403 WP 304.

<u>Schedule</u>	<u>Quantity</u>	<u>Description</u>	<u>Cont Symbol</u>
10S	2	8" Tee	JKPI
40S	3	2 1/2" Tee	JKWN
40S	5	4" Cap	JKHG
10S	15	3" 90° LR Weldell	JKLO
40S	5	2 1/2" Cap	JING
10S	15	4" 45° LR Weldell	JJZH
40S	10	3" 45° LR Weldell	JKIM
40S	5	8" Cap	JKTD
40S	5	3" Cap	JIDQ
10S	10	6" Cap	JJQJ
10S	4	4" Tee	JJII
40S	3	3" Tee	JKDD, JKDE
10S	10	8" Cap	JKON
40S	5	6" Cap	JKIZ

READ INSTRUCTIONS ON BACK BEFORE FILLING IN FORM

These requirements for Engineering and Quality Verification Documents are to be fulfilled in accordance with the schedule set forth below. Supplier's failure to comply with these requirements may result in order cancellation or withholding of payment until compliance is achieved.

1. Document Category Number	2. Specification Paragraph Reference	3. Kind of Copies	ENGINEERING DOCUMENTS				QUALITY VERIFICATION DOCUMENTS					12. Remarks	
			4. Quantity Required		5. Prior Approval Required		6. Quantity Required Per Release	7. Dist. Code	8. Supplier Conform. Check	9. Inspection Reference	11. Engineering Review		10. Field OCE Check In
			Initial	Final	Yes	No							
		Reproducible Microfilm											
		Reproducible Microfilm											
17.1V	7.3	Reproducible Microfilm			1	c						NA-3767, 4(4)	
		Reproducible Microfilm											
18.0V	7.3	Reproducible Microfilm			1	c						NC-2561 for welded with filler; metal tubular products	
20.0V	7.3	Reproducible Microfilm			1	c							
19.0V	7.3	Reproducible Microfilm			1	c						NC-2557 for seamless and welded without filler metal	
		Reproducible Microfilm											
14.0V	7.3	Reproducible Microfilm			1	c						If repairs have been done	
		Reproducible Microfilm											
17.2V	7.3	Reproducible Microfilm			1	c						If impact tested material is purchased	
		Reproducible Microfilm											
17.4V	7.3	OCE Microfilm			1	c						Conformance to O requirements	

13. Supplier's Order No. 785385	14. Supplier's Part No. N/A	15. Supplier's Part Name Misc Pipe Fittings	16. Quantity see attached
17. Buyer's Req. Item No. 7220-77-215 Rev 1	18. Buyer's Line/Field, Tag or Code No. see attached	19. Buyer's Part Name see attached	20. Traceability see attached


21. Supplier's Conformance Statement: We certify that the listed work and required documents meet the requirements of the preceding documents. Supplier: \_\_\_\_\_ Signature \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

22. Inspector Review Statement: Work was reviewed based on satisfactory completion of inspection and review of documents. Authorized Deviations:  YES, noted under 10, Remarks  NONE. Inspected by: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

23. Engineering Review Statement: The Quality Verification Documents submitted to Engineering with this form have been reviewed for conformance to the specified requirements and are acceptable. Engineer: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

24. OCE Check-in Statement: This form and the Quality Verification Documents referenced herein have been received and their relationship to the hardware items verified. CONTROL NO. \_\_\_\_\_ FILE NO. \_\_\_\_\_ LCC: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

After OCE Check-in Distribute to: Procurement Manager, Field Office Manager, Material Supervisor

 02110 AA REV 2 574	MIDLAND PLANTS - UNITS 1 & 2 CONSUMERS POWER COMPANY	JOB NO. 7220 P.O. SPEC. # 7220-M-2
	ENGINEERING AND QUALITY VERIFICATION DOCUMENT REQUIREMENTS	
	SHEET 2 OF 3	

# NONCONFORMANCE REPORT

1. PROJECT NAME <i>W2000</i>		JOB NO. <i>7200</i>		19. NO. <i>101</i>	20. PAGE <i>1</i> OF <i>2</i>
2. UNIT(S) <i>W2000</i>	3. DRAWING/PART NO. <i>W2000</i>	REV <i>10</i>	4. ITEM DESCRIPTION <i>CONCRETE - LOW RIP EMBLEMENT</i>	5. ITEM LOCATION <i>ACADEMIE</i>	
6. P.O. OR SPEC NO. <i>W2000</i>	7. SERIAL NO. <i>W2000</i>	8. REPLACEMENT PART P/N <i>W2000</i> REV <i>10</i> SER NO. <i>W2000</i>	9. SOURCE <i>CONCRETE</i>	10. CONTRACTOR/SUPPLIER <i>CHAMBERLAIN</i>	15. Equip Furnished By ( ) Client ( ) Eng ( ) FLDL
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER	IR NO. <i>W2000</i> NO. <i>W2000</i>	12. ASME AUTHORIZED INSPECTOR RECD ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. Discovered during ( ) Recg ( ) Cont ( ) Test	24. DISPOSITION CONCURRENCE
16. NONCONFORMING CONDITION: <i>SPEC. 0-230 HAS BEEN 9.6.5 STATES IN PART . . . . THE EMBLEMENT FOR EMBLEM CONCRETE SHALL BE NOT LESS THAN 2% AND MORE THAN 6% BY VOLUME . . . . COMPANY TO THE EFFECT, THE AXX. BLD. DEPT. DEPT. DEPT. HAD A TOTAL OF 100% OF CONCRETE PLACED WITH 10.0% AIR. TRV. 03. 2001 SPEC (CONC.) HAD AN E.O.L. OF 3.5% AIR. 29. TRV. 03. 2001 SPEC (CONC.) HAD AN E.O.L. OF 3.5% AIR. 29. TRV. 03. 2001</i>					
17. REPORTED BY <i>M. Specter</i>	DATE <i>8/28/78</i>	18. VALIDATED BY <i>M. Specter</i>	DATE <i>8/28/78</i>	25. DISPOSITION RESULTS	
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)					
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering					
23. PROJECT ENGINEERING DISPOSITION					
26. EC ACCEPTANCE					
				OC ENGINEER	DATE
				AUTHORIZED INSPECTOR	DATE

X

1. The above information was obtained from a review of the file of the above named individual, and is being furnished to you for your information.

# NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO.		19. NO.	20. PAGE OF
2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION	
6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART PIN REV	SER NO.	9. SOURCE	10. CONTRACTOR/SUPPLIER
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER	IR NO. NO.	12. ASME AUTHORIZED INSPECTION HEAD ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. Discovered During ( ) H. ( ) G ( ) C ( ) I ( ) M ( ) N ( ) O ( ) P ( ) Q ( ) R ( ) S ( ) T ( ) U ( ) V ( ) W ( ) X ( ) Y ( ) Z	
16. NONCONFORMING CONDITION: See. 6-2015, Part 5, Appendix C, Table 2.2, Section 4. The following table shows the disposition for the items listed in the table below. The items listed in the table below are the items that were found to be nonconforming. The items listed in the table below are the items that were found to be nonconforming. The items listed in the table below are the items that were found to be nonconforming.					
17. REPORTED BY _____ DATE _____					
18. VALIDATED BY _____ DATE _____					
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)					
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering					
23. PROJECT ENGINEERING DISPOSITION					
24. DISPOSITION CONCURRENCE					
25. DISPOSITION RESULTS					
26. QC ACCEPTANCE					
QC ENGINEER _____ DATE _____					
AUTHORIZED INSPECTOR _____ DATE _____					

NONCONFORMANCE REPORT (CONT'D)

14. NCR NO.

1. PAGE 2 OF 2

15K 40.

2. Description of the Condition

08-117, Sh. 1  
(Attached)

08-116, Sh. 1  
(Attached)

08-116, SURFACE Sh. 1  
(Attached)

08-116, Sh. 1  
(Attached)

White Copy - Originator  
Canary Copy - Field Engineer  
Pink Copy - POAE  
Gold/neutral Copy - QC

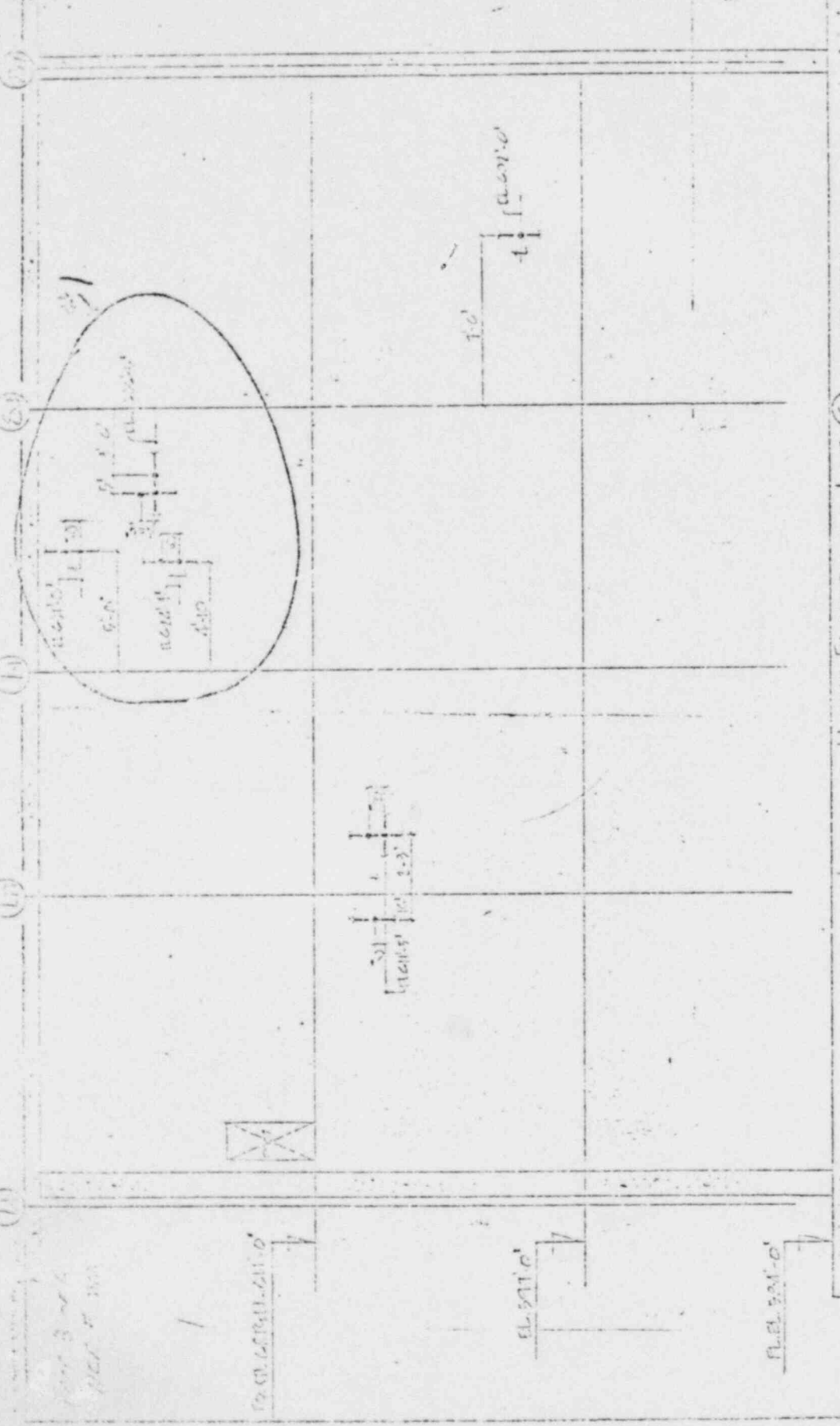
1000002

QC-033

*08-116, SURFACE Sh. 1*



Sheet 3 of 4  
 Part of 100



LOOKING NORTH ELEVATION OF LINE C

LEGEND

- 0 - CUT ELEVATION
- DIRECTION OF VIEW

ALL DIMENSIONS IN FEET

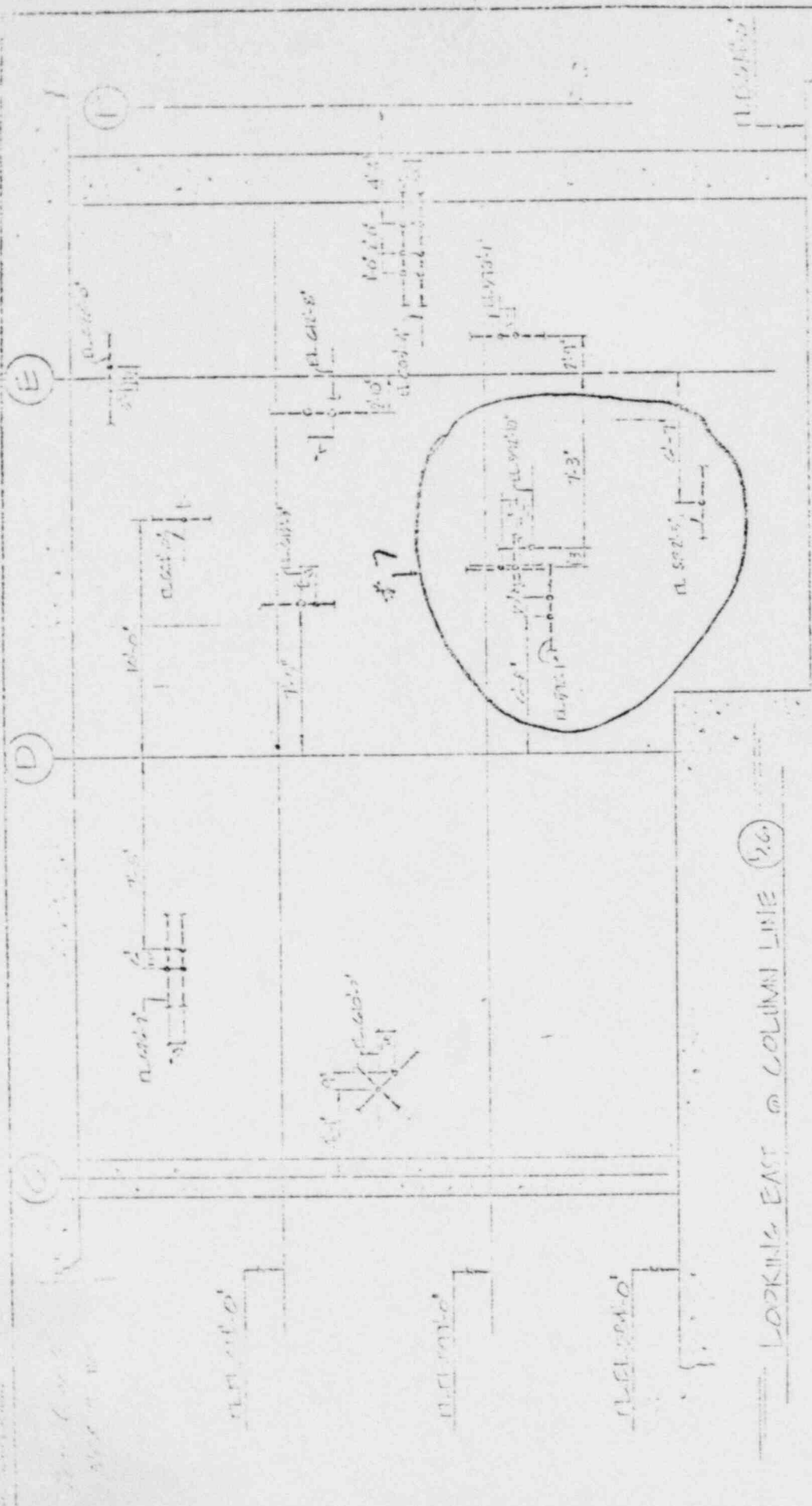
DATE	11/10/1911
BY	W. H. BROWN

NO.	DESCRIPTION	DATE	BY
1	REVISION		
2	REVISION		
3	REVISION		
4	REVISION		
5	REVISION		

This drawing and the design it shows are the property of the architect and are not to be used for any other purpose without the written consent of the architect.







NO.	REVISION	DATE	BY	CHKD.
1	ISSUED FOR CONSTRUCTION	11/15/50	J. H. [unclear]	[unclear]
2	ISSUED FOR CONSTRUCTION	11/15/50	J. H. [unclear]	[unclear]
3	ISSUED FOR CONSTRUCTION	11/15/50	J. H. [unclear]	[unclear]
4	ISSUED FOR CONSTRUCTION	11/15/50	J. H. [unclear]	[unclear]
5	ISSUED FOR CONSTRUCTION	11/15/50	J. H. [unclear]	[unclear]

SECTION  
 C - AT COLUMN  
 CONSTRUCTION OF I.M.  
 ALL DIMENSIONS EXC. H.H.O.  
 EXIST. WALL  
 EXIST. WALL  
 EXIST. WALL

LOOKING EAST @ COLUMN LINE (26)

# NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO.		19. NO	20. PAGE OF
2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION	
6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N	9. SOURCE	10. CONTRACTOR/S. NUMBER	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER	IR NO. NO.	12. ASME AUTHORIZED INSPECTION TAGS ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. Discovers During ( ) Repair ( ) Contact ( ) Test	
15. Equip. Furnished By ( ) Client ( ) Field					
16. NONCONFORMING CONDITION:					
<p><i>Handwritten description of nonconforming condition, including details of the item and the specific issue observed during inspection.</i></p>					
17. REPORTED BY	DATE	18. VALIDATED BY	DATE	24. DISPOSITION CONCURRENCE	
				repair	reject
				use as is	
				PROJECT FIELD ENGINEER	DATE
				PROJECT ENGINEER	DATE
				PROJ CONSTR QC ENGINEER	DATE
				AUTHORIZED INSPECTOR	DATE
				25. DISPOSITION RESULTS	
21. ROU, NG: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)					
22. ( ) Field Engineering; Disposition ( ) Field Engineering; recommended Disposition to Project Engineering					
23. PROJECT ENGINEERING DISPOSITION					
26. OF ACCEPTANCE					
				QC ENGINEER	DATE
				AUTHORIZED INSPECTOR	DATE



MEASUREMENTS

LOBE DATA (L.F. 1000)

A	1.000	G	1.000
B	1.143	H	1.143
C	1.143	I	1.143
D	1.000	J	1.000
E	1.143	K	1.143
F	1.143	L	1.143



1000 (1)



## NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO.		19. NO. _____	20. PAGE ____ OF ____								
2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION									
6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N _____ REV _____ SER NO. _____		9. SOURCE	10. CONTRACTOR/SUPPLIER								
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER		IR NO. _____ NO. _____	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. Discovered During ( ) Rec'g ( ) Const ( ) Test	15. Equip. Furnished By ( ) Client ( ) Eng ( ) FLD							
16. NONCONFORMING CONDITION:					24. DISPOSITION CONCURRENCE								
_____ _____ _____ _____ _____					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">rework</td> <td style="width: 25%;">reject</td> <td style="width: 25%;">repair</td> <td style="width: 25%;">use as is</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	rework	reject	repair	use as is				
					rework	reject	repair	use as is					
					PROJECT FIELD ENGINEER	DATE							
					PROJECT ENGINEER	DATE							
PROJ CONST QC ENGINEER	DATE												
AUTHORIZED INSPECTOR	DATE												
17. REPORTED BY	DATE	18. VALIDATED BY	DATE	25. DISPOSITION RESULTS									
21. ROUTING: ( ) TO FIELD ENGINEER NG ( ) TO OTHERS (SPECIFY)													
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering													
23. PROJECT ENGINEERING DISPOSITION													
26. QC ACCEPTANCE													
QC ENGINEER					DATE								
AUTHORIZED INSPECTOR					DATE								





1. 100 ohm resistor  
 2. 100 ohm resistor  
 3. 100 ohm resistor

# NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO.		19. NO. 1591	20. PAGE 1 OF 4
2. QTY(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION	
6. P.D. OR W.P.E. NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N	SER NO.	9. SOURCE	10. CONTRACTOR/SUPPLIER
11. INSPECTION CRITERIA ( ) LOG ( ) SPEC ( ) OTHER		IR NO. 101-101012	12. ASME AUTHORIZED INSPECTION REG'D ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. Discovered During ( ) Rec'g ( ) Const ( ) Test
15. Equip Furnished By ( ) Client ( ) Eng ( ) FIELD					
16. NONCONFORMING CONDITION: Specimen 720-1405 Part 3, 3.0, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 4.0, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 5.0, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 6.0, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8, 6.9, 7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 8.0, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7, 8.8, 8.9, 9.0, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 9.8, 9.9, 10.0, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8, 10.9, 11.0, 11.1, 11.2, 11.3, 11.4, 11.5, 11.6, 11.7, 11.8, 11.9, 12.0, 12.1, 12.2, 12.3, 12.4, 12.5, 12.6, 12.7, 12.8, 12.9, 13.0, 13.1, 13.2, 13.3, 13.4, 13.5, 13.6, 13.7, 13.8, 13.9, 14.0, 14.1, 14.2, 14.3, 14.4, 14.5, 14.6, 14.7, 14.8, 14.9, 15.0, 15.1, 15.2, 15.3, 15.4, 15.5, 15.6, 15.7, 15.8, 15.9, 16.0, 16.1, 16.2, 16.3, 16.4, 16.5, 16.6, 16.7, 16.8, 16.9, 17.0, 17.1, 17.2, 17.3, 17.4, 17.5, 17.6, 17.7, 17.8, 17.9, 18.0, 18.1, 18.2, 18.3, 18.4, 18.5, 18.6, 18.7, 18.8, 18.9, 19.0, 19.1, 19.2, 19.3, 19.4, 19.5, 19.6, 19.7, 19.8, 19.9, 20.0, 20.1, 20.2, 20.3, 20.4, 20.5, 20.6, 20.7, 20.8, 20.9, 21.0, 21.1, 21.2, 21.3, 21.4, 21.5, 21.6, 21.7, 21.8, 21.9, 22.0, 22.1, 22.2, 22.3, 22.4, 22.5, 22.6, 22.7, 22.8, 22.9, 23.0, 23.1, 23.2, 23.3, 23.4, 23.5, 23.6, 23.7, 23.8, 23.9, 24.0, 24.1, 24.2, 24.3, 24.4, 24.5, 24.6, 24.7, 24.8, 24.9, 25.0, 25.1, 25.2, 25.3, 25.4, 25.5, 25.6, 25.7, 25.8, 25.9, 26.0, 26.1, 26.2, 26.3, 26.4, 26.5, 26.6, 26.7, 26.8, 26.9, 27.0, 27.1, 27.2, 27.3, 27.4, 27.5, 27.6, 27.7, 27.8, 27.9, 28.0, 28.1, 28.2, 28.3, 28.4, 28.5, 28.6, 28.7, 28.8, 28.9, 29.0, 29.1, 29.2, 29.3, 29.4, 29.5, 29.6, 29.7, 29.8, 29.9, 30.0, 30.1, 30.2, 30.3, 30.4, 30.5, 30.6, 30.7, 30.8, 30.9, 31.0, 31.1, 31.2, 31.3, 31.4, 31.5, 31.6, 31.7, 31.8, 31.9, 32.0, 32.1, 32.2, 32.3, 32.4, 32.5, 32.6, 32.7, 32.8, 32.9, 33.0, 33.1, 33.2, 33.3, 33.4, 33.5, 33.6, 33.7, 33.8, 33.9, 34.0, 34.1, 34.2, 34.3, 34.4, 34.5, 34.6, 34.7, 34.8, 34.9, 35.0, 35.1, 35.2, 35.3, 35.4, 35.5, 35.6, 35.7, 35.8, 35.9, 36.0, 36.1, 36.2, 36.3, 36.4, 36.5, 36.6, 36.7, 36.8, 36.9, 37.0, 37.1, 37.2, 37.3, 37.4, 37.5, 37.6, 37.7, 37.8, 37.9, 38.0, 38.1, 38.2, 38.3, 38.4, 38.5, 38.6, 38.7, 38.8, 38.9, 39.0, 39.1, 39.2, 39.3, 39.4, 39.5, 39.6, 39.7, 39.8, 39.9, 40.0, 40.1, 40.2, 40.3, 40.4, 40.5, 40.6, 40.7, 40.8, 40.9, 41.0, 41.1, 41.2, 41.3, 41.4, 41.5, 41.6, 41.7, 41.8, 41.9, 42.0, 42.1, 42.2, 42.3, 42.4, 42.5, 42.6, 42.7, 42.8, 42.9, 43.0, 43.1, 43.2, 43.3, 43.4, 43.5, 43.6, 43.7, 43.8, 43.9, 44.0, 44.1, 44.2, 44.3, 44.4, 44.5, 44.6, 44.7, 44.8, 44.9, 45.0, 45.1, 45.2, 45.3, 45.4, 45.5, 45.6, 45.7, 45.8, 45.9, 46.0, 46.1, 46.2, 46.3, 46.4, 46.5, 46.6, 46.7, 46.8, 46.9, 47.0, 47.1, 47.2, 47.3, 47.4, 47.5, 47.6, 47.7, 47.8, 47.9, 48.0, 48.1, 48.2, 48.3, 48.4, 48.5, 48.6, 48.7, 48.8, 48.9, 49.0, 49.1, 49.2, 49.3, 49.4, 49.5, 49.6, 49.7, 49.8, 49.9, 50.0, 50.1, 50.2, 50.3, 50.4, 50.5, 50.6, 50.7, 50.8, 50.9, 51.0, 51.1, 51.2, 51.3, 51.4, 51.5, 51.6, 51.7, 51.8, 51.9, 52.0, 52.1, 52.2, 52.3, 52.4, 52.5, 52.6, 52.7, 52.8, 52.9, 53.0, 53.1, 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69.8, 69.9, 70.0, 70.1, 70.2, 70.3, 70.4, 70.5, 70.6, 70.7, 70.8, 70.9, 71.0, 71.1, 71.2, 71.3, 71.4, 71.5, 71.6, 71.7, 71.8, 71.9, 72.0, 72.1, 72.2, 72.3, 72.4, 72.5, 72.6, 72.7, 72.8, 72.9, 73.0, 73.1, 73.2, 73.3, 73.4, 73.5, 73.6, 73.7, 73.8, 73.9, 74.0, 74.1, 74.2, 74.3, 74.4, 74.5, 74.6, 74.7, 74.8, 74.9, 75.0, 75.1, 75.2, 75.3, 75.4, 75.5, 75.6, 75.7, 75.8, 75.9, 76.0, 76.1, 76.2, 76.3, 76.4, 76.5, 76.6, 76.7, 76.8, 76.9, 77.0, 77.1, 77.2, 77.3, 77.4, 77.5, 77.6, 77.7, 77.8, 77.9, 78.0, 78.1, 78.2, 78.3, 78.4, 78.5, 78.6, 78.7, 78.8, 78.9, 79.0, 79.1, 79.2, 79.3, 79.4, 79.5, 79.6, 79.7, 79.8, 79.9, 80.0, 80.1, 80.2, 80.3, 80.4, 80.5, 80.6, 80.7, 80.8, 80.9, 81.0, 81.1, 81.2, 81.3, 81.4, 81.5, 81.6, 81.7, 81.8, 81.9, 82.0, 82.1, 82.2, 82.3, 82.4, 82.5, 82.6, 82.7, 82.8, 82.9, 83.0, 83.1, 83.2, 83.3, 83.4, 83.5, 83.6, 83.7, 83.8, 83.9, 84.0, 84.1, 84.2, 84.3, 84.4, 84.5, 84.6, 84.7, 84.8, 84.9, 85.0, 85.1, 85.2, 85.3, 85.4, 85.5, 85.6, 85.7, 85.8, 85.9, 86.0, 86.1, 86.2, 86.3, 86.4, 86.5, 86.6, 86.7, 86.8, 86.9, 87.0, 87.1, 87.2, 87.3, 87.4, 87.5, 87.6, 87.7, 87.8, 87.9, 88.0, 88.1, 88.2, 88.3, 88.4, 88.5, 88.6, 88.7, 88.8, 88.9, 89.0, 89.1, 89.2, 89.3, 89.4, 89.5, 89.6, 89.7, 89.8, 89.9, 90.0, 90.1, 90.2, 90.3, 90.4, 90.5, 90.6, 90.7, 90.8, 90.9, 91.0, 91.1, 91.2, 91.3, 91.4, 91.5, 91.6, 91.7, 91.8, 91.9, 92.0, 92.1, 92.2, 92.3, 92.4, 92.5, 92.6, 92.7, 92.8, 92.9, 93.0, 93.1, 93.2, 93.3, 93.4, 93.5, 93.6, 93.7, 93.8, 93.9, 94.0, 94.1, 94.2, 94.3, 94.4, 94.5, 94.6, 94.7, 94.8, 94.9, 95.0, 95.1, 95.2, 95.3, 95.4, 95.5, 95.6, 95.7, 95.8, 95.9, 96.0, 96.1, 96.2, 96.3, 96.4, 96.5, 96.6, 96.7, 96.8, 96.9, 97.0, 97.1, 97.2, 97.3, 97.4, 97.5, 97.6, 97.7, 97.8, 97.9, 98.0, 98.1, 98.2, 98.3, 98.4, 98.5, 98.6, 98.7, 98.8, 98.9, 99.0, 99.1, 99.2, 99.3, 99.4, 99.5, 99.6, 99.7, 99.8, 99.9, 100.0					
24. DISPOSITION CONCURRENCE					
rework		reject		repair	
PROJECT FIELD ENGINEER		PROJECT ENGINEER		PROJECT FIELD ENGINEER	
PROJECT ENGINEER		PROJ CONSTR QC ENGINEER		PROJECT ENGINEER	
PROJECT ENGINEER		AUTHOR		ED INSPECTOR	
DATE		DATE		DATE	
25. DISPOSITION RESULTS					
17. REPORTED BY					
DATE		18. VALIDATED BY		DATE	
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)					
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering					
23. PROJECT ENGINEERING DISPOSITION					
26. QC ACCEPTANCE					
QC ENGINEER				DATE	
AUTHORIZED INSPECTOR				DATE	

1. The following information was obtained from the

files of the FBI, New York Office, dated 1/15/64:

On 1/15/64, the New York Office advised that

it had received information from the New York

Office of the State Police (New York State Police) that

on 1/15/64, the New York Office advised that

it had received information from the New York

Office of the State Police (New York State Police) that

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on 1/15/64, the New York Office advised that

it had received information from the New York

Office of the State Police (New York State Police) that

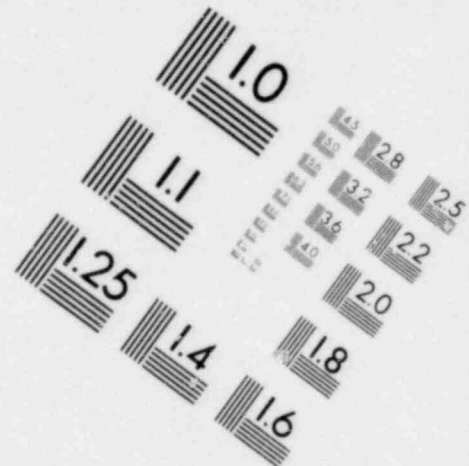
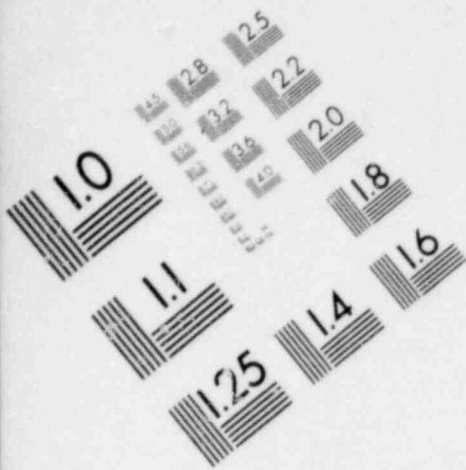


# NONCONFORMANCE REPORT

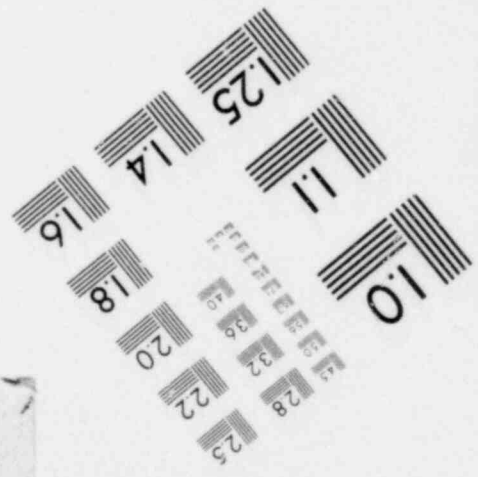
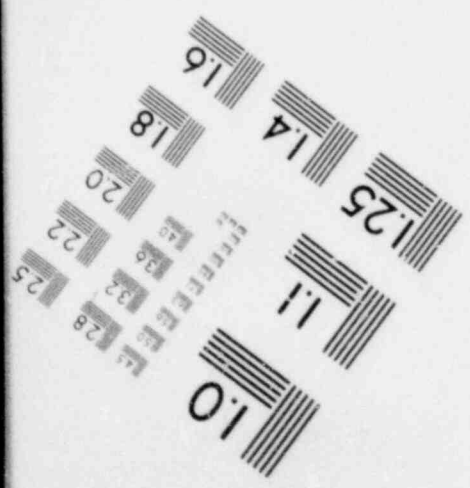
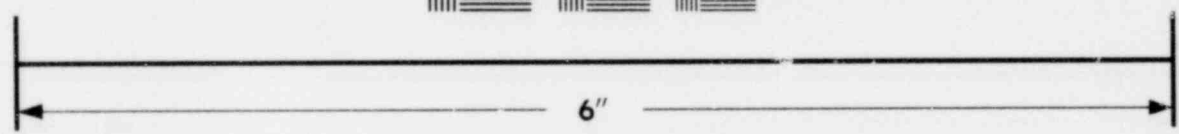
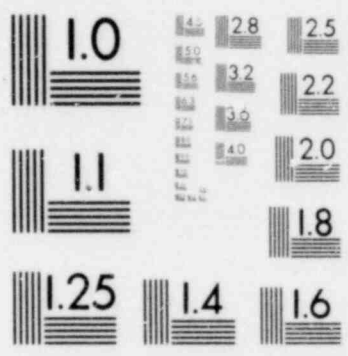
1. PROJECT NAME		JOB NO.		19. NO.	20. PAGE	1 OF 1
2. UNIT/SET	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION		
6. P/N	7. SERIAL NO.	8. REPLACEMENT PART P/N	9. SOURCE	10. SUPPLIER		
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER		IR NO.	12. ASME AUTHORIZED INSPECTION REC'D ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. Discovered During ( ) Hold ( ) Const ( ) Test	
15. Equip Furnished By ( ) Chart ( ) Eng ( ) FLD						
16. NONCONFORMING CONDITION:						
<p>24. DISPOSITION CONCURRENCE</p> <p>reject repair</p>						
25. DISPOSITION RESULTS						
<p>PROJECT FIELD ENGINEER DATE</p> <p>PROJ ENGINEER DATE</p> <p>PROJ CONSTR QC ENGINEER DATE</p> <p>AUTHORIZED INSPECTOR DATE</p>						
17. REPORTED BY	DATE	18. VALIDATED BY	DATE			
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)						
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering						
23. PROJECT ENGINEERING DISPOSITION						
26. QC ACCEPTANCE						
QC ENGINEER						DATE
AUTHORIZED INSPECTOR						DATE

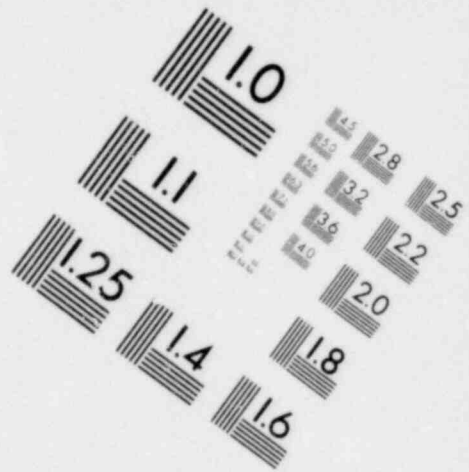
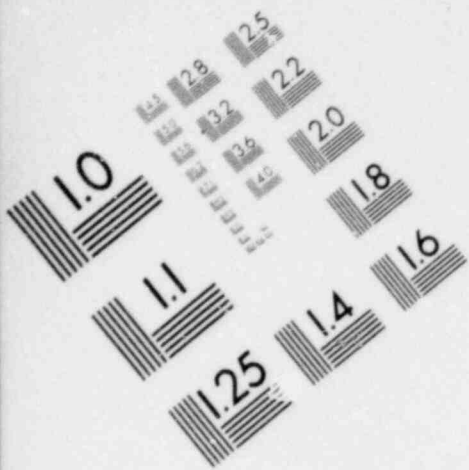
# NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO.		19. NO. 1501	20. PAGE 1 OF 1
2. UNITS	3. DRAWING PART NO.	REV 4. ITEM DESCRIPTION	5. ITEM LOCATION		
6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N	9. SOURCE	10. CONTRACTOR/SUPPLIER	
11. INSPECTION CRITERIA ( ) Dwg ( ) Spec ( ) Other	12. ASME AUTHORIZED INSPECTION BODY ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. Discovered During ( ) Hdg ( ) Cont ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng ( ) FLD	
16. NONCONFORMING CONDITION: Condition noted in PMS-200. However, 200 is not a standard. The condition and/or condition test reports shall be submitted and approved by the Quality Control Department. The Quality Control Department shall be notified of the condition and the condition shall be reported to the Quality Control Department. The Quality Control Department shall be notified of the condition and the condition shall be reported to the Quality Control Department. The Quality Control Department shall be notified of the condition and the condition shall be reported to the Quality Control Department.					
17. REPORTED BY DATE		18. VALIDATED BY DATE		24. DISPOSITION CONCURRENCE	
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)		25. DISPOSITION RESULTS		26. ACCEPTANCE	
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering		23. PROJECT ENGINEERING DISPOSITION		QC ENGINEER DATE	
				AUTHORIZED INSPECTOR DATE	

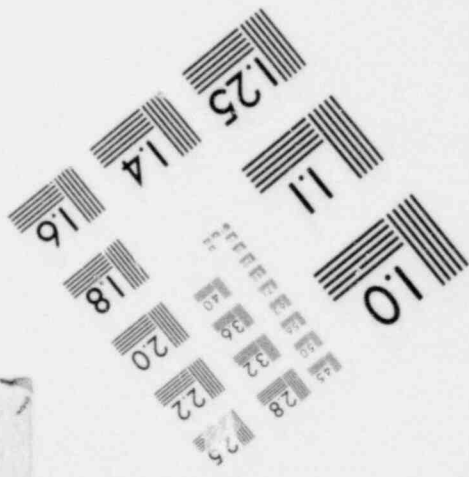
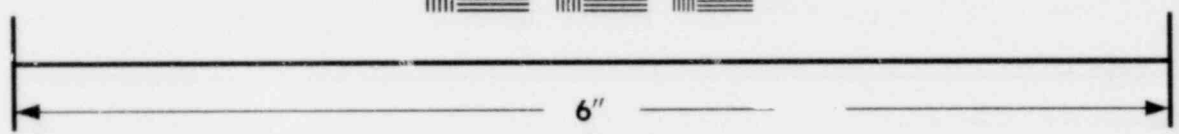
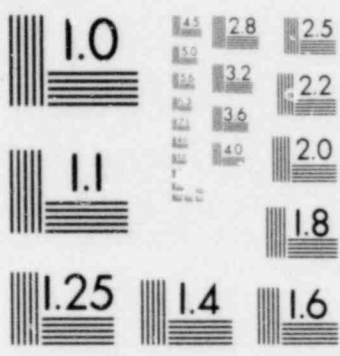


**IMAGE EVALUATION  
TEST TARGET (MT-3)**





**IMAGE EVALUATION  
TEST TARGET (MT-3)**





NONCONFORMANCE REPORT

PROJECT DATE: <b>MIDDLAND</b>		JOB NO.: <b>07220</b>		19. NO. 1505	20. PAGE 1 OF 1
1. DRAWING NO.: <b>Weld #17R2</b>	2. REV: <b>FIELD</b>	3. ITEM DESCRIPTION: <b>Weld #17R2</b>		4. ITEM LOCATION: <b>Chamber Shop</b>	
5. P.O. OR SPEC. NO.: <b>N/A</b>	6. SERIAL TO: <b>N/A</b>	7. SERIAL NO.: <b>N/A</b>	8. REFERENCE DRAWING: <b>N/A</b>	9. SOURCE: <b>CONST</b>	
10. INSPECTION CRITERIA: <b>( ) DWG ( ) SPEC ( ) OTHER</b>	11. IN NO. NO. <b>204 220 4</b>	12. ASME AUTHORIZED INSPECTION REQ'D: <b>( ) YES ( ) NO</b>	13. SKETCH ATTACHED: <b>( ) YES ( ) NO</b>	14. DISCOVERED DURING: <b>( ) REC'G ( ) CONST ( ) TEST</b>	15. EQUIP FURNISHED BY: <b>( ) CLIENT ( ) ENG ( ) FLD</b>
16. NONCONFORMING CONDITION: <b>W100 Rev 4 DATA 11 STATES "Copy number one and two are placed in a protective plastic envelope and at the time of fit up they will be located at, or as near as practical to the joint to be indicated."</b>					
17. DISPOSITION CONCURRENCE: <b>CONTRARY TO THE ABOVE F0417R2 ON DRAWING M612 G10 WAS EXCAVATED AND REWELDED WITH OUT THE W100 REV 4 I.R. BEING ISSUED TO THE FIELD. I HOLD THE APPLICABLE</b>					
18. REPORTED BY: <b>Will McVaid</b>		18. VALIDATED BY: <b>RB Bailey</b>		23. DISPOSITION RESULTS:	
DATE: <b>8/30/78</b>		DATE: <b>8-30-78</b>		PROJECT FIELD ENGINEER: _____ DATE: _____	
21. ROUTING: <b>( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)</b>					
22. ( ) Field Engineering Recommended Disposition to Project Engineering					
23. PROJECT ENGINEERING DISPOSITION:					
26. OC ACCEPTANCE: _____ DATE: _____					
GC ENGINEER: _____ DATE: _____					
AUTHORIZED INSPECTOR: _____ DATE: _____					

X

CONDITIONAL RELEASE

Conditional release is requested to allow repair in area of defective weld. Pipe may be retrieved after installation. Ref QCI R M-616-S-17 R3 No. 8.31.78

REOR 8.31.78  
PFE DATE

W. J. Felt 8.31.78  
P.F.Q.C.E. DATE

RE Fallon 8.31.78  
AUTHORIZED INSPECTOR DATE

OK'd by TELECOR G. SMITH Felt, Dueschbach  
PQAE DATE 8.31.78  
LAD Dueschbach 9-1-78

X

# NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO.		19. NO. 1970	20. PAGE 1 OF 2		
2. UNIT(S)	3. DRAWING PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION			
6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N	9. SOURCE	10. CONTRACTOR/SUPPLIER			
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER	12. ASME AUTHORIZED INSPECTION BLDG'D NO.	13. SKETCH ATTACHED ( ) YES ( ) NO	14. DISCOVERED DURING ( ) Pre ( ) Const ( ) Test	15. Equip. Furnished By ( ) Client ( ) Proj ( ) FLD			
16. NONCONFORMING CONDITION: <p>1. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>2. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>3. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>4. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>5. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>6. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>7. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>8. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>9. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>10. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>11. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>12. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>13. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>14. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>15. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>16. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>17. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>18. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>19. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>20. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>21. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>22. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>23. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>24. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>25. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>26. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>27. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>28. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>29. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p> <p>30. The contractor failed to provide adequate support for the piping during the installation process, resulting in excessive sagging and stress on the pipe supports.</p>						24. DISPOSITION CONCURRENCE	
17. REPORTED BY		DATE	18. VALIDATED BY	DATE	25. DISPOSITION RESULTS		
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)							
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering							
23. PROJECT ENGINEERING DISPOSITION							
26. QC ACCEPTANCE				QC ENGINEER	DATE		
AUTHORIZED INSPECTOR				AUTHORIZED INSPECTOR	DATE		

The first part of the report is the shell company  
 information for the 1960-61 period. The first part of the  
 report is the information for the 1960-61 period.

The second part of the report is the information for the 1961-62 period. The first part of the report is the information for the 1960-61 period.

Year	Amount
1960-61	100.00
1961-62	200.00
1962-63	300.00
1963-64	400.00

The third part of the report is the information for the 1964-65 period. The first part of the report is the information for the 1960-61 period.

P-3734

AW S 13'S ORDER NO. 19 75

C	M	P	CHEMICAL ANALYSIS			YIELD PER 50 IN. POUNDS	TENSILE PER 50 IN. POUNDS	N. ELONG. IN. IN.	BEND TESTS	SLAB NO.	REPRESENTS
			PERCENT	PERCENT	PERCENT						
.16	.43	.003	.020	.050	mk 4-14-75 5-15-75	24200 25700	50400 52200	26.0	OK	1302	3p12a 2/3 X 97 X 265
<p>DAKENER FOR REPRODUCTIVE PURPOSES</p> <p>ONLY, 5-3-78. D. med. Casey RECO PH Receiving Inspection</p>											
<p>41061</p> <p>Slab # 1303</p>											
<p>4 MILLION P. MATERIAL</p> <p>ACCEPTED AND ACCEPTED</p> <p>DATE: 5-3-78 BY: P. D. CASEY, P.E.</p>											
<p>RECEIVED</p> <p>DATE: 11-22-75</p>											

*James M. Markert*

### NONCONFORMANCE REPORT

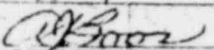
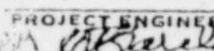


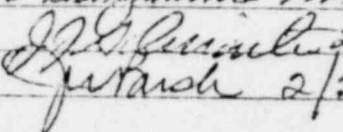
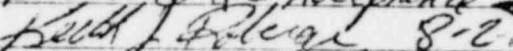
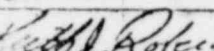
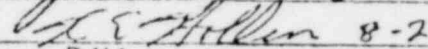
1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 1161	20. PAGE 1 OF 2										
2. UNIT(S) Unit II	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION Two Shop Fabricated Pipe Spools	5. ITEM LOCATION D-1-8 Poseyville Laydown											
6. P.O. OR SPEC NO. 7220-M-104A Rev. 8	7. SERIAL NO. See Block 16	8. REPLACEMENT PART P/N N/A REV _____ SER NO. _____	9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER ITT Grinnell, Kernersville, N.C.											
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER		IR NO. R-1 00-2435 NO. M-201 Rev. 7	12. ASME AUTHORIZED INSPECTION REQ'D (X) YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client (X) Eng ( ) FLD									
16. NONCONFORMING CONDITION:			24. DISPOSITION CONCURRENCE												
1. Specification 7220-M-201 Rev. 7, Para. 9.1 states in part: "All documentation required herein shall be furnished upon or before the arrival of the piping at the jobsite." Contrary to the above, there was no Quality Verification Documentation received for pipe spool 200A-18-S611-2-8.			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>rework</td> <td>reject</td> <td>repair</td> <td>use as is</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>			rework	reject	repair	use as is						
rework	reject	repair	use as is												
2. Specification 7220-M-201 Rev. 7, Para. 6.5.1a requires austenitic stainless steel pipe to be furnished free of rust, dirt and other Con't Page 2			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>PROJECT ENGINEER</td> <td>DATE</td> </tr> <tr> <td><i>H.M. Early</i></td> <td>2-15-78</td> </tr> <tr> <td>PROJ CONSTR QC ENGINEER</td> <td>DATE</td> </tr> <tr> <td><i>J.E. Shelton</i></td> <td>2-16-78</td> </tr> <tr> <td>AUTHORIZED INSPECTOR</td> <td>DATE</td> </tr> </table>			PROJECT ENGINEER	DATE	<i>H.M. Early</i>	2-15-78	PROJ CONSTR QC ENGINEER	DATE	<i>J.E. Shelton</i>	2-16-78	AUTHORIZED INSPECTOR	DATE
PROJECT ENGINEER	DATE														
<i>H.M. Early</i>	2-15-78														
PROJ CONSTR QC ENGINEER	DATE														
<i>J.E. Shelton</i>	2-16-78														
AUTHORIZED INSPECTOR	DATE														
17. REPORTED BY <i>Marian Donovan</i>	DATE 1-12-78	18. VALIDATED BY <i>H.M. Early</i>	DATE 1-13-78	25. DISPOSITION RESULTS											
21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)		ITEM #1 DOCUMENTATION RECEIVED 3-3-78 <i>M. Donovan</i> 3-3-78													
22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering		ITEM #2 - Rust areas removed by power brushing as per block # 22 satisfactory. <i>C. Hoat</i> 8-11-78													
1. FIELD PROCUREMENT SUPERVISOR TO OBTAIN THE QUALITY VERIFICATION DOCUMENTATION FROM ITT GRINNELL.		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>DATE</td> </tr> <tr> <td><i>H.M. Early</i> 2-7-78</td> </tr> <tr> <td><i>J.E. Shelton</i> 2/2/78</td> </tr> </table>				DATE	<i>H.M. Early</i> 2-7-78	<i>J.E. Shelton</i> 2/2/78							
DATE															
<i>H.M. Early</i> 2-7-78															
<i>J.E. Shelton</i> 2/2/78															
2. FIELD TO REMOVE RUST BY POWER BRUSHING.															
23. PROJECT ENGINEERING DISPOSITION		26. OF ACCEPTANCE <i>Paul Shoat</i> 8-11-78													
		QC ENGINEER <i>H.W. Van</i> 8-14-78													
		AUTHORIZED INSPECTOR <i>H.W. Van</i> 8-14-78													

Continued Block 16

contaminants. Contrary to the above, pipe spool 2HCB-2-S613-7-5 was delivered to the jobsite chained down with carbon steel chains. As a result the spool has started to rust where it had come in contact with the carbon steel, "Q" numbers are 4.114 and 4.134. Hold pending final disposition. / 2-hold tag(s) *MS 2-3-78*  
applied to the nonconforming item(s).

TO Helicopter  
Jenns

### NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 1224	20. PAGE 1 OF 2		
2. UNIT(S) Unit 2	3. DRAWING/PART NO. MR-6-12X	REV Sub. 2	4. ITEM DESCRIPTION Pipe Spool 2DBC-9-S634-7-4	5. ITEM LOCATION Poseyville Laydown E-5-8 - Cont. Pipe			
6. P.O. OR SPEC NO. 7220-M-104-AC Rev. 8	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV _____ SER NO. _____		9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER ITT Grinnell, Kernersville, N.C.		
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER		IR NO. R-1.00-2705 NO. H-201 Rev. 7	12. ASME AUTHORIZED INSPECTION REQ'D (X) YES ( ) NO	13. SKETCH ATTACHED (X) YES ( ) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client (X) Eng ( ) FLD	
16. NONCONFORMING CONDITION: Specification 7220-M-201, Rev. 7, Para. 6.6.8 states: "Pipe and Fittings shall be adequately blocked, strapped, or otherwise held in position during shipment and they shall be further separated by dunnage as may be necessary to prevent damage. "Contrary to the above, the pipe spool listed above was received on jobsite dented. See Attachment "A". "Q" number is 4.322. Hold pending final disposition. / hold tag(s) applied to the nonconforming item(s).				24. DISPOSITION CONCURRENCE			
				rework	reject	repair	use as is
				 PROJECT FIELD ENGINEER      2-28-78 DATE			
				 PROJECT ENGINEER      3-2-78 DATE			
				 PROJ CONST. OC ENGINEER      3-3-78 DATE			
				 AUTHORIZED INSPECTOR      DATE			
17. REPORTED BY <i>Marian Donovan</i>	DATE 2-13-78	18. VALIDATED BY <i>J. Barelay</i>	DATE 2-15-78	25. DISPOSITION RESULTS			
21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)				REMOVED DAMAGED PORTION AND			
22. <input checked="" type="checkbox"/> Field Engineering Disposition <input checked="" type="checkbox"/> Field Engineering Recommended Disposition to Project Eng nearing completion		<del>Disposition Rec'd by 3-13-78</del>		REPLACED IT WITH NEW PIPE FROM STOCK.			
REWORK - FIELD TO REMOVE 7' SECTION FROM END OF SPOOL (INCLUDING DENTED AREA) AND REPLACE WITH STOCK 6" DBC CLASS PIPE. DENTED AREA TO BE REMOVED FROM 7' SECTION AND REJECTED. TRANSFER HEAT NUMBERS TO REMAINING PIPE AND RETURN TO STOCK.				TRANSFERRED HEAT NUMBERS ONTO BOTH PIECES AND			
23. PROJECT ENGINEERING DISPOSITION				RETURNED UNUSED PORTION TO STOCK.			
 J. J. G. Acceptance 2/22/78							
Block 26 OC Acceptance  Keith Pollock 8-2-78				 Keith Pollock 8-2-78			
Block 27  J. E. Hollen 8-2-78 P.N.I.							
				26. OC ACCEPTANCE			
				OC ENGINEER      DATE			
				AUTHORIZED INSPECTOR      DATE			



ITT Grinnell Industrial Piping Inc.  
KERNERSVILLE, N. C.

CONF. NO. 7093

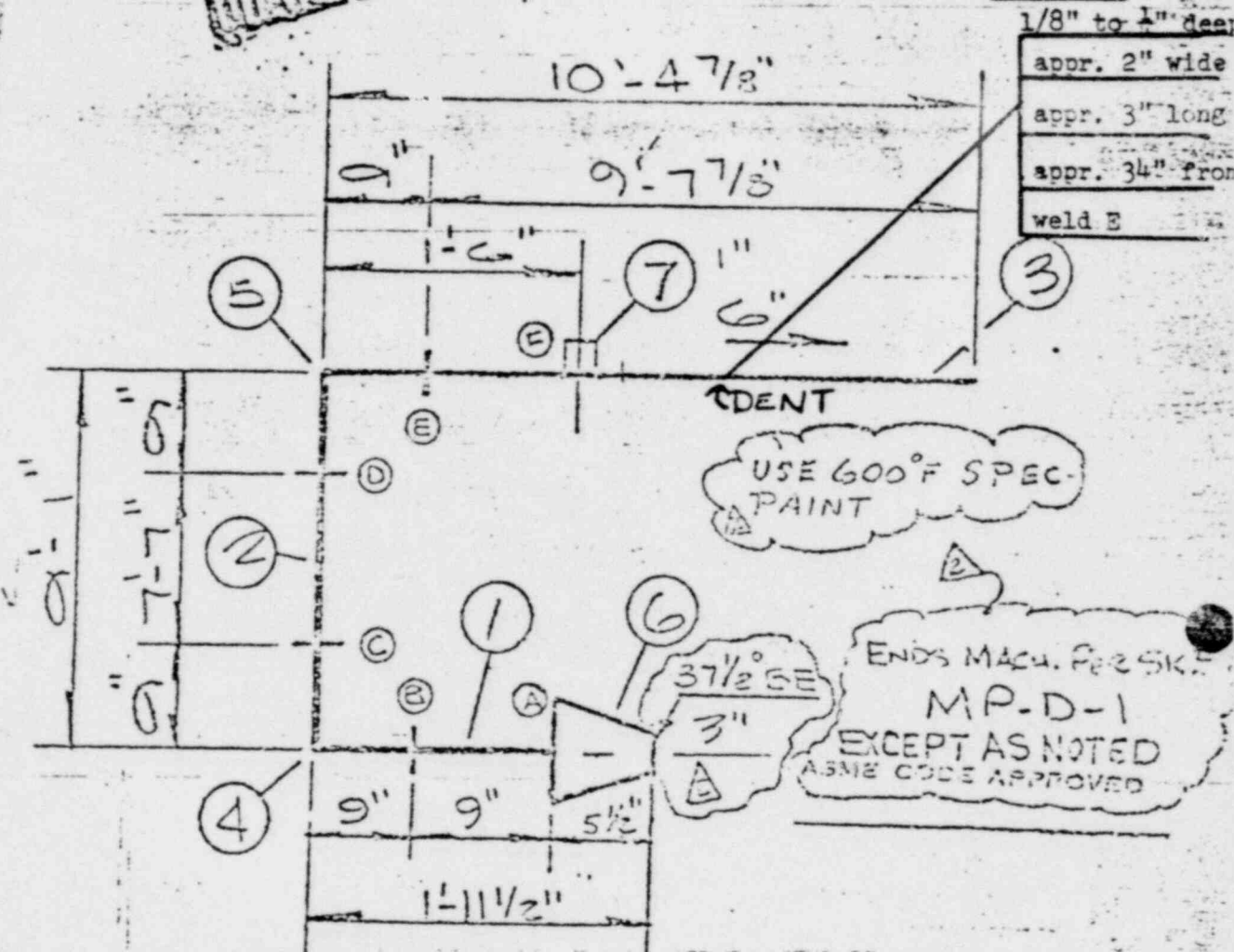
CONTRACTORS POWER COMPANY  
NATION BLDG NO. 1, LENOIR

DRWN U.C. CHK'D 12/25/76  
 ① REV. 12/17/76 CHK'D 1/18/77  
 ② REV. 1/19/77 CHK'D 4/8  
 REV. \_\_\_\_\_ CHK'D \_\_\_\_\_

Attachment "A"  
Page 2 of 2  
NCR # 1224



**QUALITY CONTROL**



PIPE - SCH. 120 SA-106 B  
 FITT - SCH. 120 SA-234 WPB  
 CONN - 300°F S.O.L. SA-106  
 CONS. INS. - SCH. 120  
 RED'R - SCH. 120 X SCH. 80 SA-234 WPB  
 CARBON STEEL

BECHTOLD  
349

CLASS	<u>Nuc. 3</u>	LINE SPEC.	<u>208C</u>	APP. CODE	<u>ASME SEC II</u>	NO. REQ'D	<u>1</u>
Radiography (RT)	<input checked="" type="checkbox"/>	Special Marking	<input type="checkbox"/>	Preheat	<input checked="" type="checkbox"/>	Cert. of Compliance	<input type="checkbox"/>
Magn. Particle (MT)	<input checked="" type="checkbox"/>	Special Cleaning	<input type="checkbox"/>	Heat Treat	<input type="checkbox"/>	Mill Test Reports	<input type="checkbox"/>
REPL (P)	<input type="checkbox"/>	Painting	<input checked="" type="checkbox"/>	Code Stamp	<input checked="" type="checkbox"/>	Data Reports	<input type="checkbox"/>

FAB. SPECS. \_\_\_\_\_  
 REF. DRWG NO. M-C-24-SHT. 7A PRESS. 100 PSI. TEMP. 250 °F. WT. 135 LBS  
 REVISIONS 9-9-83-7-4 REGISTER N.C. 6-7-76

NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 1250	20. PAGE 1 OF 1
2. UNIT(S) Indeterminate	3. DRAWING/PART NO. 12-HCB-BF-RLD	REV N/A	4. ITEM DESCRIPTION 3 - Butterfly Valves	5. ITEM LOCATION Aux. Bldg. 568' El. near 6-2-8-D Inches 3-78 Pg. 78	
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. See Block 16	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE Construction	10. CONTRACTOR/SUPPLIER N/A	
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER	IR NO. N/A NO. M-204 Rev. 8	12. ASME AUTHORIZED INSPECTION RECD (X) YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discarded During ( ) Rec'y (X) Const ( ) Test	
16. NONCONFORMING CONDITION: Butterfly valves w/SN# D-0080-5-1 and D-0080-5-4 have broken handwheels. Concrete debris (which apparently fell from a trash container) is scattered over these valves and valve SN# D-0080-5-3. Further damage to these valves caused by the falling debris is indeterminate at this time. "Q" No. is Indeterminate. 3 QC Hold Tags Applied To The Valves. Hold For Engineering Disposition.					
17. REPORTED BY M. J. [Signature]	DATE 5-6-78	18. VALIDATED BY W. B. [Signature]	DATE 3-6-78	25. DISPOSITION RESULTS New replacement handwheels for valves SN# D-0080-5-1 and SN# D-0080-5-4 have been satisfactorily installed, Dam Bannett 7-17-78 BY [Signature] 3-6-80-SY D-0080-5-4 D-0080-5-3	
22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering Two new handwheel handwheels are on order for valves 412-036 & 412-020 (FMR BM-2336) No apparent external physical damage is visible from concrete debris. All valve internals are sealed. Remove concrete debris and clean in accordance with 7220-H-342 par. 7.7. J. Mandy 3/9/78 J. J. [Signature] 3/2/78					
23. PROJECT ENGINEERING DISPOSITION HAS BEEN SATISFACTORILY CLEANED OF ALL FOREIGN MATTER 5' DEBRIS. VALVES ARE CLEANED GENERAL SV - 8-22-78 26. Q/A ACCEPTANCE [Signature] ENGINEER [Signature] 8-22-78 AUTHORIZED INSPECTOR [Signature] 8-22-78 DATE					
24. DISPOSITION CONCURRENCE		reject	repair	use as is	
[Signature]		J. Stumelle / A JB		3/10/78	
PROJECT FIELD ENGINEER		DATE		DATE	
PROJECT ENGINEER		DATE		DATE	
PROJECT CONSTRUCTION ENGINEER		DATE		DATE	
AUTHORIZED INSPECTOR		DATE		DATE	

WORKING COPY

NONCONFORMANCE REPORT

1. PROJECT NAME: PAH/AND JOB NO. 7220 19. NO. 1267 20. PAGE 1 OF 2

2. UNIT: C-248 3. DRAWING/PART NO. C-248 4. ITEM DESCRIPTION: EMBED IR'S FOR TILT PIT FUEL POOL 5. ITEM LOCATION: AUX. BLDG F. POOL

6. P.O. OR SPEC NO. N/A 7. SERIAL NO. N/A 8. REPLACEMENT PART P/N N/A 9. SOURCE: CONSTRUCTION 10. CONTRACTOR/SUPPLIER: N/A

11. INSPECTION CRITERIA: NO. C-248 12. ASME AUTHORIZED INSPECTION REG'D: N/A 13. SKETCH ATTACHED: YES 14. DISCOVERED DURING: CONSTRUCTION 15. EQUIP FURNISHED BY: FIELD

16. NONCONFORMING CONDITION: SECTION B, C-248(R), REUS CALLS OUT DETAIL 7 ON DWG. C-251 FOR THE EMBED PLATES AT THE BOTTOM CORNERS OF THE FUEL TILT PIT GATES. THIS DETAIL REQUIRES 1/2" x 4" IR'S TO RUN AROUND PERIMETER OF EXTERIOR CORNERS OF THESE GATE OPENINGS. SECTION THE GATE SHELF ON SOUTH FACE AND L 3/8" x 3/8" ON NORTH FACE. THESE IR'S WERE OMITTED ON BOTH SIDES OF BOTH GATES DURING CONSTRUCTION ATTACHED SKETCH - FIRST NO. 1, 2, 3, 4. ONE HOLD TAG APPLIED. HOLD IR'S ENGINEER'S DISPOSITION.

