



- NOTES:
- FOR ADDITIONAL NOTES, SEE SH 1 SHEETS 2 & 6 ARE FLOW FOR UNIT 1 AND FOR UNIT 2 WITH THE EXCEPTIONS NOTED.
 - PIPING ON SHEETS 2 THRU 6 IS TVA CLASS B, C, D, G, OR L.
 - CLASS CHANGES ARE SHOWN IN THE TYPICAL MANNER.
 - PIPING SHOWN IN THIS MANNER IS ELECTRICALLY HEAT TRACED.
 - ALL TVA PIPING SHOWN ON SHEETS 2 THRU 6 IS DESIGNED FOR 150 PSIG AND 200°F ON 2" DIAMETER AND SMALLER, AND FOR 210 PSIG AND 300°F ON 3" DIAMETER AND LARGER, EXCEPT AS SHOWN BY □. SEE LINE NO. TABLE ON SHEET 1. DESIGN OF SKID MOUNTED PIPING FOR THE GAS STRIPPER BORIC ACID EVAPORATOR PACKAGE IS BY THE VENDOR.
 - DESIGN PRESSURE AND TEMPERATURE FOR INDIVIDUAL TANKS AND COMPONENTS IS GIVEN IN THE VICINITY OF THE ITEM.
 - THE OPERATING TEMPERATURE FOR ALL HEAT TRACED PIPING AND EQUIPMENT IS 165°F.
 - VALVES SHOWN IN THIS MANNER ARE PROVIDED WITH EXTENSION STEM VALVE OPERATORS.
 - ARROW BLOCKS INDICATE LOCATION OF INTERFACES ON THIS SERIES OF DRAWINGS AND ON OTHER RELATED DRAWINGS.
 - DELETED.

