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Department of Energy

Idaho Operations Office
West Valley Project Office
P.O. Box 191
West Valley, NY 14171

March 29, 1994

Mr. Gary C. Comfort
Headquarter
U. S. Nuclear Regulatory Commission
Washington, DC 20555

SUBJECT: Transmittal of Information for the Vitrification Facility NRC Readiness Notebook

Dear Mr. Comfort:

An aspect of the West Valley Demonstration Project (WVDP) Vitrification Operational Readiness activities is the development of the Vitrification Facility NRC Readiness Notebook (Notebook) for the Nuclear Regulatory Commission (NRC). The purpose of the Notebook is to ensure the NRC is provided with the necessary information to support their effort in assessing the operational readiness to commence radioactive vitrification operations at WVDP. The documentation provided as enclosures includes revised P&ID drawings, HLW Solidification Facility Description and Canister Welding System Description. Enclosure A provides instructions for incorporating the information into the Notebook. Enclosure B provides the revised schedule for anticipated release of information for the Notebook.

It is the goal of the West Valley Demonstration Project to ensure the NRC is provided with the necessary information in a timely manner to support their effort in assessing the operational readiness of radioactive vitrification operations at WVDP. If there are any questions regarding this matter, contact J. J. May at (716) 942-2161 or W. S. Ketola at (716) 942-4314.

Sincerely,

T. J. Rowland, Director
West Valley Project Office

- Enclosures: A- Instructions for Updating the Contents of the Vitrification Facility NRC Readiness Notebook Volume I (3 copies)
- B- Vitrification Facility NRC Readiness Notebook Schedule (3 copies)
- C- P&ID Drawing List with Drawings (3 copies)
- D- HLW Solidification Facility Description (3 copies)
- E- Canister Welding System Description (3 copies)

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Mr. Gary C. Comfort

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cc: J. Furia, NRC Region I, w/enc. (1 copy)
T. W. McIntosh, EM-343, TREV II, w/enc. (1 copy)
W. S. Ketola, WVPO, w/o enc.
F. W. Damerow, WVNS, MS 51, w/o enc.

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Instructions for Updating the Contents of the
Vitrification Facility NRC Readiness Notebook Volume I

Attached you will find one drawing list, one drawing package, and two system descriptions. Please follow the instructions detailed below to update the Vitrification Facility NRC Readiness Notebook. Note that the vertical lines appearing to the left of the drawing number on the drawing list indicate the drawings to add or replace in your NRC Readiness Notebook.

In Section 1.2: P&IDs, of your NRC Notebook, replace the list of P&ID drawings, dated 1/25/94, with the attached list of drawings titled, Section 1.2: P&IDs, dated 2/24/94.

The drawings in your #1 package will go into this section behind the drawing list. Drawing numbers, names, and number of sheets per drawing are identified in the title block which appears on the bottom right corner of each drawing. Carefully match the drawing numbers (paying particular attention to the number of sheets per drawing) to the drawings in your NRC Notebook and replace each drawing with its updated version. Some drawings in this package are in addition to those issued in your original notebook and should be added in the sequence indicated on the drawing list.

After you have completed adding and replacing drawings, you may wish to compare the drawing list included in the front of Section 1.2: P&IDs to the actual order of drawings in your NRC Notebook.

In Volume II of your notebook series, add the High-Level Waste Solidification Facilities Description, WVNS-FD-001, behind the Section 1.4.1 tab.

In Volume III of your notebook series, add the Canister Welding System Description, WVNS-SD-63L, behind the Section 1.4.8 tab.

The Table of Contents in the front of each volume may be used to verify the correct sequence of documents.