17. REPORTED BY: GENE MARTEL DATE: 03/10/78 18. VALIDATED BY: W. J. Savelley DATE: 3-13-78

21. ROUTING:  TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY) W. J. Savelley

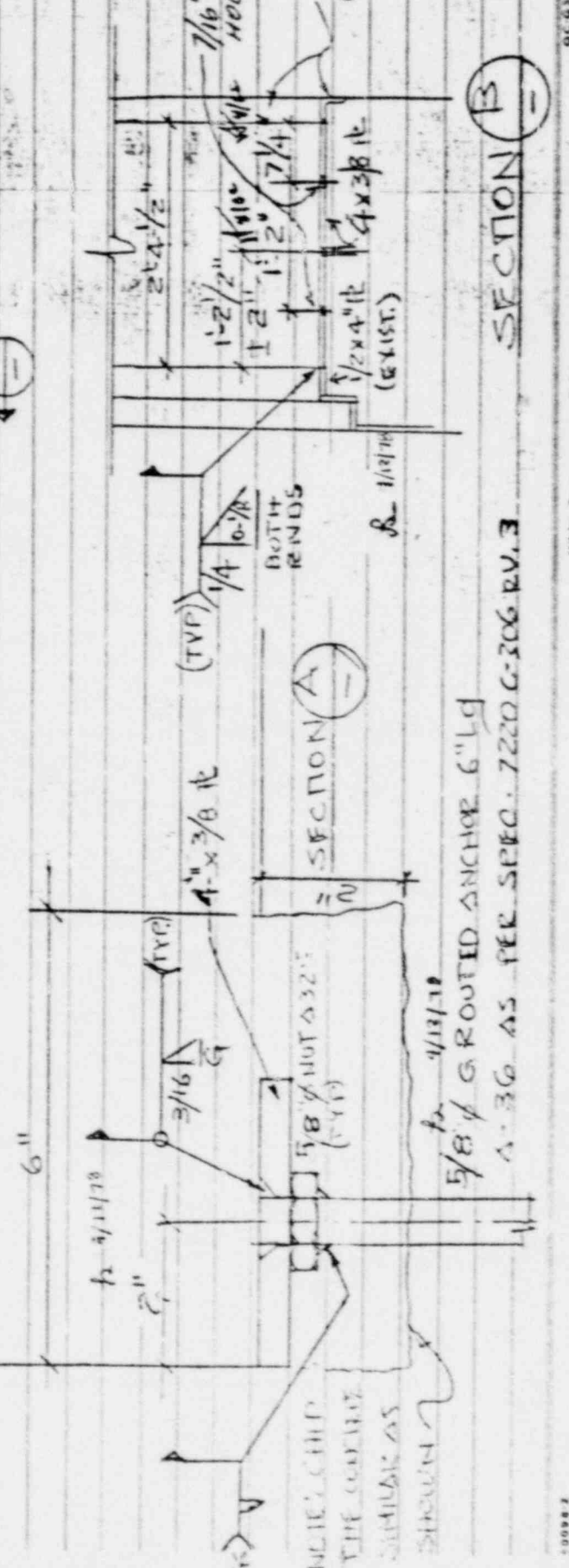
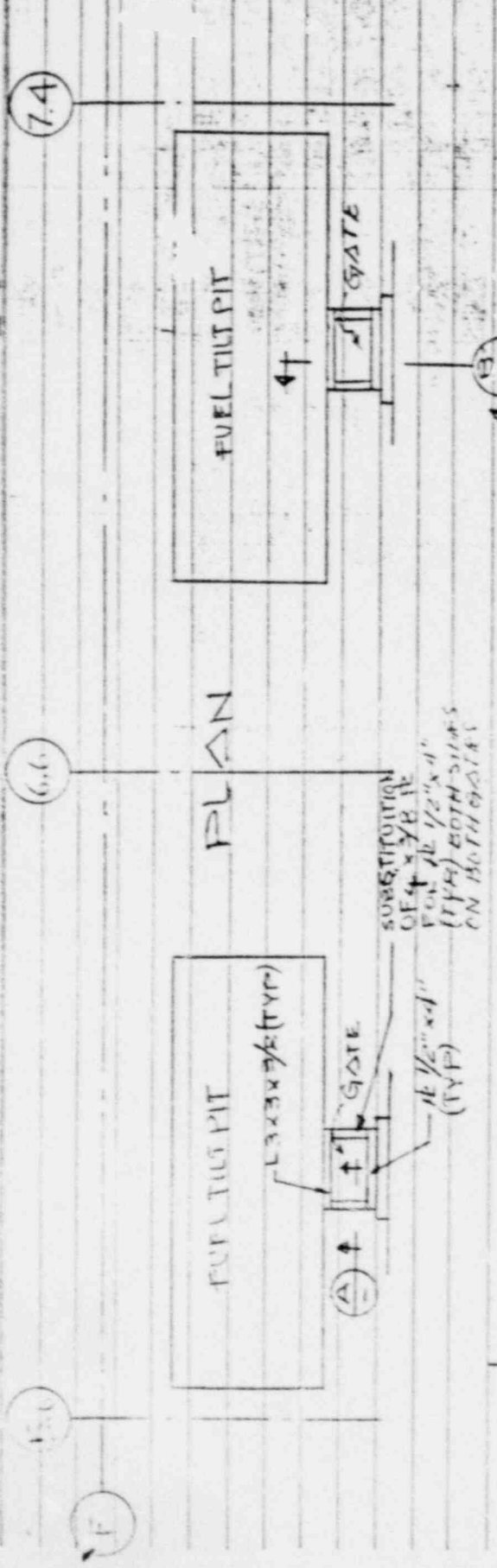
22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering  
FIELD ENGINEERING RECOMMENDS: SUBSTITUTION OF PLATES 4" x 3/8" FOR MISSING PLATES 1/2" x 4", AS SHOWN ON ATTACHED SKETCH. Alberto 3/13/78

23. PROJECT ENGINEERING DISPOSITION: Structural capacity with added embed plates 3/8" 4" as called out in Block 22 and detailed on Page 2 of 2 of the NCR is adequate and no safety implications are involved. Therefore, Project Engineering concurs with Field Engineering recommended disposition.

24. DISPOSITION CONCURRENCE: REWORK repair use as is

25. DISPOSITION RESULTS: SUBJECT PLATES (4 EA.) FABRICATED PER QCIR. # C-2, 20-558  
Approved: DCE  
4-18-78  
GRUPOING COMPLETED ON 4/19/78  
IN ASSURANCE WITH ME. J. J. O'NEILL  
REWORK REQUIRED PER  
ENGINEER'S DISPOSITION WAS  
AS COMPLETED AND FOUND  
SATISFACTORY. W/REWORK  
ACTIVITIES WERE DOCUMENT-  
ED ON QCIR C-304-666 W/1,  
3/14/78

26. OC ENGINEER: W. J. Savelley DATE: 3/13/78  
AUTHORIZED INSPECTOR: \_\_\_\_\_ DATE: \_\_\_\_\_



SECTION B

SECTION A

7/8" G ROOTED ANCHOR 6" LG

AS 36 AS PER SPEC. 7220 G-306 REV. 3

4/18/78

WHITE COPY - Originator  
 CANARY COPY - Field Engineer  
 PINK COPY - FOAE  
 GOLDENROD COPY - QC

### NONCONFORMANCE REPORT

1. PROJECT NAME Midland Project, Units 1&2		JOB NO. 7220		19. NO. 1303	20. PAGE 1 of 1
2. UNIT(S) 2	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION Concrete Cylinder Strengths		5. ITEM LOCATION CC(657.92)a' RB02 Sec. Shield Wall
6. P.O. OR SPEC NO. C-230 Rev. 12	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE Subcontractor	10. CONTRACTOR/SUPPLIER Champion, Inc.
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER		IR NO. SK-1.1 -66 NO. C-230 REV. 12	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g ( ) Const (X) Test
16. NONCONFORMING CONDITION: Spec. C-230 Rev. 12 requires E-1 concrete to meet a minimum of 6000 psi at 90 days. Contrary to this, cylinder sets 2981, 2982F and 2985 did not meet 6000 psi at 90 days. Concrete cylinder test reports are attached for review. (2) hold tags applied. "Q" list is No. 1.105.				15. Equip Furnished By: ( ) Client ( ) Eng (X) LD	
				24. DISPOSITION CONCURRENCE	
				rework	reject
				repair	use as is
				PROJECT FIELD ENGINEER DATE 8-16-78 PROJECT ENGINEER DATE 8-17-78 PROJ CONSTR QC ENGINEER DATE 8-17-78 AUTHORIZED INSPECTOR DATE	
17. REPORTED BY Thomas Sub	DATE 4-13-78	18. VALIDATED BY A. Barclay	DATE 4-13-78	25. DISPOSITION RESULTS	
21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)					
22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering Disposition requested by: 5-29-78 Refer to Project Engineering for disposition. Cylinder sets 2981, 2982F and 2985 representing E-1 Concrete placed at the Reactor Bldg. #2 south secondary shield walls from elev. 644.33' to 657.92', failed to meet their design strength of 6000 psi at 90 days. These low compressive strength results, as indicated on the attached sheets, are suspected due to high air contents (continued on Page 5)					
23. PROJECT ENGINEERING DISPOSITION					
Project Engineering has reviewed the non-conforming condition identified in Block 16 above and based on the results of additional testing performed on Pour cc(657.92)a' concludes that the noted concrete may be "USED AS IS". The additional testing was performed on July 19, 1978 using the Swiss Hammer Test method.					
REFERENCE CODE - 1976 J. Hook 7-25-78 J. A. Sumner 7/29/78				26. QC ACCEPTANCE QC ENGINEER DATE 8-15-78 AUTHORIZED INSPECTOR DATE	



BECHTEL POWER CORPORATION  
MIDLAND NUCLEAR POWER PLANT JOB 07220  
REPORT OF CONCRETE CYLINDERS

ACCEPTANCE	DATE
CONTROL NUMBER 55	FILE NUMBER C1
DATE PLACED 1-11-78	

CEMENT IDENTIFICATION  
PLACEMENT LOCATION CC (252.92) 2

PLANT DATA	SOURCE A/B-2 SEC. SHIELD	CEMENT BRAND AND TYPE Martin Marietta Type II
MIX E-1	CLASS I	Q' LIST <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
		REQUIRED STRENGTH 6000 PSI AT 90 DAYS

TEST DATA AT BATCH PLANT

Yield: 2859

TICKET NO. 25194	TRUCK NO. 51	TIME OF MOLDING 1530 HOURS AT 6 YARDS	INITIALS DH, RW
SLUMP 5 1/2 INCHES	AIR CONTENT 8.8	UNIT WEIGHT 139.12 LBS/FT <sup>3</sup>	TEMP. CONCRETE 50 °F
MOISTURE SAND 3.1	STONE 1 .2	STONE 2 N/A	TEMP. AIR 23 °F
INITIAL CURING N/A °F TO N/A °F	WATER/CEMENT + POZZOLAN RATIO .37 MAX. .37 ACT		STRIPPED N/A AT N/A HRS
		INITIALS N/A	

TEST DATA AT PLACEMENT TRUCK DISCHARGE

TICKET NO. 25194	TRUCK NO. 51	TIME OF TESTING 1458 1548 HOURS AT 6 YARDS	TIME OF MOLDING 1548 HRS
SLUMP 4 1/2 INCHES	AIR CONTENT 9.2	TEMP. CONCRETE 54 °F	TEMP. AIR 20 °F
INITIAL CURING 41 °F TO 66 °F	STRIPPED 1-12-78 AT 1325 HRS		INITIALS J

COMPRESSIVE STRENGTH DATA ASTM - C - 39 - 71

SPECIMEN IDENTIFICATION	DATE MOLDED	DATE TESTED	AGE	TOTAL LOAD IN POUNDS	ACTUAL CYL DIAM.	ACTUAL CYL AREA	TYPE OF BREAK	CURE		STRENGTH PSI
								FIELD	LAB	
2782F 9123	1-11-78	1-18-78	7	74,000	6.01	28.37	A	1	6	2610
9124		"	7	72,500	6.01	28.37	A	1	6	2560
9125		2-8-78	28	127,000	6.03	28.56	A	1	27	4450
9126		"	28	126,500	6.01	28.37	A	1	27	4460
9127		4-11-78	90	146,000	6.02	28.46	A	1	89	5130
2982F 9128	1-11-78	"	90	165,000	6.02	28.46	A	1	89	5800

TEST FAILURE

Q.C. Rep. Notified R.K. Sepp

STANDARD CYLINDER

6" X 12"  CUBE  CORE  OTHER

REMARKS: Time & Date of Notification 8800 4-12-78

Reporting Person D. Thompson

AGE (DAYS)	TESTED BY	CHECKED BY	CHECKED BY QC REP
7	KH/RL	NW	TW 2/13/78
28	OP	GF	SL 2/13/78
90	USH	NW	TK 4-12-78

LABORATORY SUPERVISOR W. J. ... DATE 4-11-78



PLACEMENT IDENTIFICATION: CC(457.92)  
 DATE PLACED: 1-11-78  
 Page 3 of 4  
 MOB 1303

PLANT DATA: R/B 2 522 SHIELD  
 Champion Incorporated  
 CEMENT BRAND AND TYPE: Martin Marietta Type II

MIX: E-1  
 CLASS: I  
 CURE LIST: YES  NO   
 REQUIRED STRENGTH: 6000 PSI AT 90 DAYS

TEST DATA AT BATCH PLANT: Yield 27.13

TICKET NO. 25212 TRUCK NO. 56 TIME OF HOLDING 2249 HOURS AT 102 YARDS INITIALS K.H.D.  
 SLUMP 5 1/2 INCHES AIR CONTENT 8.3 UNIT WEIGHT 139.82 LBS/FT<sup>3</sup> TEMP. CONCRETE 57 °F TEMP. AIR 16 °F  
 MOISTURE: SAND 2.7 STONE 1 .2 STONE 2 N/A WATER/CEMENT + POZZOLAN RATIO .37 MAX. .37  
 INITIAL CURING 63° Min °F TO 73° MAX °F STRIPPED 1-12-78 AT 13:30 HRS INITIALS D.W.

TEST DATA AT PLACEMENT

TICKET NO. 25212 TRUCK NO. 56 TIME OF TESTING 2056 HOURS AT 102 YARDS TIME OF MOLDING N/A  
 SLUMP 4 INCHES AIR CONTENT 5.8 TEMP. CONCRETE 59 °F TEMP. AIR 10 °F INITIALS J.P.  
 INITIAL CURING N/A °F TO N/A °F STRIPPED N/A AT N/A HRS INITIALS N/A

COMPRESSIVE STRENGTH DATA ASTM - C - 39 - 71

SPECIMEN IDENTIFICATION	DATE MOLED	DATE TESTED	AGE	TOTAL LOAD IN POUNDS	ACTUAL CYL DIAM.	ACTUAL CYL AREA	TYPE OF BREAK	CUPE		STRENGTH PSI
								FIELD	LAB	
2985 9129	1-11-78	1-18-78	7	83,500	6.02	28.46	A	1	1/2	2930
9130		"	7	78,500	6.04	28.75	A	1	1/2	2730
9131		2-8-78	28	123,000	6.01	28.37	A	1	27	4340
9132		"	28	125,000	6.02	28.46	A	1	27	4390
9133		4-11-78	90	165,500	6.02	28.46	B	1	89	5820
2985 9134	1-11-78	"	90	164,000	6.01	28.37	D	1	89	5780

TEST FAILURE  
 TEST FAILURE

STANDARD CYLINDER:  6" X 12"  CUBE  CORE  OTHER  
 REMARKS: CC Rep. Notified P.K. Siple  
 Time & Date of Notification 0800 4-12-78  
 Reporting Person B. Thompson  
 LABORATORY SUPERVISOR: [Signature] DATE: 4-11-78

TYPE OF BREAKS: A = CONE, MORTAR FAILURE B = CONE, AGGREGATE FAILURE C = SHEAR, MORTAR FAILURE  
 D = SHEAR, AGGREGATE FAILURE E = OTHER  
 LIST 5-284@7 LIST 4-117@90  
 LIST 7-137@28



BECHTEL POWER CORPORATION  
MIDLAND NUCLEAR POWER PLANT JOB 07220  
REPORT OF CONCRETE CYLINDERS

ACCEPTANCE \_\_\_\_\_ DATE \_\_\_\_\_  
CONTROL NUMBER 55 FILE NUMBER CCU  
DATE PLACED 1-11-78

PLACEMENT LOCATION CC(657.92) a.

R/B 2 SEC. SHIELD

PLANT DATA SOURCE Champion Incorporated CEMENT BRAND AND TYPE Martin Marietta Type II  
MIX E-1 CLASS I "Q" LIST  YES  NO REQUIRED STRENGTH 6000 PSI AT 90 DAYS

TEST DATA AT BATCH PLANT Yield: 28.59

TICKET NO. 25194 TRUCK NO. 51 TIME OF MOLDING 1530 HOURS AT 6 YARDS INITIALS DH, RW  
SLUMP 5 1/2 INCHES AIR CONTENT 8.8 UNIT WEIGHT 139.12 LBS/FT<sup>3</sup> TEMP. CONCRETE 50 °F TEMP. AIR 23 °F  
MOISTURE SAND 3.1 STONE 1 .2 STONE 2 N/A WATER/CEMENT + POZZOLAN RATIO .37 MAX. .37 ACT.  
INITIAL CURING 63 °F TO 73 °F STRIPPED 1-12-78 AT 1140 HRS. INITIALS D.D.

TEST DATA AT PLACEMENT TRUCK DISCHARGE

TICKET NO. 25194 TRUCK NO. 51 TIME OF TESTING 1548 HOURS AT 6 YARDS TIME OF MOLDING N/A HRS.  
SLUMP 4 1/2 INCHES AIR CONTENT 9.2 TEMP. CONCRETE 54 °F TEMP. AIR 20 °F INITIALS JP  
INITIAL CURING N/A °F TO N/A °F STRIPPED N/A AT N/A HRS. INITIALS N/A

COMPRESSIVE STRENGTH DATA ASTM - C - 39 - 71

SPECIMEN IDENTIFICATION	DATE MOLDED	DATE TESTED	AGE	TOTAL LOAD IN POUNDS	ACTUAL CYL DIAM.	ACTUAL CYL AREA	TYPE OF BREAK	CURE		STRENGTH PSI
								FIELD	LAB	
2981 9117	1-11-78	1-18-78	7	64,500	6.02	28.46	A	1	6	2270
9118 <del>4118</del>			7	70,000	6.02	28.46	A	1	6	2460
9119		2-8-78	28	103,500	6.01	28.37	A	1	27	3650 <del>3670</del> <u>2-10-78</u>
9120		"	28	99,500	6.01	28.37	A	1	27	3510
9121		4-11-78	90	136,000	6.02	28.46	A	1	89	4780
2981 9122	1-11-78	"	90	146,000	6.01	28.37	A	1	89	5150

**TEST FAILURE**

STANDARD CYLINDER  6" X 12"  CUBE  CORE  OTHER \_\_\_\_\_  
AGE (DAYS) TESTED BY CHECKED BY CHECKED BY QC REP  
7 KH/RL NW TL 2/13/78  
28 OP YP TL 2/13/78  
90 DSH NW XX 4-12-78  
REMARKS Q.C. Rep. Notified R.K. Lipke  
Time & Date of Notification 0800 4-12-78  
Reporting Person B. Thompson  
LABORATORY SUPERVISOR [Signature] DATE 4.11.78

TYPE OF BREAKS. A = CONE, MORTAR FAILURE B = CONE, AGGREGATE FAILURE C = SHEAR, MORTAR FAILURE  
D = SHEAR, AGGREGATE FAILURE E = OTHER  
UST 5-28267 UST 7-135028 UST A-115090  
10362 QC-C3A UST 7-28628



Block 22 Continued:  
of samples from which cylinders were cast. Additional strength verification tests will be performed if  
required upon request per Project Engineering direction.

*Ric. Reynolds 4/20/78*  
*J. Betts 4/20/78*



# NONCONFORMANCE REPORT

4/22/78

1. PROJECT NAME <b>Midland</b>		JOB NO. <b>7270</b>		19. NO. <b>1311</b>	20. PAGE <b>1 of 2</b>	
2. UNIT(S) <b>Common</b>	3. DRAWING/PART NO. <b>G186Q/E541Q</b>	REV <b>4/8</b>	4. ITEM DESCRIPTION <b>480 V. MCC OB45, OB46</b>	5. ITEM LOCATION <b>Aux. Bldg., cl. 685'</b>		
6. P.O. OR SPEC NO. <b>N/A</b>	7. SERIAL NO. <b>N/A</b>	8. REPLACEMENT PART P/N <b>N/A</b> REV <b>N/A</b> SER NO. <b>N/A</b>	9. SOURCE <b>Construction</b>	10. CONTRACTOR/SUPPLIER <b>N/A</b>		
11. INSPECTION CRITERIA <input checked="" type="checkbox"/> DWG <input type="checkbox"/> SPEC <input type="checkbox"/> OTHER		IR NO. <b>E6.0-36, 43</b> <b>NO G186 Rev 4</b>	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	14. Discovered Durin <input type="checkbox"/> Rec'g <input checked="" type="checkbox"/> Const <input type="checkbox"/> Test	15. Equip Furnished By <input type="checkbox"/> Client <input type="checkbox"/> Eng <input checked="" type="checkbox"/> FLD
16. NONCONFORMING CONDITION: <b>Dwg. G186 (Q) Rev. 4 w/DCN #5, Equipment Location Plan at</b>			24. DISPOSITION CONCURRENCE			
<b>cl. 685', references Details 1 and 7, Dwg. G141 for mounting pad installation and equipment hold down for 480 Volt Motor Control Centers OB45 and OB46. Detail 1, G141 (Q) Rev. 5 shows cabinet plug welded into place and detail 7 shows 3/4" threaded studs, field located, for cabinet anchoring. Contrary to the above, the field has intermittently welded the face of the MCC cabinet mounting channels to</b> (Continued on page 2)			rework	reject	repair	use as is
			PROJECT FIELD ENGINEER <i>[Signature]</i>		DATE <b>4-17-78</b>	
17. REPORTED BY <b>Jew Brown</b>			18. VALIDATED BY <b>[Signature]</b>	25. DISPOSITION RESULTS		
DATE <b>4-17-78</b>			DATE <b>4-17-78</b>	<b>Type of NCC OB 45 was accomplished per disposition of Block 23 and found satisfactory. The upper door described on QCR C-304-900W. Motor Control Center OB-45 was dispositioned "Use as is", therefore no further action is required. The (Q) provided the records for 4/19/78.</b>		
21. ROUTING: <input type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)			22. <input type="checkbox"/> Field Engineering Disposition <input checked="" type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering			
<b>Field recommends using welds as installed. (see page 2)</b> <b>"USE AS IS"</b>			<b>DISPOSITION REVISION 4/17/78</b> <b>Raymond Schuyfle 4/19/78</b> <b>[Signature] 4/19/78</b> <b>[Signature] 4-20-78</b>			
23. PROJECT ENGINEERING DISPOSITION			25. DISPOSITION RESULTS			
<b>Existing condition as reported in Block 16 has been reviewed. From structural consideration existing weld provided for motor control center OB45 (see page 2 of 2) is adequate. Welding of motor control center OB-46 to be modified as per engineering comments on page 2 of 2. With above recommended modifications structural capacity is adequate and no safety implications are involved. Necessary calculations are filed in engineering files.</b>			<b>Disposition of NCC OB 45 was accomplished per disposition of Block 23 and found satisfactory. The upper door described on QCR C-304-900W. Motor Control Center OB-45 was dispositioned "Use as is", therefore no further action is required. The (Q) provided the records for 4/19/78.</b>			
DISPOSITION REVISED PER RESIDENT ENGR COMMENT ON PG 2 <b>6/17/78 - R. Schuyfle REM C1527</b>			AUTHORIZED INSPECTOR <b>[Signature]</b> DATE <b>4/17/78</b>			

SEE PAGE 24 OF 27

4-27-78  
5:10  
BNC

Continued from page 1, block 16.

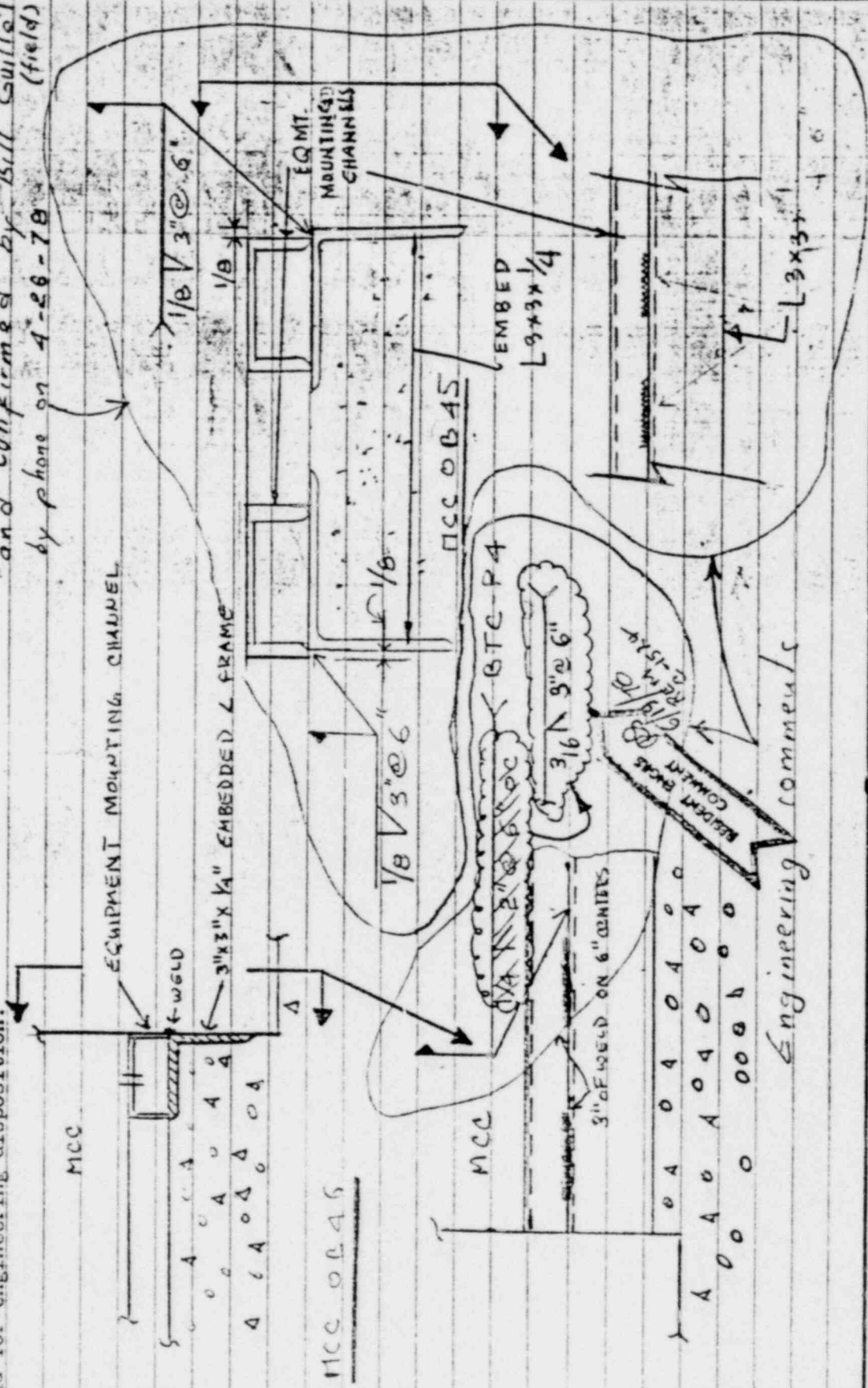
the face of the foundation pads angle frame, front and rear of cabinets.

Q-list #3.104.

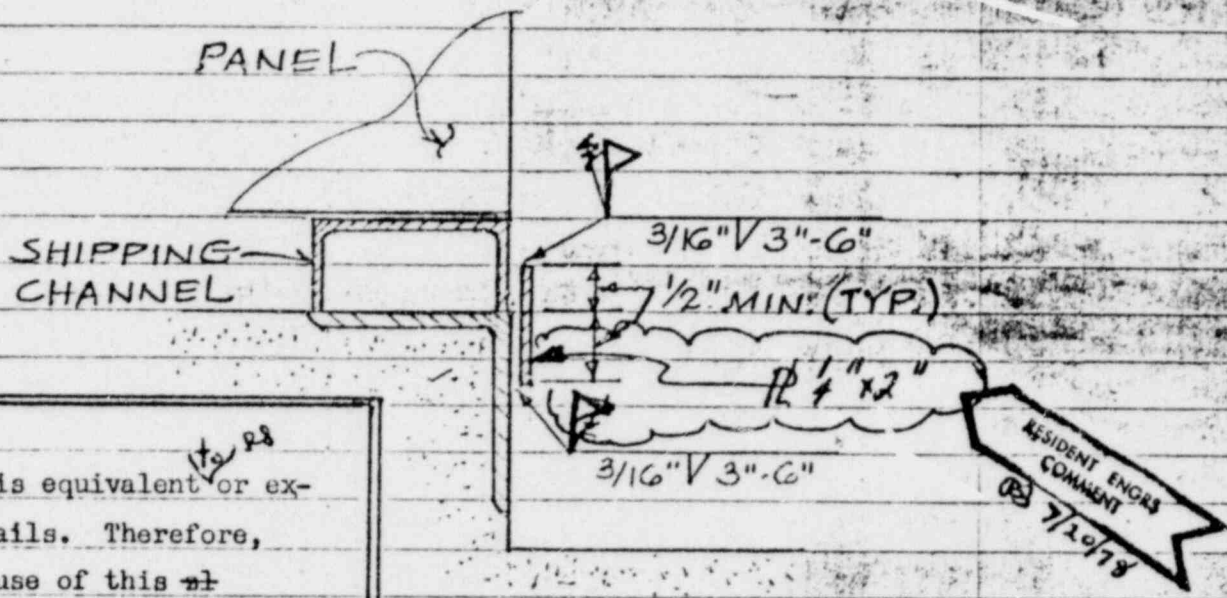
Two Hold tags applied at MCC's.

Hold for engineering disposition.

*This information has been provided by G Brown (QC field) and confirmed by Bill Guillet (field) by phone on 4-26-78*



As an alternate to welding details on sheet 2, Field ~~recomm~~ recommends using a continuous 1/4" x 2" wide plate on <sup>either side 7/20/78</sup> both sides of the panels (see sketch below). This plate may be used in conjunction with the welding details on sheet 2. 7/20/78



Block 23 Continued: 2

The proposed alternate (7-20-78) is equivalent or exceeds the previously approved details. Therefore, Project Engineering approves the use of this alternate. Note, it is acceptable to project to alternate any of the approved details provided the 3" @ 6" weld spacing is maintained.

R. Schulman 7/20/78  
REM C-1589

Raymond Schuffel 7/20/78  
Bruce Mattheis 7-20-78

RESIDENT ENGRS  
 COMMENT  
 RB 7/20/78

NONCONFORMAN REPORT (CONT'D)

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
		X	
<u>[Signature]</u>	<u>6-20-78</u>	DATE	
PROJECT FIELD ENGINEER			
<u>[Signature]</u>	<u>6-19-78</u>	DATE	
PROJECT ENGINEER			
<u>[Signature]</u>	<u>6-22-78</u>	DATE	
PROJECT CONSTR QC ENGINEER			
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
		X	X
<u>[Signature]</u>	<u>7-25-78</u>	DATE	
PROJECT FIELD ENGINEER			
<u>[Signature]</u>	<u>8-20-78</u>	DATE	
PROJECT ENGINEER			
<u>[Signature]</u>	<u>8-25-78</u>	DATE	
PROJECT CONSTR QC ENGINEER			
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

### NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 1322	20. PAGE 1 OF 1	
2. UNIT(S) Unit 2	3. DRAWING See Block 16	REV N/A	4. ITEM DESCRIPTION Shop Fabricated Pipe Spools	5. ITEM LOCATION E4N Poseyville Laydown		
6. P.O. NO. 7220-M-04A-AC Rev. 10	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV _____	9. SOURCE Supplier	10. <del>XXXXXXXXXX</del> /SUPPLIER ITT Grinnell, Kernersville, N.C.		
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER		IR NO. R-1,00-3026 NO. M-201 Rev 8	12. ASME AUTHORIZED INSPECTION REQ'D (X) YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client (X) Eng ( ) FL D
16. NONCONFORMING CONDITION: Specification 7220-M-201 Rev. 8, Para 6.5.1a requires austentic stainless steel pipe to be furnished free of rust, dirt and other contaminants. Contrary to the above, pipe spools 12"-2CCA-18-S611-2-1, MR-78-107 Sub. 3; 12"-2CCA-18-S611-2-2, MR-78-108 Sub. 3 and 2FCB-22-S611-6-6, MR-78-87 Sub. 2 were delivered to the jobsite chained down with carbon steel chains. As a result the spools have started to rust where they had come in contact with the carbon steel. "Q" number is 4.114. Hold pending final disposition. three hold tag(s) applied to the nonconforming item(s).				24. DISPOSITION CONCURRENCE		
17. REPORTED BY <i>Marian Dornan</i> 4-20-78				25. DISPOSITION RESULTS Spool 2FCB-22-S611-6-6 Has BEEN SATISFACTORY completed C. Grant AS PER block #22-6-22-78 4-22-78		
18. VALIDATED BY <i>M. J. Early</i> 4-21-78		DATE 4-21-78		26. QC ACCEPTANCE <i>Don Savitt</i> 8-9-78 DATE <i>W. J. Hillman</i> 8-9-78 DATE		
21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)				27. AUTHORIZED INSPECTOR <i>W. J. Hillman</i> 8-9-78		
22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering				28. PROJECT ENGINEERING DISPOSITION		
Remove rust and clean in accordance with specification 7220-M-204, Rev. 8, Para 6.5.				Spools 12"-2CCA-18-S611-2-1 and 12"-2CCA-18-S611-2-2 have had all rust removed and has been cleaned in accordance with spec. 7220-M-204, Rev. 9, paragraph 6.5. AB 89-78		



### NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 1336	20. PAGE 1 OF 1
2. UNIT(S) Common	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION Concrete Block Walls		5. ITEM LOCATION Blk Wall #44 El. 634'+ "E" & 5.6
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N—N/A REV—N/A SER NO.—N/A—		9. SOURCE Construction	10. CONTRACTOR/SUPPLIER N/A
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER		IR NO. N/A NO. A-13, Rev. 2	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test
15. Equip Furnished By ( ) Client ( ) Eng (X) FLD					
16. NONCONFORMING CONDITION: Specification 7220-A-13, Rev. 2, Para. 9.1.2 states in part.... "The top surface of concrete to receive masonry shall be clean, shall have the laitance removed, roughened..." Contrary to the above, work on Block Wall #44 was started without QC notification and the horizontal construction joint cannot be verified. "Q"-List #2.001. Hold for Engineering Disposition. 1 Hold Tag Applied.					24. DISPOSITION CONCURRENCE rework reject repair use as is <input checked="" type="checkbox"/>
17. REPORTED BY <i>[Signature]</i>		DATE 5/2/78	18. VALIDATED BY <i>[Signature]</i>		DATE 5-2-78
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)					
22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering					
Disposition Requested by: 5/16/78 B.W. #44 has been built to a four-foot lift. Neither the masonry cores nor the 12" cavity between widths have been grouted. Therefore verification of horizontal construction joint can be made at any time. Field Engr. certifies that construction joint has been sand-blasted. "Use as is". <i>[Signature]</i> 5/4/78 <i>[Signature]</i> 5/4/78					
23. PROJECT ENGINEERING DISPOSITION PROJECT ENGINEERING CONCURS WITH FIELD ENGINEERING RECOMMENDATION - USE I.S.I.S - <i>[Signature]</i> 5-29-78					
26. QC ACCEPTANCE <i>[Signature]</i> 8/21/78 QC ENGINEER DATE					
AUTHORIZED INSPECTOR DATE					

Unprotected Copy

NONCONFORMANCE REPORT

2-22-78  
NY 12-78-2  
#78  
#78  
#78  
#78

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 1345	20. PAGE 1 OF 79
2. UNIT(S) 1 & 2	3. DRAWING/PART NO. C-658	REV 6	4. ITEM DESCRIPTION Structural Embedments		5. ITEM LOCATION & Poseyville & site laydown interior Containment
6. P.O. OR SPEC NO. F-13440	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N REV	SER NO. N/A	9. SOURCE Proc.	10. CONTRACTOR/SUPPLIER Haven Busch
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (X) OTHER		IR NO. SEE BELOW	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'd (X) Const ( ) Test
15. Equip Furnished By ( ) Client ( ) Eng (X) FLD		16. NONCONFORMING CONDITION: The attached list of structural embedments were furnished by Haven Busch under field purchase order number F-13440. Contrary to the weld inspection criteria called for in Haven Busch's approved Quality Assurance Manual, numerous <del>wa</del> anomalies have been noted in a review of the weld inspection records. The embeds in question (and associated anomalies) are summarized on the attached list. The quality of the embeds is indeterminate. These embeds have not been embed embedded in concrete. See Continuation Sheet.			
17. REPORTED BY C. Abbotts		DATE 5-12-78	18. VALIDATED BY M. Barabey		DATE 5-17-78
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)		22. <input checked="" type="checkbox"/> Field Engineering Disposition <input checked="" type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering Disposition BY: 7-7-78			
23. PROJECT ENGINEERING DISPOSITION		24. DISPOSITION CONCURRENCE			
(A) The anomalous category 1 welds (fillet and full penetration) for the 15 embed sample were determined acceptable for each embed load capacity. These samples are considered representative of the remaining welds. Therefore, engineering recommendation for category 1 welds is to "use as is".		25. DISPOSITION RESULTS <del>Embeds # 12, 6, 13, 1, 7, 11, 12a, 8 and 12b were inspected per item 11 of field disposition and have found to be reasonable. See attached report WUR 85-72. PER. DISPOSITION OF BLOCK 23, ITEM (A) "USE AS IS," REQUIRES NO FURTHER ACTION.</del> ITEM (B) OF BLOCK 23, "REWORK OF STUDS BY WELDING," WAS ACCOMPLISHED, FOUND SUFFICIENT AND DOCUMENTED ON QC 12 C-304-381W. ALL WELD ENGS. RECOMMENDED (S) 8/9/78			
(B) The worst nonconforming stud welds were tested by the field and found capable of developing the maximum design tensile load. However, since the studs are accessible for repair, conformance of all category 2		26. DATE OF ACCEPTANCE 8/9/78 C. Phillips PROJECT ENGINEER			
		AUTHORIZED INSPECTOR DATE			

(Contd. on page 3)



"Q"-List Nos. 1.101, 1.201, 1.102, 1.202 and 1.502. Hold for Engineering Disposition. 57 Hold Tags

Applied (One on each item.)

RF. was notified on 6-19-78 of the following changes.  
The following embeds were removed from the interior of unit # 1, E-12-B-1,  
E-12-B-3, + E-10-B-6

The following embeds were removed from the site lay-down area E-9-A-1, + E-10-B-7

The following embeds were removed from the Poseyville lay down area: E-14-B-2, +  
E-12-B-7

These embeds are now in storage in combo shop for testing WAC  
6-19-78

Block 22 Continued:

Because of the anomalies of the weld inspection records as described in Block #16, the field decided to discount the inspection records and provide an engineering reinspection to assess the quality of the embed welds.

Preliminary inspection of 4 embeds indicated:

- 1) Fillet and full penetration welds met the design requirements with some exceptions.
- 2) Machine welded Nelson Studs exhibited a questionable rate of failure (particularly the 7/8" diameter studs when tested in accordance with AWS D1.1-72 Section 4.30.1).

Because of the two observations noted above, it was decided to separate all the welds on the embeds into two categories for further examination, namely:

Category 1 - Fillet and full penetration welds

Category 2 - Nelson Stud welds

The results of the engineering examination follow.

#### CATEGORY 1 - Fillet and Full Penetration Welds

The service requirements for the different types of welds on the embeds were discussed with Project Engineering. Through this discussion the field learned which welds were most critical to the performance of the embed and, accordingly, conducted a visual examination of 383 welds on 15 embeds selected at random (out of a total of 2482 welds - critical and non-critical on 57 embeds) to assess the quality of the welds. The weld

NONCONFORM

REPORT (CONT'D)

77 KEB 7-12-78  
PAGE 3 OF 28  
14. NCR NO. 345

Block 22 Continued:

examination was conducted by field welding engineers to the requirements of AWS D1.1-72. Quality Control welding engineers performed surveillance of the examination process. A summary of the examination results is included on pages 31 through 32. Based on this summary, the field recommends "Use As Is".

CATEGORY 2 Nelson Stud Welds

The results of the AWS bend test on 41 studs on 8 embeds was discussed with Project Engineering. As a result of this discussion, and to provide additional information on stud capacity, it was decided to initiate a tensile testing program on selected "worst-case" (i.e., lack of complete weld) studs.

The studs selected were tested to 90% of their yield strength by applying a tensile load along the longitudinal axis of the stud. The load was applied through a grip placed on the stud head. The test program was applied to three 3/4" diameter studs and four 7/8" diameter studs. The tests were performed by a civil field engineer with surveillance by Quality Control. The results of the test program are included on sheets 33 through 48.

Based on these results the field recommends "Use As Is".

*John Napoli 6/22/78*  
*J. Bitts 6/22/78*

Block # 23 Project Engineering Disposition:

stud welds to AWS code is required, and stud welds shall be repaired in accordance with AWS D1.1 paragraph 4.29.3.

*W.H. Hagedorn 7-7-78*  
*R. E. B. 7-10-78*  
*7-10-78*  
*R. E. B. 7-10-78*

RECEIVED 6.27

—CIRCLED EMBEDS ARE APPLICABLE ONLY TO VNCR

THIS 1385 413  
7-12  
4-12  
4-12

	1	2	3	4	5	6	7	8	9	10	11
HAIR BLOW	ROOT PASS ACCT. PL NO FINL PASS. INSPECTION	ROOT PASS ACCTD FINL REJECTED NO FINL REINPTN	NO ROOT PASS NO FINL PASS	ROOT PASS REJECTED NO ROOT REINPTN	NO ROOT LEINSPIN ROOT PASS REJECTED	FINL PASS REJECTED REJECTED REINPTN REJECTED ROOT PASS	SIGNOFF ACCESS FINL PASS REJECTED	NO SIGNOFF FINL PASS REJECTED	MT ROOT REJECTED NO REUSPECT	MT FINL REJECTED NO FINL FINL	NO FINL FINL
PO C-733	ROOT PASS ACCT. PL NO FINL PASS. INSPECTION	ROOT PASS ACCTD FINL REJECTED NO FINL REINPTN	NO ROOT PASS NO FINL PASS	ROOT PASS REJECTED NO ROOT REINPTN	NO ROOT LEINSPIN ROOT PASS REJECTED	FINL PASS REJECTED REJECTED REINPTN REJECTED ROOT PASS	SIGNOFF ACCESS FINL PASS REJECTED	NO SIGNOFF FINL PASS REJECTED	MT ROOT REJECTED NO REUSPECT	MT FINL REJECTED NO FINL FINL	NO FINL FINL
F-DRIVE, JCS-302 EMBERS	ROOT PASS ACCT. PL NO FINL PASS. INSPECTION	ROOT PASS ACCTD FINL REJECTED NO FINL REINPTN	NO ROOT PASS NO FINL PASS	ROOT PASS REJECTED NO ROOT REINPTN	NO ROOT LEINSPIN ROOT PASS REJECTED	FINL PASS REJECTED REJECTED REINPTN REJECTED ROOT PASS	SIGNOFF ACCESS FINL PASS REJECTED	NO SIGNOFF FINL PASS REJECTED	MT ROOT REJECTED NO REUSPECT	MT FINL REJECTED NO FINL FINL	NO FINL FINL
F-DIVE, JCS-302 BEANS & PLATES	ROOT PASS ACCT. PL NO FINL PASS. INSPECTION	ROOT PASS ACCTD FINL REJECTED NO FINL REINPTN	NO ROOT PASS NO FINL PASS	ROOT PASS REJECTED NO ROOT REINPTN	NO ROOT LEINSPIN ROOT PASS REJECTED	FINL PASS REJECTED REJECTED REINPTN REJECTED ROOT PASS	SIGNOFF ACCESS FINL PASS REJECTED	NO SIGNOFF FINL PASS REJECTED	MT ROOT REJECTED NO REUSPECT	MT FINL REJECTED NO FINL FINL	NO FINL FINL
F-DIVE, JCS-302 EMBERS	ROOT PASS ACCT. PL NO FINL PASS. INSPECTION	ROOT PASS ACCTD FINL REJECTED NO FINL REINPTN	NO ROOT PASS NO FINL PASS	ROOT PASS REJECTED NO ROOT REINPTN	NO ROOT LEINSPIN ROOT PASS REJECTED	FINL PASS REJECTED REJECTED REINPTN REJECTED ROOT PASS	SIGNOFF ACCESS FINL PASS REJECTED	NO SIGNOFF FINL PASS REJECTED	MT ROOT REJECTED NO REUSPECT	MT FINL REJECTED NO FINL FINL	NO FINL FINL
F-DIVE, JCS-302 EMBERS	ROOT PASS ACCT. PL NO FINL PASS. INSPECTION	ROOT PASS ACCTD FINL REJECTED NO FINL REINPTN	NO ROOT PASS NO FINL PASS	ROOT PASS REJECTED NO ROOT REINPTN	NO ROOT LEINSPIN ROOT PASS REJECTED	FINL PASS REJECTED REJECTED REINPTN REJECTED ROOT PASS	SIGNOFF ACCESS FINL PASS REJECTED	NO SIGNOFF FINL PASS REJECTED	MT ROOT REJECTED NO REUSPECT	MT FINL REJECTED NO FINL FINL	NO FINL FINL
F-DIVE, JCS-302 EMBERS	ROOT PASS ACCT. PL NO FINL PASS. INSPECTION	ROOT PASS ACCTD FINL REJECTED NO FINL REINPTN	NO ROOT PASS NO FINL PASS	ROOT PASS REJECTED NO ROOT REINPTN	NO ROOT LEINSPIN ROOT PASS REJECTED	FINL PASS REJECTED REJECTED REINPTN REJECTED ROOT PASS	SIGNOFF ACCESS FINL PASS REJECTED	NO SIGNOFF FINL PASS REJECTED	MT ROOT REJECTED NO REUSPECT	MT FINL REJECTED NO FINL FINL	NO FINL FINL
F-DIVE, JCS-302 EMBERS	ROOT PASS ACCT. PL NO FINL PASS. INSPECTION	ROOT PASS ACCTD FINL REJECTED NO FINL REINPTN	NO ROOT PASS NO FINL PASS	ROOT PASS REJECTED NO ROOT REINPTN	NO ROOT LEINSPIN ROOT PASS REJECTED	FINL PASS REJECTED REJECTED REINPTN REJECTED ROOT PASS	SIGNOFF ACCESS FINL PASS REJECTED	NO SIGNOFF FINL PASS REJECTED	MT ROOT REJECTED NO REUSPECT	MT FINL REJECTED NO FINL FINL	NO FINL FINL

Line drawn through function block



Continued on p. 1

NO.	CC-2165-2	TYPE	DATE	TIME	STATUS	REMARKS
1	F-13323	CC-2165-2	EMBED	TYPE 45C	11-1	ROOT PASS ACC'FD NO FINAL PASS INSPECTION
2	F-13323	CC-2165-2	EMBED	TYPE 45C	11-1	ROOT PASS ACC'PTD FINAL REJECTED NO FINAL REINSFTN NO ROOT PASS
3	F-13323	CC-2165-2	EMBED	TYPE 45C	11-1	NO FINAL PASS
4	F-13323	CC-2165-2	EMBED	TYPE 45C	11-1	ROOT PASS REJECTED NO ROOT REINSPTN FINAL PASS ACC'FD
5	F-13323	CC-2165-2	EMBED	TYPE 45C	11-1	ROOT PASS REJECTED NO ROOT REINSPTN FINAL PASS REJECTA REJECTED ROOT PASS REJECTED REINSPTN
7	F-13323	CC-2165-2	EMBED	TYPE 45C	11-1	FINAL PASS ACCEPTED SIGNOFF ACCROSS PAGE
8	F-13323	CC-2165-2	EMBED	TYPE 45C	11-1	NO SIGNOFF
9	F-13323	CC-2165-2	EMBED	TYPE 45C	11-1	MT. ROOT REJECTED
10	F-13323	CC-2165-2	EMBED	TYPE 45C	11-1	MT FINAL REJECTED NO MT FINAL

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F-13323



Journal 07

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Busch

SWT 1

Pd. C-933

F-15/NO. 100-1171

F-15/NO. 100-1172  
FOLDERS

DATE	TIME	PERSONS	REMARKS	STATUS
1	05	AS-512 AS-561 AS-562 AS-563 AS-564 AS-565 AS-566 AS-567 AS-568 AS-569 AS-570 AS-571 AS-572 AS-573 AS-574 AS-575 AS-576 AS-577 AS-578 AS-579 AS-580 AS-581 AS-582 AS-583 AS-584 AS-585 AS-586 AS-587 AS-588 AS-589 AS-590 AS-591 AS-592 AS-593 AS-594 AS-595 AS-596 AS-597 AS-598 AS-599 AS-600	ROOT PASS ACC'PTD NO FINAL PASS. INSPECTION.	1
2	05	AS-512 AS-561 AS-562 AS-563 AS-564 AS-565 AS-566 AS-567 AS-568 AS-569 AS-570 AS-571 AS-572 AS-573 AS-574 AS-575 AS-576 AS-577 AS-578 AS-579 AS-580 AS-581 AS-582 AS-583 AS-584 AS-585 AS-586 AS-587 AS-588 AS-589 AS-590 AS-591 AS-592 AS-593 AS-594 AS-595 AS-596 AS-597 AS-598 AS-599 AS-600	ROOT PASS ACC'PTD FINAL REJECTED. NO FINAL REINSPTN	2
3	05	AS-512 AS-561 AS-562 AS-563 AS-564 AS-565 AS-566 AS-567 AS-568 AS-569 AS-570 AS-571 AS-572 AS-573 AS-574 AS-575 AS-576 AS-577 AS-578 AS-579 AS-580 AS-581 AS-582 AS-583 AS-584 AS-585 AS-586 AS-587 AS-588 AS-589 AS-590 AS-591 AS-592 AS-593 AS-594 AS-595 AS-596 AS-597 AS-598 AS-599 AS-600	NO ROOT PASS	3
4	05	AS-512 AS-561 AS-562 AS-563 AS-564 AS-565 AS-566 AS-567 AS-568 AS-569 AS-570 AS-571 AS-572 AS-573 AS-574 AS-575 AS-576 AS-577 AS-578 AS-579 AS-580 AS-581 AS-582 AS-583 AS-584 AS-585 AS-586 AS-587 AS-588 AS-589 AS-590 AS-591 AS-592 AS-593 AS-594 AS-595 AS-596 AS-597 AS-598 AS-599 AS-600	NO FINAL PASS.	4
5	06	AS-512 AS-561 AS-562 AS-563 AS-564 AS-565 AS-566 AS-567 AS-568 AS-569 AS-570 AS-571 AS-572 AS-573 AS-574 AS-575 AS-576 AS-577 AS-578 AS-579 AS-580 AS-581 AS-582 AS-583 AS-584 AS-585 AS-586 AS-587 AS-588 AS-589 AS-590 AS-591 AS-592 AS-593 AS-594 AS-595 AS-596 AS-597 AS-598 AS-599 AS-600	ROOT PASS REJECTED NO ROOT REINSPTN. FINAL PASS ACC'PTD	5
6	06	AS-512 AS-561 AS-562 AS-563 AS-564 AS-565 AS-566 AS-567 AS-568 AS-569 AS-570 AS-571 AS-572 AS-573 AS-574 AS-575 AS-576 AS-577 AS-578 AS-579 AS-580 AS-581 AS-582 AS-583 AS-584 AS-585 AS-586 AS-587 AS-588 AS-589 AS-590 AS-591 AS-592 AS-593 AS-594 AS-595 AS-596 AS-597 AS-598 AS-599 AS-600	ROOT PASS REJECTED NO ROOT REINSPTN. FINAL PASS REJECT	6
7	06	AS-512 AS-561 AS-562 AS-563 AS-564 AS-565 AS-566 AS-567 AS-568 AS-569 AS-570 AS-571 AS-572 AS-573 AS-574 AS-575 AS-576 AS-577 AS-578 AS-579 AS-580 AS-581 AS-582 AS-583 AS-584 AS-585 AS-586 AS-587 AS-588 AS-589 AS-590 AS-591 AS-592 AS-593 AS-594 AS-595 AS-596 AS-597 AS-598 AS-599 AS-600	REJECTED ROOT PASS REJECTED REINSPTN	7
8	06	AS-512 AS-561 AS-562 AS-563 AS-564 AS-565 AS-566 AS-567 AS-568 AS-569 AS-570 AS-571 AS-572 AS-573 AS-574 AS-575 AS-576 AS-577 AS-578 AS-579 AS-580 AS-581 AS-582 AS-583 AS-584 AS-585 AS-586 AS-587 AS-588 AS-589 AS-590 AS-591 AS-592 AS-593 AS-594 AS-595 AS-596 AS-597 AS-598 AS-599 AS-600	FINAL PASS ACC'PTD SIGNOFF ACROSS PAGE	8
9	06	AS-512 AS-561 AS-562 AS-563 AS-564 AS-565 AS-566 AS-567 AS-568 AS-569 AS-570 AS-571 AS-572 AS-573 AS-574 AS-575 AS-576 AS-577 AS-578 AS-579 AS-580 AS-581 AS-582 AS-583 AS-584 AS-585 AS-586 AS-587 AS-588 AS-589 AS-590 AS-591 AS-592 AS-593 AS-594 AS-595 AS-596 AS-597 AS-598 AS-599 AS-600	NO SIGNOFF	9
10	06	AS-512 AS-561 AS-562 AS-563 AS-564 AS-565 AS-566 AS-567 AS-568 AS-569 AS-570 AS-571 AS-572 AS-573 AS-574 AS-575 AS-576 AS-577 AS-578 AS-579 AS-580 AS-581 AS-582 AS-583 AS-584 AS-585 AS-586 AS-587 AS-588 AS-589 AS-590 AS-591 AS-592 AS-593 AS-594 AS-595 AS-596 AS-597 AS-598 AS-599 AS-600	NO SIGNATURE NOTED	10
11	06	AS-512 AS-561 AS-562 AS-563 AS-564 AS-565 AS-566 AS-567 AS-568 AS-569 AS-570 AS-571 AS-572 AS-573 AS-574 AS-575 AS-576 AS-577 AS-578 AS-579 AS-580 AS-581 AS-582 AS-583 AS-584 AS-585 AS-586 AS-587 AS-588 AS-589 AS-590 AS-591 AS-592 AS-593 AS-594 AS-595 AS-596 AS-597 AS-598 AS-599 AS-600	MT. ROOT REJECTED	11
12	06	AS-512 AS-561 AS-562 AS-563 AS-564 AS-565 AS-566 AS-567 AS-568 AS-569 AS-570 AS-571 AS-572 AS-573 AS-574 AS-575 AS-576 AS-577 AS-578 AS-579 AS-580 AS-581 AS-582 AS-583 AS-584 AS-585 AS-586 AS-587 AS-588 AS-589 AS-590 AS-591 AS-592 AS-593 AS-594 AS-595 AS-596 AS-597 AS-598 AS-599 AS-600	NO MT. FINAL	12

NOTE: SOME WELD TAGS  
SHOW NO PRESENT

MR 1345  
Page 7 of 11  
10-7-49

M. C. BROWN

CIRCLED EMBEDS ARE APPLICABLE ONLY TO THIS

page 8 of 17

NO.	DESCRIPTION	TESTS	RESULTS	REMARKS
1	AVENUE BUSCH	ROOT PASS ACC'PT	NO FINAL PASS	INSPECTION
2	AVENUE BUSCH	ROOT PASS ACC'PT	FINAL REJECTED	NO FINAL REINSPT.
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4	AVENUE BUSCH	ROOT PASS REJECTED	NO ROOT REINSPT.	FINAL PASS ACC'PT
5	AVENUE BUSCH	ROOT PASS REJECTED	NO ROOT REINSPT.	FINAL PASS REJECT
6	AVENUE BUSCH	REJECTED ROOT PASS	REJECTED REINSPT.	FINAL PASS ACC'PT
7	AVENUE BUSCH	SIGNOFF ACROSS		PAGE
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9	AVENUE BUSCH	MIT ROOT REJECTED		
10	AVENUE BUSCH	MIT FINAL REJECTED		
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100	AVENUE BUSCH	NO MIT FINAL		

STUDS ONLY

1-21

5-9-22

1-21

5-1-22

STUDS ONLY

Note: Some weld repairs should be prevented

13x5

page 8 of 17

WITNESS COPY

NOT RECD  
Page 9 of 28  
4/18/88

WITNESS  
BUSCH  
SMT 2

P.O. C-243

F-13440 ACC-2141  
EMBEDS

F-13440 ACC-2141  
RESTRAINTS

F-13440 ACC-2141  
FIELD INSTRUMENTS

F-13440 ACC-2141  
PHOTO & RECORDING

F-13440 ACC-2141  
BEAMS

ROOT PASS ACC'PTD  
NO FINAL PASS  
INSPECTION  
ROOT PASS ACC'PTD  
FINAL REJECTED  
NO FINAL REINSPTN  
NO ROOT PASS  
NO FINAL PASS

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ROOT PASS REJECTED  
NO ROOT REINSPTN  
FINAL PASS ACC'PTD  
ROOT PASS REJECTED  
NO ROOT REINSPTN  
FINAL PASS REJECTED  
REJECTED ROOT PASS  
REJECTED REINSPTN  
FINAL PASS ACCEPTED  
SIGNOFF ACROSS  
PAGE

4  
5  
6  
7

NO SIGNOFF  
MT ROOT REJECTED

8  
9

MT FINAL REJECTED  
NO MT FINAL

10  
11

3/18  
O.D.K.

NOTE: SEE  
LIGHT TRENDS  
SHAWED NO  
PREHEAT ON  
A3-1EC

3/18  
O.D.K.

3/18  
O.D.K.

3/18  
O.D.K.

NOTE: SOME SIGNING GUNS  
WENT ON TOP OF  
EITHER THE ROD OR  
EMBED VISUAL COLUMN.

NOTE: WELD RECORDS FOR DI; E116  
ARE NOT IN PACKAGE

WELD RECORDS  
NOT IN PACKAGE

WELD RECORDS  
FOR DI 15  
NOT IN PACKAGE

NOTE TAKEN  
NOTE TAKEN  
NOTE TAKEN

NOTE TAKEN

NOTE TAKEN











DESIGN BY \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY \_\_\_\_\_ SHEET NO. \_\_\_\_\_  
PROJECT \_\_\_\_\_ JOB NO. 102B 7-1  
SUBJECT EMR CC2147 PC 13440 CALCULATION NO. \_\_\_\_\_ FILE NO. \_\_\_\_\_

Haven Busch I.D. | Rechtel I.D. | Haven Busch I.D. | Rechtel I.D.

