

**Nuclear**

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January 15, 1986

TMI-2 Cleanup Project Directorate  
Attn: Dr. W. D. Travers  
Director  
US Nuclear Regulatory Commission  
c/o Three Mile Island Nuclear Station  
Middletown, PA 17057

Dear Dr. Travers:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)  
Operating License No. DPR-73  
Docket No. 50-320  
Defueling Canister Checklist

Your letter NRC/TMI-85-086 dated November 8, 1985, granted approval for use of the defueling canisters subject to four (4) provisions. One of these provisions was that GPU Nuclear notify your staff of any planned reduction in GPU Nuclear's augmented Quality Assurance (QA) review program for defueling canisters supplied by Nuclear Energy Services (NES) Manufacturing.

The augmented QA review program has been continued at NES and GPU Nuclear intends to continue the program for all future shipments of canisters from NES Manufacturing. However, per your request, we are advising you that the experience gained in the use of the detailed checklists has resulted in the development of more efficient versions of those checklists for the filter, fuel, and knockout canisters (Attachment). The revised filter and knockout canister checklists will be used for all future shipments of these type canisters. The revised fuel canister checklist will be used following GPU Nuclear QA's approval of the completed initial checklist for the first shipment of NES fuel canisters.

The attached checklists have evolved from the checklists which were prepared for the first shipment of canisters. Certain items included in those checklists have been deleted. The deletions are based on either verification of certain generic activities or lack of identification of issues of concern during the previous review.

GPU Nuclear Corporation is a subsidiary of the General Public Utilities Corporation

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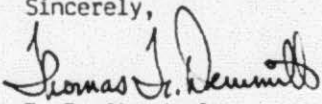
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The following is a list of significant revisions to the "first shipment" checklists.

- o The "first shipment" checklists consisted of several Material, Fabrication and Welding/NDE checklists. These three types of checklists have been combined into a single "follow-on shipment" checklist. This consolidation has been accomplished to foster efficiency in the review process, eliminate redundancy between various checklists, and reduce the overall volume of the completed checklist package.
- o The following checklist requirements, related to procurement of materials by NES, have been deleted since these activities have been reviewed generically:
  - Selection/Qualification of Suppliers
  - Imposition of QA program requirements on Suppliers
  - Imposition of 10 CFR 21 on Suppliers
- o Review of activities associated with the receipt inspection by NES has been deleted since essentially all material was previously reviewed in the "first shipment" checklists.
- o Review of activities associated with the following areas has been deleted since no deficiencies were identified as a result of reviews performed by the "first shipment" checklist teams and the Supplier Quality Representatives:
  - Activities associated with Bechtel's review/approval of NES's welding/NDE procedures.
  - Control and disbursement of welding filler material by NES.
  - Use of the current and appropriate welding procedure(s).
  - Verification of fit-up and cleanliness inspections.
  - Minimum preheat and maximum interpass temperature.




In addition, we plan to complete a single checklist for each shipment of each type canister rather than a checklist for each canister as was discussed with your staff. The amount of time associated with the review of each canister shipment and completion of checklists will be significantly reduced and thus the process will be more efficient.

Sincerely,

  
F. R. Standerfer  
Vice President/Director, TMI-2

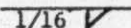
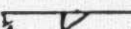
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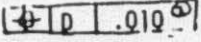


DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1154018F Rev. 5	3		Weld - Upper Head  Weld 1	WELDING 1. Verify welder qualification for WPS utilized	Traveller Nos. _____ _____
	4		Weld - Lower Head  Weld 2	COMPLETED WELD VERIFICATION	*1. Welder Nos. _____ _____
	5		Hold - Drain Tube To Upper Head 1/16  Weld 3	2a. Visual Examination/Qualification b. Liquid Penetrant Examination and Qualification c. Welder and weld number identified on weld or on documentation, i.e., (weld map) d. PT material batch numbers recorded on traveller and C of Cs are available	*2a. Visual Examiner Nos. _____ Visual Examiners are qualified? Yes _____ No _____ b. L. P. Examiner Nos. _____ L. P. Examiners are qualified? Yes _____ No _____ c. Are welder and weld numbers identified? Yes _____ No _____ d. Batch Nos. _____ Penetrant _____ Developer _____ Remover _____ Are C of Cs available? Yes _____ No _____
<u>Assembly</u>				NON-DESTRUCTIVE EXAMINATION	*3a. RT/UT Examiner No.(s) _____ Examiner is qualified? Yes _____ No _____
*Details on the attached MATRIX of approved/certified welding and NDE Personnel and Welding Materials.				RADIOGRAPHIC/ ULTRASONIC EXAMINATION	b. RT/UT records in package are complete? Yes _____ No _____
				3a. Personnel qualified to perform the examination b. Review RT and UT records	




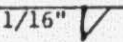
DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1154020E Rev. 2	1		DIM. 1½" + 1/16" Zone C-12	1. Issuance of Material for next operation (release to shop)	1. Traveller Nos. _____
	2		DIM. 1" + 1/16" Zone C-4  <u>Filter Canister sub-assembly</u>	2. Identification of latest approved drawings on Travellers	2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____ 3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____ b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____ c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____ 4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____ _____ _____
				IN PROCESS INSPECTIONS	
<u>Sub-Assembly</u>				3. Dimensional Inspection	
				a. Qualification of Inspectors	
				b. Use of calibrated equipment	
				c. Evidence of inspection and acceptance to required criteria	
This Checklist also applies to canister:				4. Identification, Control, and Disposition of NCRs	5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____ _____ _____
TVR No.	Shell No.	Canister No.		5. Implementation of SDDRs	
				6. Assembly Inspection Notes:	
				o NCRs - See Att. No. 1, Item _____	
				o SDDRs - See Att. No. 2, Item _____	
				o Calibration - See Att. No. 1, Item _____	

DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1154020E Rev. 2	3		Weld - Zone D-12  Weld 1	WELDING 1. Verify welder qualification for WPS utilized	Traveller Nos. _____ _____
	4		Weld - Zone F-4  Weld 2	COMPLETED WELD VERIFICATION 2a. Visual Examination/Qualification b. Liquid Penetrant Examination and Qualification c. Welder and weld number identified on weld or on documentation, i.e., (weld map) d. PT material batch numbers recorded on traveller and C of Cs are available	*1. Welder Nos. _____ *2a. Visual Examiner Nos. _____ Visual Examiners are qualified? Yes _____ No _____ b. L. P. Examiner Nos. _____ L. P. Examiners are qualified? Yes _____ No _____ c. Are welder and weld numbers identified? Yes _____ No _____ d. Batch Nos. _____ Penetrant _____ Developer _____ Remover _____ Are C of Cs available? Yes _____ No _____
			Subassembly	NON-DESTRUCTIVE EXAMINATION  RADIOGRAPHIC/ ULTRASONIC EXAMINATION	*3a. RT/UT Examiner No.(s) _____ Examiner is qualified? Yes _____ No _____ b. RT/UT records in package are complete? Yes _____ No _____
<p>*Details on the attached MATRIX of approved/certified welding and NDE Personnel and Welding Materials.</p>				3a. Personnel qualified to perform the examination b. Review RT and UT records	

DRAWING NO.	ITEM NO.	QUAN-TITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1150959D Rev. 4	1		DIM. 6 1/4" Zone B-7	1. Issuance of Material for next operation (release to shop)	1. Traveller Nos. _____
	2		DIM. 90" Zone C-6	2. Identification of latest approved drawings on Travellers	2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____
	3	2	DIM. .750 + .005 	IN PROCESS INSPECTIONS	3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____
	Note 3*		Add Catalysts (P/Ns 4 & 6) in Portions Specified Prior to Welding of Screen Assy.  Filter Canister upper Head weldment	3. Dimensional Inspection a. Qualification of Inspectors b. Use of calibrated equipment c. Evidence of inspection and acceptance to required criteria	b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____ c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____
			Upper Head	4. Identification, Control, and Disposition of NCRs	4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____
			This Checklist also applies to canister:	5. Implementation of SDDRs	5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____
			Note 3	6. Assembly Inspection	
TVR No.	HD No.	CMIR No.	TVR * Oper. No.	Notes:	
				o NCRs - See Att. No. 1 Item _____	
				o SDDRs - See Att. No. 2, Item _____	
				o Calibration - See Att. No. 1 Item _____	

\*Add TVR Operation No. that has the addition of catalyst independently verified for each head. Also, denote the verifier(s) with a "N" for NES and a "B" for Bechtel.



DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1150959D Rev. 4	4		Weld - Zone D-5  Weld 1	<u>WELDING</u> 1. Verify welder qualification for WPS utilized	Traveller Nos. _____ _____
	5		Weld - Zone C-4  Weld 2	<u>COMPLETED WELD VERIFICATION</u> 2a. Visual Examination/Qualification	*1. Welder Nos. _____ _____
	Note 2		PT in Accordance with ASME Sec. V, Art. 6 (1983 w/no Addenda)	b. Liquid Penetrant Examination and Qualification	*2a. Visual Examiner Nos. _____ Visual Examiners are qualified? Yes _____ No _____
				c. Welder and weld number identified on weld or on documentation, i.e., (weld map)	b. L. P. Examiner Nos. _____ L. P. Examiners are qualified? Yes _____ No _____
				d. PT material batch numbers recorded on traveller and C of Cs are available	c. Are welder and weld numbers identified? Yes _____ No _____
					d. Batch Nos. _____ Penetrant _____ Developer _____ Remover _____ Are C of Cs available? Yes _____ No _____
				<u>NON-DESTRUCTIVE EXAMINATION</u>	*3a. RT/UT Examiner No.(s) _____ Examiner is qualified? Yes _____ No _____
				<u>RADIOGRAPHIC/ ULTRASONIC EXAMINATION</u>	b. RT/UT records in package are complete? Yes _____ No _____
				3a. Personnel qualified to perform the examination	
				b. Review RT and UT records	

Upper Head

\*Details on the attached MATRIX of approved/certified welding and NDE Personnel and Welding Materials

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DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1150917D Rev. 1	1		DIM. 14.093 O.D. 13.969 Zone C-6	1. Issuance of Material for next operation (release to shop)	1. Traveller Nos. _____
	2		DIM. 3/8 Zone C-8	2. Identification of latest approved drawings on Travellers	2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____
	3		DIM. 5/16 MIN. Zone B-5		3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____
	4		DIM. 2 3/4 Zone B-4	IN PROCESS INSPECTIONS	b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____
				3. Dimensional Inspection	c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____
				a. Qualification of Inspectors	4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____
				b. Use of calibrated equipment	
				c. Evidence of inspection and acceptance to required criteria	
				4. Identification, Control, and Disposition of NCRs	5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____
				5. Implementation of SDDRs	
				6. Assembly Inspection	
				Notes:	
				o NCRs - See Att. No. 1, Item _____	
				o SDDRs - See Att. No. 2, Item _____	
				o Calibration - See Att. No. 1, Item _____	



DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1150944C Rev. 1	1		Dim. 14.062 13.969 Dia. Zone B-3	1. Issuance of Material for next operation (release to shop)	1. Traveller Nos. _____
	2		Dim. 4-1/2 Zone D-2	2. Identification of latest approved drawings on Travellers	2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____
				IN PROCESS INSPECTIONS	3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____
				3. Dimensional Inspection	b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____
				a. Qualification of Inspectors	c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____
				b. Use of calibrated equipment	4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____
				c. Evidence of inspection and acceptance to required criteria	5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____
				4. Identification, Control, and Disposition of NCRs	_____
				5. Implementation of SDDRs	_____
				6. Assembly Inspection	_____
				Notes:	
				o NCRs - See Att. No. 1, Item _____	
				o SDDRs - See Att. No. 2, Item _____	
				o Calibration - See Att. No. 1, Item _____	



DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION		
1150949D Rev. 5	1		Dim. 136-1/8 + 1/16 (11' - 4-1/8") Zone D-6	1. Issuance of Material for next operation (release to shop)	1. Traveller Nos. _____		
	2		Dim. 3/4 Zone C-7	2. Identification of latest approved drawings on Travellers	2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____		
	3		Dim. 1-3/8 Zone C-4	IN PROCESS INSPECTIONS	3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____		
	Note 10		Pellets loaded within 1/4" of the tube fill length	3. Dimensional Inspection a. Qualification of Inspectors b. Use of calibrated equipment c. Evidence of inspection and acceptance to required criteria	b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____ c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____ 4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____		
<u>Tubes-Plugs-Pellets</u> This Checklist also applies to Canister: <u>Note 10</u>				4. Identification, Control, and Disposition of NCRs	5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____		
TVR No.	Shell No.	Canister No.	Tube No.	TVR Oper. No.	RT Ver.	5. Implementation of SDDRs	
						6. Assembly Inspection	
						Notes:	
						o NCRs - See Att. No. 1 Item _____	
						o SDDRs - See Att. No. 2, Item _____	
						o Calibration - See Att. No. 1 Item _____	

\* Add TVR Operation No. that has the addition of pellets that was independently verified for each tube. Denote the verifier(s) with a "N" for NES and a "B" for Bechtel.



DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1150949D Rev. 5	4		Weld - Zone D-7 <u>N</u> Weld 1	<u>WELDING</u> 1. Verify welder qualification for WPS utilized	Traveller Nos. _____ _____
	5		Weld - Zone D-4 <u>N</u> Weld 2	<u>COMPLETED WELD VERIFICATION</u> 2a. Visual Examination/Qualification b. Liquid Penetrant Examination and Qualification c. Welder and weld number identified on weld or on documentation, i.e., (weld map) d. PT material batch numbers recorded on traveller and C of Cs are available	*1. Welder Nos. _____ 2a. Visual Examiner Nos. _____ Visual Examiners are qualified? Yes _____ No _____ b. L. P. Examiner Nos. _____ L. P. Examiners are qualified? Yes _____ No _____ c. Are welder and weld numbers identified? Yes _____ No _____ d. Batch Nos. _____ Penetrant _____ Developer _____ Remover _____ Are C of Cs available? Yes _____ No _____
	Note 5		PT in accordance with ASTM E165	<u>NON-DESTRUCTIVE EXAMINATION</u> <u>RADIOGRAPHIC/</u> <u>ULTRASONIC EXAMINATION</u> 3a. Personnel qualified to perform the examination b. Review RT and UT records	*3a. RT/UT Examiner No.(s) _____ Examiner is qualified? Yes _____ No _____ b. RT/UT records in package are completed? Yes _____ No _____

Tubes/Plugs

\*Details on the attached MATRIX of approved/certified welding and NDE Personnel and Welding Materials.

DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION	
1150957B Rev. 1	1		Dim. 1" Length of Plug	1. Issuance of Material for next operation (release to shop)	1. Traveller Nos. _____	
	2		Dim. .999 .997 Dia.  Plug Det. 3	2. Identification of latest approved drawings on Travellers	2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____	
				IN PROCESS INSPECTIONS	3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____	
				3. Dimensional Inspection	b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____	
				a. Qualification of Inspectors	c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____	
				b. Use of calibrated equipment	4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____	
			c. Evidence of inspection and acceptance to required criteria			
<u>Upperhead Plug</u>						
TVR No.	CMIR No.	HD No.	Shell No.	Canister No.	4. Identification, Control, and Disposition of NCRs	5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____
					5. Implementation of SDDRs	
					6. Assembly Inspection	
					Notes:	
					o NCRs - See Att. No. 1 Item _____	
					o SDDRs - See Att. No. 2, Item _____	
					o Calibration - See Att. No. 1 Item _____	

DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
11509580 REV. 3  Upper Head	1		DIM. <u>4.500</u> R Zone D-7	1. Issuance of Material for next operation (release to shop)	1. Traveller Nos. _____
	2		DIM. <u>4.800</u> Zone C-6	2. Identification of latest approved drawings on Travellers	2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____
	3		DIM. <u>14.083</u> DIA. <u>14.093</u> Zone B-6	IN PROCESS INSPECTIONS	3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____
	4		DIM. <u>13.437</u> <sup>+0.015</sup> <sub>-0.010</sub> DIA. Zone A-6	3. Dimensional Inspection	b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____
	5		DIM. <u>3 7/8</u> Zone B-8	a. Qualification of Inspectors	c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____
	6		DIM. <u>3 7/8</u> Zone B-8	b. Use of calibrated equipment	4. Are the applicable NCRs dispositioned? Yes _____ No _____
	7		DIMS. For Lifting Socket (Zone D-3): a. 2.125 DIA. b. 1/4 X 45° c. 1/16 d. 8° e. 3 7/8 DIA. f. 2 5/8	c. Evidence of inspection and acceptance to required criteria	NCR Nos. _____ _____
	8		DIM. 2.625 DIA. Thru 2 1/2 NPT (Typ 2 Plcs) <u>Ø AG &amp; 206</u> Zone C-4	4. Identification, Control, and Disposition of NCRs  5. Implementation of SDDRs  6. Assembly Inspection	5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____ _____ _____
			Notes: o NCRs - See Att. No. 1 Item _____ o SDDRs - See Att. No. 2, Item _____ o Calibration - See Att. No. 1 Item _____		
UPPER HEAD					



DRAWING NO.	ITEM NO.	QUAN- TITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION		VERIFICATION	
				TVR No.	CMIR No.	Shell No.	Canister No.
1150958D REV. 3	1		DIM. <u>4.500</u> R Zone D-7				
	2		DIM. <u>4.800</u> Zone C-6				
	3		DIM. 14.083 <u>14.093</u> DIA. Zone B-6				
	4		DIM. 13.437 <sup>+0.015</sup> <sub>-0.006</sub> DIA. Zone A-6				
	5		DIM. 3 <sup>7</sup> / <sub>8</sub> Zone B-8				
	6		DIM. 3 <sup>7</sup> / <sub>8</sub> Zone B-8				
	7		DIMS. For Lifting Socket (Zone D-3): a. 2.125 DIA. b. <sup>1</sup> / <sub>4</sub> X 45° c. <sup>13</sup> / <sub>16</sub> d. 8° e. <sup>3</sup> / <sub>8</sub> DIA. f. 2 <sup>5</sup> / <sub>8</sub>				
	8		DIM. 2.625 DIA. Thru 2 <sup>1</sup> / <sub>2</sub> NPT (Typ 2 Plcs) <u>(4) AG (206)</u> Zone C-4				
UPPER HEAD				Note: The above table is to provide information contained on Page 1 of F-10, in Summary Form.			



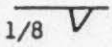
DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION																																								
1150917D Rev. 1	1		Dim. 14.093 O.D. 13.969 Zone C-6	1. Issuance of Material for next operation (release to shop)	1. Traveller Nos. _____																																								
	2		Dim. 3 8 Zone C-8	2. Identification of latest approved drawings on Travellers	2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____																																								
	3		Dim. 5 16 Min. Zone B	IN PROCESS INSPECTIONS	3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____																																								
	4		Dim. 2 3 4 Zone B-4	3. Dimensional Inspection a. Qualification of Inspectors b. Use of calibrated equipment c. Evidence of inspection and acceptance to required criteria	b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____ c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____ 4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____ _____ _____																																								
<p align="center"><u>Lower Head</u></p> <p>This Checklist also applies to Canister:</p> <table border="1"> <thead> <tr> <th>TVR No.</th><th>HD No.</th><th>CMIR No.</th><th>Shell No.</th><th>Canister No.</th></tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>				TVR No.	HD No.	CMIR No.	Shell No.	Canister No.																																				<p>4. Identification, Control, and Disposition of NCRs</p> <p>5. Implementation of SDDRs</p> <p>6. Assembly Inspection</p> <p>Notes:</p> <ul style="list-style-type: none"> <li>o NCRs - See Att. No. 1, Item _____</li> <li>o SDDRs - See Att. No. 2, Item _____</li> <li>o Calibration - See Att. No. 1, Item _____</li> </ul>	<p>5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____ _____ _____</p>
TVR No.	HD No.	CMIR No.	Shell No.	Canister No.																																									



DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1154026F Rev. 5	Note 4		Fill cavity with Catalysts (P/N 21 & 22) in Portions Specified	1. Issuance of Material for next operation (release to shop)  2. Identification of latest approved drawings on Travellers  <u>IN PROCESS INSPECTIONS</u>  3. Dimensional Inspection a. Qualification of Inspectors  b. Use of calibrated equipment  c. Evidence of inspection and acceptance to required criteria	1. Traveller Nos. _____  2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____  3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____  b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____  c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____  4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____ _____ _____
			Upper Head Catalysts		
This Checklist also applies to Canister: Note 2*					
TVR No.	Head No.	Operation No.	Shell No.	Canister No.	
					4. Identification, Control, and Disposition of NCRs
					5. Implementation of SDDRs
					6. Assembly Inspection
					Notes:
					o NCRs - See Att. No. 1, Item _____
					o SDDRs - See Att. No. 2, Item _____
					o Calibration - See Att. No. 1, Item _____

\*Add TVR Operation No. that has the addition of catalyst independently verified for each head. Also, denote the verifier(s) with a "N" for NES and a "B" for Bachtel.

DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1154026F Rev. 5	C		SDDR 2-R200C-5 (Dimensions) "X" & "Y" per Sketch  0.000 to 0.015 in Sect. W-W	1. Issuance of Material for next operation (release to shop) 2. Identification of latest approved drawings on Travellers <u>IN PROCESS INSPECTIONS</u> 3. Dimensional Inspection a. Qualification of Inspectors b. Use of calibrated equipment c. Evidence of inspection and acceptance to required criteria	1. Traveller Nos. _____ 2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____ 3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____ b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____ c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____ 4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____ _____ _____
<u>Head Weldment</u>					
This Checklist also applies to Canister:					
TVR No.	Head No.	CMIR No.		4. Identification, Control, and Disposition of NCRs	5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____ _____ _____
				5. Implementation of SDDRs	_____ _____
				6. Assembly Inspection	_____ _____
				Notes:	
				o NCRs - See Att. No. 1 Item _____	
				o SDDRs - See Att. No. 2, Item _____	
				o Calibration - See Att. No. 1 Item _____	

DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1154026F Rev. 5	1		Weld-Skirt to Head  <div style="text-align: center;">  </div> Weld 1	<u>WELDING</u> 1. Verify welder qualification for WPS utilized  <u>COMPLETED WELD VERIFICATION</u> 2a. Visual Examination/Qualification b. Liquid Penetrant Examination and Qualification c. Welder and weld number identified on weld or on documentation, i.e., (weld map) d. PT material batch numbers recorded on traveller and C of Cs are available  <u>NON-DESTRUCTIVE EXAMINATION</u>  <u>RADIOGRAPHIC/ULTRASONIC EXAMINATION</u> 3a. Personnel qualified to perform the examination b. Review RT and UT records	Traveller Nos. _____  1. Welder Nos. _____ 2a. Visual Examiner Nos. _____ Visual Examiners are qualified? Yes _____ No _____ b. L. P. Examiner Nos. _____ L. P. Examiners are qualified? Yes _____ No _____ c. Are welder and weld numbers identified? Yes _____ No _____ d. Batch Nos. _____ Penetrant _____ Developer _____ Remover _____ Are C of Cs available? Yes _____ No _____ 3a. RT/UT Examiner No.(s) _____ Examiner is qualified? Yes _____ No _____ b. RT/UT records in package are complete? Yes _____ No _____