Vitrification Facility NRC Readiness Notebook

SECTION	TITLE	DATE ANTICIPATED	PREVIOUS TRANSMITTALS
1.0	Design Information		
1.1	Process Flow Diagrams		
	Cold Chemical System	07/16/93	7/16/93
	Vitrification	06/30/94	
1.2	Process & Instrumentation Diagrams	07/16/93	2/25/94
1.3	General Arrangement Drawings		
1.3.1	Vitrification Facility	07/16/93	1/5/94
1.3.2	Tank Farm	07/16/93	1/5/94
1.3.3	High Level Waste Interim Storage (CPC & EDR)	07/16/93	7/16/93
1.3.4	Ex-Cell Off-Gas Areas of the 01-14 Building	07/16/93	7/16/93
1.4	System Descriptions		
1.4.1	High-Level Waste Vitrification Facilities Description	01/16/94	2/25/94
1.4.2	55 - Sludge Mobilization and Transfer	TBD	
1.4.3	63G - Waste Header	07/16/93	7/16/93
1.4.4	63H - In-Cell Off-Gas and Vessel Vent	07/16/93	7/16/93
1.4.5	63I - Vitrification Main Process	11/01/93	
1.4.6	63J - Canister Decontamination	01/16/94	8/30/93
1.4.7	63K - In-Cell Remote Handling, Maintenance and Viewing	TBD	
1.4.8	63L - Canister Weiding	06/15/94	2/25/94
1.4.9	63M - Vitrification Load In & Load Out	TBD	
1.4.10	63P - Vitrification Process Chemistry	TBD	
1.4.11	63CW - Vitrification Cooling Tower Water	02/28/94	
1.4.12	63DV - Vitrification Drain, Waste, Vent (Sanitary)	TBD	
1.4.13	63DW - Vitrification Demineralized Water	11/01/93	11/30/93
1.4.14	63ED - Vitrification Electric Power Distribution	04/30/94	
1.4.15	63FO - Fuel Oil	09/30/94	
1.4.16	63FP - Fire Detection and Protection	11/01/93	
1.4.17	63IA - Vitrification Instrument Air	12/01/93	
1.4.18	63PW - Vitrification Potable Water	11/01/93	
1.4.19	63SC - Vitrification Steam and Condensate	01/31/94	
1.4.20	63UA - Vitrification Utility Air	12/01/93	
1.4.21	63UW - Vitrification Utility Water	11/01/93	8/30/93
1.4.22	63VH - Vitrification Vent Header	TBD	
1.4.23	63WW - Vitrification Drains	01/31/94	
1.4.24	64 - Vitrification Ex-Cell Off-Gas	01/31/94	
1.4.25	65 - Vitrification Cold Chemical	11/01/93	
1.4.26	66 - Vitrification Closed Loop Cooling Water	11/01/93	8/30/93
1.4.27	67 - Vitrification HVAC	TBD	
1.4.28	68 - High-Level Waste Interim Storage	TBD	
1.4.29	69A - Vitrification Sampling	TBD	
1.4.30	69B - Vitrification Sample Transfer	01/16/94	
1.4.31	90 - Analytical and Environmental Laboratory	TBD	
1.4.32	200A - Instrumentation Hardware	TBD	
1.4.33	200B - Instrumentation Software	TBD	
2.0	Operational Readiness Review (ORR)		
2.1	ORR Plan	07/30/93	7/30/93
2.2	ORR Tree		
3.0	Readiness Logic		
3.1	Integrated Logic Diagram	07/30/93	7/30/93
4.0	Testing		
4.1	Test Program Plan (WVNS-TPL-63-001)	07/30/93	7/30/93
4.2	Overall Test Schedule	TBD	
4.3	Integrated Test Plan	TBD	
4.4	Performance Tests		
4.4.1	Specifications	Per Test Plan	
4.4.2	Reports	Per Test Plan	

Note: Shaded sections have been previously transmitted or are included with this transmission.