AZ-2E1	E1-2	E3-3E10B	E106-3
AZ-3E1	E1-3	E3-6E10B	E106-6
BZ-F2E1	E2-81	E3-7E10B	E106-7
CZ-5E3	E3-5	A4-3E11	E11-3
CZ-9E3	E3-9	A4-6E11	E11-6
CZ-22E3	E3-22	A4-8E11	E11-8
DZ-6E4	E4-6	A4-9E11	E11-9
DZ-7E4	E4-7	A4-10E11	E11-10
DZ-21E4	E4-21	B4-3E12A	E12a-3
DZ-23E4	E4-23	B4-8E12A	E12a-8
DZ-?E4	E4 (NO IDENT)	C4-1E12B	E12b-1
A3-13E6	E6-13	C4-2E12B	E12b-2
C3-1E7B	E7b-1	C4-3E12B	E12b-3
C3-3E7B	E7b-3	C4-5E12B	E12b-5
C3-4E7B	E7b-4	C4-7E12B	E12b-7
C3-6E7C	E7b-6	C4-8E12B	E12b-8
C3-7E7D	E7b-7	C4-9E12B	E12b-9
C3-8E7D	E7b-8	E4-3E14	E14-3
C3-10E7D	E7b-9	E4-7E14	E14-7
C3-11E7D	E7b-10	E4-10E14	E14-10
C3-12E7D	E7b-12	E4-16E14	E14-16
C3-14E7D	E7b-14	E4-17E14	E14-17
C3-15E7D	E7b-15	E4-20E14	E14-20
C3-16E7D	E7b-16	E4-21E14	E14-21
C3-17E7D	E7b-17		
C3-18E7D	E7b-18		
D3-1E7	E7-1		
B3-2E7	E7-2		
	E7-3		
	E7-4		
	E7-5		
	E7-6		
	E7-7		
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	E7-9		
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	E7-52		
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	E7-55		
	E7-56		
	E7-57		
	E7-58		
	E7-59		
	E7-60		
	E7-61		

FOR BECHTEL 6-27

RECEIVED

# HAVEN Busch

## Summary of Results for Fillet & Full Penetration Weld

Number of Embeds Examined	15	
Number of Welds Inspected	383	
Number of Welds Conforming to AWS Requirements	354	(92.4%)
Number of Welds NOT conforming to AWS Requirements	29	(7.6%)
Number of Welds Undersized by $\frac{1}{16}$ "	9	(2.3%)
Number of Welds Undersized by $\frac{1}{8}$ "	3	(0.8%)
Number of Welds Undercut	14	(3.7%)
Number of Welds with Cold-lap	3	(0.8%)

7.6%

Corrected Copy

1345  
3 of 28  
79 KEYS  
7-12  
-18

BECHTEL

HAGEN BOSCH

Completed 5/1/78

SUMMARY of Non-CONFORMING WELDS

EMBED TYPE	WELD I.O.	
E1	1 TOP	UNDER SIZED ON CORNER 1/2" LONG 1/16" UNDER TOP LEG
E1	1 Bottom	Full penetration weld not flush 1/4" LONG 1/16" DEPTH & UNDER CUT 1" LONG > 1/32" < 1/16" DEPTH
E1	2 TOP	Cold lap 1/2" LONG WITH 1/16" DEEP CAVITIES TOP LEG
E1	2 Bottom	Undercut 1" LONG > 1/32" ≤ 3/32" DEPTH
E1	3	Undercut 2 SPOTS 1" LONG > 1/32" ≤ 1/16" DEPTH & 3/8" LONG > 1/32" ≤ 3/32" DEPTH
E1	6	Under sized by 1/16" 3/4" LONG ON TOP LEG
E1	9	Undercut 6" LONG > 1/32" ≤ 3/32" DEPTH
E1	12	Undercut 1 1/2" LONG > 1/32" ≤ 1/16" DEPTH
E1	22	Undercut 2 1/2" LONG > 1/32" ≤ 3/32" DEPTH
E1	25	UNDERSIZED BOTTOM LEG 2 1/2" LONG 1/16" to 1/8" TOP LEG 1 1/2" LONG 1/16" & UNDERCUT 1 1/2" LONG > 1/32" < 3/32" DEEP
E1	29	Undercut 2" LONG > 1/32" ≤ 3/32" DEEP
E1	32	Undercut 3" LONG > 1/32" ≤ 1/16" DEEP
E2	18	CONCAVITY 1/2" LONG HAS 1/4" THROAT
E2	19 Bottom	UNDER SIZE 1/16" 50% OF WELD
E2	25	UNDER SIZE 1/16" BOTH LEGS 1 1/4" LONG
E3	24 TOP	CONCAVITY 7/16" THROAT 50% OF LENGTH
E3	24 Bottom	CONCAVITY 1/2" LONG 7/16" THROAT.
E3	7	Undercut 1/2" LONG 1/16" DEEP.
E4	6	Undercut 2 places 3/16" LONG > 1/32" < 1/16" & 1/16" LONG > 1/32" < 1/16"
E4	12	Undercut 1/2" LONG > 1/32" < 1/16"
E4	15	Undercut 1/4" LONG > 1/32" < 1/16"
E4	18	Undercut 2 places 1/2" LONG > 1/32" < 1/16" & 1/2" LONG > 1/32" < 1/16" AND INCOMPLETE WELD TO CORNER UNDERSIZED 3/16" ON TOP LEG 1/2" LONG
E4	26	Undercut 3/16" LONG > 1/32" < 1/16"
E4	31	Undercut 1/4" LONG > 1/32" < 1/16"
E76	11 Bottom	UNDERSIZED 1/8" FOR 1/4" LENGTH
E76	7	UNDERSIZED 1/8" FOR 1/4" LENGTH
E76	19	UNDERSIZED 1/8" FOR 1/4" LENGTH
E9	22 Bottom	Cold LAP 1" LONG
E9	33	Cold LAP 1" LONG
E9		

1345  
OF 28  
79 KLB  
7-12-78

HAVEN BUSH EMBED WELD  
EXAMINATION

Corrections

EMBED NO. E1-3

LOCATION: Poserville Laydown Area

WELD NO.	VISUAL EXAM		REMARKS
	ACCEPT	REJECT	
1 TOP		✓	TOP LEG UNDERSIZED ON CORNER 1/2" LONG 1/16" UNDERSIZE
1 BOTTOM		✓	FULL PENETRATION WELD NOT WELDED FLUSH 1/4" LENGTH 1/16" DEPTH ALSO UNDERCUT 1" LONG > 1/32" < 1/16" DEPTH
2 TOP		✓	COLDLAP ON TOP LEG 1/2" LENGTH WITH 1/16" DEEP CAVITY
2 BOTTOM		✓	UNDERCUT 1" LONG > 1/32" < 3/32" DEPTH
3		✓	UNDERCUT 2 SPOTS: 1" LONG > 1/32" < 1/16" DEPTH 3/8" LONG > 1/32" < 3/12" DEPTH
4	✓		
5	✓		
6		✓	UNDERSIZED BY 1/16" 3/4" LENGTH ON TOP LEG
9		✓	UNDERCUT 6" LONG > 1/32" < 3/32" DEPTH
10	✓		
11	✓		
12		✓	UNDERCUT 1 1/2" LONG > 1/32" < 1/16" DEPTH
15	✓		
16	✓		
19	✓		
20	✓		
21	✓		
22		✓	UNDERCUT 2 1/2" LONG > 1/32" < 3/32" DEPTH
25		✓	UNDERSIZED: BOTTOM LEG 2 1/2" LENGTH BY 1/16" < 1/8" TOP LEG 1 1/2" LENGTH BY 1/16" UNDERCUT 1 1/2" LONG > 1/32" < 3/32" DEPTH
26	✓		
29		✓	UNDERCUT 2" LONG > 1/32" < 3/32" DEPTH
30	✓		
31	✓		
32		✓	UNDERCUT 3" LONG > 1/32" < 1/16" DEPTH
35	✓		

INSPECTED BY:

*J. J. [Signature]* FWE  
*D. [Signature]* FWE  
*R. [Signature]* FWE

- NOTES: 1. Stud welds not included on this list.  
2. Vertical corner welds not examined.

1345  
OF 78  
79  
7-12  
-78  
KER









HAVEN BUSH EMBED WELD  
EXAMINATION

Corrected

EMBED NO. E-4-23

LOCATION: Poseyville Laydown Area

WELD NO.	VISUAL EXAM		REMARKS
	ACCEPT	REJECT	
1	✓		
2	✓		
5	✓		
6		✓	Undercut 2 spots $\frac{3}{16}$ " Long $> \frac{1}{32}$ " $< \frac{1}{16}$ " - $\frac{3}{16}$ " Long $> \frac{1}{32}$ " $< \frac{1}{16}$ "
7	✓		
8	✓		
11	✓		
12		✓	Undercut $\frac{1}{2}$ " Long $> \frac{1}{32}$ " $< \frac{1}{16}$ "
15		✓	Undercut $\frac{1}{4}$ " Long $> \frac{1}{32}$ " $< \frac{1}{16}$ "
16	✓		
17	✓		
18		✓	Undercut 2 spots $\frac{1}{2}$ " Long $> \frac{1}{32}$ " $< \frac{1}{16}$ " - $\frac{1}{2}$ " Long $> \frac{1}{32}$ " $< \frac{1}{16}$ " Incomplete Weld To Corner - Undercut by $\frac{3}{16}$ " Top Long $\frac{1}{2}$ " Long
21	✓		
22	✓		
25	✓		
26		✓	Undercut $\frac{3}{16}$ " Long $> \frac{1}{32}$ " $< \frac{1}{16}$ "
27	✓		
28	✓		
31		✓	Undercut $\frac{1}{4}$ " Long $> \frac{1}{32}$ " $< \frac{1}{16}$ "
32	✓		
33 Top	✓		
33 Bottom	✓		
34 Top	✓		
34 Bottom	✓		

NOTES: 1. Stud welds not included on this list.  
2. Vertical corner welds not examined.

INSPECTED BY: R.O. Adams F.W.E.

J.J. [Signature]  
B.W. [Signature] F.W.F.

15 of 28  
7-2  
79  
198

HAVEN BUSH EMBED WELD  
EXAMINATION

Corrections

EMBED NO. E6-13

LOCATION: OUTSIDE CONTAINMENT I

WELD NO.	VISUAL EXAM		REMARKS
	ACCEPT	REJECT	
1	✓		
2	✓		
5	✓		
8	✓		
9	✓		
10	✓		
11	✓		
12	✓		
13	✓		
16	✓		
19	✓		
20	✓		
23	✓		
26	✓		
27	✓		
28	✓		
29	✓		
30	✓		
31	✓		
34	✓		
37	✓		
38	✓		
41	✓		
44	✓		
45	✓		
46	✓		
47	✓		

NOTES: 1. Stud welds not included on this list.  
2. Vertical corner welds not examined.

INSPECTED BY: *RO Adams* FWE  
*JJ Adams* FWE  
*B.W. Casner* FWE

61-21-L  
537  
7-12-79  
2210 02  
C. J. W. N.

HAVEN BUSH EMBED WELD  
EXAMINATION

Corrected

EMBED NO. EC-13

LOCATION: OUTSIDE CONTAINMENT I

WELD NO.	VISUAL EXAM		REMARKS
	ACCEPT	REJECT	
48	✓		
49	✓		
52	✓		
55	✓		
56	✓		
59	✓		
62	✓		
63	✓		
64	✓		
65	✓		
66	✓		
67	✓		
70	✓		
73	✓		
74	✓		
77	✓		
80	✓		
81	✓		
82	✓		
83	✓		
84	✓		
85	✓		
88	✓		
91	✓		
92	✓		

NOTES: 1. Stud welds not included on this list.  
2. Vertical corner welds not examined.

INSPECTED BY: *R.O. Adams* FWIE  
*B.W. Garner* FWIE  
*J. J. [unclear]*

141B  
7-12-78

21 of 78  
b9

HAVEN BUSH EMBED WELD  
EXAMINATION

Corrosion

EMBED NO. E76-1

LOCATION: OUTSIDE CONTAINMENT I

WELD NO.	VISUAL EXAM		REMARKS
	ACCEPT	REJECT	
3	✓		
4	✓		
7	✓		
8 TOP	✓		
8 BOTTOM	✓		
9	✓		
10	✓		
11 TOP	✓		
11 BOTTOM		✓	UNDERSIZED BY 1/8" FOR 1/4" LENGTH
12	✓		
15	✓		
16	✓		
19	✓		
21	✓		
22	✓		
24	✓		
27	✓		
28	✓		

NOTES: 1. Stud welds not included on this list.  
2. Vertical corner welds not examined.

INSPECTED BY: *K.O. Adams*

7-12-78  
KCB  
NCR 1545  
220728  
79

HAVEN BUSH EMBED WELD  
EXAMINATION

*Continued*

EMBED NO. E7b-16

LOCATION: OUTSIDE CONTAINMENT I

WELD NO.	VISUAL EXAM		REMARKS
	ACCEPT	REJECT	
3	✓		
4	✓		
7		✓	UNDERSIZED BY 1/8" FOR 1/4" LENGTH ON TOP LEG, IN CORNER
8 TOP	✓		
8 BOTTOM	✓		
9	✓		
10	✓		
11 TOP	✓		
11 BOTTOM	✓		
12	✓		
15	✓		
16	✓		
19		✓	UNDERSIZED BY 1/8" FOR 1/4" LENGTH ON TOP LEG IN CORNER
21	✓		
22	✓		
24	✓		
27	✓		
28	✓		

NOTES: 1. Stud welds not included on this list. INSPECTED BY: *R.O. Johnson*  
2. Vertical corner welds not examined.

KSR  
7-12-78  
230528  
79  
NCR 1545





HAVEN BUSH EMBED WELD  
EXAMINATION

EMBED NO. E9-2

LOCATION: POSEYVILLE LAYDOWN AREA

WELD NO.	VISUAL EXAM		REMARKS
	ACCEPT	REJECT	
1	✓		
4	✓		
7	✓		
8	✓		
11	✓		
14	✓		
15	✓		
18	✓		
19 TOP	✓		
19 BOTTOM	✓		
20	✓		
21	✓		
22 TOP	✓		
22 BOTTOM		✓	COLDLAP 1" LONG
23	✓		
26	✓		
27	✓		
30	✓		
32	✓		
33		✓	COLDLAP 1" LONG
35	✓		
38	✓		
39	✓		
40			NO WELD DETAIL SHOWN ON DRWG. C-658(Q) REV 6 FOR THIS WELD GENERAL APPEARANCE OF WELD ACCEPTABLE

NOTES: 1. Stud welds not included on this list.  
2. Vertical corner welds not examined.

INSPECTED BY: *[Signature]* FW

*[Signature]* FW  
*[Signature]* FW  
 7-12  
 86

HAVEN BUSH EMBED WELD  
EXAMINATION

Completed

EMBED NO. E 106-7

LOCATION: OUTSIDE CONTAINMENT I

WELD NO.	VISUAL EXAM		REMARKS
	ACCEPT	REJECT	
6	✓		
7	✓		
10	✓		
11 TOP	✓		
11 BOTTOM	✓		
12	✓		
13	✓		
14 TOP	✓		
14 BOTTOM	✓		
15	✓		
20	✓		
21	✓		
24	✓		
26	✓		
27	✓		
29	✓		
32	✓		
33	✓		
37	✓		
39	✓		
40	✓		
41	✓		
44	✓		
45	✓		

NOTES: 1. Stud welds not included on this list.  
2. Vertical corner welds not examined.

INSPECTED BY: *R.O. Adams* F.W.E.  
*J.D. Adams* F.W.E.  
*B.W. Camer* F.W.E.  
7-12-78  
KLB  
bl  
26078





HAVEN BUSH EMBED WELD  
EXAMINATION

EMBED NO. E12b-9

LOCATION: OUTSIDE CONTAINMENT I

WELD NO.	VISUAL EXAM		REMARKS
	ACCEPT	REJECT	
6	✓		
7	✓		
10	✓		
13	✓		
14 TOP	✓		
14 BOTTOM	✓		
15	✓		
16	✓		
17 TOP	✓		
17 BOTTOM	✓		
18	✓		
19	✓		
20 TOP	✓		
20 BOTTOM	✓		
21	✓		
24	✓		
27	✓		
28	✓		
31	✓		
34	✓		
36	✓		
38	✓		
39	✓		
40	✓		
42	✓		
45	✓		
48	✓		

NOTES: 1. Stud welds not included on this list.  
2. Vertical corner welds not examined.

INSPECTED BY: R.C. Johnson  
J.J. Miller FWE  
B.W. Casner FWE  
 1-12-78  
 1345  
 29078  
 79

HAVEN BUSH EMBED WELD  
EXAMINATION

EMBED NO. E126-9

LOCATION: OUTSIDE CONTAINMENT

WELD NO.	VISUAL EXAM		REMARKS
	ACCEPT	REJECT	
49	✓		
52	✓		
55	✓		
57	✓		
58	✓		
60	✓		
61	✓		
63	✓		
66	✓		
69	✓		
70	✓		
73	✓		
76	✓		
78	✓		
79	✓		
81	✓		
82	✓		
84	✓		
87	✓		
90	✓		
91	✓		
94	✓		
97	✓		
98 Top	✓		
98 Bottom	✓		
99	✓		
100	✓		

NOTES: 1. Stud welds not included on this list.  
2. Vertical corner welds not examined.

INSPECTED BY: R.O. Adams FWE  
J. J. [unclear] FWE  
B.W. [unclear] FWE  
 1345  
 3006/8  
 79  
 7-12-78  
 KEB









DESIGN BY Tom Napoli DATE 6/12/78 CHECKED BY [Signature] SHEET NO. 1  
 OBJECT HAVEN Busch JOB NO.             
 SUBJECT Nelson Stud Summary CALCULATION NO.            FILE NO.           

	Total	7/8"	Balance
Studs Available	369	84	285
Studs Failing Visual	122	49	73
% failing Visual	33%	58%	26%
MANUALLY WELDED Studs	9	—	9
MANUALLY WELDED, failing Visual	1	—	1
MACHINE WELDED Studs	360	84	276

PRELIMINARY Stud Inspection

Studs Inspected	71	48	23
MANUALLY WELDED	6	—	6
MACHINE WELDED	65	48	17
Studs failing Visual	41	29	12
% failing Visual	63%	60%	52%
BEND TESTED	41	29	12
Failed BEND TEST	9	8	1
% Failed BEND TEST	22%	27.5%	8.5%

MACHINE WELDED Studs NOT PREVIOUSLY TESTED

Studs Available	295	36	259
Studs Failing Visual	83	20	60
% failing Visual	28%	56%	23%

10/12/78  
 3 of 25  
 79  
 148  
 7-12-78



DESIGN BY Tom Napoli DATE 6/19/78 CHECKED BY Car DATE \_\_\_\_\_  
 PROJECT Haven Busch SHEET NO. \_\_\_\_\_  
 SUBJECT TENSILE TEST of Nelson Studs JOB NO. \_\_\_\_\_  
 CALCULATION NO. \_\_\_\_\_ FILE NO. \_\_\_\_\_

Equipment

60 Ton Jack BPC L5074 Area of Piston 13.2867 sq. in  
 Hydraulic pump with GAGE # BPC 5073 25psi increments

Loading Criteria

0.9 of Yield strength

S3L Studs A108 mild steel 50,000psi yield strength

$\frac{3}{4}$ "  $\phi$  stud = 22,089 # for yield

$\frac{7}{8}$ "  $\phi$  stud = 30,066 # " "

.9 YIELD = 19,880 # for  $\frac{3}{4}$ "  $\phi$   
 27,059 # for  $\frac{7}{8}$ "  $\phi$

Embed	Stud #	STUD SIZE	DEGREE of Incomplete fixation	PSI	Pounds
E12B-3	80	$\frac{7}{8}$ " $\phi$ x 8"	180°	2100	27,902
E12B-3	41	$\frac{7}{8}$ " $\phi$ x 8"	180°	2050	27,237
E9A-1	36	$\frac{3}{4}$ " $\phi$ x 6"	180°	1500	19,930
E106-7	25	$\frac{3}{4}$ " $\phi$ x 6"	150°	1500	19,930
E14-21	21	$\frac{3}{4}$ " $\phi$ x 6"	180°	1525	20,262
E12B-7	41	$\frac{7}{8}$ " $\phi$ x 8"	180°	2075	27,569
E12B-3	56	$\frac{7}{8}$ " $\phi$ x 8"	180°	2100	27,902

Note: All studs tested showed NO signs of stress cracks or rust flaking after being pulled.

79  
 5405  
 1395  
 7-12

HAVEN BUSH - EMBED EXAMINATION

EMBED NO.	STUD NO.	VISUAL EXAM		REMARKS	FWE	DATE
		ACCEPT	REJECT			
E 4-7	35	✓			K. Anderson D. Carlson	6-15-78
	36	✓				
	37	✓				
	38	✓				
	39	✓				
	40	✓				
E 10 b-3	1	✓				
	2		✓	90° IF		
	3	✓				
	4	✓				
	5	✓				
	16	✓				
	19	✓				
	25	✓				
	28	✓				
	34	✓				
	38	✓				
E 10 b 6	1		✓	90° IF		
	2	✓				
	3	✓				
	4	✓				
	5		✓	90° IF		
	16	✓				
	19		✓	45° IF		
	25	✓				
	28		✓	180° IF		
	34		✓	60° IF		
	38	✓			✓	✓

NOTE: Record amount of incomplete fusion in degrees in the Remarks Column

INSPECTED BY: K.O. Anderson FWE, D.L. Carlson SFWF

KEB  
7-12-78  
128 1340  
350528  
79

HAVEN BUSH - EMBED EXAMINATION

EMBED NO.	STUD NO.	VISUAL EXAM		REMARKS	FWE	DATE
		ACCEPT	REJECT			
E 11-3	1	✓		MANUAL WELD	K. ANDERSON P. CARLSON	6-15-78
	2	✓		↓		
	3	✓				
	10	✓				
	12		✓	180° IF		
	23		✓	90° IF		
	26	✓				
E 11-6	1	✓		MANUAL WELD		
	2	✓		↓		
	3	✓				
	10	✓				
	12	✓				
	23	✓				
	26	✓				
12 b-1	1		✓	180° CRACKED AT BASE		
	2		✓	↓		
	3		✓			
	4		✓	↓		
	5		✓	90° IF		
	35	✓				
	37	✓				
	41		✓	STUD BROKEN OFF		
	56		✓	180° IF		
	59		✓	180° IF		
	62	✓				
	77	✓				
	80		✓	STUD BROKEN OFF		
	83		✓	90° IF 90° CRACK AT BASE		

NOTE: Record amount of incomplete fusion in degrees in the Remarks Column

INSPECTED BY: K. O. Anderson FWE, D. L. Carlson SFWE

REC'D  
 3 COF 28  
 7-12-78  
 KER

HAVEN BUSH - EMBED EXAMINATION

EMBED NO.	STUD NO.	VISUAL EXAM		REMARKS	FWE	DATE
		ACCEPT	REJECT			
12 b 3	1	}			K. Anderson D Carlson	5-3-78
	2					
	3			THESE STUDS & ANCHORS THEY ATTACH TO ARE NOT INSTALLED		
	4					
	5					
	35		✓	180° IF		
	37		✓			
	41		✓	180° IF		
	56		✓	180° IF		
	59		✓	180° IF		
	62		✓	180° IF 180° CRACK AT BASE		
	77		✓	180° IF		
	80		✓	180° IF		
	83		✓	180° IF		
12 b 5	1		✓			
	2		✓			
	3		✓			
	4		✓			
	5		✓			
	35			✓	<del>180° IF</del> 180° IF OK Carlson 5/12/78	
	37		✓			
	41			✓	180° IF	
	56			✓	180° IF	
	59		✓			
	62		✓			
	77		✓			
	80		✓			
83		✓			✓	✓

NOTE: Record amount of incomplete fusion in degrees in the Remarks Column

INSPECTED BY: K.O. Adams FWE, D Carlson SFW

12 b 5  
7-12-78

12 b 5  
3705-78  
79

HAVEN BUSH - EMBED EXAMINATION

EMBED NO.	STUD NO.	VISUAL EXAM		REMARKS	FWE	DATE
		ACCEPT	REJECT			
E 11-10	1	✓		MANUAL WELD	N. ADLER P. CARROLL J. ARCHER	3-14-78
	2	✓		↓		
	3	✓		↓		
	10	✓				
	12	✓		PREVIOUSLY BENT		
	23		✓	20° IF PREVIOUSLY PASSED BEND		
	26	✓				
E 11-9	1	<del>✓</del>	✓	MANUAL WELD UNACCEPTABLE UNDER CUT ON BASE P. W. 1/2" DEEP		
	2	✓		MANUAL WELD		
	3	✓		MANUAL WELD		
	10		✓	30° IF PREVIOUSLY PASSED BEND		
	12	✓				
	23	✓				
	26	✓				
E 7b-16	1	✓				
	2		✓	20° IF		
	20	✓				
	23	✓				
E 3-5	25	✓				
	26	✓				
	27	✓				
	28	✓				
E 2-81	21	✓				
	22	✓				
E 7b-8	1		✓	60° IF		
	2	✓				
	20	✓				
	23	✓			✓	✓

NOTE: Record amount of incomplete fusion in degrees in the Remarks Column

INSPECTED BY: R.O. Adams FWE J.D. Archer FWE

BY P.W. CARROLL FWE

7-12-78

NCR 1345  
38 of 28  
79

HAVEN BUSH - EMBED EXAMINATION

EMBED NO.	STUD NO.	VISUAL EXAM		REMARKS	FWE	DATE
		ACCEPT	REJECT			
E 11-8	1	✓		MANUAL WELD	I. ANDERSON P. CAMERON	6-14-78
	2	✓		↓		
	3	✓		↓		
	10	✓				
	12	✓				
	23	✓				
	26	✓				
E 7b-1	1	✓				
	2		✓	90° IF		
	20	✓				
	23	✓				
E 12b-9	1	✓				
	2	✓				
	3	✓				
	4	✓				
	5	✓				
	35		✓	STUD BROKEN OFF		
	37	✓		PREVIOUSLY BENT		
	41		✓	90° IF PREVIOUSLY FUSED BOND		
	56		✓	45° IF PREVIOUSLY FUSED BOND		
	59		✓	STUD BROKEN OFF		
	62		✓	45° IF PREVIOUSLY FUSED BOND		
	77	✓		PREVIOUSLY BENT		
	80		✓	STUD BROKEN OFF		
	83		✓	STUD BROKEN OFF	✓	✓

NOTE: Record amount of incomplete fusion in degrees in the Remarks Column

INSPECTED BY: K.O. Anderson FWE J. Gardner FWE  
P.W. Cameron FWE

NCR 1345  
 39 OF 78  
 79  
 1-12-78

HAVEN BUSH - EMBED EXAMINATION

EMBED NO.	STUD NO.	VISUAL EXAM		REMARKS	FWE	DATE
		ACCEPT	REJECT			
E 10 b 7	1		✓	120° IF	R. Anderson P. Chamberlain T. ...	6-14-78
	2	✓				
	3		✓	90° IF		
	4	✓				
	5	✓				
	16	✓				
	19	✓				
	25		✓	150° IF		
	28	✓				
	34	✓				
	38	✓				
	E G-13	95		✓		
96		✓				
97		✓				
98		✓		PREVIOUSLY BENT		
99			✓	10° IF		
100			✓	90° IF PREVIOUSLY PASSED BENT		
101		✓				
102		✓				
103			✓	10° IF PREVIOUSLY PASSED BENT		
104		✓		PREVIOUSLY BENT		
105		✓	STUD BROKEN OFF			
	106	✓			✓	✓

NOTE: Record amount of incomplete fusion in degrees in the Remarks Column

INSPECTED BY: R.O. Adams FWE J. Gardner FWE

R.W. Gamm FWE

112R 1345  
400F 78  
79  
7-12-78



HAVEN BUSH - EMBED EXAMINATION

EMBED NO.	STUD NO.	VISUAL EXAM		REMARKS	FWE	DATE
		ACCEPT	REJECT			
E 12 a-5	29	✓		PREVIOUSLY PASSED	E. ANDERSON P. CHAPMAN	5-14-78
	32	✓				
	35	✓				
	50	✓				
	53	✓		PREVIOUSLY PASSED		
	56		✓	30° IF PREVIOUSLY PASSED BAND		
	71		✓	120° IF PREVIOUSLY PASSED BAND		
	74		✓	120° IF PREVIOUSLY PASSED BAND		
	77		✓	120° IF PREVIOUSLY PASSED BAND		
E 12 b-2	1		✓	45° IF PREVIOUSLY PASSED BAND		
	2		✓	30° IF PREVIOUSLY PASSED BAND		
	3		✓	45° IF PREVIOUSLY PASSED BAND		
	4		✓	20° IF PREVIOUSLY PASSED BAND		
	5		✓	45° IF PREVIOUSLY PASSED BAND		
	35		✓	120° IF PREVIOUSLY PASSED BAND		
	37	✓				
	41		✓	90° IF PREVIOUSLY PASSED BAND		
	56		✓	STUD BROKEN OFF		
	59	✓				
	62		✓	30° IF PREVIOUSLY PASSED BAND		
	77		✓	120° IF PREVIOUSLY PASSED BAND		
	80		✓	45° IF PREVIOUSLY PASSED BAND		
	83		✓	90° IF PREVIOUSLY PASSED BAND	✓	✓

NOTE: Record amount of incomplete fusion in degrees in the Remarks Column

INSPECTED BY: R.O. Adams FWE J. Gardner FWE  
 B.W. Crum FWE

NCR 1345  
 9/07/78  
 79  
 1-12-78

HAVEN BUSH - BOND EXAMINATION

BOND NO.	STUD NO.	VISUAL EXAM		REMARKS	FWE	DATE
		ACCEPT	REJECT			
E 12 b-5	1		✓	20° IF PREVIOUSLY PASSED BOND	E. J. JACKSON E. CAMPBELL S. FRENCH	6-14-78
	2		✓	20° IF PREVIOUSLY PASSED BOND		
	3		✓	45° IF PREVIOUSLY PASSED BOND		
	4		✓	STUD BROKEN OFF		
	5		✓	70° IF PREVIOUSLY PASSED BOND		
	35	✓				
	37	✓				
	41		✓	45° IF PREVIOUSLY PASSED BOND		
	56			STUD BROKE OFF		
	59		✓	5° IF PREVIOUSLY PASSED BOND		
62		✓	20° IF PREVIOUSLY PASSED BOND			
77			STUD BROKE OFF			
80	✓					
83		✓	45° IF PREVIOUSLY PASSED BOND			
E 9 a-1	35	✓				
	36		✓	180° IF		
	37	✓				
	38	✓				
	39	✓				
	40	✓				
E 4-21	35	✓				
	36	✓				
	37	✓				
	38	✓				
	39	✓				
	40	✓				

NOTE: Record amount of incomplete fusion in degrees in the Remarks Column

INSPECTED BY: R.O. Adams FWE J. J. [unclear] FWE  
B.W. [unclear] FWE

NOV 15 1978  
 120 F 78  
 79  
 KSB 7-12-78

HAVEN BUSH - EMBED EXAMINATION

EMBED NO.	STUD NO.	VISUAL EXAM		REMARKS	FWE	DATE
		ACCEPT	REJECT			
E4-23	35	✓			37	
	36	✓				
	37	✓				
	38	✓				
	39	✓				
	40	✓			↓	✓
E4 - <sup>NO</sup> number	35	✓			2. Exam = 10.	
	36		✓	NO STUD		
	37	✓				
	38	✓				
	39	✓				
	40	✓				
E7B-3	1		✓	180° I.F.		
	2	✓				
	20		✓	90° I.F.		
	23		✓	90° I.F.		
E7B-4	1		✓	90° I.F.		
	2		✓	90° I.F.		
	20	✓				
	23	✓				
E7B-6	1		✓	90° I.F.		
	2		✓	90° I.F.		
	20	✓				
	23	✓				
E7B-7	1		✓	180° I.F.		
	2	✓				
	20	✓				
	23	✓			↓	✓

NOTE: Record amount of incomplete fusion in degrees in the Remarks Column

INSPECTED BY: *R.O. Adams* FWE *B.W. Cannon* FWE  
*98 Creelan* FWE *Shepherd* FWE

NCR 1345  
 430528  
 79  
 7-12-78  
 KEB

HAVEN BUSH - EMBED EXAMINATION

EMBED NO.	STUD NO.	VISUAL EXAM		REMARKS	FWE	DATE
		ACCEPT	REJECT			
E7B-9	1	✓				
	2		✓	90° IF		
	20	✓				
	23	✓				
E7B-10	1		✓	90° IF		
	2	✓				
	20	✓				
	23	✓				
E7B-13	1		✓	45° IF		
	2		✓	45° IF		
	20		✓	20° IF		
	23	✓				
E7B-14	1		✓	45° IF		
	2		✓	45° IF		
	20	✓				
	23	✓				
E7B-15	1		✓	90° IF		
	2		✓	45° IF		
	20	✓				
	23	✓				
E7B-17	1		✓	180° IF		
	2	✓				
	20		✓	90° IF		
	23	✓				
E7B-18	1		✓	90° IF		
	2	✓				
	20		✓	90° IF		
	23	✓			✓	✓

NOTE: Record amount of incomplete fusion in degrees in the Remarks Column

INSPECTED BY:

*J. J. Ancker* FWE  
*S. Buckett* FWE

NCR 1395  
 440P 28  
 79  
 7-12-78

HAVEN BUSH - EMBED EXAMINATION

EMBED NO.	STUD NO.	VISUAL EXAM		REMARKS	FWE	DATE
		ACCEPT	REJECT			
E-14-3	19	✓				
	21	✓				
	30	✓				
	33	✓				
E14-9	19	✓				
	21	✓				
	30		✓	130° = F		
	33	✓				
E 14-13	19		✓	90° = F		
	21	✓				
	30		✓	45° IF		
	33		✓	90° IF		
E 14-16	19		✓	45° IF		
	21		✓	90° IF		
	30		✓	90° IF		
	33	✓				
E14-17	19	✓				
	21		✓	45° IF		
	30	✓				
	33	✓				
E-14-20	19	✓				
	21	✓				
	30		✓	90° IF		
	33	✓				
E 14-21	19	✓				
	21		✓	180° IF		
	30	✓				
	33		✓	10° IF	✓	✓

NOTE: Record amount of incomplete fusion in degrees in the Remarks Column

INSPECTED BY: *J. Beckwith* FWE  
*J. Beckwith* FWE

NOV 13 1945  
 45928  
 79  
 100  
 7-12-45

HAVEN BUSH - EMBED EXAMINATION

EMBED NO.	STUD NO.	VISUAL EXAM		REMARKS	FWE	DATE
		ACCEPT	REJECT			
E 9-2	5		✓	45° IF		
	6		✓	15° IF		
	9	✓				
	10		✓	20° IF		
	31	✓				
	34	✓				
E 9-1	5	✓				
	6	✓				
	9	✓				
	10	✓				
	31		✓	20° IF		
	34	✓				✓
E 9-3	5		✓	100° IF		
	6	✓				
	9	✓				
	10	✓				
	31	✓				
	34	✓				
E 9-4	5	✓				
	6	✓				
	9	✓				
	10	✓				
	31	✓				
	34	✓				✓

NOTE: Record amount of incomplete fusion in degrees in the Remarks Column

INSPECTED BY: *J. J. [Signature]* FWE *B.H. [Signature]* FWE  
*K.O. [Signature]* FWE *D. [Signature]* FWE

NCR: 1342  
 960528  
 79  
 KIB  
 7-12-78

HAVEN BUSH - EMBED EXAMINATION

EMBED NO.	STUD NO.	VISUAL EXAM		REMARKS	FWE	DATE
		ACCEPT	REJECT			
E1-2	37	✓			D. E. Cramer FWE	
	38	✓				
	39	✓				
	40	✓				
	41	✓				
E1-3	37	✓				
	38	✓				
	39	✓				
	40	✓				
	41	✓				
	42	✓				
E3-9	25	✓				
	26	✓				
	27	✓				
	28	✓				
E3-22	25	✓				
	26	✓				
	27		✓	15° IF		
	28	✓				
E4-6	35	✓			F. CRAMER E. ANDERSON S. APPLER	6-14-78
	36	✓				
	37	✓				
	38	✓				
	39	✓				
	40	✓				

NOTE: Record amount of incomplete fusion in degrees in the Remarks Column

INSPECTED BY: J. J. Anderson FWE  
 K. O. [Signature] FWE  
 B. W. Cramer FWE  
 S. P. [Signature] FWE

122 1542  
 470678  
 7-12-78  
 KLB  
 79

HAVEN BUSH - EMBED EXAMINATION

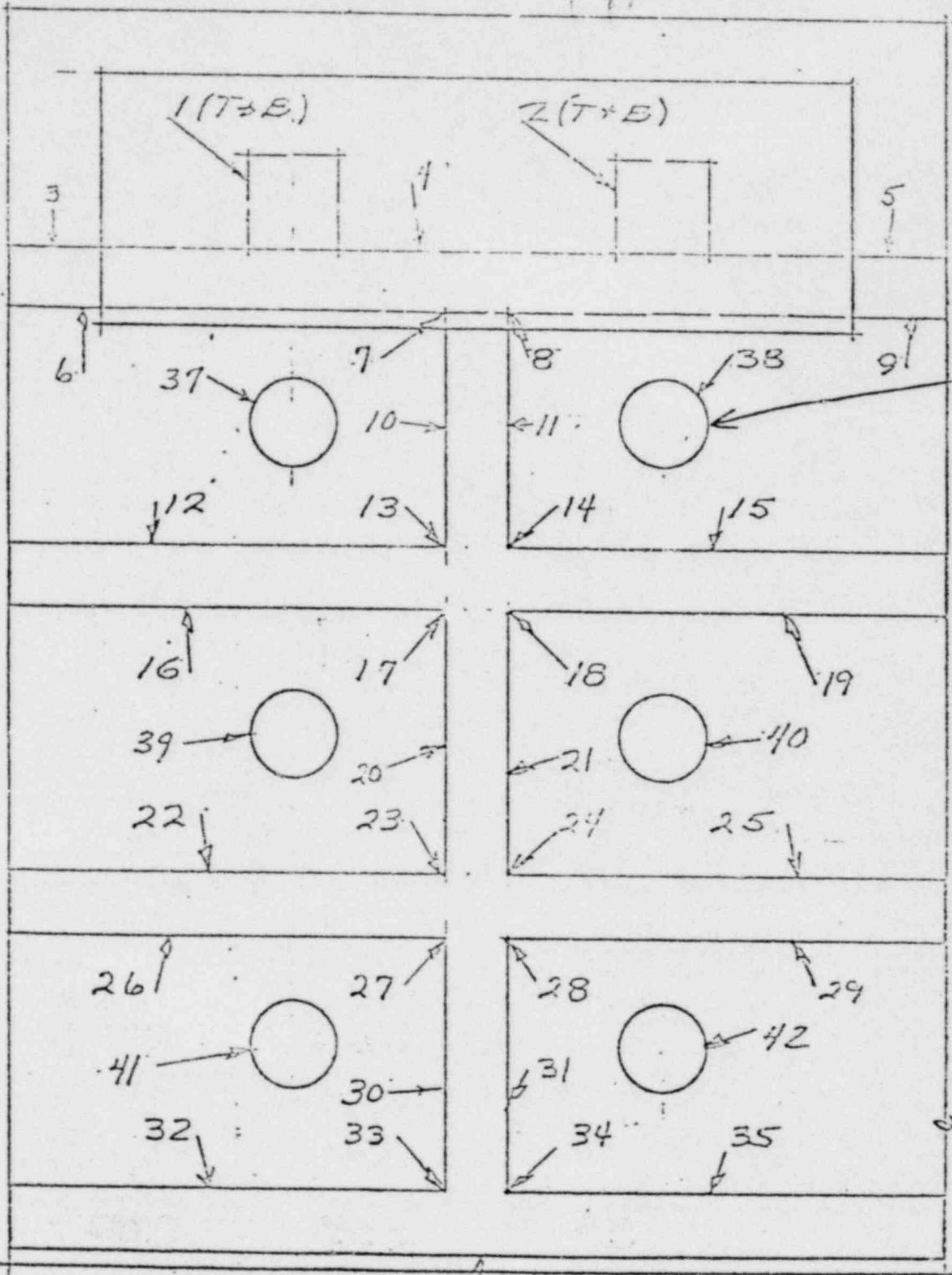
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		ACCEPT	REJECT			
E 9.5	5	✓				
	6	✓				
	9	✓				
	10	✓				
	31	✓				
E 9.6	5	✓				
	6	✓				
	9	✓				
	10	✓				
	31	✓				
E 13 b-7 ? E 12 b-7	34	✓				
	1	✓				
	2	✓				
	3		✓	90° IF		
	4	✓				
	5	✓				
	35		✓	45° IF		
	37	✓				
	41		✓	180° IF		
	56	✓				
	59		✓	15° IF		
	62		✓	15° IF		
	77		✓	30° IF		
80	✓					
83		✓	20° IF	✓	✓	

NOTE: Record amount of incomplete fusion in degrees in the Remarks Column

INSPECTED BY: *R. L. ...* FWE *P.W. ...* FWE  
*Q. ...* FWE

100% 1345  
 48° 6' 28"  
 7-12-8  
 KSB  
 79





~~XXXXXXXXXX~~  
3/4"  $\phi$  x 6

*Handwritten notes:*  
1-11-73  
J. J. [unclear]  
[unclear]

36

272  
J. J. [unclear]  
LUSCH  
COMPANY

3443 CHICAGO DR. S.W.  
GRANDVILLE, MICH. 49438  
AREA 616 532-3643

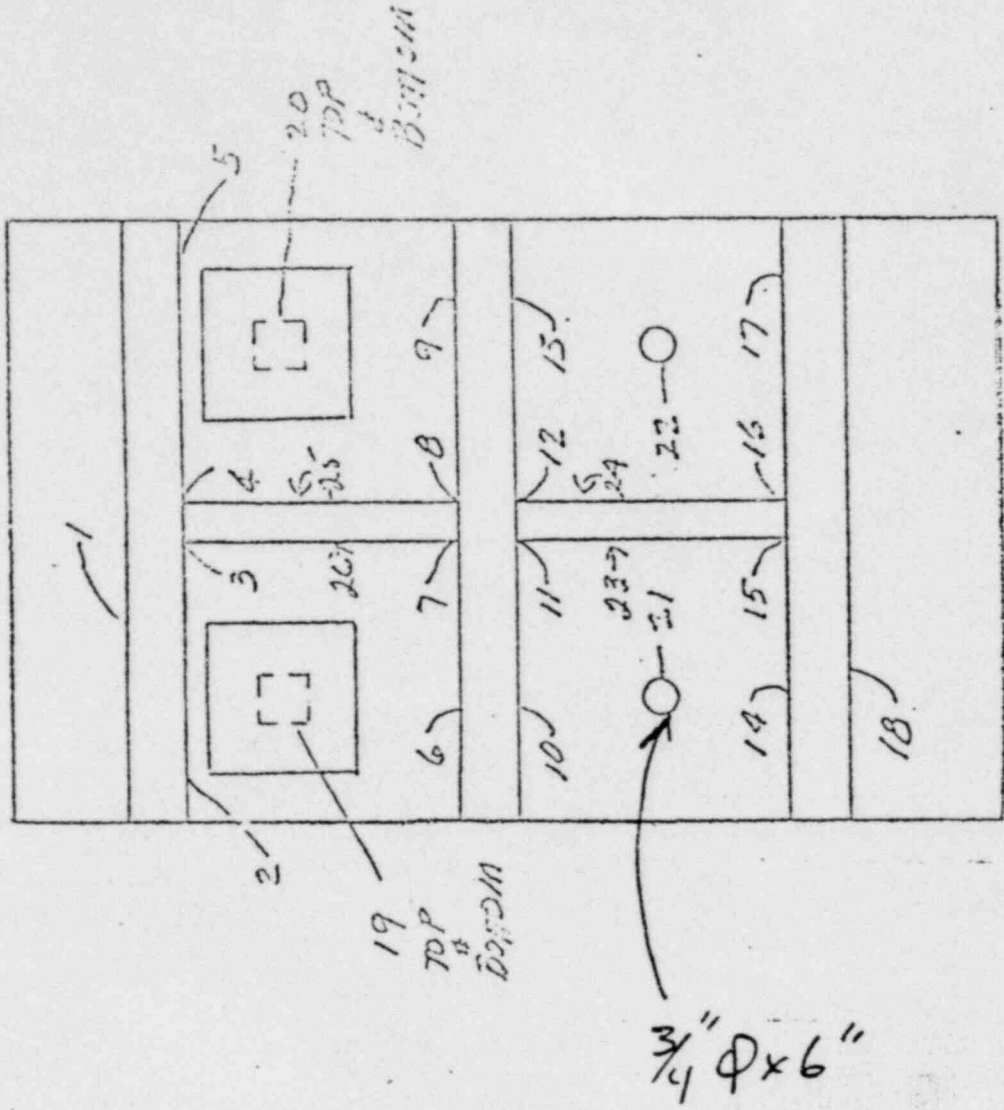
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Bechtel Mark E1  
 TITLE \_\_\_\_\_  
 ORDER NO. \_\_\_\_\_  
 EY \_\_\_\_\_ DATE \_\_\_\_\_ SHEET \_\_\_\_\_

49  
139  
28  
[unclear]

5/9/73

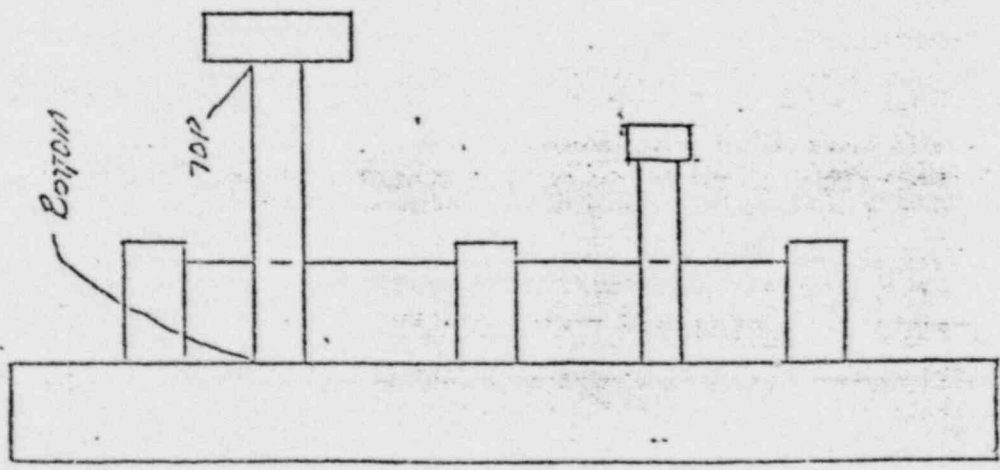
Corrected Copy

608 5/8 73  
200



Welding Log  
10-14-73

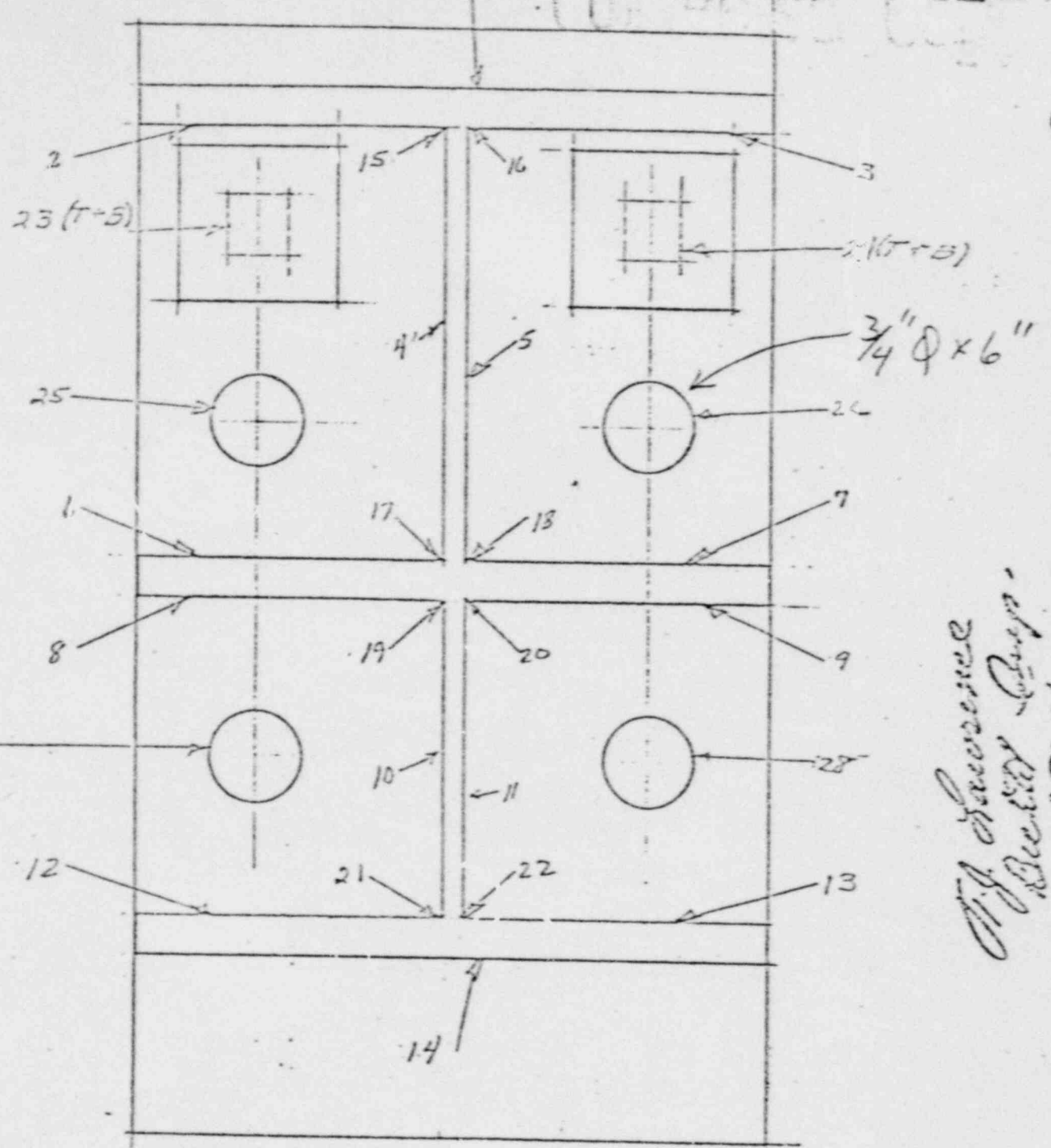
501 WELDING LOG



E-2

NCR 139  
50 of 73  
1058  
7-12-78  
79

Approved <sup>①</sup>



W. J. Lawrence  
Quality Control  
P. 76

6272  
L. W. WERN  
BUSCH  
COMPANY

3143 CHICAGO DR. S.W.  
GRANDVILLE, MICH. 49418  
AREA 518 532-3641

PROJECT 910-75 EMBEDS C2  
TITLE EMBEDS - BECHTEL MK-E-3  
ORDER NO. \_\_\_\_\_  
BY \_\_\_\_\_ DATE \_\_\_\_\_ SHEET \_\_\_\_\_

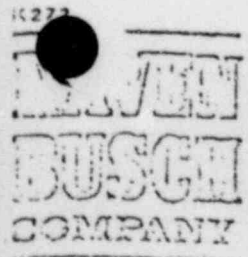
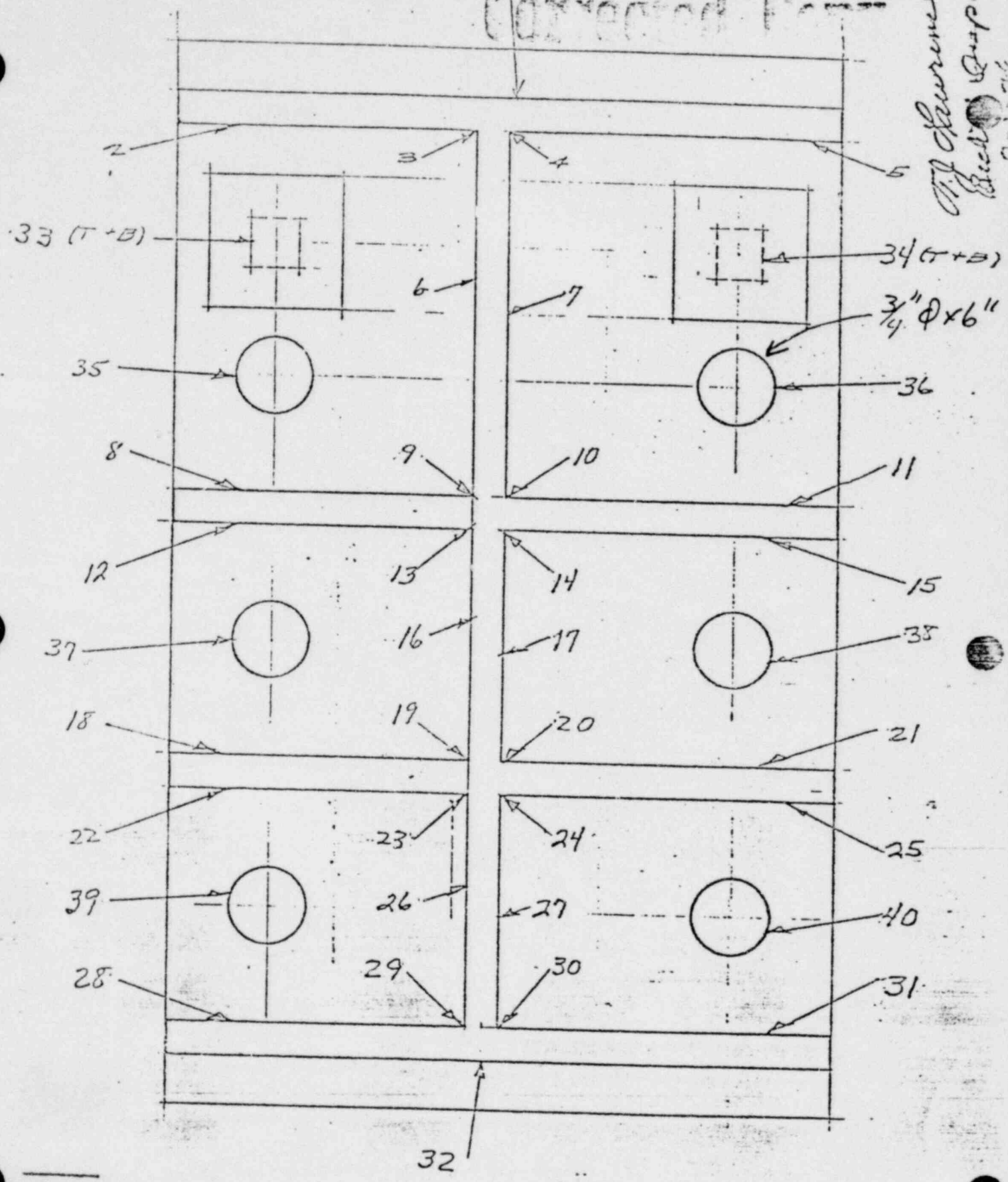
1/69

300-1704  
ATTACHED A

8/28/78  
KAM  
15/13/78

Corrected Plan

*J. Lawrence  
Bechtel Corp.*



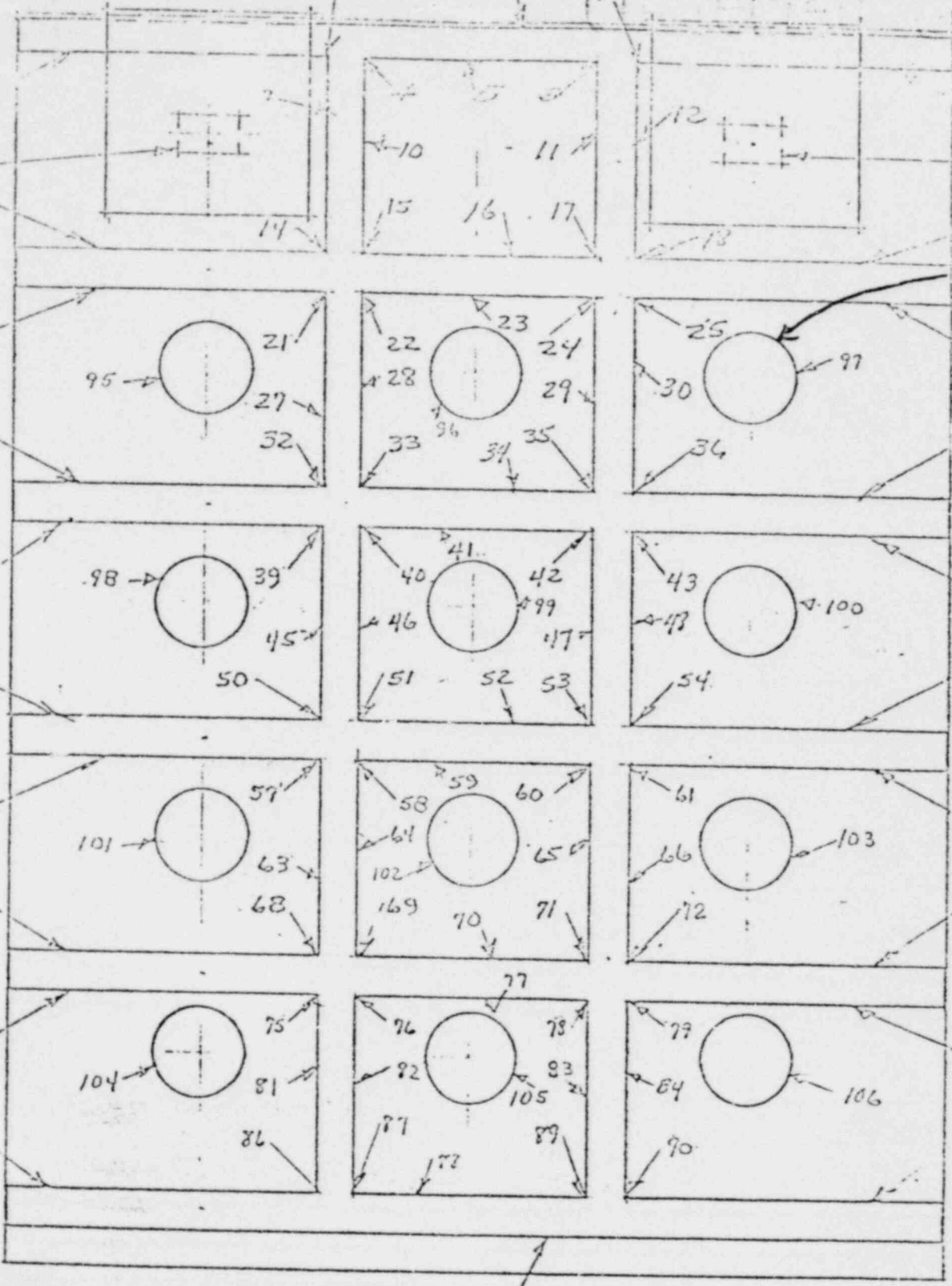
3443 CHICAGO DR. S.W.  
GRANDVILLE, MICH. 49418  
AREA 516 532-3641

PROJECT 90-73 EMBEDS D2

TITLE BECHTEL TYPE E-4 (Pcs-70)

ORDER NO. \_\_\_\_\_

MCA 1/3/74 52 94 74



7/8" Ø x 8

1272

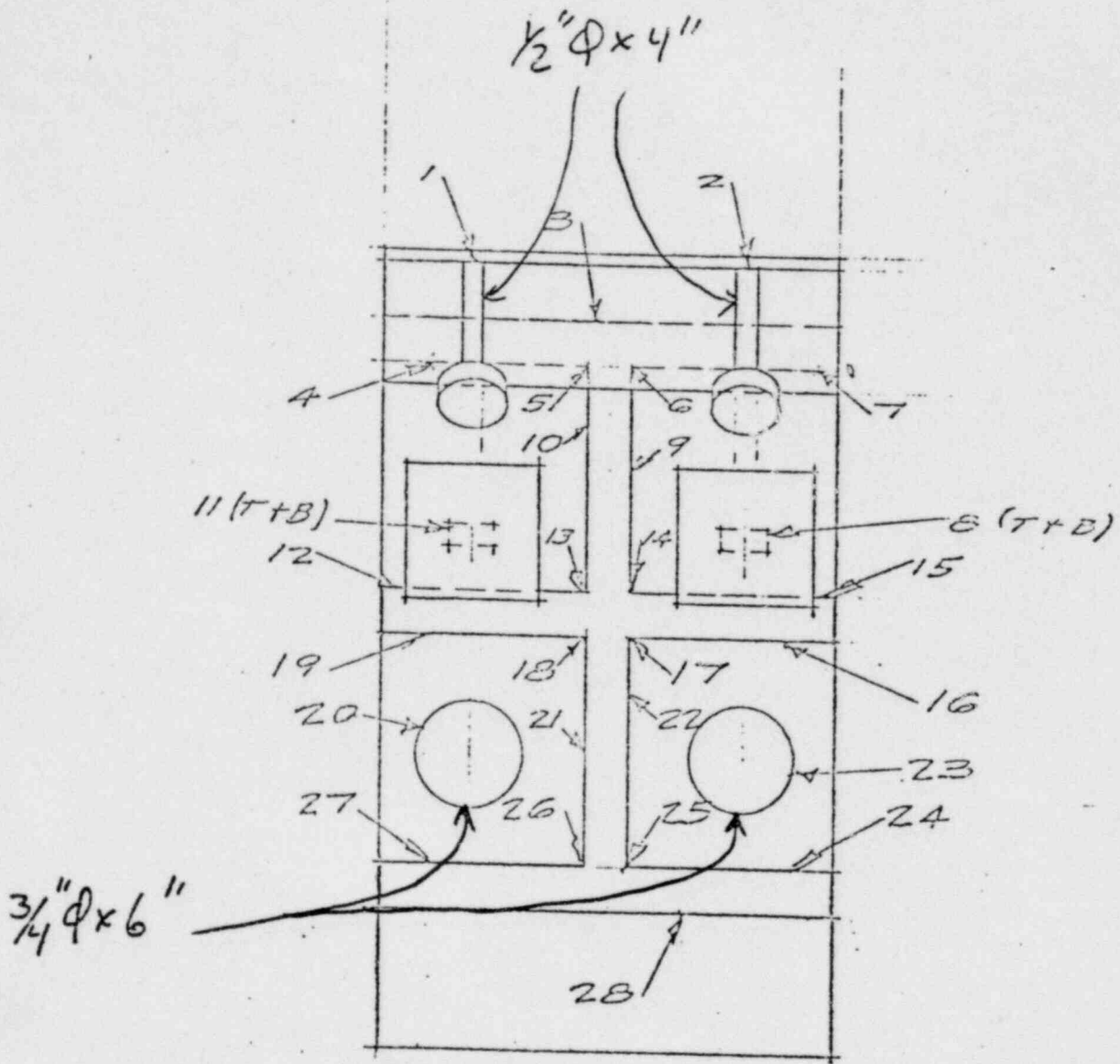


3443 CHICAGO DR. S.W.  
 GRANDVILLE, MICH. 49418  
 AREA 616 532-3641

PROJECT CIR-73 EMBEDDED 1.3  
Rock 1' Thick E6  
 TITLE \_\_\_\_\_  
 ORDER NO. \_\_\_\_\_  
 BY \_\_\_\_\_ DATE \_\_\_\_\_

