



In the Matter of:

ELECTRONIC APPLICATION OF)
BIG RIVERS ELECTRIC CORPORATION)
FOR APPROVAL OF ITS 2020 ENVIRONMENTAL)
COMPLIANCE PLAN, AUTHORITY TO RECOVER COSTS)
THROUGH A REVISED ENVIRONMENTAL SURCHARGE)
AND TARIFF, THE ISSUANCE OF A CERTIFICATE OF)
PUBLIC CONVENIENCE AND NECESSITY FOR CERTAIN)
PROJECTS, AND APPROPRIATE ACCOUNTING)
AND OTHER RELIEF)

Case No.
2019-00435

CONFIDENTIAL INFORMATION

Project 12
Wilson Station FGD Replacement and Upgrade
General Contract Package with Photos
Phase 2 Construction

Filed pursuant to Ordering Paragraph No. 18
of Commission's August 6, 2020 Order
FILED: November 30, 2021

INFORMATION SUBMITTED with
MOTION FOR CONFIDENTIAL TREATMENT





Flue Gas Desulfurization Retrofit Project
D.B. Wilson Station, Centertown, Ky

Appendix AA

Lists

(New Documents/Revisions are Denoted by *)

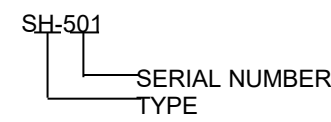
Appendix	Document Number	Document Title	Document Revision
AA	143993-ASA-DE2-LST-1238	SPRING HANGER LIST	0
AA	143993-ASA-DE2-LST-1239	PIPE SUPPORT DETAIL LIST	2
AA	143993-ASA-DF0-LST-1700	ELECTRICAL EQUIPMENT LIST	A
AA	143993-ASA-DF0-LST-1701	ELECTRICAL - CABLE LIST	B
AA	143993-ASA-DG0-LST-1600	INSTRUMENTATION AND CONTROLS - INSTRUMENT INDEX	0
AA	143993-ASA-DG0-LST-1601	INSTRUMENTATION AND CONTROLS - DCS I-O LIST	0
AA	143993-IPC-DE1-LST-0001	EQUIPMENT LIST	1
AA	143993-IPC-DE1-LST-0004	EXTERNAL HARDWARE LIST	0
AA	143993-IPC-DG0-LST-0001	LINE LIST	2
AA	143993-IPC-DE2-LST-0001	AUTOMATIC VALVE LIST	2
AA	143993-IPC-DE2-LST-0002	MANUAL VALVE LIST	3
AA	143993-IPC-DE2-LST-0003	PIPE SUPPORT DETAIL LIST	D
AA	143993-IPC-DE2-LST-0004	LINE LIST	2
AA	143993-IPC-DG0-LST-0003	VALVE LIST	1

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NOTES:

1. Spring Hanger Numbering System:



2. Type:

- SH = Spring Hanger
- SS = Spring Support
- SN = Snubber
- ST = Strut

3. Spring hangers, spring supports, sway braces and other support devices listed on this DWG to be installed in accordance with project standards.

4. The spring hanger assembly consists of:

- a) Spring hanger type, Anvil welded beam attachment Fig.66, continuous thread rod Fig.146, weldless eye nut Fig.290 and double bolt pipe clamp Fig. 295.

5. All spring hangers to be supplied with solid steel bar travel stops set for the cold load and secured in place with retaining bands. The travel stops will act as rigid hangers during hydrostatic testing and shall be removed before start up.

6. Spring hangers shall be set at erection to the cold load and adjusted to the hot load when the pipe is in service. Both cold and hot loads to be marked on the spring hangers by the supplier.

7. Parts of the spring hanger assembly listed in:

- a. COLUMN "3" to be supplied by the contractor.
- b. COLUMN "4" to be supplied by the spring hanger manufacturer.

8. Pipe Clamps on Lines 400 °C (751 °F) to 565 °C (1050 °F) shall be Chrome Molybdenum steel ASTM A387 Grade 22 or equal. Clamps shall be stamped with the ASTM number and painted yellow.

9. Spring hanger supplier to supply springs, upper and lower assemblies as per Note 4a.

10. Spring hanger supplier shall mark the bottom of each spring canister with the appropriate hanger number. The markings shall be approximately 25mm [1"] in height and shall be made of yellow paint or other approved non-washable and non-fade product.

11. If other than Anvil spring hangers are to be installed, care must be exercised in the alternate selection to ensure that the overall height of the spring hanger casing plus upper and lower assembly does not exceed that of Anvil's as this could result in inadequate head room for installation

12. All spring hangers, sway braces and snubbers shall be completely galvanized except the spring which shall be neoprene coated.

0	24-Aug-21	IFC	PAD	FZs	TS
REV.	DD-MMM-YY	DESCRIPTION	DRN.	CHK.	APP.
ISSUED FOR CONSTRUCTION					
BMc		TS	DH		
Client Proj. Mgr.		Dept. Mgr.	Proj. Mgr.		
wood.					
Big Rivers Electric Corporation D.B. Wilson Plant - FGD Retrofit Project					
AREA Balance of Plant					
SUBJECT SPRING HANGER LIST					
PROJECT NUMBER 245891			AWBS No.		
CLIENT DOCUMENT NUMBER					
DOCUMENT NUMBER 143993-ASA-DE2-LST-1238				REV. 0	

SPRING HANGER LIST

CLIENT DOCUMENT NO.

DOCUMENT NO. 143993-ASA-DE2-LST-1238



Doc.

Rev.

0

[illegible]

NOTES:

- 1. Reference Piping Specification Document No. 143993-ASA-DE2-SPC-1200
- 2. Reference Piping General Notes Document No. 143993-ASA-DE2-TLN-1202

2	10-Sep-21	FOR CONSTRUCTION	FZs		
1	23-Aug-21	FOR CONSTRUCTION	FZs		
0	23-Jul-21	FOR CONSTRUCTION	FZs		
B	19-May-21	Issued for Bid	FZs		
A	30-Apr-21	IFA	FZs	DS	
REV.	DD-MMM-YY	DESCRIPTION	DRN.	CHK.	APP.
ISSUED FOR CONSTRUCTION					
BMc		TS	DH		
Customer Proj. Mgr.		Dept. Mgr.	Proj. Mgr.		
wood.					
Big Rivers Electric Corporation D.B. Wilson Plant - FGD Retrofit Project					
AREA		Balance of Plant			
SUBJECT		PIPE SUPPORT DETAIL LIST			
PROJECT NUMBER 245891			WBS No.		
CUSTOMER DOCUMENT NUMBER					
DOCUMENT NUMBER 143993-ASA-DE2-LST-1239				REV. 2	

PIPE SUPPORT DETAIL LIST									Doc.
CUSTOMER DOCUMENT NO. 0									Rev.
DOCUMENT NO. 143993-ASA-DE2-LST-1239									1
Support Number	Quantity Required	Nominal Pipe Size	Description	Line Number	Drawing or Datasheet Number	Construction Work Area (CWA)	Purchase Order Number	Remarks	REV.
D-001	4	4	ANGLE SUPPORT	405A-LSW-HZD	143993-ASA-DE2-PSP-1230	EXIST SURGE TANK T-111 & T112		Replacement steel to be designed by Structural, see dwg XXX	0
D-002	4	4	T-POST	405-LSW-HZD	143993-ASA-DE2-PSP-1230	PLATFORM NEAR EXIST SURGE TANK T-111		DELETED	0
D-003	4	4	ANGLE SUPPORT	405-LSW-HZD	143993-ASA-DE2-PSP-1230	EXIST SURGE TANK T-111		DELETED	0
D-004	4	4	RISER SUPPORT	405-LSW-HZD	143993-ASA-DE2-PSP-1230	143993-ASA-DE2-PSP-1232		DELETED	0
D-005	4	4	T-POST	405-LSW-HZD	143993-ASA-DE2-PSP-1231	PLATFORM NEAR EXIST SURGE TANK T-111		DELETED	0
D-006								NOT USED	B
D-007	1	4	FRAME	402A-LWS-HZD, 711A-WRW-HZD	143993-ASA-DE2-PSP-1231	ABSORBER PLATFORM EL.409'-10" NORTH SIDE		IN WOOD IP SCOPE	2
D-008	1	VARIOUS	KNEE BRACE	700-WRW-HZD-8", 503-LSS-HZD-6" 504-LSS-HZD-6", 800-WSW-HZD-4"	143993-ASA-DE2-PSP-1231	ABSORBER PLATFORM, N-E COLUMN			B
D-009	1	6"	RISER SUPPORT	503-LSS-HZD-6" 504-LSS-HZD-6"	143993-ASA-DE2-PSP-1232	ABSORBER NORTH SIDE ABOVE PLATFORM EL. 409'-10"			0
D-010	1	6 & 8	SUPPORT AT TRENCH	123-ASD-HZD-6", 306-LSW-HZD-8"	143993-ASA-DE2-PSP-1232	SOUTH BLOWDOWN TRENCH			B
D-011	1	4	SUPPORT AT TOP OF SURGE TANK T-111	405A-LWS-HZD 405B-LWS-HZD	143993-ASA-DE2-PSP-1232	EXIST. SURGE TANK T-111			0
D-012	2	4	RISER SUPPORT AT SURGE TANK T-111	405A-LWS-HZD 405B-LWS-HZD	143993-ASA-DE2-PSP-1232	EXIST. SURGE TANK T-111			0
D-013	4	4	STEEL FRAMING	405-LWS-HZD	143993-ASA-DE2-PSP-1233	EXIST T-POLES AT SURGE TANK T-111		DELETED	0
D-014	40	4	SHORT T-POST	405-LWS-HZD	143993-ASA-DE2-PSP-1233	EXIST T-POLES AT SURGE TANK T-111		DELETED	0
D-015	4	4	STEEL FRAMING	405-LWS-HZD	143993-ASA-DE2-PSP-1233	EXIST T-POLES AT SURGE TANK T-111		DELETED	0
D-016	4	4	STEEL FRAMING	405-LWS-HZD	143993-ASA-DE2-PSP-1233	EXIST T-POLES AT SURGE TANK T-111		DELETED	0
D-017	1	10	RISER GUIDE	110B-LRS-HAD	143992-ASA-DE2-PSP-1231	BELOW ABSORBER INLET DUCT			1
D-018	1	8	RISER GUIDE	340-LWS-JZD	143992-ASA-DE2-PSP-1234	ABSORBER AREA		IN WOOD IP SCOPE	2
D-019	1	8	POST, GUIDE WITH STOP	340-LWS-JZD	143992-ASA-DE2-PSP-1234	ABSORBER AREA		IN WOOD IP SCOPE	2
D-020	1	4	POST	402A-LWS-JZD	143992-ASA-DE2-PSP-1234	ABSORBER AREA		IN WOOD IP SCOPE	2
D-021	1	4	POST	305A/B-LWS-JZD	143992-ASA-DE2-PSP-1235	GYPSUM FORWARDING PUMPS		IN WOOD IP SCOPE	2
D-022	2	8	RISER GUIDE	340-LWS-JZD	143992-ASA-DE2-PSP-1234	ABSORBER AREA		IN WOOD IP SCOPE	2

NOTES:

1.

REV.	D/M/Y	DESCRIPTION	CH.	APP.	REV.
A	28-May-21	ISSUED FOR BID	AS	JB	
ISSUED FOR APPROVAL					
RG		RS	DH		
Client Proj. Mgr.		Dept. Mgr.	Proj. Mgr.		
WoodPLC INDUSTRIAL POWER 437 GRANT STREET PITTSBURGH, PA					
BIG RIVERS ELECTRIC CORPORATION DB WILSON STATION CENTERTOWN, KY					
AREA ALL					
SUBJECT ELECTRICAL EQUIPMENT LIST					
AMEC FW PROJECT NUMBER		AWBS No.			
143993					
CLIENT DOCUMENT NUMBER				REV.	
AMEC FOSTER WHEELER DOCUMENT NUMBER				REV.	
143993-ASA-DF0-LST-1700				A	

EQUIPMENT LIST													
CLIENT: PROJECT:		PROJECT NO.: DATE: REV:											
EQUIPMENT I.D. NUMBER	EQUIPMENT DESCRIPTION							REMARKS	FURNISHED BY	REFERENCE DOCUMENTS	REVISION	CHANGE	
		Discipline											
1A-100A	ABSORBER AGITATOR A	Mechanical					refurbish and reuse	BREC			A		
1A-100B	ABSORBER AGITATOR B	Mechanical					refurbish and reuse	BREC			A		
1A-100C	ABSORBER AGITATOR C	Mechanical					refurbish and reuse	BREC			A		
1A-100D	ABSORBER AGITATOR D	Mechanical					refurbish and reuse	BREC			A		
1A-100E	ABSORBER AGITATOR E	Mechanical					refurbish and reuse	BREC			A		
1A-120A	ABSORBER AREA SUMP AGITATOR B	Mechanical					refurbish and reuse	BREC			A		
1A-120B	ABSORBER AREA SUMP AGITATOR A	Mechanical					refurbish and reuse	BREC			A		
1A-400	GYPSSUM SLURRY TRANSFER TANK AGITATOR	Mechanical					refurbish and reuse	BREC			A		
1AE-320A	PH ELEMENT	Mechanical					new	WOOD			A		
1AE-320B	PH ELEMENT	Instrumentation									A		
1AE-321	ORP ELEMENT	Instrumentation									A		
1AT-320A	PH TRANSMITTER	Instrumentation									A		
1AT-320B	PH TRANSMITTER	Instrumentation									A		
1AT-321	ORP TRANSMITTER	Instrumentation									A		
1C-900A	MOTOR, OXIDATION AIR BLOWER 1	Mechanical					refurbish and reuse	WOOD			A		
1C-900B	MOTOR, OXIDATION AIR BLOWER 2	Mechanical					refurbish and reuse	WOOD			A		
1C-900C	MOTOR, OXIDATION AIR BLOWER 3	Mechanical					refurbish and reuse	WOOD			A		
1D-900A	INSTRUMENT	Instrumentation									A		
1D-900B	INSTRUMENT	Instrumentation									A		
1D-900C	INSTRUMENT	Instrumentation									A		
1DE-310	INSTRUMENT	Instrumentation									A		
1DT-310	DENSITY TRANSMITTER	Instrumentation									A		
1E-130	HPU SKID	Mechanical									A		
1F-170A	RECYCLER PUMP A HEAT EXCHANGER COOLING FAN	Mechanical					refurbish and reuse	BREC			A		
1F-170B	RECYCLER PUMP B HEAT EXCHANGER COOLING FAN	Mechanical					refurbish and reuse	BREC			A		
1F-170C	RECYCLER PUMP C HEAT EXCHANGER COOLING FAN	Mechanical					refurbish and reuse	BREC			A		
1F-170D	RECYCLER PUMP D HEAT EXCHANGER COOLING FAN	Mechanical					refurbish and reuse	BREC			A		
1F-170E	RECYCLER PUMP E HEAT EXCHANGER COOLING FAN	Mechanical					refurbish and reuse	BREC			A		
1F-930A	OXIDATION BLOWER BUILDING BLOWER 1	Mechanical					new	GC			A		
1F-930B	OXIDATION BLOWER BUILDING BLOWER 2	Mechanical					new	GC			A		
1F-930C	OXIDATION BLOWER BUILDING BLOWER 3	Mechanical					new	GC			A		
1F-930D	OXIDATION BLOWER BUILDING BLOWER 4	Mechanical					new	GC			A		
1FCV-540	INSTRUMENT	Instrumentation									A		
1FCV-700	INSTRUMENT	Instrumentation									A		
1FE-210	INSTRUMENT	Instrumentation									A		
1FE-321	INSTRUMENT	Instrumentation									A		
1FE-410	INSTRUMENT	Instrumentation									A		
1FE-540	INSTRUMENT	Instrumentation									A		
1FE-700	INSTRUMENT	Instrumentation									A		
1FE-936	INSTRUMENT	Instrumentation									A		
1FSV-960	SOLENOID	Instrumentation									A		
1FT-210	FLOW TRANSMITTER	Instrumentation									A		
1FT-245	FLOW TRANSMITTER	Instrumentation									A		
1FT-321	FLOW TRANSMITTER	Instrumentation									A		
1FT-410	FLOW TRANSMITTER	Instrumentation									A		
1FT-540	FLOW TRANSMITTER	Instrumentation									A		
1FT-700	FLOW TRANSMITTER	Instrumentation									A		
1FT-936	FLOW TRANSMITTER	Instrumentation									A		
1FV-101A	ON/OFF VALVE	Instrumentation									A		
1FV-101B	ON/OFF VALVE	Instrumentation									A		
1FV-101C	ON/OFF VALVE	Instrumentation									A		
1FV-101D	ON/OFF VALVE	Instrumentation									A		
1FV-101E	ON/OFF VALVE	Instrumentation									A		
1FV-102A	ON/OFF VALVE	Instrumentation									A		
1FV-102B	ON/OFF VALVE	Instrumentation									A		
1FV-102C	ON/OFF VALVE	Instrumentation									A		
1FV-102D	ON/OFF VALVE	Instrumentation									A		
1FV-102E	ON/OFF VALVE	Instrumentation									A		
1FV-103A	ON/OFF VALVE	Instrumentation									A		
1FV-103B	ON/OFF VALVE	Instrumentation									A		
1FV-103C	ON/OFF VALVE	Instrumentation									A		
1FV-103D	ON/OFF VALVE	Instrumentation									A		
1FV-103E	ON/OFF VALVE	Instrumentation									A		
1FV-104A	ON/OFF VALVE	Instrumentation									A		
1FV-104B	ON/OFF VALVE	Instrumentation									A		
1FV-104C	ON/OFF VALVE	Instrumentation									A		
1FV-104D	ON/OFF VALVE	Instrumentation									A		
1FV-104E	ON/OFF VALVE	Instrumentation									A		
1FV-120A	ON/OFF VALVE	Instrumentation									A		
1FV-120B	ON/OFF VALVE	Instrumentation									A		
1FV-120BH	INSTRUMENT	Instrumentation									A		
1FV-205	ON/OFF VALVE	Instrumentation									A		
1FV-221	ON/OFF VALVE	Instrumentation									A		
1FV-222	ON/OFF VALVE	Instrumentation									A		
1FV-223	ON/OFF VALVE	Instrumentation									A		
1FV-224	ON/OFF VALVE	Instrumentation									A		
1FV-225	ON/OFF VALVE	Instrumentation									A		
1FV-226	ON/OFF VALVE	Instrumentation									A		
1FV-227	ON/OFF VALVE	Instrumentation									A		
1FV-228	ON/OFF VALVE	Instrumentation									A		
1FV-231	ON/OFF VALVE	Instrumentation									A		
1FV-232	ON/OFF VALVE	Instrumentation									A		
1FV-233	ON/OFF VALVE	Instrumentation									A		
1FV-234	ON/OFF VALVE	Instrumentation									A		
1FV-241	ON/OFF VALVE	Instrumentation									A		
1FV-242	ON/OFF VALVE	Instrumentation									A		
1FV-243	ON/OFF VALVE	Instrumentation									A		
1FV-244	ON/OFF VALVE	Instrumentation									A		
1FV-245	ON/OFF VALVE	Instrumentation									A		
1FV-246	ON/OFF VALVE	Instrumentation									A		
1FV-290	ON/OFF VALVE	Instrumentation									A		
1FV-301A	ON/OFF VALVE	Instrumentation									A		
1FV-301B	ON/OFF VALVE	Instrumentation									A		
1FV-302A	ON/OFF VALVE	Instrumentation									A		
1FV-302B	ON/OFF VALVE	Instrumentation									A		
1FV-303A	ON/OFF VALVE	Instrumentation									A		
1FV-303B	ON/OFF VALVE	Instrumentation									A		
1FV-304A	ON/OFF VALVE	Instrumentation									A		
1FV-304B	ON/OFF VALVE	Instrumentation									A		
1FV-330	ON/OFF VALVE	Instrumentation									A		
1FV-331	ON/OFF VALVE	Instrumentation									A		
1FV-332	ON/OFF VALVE	Instrumentation									A		
1FV-333	ON/OFF VALVE	Instrumentation									A		
1FV-335	ON/OFF VALVE	Instrumentation									A		
1FV-401A	ON/OFF VALVE	Instrumentation									A		
1FV-401B	ON/OFF VALVE	Instrumentation									A		
1FV-402A	ON/OFF VALVE	Instrumentation									A		
1FV-402B	ON/OFF VALVE	Instrumentation									A		
1FV-403A	ON/OFF VALVE	Instrumentation									A		
1FV-403B	ON/OFF VALVE	Instrumentation									A		
1FV-404A	ON/OFF VALVE	Instrumentation									A		
1FV-404B	ON/OFF VALVE	Instrumentation									A		
1FV-405	ON/OFF VALVE	Instrumentation									A		
1FV-405B		Instrumentation									A		
1FV-406	ON/OFF VALVE	Instrumentation									A		
1FV-407	ON/OFF VALVE	Instrumentation									A		
1FV-530	ON/OFF VALVE	Instrumentation									A		
1FV-531	ON/OFF VALVE	Instrumentation									A		
1FV-901A	INSTRUMENT	Instrumentation									A		
1FV-901B	INSTRUMENT	Instrumentation									A		
1FV-901C	INSTRUMENT	Instrumentation									A		
1FV-903A	INSTRUMENT	Instrumentation									A		
1FV-903B	INSTRUMENT	Instrumentation									A		
1FV-903C	INSTRUMENT	Instrumentation									A		
1FV-950		Instrumentation									A		
1FY-540	CURRENT PNEUMATIC TRANSDUCER	Instrumentation									A		
1FY-700	CURRENT PNEUMATIC TRANSDUCER	Instrumentation									A		
1HCV-540		Instrumentation									A		
1HCV-700		Instrumentation									A		
1HCV-801		Instrumentation									A		
1HSC-901A	MOV CLOSE COMMAND	Instrumentation									A		
1HSC-901B	MOV CLOSE COMMAND	Instrumentation									A		
1HSC-901C	MOV CLOSE COMMAND	Instrumentation									A		
1HSC-903A	MOV CLOSE COMMAND	Instrumentation									A		
1HSC-903B	MOV CLOSE COMMAND	Instrumentation									A		
1HSC-903C	MOV CLOSE COMMAND	Instrumentation									A		
1HSO-901A	MOV OPEN COMMAND	Instrumentation									A		
1HSO-901B	MOV OPEN COMMAND	Instrumentation									A		
1HSO-901C	MOV OPEN COMMAND	Instrumentation									A		
1HSO-903A	MOV OPEN COMMAND	Instrumentation									A		
1HSO-903B	MOV OPEN COMMAND	Instrumentation									A		
1HSO-903C	MOV OPEN COMMAND	Instrumentation									A		
1LE-100A	LEVEL ELEMENT	Instrumentation									A		
1LE-100B	LEVEL ELEMENT	Instrumentation									A		
1LE-111	LEVEL ELEMENT	Instrumentation									A		
1LEH-72	LEVEL ELEMENT	Instrumentation									A		
1LEL-72	LEVEL ELEMENT	Instrumentation									A		
1LUT-201	DIFFERENTIAL PRESSURE TRANSMITTER	Instrumentation									A		
1LSH-72	LEVEL SWITCH HIGH	Instrumentation									A		
1LSL-111	LEVEL SWITCH LOW	Instrumentation									A		
1LSL-72	LEVEL SWITCH LOW	Instrumentation									A		
1LT-100A	LEVEL TRANSMITTER	Instrumentation									A		
1LY-100B	LEVEL TRANSMITTER	Instrumentation									A		
1LT-120	LEVEL TRANSMITTER	Instrumentation									A		
1LT-290	LEVEL TRANSMITTER	Instrumentation									A		
1LT-400	LEVEL TRANSMITTER	Instrumentation									A		
1LV-801		Instrumentation									A		
1LV-801	CURRENT PNEUMATIC TRANSDUCER	Instrumentation									A		
1MB-1	EXISTING ABSORBER MARSHALLING CABINET	Instrumentation									A		
1P-100A	MOTOR, ABSORBER RECYCLE PUMP A	Mechanical					refurbish and reuse	BREC			A		
1P-100B	MOTOR, ABSORBER RECYCLE PUMP B	Mechanical					refurbish and reuse	BREC			A		
1P-100C	MOTOR, ABSORBER RECYCLE PUMP C	Mechanical					refurbish and reuse	BREC			A		
1P-100D	MOTOR, ABSORBER RECYCLE PUMP D	Mechanical					refurbish and reuse	BREC			A		
1P-100E	MOTOR, ABSORBER RECYCLE PUMP E	Mechanical					refurbish and reuse	BREC			A		
1P-120A	ABSORBER AREA SUMP PUMP A	Mechanical					refurbish and reuse	BREC					

BREC WILSON FGD
RELOCATION PROJECT
CABLE LIST
143993-ASA-DF0-LST-1701

						Department Manager:	RRS	12-May-21		ELECTRICAL CABLE SCHEDULE
						Approved by:	ARS	12-May-21		
						Checked by:	ABD	12-May-21		
						Prepared by:	HH	12-May-21		
B	28-May-21	HH	IFB	MAP	ARS	ACTION	BY	DATE		
A	12-May-21	ARS	IFA	ABD	ARS	Project No.	FILE NAME:			Client Dwg No.: 143993-ASA-DF0-LST-1701
REV.	DATE	BY	RELEASED FOR	CHK'D	APP'D	245891	143993-ASA-DF0-LST-1701.xlsx			Revision No.: A

WORK PKG	PLANT SYS CODE	START UP SYSTEM	ROUTE LOCK	DESIGN STATUS	TERM DESIGN STATUS	RT LEN	RT LEN OVERRIDE	ESTIMATED CAB LENGTH	DESIGN NOTE	UTIL CODE	P AND ID	PULL CODE	REV	DEPT SOURCE	CAB USER1	CAB USER2	CAB USER6	NEC RULE OVERRIDE
			Y	IFR		246.1		300										
			Y	IFR		246.1		300										
			Y	IFR		246.1		300										
			Y	IFR		246.1		300										
			Y	IFR		246.1		300										
			Y	IFR		287.8											SG	
			Y	IFR		287.8											SG	
			Y	IFR		287.8											SG	
			Y	IFR		287.8											SG	
			Y	IFR		287.8											SG	
			Y	IFR		287.8											SG	
			Y	IFR		287.8											SG	
			Y	IFR		287.8											SG	
			Y	IFR		287.8											SG	
			Y	IFR		287.8											SG	
			Y	IFR		287.8											SG	
			Y	IFR		287.8											SG	
			Y	IFR		287.8											SG	
			Y	IFR		287.8											SG	
			Y	IFR		287.8											SG	
			Y	IFR		287.8											SG	
			Y	IFR		287.8											SG	
			Y	IFR		287.8											SG	
			Y	IFR		287.8											SG	
			Y	IFR		287.8											SG	
			Y	IFR		324.7												
			Y	IFR		306.6												
			Y	IFR		255.5												
			Y	IFR		323.2												
			Y	IFR		147.7		300										
			Y	IFR		147.7		300										
			Y	IFR		147.7		300										
			Y	IFR		305.1												
			Y	IFR		166.0		300										
			Y	IFR		166.0		300										
			Y	IFR		166.0		300										
			Y	IFR		166.0		300										
			Y	IFR		253.5												
			Y	IFR		184.3		300										
			Y	IFR		184.3		300										
			Y	IFR		184.3		300										
				RFR				300										
				RFR														

[illegible]

WORK PKG	PLANT SYS CODE	START UP SYSTEM	ROUTE LOCK	DESIGN STATUS	TERM DESIGN STATUS	RT LEN	RT LEN OVERRIDE	ESTIMATED CAB LENGTH	DESIGN NOTE	UTIL CODE	P AND ID	PULL CODE	REV	DEPT SOURCE	CAB USER1	CAB USER2	CAB USER6	NEC RULE OVERRIDE
				RFR		208.9					143993-03-112						ARS	
				RFR		208.9					143993-03-112						ARS	
				RFR		208.9					143993-03-112						ARS	
				RFR		208.9					143993-03-112						ARS	
				RFR		208.9					143993-03-112						ARS	
				RFR		208.9					143993-03-112						ARS	
				RFR		163.5					143993-03-112						ARS	
				RFR		163.5					143993-03-112						ARS	
				RFR		163.5					143993-03-112						ARS	
				RFR		163.5					143993-03-112						ARS	
				RFR		163.5					143993-03-112						ARS	
				RFR		163.5					143993-03-112						ARS	
				RFR		163.5					143993-03-112						ARS	
				RFR		186.6					143993-03-115						ARS	
				RFR		186.6					143993-03-115						ARS	
				RFR		186.6					143993-03-115						ARS	
				RFR		186.6					143993-03-115						ARS	
				RFR		186.6					143993-03-115						ARS	
				RFR		186.6					143993-03-115						ARS	
				RFR		186.6					143993-03-115						ARS	
				RFR		234.8					143993-03-115						ARS	
				RFR		234.8					143993-03-115						ARS	
				RFR		234.8					143993-03-115						ARS	
				RFR		234.8					143993-03-115						ARS	
				RFR		234.8					143993-03-115						ARS	
				RFR		234.8					143993-03-115						ARS	
				RFR		234.8					143993-03-115						ARS	
				RFR		253.7					143993-03-115						ARS	
				RFR		253.7					143993-03-115						ARS	
				RFR		253.7					143993-03-115						ARS	
				RFR		253.7					143993-03-115						ARS	
								25									ARS	
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**INSTRUMENTATION & CONTROLS
INSTRUMENT INDEX REPORT
ALL AREAS
DB WILSON FGD REPLACEMENT
DB WILSON STATION
BIG RIVERS ELECTRIC
CENTERTOWN, KY**

REVISIONS

REV	DATE	DESCRIPTION	PREP'D BY	CHK'D BY	LEAD. ENG. APP'D	DM/TA APP'D	PM APP'D	CLIENT
A	23-Apr-21	ISSUED FOR APPROVAL	SPO	EMW	REO	RS	DH	
B	28-May-21	ISSUED FOR BID	SPO	REO	REO	RS	DH	
0	20-Aug-21	ISSUED FOR CONSTRUCTION	SPO	DMK	REO	RS	DH	

DB WILSON STATION
BIG RIVERS ELECTRIC
CENTERTOWN, KY
WOOD PROJECT NO.: P00245891
WOOD DOCUMENT NO.: 143993-ASA-DG0-LST-1600

INSTRUMENT INDEX REPORT

DB WILSON FGD REPLACEMENT
ALL AREAS



CONTROL SYSTEM FUNCTIONS

FUNCTIONS	DESCRIPTION
AI-2WT	4-20 mA DC INPUT TO CONTROL SYSTEM, LOOP POWERED
AI-4WT	4-20 mA DC INPUT TO CONTROL SYSTEM, FIELD POWERED
AO	4-20 mA DC OUTPUT FROM CONTROL SYSTEM
DI	CONTACT INPUT TO CONTROL SYSTEM
DO	CONTACT OUTPUT FROM CONTROL SYSTEM
IDI	CONTACT INPUT TO CONTROL SYSTEM, ISOLATED
IDO	CONTACT OUTPUT FROM CONTROL SYSTEM, ISOLATED
HDWIRE	HARDWIRED DEVICE (NOT WIRED TO CONTROL SYSTEM)

SUPPLIED BY LEGEND

DESIGNATION	DESCRIPTION
BREC	INSTRUMENT WILL BE SUPPLIED NEW BY BREC AND INSTALLED BY THE CONTRACTOR AT WILSON SITE
VENDOR	INSTRUMENT WILL BE SUPPLIED BY THE VENDOR AND WILL EITHER COME PRE-INSTALLED WITH THE EQUIPMENT OR WILL BE INSTALLED BY THE CONTRACTOR AT THE WILSON SITE
EXISTING	INSTRUMENT IS AN EXISTING DEVICE AT THE COLEMAN SITE AND WILL BE INSTALLED BY CONTRACTOR AT WILSON SITE

INSTRUMENT TAG	SERVICE DESCRIPTION	INSTRUMENT DESCRIPTION	P&ID DRAWING	MANUFACTURER	MODEL NUMBER	SIZE	SUPPLIED BY	I/O TYPE	CAL RANGE LOW	CAL RANGE HIGH	CAL RANGE UNITS	LOCATION DRAWING	INSTALLATION DETAIL	LOOP DRAWING	INST. REMARKS	REV	REV DATE	REV REMARKS
1LT-290	QUENCH WATER TANK	LEVEL TRANSMITTER	143993-03-110				EXISTING	AI-2WT	0	114	INCH	143993-ASA-DG0-EQD-1643	EXISTING	143993-ASA-DG0-LPD-1600-001		A	23APR21	
1LSL-72	FROM I.D. FANS TO ABSORBER	LEVEL SWITCH LOW	143993-03-110	DREXELBROOK	PML1-3312-A1CA		BREC	DI				143993-ASA-DG0-EQD-1624	143993-ASA-DG0-DTL-1600 / L007	143993-ASA-DG0-LPD-1600-002		A	23APR21	
1LSH-72	FROM I.D. FANS TO ABSORBER	LEVEL SWITCH HIGH	143993-03-110	DREXELBROOK	PML1-3312-A1CA		BREC	DI				143993-ASA-DG0-EQD-1624	143993-ASA-DG0-DTL-1600 / L007	143993-ASA-DG0-LPD-1600-002		A	23APR21	
1LEH-72	FROM I.D. FANS TO ABSORBER	LEVEL ELEMENT	143993-03-110	DREXELBROOK	700-0201-005		BREC	HDWIRE				143993-ASA-DG0-EQD-1624	N/A	143993-ASA-DG0-LPD-1600-002		A	23APR21	
1LEL-72	FROM I.D. FANS TO ABSORBER	LEVEL ELEMENT	143993-03-110	DREXELBROOK	700-0201-005		BREC	HDWIRE				143993-ASA-DG0-EQD-1624	N/A	143993-ASA-DG0-LPD-1600-002		A	23APR21	
1PI-293	ABSORBER QUENCH	PRESSURE GAUGE	143993-03-110	ASHCROFT	451259SD04L30#XNHSG		BREC	----				N/A	143993-ASA-DG0-DTL-1600 / P005	N/A		A	23APR21	
1PT-70	ABSORBER INLET DUCT	PRESSURE TRANSMITTER	143993-03-110				EXISTING	AI-2WT	0	20	IN WC	143993-ASA-DG0-EQD-1624	EXISTING	143993-ASA-DG0-LPD-1600-003		A	23APR21	
1FICV-70	ABSORBER INLET DUCT	VA FLOWMETER C/W NEEDLE VLV	143993-03-110	BROOKS	1350GAL2BBJG1ARA	6"	BREC	----	0	25	SCFH	N/A	N/A	143993-ASA-DG0-LPD-1600-003		A	23APR21	
1PDT-75	ABSORBER DUAL FLOW TRAY	DIFFERENTIAL TRANSMITTER	143993-03-110				EXISTING	AI-2WT	0	10	IN WC	143993-ASA-DG0-EQD-1624	EXISTING	143993-ASA-DG0-LPD-1600-004		A	23APR21	
1FICV-75A	ABSORBER DUAL FLOW TRAY	ROTAMETER	143993-03-110	BROOKS	1350GAL2BBJG1ARA	6"	BREC	----				N/A	N/A	143993-ASA-DG0-LPD-1600-004		A	23APR21	
1FICV-75B	ABSORBER DUAL FLOW TRAY	ROTAMETER	143993-03-110	BROOKS	1350GAL2BBJG1ARA	6"	BREC	----	0	25	SCFH	N/A	N/A	143993-ASA-DG0-LPD-1600-004		A	23APR21	
1PDT-76	ABSORBER MIST ELIMINATOR	DIFFERENTIAL TRANSMITTER	143993-03-110				EXISTING	AI-2WT	-1	+4	IN WC	143993-ASA-DG0-EQD-1644	EXISTING	143993-ASA-DG0-LPD-1600-005		A	23APR21	
1FICV-76A	ABSORBER MIST ELIMINATOR	ROTAMETER	143993-03-110	BROOKS	1350GAL2BBJG1ARA	6"	BREC	----	0	25	SCFH	N/A	N/A	143993-ASA-DG0-LPD-1600-005		A	23APR21	
1FICV-76B	ABSORBER MIST ELIMINATOR	ROTAMETER	143993-03-110	BROOKS	1350GAL2BBJG1ARA	6"	BREC	----	0	25	SCFH	N/A	N/A	143993-ASA-DG0-LPD-1600-005		A	23APR21	
1PT-80	ABSORBER OUTLET DUCT	PRESSURE TRANSMITTER	143993-03-110				EXISTING	AI-2WT	-5	+10	IN WC	143993-ASA-DG0-EQD-1642	EXISTING	143993-ASA-DG0-LPD-1600-006		A	23APR21	
1FICV-80	ABSORBER OUTLET DUCT	VA FLOWMETER C/W NEEDLE VLV	143993-03-110	BROOKS	1350GAL2BBJG1ARA	6"	BREC	----	0	25	SCFH	N/A	N/A	143993-ASA-DG0-LPD-1600-006		A	23APR21	
1TT-290	QUENCH WATER TANK	TEMPERATURE TRANSMITTER	143993-03-110				EXISTING	AI-2WT	0	100	"F	143993-ASA-DG0-EQD-1643	EXISTING	143993-ASA-DG0-LPD-1600-007		A	23APR21	
1TE-290	QUENCH WATER TANK	TEMPERATURE ELEMENT	143993-03-110				EXISTING	HDWIRE				N/A	EXISTING	143993-ASA-DG0-LPD-1600-007		A	23APR21	
1TS-290	QUENCH WATER TANK	TEMP SWITCH	143993-03-110				EXISTING	HDWIRE				N/A	EXISTING	143993-ASA-DG0-LPD-1600-007	LOCAL HARDWIRED TO 1H-290	A	23APR21	
1TI-291	QUENCH WATER TANK	TEMP GAUGE	143993-03-110				EXISTING	----				N/A	EXISTING	N/A		A	23APR21	
1TT-71A	ABSORBER INLET DUCT	TEMPERATURE TRANSMITTER	143993-03-110				EXISTING	AI-2WT	0	600	"F	143993-ASA-DG0-EQD-1624	EXISTING	143993-ASA-DG0-LPD-1600-008		A	23APR21	
1TE-71A	ABSORBER INLET DUCT	TEMPERATURE ELEMENT	143993-03-110	ASHCROFT	AT201TEA121B20T6EH9R3003DS57.75EXNH		BREC	HDWIRE				N/A	143993-ASA-DG0-DTL-1600 / T002	143993-ASA-DG0-LPD-1600-008		A	23APR21	
1TT-71B	ABSORBER INLET DUCT	TEMPERATURE TRANSMITTER	143993-03-110				EXISTING	AI-2WT	0	600	"F	143993-ASA-DG0-EQD-1624	EXISTING	143993-ASA-DG0-LPD-1600-008		A	23APR21	
1TE-71B	ABSORBER INLET DUCT	TEMPERATURE ELEMENT	143993-03-110	ASHCROFT	AT201TEA121B20T6EH9R3003DS57.75EXNH		BREC	HDWIRE	0	600	"F	N/A	143993-ASA-DG0-DTL-1600 / T002	143993-ASA-DG0-LPD-1600-008		A	23APR21	
1TT-72	FROM ID FANS TO ABSORBER	TEMPERATURE TRANSMITTER	143993-03-110	ROSEMOUNT	644HANAJ6M4WR3		BREC	AI-2WT	0	300	"F	143993-ASA-DG0-EQD-1624	143993-ASA-DG0-DTL-1600 / T002	143993-ASA-DG0-LPD-1600-009		A	23APR21	
1TE-72	FROM ID FANS TO ABSORBER	TEMPERATURE ELEMENT	143993-03-110	ASHCROFT	AT201TKA121B20T6EH9R3003DS57.75EXNH		BREC	HDWIRE	0	300	"F	143993-ASA-DG0-EQD-1624	143993-ASA-DG0-DTL-1600 / T002	143993-ASA-DG0-LPD-1600-009		A	23APR21	
1TT-81A	ABSORBER OUTLET DUCT	TEMPERATURE TRANSMITTER	143993-03-110				EXISTING	AI-2WT	0	300	"F	143993-ASA-DG0-EQD-1642	EXISTING	143993-ASA-DG0-LPD-1600-010		A	23APR21	
1TT-81B	ABSORBER OUTLET DUCT	TEMPERATURE TRANSMITTER	143993-03-110				EXISTING	AI-2WT	0	300	"F	143993-ASA-DG0-EQD-1642	EXISTING	143993-ASA-DG0-LPD-1600-010		A	23APR21	
1TE-81A	ABSORBER OUTLET DUCT	TEMPERATURE ELEMENT	143993-03-110	ASHCROFT	AT201TEA121B20T6EH9R3003DS57.75EXNH		BREC	HDWIRE	0	300	"F	143993-ASA-DG0-EQD-1642	143993-ASA-DG0-DTL-1600 / T005	143993-ASA-DG0-LPD-1600-010		A	23APR21	
1TE-81B	ABSORBER OUTLET DUCT	TEMPERATURE ELEMENT	143993-03-110	ASHCROFT	AT201TEA121B20T6EH9R3003DS57.75EXNH		BREC	HDWIRE	0	300	"F	143993-ASA-DG0-EQD-1642	143993-ASA-DG0-DTL-1600 / T005	143993-ASA-DG0-LPD-1600-010		A	23APR21	
1FV-246	QUENCH WATER INLET ISOLATION VALVE	ON/OFF VALVE	143993-03-110			4"	BREC	----				143993-ASA-DG0-EQD-1634	143993-ASA-DG0-DTL-1600 / H005	143993-ASA-DG0-LPD-1600-011		0	20AUG21	REV'D INST SIZE, SUPPLIED BY, & INSTALLATION DETAIL FOR REV. 0
1FSV-246	QUENCH WATER INLET ISOLATION VALVE	SOLENOID	143993-03-110				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-011	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSC-246	QUENCH WATER INLET ISOLATION VALVE	LIMIT SWITCH CLOSE	143993-03-110				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-011	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-246	QUENCH WATER INLET ISOLATION VALVE	LIMIT SWITCH OPEN	143993-03-110				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-011	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1FV-290	QUENCH WATER TO ABSORBER DISCHARGE VALVE	ON/OFF VALVE	143993-03-110			6"	BREC	----				143993-ASA-DG0-EQD-1643	143993-ASA-DG0-DTL-1600 / H005	143993-ASA-DG0-LPD-1600-012		0	20AUG21	REV'D SUPPLIED BY & INSTALLATION DETAIL FOR REV. 0
1FSV-290	QUENCH WATER TO ABSORBER DISCHARGE VALVE	SOLENOID	143993-03-110				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-012	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSC-290	QUENCH WATER TO ABSORBER DISCHARGE VALVE	LIMIT SWITCH CLOSE	143993-03-110				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-012	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-290	QUENCH WATER TO ABSORBER DISCHARGE VALVE	LIMIT SWITCH OPEN	143993-03-110				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-012	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1FT-540	LIMESTONE SLURRY TO ABSORBER	FLOW TRANSMITTER	143993-03-111	ROSEMOUNT	8732CT12N0M4		EXISTING	AI-4WT	0	600	GPM	143993-ASA-DG0-EQD-1624	143993-ASA-DG0-DTL-1600 / F003	143993-ASA-DG0-LPD-1600-013		A	23APR21	
1FE-540	LIMESTONE SLURRY TO ABSORBER	FLOW ELEMENT	143993-03-111	ROSEMOUNT	8705FHE040C1W0N0B3	4"	BREC	----				143993-ASA-DG0-EQD-1624	143993-ASA-DG0-DTL-1600 / F003	143993-ASA-DG0-LPD-1600-013		A	23APR21	
1FCV-540	LIMESTONE SLURRY TO ABSORBER	FLOW CONTROL VALVE	143993-03-111			4"	BREC	----				143993-ASA-DG0-EQD-1624	143993-ASA-DG0-DTL-1600 / H001-005	143993-ASA-DG0-LPD-1600-013		0	20AUG21	REV'D SUPPLIED BY & INSTALLATION DETAIL FOR REV. 0
1FY-540	LIMESTONE SLURRY TO ABSORBER	CURRENT PNEUMATIC TRANSDUCER	143993-03-111				EXISTING	AO				143993-ASA-DG0-EQD-1624	EXISTING	143993-ASA-DG0-LPD-1600-013	INCLUDED W/ VALVE	A	23APR21	
1FT-700	RECLAIM WATER TO ABSORBER	FLOW TRANSMITTER	143993-03-111	ROSEMOUNT	8732CT12N0M4		EXISTING	AI-4WT	0	2500	GPM	143993-ASA-DG0-EQD-1624	143993-ASA-DG0-DTL-1600 / F003	143993-ASA-DG0-LPD-1600-014		A	23APR21	
1FE-700	RECLAIM WATER TO ABSORBER	FLOW ELEMENT	143993-03-111	ROSEMOUNT	8711FSE040U1N0	4"	BREC	----				143993-ASA-DG0-EQD-1624	143993-ASA-DG0-DTL-1600 / F003	143993-ASA-DG0-LPD-1600-014		A	23APR21	
1FCV-700	RECLAIM WATER TO ABSORBER	FLOW CONTROL VALVE	143993-03-111			6"	BREC	----				143993-ASA-DG0-EQD-1624	143993-ASA-DG0-DTL-1600 / H001-005	143993-ASA-DG0-LPD-1600-014		0	20AUG21	REV'D INST SIZE, SUPPLIED BY, & INSTALLATION DETAIL FOR REV. 0
1FY-700	RECLAIM WATER TO ABSORBER	CURRENT PNEUMATIC TRANSDUCER	143993-03-111				EXISTING	AO				143993-ASA-DG0-EQD-1624	EXISTING	143993-ASA-DG0-LPD-1600-014	INCLUDED W/ VALVE	A	23APR21	
1LT-100A	ABSORBER STILLING WELL	LEVEL TRANSMITTER	143993-03-111	DREXELBROOK	UNIVERSAL TRANSMITTER III		EXISTING	AI-2WT	0	186	IN	143993-ASA-DG0-EQD-1624	143993-ASA-DG0-DTL-1600 / L007	143993-ASA-DG0-LPD-1600-015		A	23APR21	
1LE-100A	ABSORBER STILLING WELL	LEVEL ELEMENT	143993-03-111	DREXELBROOK	700-0005-085		BREC	HDWIRE				143993-ASA-DG0-EQD-1624	N/A	143993-ASA-DG0-LPD-1600-015		A	23APR21	
1LT-100B	ABSORBER STILLING WELL	LEVEL TRANSMITTER	143993-03-111	DREXELBROOK	UNIVERSAL TRANSMITTER III		EXISTING	AI-2WT	0	186	IN	143993-ASA-DG0-EQD-1624	143993-ASA-DG0-DTL-1600 / L007	143993-ASA-DG0-LPD-1600-016		A	23APR21	
1LE-100B	ABSORBER STILLING WELL	LEVEL ELEMENT	143993-03-111	DREXELBROOK	700-0005-085		BREC	HDWIRE				143993-ASA-DG0-EQD-1624	N/A	143993-ASA-DG0-LPD-1600-016		A	23APR21	
1LSL-111	ABSORBER	LEVEL SWITCH LOW	143993-03-111	DREXELBROOK	PML1-3312-A1CF		BREC	DI				143993-ASA-DG0-EQD-1604	143993-ASA-DG0-DTL-1600 / L007	143993-ASA-DG0-LPD-1600-017		A	23APR21	
1LE-111	ABSORBER	LEVEL ELEMENT	143993-03-111	DREXELBROOK	700-0201-005		BREC	HDWIRE				143993-ASA-DG0-EQD-1604	N/A	143993-ASA-DG0-LPD-1600-017		A	23APR21	
1FV-530	LIMESTONE SLURRY TO ABSORBER ISOLATION VALVE	ON/OFF VALVE	143993-03-111			6"	BREC	----				143993-ASA-DG0-EQD-1624	143993-ASA-DG0-DTL-1600 / H002	143993-ASA-DG0-LPD-1600-018		0	20AUG21	REV'D SUPPLIED BY & INSTALLATION DETAIL FOR REV. 0
1FSV-530	LIMESTONE SLURRY TO ABSORBER ISOLATION VALVE	SOLENOID	143993-03-111				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-018	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSC-530	LIMESTONE SLURRY TO ABSORBER ISOLATION VALVE	LIMIT SWITCH CLOSE	143993-03-111				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-018	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-530	LIMESTONE SLURRY TO ABSORBER ISOLATION VALVE	LIMIT SWITCH OPEN	143993-03-111				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-018	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1FV-531	LIMESTONE SLURRY TO ABSORBER FLUSH VALVE	ON/OFF VALVE	143993-03-111			2"	BREC	----				143993-ASA-DG0-EQD-1624	143993-ASA-DG0-DTL-1600 / H001-005	143993-ASA-DG0-LPD-1600-019		0	20AUG21	REV'D SUPPLIED BY & INSTALLATION DETAIL FOR REV. 0
1FSV-531	LIMESTONE SLURRY TO ABSORBER FLUSH VALVE	SOLENOID	143993-03-111				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-019	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSC-531	LIMESTONE SLURRY TO ABSORBER FLUSH VALVE	LIMIT SWITCH CLOSE	143993-03-111				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-019	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-531	LIMESTONE SLURRY TO ABSORBER FLUSH VALVE	LIMIT SWITCH OPEN	143993-03-111				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-019	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1PI-114A	RECYCLE PUMP A DISCHARGE	PRESSURE GAUGE	143993-03-112	ASHCROFT	451259SD04L100#XCKNHSG		BREC	----				N/A	143993-ASA-DG0-DTL-1600 / P005	N/A		A	23APR21	

