

ATTACHMENT 1
ASME SECTION XI
PUMP AND VALVE PROGRAM

CHANGES TO CALLAWAY NUCLEAR PLANT
INSERVICE TESTING PROGRAM

ITEM 1: CHANGE: Add Relief Request #P08

BASIS FOR CHANGE: As described in Relief Request #P08

ITEM 2: CHANGE: Add Relief Request #V04

BASIS FOR CHANGE: As described in Relief Request #V04

ITEM 3: CHANGE: Add Relief Request #KA 2 and delete Relief Request #V01

BASIS FOR CHANGE: Relief Request #KA 2 replaces Relief Request #V01 for valve KA-V-204. Relief Request #V01 is no longer necessary since other relief requests (#BB7, #BG1, #BL1, and #EG1) cover valves BB-V-118, -148, -178, -208, BG-8381, BL 8046, and EG-V-204. The other valves listed in Relief Request #V01 do not require relief.

ITEM 4: CHANGE: Add Relief Request #V05

BASIS FOR CHANGE: As described in Relief Request #V05

ITEM 5: CHANGE: Revise Maximum Allowable Stroke Times for AL-HV-32, AL-HV-33, AL-HV-34, AL-HV-35, AL-HV-36, BB-HV-8000A, BB-HV-8000B, BG-HV-8357B, BN-HV-8806A, BN-HV-8806B, EF-HV-31, EF-HV-32, EF-HV-33, EF-HV-34, EF-HV-43, EF-HV-45, EF-HV-46, EF-HV-51, EF-HV-59, EF-HV-60, EG-HV-69A, EG-HV-69B, EG-HV-70A, EG-HV-70B, EJ-HV-8716A, EJ-HV-8716B, EJ-FCV-610, EJ-HV-8804A, EJ-HV-8804B, EM-HV-8801A, EM-HV-8801B, EM-HV-8803A, EM-HV-8803B, EM-HV-8821A, EM-HV-8821B, EN-HV-15, EN-HV-16, AL-HV-30, AL-HV-31, EJ-HV-8809A, EJ-HV-8809B, EJ-HV-8840

BASIS FOR CHANGE: Due to new or revised design documents for the valves.

ITEM 6: CHANGE: Remove revision bars from revision 3 pages.

ATTACHMENT 2

INSERVICE TESTING PROGRAM

CALLAWAY NUCLEAR PLANT

REVISION 4

MAY 24, 1985

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INSERVICE TESTING PROGRAM
ISI CLASS 1, 2 & 3 PUMPS
CALLAWAY NUCLEAR PLANT

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PUMP NUMBER	PUMP NAME	ISI CLASS	P&ID and Coordinates	TEST PARAMETERS					NOTES
				SPEED	INLET PRES.	DIFF. PRES.	FLOW RATE	VIBRA- TION	
PAL01 A	Motor Driven Auxiliary Feedwater Pump A	3	M-02AL01 E-4	N/A	YES	YES	YES	YES	Note 1 RR# P07 RR# P04, P08,P05
PAL01 B	Motor Driven Auxiliary Feedwater Pump B	3	M-02AL01 G-4	N/A	YES	YES	YES	YES	RR# P07 Note 1 RR# P05, P08,P04
PAL02	Turbine Driven Auxiliary Feedwater Pump	3	M-02AL01 B-4 & M-02FC02	YES	YES	YES	YES	YES	Note 1 RR# P07 RR# P04, P08,P05
PBG05 A	Centrifugal Charging Pump	2	M-02BG03 C-5	N/A	YES	YES	NO	YES	Note 1 RR# P06, P07, P03, P08,P04
PBG05 B	Centrifugal Charging Pump	2	M-02BG03 B-5	N/A	YES	YES	NO	YES	Note 1 RR# P06, P07, P03, P08,P04
PEF01 A	Essential Service Water Pump	3	M-U2EF01 G-6	N/A	YES	YES	YES	YES	Note 1 Note 2 RR# P07, P08,P04
PEF01 B	Essential Service Water Pump	3	M-U2EF01 C-6	N/A	YES	YES	YES	YES	Note 1 Note 2 RR# P07, P08,P04
PEG01 A	Component Cooling Water Pump	3	M-02EG01 G-4	N/A	YES	YES	YES	YES	Note 1 RR# P08 RR# P04 RR# P07
PEG01 B	Component Cooling Water Pump	3	M-02EG01 D-4	N/A	YES	YES	YES	YES	Note 1 RR# P08 RR# P04 RR# P07
PEG01 C	Component Cooling Water Pump	3	M-02EG01 E-4	N/A	YES	YES	YES	YES	Note 1 RR# P08 RR# P04 RR# P07
PEG01 D	Component Cooling Water Pump	3	M-02EG01 B-4	N/A	YES	YES	YES	YES	Note 1 RR# P08 RR# P04 RR# P07

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INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
AE	FCV0510	M-02AE01	E-7	-	B	14"	AG	AO	O	C	NA				12
AE	FCV0520	M-02AE01	C-7	-	B	14"	AG	AO	O	C	NA				12
AE	FCV0530	M-02AE01	B-7	-	B	14"	AG	AO	O	C	NA				12
AE	FCV0540	M-02AE01	G-7	-	B	14"	AG	AO	O	C	NA				12
AE	FCV0550	M-02AE01	E-7	-	B	4"	GL	AO	C	C	NA				12
AE	FCV0560	M-02AE01	C-7	-	B	4"	GL	AO	C	C	NA				12
AE	FCV0570	M-02AE01	A-7	-	B	4"	GL	AO	C	C	NA				12
AE	FCV0580	M-02AE01	G-7	-	B	4"	GL	AO	C	C	NA				12

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
	AL HV 0005	M-02AL01	H-6	2	B	4"	GL	MO	O	C	NA				
	AL HV 0006	M-02AL01	G-6	2	B	4"	GL	AO	O	O	NA			3	
	AL HV 0007	M-02AL01	F-6	2	B	4"	GL	MO	O	C	NA				
	AL HV 0008	M-02AL01	E-6	2	B	4"	GL	AO	O	O	NA			3	
	AL HV 0009	M-02AL01	D-6	2	B	4"	GL	MO	O	C	NA				
	AL HV 0010	M-02AL01	D-6	2	B	4"	GL	AO	O	O	NA			3	
	AL HV 0011	M-02AL01	C-6	2	B	4"	GL	MO	O	O	NA				
	AL HV 0012	M-02AL01	B-6	2	B	4"	GL	AO	O	O	NA			3	
I	AL HV 0030	M-02AL01	F-3	3	B	6"	BT	MO	C	O	BT	OP	20	6	
	AL HV 0030	M-02AL01	F-3	3	B	6"	BT	MO	C	O	PIT	RR			
I	AL HV 0031	M-02AL01	E-3	3	B	6"	BT	MO	C	O	BT	OP	20	6	
	AL HV 0031	M-02AL01	E-3	3	B	6"	BT	MO	C	O	PIT	RR			
I	AL HV 0032	M-02AL01	C-3	3	B	8"	BT	MO	C	O	BT	OP	22	6	
	AL HV 0032	M-02AL01	C-3	3	B	8"	BT	MO	C	O	PIT	RR			
I	AL HV 0033	M-02AL01	B-3	3	B	8"	BT	MO	C	O	BT	OP	22	6	
	AL HV 0033	M-02AL01	B-3	3	B	8"	BT	MO	C	O	PIT	RR			
I	AL HV 0034	M-02AL01	H-3	3	B	8"	GA	MO	O	C	BT	OP	40	6	
	AL HV 0034	M-02AL01	H-3	3	B	8"	GA	MO	O	C	PIT	RR			
I	AL HV 0035	M-02AL01	D-3	3	B	8"	GA	MO	O	C	BT	OP	40	6	
	AL HV 0035	M-02AL01	D-3	3	B	8	GA	MO	O	C	PIT	RR			
I	AL HV 0036	M-02AL01	B-3	3	B	10"	GA	MO	O	C	BT	OP	40	6	
	AL HV 0036	M-02AL01	B-3	3	B	10"	GA	MO	O	C	PIT	RR			
	AL V 0001	M-02AL01	B-4	3	C	10"	CK	SA	C	O	CVP	OP			
	AL V 0001	M-02AL01	B-4	3	C	10"	CK	SA	C	O	CVT	CS		AL-1	
	AL V 0002	M-02AL01	D-4	3	C	8"	CK	SA	C	O	CVP	OP			
	AL V 0002	M-02AL01	D-4	3	C	8"	CK	SA	C	O	CVT	CS		AL-1	
	AL V 0003	M-02AL01	H-4	3	C	8"	CK	SA	C	O	CVP	OP			
	AL V 0003	M-02AL01	H-4	3	C	8"	CK	SA	C	O	CVT	CS		AL-1	
	AL V 0006	M-02AL01	F-4	3	C	6"	CK	SA	C	O	CVT	RR		AL-2 4,5	
	AL V 0009	M-02AL01	E-4	3	C	6"	CK	SA	C	O	CVT	RR		AL-2 4,5	
	AL V 0012	M-02AL01	C-4	3	C	8"	CK	SA	C	O	CVT	RR		AL-2 4	
	AL V 0015	M-02AL01	B-4	3	C	8"	CK	SA	C	O	CVT	RR		AL-2 4	
	AL V 0029	M-02AL01	G-5	3	C	2"	CK	SA	C	O	CVT	OP			
	AL V 0030	M-02AL01	H-5	3	C	6"	CK	SA	C	O	CVT	CS		AL-1 5	
	AL V 0033	M-02AL01	F-7	2	C	4"	CK	SA	C	O	CVT	CS		AL-1 5	
	AL V 0036	M-02AL01	H-7	2	C	4"	CK	SA	C	O	CVT	CS		AL-1 5	
	AL V 0041	M-02AL01	F-5	3	C	2"	CK	SA	C	O	CVT	OP			
	AL V 0042	M-02AL01	D-5	3	C	6"	CK	SA	C	O	CVT	CS		AL-1 5	
	AL V 0045	M-02AL01	C-7	2	C	4"	CK	SA	C	O	CVT	CS		AL-1 5	
	AL V 0048	M-02AL01	D-7	2	C	4"	CK	SA	C	O	CVT	CS		AL-1 5	
	AL V 0053	M-02AL01	B-5	3	C	3"	CK	SA	C	O	CVT	OP			
	AL V 0054	M-02AL01	B-5	3	C	8"	CK	SA	C	O	CVT	CS		AL-1 5	
	AL V 0057	M-02AL01	E-7	2	C	4"	CK	SA	C	O	CVT	CS		AL-1 5	
	AL V 0062	M-02AL01	G-7	2	C	4"	CK	SA	C	O	CVT	CS		AL-1 5	
	AL V 0067	M-02AL01	D-7	2	C	4"	CK	SA	C	O	CVT	CS		AL-1 5	
	AL V 0072	M-02AL01	B-7	2	C	4"	CK	SA	C	O	CVT	CS		AL-1 5	

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
BB	8378A	M-02BB01	E-4	1	C	3"	CK	SA	O	O/C	NA				
BB	8378B	M-02BB01	E-4	1	C	3"	CK	SA	O	O/C	NA				
BB	8379A	M-02BB01	E-7	1	C	3"	CK	SA	O	O/C	NA				
BB	8379B	M-02BB01	E-7	1	C	3"	CK	SA	O	O/C	NA				
	BB	8948A	M-02BB01	E-4	1	A,C	10"	CK	SA	C	O	AT	CS	V05	7
	BB	8948A	M-02BB01	E-4	1	A,C	10"	CK	SA	C	O	CVT	CS	BB-1	5
	BB	8948B	M-02BB01	D-4	1	A,C	10"	CK	SA	C	O	AT	CS	V05	7
	BB	8948B	M-02BB01	D-4	1	A,C	10"	CK	SA	C	O	CVT	CS	BB-1	5
	BB	8948C	M-02BB01	C-6	1	A,C	10"	CK	SA	C	O	AT	CS	V05	7
	BB	8948C	M-02BB01	C-6	1	A,C	10"	CK	SA	C	O	CVT	CS	BB-1	5
	BB	8948D	M-02BB01	E-6	1	A,C	10"	CK	SA	C	O	AT	CS	V05	7
	BB	8948D	M-02BB01	E-6	1	A,C	10"	CK	SA	C	O	CVT	CS	BB-1	5
	BB	8949A	M-02BB01	E-5	1	A,C	6"	CK	SA	C	O	AT	CS	V05	7
	BB	8949A	M-02BB01	E-5	1	A,C	6"	CK	SA	C	O	CVT	RR	BB-2	5
	BB	8949B	M-02BB01	C-5	1	A,C	6"	CK	SA	C	O	AT	CS	V05	7
	BB	8949B	M-02BB01	C-5	1	A,C	6"	CK	SA	C	O	CVT	RR	BB-3	5
	BB	8949C	M-02BB01	C-6	1	A,C	6"	CK	SA	C	O	AT	CS	V05	7
	BB	8949C	M-02BB01	C-6	1	A,C	6"	CK	SA	C	O	CVT	RR	BB-3	5
	BB	8949D	M-02BB01	G-6	1	A,C	6"	CK	SA	C	O	AT	CS	V05	7
	BB	8949D	M-02BB01	G-6	1	A,C	6"	CK	SA	C	O	CVT	RR	BB-2	5
	BB	PV 8702A	M-02BB01	E-4	1	A	12"	GA	MO	C	C	AT	CS	V05	7
	BB	PV 8702A	M-02BB01	E-4	1	A	12"	GA	MO	C	C	BT	CS	120	BB-6 5,6
	BB	PV 8702A	M-02BB01	E-4	1	A	12"	GA	MO	C	C	PIT	RR		
	BB	PV 8702B	M-02BB01	H-6	1	A	12"	GA	MO	C	C	AT	CS	V05	7
	BB	PV 8702B	M-02BB01	H-6	1	A	12"	GA	MO	C	C	BT	CS	120	BB-6 5,6
	BB	PV 8702B	M-02BB01	H-6	1	A	12"	GA	MO	C	C	PIT	RR		
	BB	V 0001	M-02BB01	D-5	1	A,C	1.5"	CK	SA	C	O	AT	CS	V05	7
	BB	V 0001	M-02BB01	D-5	1	A,C	1.5"	CK	SA	C	O	CVT	RR	BB-4	5
	BB	V 0022	M-02BB01	D-4	1	A,C	1.5"	CK	SA	C	O	AT	CS	V05	7
	BB	V 0022	M-02BB01	D-4	1	A,C	1.5"	CK	SA	C	O	CVT	RR	BB-4	5
	BB	V 0040	M-02BB01	D-6	1	A,C	1.5"	CK	SA	C	O	AT	CS	V05	7
	BB	V 0040	M-02BB01	D-6	1	A,C	1.5"	CK	SA	C	O	CVT	RR	BB-4	5
	BB	V 0059	M-02BB01	E-6	1	A,C	1.5"	CK	SA	C	O	AT	CS	V05	7
	BB	V 0059	M-02BB01	E-6	1	A,C	1.5"	CK	SA	C	O	CVT	RR	BB-4	5