MCR 1345  
 53 of 78  
 79  
 7-12-80

*Handwritten notes at the top of the page, partially illegible.*

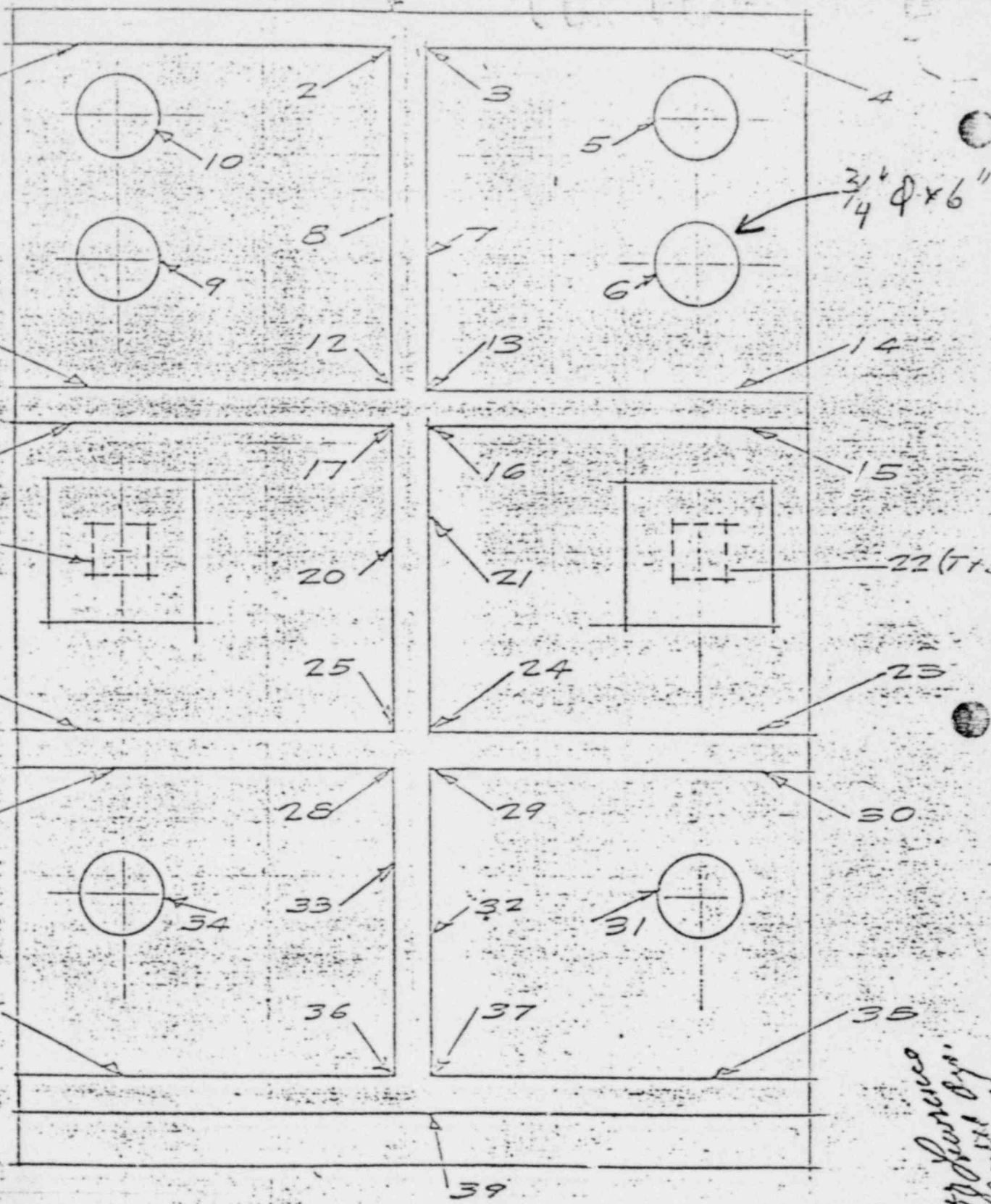


3443 CHICAGO DR. S.W.  
GRANDVILLE, MICH. 49418  
AREA 616 532-3641

PROJECT 91Q-73 EMBED C3  
Bechtel Mark E76  
TITLE \_\_\_\_\_  
BY \_\_\_\_\_ DATE \_\_\_\_\_  
ORDER NO. \_\_\_\_\_  
FEB 79  
7-12-78

MAR 13 1979  
540P 28

Consolidated Plans



$\frac{3}{4} \phi \times 6''$

*Approved by*  
*[Signature]*



3443 CHICAGO DR. S.W.  
 GRANDVILLE, MICH. 49418  
 AREA 616 532-3641

PROJECT 910-73 EMBEDS DS  
Bechtel Mark E9

TITLE \_\_\_\_\_

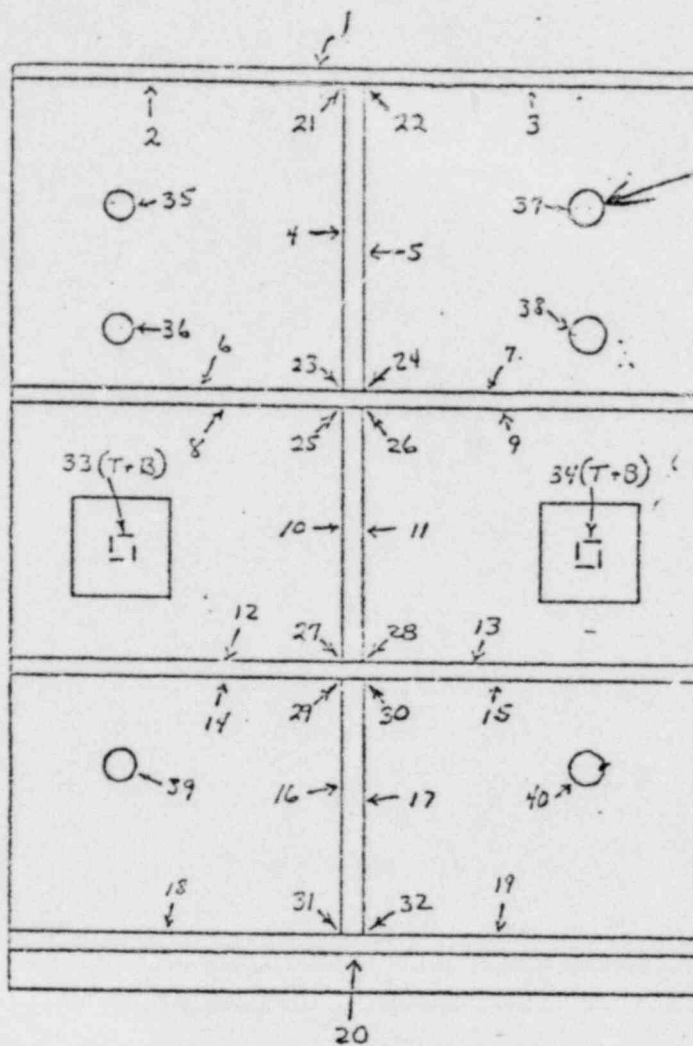
BY \_\_\_\_\_ DATE \_\_\_\_\_

ORDER NO. 550528

DATE 1/28/34

K272

*Completed*



$3/4'' \text{ } \phi \times 6''$

1272

5443 CHICAGO DR. S.W.  
 GRANDVILLE, MICH. 49418  
 AREA 016 532-3041

PROJECT CIR-73 EMENDMENT A6 E9a

TITLE \_\_\_\_\_

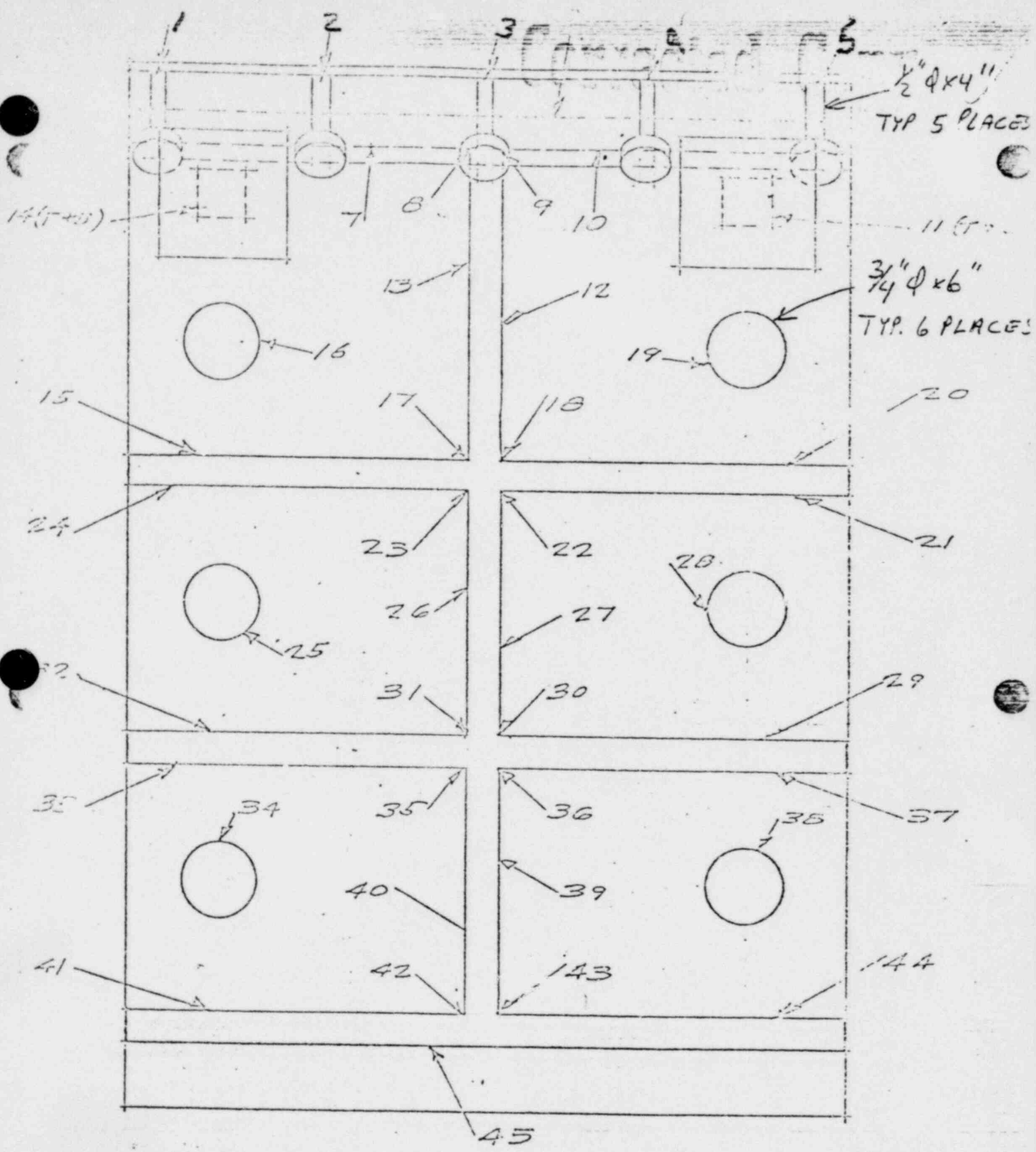
ORDER NO. \_\_\_\_\_

BY \_\_\_\_\_ DATE \_\_\_\_\_

KSP  
7-12-78  
N/K 1345  
56 of 78  
79

186





212

3443 CHICAGO DR. S.W.  
 GRANDVILLE, MICH. 49413  
 AREA 616 532-3641

PROJECT C/Q-73 ENGINEERING  
8-14-78 E-106

TITLE \_\_\_\_\_

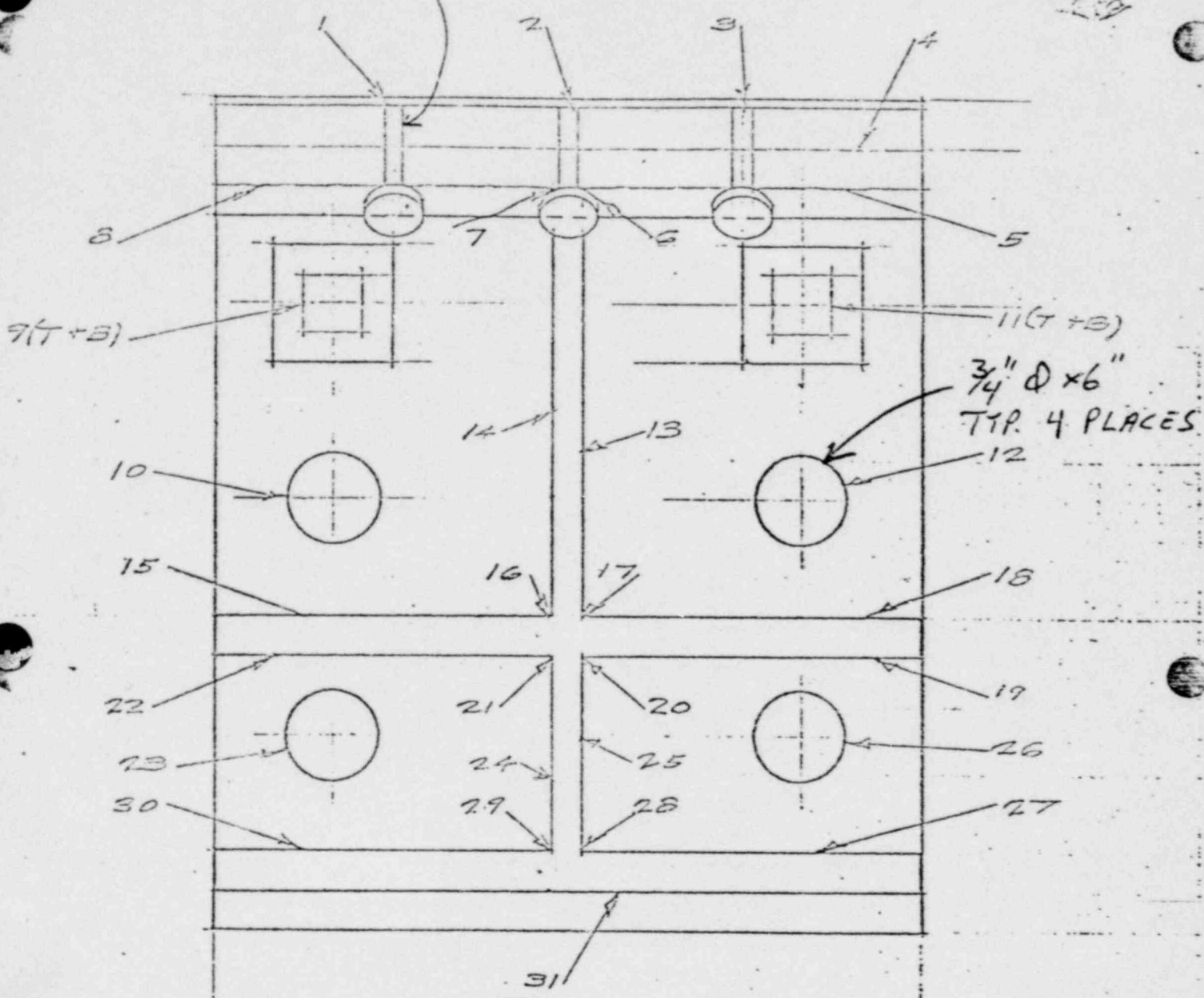
BY \_\_\_\_\_ DATE \_\_\_\_\_

ORDER NO. \_\_\_\_\_

NCR/1545  
 57 of 28  
 79  
 7-12-78  
 KEB

1/2" Ø x 4" TYPE 3 PLACES

REVISIONS  
DATE  
BY

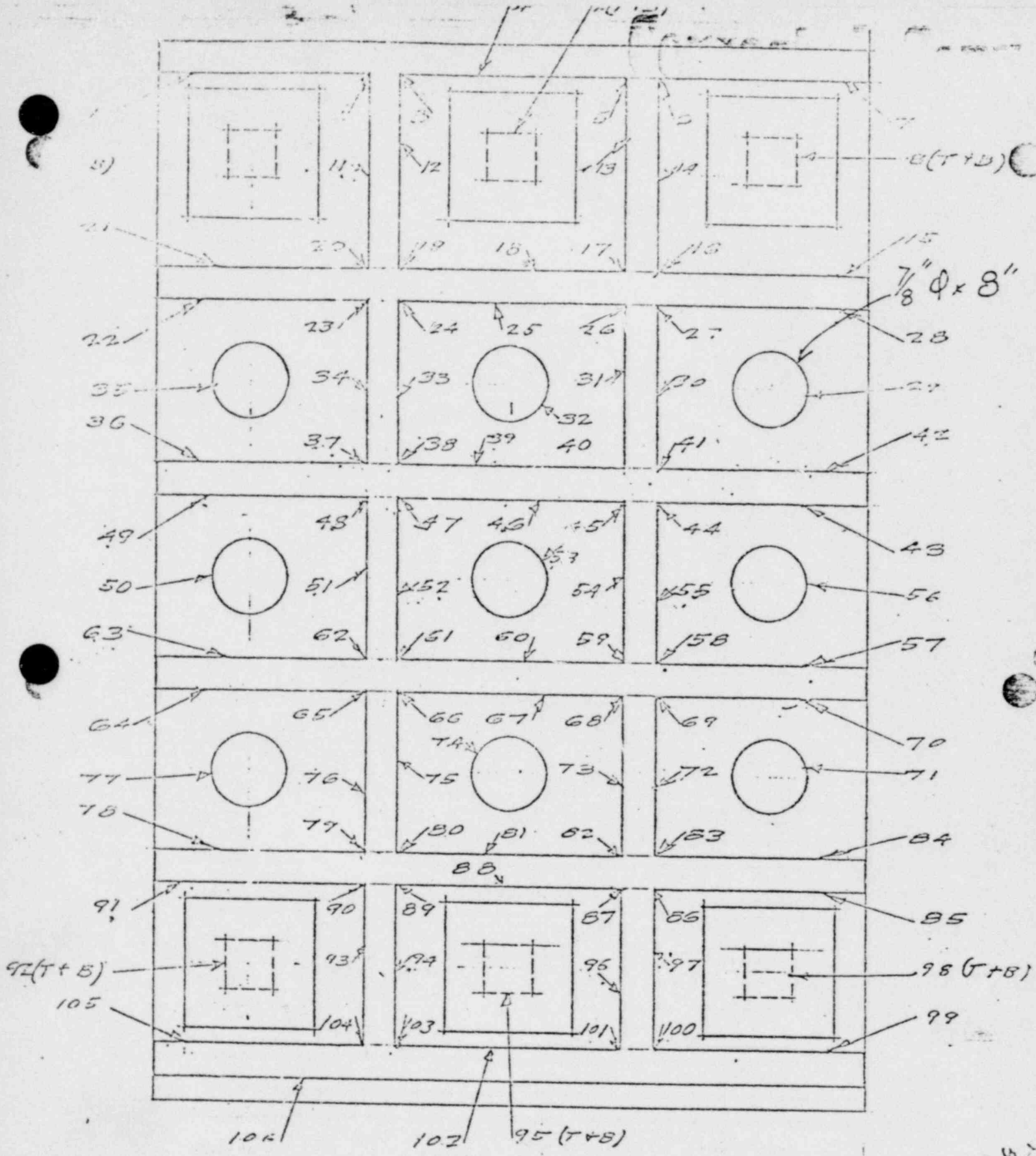


RAVEN  
BUSCH

3443 CHICAGO DR. S.W.  
GRANDVILLE, MICH. 49418  
AREA 516 532-3641

PROJECT 90-73 EMBEDS AA  
TITLE E11  
7-12-79

58  
MUN  
7-12-79



K272

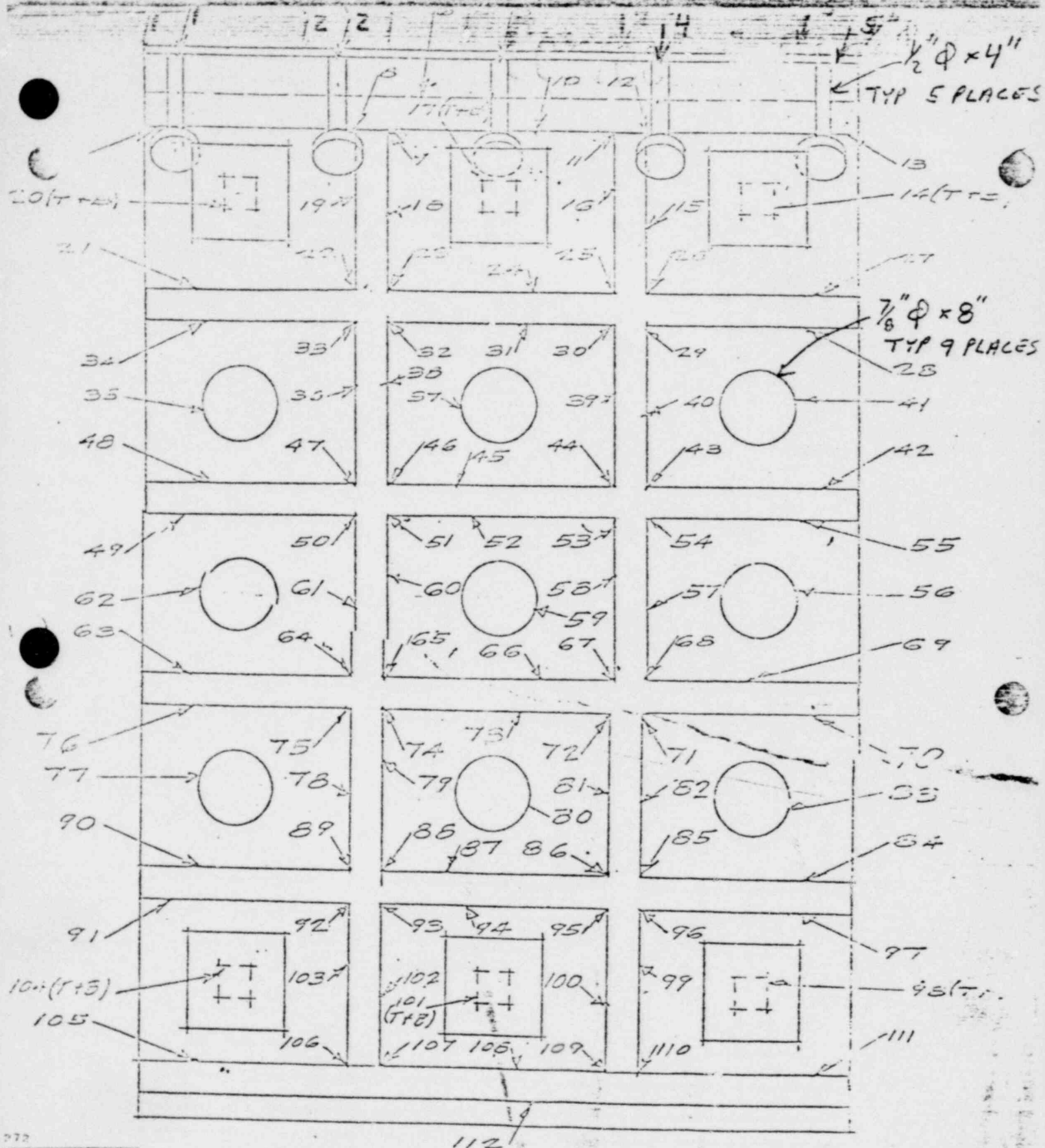
7/10

3443 CHICAGO DR. S.W.  
 GRANDVILLE MI 48118

PROJECT C/O-73 EMBEDS B  
Bracket Block E 12a

TITLE \_\_\_\_\_

5900  
 7-12-78  
 KES



272

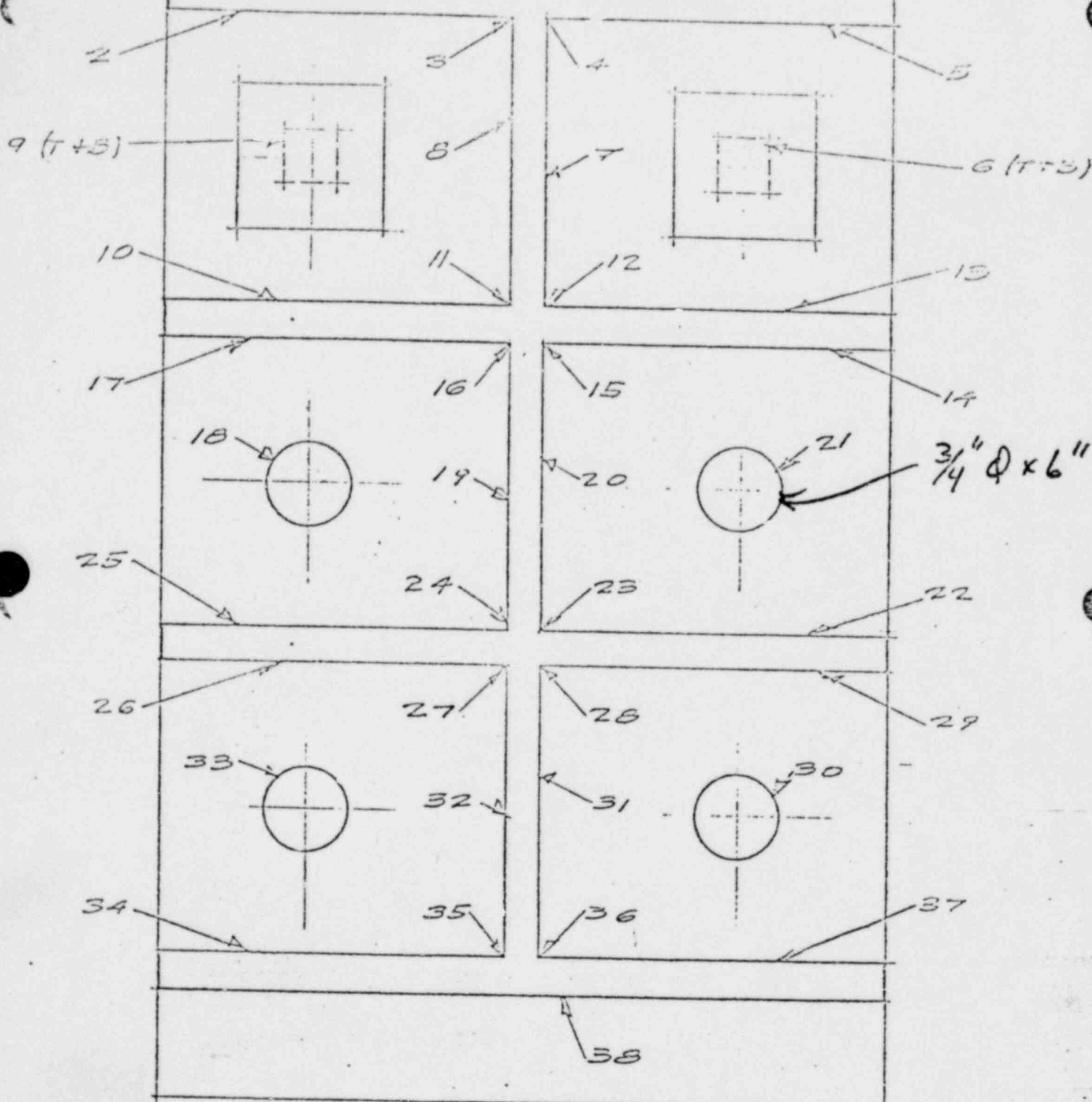
3443 CHICAGO DR. S.W.  
 GRANDVILLE, MICH. 49413  
 AREA 616 532-5641

PROJECT 90-73 EMBERS C4  
Bechtel Mach E126  
 TITLE \_\_\_\_\_  
 BY \_\_\_\_\_ DATE \_\_\_\_\_  
 ORDER NO. \_\_\_\_\_

1395  
 79  
 10B  
 7-12

Completed

402  
25-12-78



3 1/4"  $\phi$  x 6"

27  
SUNBELT  
LOGGING  
COMPANY

3443 CHICAGO DR. S.W.  
GRANDVILLE, MICH. 49418  
AREA 016 53' 11

PROJECT C10-73 EMBERS

Revised Plan **E14**

TITLE \_\_\_\_\_

ORDER NO. \_\_\_\_\_

25-12-78

KEY

79

28

COPIES

BECHTEL

FIELD INSPECTION REPORT

RECORD CONTROL  
CONTROL NO \_\_\_\_\_  
FILE NO \_\_\_\_\_

1. PROJECT NO 7220 2. DATE June 19, 1978 PAGE 1 OF 14

4. ITEM INSPECTED Surveillance of the Inspection being done by Welding Engineering on the Embeds listed on the Attached Sheets.

5. LOCATION Poseyville Laydown area, Cont. #1 Laydown area, and N.C. Embeds in South SSW pour to 685' Elev.

6. TYPE OF INSPECTION Surveillance of the Inspection being done by Field Welding Engineering. No direct measurements were taken by Q.C. - only verification that Welding Engineering did inspect the Embeds listed on the Attached Sheets. The following inspections were made by Field Welding Engineering:

(1) Stud Welds: Visual inspected for 360° Fusion, (Block 6 Cont. on Page 2)

7. STANDARD / CODE / PROCEDURE / DRAWING / SPECIFICATION \_\_\_\_\_

8. INSPECTION EQUIPMENT USED \_\_\_\_\_

*Surveillance*

9. RESULTS OF INSPECTION: SATISFACTORY  UNSATISFACTORY

10. ACTION TAKEN IF UNSATISFACTORY \_\_\_\_\_

Distribution:  
White - OC Files  
Canary - Originator

*[Handwritten Signature]*  
11. ENGINEER *[Handwritten Name]*

QC-G11  
7-12  
86



CONTINUATION SHEET

3. RECORD CONTROL  
CONTROL NO. \_\_\_\_\_  
FILE NO. \_\_\_\_\_

1. PROJECT NO. 7220 2. DATE June 19, 1978 4. PAGE 11 OF 12

4. BLOCK CONT'D  
5. FORM NO. QC-  
7. REPORT NAME

2. Block #6 continued:

(2) Fillet Welds and Full Penetration Welds: Inspected for undersize, undercut, Concavity, Cold Lap, Porosity, and Slag inclusions using a Visual and Fillet Gauge Examination.

Quality Control concurs that the technique used for these inspections was correct. The results of the inspections made by Field Welding Engineering are contained in the Attached Sheets

Distribution:  
White - QC Files  
Canary - Originator

*[Handwritten signature]*  
9. FIELD ENGINEER *[Handwritten name]*

*[Handwritten initials and numbers]*  
7-12-78  
QC-G1-2

STUDS only

	Acc	Res			
1-1	37 ✓		E4-6	35	} NOT checked
	38 ✓			36	
	39 ✓			37	
	40 ✓			38	
	41 ✓			39	
	42 ✓			40	} NOT checked
1-3	37 ✓		E4-23	35	
	38 ✓			36	
	39 ✓			37	
	40 ✓			38	
	41 ✓			39	
	42 ✓			40	
			E4-NO <sup>NO</sup>	35 ✓	
				36 NO STUD	
				37 ✓	
				38 ✓	
				39 ✓	
				40 ✓	
3-1	25 ✓				Bent
	26 ✓				
	27 ✓				
	28 ✓				
3-22	25 ✓				
	26 ✓				
	27 ✓	150			
	28 ✓				

1395  
of 28  
79  
1-12-78



STUDS only

		Acc	ReJ			Acc	ReJ
E7b-3	1		180°	E7b-15	1		90°
	2	✓			2		45°
	20		90°		20	✓	
	23		90°		23	✓	
E7b-4	1		90° IF	E7b-17	1		180°
	2		90° IF		2	✓	
	20	✓			20		90°
	23	✓			23	✓	
E7b-6	1		90°	E7b-18	1		90°
	2		90°		2	✓	
	20	✓			20		90° IF
	23	✓			23	✓	
E7b-7	1		180°				
	2	✓					
	20	✓		E+12b7			
	23	✓					
E7b-9	1	✓					
	2		90°				
	20	✓					
	23	✓					
E7b-10	1		90°				
	2	✓					
	20	✓					
	23	✓					
E7b-13	1		45°				
	2		45°				
	20		20°				
	23	✓					
E7b-14	1		45°				
	2		45°				
	20	✓					
	23	✓					

VCR 1395  
 650578  
 79  
 KEB  
 7-12-78

RESIDUES

# Corrected Comp STUDS only

Acc Res

Date	Acc	Res	Code	Studs	Notes		
14-3	✓	18	E-9-2	5	45°		
	✓	21		6	15		
	✓	30		9			
	✓	33		10			
14-9	✓	18	E-9-1	31	20°		
	✓	21		34			
	✓	30		5			
	✓	33		6			
14-13	✓	18	E-9-1	9			
	✓	21		10			
	✓	30		31			
	✓	33		34	30°		
14-16	✓	18	E-9-3	5	NOT checked		
	✓	21		6			
	✓	30		9			
	✓	33		10			
14-11	✓	18	E-9-4	31		NOT checked	
	✓	21		34			
	✓	30		5			
	✓	33		6			
14-20	✓	18	E-9-4	9			NOT checked
	✓	21		10			
	✓	30		31			
	✓	33		34			
14-21	✓	18	E-9-5	5	NOT checked		
	✓	21		6			
	✓	30		9			
	✓	33		10			
E-9-6			E-9-6	31		NOT checked	
				34			
				5			
				6			
				9			NOT checked
			10				
			31				
			34				
			5	NOT checked			
			6				
			9				
			10				
			31				
			34				

Page Not 14

DICK  
 1345  
 200128  
 79  
 7-12-78  
 1035

RECEIVED

Continued

ACC REJ

REMARKS

E-7B16

~~44~~  
~~44~~

✓

ALL OK

E-3-22

17

✓

uncut 1/16 DEEP 1/2 LONG

E-9-2

33

28B

✓

Cold LAP (1/16) LONG

✓

" " 1" LONG

E-1-5

32  
29  
25  
22  
12  
9  
6  
1  
2

✓

3" u/c long 3/32 DEEP 1/16 LESS 1/16  
1 1/2" " " " " LESS 3/32  
u/c 1/16 long 3/32 DEEP u/c 1/16 1/16 TO 1/8 TL  
u/c 2 1/2 L 3/32 E 3/32 5L  
u/c 1 1/2 L 3/32 L 1/16  
u/c 6" 9 1/32 L 3/32  
u/c 3/4 x 1/16  
T/W u/c 1/2" long 3/32 DEEP TL  
2/3 FLUSH 1/16 u/c (1) long 3/32 L 1/16  
T/W cold LAP 1/2" LONG  
B/W u/c (1) 3/32 L 3/32

E-14-13

ALL WELD OK

5 of 14

2 1395  
67 OF 28  
79  
10/15  
7-12-79

BECHTEL

CORRECTED COPY

ACC RES

REMARKS

E-12 E1

1		180°	
2		180°	CR
3		180°	H
4		180°	CK
5		90°	*
35	✓	<del>180°</del>	
37	✓	<del>180°</del>	
41		BROKEN OFF STUD	
56		180°	
59		<del>180°</del> 180°	
62	✓		
77	✓	<del>180°</del>	
80		BROKEN OFF STUD	
83		90°	

CRACK AT BASE

E-12 V3

1			
2			
3			
4			
5			
35		180°	
37	✓	<del>90°</del>	
41		180°	
56		180°	
59		180°	
62		180°	
77		180°	
80		<del>180°</del> 180°	
83		180°	

These studs & Angles ARE NOT INSTALLED

CRACK AT BASE

KEB  
7-12-78

CR 1345  
08 OF 78  
79

BECHTEL

Completed [unclear] 08/01/78

ACC RET

REMARKS

4-7

35	✓
36	✓
37	✓
38	✓
39	✓
40	✓

7-10-83

1	✓	
2		90°
3	✓	
4	✓	
5	✓	
16	✓	
19	✓	
25	✓	
28	✓	
34	✓	
38	✓	

7-10-86

1		90°
2	✓	
3	✓	
4	✓	
5		90°
16	✓	
19	+	45°
25	✓	
28		<del>20°</del> 180°
34		60°
38	✓	

70 of 14

R 1395  
 27 OF 28  
 79  
 KEB  
 7-12-78

BECHTEL

CS01-11-68

Corridor

ACC RET

REMARKS

E11-3

1	✓
2	✓
3	✓
10	✓
12	
23	
24	✓

180°  
90°

E11-6

1	✓
2	✓
3	✓
10	✓
12	✓
23	✓
24	✓

E12-B-5

1	✓
2	✓
3	✓
4	✓
5	✓
35	
37	✓
41	
56	
59	✓
62	✓
77	✓
80	✓
83	✓

~~270°~~ 180°  
180°  
180°

80114

7-12-78  
E12-B-5  
79  
1395  
00 of 28

BECHTEL

Corporated

CS01 11/60

Pardee

STUDS

		Acc	Res	REMARKS
E-11-10	1	✓		Hand welded
	2	✓		" "
	3	✓		" "
	10	✓		
	12	✓		
	23		20°	
	26	✓		
E-11-9	1	✓		Hand welded (undercut)
	2	✓		" "
	3	✓		" "
	10		30°	
	12	✓		
	23	✓		
	26	✓		
E-78-16	1	✓		
	2		20°	
	20	✓		
	23	✓		
<del>          </del> E-3-5	25	✓		
	26	✓		
	27	✓		
	28	✓		
E-2-81	21	✓		
	22	✓		
E-78-8	1		90°	
	2	✓		
	20	✓		
	23	✓		

9 of 14

1345  
710528  
71  
7-12-71

NONCONFORMANCE REPORT

1. PROJECT NAME NCR 1345		JOB NO. 7220		19. NO 1346	20. PAGE 1 OF 11		
2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION			
1, 2, 3, 4, 5	VARIES		Miscellaneous Structural steel	Aux. Bldg. Cont. 1 & Cont. 2			
6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N REV SER NO.	9. SOURCE Proc.	10. CONTRACTOR/SUPPLIER Haven Busch			
5	N/A	N/A N/A N/A					
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (X) OTHER		IR NO. NO. 7-2-1-100	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED (X) YES ( ) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLO	
16. NONCONFORMING CONDITION: The attached list of miscellaneous metal was furnished by Haven Busch under the field purchase orders listed in block 6. Contrary to the weld inspection criteria called for in Haven Busch's approved Quality Assurance Manual, numerous anomalies have been noted in a review of the weld inspection records. The miscellaneous metal items in question (and associated anomalies) are summarized on the attached list. The quality of the items is indeterminate. These items have been installed. (Continued on sheet 2)				24. DISPOSITION CONCURRENCE			
				rework	reject	repair	use as is
							X
				PROJECT FIELD ENGINEER DATE 7-13-78 PROJECT ENGINEER DATE 7-10-78 PROJECT CONSTRUCTION CHAIRMAN DATE 7-17-78			
				AUTHORIZED INSPECTOR DATE			
17. REPORTED BY M. E.	DATE 5/12/78	18. VALIDATED BY K. B. Bareng	DATE 5-17-78	25. DISPOSITION RESULTS			
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)							
22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering							
The welding of the fabricated items delivered under the above purchase orders is comparable to the welding on the purchase order on NCR 1345, in that the same type of welding is involved, done by the same vendor, and the fabrication period covers approximately the same time frame. Based on this, Field Engineering feels that the quality of welding identified on NCR 1345 will exist on this NCR. (cont. on sheet 2)							
23. PROJECT ENGINEERING DISPOSITION Inspected category 1 welds of NCR 1345 provides a basis of reliability for the acceptance of the remaining uninspected welds.							
The testing of NCR 1345 for category 2 stud weld assures the reliability of those studs embedded in concrete, and reassures the adequacy of stud welds to develop the design tensile loads.							
Therefore, engineering recommendation for category 1 and 2 welds is to "use as is".							
				26. QC ACCEPTANCE			
				QC ENGINEER DATE 8/4/78			
				AUTHORIZED INSPECTOR DATE			

-1345  
 -1346  
 -1415  
 -1426  
 -1825  
 -1347  
 -1549

J. J. J. 7/14/78  
 W. J. J. 7-15-78  
 P. H. J. 11/1/78



16 *hpc*  
*5/24/78*

BLOCK 22 CONTINUED:

"Q"-List #'s 1.101, 1.201, 1.102, 1.202 and 1.502. Hold for Engineering Disposition. No hold tags applied. A conditional release is requested to make attachment welds to the miscellaneous items listed on the attached list.

*hpc* *5-24-78* *Stiborey* *5-24-78* *J.L. Pichard* *5/27/78*  
PFC date for PFCCE date PQAE date

BLOCK 22 CONTINUED:

Therefore, Field Engineering recommends the following disposition.

CATEGORY 1 - Fillet and Full Penetration Welds

A total of 23,834 fillet and full penetration welds exist on the subject purchase orders on this NCR. The 383 welds inspected on the embeds on NCR 1345 are similar to the type of welding on this NCR, and Field Engineering feels that the same quality exists. Therefore, since the 383 welds inspected did not show any serious imperfections, the field recommends "Use as is" based on the inspection performed on the welds on NCR 1345.

CATEGORY 2 - Nelson Stud Welding

A total of 29,882 studs exist on the purchase orders on this NCR. Field Engineering feels that, at worst, the quality of stud welding on these purchase orders is the same as that on NCR 1345. Therefore, the field recommends that the test results as reported in NCR 1345 be used to disposition these studs and recommends "Use as is".

*J.P. Betts* *6/26/78*

HAVER  
BUSCH

SHIFT 1

PO. C-233

F-1323, CC-2022  
EMBEDS

F-1322, CC-2022  
BEAMS & PLATES

F-1323, CC-2022  
EMBEDS

F-1323, CC-2022  
EMBEDS - 11/24/44

F-1323, CC-2022  
EMBEDS - 11/24/44

F-1323, CC-2022  
EMBEDS - 11/24/44

F-1323, CC-2022  
EMBEDS - 11/24/44

F-1323, CC-2022  
EMBEDS - 11/24/44

ROOT PASS ACCPTD  
NO FINAL PASS  
INSPECTION  
ROOT PASS ACCPTD  
FINAL REJECTED  
NO FINAL REINSPTN  
NO ROOT PASS  
NO FINAL PASS

ROOT PASS REJECTED  
NO ROOT REINSPTN  
FINAL PASS ACCPTD  
ROOT PASS REJECTED  
NO ROOT REINSPTN  
FINAL PASS REJECTED  
REJECTED ROOT PASS  
REJECTED REINSPTN  
FINAL PASS ACCPTD  
SIGNOFF ACROSS  
PAGE  
NO SIGNOFF

Line drawn through final inspection block

EMBED  
CORRECT  
DATE  
LEGIBLE

EMBED  
CORRECT  
DATE  
LEGIBLE

D-1-14  
-5-16  
-8

MT ROOT REJECTED

MT FINAL REJECTED

NO MT FINAL

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THRU  
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D-1-16

Handwritten notes and signatures on the right margin.

APR 1988  
Page 7 of 8

Item #	ROOT PASS ACC. FL	NO FINAL PASS	INSPECTION	ROOT PASS ACC. PRD	FINAL REJECTED	NO FINAL REINSPTN	NO ROOT PASS	NO FINAL PASS	ROOT PASS REJECTED	FINAL PASS ACC. PRD	NO ROOT REINSPTN	FINAL PASS REJECTED	NO ROOT REINSPTN	FINAL PASS REJECTED	REJECTED ROOT PASS	REJECTED REINSPTN	FINAL PASS ACCEPTED	SIGNOFF ADDRESS	Page	No SIGNOFF	INT ROOT REJECTED	MT FINAL REJECTED	No INT FINAL	
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199. 95-1

Item	Root Pass Accptd	Final Pass Accptd	Root Pass Rejected	Final Pass Rejected	No Root Reinsptn	Final Pass Reinsptn	Final Pass Rejected	Rejected Root Pass	Final Pass Reinsptn	Final Pass Accepted	Signoff Across	Page	No Signoff	MT Root Rejected	MT Final Rejected	No MT Final	None Taken	None Taken	None Taken	None Taken	None Taken
HAVEN BUSCH SHT 7 PO. C-233	ROOT PASS ACCPTD	NO FINAL PASS	NO FINAL PASS	NO FINAL PASS	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO SIGNOFF	1	NO SIGNOFF	MT ROOT REJECTED	MT FINAL REJECTED	NO MT FINAL	NONE TAKEN	NONE TAKEN	NONE TAKEN	NONE TAKEN	NONE TAKEN
F-1430 CA306 COLUMNS	ROOT PASS ACCPTD	NO FINAL PASS	NO FINAL PASS	NO FINAL PASS	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO SIGNOFF	1	NO SIGNOFF	MT ROOT REJECTED	MT FINAL REJECTED	NO MT FINAL	NONE TAKEN	NONE TAKEN	NONE TAKEN	NONE TAKEN	NONE TAKEN
F-1430 CC-217 SHIELD PLATES	ROOT PASS ACCPTD	NO FINAL PASS	NO FINAL PASS	NO FINAL PASS	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO SIGNOFF	1	NO SIGNOFF	MT ROOT REJECTED	MT FINAL REJECTED	NO MT FINAL	NONE TAKEN	NONE TAKEN	NONE TAKEN	NONE TAKEN	NONE TAKEN
F-1430 CC-217 PENETRATION FRAME	ROOT PASS ACCPTD	NO FINAL PASS	NO FINAL PASS	NO FINAL PASS	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO SIGNOFF	1	NO SIGNOFF	MT ROOT REJECTED	MT FINAL REJECTED	NO MT FINAL	NONE TAKEN	NONE TAKEN	NONE TAKEN	NONE TAKEN	NONE TAKEN
F-1430 CC-217 SHIELD PLATES	ROOT PASS ACCPTD	NO FINAL PASS	NO FINAL PASS	NO FINAL PASS	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO SIGNOFF	1	NO SIGNOFF	MT ROOT REJECTED	MT FINAL REJECTED	NO MT FINAL	NONE TAKEN	NONE TAKEN	NONE TAKEN	NONE TAKEN	NONE TAKEN
F-1430 CA306 PLATE UNDER	ROOT PASS ACCPTD	NO FINAL PASS	NO FINAL PASS	NO FINAL PASS	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO FINAL REINSPTN	NO SIGNOFF	1	NO SIGNOFF	MT ROOT REJECTED	MT FINAL REJECTED	NO MT FINAL	NONE TAKEN	NONE TAKEN	NONE TAKEN	NONE TAKEN	NONE TAKEN

64360

64-3  
(200  
deep)

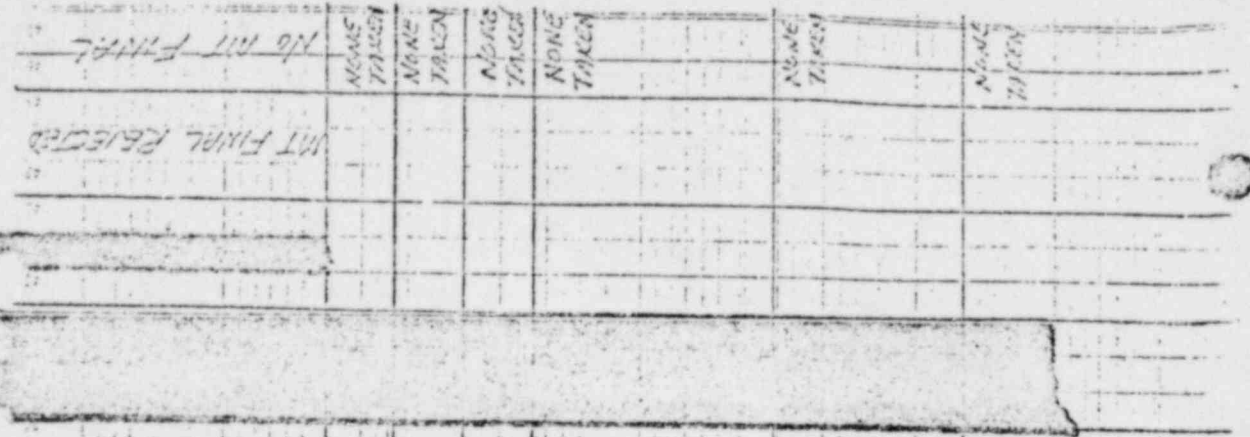


MT 10/10/88  
Page 10/10

	ROOT PASS ACC'PTD	NO FINAL PASS	INSPECTION	ROOT PASS ACC'PTD	ROOT PASS REJECTED	FINAL PASS REJECTED	NO ROOT REINSPTN.	FINAL PASS REJECTED	REJECTED ROOT PASS	REJECTED REINSPTN.	FINAL PASS REJECTED	SIGNOFF ACCESS	PAGE	No SIGNOFF	84-1	MT ROOT REJECTED	MT FINAL REJECTED	NAME TAKEN	NAME TAKEN	NAME TAKEN	NAME TAKEN	NAME TAKEN	NAME TAKEN	NAME TAKEN	
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PO C-233																									
F-1440 CA-3086 PLATE GIRDER	MT																								
F-1440 CA-3086 BEAMS	MT																								
F-1440 CA-3086 BEAM	MT																								
F-1440 CH-3086 GIRDER	MT																								
F-1440; CY-3122 GUIDED FRAMES	BEAM CELL DORS AFCT AR																								
F-1440; CC-2147 EMBEDS	MT TRU MT																								

1, 2, 4, 5, 7  
ONLY

MT-1E1  
TRU  
MT-1E1





NONCONFORMANCE REPORT

1. PROJECT DATA Plant and		JOB NO. 7220		19. NO. 1310	20. PAGE 1 OF 1								
2. DRAWING PART NO. #1 7220-M-612 sh 6	REV 8/F1	4. ITEM DESCRIPTION Spool LHCB-14-S-612-6-2		5. ITEM LOCATION Aux. Bldg. Elev. 6th									
6. PG. DR. SPEC. NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER. NO. N/A	9. SOURCE Construction	10. CONTRACTOR/SUPPLIER ITT-Grinnell N/A KAN									
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER		IR NO. P-1.10-612-6-6 NOM-204 Rev. 8	12. ASME AUTHORIZED INSPECTION RECD (X) YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip. Furnished By ( ) Client (X) Eng ( ) FLD							
16. NONCONFORMING CONDITION: The nuclear data plate has been removed from a spool, without Quality Control witnessing the transfer of spool identification. Existing spool identification LHCB-14-S-612-6-2 does not agree with design drawing M-612 sh 6 Rev. 8/F1 spool identification LHCB-14-S-612-6-2. Spool consists of 3 components, a 8" 90° elbow (HT# JCY45) and 2 (two) 8" pieces without heat number identification. "Q" No. 4.104 1 QC Hold Tag applied to spool at 90° elbow. Hold For Engineering Disposition.				24. DISPOSITION CONCURRENCE <table border="1"> <tr> <td>rework</td> <td>reject</td> <td>repair</td> <td>use as is</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>		rework	reject	repair	use as is				
rework	reject	repair	use as is										
17. REPORTED BY	DATE	18. VALIDATED BY	DATE	25. DISPOSITION RESULTS									
	11-78	KAN	5-12-78	Bechtel spool numbers vendor's register number and pipe material heat numbers have been satisfactorily etched in spool. 8-15-78									
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)		22. (X) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering											
Item #1 Subject Spool marked LHCB-14-S-612-6-2 conforms to configuration of spool LHCB-14-S-612-6-2. The spool is schedule 10s stainless steel (HC) and not schedule 40 carbon steel - lined (HG). The Heat. No. of the 90° elbow JCY45 matches that of 90° elbow in documentation package for spool LHCB-14-S-612-6-2 and the welders number C-62 and C237 etched on spool by the shop welds (continued on Page 2)		Disposition Requested By: 6-7-78											
23. PROJECT ENGINEERING DISPOSITION The nuclear data plate was removed from spool piece LHCB-14-S-612-6-2 because it interfered with a hanger. In transferring the spool number to the spool piece with a vibro-engraver, the "C" in LHCB was mistakenly made to look like a "G". The Grinnell number on the spool matches the spool for LHCB-14-S-612-6-2.													
Project Engineering Disposition: Item #1. Project Engineering concurs with the field recommendation to "use as is". Item #2. Project Engineering concurs with the field recommendation to revise the spool number on the spool piece.				26. QC ACCEPTANCE <table border="1"> <tr> <td>QC ENGINEER</td> <td>DATE</td> </tr> <tr> <td>AUTHORIZED INSPECTOR</td> <td>DATE</td> </tr> </table>		QC ENGINEER	DATE	AUTHORIZED INSPECTOR	DATE				
QC ENGINEER	DATE												
AUTHORIZED INSPECTOR	DATE												

5-15-78

REM-462

11111

NONCONFORMAN .EPORT (CONT'D)

BLOCK 22 CONTINUED:

match those in documentation package. <sup>7/10/78</sup> Spool is also attached HP-63-16C which is Grimmett's Register No. for spool-111CB-14-5-612-6-2. Therefore accept Spool-As-Is <sup>7/10/78</sup>

Item #2 <sup>7/10/78</sup> Revise Spool Number to 111CB-14-5-612-6-2.

<sup>7/10/78</sup> JC Mandy 5/30/78 JG Williams 6/20/78  
6/20/78 5-30-78

PARTIAL REVISION

insufficient justification to determine that this 111CB-14-5-612-6-2 is the correct identification of this spool. The HCAT VEEB numbers supplied the vendor in reply to FC 0X97-5394, and the vendors' return numbers will be attached on the spool pieces.

JC Mandy 6/15/78 6/20/78  
K. Williams 6/20/78

5/11/74 11-104A



TO: DIRECTOR, FBI  
FROM: SAC, NEW YORK  
SUBJECT: [Illegible]

[Illegible teletype text]

11-104A  
11-104B  
11-104C  
11-104D  
11-104E  
11-104F  
11-104G  
11-104H  
11-104I  
11-104J  
11-104K  
11-104L  
11-104M  
11-104N  
11-104O  
11-104P  
11-104Q  
11-104R  
11-104S  
11-104T  
11-104U  
11-104V  
11-104W  
11-104X  
11-104Y  
11-104Z

TO	FROM	DATE	TIME	STATUS
NEW YORK	FBI	5/11/74	11:10	✓
ATLANTA	FBI	5/11/74	11:10	✓
BOSTON	FBI	5/11/74	11:10	✓
CHICAGO	FBI	5/11/74	11:10	✓
DALLAS	FBI	5/11/74	11:10	✓
DENVER	FBI	5/11/74	11:10	✓
HOUSTON	FBI	5/11/74	11:10	✓
LOS ANGELES	FBI	5/11/74	11:10	✓
MEMPHIS	FBI	5/11/74	11:10	✓
MILWAUKEE	FBI	5/11/74	11:10	✓
MINNEAPOLIS	FBI	5/11/74	11:10	✓
MOBILE	FBI	5/11/74	11:10	✓
MONTREAL	FBI	5/11/74	11:10	✓
NEW ORLEANS	FBI	5/11/74	11:10	✓
NEW YORK	FBI	5/11/74	11:10	✓
PHOENIX	FBI	5/11/74	11:10	✓
PITTSBURGH	FBI	5/11/74	11:10	✓
RICHMOND	FBI	5/11/74	11:10	✓
SAN ANTONIO	FBI	5/11/74	11:10	✓
SAN DIEGO	FBI	5/11/74	11:10	✓
SAN FRANCISCO	FBI	5/11/74	11:10	✓
SEATTLE	FBI	5/11/74	11:10	✓
SPRINGFIELD	FBI	5/11/74	11:10	✓
ST. LOUIS	FBI	5/11/74	11:10	✓
TAMPA	FBI	5/11/74	11:10	✓
WASHINGTON	FBI	5/11/74	11:10	✓
WICHITA	FBI	5/11/74	11:10	✓
WISCONSIN	FBI	5/11/74	11:10	✓
WYOMING	FBI	5/11/74	11:10	✓

5/11/74

# Bechtel

JOB No. 7220

LOCATION MIDLAND, MICHIGAN

## NOTICE OF BACKCHARGE WORK TO BE PERFORMED

CHARGE TO:

NAME ITT Grinnell  
ADDRESS P.O. Box 566  
Kernersville, N.C. 27284

BC No. OX97.5394  
DATE ISSUED 5/19/78  
ACCOUNT CODE OX97.5394  
REF. (P.O./SC) 7220-M-104A

DESCRIPTION OF WORK TO BE PERFORMED:

(BE SPECIFIC AS TO TAG No.'s, DWG No.'s, ETC.)

Spool 1HCB-14-S-612-6-2 as received with no heat numbers stamped or etched on the two lengths of pipe

Rework required: Replace pipes with known "Q" material

- 2-8" - SCH 10s SS Cuts
- 4-8" - SCH 10s SS Bevels
- 2-8" - SCH 10s SS Welds
- 3' 10" 8" SCH 10s SS Pipe (HCB Class)

cc: W. A. Swanson (ext. 484)  
C. Holman  
J. Corder  
W. Murphy  
L. Jones  
B. Sutherland  
L. Sokol  
R. Castleberry

- NOTES: 1. Labor shall be charged at actual cost plus 60 % to cover ~~payroll~~ overhead.
2. Material shall be charged at the actual delivered cost.
3. Equipment Rental shall be charged ~~at actual cost~~ Bechtel established rates.
4. \_\_\_\_\_
5. \_\_\_\_\_

Approved by [Signature]  
BECHTEL  
Title Project Superintendent  
Date May 22, 1978

Approved by \_\_\_\_\_  
VENDOR/SUBCONTRACTOR  
Title \_\_\_\_\_  
Date \_\_\_\_\_

REC'D  
MAY 23 1978  
OFFICE 4055

NONCONFORMANCES REPORT (CONT'D)

1. PAGE 5 OF 5

14. NCR N 548

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
X			
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

1. Projected Copy

NONCONFORMANCE REPORT

1. PROJECT NAME Midland Project, Units 1&2		JOB NO. 7220		19. NO. 1361	20. PAGE 1 OF 2
2. UNIT(S) Common	3. DRAWING/PART NO. 7220-M-604 Sht. 5	REV 4/F7	4. ITEM DESCRIPTION Pipe Spool 2FCB-14-S604-5-2	5. ITEM LOCATION WSHE #1 QC Hold Area	
6. P.O. OR SPEC. NO. 7220-M-104A	7. SERIAL NO. See block 16	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE Vendor	10. CONTRACTOR/SUPPLIER ITT Grinnell
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER		IR NO. N/A NO. M-201 Rev. 8	12. ASME AUTHORIZED INSPECTION REQ'D (X) YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Proc'g (X) Const ( ) Test
15. Equip Furnished By ( ) Client (X) Eng ( ) FLD					
16. NONCONFORMING CONDITION: Purchase Order 7220-M-104 Rev. 10 revises Reva. 1 thru					24. DISPOSITION CONCURRENCE
9. P.O. Rev. 3 note Spool Control Records 3 d states in part, "The spool numbering system shall be based on Bechtel line numbers".					rework <input checked="" type="checkbox"/> reject <input type="checkbox"/> repair <input type="checkbox"/> use as is <input checked="" type="checkbox"/>
Specification 7220-M-201 Rev. 8 paragraph 8.8 states in part, "The seller shall complete the isometric drawing . . . by assigning spool piece identification numbers."					<p><i>W. L. Barclay</i> 6-19-78 PROJ. FIELD ENGINEER DATE</p> <p><i>W. L. Barclay</i> 6-9-78 SUBJECT ENGINEER DATE</p> <p><i>W. L. Barclay</i> 6-20-78 PROJ. CONST. Q. ENGINEER DATE</p> <p><i>W. L. Barclay</i> 6-22-78 AUTHORIZED INSPECTOR DATE</p>
Contrary to the above, pipe spool 2FCB-14-S604-5-2 (MR-62-26X) cannot be					25. DISPOSITION RESULTS
17. REPORTED BY <i>W. L. Barclay</i>	DATE 5-23-78	18. VALIDATED BY <i>W. L. Barclay</i>		DATE 5-23-78	cond't. 9/24/18
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)					Item - Use as is
22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering					Item 2 - Use drawing 7220-M-604 SHT 5 Rev 4/F7
Item 1) Recommend "Use As Is" ITT Grinnell Industrial Piping maintains a system for controlling the traceability of the pipe spools and the associated documentation by the Grinnell register number. Since the spool is uniquely identified by the Grinnell register number, Field Engineering recommends this item be dispositioned "Use As Is". (Continued on Page Two)					revises Grinnell register number to read "MR-62-26X" for spool 2FCB-14-S604-5-2
23. PROJECT ENGINEERING DISPOSITION Grinnell uses the suffix "X" for some of the nuclear spool pieces it produces. The spool piece is uniquely identified by the Grinnell spool number. Project Engineering Disposition:					<i>W. L. Barclay</i> 8-30-78 AUTHORIZED INSPECTOR DATE
Item 1. Project Engineering concurs with the Field recommendation to "Use As Is".					
Item 2. Project Engineering concurs with the Field recommendation that the suffix "X" be added to drawing 7220-M-604, Sh. 5, Rev. 4/F7 to make the drawing spool number conform with the number on the spool piece.					
(Continued on Page 2)					24. QC ACCEPTANCE <i>W. L. Barclay</i> 8-30-78 DATE



Block No. 16 continued.

uniquely identified using the Bechtel spool piece identification number.

- 1) Two pipe spools (Grinnell Register No's. MR-62-26X & MR-62-26AX) have the same spool number as 2FCB-S604-5-2. *2FCB-14-5604-5-2*
- 2) Isometric Drawing 7220-M-604 sht. 5 Rev. 4/F7 identifies spool 2FCB-14-S604-5-2 as having a Grinnell Register No. of MR-62-26.

Hold for Engineering Disposition

Two QC Hold Tags applied

"Q" List No. 4.047

Block 22 Continued:

Item 2 "Rework" Revise Dwg. 7220-M-604 Sht. 5 Rev. 4/F7 to show pipe spool 2FCB-14-5604-5-2 as having Grinnell Register No. MR-62-26X. *J. J. Williams 5/20/78*

Block 23 Continued:

(Note: Spool piece MR-62-26AX has been deleted from drawing 7220-M-604, Sh. 5 on a previous revision.)