INSTRUMENT TAG	SERVICE DESCRIPTION	INSTRUMENT DESCRIPTION	P&ID DRAWING	MANUFACTURER	MODEL NUMBER	SIZE	SUPPLIED BY	I/O TYPE	CAL RANGE LOW	CAL RANGE HIGH	CAL RANGE UNITS	LOCATION DRAWING	INSTALLATION DETAIL	LOOP DRAWING	INST. REMARKS	REV	REV DATE	REV REMARKS
1ZSC-103E	RECYCLE PUMP E FLUSH VALVE	LIMIT SWITCH CLOSE	143993-03-112				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-043	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-103E	RECYCLE PUMP E FLUSH VALVE	LIMIT SWITCH OPEN	143993-03-112				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-043	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1FV-104A	RECYCLE PUMP A DISCHARGE SHUTOFF VALVE	ON/OFF VALVE	143993-03-112			48"	EXISTING	-----				143993-ASA-DG0-EQD-1613	EXISTING	143993-ASA-DG0-LPD-1600-024		A	23APR21	
1ZSC-104A	RECYCLE PUMP A DISCHARGE SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-112				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-024	INCLUDED W/ VALVE	A	23APR21	
1ZSO-104A	RECYCLE PUMP A DISCHARGE SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-112				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-024	INCLUDED W/ VALVE	A	23APR21	
1FSVO-104A	RECYCLE PUMP A DISCHARGE SHUTOFF VALVE	SOLENOID	143993-03-112				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-024	INCLUDED W/ VALVE	A	23APR21	
1FSVC-104A	RECYCLE PUMP A DISCHARGE SHUTOFF VALVE	SOLENOID	143993-03-112				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-024	INCLUDED W/ VALVE	A	23APR21	
1FV-104B	RECYCLE PUMP B DISCHARGE SHUTOFF VALVE	ON/OFF VALVE	143993-03-112			48"	EXISTING	-----				143993-ASA-DG0-EQD-1613	EXISTING	143993-ASA-DG0-LPD-1600-029		A	23APR21	
1ZSC-104B	RECYCLE PUMP B DISCHARGE SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-112				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-029	INCLUDED W/ VALVE	A	23APR21	
1ZSO-104B	RECYCLE PUMP B DISCHARGE SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-112				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-029	INCLUDED W/ VALVE	A	23APR21	
1FSVO-104B	RECYCLE PUMP B DISCHARGE SHUTOFF VALVE	SOLENOID	143993-03-112				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-029	INCLUDED W/ VALVE	A	23APR21	
1FSVC-104B	RECYCLE PUMP B DISCHARGE SHUTOFF VALVE	SOLENOID	143993-03-112				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-029	INCLUDED W/ VALVE	A	23APR21	
1FV-104C	RECYCLE PUMP C DISCHARGE SHUTOFF VALVE	ON/OFF VALVE	143993-03-112			48"	EXISTING	-----				143993-ASA-DG0-EQD-1613	EXISTING	143993-ASA-DG0-LPD-1600-034		A	23APR21	
1ZSC-104C	RECYCLE PUMP C DISCHARGE SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-112				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-034	INCLUDED W/ VALVE	A	23APR21	
1ZSO-104C	RECYCLE PUMP C DISCHARGE SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-112				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-034	INCLUDED W/ VALVE	A	23APR21	
1FSVO-104C	RECYCLE PUMP C DISCHARGE SHUTOFF VALVE	SOLENOID	143993-03-112				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-034	INCLUDED W/ VALVE	A	23APR21	
1FSVC-104C	RECYCLE PUMP C DISCHARGE SHUTOFF VALVE	SOLENOID	143993-03-112				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-034	INCLUDED W/ VALVE	A	23APR21	
1FV-104D	RECYCLE PUMP D DISCHARGE SHUTOFF VALVE	ON/OFF VALVE	143993-03-112			48"	EXISTING	-----				143993-ASA-DG0-EQD-1613	EXISTING	143993-ASA-DG0-LPD-1600-039		A	23APR21	
1ZSC-104D	RECYCLE PUMP D DISCHARGE SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-112				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-039	INCLUDED W/ VALVE	A	23APR21	
1ZSO-104D	RECYCLE PUMP D DISCHARGE SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-112				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-039	INCLUDED W/ VALVE	A	23APR21	
1FSVO-104D	RECYCLE PUMP D DISCHARGE SHUTOFF VALVE	SOLENOID	143993-03-112				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-039	INCLUDED W/ VALVE	A	23APR21	
1FSVC-104D	RECYCLE PUMP D DISCHARGE SHUTOFF VALVE	SOLENOID	143993-03-112				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-039	INCLUDED W/ VALVE	A	23APR21	
1FV-104E	RECYCLE PUMP E DISCHARGE SHUTOFF VALVE	ON/OFF VALVE	143993-03-112			48"	EXISTING	-----				143993-ASA-DG0-EQD-1613	EXISTING	143993-ASA-DG0-LPD-1600-044		A	23APR21	
1ZSC-104E	RECYCLE PUMP E DISCHARGE SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-112				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-044	INCLUDED W/ VALVE	A	23APR21	
1ZSO-104E	RECYCLE PUMP E DISCHARGE SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-112				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-044	INCLUDED W/ VALVE	A	23APR21	
1FSVO-104E	RECYCLE PUMP E DISCHARGE SHUTOFF VALVE	SOLENOID	143993-03-112				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-044	INCLUDED W/ VALVE	A	23APR21	
1FSVC-104E	RECYCLE PUMP E DISCHARGE SHUTOFF VALVE	SOLENOID	143993-03-112				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-044	INCLUDED W/ VALVE	A	23APR21	
1RO-206	MIST ELIMINATOR RECIRCULATION	RESTRICTION ORIFICE	143993-03-113			2"	BREC	-----				N/A	EXISTING	N/A		0	20AUG21	REV'D INST DESC FOR REV. 0
1FT-210	ME WASH WATER TO ABSORBER	FLOW TRANSMITTER	143993-03-113			4"	EXISTING	AI-4WT	0	750	GPM	143993-ASA-DG0-EQD-1614	EXISTING	143993-ASA-DG0-LPD-1600-045		A	23APR21	
1FE-210	ME WASH WATER TO ABSORBER	FLOW ELEMENT	143993-03-113				EXISTING	HDWIRE				143993-ASA-DG0-EQD-1614	EXISTING	143993-ASA-DG0-LPD-1600-045		A	23APR21	
1LT-201	MIST ELIMINATOR WASH WATER TANK LEVEL	DP LEVEL TRANSMITTER	143993-03-113	ROSEMOUNT	3051L2AG0MD21AAE5M5		BREC	AI-2WT	0	100	%	143993-ASA-DG0-EQD-1605	EXISTING	143993-ASA-DG0-LPD-1600-046		B	28MAY21	REV'D INST DESCRIPTION ON REV. B
1LCV-801	MIST ELIMINATOR TANK INLET CONTROL VALVE	LEVEL CONTROL VALVE	143993-03-113			4"	BREC	-----				143993-ASA-DG0-EQD-1605	143993-ASA-DG0-DTL-1600 / H001-005	143993-ASA-DG0-LPD-1600-047		0	20AUG21	REV'D SUPPLIED BY & INSTALLATION DETAIL FOR REV. 0
1LY-801	MIST ELIMINATOR TANK INLET CONTROL VALVE	CURRENT PNEUMATIC TRANSDUCER	143993-03-113				EXISTING	AO				143993-ASA-DG0-EQD-1605	EXISTING	143993-ASA-DG0-LPD-1600-047		A	23APR21	
1PI-201A	MIST ELIMINATOR PUMP A DISCHARGE	PRESSURE GAUGE	143993-03-113	ASHCROFT	451259SD04L160#XNHSG		BREC	-----				N/A	143993-ASA-DG0-DTL-1600 / P005	N/A		A	23APR21	
1PI-201B	MIST ELIMINATOR PUMP B DISCHARGE	PRESSURE GAUGE	143993-03-113	ASHCROFT	451259SD04L160#XNHSG		BREC	-----				N/A	143993-ASA-DG0-DTL-1600 / P005	N/A		A	23APR21	
1FV-205	TO ME WASH PUMPS RECIRCULATION VALVE	ON/OFF VALVE	143993-03-113			2"	BREC	-----				143993-ASA-DG0-EQD-1605	143993-ASA-DG0-DTL-1600 / H003	143993-ASA-DG0-LPD-1600-048		0	20AUG21	REV'D INST SIZE, SUPPLIED BY, & INSTALLATION DETAIL FOR REV. 0
1FSV-205	TO ME WASH PUMPS RECIRCULATION VALVE	SOLENOID	143993-03-113				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-048	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSC-205	TO ME WASH PUMPS RECIRCULATION VALVE	LIMIT SWITCH CLOSE	143993-03-113				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-048	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-205	TO ME WASH PUMPS RECIRCULATION VALVE	LIMIT SWITCH OPEN	143993-03-113				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-048	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1FV-221	1ST STAGE BOTTOM ZONE 1 ME WASH VALVE	ON/OFF VALVE	143993-03-113			4"	EXISTING	-----				143993-ASA-DG0-EQD-1644	EXISTING	143993-ASA-DG0-LPD-1600-049		0	20AUG21	REV'D INST SIZE FOR REV. 0
1FSV-221	1ST STAGE BOTTOM ZONE 1 ME WASH VALVE	SOLENOID	143993-03-113				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-049	INCLUDED W/ VALVE	A	23APR21	
1ZSC-221	1ST STAGE BOTTOM ZONE 1 ME WASH VALVE	LIMIT SWITCH CLOSE	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-049	INCLUDED W/ VALVE	A	23APR21	
1ZSO-221	1ST STAGE BOTTOM ZONE 1 ME WASH VALVE	LIMIT SWITCH OPEN	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-049	INCLUDED W/ VALVE	A	23APR21	
1FV-222	1ST STAGE BOTTOM ZONE 2 ME WASH VALVE	ON/OFF VALVE	143993-03-113			4"	EXISTING	-----				143993-ASA-DG0-EQD-1644	EXISTING	143993-ASA-DG0-LPD-1600-050		0	20AUG21	REV'D INST SIZE FOR REV. 0
1FSV-222	1ST STAGE BOTTOM ZONE 2 ME WASH VALVE	SOLENOID	143993-03-113				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-050	INCLUDED W/ VALVE	A	23APR21	
1ZSC-222	1ST STAGE BOTTOM ZONE 2 ME WASH VALVE	LIMIT SWITCH CLOSE	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-050	INCLUDED W/ VALVE	A	23APR21	
1ZSO-222	1ST STAGE BOTTOM ZONE 2 ME WASH VALVE	LIMIT SWITCH OPEN	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-050	INCLUDED W/ VALVE	A	23APR21	
1FV-223	1ST STAGE BOTTOM ZONE 3 ME WASH VALVE	ON/OFF VALVE	143993-03-113			4"	EXISTING	-----				143993-ASA-DG0-EQD-1644	EXISTING	143993-ASA-DG0-LPD-1600-051		0	20AUG21	REV'D INST SIZE FOR REV. 0
1FSV-223	1ST STAGE BOTTOM ZONE 3 ME WASH VALVE	SOLENOID	143993-03-113				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-051	INCLUDED W/ VALVE	A	23APR21	
1ZSC-223	1ST STAGE BOTTOM ZONE 3 ME WASH VALVE	LIMIT SWITCH CLOSE	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-051	INCLUDED W/ VALVE	A	23APR21	
1ZSO-223	1ST STAGE BOTTOM ZONE 3 ME WASH VALVE	LIMIT SWITCH OPEN	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-051	INCLUDED W/ VALVE	A	23APR21	
1FV-224	1ST STAGE BOTTOM ZONE 4 ME WASH VALVE	ON/OFF VALVE	143993-03-113			4"	EXISTING	-----				143993-ASA-DG0-EQD-1644	EXISTING	143993-ASA-DG0-LPD-1600-052		0	20AUG21	REV'D INST SIZE FOR REV. 0
1FSV-224	1ST STAGE BOTTOM ZONE 4 ME WASH VALVE	SOLENOID	143993-03-113				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-052	INCLUDED W/ VALVE	A	23APR21	
1ZSC-224	1ST STAGE BOTTOM ZONE 4 ME WASH VALVE	LIMIT SWITCH CLOSE	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-052	INCLUDED W/ VALVE	A	23APR21	
1ZSO-224	1ST STAGE BOTTOM ZONE 4 ME WASH VALVE	LIMIT SWITCH OPEN	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-052	INCLUDED W/ VALVE	A	23APR21	
1FV-225	1ST STAGE BOTTOM ZONE 5 ME WASH VALVE	ON/OFF VALVE	143993-03-113			4"	EXISTING	-----				143993-ASA-DG0-EQD-1644	EXISTING	143993-ASA-DG0-LPD-1600-053		0	20AUG21	REV'D INST SIZE FOR REV. 0
1FSV-225	1ST STAGE BOTTOM ZONE 5 ME WASH VALVE	SOLENOID	143993-03-113				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-053	INCLUDED W/ VALVE	A	23APR21	
1ZSC-225	1ST STAGE BOTTOM ZONE 5 ME WASH VALVE	LIMIT SWITCH CLOSE	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-053	INCLUDED W/ VALVE	A	23APR21	
1ZSO-225	1ST STAGE BOTTOM ZONE 5 ME WASH VALVE	LIMIT SWITCH OPEN	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-053	INCLUDED W/ VALVE	A	23APR21	
1FV-226	1ST STAGE BOTTOM ZONE 6 ME WASH VALVE	ON/OFF VALVE	143993-03-113			4"	EXISTING	-----				143993-ASA-DG0-EQD-1644	EXISTING	143993-ASA-DG0-LPD-1600-054		0	20AUG21	REV'D INST SIZE FOR REV. 0
1FSV-226	1ST STAGE BOTTOM ZONE 6 ME WASH VALVE	SOLENOID	143993-03-113				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-054	INCLUDED W/ VALVE	A	23APR21	

INSTRUMENT TAG	SERVICE DESCRIPTION	INSTRUMENT DESCRIPTION	P&ID DRAWING	MANUFACTURER	MODEL NUMBER	SIZE	SUPPLIED BY	I/O TYPE	CAL RANGE LOW	CAL RANGE HIGH	CAL RANGE UNITS	LOCATION DRAWING	INSTALLATION DETAIL	LOOP DRAWING	INST. REMARKS	REV	REV DATE	REV REMARKS
1ZSC-226	1ST STAGE BOTTOM ZONE 6 ME WASH VALVE	LIMIT SWITCH CLOSE	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-054	INCLUDED W/ VALVE	A	23APR21	
1ZSO-226	1ST STAGE BOTTOM ZONE 6 ME WASH VALVE	LIMIT SWITCH OPEN	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-054	INCLUDED W/ VALVE	A	23APR21	
1FV-227	1ST STAGE BOTTOM ZONE 7 ME WASH VALVE	ON/OFF VALVE	143993-03-113			4"	EXISTING	-----				143993-ASA-DG0-EQD-1644	EXISTING	143993-ASA-DG0-LPD-1600-055		0	20AUG21	REV'D INST SIZE FOR REV. 0
1FSV-227	1ST STAGE BOTTOM ZONE 7 ME WASH VALVE	SOLENOID	143993-03-113				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-055	INCLUDED W/ VALVE	A	23APR21	
1ZSC-227	1ST STAGE BOTTOM ZONE 7 ME WASH VALVE	LIMIT SWITCH CLOSE	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-055	INCLUDED W/ VALVE	A	23APR21	
1ZSO-227	1ST STAGE BOTTOM ZONE 7 ME WASH VALVE	LIMIT SWITCH OPEN	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-055	INCLUDED W/ VALVE	A	23APR21	
1FV-228	1ST STAGE BOTTOM ZONE 8 ME WASH VALVE	ON/OFF VALVE	143993-03-113			4"	EXISTING	-----				143993-ASA-DG0-EQD-1644	EXISTING	143993-ASA-DG0-LPD-1600-056		0	20AUG21	REV'D INST SIZE FOR REV. 0
1FSV-228	1ST STAGE BOTTOM ZONE 8 ME WASH VALVE	SOLENOID	143993-03-113				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-056	INCLUDED W/ VALVE	A	23APR21	
1ZSC-228	1ST STAGE BOTTOM ZONE 8 ME WASH VALVE	LIMIT SWITCH CLOSE	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-056	INCLUDED W/ VALVE	A	23APR21	
1ZSO-228	1ST STAGE BOTTOM ZONE 8 ME WASH VALVE	LIMIT SWITCH OPEN	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-056	INCLUDED W/ VALVE	A	23APR21	
1FV-231	1ST STAGE TOP ZONE 1 ME WASH VALVE	ON/OFF VALVE	143993-03-113			4"	EXISTING	-----				143993-ASA-DG0-EQD-1644	EXISTING	143993-ASA-DG0-LPD-1600-057		0	20AUG21	REV'D INST SIZE FOR REV. 0
1FSV-231	1ST STAGE TOP ZONE 1 ME WASH VALVE	SOLENOID	143993-03-113				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-057	INCLUDED W/ VALVE	A	23APR21	
1ZSC-231	1ST STAGE TOP ZONE 1 ME WASH VALVE	LIMIT SWITCH CLOSE	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-057	INCLUDED W/ VALVE	A	23APR21	
1ZSO-231	1ST STAGE TOP ZONE 1 ME WASH VALVE	LIMIT SWITCH OPEN	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-057	INCLUDED W/ VALVE	A	23APR21	
1FV-232	1ST STAGE TOP ZONE 2 ME WASH VALVE	ON/OFF VALVE	143993-03-113			4"	EXISTING	-----				143993-ASA-DG0-EQD-1644	EXISTING	143993-ASA-DG0-LPD-1600-058		0	20AUG21	REV'D INST SIZE FOR REV. 0
1FSV-232	1ST STAGE TOP ZONE 2 ME WASH VALVE	SOLENOID	143993-03-113				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-058	INCLUDED W/ VALVE	A	23APR21	
1ZSC-232	1ST STAGE TOP ZONE 2 ME WASH VALVE	LIMIT SWITCH CLOSE	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-058	INCLUDED W/ VALVE	A	23APR21	
1ZSO-232	1ST STAGE TOP ZONE 2 ME WASH VALVE	LIMIT SWITCH OPEN	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-058	INCLUDED W/ VALVE	A	23APR21	
1FV-233	1ST STAGE TOP ZONE 3 ME WASH VALVE	ON/OFF VALVE	143993-03-113			4"	EXISTING	-----				143993-ASA-DG0-EQD-1644	EXISTING	143993-ASA-DG0-LPD-1600-059		0	20AUG21	REV'D INST SIZE FOR REV. 0
1FSV-233	1ST STAGE TOP ZONE 3 ME WASH VALVE	SOLENOID	143993-03-113				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-059	INCLUDED W/ VALVE	A	23APR21	
1ZSC-233	1ST STAGE TOP ZONE 3 ME WASH VALVE	LIMIT SWITCH CLOSE	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-059	INCLUDED W/ VALVE	A	23APR21	
1ZSO-233	1ST STAGE TOP ZONE 3 ME WASH VALVE	LIMIT SWITCH OPEN	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-059	INCLUDED W/ VALVE	A	23APR21	
1FV-234	1ST STAGE TOP ZONE 4 ME WASH VALVE	ON/OFF VALVE	143993-03-113			4"	EXISTING	-----				143993-ASA-DG0-EQD-1644	EXISTING	143993-ASA-DG0-LPD-1600-060		0	20AUG21	REV'D INST SIZE FOR REV. 0
1FSV-234	1ST STAGE TOP ZONE 4 ME WASH VALVE	SOLENOID	143993-03-113				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-060	INCLUDED W/ VALVE	A	23APR21	
1ZSC-234	1ST STAGE TOP ZONE 4 ME WASH VALVE	LIMIT SWITCH CLOSE	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-060	INCLUDED W/ VALVE	A	23APR21	
1ZSO-234	1ST STAGE TOP ZONE 4 ME WASH VALVE	LIMIT SWITCH OPEN	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-060	INCLUDED W/ VALVE	A	23APR21	
1FV-241	2ND STAGE BOTTOM ZONE 1 ME WASH VALVE	ON/OFF VALVE	143993-03-113			4"	EXISTING	-----				143993-ASA-DG0-EQD-1644	EXISTING	143993-ASA-DG0-LPD-1600-061		0	20AUG21	REV'D INST SIZE FOR REV. 0
1FSV-241	2ND STAGE BOTTOM ZONE 1 ME WASH VALVE	SOLENOID	143993-03-113				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-061	INCLUDED W/ VALVE	A	23APR21	
1ZSC-241	2ND STAGE BOTTOM ZONE 1 ME WASH VALVE	LIMIT SWITCH CLOSE	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-061	INCLUDED W/ VALVE	A	23APR21	
1ZSO-241	2ND STAGE BOTTOM ZONE 1 ME WASH VALVE	LIMIT SWITCH OPEN	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-061	INCLUDED W/ VALVE	A	23APR21	
1FV-242	2ND STAGE BOTTOM ZONE 2 ME WASH VALVE	ON/OFF VALVE	143993-03-113			4"	EXISTING	-----				143993-ASA-DG0-EQD-1644	EXISTING	143993-ASA-DG0-LPD-1600-062		0	20AUG21	REV'D INST SIZE FOR REV. 0
1FSV-242	2ND STAGE BOTTOM ZONE 2 ME WASH VALVE	SOLENOID	143993-03-113				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-062	INCLUDED W/ VALVE	A	23APR21	
1ZSC-242	2ND STAGE BOTTOM ZONE 2 ME WASH VALVE	LIMIT SWITCH CLOSE	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-062	INCLUDED W/ VALVE	A	23APR21	
1ZSO-242	2ND STAGE BOTTOM ZONE 2 ME WASH VALVE	LIMIT SWITCH OPEN	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-062	INCLUDED W/ VALVE	A	23APR21	
1FV-243	2ND STAGE BOTTOM ZONE 3 ME WASH VALVE	ON/OFF VALVE	143993-03-113			4"	EXISTING	-----				143993-ASA-DG0-EQD-1644	EXISTING	143993-ASA-DG0-LPD-1600-063		0	20AUG21	REV'D INST SIZE FOR REV. 0
1FSV-243	2ND STAGE BOTTOM ZONE 3 ME WASH VALVE	SOLENOID	143993-03-113				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-063	INCLUDED W/ VALVE	A	23APR21	
1ZSC-243	2ND STAGE BOTTOM ZONE 3 ME WASH VALVE	LIMIT SWITCH CLOSE	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-063	INCLUDED W/ VALVE	A	23APR21	
1ZSO-243	2ND STAGE BOTTOM ZONE 3 ME WASH VALVE	LIMIT SWITCH OPEN	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-063	INCLUDED W/ VALVE	A	23APR21	
1FV-244	2ND STAGE BOTTOM ZONE 4 ME WASH VALVE	ON/OFF VALVE	143993-03-113			4"	EXISTING	-----				143993-ASA-DG0-EQD-1644	EXISTING	143993-ASA-DG0-LPD-1600-064		0	20AUG21	REV'D INST SIZE FOR REV. 0
1FSV-244	2ND STAGE BOTTOM ZONE 4 ME WASH VALVE	SOLENOID	143993-03-113				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-064	INCLUDED W/ VALVE	A	23APR21	
1ZSC-244	2ND STAGE BOTTOM ZONE 4 ME WASH VALVE	LIMIT SWITCH CLOSE	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-064	INCLUDED W/ VALVE	A	23APR21	
1ZSO-244	2ND STAGE BOTTOM ZONE 4 ME WASH VALVE	LIMIT SWITCH OPEN	143993-03-113				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-064	INCLUDED W/ VALVE	A	23APR21	
1FT-245	OXIDATION AIR SATURATION WATER	FLOW TRANSMITTER	143993-03-114				EXISTING	AI-4WT	0	40	GPM	143993-ASA-DG0-EQD-1623	EXISTING	143993-ASA-DG0-LPD-1600-065		A	23APR21	
1FE-245	OXIDATION AIR SATURATION WATER	FLOW ELEMENT	143993-03-114				EXISTING	HDWIRE				143993-ASA-DG0-EQD-1623	EXISTING	143993-ASA-DG0-LPD-1600-065		A	23APR21	
1FT-936	OXIDATION AIR SPARGER	FLOW TRANSMITTER	143993-03-114				EXISTING	AI-2WT	0	30000	SCFM	143993-ASA-DG0-EQD-1623	EXISTING	143993-ASA-DG0-LPD-1600-066	dP FLOW TRANSMITTER	A	23APR21	
1FE-936	OXIDATION AIR SPARGER	FLOW ELEMENT	143993-03-114				EXISTING	-----				143993-ASA-DG0-EQD-1623	EXISTING	143993-ASA-DG0-LPD-1600-066		A	23APR21	
1FI-962	OXIDATION AIR SPARGER INST AIR	FLOW INDICATOR	143993-03-114	BROOKS	3810GAD08DABA1A00000	1/2"	BREC	-----	0	21	SCFM	N/A	N/A	N/A		B	28MAY21	REV'D INST SIZE ON REV. B
1PCV-245	OXIDATION AIR SATURATION WATER	PRESSURE REGULATING VALVE	143993-03-114			2"	BREC	-----				N/A	N/A	N/A		0	20AUG21	REV'D INST. DESC, SIZE, & SUPPLIED BY FOR REV. 0
1PI-245	OXIDATION AIR SATURATION WATER	PRESSURE GAUGE	143993-03-114	ASHCROFT	451259SD04L???#XNHSG		BREC	-----				N/A	143993-ASA-DG0-DTL-1600 / P005	N/A		A	23APR21	
1PT-935	OXIDATION AIR SPARGER	PRESSURE TRANSMITTER	143993-03-114				EXISTING	AI-2WT	0	30	PSIG	143993-ASA-DG0-EQD-1623	EXISTING	143993-ASA-DG0-LPD-1600-067		A	23APR21	
1PCV-961	OXIDATION AIR INSTRUMENT AIR PRESSURE	PRESSURE CONTROL VALVE	143993-03-114			3/4"	GENERAL CONTRACTOR	-----				N/A	EXISTING	N/A		0	20AUG21	REV'D INST SIZE, SUPPLIED BY FOR REV. 0
1PI-961	OXIDATION AIR INSTRUMENT AIR PRESSURE	PRESSURE GAUGE	143993-03-114	ASHCROFT	451259SD04L60#XNHSG		BREC	-----				N/A	143993-ASA-DG0-DTL-1600 / P005	N/A		A	23APR21	
1TT-937	OXIDATION AIR SPARGER	TEMPERATURE TRANSMITTER	143993-03-114				EXISTING	AI-2WT	0	400	°F	143993-ASA-DG0-EQD-1623	EXISTING	143993-ASA-DG0-LPD-1600-068		A	23APR21	
1TE-937	OXIDATION AIR SPARGER	TEMPERATURE ELEMENT	143993-03-114				EXISTING	HDWIRE				143993-ASA-DG0-EQD-1623	EXISTING	143993-ASA-DG0-LPD-1600-068		A	23APR21	
1FV-245	OXIDATION AIR SATURATION WATER SHUTOFF VALVE	ON/OFF VALVE	143993-03-114			2"	BREC	-----				143993-ASA-DG0-EQD-1623	143993-ASA-DG0-DTL-1600 / H003	143993-ASA-DG0-LPD-1600-069		0	20AUG21	REV'D SUPPLIED BY & INSTALLATION DETAIL FOR REV. 0
1FSV-245	OXIDATION AIR SATURATION WATER SHUTOFF VALVE	SOLENOID	143993-03-114				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-069	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSC-245	OXIDATION AIR SATURATION WATER SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-114				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-069	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-245	OXIDATION AIR SATURATION WATER SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-114				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-069	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1FSV-960	OXIDATION AIR INSTRUMENT AIR SOLENOID VALVE	SOLENOID	143993-03-114	ASCO	8210G88	3/4"	GENERAL CONTRACTOR	DO				143993-ASA-DG0-EQD-1623	N/A	143993-ASA-DG0-LPD-1600-070	INLINE SOLENOID	0	20AUG21	REV'D INST SIZE, SUPPLIED BY FOR REV. 0
1ZI-900A	OXIDATION BLOWER A VARIABLE DIFFUSER	POSITION INDICATOR	143993-03-115				VENDOR	-----				N/A	EXISTING	143993-ASA-DG0-LPD-1600-180	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1ZSC-900A	OXIDATION AIR BLOWER A VARIABLE DIFFUSER	LIMIT SWITCH CLOSE	143993-03-115				VENDOR	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-180	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	

INSTRUMENT TAG	SERVICE DESCRIPTION	INSTRUMENT DESCRIPTION	P&ID DRAWING	MANUFACTURER	MODEL NUMBER	SIZE	SUPPLIED BY	I/O TYPE	CAL RANGE LOW	CAL RANGE HIGH	CAL RANGE UNITS	LOCATION DRAWING	INSTALLATION DETAIL	LOOP DRAWING	INST. REMARKS	REV	REV DATE	REV REMARKS
1TT-930C	OXIDATION BLOWER C SOUND ENCLOSURE	TEMPERATURE TRANSMITTER	143993-03-115				VENDOR	AI-2WT	0	200	*F	N/A	EXISTING	143993-ASA-DG0-LPD-1600-124	DEVICE REMOVED FROM REV. 0 OF P&ID	0	20AUG21	DEVICE DELETED FOR REV. 0
1TE-930C	OXIDATION BLOWER C SOUND ENCLOSURE	TEMPERATURE ELEMENT	143993-03-115				VENDOR	HDWIRE				N/A	EXISTING	143993-ASA-DG0-LPD-1600-124	DEVICE REMOVED FROM REV. 0 OF P&ID	0	20AUG21	DEVICE DELETED FOR REV. 0
1VXT-905A	OXIDATION AIR BLOWER A HIGH SPD INNER SHAFT X VIBRATION	VIBRATION TRANSMITTER	143993-03-115	BENTLY NEVADA	990-05-50-01-00		VENDOR	AI-2WT	??			143993-ASA-DG0-EQD-1606	EXISTING	143993-ASA-DG0-LPD-1600-087	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1VYT-905A	OXIDATION AIR BLOWER A HIGH SPD INNER SHAFT Y VIBRATION	VIBRATION TRANSMITTER	143993-03-115	BENTLY NEVADA	990-05-50-01-00		VENDOR	AI-2WT	??			143993-ASA-DG0-EQD-1606	EXISTING	143993-ASA-DG0-LPD-1600-087	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1VZT-905A	OXIDATION AIR BLOWER A HIGH SPD INNER SHAFT Z VIBRATION	VIBRATION TRANSMITTER	143993-03-115	BENTLY NEVADA	991-25-50-01-00		VENDOR	AI-2WT	??			143993-ASA-DG0-EQD-1606	EXISTING	143993-ASA-DG0-LPD-1600-087	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1VXT-905B	OXIDATION AIR BLOWER B HIGH SPD INNER SHAFT X VIBRATION	VIBRATION TRANSMITTER	143993-03-115	BENTLY NEVADA	990-05-50-01-00		VENDOR	AI-2WT	??			143993-ASA-DG0-EQD-1606	EXISTING	143993-ASA-DG0-LPD-1600-106	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1VYT-905B	OXIDATION AIR BLOWER B HIGH SPD INNER SHAFT Y VIBRATION	VIBRATION TRANSMITTER	143993-03-115	BENTLY NEVADA	990-05-50-01-00		VENDOR	AI-2WT	??			143993-ASA-DG0-EQD-1606	EXISTING	143993-ASA-DG0-LPD-1600-106	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1VZT-905B	OXIDATION AIR BLOWER B HIGH SPD INNER SHAFT Z VIBRATION	VIBRATION TRANSMITTER	143993-03-115	BENTLY NEVADA	991-25-50-01-00		VENDOR	AI-2WT	??			143993-ASA-DG0-EQD-1606	EXISTING	143993-ASA-DG0-LPD-1600-106	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1VXT-905C	OXIDATION AIR BLOWER C HIGH SPD INNER SHAFT X VIBRATION	VIBRATION TRANSMITTER	143993-03-115	BENTLY NEVADA	990-05-50-01-00		VENDOR	AI-2WT	??			143993-ASA-DG0-EQD-1606	EXISTING	143993-ASA-DG0-LPD-1600-125	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1VYT-905C	OXIDATION AIR BLOWER C HIGH SPD INNER SHAFT Y VIBRATION	VIBRATION TRANSMITTER	143993-03-115	BENTLY NEVADA	990-05-50-01-00		VENDOR	AI-2WT	??			143993-ASA-DG0-EQD-1606	EXISTING	143993-ASA-DG0-LPD-1600-125	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1VZT-905C	OXIDATION AIR BLOWER C HIGH SPD INNER SHAFT Z VIBRATION	VIBRATION TRANSMITTER	143993-03-115	BENTLY NEVADA	991-25-50-01-00		VENDOR	AI-2WT	??			143993-ASA-DG0-EQD-1606	EXISTING	143993-ASA-DG0-LPD-1600-125	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1FV-901A	OXIDATION BLOWER A BLOW OFF VALVE	MOTORIZED VALVE	143993-03-115			6"	EXISTING	-----				143993-ASA-DG0-EQD-1606	EXISTING	143993-ASA-DG0-LPD-1600-088	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	0	20AUG21	REV'D INST DESC FOR REV. 0
1ZSC-901A	OXIDATION AIR BLOWER A BLOW OFF VALVE	LIMIT SWITCH CLOSE	143993-03-115				VENDOR	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-088	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1ZSO-901A	OXIDATION AIR BLOWER A BLOW OFF VALVE	LIMIT SWITCH OPEN	143993-03-115				VENDOR	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-088	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1FV-901B	OXIDATION BLOWER B BLOW OFF VALVE	MOTORIZED VALVE	143993-03-115			6"	EXISTING	-----				143993-ASA-DG0-EQD-1606	EXISTING	143993-ASA-DG0-LPD-1600-107	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	0	20AUG21	REV'D INST DESC FOR REV. 0
1ZSC-901B	OXIDATION AIR BLOWER B BLOW OFF VALVE	LIMIT SWITCH CLOSE	143993-03-115				VENDOR	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-107	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1ZSO-901B	OXIDATION AIR BLOWER B BLOW OFF VALVE	LIMIT SWITCH OPEN	143993-03-115				VENDOR	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-107	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1FV-901C	OXIDATION BLOWER C BLOW OFF VALVE	MOTORIZED VALVE	143993-03-115			6"	EXISTING	-----				143993-ASA-DG0-EQD-1606	EXISTING	143993-ASA-DG0-LPD-1600-126	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	0	20AUG21	REV'D INST DESC FOR REV. 0
1ZSC-901C	OXIDATION AIR BLOWER C BLOW OFF VALVE	LIMIT SWITCH CLOSE	143993-03-115				VENDOR	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-126	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1ZSO-901C	OXIDATION AIR BLOWER C BLOW OFF VALVE	LIMIT SWITCH OPEN	143993-03-115				VENDOR	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-126	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1FV-903A	OXIDATION BLOWER A DISCHARGE VALVE	MOTORIZED VALVE	143993-03-115			24"	EXISTING	-----				143993-ASA-DG0-EQD-1606	EXISTING	143993-ASA-DG0-LPD-1600-089	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	0	20AUG21	REV'D INST DESCRIPTION FOR REV. 0
1ZSC-903A	OXIDATION AIR BLOWER A DISCHARGE VALVE	LIMIT SWITCH CLOSE	143993-03-115				VENDOR	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-089	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1ZSO-903A	OXIDATION AIR BLOWER A DISCHARGE VALVE	LIMIT SWITCH OPEN	143993-03-115				VENDOR	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-089	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1FV-903B	OXIDATION BLOWER B DISCHARGE VALVE	MOTORIZED VALVE	143993-03-115			24"	EXISTING	-----				143993-ASA-DG0-EQD-1606	EXISTING	143993-ASA-DG0-LPD-1600-108	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	0	20AUG21	REV'D INST DESCRIPTION FOR REV. 0
1ZSC-903B	OXIDATION AIR BLOWER B DISCHARGE VALVE	LIMIT SWITCH CLOSE	143993-03-115				VENDOR	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-108	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1ZSO-903B	OXIDATION AIR BLOWER B DISCHARGE VALVE	LIMIT SWITCH OPEN	143993-03-115				VENDOR	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-108	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1FV-903C	OXIDATION BLOWER C DISCHARGE VALVE	MOTORIZED VALVE	143993-03-115			24"	EXISTING	-----				143993-ASA-DG0-EQD-1606	EXISTING	143993-ASA-DG0-LPD-1600-127	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	0	20AUG21	REV'D INST DESCRIPTION FOR REV. 0
1ZSC-903C	OXIDATION AIR BLOWER C DISCHARGE VALVE	LIMIT SWITCH CLOSE	143993-03-115				VENDOR	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-127	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1ZSO-903C	OXIDATION AIR BLOWER C DISCHARGE VALVE	LIMIT SWITCH OPEN	143993-03-115				VENDOR	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-127	DEVICE INCLUDED IN OXIDATION BLOWER REFURBISHMENT PACKAGE	A	23APR21	
1AT-320A	GYPSUM HYDROCLONE FEED PUMPS DICARGE	PH TRANSMITTER	143993-03-116	YOKOGAWA	PH202G-U-E/U/Q/SCT		EXISTING	AI-2WT	0	14	pH	143993-ASA-DG0-EQD-1603	143993-ASA-DG0-DTL-1600 / A001	143993-ASA-DG0-LPD-1600-128		A	23APR21	
1AE-320A	GYPSUM HYDROCLONE FEED PUMPS DICARGE	PH ELEMENT	143993-03-116	YOKOGAWA	PH97-07/PH87-07		BREC	HDWIRE				143993-ASA-DG0-EQD-1603	143993-ASA-DG0-DTL-1600 / A001	143993-ASA-DG0-LPD-1600-128		A	23APR21	
1AT-320B	GYPSUM HYDROCLONE FEED PUMPS DICARGE	PH TRANSMITTER	143993-03-116	YOKOGAWA	PH202G-U-E/U/Q/SCT		EXISTING	AI-2WT	0	14	pH	143993-ASA-DG0-EQD-1603	143993-ASA-DG0-DTL-1600 / A001	143993-ASA-DG0-LPD-1600-129		A	23APR21	
1AE-320B	GYPSUM HYDROCLONE FEED PUMPS DICARGE	PH ELEMENT	143993-03-116	YOKOGAWA	PH97-07/PH87-07		BREC	HDWIRE	0	14	pH	143993-ASA-DG0-EQD-1603	143993-ASA-DG0-DTL-1600 / A001	143993-ASA-DG0-LPD-1600-129		A	23APR21	
1AT-321	PRIMARY GYPSUM HYDROCLONE FEED PUMPS DISCHARGE ORP	ORP TRANSMITTER	143993-03-116	YOKOGAWA	FLXA202-D-C-DD-P1-NN-A-N-LA-N-NN/U/SCT/CD4		BREC	AI-4WT	-5000	5000	mV	143993-ASA-DG0-EQD-1603	143993-ASA-DG0-DTL-1600 / A001	143993-ASA-DG0-LPD-1600-130		B	28MAY21	REV'D SUPPLIED BY ON REV. B
1AE-321	PRIMARY GYPSUM HYDROCLONE FEED PUMPS DISCHARGE ORP	ORP ELEMENT	143993-03-116	YOKOGAWA	PH97-07/ORP/PH87-07		BREC	HDWIRE				143993-ASA-DG0-EQD-1603	143993-ASA-DG0-DTL-1600 / A001	143993-ASA-DG0-LPD-1600-130		A	23APR21	
1DT-310	GYPSUM HYDROCLONE FEED PUMPS DICARGE	DENSITY TRANSMITTER	143993-03-116			8"	EXISTING	AI-4WT	1.0	1.3	SGU	143993-ASA-DG0-EQD-1604	EXISTING	143993-ASA-DG0-LPD-1600-131		A	23APR21	
1DE-310	GYPSUM HYDROCLONE FEED PUMPS DICARGE	DENSITY ELEMENT	143993-03-116				EXISTING	HDWIRE				143993-ASA-DG0-EQD-1604	EXISTING	143993-ASA-DG0-LPD-1600-131		A	23APR21	
1FT-321	GYPSUM HYDROCLONE FEED PUMPS DICARGE	FLOW TRANSMITTER	143993-03-116	ROSEMOUNT	8732CT12NOM4		EXISTING	AI-4WT	0	2000	GPM	143993-ASA-DG0-EQD-1614	143993-ASA-DG0-DTL-1600 / F003	143993-ASA-DG0-LPD-1600-132		A	23APR21	
1FE-321	GYPSUM HYDROCLONE FEED PUMPS DICARGE	FLOW ELEMENT	143993-03-116	ROSEMOUNT	8705FHE080C1W0N0B3	8"	BREC	HDWIRE				143993-ASA-DG0-EQD-1614	143993-ASA-DG0-DTL-1600 / F003	143993-ASA-DG0-LPD-1600-132		A	23APR21	
1RO-331	HYDROCLONE FEED RECIRC	RESTRICTION ORIFICE	143993-03-116			8"	BREC	-----				N/A	EXISTING	N/A		0	20AUG21	REV'D INST DESC FOR REV. 0
1RO-332	HYDROCLONE FEED TO EXISTING BLOWDOWN SUMP	RESTRICTION ORIFICE	143993-03-116			8"	BREC	-----				N/A	EXISTING	N/A		0	20AUG21	REV'D INST DESC FOR REV. 0
1PI-305A	PRIMARY GYPSUM HYDROCLONE FEED PUMP A DISCHARGE	PRESSURE GAUGE	143993-03-116	ASHCROFT	451259SD04L160#XCKNHSG		BREC	-----				N/A	143993-ASA-DG0-DTL-1600 / P005	N/A		A	23APR21	
1PI-305B	PRIMARY GYPSUM HYDROCLONE FEED PUMP B DISCHARGE	PRESSURE GAUGE	143993-03-116	ASHCROFT	451259SD04L160#XCKNHSG		BREC	-----				N/A	143993-ASA-DG0-DTL-1600 / P005	N/A		A	23APR21	
1FV-301A	GYPSUM HYDROCLONE FEED PUMP A SUCTION SHUTOFF VALVE	ON/OFF VALVE	143993-03-116			8"	BREC	-----				143993-ASA-DG0-EQD-1604	143993-ASA-DG0-DTL-1600 / H003	143993-ASA-DG0-LPD-1600-133		0	20AUG21	REV'D SUPPLIED BY & INSTALLATION DETAIL FOR REV. 0
1FSV-301A	GYPSUM HYDROCLONE FEED PUMP A SUCTION SHUTOFF VALVE	SOLENOID	143993-03-116				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-133	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSC-301A	GYPSUM HYDROCLONE FEED PUMP A SUCTION SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-133	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-301A	GYPSUM HYDROCLONE FEED PUMP A SUCTION SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-133	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1FV-301B	GYPSUM HYDROCLONE FEED PUMP B SUCTION SHUTOFF VALVE	ON/OFF VALVE	143993-03-116			8"	BREC	-----				143993-ASA-DG0-EQD-1604	143993-ASA-DG0-DTL-1600 / H003	143993-ASA-DG0-LPD-1600-137		0	20AUG21	REV'D SUPPLIED BY & INSTALLATION DETAIL FOR REV. 0
1FSV-301B	GYPSUM HYDROCLONE FEED PUMP B SUCTION SHUTOFF VALVE	SOLENOID	143993-03-116				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-137	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSC-301B	GYPSUM HYDROCLONE FEED PUMP B SUCTION SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-137	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-301B	GYPSUM HYDROCLONE FEED PUMP B SUCTION SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-137	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1FV-302A	GYPSUM HYDROCLONE FEED PUMP A DRAIN SHUTOFF VALVE	ON/OFF VALVE	143993-03-116			3"	BREC	-----				143993-ASA-DG0-EQD-1604	143993-ASA-DG0-DTL-1600 / H003	143993-ASA-DG0-LPD-1600-134		0	20AUG21	REV'D SUPPLIED BY & INSTALLATION DETAIL FOR REV. 0
1FSV-302A	GYPSUM HYDROCLONE FEED PUMP A DRAIN SHUTOFF VALVE	SOLENOID	143993-03-116				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-134	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSC-302A	GYPSUM HYDROCLONE FEED PUMP A DRAIN SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-134	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-302A	GYPSUM HYDROCLONE FEED PUMP A DRAIN SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-134	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1FV-302B	GYPSUM HYDROCLONE FEED PUMP B DRAIN SHUTOFF VALVE	ON/OFF VALVE	143993-03-116			3"	BREC	-----				143993-ASA-DG0-EQD-1604	143993-ASA-DG0-DTL-1600 / H003	143993-ASA-DG0-LPD-1600-138		0	20AUG21	REV'D SUPPLIED BY & INSTALLATION DETAIL FOR REV. 0
1FSV-302B	GYPSUM HYDROCLONE FEED PUMP B DRAIN SHUTOFF VALVE	SOLENOID	143993-03-116				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-138	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSC-302B	GYPSUM HYDROCLONE FEED PUMP B DRAIN SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-138	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-302B	GYPSUM HYDROCLONE FEED PUMP B DRAIN SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-138	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1FV-303A	GYPSUM HYDROCLONE FEED PUMP A DISCHARGE SHUTOFF VALVE	ON/OFF VALVE	143993-03-116			8"	BREC	-----				143993-ASA-DG0-EQD-1604	143993-ASA-DG0-DTL-1600 / H003	143993-ASA-DG0-LPD-1				

INSTRUMENT TAG	SERVICE DESCRIPTION	INSTRUMENT DESCRIPTION	P&ID DRAWING	MANUFACTURER	MODEL NUMBER	SIZE	SUPPLIED BY	I/O TYPE	CAL RANGE LOW	CAL RANGE HIGH	CAL RANGE UNITS	LOCATION DRAWING	INSTALLATION DETAIL	LOOP DRAWING	INST. REMARKS	REV	REV DATE	REV REMARKS
1ZSC-303A	GYPSUM HYDROCLONE FEED PUMP A DISCHARGE SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-135	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-303A	GYPSUM HYDROCLONE FEED PUMP A DISCHARGE SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-135	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1FV-303B	GYPSUM HYDROCLONE FEED PUMP B DISCHARGE SHUTOFF VALVE	ON/OFF VALVE	143993-03-116			8"	BREC	-----				143993-ASA-DG0-EQD-1604	143993-ASA-DG0-DTL-1600 / H003	143993-ASA-DG0-LPD-1600-139		0	20AUG21	REV'D SUPPLIED BY & INSTALLATION DETAIL FOR REV. 0
1FSV-303B	GYPSUM HYDROCLONE FEED PUMP B DISCHARGE SHUTOFF VALVE	SOLENOID	143993-03-116				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-139	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSC-303B	GYPSUM HYDROCLONE FEED PUMP B DISCHARGE SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-139	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-303B	GYPSUM HYDROCLONE FEED PUMP B DISCHARGE SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-139	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1FV-304A	GYPSUM HYDROCLONE FEED PUMP A FLUSH SHUTOFF VALVE	ON/OFF VALVE	143993-03-116			2"	BREC	-----				143993-ASA-DG0-EQD-1604	143993-ASA-DG0-DTL-1600 / H003	143993-ASA-DG0-LPD-1600-136		0	20AUG21	REV'D SUPPLIED BY & INSTALLATION DETAIL FOR REV. 0
1FSV-304A	GYPSUM HYDROCLONE FEED PUMP A FLUSH SHUTOFF VALVE	SOLENOID	143993-03-116				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-136	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSC-304A	GYPSUM HYDROCLONE FEED PUMP A FLUSH SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-136	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-304A	GYPSUM HYDROCLONE FEED PUMP A FLUSH SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-136	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1FV-304B	GYPSUM HYDROCLONE FEED PUMP B FLUSH SHUTOFF VALVE	ON/OFF VALVE	143993-03-116			2"	BREC	-----				143993-ASA-DG0-EQD-1604	143993-ASA-DG0-DTL-1600 / H003	143993-ASA-DG0-LPD-1600-140		0	20AUG21	REV'D SUPPLIED BY & INSTALLATION DETAIL FOR REV. 0
1FSV-304B	GYPSUM HYDROCLONE FEED PUMP B FLUSH SHUTOFF VALVE	SOLENOID	143993-03-116				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-140	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSC-304B	GYPSUM HYDROCLONE FEED PUMP B FLUSH SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-140	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-304B	GYPSUM HYDROCLONE FEED PUMP B FLUSH SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-140	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1FV-330	GYPSUM HYDROCLONE FEED PUMPS RECIRC VALE SHUTOFF VALVE	ON/OFF VALVE	143993-03-116			8"	BREC	-----				143993-ASA-DG0-EQD-1603	143993-ASA-DG0-DTL-1600 / H003	143993-ASA-DG0-LPD-1600-141		0	20AUG21	REV'D SUPPLIED BY & INSTALLATION DETAIL FOR REV. 0
1FSV-330	GYPSUM HYDROCLONE FEED PUMPS RECIRC VALE SHUTOFF VALVE	SOLENOID	143993-03-116				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-141	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSC-330	GYPSUM HYDROCLONE FEED PUMPS RECIRC VALE SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-141	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-330	GYPSUM HYDROCLONE FEED PUMPS RECIRC VALE SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-141	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1FV-331	GYPSUM HYDROCLONE FEED PUMPS RECIRC LINE FLUSH SHUTOFF VALVE	ON/OFF VALVE	143993-03-116			2"	BREC	-----				143993-ASA-DG0-EQD-1603	143993-ASA-DG0-DTL-1600 / H003	143993-ASA-DG0-LPD-1600-142		0	20AUG21	REV'D SUPPLIED BY & INSTALLATION DETAIL FOR REV. 0
1FSV-331	GYPSUM HYDROCLONE FEED PUMPS RECIRC LINE FLUSH SHUTOFF VALVE	SOLENOID	143993-03-116				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-142	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSC-331	GYPSUM HYDROCLONE FEED PUMPS RECIRC LINE FLUSH SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-142	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-331	GYPSUM HYDROCLONE FEED PUMPS RECIRC LINE FLUSH SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-142	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1FV-332	GYPSUM HYDROCLONE FEED HEADER ISOLATION SHUTOFF VALVE	ON/OFF VALVE	143993-03-116			8"	BREC	-----				143993-ASA-DG0-EQD-1603	143993-ASA-DG0-DTL-1600 / H003	143993-ASA-DG0-LPD-1600-143		0	20AUG21	REV'D SUPPLIED BY & INSTALLATION DETAIL FOR REV. 0
1FSV-332	GYPSUM HYDROCLONE FEED HEADER ISOLATION SHUTOFF VALVE	SOLENOID	143993-03-116				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-143	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSC-332	GYPSUM HYDROCLONE FEED HEADER ISOLATION SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-143	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-332	GYPSUM HYDROCLONE FEED HEADER ISOLATION SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-143	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1FV-333	GYPSUM HYDROCLONE FEED HEADER FLUSH SHUTOFF VALVE	ON/OFF VALVE	143993-03-116			4"	BREC	-----				143993-ASA-DG0-EQD-1603	143993-ASA-DG0-DTL-1600 / H003	143993-ASA-DG0-LPD-1600-144		0	20AUG21	REV'D SUPPLIED BY & INSTALLATION DETAIL FOR REV. 0
1FSV-333	GYPSUM HYDROCLONE FEED HEADER FLUSH SHUTOFF VALVE	SOLENOID	143993-03-116				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-144	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSC-333	GYPSUM HYDROCLONE FEED HEADER FLUSH SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-144	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-333	GYPSUM HYDROCLONE FEED HEADER FLUSH SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-116				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-144	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1LI-131	HYDRAULIC OIL TANK	LEVEL GAUGE	143993-03-117				EXISTING	-----				N/A	EXISTING	N/A		A	23APR21	
1TI-131	HYDRAULIC OIL TANK	TEMP GAUGE	143993-03-117				EXISTING	-----				N/A	EXISTING	N/A		A	23APR21	
1LSL-132	HYDRAULIC OIL TANK	LEVEL SWITCH LOW	143993-03-117				EXISTING	HDWIRE				N/A	EXISTING	N/A	HARDWIRED TO LOCAL CONTROL PANEL	A	23APR21	
1PSV-135A	RECYCLE PUMP VALVE HYDRAULIC PUMP A DISCHARGE	PRESSURE SAFETY VALVE	143993-03-117				EXISTING	-----				N/A	EXISTING	N/A		A	23APR21	
1PSV-135B	RECYCLE PUMP VALVE HYDRAULIC PUMP B DISCHARGE	PRESSURE SAFETY VALVE	143993-03-117				EXISTING	-----				N/A	EXISTING	N/A		A	23APR21	
1PI-136A	RECYCLE PUMP VALVE HYDRAULIC PUMP A DISCHARGE	PRESSURE GAUGE	143993-03-117				EXISTING	-----				N/A	EXISTING	N/A		A	23APR21	
1PI-136B	RECYCLE PUMP VALVE HYDRAULIC PUMP B DISCHARGE	PRESSURE GAUGE	143993-03-117				EXISTING	-----				N/A	EXISTING	N/A		A	23APR21	
1PSH-138	RECYCLE PUMP VALVE HYDRAULIC TANK RETURN	PRESSURE SWITCH HIGH	143993-03-117				EXISTING	HDWIRE				N/A	EXISTING	N/A	HARDWIRED TO LOCAL CONTROL PANEL	A	23APR21	
1PI-139	RECYCLE PUMP VALVE HYDRAULIC TANK RETURN FILTER	PRESSURE GAUGE	143993-03-117				EXISTING	-----				N/A	EXISTING	N/A		A	23APR21	
1TS-130	RECYCLE PUMP VALVE HYDRAULIC TANK HEATER	HEATER SWITCH	143993-03-117				EXISTING	HDWIRE				N/A	EXISTING	N/A	INTEGRAL TO HEATER 1H-130	A	23APR21	
1TSH-133	RECYCLE PUMP VALVE HYDRAULIC TANK	TEMP SWITCH HIGH	143993-03-117				EXISTING	HDWIRE				N/A	EXISTING	N/A	HARDWIRED TO LOCAL CONTROL PANEL	A	23APR21	
1RO-504	ABSORBER LIMESTONE SLURRY RECIRC	RESTRICTION ORIFICE	143993-03-124			6"	BREC	-----				N/A	N/A	N/A	NEW DEVICE FOR REV. 0	0	20AUG21	NEW DEVICE FOR REV. 0
1PIT-340	PRIMARY GYPSUM HYDROCLONE	PRESSURE TRANSMITTER	143993-03-130	ROSEMOUNT	3051CG4A22A1AWR3S1B4		VENDOR	AI-2WT	0	70	PSIG	143993-ASA-DG0-EQD-1634	143993-ASA-DG0-DTL-1600 / P013	143993-ASA-DG0-LPD-1600-148		A	23APR21	
1PI-340	PRIMARY GYPSUM HYDROCLONE	PRESSURE GAUGE	143993-03-130				VENDOR	-----				N/A	143993-ASA-DG0-DTL-1600 / P005	143993-ASA-DG0-LPD-1600-148	NEW DEVICE FOR REV. 0	0	20AUG21	NEW DEVICE FOR REV. 0
1FV-335	PRIMARY GYPSUM HYDROCLONE SUPPLY LINE DRAIN SHUTOFF VALVE	ON/OFF VALVE	143993-03-130			3"	BREC	-----				143993-ASA-DG0-EQD-1624	143993-ASA-DG0-DTL-1600 / H003	143993-ASA-DG0-LPD-1600-149		0	20AUG21	REV'D SUPPLIED BY & INSTALLATION DETAIL FOR REV. 0
1FSV-335	PRIMARY GYPSUM HYDROCLONE SUPPLY LINE DRAIN SHUTOFF VALVE	SOLENOID	143993-03-130				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-149	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSC-335	PRIMARY GYPSUM HYDROCLONE SUPPLY LINE DRAIN SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-130				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-149	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-335	PRIMARY GYPSUM HYDROCLONE SUPPLY LINE DRAIN SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-130				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-149	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1LT-120	ABSORBER AREA SUMP	LEVEL TRANSMITTER	143993-03-138	SIEMENS	7ML5221-2DA14		BREC	AI-2WT	10	23	IN	143993-ASA-DG0-EQD-1601	143993-ASA-DG0-DTL-1600 / L008	143993-ASA-DG0-LPD-1600-150		A	23APR21	
1FV-120A	ABSORBER AREA SUMP PUMP A DISCHARGE SHUTOFF VALVE	ON/OFF VALVE	143993-03-138			4"	BREC	-----				143993-ASA-DG0-EQD-1601	143993-ASA-DG0-DTL-1600 / H003	143993-ASA-DG0-LPD-1600-151		0	20AUG21	REV'D SUPPLIED BY & INSTALLATION DETAIL FOR REV. 0
1FSV-120A	ABSORBER AREA SUMP PUMP A DISCHARGE SHUTOFF VALVE	SOLENOID	143993-03-138				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-151	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSC-120A	ABSORBER AREA SUMP PUMP A DISCHARGE SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-138				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-151	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-120A	ABSORBER AREA SUMP PUMP A DISCHARGE SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-138				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-151	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1FV-120B	ABSORBER AREA SUMP PUMP B DISCHARGE SHUTOFF VALVE	ON/OFF VALVE	143993-03-138			4"	BREC	-----				143993-ASA-DG0-EQD-1601	143993-ASA-DG0-DTL-1600 / H003	143993-ASA-DG0-LPD-1600-152		0	20AUG21	REV'D SUPPLIED BY & INSTALLATION DETAIL FOR REV. 0
1FSV-120B	ABSORBER AREA SUMP PUMP B DISCHARGE SHUTOFF VALVE	SOLENOID	143993-03-138				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-152	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSC-120B	ABSORBER AREA SUMP PUMP B DISCHARGE SHUTOFF VALVE	LIMIT SWITCH CLOSE	143993-03-138				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-152	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1ZSO-120B	ABSORBER AREA SUMP PUMP B DISCHARGE SHUTOFF VALVE	LIMIT SWITCH OPEN	143993-03-138				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-152	INCLUDED W/ VALVE	0	20AUG21	REV'D SUPPLIED BY FOR REV. 0
1FCV-405	GYPSUM SLURRY TRANSFER DISCHARGE VALVE	FLOW CONTROL VALVE	143993-03-139			4"	BREC	-----				143993-ASA-DG0-EQD-1601	143993-ASA-DG0-DTL-1600 / H001-005	143993-ASA-DG0-LPD-1600-163	VALVE CONTROL TYPE CHANGED TO MODULATING	0	20AUG21	REV'D VALVE CONTROL TYPE, SUPPLIED BY, & INSTALLATION DETAIL FOR REV. 0
1FSV-405	GYPSUM SLURRY TRANSFER DISCHARGE VALVE	SOLENOID	143993-03-139				EXISTING	DO				N/A	EXISTING	143993-ASA-DG0-LPD-1600-163	SOLENOID DELETED; VALVE CHANGED TO MODULATING VALVE	0	20AUG21	DEVICE DELETED FOR REV. 0
1ZSC-405	GYPSUM SLURRY TRANSFER DISCHARGE VALVE	LIMIT SWITCH CLOSE	143993-03-139				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-163	LIMIT SWITCH DELETED; VALVE CHANGED TO MODULATING VALVE	0	20AUG21	DEVICE DELETED FOR REV. 0
1ZSO-405	GYPSUM SLURRY TRANSFER DISCHARGE VALVE	LIMIT SWITCH OPEN	143993-03-139				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-163	LIMIT SWITCH DELETED; VALVE CHANGED TO MODULATING VALVE	0	20AUG21	DEVICE DELETED FOR REV. 0