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
	BB 8010A	M-02BB02	H-7	1	C	6"	RV	SA	C	O	RVT				2
	BB 8010B	M-02BB02	H-6	1	C	6"	RV	SA	C	O	RVT				2
	BB 8010C	M-02BB02	H-5	1	C	6"	RV	SA	C	O	RVT				2
	BB HV 8000A	M-02BB02	E-7	1	B	3"	GA	MO	O	O/C	BT	OP	15		6
	BB HV 8000A	M-02BB02	E-7	1	B	3"	GA	MO	O	O/C	PIT	RR			
	BB HV 8000B	M-02BB02	E-7	1	B	3"	GA	MO	O	O/C	BT	OP	15		6
	BB HV 8000B	M-02BB02	E-7	1	B	3"	GA	MO	O	O/C	PIT	RR			
	BB HV 8026	M-02BB02	E-3	2	A	1"	DI	AO	C	C	AT	RR		V04	10
	BB HV 8026	M-02BB02	E-3	2	A	1"	DI	AO	C	C	BT	OP	10		
	BB HV 8026	M-02BB02	E-3	2	A	1"	DI	AO	C	C	FST	OP			
	BB HV 8026	M-02BB02	E-3	2	A	1"	DI	AO	C	C	PIT	RR			
	BB HV 8027	M-02BB02	E-3	2	A	1"	DI	AO	C	C	AT	RR		V04	10
	BB HV 8027	M-02BB02	E-3	2	A	1"	DI	AO	C	C	BT	OP	10		
	BB HV 8027	M-02BB02	E-3	2	A	1"	DI	AO	C	C	FST	OP			
	BB HV 8027	M-02BB02	E-3	2	A	1"	DI	AO	C	C	PIT	RR			
	BB HV 8157A	M-02BB02	E-1	3	B	1"	GL	SO	C	C	NA				3
	BB HV 8157B	M-02BB02	E-1	3	B	1"	GL	SO	C	C	NA				3
	BB PCV0455A	M-02BB02	E-7	1	B	3"	GL	SO	C	O/C	BT	CS	2		5
	BB PCV0455A	M-02BB02	E-7	1	B	3"	GL	SO	C	O/C	PIT	NA		BB11	
	BB PCV0455B	M-02BB02	A-4	1	B	4"	BA	AO	O	N/A	NA				3
	BB PCV0455C	M-02BB02	B-4	1	B	4"	BA	AO	O	N/A	NA				3
	BB PCV0456A	M-02BB02	E-8	1	B	3"	GL	SO	C	O/C	BT	CS	2		5
	BB PCV0456A	M-02BB02	E-8	1	B	3"	GL	SO	C	O/C	PIT	NA		BB11	
	BB V 0084	M-02BB02	C-4	1	C	2"	CK	SA	C	C	NA				3

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
	BB HV 0013	M-02BB03	C-2	3	B	3"	GA	MO	O	C	BT	CS	30	BB-8	5,6
	BB HV 0013	M-02BB03	C-2	3	B"	3"	GA	MO	O	C	PIT	RR			
	BB HV 0014	M-02BB03	C-2	3	B	3"	GA	MO	O	C	BT	CS	30	BB-8	5,6
	BB HV 0014	M-02BB03	C-2	3	B	3"	GA	MO	O	C	PIT	RR			
	BB HV 0015	M-02BB03	C-2	3	B	3"	GA	MO	O	C	BT	CS	30	BB-8	5,6
	BB HV 0015	M-02BB03	C-2	3	B	3"	GA	MO	O	C	PIT	RR			
	BB HV 0016	M-02BB03	C-2	3	B	3"	GA	MO	O	C	BT	CS	30	BB-8	5,6
	BB HV 0016	M-02BB03	C-2	3	B	3"	GA	MO	O	C	PIT	RR			
	BB HV 8141A	M-02BB03	E-3	2	B	.75"	GL	AO	O	O	NA				3
	BB HV 8141B	M-02BB03	E-3	2	B	.75"	GL	AO	O	O	NA				3
	BB HV 8141C	M-02BB03	E-3	2	B	.75"	GL	AO	O	O	NA				3
	BB HV 8141D	M-02BB03	E-3	2	B	.75"	GL	AO	O	O	NA				3
I	BB HV 8351A	M-02BB03	C-5	2	A	2"	GL	MO	O	O/C	AT	RR		V04	10
	BB HV 8351A	M-02BB03	C-5	2	A	2"	GL	MO	O	O/C	BT	CS	10	BB-9	5
	BB HV 8351A	M-02BB03	C-5	2	A	2"	GL	MO	O	O/C	PIT	RR			
I	BB HV 8351B	M-02BB03	C-5	2	A	2"	GL	MO	O	O/C	AT	RR		V04	10
	BB HV 8351B	M-02BB03	C-5	2	A	2"	GL	MO	O	O/C	BT	CS	10	BB-9	5
	BB HV 8351B	M-02BB03	C-5	2	A	2"	GL	MO	O	O/C	PIT	RR			
I	BB HV 8351C	M-02BB03	C-5	2	A	2"	GL	MO	O	O/C	AT	RR		V04	10
	BB HV 8351C	M-02BB03	C-5	2	A	2"	GL	MO	O	O/C	BT	CS	10	BB-9	5
	BB HV 8351C	M-02BB03	C-5	2	A	2"	GL	MO	O	O/C	PIT	RR			
I	BB HV 8351D	M-02BB03	C-5	2	A	2"	GL	MO	O	O/C	AT	RR		V04	10
	BB HV 8351D	M-02BB03	C-5	2	A	2"	GL	MO	O	O/C	BT	CS	10	BB-9	5
	BB HV 8351D	M-02BB03	C-5	2	A	2"	GL	MO	O	O/C	PIT	RR			
I	BB V 0118	M-02BB03	C-5	2	A,C	2"	CK	SA	O	C	AT	RR		V04	10
I	BB V 0118	M-02BB03	C-5	2	A,C	2"	CK	SA	O	C	CVT	RR		BB-7	5
	BB V 0120	M-02BB03	C-4	1	C	2"	CK	SA	O	O	NA				
	BB V 0121	M-02BB03	C-4	1	C	2"	CK	SA	O	O	NA				
	BB V 0122	M-02BB03	C-4	3	C	3"	CK	SA	O	O	NA				3
	BB V 0124	M-02BB03	B-3	3	C	.75"	RV	SA	C	O	RVT				2
I	BB V 0148	M-02BB03	C-5	2	A,C	2"	CK	SA	O	C	AT	RR		V04	10
I	BB V 0148	M-02BB03	C-5	2	A,C	2"	CK	SA	O	C	CVT	RR		BB-7	5
	BB V 0150	M-02BB03	C-4	1	C	2"	CK	SA	O	O	NA				
	BB V 0151	M-02BB03	C-4	1	C	2"	CK	SA	O	O	NA				
	BB V 0152	M-02BB03	C-4	3	C	3"	CK	SA	O	O	NA				3
	BB V 0154	M-02BB03	B-3	3	C	.75"	RV	SA	C	O	RVT				2
I	BB V 0178	M-02BB03	C-5	2	A,C	2"	CK	SA	O	C	AT	RR		V04	10
I	BB V 0178	M-02BB03	C-5	2	A,C	2"	CK	SA	O	C	CVT	RR		BB-7	5
	BB V 0180	M-02BB03	C-4	1	C	2"	CK	SA	O	O	NA				
	BB V 0181	M-02BB03	C-4	1	C	2"	CK	SA	O	O	NA				
	BB V 0182	M-02BB03	C-4	3	C	3"	CK	SA	O	O	NA				3
	BB V 0184	M-02BB03	B-3	3	C	.75"	RV	SA	C	O	RVT				2
I	BB V 0208	M-02BB03	C-5	2	A,C	2"	CK	SA	O	C	AT	RR		V04	10
I	BB V 0208	M-02BB03	C-5	2	A,C	2"	CK	SA	O	C	CVT	RR		BB-7	5
	BB V 0210	M-02BB03	C-4	1	C	2"	CK	SA	O	C	NA				
	BB V 0211	M-02BB03	C-4	1	C	2"	CK	SA	O	C	NA				
	BB V 0212	M-02BB03	C-4	3	C	3"	CK	SA	O	O	NA				3
	BB V 0214	M-02BB03	B-3	3	C	.75"	RV	SA	C	O	RVT				2

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID--*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES--*
	BG 8117	M-02BG01	H-3	2	C	2"	RV	SA	C	O	RVT				2
	BG 8121	M-02BG01	D-3	2	C	2"	RV	SA	C	O	RVT				2
I	BG 8381	M-02BG01	F-4	2	A,C	3"	CK	SA	O	C	AT	RR		V04	10
I	BG 8381	M-02BG01	F-4	2	A,C	3"	CK	SA	O	C	CVT	RR		BG-1	5
	BG HCV0123	M-02BG01	E-5	2	B	1"	GL	AO	C	C	NA				3
I	BG HV 8100	M-02BG01	D-2	2	A	2"	GL	MO	O	C	AT	RR		V04	10
	BG HV 8100	M-02BG01	D-2	2	A	2"	GL	MO	O	C	BT	CS	10	BG-2	5,6
	BG HV 8100	M-02BG01	D-2	2	A	2"	GL	MO	O	C	PIT	RR			
I	BG HV 8112	M-02BG01	D-2	2	A	2"	GL	MO	O	C	AT	RR		V04	10
	BG HV 8112	M-02BG01	D-2	2	A	2"	GL	MO	O	C	BT	CS	10	BG-2	5,6
	BG HV 8112	M-02BG01	D-2	2	A	2"	GL	MO	O	C	PIT	RR			
	BG HV 8143	M-02BG01	E-3	2	B	1"	TW	AO	O	O	NA				3
	BG HV 8145	M-02BG01	G-7	1	B	2"	GL	AO	C	C	NA				3
	BG HV 8146	M-02BG01	F-7	2	B	3"	GL	AO	O	O	NA				3
	BG HV 8147	M-02BG01	F-7	2	B	3"	GL	AO	O	O	NA				3
I	BG HV 8152	M-02BG01	F-2	2	A	3"	GL	AO	O	C	AT	RR		V04	10
	BG HV 8152	M-02BG01	F-2	2	A	3"	GL	AO	O	C	BT	CS	10	BG-3	5
	BG HV 8152	M-02BG01	F-2	2	A	3"	GL	AO	O	C	FST	CS			5
	BG HV 8152	M-02BG01	F-2	2	A	3"	GL	AO	O	C	PIT	RR			
	BG HV 8153A	M-02BG01	D-7	1	B	1"	GL	SO	C	C	NA				3
	BG HV 8153B	M-02BG01	D-7	1	B	1"	GL	SO	C	C	NA				3
	BG HV 8154A	M-02BG01	D-8	1	B	1"	GL	SO	C	C	NA				3
	BG HV 8154B	M-02BG01	D-8	1	B	1"	GL	SO	C	C	NA				3
I	BG HV 8160	M-02BG01	F-3	2	A	3"	GL	AO	O	C	AT	RR		V04	10
	BG HV 8160	M-02BG01	F-3	2	A	3"	GL	AO	O	C	BT	CS	10	BG-3	5
	BG HV 8160	M-02BG01	F-3	2	A	3"	GL	AO	O	C	FST	CS			5
	BG HV 8160	M-02BG01	F-3	2	A	3"	GL	AO	O	C	PIT	RR			
	BG V 0019	M-02BG01	E-7	2	C	.75"	CK	SA	C	C	NA				12
I	BG V 0135	M-02BG01	D-3	2	A,C	.75"	CK	SA	C	C	AT	RR		V04	9,10
	BG V 0203	M-02BG01	E-7	3	C	.75"	RV	SA	C	O	RVT	RR			2