900-D-2318	Sht:001	Rev:009	Title: Waste Mobil. Pump P&ID 8D-1-M6
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900-D-2318	Sht:002	Rev:007	Title: Waste Mobil Pump P&ID 8D-1-M4
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900-D-2318	Sht:003	Rev:006	Title: Waste Mobil Pump P&ID 8D-1-M3
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900-D-2318	Sht:004	Rev:006	Title: Waste Mobil Pump P&ID 8D-1-M2
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900-D-2318	Sht:005	Rev:006	Title: Waste Mobil Pump P&ID 8D-1-M1
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900-D-2318	Sht:006	Rev:006	Title: Waste Mobil Pump P&ID 8D-2-M
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900-D-2318	Sht:007	Rev:006	Title: Waste Mobil Pump P&ID 8D-2-M5
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900-D-2318	Sht:008	Rev:007	Title: Waste Mobil Pump P&ID 8D-2-M3
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900-D-2318	Sht:009	Rev:006	Title: Waste Mobil Pump P&ID 8D-2-M2
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900-D-2318	Sht:010	Rev:008	Title: Waste Mobil Pump P&ID 8D-2-M1
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900-D-2731	Sht:001	Rev:002	Title: VF STACK SAMPLING SYSTEM P AND ID
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900-D-2803	Sht:001	Rev:000	Title: Cold Chemical building H&V air flow diagram and P&ID
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900-D-4672	Sht:001	Rev:000	Title: INTERIM CHEM. & SLUDGE WASH WATER ADD. SYS P&ID
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900-D-4625	Sht:001	Rev:003	Title: WTP INTERIM CHEM & SLUDGE WASH WATER ADDITION SYS P&ID
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900-E-705	Sht:01A	Rev:006	Title: CTS ABB & LEGEND PROCESS & INSTRUM DIA
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900-E-705	Sht:01B	Rev:000	Title: JET CONTROL
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900-E-705	Sht:01C	Rev:000	Title: JET CONTROL
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900-E-705	Sht:01D	Rev:000	Title: MFHT BUBBLER CONTROL
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900-E-705	Sht:01E	Rev:000	Title: CFMT BUBBLER CONTROL
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900-E-705	Sht:01F	Rev:000	Title: INDEX VIT & 01/14
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900-E-705	Sht:002	Rev:018	Title: CTS concentrator feed makup tk. 63 v001 P&ID
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900-E-705	Sht:003	Rev:016	Title: CTS melter feed hold tk 63 v011 P&ID
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900-E-705	Sht:004	Rev:014	Title: CTS waste header V-045 vit. cell P&ID
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900-E-705	Sht:005	Rev:009	Title: CTS - ADS sample pump & P&ID
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900-E-705	Sht:006	Rev:010	Title: CTS fht ads pump 63g011 P&ID
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900-E-705	Sht:007	Rev:011	Title: CTS INTERNAL MELTER THERMOCOUPLES
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900-E-705	Sht:008	Rev:013	Title: CTS MELTER COOLING SYSTEM
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900-E-705	Sht:009	Rev:018	Title: CTS MELTER PNEUMATIC INSTRUMENTATION
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900-E-705	Sht:010	Rev:013	Title: CTS MELTER AND HEATER POWER SUPPLY AND CONTROLS
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900-E-705	Sht:011	Rev:013	Title: SAMPLER FOR V001 & V011 PROCESS & INSTR. DIA.
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900-E-705	Sht:012	Rev:014	Title: CTS TURNTABLE
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900-E-705	Sht:014	Rev:016	Title: CTS PRIMARY SCRUBBER SCRUB SECTION
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900-E-705	Sht:015	Rev:014	Title: CTS PRIMARY SCRUBBER RECEIVER TANK
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900-E-705	Sht:016	Rev:004	Title: CTS GLASS LEVEL DETECTOR SYSTEM
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900-E-705	Sht:019	Rev:013	Title: CTS VESSEL VENT SYSTEM
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900-E-705	Sht:021	Rev:012	Title: CTS melt off gas sys preheater * hemes P&ID
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900-E-705	Sht:022	Rev:017	Title: CTS vessel off gas filters & heaters P&ID
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900-E-705	Sht:023	Rev:011	Title: canister decontamination Tank 63-V-044 P&ID
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900-E-705	Sht:024	Rev:007	Title: CTS-MAINTENANCE & CAPPING STATION P&ID
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900-E-705	Sht:025	Rev:004	Title: Ex-Cell Vent Header P&ID
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903-D-013	Sht:001	Rev:006	Title: P&ID STS UTILITY WATER SYSTEM
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903-D-014	Sht:001	Rev:016	Title: P&ID STS UTILITY & INSTRUMENT AIR
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903-D-014	Sht:002	Rev:011	Title: STS P&ID (V&S Bldg) UTILITY & INST. AIR
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903-D-016	Sht:001	Rev:015	Title: STS P&ID FILTRATION & COOLING SECTION
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903-D-017	Sht:001	Rev:011	Title: STS P&ID ION EXCHANGE SECTION SHEET 1
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903-D-018	Sht:001	Rev:011	Title: STS P&ID ION EXCHANGE SECTION SHEET 2
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903-D-019	Sht:001	Rev:013	Title: STS P&ID FINAL FILTRATION & STORAGE
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903-D-020	Sht:001	Rev:011	Title: STS P&ID ZEOLITE FILL & SLUICE SECTION
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903-D-021	Sht:001	Rev:009	Title: STS P&ID VENTING/CHILLER SECTION
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904-D-011	Sht:001	Rev:008	Title: P&ID sludge mobilization sys. 8Q-4Pit
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904-D-012	Sht:001	Rev:008	Title: P&ID Sludge mobilization system 8Q-1 pit
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904-D-013	Sht:001	Rev:009	Title: P&ID Sludge Mobilization system 8Q-2 pit
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904-D-014	Sht:001	Rev:008	Title: P&ID sludge mobilization system 8Q-5 pit
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904-D-015	Sht:001	Rev:008	Title: P&ID sludge mobilization sys utility water/chemical system and seal water systems