REV: 0

ISSUED FOR CONSTRUCTION

PAGE 12/13

INSTRUMENT TAG	SERVICE DESCRIPTION	INSTRUMENT DESCRIPTION	P&ID DRAWING	MANUFACTURER	MODEL NUMBER	SIZE	SUPPLIED BY	I/O TYPE	CAL RANGE LOW	CAL RANGE HIGH	CAL RANGE UNITS	LOCATION DRAWING	INSTALLATION DETAIL	LOOP DRAWING	INST. REMARKS	REV	REV DATE	REV REMARKS
1FSV-425B	GYPSUM SLURRY TRANSFER TO EXISTING SURGE TNKS DRAIN BB	SOLENOID	143993-03-139				BREC	DO				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-179	INCLUDED W/ VALVE; NEW DEVICE FOR REV. 0	0	20AUG21	NEW DEVICE FOR REV. 0
1ZSC-425B	GYPSUM SLURRY TRANSFER TO EXISTING SURGE TNKS DRAIN BB	LIMIT SWITCH CLOSE	143993-03-139				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-179	INCLUDED W/ VALVE; NEW DEVICE FOR REV. 0	0	20AUG21	NEW DEVICE FOR REV. 0
1ZSO-425B	GYPSUM SLURRY TRANSFER TO EXISTING SURGE TNKS DRAIN BB	LIMIT SWITCH OPEN	143993-03-139				BREC	DI				N/A	W/ VALVE	143993-ASA-DG0-LPD-1600-179	INCLUDED W/ VALVE; NEW DEVICE FOR REV. 0	0	20AUG21	NEW DEVICE FOR REV. 0
1PI-950	INSTRUMENT AIR TANK	PRESSURE GAUGE	143993-03-144	ASHCROFT	451259SD04L200#XNHSG		BREC	-----				N/A	143993-ASA-DG0-DTL-1600 / P005	N/A		A	23APR21	
1PSV-950	INSTRUMENT AIR TANK	PRESSURE SAFETY VALVE	143993-03-144	CROSBY	951202MFD	TBD	VENDOR	-----				N/A	N/A	N/A		A	23APR21	
1FV-950	INSTRUMENT AIR TANK DRAIN VALVE	SOLENOID	143993-03-144			TBD	VENDOR	HDWIRE				N/A	N/A	N/A	INLINE SOLENOID	A	23APR21	
1FSH-843	BATTERY ROOM SAFETY SHOWER WATER FLOW	FLOW SWITCH - HIGH	143993-ASA-DC0-PID-1111				VENDOR	DI				143993-ASA-DG0-EQD-1605	N/A	143993-ASA-DG0-LPD-1600-175	NEW DEVICE FOR REV. 0	0	20AUG21	NEW DEVICE FOR REV. 0
1XA-843	BATTERY ROOM SAFETY SHOWER ALARM	ALARM HORN	143993-ASA-DC0-PID-1111				VENDOR	-----				N/A	N/A	143993-ASA-DG0-LPD-1600-175	NEW DEVICE FOR REV. 0	0	20AUG21	NEW DEVICE FOR REV. 0
1PCV-800	BATTERY ROOM SAFETY SHOWER PRESSURE	PRESSURE REGULATING VALVE	143993-ASA-DC0-PID-1111	FISHER	MR95H	1"	BREC	-----				N/A	N/A		NEW DEVICE FOR REV. 0	0	20AUG21	NEW DEVICE FOR REV. 0
1PI-800A	BATTERY ROOM SAFETY SHOWER PRESSURE	PRESSURE GAUGE	143993-ASA-DC0-PID-1111	ASHCROFT	451259SD04L60#XNHSG		BREC	-----				N/A	143993-ASA-DG0-DTL-1600 / P005	N/A	NEW DEVICE FOR REV. 0	0	20AUG21	NEW DEVICE FOR REV. 0
1PI-800B	BATTERY ROOM SAFETY SHOWER PRESSURE	PRESSURE GAUGE	143993-ASA-DC0-PID-1111	ASHCROFT	451259SD04L60#XNHSG		BREC	-----				N/A	143993-ASA-DG0-DTL-1600 / P005	N/A	NEW DEVICE FOR REV. 0	0	20AUG21	NEW DEVICE FOR REV. 0
1AT-595	BATTERY ROOM HYDROGEN MONITOR	ANALYTICAL TRANSMITTER	14993-ASA-DE4-PLN-1551	SENSIDYNE	SensAlarm Plus		HVAC CONTACTOR	AI-2WT	0	25	LEL H2	143993-ASA-DG0-EQD-1605	143993-ASA-DG0-DTL-1600 / SPECIAL	143993-ASA-DG0-LPD-1600-169		B	28MAY21	NEW DEVICE FOR REV. B
1AE-595	BATTERY ROOM HYDROGEN MONITOR	ANALYTICAL ELEMENT	14993-ASA-DE4-PLN-1551	SENSIDYNE	823-0210-61		HVAC CONTACTOR	HDWIRE				N/A	N/A	143993-ASA-DG0-LPD-1600-169		B	28MAY21	NEW DEVICE FOR REV. B
1FT-595A	BATTERY ROOM EXHAUST FAN A	FLOW TRANSMITTER	N/A	FCI	FLT93B-AC00		BREC	DI				N/A	143993-ASA-DG0-DTL-1600 / F010	N/A		0	20AUG21	REVD SUPPLIED & INSTALLATION DETAIL FOR REV. 0
1FE-595A	BATTERY ROOM EXHAUST FAN A	FLOW ELEMENT	N/A	FCI	SEE TRANSMITTER	4" INSE RTIO N	BREC	-----				143993-ASA-DE4-PLN-1551	143993-ASA-DG0-DTL-1600 / F010	N/A		0	20AUG21	REVD SUPPLIED & INSTALLATION DETAIL FOR REV. 0
1FT-595B	BATTERY ROOM EXHAUST FAN B	FLOW TRANSMITTER	N/A	FCI	FLT93B-AC00		BREC	DI				N/A	143993-ASA-DG0-DTL-1600 / F010	N/A		0	20AUG21	REVD SUPPLIED & INSTALLATION DETAIL FOR REV. 0
1FE-595B	BATTERY ROOM EXHAUST FAN B	FLOW ELEMENT	N/A	FCI	SEE TRANSMITTER	4" INSE RTIO N	BREC	-----				143993-ASA-DE4-PLN-1551	143993-ASA-DG0-DTL-1600 / F010	N/A		0	20AUG21	REVD SUPPLIED & INSTALLATION DETAIL FOR REV. 0
1TT-595A	ELECTRICAL ROOM AMBIENT TEMPERATURE	TEMPERATURE TRANSMITTER	N/A	ROSEMOUNT	644AE5J2B5M4WR3A1F6C2C4Q4QTQMT1XA		BREC	AI-2WT	0	120	F	143993-ASA-DG0-EQD-1605	143993-ASA-DG0-DTL-1600 / T001	143993-ASA-DG0-LPD-1600-170		0	20AUG21	REVD SUPPLIED BY FOR REV. 0
1TE-595A	ELECTRICAL ROOM AMBIENT TEMPERATURE	TEMPERATURE ELEMENT	N/A	ROSEMOUNT	214CRWSMA1S3E0030XA		BREC	-----				N/A	143993-ASA-DG0-DTL-1600 / T001	143993-ASA-DG0-LPD-1600-170		B	28MAY21	NEW DEVICE FOR REV. B
1TT-595B	DCS ROOM AMBIENT TEMPERATURE	TEMPERATURE TRANSMITTER	N/A	ROSEMOUNT	644AE5J2B5M4WR3A1F6C2C4Q4QTQMT1XA		BREC	AI-2WT	0	120	F	143993-ASA-DG0-EQD-1605	143993-ASA-DG0-DTL-1600 / T001	143993-ASA-DG0-LPD-1600-171		0	20AUG21	REVD SUPPLIED BY FOR REV. 0
1TE-595B	DCS ROOM AMBIENT TEMPERATURE	TEMPERATURE ELEMENT	N/A	ROSEMOUNT	214CRWSMA1S3E0030XA		BREC	-----				N/A	143993-ASA-DG0-DTL-1600 / T001	143993-ASA-DG0-LPD-1600-171		0	20AUG21	REVD SUPPLIED & INSTALLATION DETAIL FOR REV. 0
1TT-595C	BATTERY ROOM AMBIENT TEMPERATURE	TEMPERATURE TRANSMITTER	N/A	ROSEMOUNT	644AE5J2B5M4WR3A1F6C2C4Q4QTQMT1XA		BREC	AI-2WT	0	120	F	143993-ASA-DG0-EQD-1605	143993-ASA-DG0-DTL-1600 / T001	143993-ASA-DG0-LPD-1600-172		0	20AUG21	REVD SUPPLIED BY FOR REV. 0
1TE-595C	BATTERY ROOM AMBIENT TEMPERATURE	TEMPERATURE ELEMENT	N/A	ROSEMOUNT	214CRWSMA1S3E0030XA		BREC	-----				N/A	143993-ASA-DG0-DTL-1600 / T001	143993-ASA-DG0-LPD-1600-172		0	20AUG21	REVD SUPPLIED & INSTALLATION DETAIL FOR REV. 0
1HS-900A	OXIDATION AIR BLOWER A E-STOP	E-STOP	N/A				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-083	NEW DEVICE FOR REV. 0	0	20AUG21	NEW DEVICE FOR REV. 0
1HS-900B	OXIDATION AIR BLOWER B E-STOP	E-STOP	N/A				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-102	NEW DEVICE FOR REV. 0	0	20AUG21	NEW DEVICE FOR REV. 0
1HS-900C	OXIDATION AIR BLOWER C E-STOP	E-STOP	N/A				EXISTING	DI				N/A	EXISTING	143993-ASA-DG0-LPD-1600-121	NEW DEVICE FOR REV. 0	0	20AUG21	NEW DEVICE FOR REV. 0



**INSTRUMENTATION & CONTROLS
DCS I/O LIST REPORT
FGD SYSTEM
BREC FGD RETROFIT
D.B. WILSON STATION
BIG RIVER ELECTRIC CORP.
CENTERTOWN, KY**

REVISIONS

REV	DATE	DESCRIPTION	PREP'D BY	CHK'D BY	LEAD. ENG. APP'D	DM/TA APP'D	PM APP'D	CLIENT
A	28-Apr-21	ISSUED FOR APPROVAL	JRJ	EMW	REO	RS	DH	
B	28-May-21	ISSUED FOR BID	SPO	REO	REO	RS	DH	
C	23-Jul-21	ISSUED FOR INFORMATION	SPO		REO	RS	DH	
0	20-Aug-21	ISSUED FOR DESIGN	SPO	REO	REO	RS	DH	

D.B. WILSON STATION
BIG RIVER ELECTRIC CORP.
CENTERTOWN, KY
WOOD PROJECT NO.: P00245891
WOOD DOCUMENT NO.: 143993-ASA-DG0-LST-1601

DCS I/O LIST REPORT

BREC FGD RETROFIT
FGD SYSTEM



CONTROL SYSTEM FUNCTIONS

FUNCTIONS	DESCRIPTION
AI-2WT	4-20 mA DC INPUT TO CONTROL SYSTEM, LOOP POWERED
AI-4WT	4-20 mA DC INPUT TO CONTROL SYSTEM, FIELD POWERED
AO	4-20 mA DC OUTPUT FROM CONTROL SYSTEM
DI	CONTACT INPUT TO CONTROL SYSTEM
DO	CONTACT OUTPUT FROM CONTROL SYSTEM
IDI	ISOL CONTACT INPUT TO CONTROL SYSTEM
IDO	ISOL CONTACT OUTPUT FROM CONTROL SYSTEM

CABINET DESCRIPTION

CABINET NO.	DESCRIPTION
63-1A	ABSORBER DCS CABINET 63-1A
63-2A	DEWATERING DCS CABINET 63-2A

DCS TAG NO.	LOOP SERVICE DESCRIPTION	PID NO.	SIGNAL TYPE	SIGNAL VOLTAGE	SIGNAL PWR SOURCE	CABINET	MODULE	CHANNEL	FIELD TERMINATION UNIT	CALIBRATED RANGE			I/O REMARKS	REV	REV DATE	REV REMARKS
1FY-405	GYP. SLURRY TRANSFER DISCHRG VA.	143993-03-139	AO	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-3	1	1B-2-B				NEW I/O POINT	0	20AUG21	NEW I/O POINT FOR REV. 0
1IT-918C	OXIDATION AIR BLR C CURRENT	143993-03-115	AI-4WT	4-20 mA	FIELD	DEWATERING DCS CABINET 63-2A	1A-3-4	1	1B-2-A	??			I/O POINT WAS DELETED; RTN'D TO PROJECT SCOPE; CALIBRATED RANGE ON HOLD	C	23JUL21	I/O POINT RTN'D TO PROJECT SCOPE FOR REV. C
1TT-900C	OX. AIR BLWR C INLET TEMP	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-4	2	1B-2-A	-15	106	°F		A	28APR21	
1TT-906C	OX. BLWR C SLW SPD SFT INNER JRNL BRNG	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-4	3	1B-2-A	0	300	°F		A	28APR21	
1TT-907C	OX. BLWR C SLW SPD SFT OUTER JRNL BRNG	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-4	4	1B-2-A	0	300	°F		A	28APR21	
1TT-908C	OX. BLWR C HI SPD SHAFT INNER JRNL BRNG	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-4	5	1B-2-A	0	300	°F		A	28APR21	
1TT-909C	OX. BLWR C HI SPD SHAFT OUTER JRNL BRNG	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-4	6	1B-2-A	0	300	°F		A	28APR21	
1TT-910C	OX. BLWR C BLR HI SPD SHAFT THRUST BRNG	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-4	7	1B-2-A	0	300	°F		A	28APR21	
1AT-321	PRIM. GYP. HCLONE FD PMPS DISCHRG ORP	143993-03-116	AI-4WT	4-20 mA	Loop	DEWATERING DCS CABINET 63-2A	1A-3-4	8	1B-2-A	-5000	5000	mV		A	28APR21	
1FT-410	GYP. SLURRY TRANSFER DISCH FLOW	143993-03-139	AI-4WT	4-20 mA	FIELD	DEWATERING DCS CABINET 63-2A	1A-3-4	9	1B-2-A	??			CALIBRATED RANGE ON HOLD	A	28APR21	
1TT-920C	OX. AIR BLWR C OIL RESEVOIR TEMP	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-4	10	1B-2-A	0	200	°F		A	28APR21	
1VXT-905C	OX. BLWR C HI SPD INNER SHAFT X VIB.	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-4	12	1B-2-A	??			CALIBRATED RANGE ON HOLD	A	28APR21	
1VYT-905C	OX. BLWR C HI SPD INNER SHAFT Y VIB.	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-4	13	1B-2-A	??			CALIBRATED RANGE ON HOLD	A	28APR21	
1VZT-905C	OX. BLWR C HI SPD INNER SHAFT Z VIB.	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-4	14	1B-2-A	??			CALIBRATED RANGE ON HOLD	A	28APR21	
1ZT-900C	OX. BLWR C VARIABLE DIFFUSER POS	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-4	15	1B-2-A	0	100	%		B	28MAY21	REV'D CALIBRATED RANGE FOR REV. B
1IT-918B	OXIDATION AIR BLR B CURRENT	143993-03-115	AI-4WT	4-20 mA	FIELD	DEWATERING DCS CABINET 63-2A	1A-3-5	1	1B-1-B	??			I/O POINT WAS DELETED; RTN'D TO PROJECT SCOPE; CALIBRATED RANGE ON HOLD	C	23JUL21	I/O POINT RTN'D TO PROJECT SCOPE FOR REV. C
1TT-900B	OX. AIR BLWR B INLET TEMP	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-5	2	1B-1-B	-15	106	°F		A	28APR21	
1TT-906B	OX. BLWR B SLW SPD SFT INNER JRNL BRNG	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-5	3	1B-1-B	0	300	°F		A	28APR21	
1TT-907B	OX. BLWR B SLW SPD SFT OUTER JRNL BRNG	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-5	4	1B-1-B	0	300	°F		A	28APR21	
1TT-908B	OX. BLWR B HI SPD SHAFT INNER JRNL BRNG	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-5	5	1B-1-B	0	300	°F		A	28APR21	
1TT-909B	OX. BLWR B HI SPD SHAFT OUTER JRNL BRNG	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-5	6	1B-1-B	0	300	°F		A	28APR21	
1TT-910B	OX. BLWR B BLR HI SPD SHAFT THRUST BRNG	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-5	7	1B-1-B	0	300	°F		A	28APR21	
1AT-320A	GYP. HCLONE FD PMPS DICHARGE RUN STATUS	143993-03-116	AI-2WT	4-20 mA	FIELD	DEWATERING DCS CABINET 63-2A	1A-3-5	8	1B-1-B	0	14	pH		A	28APR21	
1AT-320B	GYP. HCLONE FD PMPS DICHARGE START	143993-03-116	AI-2WT	4-20 mA	FIELD	DEWATERING DCS CABINET 63-2A	1A-3-5	9	1B-1-B	0	14	pH		A	28APR21	
1TT-920B	OX. AIR BLWR B OIL RESEVOIR TEMP	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-5	10	1B-1-B	0	200	°F		A	28APR21	
1VXT-905B	OX. BLWR B HI SPD INNER SHAFT X VIB.	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-5	12	1B-1-B	??			CALIBRATED RANGE ON HOLD	A	28APR21	
1VYT-905B	OX. BLWR B HI SPD INNER SHAFT Y VIB.	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-5	13	1B-1-B	??			CALIBRATED RANGE ON HOLD	A	28APR21	
1VZT-905B	OX. BLWR B HI SPD INNER SHAFT Z VIB.	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-5	14	1B-1-B	??			CALIBRATED RANGE ON HOLD	A	28APR21	
1ZT-900B	OX. BLWR B VARIABLE DIFFUSER POS	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-5	15	1B-1-B	0	100	%		B	28MAY21	REV'D CALIBRATED RANGE FOR REV. B
1IT-918A	OXIDATION AIR BLR A CURRENT	143993-03-115	AI-4WT	4-20 mA	FIELD	DEWATERING DCS CABINET 63-2A	1A-3-6	1	1B-1-A	??			I/O POINT WAS DELETED; RTN'D TO PROJECT SCOPE; CALIBRATED RANGE ON HOLD	C	23JUL21	I/O POINT RTN'D TO PROJECT SCOPE FOR REV. C
1TT-900A	OX. AIR BLWR A INLET TEMP	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-6	2	1B-1-A	-15	106	°F		A	28APR21	
1TT-906A	OX. BLWR A SLW SPD SFT INNER JRNL BRNG	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-6	3	1B-1-A	0	300	°F		A	28APR21	
1TT-907A	OX. BLWR A SLW SPD SFT OUTER JRNL BRNG	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-6	4	1B-1-A	0	300	°F		A	28APR21	

DCS TAG NO.	LOOP SERVICE DESCRIPTION	PID NO.	SIGNAL TYPE	SIGNAL VOLTAGE	SIGNAL PWR SOURCE	CABINET	MODULE	CHANNEL	FIELD TERMINATION UNIT	CALIBRATED RANGE			I/O REMARKS	REV	REV DATE	REV REMARKS
1TT-908A	OX. BLWR A HI SPD SHAFT INNER JRNL BRNG	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-6	5	1B-1-A	0	300	°F		A	28APR21	
1TT-909A	OX. BLWR A HI SPD SHAFT OUTER JRNL BRNG	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-6	6	1B-1-A	0	300	°F		A	28APR21	
1TT-910A	OX. BLWR A BLR HI SPD SHAFT THRUST BRNG	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-6	7	1B-1-A	0	300	°F		A	28APR21	
1DT-310	GYP. HCLONE FD PMPS DISCH. DENSITY	143993-03-116	AI-4WT	4-20 mA	FIELD	DEWATERING DCS CABINET 63-2A	1A-3-6	8	1B-1-A	1.0	1.3	SGU		A	28APR21	
1FT-321	GYP. HCLONE FD PMPS DISCH. FLOW	143993-03-116	AI-4WT	4-20 mA	FIELD	DEWATERING DCS CABINET 63-2A	1A-3-6	9	1B-1-A	0	2000	GPM		A	28APR21	
1TT-920A	OX. AIR BLWR A OIL RESEVOIR TEMP	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-6	10	1B-1-A	0	200	°F		A	28APR21	
1VXT-905A	OX. BLWR A HI SPD INNER SHAFT X VIB.	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-6	12	1B-1-A	??			CALIBRATED RANGE ON HOLD	A	28APR21	
1VYT-905A	OX. BLWR A HI SPD INNER SHAFT Y VIB.	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-6	13	1B-1-A	??			CALIBRATED RANGE ON HOLD	A	28APR21	
1VZT-905A	OX. BLWR A HI SPD INNER SHAFT Z VIB.	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-6	14	1B-1-A	??			CALIBRATED RANGE ON HOLD	A	28APR21	
1ZT-900A	OX. BLWR A VARIABLE DIFFUSER POS	143993-03-115	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-3-6	15	1B-1-A	0	100	%		B	28MAY21	REV'D CALIBRATED RANGE FOR REV. B
1ZSO-301A	GYP HCLONE FD PMP A SUCT SHTOFF VA. OPN	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-1	1	1B-4-A					A	28APR21	
1ZSC-301A	GYP HCLONE FD PMP A SUCT SHTOFF VA. CLS	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-1	2	1B-4-A					A	28APR21	
1ZSO-302A	GYP. HCLONE FD PMP A DRN SHTOFF VA. OPN	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-1	3	1B-4-A					A	28APR21	
1ZSC-302A	GYP. HCLONE FD PMP A DRN SHTOFF VA. CLS	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-1	4	1B-4-A					A	28APR21	
1ZSO-303A	GYP HCLONE FD PMP A DISCH SHTOFF VA OPN	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-1	5	1B-4-A					A	28APR21	
1ZSC-303A	GYP HCLONE FD PMP A DISCH SHTOFF VA CLS	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-1	6	1B-4-A					A	28APR21	
1ZSC-304A	GYP. HCLONE FD PMP A FL SHUTOFF VA. CLS	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-1	7	1B-4-A					A	28APR21	
1ZSO-304A	GYP. HCLONE FD PMP A FL SHUTOFF VA. OPN	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-1	9	1B-4-A					A	28APR21	
1ZSO-330	GYP HCLONE FD PMPS RECIRC SHTOFF VA OPN	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-1	11	1B-4-A					A	28APR21	
1ZSC-330	GYP HCLONE FD PMPS RECIRC VA CLS	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-1	12	1B-4-A					A	28APR21	
1ZSO-331	GYP HCLONE FD PMPS RECIRC FLUSH VA OPN	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-1	13	1B-4-A					A	28APR21	
1ZSC-331	GYP HCLONE FD PMPS RECIRC FLUSH VA CLS	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-1	14	1B-4-A					A	28APR21	
1XA-595A	BATTERY ROOM HYDROGEN MONITOR	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-1	15	1B-4-A					B	28MAY21	NEW I/O POINT FOR REV. B
BKR2AB-XI	5KV SWGR B BKR2A RELAY TRP & FAILED ALM	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-10	1	1B-8-B					C	23JUL21	REV'D LOOP SERVICE DESC FOR REV. C
BKR2AB-ZI	5KV SWGR B BKR2A BRKR POS. OPEN/CLOSED	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-10	2	1B-8-B					A	28APR21	
BKR4AA-XI	5KV SWGR A BKR4A 86LOR TRIP	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-10	3	1B-8-B					A	28APR21	
BKR4AA-ZI	5KV SWGR A BKR4A BRKR POS. OPEN/CLOSED	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-10	4	1B-8-B					A	28APR21	
1ZSC-425B	GYP SLURRY XFER TO SURGE TKS DRN BB CLS	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-10	6	1B-8-B				NEW I/O POINT	0	20AUG21	NEW I/O POINT FOR REV. 0
1ZSO-425B	GYP SLURRY XFER TO SURGE TKS DRN BB OPN	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-10	7	1B-8-B				NEW I/O POINT	0	20AUG21	NEW I/O POINT FOR REV. 0
BKR3A-XA	LV SWGR BKR3A -TIE- BELL ALARM	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-10	9	1B-8-B					C	23JUL21	REV'D LOOP SERVICE DESC FOR REV. C
BKR3A-ZI	LV SWGR BKR3A -TIE- BRKR POS. OPN/CLSD	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-10	10	1B-8-B					C	23JUL21	REV'D LOOP SERVICE DESC FOR REV. C
BKR4A-XA	LV SWGR BKR4A BELL ALARM	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-10	11	1B-8-B					A	28APR21	
BKR4A-ZI	LV SWGR BKR4A BREAKER POS. OPEN/CLOSED	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-10	12	1B-8-B					A	28APR21	

DCS TAG NO.	LOOP SERVICE DESCRIPTION	PID NO.	SIGNAL TYPE	SIGNAL VOLTAGE	SIGNAL PWR SOURCE	CABINET	MODULE	CHANNEL	FIELD TERMINATION UNIT	CALIBRATED RANGE			I/O REMARKS	REV	REV DATE	REV REMARKS
BKR4AA-XA	5KV SWGR A BKR4A RELAY FAILED ALARM	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-10	14	1B-8-B					C	23JUL21	NEW I/O POINT FOR REV. C
BKR1BB-XI	5KV SWGR B BKR1B 86LOR TRIP	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-11	1	1B-9-A					A	28APR21	
BKR1BB-ZI	5KV SWGR B BKR1B BRKR POS. OPEN/CLOSED	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-11	2	1B-9-A					A	28APR21	
BKR4AB-XI	5KV SWGR B BKR4A 86LOR TRIP	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-11	3	1B-9-A					A	28APR21	
BKR4AB-ZI	5KV SWGR B BKR4A BRKR POS. OPEN/CLOSED	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-11	4	1B-9-A					A	28APR21	
BKR1BB-XA	5KV SWGR B BKR1B RELAY FAILED ALARM	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-11	5	1B-9-A					C	23JUL21	NEW I/O POINT FOR REV. C
BKR4AB-XA	5KV SWGR B BKR4A RELAY FAILED ALARM	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-11	6	1B-9-A					C	23JUL21	NEW I/O POINT FOR REV. C
BKR5AB-XA	5KV SWGR B BKR5A RELAY FAILED ALARM	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-11	7	1B-9-A					C	23JUL21	NEW I/O POINT FOR REV. C
BKR4B-XA	LV SWGR BKR4B BELL ALARM	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-11	9	1B-9-A					A	28APR21	
BKR4B-ZI	LV SWGR BKR4B BREAKER POS. OPEN/CLOSED	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-11	10	1B-9-A					A	28APR21	
BKR4C-XA	LV SWGR BKR4C BELL ALARM	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-11	11	1B-9-A					A	28APR21	
BKR4C-ZI	LV SWGR BKR4C POS. OPEN/CLOSED	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-11	12	1B-9-A					C	23JUL21	REV'D LOOP SERVICE DESC FOR REV. C
BKR5AB-XI	5KV SWGR B BKR5A 86LOR TRIP	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-12	3	1B-9-B					A	28APR21	
BKR5AB-ZI	5KV SWGR B BKR5A BRKR POS. OPEN/CLOSED	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-12	4	1B-9-B					A	28APR21	
BKR5A-XA	LV SWGR BKR5A MAIN B BELL ALARM	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-12	9	1B-9-B					C	23JUL21	REV'D LOOP SERVICE DESC FOR REV. C
BKR5A-ZI	LV SWGR BKR5A MAIN B BRKR POS. OPN/CLSD	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-12	10	1B-9-B					C	23JUL21	REV'D LOOP SERVICE DESC FOR REV. C
1ZSO-301B	GYP HCLONE FD PMP B SUCT SHTOFF VA. OPN	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-2	1	1B-4-B					A	28APR21	
1ZSC-301B	GYP HCLONE FD PMP B SUCT SHTOFF VA. CLS	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-2	2	1B-4-B					A	28APR21	
1ZSO-302B	GYP. HCLONE FD PMP B DRN SHTOFF VA. OPN	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-2	3	1B-4-B					A	28APR21	
1ZSC-302B	GYP. HCLONE FD PMP B DRN SHTOFF VA. CLS	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-2	4	1B-4-B					A	28APR21	
1ZSO-303B	GYP HCLONE FD PMP B DISCH SHTOFF VA OPN	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-2	5	1B-4-B					A	28APR21	
1ZSC-303B	GYP HCLONE FD PMP B DISCH SHTOFF VA CLS	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-2	6	1B-4-B					A	28APR21	
1ZSO-304B	GYP. HCLONE FD PMP B FL SHUTOFF VA. OPN	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-2	7	1B-4-B					A	28APR21	
1ZSC-304B	GYP. HCLONE FD PMP B FL SHUTOFF VA. CLS	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-2	9	1B-4-B					A	28APR21	
1ZSC-424A	GYP SLURRY XFER TO SURGE TKS DRN AA CLS	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-2	10	1B-4-B				NEW I/O POINT	0	20AUG21	NEW I/O POINT FOR REV. 0
1ZSO-332	GYP. HCLONE FD HDR. SHUTOFF VA. OPN	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-2	11	1B-4-B					A	28APR21	
1ZSC-332	GYP. HCLONE FD HDR. SHUTOFF VA. CLS	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-2	12	1B-4-B					A	28APR21	
1ZSO-333	GYP. HCLONE FD HDR FL SHUTOFF VA. OPN	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-2	13	1B-4-B					A	28APR21	
1ZSC-333	GYP. HCLONE FD HDR FL SHUTOFF VA. CLS	143993-03-116	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-2	14	1B-4-B					A	28APR21	
1ZSO-424A	GYP SLURRY XFER TO SURGE TKS DRN AA OPN	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-2	15	1B-4-B				NEW I/O POINT	0	20AUG21	NEW I/O POINT FOR REV. 0
1ZSC-900A	OX. BLWR A VARIABLE DIFFUSER CLS	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-3	1	1B-5-A					A	28APR21	
1ZSO-900A	OX. BLWR A VARIABLE DIFFUSER OPN	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-3	2	1B-5-A					A	28APR21	
1ZSC-901A	OX. AIR BLWR A BLOW OFF VA. CLS	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-3	3	1B-5-A					A	28APR21	

DCS TAG NO.	LOOP SERVICE DESCRIPTION	PID NO.	SIGNAL TYPE	SIGNAL VOLTAGE	SIGNAL PWR SOURCE	CABINET	MODULE	CHANNEL	FIELD TERMINATION UNIT	CALIBRATED RANGE			I/O REMARKS	REV	REV DATE	REV REMARKS
1ZSO-901A	OX. AIR BLWR A BLOW OFF VA. OPN	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-3	4	1B-5-A					A	28APR21	
1ZSC-903A	OX. AIR BLWR A DISCHRG VA. CLS	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-3	5	1B-5-A					A	28APR21	
1ZSO-903A	OX. AIR BLWR A DISCHRG VA. OPN	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-3	6	1B-5-A					A	28APR21	
1PDISH-900A	OX. AIR BLWR A INLET FILTER DP HI	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-3	7	1B-5-A					A	28APR21	
1PSL-920A	OX. AIR BLWR A OIL RECIRC PRESS LO	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-3	9	1B-5-A					A	28APR21	
1PSL-922A	OX. AIR BLWR A OIL PRESS LO	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-3	10	1B-5-A					A	28APR21	
1PSH-900A	OX. AIR BLWR A SURGE	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-3	11	1B-5-A					A	28APR21	
1PDISH-923A1	OX. AIR BLWR A OIL FILTER A DP HI	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-3	12	1B-5-A					A	28APR21	
1ZSC-402A	GYP. SLURRY XFER PMP A DISCH VA. CLS	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-3	13	1B-5-A					A	28APR21	
1ZSO-402A	GYP. SLURRY XFER PMP A DISCH VA. OPN	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-3	14	1B-5-A					A	28APR21	
1HS-900A	OXIDATION AIR BLOWER A E-STOP	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-3	15	1B-5-A					C	23JUL21	NEW I/O POINT FOR REV. C
1ZSC-900B	OX. BLWR B VARIABLE DIFFUSER CLS	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-4	1	1B-5-B					A	28APR21	
1ZSO-900B	OX. BLWR B VARIABLE DIFFUSER OPN	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-4	2	1B-5-B					A	28APR21	
1ZSC-901B	OX. AIR BLWR B BLOW OFF VA. CLS	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-4	3	1B-5-B					A	28APR21	
1ZSO-901B	OX. AIR BLWR B BLOW OFF VA. OPN	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-4	4	1B-5-B					A	28APR21	
1ZSC-903B	OX. AIR BLWR B DISCHRG VA. CLS	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-4	5	1B-5-B					A	28APR21	
1ZSO-903B	OX. AIR BLWR B DISCHRG VA. OPN	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-4	6	1B-5-B					A	28APR21	
1PDISH-900B	OX. AIR BLWR B INLET FILTER DP HI	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-4	7	1B-5-B					A	28APR21	
1PSL-920B	OX. AIR BLWR B OIL RECIRC PRESS LO	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-4	9	1B-5-B					A	28APR21	
1PSL-922B	OX. AIR BLWR B OIL PRESS LO	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-4	10	1B-5-B					A	28APR21	
1PSH-900B	OX. AIR BLWR B SURGE	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-4	11	1B-5-B					A	28APR21	
1PDISH-923B1	OX. AIR BLWR B OIL FILTER A DP HI	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-4	12	1B-5-B					A	28APR21	
1ZSC-402B	GYP. SLURRY XFER PMP B DISCH VA. CLS	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-4	13	1B-5-B					A	28APR21	
1ZSO-402B	GYP. SLURRY XFER PMP B DISCH VA. OPN	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-4	14	1B-5-B					A	28APR21	
1HS-900B	OXIDATION AIR BLOWER B E-STOP	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-4	15	1B-5-B					C	23JUL21	NEW I/O POINT FOR REV. C
1ZSC-900C	OX. BLWR C VARIABLE DIFFUSER CLS	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-5	1	1B-6-A					A	28APR21	
1ZSO-900C	OX. BLWR C VARIABLE DIFFUSER OPN	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-5	2	1B-6-A					A	28APR21	
1ZSC-901C	OX. AIR BLWR C BLOW OFF VA. CLS	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-5	3	1B-6-A					A	28APR21	
1ZSO-901C	OX. AIR BLWR C BLOW OFF VA. OPN	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-5	4	1B-6-A					A	28APR21	
1ZSC-903C	OX. AIR BLWR C DISCHRG VA. CLS	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-5	5	1B-6-A					A	28APR21	
1ZSO-903C	OX. AIR BLWR C DISCHRG VA. OPN	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-5	6	1B-6-A					A	28APR21	
1PDISH-900C	OX. AIR BLWR C INLET FILTER DP HI	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-5	7	1B-6-A					A	28APR21	
1PSL-920C	OX. AIR BLWR C OIL RECIRC PRESS LO	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-5	9	1B-6-A					A	28APR21	

DCS TAG NO.	LOOP SERVICE DESCRIPTION	PID NO.	SIGNAL TYPE	SIGNAL VOLTAGE	SIGNAL PWR SOURCE	CABINET	MODULE	CHANNEL	FIELD TERMINATION UNIT	CALIBRATED RANGE			I/O REMARKS	REV	REV DATE	REV REMARKS
1PSL-922C	OX. AIR BLWR C OIL PRESS LO	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-5	10	1B-6-A					A	28APR21	
1PSH-900C	OX. AIR BLWR C SURGE	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-5	11	1B-6-A					A	28APR21	
1PDISH-923C1	OX. AIR BLWR C OIL FILTER A DP HI	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-5	12	1B-6-A					A	28APR21	
1FSH-843	BATTERY RM SAFETY SHWR FLOW	143993-ASA-DC0-PID-1111	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-5	13	1B-6-A					C	23JUL21	NEW I/O POINT FOR REV. C
1HS-900C	OXIDATION AIR BLOWER C E-STOP	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-5	15	1B-6-A					C	23JUL21	NEW I/O POINT FOR REV. C
1PDISH-923A2	OX. AIR BLWR A OIL FILTER B DP HI	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-6	1	1B-6-B					A	28APR21	
1ZSC-401A	GYP. SLURRY TRANSFER PMP A SUCT VA. CLS	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-6	2	1B-6-B					A	28APR21	
1ZSO-401A	GYP. SLURRY TRANSFER PMP A SUCT VA. OPN	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-6	3	1B-6-B					A	28APR21	
1ZSC-403A	GYP. SLURRY TRANSFER PMP A DRN VA. CLS	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-6	4	1B-6-B					A	28APR21	
1ZSO-403A	GYP. SLURRY TRANSFER PMP A DRN VA. OPN	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-6	5	1B-6-B					A	28APR21	
1ZSC-404A	GYP. SLURRY TRANSFER PMP A FL VA. CLS	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-6	6	1B-6-B					A	28APR21	
1ZSO-404A	GYP. SLURRY TRANSFER PMP A FL VA. OPN	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-6	7	1B-6-B					A	28APR21	
1P-400A-RUN	GYP. SLURRY TRANSFER PMP A RUN STATUS	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-6	9	1B-6-B					A	28APR21	
1A-400-RUN	GYP. SLURRY XFER. TK. AGIT. RUN STATUS	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-6	10	1B-6-B					A	28APR21	
1ZSO-335	PRI GYP. HCLONE SUP. LINE DRN VA. OPN	143993-03-130	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-6	11	1B-6-B					A	28APR21	
1ZSC-335	PRI GYP. HCLONE SUP. LINE DRN VA. CLS	143993-03-130	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-6	12	1B-6-B					A	28APR21	
1P-921A-RUN	OX AIR BLWR A AUX LUBE OIL PMP RUN FDBK	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-6	13	1B-6-B					A	28APR21	
1F-925A-RUN	OX. AIR BLWR VENT SUPPLY FAN A RUN	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-6	14	1B-6-B				REV'D TAG FROM 1F-930A-RUN; REV'D SERVICE DESC	C	23JUL21	REV'D TAG AND SERVICE DESC FOR REV. C
1F-922A-RUN	OX. BLWR A LUBE OIL COOLER CLNG FN RUN	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-6	15	1B-6-B					A	28APR21	
1PDISH-923B2	OX. AIR BLWR B OIL FILTER B DP HI	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-7	1	1B-7-A					A	28APR21	
1ZSC-401B	GYP. SLURRY TRANSFER PMP B SUCT VA. CLS	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-7	2	1B-7-A					A	28APR21	
1ZSO-401B	GYP. SLURRY TRANSFER PMP B SUCT VA. OPN	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-7	3	1B-7-A					A	28APR21	
1ZSC-403B	GYP. SLURRY TRANSFER PMP B DRN VA. CLS	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-7	4	1B-7-A					A	28APR21	
1ZSO-403B	GYP. SLURRY TRANSFER PMP B DRN VA. OPN	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-7	5	1B-7-A					A	28APR21	
1ZSC-404B	GYP. SLURRY TRANSFER PMP B FL VA. CLS	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-7	6	1B-7-A					A	28APR21	
1ZSO-404B	GYP. SLURRY TRANSFER PMP B FL VA. OPN	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-7	7	1B-7-A					A	28APR21	
1P-400B-RUN	GYP. SLURRY TRANSFER PMP B RUN STATUS	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-7	9	1B-7-A					A	28APR21	
1ZSC-425A	GYP SLURRY XFER TO SURGE TKS DRN AB CLS	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-7	10	1B-7-A				NEW I/O POINT	0	20AUG21	NEW I/O POINT FOR REV. 0
1ZSO-425A	GYP SLURRY XFER TO SURGE TKS DRN AB OPN	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-7	11	1B-7-A				NEW I/O POINT	0	20AUG21	NEW I/O POINT FOR REV. 0
1P-921B-RUN	OX AIR BLWR B AUX LUBE OIL PMP RUN FDBK	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-7	13	1B-7-A					A	28APR21	
1F-925B-RUN	OX. AIR BLWR VENT SUPPLY FAN B RUN	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-7	14	1B-7-A				REV'D TAG FROM 1F-930B-RUN; REV'D SERVICE DESC	C	23JUL21	REV'D TAG AND SERVICE DESC FOR REV. C
1F-922B-RUN	OX. BLWR B LUBE OIL COOLER CLNG FN RUN	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-7	15	1B-7-A					A	28APR21	
1PDISH-923C2	OX. AIR BLWR C OIL FILTER B DP HI	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-8	1	1B-7-B					A	28APR21	

DCS TAG NO.	LOOP SERVICE DESCRIPTION	PID NO.	SIGNAL TYPE	SIGNAL VOLTAGE	SIGNAL PWR SOURCE	CABINET	MODULE	CHANNEL	FIELD TERMINATION UNIT	CALIBRATED RANGE			I/O REMARKS	REV	REV DATE	REV REMARKS
1ZSC-406	GYP. SLURRY XFER DISCH FLUSH VA. CLS	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-8	4	1B-7-B					A	28APR21	
1ZSO-406	GYP. SLURRY XFER DISCH FLUSH VA. OPN	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-8	5	1B-7-B					A	28APR21	
1ZSC-407	GYP. SLURRY TRANSFER RECIRC VA. CLS	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-8	6	1B-7-B					A	28APR21	
1ZSO-407	GYP. SLURRY TRANSFER RECIRC VA. OPN	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-8	7	1B-7-B					A	28APR21	
1ZSC-245	OX. AIR SATURATION WTR SHUTOFF VA. CLS	143993-03-114	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-8	9	1B-7-B					A	28APR21	
1ZSO-245	OX. AIR SATURATION WTR SHUTOFF VA. OPN	143993-03-114	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-8	10	1B-7-B					A	28APR21	
1ZSC-424B	GYP SLURRY XFER TO SURGE TKS DRN BA CLS	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-8	11	1B-7-B				NEW I/O POINT	0	20AUG21	NEW I/O POINT FOR REV. 0
1ZSO-424B	GYP SLURRY XFER TO SURGE TKS DRN BA OPN	143993-03-139	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-8	12	1B-7-B				NEW I/O POINT	0	20AUG21	NEW I/O POINT FOR REV. 0
1P-921C-RUN	OX AIR BLWR C AUX LUBE OIL PMP RUN FDBK	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-8	13	1B-7-B					A	28APR21	
1F-926A-RUN	OX. AIR BLWR EXH FAN A RUN	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-8	14	1B-7-B				REV'D TAG FROM 1F-930C-RUN; REV'D SERVICE DESC	C	23JUL21	REV'D TAG AND SERVICE DESC FOR REV. C
1F-922C-RUN	OX. BLWR C LUBE OIL COOLER CLNG FN RUN	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-8	15	1B-7-B					A	28APR21	
BKR2BA-XI	5KV SWGR A BKR2B RELAY TRP & FAILED ALM	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-9	1	1B-8-A					C	23JUL21	REV'D LOOP SERVICE DESC FOR REV. C
BKR2BA-ZI	5KV SWGR A BKR2B BRKR POS. OPEN/CLOSED	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-9	2	1B-8-A					A	28APR21	
BKR1BA-XI	5KV SWGR A BKR1B 86LOR TRIP	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-9	3	1B-8-A					A	28APR21	
BKR1BA-ZI	5KV SWGR A BKR1B BRKR POS. OPEN/CLOSED	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-9	4	1B-8-A					A	28APR21	
BKR11B3-XI	6900V BKR 11B3 86LOR TRIP	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-9	5	1B-8-A					A	28APR21	
BKR11B3-ZI	6900V BKR 11B3 BREAKER POS. OPEN/CLOSED	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-9	6	1B-8-A					A	28APR21	
BKR1BA-XA	5KV SWGR A BKR1B RELAY FAILED ALARM	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-9	7	1B-8-A					C	23JUL21	NEW I/O POINT FOR REV. C
480XFMRA-XA	4160V 480 XFMR A GENERAL ALARM	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-9	10	1B-8-A					A	28APR21	
4160XFMRA-XA	6900V 4160 XFMR A GENERAL ALARM	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-9	13	1B-8-A					A	28APR21	
BKR11B3-XA	6900V BKR 11B3 RELAY FAILED ALARM	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-4-9	15	1B-8-A					C	23JUL21	NEW I/O POINT FOR REV. C
1P-400B-STR	GYP. SLURRY TRANSFER PMP B START	143993-03-139	IDO	120V AC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-10	1	1B-7-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1P-300B-STR	PRIM. GYP. HCLONE FD PMP B START	143993-03-116	IDO	120V AC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-10	3	1B-7-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1P-921B-STR	OX. AIR BLWR B AUX LUBE OIL PMP START	143993-03-115	IDO	120V AC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-10	4	1B-7-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1F-922B-STR	OX. BLWR B LUBE OIL COOLER CLNG FN STRT	143993-03-115	IDO	120V AC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-10	5	1B-7-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1H-920B-HS	OX BLWR B LUBE OIL RESERVOIR HTR ENABLE	143993-03-115	IDO	120V AC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-10	7	1B-7-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR4AA-HSC	5KV SWGR A BKR4A CLOSE COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-10	10	1B-7-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR4AA-HSO	5KV SWGR A BKR4A OPEN COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-10	11	1B-7-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR4AB-HSC	5KV SWGR B BKR4A CLOSE COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-10	12	1B-7-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR4AB-HSO	5KV SWGR B BKR4A OPEN COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-10	13	1B-7-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR11B3-HSC	6900V BKR 11B3 CLOSE COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-10	14	1B-7-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR11B3-HSO	6900V BKR 11B3 OPEN COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-10	15	1B-7-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1P-400A-STR	GYP. SLURRY TRANSFER PMP A START	143993-03-139	IDO	120V AC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-11	1	1B-7-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B