- ALL CLASS "C" PIPING IS SEISMICALLY SUPPORTED AND NON QA UNLESS OTHERWISE NOTED. WHERE NOTED, CLASS "C" PIPING IS TO BE HYDROSTATICALLY TESTED WITHIN THE QA PROGRAM.
- ALL WELDING TO AND INSPECTION AND DOCUMENTATION OF THE VENT CONDENSER, DISTILLATE COOLER AND EVAP. CONDENSER SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS FOR TVA CLASS "C".
- WHERE THIS NOTE IS REFERENCED, ALL FIELD FABRICATION, ASSEMBLY, EXAMINATION AND TESTS FOR PIPING SYSTEMS PERFORMED AFTER ISSUANCE OF R-10 OF THIS FLOW DIAGRAM AND ALL WORK REQUIRED BY EGN 2815 SHALL BE WITHIN THE REQUIREMENTS OF GENERAL CONSTRUCTION SPECIFICATION NO. C-69.
- DOWNGRADE TO NON NUCLEAR SAFETY CLASS AT THIS POINT IS BASED ON AN EXISTING STATIC LEG IN THE PIPING CONFIGURATION. SEE EN DES CALCS BR5 DOWNGRADE (NEB40426-700) PRIOR TO ANY PIPING CONFIGURATION REVISION.
- L.O.-LOCKED OPEN. CONCURRENT CLOSURE OF 1-1SV-62-953 AND 2-1SV-62-953 IS NOT PERMITTED. CONCURRENT CLOSURE OF 1-1SV-62-957 AND 2-1SV-62-957 IS NOT PERMITTED. 0-1SV-62-1080 CLOSURE IS PERMITTED ONLY WHILE UNIT 2 IS UNDER CONSTRUCTION WITH UNIT 1 OPERATIONAL. AFTER UNIT 2 BECOMES OPERATIONAL 0-1SV-62-1080 IS TO REMAIN LOCKED OPEN UNLESS PRIOR APPROVAL IS OBTAINED FROM NUCLEAR ENGINEERING.
- VALVES REFERENCING THIS NOTE WILL HAVE THE VALVE "DIAPHRAGM SUPPORT SHEET" REMOVED. THESE VALVES ARE LIMITED TO A MAXIMUM OPERATING PRESSURE AND TEMPERATURE OF 225 PSIG AND 200°F OR LESS FOR 3" AND 4" VALVES AND 150 PSIG AND 200°F OR LESS FOR 2" AND BELOW. VALVES 3" AND ABOVE ARE QUALIFIED FOR DESIGN PRESSURE AND TEMPERATURE ON LIMITED TIME BASIS (48 HOURS PER RIMS B26 88 0105 957). NO OPERATING CONDITIONS EXCEED THESE PARAMETERS PER OPERATING MODE CALCULATION (B26 85 0724 014) PROBLEM N3-62-5A.
- ALL PIPING DOWNSTREAM OF THE LAST ISOLATION VALVE ON LOCAL DRAINS, VENTS AND TEST CONNECTIONS IS TVA CLASS C UNLESS OTHERWISE NOTED. THIS NOTE APPLIES TO SHEETS 2 THROUGH 6 ONLY.
- ⑩ INTERFACE POINT DESIGNATION APPLIES ONLY TO UNIT 2 VALVES 2-62-927 AND 2-FCV-62-138.
- ⑪ & ⑫ DENOTE UNIT 1 & UNIT 2 INTERFACE POINTS. THE STRUCTURAL BOUNDARY IS THE FIRST ANCHORED EQUIPMENT OR PIPE ANCHOR ON THE UNIT 2 SIDE OF THE INTERFACE POINT, BECAUSE OF TEES, SOME INTERFACE POINTS WILL HAVE MORE THAN ONE STRUCTURAL TERMINATION.
- UNIT 1/UNIT 2 INTERFACE POINTS ARE INDICATED BY ⑬ = SAFETY RELATED AND ⑭ = NON-SAFETY RELATED. WHEN MANUAL VALVES ARE USED, NON-SAFETY RELATED INDICATES THE HANDWHEELS ARE REMOVED AND SAFETY RELATED INDICATES THE VALVE IS LOCKED CLOSED. WHEN A MOTOR OPERATED VALVE IS USED, THE VALVE IS CLOSED, ELECTRICAL MOTIVE POWER IS DISCONNECTED AND THE MANUAL OPERATOR IS DISABLED. WHEN AN AIR OPERATED VALVE IS USED, THE VALVE IS CLOSED, THE AIR SUPPLY IS ISOLATED BY CLOSING THE AIR SYSTEM ROOT VALVE, SOLENOIDS MAY BE DEENERGIZED AND HAND OPERATING MECHANISM (IF ANY) IS DISABLED. WHEN AN EXISTING FLANGE PAIR IS AVAILABLE, THE INTERFACE POINT CAN BE IMPLEMENTED BY BOLTING IN A BLANK PLATE, AS WAS DONE AT THE EDUCATORS.
- SOME CIDS ON THIS DRAWING HAVE BEEN CHANGED AND MAY DIFFER FROM THE CIDS SHOWN ON OTHER DOCUMENTS FOR THE SAME COMPONENT. THE ALTERNATE ID SCREEN (A11) IN EMS CAN BE ACCESSED AS NECESSARY TO DETERMINE IF PREVIOUS CIDS EXISTED FOR A SPECIFIC COMPONENT.
- VALVE 2-62-392A IS LOCKED CLOSED BY APPLICATION OF CHAINS, CABLES, SEAL WIRES OR PADLOCKS ON THE HAND OPERATOR TO ENSURE THE VALVE REMAINS IN THE CLOSED POSITION.

THIS CONFIGURATION CONTROL DRAWING SUPERSEDES UNIT 1 AS-CONSTRUCTED DRAWING 47809-2 REVISION 1.

22	ADMIN	GJB	JEW	JWR	12-19-08
REVISED TO CORRECT DISCREPANCIES IDENTIFIED BY DD PER 132209 (171 081218 802).					
REV	CHANGE REF	PREPARER	CHECKER	APPROVED	DATE
SCALE: NTS EXCEPT AS NOTED					
PROJECT FACILITY AUXILIARY BUILDING UNIT 1 & 2					
TITLE FLOW DIAGRAM CHEMICAL AND VOLUME CONTROL SYSTEM (BORON RECOVERY)					
1	WATTS BAR NUCLEAR PLANT TENNESSEE VALLEY AUTHORITY				Q
DESIGNER		INITIAL ISSUE		ENGINEERING APPROVAL	
J.A. TALLEY		RO ISSUE PER		1 J.R. WETH	
DESIGNER		REVIEWER		2 J.R. WETH	
M.L. CHAPMAN		M.D. DAVIS		3 L.W. BOYD	
DATE		85 M		1-47W809-2	
7-23-90				R22	

COMPANION DRAWINGS:
1-47W809-1 THRU 6 & 6A
FSR FIG.
9.3-15 SH 2

ISSUED BY:
R.M. JOHNSON FOR WSR