*AS - Williams 6/11/78*  
*J. J. Williams 6-14-78*  
*RCM-463*

### NONCONFORMANCE REPORT

1. PROJECT NAME Headland		JOB NO. 7220		19. NO. 1362	20. PAGE 1 OF 2
2. UNIT/SET / 3. DRAWING/PART NO. See blk. #16 N/A		REV N/A	4. ITEM DESCRIPTION Cadvelds--Test Splices		5. ITEM LOCATION See Block #16
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE Construction	10. CONTRACTOR/SUPPLIER N/A
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER		IR NO. C-6.00-24&25 NO. C-231, Rev. 15	12. ASME AUTHORIZED INSPECTION RECD ( ) YES (X) NO		13. SKETCH ATTACHED ( ) YES (X) NO
				14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD
16. NONCONFORMING CONDITION: Sect. 10.13 of Specification 7220-C-231, Rev. 15 states in part that .... "Splice samples shall be subjected to tensile tests in accordance with the following sample frequency: one production splice for the first ten splices and one production and three sisters for the next ninety splices, and three test splices, either sisters or productions, for subsequent one-hundred splices. Contrary to the above, <sup>one</sup> <del>two</del> <sup>295/24/78</sup> sisters and one production test splice were lost, thereby exceeding the test frequency. See Continuation Sheet				24. DISPOSITION CONCURRENCE	
				rework	reject
				repair	use as is
				PROJECT FIELD ENGINEER DATE 5/24/78 AUTHORIZED INSPECTOR DATE 5-24-78	
17. REPORTED BY S. J. Jett		DATE 5/24/78	18. VALIDATED BY M. J. Jett		DATE 5-24-78
21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)					
22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering DIST. DISPOSITION REQUESTED BY: 6-30-78					
There have been 58 test splices made for the 1700 #11 horizontal cadvelds to date, this is five more <sup>than</sup> than is required by the spec. None of the test splices have failed. Even though the frequency for the first 100 splices was not met, Due to the loss of the two test splices, 3 test splices were taken for the first 100 splices. Therefore, field engineering recommends "Use As Is".					
23. PROJECT ENGINEERING DISPOSITION The 3 Cadveld test splice samples which were taken in lieu of the required 5 splice samples will not have any detrimental effect upon the Cadvelds in question. Though the frequency for the first 100 Cadveld splices was not met. The 58 Cadveld test splices made for the 1700 #11 horizontal Cadvelds to date is five more than required by Specification 7220-C-231. All Cadvelds are 100% visually inspected and are installed by qualified personnel. In addition, none of the Cadveld test splices have failed. Therefore, Project Engineering					
				26. GC ACCEPTANCE GC ENGINEER AUTHORIZED INSPECTOR DATE	

(See continuation sheet)

BLOCK #16 CONTINUED:

IR #	DATE	NUMBER	POSITION	LOCATION
FQCR 6-6.00-25	12/3/76	CA2666ARP	#11 Horizontal	Aux. Bldg. El. 620' A-Line
FQCR 6-6.00-24	1/11/77	7SHE73B5	#11 Horizontal	Cont. #2 West 605' Sec. Shield Wall

Nonconformance noted during a review of the cadweld test frequency log. "Q"-List #1.204. Hold for Engineering Disposition. No hold tags applied.

*SQ hold 5/24/78*

BLOCK #23 CONTINUED:

concurrs with the Field Engineering recommended disposition that the Cadwelds in question may be "USED AS IS".

*DAE J. Block 7-21-78*  
*J. Sweeney 7/21/78*

NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220			19. NO. 1369	20. PAGE 1 OF 2
2. UNIT(S) #1	3. DRAWING/PART NO. M-603-5	REV 5/F1	4. ITEM DESCRIPTION Spool 1FCB-14-S-603-5-2		5. ITEM LOCATION Aux. Bldg. Hwy. 600'-0"	
6. P.O. OR SPEC NO. M-104 A.3	7. SERIAL NO. See block #16	8. REPLACEMENT PART P/N-N/A-REV-N/A-SER NO.-N/A		9. SOURCE Vendor	10. CONTRACTOR/SUPPLIER ITT Grinnell	
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER		IR NO. N/A NO. M-201, Rev. 8	12. ASME AUTHORIZED INSPECTION REG'D <input checked="" type="checkbox"/> YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client (X) Eng ( ) FLD
16. NONCONFORMING CONDITION: Purchase Order 7220-M-104, Rev. 10, revises Revs. 1 thru 9.				24. DISPOSITION CONCURRENCE		
P.O. Rev. 3 note spool control records 3 (d) states in part: "The spool numbering system shall be based on Bechtel line numbers". Specification 7220-M-201 Rev. 8, paragraph 8.8 states in part: "The seller shall complete the isometric drawing ... by assigning spool piece identification numbers".  Block #16 Continued on Page 2				rework	reject	repair
				use as is <input checked="" type="checkbox"/>		
17. REPORTED BY <i>S. Brown</i>		DATE 6-1-78	18. VALIDATED BY <i>K.A. ...</i>		DATE 6-1-78	
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)						
22. <input checked="" type="checkbox"/> Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering <i>Disposition requested by: 878-78</i>						
Use as is: Grinnell register numbers are identification unique to each spool and their respective documentation packages. A copy of this NCR to be included in each package. <i>February 8/1/78</i> <i>K. Ward 8/2/78</i>						
23. PROJECT ENGINEERING DISPOSITION - Revised Grinnell Spool No. as follows <i>C.W.</i>						
1FCB-14-S-603-5-2 (MP-62-78) change to read 1FCB-14-S-603-5-2 <i>C.W.</i>						
(MP-62-78A) - <i>C.W.</i>						
1FCB-17-S-603-5-2A (MP-62-76AX) Change to read 1FCB-14-S-603-5-2 <i>C.W.</i>						
2A (MP-62-76AX) <i>C.W.</i>						
PLANT DESIGN RE. <i>Charles R. McCool</i> 7-14-78						
PROJECT ENG CONCURS USE AS IS. <i>Charles R. McCool 8-17-78</i>						
25. DISPOSITION RESULTS					26. OF ACCEPTANCE <i>John P. ...</i> DATE 8/17/78	
					27. AUTHORIZED INSPECTOR <i>John P. ...</i> DATE 8/17/78	

Block #16 Continued

Contrary to the above, two pipe spools (Grinnell Register No's MP-62-76AX and MP-62-78X) have the same spool number LFCB-14-S-603-5-2. Hold For Engineering Disposition. "Q" No. 4,037.

2 QC Hold Tags applied to pipe spools.

*Block 20 CONTINUED!*

*1 Hold Tag FOUND & REMOVED KURT ALLEN 8/28/78*

NONCONFORMANCE REPORT (CONT'D)

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER				X
PROJECT ENGINEER				
PROJECT CONSTR QC ENGINEER				
AUTHORIZED INSPECTOR				

PROJECT FIELD ENGINEER DATE 3-17-76  
 PROJECT ENGINEER DATE 3-21-76  
 PROJECT CONSTR QC ENGINEER DATE 3-21-76  
 AUTHORIZED INSPECTOR DATE 3-21-76

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER				
PROJECT ENGINEER				
PROJECT CONSTR QC ENGINEER				
AUTHORIZED INSPECTOR				

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER				
PROJECT ENGINEER				
PROJECT CONSTR QC ENGINEER				
AUTHORIZED INSPECTOR				

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER				
PROJECT ENGINEER				
PROJECT CONSTR QC ENGINEER				
AUTHORIZED INSPECTOR				

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER				
PROJECT ENGINEER				
PROJECT CONSTR QC ENGINEER				
AUTHORIZED INSPECTOR				

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER				
PROJECT ENGINEER				
PROJECT CONSTR QC ENGINEER				
AUTHORIZED INSPECTOR				

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER				
PROJECT ENGINEER				
PROJECT CONSTR QC ENGINEER				
AUTHORIZED INSPECTOR				

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER				
PROJECT ENGINEER				
PROJECT CONSTR QC ENGINEER				
AUTHORIZED INSPECTOR				

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER				
PROJECT ENGINEER				
PROJECT CONSTR QC ENGINEER				
AUTHORIZED INSPECTOR				

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER				
PROJECT ENGINEER				
PROJECT CONSTR QC ENGINEER				
AUTHORIZED INSPECTOR				

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER				
PROJECT ENGINEER				
PROJECT CONSTR QC ENGINEER				
AUTHORIZED INSPECTOR				

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER				
PROJECT ENGINEER				
PROJECT CONSTR QC ENGINEER				
AUTHORIZED INSPECTOR				

**NONCONFORMANCE REPORT**

15  
17/2/78  
1028

1. PROJECT NAME Highland		JOB NO. 7220		19. NO. 1375	20. PAGE 1 OF 13								
2. BRITISH PROJECT NO. 1126	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION Stock ASME-See NF Material	5. ITEM LOCATION Standish Lab Shop									
6. P.O. OR SPLIC NO. Stock 16	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A	REV SER NO.	9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER J.T. Ryerson, Chicago, Ill.								
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (X) OTHER		IR NO. See Block 16 NO. NQAM Rev. 3	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD							
16. NONCONFORMING CONDITION: Bechtel Quality Assurance Manual-ASME, Div. 1 Para 4320				24. DISPOSITION CONCURRENCE									
Material Suppliers states: Para. 4321 The procurement inspection department prepares and maintains a list of acceptable material manufacturers and material suppliers. Material manufacturers and suppliers listed must have and maintain a quality program meeting Bechtel, and ASME Section III, Div. 2, requirements				<table border="1"> <tr> <td>rework</td> <td>reject</td> <td>repair</td> <td>use as is</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>		rework	reject	repair	use as is				
rework	reject	repair	use as is										
17. REPORTED BY H. R. [Signature]				18. VALIDATED BY H. D. [Signature]									
DATE 6-9-78		DATE 6-16-78		DATE 6-9-78									
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)													
22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering													
Material shall be used as is, documentation supplied by J. T. Ryerson meets the requirements of Field Material Requisition, since the listed materials shall be used in Non NA-8000 application.													
Reference Rev. 3 to NQAM Sect. 3 No. 11. 8/10/78													
23. PROJECT ENGINEERING DISPOSITION													
NQAM HAS BEEN REVISED (REF: REV. 3-E TO SECTION III NO. 11) FOR THE PROCUREMENT OF ASME MATERIAL TO COMPLY WITH ASME III NUCLEAR REQUIREMENTS. HENCE, MATERIAL SHALL BE USED AS IS. THIS CHANGE WILL DELETE THE REQUIREMENTS OF NQAM.													
H. [Signature] 8/22/78				26. QC ACCEPTANCE [Signature] QC ENGINEER									
				DATE 8-22-78									
				AUTHORIZED INSPECTOR									
				DATE									

Continued Block 16

for the material to be purchased.

Para 4322 Quality program demonstration is established through survey of the manufacturer or supplier by the procurement inspection department. Assistance may be requested from MF & QCS, project engineering, quality control, or quality assurance."

Contrary to the above, Purchase Orders 7220-F-27502, F-27764, F-28141, were awarded to J.T. Ryerson Corporation of Chicago, Ill. with no Bechtel procurement inspection department survey being accomplished. (Note: This company has been ASME committee surveyed and approved using ASME NA3800 baseline but not Bechtel surveyed.) Material that has been received at Standish Fab Shops are as listed below:

<u>Purchase Order</u>	<u>Material Receiving Report No.</u>	<u>Inspection Record No.</u>
F-27502	AEO-6188	R-1.00-3134
	AEO-6371	R-1.00-3226
	AEO-6440	R-1.00-3267
F-27764	AEO-6308	R-1.00-3192
	AEO-6325	R-1.00-3217
	AEO-6370	R-1.00-3227
	AEO-6443	R-1.00-3266
F-28141	AEO-6352	R-1.00-3218
	AEO-6369	R-1.00-3225
	AEO-6442	R-1.00-3268 & 3272

Material Receiving Report attached.

"O" number is indeterminate. Hold pending final disposition. <sup>56</sup> <sub>24</sub> hold tag(s) applied to the nonconforming item(s). *REL 6-15-78*

In addition the subject P.O.'s did not require ASME-Sec. NF Material Sub-suppliers to J.T. Ryerson to be approved in accordance with para. 4321 & 4322 of Rev. 3 of the RCAM. *John P. R. / J. B. 6-16-78*



15 2/18

375

14 NCR NO.

PAGE 3 OF 4

REPORT (CONT'D)

NONCONFORMING

BLOCKE 16 CONTINUED:

A conditional release is granted to allow fabrication and installation of any components made from this material. The components are retrievable at any time during construction.

PIE John DATE 6/19/18 PFQCE John DATE 6/19/18

LQAE John DATE 6/19/18

CONDITIONAL RELEASE SUPPRESSED PLEASE SEE PAGE 15  
M.D. Foster for Louis BARCLAY

John







Bechtel

MATERIAL RECEIVING REPORT

NCR # 13  
Pg. 1 of 13

O. C. DISTRIBUTION

P. O. NO. 7220-E-27764 Q JOB NO. 7220

SPEC. NO.

MRR NO. AEO-6308 DATE 5/15/78

VENDOR J.T. Eyerson

REF. DWG.

SHIPPED BY Vendor

SHIPPING POINT Chicago, IL

SERVICE

P.O. ITEM NO. Q. NO	QUANTITY RECEIVED	COMPLETE DESCRIPTION
24	500'	C5 X 9.0 X 20' Random Length SA-36 (25 pcs.)
25	500'	C8 X 11.5 X 20' DITTO (25 pcs.)
26	440'	5 X 1/2 Square Structural Tubing A-500 GR. B 20' Random Length (22 pcs.)
27	560'	6 X 1/2 DITTO (26 pcs.)

SHOP INSPECTION RELEASE REC'D  
YES ( ) NR ( / ) NO ( - )

QC RECORDS RECEIVED  
YES ( / ) NR ( ) NO ( )

NON CONFORMANCE TAG NO. ( )

INSPECTION PROCESS  
ADDED COMMENT/INSTRUCTION

QCTR R-1.00 3192

INSPECTED BY H. Shawl	DATE	APPROVED BY K. Deity	DATE
FIELD ENG		PFE/QC	

YONEXAWA 5/22/78

Lake Shores FR. NO. 33013 CAR. NO.

DELIVERED 5/10/78 WEIGHT 43818# CHARGES PREPAID ( ) COLLECT ( )

PACKING SLIP NO. PARTIAL ( XX ) COMPLETE ( ) OSD NO.

DELIVERED TO/LOCATION Standish Fab Shop  
Bechtel Power Corp. Agents for Consumers Power Co.



NCR # 19. 801 B

Q. C. DISTRIBUTION

P. O. NO. 7220-F-27764 Q JOB NO. 7220

SPEC. NO.

MRR NO. AEO-6370 DATE 5/26/78

VENDOR R. T. Ryerson

REF. DWG.

SHIPPED BY Vendor

SHIPPING POINT Chicago, IL

SERV CE

P.O. ITEM NO.	Q. NO.	QUANTITY RECEIVED	COMPLETE DESCRIPTION
21		520'	S6 X 12.5 X 40' Random Length SA-36 (13 pcs.) (6500#)
22		520'	W8 X 17.0 X 40' DITTO (13 pcs.) (8840#)
19		100'	WT 5 X 12.5 X 20' long Random length SA-36 (5 pcs.) .00#)
20		100'	WT 4 X 6.5 X 20' DITTO (5 pcs.) (2500#)

SHOP INSPECTION RELEASE REC'D

YES ( ) N.R. ( ) NO ( )

QC RECORDS RECEIVED

YES ( ) N.R. ( ) NO

NON CONFORMANCE

TAG NO. ( )

INSPECTION PROCESS

USED, COMMENT/INSTRUCTION

INSPECTED BY *O. J. Merlham*  
 N. J. Shawl  
 MS/PLD ENG DATE APPROVED BY PFE/QC DATE

DELIVERING Lake Shores F.B. NO. 35718 CAR NO.

RECEIVED 5/17/78 WEIGHT 43330# CHANGES PREPAID ( ) COLLECT ( )

PACKING SLIP NO. PARTIAL ( XX ) COMPLETE ( ) OSD NO.

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

7104  
Pg. 9 of 15

Q. C. DISTRIBUTION

P. O. NO. 7220-E-27764 Q JOB NO. 7220

SPEC. NO.

MRR NO. AEO-6443 DATE 6/6/78

VENDOR J. T. Ryerson & Son

REF. DWG.

SHIPPED BY Vendor

SHIPPING POINT Chicago, IL

SERVICE

P.O. ITEM NO. Q. NO.	QUANTITY RECEIVED	COMPLETE DESCRIPTION
Page 1 of 2		
2	(5 pcs.) 100'	3/4" X 1" X 20' long random length bar stock SA-240 Type 304
3	(5 pcs.) 100'	1" X 1" X 20' long DITTO
4	(5 pcs.) 100'	1" X 1 1/2" X 20' long DITTO
5	(5 pcs.) 100'	1" X 2" X 20' long DITTO
6	(5 pcs.) 100'	1" X 3" X 20' long DITTO
7	(11 pcs.) 105'	1 1/2" X 2 1/2" X 20' long DITTO
8	(8 pcs.) 100'	2" X 3" X 20' long DITTO
9	(8 pcs.) 89'	2" X 5" X 20' long DITTO
10	(10 pcs.) 100'	2" X 5" X 10' long random length bar stock SA-515
15	(9 pcs.) 108'	1" X 3" X 12'3" long DITTO
1	(5 pcs.) 100'	3/4" X 3/4" X 20' long random length bar stock SA-240 type 304
10	(10 pcs.) 100'	3/4" X 3/4" X 10' long random length bar stock SA-515- GR.65 or 70
11	(10 pcs.) 100'	3/4" X 1" X 10' long DITTO

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

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

NON CONFORMANCE ( )  
TAG NO. ( )

INSPECTION PROCESS  
USED, COMMENT/INSTRUCTION

INSPECTED BY N. Shaw	DATE 6/7/78	APPROVED BY	DATE
MS/FLD ENG	DATE	PFE/QC	DATE

DELIVERING TO: Lake Shore FB NO. 33019 CAR NO.

DATE: 5/26/78 WEIGHT: 40173# CHARGES: PREPAID ( ) COLLECT ( )

PACHT. G SLIP NO. PARTIAL ( XX ) COMPLETE ( ) OSD NO.

DELIVERED TO/LOCATION: Standish Fab Shop  
Bechtel Power Corp., agents for Consumers Power Co.



Bechtel

MATERIAL RECEIVING REPORT

NCR 275  
Pg. 10 of 13

J. C. DISTRIBUTION

P. O. NO. 7220-F-27764 Q JOB NO. 7220  
MRR NO. AEO-6443 DATE 6/6/78  
VENDOR J. T. Ryerson & Son  
SHIPPED BY Vendor  
SHIPPING POINT Chicago, IL

SPEC. NO. 15  
REF. DWG.  
SERVICE

P.O. ITEM NO. C NO.	QUANTITY RECEIVED	COMPLETE DESCRIPTION
Page 2 of 2		
12	(9 pcs.) 108'	1" X 1" X 12' long random length bar stock SA-515
13	(9 pcs.) 108'	1" X 1 1/2" X 12'3" long DITTO
14	(9 pcs.) 108'	1" X 2" X 12'3" long DITTO
16	(10 pcs.) 100'	1 1/2" X 2 1/2" X 10' long DITTO
17	(10 pcs.) 100'	2" X 3" X 10' long DITTO

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

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

NON CONFORMANCE TAG NO. ( )

INSPECTION PROCESS USED. COMMENT. INSTRUCTION

INSPECTED BY *N. Shawl* N. Shawl DATE 6/7/78

APPROVED BY \_\_\_\_\_ PFE/QC DATE \_\_\_\_\_

DELIVERING TO: Lake Shore F.B. NO. 33019 CAR NO. \_\_\_\_\_

RECEIVED 5/26/78 WEIGHT 40173# CHARGES \_\_\_\_\_ PREPAID ( ) COLLECT ( )

PACKING SLIP NO. \_\_\_\_\_ PARTIAL ( XX ) COMPLETE ( ) OSD NO. \_\_\_\_\_





Q. C. DISTRIBUTION

P. O. NO. 7220-T-28141 Q JOB NO. 7220

SPEC. NO.

MRR NO. AEO-6442 DATE 6/6/78

VENDOR J. T. Ryerson & Son

REF. DWG.

SHIPPED BY Vendor

SHIPPING POINT Chicago, IL

SERVICE

P.O. ITEM NO. Q. NO.	QUANTITY RECEIVED	COMPLETE DESCRIPTION
15	(2 pcs.) 80'	WT4 X 6.5 X 40' Tee (520#)
8	(5 pcs.) 200'	Angle 2½" X 3½" X 3/8" X 40' (1440#)
9	(5 pcs.) 200'	Angle 3½" X 3½" X 3/8" X 40' (1700#)
11	(5 pcs.) 200'	Angle 4" X 4" X 3/8" X 40' (1960#)
14	3 pcs.	1½" X 48" X 96" Plate (4901#)
15	3 pcs.)	1½" X 48" X 96" Plate (5881#)
6	(5 pcs.) 200'	Angle 3" X 2" X 3/8" X 40' (1180#)

SHOP INSPECTION RELEASE REC'D  
YES ( ) NR ( ) NO ( )

QC RECORDS RECEIVED  
YES ( ) NR ( ) NO

NON CONFORMANCE  
TAG NO. ( )

INSPECTION PROCESS  
USED COMMENT/INSTRUCTION

INSPECTED BY *N. Shawl* DATE *6/7/78* APPROVED BY \_\_\_\_\_  
 MS/FLD ENG \_\_\_\_\_ DATE \_\_\_\_\_ PFE/OC \_\_\_\_\_ DATE \_\_\_\_\_

DELIVERING TO: Lake Shore F.B. NO. 33019 CAR NO. \_\_\_\_\_  
 DATE: 5/26/78 WEIGHT: 40173# CHARGES \_\_\_\_\_ PREPAID ( ) COLLECT ( )  
 PACKING SLIP NO. \_\_\_\_\_ PARTIAL (XX) COMPLETE ( ) OSO NO. \_\_\_\_\_

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

Block 16 continued:

A conditional release is granted to allow fabrication of <sup>of "Q"</sup> components made from this material. Completed <sup>of "Q"</sup> assemblies fabricated from this material will be retained on QC Hold (with tagging per PSP G-3.2) at the Standish jobsited facility. The materials and components fabricated from these materials shall be marked <sup>of "RR"</sup> with a low stress stamp to maintain traceability through dispositioning of this NCR.

PFE

*[Signature]*

6-16-78

date

PFOCE

*[Signature]* for WIL BARCLAY 6-16-78

date

LQAE

*[Signature]*

6/16/78

date

Corrected Copy

NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220			19. NO. 1382	20. PAGE 1 OF 14																																								
2. UNIT(S) Indeter- minate	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION Stock ASME-SEE HF Material		5. ITEM LOCATION Poseyville & Rail Siting																																									
6. P.O. OR SPEC NO. See Block 16	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV	SER NO.	9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER J.T. Ryerson, Chicago, Ill.																																									
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (X) OTHER		IR NO See blk. 16 NO BQAM Rev. 3	12. ASME AUTHORIZED INSPECTION RECD ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD																																								
16. NONCONFORMING CONDITION: Bechtel Quality Assurance Manual-ASME Div. 1, Para 4320 Material				24. DISPOSITION CONCURRENCE																																										
Suppliers states: "Para. 4321 The procurement inspection department prepares and maintains a list of acceptable material manufacturers and material suppliers. Material manufacturers and suppliers listed must have and maintain a quality program meeting Bechtel, and ASME Section III, Div. 1, requirements				<table border="1"> <tr> <td>rework</td> <td>reject</td> <td>repair</td> <td>use as is</td> </tr> <tr> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="3">J. J. [Signature]</td> <td>8-22-78</td> </tr> <tr> <td colspan="3">PROJECT FIELD ENGINEER</td> <td>DATE</td> </tr> <tr> <td colspan="3">R. R. [Signature]</td> <td>8-22-78</td> </tr> <tr> <td colspan="3">PROJECT ENGINEER</td> <td>DATE</td> </tr> <tr> <td colspan="3">A. [Signature]</td> <td>7/15/78</td> </tr> <tr> <td colspan="3">PROJ CONSTR QC ENGINEER</td> <td>DATE</td> </tr> <tr> <td colspan="3">[Signature]</td> <td></td> </tr> <tr> <td colspan="3">AUTHORIZED INSPECTOR</td> <td>DATE</td> </tr> </table>			rework	reject	repair	use as is	X				J. J. [Signature]			8-22-78	PROJECT FIELD ENGINEER			DATE	R. R. [Signature]			8-22-78	PROJECT ENGINEER			DATE	A. [Signature]			7/15/78	PROJ CONSTR QC ENGINEER			DATE	[Signature]				AUTHORIZED INSPECTOR			DATE
rework	reject	repair	use as is																																											
X																																														
J. J. [Signature]			8-22-78																																											
PROJECT FIELD ENGINEER			DATE																																											
R. R. [Signature]			8-22-78																																											
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A. [Signature]			7/15/78																																											
PROJ CONSTR QC ENGINEER			DATE																																											
[Signature]																																														
AUTHORIZED INSPECTOR			DATE																																											
17. REPORTED BY [Signature]	DATE 6-13-78	18. VALIDATED BY [Signature]	DATE 6-15-78	25. DISPOSITION RESULTS																																										
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)																																														
22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering																																														
Item #1 - Request release of 400 linear feet of M4x13.0x40' from purchase order #282870, MRR / AEO-6468, Inspection Record #R-1.00-3324. This material shall shall be used for fabrication of ANSI-B31.1 Non-Nuclear supports. All identification markings on material shall be removed. [Signature] 7/5/78 [Signature] 7/5/78																																														
23. PROJECT ENGINEERING DISPOSITION																																														
NAME HAS BEEN REVISED (REF: REV. 3-E TO SECTION III NO. II) FOR THE PROCUREMENT OF ASME MATERIAL TO COMPLY WITH ASME III NUCLEAR REQUIREMENTS. HENCE, MATERIAL SHALL BE USED AS IS. THIS CHANGE WILL DELETE THE REQUIREMENTS OF BQAM. [Signature] 7/22/78																																														
				26. QC ACCEPTANCE [Signature] 8-22-78 QC ENGINEER DATE																																										
				AUTHORIZED INSPECTOR DATE																																										

Continued Block 16

for the material to be purchased.

Para. 4322 Quality program demonstration is established through survey of the manufacturer or supplier by the procurement inspection department. Assistance may be requested from MF & QCS, project engineering, quality control, or quality assurance."

Contrary to the above, Purchase Orders 7220-F-27526, F-28287, F-28796 were awarded to J.T. Ryerson Corporation of Chicago, Ill. with no Bechtel procurement inspection department survey being accomplished. (Note: This company has been ASME committee surveyed and approved to ASME-NA 3800 baseline but not Bechtel surveyed.)

Material that has been received at jobsite are as listed below:

<u>Purchase Order</u>	<u>Material Receiving Report</u>	<u>Inspection Record</u>
F-27526	AEO-6157	R-1.00-3116
F-28287	AEO-6420	R-1.00-3303
	AEO-6449	R-1.00-3304
	AEO-6450	R-1.00-3305
	AEO-6467	R-1.00-3323
	AEO-6468	R-1.00-3324
	Shipping Inv. 429446 & 429447	
	RR Car No. C & O 367553	R-1.00-3327
	Shipping Inv. 429455 & 429446	
	RR Car No. B & O 357102	R-1.00-3326
F-28796	No material has yet to be received for this P.O.	

Material Receiving Report or Shipping Invoice attached.

"Q" number is indeterminate. Hold pending final disposition. <sup>9/15/78</sup> <sup>9/16/78</sup> hold tag(s) applied to nonconforming item(s).

In addition the subject PO's did not require ASME-See NF Material Sub-suppliers to J.T. Ryerson to be approved in accordance with para. 4321 & 4322 of Rev 3 of the BQAM. *John R. St. Louis* 6-16-78

NONCONFORMITY REPORT (CONT'D)

1 PAGE 1 OF 15 14 NCR NO

Block 16 continued:

A conditional release is granted to allow fabrication of components made from this material. Completed assemblies fabricated from this material will be retained on QC Hold (with tagging per PSP-G-3.2) at the Sandish jobsite facility. The materials and components fabricated from these materials shall be marked "WT" with a low stress stamp to maintain traceability through dispositioning of this NCR.

*[Signature]*  
PFE

6-16-78  
DATE

*[Signature]* for W. Baccini  
PFQCE 6-16-78  
DATE

*[Signature]* 6/16/78  
LQAE DATE



REC-11

NONCONFORMANCE REPORT (CONT'D)

1. PAGE 4 OF 16

14. NCR NO. 82

Block 22 continued:

Item #2 - Balance of material shall be used as is, documentation supplied by J. T. Ryerson meets the requirements of Field Material Requisition, since the listed materials shall be used in Non NA-8000 application.

Reference Rev. 3-E to NQAM Sect. 3 No. 11. 8/10/78

*J. Mantham 8/11/78*  
*R. Ward 8/11/78*





# Bechtel

## MATERIAL RECEIVING REPORT

1382  
7/28/78  
M. J. ...

G. C.  
DISTRIBUTION

P. O. NO. 7220-F-28287 Q JOB NO. 7220

SPEC. NO.

MRR NO. AEO-6420 DATE 5/31/78

VENDOR I. T. Ryerson

REF. DWG.

SHIPPED BY Vendor

SHIPPING POINT Chicago, IL

SERVICE

P.O. IT. INQ. D. NO.	QUANTITY RECEIVED	COMPLETE DESCRIPTION
5	1000 LF	W6 X 15.5 X 40' Random Mill Length ASME-SA-36 (25 pcs.)
7	1360 LF	W8 X 20.0 X 40' DITTO (34 pcs.)
8	680' LF	W8 X 17.0 X 20' DITTO (34 pcs.)
14	1000 LF	L3 X 3 X 1/2 X 40' Random Length ASME-SA-36 (25 pcs.)
15	1000 LF	L4 X 4 X 3/8 X 40' DITTO (25 pcs.)
41	2000 LF	1/2" X 2 X 2 Structural Tubing 40' Random Mill Lengths ASTM-A-500 GR. B (50 pcs.)
45	720 LF	3/8" X 4 X 8 X 40' DITTO (18 pcs.)

SHOP INSPECTION RELEASE REC'D

YES ( ) N.R. ( ) NO ( )

QC RECORDS RECEIVED

YES ( ) N.R. ( ) NO

NON CONFORMANCE

TAG NO. ( )

INSPECTION PROCESS

USE FOR COMMENT/INSTRUCTION

INSPECTED BY <i>W. J. ...</i> Hendricks	DATE 6/1/78	APPROVED BY	DATE
MS/FLD ENG	DATE	PFE/QC	DATE

Railcar

F.B. NO.

CAR NO. CR 522638

5/30/78

WEIGHT

CHARGES

PREPAID ( )

COLLECT ( )

PACKING SLIP NO.

PARTIAL ( XX )

COMPLETE ( )

OSD NO.

DELIVERED TO/LOCATION

Poseyville  
Bechtel Power Corp. agents for Consumers Power Co.



MRR NO. AEO-6450 DATE 6/6/78  
 VENDOR J. T. Ryerson & Son  
 SHIPPED BY Vendor  
 SHIPPING POINT Chicago, IL  
 SERVICE

REF. DWG. *1382*  
*Fig. 2 of 14*

P.O. ITEM NO. Q. NO.	QUANTITY RECEIVED	COMPLETE DESCRIPTION
47	(25 pcs.) 1000 LF	1/2" X 4" X 4" Structural tubing 40' random mill lengths ASTM-A-500 GR. B.
52	(25 pcs.) 1000 LF	1/2" X 8" X 8" DITTO
53	(11 pcs.) 440 LF	1/2" X 10" X 10" DITTO
46	(25 pcs.) 1000 LF	3/8" X 5" X 3" DITTO

SHOP INSPECTION RELEASE REC'D YES ( ) N.R. ( ) NO ( )  
 QC RECORDS RECEIVED YES ( ) N.R. ( ) NO   
 NON CONFORMANCE TAG NO. ( )

INSPECTION PROCESS USED. COMMENT/INSTRUCTION

INSPECTED BY *W. Markham* OG Markham  
 MS. FLD. ENG. DATE APPROVED BY PFE/CC DATE

DELIVERING CARRIER Railcar F.B. NO. CAR NO. *EX ATSF 70414*  
 DATE RECEIVED *6/5/78* WEIGHT 119431# CHARGES PREPAID ( ) COLLECT ( )  
 PACKING SLIP NO. PARTIAL ( *XX* ) COMPLETE ( ) OSD NO.

DELIVERED TO LOCATION Poseyville  
 Bchtel Power Corp., agents for Consumers Power Co.  
 CHKD & COUNTED BY *[Signature]* THIS REPORT BY K. Treadway/see  
 Miner/Kelly

DISTRIBUTION

P.O. NO. 7220-F-282.7 Q JO. NO. 7220

SPEC. NO. *10-10-78*

MRR NO. AEO-6467 DATE 6/7/78

VENDOR J. T. Everson & Son

REF. DWG.

SHIPPED BY Inryco, Inc.

SHIPPING POINT Chicago, IL

SERVICE

P.O. ITEM NO Q. NO.	QUANTITY RECEIVED	COMPLETE DESCRIPTION
17	(19 Pcs.) 760 LF	L6 X 6 X 3/4 X 40' Random Length ASME-SA-36
13	(50 pcs.) 2000 LF	C3 X 4.1 X 40' Random Length ASME-SA-36
19	(50 pcs.) 2000 LF	C4 X 5.4 X 40' DITTO
8	(25 pcs.) 1000 LF	L1 1/2" X 1 1/2" X 1/2" X 40' DITTO
9	(25 pcs.) 1000 LF	L2 X 2 X 1/2 X 40' DITTO
21	(17 pcs.) 680 LF	C8 X 11.5 X 40' DITTO
21	(17 pcs.) 340 LF	C8 X 11.5 X 20' DITTO
22	(17 pcs.) 680 LF	C8 X 13.75 X 40' DITTO
22	(17 pcs.) 340 LF	C8 X 13.75 X 20' DITTO
23	(17 pcs.) 680 LF	C10 X 15.3 X 40' DITTO
23	(17 pcs.) 340 LF	C10 X 15.3 X 20' DITTO
24	(17 pcs.) 680 LF	C12 X 20.7 X 40' DITTO
24	(17 pcs.) 340 LF	C12 X 20.7 X 20' DITTO

SHOP INSPECTION RELEASE REC'D  
YES ( ) NR ( ) NO ( )

QC RECORDS RECEIVED  
YES ( ) NR ( ) NO

NON CONFORMANCE TAG NO. ( ) ( )

INSPECTION PROCESS USED. COMMENT/INSTRUCTION

INSPECTED BY <i>WOG Markham</i>	DATE <i>6/8/78</i>	APPROVED BY	DATE
MS/FLD ENG	DATE	PFE/QC	DATE

DELIVERING CARRIER Railcar F.B. NO. EJ & E 34310 CAR NO.

DATE RECEIVED 6/6/78 WEIGHT 108845# CHARGES PREPAID ( ) COLLECT ( )

DELIVERY SLIP NO. PARTIAL ( XX ) COMPLETE ( ) USD NO.

1  
2591 17-711

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

CHKD & COUNTED BY [Signature] THIS REPORT BY K. Treadway/see

Miner/Roderick





SALES ORDER - CUSTOMER COPY

QUOTATION CIRCLE NUMBER

DATE OF ORDER

7-20-57

QUOTATION

EQ. NO.

422147

JOB CONTROL NO.

SHIPPED TO

12101 5117 141 BIRMG

350 East Aille

Midland Mich.

VA SHIP COMMON CARRIER

HT # 1 pc 65174

11/2 96 32

1 pc 65174

25.0

14

SHIPPING WT. 20420#

HEAT NO.

1 1/2 72 96

1 pc 25

20.6

1 pc 7651749

72

14

SHIPPING WT. 35287

HEAT NO.

1 1/2 72 96

20.6

1 pc 80263360

14

SHIPPING WT. 29207

HEAT NO.

1 1/2 72 96

20.6

1 pc 895103

14

SHIPPING WT.

HEAT NO.

1 1/2 72 96

20.6

1 pc 80263360

14

SHIPPING WT.

HEAT NO.

1 1/2 72 96

20.6

1 pc 80263360

14

SHIPPING WT.

30

3 pc

AT # 1 pc W 72527 2076

1 pc T 65174 1076

1 pc 801619580

1 pc 801619580

1 pc 801619580

To be completed later

Customer's complaint and action taken

Reverse on Inland S

Metals + Process

- BOSTON
- BUFFALO
- CHARLOTTE
- CHATTANOOGA
- CHICAGO
- CINCINNATI
- CLEVELAND
- DALLAS
- DAYTON
- DENVER
- DETROIT
- ELK GROVE, IL
- HOUSTON
- INDIANAPOLIS
- KANSAS CITY
- LOS ANGELES
- MILWAUKEE
- MINNEAPOLIS
- NEW YORK
- PHILADELPHIA
- PITTSBURGH
- ST. LOUIS
- SAN FRANCISCO
- SEATTLE
- SPOKANE
- WALLINGFORD

PRICE	AMOUNT
21.100	0.1
31.100	0.1

Vendor: NATIONAL DIVISION  
 P.O. NO.:  
 MER NO.:  
 DATE REC'D.:  
 CHECKED BY:  
 FIELD INSPECTION BY:  
 TERMS: % DISC.  
 NET TO COLLECT

DATE SHIPPED

DATE SHIPPED

DATE SHIPPED

DATE SHIPPED

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DATE SHIPPED

# ORIGINAL DELIVERY RECEIPT

JOSEPH T. RYERSON & SON, Inc.

NO. OF COPIES

TAX CODE

INVOICE NUMBER

42 46

DATE SHIPPED

INVOICE DATE

SALES OF

CUSTOMER ORDER NUMBER

7220 F 282870

PAGE OF

LEDGER

ACCOUNT NUMBER

BUY CODE

SALES DISTRICT AND TERR.

INTER-OFFICE NUMBER

CG0396

PURCH. ORD. DATE  
4 28 78

REQUISITION NO.

(SAVE AS "SOLD TO" UNLESS OTHERWISE INDICATED)

SOLD TO

BECHTEL POWER  
PO BOX 2167  
MIDLAND MI

S  
H  
I  
P  
T  
O

X80XN0X SAME  
3500 EAST MILLER  
MIDLAND MI

Corrected Copy

THE ARTICLES AND OR PERFORMANCE OF THE SERVICES COVERED BY THIS INVOICE WERE PRODUCED IN COMPLIANCE WITH THE FEDERAL FAIR LABOR STANDARDS ACT OF 1938 AS AMENDED

TERMS: STEEL 15% 10 NET 30  
ALUMIN. NET 30 DAYS

GROSS B/L WT.

FOB SP

FOB DEST

PPG COLL

VIA

PROMISE

QUAN. ORDERED PKG	QUAN.	DESCRIPTION	SIZE	LENGTH	BILL WT., FEET SQ. FOOT AREA	PRICE	AMOUNT	WEIGHT SHI
20	(bpl)	PLT A515X G70-S4 PVQ BLUE-BROWN	1 72 96	42 FT 0	30 ft 1 1/2	30 ft 8"		57,739
HT	1 ps	38588 1017	1 ps	w 72527	42			
	1 ps	470051 51	1 ps	w 72527	31			
	1 ps	w 72527 41	1 ps	w 72527	31			

VENDOR \_\_\_\_\_  
 P.O. NO. \_\_\_\_\_ MRI NO. \_\_\_\_\_  
 AIRR NO. \_\_\_\_\_ DATE REC'D. \_\_\_\_\_  
 VIA \_\_\_\_\_ FRGT. NO. \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_  
 FIELD INSPECTION BY  
 PARTIAL  COMPLETE   
 STORAGE \_\_\_\_\_  
 TAX \_\_\_\_\_

QUANTITY BRACKET

A T

1. HEAT IDENT.	3	%
2.	4.	FRT. ON
		LBS. @

TOTAL

CERTIFIED TEST REPORTS

CLKT. OF ANALYSIS AND TEST

HARDENABILITY CHARGE

TO:  MAIL  WITH SHIPMENT

RECEIVED THESE AT GOOD CONDI

FIRM NAME

SIGNATURE

DELIVERED TIME

DEPARTED

ARRIVED

your delivery of any or all of the goods described herein shall constitute your acceptance of them (if not then shown given) to the extent of same set forth on this invoice hereat

**ORDER**

SHIP NO.  MAIL  PHOTO

DATE SHIPPED \_\_\_\_\_

INVOICE DATE \_\_\_\_\_

REVOLVING CREDIT \$ 4234.55

NO. OF COPIES \_\_\_\_\_

TAX CODE \_\_\_\_\_

PAGE OF INTER-OFFICE NUMBER \_\_\_\_\_

**JOSEPH T. RYERSON & SON, Inc.**

AS QUOTE NUMBER BUY CODE

CUSTOMER ORDER NUMBER **7220 F 282879**

PURCH. ORD. DATE \_\_\_\_\_ REQUISITION NO. \_\_\_\_\_

DATE AS SOLD TO (UNLESS OTHERWISE INDICATED) **01-20-73**

**BECHTEL POWER**

**P O BOX 2167**

**MIDLAND MI**

**DO NOT SHIP REF DENOVO**

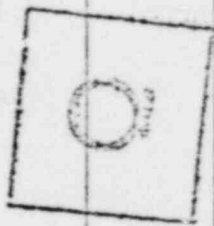
**P 3500 EAST MILLER**

**O MIDLAND MICHIGAN**

QTY. ORDERED PKG.	DESCRIPTION	SIZE	LENGTH	BILL WT. FEET SQ. FOOT AREA	PRICE	AMOUNT	WEIGHT SHIPPED
24	PLT A 515 G 70-54.1 PVQ BLUE BROWN	3/8 X 36 TO 96 96 to 30 ft long SYS 032573-08	432817				

*HT see attached paper*

Copy of G-C



5

QUANTITY BRACKET \_\_\_\_\_

1. REAT IDENT. 3. \_\_\_\_\_

2. \_\_\_\_\_

FRT. ON \_\_\_\_\_

LBS. @ \_\_\_\_\_

**TOTAL**

REC'D THESE ARTICLES IN GOOD CONDITION \_\_\_\_\_

FIRM NAME \_\_\_\_\_ DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_

TO:  MAIL  WITH SHIPMENT

CERTIFIED TEST REPORTS

CERT. OF ANALYSIS AND TEST

HARDENABILITY CHARTS

Acceptance by you of any or all of the goods described herein shall constitute your assent to the Terms of Sale set forth on the reverse hereof.

SALES ORDER - CUSTOMER COPY

CUSTOMER ORDER NUMBER

DATE

SHIP TO

SHIP TO

TO THE ORDER OF

3500 East Miller

Myrtle Beach

VA

1/12

36 to 96

96" and longer

HT numbers

see attached paper

3/16

36 to 96

96" and longer

HT Numbers

see attached paper

3/14

36 to 96

96" and longer

HT Numbers

see attached paper

1

12 to 0

to be replaced later

Customer Certificate of Compliance Met according to select Island, USS, Tucker or Belme L. Cushman's lead #, post # size ca

SHIP TO

ADDRESS

429446

JOB CONTIN. NO.

DATE SHIPPED

Corrected

PRICE

30.050

CWT

30.050

CWT

30.050

CWT

Copy 2 of C

- BOSTON
- BUFFALO
- CHARLOTTE
- CHATTANOOGA
- CHICAGO
- CINCINNATI
- CLEVELAND
- DALLAS
- DAYTON
- DENVER
- DETROIT
- ELM GROVE, IL
- HOUSTON
- INDIANAPOLIS
- KANSAS CITY
- LOS ANGELES
- MILWAUKEE
- MINNEAPOLIS
- NEW YORK
- PHILADELPHIA
- PITTSBURGH
- ST. LOUIS
- SAN FRANCISCO
- SEATTLE
- SPOKANE
- WALLINGFORD

NATIONAL DIVISION  
PLASTICS, MACHIN  
GRINDING.

SHIPPING &  
PACKING

THANK YOU  
FOR YOUR

QTY

7

HT

36 to 96

96" and longer

HT numbers

see attached paper

3/16

36 to 96

96" and longer

HT Numbers

see attached paper

3/14

36 to 96

96" and longer

HT Numbers

see attached paper

1

12 to 0

to be replaced later

Customer Certificate of Compliance Met according to select Island, USS, Tucker or Belme L. Cushman's lead #, post # size ca

PRICE

AMOUNT

DATE

FRG. NO.

CHECKED BY

FIELD INSPECTION BY

PARTIAL

STORAGE

GROSS AMOUNT

TERMS

% DISC.

NET TO COLLECT

COMPLETE

DATE

FRG. NO.

DATE

FRG. NO.

DATE

FRG. NO.

DATE

FRG. NO.

DATE

FRG. NO.

DATE

FRG. NO.

DATE

FRG. NO.

DATE

FRG. NO.

DATE

FRG. NO.

DATE

FRG. NO.

DATE

YCR# 1382  
 Pg. 15 of 15  
 14 02 15

Correlation Chart



Pcs.	SIZE	W.T.	HEAT NUMBER
1	96X30	3,677	<u>24</u> T65188
1	96X30	3,677	<u>34</u> T65188
1	96X30	3,677	<u>78</u> 40403
1	96X39	3,554	<u>103</u> 39659
1	96X30	3,677	<u>B 186101</u> 801 B 30110
1	96X30	3,677	<u>108</u> 37490
1	96X <sup>1x</sup> 296	3,616	<u>116</u> 38615
1	96X30	3,677	<u>B 186101</u> 801 B 30110
1	96X22	2,696	<u>B 186101</u> 801 B 30110
1	96X20 <sup>2</sup>	2,533	<u>34</u> 65188

YICP# 3352  
19. 4/24/11  
5. 15. 2011

Completed

1	46X8	470	<u>W 54077</u> 82
1	43X96	510	<u>54077</u> 82
1	61X8	622	<u>801830110</u> B#186101
1	61X8	622	<u>T65188</u> 34
1	61X8	622	<u>W54077</u> 72
1	80X8	818	<u>54077</u> 82
1	46X126	704	<u>172</u> W54077
2	46X126	708	<u>T65188</u> 24
1	55X93	648	<u>24</u> T65188
①	54X11	758	<u>34</u> W54077
1	35X8	352	<u>33</u> W50441
1	46X126	704	<u>B186105</u> 801830110
1	41X11	577	<u>8186105</u> 801830110
		43,281	

### NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220				19. NO. 1383	20. PAGE 1 OF 2																	
2. UNIT(S) I & II	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION Reactor Building Coatings		5. ITEM LOCATION Cont. #1 & #2 Misc. Steel Cont. #2 Incore Inst. Tunnel																			
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N - N/A - REV - N/A		9. SOURCE Construction	10. CONTRACTOR/SUPPLIER N/A																			
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER		IR NO. C-8.50-49&56 NOA-41-Rev.-3	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO		13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client (X) N/A ( ) FLD																	
16. NONCONFORMING CONDITION: Specification 7220/A-41 rev. 3, Paragraphs 7.5.2b and 8.3.2b state that prior to blasting and coating, the surface temperature of steel shall be at least 5°F above the dew point. Review of the atmospheric conditions log shows the following:						24. DISPOSITION CONCURRENCE																		
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>DATE</th> <th>LOCATION</th> <th>OPERATION</th> <th>SURFACE TEMP.</th> <th>DEW POINT</th> </tr> </thead> <tbody> <tr> <td>12/13/77</td> <td>Blast Yard</td> <td>Blasting Misc. Metals</td> <td>65°F</td> <td>65°F</td> </tr> <tr> <td>1/16/78</td> <td>Cont. #2</td> <td>Coating Incore Inst. Chan.</td> <td>57°F</td> <td>53°F</td> </tr> </tbody> </table>						DATE	LOCATION	OPERATION	SURFACE TEMP.	DEW POINT	12/13/77	Blast Yard	Blasting Misc. Metals	65°F	65°F	1/16/78	Cont. #2	Coating Incore Inst. Chan.	57°F	53°F	rework	reject	repair	use as is
						DATE	LOCATION	OPERATION	SURFACE TEMP.	DEW POINT														
						12/13/77	Blast Yard	Blasting Misc. Metals	65°F	65°F														
1/16/78	Cont. #2	Coating Incore Inst. Chan.	57°F	53°F																				
PROJECT FIELD ENGINEER PROJECT ENGINEER PROJ CONSTR QC ENGINEER				DATE	DATE	DATE																		
17. REPORTED BY <i>B. G. ...</i>		DATE 6/15/78	18. VALIDATED BY <i>W. Hill ...</i>		DATE 6/15/78	25. DISPOSITION RESULTS																		
21. ROUTING: <input checked="" type="checkbox"/> TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)		22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering <i>Disposition requested by: 7-31-78</i>																						
Item 1) On 12/13/77 at 10:00 a.m. the surface temperature and dew point were both recorded at 65°F in the blasting yard while the relative humidity was recorded at 45%. It is Field Engineering's estimation that the dew point of 65°F is an erroneous reading because it does not seem to correspond with the relative humidity and surface temperature and it is not consistent with the readings during the rest						Disposition "Use as is."  <i>B. G. ...</i> 6/15/78																		
23. PROJECT ENGINEERING DISPOSITION  ENGINEERING CONCURS WITH "USE-AS-IS" DISPOSITION																								
						26. QC ACCEPTANCE QC ENGINEER DATE																		
						AUTHORIZED INSPECTOR DATE																		

BLOCK #16 CONTINUED:

"Q"-List #2.20. Hold for Engineering Disposition. 1 Hold Tag Applied to Incore Instrument Channel Embeds.

BLOCK #22 CONTINUED:

of the month. Attached is the Atmospheric Condition Log for December.

The atmospheric readings in the paint shop during the painting of the same miscellaneous metal items as mentioned above are as follows. Time of readings was 13:35 p.m., surface temperature 58°F, dew point 47°F, and relative humidity was 68%.

Based on the above information, Field Engineering recommends "Use as is".

Item 2) The fact that the surface temperature was 4°F above the dew point instead of 5°F as required by Spec A-41 will have an insignificant affect on coating system and Field Engineering recommends "Use as is". The coating system used in the case was Carboline CZ-11.

*J. Betts 7/10/78*



WORLD CON

ATMOSPHERIC CONDITION LOG

PERICO 12-1-77 THRU 12-31-77

1. Date	2. Time		3. Surface Temperature		4. A. R.H.	4. Relative Humidity		5. Dew Point #	6. Initial & Date Of QCE	7. Remarks
	a. Temp.	b. Inst. No.	c. Cal. Due Date	b. Inst. No.		c. Cal. Due Date				
12-1-77	7:55A	BPC 2195	1-12-78	44	BPC 2293	57-16-78	57	K12-1-77	BLAST YARD	
12-1-77	2:33P	BPC 2195	1-12-78	51	BPC 2293	5-16-78	60	K12-1-77	PAINT SHOP	
12-2-77	8:45A	"	"	34	"	"	50	K12-2-77	BLAST YARD	
12-2-77	12:38P	"	"	42	"	"	51	K12-2-77	PAINT SHOP	
12-3-77		NO B	- BLASTING	COATING	NG			K12-3-77		
12-4-77		"	"	"	"			K12-4-77		
12-5-77				45	BPC 2293	5-16-78	58	K12-5-77	NO R-WORK	
12-6-77				40	"	"	54	K12-6-77	" " "	
12-7-77				48	"	"	62	K12-7-77	" " "	
12-8-77				52	"	"	65	K12-8-77	" " "	
12-9-77	12:15P	BPC 2195	1-12-78	48	"	"	57	K12-9-77	BLAST YARD	
12-9-77	1:50P	"	"	46	"	"	40	K12-9-77	PAINT SHOP	
12-9-77	2:00P	"	"	40	"	"	54	K12-9-77	BLAST YARD	
12-10-77		NO B	- BLASTING	COATING				K12-10-77		
12-11-77		"	"	"	"			K12-11-77		
12-12-77	8:00A	BPC 2195	1-12-78	30	BPC 2293	5-16-78	46	K12-12-77	BLAST YARD	
12-12-77	2:20P	"	"	42	"	"	55	K12-12-77	PAINT SHOP	
								DeWitt	pipes	

ATMOSPHERIC CONDITION LOG

PERIOD 12-1-77 THRU 12-31-77

1. Date	2. Surface Temperature			4. Relative Humidity			5. Dew Point	6. Initial & Date OF QCE	7. Remarks
	a. Time	b. Inst. No.	c. Cal. Due Date	a. R.H.	b. Inst. No.	c. Cal. Due Date			
12-13-77	10:00A	BPC 2195	1-12-78	45	BPC 2193	5-16-78	65	12-13-77	BLAST YARD
12-13-77	1:35P	"	"	68	"	"	47	12-13-77	PAINT SHOP
12-14-77	1:40P	"	"	54	"	"	46	12-14-77	BLAST YARD
12-14-77	2:30P	"	"	53	"	"	47	12-14-77	PAINT SHOP
12-15-77		N/A		47	"	"	53	12-15-77	NO Q-WORK
12-16-77	9:10A	BPC 2195	1-12-78	50	"	"	47	12-16-77	BLAST YARD
12-16-77	12:45P	"	"	46	"	"	48	12-16-77	PAINT SHOP
12-17-77		NO	R-WORK FINISHING			CONTAINERS		12-17-77	
12-18-77		"	"	"	"	"	"	12-18-77	
12-19-77	10:40A	BPC 2195	1-12-78	60	BPC 2293	5-16-78	42	12-19-77	BLAST YARD
12-19-77	1:51P	"	"	68	"	"	45	12-19-77	PAINT SHOP
12-20-77		N/A		58	"	"	41	12-20-77	NO Q-WORK
12-21-77	7:30A	BPC 2195	1-12-78	43	BPC 2293	5-16-78	45	12-21-77	NO Q-WORK BLAST YARD
12-21-77	8:20A	"	"	37	"	"	47	12-21-77	BLAST YARD
12-21-77	2:00P	"	"	37	"	"	47	12-21-77	PAINT SHOP
12-22-77	8:10A	"	"	30	"	"	50	12-22-77	BLAST YARD
12-22-77	12:40P	"	"	42	"	"	50	12-22-77	PAINT SHOP
12-23-77	7:15A	"	"	24	"	"	63	12-23-77	BLAST YARD
12-23-77	8:05A	"	"	45	"	"	43	12-23-77	PAINT SHOP

ATMOSPHERIC CONDITION LOG

PERIOD 12-1-77 THRU 12-31-77

1. Date	3. Surface Temperature		4. Relative Humidity			5. Dew Point	6. Initial Date of QCE	7. Remarks
	A. Temp.	B. Instr. No.	C. Cal. Due Date	A. R.H.	B. Instr. No.			
12-24-77		NO	R-BLASTING	4			12-24-77	
12-25-77			"	"			12-25-77	
12-26-77			"	"			12-26-77	
12-27-77	9:00A	BPC 2-195	1-12-78	45	BPC 2-195	5-16-78	12-27-77	DIESEL OIL STORAGE TANK
12-27-77		N/A	50		"	"	12-27-77	NO R-WORK
12-28-77		N/A	43		"	"	12-28-77	"
12-29-77	12:00	BPC 2-195	1-12-78	30	"	"	12-29-77	BLAST YARD
12-29-77	2:38P	"	1-12-78	43	"	"	12-29-77	PAINT SHOP
12-30-77	7:38A	"	"	35	"	"	12-30-77	BLAST YARD
12-30-77	12:05P	"	"	34	"	"	12-30-77	PAINT SHOP
12-31-77		NO	R-BLASTING		1/2 COATING		12-31-77	

12/31/77

Corrected copy

NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 1389	20. PAGE 1 OF 1
2. UNIT(S) 1, 2 & Conn	3. DRAWING/PART NO. Varies	REV N/A	4. ITEM DESCRIPTION Miscellaneous Metal	5. ITEM LOCATION Aux. Bldg Cont. 1&2, S.W.I. Poseyvi	
6. P.O. OR SPEC NO. See Block 16	7. SERIAL NO. N/A	8. REPLACEMENT PART P/W N/A - REV N/A - SER NO. N/A	9. SOURCE PROC.	10. CONTRACTOR/SUPPLIER Haven Busch	
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER		IR NO. NO. C-233	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'y (X) Const ( ) Test
16. NONCONFORMING CONDITION: Section 5.0 of Spec. C-233 requires a certified copy of all mill test reports or, if approved by the Engineer, a certificate of compliance maybe furnished in lieu of a mill test report. Contrary to this, the documentation for the steel used by Haven Busch to fabricate various miscellaneous metal items under Purchase Orders F 13402, F 13323, F 13440, F 14430, F 14280, F 18565, F 13878 and F 18549, numerous anomalies have been noted in a review of the documentation packages such as: Certificate of compliance Con't on Page 2			24. DISPOSITION CONCURRENCE		
17. REPORTED BY J. H. [Signature] DATE 6/23/78			25. DISPOSITION RESULTS P.O. 13440 only Items 1, 3 & 5 use as is		
18. VALIDATED BY [Signature] DATE 6-23-78			26. ACCEPTANCE GC ENGINEER [Signature] DATE 8-17-78		
21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)			27. AUTHORIZED INSPECTOR [Signature] DATE 7-17-78		
22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering			28. AUTHORIZED INSPECTOR [Signature] DATE 7-17-78		
23. PROJECT ENGINEERING DISPOSITION Project engineering concurs with field engineering's recommended disposition that the following items of NCR 1389 be dispositioned "use as is" for the following reasons: Item 1. Certificate of compliance for the Nelson stud and weld filler material is sufficient and may be used in lieu of the mill test reports. Item 3. Low manganese control of .50% in lieu of the specified range of .80% to			29. AUTHORIZED INSPECTOR [Signature] DATE 8-17-78		

13175

RECORDED

\* P.O. 5 F13402, F13323, F14430, F14280, F13878, F18565 & F18549

\* This item is of FIELD ENG Disposition use as is copy 5/8/78

Block 16 Con't.

in lieu of mill test report with no Engineering approval, mill test reports and certificates of compliance improperly signed, chemical composition of materials that are not in compliance with ASTM requirements, and documents that are illegible.

"Q" List Nos. 1.101, 1.102, 1.502, 1.201, 1.202. No Hold Tags applied. (Reference NCRs 1315 & 1346)

Block 23 Con't

1.20% for heat number 78791 will tend to have an insignificant effect on the overall properties of the material. Manganese is used in steel as an oxidizer and to impart strength and responsiveness to heat treatment. This steel was not heated in the fabrication process and, furthermore, the other physical and chemical test results were acceptable. Consequently the low manganese content of heat number 78791 may be used as is.

Item 5 Although the material represented by heat number D23746 has not been subjected to the bend test as required in ASTM A36-70a, the test has since been made optional per ASTM A36-75 (Reference Specification 7220-C-233(Q), Rev. 16). Since the specified physical properties indicated acceptable material per ASTM A36-75, project engineering contends that absence of the bend test is acceptable and the material may be used as is. This disposition is applicable to all heats of all purchase orders listed in block 16, *7/10/78*

Note: Item 4 is dispositioned by field engineering and need not be dispositioned by project engineering.

Item 2. Current Industry & Dechtel Standards do not require I.I.C.'s and C.O.C.'s to be signed and dated. Acceptable certification may be provided by a computer printout or typed form which includes the following: (1) the manufacturer, (2) the fabricator/supplier, (3) heat number, physical properties and chemical analysis. *R Schulman 7/19/78*

*Dejuna A. Farase 6/30/78*  
*Jon L. Hook 6:30.78*  
*J.P. Pinsky 7/5/78*  
*P.D. [unclear] 7/5/78*

A conditional release is granted to permit in-place storage. (Not to be embedded until NCR closure).

A.J. Boos, PFE  
A.J. Boos, PFE  
Date

W.L. Barclay, HFQCE  
W.L. Barclay, HFQCE  
Date 6-26-78

G.L. Richardson, Lead QAE  
R.C. Hollen  
For G.L. Richardson  
G.L. Richardson, Lead QAE  
Date 6-26-78

Block 22 Cont. Item 2: <sup>PROJECT TAN 11/178</sup> Field Engineering requires all mill test reports and certificates of compliance to be signed, dated by a responsible employee of the supplier, with his position identified. This is not a Project Engineering requirement and Field Engineering <sup>RECOMMENDS TO USE AS IS, AND</sup> will accept the documents without signatures based on the National Board of Boiler and Pressure Vessel Inspectors Bulletin for Oct. 1974 which is attached, See page 4 Item 3: Low manganese content for heat #78791: Manganese is used in steel to function as a deoxidizer and to impart strength and responsiveness to heat treatment. The physical tests showed good results and this steel was not heat treated in the process of fabricating the embeds, therefore, Field Engineering recommends to "Use as is". See attached mill test report on page 5. Item 4: Illegible documents will be replaced by the vendor with legible copies. Item 5: Upon complete review of the documentation for this purchase order, it was discovered that heats <sup>HEATS W30772, W31442, AND R21064, WDE2872</sup> 023746 <sup>WERE</sup> was not subject to the bend test as required by ASTM A36-70a. The revised ASTM requirements in ASTM-A36-75 no longer requires the bend test but makes it an optional requirement. Field Engineering recommends to accept <sup>THESE</sup> this heats without a bend test, since the other physical tests are acceptable. See attached mill test report on page 6.

Note items 1, 3 and 5 are Field recommended dispositions to Project Engineering. Items 2 and 4 are Field Engineering dispositions. <sup>TAN</sup> Thom Napoli 6-27-78  
J.P. Bell 6-27-78

5/27/78  
7/1/78

4/17/78  
7/1/78  
P. 2. 7/1/78

TAN 7/1/78

Block 22 continued:

This is a final disposition for all the remaining purchase orders listed in Block 16. Disposition items 1, 2, 4 and 5, as stated above for P.O. 13440 also existed in the rest of the purchase orders. Item 3, low manganese content, was not present in any other P.O. For items 1 and 5, the field recommends "use as is", based on Project Engineering's disposition of P.O. 13440. For item 4, the field will obtain legible copies of all illegible documents. Item 2 is acceptable, based on Project Engineering's disposition of P.O. 13440.

*Sham Nagadi* 8-7-78  
*J.P. Bitts* 8-7-78

Block 23 continued:

Project Engineering's disposition of items 1, 2 and 5 for P. O. F-13440 are applicable to all P. O.'s referenced in block 16. Therefore, Project Engineering concurs with Field Engineering's disposition to use as is.