DCS TAG NO.	LOOP SERVICE DESCRIPTION	PID NO.	SIGNAL TYPE	SIGNAL VOLTAGE	SIGNAL PWR SOURCE	CABINET	MODULE	CHANNEL	FIELD TERMINATION UNIT	CALIBRATED RANGE			I/O REMARKS	REV	REV DATE	REV REMARKS
1A-400-STR	GYP. SLURRY XFER. TK. AGIT. START	143993-03-139	IDO	120V AC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-11	2	1B-7-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1P-300A-STR	PRIM. GYP. HCLONE FD PMP A START	143993-03-116	IDO	120V AC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-11	3	1B-7-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1P-921A-STR	OX. AIR BLWR A AUX LUBE OIL PMP START	143993-03-115	IDO	120V AC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-11	4	1B-7-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1F-922A-STR	OX. BLWR A LUBE OIL COOLER CLNG FN STRT	143993-03-115	IDO	120V AC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-11	5	1B-7-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1H-920A-HS	OX BLWR A LUBE OIL RESERVOIR HTR ENABLE	143993-03-115	IDO	120V AC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-11	7	1B-7-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR2BA-HSC	5KV SWGR A BKR2B CLOSE COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-11	8	1B-7-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR2BA-HSO	5KV SWGR A BKR2B OPEN COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-11	9	1B-7-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR1BA-HSC	5KV SWGR A BKR1B CLOSE COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-11	10	1B-7-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR1BA-HSO	5KV SWGR A BKR1B OPEN COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-11	11	1B-7-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR1BB-HSC	5KV SWGR B BKR1B CLOSE COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-11	12	1B-7-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR1BB-HSO	5KV SWGR B BKR1B OPEN COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-11	13	1B-7-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR5BB-HSC	5KV SWGR B BKR5B CLOSE COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-11	14	1B-7-C				REV'D TAG FROM BKR5AB-HSC	C	23JUL21	REV'D DCS TAG FROM BKR5AB-HSC & LOOP SERVICE DESC FOR REV. C
BKR5BB-HSO	5KV SWGR B BKR5B OPEN COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-11	15	1B-7-C				REV'D TAG FROM BKR5AB-HSO	C	23JUL21	REV'D DCS TAG FROM BKR5AB-HSO & LOOP SERVICE DESC FOR REV. C
1FSV-401B	GYP. SLURRY TRANSFER PMP B SUCT VA. SOL	143993-03-139	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-5	1	1B-5-D					A	28APR21	
1FSV-402B	GYP. SLURRY XFER PMP B DISCH VA. SOL	143993-03-139	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-5	2	1B-5-D					A	28APR21	
1FSV-403B	GYP. SLURRY TRANSFER PMP B DRN VA. SOL	143993-03-139	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-5	3	1B-5-D					A	28APR21	
1FSV-404B	GYP. SLURRY TRANSFER PMP B FL VA. SOL	143993-03-139	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-5	4	1B-5-D					A	28APR21	
1HSC-900C	OX. BLWR C VARIABLE DIFFUSER CLS CMD	143993-03-115	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-5	5	1B-5-D					A	28APR21	
1HSO-900C	OX. BLWR C VARIABLE DIFFUSER OPN CMD	143993-03-115	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-5	6	1B-5-D					A	28APR21	
1HSC-901C	OX. AIR BLWR C BLOW OFF VA. CLS CMD	143993-03-115	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-5	7	1B-5-D					A	28APR21	
1HSO-901C	OX. AIR BLWR C BLOW OFF VA. OPN CMD	143993-03-115	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-5	8	1B-5-D					A	28APR21	
1HSC-903C	OX. AIR BLWR C DISCHRG VA. CLS CMD	143993-03-115	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-5	9	1B-5-D					A	28APR21	
1HSO-903C	OX. AIR BLWR C DISCHRG VA. OPN CMD	143993-03-115	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-5	10	1B-5-D					A	28APR21	
1FSV-406	GYP. SLURRY XFER DISCH FLUSH VA. SOL	143993-03-139	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-5	12	1B-5-D					A	28APR21	
1FSV-407	GYP. SLURRY TRANSFER RECIRC VA. SOL	143993-03-139	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-5	13	1B-5-D					A	28APR21	
1FSV-424A	GYP SLURRY XFER TO SURGE TKS DRN AA SOL	143993-03-139	DO	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-5	14	1B-5-D				NEW I/O POINT	0	20AUG21	NEW I/O POINT FOR REV. 0
1FSV-425A	GYP SLURRY XFER TO SURGE TKS DRN AB SOL	143993-03-139	DO	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-5	15	1B-5-D				NEW I/O POINT	0	20AUG21	NEW I/O POINT FOR REV. 0
1FSV-401A	GYP. SLURRY TRANSFER PMP A SUCT VA. SOL	143993-03-139	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-6	1	1B-5-C					A	28APR21	
1FSV-402A	GYP. SLURRY XFER PMP A DISCH VA. SOL	143993-03-139	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-6	2	1B-5-C					A	28APR21	
1FSV-403A	GYP. SLURRY TRANSFER PMP A DRN VA. SOL	143993-03-139	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-6	3	1B-5-C					A	28APR21	
1FSV-404A	GYP. SLURRY TRANSFER PMP A FL VA. SOL	143993-03-139	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-6	4	1B-5-C					A	28APR21	
1FSV-330	GYP HCLONE FD PMPS RECIRC SHTOFF VA SOL	143993-03-116	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-6	6	1B-5-C					A	28APR21	
1FSV-331	GYP HCLONE FD PMPS RECIRC FLUSH VA SOL	143993-03-116	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-6	7	1B-5-C					A	28APR21	

DCS TAG NO.	LOOP SERVICE DESCRIPTION	PID NO.	SIGNAL TYPE	SIGNAL VOLTAGE	SIGNAL PWR SOURCE	CABINET	MODULE	CHANNEL	FIELD TERMINATION UNIT	CALIBRATED RANGE			I/O REMARKS	REV	REV DATE	REV REMARKS
1FSV-332	GYP. HCLONE FD HDR. SHUTOFF VA. SOL	143993-03-116	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-6	8	1B-5-C					A	28APR21	
1FSV-333	GYP. HCLONE FD HDR FL SHUTOFF VA. SOL	143993-03-116	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-6	9	1B-5-C					A	28APR21	
1FSV-424B	GYP SLURRY XFER TO SURGE TKS DRN BA SOL	143993-03-139	DO	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-6	10	1B-5-C				NEW I/O POINT	0	20AUG21	NEW I/O POINT FOR REV. 0
1FSV-425B	GYP SLURRY XFER TO SURGE TKS DRN BB SOL	143993-03-139	DO	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-6	11	1B-5-C				NEW I/O POINT	0	20AUG21	NEW I/O POINT FOR REV. 0
1FSV-335	PRI GYP. HCLONE SUP. LINE DRN VA. SOL	143993-03-130	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-6	12	1B-5-C					A	28APR21	
1FSV-301B	GYP HCLONE FD PMP B SUCT SHTOFF VA. SOL	143993-03-116	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-7	1	1B-3-D					A	28APR21	
1FSV-302B	GYP. HCLONE FD PMP B DRN SHTOFF VA. SOL	143993-03-116	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-7	2	1B-3-D					A	28APR21	
1FSV-303B	GYP HCLONE FD PMP B DISCH SHTOFF VA SOL	143993-03-116	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-7	3	1B-3-D					A	28APR21	
1FSV-304B	GYP. HCLONE FD PMP B FL SHUTOFF VA. SOL	143993-03-116	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-7	4	1B-3-D					A	28APR21	
1HSC-900B	OX. BLWR B VARIABLE DIFFUSER CLS CMD	143993-03-115	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-7	5	1B-3-D					A	28APR21	
1HSO-900B	OX. BLWR B VARIABLE DIFFUSER OPN CMD	143993-03-115	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-7	6	1B-3-D					A	28APR21	
1HSC-901B	OX. AIR BLWR B BLOW OFF VA. CLS CMD	143993-03-115	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-7	7	1B-3-D					A	28APR21	
1HSO-901B	OX. AIR BLWR B BLOW OFF VA. OPN CMD	143993-03-115	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-7	8	1B-3-D					A	28APR21	
1HSC-903B	OX. AIR BLWR B DISCHRG VA. CLS CMD	143993-03-115	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-7	9	1B-3-D					A	28APR21	
1HSO-903B	OX. AIR BLWR B DISCHRG VA. OPN CMD	143993-03-115	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-7	10	1B-3-D					A	28APR21	
1FSV-960	OX. AIR INSTRUMENT AIR SOLENOID VA. SOL	143993-03-114	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-7	11	1B-3-D					A	28APR21	
1FSV-301A	GYP HCLONE FD PMP A SUCT SHTOFF VA. SOL	143993-03-116	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-8	1	1B-3-C					A	28APR21	
1FSV-302A	GYP. HCLONE FD PMP A DRN SHTOFF VA. SOL	143993-03-116	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-8	2	1B-3-C					A	28APR21	
1FSV-303A	GYP HCLONE FD PMP A DISCH SHTOFF VA SOL	143993-03-116	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-8	3	1B-3-C					A	28APR21	
1FSV-304A	GYP. HCLONE FD PMP A FL SHUTOFF VA. SOL	143993-03-116	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-8	4	1B-3-C					A	28APR21	
1HSC-900A	OX. BLWR A VARIABLE DIFFUSER CLS CMD	143993-03-115	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-8	5	1B-3-C					A	28APR21	
1HSO-900A	OX. BLWR A VARIABLE DIFFUSER OPN CMD	143993-03-115	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-8	6	1B-3-C					A	28APR21	
1HSC-901A	OX. AIR BLWR A BLOW OFF VA. CLS CMD	143993-03-115	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-8	7	1B-3-C					A	28APR21	
1HSO-901A	OX. AIR BLWR A BLOW OFF VA. OPN CMD	143993-03-115	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-8	8	1B-3-C					A	28APR21	
1HSC-903A	OX. AIR BLWR A DISCHRG VA. CLS CMD	143993-03-115	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-8	9	1B-3-C					A	28APR21	
1HSO-903A	OX. AIR BLWR A DISCHRG VA. OPN CMD	143993-03-115	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-8	10	1B-3-C					A	28APR21	
1FSV-245	OX. AIR SATURATION WTR SHUTOFF VA. SOL	143993-03-114	DO	120V AC	LOOP	DEWATERING DCS CABINET 63-2A	1A-5-8	11	1B-3-C					A	28APR21	
BKR3A-HSC	LV SWGR BKR3A -TIE- CLOSE COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-9	1	1B-9-C					C	23JUL21	REV'D LOOP SERVICE DESC FOR REV. C
BKR3A-HSO	LV SWGR BKR3A -TIE- OPEN COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-9	2	1B-9-C					C	23JUL21	REV'D LOOP SERVICE DESC FOR REV. C
1P-921C-STR	OX. AIR BLWR C AUX LUBE OIL PMP START	143993-03-115	IDO	120V AC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-9	4	1B-9-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1F-922C-STR	OX. BLWR C LUBE OIL COOLER CLNG FN STRT	143993-03-115	IDO	120V AC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-9	5	1B-9-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1H-920C-HS	OX BLWR C LUBE OIL RESERVOIR HTR ENABLE	143993-03-115	IDO	120V AC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-9	7	1B-9-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR3BB-HSC	5KV SWGR B BKR3B CLOSE COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-9	8	1B-9-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B

DCS TAG NO.	LOOP SERVICE DESCRIPTION	PID NO.	SIGNAL TYPE	SIGNAL VOLTAGE	SIGNAL PWR SOURCE	CABINET	MODULE	CHANNEL	FIELD TERMINATION UNIT	CALIBRATED RANGE			I/O REMARKS	REV	REV DATE	REV REMARKS
BKR3BB-HSO	5KV SWGR B BKR3B OPEN COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-9	9	1B-9-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKRC2AAT-HSC	6900V BKR C2AAT CLOSE COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-9	14	1B-9-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKRC2AAT-HSO	6900V BKR C2AAT OPEN COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-5-9	15	1B-9-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR3BB-XI	5KV SWGR B BKR3B 86LOR TRIP	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-6-1	1	1B-8-D					A	28APR21	
BKR3BB-ZI	5KV SWGR B BKR3B BRKR POS. OPEN/CLOSED	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-6-1	2	1B-8-D					A	28APR21	
1F-926B-RUN	OX. AIR BLWR EXH FAN B RUN	143993-03-115	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-6-1	3	1B-8-D					C	23JUL21	NEW I/O POINT FOR REV. C
BKRC2AAT-XI	6900V BKR C2AAT 86LOR TRIP	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-6-1	5	1B-8-D					A	28APR21	
BKRC2AAT-ZI	6900V BKR C2AAT BRKR POS. OPEN/CLOSED	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-6-1	6	1B-8-D					A	28APR21	
BKRC2AAT-XA	6900V BKR C2AAT RELAY FAILED ALARM	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-6-1	7	1B-8-D					C	23JUL21	NEW I/O POINT FOR REV. C
480XFMRB-XA	4160V 480 XFMR B GENERAL ALARM	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-6-1	10	1B-8-D					A	28APR21	
4160XFMRB-XA	6900V 4160 XFMR B GENERAL ALARM	N/A	DI	24V DC	LOOP	DEWATERING DCS CABINET 63-2A	1A-6-1	13	1B-8-D					A	28APR21	
1LT-400	GYP. SLURRY TRANSFER TANK LEVEL	143993-03-139	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-x-x	1	1B-x-x	10	276	IN	MODULE IS PLACEHOLDER FOR NEW AI MODULE	A	28APR21	
1PIT-340	PRIM. GYP. HCLONE PRESS	143993-03-130	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-x-x	2	1B-x-x	0	70	PSIG	MODULE IS PLACEHOLDER FOR NEW AI MODULE	A	28APR21	
1PT-935	OXIDATION AIR SPARGER PRESS	143993-03-114	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-x-x	3	1B-x-x	0	30	PSIG	MODULE IS PLACEHOLDER FOR NEW AI MODULE	A	28APR21	
1FT-936	OXIDATION AIR SPARGER FLOW	143993-03-114	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-x-x	4	1B-x-x	0	30000	SCFM	MODULE IS PLACEHOLDER FOR NEW AI MODULE	A	28APR21	
1TT-937	OXIDATION AIR SPARGER TEMP	143993-03-114	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-x-x	5	1B-x-x	0	400	°F	MODULE IS PLACEHOLDER FOR NEW AI MODULE	A	28APR21	
1FT-245	OXIDATION AIR SATURATION WATER	143993-03-114	AI-4WT	4-20 mA	FIELD	DEWATERING DCS CABINET 63-2A	1A-x-x	6	1B-x-x	0	40	GPM	MODULE IS PLACEHOLDER FOR NEW AI MODULE	A	28APR21	
1AT-595	BATTERY ROOM HYDROGEN CONCENTRATION	14993-ASA-DE4-PLN-1551	AI-2WT	4-20 mA	FIELD	DEWATERING DCS CABINET 63-2A	1A-x-x	7	1B-x-x	0	25	LEL H2	MODULE IS PLACEHOLDER FOR NEW AI MODULE	B	28MAY21	NEW I/O POINT FOR REV. B
1TT-595A	ELECTRICAL ROOM AMBIENT TEMP	N/A	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-x-x	8	1B-x-x	0	120	F	MODULE IS PLACEHOLDER FOR NEW AI MODULE	B	28MAY21	NEW I/O POINT FOR REV. B
1TT-595B	DCS ROOM AMBIENT TEMP	N/A	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-x-x	9	1B-x-x	0	120	F	MODULE IS PLACEHOLDER FOR NEW AI MODULE	B	28MAY21	NEW I/O POINT FOR REV. B
1TT-595C	BATTERY ROOM AMBIENT TEMP	N/A	AI-2WT	4-20 mA	LOOP	DEWATERING DCS CABINET 63-2A	1A-x-x	10	1B-x-x	0	120	F	MODULE IS PLACEHOLDER FOR NEW AI MODULE	B	28MAY21	NEW I/O POINT FOR REV. B
1P-300A-RUN	PRIM. GYP. HCLONE FD PMP A SPEED FDBK	143993-03-116	AI-4WT	4-20 mA	FIELD	DEWATERING DCS CABINET 63-2A	1A-x-x	11	1B-x-x	0	100	%	REV'D SIGNAL TYPE; MODULE IS PLACEHOLDER FOR NEW AI MODULE	C	23JUL21	REV'D SIGNAL TYPE FROM DI FOR REV. C
1P-300B-RUN	PRIM. GYP. HCLONE FD PMP B SPEED FDBK	143993-03-116	AI-4WT	4-20 mA	FIELD	DEWATERING DCS CABINET 63-2A	1A-x-x	12	1B-x-x	0	100	%	REV'D SIGNAL TYPE; MODULE IS PLACEHOLDER FOR NEW AI MODULE	C	23JUL21	REV'D SIGNAL TYPE FROM DI FOR REV. C
BKR5A-HSC	LV SWGR BKR5A MAIN B CLOSE COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-x-y	3	1B-x-y				MODULE IS PLACEHOLDER FOR NEW IDO MODULE	C	23JUL21	REV'D LOOP SERVICE DESC FOR REV. C
BKR5A-HSO	LV SWGR BKR5A MAIN B OPEN COMMAND	N/A	IDO	125V DC	FIELD	DEWATERING DCS CABINET 63-2A	1A-x-y	4	1B-x-y				MODULE IS PLACEHOLDER FOR NEW IDO MODULE	C	23JUL21	REV'D LOOP SERVICE DESC FOR REV. C
1FY-540	LIMESTONE SLURRY TO ABSORBER VA.	143993-03-111	AO	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-1	5	2B-3-A					A	28APR21	
1FY-700	RECLAIM WATER TO ABSORBER VA.	143993-03-111	AO	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-1	6	2B-3-A					A	28APR21	
1LY-801	MIST ELIMINATOR TANK INLET CONTROL VA.	143993-03-113	AO	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-1	7	2B-3-A					A	28APR21	
1IT-100E	RECYCLE PMP E CURRENT	143993-03-112	AI-4WT	4-20 mA	FIELD	ABSORBER DCS CABINET 63-1A	2A-3-3	1	2B-2-B	0	300	AMPS		A	28APR21	
1TT-105E	RECYCLE PMP E GEAR BOX TEMP	143993-03-112	AI-2WT	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-3	2	2B-2-B	0	200	°F		A	28APR21	
1FT-210	ME WASH WATER TO ABSORBER	143993-03-113	AI-4WT	4-20 mA	FIELD	ABSORBER DCS CABINET 63-1A	2A-3-3	5	2B-2-B	0	750	GPM		A	28APR21	
1IT-120B	ABSORBER AREA SUMP AGITATOR B CURRENT	143993-03-138	AI-4WT	4-20 mA	FIELD	ABSORBER DCS CABINET 63-1A	2A-3-3	7	2B-2-B	0	100	%		A	28APR21	
1IT-100D	RECYCLE PMP D CURRENT	143993-03-112	AI-4WT	4-20 mA	FIELD	ABSORBER DCS CABINET 63-1A	2A-3-3	8	2B-2-B	0	300	AMPS		A	28APR21	

DCS TAG NO.	LOOP SERVICE DESCRIPTION	PID NO.	SIGNAL TYPE	SIGNAL VOLTAGE	SIGNAL PWR SOURCE	CABINET	MODULE	CHANNEL	FIELD TERMINATION UNIT	CALIBRATED RANGE			I/O REMARKS	REV	REV DATE	REV REMARKS
1TT-105D	RECYCLE PMP D GEAR BOX TEMP	143993-03-112	AI-2WT	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-3	9	2B-2-B	0	200	°F		A	28APR21	
1IT-A100D	ABSORBER AGITATOR D CURRENT	143993-03-111	AI-4WT	4-20 mA	FIELD	ABSORBER DCS CABINET 63-1A	2A-3-3	13	2B-2-B	??			I/O POINT WAS DELETED; RTN'D TO PROJECT SCOPE; CALIBRATED RANGE ON HOLD	C	23JUL21	I/O POINT RTN'D TO PROJECT SCOPE FOR REV. C
1IT-A100E	ABSORBER AGITATOR E CURRENT	143993-03-111	AI-4WT	4-20 mA	FIELD	ABSORBER DCS CABINET 63-1A	2A-3-3	14	2B-2-B	??			I/O POINT WAS DELETED; RTN'D TO PROJECT SCOPE; CALIBRATED RANGE ON HOLD	C	23JUL21	I/O POINT RTN'D TO PROJECT SCOPE FOR REV. C
1LT-120	ABSORBER AREA SUMP LEVEL	143993-03-138	AI-2WT	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-4	5	2B-2-A	10	23	IN		A	28APR21	
1IT-120A	ABSORBER AREA SUMP AGITATOR A CURRENT	143993-03-138	AI-4WT	4-20 mA	FIELD	ABSORBER DCS CABINET 63-1A	2A-3-4	7	2B-2-A	0	100	%		A	28APR21	
1IT-100C	RECYCLE PMP C CURRENT	143993-03-112	AI-4WT	4-20 mA	FIELD	ABSORBER DCS CABINET 63-1A	2A-3-4	8	2B-2-A	0	300	AMPS		A	28APR21	
1TT-105C	RECYCLE PMP C GEAR BOX TEMP	143993-03-112	AI-2WT	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-4	9	2B-2-A	0	200	°F		A	28APR21	
1IT-A100A	ABSORBER AGITATOR A CURRENT	143993-03-111	AI-4WT	4-20 mA	FIELD	ABSORBER DCS CABINET 63-1A	2A-3-4	13	2B-2-A	??			I/O POINT WAS DELETED; RTN'D TO PROJECT SCOPE; CALIBRATED RANGE ON HOLD	C	23JUL21	I/O POINT RTN'D TO PROJECT SCOPE FOR REV. C
1IT-A100B	ABSORBER AGITATOR B CURRENT	143993-03-111	AI-4WT	4-20 mA	FIELD	ABSORBER DCS CABINET 63-1A	2A-3-4	14	2B-2-A	??			I/O POINT WAS DELETED; RTN'D TO PROJECT SCOPE; CALIBRATED RANGE ON HOLD	C	23JUL21	I/O POINT RTN'D TO PROJECT SCOPE FOR REV. C
1IT-A100C	ABSORBER AGITATOR C CURRENT	143993-03-111	AI-4WT	4-20 mA	FIELD	ABSORBER DCS CABINET 63-1A	2A-3-4	15	2B-2-A	??			I/O POINT WAS DELETED; RTN'D TO PROJECT SCOPE; CALIBRATED RANGE ON HOLD	C	23JUL21	I/O POINT RTN'D TO PROJECT SCOPE FOR REV. C
1PT-80	ABSORBER OUTLET DUCT PRESS	143993-03-110	AI-2WT	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-5	2	2B-1-B	-5	+10	IN WC		A	28APR21	
1TT-81B	ABSORBER OUTLET DUCT TEMP B	143993-03-110	AI-2WT	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-5	3	2B-1-B	0	300	°F		A	28APR21	
1TT-71B	ABSORBER INLET DUCT TEMP B	143993-03-110	AI-2WT	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-5	4	2B-1-B	0	600	°F		A	28APR21	
1PDT-76	ABSORBER MIST ELIMINATOR DP	143993-03-110	AI-2WT	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-5	5	2B-1-B	-1	+4	IN WC		A	28APR21	
1PDT-75	ABSORBER DUAL FLOW TRAY DP	143993-03-110	AI-2WT	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-5	6	2B-1-B	0	10	IN WC		A	28APR21	
1LT-100B	ABSORBER STILLING WELL LEVEL B	143993-03-111	AI-2WT	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-5	7	2B-1-B	0	186	IN		A	28APR21	
1IT-100B	RECYCLE PMP B CURRENT	143993-03-112	AI-4WT	4-20 mA	FIELD	ABSORBER DCS CABINET 63-1A	2A-3-5	8	2B-1-B	0	300	AMPS		A	28APR21	
1TT-105B	RECYCLE PMP B GEAR BOX TEMP	143993-03-112	AI-2WT	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-5	9	2B-1-B	0	200	°F		A	28APR21	
1TT-72	FROM ID FANS TO ABSORBER TEMP	143993-03-110	AI-2WT	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-5	13	2B-1-B	0	300	°F		A	28APR21	
1FT-700	RECLAIM WATER TO ABSORBER FLOW	143993-03-111	AI-4WT	4-20 mA	FIELD	ABSORBER DCS CABINET 63-1A	2A-3-5	14	2B-1-B	0	2500	GPM		A	28APR21	
1LIT-201	MIST ELIMINATOR WASH WATER TANK LEVEL	143993-03-113	AI-2WT	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-5	15	2B-1-B	0	100	%		A	28APR21	
1FT-540	LIMESTONE SLURRY TO ABSORBER FLOW	143993-03-111	AI-4WT	4-20 mA	FIELD	ABSORBER DCS CABINET 63-1A	2A-3-6	1	2B-1-A	0	600	GPM		A	28APR21	
1PT-70	ABSORBER INLET DUCT PRESS	143993-03-110	AI-2WT	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-6	2	2B-1-A	0	20	IN WC		A	28APR21	
1TT-81A	ABSORBER OUTLET DUCT TEMP A	143993-03-110	AI-2WT	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-6	3	2B-1-A	0	300	°F		A	28APR21	
1TT-71A	ABSORBER INLET DUCT TEMP A	143993-03-110	AI-2WT	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-6	4	2B-1-A	0	600	°F		A	28APR21	
1TT-290	QUENCH WATER TANK TEMP	143993-03-110	AI-2WT	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-6	5	2B-1-A	0	100	°F		A	28APR21	
1LT-290	QUENCH WATER TANK LEVEL	143993-03-110	AI-2WT	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-6	6	2B-1-A	0	114	INCH		A	28APR21	
1LT-100A	ABSORBER STILLING WELL LEVEL A	143993-03-111	AI-2WT	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-6	7	2B-1-A	0	186	IN		A	28APR21	
1IT-100A	RECYCLE PMP A CURRENT	143993-03-112	AI-4WT	4-20 mA	FIELD	ABSORBER DCS CABINET 63-1A	2A-3-6	8	2B-1-A	0	300	AMPS		A	28APR21	
1TT-105A	RECYCLE PMP A GEAR BOX TEMP	143993-03-112	AI-2WT	4-20 mA	LOOP	ABSORBER DCS CABINET 63-1A	2A-3-6	9	2B-1-A	0	200	°F		A	28APR21	
1F-170A-RUN	RECYCLER PMP A HEAT XCHNGR CLNG FN RUN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-1	1	2B-4-A					A	28APR21	
1P-170A-RUN	RECYCLE PMP A GEAR BX LUBE OIL PMP RUN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-1	6	2B-4-A					A	28APR21	
1ZSC-101A	RECYCLE PMP A SUCT SHUTOFF VA. CLS	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-1	7	2B-4-A					A	28APR21	

DCS TAG NO.	LOOP SERVICE DESCRIPTION	PID NO.	SIGNAL TYPE	SIGNAL VOLTAGE	SIGNAL PWR SOURCE	CABINET	MODULE	CHANNEL	FIELD TERMINATION UNIT	CALIBRATED RANGE			I/O REMARKS	REV	REV DATE	REV REMARKS
1ZSO-101A	RECYCLE PMP A SUCT SHUTOFF VA. OPN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-1	9	2B-4-A					A	28APR21	
1ZSC-102A	RECYCLE PMP A DRN VA. CLS	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-1	10	2B-4-A					A	28APR21	
1ZSO-102A	RECYCLE PMP A DRN VA. OPN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-1	11	2B-4-A					A	28APR21	
1ZSC-103A	RECYCLE PMP A FLUSH VA. CLS	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-1	12	2B-4-A					A	28APR21	
1ZSO-103A	RECYCLE PMP A FLUSH VA. OPN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-1	13	2B-4-A					A	28APR21	
1LSH-72	FROM I.D. FANS TO ABSORBER LEVEL HI	143993-03-110	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-1	14	2B-4-A					B	28MAY21	REV'D CALIBRATED RANGE FOR REV. B
1A-100A-RUN	ABSORBER AGITATOR A RUN STATUS	143993-03-111	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-1	15	2B-4-A					A	28APR21	
1ZSO-227	1ST STAGE BOTTOM ZONE 7 ME WASH VA. OPN	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-10	1	2B-8-B					A	28APR21	
1ZSC-227	1ST STAGE BOTTOM ZONE 7 ME WASH VA. CLS	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-10	2	2B-8-B					A	28APR21	
1ZSO-228	1ST STAGE BOTTOM ZONE 8 ME WASH VA. OPN	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-10	3	2B-8-B					A	28APR21	
1ZSC-228	1ST STAGE BOTTOM ZONE 8 ME WASH VA. CLS	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-10	4	2B-8-B					A	28APR21	
1ZSC-104C	RECYCLE PMP C DISCH SHUTOFF VA. CLS	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-10	5	2B-8-B					A	28APR21	
1ZSO-104C	RECYCLE PMP C DISCH SHUTOFF VA. OPN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-10	6	2B-8-B					A	28APR21	
1P-130B-RUN	RECYCLE PMP VA. HYD. PMP B RUN STATUS	143993-03-117	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-10	9	2B-8-B					A	28APR21	
1ZSO-120B	ABSORBER SUMP PMP B DISCH SHTOFF VA OPN	143993-03-138	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-10	10	2B-8-B					A	28APR21	
1P-120B-RUN	ABSORBER AREA SUMP PMP B RUN STATUS	143993-03-138	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-10	11	2B-8-B					A	28APR21	
1ZSC-120B	ABSORBER SUMP PMP B DISCH SHTOFF VA CLS	143993-03-138	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-10	12	2B-8-B					A	28APR21	
BKR3BA-XI	5KV SWGR A BKR3B RELAY TRP & FAILED ALM	N/A	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-10	13	2B-8-B					C	23JUL21	REV'D LOOP SERVICE DESC FOR REV. C
BKR3BA-ZI	5KV SWGR A BKR3B BRKR POS. OPEN/CLOSED	N/A	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-10	14	2B-8-B					A	28APR21	
1A-120A-RUN	ABSORBER AREA SUMP AGIT. A RUN STATUS	143993-03-138	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-11	1	2B-9-A					A	28APR21	
BKR1A-XA	LV SWGR BKR1A BELL ALARM	N/A	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-11	2	2B-9-A					C	23JUL21	REV'D LOOP SERVICE DESC FOR REV. C
BKR1A-ZI	LV SWGR BKR1A MAIN A BRKR POS. OPN/CLSD	N/A	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-11	3	2B-9-A					C	23JUL21	REV'D LOOP SERVICE DESC FOR REV. C
1E-130-TBL	RECYCLE PMP VA. HYD. PMP TROUBLE	143993-03-117	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-11	4	2B-9-A					A	28APR21	
1ZSC-104D	RECYCLE PMP D DISCH SHUTOFF VA. CLS	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-11	5	2B-9-A					A	28APR21	
1ZSO-104D	RECYCLE PMP D DISCH SHUTOFF VA. OPN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-11	6	2B-9-A					A	28APR21	
BKR2AA-XI	5KV SWGR A BKR2A RELAY TRP & FAILED ALM	N/A	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-11	9	2B-9-A					C	23JUL21	REV'D LOOP SERVICE DESC FOR REV. C
BKR2AA-ZI	5KV SWGR A BKR2A BRKR POS. OPEN/CLOSED	N/A	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-11	10	2B-9-A					A	28APR21	
BKR2BB-XI	5KV SWGR B BKR2B RELAY TRP & FAILED ALM	N/A	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-11	11	2B-9-A					C	23JUL21	REV'D LOOP SERVICE DESC FOR REV. C
BKR2BB-ZI	5KV SWGR B BKR2B BRKR POS. OPEN/CLOSED	N/A	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-11	12	2B-9-A					A	28APR21	
BKR2A-XA	LV SWGR BKR2A BELL ALARM	N/A	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-11	13	2B-9-A					A	28APR21	
BKR2A-ZI	LV SWGR BKR2A BREAKER POS. OPEN/CLOSED	N/A	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-11	14	2B-9-A					A	28APR21	
1A-120B-RUN	ABSORBER AREA SUMP AGIT. B RUN STATUS	143993-03-138	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-12	1	2B-9-B					B	28MAY21	REV'D CHANNEL FOR REV. B
BKR2B-XA	LV SWGR BKR2B BELL ALARM	N/A	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-12	2	2B-9-B					A	28APR21	

DCS TAG NO.	LOOP SERVICE DESCRIPTION	PID NO.	SIGNAL TYPE	SIGNAL VOLTAGE	SIGNAL PWR SOURCE	CABINET	MODULE	CHANNEL	FIELD TERMINATION UNIT	CALIBRATED RANGE			I/O REMARKS	REV	REV DATE	REV REMARKS
BKR2B-ZI	LV SWGR BKR2B BREAKER POS. OPEN/CLOSED	N/A	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-12	3	2B-9-B					A	28APR21	
1ZSC-104E	RECYCLE PMP E DISCH SHUTOFF VA. CLS	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-12	5	2B-9-B					A	28APR21	
1ZSO-104E	RECYCLE PMP E DISCH SHUTOFF VA. OPN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-12	6	2B-9-B					A	28APR21	
BKR3AA-XI	5KV SWGR A BKR3A RELAY TRP & FAILED ALM	N/A	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-12	9	2B-9-B					C	23JUL21	REV'D LOOP SERVICE DESC FOR REV. C
BKR3AA-ZI	5KV SWGR A BKR3A BRKR POS. OPEN/CLOSED	N/A	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-12	10	2B-9-B					A	28APR21	
BKR3AB-XI	5KV SWGR B BKR3A RELAY TRP & FAILED ALM	N/A	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-12	11	2B-9-B					C	23JUL21	REV'D LOOP SERVICE DESC FOR REV. C
BKR3AB-ZI	5KV SWGR B BKR3A BRKR POS. OPEN/CLOSED	N/A	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-12	12	2B-9-B					A	28APR21	
1F-170B-RUN	RECYCLER PMP B HEAT XCHNGR CLNG FN RUN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-2	1	2B-4-B					A	28APR21	
1P-170B-RUN	RECYCLE PMP B GEAR BX LUBE OIL PMP RUN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-2	6	2B-4-B					A	28APR21	
1ZSC-101B	RECYCLE PMP B SUCT SHUTOFF VA. CLS	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-2	7	2B-4-B					A	28APR21	
1ZSO-101B	RECYCLE PMP B SUCT SHUTOFF VA. OPN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-2	9	2B-4-B					A	28APR21	
1ZSC-102B	RECYCLE PMP B DRN VA. CLS	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-2	10	2B-4-B					A	28APR21	
1ZSO-102B	RECYCLE PMP B DRN VA. OPN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-2	11	2B-4-B					A	28APR21	
1ZSC-103B	RECYCLE PMP B FLUSH VA. CLS	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-2	12	2B-4-B					A	28APR21	
1ZSO-103B	RECYCLE PMP B FLUSH VA. OPN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-2	13	2B-4-B					A	28APR21	
1LSL-72	FROM I.D. FANS TO ABSORBER LEVEL LOW	143993-03-110	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-2	14	2B-4-B					B	28MAY21	REV'D CALIBRATED RANGE FOR REV. B
1A-100B-RUN	ABSORBER AGITATOR B RUN STATUS	143993-03-111	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-2	15	2B-4-B					A	28APR21	
1F-170C-RUN	RECYCLER PMP C HEAT XCHNGR CLNG FN RUN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-3	1	2B-5-A					A	28APR21	
1P-170C-RUN	RECYCLE PMP C GEAR BX LUBE OIL PMP RUN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-3	6	2B-5-A					A	28APR21	
1ZSC-101C	RECYCLE PMP C SUCT SHUTOFF VA. CLS	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-3	7	2B-5-A					A	28APR21	
1ZSO-101C	RECYCLE PMP C SUCT SHUTOFF VA. OPN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-3	9	2B-5-A					A	28APR21	
1ZSC-102C	RECYCLE PMP C DRN VA. CLS	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-3	10	2B-5-A					A	28APR21	
1ZSO-102C	RECYCLE PMP C DRN VA. OPN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-3	11	2B-5-A					A	28APR21	
1ZSC-103C	RECYCLE PMP C FLUSH VA. CLS	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-3	12	2B-5-A					A	28APR21	
1ZSO-103C	RECYCLE PMP C FLUSH VA. OPN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-3	13	2B-5-A					A	28APR21	
1A-100C-RUN	ABSORBER AGITATOR C RUN STATUS	143993-03-111	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-3	15	2B-5-A					A	28APR21	
1F-170D-RUN	RECYCLER PMP D HEAT XCHNGR CLNG FN RUN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-4	1	2B-5-B					A	28APR21	
1P-170D-RUN	RECYCLE PMP D GEAR BX LUBE OIL PMP RUN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-4	6	2B-5-B					A	28APR21	
1ZSC-101D	RECYCLE PMP D SUCT SHUTOFF VA. CLS	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-4	7	2B-5-B					A	28APR21	
1ZSO-101D	RECYCLE PMP D SUCT SHUTOFF VA. OPN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-4	9	2B-5-B					A	28APR21	
1ZSC-102D	RECYCLE PMP D DRN VA. CLS	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-4	10	2B-5-B					A	28APR21	
1ZSO-102D	RECYCLE PMP D DRN VA. OPN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-4	11	2B-5-B					A	28APR21	
1ZSC-103D	RECYCLE PMP D FLUSH VA. CLS	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-4	12	2B-5-B					A	28APR21	

DCS TAG NO.	LOOP SERVICE DESCRIPTION	PID NO.	SIGNAL TYPE	SIGNAL VOLTAGE	SIGNAL PWR SOURCE	CABINET	MODULE	CHANNEL	FIELD TERMINATION UNIT	CALIBRATED RANGE			I/O REMARKS	REV	REV DATE	REV REMARKS
1ZSO-103D	RECYCLE PMP D FLUSH VA. OPN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-4	13	2B-5-B					A	28APR21	
1A-100D-RUN	ABSORBER AGITATOR D RUN STATUS	143993-03-111	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-4	15	2B-5-B					A	28APR21	
1F-170E-RUN	RECYCLER PMP E HEAT XCHNGR CLNG FN RUN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-5	1	2B-6-A					A	28APR21	
1P-170E-RUN	RECYCLE PMP E GEAR BX LUBE OIL PMP RUN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-5	6	2B-6-A					A	28APR21	
1ZSC-101E	RECYCLE PMP E SUCT SHUTOFF VA. CLS	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-5	7	2B-6-A					A	28APR21	
1ZSO-101E	RECYCLE PMP E SUCT SHUTOFF VA. OPN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-5	9	2B-6-A					A	28APR21	
1ZSC-102E	RECYCLE PMP E DRN VA. CLS	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-5	10	2B-6-A					A	28APR21	
1ZSO-102E	RECYCLE PMP E DRN VA. OPN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-5	11	2B-6-A					A	28APR21	
1ZSC-103E	RECYCLE PMP E FLUSH VA. CLS	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-5	12	2B-6-A					A	28APR21	
1ZSO-103E	RECYCLE PMP E FLUSH VA. OPN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-5	13	2B-6-A					A	28APR21	
1A-100E-RUN	ABSORBER AGITATOR E RUN STATUS	143993-03-111	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-5	15	2B-6-A					A	28APR21	
1ZSC-246	QUENCH WATER INLET ISOLATION VA. CLS	143993-03-110	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-6	1	2B-6-B					A	28APR21	
1ZSO-246	QUENCH WATER INLET ISOLATION VA. OPN	143993-03-110	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-6	2	2B-6-B					A	28APR21	
1ZSC-290	QUENCH WTR TO ABSORBER DISCH VA. CLS	143993-03-110	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-6	3	2B-6-B					A	28APR21	
1ZSO-290	QUENCH WTR TO ABSORBER DISCH VA. OPN	143993-03-110	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-6	4	2B-6-B					A	28APR21	
1ZSC-104A	RECYCLE PMP A DISCH SHUTOFF VA. CLS	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-6	5	2B-6-B					A	28APR21	
1ZSO-530	LIMESTN. SLURRY TO ABSRBR SHTOFF VA OPN	143993-03-111	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-6	6	2B-6-B					A	28APR21	
1ZSC-530	LIMESTN. SLURRY TO ABSRBR SHTOFF VA CLS	143993-03-111	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-6	7	2B-6-B					A	28APR21	
1ZSO-531	LIMESTONE SLURRY TO ABSRBR FLUSH VA OPN	143993-03-111	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-6	9	2B-6-B					A	28APR21	
1ZSC-531	LIMESTONE SLURRY TO ABSRBR FLUSH VA CLS	143993-03-111	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-6	10	2B-6-B					A	28APR21	
1LSL-111	ABSORBER LOW LEVEL	143993-03-111	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-6	11	2B-6-B					B	28MAY21	REV'D CALIBRATED RANGE FOR REV. B
1ZSO-104A	RECYCLE PMP A DISCH SHUTOFF VA. OPN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-6	12	2B-6-B					A	28APR21	
1ZSC-205	TO ME WASH PMPS RECIRCULATION VA. CLS	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-6	13	2B-6-B					A	28APR21	
1ZSO-205	TO ME WASH PMPS RECIRCULATION VA. OPN	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-6	14	2B-6-B					A	28APR21	
1ZSC-221	1ST STAGE BOTTOM ZONE 1 ME WASH VA. CLS	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-7	1	2B-7-A					A	28APR21	
1ZSO-221	1ST STAGE BOTTOM ZONE 1 ME WASH VA. OPN	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-7	2	2B-7-A					A	28APR21	
1ZSC-222	1ST STAGE BOTTOM ZONE 2 ME WASH VA. CLS	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-7	3	2B-7-A					A	28APR21	
1ZSO-222	1ST STAGE BOTTOM ZONE 2 ME WASH VA. OPN	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-7	4	2B-7-A					A	28APR21	
1ZSC-231	1ST STAGE TOP ZONE 1 ME WASH VA. CLS	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-7	5	2B-7-A					A	28APR21	
1ZSO-231	1ST STAGE TOP ZONE 1 ME WASH VA. OPN	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-7	6	2B-7-A					A	28APR21	
1ZSC-232	1ST STAGE TOP ZONE 2 ME WASH VA. CLS	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-7	7	2B-7-A					A	28APR21	
1ZSO-232	1ST STAGE TOP ZONE 2 ME WASH VA. OPN	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-7	9	2B-7-A					A	28APR21	
1ZSC-241	2ND STAGE BOTTOM ZONE 1 ME WASH VA. CLS	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-7	10	2B-7-A					A	28APR21	

DCS TAG NO.	LOOP SERVICE DESCRIPTION	PID NO.	SIGNAL TYPE	SIGNAL VOLTAGE	SIGNAL PWR SOURCE	CABINET	MODULE	CHANNEL	FIELD TERMINATION UNIT	CALIBRATED RANGE			I/O REMARKS	REV	REV DATE	REV REMARKS
1ZSO-241	2ND STAGE BOTTOM ZONE 1 ME WASH VA. OPN	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-7	11	2B-7-A					A	28APR21	
1ZSC-242	2ND STAGE BOTTOM ZONE 2 ME WASH VA. CLS	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-7	12	2B-7-A					A	28APR21	
1ZSO-242	2ND STAGE BOTTOM ZONE 2 ME WASH VA. OPN	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-7	13	2B-7-A					A	28APR21	
1P-200A-RUN	MIST ELIMINATOR WASH PMP A RUN STATUS	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-7	14	2B-7-A					A	28APR21	
1ZSO-223	1ST STAGE BOTTOM ZONE 3 ME WASH VA. OPN	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-8	1	2B-7-B					A	28APR21	
1ZSC-223	1ST STAGE BOTTOM ZONE 3 ME WASH VA. CLS	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-8	2	2B-7-B					A	28APR21	
1ZSC-224	1ST STAGE BOTTOM ZONE 4 ME WASH VA. CLS	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-8	3	2B-7-B					A	28APR21	
1ZSO-224	1ST STAGE BOTTOM ZONE 4 ME WASH VA. OPN	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-8	4	2B-7-B					A	28APR21	
1ZSC-233	1ST STAGE TOP ZONE 3 ME WASH VA. CLS	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-8	5	2B-7-B					A	28APR21	
1ZSO-233	1ST STAGE TOP ZONE 3 ME WASH VA. OPN	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-8	6	2B-7-B					A	28APR21	
1ZSO-234	1ST STAGE TOP ZONE 4 ME WASH VA. OPN	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-8	7	2B-7-B					A	28APR21	
1ZSC-234	1ST STAGE TOP ZONE 4 ME WASH VA. CLS	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-8	9	2B-7-B					A	28APR21	
1ZSO-243	2ND STAGE BOTTOM ZONE 3 ME WASH VA. OPN	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-8	10	2B-7-B					A	28APR21	
1ZSC-243	2ND STAGE BOTTOM ZONE 3 ME WASH VA. CLS	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-8	11	2B-7-B					A	28APR21	
1ZSC-244	2ND STAGE BOTTOM ZONE 4 ME WASH VA. CLS	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-8	12	2B-7-B					A	28APR21	
1ZSO-244	2ND STAGE BOTTOM ZONE 4 ME WASH VA. OPN	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-8	13	2B-7-B					A	28APR21	
1P-200B-RUN	MIST ELIMINATOR WASH PMP B RUN STATUS	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-8	14	2B-7-B					A	28APR21	
1ZSC-225	1ST STAGE BOTTOM ZONE 5 ME WASH VA. CLS	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-9	1	2B-8-A					A	28APR21	
1ZSO-225	1ST STAGE BOTTOM ZONE 5 ME WASH VA. OPN	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-9	2	2B-8-A					A	28APR21	
1ZSO-226	1ST STAGE BOTTOM ZONE 6 ME WASH VA. OPN	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-9	3	2B-8-A					A	28APR21	
1ZSC-226	1ST STAGE BOTTOM ZONE 6 ME WASH VA. CLS	143993-03-113	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-9	4	2B-8-A					A	28APR21	
1ZSC-104B	RECYCLE PMP B DISCH SHUTOFF VA. CLS	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-9	5	2B-8-A					A	28APR21	
1ZSO-104B	RECYCLE PMP B DISCH SHUTOFF VA. OPN	143993-03-112	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-9	6	2B-8-A					A	28APR21	
1P-130A-RUN	RECYCLE PMP VA. HYD. PMP A RUN STATUS	143993-03-117	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-9	9	2B-8-A					A	28APR21	
1E-130-REM	RECYCLE PMP VA. HYD. PMP REMOTE IND.	143993-03-117	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-9	10	2B-8-A					A	28APR21	
1P-120A-RUN	ABSORBER AREA SUMP PMP A RUN STATUS	143993-03-138	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-9	11	2B-8-A					A	28APR21	
1ZSO-120A	ABSORBER SUMP PMP A DISCH SHTOFF VA OPN	143993-03-138	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-9	12	2B-8-A					A	28APR21	
1ZSC-120A	ABSORBER SUMP PMP A DISCH SHTOFF VA CLS	143993-03-138	DI	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-4-9	13	2B-8-A					A	28APR21	
1A-100A-STR	ABSORBER AGITATOR A START	143993-03-111	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-10	1	2B-7-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR1A-HSC	LV SWGR BKR1A CLOSE COMMAND	N/A	IDO	125V DC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-10	2	2B-7-C					C	23JUL21	REV'D LOOP SERVICE DESC FOR REV. C
BKR1A-HSO	LV SWGR BKR1A OPEN COMMAND	N/A	IDO	125V DC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-10	3	2B-7-C					C	23JUL21	REV'D LOOP SERVICE DESC FOR REV. C
1F-170A-STR	RECYCLER PMP A HT XCHNGR CLNG FN START	143993-03-112	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-10	4	2B-7-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1P-120A-STR	ABSORBER AREA SUMP PMP A START	143993-03-138	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-10	7	2B-7-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B

DCS TAG NO.	LOOP SERVICE DESCRIPTION	PID NO.	SIGNAL TYPE	SIGNAL VOLTAGE	SIGNAL PWR SOURCE	CABINET	MODULE	CHANNEL	FIELD TERMINATION UNIT	CALIBRATED RANGE			I/O REMARKS	REV	REV DATE	REV REMARKS
1P-130A-STR	RECYCLE PMP VA. HYDRAULIC PMP A START	143993-03-117	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-10	9	2B-7-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1P-170A-STR	RECYCLE PMP A GEAR BX LUBE OIL PMP STRT	143993-03-112	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-10	10	2B-7-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1P-200A-STR	MIST ELIMINATOR WASH PMP A START	143993-03-113	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-10	11	2B-7-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1A-120A-STR	ABSORBER AREA SUMP AGITATOR A START	143993-03-138	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-10	12	2B-7-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1FSV-531	LIMESTONE SLURRY TO ABSRBR FLUSH VA SOL	143993-03-111	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-3	2	2B-5-D					A	28APR21	
1FSV-530	LIMESTN. SLURRY TO ABSRBR SHTOFF VA SOL	143993-03-111	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-3	3	2B-5-D					A	28APR21	
1FSV-205	TO ME WASH PMPS RECIRCULATION VA. SOL	143993-03-113	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-3	4	2B-5-D					A	28APR21	
1FSV-290	QUENCH WTR TO ABSORBER DISCH VA. SOL	143993-03-110	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-3	7	2B-5-D					B	28MAY21	REV'D MODULE FOR REV. B
1FSV-102C	RECYCLE PMP C DRN VA. SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-3	10	2B-5-D					A	28APR21	
1FSV-103C	RECYCLE PMP C FLUSH VA. SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-3	11	2B-5-D					A	28APR21	
1FSVO-101C	RECYCLE PMP C SUCT SHUTOFF VA. OPN SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-3	12	2B-5-D					A	28APR21	
1FSVC-101C	RECYCLE PMP C SUCT SHUTOFF VA. CLS SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-3	13	2B-5-D					A	28APR21	
1FSVO-104C	RECYCLE PMP C DISCH SHUTOFF VA. OPN SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-3	14	2B-5-D					A	28APR21	
1FSVC-104C	RECYCLE PMP C DISCH SHUTOFF VA. CLS SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-3	15	2B-5-D					A	28APR21	
1FSV-225	1ST STAGE BOTTOM ZONE 5 ME WASH VA. SOL	143993-03-113	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-4	1	2B-5-C					A	28APR21	
1FSV-226	1ST STAGE BOTTOM ZONE 6 ME WASH VA. SOL	143993-03-113	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-4	2	2B-5-C					A	28APR21	
1FSV-227	1ST STAGE BOTTOM ZONE 7 ME WASH VA. SOL	143993-03-113	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-4	3	2B-5-C					A	28APR21	
1FSV-228	1ST STAGE BOTTOM ZONE 8 ME WASH VA. SOL	143993-03-113	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-4	4	2B-5-C					A	28APR21	
1FSV-233	1ST STAGE TOP ZONE 3 ME WASH VA. SOL	143993-03-113	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-4	5	2B-5-C					A	28APR21	
1FSV-234	1ST STAGE TOP ZONE 4 ME WASH VA. SOL	143993-03-113	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-4	6	2B-5-C					A	28APR21	
1FSV-243	2ND STAGE BOTTOM ZONE 3 ME WASH VA. SOL	143993-03-113	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-4	7	2B-5-C					A	28APR21	
1FSV-244	2ND STAGE BOTTOM ZONE 4 ME WASH VA. SOL	143993-03-113	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-4	9	2B-5-C					A	28APR21	
1FSV-102B	RECYCLE PMP B DRN VA. SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-4	10	2B-5-C					A	28APR21	
1FSV-103B	RECYCLE PMP B FLUSH VA. SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-4	11	2B-5-C					A	28APR21	
1FSVO-101B	RECYCLE PMP B SUCT SHUTOFF VA.OPN SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-4	12	2B-5-C					A	28APR21	
1FSVC-101B	RECYCLE PMP B SUCT SHUTOFF VA. CLS SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-4	13	2B-5-C					A	28APR21	
1FSVO-104B	RECYCLE PMP B DISCH SHUTOFF VA. OPN SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-4	14	2B-5-C					A	28APR21	
1FSVC-104B	RECYCLE PMP B DISCH SHUTOFF VA. CLS SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-4	15	2B-5-C					A	28APR21	
1FSV-120B	ABSORBER SUMP PMP B DISCH SHTOFF VA SOL	143993-03-138	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-4	16	2B-5-C					A	28APR21	
1FSV-221	1ST STAGE BOTTOM ZONE 1 ME WASH VA. SOL	143993-03-113	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-5	1	2B-3-D					A	28APR21	
1FSV-222	1ST STAGE BOTTOM ZONE 2 ME WASH VA. SOL	143993-03-113	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-5	2	2B-3-D					A	28APR21	
1FSV-223	1ST STAGE BOTTOM ZONE 3 ME WASH VA. SOL	143993-03-113	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-5	3	2B-3-D					A	28APR21	
1FSV-224	1ST STAGE BOTTOM ZONE 4 ME WASH VA. SOL	143993-03-113	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-5	4	2B-3-D					A	28APR21	