\*Details on the attached MATRIX of approved/certified welding and NDE Personnel and Welding Materials







DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1150999F Sht. 1 of 3 Rev. 4	Note 9		Completed lower ass'y must be shown to fit within a 14 5/16 max. dia. perfect cylinder for length.	1. Issuance of Material for next operation (release to shop)  2. Identification of latest approved drawings on Travellers  <u>IN PROCESS INSPECTIONS</u>  3. Dimensional Inspection a. Qualification of Inspectors  b. Use of calibrated equipment  c. Evidence of inspection and acceptance to required criteria	1. Traveller Nos. _____  2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____ 3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____ b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____ c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____ 4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____ _____ _____
<u>Lower Assembly</u>					
This Checklist also applies to canister:					
TVR No.	Assembly No.	Canister No.		4. Identification, Control, and Disposition of NCRs	5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____ _____ _____
				5. Implementation of SDDRs	_____
				6. Assembly Inspection	_____
				Notes:	
				o NCRs - See Att. No. 1 Item _____	
				o SDDRs - See Att. No. 2, Item _____	
				o Calibration - See Att. No. 1 Item _____	

DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1150999F Sht. 1 of 3 Rev. 4	A		SDDR 2-M101A-22  RT per ART. 2 of Section V of 1983 Edition, ASME Code (w/o Addenda)  UT per ART. 5 of Section V of 1983 Edition, ASME Code (w/o Addenda)	<b>WELDING</b> 1. Verify welder qualification for WPS utilized  <b>COMPLETED WELD VERIFICATION</b> 2a. Visual Examination/Qualification b. Liquid Penetrant Examination and Qualification c. Welder and weld number identified on weld or on documentation, i.e., (weld map) d. PT material batch numbers recorded on traveller and C of Cs are available  <b>NON-DESTRUCTIVE EXAMINATION</b>  <b>RADIOGRAPHIC/ULTRASONIC EXAMINATION</b> 3a. Personnel qualified to perform the examination b. Review RT and UT records	Traveller Nos. _____ _____ *1. Welder Nos. _____ _____ *2a. Visual Examiner Nos. _____ _____ Visual Examiners are qualified? Yes _____ No _____ b. L. P. Examiner Nos. _____ _____ L. P. Examiners are qualified? Yes _____ No _____ c. Are welder and weld numbers identified? Yes _____ No _____ d. Batch Nos. _____ Penetrant _____ Developer _____ Remover _____ Are C of Cs available? Yes _____ No _____ *3a. RT/UT Examiner No.(s) _____ _____ Examiner is qualified? Yes _____ No _____ b. RT/UT records in package are complete? Yes _____ No _____

\*Details on the attached MATRIX of approved/certified welding and NDE Personnel and Welding Materials.

DRAWING NO.	ITEM NO.	QUAN-TITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1150999F Sht. 2 of 3 Rev. 4	1		DIM 145 7/8 + 1/8 (12'-1 7/8")	1. Issuance of Material for next operation (release to shop)	1. Traveller Nos. _____
	2		Top face of bulkhead relation to length of bulkhead:  <div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;">-A-</div>  <div style="display: flex; align-items: center; gap: 5px;"> <div style="border: 1px solid black; padding: 2px;">⊥</div> <div style="border: 1px solid black; padding: 2px;">B</div> <div style="border: 1px solid black; padding: 2px;">.005 F.I.M.</div> </div> <div style="display: flex; align-items: center; gap: 5px; margin-top: 5px;"> <div style="border: 1px solid black; padding: 2px;">□</div> <div style="border: 1px solid black; padding: 2px;">.002</div> </div> </div>	2. Identification of latest approved drawings on Travellers	2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____
	3		Dim. 1 Bottom Plate to Lower Head Weld	<p style="text-align: center;">IN PROCESS INSPECTIONS</p> 3. Dimensional Inspection <ul style="list-style-type: none"> <li>a. Qualification of Inspectors</li> <li>b. Use of calibrated equipment</li> <li>c. Evidence of inspection and acceptance to required criteria</li> </ul>	3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____ b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____ c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____ 4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____ _____ _____ 5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____ _____ _____ _____
TVR No.	S/N-D	Shell S/N		4. Identification, Control, and Disposition of NCRs	
				5. Implementation of SDDRs	
				6. Assembly Inspection	
				Notes:	
				o NCRs - See Att. No. 1 Item _____	
				o SDDRs - See Att. No. 2, Item _____	
				o Calibration - See Att. No. 1 Item _____	





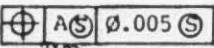



DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1150999F Sht.2 of 3 Rev. 4	4		Weld-Bulkhead to Shell  Weld 1	WELDING 1. Verify welder qualification for WPS utilized	Traveller Nos. _____ _____ *1. Welder Nos. _____
	5		Weld-lower head to Shell  Weld 2	COMPLETED WELD VERIFICATION 2a. Visual Examination/Qualification	*2a. Visual Examiner Nos. _____ Visual Examiners are qualified? Yes _____ No _____
	6		Weld-Shroud Ass'y to Bottom Plate  Weld 3	b. Liquid Penetrant Examination and Qualification	b. L. P. Examiner Nos. _____ L. P. Examiners are qualified? Yes _____ No _____
	7		Weld-Bottom Plate to Shell  Weld 4	c. Welder and weld number identified on weld or on documentation, i.e., (weld map)	c. Are welder and weld numbers identified? Yes _____ No _____
				d. PT material batch numbers recorded on traveller and C of Cs are available	d. Batch Nos. _____ Penetrant _____ Developer _____ Remover _____ Are C of Cs available? Yes _____ No _____
*Details on the attached MATRIX of approved/ <u>certified welding and NDE Personnel and Welding Materials.</u>				NON-DESTRUCTIVE EXAMINATION	*3a. RT/UT Examiner No.(s) _____ Examiner is qualified? Yes _____ No _____
				RADIOGRAPHIC/ ULTRASONIC EXAMINATION	b. RT/UT records in package are complete? Yes _____ No _____
				3a. Personnel qualified to perform the examination	
				b. Review RT and UT records	

DRAWING NO.	ITEM NO.	QUAN-TITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION																																				
1150983C Rev. 1	1		DIM. 14.000 + 0.093 - 0.031  DIA. <div style="border: 1px solid black; padding: 2px; display: inline-block;">-A-</div> Zone C-2	1. Issuance of Material for next operation (release to shop)  2. Identification of latest approved drawings on Travellers  <u>IN PROCESS INSPECTIONS</u>  3. Dimensional Inspection a. Qualification of Inspectors  b. Use of calibrated equipment  c. Evidence of inspection and acceptance to required criteria  4. Identification, Control, and Disposition of NCRs  5. Implementation of SDDRs  6. Assembly Inspection Notes: o NCRs - See Att. No. 1, Item _____ o SDDRs - See Att. No. 2, Item _____ o Calibration - See Att. No. 1, Item _____	1. Traveller Nos. _____  2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____ 3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____ b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____ c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____ 4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____ _____ _____ _____ 5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____ _____ _____ _____																																				
This Checklist also applies to Canister: <table border="1" style="width: 100%; margin-top: 10px;"> <thead> <tr> <th>TVR No.</th> <th>CMIR No.</th> <th>Shell No.</th> <th>Canister No.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>				TVR No.	CMIR No.	Shell No.	Canister No.																																		
TVR No.	CMIR No.	Shell No.	Canister No.																																						