*R. F. Schulman* 8-10-78

ASME - BOILER BOARD - MEMBERSHIP REPORT

100-1174

MEMBERSHIP REPORT  
FOR THE YEAR 1974

MEMBERSHIP REPORT  
FOR THE YEAR 1974

MEMBERSHIP REPORT  
FOR THE YEAR 1974

MEMBERSHIP REPORT  
FOR THE YEAR 1974

MEMBERSHIP REPORT  
FOR THE YEAR 1974

MEMBERSHIP REPORT  
FOR THE YEAR 1974



# NORTHWESTERN STEEL AND WIRE COMPANY

## CERTIFIED

STERLING, ILLINOIS 61081

METALLURGICAL DEPARTMENT - CERTIFIED MILL TEST REPORT

ORDER NO. 23-76 24121 6631 1-9  
 CUSTOMER P.O. NO. 49418  
 SHIP METHOD TRUCK  
 CAR ON TRUCK NUMBERS ARTN 75630 / 75630A  
 QTY 12 2 44 1  
 UNIT 2 44 1

WE HEREBY CERTIFY THAT THE FOREGOING DATA IS A TRUE COPY OF THE MILL TEST REPORTS RESULTING FROM TESTS IN OUR LABORATORY.

NORTHWESTERN STEEL AND WIRE COMPANY

*M.P. Cheng*

HAVENHUSCH CO  
 BOX 56  
 3443 CHICAGO DR SW  
 GRANDVILLE, MICHIGAN 49418

HAVENHUSCH CO  
 BOX 56  
 3443 CHICAGO DR SW  
 GRANDVILLE, MICHIGAN 49418

SECTION	SPEC	LENGTH	PIECES	WEIGHT	HEAT #	MILD POINT PSI	UTENSIL STRONGTH PSI	YIELD POINT PSI	ELONG. IN 8 IN. B	REID TEST	CAR	PHOS	SUL
PLT 1 X 2	A-36 ✓	201		10050	76791	48300	54300	24.2	OK	21	50	0.11	0.29

*Rec'd by [unclear] 5-12-76*

REMARKS:

A NOTARY PUBLIC IN AND WITHIN THE STATE OF ILLINOIS, DO HEREBY CERTIFY THAT THIS AFFIDAVIT WAS SWORN TO BEFORE ME BY \_\_\_\_\_

A DULY AUTHORIZED AGENT OF NORTHWESTERN STEEL AND WIRE COMPANY, GIVEN UNDER MY HAND AND SEAL OF OFFICE.

05/06  
 CHECKED *3/31/66*  
 APPROVED *[Signature]*  
 HAVENHUSCH COMPANY

PLATES  
 GARY U.S. ORDER NO. JE61635 LOAD TALLY OR INVOICE NO. 154-44739  
 6357 2/19/76  
 33209 SHIPPER NO. & DATE TO1840 3/17/76

WE HEREBY CERTIFY THAT THE CHEMICAL ANALYSIS AND/OR TESTS SHOWN IN THIS REPORT ARE CORRECT AS CONTAINED IN THE RECORDS OF THE COMPANY.  
 D.A. HAYES  
 CHIEF METALLURG

HAVEN BUSCH CO  
 3443 CHICAGO DRIVE S W  
 BOX 96  
 GRANDVILLE MICH 49418

SHIP TO  
 HAVEN BUSCH CO  
 3443 CHICAGO DRIVE S W  
 GRANDVILLE MICH

STK

PLATE CARBON ASTM A36-75

MILL C200

BY: *[Signature]*  
 DATE 3-22-76

HEAT NO.	TEST OR TUBE NO.	NO. PCS.	MATERIAL DESCRIPTION				WEIGHT	YIELD STRENGTH	TENSILE STRENGTH	ELONGATION
			THICKNESS OR SECTION	WIDTH DIA. OR 1/2 WT	LENGTH					
D23746		2	1-1/4"	72.0"	240	12238	46800	69900	25.0	

BEND TEST  
 ✓

*[Signature]*  
 9-7-76

ALL TESTS ACCORDING TO COMPANY RECORDS CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION LISTED ABOVE

HEAT NO.	TYPE	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Sb	Al	N	V	Bi	Co	Co
D23746	H	23	1.18	008	023												

QA/QC CHECKED *[Signature]*  
 APPROVED *[Signature]*  
 HAVEN BUSCH COMPANY

AS NOTED IN BLOCK 23

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
			X
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

*Handwritten:* 7-10-78  
7-10-78  
7/10/78

*Handwritten:* S.R. Basma/RLC

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
			X
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

*Handwritten:* 7-17-78  
7-19-78  
7-19-78

*Handwritten:* S.R. Basma/RLC

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
			X
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

*Handwritten:* 8-10-78  
8-10-78  
8-10-78

*Handwritten:* S.R. Basma/RLC

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

# NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO.		19. NO. 1390	20. PAGE 1 OF 10
2. UNIT/SI		3. DRAWING/PART NO.		4. ITEM DESCRIPTION	
		W/A		H/A Stock ASME-SEC III Material	
6. P.O. OR SPEC NO.		7. SERIAL NO.		8. REPLACEMENT PART	
See Block 16		W/A		P/N N/A REV. SER NO.	
9. SOURCE		10. CONTRACTOR/SUPPLIER			
Supplier		J.T. Ryerson & Son, Inc., Chicago, Ill.			
11. INSPECTION CRITERIA		12. ASME AUTHORIZED INSPECTION REQ'D		13. SKETCH ATTACHED	
( ) DWG ( ) SPEC ( ) OTHER		IR NO. See blk. 16 NO. NQA Rev. 3		( ) YES ( ) NO	
14. Discovered During		15. Equip Furnished By			
( ) Rec'g ( ) Const ( ) Test		( ) Client ( ) Eng ( ) PLD			
16. NONCONFORMING CONDITION:				24. DISPOSITION CONCURRENCE	
Bechtel Quality Assurance Manual-ASME Div. 1, Para. 4320				rework reject repair use as is	
Material Suppliers states:				<div style="text-align: right;"> <i>[Signature]</i> 8-22-78              PROJECT FIELD ENGINEER DATE  <i>[Signature]</i> 8-22-78              PROJECT ENGINEER DATE  <i>[Signature]</i> 8-22-78              PROJ CONSTR QC ENGINEER DATE           </div>	
"Para. 4321 The procurement inspection department prepares and maintains a list of acceptable material manufacturers and material suppliers. Material manufacturers and suppliers listed must have and maintain a quality program meeting Bechtel, and ASME Section III, Div. 1, requirements				AUTHORIZED INSPECTOR DATE	
Cont. on Page 2				25. DISPOSITION RESULTS	
17. REPORTED BY		DATE		18. VALIDATED BY	
<i>[Signature]</i>		6-22-78		<i>[Signature]</i> 6-22-78	
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)					
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering					
Material shall be used as is, documentation supplied by J.T. Ryerson meets the requirements of Field Material requisition, since the listed materials shall be used in Non NIA-8000 application. Reference Rev. 3 to NQA Sect. 3 No. 11.					
8/10/78 <span style="float: right;"><i>[Signature]</i> 8/16/78 <i>[Signature]</i> 8/16/78</span>					
23. PROJECT ENGINEERING DISPOSITION					
NQAAM HAS BEEN REVISED (REF: REV. 3-E TO SECTION III NC. II) FOR THE PROCUREMENT OF ASME MATERIAL TO COMPLY WITH ASME III NUCLEAR COMPONENTS. HENCE, MATERIAL SHALL BE USED AS IS. THIS CHANGE WILL DELETE THE REQUIREMENTS OF NQAAM.					
<div style="display: flex; justify-content: space-between;"> <div> <i>[Signature]</i> 2/22/78              AUTHORIZED INSPECTOR DATE           </div> <div>             26. QC ACCEPTANCE  <i>[Signature]</i> 2-22-78              QC ENGINEER DATE           </div> </div>					

Continued Block 16

for the material to be purchased.

Para. 4322 "Quality program demonstration is established through survey of the manufacturer or supplier by the procurement inspection department. Assistance may be requested from MF & QCS, project engineering, quality control, or quality assurance."

Contrary to the above, Purchase Orders 7220-F-28141, F-28796 were awarded to J.T. Ryerson & Son, Inc. of Chicago, Ill. with no Bechtel procurement inspection department survey being accomplished. In addition the subject P.O.'s did not require ASME-See NF Material Sub-suppliers to J.T. Ryerson to be approved in accordance with para. 4321 & 4322 of Rev. 3 of the BOAM. (Note: This company has been ASME committee surveyed and approved using ASME NA-3800 baseline but not Bechtel surveyed.)

<u>Purchase Order</u>	<u>Ryerson Register No.</u>	<u>Inspection Record No.</u>
F-28141	447595 & 462214	R-1.00-3333
	425801, 460218, 1B425745	R-1.00-3332
	425807, 438247	
	462309 (200 ft. of $2\frac{1}{2}$ x $2\frac{1}{2}$ x $\frac{1}{4}$ Angle)	R-1.00-3377
	469482 (200 ft. of 3 x 2 x $\frac{3}{16}$ Angle)	
F-28796	454999	R-1.00-3331

Ryerson Registers attached.

"Q" number is indeterminate. Hold pending final disposition. 15 hold tag(s) applied to the nonconforming item(s).

MET BOST BUFF CHA CHIC CINC CLEV DALL DAY DENN DETR ELK HOU INDIA KANS LOS MILW MINN NEW PHILA PITTS ST. L SAN SEAT SPOK WALL NATH PLAS GRIN SHIP & PA THAM FOR

100 INVOICE NO. CGO336  
 200 ORDER NO. 7220F281410  
 300 QUANTITY 1390  
 400 CLASS 1390  
 500 DATE 5/10/78  
 600 SHIPPED TO  
 700 DO NOT SHIP  
 800 REFER DENOVA  
 900 MIDLAND RICH  
 1000 TEL FAX 2167  
 1100 DATE REC'D. 6/12/78  
 1200 P.R. FSGT. NO. Cuddie  
 1300 CHECKED  
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RECEIVED  
 6/13/78  
 D and C

Thomas of Brendel 6-12-78

CERT TEST REPORT W/SHPT  
 Make head post, 4 wire each item -  
 10 CFS - 1 Applied

ME BOS BUR CHA CHN CIN CLE DAL DAN DEN DET ELK HOU IND KAN LOS MIL MIN NEV PHO PIT ST. SAN SEA SPO VAL NAT PLAS GRIN SHN & P THA FOR

ASS'Y NO. 04 DATE SHIPPED 0854650  
 VENDOR J. T. Ryerson  
 P.O. NO. 25419 M.I. NO.  
 DATE REC'D. 6/12/78  
 FRGT. NO.

JOB CONTROL NO. 462214  
 VENDOR J. T. Ryerson  
 P.O. NO. 25419 M.I. NO.  
 DATE REC'D. 6/12/78  
 FRGT. NO.

SHIPPED TO Do Not Ship See  
 Standardick Machine Co.  
 MS OTXX-HOF SHEET 6/1-REM  
 L-3X3X2/8  
 20 FT 0 TO 40 FT 0  
 SHIPPING WGT. 7200  
 HEAT NO. 71775

QUANTITY  
 AMG A36  
 NO COLOR IDENT  
 SEND 1000 FT APPROX 25 PCS  
 \* REF WHITEHEAD  
 RECEIVED  
 6/13/78  
 Ruck  
 Thomas Boensch 6-12-78  
 SHIP COMMON CARRIER DIRECT PER INSP  
 Customer's copy of this invoice with  
 10 CT's of 1 Apples  
 Note health post & inc each item.

GROSS AMOUNT  
 TERMS % DISC.  
 NET TO COLLECT

**CUSTOMER'S COPY**  
**JOSEPH T. RYERSON & SON, Inc.**

SA  
 ENTRY DAY  
 NO DAY  
 MAIL

INVOICE D/F  
 DATE SHIPPED

CUSTOMER ORDER NUMBER  
 7220F201410

INVOICE NUMBER  
 25501

NO. OF COPIES  
 TAX CODE

LEDGER ACCOUNT NUMBER  
 SALES DISTRICT AND TERR.  
 INTER-OFFICE NUMBER  
 RRB CC0396

INVOICE NO.  
 PURCH. ORD. DATE  
 4 25 78

INSIDE SALES  
 WE

REQUISITION NO.

DATE SHIPPED

SALES DISTRICT AND TERR.  
 INTER-OFFICE NUMBER

LEDGER ACCOUNT NUMBER  
 SALES DISTRICT AND TERR.  
 INTER-OFFICE NUMBER

INVOICE NO.  
 PURCH. ORD. DATE

SOLD TO  
 BECHTEL POWER CORP  
 PO BOX 2167  
 MIDLAND MI 48640

SHIP TO  
 NCR# 1390  
 SHIP TO

THE ABOVE IS AN UNLESS OTHERWISE INDICATED  
 SAME AS SOLD TO UNLESS OTHERWISE INDICATED  
 BECHTEL POWER  
 STANDISH MICH

SHIP CC DIRECT ONLY

QUAN. ORDERED  
 P.C. QUAN  
 4 pcs CHAN A36

DESCRIPTION  
 SIZE  
 C 3 X 5.0  
 20 FT 0  
 SYS#020092-13

SHIP CC DIRECT ONLY  
 BILL WT., FEET  
 SQ. FOOT AREA  
 LENGTH  
 PRICE  
 AMOUNT

FROMISE  
 VENDOR  
 P.O. NO.  
 281410  
 DATE REC'D.  
 6/9/78  
 VIA  
 V.D.  
 CHECKED BY  
 C. Addie  
 FIELD BY  
 STICK  
 PARTIAL  
 STORAGE  
 COMPLETE  
 TAX ON  
 %  
 FRT. ON  
 LBS. e  
 TOTAL

QUANTITY BRACKET  
 AT  
 RECEIVED  
 6-9-78  
 Thomas Boenel 6-9-78  
 CERTIFIED TEST REPORTS  
 CERT. OF ANALYSIS AND TEST  
 HARDENABILITY CHARTS  
 TO: MAIL WITH SHIPMENT





METAL BOSTON BUFFALO CHATTANOOGA CHICAGO CINCINNATI CLEVELAND DALLAS DAYTON DENVER DETROIT ELK GROVE HOUSTON INDIANAPOLIS KANSAS CITY LOS ANGELES MILWAUKEE MINNEAPOLIS NEW YORK PHILADELPHIA PITTSBURGH ST. LOUIS SAN FRANCISCO SEATTLE SPOKANE WALLINGFORD WASHINGTON NATIONAL PLASTIC GRIND SHIP & PA THAN FOR Y

DATE OF ORDER: 11-25-76  
 PART: 01  
 JOB CONTROL NO.: 460218  
 ACCOUNT NO.: 04  
 DATE SHIPPED: 0854650  
 CREDIT: 10  
 DEBIT: 00

BILLED TO: BECHTEL POWER CORP 6 of 10  
 PO 2167  
 MIDLAND MI 48640

VIA SHIP CC DIRECT ONLY

SHIPPED TO: STANDISH MICH

QUANTITY	DESCRIPTION	SHIP. WT.	HEAT NO.	PRICE	AMOUNT
HR A36	5/8 RD			19.100	CWT
SEND 2000 FT APPROX 100 PCS * REF ALL ITEMS WHITEHEAD	20 FT 0		2099		
HR A36	3/4 RD			18.500	CWT
SEND 1000 FT APPROX 50 PCS	20 FT 0		1510		
<p>REMOVED 6-9-78 address</p> <p>Thorn of Boenach 6-9-78</p>					
SHIP CC DIRECT ONLY					
<p>SEND TEST REPORT</p>					
<p>TAX ON</p>					
<p>FREIGHT RATE</p>					
<p>PROTECTION RATE</p>					
<p>GROSS AMOUNT</p>					
<p>TERMS % DISC.</p>					
<p>NET TO COLLECT</p>					



METAL  
 BOSTON  
 BUFFALO  
 CHARLOTTE  
 CHICAGO  
 CINCINNATI  
 CLEVELAND  
 DALLAS  
 DAYTON  
 DENVER  
 DETROIT  
 ELK GROVE  
 HOUSTON  
 INDIANAPOLIS  
 KANSAS CITY  
 LOS ANGELES  
 MILWAUKEE  
 MINNEAPOLIS  
 NEW YORK  
 PHILADELPHIA  
 PITTSBURGH  
 ST. LOUIS  
 SAN FRANCISCO  
 SEATTLE  
 SPOKANE  
 WALLINGFORD

NATIONAL  
 PLASTIC  
 GRINDING

SHIPPING  
 & PACKING

THANK YOU  
 FOR YOUR BUSINESS

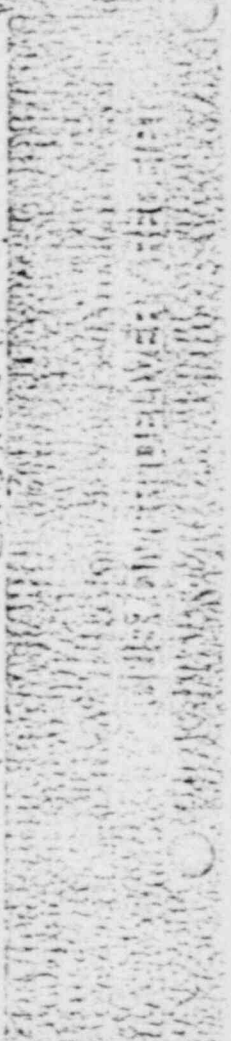
ORDER NO. 7220F201410  
 DATE OF ORDER 01/25/78  
 JCB CONTROL NO. 11/18/125718  
 ACCOUNT NO. 04  
 DATE SHIPPED 01/25/78  
 CREDIT CARD NO. 77C.P. 1390  
 SHIPPED TO BOSTON  
 SAME STANDISH MICH  
 VIA SHIP CC DIRECT ONLY  
 6 X 20  
 40 FT 0

QUANTITY	DESCRIPTION	SHIP. WT.	HEAT NO.	PRICE	AMOUNT
2 PCS	H DEAN A36 SEND 80 FT	1600		LOT	400.000

TAX ON \_\_\_\_\_  
 PLUS V.A.T. \_\_\_\_\_  
 V.G.T. \_\_\_\_\_  
 W.G.T. \_\_\_\_\_  
 FREIGHT RATE \_\_\_\_\_  
 PROTECTION RATE \_\_\_\_\_  
 GROSS AMOUNT \_\_\_\_\_  
 TERMS % DISC. \_\_\_\_\_  
 NET TO COLLECT \_\_\_\_\_

*Owner of Bonded 6-9-78*  
*4009*

3 NUCLEAR 503 - T.R. must accompany  
 shipment  
 Must conform to Sec 3  
 5/31



MET BOS BUFF CHA CHIC CINC CLEV DALL DAY DEN DETR ELK HOU INDIA KANS LOS MILW MINN NEW PHIL PITTS ST. L SAN SEAT SPOR WALL NATI PLAS GRIN SHI & P THA FOR

LED	ACCOUNT NO.	BUY	CREDIT
04	0554650		240
DATE SHIPPED			

DATE OF ORDER	PAY.	JOB CONTROL NO.
04-25-70	01	425007

**Corrected Copy**

QUANTITY	DESCRIPTION	RD	PRICE	AMOUNT
1000	HR 1016 SA 36 GREEN SEND APPROX 400 FT 20 PCS	7/8 RD 20 FT 0	18.500	18.500 CWT
1000	HR 1016 SA 36 GREEN SEND APPROX 200 FT 10 PCS	1 3/4 RD 20 FT 0	20.450	20.450 CWT
1000	HR 1016 SA 36 GREEN SEND APPROX 400 FT 20 PCS	2 FT 0 RD	18.450	18.450 CWT

Joseph T. Ryerson & Son, Inc., an Inland Steel Company

BILLED TO: BECHTEL POWER CORP, PO 2107, MIDLAND MI 486409  
 SHIPPED TO: SAME, STANDISH NICH, MA SHIP CC DIRECT ONLY  
 3 tensile tests made by R. Hyson, 16-78, by Baerwald 6-9-78  
 3 tensile tests made by R. Hyson, 16-78, by Baerwald 6-9-78  
 10 CR 601 Applied  
 MACK head #, Size 120 on each item  
 20 CR 601 Applied

NET TO COLLECT



CSM 506  
 ORDER NO. 722DF2B1410  
 SHIPPED TO  
 BECHTEL POWER  
 P.O. BOX 2167  
 MIDLAND MICH

ORDER NO. 438247  
 DATE SHIPPED 0854650  
 ACCOUNT NO. 04  
 LID 04

VIA DO NOT SHIP REF DEHQVO  
 1-1/8 RD  
 20 FT 0

\*REF WHITEHEAD ALL ITEMS  
 200 FT  
 RECEIVED 9-78  
 6-20-88

1000  
 1-71  
 1-71

SHIPPING WGT.  
 HEAT NO.

SHIPPING WGT.  
 HEAT NO.

SHIPPING WGT.  
 HEAT NO.

C CERT. OF ANALYSIS W/SHT  
 29 TR 10019  
 Nuclear Ore

METALS  
 BOSTON  
 BUFFALO  
 CHARLOT  
 CHATTAN  
 CHICAGO  
 CINCINN  
 CLEVELA  
 DALLAS  
 DAYTON  
 DENVER  
 DETROIT  
 ELK GRO  
 HOUSTON  
 INDIANA  
 KANSAS  
 LOS ANG  
 MILWAU  
 MINNEAP  
 NEW YOR  
 PHILADEL  
 PITTSBUR  
 ST. LOUIS  
 SAN FRA  
 SEATTLE  
 SPOKANE  
 WALLING

COLLECTOR

FOB SP  
 PRICE  
 LOT  
 AMOUNT  
 300,000

SHIPPING WGT.  
 HEAT NO.

SHIPPING WGT.  
 HEAT NO.

SHIPPING WGT.  
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SHIPPING WGT.  
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SHIPPING WGT.  
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SHIPPING WGT.  
 HEAT NO.

NATIONAL PLASTICS GRINDING  
 SHIPPING & PAC  
 THANK FOR YOU

GROSS AMOUNT  
 TERMS % DISC.

PROTECTION  
 WGT.

PROTECTION  
 WGT.

PROTECTION  
 WGT.

PROTECTION  
 WGT.

PROTECTION  
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PROTECTION  
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PROTECTION  
 WGT.

0356  
 7220P 247960  
 1170 01  
 154499  
 04 0854650  
 DATE SHIP TO  
 ACCOUNT NO.

SHIPPED TO  
 80 NOT SNIP  
 REF. CHINOVO (STANDISH), Mich  
 101 STREET BZBREN  
 MIDLAND MICH  
 VIA CTEX-EEP CATTORE SHIP 04 FOOL

QUANTITY  
 1  
 1  
 20 FT 0  
 PLT A36  
 BROWN-PINK  
 SEND 300 FT 21 per  
 APPROX 15 PCS  
 5 FT 0 TO  
 COLDSAW CUT  
 15' 2"

315  
 RECEIVED  
 9-78  
 J. J. Ryerson  
 28796 Q  
 6513 DATE REC'D. 6/9/78  
 VIA FRGT. NO. Cuddie  
 CHECKED BY Cuddie

SHIPPING WGT. 28796 Q  
 HEAT NO.

SHIPPING WGT. 28796 Q  
 HEAT NO.

SHIPPING WGT. 28796 Q  
 HEAT NO.

FIELD INSPECTION BY COMPLETE   
 PARTIAL   
 STORAGE  
 Flomery-Barnish 6-9-78

3 Customers Certificate of Compliance w/ Material  
 10 CTC 01 Applied  
 Make head 4 post + size each piece

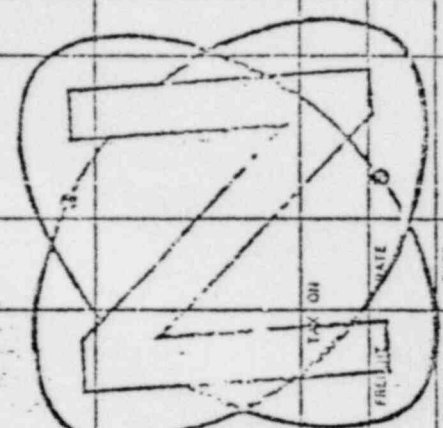


METALS  
 BOSTON  
 BUFFALO  
 CHARLOTTE  
 CHATTANOOGA  
 CHICAGO  
 CINCINNATI  
 CLEVELAND  
 DALLAS  
 DAYTON  
 DENVER  
 DETROIT  
 ELK GROVE  
 HOUSTON  
 INDIANAPOLIS  
 KANSAS CITY  
 LOS ANGELES  
 MILWAUKEE  
 MINNEAPOLIS  
 NEW YORK  
 PHILADELPHIA  
 PITTSBURGH  
 ST. LOUIS  
 SAN FRANCISCO  
 SEATTLE  
 SPOKANE  
 WALLINGFORD

NATIONAL  
 PLASTIC  
 GRINDING  
 SHIPPED BY PAC  
 THANK YOU FOR YOUR BUSINESS

PRICE  
 LOT  
 AMOUNT  
 985.530

GROSS AMOUNT  
 TERMS % DISC.  
 NET TO COLLECT



10098-2

Corrected Copy  
1 PAGE OF  
12 NCR NO.

Block 16 continued:

A conditional release is granted to allow fabrication of Q-components made from this material. Completed "Q" assemblies fabricated from this material will be retained on QC Hold (with tagging per PSP G-3.2) at the Standish jobsite facility. The materials and components fabricated from these materials shall be marked "RR" with a low stress stamp to maintain traceability through dispositioning of this NCR.

*J. Joon*  
PFE

*6-29-78*  
DATE

*A. J. Barclay*  
PFQCE

*6-29-78*  
DATE

*R. C. Hill for  
G. L. Richardson*  
LQAE

*6-29-78*  
DATE

# COPY COPY

## NONCONFORMANCE REPORT

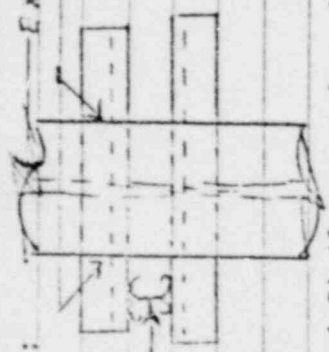
LD 8-8-78

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 1392	20. PAGE 1 OF 1								
2. UNIT(S) 1 & 2	3. DRAWING/PART NO. E750 sh. 1	REV 3	4. ITEM DESCRIPTION Cable Tray Hanger	5. ITEM LOCATION Containment #2									
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE Constr.	10. CONTRACTOR/SUPPLIER N/A									
11. INSPECTION CRITERIA <input checked="" type="checkbox"/> DWG <input type="checkbox"/> SPEC <input type="checkbox"/> OTHER		IR NO. E2.1 - 130 NO. _____	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input type="checkbox"/> Huc'g <input checked="" type="checkbox"/> Const <input type="checkbox"/> Inst	15. Equip Furnished By <input type="checkbox"/> Client <input type="checkbox"/> Eng <input checked="" type="checkbox"/> PFLD							
16. NONCONFORMING CONDITION: Cable tray hanger utilizing Detail 6 top connection (Dwg. E750 sh. 2) located at 120° Ctmt. #2 el. 610' (Ref. Section B Dwg. E750 sh. 2) is not installed according to the project approved detail. Q-list #3.006. 1 Hold tag applied to hanger in containment #2. Hold for engineering disposition.				24. DISPOSITION CONCURRENCE									
				<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>rework</td> <td>reject</td> <td>repair</td> <td>use as is</td> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table>		rework	reject	repair	use as is				<input checked="" type="checkbox"/>
rework	reject	repair	use as is										
			<input checked="" type="checkbox"/>										
				<p style="text-align: right;"><i>C. J. Soan</i> 8-24-78 PROJECT FIELD ENGINEER DATE</p> <p style="text-align: right;"><i>S. R. Burns/RIC</i> 8-24-78 PROJECT ENGINEER DATE</p> <p style="text-align: right;"><i>J. W. Barclay</i> 8-28-78 PROJ CONSTR QC ENGINEER DATE</p>									
				25. DISPOSITION RESULTS									
				<p>Quality Control concures with the project Engineers disposition, the suggestion of the suggest in question shall be to the detail connection in Page Two of this NCR.</p> <p style="text-align: right;"><i>J. C. Thompson</i> 8-28-78</p>									
17. REPORTED BY <i>Ray J. King</i>	DATE 6-22-78	18. VALIDATED BY <i>J. W. Barclay</i>	DATE 7-26-78										
21. ROUTING: <input type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)													
22. <input type="checkbox"/> Field Engineering Disposition <input checked="" type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering DISPOSITION REQUESTED BY: 8-18-78													
Field Engineering recommends Use As Is based on the following: Detail 6 is shown with welding across the flange; Installation utilizing welding with the beam in configuration as follows: Continued on Page Two													
23. PROJECT ENGINEERING DISPOSITION Project Engineering has evaluated the condition described in Block 16 and concurs with the Field Engineering recommended disposition to "Use As Is".													
<p><i>G. Richardson</i> 8-24-78</p> <p><i>R. Schulman</i> 8/24/78</p>													
				26. QC ACCEPTANCE <i>J. C. Thompson</i> 8-28-78 QC ENGINEER DATE									
				AUTHORIZED INSPECTOR DATE									

REPAIR

Block 22 Continued:

EXISTING BEAM



5/16 V (TYP)

PS 201-86

Field Electrical and Civil agree that this installation is more than adequate.

*Mary K. Shon* 8/8/78  
*Robert M. Wilkins* 8-8-78



# NONCONFORMANCE REPORT

JOB NO. 7220

19. NO. 1407 20. PAGE 1 OF 2

1. PROJECT NAME Wilson

2. UNITS) 3. DRAWING/PART NO. 44-1-25X Sub 4

4. ITEM DESCRIPTION Shop Fabricated Pipe Spools

5. ITEM LOCATION ELYN

6. P.O. OR SEC. NO. 720-1-101-AC

7. SERIAL NO. 11-21-211Y Sub 3

8. REPLACEMENT PART M/A

9. SOURCE ITT Grinnell, Kernersville N.C.

10. CONTRACTOR/SUPPLIER

11. INSPECTION CRITERIA IR NO. R-1.00-3457

12. ASME AUTHORIZED INSPECTION REC'D NO. M/R M-104A Rev. 7

13. SKETCH ATTACHED ( ) YES ( ) NO

14. Discovered During (X) Rec'g ( ) Const ( ) Eng ( ) FLD

16. NONCONFORMING CONDITION: Material Requisition 7220-M-104A Rev. 7, MATERIAL: SHOP FABRICATED NUCLEAR PIPING, A states: Drawings, data and other documents in accordance with Form G-321-D." Column 8 Document Category No. 18.0 and 19.0 of the G-321-D form for the above listed spools states 3 pages each. Contrary to the above, Quality Verification Documentation Package indicates only 2 pages for Document Category 18.0 and 4 pages for Document Category 19.0. "0" numbers are 4.185 and 4.322. Hold pending final disposition. 2 hold tag(s) applied to the nonconforming item(s).

17. REPORTED BY Marian Doreward DATE 7-14-78

18. VALIDATED BY W. Baraley DATE 7/14/78

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

Procurement Supervisor to expedite expedite documentation per material requisition 7220-M-104A, Rev. 7.

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

25. DISPOSITION RESULTS

26. OC ACCEPTANCE

DATE

AUTHORIZED INSPECTOR

DATE

DATE

DATE

DATE

DATE

DATE

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DATE

DATE

DATE

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DATE

7-17  
7-18  
7-18

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8-1-78

Conditional release is granted to install said pipe spools up to welding. These pipe are retrievable anytime during construction. Code data packages are available.

Boor 7/14/78  
PFE DATE

W. J. Albani  
PFE DATE

7-17-78  
DATE

W. J. Richardson 7/17/78  
DATE

H. W. Ketrion  
A.I.

7-17-78  
DATE

Block 5 mb 79518  
to entered

Location: OHBC-1-S618-1-2 - Service Water Bldg. NE. corner El 629 N.E. 125th

## NONCONFORMANCE REPORT

1. PROJECT NAME Midland Project, Units 1&2		JOB NO. 7220		19. NO. 1408	20. PAGE 1 OF 2
2. UNIT(S) COLLEGA	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION Concrete Sand	5. ITEM LOCATION Aux. Bldg.	
6. P.O. OR SPEC NO. C-230 Rev. 12	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A - REV N/A SER NO. N/A		9. SOURCE Subcontractor	10. CONTRACTOR/SUPPLIER Champion
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER		IR NO. C-4 10-302 NO. C-230 Rev. 12	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g ( ) Const (X) Test
16. NONCONFORMING CONDITION: The first sand gradation (1911) for 7/7/78 had 69% passing the #30 sieve thereby exceeding that allowable limit by 9%. The two required retests (1914 and 1915) exceeded the maximum on the #30 sieve by 8% and 9% respectively. When these retests failed the sand was rejected. However, prior to rejection a four cubic yard batch of C-1-C concrete represented by ticket #27975 was placed in Four A(642.58)c. No hold tags applied. "Q" list is 1.205.			24. DISPOSITION CONCURRENCE		
17. REPORTED BY <i>Thomas Galt</i>			18. VALIDATED BY <i>John Barclay</i>		
DATE 7-12-78			DATE 7-17-78		
21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)					
22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering <i>DISPOSITION REQUIRED BY 8-23-78</i>					
23. PROJECT ENGINEERING DISPOSITION Project Engineering has evaluated the (cont.) conditions described in Block 16. The excessive fines in the aggregate (ie; material passing the #30 sieve) generally increases the air content and the slump of concrete. The air contents of the concrete tested at the batch plant and placement were within the 3-6 % limit (4.2 % and 3.2 % respectively). The 2 1/2" slump at placement was within the limit of 3". Based on the above and the fact the concrete attained 98.9 % of its 28 day design strength in 7 days, Project					
				25. DISPOSITION RESULTS	
				26. QC ACCEPTANCE DATE 8-15-78	
				AUTHORIZED INSPECTOR	DATE

Block 22 continued:

results for cyl. set no. 3393 cast at the batch plant on ticket no. 27975 averaged 3955 psi at seven (7) days of age.

Res. Kenneth B. 7/10/78  
J. Belts 7/26/78

Block 23 continued:

Engineering concludes the concrete in pour A (642.58)c is acceptable and concurs with the Field Engineering recommended disposition to "use as is".

M. D. Rasner ES

8-8-78

REM C-1633

# NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO.		19. NO. 1414	20. PAGE 1 OF 2
2. UNIT(S)		3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	
COMBON		7220-C-24	N/A	6 Motor Operated Lifting Devices	
5. ITEM LOCATION		QC Hold, Whse. # 1			
6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER	
7220-C-24AC	N/A	P/N N/A REV SER NO.	Supplier	Armco Steel Corporation	
11. INSPECTION CRITERIA		IR NO.	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During
( ) DWG ( ) SPEC ( ) OTHER		R-1, 00-3161 NO. C-24 Rev. 3	( ) YES ( ) NO	( ) YES ( ) NO	( ) Rec'g ( ) Const ( ) Test
15. Equip. Furnished By		16. NONCONFORMING CONDITION:			
( ) Client ( ) Eng ( ) FLD		Item # 1 Specification 7220-C-24 Rev. 3 Para. 5.1.6 reads,			
		"All motor and limit switches shall comply with the requirements of Specification 7220-C-9, Appendix D." Contrary to the above, column 12 (Remarks) on Form G-321-D reads Appendix B 7220-C-9. Item # 2 Specification 7220-C-24 Rev. 3 Appendix B requires Form G-321-D Rev. 2. Contrary to the above, Form G-321-D received with quality verification documentation is Rev. 1. "Q" number is 1,506. Hold pending final disposition. <sup>6-11-78</sup> <del>one</del> hold tag(s) applied to the nonconforming item(s).			
17. REPORTED BY		DATE	18. VALIDATED BY	DATE	24. DISPOSITION CONCURRENCE
Tim Christofferson		7/19/78	J. Barclay	7-19-78	rework <input checked="" type="checkbox"/> reject <input type="checkbox"/> repair <input type="checkbox"/> use as is <input type="checkbox"/>
21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)		25. DISPOSITION RESULTS			
(X) Project procurement supervisor to procure proper documentation.		Corrected G321D			
(X) Project Engineering to concur to "Use as is" 7-26-78		received and accepted.			
7/21/78		Tim Christofferson 8/8/78			
7/21/78		NCR TAGS 3, 5, & 6 of 6 could not be found. <sup>8/8/78</sup> Tim Christofferson			
23. PROJECT ENGINEERING DISPOSITION		26. QC ACCEPTANCE			
		Tim Christofferson 8/8/78			
		QC ENGINEER DATE			
		AUTHORIZED INSPECTOR DATE			

7-26-78

7-20-78

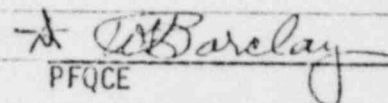
A conditional release is granted to install 6 motor-operated lifting devices. These lifting devices are for construction only not turnover. These lifting devices are retrievable at any time during construction.

PFE



7-20-78

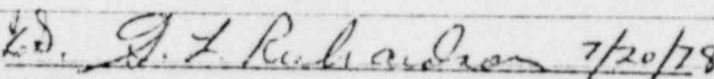
Date



PFQCE

7-20-78

Date



LQAE

Date

7/20/78

## NONCONFORMANCE REPORT

1. PROJECT NAME		JOB NO. 7220			19. NO. 1416	20. PAGE 1 OF 2
2. UNIT(S)	3. DRAWING PART NO.	REV	4. ITEM DESCRIPTION		5. ITEM LOCATION	
	4-2 Rev. 36		7220-J-201 Control Boards		Whse. 1 & Control Rm.	
6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART		9. SOURCE	10. CONTRACTOR/SUPPLIER	
7220-J-201	See Blk. 16	P/N N/A REV _____ SER NO. _____		Supplier	Magnetics, Industrial Construction Div.	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER		IR NO. See Blk. 16 NO. 7220-J-201 Rev. 3	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. Discovered During ( ) Rec'g ( ) Const ( ) Test	15. Equip. Furnished By ( ) Client ( ) Eng ( ) FLD
16. NONCONFORMING CONDITION: Specification 7220-J-201 Rev. 3 requires Quality Verification Documentation according to Form G-321-D. Quality Control Instructions PQCI-R-1.00 Rev. 7 requires documentation required by Form G-321-D to be available, legible & traceable. Contrary to the above category number 17.4, specification para. reference 8.2.1 requires seller to provide certification of compliance to the heat load calculations. This certification is not available. "O" number is 5.031. Hold pending final disposition. 9 hold tag(s) affixed to the material.					24. DISPOSITION CONCURRENCE	
					rework	reject
					repair	use as is
					PROJECT FIELD ENGINEER <i>[Signature]</i> DATE 8/1/78 PROJECT ENGINEER <i>[Signature]</i> DATE 8-8-78 PROJ. CONSTR. QC ENGINEER <i>[Signature]</i> DATE AUTHORIZED INSPECTOR _____ DATE	
17. REPORTED BY		DATE	18. VALIDATED BY		DATE	
<i>L. Deet</i>		<i>7/21/78</i>	<i>[Signature]</i>		<i>7-31-78</i>	
21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)						
22. <input checked="" type="checkbox"/> Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering						
<del>Measurement Supervisor to obtain proper documentation</del>						
<i>[Signature]</i>						
This is <del>Not</del> a Nonconforming Condition. The heat load calculation are on file at Ann Arbor per the G-321-D. <i>Bruce Matthews 8-18-78</i>						
23. PROJECT ENGINEERING DISPOSITION						
26. QC ACCEPTANCE					<i>8/18/78</i>	
<i>L. Deet</i>					DATE	
QC ENGINEER						
AUTHORISED INSPECTOR					DATE	

ADDITIONAL RELEASE IS GRANTED TO INSTALL THESE PANELS  
PURCHASED UNDER SPEC 7220-T-201. THESE PANELS ARE  
RETRIEVABLE ANY TIME DURING CONSTRUCTION. THE EXISTING  
CONSTRUCTION OPENINGS WILL REMAIN OPEN.

W.C. [Signature] 7-27-78  
PFE DATE

S.D. [Signature] 7/27/78  
PFE DATE

NOTED BY L. R. [Signature] 7/28/78  
LGR DATE



NONCONFORMANCE REPORT (CONT'D)

1. PAGE 3 OF 3

14. NCR NO

'6  
8-18-78

24. Disposition Concurrence Item N/A

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

# NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19. NO -4418	20. PAGE 1 OF 4		
2. UNIT(S) 7220	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION See Attachments "A" and "B"	5. ITEM LOCATION Poseyville WH-16 & 17			
6. P.O. OR SPEC NO. 7220-F-3107	7. SERIAL NO. See Attachment	8. REPLACEMENT PART P/N N/A REV 3504	SER NO.	9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER NPS Industries		
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER		IR NO R-1.00-3510 NO See BIK. 16	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. Discovered During ( ) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng ( ) FLD	
16. NONCONFORMING CONDITION: Purchase Order 7220-F-3107 Rev. 12 requires Quality Verification documentation in accordance with Specification 7220-C-233. Specification 7220-C-233 Sec. 12, Appendix A, Section 3.0 states in part: "The seller/subcontractor shall furnish documentation in accordance with the specifications as summarized and directed by Form G-321-D." Contrary to the above, (1) No Quality Verification documentation was received for NPS shipment number NPST-6837/cc, (See Attachment "A") Cont. on Page 2				24. DISPOSITION CONCURRENCE			
				rework	reject	repair	use as is
				DOC			
				<i>[Signature]</i>		7-27-78	
				PROJECT FIELD ENGINEER		DATE	
				<i>[Signature]</i>		7/28/78	
				PROJECT ENGINEER		DATE	
				PROJ CONSTR Q ENGINEER		DATE	
				AUTHORIZED INSPECTOR		DATE	
17. REPORTED BY <i>[Signature]</i>		DATE 7-21-78		18. VALIDATED BY <i>[Signature]</i>		DATE 7-21-78	
21. ROUTING: <input checked="" type="checkbox"/> TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)		25. DISPOSITION RESULT: DOCUMENTATION FOR MATERIAL ON NPS Shipment Number NPST-6837/cc has been received and reviewed. <i>[Signature]</i> 7-28-78					
22. <input checked="" type="checkbox"/> Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering Receiving procurement Supervisor to obtain proper documentation. <i>[Signature]</i> 7-27-78 <i>[Signature]</i> 7/27/78		DOCUMENTATION FOR MATERIAL RECEIVED ON NPS SHIPMENT NUMBER NPST-6843/cc HAS BEEN RECEIVED AND ACCEPTED. <i>[Signature]</i> 8-9-78					
23. PROJECT ENGINEERING DISPOSITION		26. QC ACCEPTANCE BY <i>[Signature]</i> 8-9-78 QC ENGINEER DATE					
		AUTHORIZED INSPECTOR DATE					

Continued

- (2) Two pages of verification of procedures reports were not received for NPS shipment number NPSI-6843/cc, (See Attachment "B"). Hold pending final disposition. "Q" numbers are 4.211 and 4.221. 7 hold tag(s) applied to the nonconforming item(s).





# NONCONFORMANCE REPORT

1. PROJECT NAME <i>7220</i>		JOB NO. <i>7220</i>		19. 1427	20. PAGE 1 OF 1
2. UNIT(S) <i>Unit 2</i>	3. DRAWING/PART NO. <i>7220-M 1.17-9</i>	REV <i>3</i>	4. ITEM DESCRIPTION <i>Decay Heat Removal Pump</i>	5. ITEM LOCATION <i>Warehouse # 1</i>	
6. P.O. OR SPEC NO. <i>7220-M 1.17</i>	7. SERIAL NO. <i>2160A</i>	8. REPLACEMENT PART P/N <i>11A</i> REV <i>3</i> SER NO. _____	9. SOURCE <i>Supplier</i>	10. CONTRACTOR/SUPPLIER <i>Babcock &amp; Wilcox</i>	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER	IR NO. <i>R-2, 00-70</i> NO. <i>See RIR-3</i>	12. ASME AUTHORIZED INSPECTION RECD ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	
15. Equip Furnished By ( ) Client ( ) Eng ( ) FLD					
16. NONCONFORMING CONDITION: <i>Lightel approved B &amp; W Vendor IMJ 7220-M 1.17-9-3 indicates the pump's stuffing box flange to be on the opposite side of the motor coupling. Contrary to the above, Decay Heat Pump 2F60A(S/M 69030) has the stuffing box on the same side as the motor coupling. "Q" number is 4.113. Hold pending final disposition. 1 hold tag(s) applied to this pump.</i>					
17. REPORTED BY <i>John R. Phillips</i>	DATE <i>7-26-78</i>	18. VALIDATED BY <i>John R. Phillips</i>	DATE <i>7-26-78</i>	24. DISPOSITION CONCURRENCE	
21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY) <i>Return to vendor for correction.</i>		22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering <i>Shipping Notice 7-20-78</i>		rework	reject
23. PROJECT ENGINEERING DISPOSITION		25. DISPOSITION RESULTS <i>Pump 2F60A (S/M 69030) returned to vendor.</i>		repair	use as is
				26. OC ACCEPTANCE <i>John R. Phillips</i>	
				DATE <i>8-22-78</i>	
				AUTHORIZED INSPECTOR <i>John R. Phillips</i>	
				DATE <i>8-22-78</i>	

PROJECT ENGINEER  
*John R. Phillips*  
 PROJECT FIELD ENGINEER  
 DATE  
*7-27-78*

PROJECT INSPECTOR  
*John R. Phillips*  
 AUTHORIZED INSPECTOR  
 DATE  
*7-27-78*

Bechtel  
**SHIPPING NOTICE**

JOB NO. 7220

SN NO. 7220-5279

DATE 7-27 19 78

CONIGNED TO Babcock & Wilcox

ADDRESS Cononation Blvd., Cambridge Ont., Canada

ROUTING Central/McKinly Via Port Huron

COLLECT PREPAID

SHIP VIA	AIR EXPRESS			PURCHASE ORDER NO.	<del>C/S</del> NCR-1427	ORIGINAL MRR NO.
	EXPRESS			MATERIAL ORIGINALLY PURCHASED ON P.O. NO.	VENDOR	
	RAIL FREIGHT			M1.17	SAME	
	Central MOTOR FREIGHT McKinly		XXX	REASON FOR SHIPMENT:		
	PARCEL POST			Rework and Return		
	BEARER			SHIPMENT AUTHORIZED FOR BECTEL BY:		BILL OF LADING ATTACHED

*John R. Slifer*  
T.C. Cooke / J. Slifer *DJ Ukol for TC Cooke*

ITEM NO.	QUANTITY	UNIT	COMPLETE DESCRIPTION
1.	1	ea	Decay Heat Removal Pump Tag #2P60A Serial # 69080
<p>NOTE: Do Not Export Without U.S. Customs Inspection. Norify John V. Carr Ltd. U.S. Custom Broker ATT: Jerry Mestow At Port Huron To Prepare Export Declaration. Canadian Goods Returning To Canada For Repairs. Scheduled To Return To U.S.A. In 1978.</p>			

RETURN AUTHORIZED BY: *Walter J. Lee*  
COMPANY Babcock & Wilcox -

AUTHORIZATION NUMBER:  
CREDIT TERMS:

SHIPPER  
**Bechtel**  
ADDRESS 3500 E. Miller Road  
Midland, MI. 48640

ACCEPTED FOR SHIPMENT  
DATE 7-27 19 78  
CARRIER Central/McKinlyvia Port Huron

PER *John R. Slifer*  
A.S. Treadway

PER *David Chapman*

# NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. <u>1431</u>	20. PAGE <u>1</u> OF <u>1</u>	
2. UNIT(S) Common	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION Curing of Block Walls	5. ITEM LOCATION BW #18, Elev. 659'		
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE Construction	10. CONTRACTOR/SUPPLIER N/A		
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER		IR NO. <u>C-1.80-71</u> NO. <u>C-231, R.16</u>	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD
16. NONCONFORMING CONDITION: Specification C-231, Rev. 16, Para. 14.0, states in part... "All concrete construction joints to receive additional lifts of concrete shall be water cured." Contrary to the above the first lift of concrete for Block Wall #18, Elev. 659' was found with a dry surface @ 0920 hours on 7/25/78. "Q"-List #2.001. 1 Hold Tag Applied. Hold for Engineering Disposition. <i>Applied on east face of wall</i>				24. DISPOSITION CONCURRENCE rework    reject    repair    use as is  <i>8-29-78</i> PROJECT FIELD ENGINEER <i>R. Basimchi/RIC</i> DATE PROJECT ENGINEER <i>M. D. Revins</i> DATE PROJ CONSTR QC ENGINEER    DATE  AUTHORIZED INSPECTOR    DATE		
17. REPORTED BY <i>W.A. Revins</i>	DATE <i>7-27-78</i>	18. VALIDATED BY <i>M. D. Revins</i>	DATE <i>7-27-78</i>	25. DISPOSITION RESULTS		
21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)						
22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering <i>disposition Requested BY 8-27-78</i>						
"Use as is" Masonry grout placed at 1800 hrs. on 7-24-78 for the Wythes of Block Wall #18 at Elev. 659' was found dry at 0920 hrs. on 7-25-78. Upon discovery of this nonconforming condition immediate corrective action was taken to apply additional moist curing. Compressive strength test results representing masonry grout placed						
23. PROJECT ENGINEERING DISPOSITION (cont) Concrete surfaces found dry during the moist curing period will experience lower early concrete strengths. However, additional moist curing plus the placing of the next lift assures that there will be no significant effect upon long term strength development. Project Engineering, therefore, concurs with the Field Engineering recommended disposition to "Use As Is". <i>M. D. Revins</i> <i>P. Schulman</i> <i>8-29-78</i> <i>8/29/78</i>						
26. QC ACCEPTANCE <i>M. D. Revins</i> <i>8/30/78</i>				QC ENGINEER    DATE		
REM C-1174    8-29-78				AUTHORIZED INSPECTOR    DATE		



Block 22 continued:

7-24-78 averaged 2997 psi at seven days of age.

*R. L. Coyne 8/13/78*  
*J. P. Bette 8/15/78*

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



16 Continued

D.

"Q" number is 5.023. Hold pending final disposition. 16 hold tag(s) applied to nonconforming item(s).

### NONCONFORMANCE REPORT

1. PROJECT NAME <i>MIDLAND</i>		JOB NO. <i>7220</i>		19. NO. <i>1436</i>	20. PAGE <i>1</i> OF <i>2</i>																								
2. UNIT(S) <i>WATER PUMP STATION</i>	3. DRAWING/PART NO. <i>C-99 (G)</i>	REV <i>4</i>	4. ITEM DESCRIPTION <i>ALUS W18X55 BEAMS + STIFFENERS</i>	5. ITEM LOCATION <i>SRR, WATER PUMP STATION 20.32 0.55 10' 0" + 14' 3" W OF E WALL</i>																									
6. P.O. OR SPEC NO. <i>N/A</i>	7. SERIAL NO. <i>N/A</i>	8. REPLACEMENT PART P/N <i>N/A</i> REV <i>N/A</i> SER NO. <i>N/A</i>	9. SOURCE <i>At Const</i>	10. CONTRACTOR/SUPPLIER <i>N/A</i>																									
11. INSPECTION CRITERIA <input checked="" type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC <input type="checkbox"/> OTHER		IR NO. <i>C-304-8984</i>	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input type="checkbox"/> Rec'g <input checked="" type="checkbox"/> Const <input type="checkbox"/> Test																								
15. Equip Furnished By <input type="checkbox"/> Client <input checked="" type="checkbox"/> Eng <input type="checkbox"/> FLD				16. NONCONFORMING CONDITION: <i>Dwg. C-99 (G) SECTION L CALLS FOR ADDED VERTICAL STIFFENER PLATES TO W18X55 BEAMS TO BE WELDED WITH FULL PENETRATION WELDS WITH 1/4" INCH FILLET WELD G.L.S STRUCTURAL (G27) <sup>4.1.3</sup> ALLOWS USE OF BACKING BAR WITH ROOT OPENING OF 1/4 INCH - 1/16 INCH PGRT NO. 7220/W 100A REV 4 ACT 2.1 CALLS FOR FIT UP INSPECTION PRIOR TO WELDING</i> <i>See page 2</i>																									
17. REPORTED BY <i>Walt &amp; Fish</i>		DATE <i>7/29/78</i>	18. VALIDATED BY <i>Barclay</i>	DATE <i>7/31/78</i>	24. DISPOSITION CONCURRENCE																								
21. ROUTING: <input checked="" type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)		22. ( ) Field Engineering Disposition <input checked="" type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering <i>DISPOSITION Requested BY 8/4/78 further action</i>			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>rework</th> <th>reject</th> <th>repair</th> <th>use as is</th> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td colspan="3"> <i>C. E. Brown</i>                  PROJ CONST QC ENGINEER                  DATE <i>8-7-78</i> </td> <td></td> </tr> <tr> <td colspan="3"> <i>R. K. Basinski</i>                  PROJ ENGINEER                  DATE <i>8-7-78</i> </td> <td></td> </tr> <tr> <td colspan="3"> <i>W. Barclay</i>                  PROJ CONST QC ENGINEER                  DATE <i>8-7-78</i> </td> <td></td> </tr> <tr> <td colspan="3">                 AUTHORIZED INSPECTOR             </td> <td>DATE</td> </tr> </table>	rework	reject	repair	use as is				<input checked="" type="checkbox"/>	<i>C. E. Brown</i> PROJ CONST QC ENGINEER DATE <i>8-7-78</i>				<i>R. K. Basinski</i> PROJ ENGINEER DATE <i>8-7-78</i>				<i>W. Barclay</i> PROJ CONST QC ENGINEER DATE <i>8-7-78</i>				AUTHORIZED INSPECTOR			DATE
rework	reject	repair	use as is																										
			<input checked="" type="checkbox"/>																										
<i>C. E. Brown</i> PROJ CONST QC ENGINEER DATE <i>8-7-78</i>																													
<i>R. K. Basinski</i> PROJ ENGINEER DATE <i>8-7-78</i>																													
<i>W. Barclay</i> PROJ CONST QC ENGINEER DATE <i>8-7-78</i>																													
AUTHORIZED INSPECTOR			DATE																										
23. PROJECT ENGINEERING DISPOSITION Project Engineering has evaluated the condition described in Block 16 and concurs with the Field Engineering Recommended Disposition to use a partial penetration weld the same size as the stiffener plate.				25. DISPOSITION RESULTS <i>Per Block 24 and 23 "USE AS IS" no further action is required by P.E. following 8/2/78 removal of C. E. Brown 8/7/78</i>																									
26. QC ACCEPTANCE <i>Steven Johnson</i> QC ENGINEER DATE <i>8/7/78</i>		<i>M. D. Renner</i> 8-7-78 REM C-1627		AUTHORIZED INSPECTOR DATE																									

Block 16 cont.

CONTRARY TO PAGE ONE 2 W18 X 55 BRIMS & STIFFENERS LOCATED @ 10' 9" X 16' 3"  
WEST OF THE EAST WALL OF THE SERVICE WATER STRUCTURE AT EL 6.55' WERE WELDED WITHOUT  
A FIT UP INSPECTION AFTER PRIOR FIT UP INSPECTION HAD BEEN REJECTED FOR LACK OF  
ROOT OPENING (NEITHER QC OR FE NOTIFIED) Q# 1.501 HOLD FOR ENGINEERING  
DISPOSITION 2 HOLD TAGS APPLIED

# NONCONFORMANCE REPORT

1. PROJECT NAME <i>11410</i>		JOB NO. <i>7220</i>		19. NO. <i>11410</i>	20. PAGE <i>1</i> OF <i>1</i>																								
2. UNIT(S) <i>1</i>	3. DRAWING/PART NO. <i>1-1-1-1</i>	REV <i>1</i>	4. ITEM DESCRIPTION <i>Fabricated Pipe Spool OHEC-16-6618-1-5A</i>		5. ITEM LOCATION <i>Installed</i>																								
6. P.O. OR SPEC NO. <i>7220-M-104-A-AC</i>	7. SERIAL NO. <i>N/A</i>	8. REPLACEMENT PART P/N <i>N/A</i> REV _____ SER NO. _____		9. SOURCE <i>Supplier</i>	10. CONTRACTOR/SUPPLIER <i>ITT Grinnell, Ind. Pipe, Inc.</i>																								
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( <input checked="" type="checkbox"/> ) OTHER		IR NO. <i>R-1,00-1620</i> NO. <i>See RIR 16</i>	12. ASME AUTHORIZED INSPECTION REC'D <input checked="" type="checkbox"/> YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( <input checked="" type="checkbox"/> ) NO	14. Discovered During ( ) Rec'y ( <input checked="" type="checkbox"/> ) Const ( ) Test																								
15. Equip Furnished By ( ) Client ( <input checked="" type="checkbox"/> ) Eng ( ) FLD		16. NONCONFORMING CONDITION: <i>Purchase Order 7220-M-104A-AC Rev. 8 requires Quality Verification documentation in accordance with the requirements of Para G-321-D. This documentation is to be reviewed for availability, legibility and traceability. Contrary to the above, the Code Data Report, Engineering Shop Sketch, Material Record Production Planner and Traveler are damaged and are illegible. "C" number is 4.185. Hold pending final disposition. <u>1</u> NCR tag attached to the pipe.</i>			24. DISPOSITION CONCURRENCE																								
17. REPORTED BY <i>K. Deitz</i>		DATE <i>7/31/78</i>	18. VALIDATED BY <i>R. Barolay</i>	DATE <i>7/31/78</i>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>rework</td> <td>reject</td> <td>repair</td> <td>use as is</td> </tr> <tr> <td><i>Doc</i></td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="3">PROJECT FIELD ENGINEER <i>[Signature]</i></td> <td>DATE <i>8-01-78</i></td> </tr> <tr> <td colspan="3">PROJECT ENGINEER <i>[Signature]</i></td> <td>DATE <i>8-8-78</i></td> </tr> <tr> <td colspan="3">PROJECT CONST QC ENGINEER <i>[Signature]</i></td> <td>DATE <i>8-9-78</i></td> </tr> <tr> <td colspan="3">AUTHORIZED INSPECTOR <i>[Signature]</i></td> <td>DATE</td> </tr> </table>	rework	reject	repair	use as is	<i>Doc</i>				PROJECT FIELD ENGINEER <i>[Signature]</i>			DATE <i>8-01-78</i>	PROJECT ENGINEER <i>[Signature]</i>			DATE <i>8-8-78</i>	PROJECT CONST QC ENGINEER <i>[Signature]</i>			DATE <i>8-9-78</i>	AUTHORIZED INSPECTOR <i>[Signature]</i>			DATE
rework	reject	repair	use as is																										
<i>Doc</i>																													
PROJECT FIELD ENGINEER <i>[Signature]</i>			DATE <i>8-01-78</i>																										
PROJECT ENGINEER <i>[Signature]</i>			DATE <i>8-8-78</i>																										
PROJECT CONST QC ENGINEER <i>[Signature]</i>			DATE <i>8-9-78</i>																										
AUTHORIZED INSPECTOR <i>[Signature]</i>			DATE																										
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)		25. DISPOSITION RESULTS <i>CORRECT DOCUMENTATION RECEIVED AND ACCEPTED FOR LEGIBILITY &amp; TRACEABILITY</i>																											
22. <input checked="" type="checkbox"/> Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering <i>Procurement supervisor to obtain proper documentation.</i>		<i>R. Ward 8/4/78</i>																											
23. PROJECT ENGINEERING DISPOSITION		26. QC ACCEPTANCE <i>[Signature]</i> <i>8-25-78</i> DATE QC ENGINEER <i>[Signature]</i> <i>8-25-78</i> DATE AUTHORIZED INSPECTOR																											

NONCONFORMANCE REPORT

1. PROJECT NAME Littlefield		JOB NO. 7220		19. NO. 1142	20. PAGE 1 OF 3	
2. UNIT(S) Inlets	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION Stock ASME-SEE NF Material	5. ITEM LOCATION Grids P-N Poseyville Laydown P-S		
6. P.O. OR SPEC NO. 7220-P-26287	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV _____ SER NO. _____	9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER J.T. Ryerson, Chicago, Ill.		
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (X) OTHER		IR NO. See Blk. 16 NO. NQAM Rev. 0	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD
16. NONCONFORMING CONDITION: Bechtel Quality Assurance Manual-ASME Div. 1, Para 4320 Material Suppliers states: "Para. 4321 The Procurement Inspection Department prepares and maintains a list of acceptable Material Manufacturers and Material Suppliers. Material Manufacturers and Suppliers listed must have and maintain a quality program meeting Bechtel, and/or ASME Section III, Div. 1 requirements				24. DISPOSITION CONCURRENCE rework reject repair use as is X		
17. REPORTED BY Charles Gwin				DATE 7-31-78	18. VALIDATED BY J. J. Berkeley	DATE 7/31/78
21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)						
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering Material shall be used as is, documentation supplied by J.T. Ryerson meets the requirements of Field Material Requisition, since the listed materials shall be used in Non IIA-8000 application. Reference Rev. 3 to NQAM Sect. 3, No. 11, 8/10/78 D. J. Manham 8/16/78 R. Ward 8/16/78						
23. PROJECT ENGINEERING DISPOSITION NQAM HAS BEEN REVISED (REF: REV. 3-E TO SECTION III NO. 11) FOR THE PROCUREMENT OF ASME MATERIAL TO COMPLY WITH ASME III NUCLEAR COMPONENTS. HENCE, MATERIAL SHALL BE USED AS IS. THIS CHANGE WILL DELETE THE REQUIREMENTS OF BRAM. A. Siddle 8/22/78						
				25. DISPOSITION RESULTS		
				26. QC ACCEPTANCE QC ENGINEER	DATE 8/22/78	
				AUTHORIZED INSPECTOR	DATE	

To Continued

For the material to be purchased.

Spec. 4372 Quality Program Demonstration is established through survey of the Manufacturer or Supplier by the Procurement Inspection Department. Assistance may be requested from IF & QCS, Project Engineering, Quality Control, or Quality Assurance."