DCS TAG NO.	LOOP SERVICE DESCRIPTION	PID NO.	SIGNAL TYPE	SIGNAL VOLTAGE	SIGNAL PWR SOURCE	CABINET	MODULE	CHANNEL	FIELD TERMINATION UNIT	CALIBRATED RANGE			I/O REMARKS	REV	REV DATE	REV REMARKS
1FSV-231	1ST STAGE TOP ZONE 1 ME WASH VA. SOL	143993-03-113	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-5	5	2B-3-D					A	28APR21	
1FSV-232	1ST STAGE TOP ZONE 2 ME WASH VA. SOL	143993-03-113	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-5	6	2B-3-D					A	28APR21	
1FSV-241	2ND STAGE BOTTOM ZONE 1 ME WASH VA. SOL	143993-03-113	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-5	7	2B-3-D					A	28APR21	
1FSV-242	2ND STAGE BOTTOM ZONE 2 ME WASH VA. SOL	143993-03-113	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-5	9	2B-3-D					A	28APR21	
1FSV-102A	RECYCLE PMP A DRN VA. SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-5	10	2B-3-D					A	28APR21	
1FSV-103A	RECYCLE PMP A FLUSH VA. SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-5	11	2B-3-D					A	28APR21	
1FSVO-101A	RECYCLE PMP A SUCT SHUTOFF VA. OPN SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-5	12	2B-3-D					A	28APR21	
1FSVC-101A	RECYCLE PMP A SUCT SHUTOFF VA. CLS SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-5	13	2B-3-D					A	28APR21	
1FSVO-104A	RECYCLE PMP A DISCH SHUTOFF VA. OPN SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-5	14	2B-3-D					A	28APR21	
1FSVC-104A	RECYCLE PMP A DISCH SHUTOFF VA. CLS SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-5	15	2B-3-D					A	28APR21	
1FSV-120A	ABSORBER SUMP PMP A DISCH SHTOFF VA SOL	143993-03-138	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-5	16	2B-3-D					A	28APR21	
1FSV-103D	RECYCLE PMP D FLUSH VA. SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-6	1	2B-3-C					A	28APR21	
1FSV-102D	RECYCLE PMP D DRN VA. SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-6	2	2B-3-C					A	28APR21	
1FSVO-101D	RECYCLE PMP D SUCT SHUTOFF VA. OPN SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-6	3	2B-3-C					A	28APR21	
1FSVC-101D	RECYCLE PMP D SUCT SHUTOFF VA. CLS SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-6	4	2B-3-C					A	28APR21	
1FSV-103E	RECYCLE PMP E FLUSH VA. SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-6	5	2B-3-C					A	28APR21	
1FSV-102E	RECYCLE PMP E DRN VA. SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-6	6	2B-3-C					A	28APR21	
1FSVO-101E	RECYCLE PMP E SUCT SHUTOFF VA. OPN CLS	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-6	7	2B-3-C					A	28APR21	
1FSVC-101E	RECYCLE PMP E SUCT SHUTOFF VA. CLS SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-6	9	2B-3-C					A	28APR21	
1FSV-246	QUENCH WATER INLET ISOLATION VA. SOL	143993-03-110	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-6	10	2B-3-C					A	28APR21	
1FSVO-104D	RECYCLE PMP D DISCH SHUTOFF VA. OPN SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-6	12	2B-3-C					A	28APR21	
1FSVC-104D	RECYCLE PMP D DISCH SHUTOFF VA. CLS SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-6	13	2B-3-C					A	28APR21	
1FSVO-104E	RECYCLE PMP E DISCH SHUTOFF VA. OPN SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-6	14	2B-3-C					A	28APR21	
1FSVC-104E	RECYCLE PMP E DISCH SHUTOFF VA. CLS SOL	143993-03-112	DO	24V DC	LOOP	ABSORBER DCS CABINET 63-1A	2A-5-6	15	2B-3-C					A	28APR21	
1A-100D-STR	ABSORBER AGITATOR D START	143993-03-111	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-7	1	2B-9-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1F-170D-STR	RECYCLER PMP D HT XCHNGR CLNG FN START	143993-03-112	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-7	2	2B-9-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1P-170D-STR	RECYCLE PMP D GEAR BX LUBE OIL PMP STRT	143993-03-112	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-7	5	2B-9-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1A-100E-STR	ABSORBER AGITATOR E START	143993-03-111	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-7	6	2B-9-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1F-170E-STR	RECYCLER PMP E HT XCHNGR CLNG FN START	143993-03-112	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-7	7	2B-9-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1P-170E-STR	RECYCLE PMP E GEAR BX LUBE OIL PMP STRT	143993-03-112	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-7	11	2B-9-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR3AA-HSC	5KV SWGR A BKR3A CLOSE COMMAND	N/A	IDO	125V DC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-7	12	2B-9-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR3AA-HSO	5KV SWGR A BKR3A OPEN COMMAND	N/A	IDO	125V DC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-7	13	2B-9-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR3AB-HSC	5KV SWGR B BKR3A CLOSE COMMAND	N/A	IDO	125V DC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-7	14	2B-9-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B

DCS TAG NO.	LOOP SERVICE DESCRIPTION	PID NO.	SIGNAL TYPE	SIGNAL VOLTAGE	SIGNAL PWR SOURCE	CABINET	MODULE	CHANNEL	FIELD TERMINATION UNIT	CALIBRATED RANGE			I/O REMARKS	REV	REV DATE	REV REMARKS
BKR3AB-HSO	5KV SWGR B BKR3A OPEN COMMAND	N/A	IDO	125V DC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-7	15	2B-9-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1A-100C-STR	ABSORBER AGITATOR C START	143993-03-111	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-8	1	2B-9-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1F-170C-STR	RECYCLER PMP C HT XCHNGR CLNG FN START	143993-03-112	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-8	4	2B-9-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1P-170C-STR	RECYCLE PMP C GEAR BX LUBE OIL PMP STRT	143993-03-112	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-8	7	2B-9-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR2AA-HSC	5KV SWGR A BKR2A CLOSE COMMAND	N/A	IDO	125V DC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-8	12	2B-9-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR2AA-HSO	5KV SWGR A BKR2A OPEN COMMAND	N/A	IDO	125V DC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-8	13	2B-9-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR2BB-HSC	5KV SWGR B BKR2B CLOSE COMMAND	N/A	IDO	125V DC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-8	14	2B-9-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR2BB-HSO	5KV SWGR B BKR2B OPEN COMMAND	N/A	IDO	125V DC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-8	15	2B-9-C					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1A-100B-STR	ABSORBER AGITATOR B START	143993-03-111	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-9	1	2B-7-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1F-170B-STR	RECYCLER PMP B HT XCHNGR CLNG FN START	143993-03-112	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-9	4	2B-7-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1P-120B-STR	ABSORBER AREA SUMP PMP B START	143993-03-138	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-9	7	2B-7-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1P-130B-STR	RECYCLE PMP VA. HYDRAULIC PMP B START	143993-03-117	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-9	9	2B-7-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1P-170B-STR	RECYCLE PMP B GEAR BX LUBE OIL PMP STRT	143993-03-112	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-9	10	2B-7-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1P-200B-STR	MIST ELIMINATOR WASH PMP B START	143993-03-113	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-9	11	2B-7-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
1A-120B-STR	ABSORBER AREA SUMP AGITATOR B START	143993-03-138	IDO	120V AC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-9	13	2B-7-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR3BA-HSC	5KV SWGR A BKR3B CLOSE COMMAND	N/A	IDO	125V DC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-9	14	2B-7-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
BKR3BA-HSO	5KV SWGR A BKR3B OPEN COMMAND	N/A	IDO	125V DC	FIELD	ABSORBER DCS CABINET 63-1A	2A-5-9	15	2B-7-D					B	28MAY21	REV'D SIGNAL VOLTAGE FOR REV. B
4FSV-405	GYP-SLURRY-TRANSFER-DISCHRG-VA-SOL	143993-03-139	DO	120V-AC	LOOP	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-5-D, 11	0	20AUG21	I/O POINT DELETED FOR REV. 0
BKR2C-HSO	LV-SWGR-BKR2C-OPEN-COMMAND	N/A	IDO	125V-DC	FIELD	ABSORBER-DCS-CABINET-63-1A							I/O POINT DELETED; WAS ASSIGNED TO 2B-9-C, 3	C	23JUL21	I/O POINT DELETED FOR REV. C
BKR4B-HSC	LV-SWGR-BKR4B-CLOSE-COMMAND	N/A	IDO	125V-DC	FIELD	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-7-D, 2	C	23JUL21	I/O POINT DELETED FOR REV. C
4ZSO-405	GYP-SLURRY-TRANSFER-DISCHRG-VA-OPN	143993-03-139	DI	24V-DC	LOOP	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-7-B, 3	0	20AUG21	I/O POINT DELETED FOR REV. 0
BKR4C-HSO	LV-SWGR-BKR4C-OPEN-COMMAND	N/A	IDO	125V-DC	FIELD	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-x-y, 2	C	23JUL21	I/O POINT DELETED FOR REV. C
BKR4C-HSC	LV-SWGR-BKR4C-CLOSE-COMMAND	N/A	IDO	125V-DC	FIELD	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-x-y, 1	C	23JUL21	I/O POINT DELETED FOR REV. C
BKR4BA-ZI	5KV-SWGR-A-BKR4B-BRKR-POS-OPEN/CLOSED	N/A	DI	24V-DC	LOOP	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-9-D, 4	C	23JUL21	I/O POINT DELETED FOR REV. C
BKR4BA-XI	5KV-SWGR-A-BKR4B-86LOR-TRIP	N/A	DI	24V-DC	LOOP	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-9-D, 3	C	23JUL21	I/O POINT DELETED FOR REV. C
BKR4BA-HSO	5KV-SWGR-A-BKR4B-OPEN-COMMAND	N/A	IDO	125V-DC	FIELD	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-9-C, 11	C	23JUL21	I/O POINT DELETED FOR REV. C
BKR4BA-HSC	5KV-SWGR-A-BKR4B-CLOSE-COMMAND	N/A	IDO	125V-DC	FIELD	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-9-C, 10	C	23JUL21	I/O POINT DELETED FOR REV. C
BKR2AB-HSO	5KV-SWGR-B-BKR2A-OPEN-COMMAND	N/A	IDO	125V-DC	FIELD	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-7-D, 9	C	23JUL21	I/O POINT DELETED FOR REV. C
BKR2AB-HSC	5KV-SWGR-B-BKR2A-CLOSE-COMMAND	N/A	IDO	125V-DC	FIELD	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-7-D, 8	C	23JUL21	I/O POINT DELETED FOR REV. C
4160XFMRA-XI	6900V-4160-XFMR-A-RAPID-RISE-RELAY-TRIP	N/A	DI	24V-DC	LOOP	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-8-A, 14	0	20AUG21	I/O POINT DELETED FOR REV. 0
4160XFMRA-TI	6900V-4160-XFMR-A-HIHI-WINDING-TEMP-TRP	N/A	DI	24V-DC	LOOP	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-8-A, 12	0	20AUG21	I/O POINT DELETED FOR REV. 0
4160XFMRB-XI	6900V-4160-XFMR-B-RAPID-RISE-RELAY-TRIP	N/A	DI	24V-DC	LOOP	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-8-D, 14	0	20AUG21	I/O POINT DELETED FOR REV. 0
BKR2C-HSC	LV-SWGR-BKR2C-CLOSE-COMMAND	N/A	IDO	125V-DC	FIELD	ABSORBER-DCS-CABINET-63-1A							I/O POINT DELETED; WAS ASSIGNED TO 2B-9-C, 2	C	23JUL21	I/O POINT DELETED FOR REV. C

DCS TAG NO.	LOOP SERVICE DESCRIPTION	PID NO.	SIGNAL TYPE	SIGNAL VOLTAGE	SIGNAL PWR SOURCE	CABINET	MODULE	CHANNEL	FIELD TERMINATION UNIT	CALIBRATED RANGE			I/O REMARKS	REV	REV DATE	REV REMARKS
1TT-930A	OX-AIR-BLWR-A-ENCLOSURE-TEMP	143993-03-115	AI-2WT	4-20-mA	LOOP	DEWATERING-DCS-CABINET-63-2A				0	200	±F	I/O POINT DELETED; WAS ASSIGNED TO TO 1B-1-A, 11	0	20AUG21	I/O POINT DELETED FOR REV. 0
1TT-930B	OX-AIR-BLWR-B-ENCLOSURE-TEMP	143993-03-115	AI-2WT	4-20-mA	LOOP	DEWATERING-DCS-CABINET-63-2A				0	200	±F	I/O POINT DELETED; WAS ASSIGNED TO TO 1B-1-B, 11	0	20AUG21	I/O POINT DELETED FOR REV. 0
1TT-930C	OX-AIR-BLWR-C-ENCLOSURE-TEMP	143993-03-115	AI-2WT	4-20-mA	LOOP	DEWATERING-DCS-CABINET-63-2A				0	200	±F	I/O POINT DELETED; WAS ASSIGNED TO TO 1B-2-A, 11	0	20AUG21	I/O POINT DELETED FOR REV. 0
1ZSC-405	GYP-SLURRY-TRANSFER-DISCHRG-VA-CLS	143993-03-139	DI	24V-DC	LOOP	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-7-B, 2	0	20AUG21	I/O POINT DELETED FOR REV. 0
4160XFMRB-TI	6900V-4160-XFMR-B-HIHI-WINDING-TEMP-TRP	N/A	DI	24V-DC	LOOP	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-8-D, 12	0	20AUG21	I/O POINT DELETED FOR REV. 0
480XFMR-A-XI	4160V-480-XFMR-A-RAPID-RISE-RELAY-TRIP	N/A	DI	24V-DC	LOOP	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-8-A, 11	0	20AUG21	I/O POINT DELETED FOR REV. 0
480XFMR-A-TI	4160V-480-XFMR-A-HIHI-WINDING-TEMP-TRIP	N/A	DI	24V-DC	LOOP	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-8-A, 9	0	20AUG21	I/O POINT DELETED FOR REV. 0
480XFMRB-XI	4160V-480-XFMR-B-RAPID-RISE-RELAY-TRIP	N/A	DI	24V-DC	LOOP	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-8-D, 11	0	20AUG21	I/O POINT DELETED FOR REV. 0
480XFMRB-TI	4160V-480-XFMR-B-HIHI-WINDING-TEMP-TRIP	N/A	DI	24V-DC	LOOP	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-8-D, 9	0	20AUG21	I/O POINT DELETED FOR REV. 0
BKR4A-HSO	LV-SWGR-BKR4A-OPEN-COMMAND	N/A	IDO	125V-DC	FIELD	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-9-C, 16	C	23JUL21	I/O POINT DELETED FOR REV. C
BKR4A-HSC	LV-SWGR-BKR4A-CLOSE-COMMAND	N/A	IDO	125V-DC	FIELD	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-9-C, 3	C	23JUL21	I/O POINT DELETED FOR REV. C
BKR4B-HSO	LV-SWGR-BKR4B-OPEN-COMMAND	N/A	IDO	125V-DC	FIELD	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-7-D, 16	C	23JUL21	I/O POINT DELETED FOR REV. C
BRK4BB-ZI	5KV-SWGR-B-BKR4B-BRK4B-POS-OPEN/CLOSED	N/A	DI	24V-DC	LOOP	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-9-B, 2	C	23JUL21	I/O POINT DELETED FOR REV. C
BRK4BB-XI	5KV-SWGR-B-BKR4B-86LOR-TRIP	N/A	DI	24V-DC	LOOP	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-9-B, 1	C	23JUL21	I/O POINT DELETED FOR REV. C
BRK4BB-HSO	5KV-SWGR-B-BKR4B-OPEN-COMMAND	N/A	IDO	125V-DC	FIELD	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-9-C, 13	C	23JUL21	I/O POINT DELETED FOR REV. C
BRK4BB-HSC	5KV-SWGR-B-BKR4B-CLOSE-COMMAND	N/A	IDO	125V-DC	FIELD	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-9-C, 12	C	23JUL21	I/O POINT DELETED FOR REV. C
BKR2A-HSO	LV-SWGR-BKR2A-OPEN-COMMAND	N/A	IDO	125V-DC	FIELD	ABSORBER-DCS-CABINET-63-1A							I/O POINT DELETED; WAS ASSIGNED TO 2B-7-C, 14	C	23JUL21	I/O POINT DELETED FOR REV. C
BKR2A-HSC	LV-SWGR-BKR2A-CLOSE-COMMAND	N/A	IDO	125V-DC	FIELD	ABSORBER-DCS-CABINET-63-1A							I/O POINT DELETED; WAS ASSIGNED TO 2B-7-C, 13	C	23JUL21	I/O POINT DELETED FOR REV. C
BKR2B-HSO	LV-SWGR-BKR2B-OPEN-COMMAND	N/A	IDO	125V-DC	FIELD	ABSORBER-DCS-CABINET-63-1A							I/O POINT DELETED; WAS ASSIGNED TO 2B-7-D, 3	C	23JUL21	I/O POINT DELETED FOR REV. C
BKR2B-HSC	LV-SWGR-BKR2B-CLOSE-COMMAND	N/A	IDO	125V-DC	FIELD	ABSORBER-DCS-CABINET-63-1A							I/O POINT DELETED; WAS ASSIGNED TO 2B-7-D, 2	C	23JUL21	I/O POINT DELETED FOR REV. C
BKR2C-ZI	LV-SWGR-BKR2C-BREAKER-POS-OPEN/CLOSED	N/A	DI	24V-DC	LOOP	ABSORBER-DCS-CABINET-63-1A							I/O POINT DELETED; WAS ASSIGNED TO 2B-9-B, 14	C	23JUL21	I/O POINT DELETED FOR REV. C
BKR2C-XA	LV-SWGR-BKR2C-BELL-ALARM	N/A	DI	24V-DC	LOOP	ABSORBER-DCS-CABINET-63-1A							I/O POINT DELETED; WAS ASSIGNED TO 2B-9-B, 13	C	23JUL21	I/O POINT DELETED FOR REV. C
1F-930C-STR	OX-AIR-BLWR-C-ENCL-COOLING-FAN-START	143993-03-115	IDO	120V-AC	FIELD	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-9-C, 6	C	23JUL21	I/O POINT DELETED FOR REV. C
1F-930B-STR	OX-AIR-BLWR-B-ENCL-COOLING-FAN-START	143993-03-115	IDO	120V-AC	FIELD	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-7-D, 6	C	23JUL21	I/O POINT DELETED FOR REV. C
1F-930A-STR	OX-AIR-BLWR-A-ENCL-COOLING-FAN-START	143993-03-115	IDO	120V-AC	FIELD	DEWATERING-DCS-CABINET-63-2A							I/O POINT DELETED; WAS ASSIGNED TO 1B-7-C, 6	C	23JUL21	I/O POINT DELETED FOR REV. C



TAG NO	DESCRIPTION	VENDOR	MANUFACTURER MODEL No.	CAPACITY	SIZE (LxWxH) (in) WEIGHT (lb)	POWER REQUIRED	VOLTS PHASE	P&ID	Purchase Order No.	SUPPLY/INSTALL	REV
1EJ-104	ID FAN OUTLET EXPANSION JOINT	-	-	-	-	NA	NA	-	-	NEW, SUPPLIED BY BREC, INSTALLED BY CONTRACTOR	1
1EJ-105	ID FAN OUTLET EXPANSION JOINT	-	-	-	-	NA	NA	-	-	NEW, SUPPLIED BY BREC, INSTALLED BY CONTRACTOR	1
1EJ-106	ABSORBER INLET DUCTWORK EXPANSION JOINT	-	-	-	-	NA	NA	-	-	NEW, SUPPLIED BY BREC, INSTALLED BY CONTRACTOR	1
1EJ-107	ABSORBER INLET DUCTWORK EXPANSION JOINT	-	-	-	-	NA	NA	-	-	NEW, SUPPLIED BY BREC, INSTALLED BY CONTRACTOR	1
1EJ-108	ABSORBER INLET DUCTWORK EXPANSION JOINT	-	-	-	-	NA	NA	-	-	NEW, SUPPLIED BY BREC, INSTALLED BY CONTRACTOR	1
1F-595A	BATTERY ROOM FAN CENTRIFUGAL SIDEWALL EXHAUST SPARK-RESISTANT	-	GREENHECK CUBE-099-4	-	24.88x24.88x28.25 93	0.25 HP	120 1	-	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	
1F-595B	BATTERY ROOM FAN CENTRIFUGAL SIDEWALL EXHAUST SPARK-RESISTANT	-	GREENHECK CUBE-099-4	-	24.88x24.88x28.25 93	0.25 HP	120 1	-	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	
1F-925A	OXIDATION BLOWER BUILDING HOODED FILTERED ROOF PROPELLER SUPPLY	-	GREENHECK RBCF-3H54-75	-	124x123x65 957	7.5 HP	460 3	-	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	
1F-925B	OXIDATION BLOWER BUILDING HOODED FILTERED ROOF PROPELLER SUPPLY	-	GREENHECK RBCF-3H54-75	-	124x123x65 957	7.5 HP	460 3	-	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	
1F-926A	OXIDATION BLOWER BUILDING HOODED FILTERED ROOF PROPELLER EXHAUST	-	GREENHECK RBCE-3H72-75	-	136x135x69 966	7.5 HP	460 3	-	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	
1F-926B	OXIDATION BLOWER BUILDING HOODED FILTERED ROOF PROPELLER EXHAUST	-	GREENHECK RBCE-3H72-75	-	136x135x69 966	7.5 HP	460 3	-	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	
1H-840	BATTERY ROOM SAFETY SHOWER TANKLESS HEATER	-	HAWS 9327	-	24x13.5x30 116	-	480 3	-	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR (Add electrical requirements- V , KW)	
1H-925A	OXIDATION BLOWER BUILDING ELECTRIC UNIT HEATER HOSE-DOWN CORROSION-RESISTANT	-	CHROMALOX HD3D-1000 TSP	-	- 61	-	480 3	-	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	
1H-925B	OXIDATION BLOWER BUILDING ELECTRIC UNIT HEATER HOSE-DOWN CORROSION-RESISTANT	-	CHROMALOX HD3D-1000 TSP	-	- 61	-	480 3	-	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	
1H-925C	OXIDATION BLOWER BUILDING ELECTRIC UNIT HEATER HOSE-DOWN CORROSION-RESISTANT	-	CHROMALOX HD3D-1000 TSP	-	- 61	-	480 3	-	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	
1H-925D	OXIDATION BLOWER BUILDING ELECTRIC UNIT HEATER HOSE-DOWN CORROSION-RESISTANT	-	CHROMALOX HD3D-1000 TSP	-	- 61	-	480 3	-	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	
1M-595A	ELECTRICAL ROOM HVAC UNIT PACKAGED WALL MOUNTED	-	SPECIFIC SYSTEMS APK 240-C-WHD-X-G-B-7- HB-T-R410A-N-N-N-L	-	76x44x96 1980	0.2 HP	460 3	-	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	
1M-595B	ELECTRICAL ROOM HVAC UNIT PACKAGED WALL MOUNTED	-	SPECIFIC SYSTEMS APK 240-C-WHD-X-G-B-7- HB-T-R410A-N-N-N-L	-	76x44x96 1980	0.2 HP	460 3	-	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	
1M-595C	ELECTRICAL ROOM HVAC UNIT PACKAGED WALL MOUNTED	-	SPECIFIC SYSTEMS APK 240-C-WHD-X-G-B-7- HB-T-R410A-N-N-N-L	-	76x44x96 1980	0.2 HP	460 3	-	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	
1M-596A	DCS ROOM HVAC UNIT PACKAGED WALL MOUNTED	-	BARD W24AB-C06XMX3V	-	33.3x17.125x74.563 343	0.33 HP	460 3	-	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	
1M-596B	DCS ROOM HVAC UNIT PACKAGED WALL MOUNTED	-	BARD W24AB-C06XMX3V	-	33.3x17.125x74.563 343	0.33 HP	460 3	-	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	
1M-597A	BATTERY ROOM HVAC UNIT PACKAGED WALL MOUNTED	-	BARD W30AB-C06XMX3V	-	38.2x17.125x74.563 354	0.5 HP	460 3	-	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	



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1M-597B	BATTERY ROOM HVAC UNIT PACKAGED WALL MOUNTED	-	BARD W30AB-C06XMX3V	-	38.2x17.125x74.563 354	0.5 HP	460 3	-	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	
1M-911	OXIDATION AIR BLOWER VALVE HOIST	-	- -	-	- -	NA	NA	-	-	NEW, SUPPLIED AND INSTALLED BY BREC	1
A	ELECTRICAL ROOM LOUVERED SUPPLY GRILLE DOUBLE DEFLECTION	-	TITUS 300RS	-	26x26 -	NA	NA	-	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	1
1EJ-100	ABSORBER INLET EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-110	-	NEW, SUPPLIED BY BREC, INSTALLED BY CONTRACTOR	1
1EJ-101	ABSORBER OUTLET EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-110	-	NEW, SUPPLIED BY BREC, INSTALLED BY CONTRACTOR	1
1EJ-102	ABSORBER OUTLET DUCT EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-110	-	NEW, SUPPLIED BY BREC, INSTALLED BY CONTRACTOR	1
1EJ-103	STACK INLET EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-110	-	NEW, SUPPLIED BY BREC, INSTALLED BY CONTRACTOR	1
1H-290	QUENCH WATER TANK HEATER	-	- -	-	- -	-	-	143993-3-110	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	
1S-100	ABSORBER	-	- -	-	- -	NA	NA	143993-3-110	-	RELOCATED AND INSTALLED BY OTHERS	1
1T-290	QUENCH WATER TANK	-	- -	-	- -	NA	NA	143993-3-110	-	RELOCATED BY OTHERS, INSTALLED BY CONTRACTOR	1
1A-100A	ABSORBER AGITATOR	-	EKATO HWL 2100-N	-	- -	75 HP	460 3	143993-3-111	-	RELOCATED BY OTHERS, INSTALLED BY CONTRACTOR	
1A-100B	ABSORBER AGITATOR	-	EKATO HWL 2100-N	-	- -	75 HP	460 3	143993-3-111	-	RELOCATED BY OTHERS, INSTALLED BY CONTRACTOR	
1A-100C	ABSORBER AGITATOR	-	EKATO HWL 2100-N	-	- -	75 HP	460 3	143993-3-111	-	RELOCATED BY OTHERS, INSTALLED BY CONTRACTOR	
1A-100D	ABSORBER AGITATOR	-	EKATO HWL 2100-N	-	- -	75 HP	460 3	143993-3-111	-	RELOCATED BY OTHERS, INSTALLED BY CONTRACTOR	
1A-100E	ABSORBER AGITATOR	-	EKATO HWL 2100-N	-	- -	75 HP	460 3	143993-3-111	-	RELOCATED BY OTHERS, INSTALLED BY CONTRACTOR	
1EJ-103A	RECYCLE PUMP ABSORBER INLET EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-111	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-103B	RECYCLE PUMP ABSORBER INLET EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-111	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-103C	RECYCLE PUMP ABSORBER INLET EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-111	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-103D	RECYCLE PUMP ABSORBER INLET EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-111	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-103E	RECYCLE PUMP ABSORBER INLET EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-111	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1E-108A	RECYCLE PUMP SOLID STATE MOTOR PROTECTOR	-	- -	-	- -	-	-	143993-3-112	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	
1E-108B	RECYCLE PUMP SOLID STATE MOTOR PROTECTOR	-	- -	-	- -	-	-	143993-3-112	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	



TAG NO	DESCRIPTION	VENDOR	MANUFACTURER MODEL No.	CAPACITY	SIZE (LxWxH) (in) WEIGHT (lb)	POWER REQUIRED	VOLTS PHASE	P&ID	Purchase Order No.	SUPPLY/INSTALL	REV
1E-108C	RECYCLE PUMP SOLID STATE MOTOR PROTECTOR	-	- -	-	- -	-	-	143993-3-112	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	
1E-108D	RECYCLE PUMP SOLID STATE MOTOR PROTECTOR	-	- -	-	- -	-	-	143993-3-112	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	
1E-108E	RECYCLE PUMP SOLID STATE MOTOR PROTECTOR	-	- -	-	- -	-	-	143993-3-112	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	
1EJ-101A	RECYCLE PUMP SUCTION EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-112	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-101B	RECYCLE PUMP SUCTION EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-112	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-101C	RECYCLE PUMP SUCTION EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-112	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-101D	RECYCLE PUMP SUCTION EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-112	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-101E	RECYCLE PUMP SUCTION EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-112	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-102A	RECYCLE PUMP DISCHARGE EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-112	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-102B	RECYCLE PUMP DISCHARGE EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-112	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-102C	RECYCLE PUMP DISCHARGE EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-112	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-102D	RECYCLE PUMP DISCHARGE EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-112	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-102E	RECYCLE PUMP DISCHARGE EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-112	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1F-170A	RECYCLE PUMP HEAT EXCHANGER FAN	-	- -	-	- -	0.5 HP	460 3	143993-3-112	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1F-170B	RECYCLE PUMP HEAT EXCHANGER FAN	-	- -	-	- -	0.5 HP	460 3	143993-3-112	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1F-170C	RECYCLE PUMP HEAT EXCHANGER FAN	-	- -	-	- -	0.5 HP	460 3	143993-3-112	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1F-170D	RECYCLE PUMP HEAT EXCHANGER FAN	-	- -	-	- -	0.5 HP	460 3	143993-3-112	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1F-170E	RECYCLE PUMP HEAT EXCHANGER FAN	-	- -	-	- -	0.5 HP	460 3	143993-3-112	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1M-170A	RECYCLE PUMP GEAR BOX LUBE OIL HEAT EXCHANGER	-	- -	-	- -	-	-	143993-3-112	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	
1M-170B	RECYCLE PUMP GEAR BOX LUBE OIL HEAT EXCHANGER	-	- -	-	- -	-	-	143993-3-112	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	
1M-170C	RECYCLE PUMP GEAR BOX LUBE OIL HEAT EXCHANGER	-	- -	-	- -	-	-	143993-3-112	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	
1M-170D	RECYCLE PUMP GEAR BOX LUBE OIL HEAT EXCHANGER	-	- -	-	- -	-	-	143993-3-112	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	

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1M-170E	RECYCLE PUMP GEAR BOX LUBE OIL HEAT EXCHANGER	-	- -	-	- -	-	-	143993-3-112	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	
1P-100A	RECYCLE PUMP	-	WEIR 700TY GSL 3 ELEMENT ARRG	-	- 46,208	1850 HP	4000 3	143993-3-112	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1P-100B	RECYCLE PUMP	-	WEIR 700TY GSL 3 ELEMENT ARRG	-	- 46,208	1850 HP	4000 3	143993-3-112	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1P-100C	RECYCLE PUMP	-	WEIR 700TY GSL 3 ELEMENT ARRG	-	- 46,208	1850 HP	4000 3	143993-3-112	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1P-100D	RECYCLE PUMP	-	WEIR 700TY GSL 3 ELEMENT ARRG	-	- 46,208	1850 HP	4000 3	143993-3-112	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1P-100E	RECYCLE PUMP	-	WEIR 700TY GSL 3 ELEMENT ARRG	-	- 46,208	1850 HP	4000 3	143993-3-112	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1P-170A	RECYCLE PUMP GEAR BOX LUBE OIL PUMP	-	- -	-	- -	3 HP	460 3	143993-3-112	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1P-170B	RECYCLE PUMP GEAR BOX LUBE OIL PUMP	-	- -	-	- -	3 HP	460 3	143993-3-112	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1P-170C	RECYCLE PUMP GEAR BOX LUBE OIL PUMP	-	- -	-	- -	3 HP	460 3	143993-3-112	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1P-170D	RECYCLE PUMP GEAR BOX LUBE OIL PUMP	-	- -	-	- -	3 HP	460 3	143993-3-112	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1P-170E	RECYCLE PUMP GEAR BOX LUBE OIL PUMP	-	- -	-	- -	3 HP	460 3	143993-3-112	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1EJ-201A	MIST ELIMINATOR PUMP SUCTION EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-113	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-201B	MIST ELIMINATOR PUMP SUCTION EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-113	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-202A	MIST ELIMINATOR PUMP DISCHARGE EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-113	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-202B	MIST ELIMINATOR PUMP DISCHARGE EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-113	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1P-200A	MIST ELIMINATOR PUMP	-	FLOWSERVE 2K4x3-82OP M3 ST	-	64x22x24 1357	50 HP	460 3	143993-3-113	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1P-200B	MIST ELIMINATOR PUMP	-	FLOWSERVE 2K4x3-82OP M3 ST	-	64x22x24 1357	50 HP	460 3	143993-3-113	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1T-200	MIST ELIMINATOR WASH WATER TANK	-	- -	-	- -	NA	NA	143993-3-113	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1C-900A	OXIDATION AIR BLOWER	-	TURBLEX	-	16079	1000 HP	4000 3	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1C-900B	OXIDATION AIR BLOWER	-	TURBLEX	-	16079	1000 HP	4000 3	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1C-900C	OXIDATION AIR BLOWER	-	TURBLEX	-	16079	1000 HP	4000 3	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1D-900A	OXIDATION AIR VARIABLE DIFFUSER	-	TURBLEX	-	(Included in 1C-900A)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1



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1D-900B	OXIDATION AIR VARIABLE DIFFUSER	-	TURBLEX	-	(Included in 1C-900B)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1D-900C	OXIDATION AIR VARIABLE DIFFUSER	-	TURBLEX	-	(Included in 1C-900C)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1EJ-900A	OXIDATION AIR DISCHARGE EXPANSION JOINT	-	TURBLEX	-	50 (Included in 1C-900A)	NA	NA	143993-3-115	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-900B	OXIDATION AIR DISCHARGE EXPANSION JOINT	-	TURBLEX	-	50 (Included in 1C-900B)	NA	NA	143993-3-115	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-900C	OXIDATION AIR DISCHARGE EXPANSION JOINT	-	TURBLEX	-	50 (Included in 1C-900C)	NA	NA	143993-3-115	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-920A	OXIDATION AIR GEAR BOX LUBE OIL PUMP EXPANSION JOINT	-	TURBLEX	-	(Included in 1C-900A)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1EJ-920B	OXIDATION AIR GEAR BOX LUBE OIL PUMP EXPANSION JOINT	-	TURBLEX	-	(Included in 1C-900B)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1EJ-920C	OXIDATION AIR GEAR BOX LUBE OIL PUMP EXPANSION JOINT	-	TURBLEX	-	(Included in 1C-900C)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1F-922A	OXIDATION AIR GEAR BOX LUBE OIL COOLING FAN	-	TURBLEX	-	(Included in 1C-900A)	5 HP	460 3	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1F-922B	OXIDATION AIR GEAR BOX LUBE OIL COOLING FAN	-	TURBLEX	-	(Included in 1C-900B)	5 HP	460 3	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1F-922C	OXIDATION AIR GEAR BOX LUBE OIL COOLING FAN	-	TURBLEX	-	(Included in 1C-900C)	5 HP	460 3	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1H-920A	OXIDATION AIR GEAR BOX OIL RESERVOIR HEATER	-	TURBLEX	-	(Included in 1C-900A)	-	-	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	
1H-920B	OXIDATION AIR GEAR BOX OIL RESERVOIR HEATER	-	TURBLEX	-	(Included in 1C-900B)	-	-	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	
1H-920C	OXIDATION AIR GEAR BOX OIL RESERVOIR HEATER	-	TURBLEX	-	(Included in 1C-900C)	-	-	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	
1M-900A	OXIDATION AIR INLET FILTER/SILENCER	-	TURBLEX	-	50x68.5x96.4375 1856 (Included in 1C-900A)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1M-900B	OXIDATION AIR INLET FILTER/SILENCER	-	TURBLEX	-	50x68.5x96.4375 1856 (Included in 1C-900B)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1M-900C	OXIDATION AIR INLET FILTER/SILENCER	-	TURBLEX	-	50x68.5x96.4375 1856 (Included in 1C-900C)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1M-901A	OXIDATION AIR DISCHARGE SILENCER	-	TURBLEX	-	- 460 (Included in 1C-900A)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1M-901B	OXIDATION AIR DISCHARGE SILENCER	-	TURBLEX	-	- 460 (Included in 1C-900B)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1M-901C	OXIDATION AIR DISCHARGE SILENCER	-	TURBLEX	-	- 460 (Included in 1C-900C)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1M-902A	OXIDATION AIR BLOW OFF SILENCER	-	TURBLEX	-	27.8125x27.8125x28.0625 197 (Included in 1C-900A)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1M-902B	OXIDATION AIR BLOW OFF SILENCER	-	TURBLEX	-	27.8125x27.8125x28.0625 197 (Included in 1C-900B)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1



TAG NO	DESCRIPTION	VENDOR	MANUFACTURER MODEL No.	CAPACITY	SIZE (LxWxH) (in) WEIGHT (lb)	POWER REQUIRED	VOLTS PHASE	P&ID	Purchase Order No.	SUPPLY/INSTALL	REV
1M-902C	OXIDATION AIR BLOW OFF SILENCER	-	TURBLEX	-	27.8125x27.8125x28.0625 197 (Included in 1C-900C)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1M-922A	OXIDATION AIR GEAR BOX LUBE OIL HEAT EXCHANGER	-	TURBLEX	-	(Included in 1C-900A)	-	-	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	
1M-922B	OXIDATION AIR GEAR BOX LUBE OIL HEAT EXCHANGER	-	TURBLEX	-	(Included in 1C-900B)	-	-	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	
1M-922C	OXIDATION AIR GEAR BOX LUBE OIL HEAT EXCHANGER	-	TURBLEX	-	(Included in 1C-900C)	-	-	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	
1M-923A	OXIDATION AIR GEAR BOX LUBE OIL DUPLEX FILTER	-	TURBLEX	-	(Included in 1C-900A)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1M-923B	OXIDATION AIR GEAR BOX LUBE OIL DUPLEX FILTER	-	TURBLEX	-	(Included in 1C-900B)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1M-923C	OXIDATION AIR GEAR BOX LUBE OIL DUPLEX FILTER	-	TURBLEX	-	(Included in 1C-900C)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1P-920A	OXIDATION AIR GEAR BOX MAIN LUBE OIL PUMP	-	TURBLEX	-	(Included in 1C-900A)	-	-	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	
1P-920B	OXIDATION AIR GEAR BOX MAIN LUBE OIL PUMP	-	TURBLEX	-	(Included in 1C-900B)	-	-	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	
1P-920C	OXIDATION AIR GEAR BOX MAIN LUBE OIL PUMP	-	TURBLEX	-	(Included in 1C-900C)	-	-	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	
1P-921A	OXIDATION AIR GEAR BOX AUX LUBE OIL PUMP	-	TURBLEX	-	(Included in 1C-900A)	10 HP	460 3	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1P-921B	OXIDATION AIR GEAR BOX AUX LUBE OIL PUMP	-	TURBLEX	-	(Included in 1C-900B)	10 HP	460 3	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1P-921C	OXIDATION AIR GEAR BOX AUX LUBE OIL PUMP	-	TURBLEX	-	(Included in 1C-900C)	10 HP	460 3	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1T-920A	OXIDATION AIR GEAR BOX LUBE OIL TANK	-	TURBLEX	-	- (Included in 1C-900A)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1T-920B	OXIDATION AIR GEAR BOX LUBE OIL TANK	-	TURBLEX	-	(Included in 1C-900B)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1T-920C	OXIDATION AIR GEAR BOX LUBE OIL TANK	-	TURBLEX	-	(Included in 1C-900C)	NA	NA	143993-3-115	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1EJ-301A	PRIMARY GYPSUM HYDROCLONE FEED PUMP SUCTION EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-116	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-301B	PRIMARY GYPSUM HYDROCLONE FEED PUMP SUCTION EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-116	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-302A	PRIMARY GYPSUM HYDROCLONE FEED PUMP DISCHARGE EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-116	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-302B	PRIMARY GYPSUM HYDROCLONE FEED PUMP DISCHARGE EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-116	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1P-300A	PRIMARY GYPSUM HYDROCLONE FEED PUMP	-	WEIR SET, AH, 6/4, E, CV, 365T	-	52x42x76 3325	75 HP	460 3	143993-3-116	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1P-300B	PRIMARY GYPSUM HYDROCLONE FEED PUMP	-	WEIR SET, AH, 6/4, E, CV, 365T	-	52x42x76 3325	75 HP	460 3	143993-3-116	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1



TAG NO	DESCRIPTION	VENDOR	MANUFACTURER MODEL No.	CAPACITY	SIZE (LxWxH) (in) WEIGHT (lb)	POWER REQUIRED	VOLTS PHASE	P&ID	Purchase Order No.	SUPPLY/INSTALL	REV
1SC-300A	PRIMARY GYPSUM HYDROCLONE FEED PUMP VFD	-	- -	-	- -	-	-	143993-3-116	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1SC-300B	PRIMARY GYPSUM HYDROCLONE FEED PUMP VFD	-	- -	-	- -	-	-	143993-3-116	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1E-130	HYDRAULIC OIL LOCAL CONTROL PANEL	-	CONTINENTAL HYDRAULICS -	-	- -	-	-	143993-3-117	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	
1H-130	HYDRAULIC OIL TANK HEATER	-	CONTINENTAL HYDRAULICS -	-	- -	-	-	143993-3-117	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	
1P-130A	HYDRAULIC OIL PUMP	-	CONTINENTAL HYDRAULICS -	-	- -	20 HP	460 3	143993-3-117	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1P-130B	HYDRAULIC OIL PUMP	-	CONTINENTAL HYDRAULICS -	-	- -	20 HP	460 3	143993-3-117	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1T-130	HYDRAULIC OIL TANK	-	CONTINENTAL HYDRAULICS -	-	- -	NA	NA	143993-3-117	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1P-500A	LIMESTONE SLURRY FEED PUMPS		WEIR SET, AH, 6/4, E, CV, 364T		51x42x76 3323	60 HP	460 3	143993-3-124	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1P-500B	LIMESTONE SLURRY FEED PUMPS		WEIR SET, AH, 6/4, E, CV, 364T		51x42x76 3323	60 HP	460 3	143993-3-124	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1M-340	PRIMARY GYPSUM HYDROCLONE	-	- -	-	- -	NA	NA	143993-3-130	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1A-120A	ABSORBER AREA SUMP AGITATOR	-	CHEMINEER 3GTD-5	-	- 1590	5 HP	460 3	143993-3-138	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1A-120B	ABSORBER AREA SUMP AGITATOR	-	CHEMINEER 3GTD-5	-	- 1590	5 HP	460 3	143993-3-138	-	REFURBISHED, ASSEMBLY AND INSTALLATION BY CONTRACTOR	1
1EJ-120A	ABSORBER AREA SUMP PUMP EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-138	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-120B	ABSORBER AREA SUMP PUMP EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-138	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1P-120A	ABSORBER AREA SUMP PUMP	-	- -	-	- -	-	460 3	143993-3-138	-	NEW, SUPPLIED BY OTHERS, INSTALLED BY CONTRACTOR	1
1P-120B	ABSORBER AREA SUMP PUMP	-	- -	-	- -	-	460 3	143993-3-138	-	NEW, SUPPLIED BY OTHERS, INSTALLED BY CONTRACTOR	1
1T-120	ABSORBER AREA SUMP	-	- -	-	- -	NA	NA	143993-3-138	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	1
1A-400	GYPSUM SLURRY TRANSFER TANK AGITATOR	-	CHEMINEER 21GTD-3	-	194x59x16 858	3 HP	460 3	143993-3-139	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-401A	GYPSUM SLURRY TRANSFER PUMP SUCTION EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-139	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-401B	GYPSUM SLURRY TRANSFER PUMP SUCTION EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-139	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-402A	GYPSUM SLURRY TRANSFER PUMP DISCHARGE EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-139	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1EJ-402B	GYPSUM SLURRY TRANSFER PUMP DISCHARGE EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-139	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1



TAG NO	DESCRIPTION	VENDOR	MANUFACTURER MODEL No.	CAPACITY	SIZE (LxWxH) (in) WEIGHT (lb)	POWER REQUIRED	VOLTS PHASE	P&ID	Purchase Order No.	SUPPLY/INSTALL	REV
1EJ-403A	GYPSUM SLURRY TRANSFER EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-139	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	1
1EJ-403B	GYPSUM SLURRY TRANSFER EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-139	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	1
1EJ-404A	GYPSUM SLURRY TRANSFER EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-139	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	1
1EJ-404B	GYPSUM SLURRY TRANSFER EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-139	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	1
1EJ-405A	GYPSUM SLURRY TRANSFER EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-139	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	1
1EJ-405B	GYPSUM SLURRY TRANSFER EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-139	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	1
1EJ-406A	GYPSUM SLURRY TRANSFER EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-139	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	1
1EJ-406B	GYPSUM SLURRY TRANSFER EXPANSION JOINT	-	- -	-	- -	NA	NA	143993-3-139	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	1
1P-400A	GYPSUM SLURRY TRANSFER PUMP	-	WEIR SET, AH, 3/2, CC, CV, 286T	-	36x29x48 1115	30 HP	460 3	143993-3-139	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1P-400B	GYPSUM SLURRY TRANSFER PUMP	-	WEIR SET, AH, 3/2, CC, CV, 286T	-	36x29x48 1115	30 HP	460 3	143993-3-139	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1T-400	GYPSUM SLURRY TRANSFER TANK	-	- -	-	144 DIA x 168 -	NA	NA	143993-3-139	-	NEW, SUPPLIED BY WOOD, INSTALLED BY CONTRACTOR	1
1T-950	INSTRUMENT AIR TANK	-	- -	-	- -	NA	NA	143993-3-144	-	NEW, SUPPLIED BY BREC, INSTALLED BY CONTRACTOR	1
1M-840	POTABLE WATER INLET FILTER	-	- -	-	- -	NA	NA	143993-ASA-DC0-PID-1111	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR (Change name to "Backflow Preventer")	1
1M-841	POTABLE WATER NON RETURN VALVE	-	- -	-	- -	NA	NA	143993-ASA-DC0-PID-1111	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	1
1M-842	BATTERY ROOM SAFETY SHOWER	-	HAWS 8300-8309 COMBINATION UNIT W/ALARM SYSTEM	-	9x38.5x98.75 -	NA	NA	143993-ASA-DC0-PID-1111	-	NEW, SUPPLIED AND INSTALLED BY CONTRACTOR	1

DATA SHEET

Department	INDUSTRIAL BOILERS
Author	SRY
Document Code	143993-IPC-DE1-LST-0004
Status	Rev 0



Project:	143993 D.B. WILSON
Title:	EXTERNAL HARDWARE LIST

Author: SRY	Approved: AWL
Customer: Big Rivers Electric Corporation	Customer Reference:
Action: FOR QUOTATION	Additional Information:

[illegible]

EXTERNAL HARDWARE LIST

143993-IPC-DE1-LST-0004

48" EXTERNAL RECYCLE PIPING FASTENER IDENTIFICATION LIST

(48" ABSORBER RECYCLE PIPE)

(30" OXIDATION AIR HEADER)

Drawing 3906-6-	Item	Type of Conn.	Flange Size (in)	Stud Dia. (in)	Stud Length & No.Req'd.per Connection Length / Req'd		Number of Fig. Conn.	Total Number of Studs per Item	Total Number of Nuts per Item	Total Number of Washers per Item
75	Z	Alloy / Alloy	30"	1 1/4"	6 1/2"	28	2	56	112	112
75	AB	Alloy / Alloy	18"	1 1/8"	6"	16	2	32	64	64
75	AC	Alloy / Alloy	10"	7/8"	5"	12	24	288	576	576
100, 101, 102,103,104, 105,106	BA	EXP JT./Alloy	48"	1 1/2"	9 1/2"	44	5	220	440	440
100, 101, 102,103,104, 105,106	BB	EXP JT./Alloy Valve/FRP Valve/Alloy FRP/EXP JT.	48"	1 1/2"	13 1/2"	44	45	1980	3960	3960
100, 101, 102,103,104, 105,106	BC	FRP/FRP	48"	1 1/2"	14 1/4"	44	11	484	968	968
100, 101, 102,103,104, 105,106	BD	Pump/FRP	27 1/2" 31 1/2"	1 3/8"	8 3/4"	12	10	120	240	240
100, 101, 102,103,104, 105,106	BE	FRP/VALVE	2" 3"	5/8"	4 3/4"	4	15	60	120	120

Stud bolts: ASTM A193, Grade B7 (full thread)

Stud Size	Quantity Req'd	Qty. w/ Spares	Tag
5/8" x 4 3/4"	60	70	BE
7/8" x 5"	288	320	AC
1 1/8" x 6"	32	40	AB
1 1/4" x 6 1/2"	56	62	Z
1 3/8" x 8 3/4"	120	140	BD
1 1/2" x 9 1/2"	220	240	BA
1 1/2" x 13 1/2"	1980	2200	BB
1 1/2" x 14 1/4"	484	550	BC

EXTERNAL HARDWARE LIST

143993-IPC-DE1-LST-0004

Nuts: Heavy Hex, ASTM A194, Grade 2H

Two nuts required per stud

Size	Quantity	Qty. w/ Spares	Tag
5/8"	120	140	BE
7/8"	576	640	AC
1 1/8"	64	80	AB
1 1/4"	112	140	Z
1 3/8"	240	270	BD
1 1/2"	5368	5900	BA, BB, BC

Washers: ANSI/ASME B18.22.1, Type B, SAE Size Regular

Two washers required per stud

Size	I.D.	O.D.	Thickness
5/8"	0.6560	1.7500	0.1000
7/8"	0.9380	2.2500	0.1600
1 1/8"	1.1250	2.7500	0.1600
1 1/4"	1.2500	3.0000	0.1600
1 3/8"	1.3750	3.2500	0.1740
1 1/2"	1.5000	3.5000	0.2660

Size	Quantity	Qty. w/ Spares	Tag
5/8"	120	140	BE
7/8"	576	640	AC
1 1/8"	64	80	AB
1 1/4"	112	140	Z
1 3/8"	240	270	BD
1 1/2"	5368	5900	BA, BB, BC

EXTERNAL HARDWARE LIST

143993-IPC-DE1-LST-0004

EXTERNAL FRP PIPING FASTENER IDENTIFICATION LIST

143993-ISO-	Item	Flange Size (in)	Stud Dia. (in)	Stud Length & No.Req'd.per Connection Length / Req'd		Number of Flg. Conn.	Total Number of Studs per Item	Total Number of Nuts per Item	Total Number of Washers per Item
120A-ASD-JZD-01	6	4	5/8	5	8	6	48	96	96
120B-ASD-JZD-01	6	4	5/8	5	8	5	40	80	80
121-ASD-JZD-01	9	6	3/4	6	8	7	56	112	112
122-ASD-JZD-01	7	6	3/4	6	8	2	16	32	32
122-ASD-JZD-02	6	6	3/4	6	8	4	32	64	64
301A-LWS-JZD-01	9	3	5/8	5	4	2	8	16	16
	10	8	3/4	6	8	5	40	80	80
301B-LWS-JZD-01	9	3	5/8	5	4	2	8	16	16
	10	8	3/4	6	8	5	40	80	80
302A-LWS-JZD-01	12	8	3/4	6	8	6	48	96	96
	15	4	5/8	6	8	1	8	16	16
302A-LWS-JZD-02	5	8	3/4	6	8	4	32	64	64
302A-LWS-JZD-03	9	8	3/4	6	8	4	32	64	64
	?	2	5/8	5	4	3	12	24	24
302B-LWS-JZD-01	10	8	3/4	6	8	3	24	48	48
	13	4	5/8	6	8	1	8	16	16
304-LWS-JZD-01	9	8	3/4	6	8	7	56	112	112
	?	2	5/8	5	4	1	4	8	8
304-LWS-JZD-02	12	8	3/4	6	8	6	48	96	96
	13	4	5/8	6	8	1	8	16	16
	?	6	5/8	6	8	1	8	16	16
305-LWS-JZD-01	6	8	3/4	6	8	4	32	64	64
	?	2	5/8	5	4	1	4	8	8
307-LWS-JZD SHT1	?	3	5/8	5	4	2	8	16	16
340-LWS-JZD SH1	?	8	3/4	6	8	1	8	16	16
340-LWS-JZD SH2	?	8	3/4	6	8	1	8	16	16
341-LWS-JZD SHT1	?	8	3/4	6	8	2	16	32	32
401A-LWS-JZD-01	8	4	5/8	6	8	4	32	64	64
	?	3	5/8	5	4	3	12	24	24
401B-LWS-JZD-01	8	4	5/8	6	8	4	32	64	64
	?	3	5/8	5	4	3	12	24	24
402A-LWS-JZD-01	10	4	5/8	6	8	6	48	96	96
	?	2	5/8	5	4	3	12	24	24
402A-LWS-JZD-02	7	4	5/8	6	8	11	88	176	176
402B-LWS-JZD-01	9	4	5/8	6	8	6	48	96	96

EXTERNAL HARDWARE LIST

143993-IPC-DE1-LST-0004

404-LWS-JZD-01	?	2	5/8	5	4	3	12	24	24
404-LWS-JZD-01	6	4	5/8	6	8	3	24	48	48
503-LSS-JZD-01	5	6	3/4	6	8	3	24	48	48
504-LSS-JZD-01	6	6	3/4	6	8	6	48	96	96
505-LSS-JZD-01	4	4	5/8	6	8	4	32	64	64
	?	2	5/8	5	4	1	4	8	8
505-LSS-JZD-02	6	4	5/8	6	8	8	64	128	128
505-LSS-JZD-03	6	4	5/8	6	8	3	24	48	48
702-WRW-JZD-01	8	6	3/4	6	8	5	40	80	80
702-WRW-JZD-02	6	6	3/4	6	8	9	72	144	144

Stud bolts: ASTM A193, Grade B7 (full thread)

Stud Size	Quantity Req'd	Qty. w/ Spares
5/8" x 5"	184	205
5/8" x 6"	424	470
3/4" x 6"	672	740