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
BG	8118	M-02BG03	E-4	2	C	1.5"	RV	SA	C	O	RVT				2
BG	8120	M-02BG03	G-8	2	C	3"	RV	SA	C	O	RVT				2
BG	8123	M-02BG03	H-3	2	C	2"	RV	SA	C	O	RVT				2
BG	8124	M-02BG03	B-7	2	C	.75"	RV	SA	C	O	RVT				2
BG	8440	M-02BG03	E-6	2	C	4"	CK	SA	O	O	NA				3
BG	8481A	M-02BG03	C-4	2	C	4"	CK	SA	C	O	CVT	RR		BG-4	5
BG	8481B	M-02BG03	B-4	2	C	4"	CK	SA	C	O	CVT	RR		BG-4	5
BG	8497	M-02BG03	E-4	2	C	3"	CK	SA	O	O	NA				3
BG	8546A	M-02BG03	C-7	2	C	8"	CK	SA	C	O	CVT	RR		BG-5	5
BG	8546B	M-02BG03	B-7	2	C	8"	CK	SA	C	O	CVT	RR		BG-5	5
BG	FCV0111B	M-02BG03	G-5	2	B	2"	DI	AO	C	C	NA				3
BG	FCV0121	M-02BG03	D-4	2	B	3"	GL	AO	O	O	NA				3
BG	HCV0182	M-02BG03	E-3	2	B	3"	GL	AO	O	O	NA				3
I	BG HV 8105	M-02BG03	E-2	2	A	3"	GA	MO	O	C	AT	RR		V04	10
BG	HV 8105	M-02BG03	E-2	2	A	3"	GA	MO	O	C	BT	CS	10	BG-6	6,5
BG	HV 8105	M-02BG03	E-2	2	A	3"	GA	MO	O	C	PIT	RR			
BG	HV 8106	M-02BG03	E-2	2	B	3"	GA	MO	O	C	BT	CS	10	BG-6	6,5
BG	HV 8106	M-02BG03	E-2	2	B	3"	GA	MO	O	C	PIT	RR			
BG	HV 8109	M-02BG03	E-5	2	B	2"	GL	MO	C	C	NA				12
BG	HV 8110	M-02BG03	E-3	2	B	2"	GL	MO	O	O/C	BT	OP	10		6
BG	HV 8110	M-02BG03	E-3	2	B	2"	GL	MO	O	O/C	PIT	RR			
BG	HV 8111	M-02BG03	E-4	2	B	2"	GL	MO	O	O/C	BT	OP	10		6
BG	HV 8111	M-02BG03	E-4	2	B	2"	GL	MO	O	O/C	PIT	RR			
BG	HV 8357A	M-02BG03	C-4	2	B	1"	GL	SO	C	O/C	BT	OP	10	BG-8	
I	BG HV 8357B	M-02BG03	B-4	2	B	1"	GL	SO	C	O/C	BT	OP	15	BG-8	
BG	LCV0112B	M-02BG03	F-6	2	B	4"	GA	MO	O	C	BT	CS	10	BG-7	5,6
BG	LCV0112B	M-02BG03	F-6	2	B	4"	GA	MO	O	C	PIT	RR			
BG	LCV0112C	M-02BG03	F-6	2	B	4"	GA	MO	O	C	BT	CS	10	BG-7	5,6
BG	LCV0112C	M-02BG03	F-6	2	B	4"	GA	MO	O	C	PIT	RR			
BG	V 0091	M-02BG03	C-4	2	C	2"	CK	SA	C	O	CVT	OP			
BG	V 0095	M-02BG03	B-4	2	C	2"	CK	SA	C	O	CVT	OP			
BG	V 0207	M-02BG03	G-4	3	B	3"	RV	SA	C	O	RVT	RR			2
BG	V 0524	M-02BG03	C-6	3	C	.75"	RV	SA	C	O	RVT				2
BG	V 0525	M-02BG03	A-6	3	C	.75"	RV	SA	C	O	RVT				2
BG	V 0545	M-02BG03	D-5	3	C	.75"	RV	SA	C	O	RVT				2
BG	V 0589	M-02BG03	B-4	2	C	1"	CK	SA	C	C	NA				3
BG	V 0590	M-02BG03	C-4	2	C	1"	CK	SA	C	C	NA				3

INSERVICE TESTING PROGRAM

	SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES--*
	BL	8046	M-02BL01	B-3	2	A,C	3"	CK	SA	O	C	AT	RR		V04	10
	BL	8046	M-02BL01	B-3	2	A,C	3"	CK	SA	O	C	CVT	RR		BL-1	11
	BL	HV 8047	M-02BL01	B-4	2	A	3"	DI	AO	O	C	AT	RR		V04	10
	BL	HV 8047	M-02BL01	B-4	2	A	3"	DI	AO	O	C	BT	OP	10		
	BL	HV 8047	M-02BL01	B-4	2	A	3"	DI	AO	O	C	FST	OP			
	BL	HV 8047	M-02BL01	B-4	2	A	3"	DI	AO	O	C	PIT	RR			

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
BM	HV	0001	M-02BM01	F-5	2	B	4"	GL	AO	O	C	BT	CS	10	BM-1 5
BM	HV	0001	M-02BM01	F-5	2	B	4"	GL	AO	O	C	FST	CS		BM-1 5
BM	HV	0001	M-02BM01	F-5	2	B	4"	GL	AO	O	C	PIT	RR		
BM	HV	0002	M-02BM01	E-5	2	B	4"	GL	AO	O	C	BT	CS	10	BM-1 5
BM	HV	0002	M-02BM01	E-5	2	B	4"	GL	AO	O	C	FST	CS		BM-1 5
BM	HV	0002	M-02BM01	E-5	2	B	4"	GL	AO	O	C	PIT	RR		
BM	HV	0003	M-02BM01	C-5	2	B	4"	GL	AO	O	C	BT	CS	10	BM-1
BM	HV	0003	M-02BM01	C-5	2	B	4"	GL	AO	O	C	FST	CS		5
BM	HV	0003	M-02BM01	C-5	2	B	4"	GL	AO	O	C	PIT	RR		
BM	HV	0004	M-02BM01	A-5	2	B	4"	GL	AO	O	C	BT	CS	10	BM-1
BM	HV	0004	M-02BM01	A-5	2	B	4"	GL	AO	O	C	FST	CS		5
BM	HV	0004	M-02BM01	A-5	2	B	4"	GL	AO	O	C	PIT	RR		
BM	HV	0019	M-02BM01	G-7	2	B	1"	GL	SO	C	C	BT	OP	5	
BM	HV	0019	M-02BM01	G-7	2	B	1"	GL	SO	C	C	FST	OP		
BM	HV	0019	M-02BM01	G-7	2	B	1"	GL	SO	C	C	PIT	NA		BM-2
BM	HV	0020	M-02BM01	E-7	2	B	1"	GL	SO	C	C	BT	OP	5	
BM	HV	0020	M-02BM01	E-7	2	B	1"	GL	SO	C	C	FST	OP		
BM	HV	0020	M-02BM01	E-7	2	B	1"	GL	SO	C	C	PIT	NA		BM-2
BM	HV	0021	M-02BM01	D-7	2	B	1"	GL	SO	C	C	BT	OP	5	
BM	HV	0021	M-02BM01	D-7	2	B	1"	GL	SO	C	C	FST	OP		
BM	HV	0021	M-02BM01	D-7	2	B	1"	GL	SO	C	C	PIT	NA		BM-2
BM	HV	0022	M-02BM01	B-7	2	B	1"	GL	SO	C	C	BT	OP	5	
BM	HV	0022	M-02BM01	B-7	2	B	1"	GL	SO	C	C	FST	OP		
BM	HV	0022	M-02BM01	B-7	2	B	1"	GL	SO	C	C	PIT	NA		BM-2
BM	HV	0035	M-02BM01	G-7	2	B	1"	GL	SO	O	C	BT	OP	5	
BM	HV	0035	M-02BM01	G-7	2	B	1"	GL	SO	O	C	FST	OP		
BM	HV	0035	M-02BM01	G-7	2	B	1"	GL	SO	O	C	PIT	NA		BM-2
BM	HV	0036	M-02BM01	E-7	2	B	1"	GL	SO	O	C	BT	OP	5	
BM	HV	0036	M-02BM01	E-7	2	B	1"	GL	SO	O	C	FST	OP		
BM	HV	0036	M-02BM01	E-7	2	B	1"	GL	SO	O	C	PIT	NA		BM-2
BM	HV	0037	M-02BM01	C-7	2	B	1"	GL	SO	O	C	BT	OP	5	
BM	HV	0037	M-02BM01	C-7	2	B	1"	GL	SO	O	C	FST	OP		
BM	HV	0037	M-02BM01	C-7	2	B	1"	GL	SO	O	C	PIT	NA		BM-2
BM	HV	0038	M-02BM01	B-7	2	B	1"	GL	SO	O	C	BT	OP	5	
BM	HV	0038	M-02BM01	B-7	2	B	1"	GL	SO	O	C	FST	OP		
BM	HV	0038	M-02BM01	B-7	2	B	1"	GL	SO	O	C	PIT	NA		BM-2
BM	HV	0065	M-02BM01	G-6	2	B	1"	GL	SO	O	C	BT	OP	5	
BM	HV	0065	M-02BM01	G-6	2	B	1"	GL	SO	O	C	FST	OP		
BM	HV	0065	M-02BM01	G-6	2	B	1"	GL	SO	O	C	PIT	NA		BM-2
BM	HV	0066	M-02BM01	E-6	2	B	1"	GL	SO	O	C	BT	OP	5	
BM	HV	0066	M-02BM01	E-6	2	B	1"	GL	SO	O	C	FST	OP		
BM	HV	0066	M-02BM01	E-6	2	B	1"	GL	SO	O	C	PIT	NA		BM-2
BM	HV	0067	M-02BM01	C-6	2	B	1"	GL	SO	O	C	BT	OP	5	
BM	HV	0067	M-02BM01	C-6	2	B	1"	GL	SO	O	C	FST	OP		
BM	HV	0067	M-02BM01	C-6	2	B	1"	GL	SO	O	C	PIT	NA		BM-2
BM	HV	0068	M-02BM01	B-6	2	B	1"	GL	SO	O	C	BT	OP	5	
BM	HV	0068	M-02BM01	B-6	2	B	1"	GL	SO	O	C	FST	OP		
BM	HV	0068	M-02BM01	B-6	2	B	1"	GL	SO	O	C	PIT	NA		BM-2
BM	V	0045	M-02BM01	A-4	2	A	3"	GA	M	C	C	AT	RR		V04 1,9,11
BM	V	0046	M-02BM01	A-3	2	A	3"	GA	M	C	C	AT	RR		V04 1,9,11

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
BN	HCV8800A	M-02BN01	E-5	2	B	3"	GL	AO	C	C	NA				3
BN	HCV8800B	M-02BN01	E-5	2	B	3"	GL	AO	C	C	NA				3
BN	HV 0003	M-02BN01	C-3	2	B	12"	GA	MO	O	C	BT	OP	65		6
BN	HV 0003	M-02BN01	C-3	2	B	12"	GA	MO	O	C	PIT	RR			
BN	HV 0004	M-02BN01	A-3	2	B	12"	GA	MO	O	C	BT	OP	65		6
BN	HV 0004	M-02BN01	A-3	2	B	12"	GA	MO	O	C	PIT	RR			
BN	HV 8806A	M-02BN01	B-5	2	B	8"	GA	MO	O	C	BT	OP	15		6
BN	HV 8806A	M-02BN01	B-5	2	B	8"	GA	MO	O	C	PIT	RR			
BN	HV 8806B	M-02BN01	E-3	2	B	8"	GA	MO	O	C	BT	OP	15		6
BN	HV 8806B	M-02BN01	E-3	2	B	8"	GA	MO	O	C	PIT	RR			
BN	HV 8812A	M-02BN01	B-3	2	B	14"	GA	MO	O	C	BT	OP	17		6
BN	HV 8812A	M-02BN01	B-3	2	B	14"	GA	MO	O	C	PIT	RR			
BN	HV 8812B	M-02BN01	D-3	2	B	14"	GA	MO	O	C	BT	OP	17		6
BN	HV 8812B	M-02BN01	D-3	2	B	14"	GA	MO	O	C	PIT	RR			
BN	HV 8813	M-02BN01	B-7	2	B	2"	GL	MO	O	C	BT	CS	10	BN-2	6,5
BN	HV 8813	M-02BN01	B-7	2	B	2"	GL	MO	O	C	PIT	RR			
BN	LCV0112D	M-02BN01	A-5	2	B	8"	GA	MO	C	O/C	BT	CS	10	BN-1	6,5
BN	LCV0112D	M-02BN01	A-5	2	B	8"	GA	MO	C	O/C	PIT	RR			
BN	LCV0112E	M-02BN01	E-3	2	B	8"	GA	MO	C	O/C	BT	CS	10	BN-1	6,5
BN	LCV0112E	M-02BN01	E-3	2	B	8"	GA	MO	C	O/C	PIT	RR			

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
	EC V 0083	M-02EC02	C-6	2	A	6"	GA	M	C	C	AT	RR		V04	1,9,11
	EC V 0084	M-02EC02	C-5	2	A	6"	GA	M	C	C	AT	RR		V04	1,9,11
	EC V 0087	M-02EC02	D-7	2	A	6"	GA	M	C	C	AT	RR		V04	1,9,11
	EC V 0088	M-02EC02	D-7	2	A	6"	GA	M	C	C	AT	RR		V04	1,9,11
	EC V 0095	M-02EC02	B-5	2	A	6"	GA	M	C	C	AT	RR		V04	1,9,11
	EC V 0096	M-02EC02	B-5	2	A	6"	GA	M	C	C	AT	RR		V04	1,9,11