Contrary to the above, Purchase Order F-28287 was originally awarded to J.T. Iverson Corporation of Chicago, Ill. with no Bechtel Procurement Inspection Department survey being accomplished. Subsequently the survey has been accomplished and approved, however the subject P.O. did not require, nor is there evidence of ASME-Sec NF Material sub-supplier to J.T. Iverson approval in accordance with Para. 4321 & 4322 of Rev. 0 of the BQAM.

Purchase Order No.	Register Number	Inspection Record
F-28287	429436	QCIR # R-1.OO-3451
"	474464	"
"	467546	"
"	467805	"
"	429443	QCIR # R-1.OO-3427
"	442512	"
"	442513	"
"	443812	"
"	460216	"
"	450939	"
"	453558	"
"	453566	"
"	462657	"
"	462679	"
"	462670	"



Bl. 16 Continued

<u>Purchase Order No.</u>	<u>Register Number</u>	<u>Inspection Record</u>
F-28287	462313	QCIR # R-1.00-3419
"	449873	"
"	460973	"
"	454804	"
"	470671	"
"	462470	"
"	462458	"
"	479534	QCIR # R-1.00-3514
"	484724	"
"	474242	"
"	480999	"
"	481132	"
"	484275	"

"Q" number is indeterminate. Hold pending final disposition. 6 hold tag(s) applied to nonconforming item(s).



Block 16 Continued

\* (2) The following discrepancy is apparent for NPS shipment number NPSI-6842/cc: piece mark number 2-11B-1 actually reads 2-11A-1. \*

Hold pending final disposition. "Q" numbers are 4.211 and 4.221. 4 hold tag(s) applied to the nonconforming item(s).

\* See Attachment "A"

\* See Attachment "B"





## NONCONFORMANCE REPORT

1. PROJECT NAME <i>13700</i>		JOB NO. <i>7220</i>		19. NO. <i>1152</i>	20. PAGE <i>1</i> OF <i>2</i>		
2. UNIT(S) <i>1 unit</i>	3. DRAWING/PART NO. <i>P/A</i>	REV <i>H/A</i>	4. ITEM DESCRIPTION <i>Stock ASME-SEC III Material</i>	5. ITEM LOCATION <i>Spanish Pub Shop</i>			
6. P.O. OR SPEC NO. <i>See Block 16</i>	7. SERIAL NO. <i>H/A</i>	8. REPLACEMENT PART P/N <i>H/A</i> REV _____ SER NO. _____	9. SOURCE <i>Supplier</i>	10. CONTRACTOR/SUPPLIER <i>J.T. Ryerson, Chicago, Ill.</i>			
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER		IR NO. <i>See Block 16</i> NO. <i>NOAM Rev. 0</i>	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES ( ) NO	14. Discovered During ( ) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng ( ) FLD	
16. NONCONFORMING CONDITION: <i>Bechtel Quality Assurance Manual-ASME, Div. 1 Para 4320</i>				24. DISPOSITION CONCURRENCE			
Material Suppliers states: "Para. 4321 The procurement inspection department prepares and maintains a list of acceptable material manufacturers and material suppliers. Material manufacturers and suppliers listed must have and maintain a quality program meeting Bechtel, and/or ASME Section III, Div. 2, requirements Cont. on Page 2				rework	reject	repair	use as is
				<i>[Signature]</i> <i>8-22-78</i>		<i>[Signature]</i> <i>8-22-78</i>	
17. REPORTED BY <i>R. A. Young</i>		DATE <i>7-29-78</i>	18. VALIDATED BY <i>[Signature]</i>		DATE <i>8-2-78</i>		
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)							
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering							
Material shall be used as is, documentation supplied by J.T. Ryerson meets the requirements of Field Material <del>XXXXXX</del> Requisition, since the listed materials shall be used in Non IIA-8000 application. Reference Rev. 3 to NOAM Sect. 3, No. 11, 8/10/78 <i>[Signatures]</i> <i>8/16/78</i>							
23. PROJECT ENGINEERING DISPOSITION							
NOAM HAS BEEN REVISED (REF: REV. 3-E TO SECTION III, NO. 11) FOR THE PROCUREMENT OF ASME MATERIAL TO COMPLY WITH ASME III NUCLEAR COMPONENTS. HENCE, MATERIAL SHALL BE USED AS IS. THIS CHANGE WILL DELETE THE REQUIREMENTS OF NOAM. <i>[Signature]</i> <i>8/22/78</i>							
26) QC ACCEPTANCE <i>[Signature]</i>					DATE <i>8-22-78</i>		
AUTHORIZED INSPECTOR					DATE		

Block 16 Continued

for the material to be purchased.

Para 4322 Quality program demonstration is established through survey of the manufacturer or supplier by the procurement inspection department. Assistance may be requested from MF & QCS, project engineering, quality control, or quality assurance."

Contrary to the above, Purchase Orders 7220-F-28287 Q & F-28141 Q, were originally awarded to J.T. Ryerson Corporation of Chicago, Ill. with no Bechtel procurement inspection department survey being accomplished. The survey has been accomplished and approved, however the subject P.O.'s did not require nor is there evidence of approval for ASME-SEC NF Material Sub-suppliers to J.T. Ryerson in accordance with para. 4321 & 4322 of Rev. 0 of the BQAM. Material that has been received at Standish Fab Shops are as listed below:

<u>Purchase Order No.</u>	<u>Ryerson Register No.</u>	<u>Inspection Record No.</u>
F-28141 Q	425806, 425801	R-1.00-3268
"	425800, 425799	R-1.00-3272
"	480394	R-1.00-3458
"	469482, 462309	R-1.00-3377
"	468549	R-1.00-3428
"	447594	R-1.00-3411
F-28287 Q	485863	R-1.00-3459

Material Receiving Report attached.

"Q" number is indeterminate. Hold pending final disposition. 10 hold tag(s) applied to the nonconforming item

# Corrected Copy

## NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 1453	20. PAGE 1 OF 1																								
2. UNIT(S) Common	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION Form Removal	5. ITEM LOCATION Tank Farm NE Corner																									
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A - REV N/A - SER NO. N/A	9. SOURCE Construction	10. CONTRACTOR/SUPPLIER N/A																									
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER		IR NO. C-1.40-626 NO. C-231, Rev. 16	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Test ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng ( ) FLD																							
16. NONCONFORMING CONDITION: Specification 7220-C-231, Rev. 16, Para. 5.4 states in part.... "If forms are not stripped or loosened within 24 hours, they must remain in place for 7 days unless otherwise approved by Project Engineering." Contrary to the above while removing forms for the third Tank Farm Footer Pour, forms for the second Tank Farm Footer were broken away from the surface on the northside for a distance of 12'. "Q"-List #1.003. 1 Hold Tag Applied. Hold for Engineering Disposition. Tag placed on north east corner inside face				24. DISPOSITION CONCURRENCE																									
17. REPORTED BY W. L. Coir 8-2-78				18. VALIDATED BY W. Baralay 8-2-78																									
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)				25. DISPOSITION RESULTS																									
22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering "Use as is" formwork for the fourth section of tank farm retaining wall foundation (Pour No. TF(631.5) placed 7/31/78). Wall foundation (Pour No. TF(631.5) placed 7/28/78). Consequently, following placement of TF(631.5)D, Forms were loosened and removed between 12 to 24 hours after placement. The removal of these forms inadvertently loosened approximately 6' of formwork on the north face of the				<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>rework</td> <td>reject</td> <td>repair</td> <td>use as is</td> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align: center;">X</td> </tr> <tr> <td colspan="2">C. T. ... 8-11-78</td> <td colspan="2">DATE</td> </tr> <tr> <td colspan="2">S. R. ... 8-11-78</td> <td colspan="2">DATE</td> </tr> <tr> <td colspan="2">... 8-11-78</td> <td colspan="2">DATE</td> </tr> <tr> <td colspan="2">AUTHORIZED INSPECTOR</td> <td colspan="2">DATE</td> </tr> </table>		rework	reject	repair	use as is				X	C. T. ... 8-11-78		DATE		S. R. ... 8-11-78		DATE		... 8-11-78		DATE		AUTHORIZED INSPECTOR		DATE	
rework	reject	repair	use as is																										
			X																										
C. T. ... 8-11-78		DATE																											
S. R. ... 8-11-78		DATE																											
... 8-11-78		DATE																											
AUTHORIZED INSPECTOR		DATE																											
23. PROJECT ENGINEERING DISPOSITION Project Engineering has evaluated the condition described in Block 16 and concurs with field's disposition to use as is. For the structure in question and the relatively small area involved, no detrimental effects should occur. A visual examination by the R.C.E. confirmed this.				26. OCCURRENCE 8/11/78																									
<p style="text-align: right;">B. Schulman 8/11/78</p> <p style="text-align: center;">REM C-1642</p>				<p style="text-align: right;">... 8/25/78</p> <p style="text-align: right;">... 8/11/78</p> <p style="text-align: right;">... 8/11/78</p>																									



24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
			X
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

11/11/78

NONCONFORMANCE REPORT (CONT'D)

1. SUBJECT OF RPT

14. NCH NO. 1753

Block 22 cont'd foundation for pour TF(631.5)E which were to remain in place for seven days

RP *Erwald's 8/10/78*

*Paul Loguen For SPB 8/10/78*

White Copy - Originator  
 Canary Copy - Field Engineer  
 Pink Copy - PG&E  
 Goldenrod Copy - GC

NONCONFORMANCE REPORT

1. PROJECT NAME Midland		OB NO. 7220		19. NO. 1154	20. PAGE 1 OF 2								
2. UNITS Common	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION Concrete -- Curing	5. ITEM LOCATION Tank Farm See Blk. #16									
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A -- REV N/A -- SER NO. N/A --		9. SOURCE Construction	10. CONTRACTOR/SUPPLIER N/A								
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER		IR NO. C-1,40-635 Dwg. NO. C-128 R. 1	12. ASME AUTHORIZED INSPECTION RECD ( ) YES (X) NO	13. SKETCH ATTACHED (X) YES ( ) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD							
16. NONCONFORMING CONDITION: Specification C-231, Rev. 16, Section 5.4 states in part.... "Forms shall be removed from 12 to 24 hours after placement or remain in place for 7 days." Contrary to the above approx. 3' of formwork at the construction joint between Pours #4 & #5 (See Sketch) were stripped after 24 hours. Hold for Engineering Disposition. 1 Hold Tag Applied. "Q"-List #1.003. HOLD TAG APPROX. 110' E. OF N.W. CORNER OF FOOTER -- INSIDE FACE				24. DISPOSITION CONCURRENCE <table border="1"> <tr> <td>rework</td> <td>reject</td> <td>repair</td> <td>use as is</td> </tr> <tr> <td></td> <td></td> <td></td> <td>X</td> </tr> </table> W. New RAS 8-11-78 PROJECT FIELD ENGINEER DATE R.R. Basimley/R.C. 8-11-78 PROJECT ENGINEER DATE J. Burley 8-16-78 PROJ CONSTR GC ENGINEER DATE AUTHORIZED INSPECTOR DATE		rework	reject	repair	use as is				X
rework	reject	repair	use as is										
			X										
17. REPORTED BY <i>[Signature]</i> 8/2/78		18. VALIDATED BY <i>[Signature]</i> 8/3/78		25. DISPOSITION RESULTS DISPOSITION - "USE AS IS" <i>[Signature]</i> 8/23/78									
21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)		22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering		26. QC ACCEPTANCE <i>[Signature]</i> 8/23/78 QC ENGINEER DATE AUTHORIZED INSPE... DATE									
"Use as is" formwork for the fifth section of tank farm retaining wall foundation (pour No. TF(631.5)E placed 8/1/78) adjoined the fourth section of tank farm retaining wall foundation (pour No. TF(631.5)D placed 7/31/78). Following placement of TF(631.5)E, forms were loosened and removed between 12 to 24 hours after placement. During the process of removing those forms, approximately 3' of													
23. PROJECT ENGINEERING DISPOSITION Project Engineering has evaluated the condition described in Block 16, and concurs with field's disposition to use as is. For the structure in question and the relatively small area involved, no detrimental effects should occur. A visual examination by the R.C.E. confirmed this.													
				R. Sahelman 8/11/78 REM C-1641									

NONCONFORMANCE REPORT (CONT'D)

PAGE 3 OF 3

14. NCH NO 1454

Block 22 cont'd formwork was removed from pour TF(631.5)E which were to remain in place for seven days. Note that liquid membrane curing compound was immediately applied to all surfaces from which formwork was removed for each of these two pours.

R. P. Reynolds 8/9/78  
Paul Soguen Fer JCB 8/10/78

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



# FIELD CHANGE REQUEST

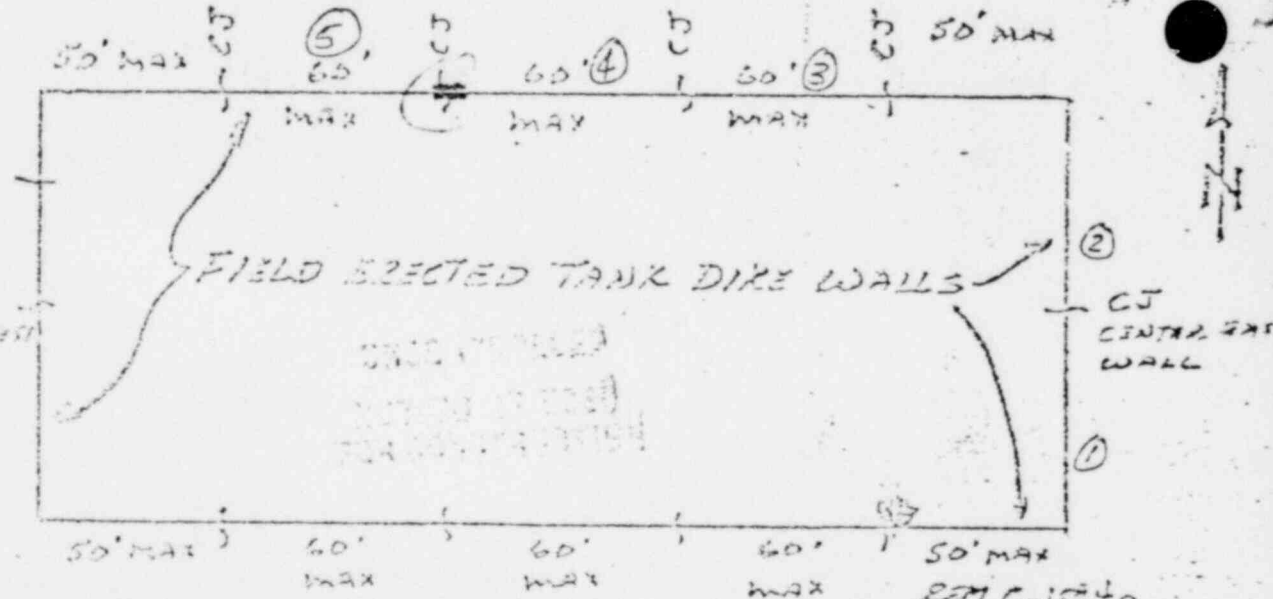
PAGE 1 OF 1  
 FOR NO.   
 PCN NO.   
 C-11036

JOB NO. 7220	SPECIFICATION NO. C-231 (9)	SHEET NO. NA	REV SYM. 16	CITEN YES NO <input checked="" type="checkbox"/> <input type="checkbox"/>	TITLE OF CHG OR SPEC FORMING PLACING FINISHING & CURING OF CONCRETE
CHANGE PROPOSED FOR <input checked="" type="checkbox"/> FOR <input type="checkbox"/> PCN	PREPARED BY AND DATE JERRY MORZIS 7-20-78	CHANGE APPROVED YES NO <input checked="" type="checkbox"/> <input type="checkbox"/>	ENGINEER SIGNATURE AND DATE W. Miller 7-20-78		DISPOSITION FOR REVIEW BY DATE 7/21

REASON FOR CHANGE:  
 EXPEDITE CONSTRUCTION BY REDUCING THE NUMBER OF CONCRETE PLACEMENTS

EXISTING CONDITION:  
 SEC. 7.2 OF SPEC. 7220-C-231 STATES IN PART:  
 HORIZONTAL LENGTH OF PLACEMENT SHALL NOT EXCEED A STRAIGHT LINE DISTANCE OF 50 FEET.

DESCRIPTION OF CHANGE:  
 FIELD REQUEST APPROVAL TO MAKE PLACEMENTS



APPROVAL REQUESTED: RES. ENG. M. Miller DATE 7/21/78

OTHER TRADES REQUESTED	CIVIL	ELECTRICAL	INSTRUMENTATION	MECHANICAL	PAINTING	WELDING OR OTHERS
NA	NA	NA	NA	NA	NA	NA
APPROVED BY	J. Miller					

FOR APPROVED YES  NO  PROJECT ENGINEER SIGNATURE AND DATE

# CORRECTED COPY

## NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 1455	20. PAGE 1 OF 1										
2. UNIT(S) SW Bldg.	3. DRAWING/PART NO. M-618 Sh. 1	REV 7/81	4. ITEM DESCRIPTION Field Weld #18	5. ITEM LOCATION SW Bldg. El. 623'											
6. P.O. OR SPEC NO. M-204	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE Constr.	10. CONTRACTOR/SUPPLIER N/A										
11. INSPECTION CRITERIA <input checked="" type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC <input type="checkbox"/> OTHER		IR NO M-618 Sh. 1 NO. M-204 Rev. 8	12. ASME AUTHORIZED INSPECTION REQ'D <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input type="checkbox"/> Rec'd <input checked="" type="checkbox"/> Const <input type="checkbox"/> Test	15. Equip Furnished By <input type="checkbox"/> Client <input checked="" type="checkbox"/> Eng <input type="checkbox"/> FLD									
16. NONCONFORMING CONDITION: W-1.00 Rev. 4, Para. 11 requires that the IR be placed as near as practical to the joint to be Fabricated at the time of Fit-up. Contrary to the above, Field Weld #18, Dwg. M-618 Sh.1 was welded on without any inspection by either FWE or QCWB. Q-list no. 4.185 Hold for Engineering Disposition.				24. DISPOSITION CONCURRENCE rework reject repair use as is  <table style="width: 100%; border: none;"> <tr> <td style="width: 70%;"><i>[Signature]</i></td> <td style="width: 30%;">8-8-78</td> </tr> <tr> <td>PROJECT FIELD ENGINEER</td> <td>DATE</td> </tr> <tr> <td>PROJECT ENGINEER</td> <td>DATE</td> </tr> <tr> <td>PROJ CONSTR QC ENGINEER</td> <td>DATE</td> </tr> <tr> <td>AUTHORIZED INSPECTOR</td> <td>DATE</td> </tr> </table>		<i>[Signature]</i>	8-8-78	PROJECT FIELD ENGINEER	DATE	PROJECT ENGINEER	DATE	PROJ CONSTR QC ENGINEER	DATE	AUTHORIZED INSPECTOR	DATE
<i>[Signature]</i>	8-8-78														
PROJECT FIELD ENGINEER	DATE														
PROJECT ENGINEER	DATE														
PROJ CONSTR QC ENGINEER	DATE														
AUTHORIZED INSPECTOR	DATE														
17. REPORTED BY <i>[Signature]</i>		DATE 8/13/78		18. VALIDATED BY <i>[Signature]</i>											
		DATE 8/3/78		25. DISPOSITION RESULTS M-618 Sh.1 FWEIS NETWORK ACCOMPLISHED PER DISPOSITION BLOCK 22 <i>[Signature]</i> 8/30/78											
21. ROUTING: <input type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)															
22. <input checked="" type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering Cut apart and fit-up and weld in accordance with Specifications M-204 and G-270. <i>[Signature]</i> 8/8/78															
23. PROJECT ENGINEERING DISPOSITION															
26. QC ACCEPTANCE QC ENGINEER <i>[Signature]</i> DATE 8/20/78 AUTHORIZED INSPECTOR <i>[Signature]</i> DATE 8-20-78															



NONCONFORMANCE REPORT (CONT'D)

1. PAGE 2 OF 2

14. NCM NO. 1456

Block 22 continued:

accordance with the ASME Code Section III.

James A. Bann 8/7/78  
Richard 8/8/78

Block 25 continued:

Replaced section of line was retested and found to  
be satisfactory. Per. I.R. T-1.00-452-7, Log # 17559, Pneumatic Test  
1004 J.W. Hambley 8/11/78

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



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NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 1457	20. PAGE 1 of 1	
2. UNIT(S) Unit # 1	3. DRAWING/RATE NO. 7220-M-117-63-3	REV N/A	4. ITEM DESCRIPTION Nuclear Service Valves	5. ITEM LOCATION Whse. # 1, CC Hold		
6. P.O. OR SPEC NO. 7220-M-117AC Rev. 12	7. SERIAL NO. See Blk. 16	8. REPLACEMENT PART P/N N/A REV. SER NO.		9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER Anchor Darling	
11. INSPECTION CRITERIA ( ) DWG (x) SPEC ( ) OTHER		IR NO. R-1.00-3270 NO. M-117 Rev. 8	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (x) NO	13. SKETCH ATTACHED ( ) YES (x) NO	14. Discovered During (x) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client (x) Eng ( ) FLD
16. NONCONFORMING CONDITION: Purchase Order 7220-M-117 AC Rev. 12 and Specification 7220-M-177 Rev. 8 requires Bechtel Form G-321-D to be filled out. Contrary to the above, the Shop Inspector did not sign page one of Form G-321-D for Valve # 6"-EBB-GT-1MO-3177A-RP (P.O. Item # 8.1). "Q" number is indeterminate. Hold pending final disposition. 1 hold tag(s) applied to the nonconforming item(s).				24. DISPOSITION CONCURRENCE rework reject repair use as is <i>[Signature]</i> 8-4-78 PROJECT FIELD ENGINEER DATE <i>[Signature]</i> 8/1/78 PROJECT ENGINEER DATE <i>[Signature]</i> PROJ CONSTR QC ENGINEER DATE AUTHORIZED INSPECTOR DATE		
17. REPORTED BY <i>[Signature]</i> 8-2-78		18. VALIDATED BY <i>[Signature]</i> 8/3/78		25. DISPOSITION RESULTS Corrected G-321-D received and reviewed. <i>[Signature]</i> 8-7-78		
21. ROUTING <input checked="" type="checkbox"/> TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)						
22. (K) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering Procurement supervisor to obtain corrected documentation from vendor. <i>[Signature]</i> 8/4/78						
23. PROJECT ENGINEERING DISPOSITION						
26. OC ACCEPTANCE <i>[Signature]</i> 8-7-78 OC ENGINEER DATE AUTHORIZED INSPECTOR DATE						

# NONCONFORMANCE REPORT

1. PROJECT NAME <i>Unlabeled</i>		JOB NO. <b>7220</b>		19. NO. <b>1462</b>	20. PAGE <b>1</b> OF <b>2</b>
2. UNIT(S) <b>1, 2</b>	3. DRAWING/PART NO. <i>See Block 16</i>	REV <b>N/A</b>	4. ITEM DESCRIPTION <b>Makeup Filters &amp; Spare Filter Cartridges</b>		
5. P.O. OR STORE NO. <b>7220-1-01-AC</b>	7. SERIAL NO. <b>N/A</b>	8. REPLACEMENT PART P/N <b>N/A</b> REV <b>N/A</b> SER NO. <b>N/A</b>		9. SOURCE <b>Supplier</b>	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC ( ) OTHER		IR NO. <b>See Blk. 16</b>	12. ASME AUTHORIZED INSPECTION REQ'D (X) YES ( ) NO		10. CONTRACTOR/SUPPLIER <b>Fall Trinity Micro Corporation</b>
16. NONCONFORMING CONDITION: <b>Specification 7220-M-61 Rev. 5 requires documentation</b>			13. SKETCH ATTACHED ( ) YES (X) NO		14. Discovered During (X) Rec'g ( ) Const ( ) Test
					15. Equip Furnished By ( ) Client (X) Eng ( ) PLD

according to Form G-321-D.

Item 1. For 16 spare cartridge filters received on IR-R-1.00-3349, no G-321-D form has been received.

Item 2. For 8 makeup filters with tag no's 1F-56A & B, 2F-56A & B, 1F-57A & B and 2F-57A & B received on IR-R-1.00-3348 the G-321-D forms (page 3 of 3)

24. DISPOSITION CONCURRENCE			
rework <input checked="" type="checkbox"/>	reject <input type="checkbox"/>	repair <input type="checkbox"/>	use as is <input type="checkbox"/>
<i>J. Boone</i>		<b>8-10-78</b>	
PROJECT FIELD ENGINEER		DATE	
<i>J. C. McKinley</i>		<b>8-10-78</b>	
PROJECT ENGINEER		DATE	
<i>J. S. Holden</i>		<b>8-11-78</b>	
PROF. CONSTR. ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

17. REPORTED BY <i>Dian W. Delaney</i>	DATE <b>8/7/78</b>	18. VALIDATED BY <i>J. B. Berkeley</i>	DATE <b>8-8-78</b>
---	-----------------------	---	-----------------------

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22.  Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

Procurement supervisor to contact vendor and obtain correct documentation per Spec. 7220-M-61 Rev 5

*J. B. Berkeley 8/9/78*  
*J. W. Ward 8/7/78*

25. DISPOSITION RESULTS

Item 1. Form G-321-D received and accepted.

Item 2. Corrected documentation received and accepted.

Item 3. Radiographic film received and accepted.

*Dian W. Delaney 8/25/78*

23. PROJECT ENGINEERING DISPOSITION	26. QC ACCEPTANCE <i>Dian W. Delaney</i>	DATE <b>8/25/78</b>
	QC ENGINEER	DATE <b>8-28-78</b>
	AUTHORIZED INSPECTOR	DATE

Block 16 Continued

received with the Quality Verification Documentation packages are the wrong revision. The documentation packages for these makeup filters contain illegible MTR's, documentation with incorrect serial numbers and part numbers, and a cleaning certification for 2F-57B is missing.

Item 3. Specification 7220-M-61 Rev. 5, para. 8.4 requires the Seller to furnish the Buyer copies of radiographic film. Contrary to the above, no radiographic film has been received for the Radiographic Verification Reports required by Form G-321-D.

"Q" numbers are 4.033, 4.034, 4.043 and 4.044. Hold pending final disposition. 3 hold tag(s) applied to the nonconforming item(s).







Consumers  
Power  
Company

# NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION  
QUALITY ASSURANCE DEPARTMENT

6. PROJECT NAME: Midland 1 & 2	7. NONCONFORMING PART NO: NA	8. NONCONFORMING PART NAME: NA	1. NCR SERIAL NO: M-01-5-8-022
9. SERIAL NUMBER: NA	10. ORG. COMPETING NO: Bechtel Construction & Quality Control	11. AREA/LIN OF NO: Service Water Bldg. & Pond Area	2. DATE: 3-28-78
12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS: The following Bechtel NCR's relative to pond turnover are open and have either not been identified as exceptions by Bechtel or require dispositioning by Bechtel:  1045 1108 1214 1268 1270 1290			3. DATE OF REV. Closed 8-16-78
			4. FILE NO: 16.3.4, 16.3.6

5. DISTRIBUTION ACTION COPY:  
G. L. Richardson

INFO COPY:  
WBarclay JMilandin  
WRBird DBMiller  
TCooke JFNewgen  
JLCorley JTPride  
RHermeston DATaggart  
SHHowell  
DRJohnson  
GSKoeley  
JMKlacking  
BWMarguglio  
PAMartinez

13. QA RECOMMENDATION FOR PART CA:  
(1) Disposition the NCR's.  
or  
(2) Take exceptions to turnover as required.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED  NOT REQUIRED

14. HOLD TAGS APPLIED: YES  NO  NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: NA

15. IS PROCESS CA REQUIRED: YES  NO  IF NO, ENTER JUSTIFICATION BELOW:

16. DOES DC AFFECT Q-LIST ITEM: YES  NO

17. IS DC REPORTABLE PER 50.55(\*): YES  NO

18. IS DC REPORTABLE PER PART 21: YES  NO

19. IF YES, DATE & TIME OF REPORT TO NRC: NA

20. IF YES, WHO MADE REPORT TO NRC: NA

21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA

22. NCR ORIGINATOR: *D.R. Keating*  
/s/ D. R. Keating

23. WRITTEN REPLY REQUESTED BY: NA TO ESTABLISH CA COMPLETION DATE

24. SUPERVISOR'S SIGNATURE/DATE: NA

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:  
See attached page 3.

26. DESIGN/PROJECT SIG. AUTH. DISP.: See Ref NCR's 1045, 1108, 1214, 1268 & 1290	27. ENG SIG. AUTH. DISP.: <i>[Signature]</i> 8/16/78	28. PROCUREMENT SIG. CONC. DISP.: NA	29. SIG. OF OAG. RESP. FOR C/A: NA
30. PAM/CONST. SIG. AUTH. DISP.: NA	31. SIG. OF TEST GROUP ACKNOW. CONDITION: <i>[Signature]</i> 8/16/78	32. FOR MAJOR MOD - PLS. SUPT. SIG. AUTH. DISP.: NA	33. QA AUTH. SIG. TO IMPLEMENT DISP.: <i>[Signature]</i> / <i>[Signature]</i>
34. MEMO OF PART CA VERIFICATION: Reviewed NCR's 1045, 1108, 1214, 1268, 1270 and 1290 and letters GLR-03-78-158, IOM from RLCastleberry to JMKlacking dated April 7, 1978, GLR-04-78-182, 1FQA78, GLR-273, 112FQA78, QCFM-4925, QCFM-4903, GLR-306, 137FQA78, GLR-06-78-321, QCEN's 4555, 4559, 4615, 4628, 4643 and 4659, and BEBC-2308 and REM C-1515.			
35. SIG. OF OAG. RESP. FOR PART C/A SIGNIFYING COMPLETION: See ref letter GLR-04-78-182 and GLR-06-78-321	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE: <i>[Signature]</i> / <i>[Signature]</i> 8/16/78	37. NCR CLOSED BY/DATE: (PART - PROCESS CA COMPLETE) <i>[Signature]</i> / <i>[Signature]</i> 8/16/78	



Consumers  
Power  
Company

# NONCONFORMANCE REPORT

## PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION -  
QUALITY ASSURANCE DEPARTMENT  
M-01-5-8-022  
SEE SERIAL NUMBER:

PAGE 2 OF 4

38. ASSIGNMENT OF ROOT CAUSE(S):

See block 39.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

See attached page 4.

40. PROCESS CA REQUIRED FROM:

DESIGN

FABRICATION

CONSTRUCTION

PROCUREMENT

INSPECTION

OTHER \_\_\_\_\_

41. QA RECOMMENDATION FOR PROCESS CA:

See block 42.

42. PROCESS CA TO BE TAKEN BY WHO(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

See attached page 4.

43. METHOD OF PROCESS CA VERIFICATION:

Reviewed documentation listed below to verify meetings were held and required instructions and clarifications were provided:

1. Bechtel training session documentation - QC Leads meeting dated 4-7-78.
2. CPCo letter serial 3038 TCCooke to JFNewgen dated 4-25-76
3. Bechtel letter GLR-307 dated 6-21-78.

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

See Ref GLR-307

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

*R. Keating* *R. E. Brown* 8-16-78

NCR SER NO: M-01-5-8-022  
DATE OF NCR ORIG: 3-28-78  
DATE OF NCR REV: Closed 8-16-78  
FILE NO: 16.3.4, 16.3 6

## PART CA DISPOSITION, JUSTIFICATION &amp; COMPLETION DATE:

- (1) NCR 1045 was dispositioned "Repair" and taken as an exception to the pond turnover (letter QCFM-4555). The NCR remains open pending completion of repair.
- (2) NCR 1108 was dispositioned "Use-As-Is" and closed April 12, 1978.
- (3) NCR 1214 was dispositioned "Use-As-Is" and closed April 12, 1978.
- (4) NCR 1268 was dispositioned "Use-As-Is" and the documents revised as required. The NCR is listed as a current exception to the turnover (letter QCFM-4559) and remains open.
- (5) NCR 1270 was dispositioned "Rework" and taken as an exception to pond turnover in letter QCFM-4643. The NCR remains open pending completion of rework.
- (6) NCR 1290 was dispositioned "Use-As-Is" and closed March 31, 1978. However, NCR 1290 contained erroneous information as indicated in CPCo letter 91FQA78. Field Engineer's Report dated June 2, 1978, Project Engineering's letter BEBC-2308 dated June 15, 1978, and Resident Engineer Memorandum C-1515 dated June 19, 1978 addressed the erroneous information and support the original "Use-As-Is" disposition given this NCR on March 31, 1978. Copies of the Field Engineer's Report dated June 2, 1978, letter BEBC-2308 and REM C-1515 have been attached to the original copy of NCR 1290.



NCR SER NO: M-01-5-8-022  
DATE OF NCR ORIG: 3-28-78  
DATE OF NCR REV: Closed 8-16-78  
FILE NO: 16.3.4, 16.3.6

ROOT CAUSE AND NATURE OF PROCESS AND INSPECTION PROCESS CORRECTIVE ACTION:

To determine the root cause of this nonconformance and develop corrective actions to be taken, an indepth review of the items included in the dike turnover nonconformances was performed.

This review resulted into the categorization of the problems into four areas.

1. Missing verification documents in the Quality Assurance Records.
2. Missing documents in the turnover packages.
3. Omissions/incomplete records and typo's in the Quality Assurance Records.
4. Failure to implement specification and inspection requirements.

The root cause of items 1, 2 and 3 is that an inadequate review was performed by the responsible QCE's implementing and reviewing the items, resulting in errors in the documentation turnover packages and that no procedure for turnover was available to control this activity. The root cause for item 4 is as described, in that Construction and Quality Control failed to implement the instructions properly, or misinterpreted the intent of the instructions as presented in the specifications and QCI's.

Quality Control Engineers have been given detailed instruction by the PFQCE on the importance of the Level II review and the seriousness of an improper review and its impact on the credibility of the Quality Assurance Records being turned over. Guidelines have been (i.e., checklists, etc.) prepared for the Level II's use to assure that a complete review is being performed as required by SF/PSP G-6.1.

In addition, Quality Control is performing an indepth audit of all Quality Assurance records to resolve any possible problems prior to turnover.

Since the original turnover in March, Bechtel and CPCo have held several joint meetings in order to identify and resolve problems and procedures to eliminate misunderstandings with future turnovers. QAR SD-71 dated 3/16/78 request that a procedure be developed to control turnover of documentation. Meeting Notes dated 4/25/78 (T. Cooke to J. Newgen, serial 3038) summarizes a meeting held on 4/13/78 with Bechtel and Consumers personnel in attendance. This meeting resulted in twelve (12) action items which will also aid in preventing recurrence of these types of problems.

Each problem identified in this nonconformance report has been corrected by the individuals or organization responsible for the errors. Each QCE that is still employed at the jobsite and was involved with the errors is aware of the errors made. This action assures that the type and extent of the errors are known by the responsible individuals.

X



Consumers Power Company

# NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

PAGE 1 OF 4

PROJECT NAME: Midland	7. NONCONFORMING PART NO: NA	8. NONCONFORMING PART NAME: NA	1. NCR SERIAL NO: M-01-5-8-024
9. SERIAL NUMBER: NA	10. ORG. COMMITTEE NO: Bechtel Construction & QA	11. AREA/LOC. OF NO: Service Water Bldg. & Pond Area	2. DATE: 3-28-78
12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS: The following discrepancies represent hardware discrepancies located inside the service water building: The documents are listed by document package: M-618/1-6-23			3. DATE OF REV: Closed 8-18-78
			4. FILE NO: 16.3.4. 16.3.6

1. Inspection Record indicates valve was installed to revision 1 of the drawing. Actual valve stem orientation is not in accord with revision 1 of the drawing.  
M-618/1-8-24

1. Valve is not oriented in accordance with referenced revision of the drawing.

5. DISTRIBUTION ACTION COPY:  
G. L. Richardson

INFO COPY:  
WLBarclay JMilandin  
WRBird JFNewgen  
TCCooke DATaggart  
JLCorley  
RHermeston  
SHHowell  
DRJohnson  
GSKeeley  
JMKlacking  
BWMarguglio  
PAMartinez

13. CA RECOMMENDATION FOR PART CA: (Contd on Page 3)

- Provide disposition for these items.
- Correct items as appropriate.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED  NOT REQUIRED

14. HOLD TAGS APPLIED: YES  NO  NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: NA

15. IS PROCESS CA REQUIRED: YES  NO  IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES  NO  17. IS NC REPORTABLE PER 50.55(e): YES  NO

18. IS NC REPORTABLE PER PART 21: YES  NO  19. IF YES, DATE & TIME OF REPORT TO NRC: NA

20. IF YES, WHO MADE REPORT TO NRC: NA 21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA

22. NCR ORIGINATED BY: *DR Keating*  
/s/ D. R. Keating 23. WRITTEN REPLY REQUIRED BY: NA 24. SUPERVISOR'S SIGNATURE/DATE: NA

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:  
See page 3.

26. DESIGN/PROJECT SIG. AUTH. DISP.: NA 27. P&O SIG. AUTH. DISP.: *Billie 8/18/78* 28. PROCUREMENT SIG. CONC. DISP.: NA 29. SIG. OF OAG. RESP. FOR C/A: NA

30. FAB/CONST. SIG. AUTH. IMP. DISP.: NA 31. SIG. OF TEST GROUP ACKNOW. CONDITION: *Billie for JT Ponds* 32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.: NA 33. QA AUTH. SIG. TO IMPLEMENT DISP.: *DR Keating*

34. METHOD OF PART CA VERIFICATION:  
The document packages were reviewed and found to be corrected as indicated.

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION: CLR-04-78-168 36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL: *DR Keating 8-18-78* 37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE) *DR Keating 8-18-78*



Consumers  
Power  
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# NONCONFORMANCE REPORT

## PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION -  
QUALITY ASSURANCE DEPARTMENT  
M-01-5-8-024  
MCR SERIAL NUMBER:

PAGE 2 OF 4

38. ASSESSMENT OF ROOT CAUSE(S):

See page 4.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

See page 4.

40. PROCESS CA REQUIRED FROM:

DESIGN

FABRICATION

CONSTRUCTION

PROCUREMENT

INSPECTION

OTHER \_\_\_\_\_

41. QA RECOMMENDATION FOR PROCESS CA:

See page 4.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED BY STAFF 41 & DATE OF COMPLETION:

See page 4.

43. METHOD OF PROCESS CA VERIFICATION:

The following documents were reviewed:

1. Bechtel training session documentation. QC Leads meeting dated 4-7-78 and 5-19-78.
  2. CPCo letter serial 3038 TCCooke to JFNewgen dated 4-25-78.
  3. Bechtel letter GLR-307 dated 6-21-78.
  4. Bechtel letter GLR-04-78-190 dated April 13, 1978.
- General instructions for the review of all IR's.  
QAR SD-71.

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

GLR-04-78-168, GLR-307

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

*W. Keating* 8-18-78

NCR SERIAL NO: M-01-5-8-024  
DATE: 3-28-78  
DATE OF REV: Closed 8-18-78  
FILE NO: 16.3.4, 16.3.6

"AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS: (Contd)

M-618/1-13-6

1. Actual valve stem direction is not in accordance with direction shown on drawing FSK-M-618-1-9, Rev. 0 which is contained in the package.

M-618/1-13-7

1. Actual valve stem direction is not in accordance with direction shown on drawing FSK-M-618-1-10 which is contained in the package.

PART CORRECTIVE ACTION:

The following corrective action has been taken and is complete.

M-618/1-5-23 and M-618/1-8-24

1. Revision 3 to drawing FSK M-618-1-9 corrected the discrepant condition.
2. QC Inspection Record "Referenced Criteria" continuation sheets have been updated to reflect the proper drawing revision which was used to accept the valve stem orientation.

M-618/1-13-6

1. FSK M-618-1-9, Revision 4, has been inserted in File M-618/1-13-6 which indicates actual valve stem direction.

M-618/1-13-7

1. FSK M-618-1-10, Revision 2, has been inserted in File M-618/1-13-7 which indicates the actual valve stem orientation.

NCR SER NO: M-01-5-8-024  
DATE OF NCR ORIG: 3-28-78  
DATE OF NCR REV: Closed 8-18-78  
FILE NO: 16.3.4, 16.3.6

ROOT CAUSE AND NATURE OF PROCESS AND INSPECTION PROCESS CORRECTIVE ACTION:

To determine the root cause of this nonconformance and develop corrective actions to be taken, an indepth review of the items included in the dike turnover nonconformances was performed.

This review resulted into the categorization of the problems into four areas.

1. Missing verification documents in the Quality Assurance Records.
2. Missing documents in the turnover packages.
3. Omissions/incomplete records and typo's in the Quality Assurance Records.
4. Failure to implement specification and inspection requirements.

The root cause of items 1, 2 and 3 is that an inadequate review was performed by the responsible QCE's implementing and reviewing the items, resulting in errors in the documentation turnover packages and that no procedure for turnover was available to control this activity. The root cause for item 4 is as described, in that Construction and Quality Control failed to implement the instructions properly, or misinterpreted the intent of the instructions as presented in the specifications and QCI's.

Quality Control Engineers have been given detailed instruction by the PFQCE on the importance of the Level II review and the seriousness of an improper review and its impact on the credibility of the Quality Assurance Records being turned over. Guidelines have been (i.e., checklists, etc.) prepared for the Level II's use to assure that a complete review is being performed as required by SF/PSP G-6.1.

In addition, Quality Control is performing an indepth audit of all Quality Assurance records to resolve any possible problems prior to turnover.

Since the original turnover in March, Bechtel and CPCo have held several joint meetings in order to identify and resolve problems and procedures to eliminate misunderstandings with future turnovers. QAR SD-71 dated 3/16/78 request that a procedure be developed to control turnover of documentation. Meeting Notes dated 4/25/78 (T. Cooke to J. Newgen, serial 3038) summarizes a meeting held on 4/13/78 with Bechtel and Consumers personnel in attendance. This meeting resulted in twelve (12) action items which will also aid in preventing recurrence of these types of problems.

Each problem identified in this nonconformance report has been corrected by the individuals or organization responsible for the errors. Each QCE that is still employed at the jobsite and was involved with the errors is aware of the errors made. This action assures that the type and extent of the errors are known by the responsible individuals.

X



Consumers Power Company

# NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

PAGE 1 OF 12

6. PROJECT NAME: Midland 1 & 2		7. NONCONFORMING PART NO: NA		8. NONCONFORMING PART NAME: NA		1. NCR SERIAL NO: M-01-5-8-028	
9. SERIAL NUMBER: NA		10. ORG. COMMITTING NCR: Bechtel Construction Bechtel Quality Control		11. AREA/LOC. OF NC: Service Water Discharge Structures 1 & 2, Aux. Bldg. & Reactor Bldg.		2. DATE: 4-11-78	
12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS: See attached pages 3-5.						3. DATE OF REV: Closed 8-9-78	
13. CA RECOMMENDATION FOR PART CA: See attached page 6.						4. FILE NO: 16.3.4, 16.3.6	
DESIGN/PROJECT ENG. DISPOSITION REQUIRED <input checked="" type="checkbox"/> NOT REQUIRED <input type="checkbox"/>						5. DISTRIBUTION ACTION COPY:  GLRichardson  INFO COPY: WLBarclay JMilandin WRBird JFNewgen TCCooke JTPride JLCorley DATaggart RHermeston SHHowell DRJohnson GSKeeley JMKlacking BWMarguglio PAMartinez	
14. HOLD TAGS APPLIED: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: NA					
15. IS PROCESS CA REQUIRED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF NO, ENTER JUSTIFICATION BELOW:							
16. DOES NC AFFECT Q-LIST ITEM: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>				17. IS NC REPORTABLE PER 50.55(*): YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			
18. IS NC REPORTABLE PER PART 21: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>				19. IF YES, DATE & TIME OF REPORT TO NRC: NA			
20. IF YES, WHO MADE REPORT TO NRC: NA				21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA			
22. NCR ORIGINATED BY: Donald E. Horn			23. WRITTEN REPLY REQUIRED BY: NA TO ESTABLISH CA COMPLETION DATE			24. SUPERVISOR'S SIGNATURE/DATE:  NA	
25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE: See attached pages 6-10.							
26. DESIGN/PROJECT SIG. AUTH. DISP.: Refer to IOM to GLRichardson from RLCastleberry dated 5/24/78, BEEC 2308 & REM's C-1286, C-1335, P.M. Wheeler 3-9-78		27. PMO SIG. AUTH. DISP.:		28. PROCUREMENT SIG. CONC. DISP.:		29. SIG. OF ORG. RESP. FOR C/A:	
30. FAB/CONST. SIG. AUTH. DISP.: C-1505 & C-1515 NA		31. SIG. OF TEST GROUP AGENOV. CONDITION: P.L. Corley for JTPride 8/1/78		32. FOR MAJOR MOD - P.L. SUPT. SIG. AUTH. DISP.: NA		33. QA AUTH. SIG. TO IMPLEMENT DISP.: Donald E. Horn	
34. METHOD OF PART CA VERIFICATION: See attached page 12.							
35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION: See ref OCFM-2729 (dated 4/19/78) & OCFM-4920 (dated 6/16/78).			36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE: Donald E. Horn 8-9-78			37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE) Donald E. Horn 8-9-78	



Consumers  
Power  
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# NONCONFORMANCE REPORT

## PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION -

QUALITY ASSURANCE DEPARTMENT

M-01-5-8-028  
MCR SERIAL NUMBER:

PAGE 2 OF 12

ASSESSMENT OF ROOT CAUSE(S):

See attached page 11.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

See attached page 11.

40. PROCESS CA REQUIRED FROM:

DESIGN

FABRICATION

CONSTRUCTION

PROCUREMENT

INSPECTION

OTHER \_\_\_\_\_

41. QA RECOMMENDATION FOR PROCESS CA:

See attached page 11.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

See attached page 11.

43. METHOD OF PROCESS CA VERIFICATION:

See attached page 12.

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

See ref. letter GLR-307

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Donald E. Horn 8-9-78

NCR SER NO:M-01-5-8-028  
 DATE OF NCR ORIG: 4-11-78  
 DATE OF NCR REV: Closed 8-9-78  
 FILE NO: 16.3.4, 16.3.6

"AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFERENCES: (Contd

SW Pump Structure, SW Discharge Structure and Misc. Cooling Pond & River SW Retaining Wall

(Turnover System - FACL Sequential No. 010/011/013)

SW-1-65 FOR POUR Y(604.5)a

1. IR C-1.30-487, Rev. 1 does not indicate the inspection criteria for the concrete mix design to be used. Drawing C-93, Rev. 3 requires concrete mix C-2c to be used. D-1c was actually used.
2. IR C-1.30-487, Rev. 1 activities 1.7 and 2.3 are signed and dated. These activities are not applicable.
3. IR C-1.30-487, Rev. 1 activity 3.2 has DR pages "\_\_\_". This has been corrected.
4. IR C-1.40-487 activity 2.2a indicates forms were stripped 3-10-78. Forms should not have been stripped earlier than 3-15-78.
5. In-Process Concrete Test Report for IR C-4.10-249 indicates 2%-7% air content limits, should be 3%-6%.
6. There are no concrete cylinder reports in this package.
7. No QC Inspection was performed on the installation of this precast cover to the Service Water Discharge Structure.

SW-1-32 FOR POUR Y (604.5)b

1. IR C-1.30-488, Rev. 1 does not indicate the inspection criteria for the concrete mix design to be used. Drawing C-93, Rev. 3 requires concrete mix C-2c to be used. D-1c was actually used.
2. IR C-1.30-488, Rev. 1 activities 1.7 and 2.3 are signed and dated. These activities are not applicable.
3. IR C-1.30-488, Rev. 1 activity 3.2 has DR pages "\_\_\_". This has been corrected.
4. IRC-1.40-488 activity 2.2a indicates forms were stripped 3-10-78. Forms should not have been stripped earlier than 3-15-78.
5. There are no concrete cylinder reports in this package.
6. "Location/Transfer Record" card is needed to reference In-Process Concrete Test Reports, Batch Plant Tickets, and Concrete Cylinder Reports to Y(604.5)a-control number SW-1-65.



NCR SER NO:M-01-5-8-028  
DATE OF NCR ORIG: 4-11-78  
DATE OF NCR REV: Closed 8-9-78  
FILE NO: 16.3.4, 16.3.6

"AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFERENCES: (Contd)

SW-1-32 FOR POUR Y (604.5)b (Contd)

7. No QC Inspection was performed on the installation of this precast cover to the Service Water Discharge Structure.

SW-2-10 FOR POUR Y (603)a'

1. IR C-130-485, Rev. 1 does not indicate the inspection criteria for the concrete mix design to be used. Drawing C-93, Rev. 3 requires concrete mix C-2c to be used. D-1c was actually used.
2. IR C-1.40-485 activity 2.2b is signed and dated 3-20-78, but this activity is not applicable.
3. In-Process Concrete Test Report for C-1.30-485 and 486 did not give D-1c grout for mix number used.
4. There are no concrete cylinder reports in this package.

SW-2-11 FOR POUR Y(603)b'

1. IR C-1.30-486, Rev. 1 does not indicate the inspection criteria for the concrete mix design to be used. Drawing C-93, Rev. 3 requires concrete mix C-2c to be used. D-1c was actually used.
2. IR C-1.40-486 activity 2.2a indicates forms were stripped 3-10-78. Forms should not have been stripped earlier than 3-14-78.
3. There are no concrete cylinder reports in this package.
4. "Location/Transfer Record" card is needed to reference In-Process Concrete Test Reports, Batch Plant Tickets, and Concrete Cylinder Reports to Y(603)a'-control number SW-2-10.

DOCUMENTATION TURNOVER INDEX TRANSMITTED IN BECHTEL QC LETTER QCFM-4615

1. No drawings listed for File/Index No. SW-2-11.
2. No drawings listed for File/Index No. SW-1-32.
3. Number of pages for C-1.30-488 (File/Index No. SW-1-32) should be 5 not 4.

NCR SER NO: M-01-5-8-028  
DATE OF NCR ORIG: 4-11-78  
DATE OF NCR REV: Closed 8-9-78  
FILE NO: 16.3.4, 16.3.6

"AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFERENCES: (Contd)

C-230-9-462 BATCH PLANT DAILY INSPECTION REPORTS FOR FEBRUARY, 1978

1. IR's C-4.10-242&243 activity 1.1 are signed and dated, the revision to Specification C-230 is shown as 11, it should have been 12.
2. IR C-4.10-243 activity 2.3i is signed and dated 2-28-78, however no wash test, gradation test or moisture test were taken 2-28-78 for 3/8" aggregate. (This is not cooling pond related.)
3. IR C-4.10-233 activity 2.3j has not been signed or date.
4. There is no IR for concrete batched February 10, 1978 in this folder.
5. IR C-4.10-229 activity 2.3j has not been signed or dated.

C-230-9-522 BATCH PLANT DAILY INSPECTION REPORTS FOR MARCH, 1978

1. IR's C-4.10-244,245,246,247,248 and 249 activity 1.1 are signed and dated, the revision to Specification C-230 is shown as 11, it should have been 12.
2. IR C-4.10-248 activity 2.3i is signed and dated 3-7-78, however no wash test, gradation test or moisture test were taken for 3/8" aggregate on 3-7-78. (This problem is not cooling pond turnover related.)
3. IR C-4.10-248 activity 2.3j is signed and dated 3-13-78, it should have been signed 3-7-78.
4. IR C-4.10-250 activity 2.3j is signed and dated 3-13-78, it should have been signed 3-9-78.
5. IR C-4.10-244 activity 2.3j has not been signed or dated.
6. IR C-4.10-246 activity 2.3j has not been signed or dated.
7. IR C-4.10-254 activity 2.3j has not been signed or dated.

NCR SER NO:M-01-5-8-028  
 DATE OF NCR ORIG: 4-11-78  
 DATE OF NCR REV: Closed 8-9-78  
 FILE NO: 16.3.4, 16.3.6

PART CORRECTIVE ACTION, DATE & JUSTIFICATION:

RECOMMENDED PART CORRECTIVE ACTION:

- (1) Review listing of nonconforming items and provide Project Engineering dispositions.
- (2) Correct the deficiencies.

PART CORRECTIVE ACTION TAKEN:

SW Pump Structure, SW Discharge Structure and Misc. Cooling Pond & River SW Retaining Wall (Turnover System - FACL Sequential No. 010/011/013)

SW-1-65 For Pour Y(604.5)a

1. REM C-1286 was added to the inspection criteria allowing for the use of D-1C (a higher strength mix) in the place of C-2c.
2. The QCE inadvertently signed Act/Tasks 1.7 and 2.3 in error. Act/Tasks 1.7 and 2.3 have been corrected per SF/PSP G-7.1 Rev. 4 to read N/A.
3. This had been corrected prior to the NCR being issued. The number of DR pages was 0.
4. The following is a further clarification of the curing period from 3/8/78 to 3/10/78:
  - a. 3/08/78 - Concrete placement completed.
  - b. 3/08/78 - Curing compound sprayed on top of the pre-cast cover after initial set.
  - c. 3/09/78 - Side forms broken loose prior to 24 hours.
  - d. 3/10/78 - Side forms removed and curing compound applied to sides.

The above clarification has been added to the curing report.

It should be pointed out that from 3/9/78 to 3/10/78 the pre-cast cover was not moist cured.

For the two days following placement, the method of curing of the sides of the pre-cast cover has been accepted by Project Engineering per Rem C-1515 and Letter BEBC 2308.

5. The Batch Plant QCF-15 form, in process concrete test report acceptance criteria for air content limits is at point of placement not at the Batch Plant. Block 7 of the form has been N/A.

NCR SER NO:M-01-5-8-028  
 DATE OF NCR ORIG: 4-11-78  
 DATE OF NCR REV: Closed 8-9-78  
 FILE NO: 16.3.4, 16.3.6

## PART CORRECTIVE ACTION TAKEN: (Contd)

6. This package has been reorganized and the required records located. A location/transfer record has been placed in package SW-1-65, Pour Y(604.5)a to reference SW-1-32, Pour Y(604.5)b for the in-process concrete test report, batch tickets and concrete cylinder report.
7. Quality Control's original response in QCFM-2729 stated that the installation of the pre-cast covers was "non-Q". A further clarification followed:
  - a. FCR Ç-1351 changed the original design of the Service Water Intake Structure tops from poured in-placed to pre-casts. This FCR addresses additional reinforcing steel, 1½" diameter anchor bolts, 1" hold down plates and nuts and the grouting operation.
  - b. The reinforcing steel and anchor bolt inspections were performed and documented as follows:
    1. Additional reinforcing steel: C-1.20-485 (Columns)  
C-1.20-487 (Pre-cast cover)
    2. 1½" Anchor Bolts: C-1.20-485 (Columns)
  - c. The hold down plates, nuts and grouting operation were determined non-Q by Project Engineering per REM's C-1335 and C-1505.

SW-1-32 For Pour Y(604.5)b

1. REM C-1286 was added to the inspection criteria allowing for the use of D-1C (a higher strength mix) in the place of C-2c.
2. The QCE inadvertently signed Act/Tasks 1.7 and 2.3 in error. Act/Tasks 1.7 and 2.3 have been corrected per SF/PSP G-7.1 Rev. 4 to read N/A.
3. This had been corrected prior to the NCR being issued. The number of DR pages was 0.
4. The following is a further clarification of the curing period from 3/8/78 to 3/10/78:
  - a. 3/08/78 - Concrete placement completed.
  - b. 3/08/78 - Curing compound sprayed on top of the pre-cast cover after initial set.
  - c. 3/09/78 - Side forms broken loose prior to 24 hours.
  - d. 3/10/78 - Side forms removed and curing compound applied to sides.

The above clarification has been added to the curing report.

NCR SER NO:M-01-5-8-028  
 DATE OF NCR ORIG: 4-11-78  
 DATE OF NCR REV: Closed 8-9-78  
 FILE NO: 16.3.4, 16.3.6

## PART CORRECTIVE ACTION TAKEN:

## 4. (Contd)

It should be pointed out that from 3/9/78 to 3/10/78 the pre-cast cover was not moist cured.

For the two days following placement, the method of curing of the sides of the pre-cast cover has been accepted by Project Engineering per Rem C-1515 and Letter BEBC 2308.

5. & 6. This package has been reorganized and the required records located. A location/transfer record has been placed in package SW-1-65, Pour Y(604.5)a to reference SW-1-32, Pour Y(604.5)b for the in-process concrete test report, batch tickets and concrete cylinder report.
7. Quality Control's original response in QCFM-2729 stated that the installation of the pre-cast covers was "non-Q". A further clarification followed:
- a. FCR C-1351 changed the original design of the Service Water Intake Structure tops from poured in-placed to pre-casts. This FCR addresses additional reinforcing steel, 1½" diameter anchor bolts, 1" hold down plates and nuts and the grouting operation.
  - b. The reinforcing steel and anchor bolt inspections were performed and documented as follows:
    1. Additional Reinforcing Steel: C-1.20-488 (Pre-cast cover)  
C-1.20-486 (Columns)
    2. 1½" Anchor Bolts: C-1.20-486 (Columns)
  - c. The hold down plates, nuts and grouting operation were determined non-Q by Project Engineering per REM's C-1335 and C-1505.

SW-2-10 For Pour Y(603)a'

1. REM C-1286 was added to the inspection criteria allowing for the use of D-1C (a higher strength mix) in the place of C-2c.
2. The QCE inadvertently signed Act/Task 2.2b in error. Act/Task 2.2b has been corrected per SF/PSP G-7.1 Rev. 4 to read N/A.
3. D-1c grout was added to block 6 on the In-Process Concrete Test Report for C-1.30-485 and 486.
4. This package has been reorganized and a location/transfer record placed in SW-2-10, Pour Y(603)a' to reference SW-2-11, Pour Y(603)b' for the in-process concrete test reports, batch tickets and concrete cylinder report.

NCR SER NO:M-01-5-8-028  
 DATE OF NCR ORIG: 4-11-78  
 DATE OF NCR REV: Closed 8-9-78  
 FILE NO: 16.3.4, 16.3.6

PART CORRECTIVE ACTION TAKEN: (Contd)

SW-2-11 For Pour Y(603)b'

1. REM C-1286 was added to the inspection criteria allowing for the use of D-1c (a higher strength mix) in the place of C-2c.
2. The following is a further clarification of the curing period from 3/7/78 to 3/10/78:
  - a. 3/07/78 - Concrete placement completed.
  - b. 3/07/78 - Curing compound sprayed on top of the columns after initial set.
  - c. 3/08/78 - Side forms broken loose prior to 24 hours.
  - d. 3/10/78 - Side forms removed and curing compound applied to sides.

The above clarification has been added to the curing report.

It should be pointed out that from 3/8/78 to 3/10/78 the columns were not moist cured.

For the three days following placement, the method of curing of the sides of the piers has been accepted by Project Engineering per Rem C-1515 and Letter BEBC 2308.

3. & 4. This package has been reorganized and the in-process concrete test report, batch ticket and concrete cylinder report placed in the package.

Documentation Turnover Index Transmitted in Bechtel QC Letter QCFM-4615

1. File/Index No. SW-2-11 has been revised to include drawing number.
2. File/Index No. SW-1-32 has been revised to include drawing number.
3. SW-1-32 has been reorganized and re-indexed.

C-230-9-462 Batch Plant Daily Inspection Reports For February, 1978

1. The QCE did inspect to Rev. 11 of Spec. C-230 when Rev. 12 was issued. The change to Rev. 12 did not alter the PQCI or the batch plant inspectors duties.
2. Project Engineering concluded that the 3/8 inch aggregate used on February 28, 1978 may be "used-as-is" with no additional testing required. This is documented in Inter-Office Memorandum to G. L. Richardson from R. L. Castleberry dated May 24, 1978.

NCR SER NO:M-01-5-8-028  
DATE OF NCR ORIG: 4-11-78  
DATE OF NCR REV: Closed 8-9-78  
FILE NO: 16.3.4, 16.3.6

## PART CORRECTIVE ACTION TAKEN:

C-230-9-462 Batch Plant Daily Inspection Reports For February, 1978 (Contd)

3. The sieve analysis report does indicate QC acceptance. Act/Task 2.3j, QCIR C-4.10-233 has been signed and dated per SF/PSP 7.1 Rev. 4.
4. QCIR C-4.10-231 for February 10, 1978 has been located and placed in the package.
5. A review of the sieve analysis report does indicate QC acceptance. Act/Task 2.3j, QCIR C-4.10-229 has been signed and dated per SF/PSP 7.1 Rev. 4.

C-230-9-522 Batch Plant Daily Inspection Reports For March 1978

1. The QCE did inspect to Rev. 11 of Spec. C-230 when Rev. 12 was issued. The change to Rev. 12 did not alter the PQCI or the batch plant inspectors duties.
2. Project Engineering concluded that the 3/8 inch aggregate used on March 7, 1978 may be "used-as-is" with no additional testing required. This is documented in Inter-Office Memorandum to G. L. Richardson from R. L. Castleberry dated May 24, 1978.
3. & 4. The Level II review on 3/13/78 discovered that the Act/task 2.3j had not been signed. After his review of the sieve analysis reports which did indicate QC acceptance, he signed and dated Act/Task 2.3j.
- 5, 6, 7. A review of the sieve analysis report does indicate QC acceptance. Act/Tasks 2.3j have been signed and dated per SF/PSP 7.1 Rev. 4.

NCR SER NO: M-01-5-8-028  
DATE OF NCR ORIG: 4-11-78  
DATE OF NCR REV: Closed 8-9-78  
FILE NO: 16.3.4, 16.3.6

ROOT CAUSE AND NATURE OF PROCESS AND INSPECTION PROCESS CORRECTIVE ACTION:

To determine the root cause of this nonconformance and develop corrective actions to be taken, an indepth review of the items included in the dike turnover nonconformances was performed.

This review resulted into the categorization of the problems into four areas.

1. Missing verification documents in the Quality Assurance Records.
2. Missing documents in the turnover packages.
3. Omissions/incomplete records and typo's in the Quality Assurance Records.
4. Failure to implement specification and inspection requirements.