Nuts: Heavy Hex, ASTM A194, Grade 2H

Two nuts required per stud

Size	Quantity	Qty. w/ Spares
5/8"	1216	1350
3/4"	1344	1480

Washers: ANSI/ASME B18.22.1, Type B, SAE Size Regular

Two washers required per stud

Size	I.D.	O.D.	Thickness
5/8"	0.6560	1.7500	0.1000
3/4"	0.8120	2.0000	0.1000

Size	Quantity	Qty. w/ Spares
5/8"	1216	1350
3/4"	1344	1480

EXTERNAL HARDWARE LIST

143993-IPC-DE1-LST-0004

EXTERNAL CARBON PIPING FASTENER IDENTIFICATION LIST

143993-ISO-	Item	Flange Size (in)	Stud Dia. (in)	Stud Length & No.Req'd.per Connection Length / Req'd		Number of Flg. Conn.	Total Number of Studs per Item	Total Number of Nuts per Item	Total Number of Washers per Item
201A-WWA-JBD-01	5	4	5/8	4 1/4	8	4	32	64	64
201B-WWA-JBD-01	5	4	5/8	4 1/4	8	4	32	64	64
202A-WWA-JBD-01	12	4	5/8	4 1/4	8	5	40	80	80
	12	3	5/8	4 1/4	8	1	8	16	16
202B-WWA-JBD-01	12	4	5/8	4 1/4	8	5	40	80	80
	12	3	5/8	4 1/4	8	1	8	16	16
203-WWA-JBD-01	10	4	5/8	4 1/4	8	8	64	128	128
	?	2	5/8	4 1/4	8	1	8	16	16
203-WWA-JBD-02	5	4	5/8	4 1/4	8	3	24	48	48
203A-WWA-JBD SHT1	?	4	5/8	4 1/4	8	1	8	16	16
203A-WWA-JBD SHT3	?	4	5/8	4 1/4	8	3	24	48	48
204-WWA-JBD-01	6	2	5/8	4 1/4	8	2	16	32	32
ME WASH HEADER	?	4	5/8	4 1/4	8	51	408	816	816
246-WWA-JBD SHT1	?	4	5/8	4 1/4	8	5	40	80	80
290-WQW-JAD-01	7	6	3/4	4 1/2	8	3	24	48	48
290-WQW-JBD-01	7	6	3/4	4 1/2	8	2	16	32	32
290-WQW-JBD-02	7	6	3/4	4 1/2	8	5	40	80	80
290-WQW-JBD-03	7	6	3/4	4 1/2	8	3	24	48	48
291-WQW-JBD SHT1	?	3	5/8	4 1/4	8	1	8	16	16
800-WSW-JBD-01	7	4	5/8	4 1/4	8	10	80	160	160
900A-FOA-JBD-01	5	24	1 1/4	6 3/4	20	4	80	160	160
	?	10	7/8	5	12	2	24	48	48
	?	6	3/4	4 1/2	8	4	32	64	64
900B-FOA-JBD-01	5	24	1 1/4	6 3/4	20	4	80	160	160
	?	10	7/8	5	12	2	24	48	48
	?	6	3/4	4 1/2	8	4	32	64	64
900C-FOA-JBD-01	5	24	1 1/4	6 3/4	20	4	80	160	160
	?	10	7/8	5	12	2	24	48	48
	?	6	3/4	4 1/2	8	4	32	64	64
901-FOA-JBD-01	9	24	1 1/4	6 3/4	20	3	60	120	120
901-FOA-JBD-02	10	30	1 1/4	9 3/8	28	3	84	168	168

EXTERNAL HARDWARE LIST

143993-IPC-DE1-LST-0004

Stud bolts: ASTM A193, Grade B7 (full thread)

Stud Size	Quantity Req'd	Qty. w/ Spares
5/8" x 4 1/4"	840	925
3/4" x 4 1/2"	200	220
7/8" x 5"	72	80
1 1/4" x 6 3/4"	384	425
1 1/4" x 9 3/8"	84	92

Nuts: Heavy Hex, ASTM A194, Grade 2H

Two nuts required per stud

Size	Quantity	Qty. w/ Spares
5/8"	1680	1850
3/4"	400	440
7/8"	144	160
1 1/4"	936	850

Washers: ANSI/ASME B18.22.1, Type B, SAE Size Regular

Two washers required per stud

Size	I.D.	O.D.	Thickness
5/8"	0.6560	1.7500	0.1000
3/4"	0.8120	2.0000	0.1000
7/8"	0.9380	2.2500	0.1600
1 1/4"	1.2500	3.0000	0.1600

Size	Quantity	Qty. w/ Spares
5/8"	1680	1850
3/4"	400	440
7/8"	144	160
1 1/4"	936	850

DATA SHEET

Department INDUSTRIAL BOILERS
Author SRY
Document Code 143993-IPC-DE2-LST-0001
Status Rev 2



Project: 143993 D.B. WILSON
Title: AUTOMATIC VALVE LIST

Author: SRY	Approved: AWL
Customer: Big Rivers Electric Corporation	Customer Reference:
Action: FOR QUOTATION	Additional Information:

Revisions					
Revision	Date	Description	Pages	Revised	Approved
0	4/9/2021	For Quotation	3	SRY	AWL
1	6/4/2021	Updated	3	SRY	AWL
2	7/7/2021	Updated	3	SRY	AWL

VALVE TAG NO(S)	DESCRIPTION	QTY	AUTO/ MANUAL	ACTION	TYPE	SIZE [IN]	DSGN PRESS	BODY MATERIAL	END PREP	Fail Position	PIPE SPEC	SYSTEM CODE	VALVE CODE OR DATASHEET	P & ID	REV
1-FV-700	RECLAIM WATER FLOW CONTROL VALVE	1	AUTO	CONTROL	BALL	4	125 ANSI	STAINLESS STEEL	FLANGED	FC	JZD	WRW	143993-IPC-DE2-DAT 0005	143993-03-111	2
1-FV-102A	ABSORBER RECYCLE PUMP DRAIN	1	AUTO	ON/OFF	KNIFE GATE	3	125 ANSI	RUBBER LINED	LUG	FC	JZD	LRS	143993-IPC-DE2-DAT 0009	143993-03-112	
1-FV-102B	ABSORBER RECYCLE PUMP DRAIN	1	AUTO	ON/OFF	KNIFE GATE	3	125 ANSI	RUBBER LINED	LUG	FC	JZD	LRS	143993-IPC-DE2-DAT 0009	143993-03-112	
1-FV-102C	ABSORBER RECYCLE PUMP DRAIN	1	AUTO	ON/OFF	KNIFE GATE	3	125 ANSI	RUBBER LINED	LUG	FC	JZD	LRS	143993-IPC-DE2-DAT 0009	143993-03-112	
1-FV-102D	ABSORBER RECYCLE PUMP DRAIN	1	AUTO	ON/OFF	KNIFE GATE	3	125 ANSI	RUBBER LINED	LUG	FC	JZD	LRS	143993-IPC-DE2-DAT 0009	143993-03-112	
1-FV-102E	ABSORBER RECYCLE PUMP DRAIN	1	AUTO	ON/OFF	KNIFE GATE	3	125 ANSI	RUBBER LINED	LUG	FC	JZD	LRS	143993-IPC-DE2-DAT 0009	143993-03-112	
1-FV-103A	ABSORBER RECYCLE PUMP FLUSH WATER	1	AUTO	ON/OFF	PLUG	2	125 ANSI	PLASTIC LINED	FLANGED	FC	JZD	WRW	143993-IPC-DE2-DAT 0016	143993-03-112	
1-FV-103B	ABSORBER RECYCLE PUMP FLUSH WATER	1	AUTO	ON/OFF	PLUG	2	125 ANSI	PLASTIC LINED	FLANGED	FC	JZD	WRW	143993-IPC-DE2-DAT 0016	143993-03-112	
1-FV-103C	ABSORBER RECYCLE PUMP FLUSH WATER	1	AUTO	ON/OFF	PLUG	2	125 ANSI	PLASTIC LINED	FLANGED	FC	JZD	WRW	143993-IPC-DE2-DAT 0016	143993-03-112	
1-FV-103D	ABSORBER RECYCLE PUMP FLUSH WATER	1	AUTO	ON/OFF	PLUG	2	125 ANSI	PLASTIC LINED	FLANGED	FC	JZD	WRW	143993-IPC-DE2-DAT 0016	143993-03-112	
1-FV-103E	ABSORBER RECYCLE PUMP FLUSH WATER	1	AUTO	ON/OFF	PLUG	2	125 ANSI	PLASTIC LINED	FLANGED	FC	JZD	WRW	143993-IPC-DE2-DAT 0016	143993-03-112	
1-FV-120A	ABSORBER AREA SUMP PUMP	1	AUTO	ON/OFF	KNIFE GATE	4	125 ANSI	RUBBER LINED	LUG	FC	JZD	ASD	143993-IPC-DE2-DAT 0010	143993-03-138	
1-FV-120B	ABSORBER AREA SUMP PUMP	1	AUTO	ON/OFF	KNIFE GATE	4	125 ANSI	RUBBER LINED	LUG	FC	JZD	ASD	143993-IPC-DE2-DAT 0010	143993-03-138	
1-FV-205	MIST ELIMINATOR RECIRCULATION	1	AUTO	ON/OFF	PLUG	2	125 ANSI	CAST IRON / DUCTILE IRON	FLANGED	FO	JBD	WWA	143993-IPC-DE2-DAT 0006	143993-03-113	
1-FV-245	OXIDATION AIR SATURATION WATER	1	AUTO	ON/OFF	BALL	2	125 ANSI	CARBON STEEL	FLANGED	FO	JBD	WWA	143993-IPC-DE2-DAT 0007	143993-03-114	
1-FV-246	QUENCH WATER INLET ISOLATION VALVE	1	AUTO	ON/OFF	BUTTERFLY	4	125 ANSI	CARBON STEEL	LUG	FC	JBD	WWA	143993-IPC-DE2-DAT 0008	143993-03-110	
1-FV-290	ABSORBER QUENCH ISOLATION VALVE	1	AUTO	ON/OFF	BUTTERFLY	6	125 ANSI	C-276	FLANGED	FO	JAD	WQW	143993-IPC-DE2-DAT 0003	143993-03-110	
1-FV-301A	HYDROCLONE FEED PUMP SUCTION	1	AUTO	ON/OFF	KNIFE GATE	8	125 ANSI	RUBBER LINED	LUG	FC	JZD	LWS	143993-IPC-DE2-DAT 0012	143993-03-116	
1-FV-301B	HYDROCLONE FEED PUMP SUCTION	1	AUTO	ON/OFF	KNIFE GATE	8	125 ANSI	RUBBER LINED	LUG	FC	JZD	LWS	143993-IPC-DE2-DAT 0012	143993-03-116	
1-FV-302A	HYDROCLONE FEED PUMP DRAIN	1	AUTO	ON/OFF	KNIFE GATE	3	125 ANSI	RUBBER LINED	LUG	FC	JZD	LWS	143993-IPC-DE2-DAT 0009	143993-03-116	
1-FV-302B	HYDROCLONE FEED PUMP DRAIN	1	AUTO	ON/OFF	KNIFE GATE	3	125 ANSI	RUBBER LINED	LUG	FC	JZD	LWS	143993-IPC-DE2-DAT 0009	143993-03-116	
1-FV-303A	HYDROCLONE FEED PUMP DISCHARGE	1	AUTO	ON/OFF	KNIFE GATE	8	125 ANSI	RUBBER LINED	LUG	FC	JZD	LWS	143993-IPC-DE2-DAT 0012	143993-03-116	
1-FV-303B	HYDROCLONE FEED PUMP DISCHARGE	1	AUTO	ON/OFF	KNIFE GATE	8	125 ANSI	RUBBER LINED	LUG	FC	JZD	LWS	143993-IPC-DE2-DAT 0012	143993-03-116	
1-FV-304A	HYDROCLONE FEED PUMP FLUSH	1	AUTO	ON/OFF	PLUG	2	125 ANSI	PLASTIC LINED	FLANGED	FC	JZD	WRW	143993-IPC-DE2-DAT 0016	143993-03-116	
1-FV-304B	HYDROCLONE FEED PUMP FLUSH	1	AUTO	ON/OFF	PLUG	2	125 ANSI	PLASTIC LINED	FLANGED	FC	JZD	WRW	143993-IPC-DE2-DAT 0016	143993-03-116	
1-FV-330	HYDROCLONE FEED RECIRC	1	AUTO	ON/OFF	KNIFE GATE	8	125 ANSI	RUBBER LINED	LUG	FO	JZD	LWS	143993-IPC-DE2-DAT 0013	143993-03-116	
1-FV-331	HYDROCLONE FEED RECIRC FLUSH	1	AUTO	ON/OFF	PLUG	2	125 ANSI	PLASTIC LINED	FLANGED	FC	JZD	WRW	143993-IPC-DE2-DAT 0016	143993-03-116	
1-FV-332	HYDROCLONE FEED DISCHARGE	1	AUTO	ON/OFF	KNIFE GATE	8	125 ANSI	RUBBER LINED	LUG	FO	JZD	LWS	143993-IPC-DE2-DAT 0013	143993-03-116	
1-FV-333	HYDROCLONE FEED DISCHARGE FLUSH	1	AUTO	ON/OFF	KNIFE GATE	4	125 ANSI	RUBBER LINED	LUG	FC	JZD	WRW	143993-IPC-DE2-DAT 0010	143993-03-116	
1-FV-335	HYDROCLONE FEED DRAIN	1	AUTO	ON/OFF	KNIFE GATE	3	125 ANSI	RUBBER LINED	LUG	FC	JZD	LWS	143993-IPC-DE2-DAT 0009	143993-03-130	
1-FV-401A	GYP SUM SLURRY TRANSFER SUCTION	1	AUTO	ON/OFF	KNIFE GATE	4	125 ANSI	RUBBER LINED	LUG	FC	JZD	LWS	143993-IPC-DE2-DAT 0010	143993-03-139	
1-FV-401B	GYP SUM SLURRY TRANSFER SUCTION	1	AUTO	ON/OFF	KNIFE GATE	4	125 ANSI	RUBBER LINED	LUG	FC	JZD	LWS	143993-IPC-DE2-DAT 0010	143993-03-139	
1-FV-402A	GYP SUM SLURRY TRANSFER PUMP DISCHARGE	1	AUTO	ON/OFF	KNIFE GATE	4	125 ANSI	RUBBER LINED	LUG	FC	JZD	LWS	143993-IPC-DE2-DAT 0010	143993-03-139	
1-FV-402B	GYP SUM SLURRY TRANSFER PUMP DISCHARGE	1	AUTO	ON/OFF	KNIFE GATE	4	125 ANSI	RUBBER LINED	LUG	FC	JZD	LWS	143993-IPC-DE2-DAT 0010	143993-03-139	
1-FV-403A	GYP SUM SLURRY TRANSFER PUMP DRAIN	1	AUTO	ON/OFF	KNIFE GATE	3	125 ANSI	RUBBER LINED	LUG	FC	JZD	LWS	143993-IPC-DE2-DAT 0009	143993-03-139	

VALVE TAG NO(S)	DESCRIPTION	QTY	AUTO/ MANUAL	ACTION	TYPE	SIZE [IN]	DSGN PRESS	BODY MATERIAL	END PREP	Fail Position	PIPE SPEC	SYSTEM CODE	VALVE CODE OR DATASHEET	P & ID	REV
1-FV-403B	GYP SUM SLURRY TRANSFER PUMP DRAIN	1	AUTO	ON/OFF	KNIFE GATE	3	125 ANSI	RUBBER LINED	LUG	FC	JZD	LWS	143993-IPC-DE2-DAT-0009	143993-03-139	
1-FV-404A	GYP SUM SLURRY TRANSFER PUMP FLUSH	1	AUTO	ON/OFF	PLUG	2	125 ANSI	PLASTIC LINED	FLANGED	FC	JZD	WRW	143993-IPC-DE2-DAT-0016	143993-03-139	
1-FV-404B	GYP SUM SLURRY TRANSFER PUMP FLUSH	1	AUTO	ON/OFF	PLUG	2	125 ANSI	PLASTIC LINED	FLANGED	FC	JZD	WRW	143993-IPC-DE2-DAT-0016	143993-03-139	
1-FV-406	GYP SUM SLURRY TRANSFER DISCHARGE FLUSH	1	AUTO	ON/OFF	PLUG	2	125 ANSI	PLASTIC LINED	FLANGED	FC	JZD	WRW	143993-IPC-DE2-DAT-0016	143993-03-139	
1-FV-407	GYP SUM SLURRY TRANSFER RECIRC	1	AUTO	ON/OFF	KNIFE GATE	4	125 ANSI	RUBBER LINED	LUG	FC	JZD	LWS	143993-IPC-DE2-DAT-0010	143993-03-139	
1-FV-530	LIMESTONE SLURRY ABSORBER FEED	1	AUTO	ON/OFF	KNIFE GATE	6	125 ANSI	RUBBER LINED	LUG	FC	JZD	LSS	143993-IPC-DE2-DAT-0011	143993-03-111	
1-FV-531	REAGENT FEED FLUSH WATER	1	AUTO	ON/OFF	PLUG	2	125 ANSI	PLASTIC LINED	FLANGED	FC	JZD	WRW	143993-IPC-DE2-DAT-0016	143993-03-111	
1-LCV-801	MIST ELIMINATOR TANK INLET CONTROL VALVE	1	AUTO	CONTROL	BALL	3	125 ANSI	CARBON STEEL	FLANGED	FC	JBD	WSW	143993-IPC-DE2-DAT-0014	143993-03-113	2
1-PCV-245	OXIDATION AIR SATURATION WATER	1	AUTO	REGULATE	PCV	2	125 ANSI	CARBON STEEL	THREADED	-	JBD	WWA	143993-IPC-DE2-DAT-0015	143993-03-114	

DATA SHEET

Department INDUSTRIAL BOILERS
Author SRY
Document Code 143993-IPC-DE2-LST-0002
Status Rev 3



Project: 143993 D.B. WILSON
Title: MANUAL VALVE LIST

Author: SRY	Approved: AWL
Customer: Big Rivers Electric Corporation	Customer Reference:
Action: FOR QUOTATION	Additional Information:

Revisions					
Revision	Date	Description	Pages	Revised	Approved
0	4/8/2021	For Quotation	3	SRY	AWL
1	6/4/2021	Updated	3	SRY	AWL
2	6/15/2021	Updated	3	SRY	AWL
3	7/7/2021	Updated	3	SRY	AWL

VALVE TAG NO(S)	DESCRIPTION	QTY	AUTO/ MANUAL	TYPE	SIZE [IN]	DSGN PRESS	BODY MATERIAL	END PREP	PIPE SPEC	SYSTEM CODE	VALVE CODE OR DATASHEET	P & ID	REV
1-HCV-405	GYP SUM SLURRY TRANSFER CONTROL VALVE BYPASS	1	MANUAL	PINCH	4	125 ANSI	RUBBER LINED	FLANGED	JZD	LWS	H21N	143993-03-139	
1-HCV-540	REAGENT FEED BYPASS	1	MANUAL	PINCH	4	125 ANSI	RUBBER LINED	FLANGED	JZD	LSS	H21N	143993-03-111	
1-HCV-700	RECLAIM WATER BYPASS	1	MANUAL	BALL	6	125 ANSI	STAINLESS STEEL	FLANGED	JZD	WRW	B71N	143993-03-111	
1-HCV-801	MIST ELIMINATOR TANK INLET CONTROL VALVE BYPASS	1	MANUAL	BALL	4	125 ANSI	CARBON STEEL	FLANGED	JBD	WSW	B41N	143993-03-113	
1-V-001	QUENCH WATER INLET MANUAL VALVE	1	MANUAL	BUTTERFLY	4	125 ANSI	CARBON STEEL	LUG	JBD	WWA	F41V	143993-03-110	
1-V-005	ABSORBER DRAIN	1	MANUAL	KNIFE GATE	6	125 ANSI	RUBBER LINED	LUG	JZD	LR5	K21V	143993-03-111	
1-V-006	REAGENT FEED CONTROL VALVE INLET	1	MANUAL	KNIFE GATE	4	125 ANSI	RUBBER LINED	LUG	JZD	LSS	K21V	143993-03-111	
1-V-007	REAGENT FEED CONTROL VALVE OUTLET	1	MANUAL	KNIFE GATE	4	125 ANSI	RUBBER LINED	LUG	JZD	LSS	K21V	143993-03-111	
1-V-016	MIST ELIMINATOR PUMP A SUCTION	1	MANUAL	PLUG	4	125 ANSI	CAST IRON / DUCTILE IRON	FLANGED	JBD	WWA	P11N	143993-03-113	
1-V-017	MIST ELIMINATOR PUMP B SUCTION	1	MANUAL	PLUG	4	125 ANSI	CAST IRON / DUCTILE IRON	FLANGED	JBD	WWA	P11N	143993-03-113	
1-V-018	MIST ELIMINATOR PUMP DISCHARGE	1	MANUAL	PLUG	4	125 ANSI	CAST IRON / DUCTILE IRON	FLANGED	JBD	WWA	P11N	143993-03-113	
1-V-019	MIST ELIMINATOR PUMP DISCHARGE	1	MANUAL	PLUG	4	125 ANSI	CAST IRON / DUCTILE IRON	FLANGED	JBD	WWA	P11N	143993-03-113	
1-V-020	MIST ELIMINATOR TANK DRAIN	1	MANUAL	PLUG	4	125 ANSI	CAST IRON / DUCTILE IRON	FLANGED	JBD	WWA	P11N	143993-03-113	
1-V-021	MIST ELIMINATOR 1ST STAGE BOTTOM	1	MANUAL	PLUG	4	125 ANSI	CAST IRON / DUCTILE IRON	FLANGED	JBD	WWA	P11N	143993-03-113	
1-V-022	MIST ELIMINATOR 1ST STAGE TOP	1	MANUAL	PLUG	4	125 ANSI	CAST IRON / DUCTILE IRON	FLANGED	JBD	WWA	P11N	143993-03-113	
1-V-023	MIST ELIMINATOR 2ND STAGE BOTTOM	1	MANUAL	PLUG	4	125 ANSI	CAST IRON / DUCTILE IRON	FLANGED	JBD	WWA	P11N	143993-03-113	
1-V-025	MIST ELIMINATOR PUMP DISCHARGE	1	MANUAL	CHECK	4	125 ANSI	CARBON STEEL	FLANGED	JBD	WWA	C41N	143993-03-113	
1-V-026	MIST ELIMINATOR PUMP DISCHARGE	1	MANUAL	CHECK	4	125 ANSI	CARBON STEEL	FLANGED	JBD	WWA	C41N	143993-03-113	
1-V-027	MIST ELIMINATOR TANK LEVEL TRANSMITTER	1	MANUAL	BALL	2	125 ANSI	CARBON STEEL	FLANGED	JBD	WWA	B41N	143993-03-113	
1-V-040	OXIDATION AIR SATURATION WATER PRESSURE GAUGE	1	MANUAL	BALL	1/2	125 ANSI	CARBON STEEL	SWE x NPT	JBD	WWA	B43ST	143993-03-114	3
1-V-041	OXIDATION AIR DISCHARGE PRESSURE	1	MANUAL	BALL	1/2	125 ANSI	CARBON STEEL	THREADED	JBD	FOA	B41T	143993-03-114	
1-V-082	HYDROCLONE FEED	1	MANUAL	KNIFE GATE	8	125 ANSI	RUBBER LINED	LUG	JZD	LWS	K21V	143993-03-116	
1-V-083	HYDROCLONE FEED TO BLOW DOWN SUMP	1	MANUAL	KNIFE GATE	8	125 ANSI	RUBBER LINED	LUG	JZD	LWS	K21V	143993-03-116	
1-V-102	RECLAIM WATER HEADER	1	MANUAL	PLUG	6	125 ANSI	PLASTIC LINED	FLANGED	JZD	WRW	P81N	143993-03-111	
1-V-103	RECLAIM WATER CONTROL VALVE INLET	1	MANUAL	PLUG	6	125 ANSI	PLASTIC LINED	FLANGED	JZD	WRW	P81N	143993-03-111	
1-V-104	RECLAIM WATER CONTROL VALVE OUTLET	1	MANUAL	PLUG	6	125 ANSI	PLASTIC LINED	FLANGED	JZD	WRW	P81N	143993-03-111	
1-V-111	MIST ELIMINATOR TANK LEVEL CONTROL VALVE	1	MANUAL	PLUG	4	125 ANSI	CAST IRON / DUCTILE IRON	FLANGED	JBD	WSW	P11N	143993-03-113	
1-V-112	MIST ELIMINATOR TANK LEVEL CONTROL VALVE	1	MANUAL	PLUG	4	125 ANSI	CAST IRON / DUCTILE IRON	FLANGED	JBD	WSW	P11N	143993-03-113	
1-V-220	ABSORBER AREA SUMP TO ABSORBER	1	MANUAL	KNIFE GATE	6	125 ANSI	RUBBER LINED	LUG	JZD	ASD	K21V	143993-03-138	
1-V-221	ABSORBER AREA SUMP TO BLOW DOWN SUMP	1	MANUAL	KNIFE GATE	6	125 ANSI	RUBBER LINED	LUG	JZD	ASD	K21V	143993-03-138	
1-V-271	OXIDATION AIR SATURATION WATER	1	MANUAL	PLUG	2	125 ANSI	CAST IRON / DUCTILE IRON	FLANGED	JBD	WWA	P11N	143993-03-114	

VALVE TAG NO(S)	DESCRIPTION	QTY	AUTO/ MANUAL	TYPE	SIZE [IN]	DSGN PRESS	BODY MATERIAL	END PREP	PIPE SPEC	SYSTEM CODE	VALVE CODE OR DATASHEET	P & ID	REV
1V-291	QUENCH WATER TANK OUTLET ISOLATION	1	MANUAL	KNIFE GATE	6	125 ANSI	RUBBER LINED	LUG	JBD	WWA	K21V	143993-03-110	
1-V-402	HYDROCLONE FEED SAMPLE	1	MANUAL	PINCH	1	125 ANSI	RUBBER LINED	FLANGED	JZD	LWS	H21N	143993-03-116	
1-V-410	GYPSUM SLURRY TRANSFER TANK	1	MANUAL	KNIFE GATE	4	125 ANSI	RUBBER LINED	LUG	JZD	LWS	K21V	143993-03-139	
1-V-416	GYPSUM TRANSFER CONTROL VALVE INLET	1	MANUAL	KNIFE GATE	4	125 ANSI	RUBBER LINED	LUG	JZD	LWS	K21V	143993-03-139	
1-V-417	GYPSUM TRANSFER CONTROL VALVE OUTLET	1	MANUAL	KNIFE GATE	4	125 ANSI	RUBBER LINED	LUG	JZD	LWS	K21V	143993-03-139	
1-V-427	QUENCH WATER LEVEL TRANSMITTER	1	MANUAL	BALL	2	125 ANSI	PLASTIC LINED	FLANGED	JBD	WQW	B81N	143993-03-110	
1-V-433	ABSORBER AGITATOR A FLUSH	1	MANUAL	PLUG	2	125 ANSI	PLASTIC LINED	FLANGED	JBD	LR5	P81N	143993-03-111	
1-V-434	ABSORBER AGITATOR B FLUSH	1	MANUAL	PLUG	2	125 ANSI	PLASTIC LINED	FLANGED	JBD	LR5	P81N	143993-03-111	
1-V-435	ABSORBER AGITATOR C FLUSH	1	MANUAL	PLUG	2	125 ANSI	PLASTIC LINED	FLANGED	JBD	LR5	P81N	143993-03-111	
1-V-436	ABSORBER AGITATOR D FLUSH	1	MANUAL	PLUG	2	125 ANSI	PLASTIC LINED	FLANGED	JBD	LR5	P81N	143993-03-111	
1-V-437	ABSORBER AGITATOR E FLUSH	1	MANUAL	PLUG	2	125 ANSI	PLASTIC LINED	FLANGED	JBD	LR5	P81N	143993-03-111	
1-V-439	MIST ELIMINATOR PUMP PRESSURE GAUGE	1	MANUAL	BLOCK N BLEED	1/2	125 ANSI	STAINLESS STEEL	THREADED	JBD	WWA	NA	143993-03-113	3
1-V-440	MIST ELIMINATOR PUMP PRESSURE GAUGE	1	MANUAL	BLOCK N BLEED	1/2	125 ANSI	STAINLESS STEEL	THREADED	JBD	WWA	NA	143993-03-113	3

DOC TITLE IPC - PIPE SUPPORT DETAIL LIST
DOC NUMBER 143993-IPC-DE2-LST-0003
DOC REV. D
ISSUE FOR: IFB
DATE 8-Jun-21



Pipe Support Tag	Quantity Required	Nominal Pipe Size	Description	Figure	Reference Doc	Line Number	Document or Data Sheet Number	Drawing No	Construction Work Area	Remarks	Rev	SUPPLIER
PS-101A-1	1	48"	Pipe Support	Detail 6	143993-06-900	101A-LRS-JZD	143993-SMM-DE2-ISO-101A-01	143993-ISO-101A-LRS-JZD-01	Piping Absorber Recycle Pumps		A	
PS-101B-1	1	48"	Pipe Support	Detail 6	143993-06-900	101B-LRS-JZD	143993-SMM-DE2-ISO-101B-01	143993-ISO-101B-LRS-JZD-01	Piping Absorber Recycle Pumps		A	
PS-101D-1	1	48"	Pipe Support	Detail 6	143993-06-900	101D-LRS-JZD	143993-SMM-DE2-ISO-101D-01	143993-ISO-101D-LRS-JZD-01	Piping Absorber Recycle Pumps		A	
PS-101E-1	1	48"	Pipe Support	Detail 6	143993-06-900	101E-LRS-JZD	143993-SMM-DE2-ISO-101E-01	143993-ISO-101E-LRS-JZD-01	Piping Absorber Recycle Pumps		A	
PS-102A-1	1	48"	Pipe Support	PS-1	143993-06-900	102A-LRS-JZD-48"	143993-SMM-DE2-ISO-102A-01	143993-ISO-102A-LRS-JZD-01	Piping Absorber Recycle Pumps		A	
PS-102A-2	1	48"	Pipe Support	PG-2	143993-06-900	102A-LRS-JZD-48"	143993-SMM-DE2-ISO-102A-02	143993-ISO-102A-LRS-JZD-02	Piping Absorber Recycle Pumps		A	
PS-102A-5A	1	48"	Pipe Support	PS-5A	143993-06-083	102A-LRS-JZD-48"	143993-SMM-DE2-ISO-102A-02	143993-ISO-102A-LRS-JZD-02	Piping Absorber Recycle Pumps		A	
PS-102B-1	1	48"	Pipe Support	PS-1	143993-06-900	102B-LRS-JZD-48"	143993-SMM-DE2-ISO-102B-01	143993-ISO-102B-LRS-JZD-01	Piping Absorber Recycle Pumps		A	
PS-102B-2	1	48"	Pipe Support	PG-2	143993-06-900	102B-LRS-JZD-48"	143993-SMM-DE2-ISO-102B-02	143993-ISO-102B-LRS-JZD-02	Piping Absorber Recycle Pumps		A	
PS-102B-5B	1	48"	Pipe Support	PS-5B	143993-06-083	102B-LRS-JZD-48"	143993-SMM-DE2-ISO-102B-02	143993-ISO-102B-LRS-JZD-02	Piping Absorber Recycle Pumps		A	
PS-102C-1	1	48"	Pipe Support	PS-1	143993-06-900	102C-LRS-JZD-48"	143993-SMM-DE2-ISO-102C-01	143993-ISO-102C-LRS-JZD-01	Piping Absorber Recycle Pumps		A	
PS-102C-2	1	48"	Pipe Support	PG-2	143993-06-900	102C-LRS-JZD-48"	143993-SMM-DE2-ISO-102C-02	143993-ISO-102C-LRS-JZD-02	Piping Absorber Recycle Pumps		A	
PS-102C-5C	1	48"	Pipe Support	PS-5C	143993-06-083	102C-LRS-JZD-48"	143993-SMM-DE2-ISO-102C-02	143993-ISO-102C-LRS-JZD-02	Piping Absorber Recycle Pumps		A	
PS-102D-1	1	48"	Pipe Support	PS-1	143993-06-900	102D-LRS-JZD-48"	143993-SMM-DE2-ISO-102D-01	143993-ISO-102D-LRS-JZD-01	Piping Absorber Recycle Pumps		A	
PS-102D-2	1	48"	Pipe Support	PG-2	143993-06-900	102D-LRS-JZD-48"	143993-SMM-DE2-ISO-102D-02	143993-ISO-102D-LRS-JZD-02	Piping Absorber Recycle Pumps		A	
PS-102D-5D	1	48"	Pipe Support	PS-5D	143993-06-083	102D-LRS-JZD-48"	143993-SMM-DE2-ISO-102D-02	143993-ISO-102D-LRS-JZD-02	Piping Absorber Recycle Pumps		A	
PS-102E-1	1	48"	Pipe Support	PS-1	143993-06-900	102E-LRS-JZD-48"	143993-SMM-DE2-ISO-102E-01	143993-ISO-102E-LRS-JZD-01	Piping Absorber Recycle Pumps		A	
PS-102E-2	1	48"	Pipe Support	PG-2	143993-06-900	102E-LRS-JZD-48"	143993-SMM-DE2-ISO-102E-02	143993-ISO-102E-LRS-JZD-02	Piping Absorber Recycle Pumps		A	
PS-102E-5E	1	48"	Pipe Support	PS-5E	143993-06-083	102E-LRS-JZD-48"	143993-SMM-DE2-ISO-102E-02	143993-ISO-102E-LRS-JZD-02	Piping Absorber Recycle Pumps		A	
PS-120A-1	2	4	Pipe Support	HB11, FIG 121	TD-039-HB11 TD-39-001(page 42/47)	120A-ASD-JZD	143993-SMM-DE2-ISO-120A-01	143993-ISO-120A-ASD-JZD-01	Sump Pump Absorber Area	NO GUIDE	C	
PS-120A-2	2	4	Pipe Support	80A, FIG 110, FIG 124	TD-39-001(page 20/47) TD-39-001(page 37/47) TD-39-001(page 44/47)	120A-ASD-JZD	143993-SMM-DE2-ISO-120A-01	143993-ISO-120A-ASD-JZD-01	Sump Pump Absorber Area		C	
PS-120B-1	1	4	Pipe Support	HB11, FIG 121	TD-039-HB-11 TD-39-001(page 42/47)	120B-ASD-JZD	143993-SMM-DE2-ISO-120B-01	143993-ISO-120B-ASD-JZD-01	Sump Pump Absorber Area	NO GUIDE	C	
PS-121-1	1	6	Pipe Support	FIG 80-C (L=78.75") FIG 123	TD-39-001(page 20/47) TD-39-001(page 43/47)	121-ASD-JZD	143993-SMM-DE2-ISO-121-01	143993-ISO-121-ASD-JZD-01	Sump Pump Absorber Area		C	
PS-121-2	1	6	Pipe Support	FIG 120 FIG 80-B (L=7")	TD-39-001(page 42/47) TD-39-001(page 20/47)	121-ASD-JZD	143993-SMM-DE2-ISO-121-01	143993-ISO-121-ASD-JZD-01	Sump Pump Absorber Area		C	
PS-121-3	1	6	Pipe Support	FIG 120 FIG 110 (W6-4) Trim to 24"	TD-39-001(page 42/47) TD-39-001(page 37/47)	121-ASD-JZD	143993-SMM-DE2-ISO-121-01	143993-ISO-121-ASD-JZD-01	Sump Pump Absorber Area		C	
PS-121-4	1	6	Pipe Support	FIG120	TD-39-001(page 42/47)	121-ASD-JZD	143993-SMM-DE2-ISO-121-01	143993-ISO-121-ASD-JZD-01	Sump Pump Absorber Area		C	
PS-121-5	2	6	Pipe Support	TYPE HA14 (L=124")	TD-039-HA14	121-ASD-JZD	143993-SMM-DE2-ISO-121-01	143993-ISO-121-ASD-JZD-01	Sump Pump Absorber Area		C	
PS-121-6	1	6	Pipe Support	TYPE HA14 (L=119.5")	TD-039-HA14	121-ASD-JZD	143993-SMM-DE2-ISO-121-01	143993-ISO-121-ASD-JZD-01	Sump Pump Absorber Area		C	
PS-122-1	1	6	Pipe Support	Type HA14 (L=21")	TD-039-HA14	122-ASD-JZD	143993-SMM-DE2-ISO-122-01	143993-ISO-122-ASD-JZD-01	Sump Pump Absorber Area		C	
PS-122-2	1	6	Pipe Support	FIG 118 (L=75"). (1) FIG 103 (SC6-3) Trim to 24" LG	TD-39-001(page 41/47) TD-39-001(page 31/47)	122-ASD-JZD	143993-SMM-DE2-ISO-122-01	143993-ISO-122-ASD-JZD-01	Sump Pump Absorber Area		C	
PS-122-3	1	6	Pipe Support	FIG 116, (2) FIG 103 (SC6-3) Trim to 24"LG	TD-39-001(page 40/47) TD-39-001(page 31/47)	122-ASD-JZD	143993-SMM-DE2-ISO-122-01	143993-ISO-122-ASD-JZD-01	Sump Pump Absorber Area		C	
PS-122-4	0	6	Pipe Support	FIG 123, FIG 80(A)- FIG 86(6)	TD-39-001(page 42/47) TD-39-001(page 20/47) TD-39-001(page 23/47)	122-ASD-JZD	143993-SMM-DE2-ISO-122-01	143993-ISO-122-ASD-JZD-01	Sump Pump Absorber Area		C	
PS-122-5	0	6	Pipe Support	HF12	TD-039-HF12	122-ASD-JZD	143993-SMM-DE2-ISO-122-01	143993-ISO-122-ASD-JZD-01	Sump Pump Absorber Area		C	
PS-122-4	2	6	Pipe Support	TYPE HA14 (L=34"). FIG 110 (SC6-3) Trim to 24"	TD-039-HA14 TD-39-001(page 37/47)	122 ASD JZD	143993-SMM-DE2-ISO-122-02	143993-ISO-122-ASD-JZD-02	Sump Pump Absorber Area		A	
PS-122-5	1	6	Pipe Support	FIG 116, (2) FIG 103 (SC6-3) Trim to 24"LG	TD-39-001(page 40/47) TD-39-001(page 31/47)	122 ASD JZD	143993-SMM-DE2-ISO-122-02	143993-ISO-122-ASD-JZD-02	Sump Pump Absorber Area		A	
PS-201A-1	1	4	Pipe Support	FIG 100, FIG 80-B (L=21.25")	TD-39-001(page 30/47) TD-39-001(page 20/47)	201A-WWA-JBD	143993-SMM-DE2-ISO-201A-01	143993-ISO-201A-WWA-JBD-01	Mist Eliminator Wash Water Piping		B	
PS-201B-1	1	4	Pipe Support	FIG 100, FIG 80-A (L=21.25")	TD-39-001(page 30/47) TD-39-001(page 20/47)	201B-WWA-JBD	143993-SMM-DE2-ISO-201B-01	143993-ISO-201B-WWA-JBD-01	Mist Eliminator Wash Water Piping		B	
PS-203-1	1	4	Pipe Support	FIG 100	TD-39-001(page 30/47)	203-WWA-JBD	143993-SMM-DE2-ISO-203-01	143993-ISO-203-WWA-JBD-01	Mist Eliminator Wash Water Piping		A	
PS-203-2	1	4	Pipe Support	TYPE HA61	TD-039-HA61	203-WWA-JBD	143993-SMM-DE2-ISO-203-01	143993-ISO-203-WWA-JBD-01	Mist Eliminator Wash Water Piping		A	
PS-203-3	1	4	Pipe Support	TYPE HB20	TD-039-HB20	203-WWA-JBD	143993-SMM-DE2-ISO-203-01	143993-ISO-203-WWA-JBD-01	Mist Eliminator Wash Water Piping		A	
PS-203-4	1	4	Pipe Support	TYPE HA88	TD-039-HA88	203-WWA-JBD	143993-SMM-DE2-ISO-203-02	143993-ISO-203-WWA-JBD-02	Mist Eliminator Wash Water Piping	L=17"	A	
PS-203-5	1	4	Pipe Support	TYPE HA61	TD-039-HA61	203-WWA-JBD	143993-SMM-DE2-ISO-203-02	143993-ISO-203-WWA-JBD-02	Mist Eliminator Wash Water Piping		A	
PS-203-6	1	4	Pipe Support	FIG 74	TD-39-001 (page 19/47)	203-WWA-JBD	143993-SMM-DE2-ISO-203-02	143993-ISO-203-WWA-JBD-02	Mist Eliminator Wash Water Piping		A	
PS-290-1	3	6	Pipe Support	FIG 81	TD-39-001 (page 20/47)	290-WQW-JBD	143993-SMM-DE2-ISO-290-01	143993-ISO-290-WQW-JAD-01	Quench Water Piping		A	
PS-290-2	1	6	Pipe Support	TYPE HS88	TD-039-HS88	290-WQW-JBD	143993-SMM-DE2-ISO-290-02	143993-ISO-290-WQW-JAD-02	Quench Water Piping	L=29"	A	
PS-290-3	3	6	Pipe Support	TYPE HA61	TD-039-HA61	290-WQW-JBD	143993-SMM-DE2-ISO-290-02	143993-ISO-290-WQW-JAD-02	Quench Water Piping		A	
PS-290-4	1	6	Pipe Support	TYPE HA50	TD-039-HA50	290-WQW-JBD	143993-SMM-DE2-ISO-290-02	143993-ISO-290-WQW-JAD-02	Quench Water Piping		A	
PS-290-5	2	6	Pipe Support	FIG 100, FIG 8	TD-39-001(page 30/47) TD-39-001(page 2/47)	290-WQW-JBD	143993-SMM-DE2-ISO-290-03	143993-ISO-290-WQW-JAD-03	Quench Water Piping	Anvil No. 199, Bracket 2	A	
PS-290-6	1	6	Pipe Support	FIG 100, FIG 80B	TD-39-001(page 20/47)	290-WQW-JBD	143993-SMM-DE2-ISO-290-03	143993-ISO-290-WQW-JAD-03	Quench Water Piping	C/W HORZ. W6x15	A	

PS-301A-1	1	8	Pipe Support	TYPE HB11 C/W FIG 120.	TD-039-HB11 TD-39-001(page 42/47)	301A-LWS-JZD	143993-SMM-DE2-ISO-301A-01	143993-ISO-301A-LWS-JZD-01	Hydroclone Feed Piping	GUIDED	B	
PS-301B-1	1	8	Pipe Support	TYPE HB11 C/W FIG 120.	TD-039-HB11 TD-39-001(page 42/47)	301B-LWS-JZD	143993-SMM-DE2-ISO-301B-01	143993-ISO-301B-LWS-JZD-01	Hydroclone Feed Piping	GUIDED	B	
PS-302A-1	1	8	Pipe Support	FIG 116	TD-39-001(page 40/47)	302A-LWS-JZD	143993-SMM-DE2-ISO-302A-01	143993-ISO-302A-LWS-JZD-01	Hydroclone Feed Piping		A	
PS-302A-2	2	8	Pipe Support	TYPE HS12	TD-039-HS12	302A-LWS-JZD	143993-SMM-DE2-ISO-302A-02	143993-ISO-302A-LWS-JZD-02	Hydroclone Feed Piping		A	
PS-302A-3	1	8	Pipe Support	FIG 123	TD-39-001(page 43/47)	302A-LWS-JZD	143993-SMM-DE2-ISO-302A-02	143993-ISO-302A-LWS-JZD-02	Hydroclone Feed Piping	HEAVY DUTY ANCHOR	A	
PS-302A-4	1	8	Pipe Support	TYPE HB11 C/W FIG 120.	TD-039-HB11 TD-39-001(page 42/47)	302A-LWS-JZD	143993-SMM-DE2-ISO-302A-02	143993-ISO-302A-LWS-JZD-02	Hydroclone Feed Piping	GUIDED	A	
PS-302A-5	1	8	Pipe Support	FIG 88-B	TD-39-001(page 24/47)	302A-LWS-JZD	143993-SMM-DE2-ISO-302A-02	143993-ISO-302A-LWS-JZD-02	Hydroclone Feed Piping		A	
PS-302A-6	1	8	Pipe Support	FIG 116, FIG 110	TD-39-001(page 40/47) TD-39-001(page 37/47)	302A-LWS-JZD	143993-SMM-DE2-ISO-302A-02	143993-ISO-302A-LWS-JZD-02	Hydroclone Feed Piping		A	
PS-302A-7	3	8	Pipe Support	TYPE HJ10	TD-039-HJ10	302A-LWS-JZD	143993-SMM-DE2-ISO-302A-03	143993-ISO-302A-LWS-JZD-03	Hydroclone Feed Piping		B	
PS-302A-8	2	8	Pipe Support	FIG 120, FIG 80-A (L=27.25")	TD-39-001(page 42/47) TD-39-001(page 20/47)	302A-LWS-JZD	143993-SMM-DE2-ISO-302A-03	143993-ISO-302A-LWS-JZD-03	Hydroclone Feed Piping		B	
PS-302A-9	1	8	Pipe Support	FIG 120, FIG 80-A (L=27.25")	TD-39-001(page 42/47) TD-39-001(page 20/47)	302A-LWS-JZD	143993-SMM-DE2-ISO-302A-03	143993-ISO-302A-LWS-JZD-03	Hydroclone Feed Piping		B	
PS-304-1	1	8	Pipe Support	TYPE HS12	TD-039-HS12	304-LWS-JZD	143993-SMM-DE2-ISO-304-01	143993-ISO-304-LWS-JZD-01	Hydroclone Feed Piping		B	
PS-304-2	1	8	Pipe Support	FIG 123	TD-39-001(page 43/47)	304-LWS-JZD	143993-SMM-DE2-ISO-304-01	143993-ISO-304-LWS-JZD-01	Hydroclone Feed Piping		B	
PS-304-3	1	8	Pipe Support	FIG 116	TD-39-001(page 40/47)	304-LWS-JZD	143993-SMM-DE2-ISO-304-01	143993-ISO-304-LWS-JZD-01	Hydroclone Feed Piping	C/W SHEAR COLLAR	B	
PS-304-4	1	8	Pipe Support	FIG 117	TD-39-001(page 40/47)	304-LWS-JZD	143993-SMM-DE2-ISO-304-01	143993-ISO-304-LWS-JZD-01	Hydroclone Feed Piping		B	
PS-304-5	2	8	Pipe Support	FIG 123	TD-39-001(page 43/47)	304-LWS-JZD	143993-SMM-DE2-ISO-304-02	143993-ISO-304-LWS-JZD-02	Hydroclone Feed Piping		B	
PS-304-6	1	8	Pipe Support	FIG 118	TD-39-001(page 41/47)	304-LWS-JZD	143993-SMM-DE2-ISO-304-02	143993-ISO-304-LWS-JZD-02	Hydroclone Feed Piping		B	
PS-304-7	1	8	Pipe Support	FIG 120	TD-39-001(page 42/47)	304-LWS-JZD	143993-SMM-DE2-ISO-304-02	143993-ISO-304-LWS-JZD-02	Hydroclone Feed Piping		B	
PS-305-1	1	8	Pipe Support	FIG 118	TD-39-001(page 41/47)	305-LWS-JZD	143993-SMM-DE2-ISO-305-01	143993-ISO-305-LWS-JZD-01	Hydroclone Feed Piping		A	
PS-401A-1	1	4	Pipe Support	TYPE HB11 C/W FIG 120.	TD-039-HB11 TD-39-001(page 42/47)	401A-LWS-JZD	143993-SMM-DE2-ISO-401A-01	143993-ISO-401A-LWS-JZD-01	Gypsum Feed Pump piping	GUIDED	B	
PS-401B-1	1	8	Pipe Support	TYPE HB11 C/W FIG 120.	TD-039-HB11 TD-39-001(page 42/47)	401B-LWS-JZD	143993-SMM-DE2-ISO-401B-01	143993-ISO-401B-LWS-JZD-01	Gypsum Feed Pump piping	GUIDED	B	
PS-402A-1	0	4	Pipe Support	TYPE HJ10	TD-039-HJ10	402A-LWS-JZD	143993-SMM-DE2-ISO-402A-01	143993-ISO-402A-LWS-JZD-01	Gypsum Feed Pump piping		B	
PS-402A-1	1	4	Pipe Support	FIG 116	TD-39-001(page 40/47)	402A-LWS-JZD	143993-SMM-DE2-ISO-402A-02	143993-ISO-402A-LWS-JZD-02	Gypsum Feed Pump piping		B	
PS-402A-2	1	4	Pipe Support	FIG 123	TD-39-001(page 43/47)	402A-LWS-JZD	143993-SMM-DE2-ISO-402A-02	143993-ISO-402A-LWS-JZD-02	Gypsum Feed Pump piping		B	
PS-503-1	1	6	Pipe Support	FIG 116, (2) FIG 103 (SC8-3) Trim to 28" LG	TD-39-001(page 40/47) TD-39-001(page 31/47)	503-LSS-JZD	143993-SMM-DE2-ISO-503-01	143993-ISO-503-LSS-JZD-01	Limestone Feed Piping		A	
PS-504-1	1	6	Pipe Support	FIG 116, (2) FIG 103 (SC8-3)	TD-39-001(page 40/47) TD-39-001(page 31/47)	504-LSS-JZD	143993-SMM-DE2-ISO-504-01	143993-ISO-504-LSS-JZD-01	Limestone Feed Piping		A	
PS-505-1	1	4	Pipe Support	FIG 120, FIG 80-B (L=32.25")	TD-39-001(page 42/47) TD-39-001(page 20/47)	505-LSS-JZD	143993-SMM-DE2-ISO-505-01	143993-ISO-505-LSS-JZD-01	Limestone Feed Piping		B	
PS-505-2	1	4	Pipe Support	FIG 122, FIG 80-B (L=33.5")	TD-39-001(page 43/47) TD-39-001(page 20/47)	505-LSS-JZD	143993-SMM-DE2-ISO-505-01	143993-ISO-505-LSS-JZD-01	Limestone Feed Piping		B	
PS-505-3	2	4	Pipe Support	FIG 120, FIG 80-A (L=32.25")	TD-39-001(page 42/47) TD-39-001(page 20/47)	505-LSS-JZD	143993-SMM-DE2-ISO-505-02	143993-ISO-505-LSS-JZD-02	Limestone Feed Piping		B	
PS-505-4	2	4	Pipe Support	FIG 116, FIG 110	TD-39-001(page 40/47) TD-39-001(page 37/47)	505-LSS-JZD	143993-SMM-DE2-ISO-505-02	143993-ISO-505-LSS-JZD-02	Limestone Feed Piping		B	
PS-505-5	4	4	Pipe Support	FIG 80-B (L=48") C/W FIG 84	TD-39-001(page 20/47) TD-39-001 (page 21/47)	505-LSS-JZD	143993-SMM-DE2-ISO-505-02	143993-ISO-505-LSS-JZD-02	Limestone Feed Piping		B	
PS-505-6	1	4	Pipe Support	FIG 120 FIG 80-B (L=32.35")	TD-39-001(page 20/47) TD-39-001(page 42/47)	505-LSS-JZD	143993-SMM-DE2-ISO-505-03	143993-ISO-505-LSS-JZD-03	Limestone Feed Piping	WITH GUIDES	B	
PS-505-7	1	4	Pipe Support	FIG 117, (C=6")	TD-39-001(page 40/47)	505-LSS-JZD	143993-SMM-DE2-ISO-505-03	143993-ISO-505-LSS-JZD-03	Limestone Feed Piping		B	
PS-505-8	1	4	Pipe Support	FIG 118	TD-39-001(page 41/47)	505-LSS-JZD	143993-SMM-DE2-ISO-505-03	143993-ISO-505-LSS-JZD-03	Limestone Feed Piping		B	
PS-700-1	1	6	Pipe Support	FIG 123, FIG 80-B (L=32.75")	TD-39-001(page 43/47) TD-39-001(page 20/47)	700-WRW-JZD	143993-SMM-DE2-ISO-700-01	143993-ISO-700-WRW-JZD-01	Reclaim Water Piping		A	
PS-700-2	1	6	Pipe Support	FIG 120, FIG 80-B (L=49")	TD-39-001(page 20/47) TD-39-001(page 42/47)	700-WRW-JZD	143993-SMM-DE2-ISO-700-01	143993-ISO-700-WRW-JZD-01	Reclaim Water Piping		A	
PS-700-3	1	6	Pipe Support	FIG 120, FIG 80-B (L=41.1")	TD-39-001(page 20/47) TD-39-001(page 42/47)	700-WRW-JZD	143993-SMM-DE2-ISO-700-01	143993-ISO-700-WRW-JZD-01	Reclaim Water Piping		A	
PS-700-4	2	6	Pipe Support	FIG 103 (SC10-4) C/W F86-F FIG 124, FIG 80-B (L=12")	TD-39-001(page 31/47) TD-39-001(page 23/47) TD-39-001(page 20/47)	700-WRW-JZD	143993-SMM-DE2-ISO-700-01	143993-ISO-700-WRW-JZD-01	Reclaim Water Piping		A	
PS-700-5	2	6	Pipe Support	FIG 120, FIG 80-B (L=31.5")	TD-39-001(page 20/47) TD-39-001(page 42/47)	700-WRW-JZD	143993-SMM-DE2-ISO-700-02	143993-ISO-700-WRW-JZD-02	Reclaim Water Piping		A	
PS-800-1	2	4	Pipe Support	FIG 81 (L=32.75"), FIG 84	TD-39-001(page 20/47) TD-39-001(page 21/47)	800-WSE-JBD	143993-SMM-DE2-ISO-800-02	143993-ISO-800-WSE-JBD-01	Service Water Piping		A	
PS-900A-1	1	24	Pipe Support	FIG 98, FIG 80-C	TD-39-001(page 30/47) TD-39-001 (page 20/47)	900A-FOA-JBD	143993-SMM-DE2-ISO-900A-01	143993-ISO-900A-FOA-JBD-01	Oxidation Air Piping	L=14'-0"	B	
PS-900B-1	1	24	Pipe Support	FIG 98, FIG 80-C	TD-39-001(page 30/47) TD-39-001 (page 20/47)	900B-FOA-JBD	143993-SMM-DE2-ISO-900B-01	143993-ISO-900B-FOA-JBD-01	Oxidation Air Piping	L=14'-0"	B	
PS-900C-1	1	24	Pipe Support	FIG 98, FIG 80-C	TD-39-001(page 30/47) TD-39-001 (page 20/47)	900C-FOA-JBD	143993-SMM-DE2-ISO-900C-01	143993-ISO-900C-FOA-JBD-01	Oxidation Air Piping	L=14'-0"	B	
PS-901-1	2	30	Pipe Support	FIG 98	TD-39-001(page 30/47)	901-FOA-JBD	143993-SMM-DE2-ISO-901-01	143993-ISO-901-FOA-JBD-01	Oxidation Air Piping		B	
PS-901-2	2	30	Pipe Support	FIG 67	TD-39-001 (page 18/47)	901-FOA-JBD	143993-SMM-DE2-ISO-901-01	143993-ISO-901-FOA-JBD-01	Oxidation Air Piping		B	
PS-901-3	1	24	Pipe Support	FIG 67	TD-39-001 (page 18/47)	901-FOA-JBD	143993-SMM-DE2-ISO-901-01	143993-ISO-901-FOA-JBD-01	Oxidation Air Piping		B	
PS-901-4	2	30	Pipe Support	TYPE HT01	TD-039-HT01	901-FOA-JBD	143993-SMM-DE2-ISO-901-02	143993-ISO-901-FOA-JBD-02	Oxidation Air Piping	L=62" / X=38"	A	
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LINE NO.	SIZE (in)	DESCRIPTION	ISO NO	SYS. DESIGN PRESSURE (psig)	SYS. DESIGN TEMP (deg F)	P&ID PIPE DWG	INSULATED	HEAT TRACED	TEST PRES (psig)	INSUL SIZE	SUPPLY/INSTALL	REV
110A-LRS-HAD	10	INLET DUCT DRAIN	143993-ASA-DE2-ISO-1268	GRAVITY	212	143993-3-110	YES	YES	42	1.5	BREC supply; GC Install	1
110B-LRS-HAD	10	INLET DUCT DRAIN	143993-ASA-DE2-ISO-1269	GRAVITY	212	143993-3-110	YES	YES	42	1.5	BREC supply; GC Install	1
150-SDD-JZD	4	STACK DRAIN	FIELD ROUTE	20	180	143993-3-110	NO	NO	23	N/A	Supply and install by GC	
151-SDD-JZD	4	ABSORBER OUTLET EJ DRAIN	FIELD ROUTE	20	180	143993-3-110	NO	NO	23	N/A	Supply and install by GC	
153-SDD-JZD	4	STACK INLET EJ DRAIN	FIELD ROUTE	20	180	143993-3-110	NO	NO	23	N/A	Supply and install by GC	
290-WQW-JAD	6	QUENCH WATER TO ABSORBER	143993-ISO-290-WQW-JAD-01	125	100	143993-3-110	YES	YES	188	1.5	Wood Supply; GC Install	1
290-WQW-JBD	6	QUENCH WATER TO ABSORBER	143993-ISO-290-WQW-JBD-01 143993-ISO-290-WQW-JBD-02 143993-ISO-290-WQW-JBD-03	125	100	143993-3-110	YES	YES	188	1.5	Wood Supply; GC Install	1
291-WQW-JBD	3	QUENCH WATER TANK OVERFLOW	143993-ISO-291-WQW-JBD	60	100	143993-3-110	NO	NO	90	N/A	Wood Supply; GC Install	1
100-LRS-JZD	6	ABSORBER STILLING WELL	NA	70	140	143993-3-111	YES	YES	81	1.5	Relocated; installed by GC	
104-LRS-JZD	10	ABSORBER OVERFLOW	NA	70	140	143993-3-111	YES	YES	81	1.5	Relocated; installed by GC	
105-LRS-JZD	6	ABSORBER DRAIN	NA	70	140	143993-3-111	NO	NO	81	N/A	Relocated; installed by GC	
503-LSS-JZD	6	LIMESTONE SLURRY RECIRC	143993-ISO-503-LSS-JZD-01	85	130	143993-3-111	NO	NO	98	N/A	Wood Supply; GC Install	
504-LSS-HZD	6	LIMESTONE SLURRY RECIRC	143993-ASA-DE2-ISO-1240	85	130	143993-3-111	NO	NO	102	N/A	BREC supply; GC Install	
504-LSS-JZD	6	LIMESTONE SLURRY RECIRC	143993-ISO-504-LSS-JZD-01	85	130	143993-3-111	NO	NO	102	N/A	Wood Supply; GC Install	
505-LSS-JZD	4	LIMESTONE SLURRY FEED CONTROL	143993-ISO-505-LSS-JZD-01 143993-ISO-505-LSS-JZD-02 143993-ISO-505-LSS-JZD-03	85	130	143993-3-111	YES	YES	98	1.5	Wood Supply; GC Install	
700-WRW-HZD	8	RELAIM WATER HEADER FLUSH WATER HEADER	143993-ASA-DE2-ISO-1247	62	130	143993-3-111	YES	YES	75	1.5	BREC supply; GC Install	
702-WRW-JZD	6	RECLAIM WATER TO ABSORBER	143993-ISO-702-WRW-JZD-01 143993-ISO-702-WRW-JZD-02	62	130	143993-3-111	YES	YES	72	1.5	Wood Supply; GC Install	
101A-LRS-JZD	48	RECYCLE PUMP SUCTION	143993-ISO-101A-LRS-JZD-01	70	140	143993-3-112	NO	NO	81	N/A	Relocated; installed by GC	
101B-LRS-JZD	48	RECYCLE PUMP SUCTION	143993-ISO-101B-LRS-JZD-01	70	140	143993-3-112	NO	NO	81	N/A	Relocated; installed by GC	
101C-LRS-JZD	48	RECYCLE PUMP SUCTION	143993-ISO-101C-LRS-JZD-01	70	140	143993-3-112	NO	NO	81	N/A	Relocated; installed by GC	