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DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1150989F Rev. 4 Part II	1		DIMS.-Sect. W-W 3 3/8 2 1 1/8  .001 14 + 1/64 DIA. 8.751 + .002 DIA.  -A- Lifting Socket 3 1/8 DIA 2.125 DIA. 1/4 x 45° R0 13/16 2 3/8	1. Issuance of Material for next operation (release to shop)  2. Identification of latest approved drawings on Travellers  IN PROCESS INSPECTIONS  3. Dimensional Inspection a. Qualification of Inspectors  b. Use of calibrated equipment  c. Evidence of inspection and acceptance to required criteria	1. Traveller Nos. _____  2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____ 3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____ b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____ c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____ 4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____ _____ _____ 5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____ _____ _____ _____
	2		DIMS. -Section. Y-Y .125 .130 .205 ± .005	4. Identification, Control, and Disposition of NCRs  5. Implementation of SDDRs  6. Assembly Inspection Notes: o NCRs - See Att. No. 1, Item _____ o SDDRs - See Att. No. 2, Item _____ o Calibration - See Att. No. 1, Item _____	
	3		DIMS. -Sect. Z-Z .100 .105 .130 + .005 (Continued)		
			HEAD		

DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1150989F Rev. 4 Part II	4		<p>DIMS. Sect. Z-Z (Continued) 1.605 + .005 - .000 DIA. DIMS - Plan 10.125 + 0.005 SQ 5.063 Typ 1.500 + .010 .000 R Typ .888 + .002 DIA.</p> <p> Typ .750 + .010  Typ  typ  Typ</p> <p>SDDR 2-M-101A-29 Dimensions Vary as Stated in SDDR for Heads #251, 252, 253 and 260 (Continued)</p>	<p>1. Issuance of Material for next operation (release to shop)</p> <p>2. Identification of latest approved drawings on Travellers</p> <p>IN PROCESS INSPECTIONS</p> <p>3. Dimensional Inspection</p> <p>a. Qualification of Inspectors</p> <p>b. Use of calibrated equipment</p> <p>c. Evidence of inspection and acceptance to required criteria</p> <p>4. Identification, Control, and Disposition of NCRs</p> <p>5. Implementation of SDDRs</p> <p>6. Assembly Inspection</p> <p>Notes:</p> <ul style="list-style-type: none"> <li>o NCRs - See Att. No. 1, Item _____</li> <li>o SDDRs - See Att. No. 2, Item _____</li> <li>o Calibration - See Att. No. 1, Item _____</li> </ul>	<p>1. Traveller Nos. _____</p> <p>2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____</p> <p>3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____</p> <p>b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____</p> <p>c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____</p> <p>4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____ _____ _____</p> <p>5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____ _____ _____</p>
	A				
			HEAD		

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DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1150992E Rev. 1	1		DIM. 13 13/32 DIA. <div style="border: 1px solid black; padding: 2px; display: inline-block;">-A-</div> Zone C-9	1. Issuance of Material for next operation (release to shop)	1. Traveller Nos. _____
	2		DIM. 1/2 Zone B-7	2. Identification of latest approved drawings on Travellers	2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____
				IN PROCESS INSPECTIONS	3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____
				3. Dimensional Inspection	b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____
				a. Qualification of Inspectors	c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____
				b. Use of calibrated equipment	4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____
				c. Evidence of inspection and acceptance to required criteria	_____
TVR No.	Shell No.	Canister No.		4. Identification, Control, and Disposition of NCRs	5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____
				5. Implementation of SDDRs	_____
				6. Assembly Inspection	_____
				Notes:	
				o NCRs - See Att. No. 1, Item _____	
				o SDDRs - See Att. No. 2, Item _____	
				o Calibration - See Att. No. 1, Item _____	

DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1154006D Rev. 1	1		DIM 1/8 Zone A-5	1. Issuance of Material for next operation (release to shop) 2. Identification of latest approved drawings on Travellers <u>IN PROCESS INSPECTIONS</u> 3. Dimensional Inspection a. Qualification of Inspectors b. Use of calibrated equipment c. Evidence of inspection and acceptance to required criteria	1. Traveller Nos. _____ 2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____ 3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____ b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____ c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____ 4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____ _____ _____ _____ 5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____ _____ _____ _____
<u>Lower Impact Plate A</u>					
TVR No.	Shell No.	Canister No.		4. Identification, Control, and Disposition of NCRs	
		:		5. Implementation of SDDRs	
				6. Assembly Inspection	
				Notes:	
				o NCRs - See Att. No. 1 Item _____	
				o SDDRs - See Att. No. 2, Item _____	
				o Calibration - See Att. No. 1 Item _____	

[illegible]



DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1154014F Rev. 3	1		<p>DIMS. Plan Upper Surface</p> <p>22 1/2°</p> <p>45° Typ</p> <p>100 2 Places</p> <p>5.906</p> <p>2 R Typ (4 Places)</p> <p>- B .030</p> <p>8.760 +000 -005 SQ</p> <p>⊕ A (L) Ø.010 (L)</p> <p>-B-</p> <p>2 Holes on a</p> <p>12.875 DIA B.C.</p> <p>⊕ B (S) Ø.005 (S)</p> <p>3/4-10 UNC 2B X 1 3/4 DP (Full Thread) 8 Holes on a 12.250 DIA B.C.</p> <p>⊕ B (S) Ø0.005 (S)</p>	<p>1. Issuance of Material for next operation (release to shop)</p> <p>2. Identification of latest approved drawings on Travellers</p> <p><u>IN PROCESS INSPECTIONS</u></p> <p>3. Dimensional Inspection</p> <p>a. Qualification of Inspectors</p> <p>b. Use of calibrated equipment</p> <p>c. Evidence of inspection and acceptance to required criteria</p> <p>4. Identification, Control, and Disposition of NCRs</p> <p>5. Implementation of SDDRs</p> <p>6. Assembly Inspection</p> <p>Notes:</p> <p>o NCRs - See Att. No. 1 Item _____</p> <p>o SDDRs - See Att. No. 2, Item _____</p> <p>o Calibration - See Att. No. 1 Item _____</p>	<p>1. Traveller Nos. _____</p> <p>2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____</p> <p>3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____</p> <p>b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____</p> <p>c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____</p> <p>4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____</p> <p>5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____</p>

BULKHEAD

DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1154014F Rev. 3	2		DIMS. -Sect 2-Z 14.093 DIA 14.088 <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <input type="radio"/> B <input checked="" type="radio"/> <math>\varnothing</math> 0.010 <input checked="" type="radio"/> M         </div> 9.578 + .010 - .000 SQ <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-top: 10px;">-A-</div>	1. Issuance of Material for next operation (release to shop) 2. Identification of latest approved drawings on Travellers <u>IN PROCESS INSPECTIONS</u> 3. Dimensional Inspection a. Qualification of Inspectors b. Use of calibrated equipment c. Evidence of inspection and acceptance to required criteria	1. Traveller Nos. _____ 2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____ 3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____ b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____ c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____ 4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____ _____ _____ 5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____ _____ _____ _____
<u>BULKHEAD</u>					
TVR No.	Bulkhead No.	Shell No.	Canister No.	4. Identification, Control, and Disposition of NCRs	
				5. Implementation of SDDRs	
				6. Assembly Inspection	
				Notes:	
				o NCRs - See Att. No. 1, Item _____	
				o SDDRs - See Att. No. 2, Item _____	
				o Calibration - See Att. No. 1, Item _____	

DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1154021C Rev. 1	1		DIMS. 1 5/16 and 1 1/4 Zone C-3	1. Issuance of Material for next operation (release to shop)	1. Traveller Nos. _____
	2		DIM. .640 ± .005 DIA. Zone B-3	2. Identification of latest approved drawings on Travellers	2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____
	3		DIM. .750 + .000 - .001  DIA (Threads) Zone C-2	IN PROCESS INSPECTIONS  3. Dimensional Inspection a. Qualification of Inspectors b. Use of calibrated equipment c. Evidence of inspection and acceptance to required criteria	3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____ b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____ c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____
Head Bolts				4. Identification, Control, and Disposition of NCRs	4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____
TVR No.	CMIR No.	Shell No.	Canister No.	5. Implementation of SDDRs	5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____
				6. Assembly Inspection	
				Notes:	
				o NCRs - See Att. No. 1 Item _____	
				o SDDRs - See Att. No. 2, Item _____	
				o Calibration - See Att. No. 1 Item _____	



DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1154045D Rev. 5	Note 2		Add Catalysts (P/N 4&5) in Portions specified prior to welding of Screen Assy	1. Issuance of Material for next operation (release to shop) 2. Identification of latest approved drawings on Travellers <u>IN PROCESS INSPECTIONS</u> 3. Dimensional Inspection a. Qualification of Inspectors b. Use of calibrated equipment c. Evidence of inspection and acceptance to required criteria	1. Traveller Nos. _____ 2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____ 3a. Are the Inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____ b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____ c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____ 4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____ _____ _____ 5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____ _____ _____ _____
			<u>Lower Head Catalysts</u>		
This Checklist also applies to canister:					
			Note 2*		
TVR No.	Head No.	Oper. No.	Shell No.	Canister No.	
					4. Identification, Control, and Disposition of NCRs
					5. Implementation of SDDRs
					6. Assembly Inspection
					Notes:
					o NCRs - See Att. No. 1 Item _____
					o SDDRs - See Att. No. 2, Item _____
					o Calibration - See Att. No. 1 Item _____

\*Add TVR Operation No. that has the addition of catalyst independently verified for each head. Also, denote the verifier(s) with a "N" for NES and a "B" for Bechtel.

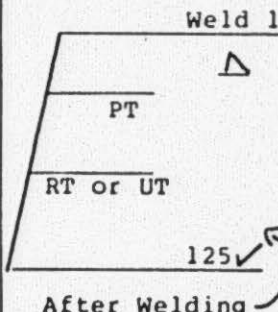
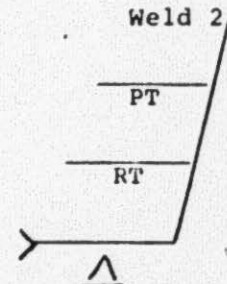
DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION																																													
1150917D Rev. 1	1		Dim. $\frac{14.093}{13.969}$ O.D.	1. Issuance of Material for next operation (release to shop)	1. Traveller Nos. _____																																													
	2		Zone C-6 Dim. $\frac{3}{8}$	2. Identification of latest approved drawings on Travellers	2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____																																													
	3		Zone C-8 Dim. $\frac{5}{16}$ Min.	IN PROCESS INSPECTIONS	3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____																																													
	4		Zone B-5 Dim. $2 \frac{3}{4}$ Zone B-4	3. Dimensional Inspection a. Qualification of Inspectors b. Use of calibrated equipment c. Evidence of inspection and acceptance to required criteria	b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____ c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____ 4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____																																													
<p><u>Lower Head</u></p> <p>This Checklist also applies to canister:</p> <table border="1"> <thead> <tr> <th>TVR No.</th> <th>HD No.</th> <th>CMIR No.</th> <th>Shell No.</th> <th>Canister No.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>				TVR No.	HD No.	CMIR No.	Shell No.	Canister No.																																									<p>4. Identification, Control, and Disposition of NCRs</p> <p>5. Implementation of SDDRs</p> <p>6. Assembly Inspection</p> <p>Notes:</p> <ul style="list-style-type: none"> <li>o NCRs - See Att. No. 1, Item _____</li> <li>o SDDRs - See Att. No. 2, Item _____</li> <li>o Calibration - See Att. No. 1, Item _____</li> </ul>	<p>5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____</p>
TVR No.	HD No.	CMIR No.	Shell No.	Canister No.																																														

DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION																																				
1150944C Rev. 1	1		Dim. $\frac{14.062}{13.969}$ Dia.  Zone B-3	1. Issuance of Material for next operation (release to shop)	1. Traveller Nos. _____																																				
	2		Dim. $4 \frac{1}{2}$ Zone D-2	2. Identification of latest approved drawings on Travellers	2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____																																				
				IN PROCESS INSPECTIONS	3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____																																				
				3. Dimensional Inspection	b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____																																				
				a. Qualification of Inspectors	c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____																																				
				b. Use of calibrated equipment	4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____																																				
				c. Evidence of inspection and acceptance to required criteria	5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____																																				
<p><u>Skirt</u></p> <p>This Checklist also applies to canister:</p> <table border="1"> <thead> <tr> <th>TVR No.</th> <th>CMIR No.</th> <th>Shell No.</th> <th>Canister No.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>				TVR No.	CMIR No.	Shell No.	Canister No.																																	4. Identification, Control, and Disposition of NCRs	
TVR No.	CMIR No.	Shell No.	Canister No.																																						
				5. Implementation of SDDRs																																					
				6. Assembly Inspection																																					
				Notes:																																					
				o NCRs - See Att. No. 1 Item _____																																					
				o SDDRs - See Att. No. 2, Item _____																																					
				o Calibration - See Att. No. 1 Item _____																																					



DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1150945C Rev. 1	1		Dim. 14.000 +.093 -.031 Dia.  Zone C-2	1. Issuance of Material for next operation (release to shop)  2. Identification of latest approved drawings on Travellers  <u>IN PROCESS INSPECTIONS</u>  3. Dimensional Inspection a. Qualification of Inspectors b. Use of calibrated equipment c. Evidence of inspection and acceptance to required criteria	1. Traveller Nos. _____  2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____ 3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____ b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____ c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____ 4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____ _____ _____
<u>Shell</u>					
This Checklist also applies to canister:					
TVR No.	CMIR No.	Shell No.	Canister No.	4. Identification, Control, and Disposition of NCRs	5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____ _____ _____
				5. Implementation of SDDRs	_____ _____
				6. Assembly Inspection	
				Notes:	
				o NCRs - See Att. No. 1, Item _____	
				o SDDRs - See Att. No. 2, Item _____	
				o Calibration - See Att. No. 1, Item _____	

[illegible]

DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1154041F Rev. 3	2		Weldment Zone E-7 	<b>WELDING</b> 1. Verify welder qualification for WPS utilized  <b>COMPLETED WELD VERIFICATION</b> 2a. Visual Examination/Qualification b. Liquid Penetrant Examination and Qualification c. Welder and weld number identified on weld or on documentation, i.e., (weld map) d. PT material batch numbers recorded on traveller and C of Cs are available	Traveller Nos. _____  *1. Welder Nos. _____ Welders are qualified? Yes <u>  </u> No <u>  </u> *2a. Visual Examiner Nos. _____ Visual Examiners are qualified? Yes <u>  </u> No <u>  </u> b. L. P. Examiner Nos. _____ L. P. Examiners are qualified? Yes <u>  </u> No <u>  </u> c. Are welder and weld numbers identified? Yes <u>  </u> No <u>  </u> d. Batch Nos. _____ Penetrant Developer _____ Remover _____ Are C of Cs available? Yes <u>  </u> No <u>  </u> *3a. RT/UT Examiner No.(s) _____ Examiner is qualified? Yes <u>  </u> No <u>  </u> b. RT/UT records in package are complete? Yes <u>  </u> No <u>  </u>
	3		Weldment Zone D-3 	<b>NON-DESTRUCTIVE EXAMINATION</b>  <b>RADIOGRAPHIC/ULTRASONIC EXAMINATION</b> 3a. Personnel qualified to perform the examination b. Review RT and UT records	

\* Details on the attached MATRIX of approved/certified welding and NDE Personnel and Welding Materials.