The root cause of items 1, 2 and 3 is that an inadequate review was performed by the responsible QCE's implementing and reviewing the items, resulting in errors in the documents in turnover packages and that no procedure for turnover was available to control this activity. The root cause for item 4 is as described, in that Construction and Quality Control failed to implement the instructions properly, or misinterpreted the intent of the instructions as presented in the specifications and QCI's.

Quality Control Engineers have been given detailed instruction by the PFQCE on the importance of the Level II review and the seriousness of an improper review and its impact on the credibility of the Quality Assurance Records being turned over. Guidelines have been (i.e., checklists, etc.) prepared for the Level II's use to assure that a complete review is being performed as required by SF/PSP G-6.1.

In addition, Quality Control is performing an indepth audit of all Quality Assurance records to resolve any possible problems prior to turnover.

Since the original turnover in March, Bechtel and CPCo have held several joint meetings in order to identify and resolve problems and procedures to eliminate misunderstandings with future turnovers. QAR SD-71 dated 3/16/78 request that a procedure be developed to control turnover of documentation. Meeting Notes dated 4/25/78 (T. Cooke to J. Newgen, serial 3038) summarizes a meeting held on 4/13/78 with Bechtel and Consumers personnel in attendance. This meeting resulted in twelve (12) action items which will also aid in preventing recurrence of these types of problems.

Each problem identified in this nonconformance report has been corrected by the individuals or organization responsible for the errors. Each QCE that is still employed at the jobsite and was involved with the errors is aware of the errors made. This action assures that the type and extent of the errors are known by the responsible individuals.



NCR SER NO:M-01-5-8-028  
DATE OF NCR ORIG: 4-11-78  
DATE OF NCR REV: Closed 8-9-78  
FILE NO: 16.3.4, 16.3.6

## METHOD OF VERIFICATION:

Reviewed letters GLR-04-78-190 dated April 13, 1978; QCFM-2729 dated April 19, 1978; GLR-04-78-209 dated April 21, 1978; 77FQA78 dated May 4, 1978; GLR-262 dated May 23, 1978; IOM to GLRichardson from RLCastleberry dated May 24, 1978; 104FQA78 dated May 25, 1978; GLR-273 dated May 30, 1978; QCFM-4846 dated May 30, 1978; 112FQA78 dated June 2, 1978; QCFM-4903 dated June 9, 1978; GLR-306 dated June 13, 1978; BEBC-2308 dated June 15, 1978; QCFM-4920 and QCFM-4921 dated June 16, 1978; 137FQA78 dated June 20, 1978; GLR-307 dated June 21, 1978; GLR-313 dated June 23, 1978; Resident Engineer Memorandums C-1286, C-1335, C-1505, C-1515; Field Change Request C-1351; General Instructions for the review of all IR's; checklist for reviewing closed Bechtel NCR's for client turnover; QCIR checklist for C-5.10; checklist for reviewing QCIR C-1.20, C-1.21, C-1.22, C-1.30, C-1.40, C-4.10, Concrete Cylinder Reports (Form QC-C3A), In-Process Concrete Test Report (Form C12-1, C12-2 and QCF-15) and Batch Plant Tickets; QCIR checklist; General Instructions for the review of all Field Inspection Plans; QC's leads meetings of April 7, 1978 and May 19, 1978; package SW-1-65 for Pour Y(604.5)a; package SW-1-32 for Pour Y(604.5)b; package SW-2-10 for Pour Y(603)a'; package SW-2-11 for Pour Y(603)b'; package C-230-9-462 Batch Plant Daily Inspection Reports for February 1978 and package C-230-9-522 Batch Plant Daily Inspection Reports for March 1978.



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# NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION -  
QUALITY ASSURANCE DEPARTMENT

PAGE 1 OF 3

PROJECT: <b>Midland MSSS Erection</b>	NC PART NO: <b>NA</b>	NC PART NAME: <b>NA</b>	NCR SER NO: <b>03-4-8-039</b>
SERIAL NO: <b>NA</b>	OPG COMMITTING NCR: <b>B&amp;W Quality Control</b>	AREA/LOC OF NCR: <b>NA</b>	DATE OF NCR ORIG: <b>5-7-78</b>
"AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFERENCE:			DATE OF NCR REV: <b>Closed 8-7-78</b>
<p>Section V Article 2 of the ASME Code states in part that, "As a check on back-scattered radiation, a lead symbol "B" shall be attached to the back of each film holder. If the image of the "B" appears on the radiograph, protection from back-scatter is insufficient and the radiograph shall be considered unacceptable".</p> <p>Contrary to the above, B&amp;W Construction has not incorporated this code requirement in their General Procedure for Radiography Examination, 9-RT-100 or subsequent RT Procedures. Consequently, their radiographer had been shooting welds without checking for excessive back-scatter until notified by Consumers QA on May 3 that there was a code requirement for this check.</p>			FILE NO: <b>16.4.4</b>

DISTRIBUTION: This NCR is issued to RWShope

COPIES:

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- PAMarcinez
- JMilandin
- JFNewgen
- DATaggart

PART CORRECTIVE ACTION, DATE & JUSTIFICATION:

Incorporate check on back-scatter in applicable procedures.

Determine if any radiographs taken prior to notification by Consumers QA of code requirement had indeed been exposed to excessive back-scatter and are unacceptable.

OPG RESP FOR PART C/A: <b>B&amp;W Quality Control</b>	DESIGN AUTH SIG: <b>NA</b>	PROC AUTH SIG: <b>NA</b>	FAB/CONST AUTH SIG: <b>Ref. Ltr. M-1A-(Q)-56</b>
TEST AUTH SIG: <b>NA</b>	PMO AUTH SIG: <b>NA</b>	OPS AUTH SIG: <b>NA</b>	QA AUTH SIG: <i>R. Stumli</i>

DOES NC AFFECT Q-LISTED ITEM: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	IS NC REPORTABLE PER 50.55(e): YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
IS NC REPORTABLE PER 21: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	IF "YES", DATE OF REPORT TO NRC: <b>NA</b>
IF "YES", TIME OF REPORT TO NRC: <b>NA</b>	IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED: <b>NA</b>
IF "YES", WHO MADE REPORT: <b>NA</b>	
IS PROCESS C/A REQUIRED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	IF "YES", SEE PAGE <b>2</b>

IF "NO", WHAT IS JUSTIFICATION: **NA**

IS DESIGN PROCESS C/A REQUIRED: YES  NO

IF "YES", SEE PAGE **NA**

INITIATOR'S SIGNATURE: <i>R. Stumli</i>	SUPERVISOR'S SIGNATURE: <i>Y. Harold Stumli</i> <b>5/8/78</b>
PART C/A VERIFICATION SIGNATURE: <i>R. Stumli</i>	VERIFICATION DATE: <b>8-7-78</b>



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# NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION -  
QUALITY ASSURANCE DEPARTMENT

SUPPLEMENTAL SHEET

PAGE 2 OF 3

CAUSE OF NCR: Inadequate training of personnel to applicable code requirements.

NCR SER NO: 03-48-039

DATE OF NCR ORIG: 5-7-78

DATE OF NCR REV: Closed 8-7-78

FILE NO: 16.4.4

DATE BY WHICH C/A COMMITMENT WILL BE MADE: NA

- NATURE OF C/A:
1. Immediately make site personnel who are responsible for radiography aware of code requirements.
  2. Provide appropriate supervision during radiographic shift hours.
  3. Correct deficiencies in training program to preclude repetition.

DATE OF C/A COMPLETION: NA at this time.

ORG RESP FOR C/A:

SIG OF PERSON MAKING C/A COMMITMENT:

DATE OF C/A EFFECTIVENESS: NA at this time.

B&W Quality Control

Ref. Ltr. M-1A-(Q)-56

ROOT CAUSE OF INSPECTION NCR: NA

DATE BY WHICH C/A COMMITMENT WILL BE MADE: NA

NATURE OF C/A: NA

DATE OF C/A COMPLETION: NA

ORG RESP FOR C/A:

SIG OF PERSON MAKING C/A COMMITMENT:

DATE OF C/A EFFECTIVENESS: NA

NA

NA

NCR ORIGINATOR'S SIGNATURE:

*R. Stumli*

SUPERVISOR'S SIGNATURE:

*Herald Stepl...* 5/8/78

PROCESS C/A VERIFIER'S SIGNATURE:

*R. Stumli*

VERIFICATION DATE:

8-7-78

PROCESS CORRECTIVE ACTION

INSPECTION WITHOUT CORRECTIVE ACTION

NCR SER NO: 03-4-8-039  
DATE OF NCR ORIG: 5-7-78  
DATE OF NCR REV: Closed 8-7-78  
FILE NO: 16.4.4

CORRECTIVE ACTION TAKEN:

1. New procedure 9-RT-104 (radiographic examination of weld test coupons) with required criteria, has been incorporated into B&W Quality Control Manual.
2. As a result of radiographs taken using same technique noted in nonconformance, films showed no evidence of excessive back-scatter.

VERIFICATION OF CORRECTIVE ACTION:

1. Procedure 9-RT-104 reviewed for adequacy and found acceptable.
2. Presently, all welders qualification film are reviewed by Consumers Power. Film has met code requirements with respect to back-scatter.

# NONCONFORMANCE REPORT

PROJECT NAME: Midland Project	DESIGN AUTH SIG: NA	CONTRACT NO: Sodium Hydroxide and Sodium Thiosulfate Lines	NON CON. NO.: 01-9-8-043
CONTRACTING NO: NA	CONTRACTING CO.: Bechtel Construction	AREA/LOC OF DEF: Yard Area "B" North-east of Auxiliary Bldg	DATE OF NON CON: 5-15-78
DATE OF THIS REV: Closed 8-2-78			FILE NO: 16.3.4

THE IS NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFERENCE:  
The following lines were buried in November of 1977 with duct tape over open ends. Upon exposing the lines, it was observed the duct tape had deteriorated resulting in dirt and water in the lines.

- 4" 2HCB-20                      4" 2HCB-18
- 4" 2HCB-21                      4" 2HCB-19

This condition is nonconforming to requirements stipulated in Section 6 of ANSI N45.2.1 which states in part, "Where environmental contamination could cause degradation of quality, seals must be installed which must be hermetically tight and difficult to remove". Additionally, borated water lines numbers 18" 2HCB-1 and 18" 2HCB-2 were buried with "Jamesbury Clincher" valves installed in temporary caps. These valves were found open when the lines were unearthed.

No hold tags applied.

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PART CORRECTIVE ACTION, DATE & JUSTIFICATION:  
1. Insure internal cleanliness meets requirements of Class II piping.  
2. Install seals or caps conforming to Section 6 of ANSI N45.2.1 on identified piping.  
Determine if other "Q" piping has been buried without seals or caps conforming to Section 6 of ANSI N45.2.1.  
Corrective action commitment by May 30, 1978.

DESIGN AUTH SIG: NA	CONTRACT AUTH SIG: NA	FAB/CONST AUTH SIG: NA
TEST AUTH SIG: NA	PRO AUTH SIG: NA	QA AUTH SIG: <i>Donald H. Martin</i>
IS THIS REPORTABLE PER 50.95(a): YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	IS THIS REPORTABLE PER 211: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	IF "YES", DATE OF REPORT TO NRC: NA
IF "YES", WHO MADE REPORT: NA	IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED: NA	IF "YES", SEE PAGE <u>2</u>
IS PROCESS C/A REQUIRED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	IF "NO", WHAT IS JUSTIFICATION: NA	IS INSPECTOR PROCESS C/A REQUIRED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
INSPECTOR'S SIGNATURE: <i>DRKentony</i>	CONTRACTOR'S SIGNATURE: <i>Donald H. Martin</i>	DATE: 8/2/78



Consumers Power Company

# NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION  
QUALITY ASSURANCE DEPARTMENT

SUPPLEMENTAL SHEET

PAGE 2 OF 3

ROOT CAUSE OF NC:

lack of communication between field engineers, prior to backfilling, has been determined as the root cause.

MCR SER NO:	0 1-9-8-043
DATE OF MCR ORIG:	5-15-78
DATE OF MCR REV:	Closed 8-2-78
FILE NO:	16.3.4

DATE BY WHICH C/A COMMITMENT WILL BE MADE: Corrective action determination by June 5, 1978.

NATURE OF C/A:

1. Provide assurance there will be no recurrence.

PROCESS CORRECTIVE ACTION

DATE OF C/A COMPLETION: NA

DATE OF C/A EFFECTIVENESS: NA

ORG RESP FOR C/A:  
Bechtel Construction

SIG OF PERSON MAKING C/A COMMITMENT:  
GLRichardson

CAUSE OF INSPECTION NO: NA

DATE BY WHICH C/A COMMITMENT WILL BE MADE: NA

NATURE OF C/A: NA

DATE OF C/A COMPLETION: NA

DATE OF C/A EFFECTIVENESS: NA

ORG RESP FOR C/A:  
NA

SIG OF PERSON MAKING C/A COMMITMENT:  
NA

INSPECTOR'S SIGNATURE:  
*Ronald H. Martin* 5/15/78

SUPERVISOR'S SIGNATURE:  
*W. Kenting*

PRINCIPAL SUPERVISOR'S SIGNATURE:  
*Ronald H. Martin*

DATE:  
8/2/78

INSPECTION FAILING CORRECTIVE ACTION

NCR SER NO: 01-9-8-043  
DATE OF NCR ORIG: 5-15-73  
DATE OF NCR REV: Closed 8-2-78  
FILE NO: 16.3.4

## CORRECTIVE ACTION TAKEN:

All corrective actions have been completed.

## METHOD OF VERIFICATION:

1. Stainless steel blank plates were physically checked and verified as being welded to the 4 inch lines.
2. Bechtel Memo 0-1804 dated 5/26/78 states that cognizant field engineers have been instructed to closely monitor backfilling operations to preclude burying "Q" pipe without proper closures.
3. Bechtel Memo 0-1863 dated 7/19/78 documents the review to determine that no other "Q" pipe has been buried without proper closures.
4. Bechtel Letter GLR-373 states, "The 4" lines have been cleaned and capped".
5. Bechtel Letter GLR-373 states, "Construction will continue by 8/15/78" on the 18" lines 2HCB-1 and 2HCB-2. In normal construction procedures the internal cleanliness is verified at the fit-up inspection and documented on Quality Records. i.e., QCIR.



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# NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION -  
QUALITY ASSURANCE DEPARTMENT

PAGE 1 OF 4

6. PROJECT NAME: Midland 1 & 2		7. NONCONFORMING PART NO: NA		8. NONCONFORMING PART NAME: Anchor Plates Mark #10-1FCB-34-H1		1. NCR SERIAL NO: M-01-4-8-046	
9. SERIAL NUMBER: NA		10. ORG. COMMITTING NO: Bechtel Construction		11. AREA/LOC. OF NO: Auxiliary Building Elevation 568 Room 27 - West Wall		2. DATE: 5-19-78	
12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:  See attached page 3.						3. DATE OF REV: Closed 8-15-78	
						4. FILE NO: 16.3.4, 16.3.6	
13. RECOMMENDATION FOR PART CA:  See attached page 3.						5. DISTRIBUTION ACTION COPY:  GLRichardson	
						INFO COPY: WLBarclay      JMilandin WRBird          JFNewgen TCCooke        DATaggart JLCorley RHermeston SHHowell DRJohnson GSKeeley JMKlacking BWMarguglio PAMartinez	
14. DESIGN/PROJECT ENG. DISPOSITION REQUIRED <input checked="" type="checkbox"/> NOT REQUIRED <input type="checkbox"/>							
14. HOLD TAGS APPLIED: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: NA							
15. PROCESS CA REQUIRED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF NO, ENTER JUSTIFICATION BELOW:							
15. DOES NC AFFECT Q-LIST ITEM: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>				17. IS NC REPORTABLE PER 50.55(+): YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			
16. IS NC REPORTABLE PER PART 21: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>				19. IF YES, DATE & TIME OF REPORT TO NRC: NA			
20. IF YES, WHO MADE REPORT TO NRC: NA				21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA			
22. NCR ORIGINATED BY:  /s/ Spencer A. Faurot			23. WRITTEN REPLY REQUIRED BY: NA  TO ESTABLISH CA COMPLETION DATE		24. SUPERVISOR'S SIGNATURE/DATE:  /s/ Donald E. Horn, 5-19-78		
25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:  See attached pages 3 and 4.							
26. DESIGN/PROJECT SIG. AUTH. DISP.: Ref GLR-285, IOM to Richardson from Castleberry dated 7-31-78, GLR-385		27. PNO SIG. AUTH. DISP.: <i>Richardson</i> 8-15-78		28. PROCUREMENT SIG. CONC. DISP.: NA		29. SIG. OF ORG. RESP. FOR C/A: NA	
30. FAB/CONST. SIG. AUTH. D.P. DISP.: NA		31. SIG. OF TEST GROUP ACKNOW. CONDITION: NA		32. FOR MAJOR MOD - FLT. SUPT. SIG. AUTH. DISP.: NA		33. QA AUTH. SIG. TO IMPLEMENT DISP.: <i>Donald E. Horn</i>	
34. METHOD OF PART CA VERIFICATION: Reviewed letter GLR-266, 97FQA78, GLR-285, 135FQA78, IOM 0-1864 to GLRichardson from JFNewgen, BCBE-1984 and attached sketches, GLR-348, QCFM-5027/AI-257, IOM to GLRichardson from RLCastleberry dated July 31, 1978, and GLR-385.							
35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION: NA			36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE: <i>Donald E. Horn</i> 8-15-78			37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE) <i>Donald E. Horn</i> 8-15-78	





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# NONCONFORMANCE REPORT

## PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION -  
QUALITY ASSURANCE DEPARTMENT  
M-01-4-8-046  
NCR SERIAL NUMBER:

PAGE 2 OF 4

ASSESSMENT OF ROOT CAUSE(S):

See block 39.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

The previous methods of grouting anchor bolts produced the various voids in the grout.

40. PROCESS CA REQUIRED FROM:

DESIGN  FABRICATION  CONSTRUCTION  PROCUREMENT  INSPECTION

OWNER

41. QA RECOMMENDATION FOR PROCESS CA:

See block 42.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

Construction has modified the grouting technique by utilization of sealant around the perimeter of the plate against the wall and not between the plate and the wall.

43. METHOD OF PROCESS CA VERIFICATION:

Reviewed letter GLR-385 dated August 7, 1978.

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

See ref GLR-385

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Donald E. Horn 8-15-78

NCR SER NO: M-01-4-8-046  
DATE OF NCR ORIG: 5-19-78  
DATE OF NCR REV: Closed 8-15-78  
FILE NO: 16.3.4, 16.3.6

"AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

Specification 7220-C-306 "Furnishing and Installation of Grouted Anchor Bolts" Rev. 3, paragraph 6.8 states, "The grout shall be injected in the drilled hole in accordance with manufacturer's recommendation, until the hole is completely filled with grout. Care shall be taken to avoid air entrapment during grouting".

Contrary to the above, two 3/8" x 10" x 10" hangers, Mark #10-1FCB-34-H1, shown on ITT Grinnell sketch #i-610-4-1 were installed with grouted anchor bolts which were installed incorrectly. Four of the total eight grouted anchor bolt holes have voids. Two of the voids extend the entire depth of the drilled holes. This nonconforming condition was discovered due to a location change for the plates. Upon removal of the plates, a full visual inspection could be performed and the voids were discovered by CPCo during routine surveillance. See attached sketch.

QA RECOMMENDATION FOR PART CA:

- 1) The two anchor plates upon initial installation were mislocated and the original grouted anchor bolts will not be used. Removal of grouted anchors is not necessary unless they interfere with other work (Ref. Spec 7220-C-306, paragraph 7.0).
- 2) This nonconforming condition may be repetitious and, therefore, it will be necessary to inspect additional grouted anchor bolts to determine the extent of the nonconforming condition. Determine (a) a work schedule to remove additional plates for inspection, (b) a sample size and sampling program and (c) a detailed inspection program. An alternate program may be submitted for approval.

PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

The two 3/8" x 10" x 10" hangers, described in this NCR, have been reviewed by Project Engineering from a design standpoint and are determined by evaluation to be acceptable in the present condition for the original intended use had there been no plate location change. In addition to the two grouted anchor plates described in this NCR, three additional "abandoned" anchor plate assemblies were also removed and the grouting inspected and were found acceptable even though some minor voids were found in the grout around the anchor bolts.

The five anchor plate assemblies were evaluated by project engineering and found acceptable based on the following. The anchor bolts are designed for a grout pull-out failure. The critical area for the anchor bolts is the bond between the concrete and grout that transmits the load into the surrounding slab or wall. Any voids in the area between the grout and the concrete reduces the holding capacity of the grout proportionally.

In evaluating the conditions of the five anchor bolt assemblies, there was sufficient contact area in all cases between the grout and the concrete for the anchor bolt assemblies to transmit the load into the concrete. Therefore, the five anchor bolt assemblies were acceptable and no repair was necessary.

NCR SER NO: M-01-4-8-046  
DATE OF NCR ORIG: 5-19-78  
DATE OF NCR REV: Closed 8-15-78  
FILE NO: 16.3.4, 16.3.6

PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE: (Contd)

Also, the design of the grouted anchor bolts is conservative to compensate for anticipated difficulties during their installation. This conservatism is in the form of the following factors.

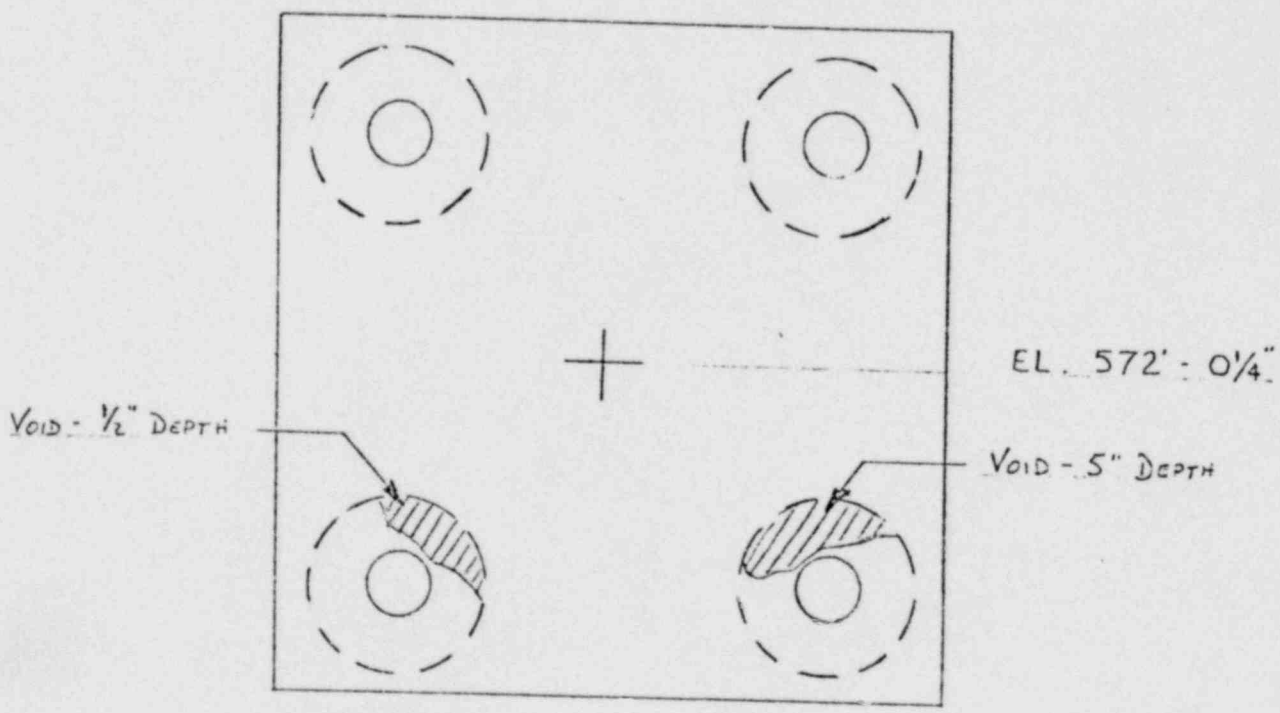
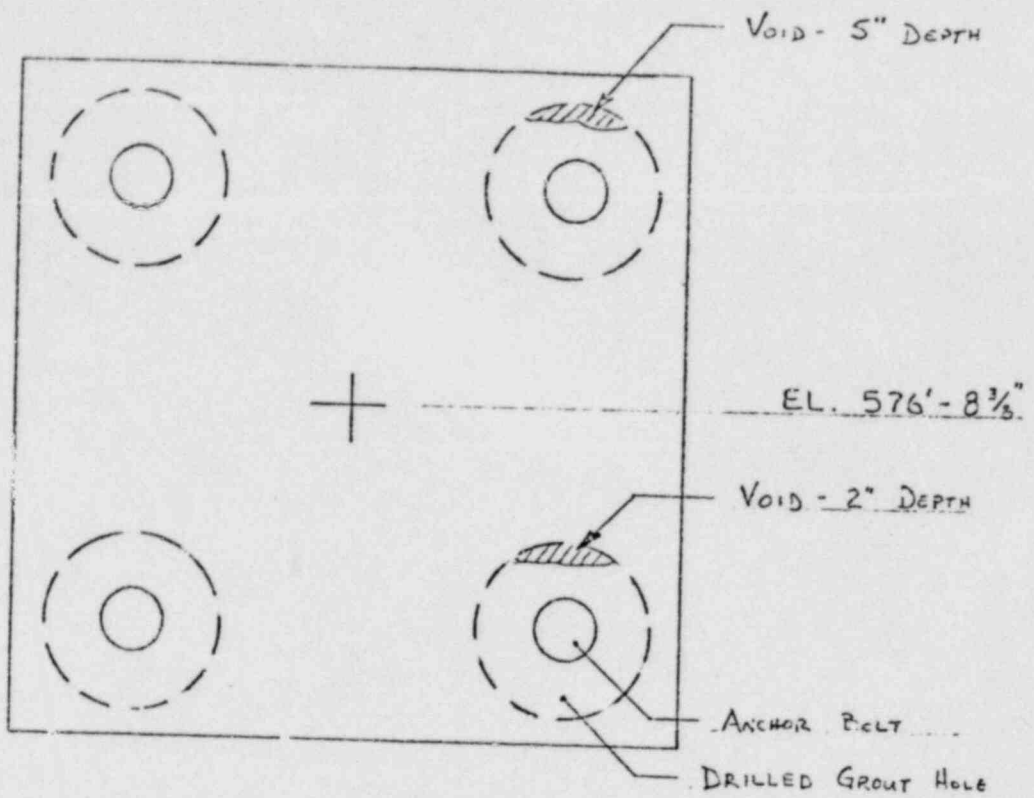
- a. The grouted anchor bolts are designed with a safety factor of 4 on the ultimate pull-out capacity on the grout concrete contact area.
- b. Many of the grouted anchor bolt assemblies have more than the designed number of anchor bolts in order to maintain stability and symmetry.
- c. The actual strength of the concrete and the grout is greater than the design strength of the concrete and the grout respectively, thereby, increasing the capacity of the anchor.

In order to provide assurance that the remainder of the installed anchor plate assemblies were satisfactory for the design conditions, Project Engineering requested that an additional 23 anchor plate assemblies be removed and the anchor bolt grouting be visually examined and photographed.

The additional 23 anchor plates assemblies were randomly chosen to represent the 350 installed anchor plate assemblies. The total 28 anchor plate assemblies would provide a 95% confidence level that 90% of the anchor plate assemblies were satisfactory, provided that no deficient assemblies were discovered. The probability of this occurring was based on a binomial distribution chart for a one-sided (lower) confidence limit.

Field Engineering mapped the conditions found upon removal of subject wall plates. The following was documented: Location of vent and fill holes, size and location of voids thickness, and surface area of silicone. This information was transmitted to Project Engineering for resolution.

Project Engineering has determined there is sufficient contact area in all the identified cases between the grout and the concrete for the anchor bolt assemblies to transmit the load into the concrete. Thus, the capacity of the anchor bolts in the as built condition has been determined to be adequate and no repair is necessary. Project Engineering concludes that out of the total 28 anchor plate assemblies identified and evaluated by Project Engineering, there were no deficient anchor bolts discovered. Therefore, it is Project Engineering's position that the anchor bolts are being installed sufficiently to meet the intent of the design and that additional investigation in this area is not warranted. Project Engineering considers the intent of the specification was met.



« TWO ANCHOR PLATES - MARK # 10-IFCB-34-H1  
SEE ITT GRINNELL SKETCH # 1-610-4-1 REV(2)

\* Not to Scale



# NONCONFORMANCE REPORT

PROJECT NO: dland Units 1 & 2	NC PART NO: 2Z-110; 2Z-111; 2Z-120; 2Z-122; 2Z-124; 2Z-157; 2Z-160	NC PART NAME: Electrical Penetrations	NCR SER NO: 014-8-054
SERIAL NO: See Part No.	ORG COMMITTING NC: Bechtel Construction	AREA/LOC OF NC: Containment #2	DATE OF NCR ORIG: 6-23-78
"AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFERENCES:			DATE OF NCR REV: Closed 8-08-78
Twelve electrical penetrations have been installed to date and seven have at least part of the junction box removed. This condition fails to provide protection against physical damage and airborne contamination required by paragraph 2.7.2 ANSI N45.2.2-1972.			FILE NO: 16.3.4

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  - JMKlacking
  - BWMarguglio
  - PAMartinez
  - JMilandin
  - DBMiller
  - JFNewgen

PART CORRECTIVE ACTION, DATE & JUSTIFICATION: RECOMMENDED CORRECTION ACTION

- Clean contamination from interior of junction boxes.
- Install gages and gas line per paragraph 3.6.4.4.2 of Instruction Manual 123-2056 so that covers fit.
- Inspect cover gaskets for damage and replace covers on boxes.
- Install junction boxes not presently on 2Z-110; 2Z-120.
- Request corrective action be accomplished by July 7, 1978.

ORG RESP FOR PART C/A: Bechtel QA	DESIGN AUTH SIG: NA	PROC AUTH SIG: NA	FAB/CONST AUTH SIG: NA
TEST AUTH SIG: NA	PWD AUTH SIG: NA	OPS AUTH SIG: NA	QA AUTH SIG: NA

DOES NC AFFECT Q-LISTED ITEM: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	IS NC REPORTABLE PER 50.55(e): YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
IS NC REPORTABLE PER 21: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	IF "YES", DATE OF REPORT TO NRC: NA
IF "YES", TIME OF REPORT TO NRC: NA	IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED: NA
IF "YES", WHO MADE REPORT: NA	
IS PROCESS C/A REQUIRED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	IF "YES", SEE PAGE 2

IF "NO", WHAT IS JUSTIFICATION:  
NA

IS PROCESS C/A REQUIRED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	IF "YES", SEE PAGE 2
---	----------------------

ISSUER'S SIGNATURE: <i>[Signature]</i>	SUPERVISOR'S SIGNATURE: <i>[Signature]</i>
PART C/A VERIFICATION SIGNATURE: <i>[Signature]</i>	VERIFICATION DATE: 21 July 1978



Consumers  
Power  
Company

# NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION  
QUALITY ASSURANCE DEPARTMENT

SUPPLEMENTAL SHEET

PAGE 2 OF 3

CAUSE OF NC: No tubing on site with which to make extensions for large lines during the initial installation. Gauges could not fit directly beneath the boxes due to raceway interferences.

NCR SER NO: 01-4-8-054

DATE OF NCR ORIG: 6-23-78

DATE OF NCR REV: Closed 8-08-78

FILE NO: 16.3.4

DATE BY WHICH C/A COMMITMENT WILL BE MADE: RECOMMENDATION: Submit to Consumers Power Company Quality Assurance by July 7, 1978 details of corrective action.

NATURE OF C/A:

NA

PROCESS CORRECTIVE ACTION

DATE OF C/A COMPLETION: NA

DATE OF C/A EFFECTIVENESS: NA

ORG RESP FOR C/A:

Bechtel Construction

SIG OF PERSON MAKING C/A COMMITMENT:

GLRichardson

CAUSE OF INSPECTION NC:

NA

INSPECTION FINDS CORRECTIVE ACTION

DATE BY WHICH C/A COMMITMENT WILL BE MADE: NA

NATURE OF C/A: NA

DATE OF C/A COMPLETION: NA

DATE OF C/A EFFECTIVENESS: NA

ORG RESP FOR C/A:

NA

SIG OF PERSON MAKING C/A COMMITMENT:

NA

CLIENT'S SIGNATURE:

*Edwin H. Jones*

SUPERVISOR'S SIGNATURE:

*Paul K. Jones*

PROCESS C/A VISITOR'S SIGNATURE:

*Edwin H. Jones*

VERIFICATION DATE:

8 August 1978

NCR SER NO: 01-4-8-054  
DATE OF NCR ORIG: 6-23-78  
DATE OF NCR REV: Closed 8-08-78  
FILE NO: 16.3.4

## CORRECTIVE ACTION TAKEN:

All corrective actions have been completed.

## METHOD OF VERIFICATION:

1. Removed cover from one penetration to verify that contamination had been removed.
2. Metal junction boxes are not required on units 2Z110 and 2Z120. Heavy duty plywood boxes have been installed and will provide adequate protection against physical damage and airborne contamination.
3. Gages and gas lines have been installed per Instruction Manual 123-2056 and side panels installed on the junction boxes.
4. All corrective actions have been physically checked and verified.



# NONCONFORMANCE REPORT

6. PROJECT NAME: <b>Midland</b>	7. NONCONFORMING PART NO: <b>NA</b>	8. NONCONFORMING PART NAME: <b>Hot Leg Pipe Rupture Support Plate</b>	1. NCR SERIAL NO: <b>N-01-4-8-062</b>
9. SERIAL NUMBER: <b>NA</b>	10. ORG. COMMITTING NO: <b>Bechtel Proj. Engr.</b>	11. AREA/LOC. OF NO: <b>Combination Shop</b>	2. DATE: <b>7-14-78</b>
12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:			3. DATE OF REV: <b>Closed 8-17-78</b>
1. The two plates purchased on P.O. 7220-F-28629 Q were purchased in accordance with Bechtel Spec 7220-G-33. The correct Bechtel specs for purchase of this material is 7220-C-233(Q) and 7220-G-23 as required by drawings C-438 and C-435, Note 1.			4. FILE NO: <b>16.3.1, 16.3.6</b>

5. DISTRIBUTION ACTION COPY:
- GLRichardson**
- INFO COPY:
- |                    |                  |
|--------------------|------------------|
| <b>WLBarclay</b>   | <b>JMilandin</b> |
| <b>WRBird</b>      | <b>DBMiller</b>  |
| <b>TCCooke</b>     | <b>JFNewgen</b>  |
| <b>JLCorley</b>    | <b>DATaggart</b> |
| <b>RHermeston</b>  |                  |
| <b>SHHowell</b>    |                  |
| <b>DRJohnson</b>   |                  |
| <b>GSKeeley</b>    |                  |
| <b>JMKlacking</b>  |                  |
| <b>BWMarguglio</b> |                  |
| <b>PAMartinez</b>  |                  |

2. Field P.O./Subcontract review checklist in PSP G-7.1 for P.O. 7220-F-28629(Q) indicates P.O. released to an approved vendor, when, in fact, the Quality Assurance Program of the vendor supplying the above plates has not been approved by Bechtel.

13. QA RECOMMENDATION FOR PART CA:  
**Use as is.**

DESIGN/PROJECT ENG. DISPOSITION REQUIRED  NOT REQUIRED

14. HOLD TAGS APPLIED: YES  NO  NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: **Two - on plates - fabrication may proceed to installation.**

15. IS PROCESS CA REQUIRED: YES  NO  IF NO, ENTER JUSTIFICATION BELOW:

16. DOES IT AFFECT Q-LIST ITEM: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	17. IS HE REPORTABLE PER 50.55(e): YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
18. IS HE REPORTABLE PER PART 21: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	19. IF YES, DATE & TIME OF REPORT TO NRC: <b>NA</b>
20. IF YES, WHO MADE REPORT TO NRC: <b>NA</b>	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: <b>NA</b>

22. NCR ORIGINATED BY: **/s/ L. R. Howell**

23. WRITTEN REPLY REQUIRED BY: **7-27-78** TO ESTABLISH CA COMPLETION DATE

24. SUPERVISOR'S SIGNATURE/DATE: **JR Keating 8-17-78**

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

- Bechtel provided statement in letter GLR-382 indicating G-33Q satisfies requirements of ANSI N45.2.13.
- Bechtel issued REM (C-1574) dated 7-14-78 which stated, in part, G-33Q satisfies the requirements of C-233Q.

26. DESIGN/PROJECT SIG. AUTH. DISP.: <b>NA</b>	27. PMO SIG. AUTH. DISP.: <b>NA</b>	28. PROCUREMENT SIG. CONC. DISP.: <b>NA</b>	29. SIG. OF ORG. RESP. FOR C/A: <b>Bechtel Proj. Engr.</b>
30. FAB/CONST. SIG. AUTH. IMP. DISP.: <b>NA</b>	31. SIG. OF TEST GROUP ACKNOW. CONDITION: <b>NA</b>	32. FOR MAJOR MCD - PLO. SUPP. SIG. AUTH. DISP.: <b>NA</b>	33. QA AUTH. SIG. TO IMPLEMENT DISP.: <b>NA</b>

34. METHOD OF PART CA VERIFICATION: **see page 3.**

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION: <b>GLR-382</b>	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE: <b>[Signature] 8-17-78</b>	37. NCR CLOSED BY/DATE: (BASE & PROCESS CA COMPLETE) <b>[Signature] 8-17-78</b>
---	---	---





Consumers  
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# NONCONFORMANCE REPORT

## PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION -

QUALITY ASSURANCE DEPARTMENT

M-01-4-8-062

ECR SERIAL NUMBER:

PAGE 2 OF 3

38. QA ASSESSMENT OF ROOT CAUSE(S):

NA

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

NA

40. PROCESS CA REQUIRED FROM:

DESIGN

FABRICATION

CONSTRUCTION

PROCUREMENT

INSPECTION

NA  
OTHER

41. QA RECOMMENDATION FOR PROCESS CA:

Revise bulk purchase program to conform to ANSI N45.2.13.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

Based on information submitted by Bechtel, no process corrective action is considered necessary.

43. METHOD OF PROCESS CA VERIFICATION:

NA

SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

*J.H. Kowal* 8-17-78

NCR SERIAL NO: M-01-4-8-062

DATE: 7-14-78

DATE OF REV: Closed 8-17-78

FILE NO: 16.3.1, 16.3.6

## METHOD OF PART CA VERIFICATION:

1. Thirteen record packages (purchases made to G-33Q) reviewed for conformance/nonconformance. No areas of nonconformance were found.

- a. Packages reviewed:

AEO 3242	2468	1949
3307	2238	3238
3164	2069	3243
3126	2073	
1407	1996	

2. QA Engineering reviewed program. QA Engineering indicated that no apparent conflict exists.
3. CPCo reviewed REM issued in Part Corrective Action above. CPCo considers REM to provide an adequate explanation of program.

Based on the above information, the NCR was closed on 8-17-78.

Two (2) hold tags removed on 8-17-78.



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# NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION -  
QUALITY ASSURANCE DEPARTMENT

PAGE 1 OF 3

PROJECT NAME: Midland		7. NONCONFORMING PART NO: Decay Heat Pump No. 69080 SA 351CF8	8. NONCONFORMING PART NAME: Decay Heat Pump	1. NCR NUMBER: 9-8-066
9. SERIAL NUMBER: Pump No. 69080 SA 351CF8		10. ORG. CONTRACTING NO: Babcock & Wilcox	11. AREA/LOC. OF NO: Elevation 568 Room 25	2. DATE: 7-26-78
12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS: Decay Heat Pump No. 69080 SA 351CF8 rotating assembly is reversed in the pump casing. The present configuration will not permit connecting the pump assembly in the system.  The pump has been removed from the Auxiliary Building and is being prepared for shipment to B&W Canada.				3. DATE OF REV: Closed 8-16-78
13. QA RECOMMENDATION FOR PART CA: 1) Disassemble the pump and inspect for damage due to improper assembly. Re-assemble the pump in the correct configuration. (Contd on Page 3)				4. FILE NO: 16.4.1
DESIGN/PROJECT ENG. DISPOSITION REQUIRED <input type="checkbox"/> NOT REQUIRED <input checked="" type="checkbox"/>				5. DISTRIBUTION ACTION COPY: WJLee  INFO COPY: CAArmontrout RCBauman WRBird TCCooke JLCorley SHHowell GSKeeley CEMahaney BWMarguglio DBMiller DATaggart
14. HOLD TAGS APPLIED: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: NA		
15. PROCESS CA REQUIRED: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF NO, ENTER JUSTIFICATION BELOW: B&W Canada going out of the pump business, no future pump purchases will be made. It was verified that proper inspection was performed on the reassembly.				
16. DOES NC AFFECT Q-LIST ITEM: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		17. IS NC REPORTABLE PER 50.55(+): YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		
18. IS NC REPORTABLE PER PART 21: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		19. IF YES, DATE & TIME OF REPORT TO NRC: NA		
20. IF YES, WHO MADE REPORT TO NRC: NA		21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA		
22. NCR ORIGINATED BY: <i>Harold L. Allen</i>		23. WRITTEN REPLY REQUIRED BY: NA TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: DRKeating <i>DRKeating</i>	
25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE: All recommended corrective action has been accomplished as of 8/16/78.				
26. DESIGN/PROJECT SIG. AUTH. DISP.: NA	27. PMO SIG. AUTH. DISP.: NA	28. PROCUREMENT SIG. CONC. DISP.: NA	29. SIG. OF ORG. RESP. FOR C/A: NA	
30. FAB/CONST. SIG. AUTH. EMP. DISP.: NA	31. SIG. OF TEST GROUP ACTION. CONDITION: NA	32. FOR MAJOR MOD - MGT. SUPT. SIG. AUTH. DISP.: NA	33. QA AUTH. SIG. TO IMPLEMENT DISP.: HLA / <i>DRKeating</i>	
34. METHOD OF PART CA VERIFICATION: See page 3.				
35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION: NA		36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE: <i>Harold L. Allen</i>		37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE) <i>Harold L. Allen 8-16-78</i>



Consumers  
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# NONCONFORMANCE REPORT

## PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION -

QUALITY ASSURANCE DEPARTMENT

M-01-9-8-066  
MCR SERIAL NUMBER:

PAGE 2 OF 3

38. QA ASSESSMENT OF ROOT CAUSE(S):

Inadequate shop inspection.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

See 38 above.

40. PROCESS CA REQUIRED FROM:

DESIGN

FABRICATION

CONSTRUCTION

PROCUREMENT

INSPECTION

OTHER Assembly

41. QA RECOMMENDATION FOR PROCESS CA:

Properly implement inspection requirements.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

Inspection requirements were properly implemented.

43. METHOD OF PROCESS CA VERIFICATION:

CPCo QA witnessed inspection of the reassembly.

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

B&W Canada letter dated August 1, 1978  
(Gever to Lee).

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

HL ALLEN 8-16-78 DRK

NCR SERIAL NO: M-01-9-8-066  
DATE: 7-26-78  
DATE OF REV: Closed 8-16-78  
FILE NO: 16.4.1

QA RECOMMENDATION FOR PART CA: (Contd)

- 2) Verify that the impeller blading is installed on the shaft in accordance with design requirements.
- 3) Provide QC inspection for activity described in 1) above.
- 4) Assure other Decay Heat Removal Pumps on order were properly assembled.
- 5) Provide copies of assembly and inspection procedures and inspection reports to CPCo QA for our review.

METHOD OF PART CA VERIFICATION:

CPCo completed verification of corrective action as follows:

- 1) Verified by onsite inspection at the manufacturer's facility that Decay Heat Pump Ser. #69080 has been assembled in accordance with approved drawings and Quality Control Procedures.
- 2) Inspected the pump parts and subassemblies prior to reassembly for cleanliness, serviceability of parts and identification of parts.
- 3) Verified by visual inspection the impeller blading was installed in accordance with the drawing.
- 4) Verified QC Inspection was carried out in accordance with approved procedures.
- 5) Inspected Decay Heat Pumps Ser. #69082 and 69083 and verified impeller blading was installed properly. Decay Heat Pump Ser. #69081 has been placed on punch list for inspection prior to final connection of the inlet and discharge flange.
- 6) Copies of Shop Route Sheet, Inspection Procedure and Site Problem Report, resolution transmittal have been reviewed and are acceptable.



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# NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION -  
QUALITY ASSURANCE DEPARTMENT

6. PROJECT NAME: Midland 1 & 2		7. NONCONFORMING PART NO: 2B-91 and 2B-92 A, B, C, D		8. NONCONFORMING PART NAME: CRD Primary Breakers		1. NRC SERIAL NO: M-01-4-8-063	
9. SERIAL NUMBER: NA		10. ORG. COMMITTING NO: Bechtel OC		11. AREA/LOC. OF NO: Area 3 Elevation 674 Auxiliary Bldg.		2. DATE: 8-23-78	
12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS: Field Procedure FPG-5.000 describes the way in which equipment is treated after it has been released for construction. The form used to establish the maintenance requirements and document the acceptance of these requirements is the F-10/20 form. CRD primary breakers 2B-91A, 2B-91C, 2B-92B and 2B-92D were removed from warehouse storage on or about July 5, 1978. The F-10/20 form for this equipment requires that humidity readings be taken at three day intervals and that temperature readings at seven day intervals. Since July 5 the following violations to the above procedures have occurred: 1. The equipment was stored in place for 21 days (July 5-26) before an F-10/20 form was issued (No humidity/temperature (Contd-Pg.3))						3. DATE OF REV: NA	
						4. FILE NO: 16.3.6	
13. QA RECOMMENDATION FOR PART CA: Repair - all breaker cabinets to be opened and equipment given a detailed inspection for possible damage. All dessicant bags should be replaced.						5. DISTRIBUTION ACTION COPY: TO: LADreisbach WLBarclay JFNewgen INFO COPY: WRBird TCCooke JLCorley RHermeston SHHowell DRJohnson GSKeeley JMKlacking BWMarguglio PAMartinez JMilandin	
DESIGN/PROJECT ENG. DISPOSITION REQUIRED <input type="checkbox"/> NOT REQUIRED <input checked="" type="checkbox"/>							
14. HOLD TAGS APPLIED: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: NA							
15. IS PROCESS CA REQUIRED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF NO, ENTER JUSTIFICATION BELOW:							
16. DOES NC AFFECT Q-LIST ITEM: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>				17. IS NC REPORTABLE PER 50.55(e): YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			
18. IS NC REPORTABLE PER PART 21: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>				19. IF YES, DATE & TIME OF REPORT TO NRC: NA			
20. IF YES, WHO MADE REPORT TO NRC: NA				21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA			
22. "OR ORIGINATED BY": <i>John L. Jones</i>		23. WRITTEN REPLY REQUIRED BY: 9-15-78 TO ESTABLISH CA COMPLETION DATE		24. SUPERVISOR'S SIGNATURE/DATE: <i>Paul Kuper</i> 8-24-78			
25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:							
26. DESIGN/PROJECT SIG. AUTH. DISP.: NA		27. PNO SIG. AUTH. DISP.: NA		28. PROCUREMENT SIG. CONC. DISP.: NA		29. SIG. OF ENG. RESP. FOR C/A:	
30. FAB/CONST. SIG. AUTH. DOP. DISP.: NA		31. SIG. OF TEST GROUP ACKNOW. CONDITION: NA		32. FOR MAJOR MOD - PLOT. SUPT. SIG. AUTH. DISP.: NA		33. QA AUTH. SIG. TO EXPLOIMENT DISP.:	
34. METHOD OF PART CA VERIFICATION:							
35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:		36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:			37. NRC CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)		



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# NONCONFORMANCE REPORT

## PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION -  
QUALITY ASSURANCE DEPARTMENT

M-01-4-8-068  
JOB SERIAL NUMBER:

PAGE 2 OF 3

38. QA ASSESSMENT OF ROOT CAUSE(S):

- (1) Equipment was not released for construction as required by paragraph 7.0 of FPG-5.000 Rev. 2. Therefore, initial E-20 was not prepared until 8/10/78.
- (2) No evidence was found that paragraph 2.1 of F-10-160 is being complied with by Quality Control.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA DERIVED FROM:

DESIGN       FABRICATION       CONSTRUCTION       PROCUREMENT       INSPECTION

OTHER \_\_\_\_\_

41. QA RECOMMENDATION FOR PROCESS CA:

Take appropriate action to insure that the requirements of FPG-5.000/F-10 forms are carried out for Q-listed equipment.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

NCR SERIAL NO: M-01-4-8-068

DATE: 8-23-78

DATE OF REV: NA

FILE NO: 16.3.6

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:  
(Contd)

1. readings taken).
2. Fifteen days passed (July 26 - August 10) after issue of the F-10/20 form and before the first temperature/humidity reading was taken.
3. After the first temperature/humidity reading was taken (on August 10) no evidence could be found that any subsequent inspections were made.





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# NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION -  
QUALITY ASSURANCE DEPARTMENT

6. PROJECT NAME: <b>Midland</b>		7. NONCONFORMING PART NO: 1HCB-14-612-6-2 FW 25 2HCB-14-613-6-1 FW 30		8. NONCONFORMING PART NAME: <b>NA</b>		1. NCR SERIAL NO: <b>N-01-4-8-069</b>	
9. SERIAL NUMBER: <b>NA</b>		10. ORG. COMMITTING NO: Bechtel QC Bechtel Construction		11. AREA/LOC. OF NC: Auxiliary Building 599' Elevation		2. DATE: <b>8-24-78</b>	
12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS: 1. Specification 7220-M-204 (Tech. Spec. for Field Fabrication & Installation of Piping for Nuclear Service), paragraph 5.2.6 states in part, "Minimum wall thickness for fabricated assemblies as finally assembled shall be at least 87½% of the nominal wall thickness for pipe specified by nominal wall".  a. In violation of the above paragraph, spool piece 1HCB-14-612-6-2 at FW 25 and spool piece 2HCB-14-613-6-1 at FW 30 exhibit wall thickness areas that are lower than the minimum allowed.						3. DATE OF REV: <b>NA</b>	
						4. FILE NO: <b>16.3.4, 16.3.6</b>	
13. QA RECOMMENDATION FOR PART CA: Rework - 1. Rework to conform to requirements or 2. Provide technical justification for use-as-is. 3. Investigate similar welds for minimum wall violations.						5. DISTRIBUTION ACTION COPY: <b>LADreisbach</b>	
(Contd on Page 3)						INFO COPY: WLBarclay      JMilandin WRBird          DBMiller TCCooke        JFNewgen JLCorley        DATaggart RHermeston SHHowell DRJohnson GSKeeley JMKlacking BWMarguglio PAMartinez	
DESIGN/PROJECT ENG. DISPOSITION: REQUIRED <input checked="" type="checkbox"/> NOT REQUIRED <input type="checkbox"/>							

14. HOLD TAGS APPLIED: YES  NO  NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: **NA**

15. IS PROCESS CA REQUIRED: YES  NO  IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		17. IS NC REPORTABLE PER 90.55(e): YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	
18. IS NC REPORTABLE PER PART 21: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		19. IF YES, DATE & TIME OF REPORT TO NRC: <b>NA</b>	
20. IF YES, WHO MADE REPORT TO NRC: <b>NA</b>		21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: <b>NA</b>	
22. NCR ORIGINATED BY: <i>J. J. ...</i>		23. WRITTEN REPLY ACQUIRED BY: <b>9-24-78</b>	
24. NCR CLOSING DATE: <b>8-24-78</b>		24. SUPERVISOR'S SIGNATURE/DATE: <i>RG Wolney</i>	

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.:		27. PMO SIG. AUTH. DISP.:		28. PROCUREMENT SIG. CONC. DISP.:		29. SIG. OF CRG. RESP. FOR C/A:	
<b>NA</b>		<b>NA</b>		<b>NA</b>			
30. FAB/CONST. SIG. AUTH. IMP. DISP.:		31. SIG. OF TEST GROUP ACKNOW. CONDITION:		32. FOR MAJOR MOD - FLT. SUPT. SIG. AUTH. DISP.:		33. QA AUTH. SIG. TO IMPLEMENT DISP.:	
<b>NA</b>		<b>NA</b>		<b>NA</b>			
34. METHOD OF PART CA VERIFICATION:							
35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:		36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:			37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)		



# NONCONFORMANCE REPORT

## PROCESS CORRECTIVE ACTION

38. QA ASSESSMENT OF ROOT CAUSE(S):

procedural requirements dictating wall thickness measurement checks.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN

FABRICATION

CONSTRUCTION

PROCUREMENT

INSPECTION

OTHER \_\_\_\_\_

41. QA RECOMMENDATION FOR PROCESS CA:

Devise and implement program for wall thickness measurement checks.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

NCR SERIAL NO: M-01-4-8-069

DATE: 8-24-78

DATE OF REV: NA

FILE NO: 16.3.4, 16.3.6

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS: (Contd

- b. Subject spool pieces are schedule 10S stainless steel with a nominal wall thickness of .148 inches. Minimum wall thickness allowed by the above criteria is .1295 inches. Spool piece 2HCB-14 exhibited the lowest thickness area which was .112 inches. Several areas on both spools were determined to be between the lowest (.112") thickness and the minimum allowed (.1295").



Consumers  
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# NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION -  
QUALITY ASSURANCE DEPARTMENT

PROJECT NAME: Midland 1 & 2		7. NONCONFORMING PART NO.: 1C-045, 2C-045, 1C-041 1C-042, 2C-041, 2C-042	8. NONCONFORMING PART NAME: Safeguards activation Nuclear Inst. & Reactor Protection Systems	1. NRC SERIAL NO.: M-01-4-8-070
9. SERIAL NUMBER: NA		10. ORG. CONTRACTING NO.: Bechtel OC	11. AREA/LOC. OF DEF.: Area 3 Elevation 659 Auxiliary Building	2. DATE: 8-28-78
12. AS IS NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS: Paragraph 2.1 of F-10-164 Rev. No. 1 requires that humidity be verified and documented at intervals not to exceed three days. F-20-1664 dated July 28, 1978 does document the three day readings and F-20-1684 dated August 10, 1978 does not document the three day readings. The F-20 documents the requirements of the F-10 form. Paragraph 2.1 of F-10-168 Rev. No. 1 requires that humidity be verified and documented at intervals not to exceed three days. F-20-1663 dated July 28, 1978 does document the three day readings and F-20-1685 dated August 10, 1978 does not document the three day readings. The F-20 documents the requirements of the F-10 form.			3. DATE OF REV.: NA	4. FILE NO.: 16.3.4
13. CA RECOMMENDATION FOR PART CA: Repair - All cabinets to be given a detailed inspection for possible damage.			5. DISTRIBUTION AGENCY COPY: To: LADreisbach WLBarclay JFNewgen INFO COPY: WRBird DBMiller TCCooke DATaggart JLCorley RHermeston SHHowell DRJohnson GSKeeley JMKlacking BWMarguglio PAMartinez JMilandin	
14. FIELD TAGS APPLIED: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NUMBER, LOCATION & TYPE OF FIELD TAGS APPLIED: NA				
15. PROCESS CA REQUIRED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF NO, ENTER JUSTIFICATION BELOW:				
16. DOES THIS AFFECT Q-LIST ITEM: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		17. IS THIS REPORTABLE PER 50.55(e): YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		
18. IS THIS REPORTABLE PER PART 21: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		19. IF YES, DATE & TIME OF REPORT TO NRC: NA		
20. IF YES, WHO MADE REPORT TO NRC: NA		21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA		
23. NOTIFIED BY: <i>John L. Jones</i>		23. WRITTEN REPLY REQUIRED BY: 9-15-78		24. SUPERVISOR'S SIGNATURE/DATE: <i>Paul Super 8-29-78</i>
25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:				
26. DESIGNER/PROJECT SIG. AUTH. DISP.: NA		27. EMO SIG. AUTH. DISP.: NA	28. PROCUREMENT SIG. CONC. DISP.: NA	29. SIG. OF WGT. RESP. FOR C/P: NA
30. FAB/DINER. SIG. AUTH. EMP. DISP.: NA		31. SIG. OF TEST GROUP ACTION CONDITION: NA	32. FOR MAJOR MOD - P.L.T. SUPP. SIG. AUTH. DISP.: NA	33. QA AUTH. SIG. TO IMPLEMENT DISP.: NA
34. METHOD OF PART CA VERIFICATION:				
35. SIG. OF EMP. RESP. FOR PART C/A SIGNIFYING COMPLETION:		36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:		37. NRC CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)



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# NONCONFORMANCE REPORT

## PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION -  
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M-01-4-3-070  
NCR SERIAL NUMBER:

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ASSESSMENT OF ROOT CAUSE(S):

F-10-164 and the F-10-168 does not have provisions for recording three day interval readings and because these forms are used as the F-20 record that is turned in at the end of each seven day period by the Field QCE, failure to document the three day interval readings are not checked by the Lead QCE except at seven day intervals.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN  FABRICATION  CONSTRUCTION  PROCUREMENT  INSPECTION

OTHER

41. QA RECOMMENDATION FOR PROCESS CA:

Revise the F-10-164 and F-10-168 forms to include provisions for recording data required at intervals indicated in the requirements. Or, require that F-20 forms be completed and turned in at intervals indicated in the requirements of the F-10 forms.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 / DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF OAG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:



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# NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION -  
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PROJECT NAME: <b>MIDLAND</b>		7. NONCONFORMING PART NO: <b>N/A</b>	8. NONCONFORMING PART NAME: <b>FW38 LINE 2HCB8</b>	1. NCR SERIAL NO: <b>M-01-4-8-071</b>
9. SERIAL NUMBER: <b>N/A</b>		10. DES. COMMITTEE NO: <b>Bechtel QC Bechtel Const.</b>	11. AREA/LOC. OF NO: <b>Levels 575 Aux. Bldg.</b>	2. DATE: <b>August 31, 1978</b>
12. "AS IS" NONCONFORMING CONDITION VERSUS "AS SPECIFIED" CONDITION WITH REFS:  Field weld 38 line 2HCB8 root pass was welded with an indicated purge gas flow of 45 CFH. Weld procedure P8-AT-AG Rev 1 dated June 9, 1976, requires a backing gas flow rate of 10-15 CFH. General welding standard GWS-SN Rev 3 paragraph 4.3 states "Purging . . . when required shall be in accordance with the WPS and General Purging Specification GPS-1." GPS-1 paragraph 2.10 states "If internal gas purging parameters are not stated in the Applicable Welding Procedure Specification and purging is required, refer to Table I for parameters." Form SFP 21994-2 (cont. Page 3)				3. DATE OF REV: <b>N/A</b>
				4. FILE NO: <b>16.3.6, 16.3.4</b>
13. CA RECOMMENDATION FOR PART CA:  <b>USE AS IS</b>				5. DISTRIBUTION ACTION COPY: <b>WLB Barclay LADreisbach JFNewgen</b>  INFO COPY: <b>WRBird WMorning TCCooke DATaggart RHermeston SHHowell DRJohnson GSKeeley BWMarguglio PAMartinez JMilandin DBMiller</b>
DESIGN/PROJECT ENG. DISPOSITION REQUIRED <input type="checkbox"/> NOT REQUIRED <input checked="" type="checkbox"/>				
14. HOLD TAGS APPLIED: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> FORMER, LOCATION & TYPE OF HOLD TAGS APPLIED: _____				
15. IS PROCESS CA REQUIRED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF NO, ENTER JUSTIFICATION BELOW: _____				
16. DOES NC AFFECT A-LIST ITEM: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		17. IS NC REPORTABLE PER 90.55(e): YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		
18. IS NC REPORTABLE PER PART 21: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		19. IF YES, DATE & TIME OF REPORT TO NRC: <b>N/A</b>		
20. IF YES, WHO MADE REPORT TO NRC: <b>N/A</b>		21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: <b>N/A</b>		
22. NCR ORIGINATED BY: <i>A.O. Rafferty</i>		23. WRITTEN REPLY REQUIRED BY: <b>September 8, 1978</b> TO ESTABLISH CA COMPLETION DATE		24. SUPERVISOR'S SIGNATURE/DATE: <i>[Signature]</i>
25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:  <div style="text-align: right; font-size: 2em;">0</div>				
26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. P/O SIG. AUTH. DISP.:	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:	
30. FAB/CONST. SIG. AUTH. DEP. DISP.:	31. SIG. OF TEST GROUP ACCORD. CONDITION:	32. FOR MAJOR MOD - FLT. SUPPL. SIG. AUTH. DISP.:	33. CA AUTH. SIG. TO IMPLEMENT DISP.:	
34. METHOD OF PART CA VERIFICATION:				
35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:		36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL DATE:	37. NCR CLOSED BY DATE: (PART & PROCESS CA COMPLETE)	



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# NONCONFORMANCE REPORT

## PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION -  
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WPS SERIAL NUMBER: M-01-4-8-0

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CA ASSIGNMENT OF ROOT CAUSE(S):

Failure to follow the established procedure in both process and inspection activities.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA DERIVED FROM:

DESIGN

FABRICATION

CONSTRUCTION

PROCUREMENT

INSPECTION

OTHER

41. QA RECOMMENDATION FOR PROCESS CA:

1. The maximum purge gas flow as stated in WPS P8-AT-AG is not adequate for all sizes, lengths and configurations of pipe and should be changed to allow deviations to suit field conditions.

QC and Field Engineering should monitor process parameters more closely, make a determination why the parameters were not properly monitored initially, and establish corrective action to preclude recurrence.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 11, & DATE OF COMPLETION:

43. NEEDED OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Rev 6/78 for FW 38 2HCB8 was initialed in the QC block indicating that the purge gas flow rate was correct (dated August 31, 1978). Form PQCI No. 7220/W-1.00A Rev 4 for FW 38 2HCB8 was signed in the field engineering process control checklist area and the block for "purge checked" was checked indicating that the purge gas flow was correct (dated August 31, 1978).

The foregoing conditions and references establish that FW 38 2HCB8 was not accomplished according to procedure and that QC and field engineering process control were not adequately monitoring the required parameters.