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101D-LRS-JZD	48	RECYCLE PUMP SUCTION	143993-ISO-101D-LRS-JZD-01	70	140	143993-3-112	NO	NO	81	N/A	Relocated; installed by GC	
101E-LRS-JZD	48	RECYCLE PUMP SUCTION	143993-ISO-101E-LRS-JZD-01	70	140	143993-3-112	NO	NO	81	N/A	Relocated; installed by GC	
102A-LRS-JZD	48	RECYCLE PUMP DISCHARGE	143993-ISO-102A-LRS-JZD-01	70	140	143993-3-112	NO	NO	81	N/A	Modified by GC for new valve	
102B-LRS-JZD	48	RECYCLE PUMP DISCHARGE	143993-ISO-102B-LRS-JZD-01	70	140	143993-3-112	NO	NO	81	N/A	Modified by GC for new valve	
102C-LRS-JZD	48	RECYCLE PUMP DISCHARGE	143993-ISO-102C-LRS-JZD-01	70	140	143993-3-112	NO	NO	81	N/A	Modified by GC for new valve	
102D-LRS-JZD	48	RECYCLE PUMP DISCHARGE	143993-ISO-102D-LRS-JZD-01	70	140	143993-3-112	NO	NO	81	N/A	Modified by GC for new valve	
102E-LRS-JZD	48	RECYCLE PUMP DISCHARGE	143993-ISO-102E-LRS-JZD-01	70	140	143993-3-112	NO	NO	81	N/A	Modified by GC for new valve	
103A-LRS-JZD	3	RECYCLE PUMP DRAIN	NA	70	140	143993-3-112	NO	NO	81	N/A	Relocated; installed by GC	
103B-LRS-JZD	3	RECYCLE PUMP DRAIN	NA	70	140	143993-3-112	NO	NO	81	N/A	Relocated; installed by GC	
103C-LRS-JZD	3	RECYCLE PUMP DRAIN	NA	70	140	143993-3-112	NO	NO	81	N/A	Relocated; installed by GC	
103D-LRS-JZD	3	RECYCLE PUMP DRAIN	NA	70	140	143993-3-112	NO	NO	81	N/A	Relocated; installed by GC	
103E-LRS-JZD	3	RECYCLE PUMP DRAIN	NA	70	140	143993-3-112	NO	NO	81	N/A	Relocated; installed by GC	
132A-LHY-CID	0.75	RECYCLE PUMP SUCTION VALVE HYDRAULIC OIL RETURN	FIELD ROUTE	3000	150	143993-3-112	NO	NO	3450	N/A	Supply and install by GC	
132B-LHY-CID	0.75	RECYCLE PUMP SUCTION VALVE HYDRAULIC OIL RETURN	FIELD ROUTE	3000	150	143993-3-112	NO	NO	3450	N/A	Supply and install by GC	
132C-LHY-CID	0.75	RECYCLE PUMP SUCTION VALVE HYDRAULIC OIL RETURN	FIELD ROUTE	3000	150	143993-3-112	NO	NO	3450	N/A	Supply and install by GC	
132D-LHY-CID	0.75	RECYCLE PUMP SUCTION VALVE HYDRAULIC OIL RETURN	FIELD ROUTE	3000	150	143993-3-112	NO	NO	3450	N/A	Supply and install by GC	
132E-LHY-CID	0.75	RECYCLE PUMP SUCTION VALVE HYDRAULIC OIL RETURN	FIELD ROUTE	3000	150	143993-3-112	NO	NO	3450	N/A	Supply and install by GC	
135A-LHY-CID	0.75	RECYCLE PUMP DISCHARGE VALVE HYDRAULIC OIL RETURN	FIELD ROUTE	3000	150	143993-3-112	NO	NO	3450	N/A	Supply and install by GC	
135B-LHY-CID	0.75	RECYCLE PUMP DISCHARGE VALVE HYDRAULIC OIL RETURN	FIELD ROUTE	3000	150	143993-3-112	NO	NO	3450	N/A	Supply and install by GC	
135C-LHY-CID	0.75	RECYCLE PUMP DISCHARGE VALVE HYDRAULIC OIL RETURN	FIELD ROUTE	3000	150	143993-3-112	NO	NO	3450	N/A	Supply and install by GC	



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135D-LHY-CID	0.75	RECYCLE PUMP DISCHARGE VALVE HYDRAULIC OIL RETURN	FIELD ROUTE	3000	150	143993-3-112	NO	NO	3450	N/A	Supply and install by GC	
135E-LHY-CID	0.75	RECYCLE PUMP DISCHARGE VALVE HYDRAULIC OIL RETURN	FIELD ROUTE	3000	150	143993-3-112	NO	NO	3450	N/A	Supply and install by GC	
201A-WWA-JBD	4	ME WASH PUMP SUCTION	143993-ISO-201A-WWA-JBD-01	125	100	143993-3-113	YES	YES	188	1.5	Wood Supply; GC Install	
201B-WWA-JBD	4	ME WASH PUMP SUCTION	143993-ISO-201B-WWA-JBD-01	125	100	143993-3-113	YES	YES	188	1.5	Wood Supply; GC Install	
202A-WWA-JBD	4	ME WASH PUMP DISCHARGE	143993-ISO-202A-WWA-JBD-01	125	100	143993-3-113	YES	YES	188	1.5	Wood Supply; GC Install	
202B-WWA-JBD	4	ME WASH PUMP DISCHARGE	143993-ISO-202B-WWA-JBD-01	125	100	143993-3-113	YES	YES	188	1.5	Wood Supply; GC Install	
203-WWA-JBD	4	ME WASH WATER DISCHARGE HEADER	143993-ISO-203-WWA-JBD-01 143993-ISO-203-WWA-JBD-02 143993-ISO-203A-WWA-JBD	125	100	143993-3-113	YES	YES	188	1.5	Wood Supply; GC Install	
204-WWA-JBD	2	ME WASH WATER RECIRC	143993-ISO-204-WWA-JBD-01	125	100	143993-3-113	YES	YES	188	1.5	Wood Supply; GC Install	
205-WWA-JBD	6	ME WASH TANK OVERFLOW	NA	125	100	143993-3-113	NO	NO	188	N/A	Wood Supply; GC Install	
206-WWA-JBD	4	ME WASH TANK DRAIN	NA	125	100	143993-3-113	NO	NO	188	N/A	Wood Supply; GC Install	
220-WWA-JBD	4	ME WASH WATER 1ST STAGE BOTTOM	NA	125	100	143993-3-113	YES	YES	188	1.5	Relocated; installed by GC	
221-WWA-JBD	4	ME WASH WATER 1ST STAGE BOTTOM ZONE 1	NA	125	100	143993-3-113	YES	YES	188	1.5	Relocated; installed by GC	
222-WWA-JBD	4	ME WASH WATER 1ST STAGE BOTTOM ZONE 2	NA	125	100	143993-3-113	YES	YES	188	1.5	Relocated; installed by GC	
223-WWA-JBD	4	ME WASH WATER 1ST STAGE BOTTOM ZONE 3	NA	125	100	143993-3-113	YES	YES	188	1.5	Relocated; installed by GC	
224-WWA-JBD	4	ME WASH WATER 1ST STAGE BOTTOM ZONE 4	NA	125	100	143993-3-113	YES	YES	188	1.5	Relocated; installed by GC	
225-WWA-JBD	4	ME WASH WATER 1ST STAGE BOTTOM ZONE 5	NA	125	100	143993-3-113	YES	YES	188	1.5	Relocated; installed by GC	
226-WWA-JBD	4	ME WASH WATER 1ST STAGE BOTTOM ZONE 6	NA	125	100	143993-3-113	YES	YES	188	1.5	Relocated; installed by GC	
227-WWA-JBD	4	ME WASH WATER 1ST STAGE BOTTOM ZONE 7	NA	125	100	143993-3-113	YES	YES	188	1.5	Relocated; installed by GC	
228-WWA-JBD	4	ME WASH WATER 1ST STAGE BOTTOM ZONE 8	NA	125	100	143993-3-113	YES	YES	188	1.5	Relocated; installed by GC	
230-WWA-JBD	4	ME WASH WATER 1ST STAGE TOP	NA	125	100	143993-3-113	YES	YES	188	1.5	Relocated; installed by GC	



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231-WWA-JBD	4	ME WASH WATER 1ST STAGE TOP ZONE 1	NA	125	100	143993-3-113	YES	YES	188	1.5	Relocated; installed by GC	
232-WWA-JBD	4	ME WASH WATER 1ST STAGE TOP ZONE 2	NA	125	100	143993-3-113	YES	YES	188	1.5	Relocated; installed by GC	
233-WWA-JBD	4	ME WASH WATER 1ST STAGE TOP ZONE 3	NA	125	100	143993-3-113	YES	YES	188	1.5	Relocated; installed by GC	
234-WWA-JBD	4	ME WASH WATER 1ST STAGE TOP ZONE 4	NA	125	100	143993-3-113	YES	YES	188	1.5	Relocated; installed by GC	
240-WWA-JBD	4	ME WASH WATER 2ND STAGE BOTTOM	NA	125	100	143993-3-113	YES	YES	188	1.5	Relocated; installed by GC	
241-WWA-JBD	4	ME WASH WATER 2ND STAGE BOTTOM ZONE 1	NA	125	100	143993-3-113	YES	YES	188	1.5	Relocated; installed by GC	
242-WWA-JBD	4	ME WASH WATER 2ND STAGE BOTTOM ZONE 2	NA	125	100	143993-3-113	YES	YES	188	1.5	Relocated; installed by GC	
243-WWA-JBD	4	ME WASH WATER 2ND STAGE BOTTOM ZONE 3	NA	125	100	143993-3-113	YES	YES	188	1.5	Relocated; installed by GC	
244-WWA-JBD	4	ME WASH WATER 2ND STAGE BOTTOM ZONE 4	NA	125	100	143993-3-113	YES	YES	188	1.5	Relocated; installed by GC	
245-WWA-JBD	2	ME WASH WATER TO OXIDATION AIR SATURATION	FIELD ROUTE	125	100	143993-3-113	YES	YES	188	1.5	Supply and install by GC	
246-WWA-JBD	4	QUENCH WATER TANK INLET	143993-ISO-246-WWA-JBD	125	100	143993-3-113	YES	YES	188	1.5	Wood Supply; GC Install	
703-WWA-HBD	2	FLUSH WATER HOSE STATIONS HEADER	143993-ASA-DE2-ISO-1242	125	100	143993-3-113	YES	YES	188	1.5	Supply and install by GC	
800-WSW-HBD	4	BREC SERVICE WATER ME WASH TANK	143993-ASA-DE2-ISO-1243	125	100	143993-3-113	YES	YES	188	1.5	BREC supply; GC Install	
800-WSW-JBD	4	BREC SERVICE WATER ME WASH TANK	143993-ISO-800-WSW-JBD-01	125	100	143993-3-113	YES	YES	188	1.5	Wood Supply; GC Install	
901-FOA-JAD	30	OXIDATION AIR HEADER	NA	20	250	143993-3-114	NO	NO	23	N/A	Relocated; installed by GC	
901-FOA-JBD	30	OXIDATION AIR HEADER	143993-ISO-901-FOA-JBD-01 143993-ISO-901-FOA-JBD-02	20	250	143993-3-114	NO	NO	23	N/A	Wood Supply; GC Install	
910-FOA-JAD	10	OXIDATION AIR SPARGER	NA	20	250	143993-3-114	NO	NO	23	N/A	Wood Supply; GC Install	
911-FOA-JAD	10	OXIDATION AIR SPARGER	NA	20	250	143993-3-114	NO	NO	23	N/A	Wood Supply; GC Install	
912-FOA-JAD	10	OXIDATION AIR SPARGER	NA	20	250	143993-3-114	NO	NO	23	N/A	Wood Supply; GC Install	
913-FOA-JAD	10	OXIDATION AIR SPARGER	NA	20	250	143993-3-114	NO	NO	23	N/A	Wood Supply; GC Install	



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914-FOA-JAD	10	OXIDATION AIR SPARGER	NA	20	250	143993-3-114	NO	NO	23	N/A	Wood Supply; GC Install	
915-FOA-JAD	10	OXIDATION AIR SPARGER	NA	20	250	143993-3-114	NO	NO	23	N/A	Wood Supply; GC Install	
916-FOA-JAD	10	OXIDATION AIR SPARGER	NA	20	250	143993-3-114	NO	NO	23	N/A	Wood Supply; GC Install	
917-FOA-JAD	10	OXIDATION AIR SPARGER	NA	20	250	143993-3-114	NO	NO	23	N/A	Wood Supply; GC Install	
900A-FOA-JBD	24	OXIDATION AIR DISCHARGE	143993-ISO-900A-FOA-JBD-01	20	250	143993-3-115	NO	NO	23	N/A	Wood Supply; GC Install	
900B-FOA-JBD	24	OXIDATION AIR DISCHARGE	143993-ISO-900B-FOA-JBD-01	20	250	143993-3-115	NO	NO	23	N/A	Wood Supply; GC Install	
900C-FOA-JBD	24	OXIDATION AIR DISCHARGE	143993-ISO-900B-FOA-JBD-01	20	250	143993-3-115	NO	NO	23	N/A	Wood Supply; GC Install	
905A-LOL-HID	1.5	OXIDATION AIR LUBE OIL	FIELD ROUTE	120	200	143993-3-115	NO	NO	138	N/A	Supply and install by GC	
905B-LOL-HID	1.5	OXIDATION AIR LUBE OIL	FIELD ROUTE	120	200	143993-3-115	NO	NO	138	N/A	Supply and install by GC	
905C-LOL-HID	1.5	OXIDATION AIR LUBE OIL	FIELD ROUTE	120	200	143993-3-115	NO	NO	138	N/A	Supply and install by GC	
301A-LWS-JZD	8	HYDROCLONE FEED PUMP SUCTION	143993-ISO-301A-LWS-JZD-01	105	140	143993-3-116	NO	NO	121	N/A	Wood Supply; GC Install	
301B-LWS-JZD	8	HYDROCLONE FEED PUMP SUCTION	143993-ISO-301B-LWS-JZD-01	105	140	143993-3-116	NO	NO	121	N/A	Wood Supply; GC Install	
302A-LWS-JZD	8	HYDROCLONE FEED PUMP DISCHARGE	143993-ISO-302A-LWS-JZD-01	105	140	143993-3-116	NO	NO	121	N/A	Wood Supply; GC Install	
302B-LWS-JZD	8	HYDROCLONE FEED PUMP DISCHARGE	143993-ISO-302B-LWS-JZD-01	105	140	143993-3-116	NO	NO	121	N/A	Wood Supply; GC Install	
303A-LWS-JZD	3	HYDROCLONE FEED PUMP DRAIN	NA	105	140	143993-3-116	NO	NO	121	N/A	Wood Supply; GC Install	
303B-LWS-JZD	3	HYDROCLONE FEED PUMP DRAIN	NA	105	140	143993-3-116	NO	NO	121	N/A	Wood Supply; GC Install	
304-LWS-JZD	8	HYDROCLONE FEED DISCHARGE HEADER	143993-ISO-304-LWS-JZD-01 143993-ISO-304-LWS-JZD-02	105	140	143993-3-116	NO	NO	121	N/A	Wood Supply; GC Install	
305-LWS-JZD	8	HYDROCLONE FEED RECIRC	143993-ISO-305-LWS-JZD-01	105	140	143993-3-116	NO	NO	121	N/A	Wood Supply; GC Install	
306-LWS-HZD	8	HYDROCLONE FEED TO BLOW DOWN SUMP	143993-ASA-DE2-ISO-1244	105	140	143993-3-116	NO	NO	126	N/A	BREC supply; GC Install	1
130-LHY-CID	0.75	HYDRAULIC PUMP DISCHARGE HEADER	FIELD ROUTE	3000	150	143993-3-117	NO	NO	3450	N/A	Supply and install by GC	



LINE NO.	SIZE (in)	DESCRIPTION	ISO NO	SYS. DESIGN PRESSURE (psig)	SYS. DESIGN TEMP (deg F)	P&ID PIPE DWG	INSULATED	HEAT TRACED	TEST PRES (psig)	INSUL SIZE	SUPPLY/INSTALL	REV
131A-LHY-CID	0.75	RECYCLE PUMP SUCTION VALVE HYDRAULIC OIL FEED	FIELD ROUTE	3000	150	143993-3-117	NO	NO	3450	N/A	Supply and install by GC	
131B-LHY-CID	0.75	RECYCLE PUMP SUCTION VALVE HYDRAULIC OIL FEED	FIELD ROUTE	3000	150	143993-3-117	NO	NO	3450	N/A	Supply and install by GC	
131C-LHY-CID	0.75	RECYCLE PUMP SUCTION VALVE HYDRAULIC OIL FEED	FIELD ROUTE	3000	150	143993-3-117	NO	NO	3450	N/A	Supply and install by GC	
131D-LHY-CID	0.75	RECYCLE PUMP SUCTION VALVE HYDRAULIC OIL FEED	FIELD ROUTE	3000	150	143993-3-117	NO	NO	3450	N/A	Supply and install by GC	
131E-LHY-CID	0.75	RECYCLE PUMP SUCTION VALVE HYDRAULIC OIL FEED	FIELD ROUTE	3000	150	143993-3-117	NO	NO	3450	N/A	Supply and install by GC	
133-LHY-CID	0.75	HYDRAULIC PUMP RECIRC	FIELD ROUTE	3000	150	143993-3-117	NO	NO	3450	N/A	Supply and install by GC	
134A-LHY-CID	0.75	RECYCLE PUMP DISCHARGE VALVE HYDRAULIC OIL FEED	FIELD ROUTE	3000	150	143993-3-117	NO	NO	3450	N/A	Supply and install by GC	
134B-LHY-CID	0.75	RECYCLE PUMP DISCHARGE VALVE HYDRAULIC OIL FEED	FIELD ROUTE	3000	150	143993-3-117	NO	NO	3450	N/A	Supply and install by GC	
134C-LHY-CID	0.75	RECYCLE PUMP DISCHARGE VALVE HYDRAULIC OIL FEED	FIELD ROUTE	3000	150	143993-3-117	NO	NO	3450	N/A	Supply and install by GC	
134D-LHY-CID	0.75	RECYCLE PUMP DISCHARGE VALVE HYDRAULIC OIL FEED	FIELD ROUTE	3000	150	143993-3-117	NO	NO	3450	N/A	Supply and install by GC	
134E-LHY-CID	0.75	RECYCLE PUMP DISCHARGE VALVE HYDRAULIC OIL FEED	FIELD ROUTE	3000	150	143993-3-117	NO	NO	3450	N/A	Supply and install by GC	
503-LSS-HZD	6	LIMESTONE SLURRY RECIRC	143993-ASA-DE2-ISO-1245	85	130	143993-3-124	NO	NO	102	N/A	BREC supply; GC Install	1
307-LWS-JZD	3	HYDROCLONE FEED DRAIN	143993-ISO-307-LWS-JZD	105	140	143993-3-130	NO	NO	123	N/A	Wood Supply; GC Install	
340-LWS-JZD	8	HYDROCLONE UNDERFLOW TO GYPSUM TRANSFER TANK	143993-ISO-340-LWS-JZD	105	140	143993-3-130	NO	NO	123	N/A	Wood Supply; GC Install	
341-LWS-JZD	8	HYDROCLONE OVERFLOW TO ABSORBER	143993-ISO-341-LWS-JZD	105	140	143993-3-130	NO	NO	123	N/A	Wood supply; GC Install	
700-WRW-HZD	8	BREC RECLAIM WATER ABSORBER RECLAIM WATER HEADER	143993-ASA-DE2-ISO-1247	62	130	143993-3-132	YES	YES	74.4	1.5	BREC supply; GC Install	
120A-ASD-JZD	4	ABSORBER AREA SUMP DISCHARGE	143993-ISO-120A-ASD-JZD-01	50	140	143993-3-138	YES	YES	60	1.5	Wood Supply; GC Install	
120B-ASD-JZD	4	ABSORBER AREA SUMP DISCHARGE	143993-ISO-120B-ASD-JZD-01	50	140	143993-3-138	YES	YES	60	1.5	Wood Supply; GC Install	
121-ASD-JZD	6	ABSORBER AREA SUMP DISCHARGE HEADER	143993-ISO-121-ASD-JZD-01	50	140	143993-3-138	YES	YES	60	1.5	Wood Supply; GC Install	
122-ASD-JZD	6	ABSORBER AREA SUMP TO ABSORBER	143993-ISO-122-ASD-JZD-01 143993-ISO-122-ASD-JZD-02	50	140	143993-3-138	YES	YES	60	1.5	Wood Supply; GC Install	

LINE NO.	SIZE (in)	DESCRIPTION	ISO NO	SYS. DESIGN PRESSURE (psig)	SYS. DESIGN TEMP (deg F)	P&ID PIPE DWG	INSULATED	HEAT TRACED	TEST PRES (psig)	INSUL SIZE	SUPPLY/INSTALL	REV
123-ASD-HZD	6	ABSORBER AREA SUMP TO BLOW DOWN SUMP	143993-ASA-DE2-ISO-1246	50	140	143993-3-138	YES	YES	60	1.5	BREC supply; GC Install	
401A-LWS-JZD	4	GYPSUM TRANSFER PUMP SUCTION	143993-ISO-401A-LWS-JZD-01	105	140	143993-3-139	NO	NO	126	N/A	Wood Supply; GC Install	
401B-LWS-JZD	4	GYPSUM TRANSFER PUMP SUCTION	143993-ISO-401B-LWS-JZD-01	105	140	143993-3-139	NO	NO	126	N/A	Wood Supply; GC Install	
402A-LWS-JZD	4	GYPSUM TRANSFER PUMP DISCHARGE	143993-ISO-402A-LWS-JZD 143993-ISO-402A-LWS-JZD-01 143993-ISO-402A-LWS-JZD-02	105	140	143993-3-139	NO	NO	126	N/A	Wood Supply; GC Install	
402B-LWS-JZD	4	GYPSUM TRANSFER PUMP DISCHARGE	143993-ISO-402B-LWS-JZD-01	105	140	143993-3-139	NO	NO	126	N/A	Wood Supply; GC Install	
403A-LWS-JZD	3	GYPSUM TRANSFER PUMP DRAIN	NA	105	140	143993-3-139	NO	NO	126	N/A	Wood Supply; GC Install	
403B-LWS-JZD	3	GYPSUM TRANSFER PUMP DRAIN	NA	105	140	143993-3-139	NO	NO	126	N/A	Wood Supply; GC Install	
404-LWS-JZD	4	GYPSUM TRANSFER PUMP RECIRC	143993-ISO-404-LWS-JZD-01	105	140	143993-3-139	NO	NO	126	N/A	Wood Supply; GC Install	
405A-LWS-HZD	4	GYPSUM TRANSFER PUMP DISCHARGE HEADER	143993-ASA-DE2-ISO-1248	105	140	143993-3-139	NO	NO	126	N/A	BREC supply; GC Install	
405B-LWS-HZD	4	GYPSUM TRANSFER PUMP DISCHARGE HEADER	143993-ASA-DE2-ISO-1267	105	140	143993-3-139	NO	NO	126	N/A	BREC supply; GC Install	
406-LWS-JZD	6	GYPSUM TRANSFER TANK OVERFLOW	NA	105	140	143993-3-139	NO	NO	126	N/A	Wood Supply; GC Install	
407-LWS-JZD	4	GYPSUM TRANSFER TANK DRAIN	NA	105	140	143993-3-139	NO	NO	126	N/A	Wood Supply; GC Install	
704-WRW-HZD	2	FLUSH WATER LIMESTONE SLURRY FEED	143993-ASA-DE2-ISO-1249	62	130	143993-3-141	YES	YES	74.4	1.5	Supply and install by GC	
710A-WRW-JZD	2	FLUSH WATER RECYCLE PUMP	143993-ASA-DE2-ISO-1252	62	130	143993-3-141	YES	YES	74.4	1.5	Supply and install by GC	
710B-WRW-JZD	2	FLUSH WATER RECYCLE PUMP	143993-ASA-DE2-ISO-1253	62	130	143993-3-141	YES	YES	74.4	1.5	Supply and install by GC	
710C-WRW-JZD	2	FLUSH WATER RECYCLE PUMP	143993-ASA-DE2-ISO-1254	62	130	143993-3-141	YES	YES	74.4	1.5	Supply and install by GC	
710D-WRW-JZD	2	FLUSH WATER RECYCLE PUMP	143993-ASA-DE2-ISO-1255	62	130	143993-3-141	YES	YES	74.4	1.5	Supply and install by GC	
710E-WRW-JZD	2	FLUSH WATER RECYCLE PUMP	143993-ASA-DE2-ISO-1256	62	130	143993-3-141	YES	YES	74.4	1.5	Supply and install by GC	
711A-WRW-JZD	2	FLUSH WATER GYPSUM TRANSFER PUMP	143993-ASA-DE2-ISO-1250	62	130	143993-3-141	YES	YES	74.4	1.5	Supply and install by GC	
711B-WRW-JZD	2	FLUSH WATER GYPSUM TRANSFER PUMP	143993-ASA-DE2-ISO-1251	62	130	143993-3-141	YES	YES	74.4	1.5	Supply and install by GC	



LINE NO.	SIZE (in)	DESCRIPTION	ISO NO	SYS. DESIGN PRESSURE (psig)	SYS. DESIGN TEMP (deg F)	P&ID PIPE DWG	INSULATED	HEAT TRACED	TEST PRES (psig)	INSUL SIZE	SUPPLY/INSTALL	REV
712A-WRW-JZD	2	FLUSH WATER HYDROCLONE FEED PUMP	143993-ASA-DE2-ISO-1260	62	130	143993-3-141	YES	YES	74.4	1.5	Supply and install by GC	
712B-WRW-JZD	2	FLUSH WATER HYDROCLONE FEED PUMP	143993-ASA-DE2-ISO-1261	62	130	143993-3-141	YES	YES	74.4	1.5	Supply and install by GC	
713-WRW-JZD	2	FLUSH WATER HYDROCLONE FEED RECIRC	143993-ASA-DE2-ISO-1257	62	130	143993-3-141	YES	YES	74.4	1.5	Supply and install by GC	
714-WRW-HZD	4	FLUSH WATER HYDROCLONE FEED HEADER	143993-ASA-DE2-ISO-1258	62	130	143993-3-141	YES	YES	74.4	1.5	BREC supply; GC Install	
715-WRW-JZD	2	FLUSH WATER GYPSUM TRANSFER HEADER	143993-ASA-DE2-ISO-1259	62	130	143993-3-141	YES	YES	74.4	1.5	BREC supply; GC Install	
951-IAI-HID	2	INSTRUMENT AIR RECEIVER OUTLET	143993-ASA-DE2-ISO-1262	150	150	143993-3-144	NO	NO	225	N/A	Supply and install by GC	
952-IAI-HID	1.5	INSTRUMENT AIR HEADER	143993-ASA-DE2-ISO-1263	150	150	143993-3-144	NO	NO	225	N/A	Supply and install by GC	
953-IAI-HID	1	INSTRUMENT AIR USERS EL 390-10	FIELD ROUTE	150	150	143993-3-144	NO	NO	225	N/A	Supply and install by GC	
954-IAI-HID	1.5	INSTRUMENT AIR USERS EL 427-10	FIELD ROUTE	150	150	143993-3-144	NO	NO	225	N/A	Supply and install by GC	
955-IAI-HID	0.5	INSTRUMENT AIR USERS EL 462-4	FIELD ROUTE	150	150	143993-3-144	NO	NO	225	N/A	Supply and install by GC	
956-IAI-HID	0.75	INSTRUMENT AIR USERS EL 483-1	FIELD ROUTE	150	150	143993-3-144	NO	NO	225	N/A	Supply and install by GC	
957-IAI-HID	1	INSTRUMENT AIR USERS EL 516-7	FIELD ROUTE	150	150	143993-3-144	NO	NO	225	N/A	Supply and install by GC	
960-IAI-HID	0.75	INSTRUMENT AIR OXIDATION AIR HEADER	FIELD ROUTE	150	150	143993-3-144	NO	NO	225	N/A	Supply and install by GC	
971-IAI-HID	2	BREC SERVICE AIR RECEIVER INLET	143993-ASA-DE2-ISO-1264	150	150	143993-3-144	NO	NO	225	N/A	Supply and install by GC	
972-IAI-HID	2	SERVICE AIR RECEIVER BYPASS	143993-ASA-DE2-ISO-1265	150	150	143993-3-144	NO	NO	225	N/A	Supply and install by GC	
980-IAI-HID	2	SERVICE AIR HEADER	143993-ASA-DE2-ISO-1266	150	150	143993-3-144	NO	NO	225	N/A	Supply and install by GC	
840A-WPW-SK4	1.5	POTABLE WATER HEATER SUPPLY LINE	FIELD ROUTE	150	150	143993-ASA-DC0-PID-1111	YES	YES	225	1.5	Supply and install by GC	1
840-WPW-SK4	1.5	POTABLE WATER HEATER SUPPLY LINE	FIELD ROUTE 143993-ASA-DD1-PLN-1406 143993-ASA-DD2-RCD-1314	150	150	143993-ASA-DC0-PID-1111	NO	NO	225	N/A	Supply and install by GC	1
841-WPW-SK4	1.5	POTABLE WATER HEATER BYPASS LINE	FIELD ROUTE	150	150	143993-ASA-DC0-PID-1111	NO	NO	225	N/A	Supply and install by GC	1
842A-WPW-SK4	1.5	POTABLE WATER SAFETY SHOWER SUPPLY LINE	FIELD ROUTE	150	150	143993-ASA-DC0-PID-1111	YES	YES	225	1.5	Supply and install by GC	1

WoodPLC INDUSTRIAL POWER
437 GRANT STREET
PITTSBURGH, PA 15219
DATE: 8/25/2021



WoodPLC CONTRACT # 143993
143993-IPC-DE2-LST-0004
LINE LIST
REV: 2

LINE NO.	SIZE (in)	DESCRIPTION	ISO NO	SYS. DESIGN PRESSURE (psig)	SYS. DESIGN TEMP (deg F)	P&ID PIPE DWG	INSULATED	HEAT TRACED	TEST PRES (psig)	INSUL SIZE	SUPPLY/INSTALL	REV
842-WPW-SK4	1.5	POTABLE WATER SAFETY SHOWER SUPPLY LINE	FIELD ROUTE 143993-ASA-DE4-PLU-1580	150	150	143993-ASA-DC0-PID-1111	NO	NO	225	N/A	Supply and install by GC	1

WoodPLC INDUSTRIAL POWER
437 GRANT STREET
PITTSBURGH, PA 15219
DATE: 8/18/2021



WoodPLC CONTRACT # 143993
143993-IPC-DG0-LST-0003
VALVE LIST
REV: 1

VALVE TAG NO(S)	DESCRIPTION	QTY	TYPE	CLASS	SIZE [IN]	DSGN PRESS	DSGN TEMP [°F]	BODY MATERIAL	END PREP	PIPE SPEC	SYSTEM CODE	VALVE CODE OR DATASHEET	P & ID	SUPPLIED BY	MANUFACTURE	MODEL NO.	REV
1V-001	QUENCH WATER INLET MANUAL VALVE	1	BUTTERFLY	TBD	4	125 ANSI	TBD	CARBON STEEL	LUG	JBD	WWA	F41V	143993-03-110	WOOD	TBD	TBD	
1V-002	INLET DUCT DRAIN FLUSH	1	BALL	TBD	2	150 ANSI	TBD	PLASTIC LINED	FLANGED	HAD	WRW	B81N	143993-03-110	GENERAL CONTRACTOR	TBD	TBD	1
1V-291	QUENCH WATER TANK OUTLET ISOLATION	1	KNIFE GATE	TBD	6	125 ANSI	TBD	RUBBER LINED	LUG	JBD	WWA	K21V	143993-03-110	WOOD	TBD	TBD	
1V-427	QUENCH WATER LEVEL TRANSMITTER	1	BALL	TBD	2	125 ANSI	TBD	PLASTIC LINED	FLANGED	JBD	WQW	B81N	143993-03-110	WOOD	TBD	TBD	
1FV-246	QUENCH WATER INLET ISOLATION VALVE	1	BUTTERFLY	TBD	4	125 ANSI	TBD	CARBON STEEL	LUG	JBD	WWA	143993-IPC-DE2-DAT-0008	143993-03-110	WOOD	TBD	TBD	
1FV-290	ABSORBER QUENCH ISOLATION VALVE	1	BUTTERFLY	TBD	6	125 ANSI	TBD	C-276	FLANGED	JAD	WQW	143993-IPC-DE2-DAT-0003	143993-03-110	WOOD	TBD	TBD	
1FCV-700	RECLAIM WATER FLOW CONTROL VALVE	1	BALL	TBD	4	125 ANSI	TBD	STAINLESS STEEL	FLANGED	JZD	WRW	143993-IPC-DE2-DAT-0005	143993-03-111	WOOD	TBD	TBD	
1FCV-540	REAGENT FEED FLOW CONTROL VALVE	1	BALL	TBD	4	125 ANSI	120	CERAMIC	FLANGED	JZD	LSS	143993-IPC-DE2-DAT-0001	143993-03-111	WOOD	TBD	TBD	
1HCV-540	REAGENT FEED BYPASS	1	PINCH	TBD	4	125 ANSI	TBD	RUBBER LINED	FLANGED	JZD	LSS	H21N	143993-03-111	WOOD	TBD	TBD	
1HCV-700	RECLAIM WATER BYPASS	1	BALL	TBD	6	125 ANSI	TBD	STAINLESS STEEL	FLANGED	JZD	WRW	B71N	143993-03-111	WOOD	TBD	TBD	
1V-005	ABSORBER DRAIN	1	KNIFE GATE	TBD	6	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LRS	K21V	143993-03-111	WOOD	TBD	TBD	
1V-006	REAGENT FEED CONTROL VALVE INLET	1	KNIFE GATE	TBD	4	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LSS	K21V	143993-03-111	WOOD	TBD	TBD	
1V-007	REAGENT FEED CONTROL VALVE OUTLET	1	KNIFE GATE	TBD	4	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LSS	K21V	143993-03-111	WOOD	TBD	TBD	
1V-008	REAGENT FEED FLUSH WATER	1	CHECK	TBD	2	150 ANSI	TBD	RUBBER LINED	FLANGED	HZD	WRW	C21N	143993-03-111	GENERAL CONTRACTOR	TBD	TBD	
1V-102	RECLAIM WATER HEADER	1	PLUG	TBD	6	125 ANSI	TBD	PLASTIC LINED	FLANGED	JZD	WRW	P81N	143993-03-111	WOOD	TBD	TBD	
1V-103	RECLAIM WATER CONTROL VALVE INLET	1	PLUG	TBD	6	125 ANSI	TBD	PLASTIC LINED	FLANGED	JZD	WRW	P81N	143993-03-111	WOOD	TBD	TBD	
1V-104	RECLAIM WATER CONTROL VALVE OUTLET	1	PLUG	TBD	6	125 ANSI	TBD	PLASTIC LINED	FLANGED	JZD	WRW	P81N	143993-03-111	WOOD	TBD	TBD	
1V-202	RECLAIM WATER FLUSH HEADER	1	KNIFE GATE	TBD	6	150 ANSI	TBD	RUBBER LINED	LUG	HZD	WRW	K21V	143993-03-111	GENERAL CONTRACTOR	TBD	TBD	
1V-433	ABSORBER AGITATOR A FLUSH	1	PLUG	TBD	2	125 ANSI	TBD	PLASTIC LINED	FLANGED	JBD	LRS	P81N	143993-03-111	WOOD	TBD	TBD	
1V-434	ABSORBER AGITATOR B FLUSH	1	PLUG	TBD	2	125 ANSI	TBD	PLASTIC LINED	FLANGED	JBD	LRS	P81N	143993-03-111	WOOD	TBD	TBD	
1V-435	ABSORBER AGITATOR C FLUSH	1	PLUG	TBD	2	125 ANSI	TBD	PLASTIC LINED	FLANGED	JBD	LRS	P81N	143993-03-111	WOOD	TBD	TBD	
1V-436	ABSORBER AGITATOR D FLUSH	1	PLUG	TBD	2	125 ANSI	TBD	PLASTIC LINED	FLANGED	JBD	LRS	P81N	143993-03-111	WOOD	TBD	TBD	
1V-437	ABSORBER AGITATOR E FLUSH	1	PLUG	TBD	2	125 ANSI	TBD	PLASTIC LINED	FLANGED	JBD	LRS	P81N	143993-03-111	WOOD	TBD	TBD	
1FV-530	LIMESTONE SLURRY ABSORBER FEED	1	KNIFE GATE	TBD	6	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LSS	143993-IPC-DE2-DAT-0011	143993-03-111	WOOD	TBD	TBD	
1FV-531	REAGENT FEED FLUSH WATER	1	PLUG	TBD	2	125 ANSI	TBD	PLASTIC LINED	FLANGED	JZD	WRW	143993-IPC-DE2-DAT-0016	143993-03-111	WOOD	TBD	TBD	
1FV-102A	ABSORBER RECYCLE PUMP DRAIN	1	KNIFE GATE	TBD	3	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LRS	143993-IPC-DE2-DAT-0009	143993-03-112	WOOD	TBD	TBD	
1FV-102B	ABSORBER RECYCLE PUMP DRAIN	1	KNIFE GATE	TBD	3	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LRS	143993-IPC-DE2-DAT-0009	143993-03-112	WOOD	TBD	TBD	
1FV-102C	ABSORBER RECYCLE PUMP DRAIN	1	KNIFE GATE	TBD	3	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LRS	143993-IPC-DE2-DAT-0009	143993-03-112	WOOD	TBD	TBD	
1FV-102D	ABSORBER RECYCLE PUMP DRAIN	1	KNIFE GATE	TBD	3	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LRS	143993-IPC-DE2-DAT-0009	143993-03-112	WOOD	TBD	TBD	
1FV-101A	ABSORBER RECYCLE PUMP SUCTION	1	KNIFE GATE	TBD	48	125 ANSI	TBD	TBD	TBD	JZD	LRS	NA	143993-03-112	EXISTING	TBD	TBD	
1FV-101B	ABSORBER RECYCLE PUMP SUCTION	1	KNIFE GATE	TBD	48	125 ANSI	TBD	TBD	TBD	JZD	LRS	NA	143993-03-112	EXISTING	TBD	TBD	
1FV-101C	ABSORBER RECYCLE PUMP SUCTION	1	KNIFE GATE	TBD	48	125 ANSI	TBD	TBD	TBD	JZD	LRS	NA	143993-03-112	EXISTING	TBD	TBD	
1FV-101D	ABSORBER RECYCLE PUMP SUCTION	1	KNIFE GATE	TBD	48	125 ANSI	TBD	TBD	TBD	JZD	LRS	NA	143993-03-112	EXISTING	TBD	TBD	
1FV-101E	ABSORBER RECYCLE PUMP SUCTION	1	KNIFE GATE	TBD	48	125 ANSI	TBD	TBD	TBD	JZD	LRS	NA	143993-03-112	EXISTING	TBD	TBD	
1FV-102E	ABSORBER RECYCLE PUMP DRAIN	1	KNIFE GATE	TBD	3	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LRS	143993-IPC-DE2-DAT-0009	143993-03-112	WOOD	TBD	TBD	
1FV-103A	ABSORBER RECYCLE PUMP FLUSH WATER	1	PLUG	TBD	2	125 ANSI	TBD	PLASTIC LINED	FLANGED	JZD	WRW	143993-IPC-DE2-DAT-0016	143993-03-112	WOOD	TBD	TBD	
1FV-103B	ABSORBER RECYCLE PUMP FLUSH WATER	1	PLUG	TBD	2	125 ANSI	TBD	PLASTIC LINED	FLANGED	JZD	WRW	143993-IPC-DE2-DAT-0016	143993-03-112	WOOD	TBD	TBD	
1FV-103C	ABSORBER RECYCLE PUMP FLUSH WATER	1	PLUG	TBD	2	125 ANSI	TBD	PLASTIC LINED	FLANGED	JZD	WRW	143993-IPC-DE2-DAT-0016	143993-03-112	WOOD	TBD	TBD	
1FV-103D	ABSORBER RECYCLE PUMP FLUSH WATER	1	PLUG	TBD	2	125 ANSI	TBD	PLASTIC LINED	FLANGED	JZD	WRW	143993-IPC-DE2-DAT-0016	143993-03-112	WOOD	TBD	TBD	
1FV-103E	ABSORBER RECYCLE PUMP FLUSH WATER	1	PLUG	TBD	2	125 ANSI	TBD	PLASTIC LINED	FLANGED	JZD	WRW	143993-IPC-DE2-DAT-0016	143993-03-112	WOOD	TBD	TBD	
1FV-104A	ABSORBER RECYCLE PUMP DISCHARGE	1	KNIFE GATE	TBD	48	125 ANSI	TBD	TBD	TBD	JZD	LRS	NA	143993-03-112	WOOD	TBD	TBD	
1FV-104B	ABSORBER RECYCLE PUMP DISCHARGE	1	KNIFE GATE	TBD	48	125 ANSI	TBD	TBD	TBD	JZD	LRS	NA	143993-03-112	WOOD	TBD	TBD	
1FV-104C	ABSORBER RECYCLE PUMP DISCHARGE	1	KNIFE GATE	TBD	48	125 ANSI	TBD	TBD	TBD	JZD	LRS	NA	143993-03-112	WOOD	TBD	TBD	
1FV-104D	ABSORBER RECYCLE PUMP DISCHARGE	1	KNIFE GATE	TBD	48	125 ANSI	TBD	TBD	TBD	JZD	LRS	NA	143993-03-112	WOOD	TBD	TBD	