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
I	EF HV 0031	M-02EF02	G-7	2	A	14"	BT	MO	O	O/C	AT	RR		V04	10
I	EF HV 0031	M-02EF02	G-7	2	A	14"	BT	MO	O	O/C	BT	OP	40		6
	EF HV 0031	M-02EF02	G-7	2	A	14"	BT	MO	O	O/C	PIT	RR			
I	EF HV 0032	M-02EF02	B-7	2	A	14"	BT	MO	O	O/C	AT	RR		V04	10
I	EF HV 0032	M-02EF02	B-7	2	A	14"	BT	MO	O	O/C	BT	OP	40		6
	EF HV 0032	M-02EF02	B-7	2	A	14"	BT	MO	O	O/C	PIT	RR			
I	EF HV 0033	M-02EF02	G-7	2	A	14"	BT	MO	O	O/C	AT	RR		V04	10
I	EF HV 0033	M-02EF02	G-7	2	A	14"	BT	MO	O	O/C	BT	OP	40		6
	EF HV 0033	M-02EF02	G-7	2	A	14"	BT	MO	O	O/C	PIT	RR			
I	EF HV 0034	M-02EF02	B-7	2	A	14"	BT	MO	O	O/C	AT	RR		V04	10
I	EF HV 0034	M-02EF02	B-7	2	A	14"	BT	MO	O	O/C	BT	OP	35		6
	EF HV 0034	M-02EF02	B-7	2	A	14"	BT	MO	O	O/C	PIT	RR			
	EF HV 0037	M-02EF02	G-2	3	B	30"	BT	MO	C	O	BT	OP	30		6
	EF HV 0037	M-02EF02	G-2	3	B	30"	BT	MO	C	O	PIT	RR			
	EF HV 0038	M-02EF02	C-2	3	B	30"	BT	MO	C	O	BT	OP	30		6
	EF HV 0038	M-02EF02	C-2	3	B	30"	BT	MO	C	O	PIT	RR			
	EF HV 0039	M-02EF02	F-2	3	B	30"	BT	MO	O	C	BT	OP	30		6
	EF HV 0039	M-02EF02	F-2	3	B	30"	BT	MO	O	C	PIT	RR			
	EF HV 0040	M-02EF02	D-2	3	B	30"	BT	MO	O	C	BT	OP	30		6
	EF HV 0040	M-02EF02	D-2	3	B	30"	BT	MO	O	C	PIT	RR			
	EF HV 0041	M-02EF02	E-2	3	B	30"	BT	MO	O	C	BT	OP	30		6
	EF HV 0041	M-02EF02	E-2	3	B	30"	BT	MO	O	C	PIT	RR			
	EF HV 0042	M-02EF02	D-2	3	B	30"	BT	MO	O	C	BT	OP	30		6
	EF HV 0042	M-02EF02	D-2	3	B	30"	BT	MO	O	C	PIT	RR			
I	EF HV 0043	M-02EF02	E-7	3	B	2"	GL	AO	O	C	BT	OP	8		
	EF HV 0043	M-02EF02	E-7	3	B	2"	GL	AO	O	C	FST	OP			
	EF HV 0043	M-02EF02	E-7	3	B	2"	GL	AO	O	C	PIT	RR			
I	EF HV 0045	M-02EF02	G-6	2	A	14"	BT	MO	O	O/C	AT	RR		V04	10
I	EF HV 0045	M-02EF02	G-6	2	A	14"	BT	MO	O	O/C	BT	OP	40		6
	EF HV 0045	M-02EF02	G-6	2	A	14"	BT	MO	O	O/C	PIT	RR			
I	EF HV 0046	M-02EF02	B-6	2	A	14"	BT	MO	O	O/C	AT	RR		V04	10
I	EF HV 0046	M-02EF02	B-6	2	A	14"	BT	MO	O	O/C	BT	OP	35		6
	EF HV 0046	M-02EF02	B-6	2	A	14"	BT	MO	O	O/C	PIT	RR			
I	EF HV 0047	M-02EF02	G-6	2	A	10"	BT	MO	O	C	AT	RR		V04	10
	EF HV 0047	M-02EF02	G-6	2	A	10"	BT	MO	O	C	BT	OP	30		6
	EF HV 0047	M-02EF02	G-6	2	A	10"	BT	MO	O	C	PIT	RR			
I	EF HV 0048	M-02EF02	C-6	2	A	10"	BT	MO	O	C	AT	RR		V04	10
	EF HV 0048	M-02EF02	C-6	2	A	10"	BT	MO	O	C	BT	OP	30		6
	EF HV 0048	M-02EF02	C-6	2	A	10"	BT	MO	O	C	PIT	RR			
I	EF HV 0049	M-02EF02	G-6	2	A	14"	BT	MO	C	O/C	AT	RR		V04	10
	EF HV 0049	M-02EF02	G-6	2	A	14"	BT	MO	C	O/C	BT	OP	30		6
	EF HV 0049	M-02EF02	G-6	2	A	14"	BT	MO	C	O/C	PIT	RR			
I	EF HV 0050	M-02EF02	B-6	2	A	14"	BT	MO	C	O/C	AT	RR		V04	10
	EF HV 0050	M-02EF02	B-6	2	A	14"	BT	MO	C	O/C	BT	OP	30		6
	EF HV 0050	M-02EF02	B-6	2	A	14"	BT	MO	C	O/C	PIT	RR			
I	EF HV 0051	M-02EF02	G-4	3	B	24"	BT	MO	O	O	BT	OP	65		6
	EF HV 0051	M-02EF02	G-4	3	B	24"	BT	MO	O	O	PIT	RR			
	EF HV 0052	M-02EF02	C-4	3	B	24"	BT	MO	O	O	BT	OP	60		6
	EF HV 0052	M-02EF02	C-4	3	B	24"	BT	MO	O	O	PIT	RR			
I	EF HV 0059	M-02EF02	G-3	3	B	24"	BT	MO	O	C	BT	OP	65		6
	EF HV 0059	M-02EF02	G-3	3	B	24"	BT	MO	O	C	PIT	RR			
I	EF HV 0060	M-02EF02	C-3	3	B	24"	BT	MO	O	C	BT	OP	65		6

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
I	EG HV 0058	M-02EG03	H-5	2	A	12"	GA	MO	O	C	AT	RR		V04	10
	EG HV 0058	M-02EG03	H-5	2	A	12"	GA	MO	O	C	BT	OP	30		6
	EG HV 0058	M-02EG03	H-5	2	A	12"	GA	MO	O	C	PIT	RR			
I	EG HV 0059	M-02EG03	C-5	2	A	12"	GA	MO	O	C	AT	RR		V04	10
	EG HV 0059	M-02EG03	C-5	2	A	12"	GA	MO	O	C	BT	OP	30		6
	EG HV 0059	M-02EG03	C-5	2	A	12"	GA	MO	O	C	PIT	RR			
I	EG HV 0060	M-02EG03	B-5	2	A	12"	GA	MO	O	C	AT	RR		V04	10
	EG HV 0060	M-02EG03	B-5	2	A	12"	GA	MO	O	C	BT	OP	30		6
	EG HV 0060	M-02EG03	B-5	2	A	12"	GA	MO	O	C	PIT	RR			
I	EG HV 0061	M-02EG03	C-4	2	A	4"	GA	MO	O	C	AT	RR		V04	10
	EG HV 0061	M-02EG03	C-4	2	A	4"	GA	MO	O	C	BT	OP	30		6
	EG HV 0061	M-02EG03	C-4	2	A	4"	GA	MO	O	C	PIT	RR			
I	EG HV 0062	M-02EG03	B-4	2	A	4"	GA	MO	O	C	AT	RR		V04	10
	EG HV 0062	M-02EG03	B-4	2	A	4"	GA	MO	O	C	BT	OP	30		6
	EG HV 0062	M-02EG03	B-4	2	A	4"	GA	MO	O	C	PIT	RR			
I	EG HV 0069A	M-02EG03	F-8	3	B	14"	BT	AO	O	C	BT	OP	13		
	EG HV 0069A	M-02EG03	F-8	3	B	14"	BT	AO	O	C	FST	OP			
	EG HV 0069A	M-02EG03	F-8	3	B	14"	BT	AO	O	C	PIT	RR			
I	EG HV 0069B	M-02EG03	F-6	3	B	14"	BT	AO	O	C	BT	OP	13		
	EG HV 0069B	M-02EG03	F-6	3	B	14"	BT	AO	O	C	FST	OP			
	EG HV 0069B	M-02EG03	F-6	3	B	14"	BT	AO	O	C	PIT	RR			
I	EG HV 0070A	M-02EG03	F-8	3	B	14"	BT	AO	O	C	BT	OP	10		
	EG HV 0070A	M-02EG03	F-8	3	B	14"	BT	AO	O	C	FST	OP			
	EG HV 0070A	M-02EG03	F-8	3	B	14"	BT	AO	O	C	PIT	RR			
I	EG HV 0070B	M-02EG03	F-6	3	B	14"	BT	AO	O	C	BT	OP	10		
	EG HV 0070B	M-02EG03	F-6	3	B	14"	BT	AO	O	C	FST	OP			
	EG HV 0070B	M-02EG03	F-6	3	B	14"	BT	AO	O	C	PIT	RR			
	EG HV 0071	M-02EG03	H-5	3	B	12"	GA	MO	O	C	BT	OP	30		6
	EG HV 0071	M-02EG03	H-5	3	B	12"	GA	MO	O	C	PIT	RR			
	EG HV 0126	M-02EG03	G-5	3	B	12"	GA	MO	C	O	BT	OP	30		
	EG HV 0126	M-02EG03	G-5	3	B	12"	GA	MO	C	O	PIT	RR			
I	EG HV 0127	M-02EG03	G-5	2	A	12"	GA	MO	C	O	AT	RR		V04	10
	EG HV 0127	M-02EG03	G-5	2	A	12"	GA	MO	C	O	BT	OP	30		
	EG HV 0127	M-02EG03	G-5	2	A	12"	GA	MO	C	O	PIT	RR			
I	EG HV 0130	M-02EG03	B-5	2	A	12"	GA	MO	C	O	AT	RR		V04	10
	EG HV 0130	M-02EG03	B-5	2	A	12"	GA	MO	C	O	BT	OP	30		
	EG HV 0130	M-02EG03	B-5	2	A	12"	GA	MO	C	O	PIT	RR			
I	EG HV 0131	M-02EG03	C-5	2	A	12"	GA	MO	C	O	AT	RR		V04	10
	EG HV 0131	M-02EG03	C-5	2	A	12"	GA	MO	C	O	BT	OP	30		
	EG HV 0131	M-02EG03	C-5	2	A	12"	GA	MO	C	O	PIT	RR			
I	EG HV 0132	M-02EG03	B-4	2	A	4"	GA	MO	C	O	AT	RR		V04	10
	EG HV 0132	M-02EG03	B-4	2	A	4"	GA	MO	C	O	BT	OP	30		
	EG HV 0132	M-02EG03	B-4	2	A	4"	GA	MO	C	O	PIT	RR			
I	EG HV 0133	M-02EG03	C-5	2	A	4"	GA	MO	C	O	AT	RR		V04	10
	EG HV 0133	M-02EG03	C-5	2	A	4"	GA	MO	C	O	BT	OP	30		
	EG HV 0133	M-02EG03	C-5	2	A	4"	GA	MO	C	O	PIT	RR			
	EG V 0124	M-02EG03	D-4	3	C	4"	CK	SA	O	O	NA				3
	EG V 0129	M-02EG03	D-5	3	C	12"	CK	SA	O	O	NA				3
I	EG V 0204	M-02EG03	H-4	2	A,C	12"	CK	SA	O	O/C	AT	RR		V04	10
	EG V 0204	M-02EG03	H-4	2	A,C	12"	CK	SA	O	O/C	CVT	OP		EG-1	