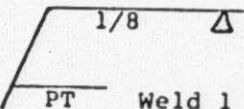
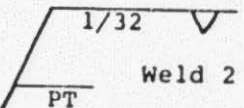
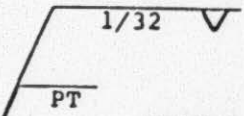


DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1154046F Rev. 6	1		Angle 90° Zone B-14	1. Issuance of Material for next operation (release to shop)	1. Traveller Nos. _____
	2		Dim. Zone B-14 .750 ± .005	2. Identification of latest approved drawings on Travellers	2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____
	3		Dim. Zone A-14 View A-a ↓ 2 ↑	IN PROCESS INSPECTIONS	3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____
	4		Angle 14° Zone B-12	3. Dimensional Inspection	b. Are the tools/gauges calibrated? N/A Yes _____ No _____
	5		Add Catalysts in portions specified prior to welding on screen assembly.	a. Qualification of Inspectors b. Use of calibrated equipment c. Evidence of inspection and acceptance to required criteria	c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____
				4. Identification, Control, and Disposition of NCRs	4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____
				5. Implementation of SDDRs	5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____
				6. Assembly Inspection	
				Notes:	
				o NCRs - See Att. No. 1	
				Item _____	
				o SDDRs - See Att. No. 2, Item _____	
				o Calibration - See Att. No. 1	

Upper Head  
This Checklist also applies to canister:

TVR No.	Shell No.	Head No.	CMIR No.	Canister No.	Oper. No.

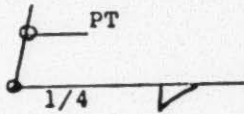
\*Add TVR Operation No. that has the addition of catalyst independently verified for each head. Denote the verifier(s) with a "N" for NES and a "B" for Bechtel.

DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1154046F Rev. 6  15737-2-R200C-00120-07 Part II	1		Weldment Zone E-9  	<b>WELDING</b> 1. Verify welder qualification for WPS utilized	Traveller Nos. _____ _____ 1. Welder Nos. _____ Welders are qualified? Yes ___ No ___ 2a. Visual Examiner Nos. _____ Visual Examiners are qualified? Yes ___ No ___ b. L. P. Examiner Nos. _____ L. P. Examiners are qualified? Yes ___ No ___ c. Are welder and weld numbers identified? Yes ___ No ___ d. Batch Nos. _____ Penetrant _____ Developer _____ Remover _____ Are C of Cs available? Yes ___ No ___
	2		Weldment Zone E-8  	<b>COMPLETED WELD VERIFICATION</b> 2a. Visual Examination/Qualification b. Liquid Penetrant Examination and Qualification c. Welder and weld number identified on weld or on documentation, i.e., (weld map) d. PT material batch numbers recorded on traveller and C of Cs are available	Are C of Cs available? Yes ___ No ___ *3a. RT/UT Examiner No.(s) _____ Examiner is qualified? Yes ___ No ___ b. RT/UT records in package are complete? Yes ___ No ___
	3		Weldment Zone D-5  	<b>NON-DESTRUCTIVE EXAMINATION</b>  <b>RADIOGRAPHIC/ULTRASONIC EXAMINATION</b> 3a. Personnel qualified to perform the examination b. Review RT and UT records	

\*Details on the attached MATRIX of approved/certified welding and NDE Personnel and Welding Materials

[illegible]



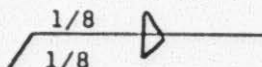
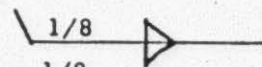
DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1154034F Rev. 2	2		Weldment 	<b>WELDING</b> 1. Verify welder qualification for WPS utilized  <b>COMPLETED WELD VERIFICATION</b> 2a. Visual Examination/Qualification b. Liquid Penetrant Examination and Qualification c. Welder and weld number identified on weld or on documentation, i.e., (weld map) d. PT material batch numbers recorded on traveller and C of Cs are available  <b>NON-DESTRUCTIVE EXAMINATION</b>  <b>RADIOGRAPHIC/ULTRASONIC EXAMINATION</b> 3a. Personnel qualified to perform the examination b. Review RT and UT records	Traveller Nos. _____  1. Welder Nos. _____ Welders are qualified? Yes <u>  </u> No <u>  </u> 2a. Visual Examiner Nos. _____  Visual Examiners are qualified? Yes <u>  </u> No <u>  </u> b. L. P. Examiner Nos. _____  L. P. Examiners are qualified? Yes <u>  </u> No <u>  </u> c. Are welder and weld numbers identified? Yes <u>  </u> No <u>  </u> d. Batch Nos. _____ Penetrant _____ Developer _____ Remover _____ Are C of Cs available? Yes <u>  </u> No <u>  </u> 3a. RT/UT Examiner No.(s) _____  Examiner is qualified? Yes <u>  </u> No <u>  </u> b. RT/UT records in package are complete? Yes <u>  </u> No <u>  </u>

\*Details on the attached MATRIX of approved/certified welding and NDE Personnel Welding Materials.

[illegible]

DRAWING NO.	ITEM NO.	QUAN-TITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1154027F Rev. 3 Sheet 2	1		Dim. 127 $\frac{3}{4}$ + $\frac{3}{16}$ Zone E-7	1. Issuance of Material for next operation (release to shop)	1. Traveller Nos. _____
	4		Dim. 134 $\frac{5}{8}$ + $\frac{3}{32}$	2. Identification of latest approved drawings on Travellers	2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____
				IN PROCESS INSPECTIONS	3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____
				3. Dimensional Inspection	b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____
				a. Qualification of Inspectors	c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____
				b. Use of calibrated equipment	4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____
				c. Evidence of inspection and acceptance to required criteria	
<u>Internal Assembly</u>					
TVR NO.	Shell No.	Canister No.		4. Identification, Control, and Disposition of NCRs	5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____
				5. Implementation of SDDRs	
				6. Assembly Inspection	
				Notes:	
				o NCRs - See Att. No. 1 Item _____	
				o SDDRs - See Att. No. 2, Item _____	
				o Calibration - See Att. No. 1	

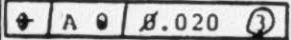
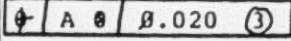


DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1154027F Rev. 3  Sht. 2	2		Weldment Zone D-9   Weld 1	<b>WELDING</b> 1. Verify welder qualification for WPS utilized	Traveller Nos. _____  1. Welder Nos. _____ Welders are qualified? Yes <u>  </u> No <u>  </u>
	3		Weldment Zone C-8   Weld 2	<b>COMPLETED WELD VERIFICATION</b> 2a. Visual Examination/Qualification b. Liquid Penetrant Examination and Qualification c. Welder and weld number identified on weld or on documentation, i.e., (weld map) d. PT material batch numbers recorded on traveller and C of Cs are available	*2a. Visual Examiner Nos. _____ Visual Examiners are qualified? Yes <u>  </u> No <u>  </u> b. L. P. Examiner Nos. _____ L. P. Examiners are qualified? Yes <u>  </u> No <u>  </u> c. Are welder and weld numbers identified? Yes <u>  </u> No <u>  </u> d. Batch Nos. _____ Penetrant _____ Developer _____ Remover _____ Are C of Cs available? Yes <u>  </u> No <u>  </u>
*Details on the attached MATRIX of approved/certified welding and NDE Personnel and Welding Materials.				<b>NON-DESTRUCTIVE EXAMINATION</b>  <b>RADIOGRAPHIC/ ULTRASONIC EXAMINATION</b> 3a. Personnel qualified to perform the examination b. Review RT and UT records	*3a. RT/UT Examiner No.(s) _____ Examiner is qualified? Yes <u>  </u> No <u>  </u> b. RT/UT records in package are complete? Yes <u>  </u> No <u>  </u>

DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1150937D Rev. 1	1		Thickness Dim. $\frac{1}{2}$ in.	1. Issuance of Material for next operation (release to shop) 2. Identification of latest approved drawings on Travellers <u>IN PROCESS INSPECTIONS</u> 3. Dimensional Inspection a. Qualification of Inspectors b. Use of calibrated equipment c. Evidence of inspection and acceptance to required criteria	1. Traveller Nos. _____ 2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____ 3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____ b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____ c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____ 4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____ _____ _____
Ring This Checklist also applies to canister:					
TVR No.	Shell No.	Canister No.		4. Identification, Control, and Disposition of NCRs	5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____ _____ _____
	"			5. Implementation of SDDRs	_____
				6. Assembly Inspection	_____
				Notes:	
				o NCRs - See Att. No. 1, Item _____	
				o SDDRs - See Att. No. 2, Item _____	
				o Calibration - See Att. No. 1	

[illegible]



DRAWING NO.	ITEM NO.	QUAN-TITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1150943E Rev. 3	1		Angle 30° Zone H-11	1. Issuance of Material for next operation (release to shop)	1. Traveller Nos. _____
	2		Dim. 4.000 Zone H-12	2. Identification of latest approved drawings on Travellers	2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____
	3		Dim. 4.000 Zone G-9	IN PROCESS INSPECTIONS	3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____
	4		Dim. - Zone H-7 2 3/16 Dia. thru 2" NPT x 1 1/4 DP.		b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____
	5		<div>  </div>		c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____
	6		Dim. Zone H-5 2 3/16 x 2 1/2 DP, 2" NPT x 1 1/4 DP	3. Dimensional Inspection	4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____
	7		<div>  </div>	a. Qualification of Inspectors	5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____
	8		Dim. Zone D-11 Dia. 14.083 14.093	b. Use of calibrated equipment	
	9		Dim. 3 7/8 + 1/32 Zone CID-13	c. Evidence of inspection and acceptance to required criteria	
			Dim. 3 3/8 Zone CID-13	4. Identification, Control, and Disposition of NCRs	
			Dia. 3 1/8 Zone E-6	5. Implementation of SDDRs	
				6. Assembly Inspection	
				Notes:	
				o NCRs - See Att. No. 1 Item _____	
				o SDDRs - See Att. No. 2, Item _____	
				o Calibration - See Att. No. 1	

Head

DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION	
1150943E Rev. 3	10		Dia. 2.125 Zone E-6	1. Issuance of Material for next operation (release to shop)	1. Traveller Nos. _____	
	11		Chamfer 1/4 x 45° Zone D-5	2. Identification of latest approved drawings on Travellers	2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____	
	12		Angle 8° Zone D-5		3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____	
	13		Dim. 13/16" Zone D-4	IN PROCESS INSPECTIONS	b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____	
	14		Dim. 2 3/8" Zone D-4	3. Dimensional Inspection	c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____	
	B		SDDR 2-M101A-36 (Dimensions)  (Dimensions relating to Items 4 & 5, above)	a. Qualification of Inspectors  b. Use of calibrated equipment  c. Evidence of inspection and acceptance to required criteria	4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____ _____ _____	
TVR No.	Head No.	CMIR No.	Shell No.	Canister No.	4. Identification, Control, and Disposition of NCRs	5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____ _____ _____
					5. Implementation of SDDRs	
					6. Assembly Inspection	
					Notes:	
					o NCRs - See Att. No. 1 Item _____	
					o SDDRs - See Att. No. 2, Item _____	
					o Calibration - See Att. No. 1	

DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1150946C Rev. 3	1		Dim. 131"	1. Issuance of Material for next operation (release to shop)	1. Traveller Nos. _____
	Note 10		Pellets shall be loaded within 1/4" of tube length	2. Identification of latest approved drawings on Travellers	2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____
				IN PROCESS INSPECTIONS	3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____
				3. Dimensional Inspection	b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____
				a. Qualification of Inspectors	c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____
				b. Use of calibrated equipment	4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____
				c. Evidence of inspection and acceptance to required criteria	
				4. Identification, Control, and Disposition of NCRs	5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____
				5. Implementation of SDDRs	
				6. Assembly Inspection	
				Notes:	
				o NCRs - See Att. No. 1, Item _____	
				o SDDRs - See Att. No. 2, Item _____	
				o Calibration - See Att. No. 1	

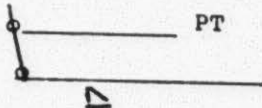
  

TVR No.	Oper. No.	Tube No.	Shell No.	Canister No.

Poison Tube Assembly  
Note 10\*

\*Add TVR Operation No. that has the addition of poison to 1/4" of tube length. Denote the verifier(s) with a "N" for NES and a "B" for Bechtel.



DRAWING NO.	ITEM NO.	QUANTITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1150946C Rev. 3	2		<p>Weld - Both Ends</p> 	<p><b>WELDING</b></p> <p>1. Verify welder qualification for WPS utilized</p> <p><b>COMPLETED WELD VERIFICATION</b></p> <p>2a. Visual Examination/Qualification</p> <p>b. Liquid Penetrant Examination and Qualification</p> <p>c. Welder and weld number identified on weld or on documentation, i.e., (weld map)</p> <p>d. PT material batch numbers recorded on traveller and C of Cs are available</p> <p><b>NON-DESTRUCTIVE EXAMINATION</b></p> <p><b>RADIOGRAPHIC/ULTRASONIC EXAMINATION</b></p> <p>3a. Personnel qualified to perform the examination</p> <p>b. Review RT and UT records</p>	<p>Traveller Nos. _____</p> <p>*1. Welder Nos. _____ Welders are qualified? Yes <u>  </u> No <u>  </u></p> <p>*2a. Visual Examiner Nos. _____ Visual Examiners are qualified? Yes <u>  </u> No <u>  </u></p> <p>b. L. P. Examiner Nos. _____ L. P. Examiners are qualified? Yes <u>  </u> No <u>  </u></p> <p>c. Are welder and weld numbers identified? Yes <u>  </u> No <u>  </u></p> <p>d. Batch Nos. _____ Penetrant Developer _____ Remover _____ Are C of Cs available? Yes <u>  </u> No <u>  </u></p> <p>*3a. RT/UT Examiner No.(s) _____ Examiner is qualified? Yes <u>  </u> No <u>  </u></p> <p>b. RT/UT records in package are complete? Yes <u>  </u> No <u>  </u></p>

\*Details on the attached MATRIX of approved/certified welding and NDE Personnel and welding Materials

DRAWING NO.	ITEM NO.	QUAN-TITY	DESCRIPTION	REQUIREMENT FOR VERIFICATION	VERIFICATION
1150950E Rev. 1	1		Dia. Zone E-4 13 13/32 <span style="border: 1px solid black; padding: 0 2px;">-A-</span>	1. Issuance of Material for next operation (release to shop)	1. Traveller Nos. _____
	2		Dim. 1 1/4" thick Zone B-6	2. Identification of latest approved drawings on Travellers	2. Have the travelers incorporated the design dwg. and SDDR data? Yes _____ No _____
				IN PROCESS INSPECTIONS	3a. Are the inspectors qualified? Yes _____ No _____ Inspectors on Master QA Issuance Log? Yes _____ No _____
				3. Dimensional Inspection	b. Are the tools/gauges calibrated? N/A _____ Yes _____ No _____
				a. Qualification of Inspectors	c. Do the travellers have evidence of inspection and acceptance to the required criteria? Yes _____ No _____
				b. Use of calibrated equipment	4. Are the applicable NCRs dispositioned? Yes _____ No _____ NCR Nos. _____
				c. Evidence of inspection and acceptance to required criteria	5. Are the SDDRs dispositioned? Yes _____ No _____ SDDR Nos. _____
<u>Bottom Support Plate</u>					
TVR No.	Shell No.	Canister No.		4. Identification, Control, and Disposition of NCRs	
				5. Implementation of SDDRs	
				6. Assembly Inspection	
				Notes:	
				o NCRs - See Att. No. 1 Item _____	
				o SDDRs - See Att. No. 2, Item _____	
				o Calibration - See Att. No. 1 Item _____	

[illegible]