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904-D-016	Sht:001	Rev:004	Title: P&ID sludge mobilization system utility air system
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905-D-010	Sht:001	Rev:001	Title: VF SHIELDING GAS & ARGON GAS SYSTEM P&ID
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905-D-011	Sht:001	Rev:010	Title: P&ID Vitrification Drainage system high level
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905-D-015	Sht:001	Rev:014	Title: P&ID COLD CHEMICAL PREPARATION & FEED SYSTEM
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905-D-016	Sht:001	R J14	Title: P&ID COLD CHEMICAL PREPARATION & FEED SYSTEM
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905-D-017	Sht:001	Rev:016	Title: P&ID COLD CHEMICAL PREPARATION & FEED SYSTEM
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905-D-018	Sht:001	Rev:010	Title: P&ID COLD CHEMICAL PREPARATION & FEED SYSTEM
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905-D-019	Sht:001	Rev:008	Title: P&ID COLD CHEMICAL STEAM & CONDENSATE SYSTEM
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905-D-020	Sht:001	Rev:010	Title: P&ID COLD CHEMICAL UTILITY & INSTRUMENT AIR
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905-D-021	Sht:001	Rev:010	Title: P&ID COLD CHEMICAL WATER SYSTEMS
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905-D-022	Sht:001	Rev:006	Title: P&ID COLD CHEMICAL ACID & CAUSTIC SYSTEMS
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905-D-023	Sht:001	Rev:013	Title: P&ID diesel fuel oil transfer system
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905-D-024	Sht:001	Rev:005	Title: P&ID COLD CHEMICAL FIRE PROTECTION
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905-D-025	Sht:001	Rev:004	Title: P&ID secondary filter, diesel gen & crane maintenance room
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905-D-026	Sht:001	Rev:003	Title: P&ID Vitrification facility utility water system
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905-D-027	Sht:001	Rev:004	Title: P&ID vitrification facility non rack cold chemical decon system
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905-D-028	Sht:001	Rev:004	Title: P&ID vitrification facility steam system
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905-D-029	Sht:001	Rev:013	Title: P&ID vitrification facility instrument & utility air sys
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905-D-044	Sht:001	Rev:002	Title: VF SFR & CMR HIGH PRESSURE AIR SYSTEM P&ID
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905-D-045	Sht:001	Rev:004	Title: P&ID Vitrification facility instrument rack 3W2-1A
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905-D-045	Sht:002	Rev:005	Title: P&ID Vitrification facility instrument rack 3E8-7A
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905-D-045	Sht:003	Rev:005	Title: P&ID Vitrification facility instrument rack 2N7-6
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905-D-045	Sht:004	Rev:004	Title: P&ID Vitrification facility instrument rack 2N6-5
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905-D-045	Sht:005	Rev:004	Title: P&ID Vitrification facility
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905-D-045	Sht:006	Rev:004	Title: P&ID Vitrification facility instrument rack 2E9-8
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905-D-045	Sht:007	Rev:002	Title: P&ID Vitrification Facility instrument rack 2W3-2
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905-D-045	Sht:008	Rev:003	Title: P&ID Vitrification facility instrument rack 1E9-7B
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905-D-045	Sht:009	Rev:005	Title: P&ID Vitrification facility instrument rack 3W7
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905-D-045	Sht:010	Rev:006	Title: P&ID Vitrification facility instrument rack 2N8
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905-D-045	Sht:011	Rev:007	Title: P&ID Vitrification facility instrument rack 3W4
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905-D-045	Sht:012	Rev:006	Title: P&ID Vitrification facility instrument rack 3W5 sheet 1
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905-D-045	Sht:013	Rev:006	Title: P&ID Vitrification facility instrument rack 3W6
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905-D-045	Sht:014	Rev:003	Title: P&ID Vitrification facility instrument rack 3W3
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905-D-045	Sht:015	Rev:002	Title: P&ID Vitrification facility instrument rack 3W1
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905-D-045	Sht:016	Rev:005	Title: P&ID Vitrification facility instrument rack 2W4
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905-D-045	Sht:017	Rev:003	Title: P&ID Vitrification facility instrument rack 2W5
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905-D-045	Sht:018	Rev:004	Title: P&ID Vitrification facility instrument rack 3E10
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905-D-045	Sht:019	Rev:001	Title: P&ID Vitrification facility instrument rack 2E10
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905-D-045	Sht:020	Rev:004	Title: P&ID Vitrification facility instrument rack 3W5 Sheet 2
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905-D-046	Sht:001	Rev:021	Title: P&ID vitrification facility utility air system
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905-D-046	Sht:002	Rev:010	Title: P&ID vitrification facility instrument air system
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905-D-046	Sht:003	Rev:011	Title: P&ID vitrification facility instrument air system
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905-D-046	Sht:004	Rev:001	Title: VF P&ID UTILITY AIR SYSTEM
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905-D-047	Sht:001	Rev:012	Title: P&ID vitrification facility steam system
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905-D-047	Sht:002	Rev:013	Title: P&ID vitrification facility condensate system
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905-D-047	Sht:003	Rev:011	Title: P&ID vitrification facility steam system
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905-D-048	Sht:001	Rev:008	Title: P&ID vitrification facility utility water system
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905-D-048	Sht:002	Rev:011	Title: P&ID vitrification facility demineralized water system
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