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES--*
EJ	8708A	M-02EJ01	F-7	2	C	3"	RV	SA	C	O/C	RVT				2
EJ	8708B	M-02EJ01	C-7	2	C	3"	RV	SA	C	O/C	RVT				2
EJ	8730A	M-02EJ01	G-4	2	C	10"	CK	SA	C	O	CVT	OP			
EJ	8730B	M-02EJ01	C-4	2	C	10"	CK	SA	C	O	CVT	OP			
EJ	8841A	M-02EJ01	E-2	1	A,C	6"	CK	SA	C	C/O	AT	CS		V05	5,7
EJ	8841A	M-02EJ01	E-2	1	A,C	6"	CK	SA	C	C/O	CVT	CS		EJ-1	
EJ	8841B	M-02EJ01	D-2	1	A,C	6"	CK	SA	C	C/O	AT	CS		V05	5,7
EJ	8841B	M-02EJ01	D-2	1	A,C	6"	CK	SA	C	C/O	CVT	CS		EJ-1	
EJ	8958A	M-02EJ01	F-6	2	C	14"	CK	SA	C	O	CVT	OP			
EJ	8958B	M-02EJ01	B-6	2	C	14"	CK	SA	C	O	CVT	OP			
EJ	8969A	M-02EJ01	G-3	2	C	8"	CK	SA	C	O	CVT	RR		LJ-2	5
EJ	8969B	M-02EJ01	A-4	2	C	8"	CK	SA	C	O	CVT	RR		EJ-2	5
EJ	FCV0610	M-02EJ01	H-6	2	B	3"	GA	MO	O	C	BT	OP	13		6
EJ	FCV0610	M-02EJ01	H-6	2	B	3"	GA	MO	O	C	PIT	RR			
EJ	FCV0611	M-02EJ01	A-5	2	B	3"	GA	MO	O	C	BT	OP	10		6
EJ	FCV0611	M-02EJ01	A-5	2	B	3"	GA	MO	O	C	PIT	RR			
EJ	FCV0618	M-02EJ01	F-5	2	B	8"	BT	AO	C	C	NA				3
EJ	FCV0619	M-02EJ01	B-5	2	B	8"	BT	AO	C	C	NA				3
EJ	HCV0606	M-02EJ01	G-4	2	B	10"	BT	AO	O	O	NA				3
EJ	HCV0607	M-02EJ01	C-4	2	B	10"	BT	AO	O	O	NA				3
EJ	HCV8825	M-02EJ01	E-2	2	B	.75"	GL	AO	C	C	BT	OP	10		
EJ	HCV8825	M-02EJ01	E-2	2	B	.75"	GL	AO	C	C	PIT	RR			
EJ	HCV8890A	M-02EJ01	F-2	2	B	.75"	GL	AO	C	C	BT	OP	13		
EJ	HCV8890A	M-02EJ01	F-2	2	B	.75"	GL	AO	C	C	PIT	RR			
EJ	HCV8890B	M-02EJ01	C-2	2	B	.75"	GL	AO	C	C	BT	OP	13		
EJ	HCV8890B	M-02EJ01	C-2	2	B	.75"	GL	AO	C	C	PIT	RR			
EJ	HV 0014	M-02EJ01	H-5	2	B	1"	GL	SO	C	C	NA				3
EJ	HV 0015	M-02EJ01	A-5	2	B	1"	GL	SO	C	C	NA				3
EJ	HV 0021	M-02EJ01	E-7	2	B	1"	GL	SO	C	O	BT	OP	5		
EJ	HV 0022	M-02EJ01	D-7	2	B	1"	GL	SO	C	O	BT	OP	5		
EJ	HV 0023	M-02EJ01	E-7	2	A	1"	GL	SO	C	O/C	AT	RR		V04	10
EJ	HV 0023	M-02EJ01	E-7	2	A	1"	GL	SO	C	O/C	BT	OP	5		
EJ	HV 0024	M-02EJ01	D-6	2	A	1"	GL	SO	C	O/C	AT	RR		V04	10
EJ	HV 0024	M-02EJ01	D-6	2	A	1"	GL	SO	C	O/C	BT	OP	5		
EJ	HV 0025	M-02EJ01	E-7	2	A	1"	GL	SO	C	O/C	AT	RR		V04	10
EJ	HV 0025	M-02EJ01	E-7	2	A	1"	GL	SO	C	O/C	BT	OP	5		
EJ	HV 0026	M-02EJ01	D-6	2	A	1"	GL	SO	C	O/C	AT	RR		V04	10
EJ	HV 0026	M-02EJ01	D-6	2	A	1"	GL	SO	C	O/C	BT	OP	5		
EJ	HV 8701A	M-02EJ01	F-8	1	A	12"	GA	MO	C	C	AT	CS		V05	7
EJ	HV 8701A	M-02EJ01	F-8	1	A	12"	GA	MO	C	C	BT	CS	120	EJ-3	5,6
EJ	HV 8701A	M-02EJ01	F-8	1	A	12"	GA	MO	C	C	PIT	RR			
EJ	HV 8701B	M-02EJ01	B-8	1	A	12"	GA	MO	C	C	AT	CS		V05	7
EJ	HV 8701B	M-02EJ01	B-8	1	A	12"	GA	MO	C	C	BT	CS	120	EJ-3	5,6
EJ	HV 8701B	M-02EJ01	B-8	1	A	12"	GA	MO	C	C	PIT	RR			
EJ	HV 8716A	M-02EJ01	E-4	2	B	10"	GA	MO	O	C	BT	OP	15		6
EJ	HV 8716A	M-02EJ01	E-4	2	B	10"	GA	MO	O	C	PIT	RR			
EJ	HV 8716B	M-02EJ01	D-4	2	B	10"	GA	MO	O	C	BT	OP	15		6
EJ	HV 8716B	M-02EJ01	D-4	2	B	10"	GA	MO	O	C	PIT	RR			
EJ	HV 8804A	M-02EJ01	G-4	2	B	8"	GA	MO	C	O	BT	CS	15	EJ-4	6,5
EJ	HV 8804A	M-02EJ01	G-4	2	B	8"	GA	MO	C	O	PIT	RR			
EJ	HV 8804B	M-02EJ01	A-4	2	B	8"	GA	MO	C	O	BT	CS	15	EJ-4	6,5
EJ	HV 8804B	M-02EJ01	A-4	2	B	8"	GA	MO	C	O	PIT	RR			

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
I	EJ HV 8809A	M-02EJ01	G-3	2	B	10"	GA	MO	O	C	BT	CS	15	EJ-5	6,5
	EJ HV 8809A	M-02EJ01	G-3	2	B	10"	GA	MO	O	C	PIT	RR			
I	EJ HV 8809B	M-02EJ01	C-3	2	B	10"	GA	MO	O	C	BT	CS	15	EJ-5	6,5
	EJ HV 8809B	M-02EJ01	C-3	2	B	10"	GA	MO	O	C	PIT	RR			
	EJ HV 8811A	M-02EJ01	E-7	2	B	14"	GA	MO	C	O/C	BT	RR	18	EJ-6	6,5
	EJ HV 8811A	M-02EJ01	E-7	2	B	14"	GA	MO	C	O/C	PIT	RR			
	EJ HV 8811B	M-02EJ01	D-7	2	B	14"	GA	MO	C	O/C	BT	RR	18	EJ-6	6,5
	EJ HV 8811B	M-02EJ01	D-7	2	B	14"	GA	MO	C	O/C	PIT	RR			
I	EJ HV 8840	M-02EJ01	E-3	2	B	10"	GA	MO	C	O	BT	CS	15		6,5
	EJ HV 8840	M-02EJ01	E-3	2	B	10"	GA	MO	C	O	PIT	RR			
	EJ V 0084	M-02EJ01	H-5	3	C	1.5"	RV	SA	C	O	RVT	RR			2
	EJ V 0085	M-02EJ01	E-5	3	C	1.5"	RV	SA	C	O	RVT	RR			2
	EJ V 0156	M-02EJ01	G-5	3	C	.75"	RV	SA	C	O	RVT	RR			2
	EJ V 0157	M-02EJ01	D-6	3	C	.75"	RV	SA	C	O	RVT	RR			2

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
EM	8922A	M-02EM01	E-5	2	C	4"	CK	SA	C	O	CVT	RR		EM-1	5
EM	8922B	M-02EM01	D-5	2	C	4"	CK	SA	C	O	CVT	RR		EM-1	5
EM	8926A	M-02EM01	E-7	2	C	8"	CK	SA	C	O	CVP	OP		EM-5	
EM	8926A	M-02EM01	E-7	2	C	8"	CK	SA	C	O	CVT	RR		EM-5	
EM	8926B	M-02EM01	D-7	2	C	8"	CK	SA	C	O	CVP	OP		EM-5	
EM	8926B	M-02EM01	D-7	2	C	8"	CK	SA	C	O	CVT	RR		EM-5	
EM HV	8802A	M-02EM01	E-4	2	B	4"	GA	MO	C	O	BT	OP	10	6	
EM HV	8802A	M-02EM01	E-4	2	B	4"	GA	MO	C	O	PIT	RR			
EM HV	8802B	M-02EM01	D-4	2	B	4"	GA	MO	C	O	BT	OP	10	5,6	
EM HV	8802B	M-02EM01	D-4	2	B	4"	GA	MO	C	O	PIT	RR			
EM HV	8807A	M-02EM01	G-7	2	B	6"	GA	MO	C	O	BT	OP	15	6	
EM HV	8807A	M-02EM01	G-7	2	B	6"	GA	MO	C	O	PIT	RR			
EM HV	8807B	M-02EM01	F-7	2	B	6"	GA	MO	C	O	BT	OP	15	6	
EM HV	8807B	M-02EM01	F-7	2	B	6"	GA	MO	C	O	PIT	RR			
EM HV	8814A	M-02EM01	B-6	2	B	1.5"	GL	MO	O	C	BT	OP	10	6	
EM HV	8814A	M-02EM01	B-6	2	B	1.5"	GL	MO	O	C	PIT	RR			
EM HV	8814B	M-02EM01	B-5	2	B	1.5"	GL	MO	O	C	BT	OP	10	6	
EM HV	8814B	M-02EM01	B-5	2	B	1.5"	GL	MO	O	C	PIT	RR			
EM HV	8821A	M-02EM01	E-4	2	B	4"	GA	MO	O	C	BT	OP	15	6	
EM HV	8821A	M-02EM01	E-4	2	B	4"	GA	MO	O	C	PIT	RR			
EM HV	8821B	M-02EM01	D-4	2	B	4"	GA	MO	O	C	BT	OP	15	6	
EM HV	8821B	M-02EM01	D-4	2	B	4"	GA	MO	O	C	PIT	RR			
EM HV	8823	M-02EM01	C-4	2	B	.75"	GL	AO	C	C	BT	OP	10		
EM HV	8823	M-02EM01	C-4	2	B	.75"	GL	AO	C	C	FST	OP			
EM HV	8823	M-02EM01	C-4	2	B	.75"	GL	AO	C	C	PIT	RR			
EM HV	8824	M-02EM01	D-3	2	B	.75"	GL	AO	C	C	BT	OP	10		
EM HV	8824	M-02EM01	D-3	2	B	.75"	GL	AO	C	C	FST	OP			
EM HV	8824	M-02EM01	D-3	2	B	.75"	GL	AO	C	C	PIT	RR			
EM HV	8835	M-02EM01	B-4	2	B	4"	GA	MO	O	C	BT	CS	10	6,5	
EM HV	8835	M-02EM01	B-4	2	B	4"	GA	MO	O	C	PIT	RR			
EM HV	8871	M-02EM01	G-5	2	A	.75"	GL	AO	C	C	AT	RR		V04	10
EM HV	8871	M-02EM01	G-5	2	A	.75"	GL	AO	C	C	BT	OP	10		
EM HV	8871	M-02EM01	G-5	2	A	.75"	GL	AO	C	C	FST	OP			
EM HV	8871	M-02EM01	G-5	2	A	.75"	GL	AO	C	C	PIT	RR			
EM HV	8881	M-02EM01	G-4	2	B	.75"	GL	AO	C	C	BT	OP	10		
EM HV	8881	M-02EM01	G-4	2	B	.75"	GL	AO	C	C	FST	OP			
EM HV	8881	M-02EM01	G-4	2	B	.75"	GL	AO	C	C	PIT	RR			
EM HV	8888	M-02EM01	F-6	2	A	1"	GL	AO	C	C	AT	RR		V04	9,10
EM HV	8889A	M-02EM01	G-2	1	B	.75"	GL	AO	C	C	NA			3	
EM HV	8889B	M-02EM01	G-3	1	B	.75"	GL	AO	C	C	NA			3	
EM HV	8889C	M-02EM01	G-2	1	B	.75"	GL	AO	C	C	NA			3	
EM HV	8889D	M-02EM01	G-2	1	B	.75"	GL	AO	C	C	NA			3	
EM HV	8923A	M-02EM01	E-7	2	B	6"	GA	MO	O	O	NA			3	
EM HV	8923B	M-02EM01	D-7	2	B	6"	GA	MO	O	O	NA			3	
EM HV	8924	M-02EM01	G-8	2	B	6"	GA	MO	O	O	NA			3	
EM HV	8964	M-02EM01	G-6	2	A	.75"	GL	AO	C	C	AT	RR		V04	10
EM HV	8964	M-02EM01	G-6	2	A	.75"	GL	AO	C	C	BT	OP	10		
EM HV	8964	M-02EM01	G-6	2	A	.75"	GL	AO	C	C	FST	OP			
EM HV	8964	M-02EM01	G-6	2	A	.75"	GL	AO	C	C	PIT	RR			
EM V	0001	M-02EM01	F-3	1	A,C	2"	CK	SA	C	O/C	AT	CS		V05	7
EM V	0001	M-02EM01	F-3	1	A,C	2"	CK	SA	C	O/C	CVT	RR		EM-2	5
EM V	0002	M-02EM01	E-3	1	A,C	2"	CK	SA	C	O/C	AT	CS		V05	7

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
	EM V 0002	M-02EM01	E-3	1	A,C	2"	CK	SA	C	O/C	CVT	RR		EM-2	5
	EM V 0003	M-02EM01	D-3	1	A,C	2"	CK	SA	C	O/C	AT	CS		V05	7
	EM V 0003	M-02EM01	D-3	1	A,C	2"	CK	SA	C	O/C	CVT	RR		EM-2	5
	EM V 0004	M-02EM01	C-3	1	A,C	2"	CK	SA	C	O/C	AT	CS		V05	7
	EM V 0004	M-02EM01	C-3	1	A,C	2"	CK	SA	C	O/C	CVT	RR		EM-2	5
	EM V 0005	M-02EM01	A-6	2	C	1.5"	CK	SA	C	O	CVT	OP			
	EM V 0006	M-02EM01	F-6	2	A,C	1"	CK	SA	C	C	AT	RR		V04	9,10
	EM V 0007	M-02EM01	A-5	2	C	1.5"	CK	SA	C	O	CVT	OP			
	EM V 0188	M-02EM01	D-6	3	C	.75"	RV	SA	C	O	RVT	RR		2	
	EM V 0189	M-02EM01	F-6	3	C	.75"	RV	SA	C	O	RVT	RR		2	

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
I	EM 8815	M-02EM02	D-3	1	A,C	3"	CK	SA	C	O/C	AT	CS		V05	7
	EM 8815	M-02EM02	D-3	1	A,C	3"	CK	SA	C	O/C	CVT	RR		EM-3	5
	EM 8852	M-02EM02	E-5	3	C	.75"	RV	SA	C	O	RVT	RR			2
I	EM HV 8801A	M-02EM02	D-4	2	B	4"	GA	MO	C	O	RT	OP	15		6
	EM HV 8801A	M-02EM02	D-4	2	B	4"	GA	MO	C	O	PIT	RR			
I	EM HV 8801B	M-02EM02	D-4	2	B	4"	GA	MO	C	O	BT	OP	15		6
	EM HV 8801B	M-02EM02	D-4	2	B	4"	GA	MO	C	O	PIT	RR			
I	EM HV 8803A	M-02EM02	C-7	2	B	4"	GA	MO	C	O	BT	OP	15		6
	EM HV 8803A	M-02EM02	C-7	2	B	4"	GA	MO	C	O	PIT	RR			
I	EM HV 8803B	M-02EM02	A-7	2	B	4"	GA	MO	C	O	BT	OP	15		6
	EM HV 8803B	M-02EM02	A-7	2	B	4"	GA	MO	C	O	PIT	RR			
	EM HV 8837A	M-02EM02	C-7	2	B	1"	GL	SO	C	O	BT	OP	10		
	EM HV 8837A	M-02EM02	C-7	2	B	1"	GL	SO	C	O	FST	OP			
	EM HV 8837A	M-02EM02	C-7	2	B	1"	GL	SO	C	O	PIT	RR		EM-4	
	EM HV 8837B	M-02EM02	B-7	2	B	1"	GL	SO	C	O	BT	OP	10		
	EM HV 8837B	M-02EM02	B-7	2	B	1"	GL	SO	C	O	FST	OP			
	EM HV 8837B	M-02EM02	B-7	2	B	1"	GL	SO	C	O	PIT	RR		EM-4	
	EM HV 8843	M-02EM02	C-4	2	B	.75"	GL	AO	C	C	BT	OP	10		
	EM HV 8843	M-02EM02	C-4	2	B	.75"	GL	AO	C	C	FST	OP			
	EM HV 8843	M-02EM02	C-4	2	B	.75"	GL	AO	C	C	PIT	RR			
	EM HV 8870A	M-02EM02	E-5	2	B	1"	GL	AO	O	C	FST	OP			
	EM HV 8870A	M-02EM02	E-5	2	B	1"	GL	AO	O	C	PIT	RR			
	EM HV 8870A	M-02EM02	E-5	2	B	1"	GL	AO	O	C	BT	OP	5		
	EM HV 8870B	M-02EM02	E-5	2	B	1"	GL	AO	O	C	BT	OP	5		
	EM HV 8870B	M-02EM02	E-5	2	B	1"	GL	AO	O	C	FST	OP			
	EM HV 8870B	M-02EM02	E-5	2	B	1"	GL	AO	O	C	PIT	RR			
	EM HV 8882	M-02EM02	C-3	2	B	.75"	GL	AO	C	C	NA				3
	EM HV 8883	M-02EM02	D-6	2	B	1"	GL	AO	O	C	BT	OP	5		
	EM HV 8883	M-02EM02	D-6	2	B	1"	GL	AO	O	C	FST	OP			
	EM HV 8883	M-02EM02	D-6	2	B	1"	GL	AO	O	C	PIT	RR			
	EM V 0014	M-02EM02	E-6	2	C	1"	CK	SA	C	C	NA				12
	EM V 0017	M-02EM02	D-6	2	C	1"	CK	SA	C	C	NA				12
	EM V 0240	M-02EM02	C-7	2	C	1"	CK	SA	C	O	CVT	RR		EM-3	5
	EM V 0241	M-02EM02	B-7	2	C	1"	CK	SA	C	O	CVT	RR		EM-3	5

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
EN	HV 0001	M-02EN01	G-7	2	B	12"	GA	MO	C	C/O	BT	RR	30	EN-4	6,5
EN	HV 0001	M-02EN01	G-7	2	B	12"	GA	MO	C	C/O	PIT	RR			
EN	HV 0006	M-02EN01	G-4	2	B	10"	GA	MO	C	O	BT	OP	15	6	
EN	HV 0006	M-02EN01	G-4	2	B	10"	GA	MO	C	O	PIT	RR			
EN	HV 0007	M-02EN01	B-7	2	B	12"	GA	MO	C	C/O	BT	RR	30	EN-4	6,5
EN	HV 0007	M-02EN01	B-7	2	B	12"	GA	MO	C	C/O	PIT	RR			
EN	HV 0012	M-02EN01	B-4	2	B	10"	GA	MO	C	O	BT	OP	15	6	
EN	HV 0012	M-02EN01	B-4	2	B	10"	GA	MO	C	O	PIT	RR			
EN	HV 0015	M-02EN01	E-6	2	B	3"	GA	MO	C	O	BT	OP	8		
EN	HV 0015	M-02EN01	E-6	2	B	3"	GA	MO	C	O	PIT	RR			
EN	HV 0016	M-02EN01	D-6	2	B	3"	GA	MO	C	O	BT	OP	8		
EN	HV 0016	M-02EN01	D-6	2	B	3"	GA	MO	C	O	PIT	RR			
EN	V 0002	M-02EN01	G-7	2	C	12"	CK	SA	C	O	CVT	RR		EN-1	5
EN	V 0003	M-02EN01	G-7	2	C	12"	CK	SA	C	O	CVP	OP		EN-2	
EN	V 0004	M-02EN01	G-5	2	C	10"	CK	SA	C	O	CVP	OP		EN-2	
EN	V 0008	M-02EN01	B-7	2	C	12"	CK	SA	C	O	CVT	RR		EN-1	5
EN	V 0009	M-02EN01	B-7	2	C	12"	CK	SA	C	O	CVP	OP		EN-2	
EN	V 0010	M-02EN01	B-5	2	C	10"	CK	SA	C	O	CVP	OP		EN-2	
EN	V 0013	M-02EN01	G-4	2	C	10"	CK	SA	C	O	CVT	RR		EN-3	5
EN	V 0017	M-02EN01	B-4	2	C	10"	CK	SA	C	O	CVT	RR		EN-3	5
EN	V 0057	M-02EN01	F-5	2	C	.75"	RV	SA	C	C	RVT			2	
EN	V 0058	M-02EN01	F-5	2	C	1"	RV	SA	C	O	RVT			2	
EN	V 0099	M-02EN01	F-6	2	C	3"	CK	SA	C	O	CVT	OP			
EN	V 0101	M-02EN01	C-6	2	C	3"	CK	SA	C	O	CVT	OP			
EN	V 0106	M-02EN01	F-5	2	C	1"	RV	SA	C	O	RVT			2	

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
I	EP 8818A	M-02EP01	G-3	1	A,C	6"	CK	SA	C	O/C	AT	CS		V05	7
	EP 8818A	M-02EP01	G-3	1	A,C	6"	CK	SA	C	O/C	CVT	CS		EP-1	5
I	EP 8818B	M-02EP01	F-3	1	A,C	6"	CK	SA	C	O/C	AT	CS		V05	7
	EP 8818B	M-02EP01	F-3	1	A,C	6"	CK	SA	C	O/C	CVT	CS		EP-1	5
I	EP 8818C	M-02EP01	D-3	1	A,C	6"	CK	SA	C	O/C	AT	CS		V05	7
	EP 8818C	M-02EP01	D-3	1	A,C	6"	CK	SA	C	O/C	CVT	CS		EP-1	5
I	EP 8818D	M-02EP01	C-3	1	A,C	6"	CK	SA	C	O/C	AT	CS		V05	7
	EP 8818D	M-02EP01	C-3	1	A,C	6"	CK	SA	C	O/C	CVT	CS		EP-1	5
	EP 8855A	M-02EP01	H-7	2	C	1"	RV	SA	C	O	RVT				2
	EP 8855B	M-02EP01	F-7	2	C	1"	RV	SA	C	O	RVT				2
	EP 8855C	M-02EP01	D-7	2	C	1"	RV	SA	C	O	RVT				2
	EP 8855D	M-02EP01	C-7	2	C	1"	RV	SA	C	O	RVT				2
I	EP 8956A	M-02EP01	G-4	1	A,C	10"	CK	SA	C	O	AT	CS		V05	7
	EP 8956A	M-02EP01	G-4	1	A,C	10"	CK	SA	C	O	CVP	RR		EP-2	5
I	EP 8956B	M-02EP01	E-4	1	A,C	10"	CK	SA	C	O	AT	CS		V05	7
	EP 8956B	M-02EP01	E-4	1	A,C	10"	CK	SA	C	O	CVP	RR		EP-2	5
I	EP 8956C	M-02EP01	C-4	1	A,C	10"	CK	SA	C	O	AT	CS		V05	7
	EP 8956C	M-02EP01	C-4	1	A,C	10"	CK	SA	C	O	CVP	RR		EP-2	5
I	EP 8956D	M-02EP01	B-4	1	A,C	10"	CK	SA	C	O	AT	CS		V05	7
	EP 8956D	M-02EP01	B-4	1	A,C	10"	CK	SA	C	O	CVP	RR		EP-2	5
	EP HV 8808A	M-02EP01	G-5	2	B	10"	GA	MO	O	O	NA				1,3
	EP HV 8808B	M-02EP01	E-5	2	B	10"	GA	MO	O	O	NA				1,3
	EP HV 8808C	M-02EP01	C-5	2	B	10"	GA	MO	O	O	NA				1,3
	EP HV 8808D	M-02EP01	B-5	2	B	10"	GA	MO	O	O	NA				1,3
	EP HV 8875A	M-02EP01	H-6	2	B	1"	GL	AO	C	C	NA				3
	EP HV 8875B	M-02EP01	F-6	2	B	1"	GL	AO	C	C	NA				3
	EP HV 8875C	M-02EP01	D-6	2	B	1"	GL	AO	C	C	NA				3
	EP HV 8875D	M-02EP01	C-6	2	B	1"	GL	AO	C	C	NA				3
	EP HV 8877A	M-02EP01	F-4	2	B	.75"	GL	AO	C	C	NA				3
	EP HV 8877B	M-02EP01	E-4	2	B	.75"	GL	AO	C	C	NA				3
	EP HV 8877C	M-02EP01	C-4	2	B	.75"	GL	AO	C	C	NA				3
	EP HV 8877D	M-02EP01	A-4	2	B	.75"	GL	AO	C	C	NA				3
	EP HV 8878A	M-02EP01	G-5	2	B	1"	GL	AO	C	C	NA				3
	EP HV 8878B	M-02EP01	E-5	2	B	1"	GL	AO	C	C	NA				3
	EP HV 8878C	M-02EP01	D-5	2	B	1"	GL	AO	C	C	NA				3
	EP HV 8878D	M-02EP01	B-5	2	B	1"	GL	AO	C	C	NA				3
	EP HV 8879A	M-02EP01	G-4	2	B	.75"	GL	AO	C	C	NA				3
	EP HV 8879B	M-02EP01	E-4	2	B	.75"	GL	AO	C	C	NA				3
	EP HV 8879C	M-02EP01	D-4	2	B	.75"	GL	AO	C	C	NA				3
	EP HV 8879D	M-02EP01	C-2	2	B	.75"	GL	AO	C	C	NA				3
I	EP HV 8880	M-02EP01	A-4	2	A	1"	GL	AO	C	C	AT	RR		V04	9,10
	EP HV 8950A	M-02EP01	H-7	2	B	1"	GL	SO	C	O	BT	RR	10	EP-4	5
	EP HV 8950A	M-02EP01	H-7	2	B	1"	GL	SO	C	O	PIT	RR			
	EP HV 8950B	M-02EP01	F-8	2	B	1"	GL	SO	C	O	BT	RR	10	EP-4	5
	EP HV 8950B	M-02EP01	F-8	2	B	1"	GL	SO	C	O	PIT	RR			
	EP HV 8950C	M-02EP01	F-7	2	B	1"	GL	SO	C	O	BT	RR	10	EP-4	5
	EP HV 8950C	M-02EP01	F-7	2	B	1"	GL	SO	C	O	PIT	RR			
	EP HV 8950D	M-02EP01	O-8	2	B	1"	GL	SO	C	O	BT	RR	10	EP-4	5
	EP HV 8950D	M-02EP01	D-8	2	B	1"	GL	SO	C	O	PIT	RR			
	EP HV 8950E	M-02EP01	D-7	2	B	1"	GL	SO	C	O	BT	RR	10	EP-4	5
	EP HV 8950E	M-02EP01	D-7	2	B	1"	GL	SO	C	O	PIT	RR			
	EP HV 8950F	M-02EP01	C-8	2	B	1"	GL	SO	C	O	BT	RR	10	EP-4	5

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
	EP HV 8950F	M-02EP01	C-8	2	B	1"	GL	SO	C	O	PIT	RR			
	EP V 0010	M-02EP01	G-3	1	A,C	2"	CK	SA	C	O/C	AT	CS		V05	7
	EP V 0010	M-02EP01	G-3	1	A,C	2"	CK	SA	C	O/C	CVT	RR		EP-3	5
	EP V 0020	M-02EP01	F-3	1	A,C	2"	CK	SA	C	O/C	AT	CS		V05	7
	EP V 0020	M-02EP01	F-3	1	A,C	2"	CK	SA	C	O/C	CVT	RR		EP-3	5
	EP V 0030	M-02EP01	D-3	1	A,C	2"	CK	SA	C	O/C	AT	CS		V05	7
	EP V 0030	M-02EP01	D-3	1	A,C	2"	CK	SA	C	O/C	CVT	RR		EP-3	5
	EP V 0040	M-02EP01	C-3	1	A,C	2"	CK	SA	C	O/C	AT	CS		V05	7
	EP V 0040	M-02EP01	C-3	1	A,C	2"	CK	SA	C	O/C	CVT	RR		EP-3	5
	EP V 0046	M-02EP01	A-5	2	A,C	1"	CK	SA	C	C	AT	RR		V04	9,10

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
I	GS HV 0003	M-02GS01	E-6	2	A	1"	GA	SO	C	O/C	AT	RR		V04	10
	GS HV 0003	M-02GS01	E-6	2	A	1"	GA	SO	C	O/C	BT	OP	5		
	GS HV 0003	M-02GS01	E-6	2	A	1"	GA	SO	C	O/C	FST	OP			
	GS HV 0003	M-02GS01	E-6	2	A	1"	GA	SO	C	O/C	PIT	RR		VO-3	
I	GS HV 0004	M-02GS01	E-6	2	A	1"	GA	SO	C	O/C	AT	RR		V04	10
	GS HV 0004	M-02GS01	E-6	2	A	1"	GA	SO	C	O/C	BT	OP	5		
	GS HV 0004	M-02GS01	E-6	2	A	1"	GA	SO	C	O/C	FST	OP			
	GS HV 0004	M-02GS01	E-6	2	A	1"	GA	SO	C	O/C	PIT	RR		VO-3	
I	GS HV 0005	M-02GS01	D-5	2	A	1"	GA	SO	C	O/C	AT	RR		V04	10
	GS HV 0005	M-02GS01	D-5	2	A	1"	GA	SO	C	O/C	BT	OP	5		
	GS HV 0005	M-02GS01	D-5	2	A	1"	GA	SO	C	O/C	FST	OP			
	GS HV 0005	M-02GS01	D-5	2	A	1"	GA	SO	C	O/C	PIT	RR		VO-3	
I	GS HV 0008	M-02GS01	B-6	2	A	1"	GA	SO	C	O/C	AT	RR		V04	10
	GS HV 0008	M-02GS01	B-6	2	A	1"	GA	SO	C	O/C	BT	OP	5		
	GS HV 0008	M-02GS01	B-6	2	A	1"	GA	SO	C	O/C	FST	OP			
	GS HV 0008	M-02GS01	B-6	2	A	1"	GA	SO	C	O/C	PIT	RR		VO-3	
I	GS HV 0009	M-02GS01	B-6	2	A	1"	GA	SO	C	O/C	AT	RR		V04	10
	GS HV 0009	M-02GS01	B-6	2	A	1"	GA	SO	C	O/C	BT	OP	5		
	GS HV 0009	M-02GS01	B-6	2	A	1"	GA	SO	C	O/C	FST	OP			
	GS HV 0009	M-02GS01	B-6	2	A	1"	GA	SO	C	O/C	PIT	RR		VO-3	
I	GS HV 0012	M-02GS01	E-4	2	A	1"	GA	SO	C	O/C	AT	RR		V04	10
	GS HV 0012	M-02GS01	E-4	2	A	1"	GA	SO	C	O/C	BT	OP	5		
	GS HV 0012	M-02GS01	E-4	2	A	1"	GA	SO	C	O/C	FST	OP			
	GS HV 0012	M-02GS01	E-4	2	A	1"	GA	SO	C	O/C	PIT	RR		VO-3	
I	GS HV 0013	M-02GS01	E-5	2	A	1"	GA	SO	C	O/C	AT	RR		V04	10
	GS HV 0013	M-02GS01	E-5	2	A	1"	GA	SO	C	O/C	BT	OP	5		
	GS HV 0013	M-02GS01	E-5	2	A	1"	GA	SO	C	O/C	FST	OP			
	GS HV 0013	M-02GS01	E-5	2	A	1"	GA	SO	C	O/C	PIT	RR		VO-3	
I	GS HV 0014	M-02GS01	D-5	2	A	1"	GA	SO	C	O/C	AT	RR		V04	10
	GS HV 0014	M-02GS01	D-5	2	A	1"	GA	SO	C	O/C	BT	OP	5		
	GS HV 0014	M-02GS01	D-5	2	A	1"	GA	SO	C	O/C	FST	OP			
	GS HV 0014	M-02GS01	D-5	2	A	1"	GA	SO	C	O/C	PIT	RR		VO-3	
I	GS HV 0017	M-02GS01	B-4	2	A	1"	GA	SO	C	O/C	AT	RR		V04	10
	GS HV 0017	M-02GS01	B-4	2	A	1"	GA	SO	C	O/C	BT	OP	5		
	GS HV 0017	M-02GS01	B-4	2	A	1"	GA	SO	C	O/C	FST	OP			
	GS HV 0017	M-02GS01	B-4	2	A	1"	GA	SO	C	O/C	PIT	RR		VO-3	
I	GS HV 0018	M-02GS01	B-5	2	A	1"	GA	SO	C	O/C	AT	RR		V04	10
	GS HV 0018	M-02GS01	B-5	2	A	1"	GA	SO	C	O/C	BT	OP	5		
	GS HV 0018	M-02GS01	B-5	2	A	1"	GA	SO	C	O/C	FST	OP			
	GS HV 0018	M-02GS01	B-5	2	A	1"	GA	SO	C	O/C	PIT	RR		VO-3	
I	GS HV 0020	M-02GS01	F-5	2	A	6"	BT	MO	C	O/C	AT	RR		V04	10
	GS HV 0020	M-02GS01	F-5	2	A	6"	BT	MO	C	O/C	BT	OP	5		6
	GS HV 0020	M-02GS01	F-5	2	A	6"	BT	MO	C	O/C	PIT	RR			
I	GS HV 0021	M-02GS01	F-4	2	A	6"	BT	MO	C	O/C	AT	RR		V04	10
	GS HV 0021	M-02GS01	F-4	2	A	6"	BT	MO	C	O/C	BT	OP	5		6
	GS HV 0021	M-02GS01	F-4	2	A	6"	BT	MO	C	O/C	PIT	RR			
I	GS HV 0031	M-02GS01	D-4	2	A	1"	GA	SO	O	C	AT	RR		V04	10
	GS HV 0031	M-02GS01	D-4	2	A	1"	GA	SO	O	C	BT	OP	5		
	GS HV 0031	M-02GS01	D-4	2	A	1"	GA	SO	O	C	FST	OP			
	GS HV 0031	M-02GS01	D-4	2	A	1"	GA	SO	O	C	PIT	RR		VO-3	
I	GS HV 0032	M-02GS01	D-3	2	A	1"	GA	SO	O	C	AT	RR		V04	10
	GS HV 0032	M-02GS01	D-3	2	A	1"	GA	SO	O	C	BT	OP	5		

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
	GS HV 0032	M-02GS01	D-3	2	A	1"	GA	SO	O	C	FST	OP			
	GS HV 0032	M-02GS01	D-3	2	A	1"	GA	SO	O	C	PIT	RR		VO-3	
I	GS HV 0033	M-02GS01	C-4	2	A	1"	GA	SO	O	C	AT	RR		V04	10
	GS HV 0033	M-02GS01	C-4	2	A	1"	GA	SO	O	C	BT	OP	5		
	GS HV 0033	M-02GS01	C-4	2	A	1"	GA	SO	O	C	FST	OP			
	GS HV 0033	M-02GS01	C-4	2	A	1"	GA	SO	O	C	PIT	RR		VO-3	
I	GS HV 0034	M-02GS01	C-4	2	A	1"	GA	SO	O	C	AT	RR		V04	10
	GS HV 0034	M-02GS01	C-4	2	A	1"	GA	SO	O	C	BT	OP	5		
	GS HV 0034	M-02GS01	C-4	2	A	1"	GA	SO	O	C	FST	OP			
	GS HV 0034	M-02GS01	C-4	2	A	1"	GA	SO	O	C	PIT	RR		VO-3	
I	GS HV 0036	M-02GS01	D-6	2	A	1"	GA	SO	O	C	AT	RR		V04	10
	GS HV 0036	M-02GS01	D-6	2	A	1"	GA	SO	O	C	BT	OP	5		
	GS HV 0036	M-02GS01	D-6	2	A	1"	GA	SO	O	C	FST	OP			
	GS HV 0036	M-02GS01	D-6	2	A	1"	GA	SO	O	C	PIT	RR		VO-3	
I	GS HV 0037	M-02GS01	D-7	2	A	1"	GA	SO	O	C	AT	RR		V04	10
	GS HV 0037	M-02GS01	D-7	2	A	1"	GA	SO	O	C	BT	OP	5		
	GS HV 0037	M-02GS01	D-7	2	A	1"	GA	SO	O	C	FST	OP			
	GS HV 0037	M-02GS01	D-7	2	A	1"	GA	SO	O	C	PIT	RR		VO-3	
I	GS HV 0038	M-02GS01	C-6	2	A	1"	GA	SO	O	C	AT	RR		V04	10
	GS HV 0038	M-02GS01	C-6	2	A	1"	GA	SO	O	C	BT	OP	5		
	GS HV 0038	M-02GS01	C-6	2	A	1"	GA	SO	O	C	FST	OP			
	GS HV 0038	M-02GS01	C-6	2	A	1"	GA	SO	O	C	PIT	RR		VO-3	
I	GS HV 0039	M-02GS01	C-6	2	A	1"	GA	SO	O	C	AT	RR		V04	10
	GS HV 0039	M-02GS01	C-6	2	A	1"	GA	SO	O	C	BT	OP	5		
	GS HV 0039	M-02GS01	C-6	2	A	1"	GA	SO	O	C	FST	OP			
	GS HV 0039	M-02GS01	C-6	2	A	1"	GA	SO	O	C	PIT	RR		VO-3	

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
	GT HZ 0004	M-02GT01	D-4	2	A	18"	BT	AO	O	C	AT	RR		V04	10
	GT HZ 0004	M-02GT01	D-4	2	A	18"	BT	AO	O	C	BT	OP	3		
	GT HZ 0004	M-02GT01	D-4	2	A	18"	BT	AO	O	C	FST	OP			
	GT HZ 0004	M-02GT01	D-4	2	A	18"	BT	AO	O	C	PIT	RR			
	GT HZ 0005	M-02GT01	A-5	2	A	18"	BT	AO	O	C	AT	RR		V04	10
	GT HZ 0005	M-02GT01	A-5	2	A	18"	BT	AO	O	C	BT	OP	3		
	GT HZ 0005	M-02GT01	A-5	2	A	18"	BT	AO	O	C	FST	OP			
	GT HZ 0005	M-02GT01	A-5	2	A	18"	BT	AO	O	C	PIT	RR			
	GT HZ 0006	M-02GT01	C-4	2	A	36"	BT	AO	C	C	AT	RR		V04	9,10
	GT HZ 0007	M-02GT01	C-5	2	A	36"	BT	AO	C	C	AT	RR		V04	9,10
	GT HZ 0008	M-02GT01	C-6	2	A	36"	BT	AO	C	C	AT	RR		V04	9,10
	GT HZ 0009	M-02GT01	C-7	2	A	36"	BT	AO	C	C	AT	RR		V04	9,10
	GT HZ 0011	M-02GT01	A-6	2	A	18"	BT	AO	O	C	AT	RR		V04	10
	GT HZ 0011	M-02GT01	A-6	2	A	18"	BT	AO	O	C	BT	OP	3		
	GT HZ 0011	M-02GT01	A-6	2	A	18"	BT	AO	O	C	FST	OP			
	GT HZ 0011	M-02GT01	A-6	2	A	18"	BT	AO	O	C	PIT	RR			
	GT HZ 0012	M-02GT01	A-7	2	A	18"	BT	AO	O	C	AT	RR		V04	10
	GT HZ 0012	M-02GT01	A-7	2	A	18"	BT	AO	O	C	BT	OP	3		
	GT HZ 0012	M-02GT01	A-7	2	A	18"	BT	AO	O	C	FST	OP			
	GT HZ 0012	M-02GT01	A-7	2	A	18"	BT	AO	O	C	PIT	RR			

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
I	HB HV 7126	M-02HB01	G-6	2	A	.75"	DI	AO	O	C	AT	RR		V04	10
	HB HV 7126	M-02HB01	G-6	2	A	.75"	DI	AO	O	C	BT	OP	10		
	HB HV 7126	M-02HB01	G-6	2	A	.75"	DI	AO	O	C	FST	OP			
	HB HV 7126	M-02HB01	G-6	2	A	.75"	DI	AO	O	C	PIT	RR			
I	HB HV 7136	M-02HB01	F-3	2	A	3"	DI	AO	O	C	AT	RR		V04	10
	HB HV 7136	M-02HB01	F-3	2	A	3"	DI	AO	O	C	BT	OP	10		
	HB HV 7136	M-02HB01	F-3	2	A	3"	DI	AO	O	C	FST	OP			
	HB HV 7136	M-02HB01	F-3	2	A	3"	DI	AO	O	C	PIT	RR			
I	HB HV 7150	M-02HB01	G-5	2	A	.75"	DI	AO	O	C	AT	RR		V04	10
	HB HV 7150	M-02HB01	G-5	2	A	.75"	DI	AO	O	C	BT	OP	10		
	HB HV 7150	M-02HB01	G-5	2	A	.75"	DI	AO	O	C	FST	OP			
	HB HV 7150	M-02HB01	G-5	2	A	.75"	DI	AO	O	C	PIT	RR			
I	HB HV 7176	M-02HB01	F-3	2	A	3"	DI	AO	O	C	AT	RR		V04	10
	HB HV 7176	M-02HB01	F-3	2	A	3"	DI	AO	O	C	BT	OP	10		
	HB HV 7176	M-02HB01	F-3	2	A	3"	DI	AO	O	C	FST	OP			
	HB HV 7176	M-02HB01	F-3	2	A	3"	DI	AO	O	C	PIT	RR			
	HB V 0036	M-02HB01	C-3	3	C	.75"	RV	SA	C	O	RVT	RR			2

INSERVICE TESTING PROGRAM

	SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
	HD	V	0016	M-02HDO1	B-7	2	A	2"	GL	M	C	C	AT	RR	V04	1,9,11
	HD	V	0017	M-02HDO1	B-7	2	A	2"	GL	M	C	C	AT	RR	V04	1,9,11

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
I	KA FV 0029	M-02KA01	D-2	2	A	2"	GL	AO	O	C	AT	RR		V04	10
	KA FV 0029	M-02KA01	D-2	2	A	2"	GL	AO	O	C	BT	CS	5	KA-1	5
	KA FV 0029	M-02KA01	D-2	2	A	2"	GL	AO	O	C	FST	CS		KA-1	
	KA FV 0029	M-02KA01	D-2	2	A	2"	GL	AO	O	C	PIT	RR			
	KA HV 0030	M-02KA01	C-1	2	B	1.5"	GA	MO	C	O	BT	CS	12	KA-1	5
	KA HV 0030	M-02KA01	C-1	2	B	1.5"	GA	MO	C	O	PIT	RR			
	KA V 0204	M-02KA01	C-2	2	A,C	1.5"	CK	SA	O	C	AT	RR		V04	5,11
I	KA V 0204	M-02KA01	C-2	2	A,C	1.5"	CK	SA	O	C	CVT	RR		KA-2	

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
/	KA V 0039	M-02KA02	D-6	2	A,C	4"	CS	SA	C	C	AT	RR		V04	9,11
/	KA V 0118	M-02KA02	D-6	2	A	4"	GL	M	C	C	AT	RR		V04	1,9,11

INSERVICE TESTING PROGRAM

	SY VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
	KC HV 0253	M-02KC02	B-6	2	A	4"	GA	MO	C	C	AT	RR		V04	9,11
	KC V 0478	M-02KC02	B-6	2	A,C	4"	CK	SA	C	C	AT	RR		V04	9,11

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
1	LF FV 0095	M-02LF09	F-2	2	A	6"	GA	MO	O	C	AT	RR		V04	10
	LF FV 0095	M-02LF09	F-2	2	A	6"	GA	MO	O	C	BT	OP	30		6
	LF FV 0095	M-02LF09	F-2	2	A	6"	GA	MO	O	C	PIT	RR			
1	LF FV 0096	M-02LF09	F-2	2	A	6"	GL	AO	C	C	AT	RR		V04	10
	LF FV 0096	M-02LF09	F-2	2	A	6"	GL	AO	C	C	BT	OP	4		
	LF FV 0096	M-02LF09	F-2	2	A	6"	GL	AO	C	C	FST	OP			
	LF FV 0096	M-02LF09	F-2	2	A	6"	GL	AO	C	C	PIT	RR			

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
I	SJ HV 0012	M-02SJ01	F-7	2	A	1"	GL	SO	C	C	AT	RR		V04	10
	SJ HV 0012	M-02SJ01	F-7	2	A	1"	GL	SO	C	C	BT	OP	5		
	SJ HV 0012	M-02SJ01	F-7	2	A	1"	GL	SO	C	C	FST	OP			
	SJ HV 0012	M-02SJ01	F-7	2	A	1"	GL	SO	C	C	PIT	RR		VO-3	
I	SJ HV 0013	M-02SJ01	E-7	2	A	1"	GL	SO	C	C	AT	RR		V04	10
	SJ HV 0013	M-02SJ01	E-7	2	A	1"	GL	SO	C	C	BT	OP	5		
	SJ HV 0013	M-02SJ01	E-7	2	A	1"	GL	SO	C	C	FST	OP			
	SJ HV 0013	M-02SJ01	E-7	2	A	1"	GL	SO	C	C	PIT	RR		VO-3	
I	SJ HV 0018	M-02SJ01	F-3	2	A	1"	GL	SO	C	C	AT	RR		V04	10
	SJ HV 0018	M-02SJ01	F-3	2	A	1"	GL	SO	C	C	BT	OP	5		
	SJ HV 0018	M-02SJ01	F-3	2	A	1"	GL	SO	C	C	FST	OP			
	SJ HV 0018	M-02SJ01	F-3	2	A	1"	GL	SO	C	C	PIT	RR		VO-3	
I	SJ HV 0019	M-02SJ01	E-3	2	A	1"	GL	SO	C	C	AT	RR		V04	10
	SJ HV 0019	M-02SJ01	E-3	2	A	1"	GL	SO	C	C	BT	OP	5		
	SJ HV 0019	M-02SJ01	E-3	2	A	1"	GL	SO	C	C	FST	OP			
	SJ HV 0019	M-02SJ01	E-3	2	A	1"	GL	SO	C	C	PIT	RR		VO-3	

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
	SJ HV 0003	M-02SJ04	F-7	2	B	1"	GL	SO	C	C	NA				3
	SJ HV 0004	M-02SJ04	H-7	2	B	1"	GL	SO	C	C	NA				3
I	SJ HV 0005	M-02SJ04	F-7	2	A	1"	GL	SO	O	C	AT	RR		V04	10
	SJ HV 0005	M-02SJ04	F-7	2	A	1"	GL	SO	O	C	BT	OP	5		
	SJ HV 0005	M-02SJ04	F-7	2	A	1"	GL	SO	O	C	FST	OP			
	SJ HV 0005	M-02SJ04	F-7	2	A	1"	GL	SO	O	C	PIT	RR		VO-3	
I	SJ HV 0006	M-02SJ04	F-6	2	A	1"	GL	SO	O	C	AT	RR		V04	10
	SJ HV 0006	M-02SJ04	F-6	2	A	1"	GL	SO	O	C	BT	OP	5		
	SJ HV 0006	M-02SJ04	F-6	2	A	1"	GL	SO	O	C	FST	OP			
	SJ HV 0006	M-02SJ04	F-6	2	A	1"	GL	SO	O	C	PIT	RR		VO-3	
	SJ HV 0020	M-02SJ04	G-7	2	B	1"	GL	SO	C	C	NA				3
I	SJ HV 0127	M-02SJ04	F-6	2	A	1"	GL	SO	C	C	AT	RR		V04	10
	SJ HV 0127	M-02SJ04	F-6	2	A	1"	GL	SO	C	C	BT	OP	5		
	SJ HV 0127	M-02SJ04	F-6	2	A	1"	GL	SO	C	C	FST	OP			
	SJ HV 0127	M-02SJ04	F-6	2	A	1"	GL	SO	C	C	PIT	RR		VO-3	
I	SJ HV 0128	M-02SJ04	H-6	2	A	1"	GL	SO	O	C	AT	RR		V04	10
	SJ HV 0128	M-02SJ04	H-6	2	A	1"	GL	SO	O	C	BT	OP	5		
	SJ HV 0128	M-02SJ04	H-6	2	A	1"	GL	SO	O	C	FST	OP			
	SJ HV 0128	M-02SJ04	H-6	2	A	1"	GL	SO	O	C	PIT	RR		VO-3	
I	SJ HV 0129	M-02SJ04	H-5	2	A	1"	GL	SO	O	C	AT	RR		V04	10
	SJ HV 0129	M-02SJ04	H-5	2	A	1"	GL	SO	O	C	BT	OP	5		
	SJ HV 0129	M-02SJ04	H-5	2	A	1"	GL	SO	O	C	FST	OP			
	SJ HV 0129	M-02SJ04	H-5	2	A	1"	GL	SO	O	C	PIT	RR		VO-3	
I	SJ HV 0130	M-02SJ04	G-5	2	A	1"	GL	SO	C	C	AT	RR		V04	10
	SJ HV 0130	M-02SJ04	G-5	2	A	1"	GL	SO	C	C	BT	OP	5		
	SJ HV 0130	M-02SJ04	G-5	2	A	1"	GL	SO	C	C	FST	OP			
	SJ HV 0130	M-02SJ04	G-5	2	A	1"	GL	SO	C	C	PIT	RR		VO-3	
I	SJ HV 0131	M-02SJ04	B-6	2	A	1"	GL	SO	C	C	AT	RR		V04	10
	SJ HV 0131	M-02SJ04	B-6	2	A	1"	GL	SO	C	C	BT	OP	5		
	SJ HV 0131	M-02SJ04	B-6	2	A	1"	GL	SO	C	C	FST	OP			
	SJ HV 0131	M-02SJ04	B-6	2	A	1"	GL	SO	C	C	PIT	RR		VO-3	
I	SJ HV 0132	M-02SJ04	A-6	2	A	1"	GL	SO	C	C	AT	RR		V04	10
	SJ HV 0132	M-02SJ04	A-6	2	A	1"	GL	SO	C	C	BT	OP	5		
	SJ HV 0132	M-02SJ04	A-6	2	A	1"	GL	SO	C	C	FST	OP			
	SJ HV 0132	M-02SJ04	A-6	2	A	1"	GL	SO	C	C	PIT	RR		VO-3	
	SJ V 0101	M-02SJ04	G-7	2	C	1"	CK	SA	C	C	NA				3
I	SJ V 0111	M-02SJ04	A-7	2	A,C	1"	CK	SA	C	C	AT	RR		V04	9,11

RELIEF REQUEST #P08

SYSTEM: Safety Related

COMPONENT: All pumps listed in the program.

CLASS: 2 & 3

FUNCTION: To provide flow to safety related systems.

TEST REQUIREMENT: The direction of displacement shall be measured in a plane approximately perpendicular to the rotating shaft, and in the horizontal or vertical direction that has the largest deflection for the particular pump installation.

BASIS FOR RELIEF: Some bearing housings have obstructions such as oil fill caps, sight glasses, bolts, rigid supports, etc., which prevent obtaining valid vibration data in the perfectly horizontal or vertical direction.

ALTERNATE TESTING: The direction of displacement shall be measured in a plane approximately perpendicular to the rotating shaft, and in approximately the horizontal or vertical direction that has the largest deflection for the particular pump installation.

DELETE

RELIEF REQUEST #V01

VALVE: BB-V118, V148, V178, V208
BG-V135, BG-8381
BL-8048, BM-V045, V046
EC-V083, V084, V087, V088, V095, V096
EG-V204, EM-V006, EP-V046
HD-V016, V017
KA-V039, V118, V204
KC-V478, SJ-V111

CATEGORY: A, C

CLASS: 2

FUNCTION: Provides containment isolation.

TEST REQUIREMENT: Exercise check valve (full stroke) to the position required to fulfill its function every 3 months.

BASIS FOR RELIEF: System design does not provide any indication for verifying valve closure upon flow reversal.

ALTERNATE TESTING: Verify valve closure during performance of leak rate test during refueling.

RELIEF REQUEST #V04

VALVE: All Containment Isolation Valves

CATEGORY: A

CLASS: 2

FUNCTION: Provides containment isolation.

TEST REQUIREMENT: Perform valve leak rate test per section IWV-3420.

BASIS FOR RELIEF: 10 CFR 50, Appendix J, Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors, provides leakage test requirements for containment isolation valves. Technical Specifications provide ACTION statements to be adhered to in the event of test failure.

ALTERNATE
TESTING: Valve leak rate testing for containment isolation valves will be performed to the leak test requirements of 10 CFR 50, Appendix J, and Technical Specifications. This includes requirements for test frequency, differential test pressure, seat leakage measurement, test medium, analysis of leakage rates and corrective action.

RELIEF REQUEST #V05

VALVE: BB-8948A, B, C, D
BB-8949A, B, C, D
BB-V-0001, 0022, 0040, 0059
BB-PV-8702A, B
EJ-8841A, B
EJ-HV-8701A, B
EM-V-0001, 0002, 0003, 0004
EM-8815
EP-V-0010, 0020, 0030, 0040
EP-8818A, B, C, D
EP-8956A, B, C, D

CATEGORY: A

CLASS: 1

FUNCTION: Provide Reactor Coolant System Pressure Isolation.

TEST REQUIREMENT: Perform valve leak rate test per sections IWV-3421 thru IWV-3427.

BASIS FOR RELIEF: Reactor Coolant System Pressure Isolation Valves are sufficiently leak tested per Callaway Plant Technical Specification 4.4.6.2.2.

ALTERNATE TESTING: Reactor Coolant System Pressure Isolation Valves will be leak tested in accordance with Technical Specification 4.4.6.2.2.

RELIEF REQUEST #KA 2

VALVE: KA-V-204

CATEGORY: A, C

CLASS: 2

FUNCTION: Provides containment isolation.

TEST REQUIREMENT: Exercise check valve (full stroke) to the position required to fulfill its function every 3 months.

BASIS FOR RELIEF: System design does not provide any indication for verifying valve closure upon flow reversal.

ALTERNATE TESTING: Verify valve closure during performance of leak rate test required to be performed during re-fueling.



UNION ELECTRIC COMPANY

1901 Gratiot Street, St. Louis

Donald F. Schnell
Vice President

June 28, 1985

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

ULNRC-1127

Dear Mr. Denton:

DOCKET NUMBER 50-483
CALLAWAY PLANT, UNIT 1
CALLAWAY PUMP AND VALVE INSERVICE TESTING PROGRAM
References: 1) ULNRC-738 dated January 31, 1984
2) ULNRC-833 dated May 29, 1984
3) ULNRC-1039 dated February 11, 1985

References 1, 2, and 3 transmitted the Callaway Pump and Valve Inservice Testing Program and an update to the program. Included as attachments to this letter are further updates to the Callaway testing program. Attachment 1 is a brief description of the changes, and Attachment 2 contains revised replacement pages.

If there are any questions, please contact us.

Very truly yours,

Donald F. Schnell

WEK/WAW/kc

Attachments

A047
11

STATE OF MISSOURI)
) S S
CITY OF ST. LOUIS)

Donald F. Schnell, of lawful age, being first duly sworn upon oath says that he is Vice President-Nuclear and an officer of Union Electric Company; that he has read the foregoing document and knows the content thereof; that he has executed the same for and on behalf of said company with full power and authority to do so; and that the facts therein stated are true and correct to the best of his knowledge, information and belief.

By Donald F. Schnell
Donald F. Schnell
Vice President
Nuclear

SUBSCRIBED and sworn to before me this 28th day of June, 1985.

Barbara J. Papp
BARBARA J. PAPP
NOTARY PUBLIC, STATE OF MISSOURI
MY COMMISSION EXPIRES APRIL 22, 1989
ST. LOUIS COUNTY

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G. P. Rathbun (KG&E)
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Compliance (J. E. Davis)
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