WoodPLC INDUSTRIAL POWER
437 GRANT STREET
PITTSBURGH, PA 15219
DATE: 8/18/2021



WoodPLC CONTRACT # 143993
143993-IPC-DG0-LST-0003
VALVE LIST
REV: 1

VALVE TAG NO(S)	DESCRIPTION	QTY	TYPE	CLASS	SIZE [IN]	DSGN PRESS	DSGN TEMP [°F]	BODY MATERIAL	END PREP	PIPE SPEC	SYSTEM CODE	VALVE CODE OR DATASHEET	P & ID	SUPPLIED BY	MANUFACTURE	MODEL NO.	REV
1FV-104E	ABSORBER RECYCLE PUMP DISCHARGE	1	KNIFE GATE	TBD	48	125 ANSI	TBD	TBD	TBD	JZD	LRS	NA	143993-03-112	WOOD	TBD	TBD	
1V-011	ABSORBER RECYCLE PUMP FLUSH WATER	1	CHECK	TBD	2	150 ANSI	TBD	CAST IRON / DUCTILE IRON	FLANGED	HZD	WRW	C11N	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-012	ABSORBER RECYCLE PUMP FLUSH WATER	1	CHECK	TBD	2	150 ANSI	TBD	CAST IRON / DUCTILE IRON	FLANGED	HZD	WRW	C11N	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-013	ABSORBER RECYCLE PUMP FLUSH WATER	1	CHECK	TBD	2	150 ANSI	TBD	CAST IRON / DUCTILE IRON	FLANGED	HZD	WRW	C11N	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-014	ABSORBER RECYCLE PUMP FLUSH WATER	1	CHECK	TBD	2	150 ANSI	TBD	CAST IRON / DUCTILE IRON	FLANGED	HZD	WRW	C11N	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-015	ABSORBER RECYCLE PUMP FLUSH WATER	1	CHECK	TBD	2	150 ANSI	TBD	CAST IRON / DUCTILE IRON	FLANGED	HZD	WRW	C11N	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-030	SUCTION VALVE 101A HYDRAULIC OIL SUPPLY	1	BALL	TBD	3/4	1500 ANSI	TBD	TBD	TBD	CID	LHY	NA	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-031	SUCTION VALVE 101B HYDRAULIC OIL SUPPLY	1	BALL	TBD	3/4	1500 ANSI	TBD	TBD	TBD	CID	LHY	NA	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-032	SUCTION VALVE 101C HYDRAULIC OIL SUPPLY	1	BALL	TBD	3/4	1500 ANSI	TBD	TBD	TBD	CID	LHY	NA	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-033	SUCTION VALVE 101D HYDRAULIC OIL SUPPLY	1	BALL	TBD	3/4	1500 ANSI	TBD	TBD	TBD	CID	LHY	NA	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-034	SUCTION VALVE 101E HYDRAULIC OIL SUPPLY	1	BALL	TBD	3/4	1500 ANSI	TBD	TBD	TBD	CID	LHY	NA	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-035	SUCTION VALVE 101A HYDRAULIC OIL RETURN	1	BALL	TBD	3/4	1500 ANSI	TBD	TBD	TBD	CID	LHY	NA	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-036	SUCTION VALVE 101B HYDRAULIC OIL RETURN	1	BALL	TBD	3/4	1500 ANSI	TBD	TBD	TBD	CID	LHY	NA	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-037	SUCTION VALVE 101C HYDRAULIC OIL RETURN	1	BALL	TBD	3/4	1500 ANSI	TBD	TBD	TBD	CID	LHY	NA	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-038	SUCTION VALVE 101D HYDRAULIC OIL RETURN	1	BALL	TBD	3/4	1500 ANSI	TBD	TBD	TBD	CID	LHY	NA	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-039	SUCTION VALVE 101E HYDRAULIC OIL RETURN	1	BALL	TBD	3/4	1500 ANSI	TBD	TBD	TBD	CID	LHY	NA	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-130	DISCHARGE VALVE 104A HYDRAULIC OIL SUPPLY	1	BALL	TBD	3/4	1500 ANSI	TBD	TBD	TBD	CID	LHY	NA	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-131	DISCHARGE VALVE 104B HYDRAULIC OIL SUPPLY	1	BALL	TBD	3/4	1500 ANSI	TBD	TBD	TBD	CID	LHY	NA	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-132	DISCHARGE VALVE 104C HYDRAULIC OIL SUPPLY	1	BALL	TBD	3/4	1500 ANSI	TBD	TBD	TBD	CID	LHY	NA	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-133	DISCHARGE VALVE 104D HYDRAULIC OIL SUPPLY	1	BALL	TBD	3/4	1500 ANSI	TBD	TBD	TBD	CID	LHY	NA	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-134	DISCHARGE VALVE 104E HYDRAULIC OIL SUPPLY	1	BALL	TBD	3/4	1500 ANSI	TBD	TBD	TBD	CID	LHY	NA	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-135	DISCHARGE VALVE 104A HYDRAULIC OIL RETURN	1	BALL	TBD	3/4	1500 ANSI	TBD	TBD	TBD	CID	LHY	NA	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-136	DISCHARGE VALVE 104B HYDRAULIC OIL RETURN	1	BALL	TBD	3/4	1500 ANSI	TBD	TBD	TBD	CID	LHY	NA	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-137	DISCHARGE VALVE 104C HYDRAULIC OIL RETURN	1	BALL	TBD	3/4	1500 ANSI	TBD	TBD	TBD	CID	LHY	NA	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-138	DISCHARGE VALVE 104D HYDRAULIC OIL RETURN	1	BALL	TBD	3/4	1500 ANSI	TBD	TBD	TBD	CID	LHY	NA	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-139	DISCHARGE VALVE 104E HYDRAULIC OIL RETURN	1	BALL	TBD	3/4	1500 ANSI	TBD	TBD	TBD	CID	LHY	NA	143993-03-112	GENERAL CONTRACTOR	TBD	TBD	
1V-140	RECYCLE PUMP GEAR BOX LUBE OIL	1	CHECK	TBD	TBD	TBD	TBD	TBD	TBD	NA	NA	NA	143993-03-112	EXISTING	TBD	TBD	
1V-141	RECYCLE PUMP GEAR BOX LUBE OIL	1	CHECK	TBD	TBD	TBD	TBD	TBD	TBD	NA	NA	NA	143993-03-112	EXISTING	TBD	TBD	
1V-142	RECYCLE PUMP GEAR BOX LUBE OIL	1	CHECK	TBD	TBD	TBD	TBD	TBD	TBD	NA	NA	NA	143993-03-112	EXISTING	TBD	TBD	
1V-143	RECYCLE PUMP GEAR BOX LUBE OIL	1	CHECK	TBD	TBD	TBD	TBD	TBD	TBD	NA	NA	NA	143993-03-112	EXISTING	TBD	TBD	
1V-144	RECYCLE PUMP GEAR BOX LUBE OIL	1	CHECK	TBD	TBD	TBD	TBD	TBD	TBD	NA	NA	NA	143993-03-112	EXISTING	TBD	TBD	
1FV-205	MIST ELIMINATOR RECIRCULATION	1	PLUG	TBD	2	125 ANSI	TBD	CAST IRON / DUCTILE IRON	FLANGED	JBD	WWA	143993-IPC-DE2-DAT-0006	143993-03-113	WOOD	TBD	TBD	
1FV-221	MIST ELIMINATOR 1ST STAGE BOTTOM ZONE 1	1	PLUG	TBD	4	125 ANSI	TBD	TBD	TBD	JBD	WWA	NA	143993-03-113	EXISTING	TBD	TBD	
1FV-222	MIST ELIMINATOR 1ST STAGE BOTTOM ZONE 2	1	PLUG	TBD	4	125 ANSI	TBD	TBD	TBD	JBD	WWA	NA	143993-03-113	EXISTING	TBD	TBD	
1FV-223	MIST ELIMINATOR 1ST STAGE BOTTOM ZONE 3	1	PLUG	TBD	4	125 ANSI	TBD	TBD	TBD	JBD	WWA	NA	143993-03-113	EXISTING	TBD	TBD	
1FV-224	MIST ELIMINATOR 1ST STAGE BOTTOM ZONE 4	1	PLUG	TBD	4	125 ANSI	TBD	TBD	TBD	JBD	WWA	NA	143993-03-113	EXISTING	TBD	TBD	
1FV-225	MIST ELIMINATOR 1ST STAGE BOTTOM ZONE 5	1	PLUG	TBD	4	125 ANSI	TBD	TBD	TBD	JBD	WWA	NA	143993-03-113	EXISTING	TBD	TBD	
1FV-226	MIST ELIMINATOR 1ST STAGE BOTTOM ZONE 6	1	PLUG	TBD	4	125 ANSI	TBD	TBD	TBD	JBD	WWA	NA	143993-03-113	EXISTING	TBD	TBD	
1FV-227	MIST ELIMINATOR 1ST STAGE BOTTOM ZONE 7	1	PLUG	TBD	4	125 ANSI	TBD	TBD	TBD	JBD	WWA	NA	143993-03-113	EXISTING	TBD	TBD	
1FV-228	MIST ELIMINATOR 1ST STAGE BOTTOM ZONE 8	1	PLUG	TBD	4	125 ANSI	TBD	TBD	TBD	JBD	WWA	NA	143993-03-113	EXISTING	TBD	TBD	
1FV-231	MIST ELIMINATOR 1ST STAGE TOP ZONE 1	1	PLUG	TBD	4	125 ANSI	TBD	TBD	TBD	JBD	WWA	NA	143993-03-113	EXISTING	TBD	TBD	
1FV-232	MIST ELIMINATOR 1ST STAGE TOP ZONE 2	1	PLUG	TBD	4	125 ANSI	TBD	TBD	TBD	JBD	WWA	NA	143993-03-113	EXISTING	TBD	TBD	
1FV-233	MIST ELIMINATOR 1ST STAGE TOP ZONE 3	1	PLUG	TBD	4	125 ANSI	TBD	TBD	TBD	JBD	WWA	NA	143993-03-113	EXISTING	TBD	TBD	

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WoodPLC CONTRACT # 143993
143993-IPC-DG0-LST-0003
VALVE LIST
REV: 1

VALVE TAG NO(S)	DESCRIPTION	QTY	TYPE	CLASS	SIZE [IN]	DSGN PRESS	DSGN TEMP [°F]	BODY MATERIAL	END PREP	PIPE SPEC	SYSTEM CODE	VALVE CODE OR DATASHEET	P & ID	SUPPLIED BY	MANUFACTURE	MODEL NO.	REV
1FV-234	MIST ELIMINATOR 1ST STAGE TOP ZONE 4	1	PLUG	TBD	4	125 ANSI	TBD	TBD	TBD	JBD	WWA	NA	143993-03-113	EXISTING	TBD	TBD	
1FV-241	MIST ELIMINATOR 2ND STAGE BOTTOM ZONE 1	1	PLUG	TBD	4	125 ANSI	TBD	TBD	TBD	JBD	WWA	NA	143993-03-113	EXISTING	TBD	TBD	
1FV-242	MIST ELIMINATOR 2ND STAGE BOTTOM ZONE 2	1	PLUG	TBD	4	125 ANSI	TBD	TBD	TBD	JBD	WWA	NA	143993-03-113	EXISTING	TBD	TBD	
1FV-243	MIST ELIMINATOR 2ND STAGE BOTTOM ZONE 3	1	PLUG	TBD	4	125 ANSI	TBD	TBD	TBD	JBD	WWA	NA	143993-03-113	EXISTING	TBD	TBD	
1FV-244	MIST ELIMINATOR 2ND STAGE BOTTOM ZONE 4	1	PLUG	TBD	4	125 ANSI	TBD	TBD	TBD	JBD	WWA	NA	143993-03-113	EXISTING	TBD	TBD	
1HCV-801	MIST ELIMINATOR TANK INLET CONTROL VALVE BYPASS	1	BALL	TBD	4	125 ANSI	TBD	CARBON STEEL	FLANGED	JBD	WSW	B41N	143993-03-113	WOOD	TBD	TBD	
1V-016	MIST ELIMINATOR PUMP A SUCTION	1	PLUG	TBD	4	125 ANSI	TBD	CAST IRON / DUCTILE IRON	FLANGED	JBD	WWA	P11N	143993-03-113	WOOD	TBD	TBD	
1V-017	MIST ELIMINATOR PUMP B SUCTION	1	PLUG	TBD	4	125 ANSI	TBD	CAST IRON / DUCTILE IRON	FLANGED	JBD	WWA	P11N	143993-03-113	WOOD	TBD	TBD	
1V-018	MIST ELIMINATOR PUMP DISCHARGE	1	PLUG	TBD	4	125 ANSI	TBD	CAST IRON / DUCTILE IRON	FLANGED	JBD	WWA	P11N	143993-03-113	WOOD	TBD	TBD	
1V-019	MIST ELIMINATOR PUMP DISCHARGE	1	PLUG	TBD	4	125 ANSI	TBD	CAST IRON / DUCTILE IRON	FLANGED	JBD	WWA	P11N	143993-03-113	WOOD	TBD	TBD	
1V-020	MIST ELIMINATOR TANK DRAIN	1	PLUG	TBD	4	125 ANSI	TBD	CAST IRON / DUCTILE IRON	FLANGED	JBD	WWA	P11N	143993-03-113	WOOD	TBD	TBD	
1V-021	MIST ELIMINATOR 1ST STAGE BOTTOM	1	PLUG	TBD	4	125 ANSI	TBD	CAST IRON / DUCTILE IRON	FLANGED	JBD	WWA	P11N	143993-03-113	WOOD	TBD	TBD	
1V-022	MIST ELIMINATOR 1ST STAGE TOP	1	PLUG	TBD	4	125 ANSI	TBD	CAST IRON / DUCTILE IRON	FLANGED	JBD	WWA	P11N	143993-03-113	WOOD	TBD	TBD	
1V-023	MIST ELIMINATOR 2ND STAGE BOTTOM	1	PLUG	TBD	4	125 ANSI	TBD	CAST IRON / DUCTILE IRON	FLANGED	JBD	WWA	P11N	143993-03-113	WOOD	TBD	TBD	
1V-025	MIST ELIMINATOR PUMP DISCHARGE	1	CHECK	TBD	4	125 ANSI	TBD	CARBON STEEL	FLANGED	JBD	WWA	C41N	143993-03-113	WOOD	TBD	TBD	
1V-026	MIST ELIMINATOR PUMP DISCHARGE	1	CHECK	TBD	4	125 ANSI	TBD	CARBON STEEL	FLANGED	JBD	WWA	C41N	143993-03-113	WOOD	TBD	TBD	
1V-027	MIST ELIMINATOR TANK LEVEL TRANSMITTER	1	BALL	TBD	2	125 ANSI	TBD	CARBON STEEL	FLANGED	JBD	WWA	B41N	143993-03-113	WOOD	TBD	TBD	
1V-110	MIST ELIMINATOR TANK INLET	1	BALL	TBD	3	150 ANSI	TBD	CARBON STEEL	FLANGED	HBD	WSW	B41N	143993-03-113	GENERAL CONTRACTOR	TBD	TBD	
1V-111	MIST ELIMINATOR TANK LEVEL CONTROL VALVE	1	PLUG	TBD	4	125 ANSI	TBD	CAST IRON / DUCTILE IRON	FLANGED	JBD	WSW	P11N	143993-03-113	WOOD	TBD	TBD	
1V-112	MIST ELIMINATOR TANK LEVEL CONTROL VALVE	1	PLUG	TBD	4	125 ANSI	TBD	CAST IRON / DUCTILE IRON	FLANGED	JBD	WSW	P11N	143993-03-113	WOOD	TBD	TBD	
1V-439	MIST ELIMINATOR PUMP PRESSURE GAUGE	1	BLOCK N BLEED	TBD	1/2	125 ANSI	TBD	STAINLESS STEEL	THREADED	JBD	WWA	NA	143993-03-113	WOOD	TBD	TBD	
1V-440	MIST ELIMINATOR PUMP PRESSURE GAUGE	1	BLOCK N BLEED	TBD	1/2	125 ANSI	TBD	STAINLESS STEEL	THREADED	JBD	WWA	NA	143993-03-113	WOOD	TBD	TBD	
1LCV-801	MIST ELIMINATOR TANK INLET CONTROL VALVE	1	BALL	TBD	3	125 ANSI	TBD	CARBON STEEL	FLANGED	JBD	WSW	143993-IPC-DE2-DAT-0014	143993-03-113	WOOD	TBD	TBD	
1FV-245	OXIDATION AIR SATURATION WATER	1	BALL	TBD	2	125 ANSI	TBD	CARBON STEEL	FLANGED	JBD	WWA	143993-IPC-DE2-DAT-0007	143993-03-114	WOOD	TBD	TBD	
1FSV-960	OXIDATION AIR INSTRUMENT AIR ISOLATION VALVE	1	SOLENOID	TBD	3/4	TBD	TBD	TBD	TBD	HID	IAI	TBD	143993-03-114	GENERAL CONTRACTOR	TBD	TBD	
1PCV-961	OXIDATION AIR INSTRUMENT AIR	1	PCV	TBD	3/4	TBD	TBD	STAINLESS STEEL	TBD	HID	IAI	TBD	143993-03-114	GENERAL CONTRACTOR	TBD	TBD	
1V-040	OXIDATION AIR SATURATION WATER PRESSURE GAUGE	1	BALL	TBD	1/2	125 ANSI	TBD	CARBON STEEL	SWE x NPT	JBD	WWA	B43ST	143993-03-114	WOOD	TBD	TBD	
1V-041	OXIDATION AIR DISCHARGE PRESSURE	1	BALL	TBD	1/2	125 ANSI	TBD	CARBON STEEL	THREADED	JBD	FOA	B41T	143993-03-114	WOOD	TBD	TBD	
1V-044	OXIDATION AIR INSTRUMENT AIR PRESSURE GAUGE	1	BALL	TBD	1/2	150 ANSI	TBD	STAINLESS STEEL	SWE x NPT	HID	IAI	B73ST	143993-03-114	GENERAL CONTRACTOR	TBD	TBD	
1V-271	OXIDATION AIR SATURATION WATER	1	PLUG	TBD	2	125 ANSI	TBD	CAST IRON / DUCTILE IRON	FLANGED	JBD	WWA	P11N	143993-03-114	WOOD	TBD	TBD	
1PCV-245	OXIDATION AIR SATURATION WATER	1	PCV	TBD	2	125 ANSI	TBD	CARBON STEEL	THREADED	JBD	WWA	143993-IPC-DE2-DAT-0015	143993-03-114	WOOD	TBD	TBD	
1FV-901A	OXIDATION AIR BLOW OFF	1	BUTTERFLY	TBD	6	NA	NA	NA	NA	NA	NA	NA	143993-03-115	EXISTING	TBD	TBD	
1FV-901B	OXIDATION AIR BLOW OFF	1	BUTTERFLY	TBD	6	NA	NA	NA	NA	NA	NA	NA	143993-03-115	EXISTING	TBD	TBD	
1FV-901C	OXIDATION AIR BLOW OFF	1	BUTTERFLY	TBD	6	NA	NA	NA	NA	NA	NA	NA	143993-03-115	EXISTING	TBD	TBD	
1FV-903A	OXIDATION AIR DISCHARGE	1	BUTTERFLY	TBD	24	NA	NA	NA	NA	NA	NA	NA	143993-03-115	EXISTING	TBD	TBD	
1FV-903B	OXIDATION AIR DISCHARGE	1	BUTTERFLY	TBD	24	NA	NA	NA	NA	NA	NA	NA	143993-03-115	EXISTING	TBD	TBD	
1FV-903C	OXIDATION AIR DISCHARGE	1	BUTTERFLY	TBD	24	NA	NA	NA	NA	NA	NA	NA	143993-03-115	EXISTING	TBD	TBD	
1V-361	OXIDATION AIR GEAR BOX LUBE OIL	1	3-WAY	NA	NA	NA	NA	NA	NA	NA	NA	NA	143993-03-115	EXISTING	TBD	TBD	
1V-362	OXIDATION AIR GEAR BOX LUBE OIL	1	3-WAY	NA	NA	NA	NA	NA	NA	NA	NA	NA	143993-03-115	EXISTING	TBD	TBD	
1V-363	OXIDATION AIR GEAR BOX LUBE OIL	1	3-WAY	NA	NA	NA	NA	NA	NA	NA	NA	NA	143993-03-115	EXISTING	TBD	TBD	
1V-441	OXIDATION AIR MAIN LUBE OIL DISCHARGE	1	CHECK	NA	NA	NA	NA	NA	NA	NA	NA	NA	143993-03-115	EXISTING	TBD	TBD	
1V-442	OXIDATION AIR MAIN LUBE OIL DISCHARGE	1	CHECK	NA	NA	NA	NA	NA	NA	NA	NA	NA	143993-03-115	EXISTING	TBD	TBD	
1V-443	OXIDATION AIR MAIN LUBE OIL DISCHARGE	1	CHECK	NA	NA	NA	NA	NA	NA	NA	NA	NA	143993-03-115	EXISTING	TBD	TBD	

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WoodPLC CONTRACT # 143993
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VALVE LIST
REV: 1

VALVE TAG NO(S)	DESCRIPTION	QTY	TYPE	CLASS	SIZE [IN]	DSGN PRESS	DSGN TEMP [°F]	BODY MATERIAL	END PREP	PIPE SPEC	SYSTEM CODE	VALVE CODE OR DATASHEET	P & ID	SUPPLIED BY	MANUFACTURE	MODEL NO.	REV
1V-444	OXIDATION AIR AUX LUBE OIL DISCHARGE	1	CHECK	NA	NA	NA	NA	NA	NA	NA	NA	NA	143993-03-115	EXISTING	TBD	TBD	
1V-445	OXIDATION AIR AUX LUBE OIL DISCHARGE	1	CHECK	NA	NA	NA	NA	NA	NA	NA	NA	NA	143993-03-115	EXISTING	TBD	TBD	
1V-446	OXIDATION AIR AUX LUBE OIL DISCHARGE	1	CHECK	NA	NA	NA	NA	NA	NA	NA	NA	NA	143993-03-115	EXISTING	TBD	TBD	
1V-447	OXIDATION AIR GEAR BOX OIL RESERVOIR	1	BALL	NA	NA	NA	NA	NA	NA	NA	NA	NA	143993-03-115	EXISTING	TBD	TBD	
1V-448	OXIDATION AIR GEAR BOX OIL RESERVOIR	1	BALL	NA	NA	NA	NA	NA	NA	NA	NA	NA	143993-03-115	EXISTING	TBD	TBD	
1V-449	OXIDATION AIR GEAR BOX OIL RESERVOIR	1	BALL	NA	NA	NA	NA	NA	NA	NA	NA	NA	143993-03-115	EXISTING	TBD	TBD	
1FV-301A	HYDROCLONE FEED PUMP SUCTION	1	KNIFE GATE	TBD	8	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	143993-IPC-DE2-DAT-0012	143993-03-116	WOOD	TBD	TBD	
1FV-301B	HYDROCLONE FEED PUMP SUCTION	1	KNIFE GATE	TBD	8	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	143993-IPC-DE2-DAT-0012	143993-03-116	WOOD	TBD	TBD	
1FV-302A	HYDROCLONE FEED PUMP DRAIN	1	KNIFE GATE	TBD	3	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	143993-IPC-DE2-DAT-0009	143993-03-116	WOOD	TBD	TBD	
1FV-302B	HYDROCLONE FEED PUMP DRAIN	1	KNIFE GATE	TBD	3	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	143993-IPC-DE2-DAT-0009	143993-03-116	WOOD	TBD	TBD	
1FV-303A	HYDROCLONE FEED PUMP DISCHARGE	1	KNIFE GATE	TBD	8	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	143993-IPC-DE2-DAT-0012	143993-03-116	WOOD	TBD	TBD	
1FV-303B	HYDROCLONE FEED PUMP DISCHARGE	1	KNIFE GATE	TBD	8	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	143993-IPC-DE2-DAT-0012	143993-03-116	WOOD	TBD	TBD	
1FV-304A	HYDROCLONE FEED PUMP FLUSH	1	PLUG	TBD	2	125 ANSI	TBD	PLASTIC LINED	FLANGED	JZD	WRW	143993-IPC-DE2-DAT-0016	143993-03-116	WOOD	TBD	TBD	
1FV-304B	HYDROCLONE FEED PUMP FLUSH	1	PLUG	TBD	2	125 ANSI	TBD	PLASTIC LINED	FLANGED	JZD	WRW	143993-IPC-DE2-DAT-0016	143993-03-116	WOOD	TBD	TBD	
1FV-330	HYDROCLONE FEED RECIRC	1	KNIFE GATE	TBD	8	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	143993-IPC-DE2-DAT-0013	143993-03-116	WOOD	TBD	TBD	
1FV-331	HYDROCLONE FEED RECIRC FLUSH	1	PLUG	TBD	2	125 ANSI	TBD	PLASTIC LINED	FLANGED	JZD	WRW	143993-IPC-DE2-DAT-0016	143993-03-116	WOOD	TBD	TBD	
1FV-332	HYDROCLONE FEED DISCHARGE	1	KNIFE GATE	TBD	8	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	143993-IPC-DE2-DAT-0013	143993-03-116	WOOD	TBD	TBD	
1FV-333	HYDROCLONE FEED DISCHARGE FLUSH	1	KNIFE GATE	TBD	4	125 ANSI	TBD	RUBBER LINED	LUG	JZD	WRW	143993-IPC-DE2-DAT-0010	143993-03-130	WOOD	TBD	TBD	1
1V-028	HYDROCLONE FEED DISCHARGE FLUSH	1	CHECK	TBD	4	150 ANSI	TBD	RUBBER LINED	FLANGED	HZD	WRW	C21N	143993-03-116	GENERAL CONTRACTOR	TBD	TBD	
1V-029	HYDROCLONE FEED RECIRC FLUSH	1	CHECK	TBD	2	150 ANSI	TBD	RUBBER LINED	FLANGED	HZD	WRW	C21N	143993-03-116	GENERAL CONTRACTOR	TBD	TBD	
1V-042	HYDROCLONE FEED PUMP A FLUSH	1	CHECK	TBD	2	150 ANSI	TBD	RUBBER LINED	FLANGED	HZD	WRW	C21N	143993-03-116	GENERAL CONTRACTOR	TBD	TBD	
1V-043	HYDROCLONE FEED PUMP B FLUSH	1	CHECK	TBD	2	150 ANSI	TBD	RUBBER LINED	FLANGED	HZD	WRW	C21N	143993-03-116	GENERAL CONTRACTOR	TBD	TBD	
1V-045	HYDROCLONE FEED PH METER A	1	BALL	TBD	TBD	125 ANSI	TBD	TBD	TBD	JZD	LWS	NA	143993-03-116	VENDOR PACKAGED SYSTEM	TBD	TBD	
1V-046	HYDROCLONE FEED PH METER B	1	BALL	TBD	TBD	125 ANSI	TBD	TBD	TBD	JZD	LWS	NA	143993-03-116	VENDOR PACKAGED SYSTEM	TBD	TBD	
1V-047	HYDROCLONE FEED OPR METER	1	BALL	TBD	TBD	125 ANSI	TBD	TBD	TBD	JZD	LWS	NA	143993-03-116	VENDOR PACKAGED SYSTEM	TBD	TBD	
1V-082	HYDROCLONE FEED	1	KNIFE GATE	TBD	8	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	K21V	143993-03-116	WOOD	TBD	TBD	
1V-083	HYDROCLONE FEED TO BLOW DOWN SUMP	1	KNIFE GATE	TBD	8	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	K21V	143993-03-116	WOOD	TBD	TBD	
1V-084	HYDROCLONE FEED FLUSH TO BLOW DOWN SUMP	1	PLUG	TBD	2	150 ANSI	TBD	PLASTIC LINED	FLANGED	HZD	LWS	P81N	143993-03-116	GENERAL CONTRACTOR	TBD	TBD	
1V-402	HYDROCLONE FEED SAMPLE	1	PINCH	TBD	1	125 ANSI	TBD	RUBBER LINED	FLANGED	JZD	LWS	H21N	143993-03-116	WOOD	TBD	TBD	
1V-364	HYDRAULIC OIL PUMP A SUCTION	1	BALL	NA	NA	NA	NA	NA	NA	NA	NA	NA	143993-03-117	EXISTING	TBD	TBD	
1V-365	HYDRAULIC OIL PUMP B SUCTION	1	BALL	TBD	NA	NA	NA	NA	NA	NA	NA	NA	143993-03-117	EXISTING	TBD	TBD	
1V-366	HYDRAULIC OIL PUMP A DISCHARGE	1	BALL	TBD	NA	NA	NA	NA	NA	NA	NA	NA	143993-03-117	EXISTING	TBD	TBD	
1V-367	HYDRAULIC OIL PUMP B DISCHARGE	1	BALL	TBD	NA	NA	NA	NA	NA	NA	NA	NA	143993-03-117	EXISTING	TBD	TBD	
1V-403	HYDRAULIC OIL TANK	1	BALL	TBD	3/4	NA	NA	NA	NA	NA	NA	NA	143993-03-117	EXISTING	TBD	TBD	
1V-404	HYDRAULIC OIL PUMP A DISCHARGE	1	CHECK	TBD	NA	NA	NA	NA	NA	NA	NA	NA	143993-03-117	EXISTING	TBD	TBD	
1V-405	HYDRAULIC OIL PUMP B DISCHARGE	1	CHECK	TBD	NA	NA	NA	NA	NA	NA	NA	NA	143993-03-117	EXISTING	TBD	TBD	
1FV-335	HYDROCLONE FEED DRAIN	1	KNIFE GATE	TBD	3	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	143993-IPC-DE2-DAT-0009	143993-03-130	WOOD	TBD	TBD	
1V-502	HYDROCLONE VORTEX	1	KNIFE GATE	TBD	TBD	TBD	TBD	TBD	TBD	NA	NA	NA	143993-03-130	VENDOR PACKAGED SYSTEM	TBD	TBD	
1V-503	HYDROCLONE VORTEX	1	KNIFE GATE	TBD	TBD	TBD	TBD	TBD	TBD	NA	NA	NA	143993-03-130	VENDOR PACKAGED SYSTEM	TBD	TBD	
1V-504	HYDROCLONE VORTEX	1	KNIFE GATE	TBD	TBD	TBD	TBD	TBD	TBD	NA	NA	NA	143993-03-130	VENDOR PACKAGED SYSTEM	TBD	TBD	
1V-505	HYDROCLONE VORTEX	1	KNIFE GATE	TBD	TBD	TBD	TBD	TBD	TBD	NA	NA	NA	143993-03-130	VENDOR PACKAGED SYSTEM	TBD	TBD	
1V-506	HYDROCLONE VORTEX	1	KNIFE GATE	TBD	TBD	TBD	TBD	TBD	TBD	NA	NA	NA	143993-03-130	VENDOR PACKAGED SYSTEM	TBD	TBD	
1V-507	HYDROCLONE VORTEX	1	KNIFE GATE	TBD	TBD	TBD	TBD	TBD	TBD	NA	NA	NA	143993-03-130	VENDOR PACKAGED SYSTEM	TBD	TBD	

WoodPLC INDUSTRIAL POWER
437 GRANT STREET
PITTSBURGH, PA 15219
DATE: 8/18/2021



WoodPLC CONTRACT # 143993
143993-IPC-DG0-LST-0003
VALVE LIST
REV: 1

VALVE TAG NO(S)	DESCRIPTION	QTY	TYPE	CLASS	SIZE [IN]	DSGN PRESS	DSGN TEMP [°F]	BODY MATERIAL	END PREP	PIPE SPEC	SYSTEM CODE	VALVE CODE OR DATASHEET	P & ID	SUPPLIED BY	MANUFACTURE	MODEL NO.	REV
1V-508	HYDROCLONE VORTEX	1	KNIFE GATE	TBD	TBD	TBD	TBD	TBD	TBD	NA	NA	NA	143993-03-130	VENDOR PACKAGED SYSTEM	TBD	TBD	
1V-509	HYDROCLONE VORTEX	1	KNIFE GATE	TBD	TBD	TBD	TBD	TBD	TBD	NA	NA	NA	143993-03-130	VENDOR PACKAGED SYSTEM	TBD	TBD	
1V-105	RECLAIM WATER DISCHARGE	1	KNIFE GATE	TBD	8	150 ANSI	TBD	RUBBER LINED	LUG	HZD	WRW	K21V	143993-03-132	GENERAL CONTRACTOR	TBD	TBD	
1V-414	GYP SUM SLURRY TRANSFER SURGE TANK T111	1	KNIFE GATE	TBD	4	150 ANSI	TBD	RUBBER LINED	LUG	HZD	LWS	K21V	143993-03-134	GENERAL CONTRACTOR	TBD	TBD	
1V-415	GYP SUM SLURRY TRANSFER SURGE TANK T112	1	KNIFE GATE	TBD	4	150 ANSI	TBD	RUBBER LINED	LUG	HZD	LWS	K21V	143993-03-134	GENERAL CONTRACTOR	TBD	TBD	
1V-416A	GYP SUM SLURRY TRANSFER PRIMARY LINE	1	KNIFE GATE	TBD	4	150 ANSI	TBD	RUBBER LINED	LUG	HZD	LWS	K21V	143993-03-134	GENERAL CONTRACTOR	TBD	TBD	
1V-416B	GYP SUM SLURRY TRANSFER SPARE LINE	1	KNIFE GATE	TBD	4	150 ANSI	TBD	RUBBER LINED	LUG	HZD	LWS	K21V	143993-03-134	GENERAL CONTRACTOR	TBD	TBD	
1FV-120A	ABSORBER AREA SUMP PUMP	1	KNIFE GATE	TBD	4	125 ANSI	TBD	RUBBER LINED	LUG	JZD	ASD	143993-IPC-DE2-DAT-0010	143993-03-138	WOOD	TBD	TBD	
1FV-120B	ABSORBER AREA SUMP PUMP	1	KNIFE GATE	TBD	4	125 ANSI	TBD	RUBBER LINED	LUG	JZD	ASD	143993-IPC-DE2-DAT-0010	143993-03-138	WOOD	TBD	TBD	
1V-220	ABSORBER AREA SUMP TO ABSORBER	1	KNIFE GATE	TBD	6	125 ANSI	TBD	RUBBER LINED	LUG	JZD	ASD	K21V	143993-03-138	WOOD	TBD	TBD	
1V-221	ABSORBER AREA SUMP TO BLOW DOWN SUMP	1	KNIFE GATE	TBD	6	125 ANSI	TBD	RUBBER LINED	LUG	JZD	ASD	K21V	143993-03-138	WOOD	TBD	TBD	
1V-222	ABSORBER AREA SUMP FLUSH TO BLOW DOWN SUMP	1	KNIFE GATE	TBD	2	150 ANSI	TBD	RUBBER LINED	LUG	HZD	ASD	K21V	143993-03-138	GENERAL CONTRACTOR	TBD	TBD	
1FV-401A	GYP SUM SLURRY TRANSFER SUCTION	1	KNIFE GATE	TBD	4	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	143993-IPC-DE2-DAT-0010	143993-03-139	WOOD	TBD	TBD	
1FV-401B	GYP SUM SLURRY TRANSFER SUCTION	1	KNIFE GATE	TBD	4	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	143993-IPC-DE2-DAT-0010	143993-03-139	WOOD	TBD	TBD	
1FV-402A	GYP SUM SLURRY TRANSFER PUMP DISCHARGE	1	KNIFE GATE	TBD	4	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	143993-IPC-DE2-DAT-0010	143993-03-139	WOOD	TBD	TBD	
1FV-402B	GYP SUM SLURRY TRANSFER PUMP DISCHARGE	1	KNIFE GATE	TBD	4	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	143993-IPC-DE2-DAT-0010	143993-03-139	WOOD	TBD	TBD	
1FV-424A	GYP SUM SLURRY TRANSFER DRAIN VALVE	1	KNIFE GATE	150	2	105	140	RUBBER LINED	LUG	HZD	LWS	K21V	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	
1FV-424B	GYP SUM SLURRY TRANSFER DRAIN VALVE	1	KNIFE GATE	150	2	105	140	RUBBER LINED	LUG	HZD	LWS	K21V	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	
1FV-425A	GYP SUM SLURRY TRANSFER DRAIN VALVE	1	KNIFE GATE	150	2	105	140	RUBBER LINED	LUG	HZD	LWS	K21V	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	
1FV-425B	GYP SUM SLURRY TRANSFER DRAIN VALVE	1	KNIFE GATE	150	2	105	140	RUBBER LINED	LUG	HZD	LWS	K21V	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	
1V-418A	GYP SUM SLURRY TRANSFER AIR VENT ISOLATION VALVE	1	KNIFE GATE	150	2	105	140	RUBBER LINED	LUG	HZD	LWS	K21V	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	
1V-418B	GYP SUM SLURRY TRANSFER AIR VENT ISOLATION VALVE	1	KNIFE GATE	150	2	105	140	RUBBER LINED	LUG	HZD	LWS	K21V	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	
1V-419A	GYP SUM SLURRY TRANSFER AIR VENT VALVE	1	COMBINATION AIR VALVE	150	2	105	140	EPOXY COATING	FLANGED	HZD	LWS	NA	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	
1V-419B	GYP SUM SLURRY TRANSFER AIR VENT VALVE	1	COMBINATION AIR VALVE	150	2	105	140	EPOXY COATING	FLANGED	HZD	LWS	NA	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	
1V-420A	GYP SUM SLURRY TRANSFER AIR VENT ISOLATION VALVE	1	KNIFE GATE	150	2	105	140	RUBBER LINED	LUG	HZD	LWS	K21V	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	
1V-420B	GYP SUM SLURRY TRANSFER AIR VENT ISOLATION VALVE	1	KNIFE GATE	150	2	105	140	RUBBER LINED	LUG	HZD	LWS	K21V	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	
1V-421A	GYP SUM SLURRY TRANSFER AIR VENT VALVE	1	COMBINATION AIR VALVE	150	2	105	140	EPOXY COATING	FLANGED	HZD	LWS	NA	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	
1V-421B	GYP SUM SLURRY TRANSFER AIR VENT VALVE	1	COMBINATION AIR VALVE	150	2	105	140	EPOXY COATING	FLANGED	HZD	LWS	NA	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	
1V-422A	GYP SUM SLURRY TRANSFER AIR VENT ISOLATION VALVE	1	KNIFE GATE	150	2	105	140	RUBBER LINED	LUG	HZD	LWS	K21V	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	
1V-422B	GYP SUM SLURRY TRANSFER AIR VENT ISOLATION VALVE	1	KNIFE GATE	150	2	105	140	RUBBER LINED	LUG	HZD	LWS	K21V	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	
1V-423A	GYP SUM SLURRY TRANSFER AIR VENT VALVE	1	COMBINATION AIR VALVE	150	2	105	140	EPOXY COATING	FLANGED	HZD	LWS	NA	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	
1V-423B	GYP SUM SLURRY TRANSFER AIR VENT VALVE	1	COMBINATION AIR VALVE	150	2	105	140	EPOXY COATING	FLANGED	HZD	LWS	NA	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	
1FCV-405	GYP SUM SLURRY TRANSFER CONTROL VALVE	1	BALL	TBD	4	125 ANSI	TBD	CERAMIC	FLANGED	JZD	LWS	TBD	143993-03-139	WOOD	TBD	TBD	
1FV-403A	GYP SUM SLURRY TRANSFER PUMP DRAIN	1	KNIFE GATE	TBD	3	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	143993-IPC-DE2-DAT-0009	143993-03-139	WOOD	TBD	TBD	
1FV-403B	GYP SUM SLURRY TRANSFER PUMP DRAIN	1	KNIFE GATE	TBD	3	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	143993-IPC-DE2-DAT-0009	143993-03-139	WOOD	TBD	TBD	
1FV-404A	GYP SUM SLURRY TRANSFER PUMP FLUSH	1	PLUG	TBD	2	125 ANSI	TBD	PLASTIC LINED	FLANGED	JZD	WRW	143993-IPC-DE2-DAT-0016	143993-03-139	WOOD	TBD	TBD	
1FV-404B	GYP SUM SLURRY TRANSFER PUMP FLUSH	1	PLUG	TBD	2	125 ANSI	TBD	PLASTIC LINED	FLANGED	JZD	WRW	143993-IPC-DE2-DAT-0016	143993-03-139	WOOD	TBD	TBD	
1FV-406	GYP SUM SLURRY TRANSFER DISCHARGE FLUSH	1	PLUG	TBD	2	125 ANSI	TBD	PLASTIC LINED	FLANGED	JZD	WRW	143993-IPC-DE2-DAT-0016	143993-03-139	WOOD	TBD	TBD	
1FV-407	GYP SUM SLURRY TRANSFER RECIRC	1	KNIFE GATE	TBD	4	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	143993-IPC-DE2-DAT-0010	143993-03-139	WOOD	TBD	TBD	
1HCV-405	GYP SUM SLURRY TRANSFER CONTROL VALVE BYPASS	1	PINCH	TBD	4	125 ANSI	TBD	RUBBER LINED	FLANGED	JZD	LWS	H21N	143993-03-139	WOOD	TBD	TBD	
1V-410	GYP SUM SLURRY TRANSFER TANK	1	KNIFE GATE	TBD	4	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	K21V	143993-03-139	WOOD	TBD	TBD	
1V-411	GYP SUM SLURRY TRANSFER PUMP A FLUSH	1	CHECK	TBD	2	150 ANSI	TBD	RUBBER LINED	FLANGED	HZD	WRW	C21N	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	
1V-412	GYP SUM SLURRY TRANSFER PUMP B FLUSH	1	CHECK	TBD	2	150 ANSI	TBD	RUBBER LINED	FLANGED	HZD	WRW	C21N	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	

WoodPLC INDUSTRIAL POWER
437 GRANT STREET
PITTSBURGH, PA 15219
DATE: 8/18/2021



WoodPLC CONTRACT # 143993
143993-IPC-DG0-LST-0003
VALVE LIST
REV: 1

VALVE TAG NO(S)	DESCRIPTION	QTY	TYPE	CLASS	SIZE [IN]	DSGN PRESS	DSGN TEMP [°F]	BODY MATERIAL	END PREP	PIPE SPEC	SYSTEM CODE	VALVE CODE OR DATASHEET	P & ID	SUPPLIED BY	MANUFACTURE	MODEL NO.	REV
1V-413	GYPSUM SLURRY TRANSFER DISCHARGE FLUSH	1	CHECK	TBD	2	150 ANSI	TBD	RUBBER LINED	FLANGED	HZD	WRW	C21N	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	
1V-416	GYPSUM TRANSFER CONTROL VALVE INLET	1	KNIFE GATE	TBD	4	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	K21V	143993-03-139	WOOD	TBD	TBD	
1V-417	GYPSUM TRANSFER CONTROL VALVE OUTLET	1	KNIFE GATE	TBD	4	125 ANSI	TBD	RUBBER LINED	LUG	JZD	LWS	K21V	143993-03-139	WOOD	TBD	TBD	
1V-426A	GYPSUM SLURRY TRANSFER PRIMARY LINE	1	KNIFE GATE	TBD	4	TBD	TBD	RUBBER LINED	LUG	TBD	LWS	K21V	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	
1V-426B	GYPSUM SLURRY TRANSFER SPARE LINE	1	KNIFE GATE	TBD	4	TBD	TBD	RUBBER LINED	LUG	TBD	LWS	K21V	143993-03-139	GENERAL CONTRACTOR	TBD	TBD	
1V-428	RECLAIM WATER HOSE STATION	1	BALL	TBD	1	150 ANSI	TBD	CARBON STEEL	SOCKET WELD	HBD	WWA	B43S	143993-03-141	GENERAL CONTRACTOR	TBD	TBD	
1V-429	RECLAIM WATER HOSE STATION	1	BALL	TBD	1	150 ANSI	TBD	CARBON STEEL	SOCKET WELD	HBD	WWA	B43S	143993-03-141	GENERAL CONTRACTOR	TBD	TBD	
1V-430	RECLAIM WATER HOSE STATION	1	BALL	TBD	1	150 ANSI	TBD	CARBON STEEL	SOCKET WELD	HBD	WWA	B43S	143993-03-141	GENERAL CONTRACTOR	TBD	TBD	
1V-431	RECLAIM WATER HOSE STATION	1	BALL	TBD	1	150 ANSI	TBD	CARBON STEEL	SOCKET WELD	HBD	WWA	B43S	143993-03-141	GENERAL CONTRACTOR	TBD	TBD	
1V-432	RECLAIM WATER HOSE STATION	1	BALL	TBD	1	150 ANSI	TBD	CARBON STEEL	SOCKET WELD	HBD	WWA	B43S	143993-03-141	GENERAL CONTRACTOR	TBD	TBD	
1FV-950	INSTRUMENT AIR TANK DRAIN	1	SOLENOID	TBD	TBD	150 ANSI	TBD	TBD	TBD	HID	IAI	NA	143993-03-144	VENDOR PACKAGED SYSTEM	TBD	TBD	
1PSV-950	INSTRUMENT AIR PSV	1	RELIEF	TBD	TBD	150 ANSI	TBD	TBD	TBD	HID	IAI	NA	143993-03-144	VENDOR PACKAGED SYSTEM	TBD	TBD	
1V-301	INSTRUMENT AIR HEADER	1	BALL	TBD	2	150 ANSI	TBD	STAINLESS STEEL	SOCKET WELD	HID	IAI	B73S	143993-03-144	GENERAL CONTRACTOR	TBD	TBD	
1V-302	INSTRUMENT AIR TANK INLET	1	BALL	TBD	2	150 ANSI	TBD	STAINLESS STEEL	SOCKET WELD	HID	IAI	B73S	143993-03-144	GENERAL CONTRACTOR	TBD	TBD	
1V-303	INSTRUMENT AIR TANK INLET	1	CHECK	TBD	2	150 ANSI	TBD	STAINLESS STEEL	SOCKET WELD	HID	IAI	C71S	143993-03-144	GENERAL CONTRACTOR	TBD	TBD	
1V-304	INSTRUMENT AIR TANK BYPASS	1	BALL	TBD	2	150 ANSI	TBD	STAINLESS STEEL	SOCKET WELD	HID	IAI	B73S	143993-03-144	GENERAL CONTRACTOR	TBD	TBD	
1V-305	INSTRUMENT AIR TANK OUTLET	1	BALL	TBD	2	150 ANSI	TBD	STAINLESS STEEL	SOCKET WELD	HID	IAI	B73S	143993-03-144	GENERAL CONTRACTOR	TBD	TBD	
1V-306	INSTRUMENT AIR TANK PRESSURE GAGE	1	BLOCK N BLEED	TBD	1/2	150 ANSI	TBD	STAINLESS STEEL	THREADED	HID	IAI	TBD	143993-03-144	VENDOR PACKAGED SYSTEM	TBD	TBD	
1V-338	INSTRUMENT AIR EL 390-10	1	BALL	TBD	1	150 ANSI	TBD	STAINLESS STEEL	SOCKET WELD	HID	IAI	B73S	143993-03-144	GENERAL CONTRACTOR	TBD	TBD	
1V-339	INSTRUMENT AIR TO OXIDATION AIR	1	BALL	TBD	3/4	150 ANSI	TBD	STAINLESS STEEL	SOCKET WELD	HID	IAI	B73S	143993-03-144	GENERAL CONTRACTOR	TBD	TBD	
1V-340	INSTRUMENT AIR EL 427-10	1	BALL	TBD	1-1/2	150 ANSI	TBD	STAINLESS STEEL	SOCKET WELD	HID	IAI	B73S	143993-03-144	GENERAL CONTRACTOR	TBD	TBD	
1V-341	INSTRUMENT AIR EL 462-4	1	BALL	TBD	1/2	150 ANSI	TBD	STAINLESS STEEL	SOCKET WELD	HID	IAI	B73S	143993-03-144	GENERAL CONTRACTOR	TBD	TBD	
1V-342	INSTRUMENT AIR EL 483-1	1	BALL	TBD	3/4	150 ANSI	TBD	STAINLESS STEEL	SOCKET WELD	HID	IAI	B73S	143993-03-144	GENERAL CONTRACTOR	TBD	TBD	
1V-343	INSTRUMENT AIR EL 516-7	1	BALL	TBD	1	150 ANSI	TBD	STAINLESS STEEL	SOCKET WELD	HID	IAI	B73S	143993-03-144	GENERAL CONTRACTOR	TBD	TBD	
1V-350	AIR HOSE STATION ISOLATION VALVE	1	BALL	TBD	2	150 ANSI	TBD	CARBON STEEL	SOCKET WELD	HBD	SAI	B43S	143993-03-144	GENERAL CONTRACTOR	TBD	TBD	
1V-351	1" HOSE STATION AT ABSORBER PLATF EL 516'-7"	1	BALL	TBD	1	150 ANSI	TBD	CARBON STEEL	SOCKET WELD	HBD	SAI	B43S	143993-03-144	GENERAL CONTRACTOR	TBD	TBD	
1V-352	1" HOSE STATION AT ABSORBER PLATF EL 483'-1"	1	BALL	TBD	1	150 ANSI	TBD	CARBON STEEL	SOCKET WELD	HBD	SAI	B43S	143993-03-144	GENERAL CONTRACTOR	TBD	TBD	
1V-353	1" HOSE STATION AT ABSORBER PLATF EL 462'-4"	1	BALL	TBD	1	150 ANSI	TBD	CARBON STEEL	SOCKET WELD	HBD	SAI	B43S	143993-03-144	GENERAL CONTRACTOR	TBD	TBD	
1V-354	1" HOSE STATION AT ABSORBER PLATF EL 427'-10"	1	BALL	TBD	1	150 ANSI	TBD	CARBON STEEL	SOCKET WELD	HBD	SAI	B43S	143993-03-144	GENERAL CONTRACTOR	TBD	TBD	
1V-355	1" HOSE STATION AT ABSORBER PLATF EL 390'-10"	1	BALL	TBD	1	150 ANSI	TBD	CARBON STEEL	SOCKET WELD	HBD	SAI	B43S	143993-03-144	GENERAL CONTRACTOR	TBD	TBD	
1V-950	POTABLE WATER BATTERY ROOM ISOLATION MANUAL VALVE	1	BALL	600	1-1/2	TBD	TBD	STAINLESS STEEL	SOCKET WELD	TBD	WPW	B73S	143993-ASA-DC0-PID-1111	GENERAL CONTRACTOR	TBD	TBD	
IV-951	POTABLE WATERREGULATOR ISOLATIONMANUAL VALVE	1	BALL	600	1-1/2	TBD	TBD	STAINLESS STEEL	SOCKET WELD	TBD	WPW	B73S	143993-ASA-DC0-PID-1111	GENERAL CONTRACTOR	TBD	TBD	
IV-952	POTABLE WATERHEATER INLET ISOLATIONMANUAL VALVE	1	BALL	600	1-1/2	TBD	TBD	STAINLESS STEEL	SOCKET WELD	TBD	WPW	B73S	143993-ASA-DC0-PID-1111	GENERAL CONTRACTOR	TBD	TBD	
IV-953	POTABLE WATERHEATER BYPASSMANUAL VALVE	1	BALL	600	1-1/2	TBD	TBD	STAINLESS STEEL	SOCKET WELD	TBD	WPW	B73S	143993-ASA-DC0-PID-1111	GENERAL CONTRACTOR	TBD	TBD	
IV-954	POTABLE WATERVENTMANUAL VALVE	1	BALL	600	1-1/2	TBD	TBD	STAINLESS STEEL	SOCKET WELD	TBD	WPW	B73S	143993-ASA-DC0-PID-1111	GENERAL CONTRACTOR	TBD	TBD	
IV-955	POTABLE WATERPI ISOLATIONMANUAL VALVE	1	BALL	600	1/2	TBD	TBD	STAINLESS STEEL	SOCKET WELD	TBD	WPW	B73S	143993-ASA-DC0-PID-1111	GENERAL CONTRACTOR	TBD	TBD	
IV-956	POTABLE WATERPI ISOLATIONMANUAL VALVE	1	BALL	600	1/2	TBD	TBD	STAINLESS STEEL	SOCKET WELD	TBD	WPW	B73S	143993-ASA-DC0-PID-1111	GENERAL CONTRACTOR	TBD	TBD	
IV-957	POTABLE WATERHEATER OUTLET ISOLATIONMANUAL VALVE	1	BALL	600	1-1/2	TBD	TBD	STAINLESS STEEL	SOCKET WELD	TBD	WPW	B73S	143993-ASA-DC0-PID-1111	GENERAL CONTRACTOR	TBD	TBD	



In the Matter of:

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COMPLIANCE PLAN, AUTHORITY TO RECOVER COSTS)
THROUGH A REVISED ENVIRONMENTAL SURCHARGE)
AND TARIFF, THE ISSUANCE OF A CERTIFICATE OF)
PUBLIC CONVENIENCE AND NECESSITY FOR CERTAIN)
PROJECTS, AND APPROPRIATE ACCOUNTING)
AND OTHER RELIEF)

Case No.
2019-00435

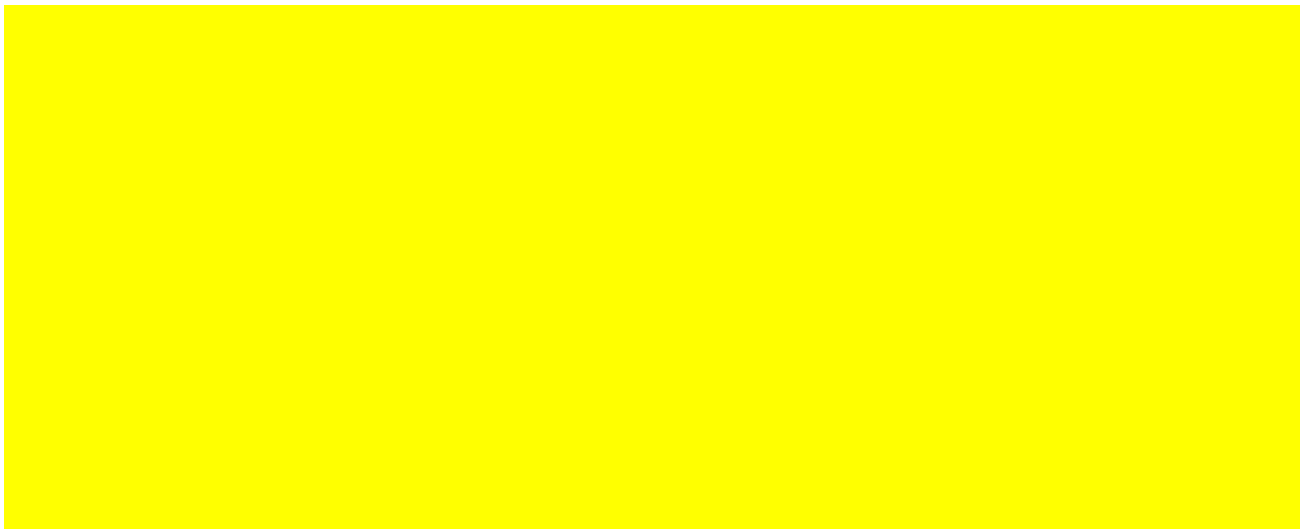
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Project 12
Wilson Station FGD Replacement and Upgrade

Appendix BB – Wiring Diagrams

Filed pursuant to Ordering Paragraph No. 18
of Commission's August 6, 2020 Order
FILED: November 30, 2021

INFORMATION SUBMITTED with
MOTION FOR CONFIDENTIAL TREATMENT





In the Matter of:

ELECTRONIC APPLICATION OF)
BIG RIVERS ELECTRIC CORPORATION)
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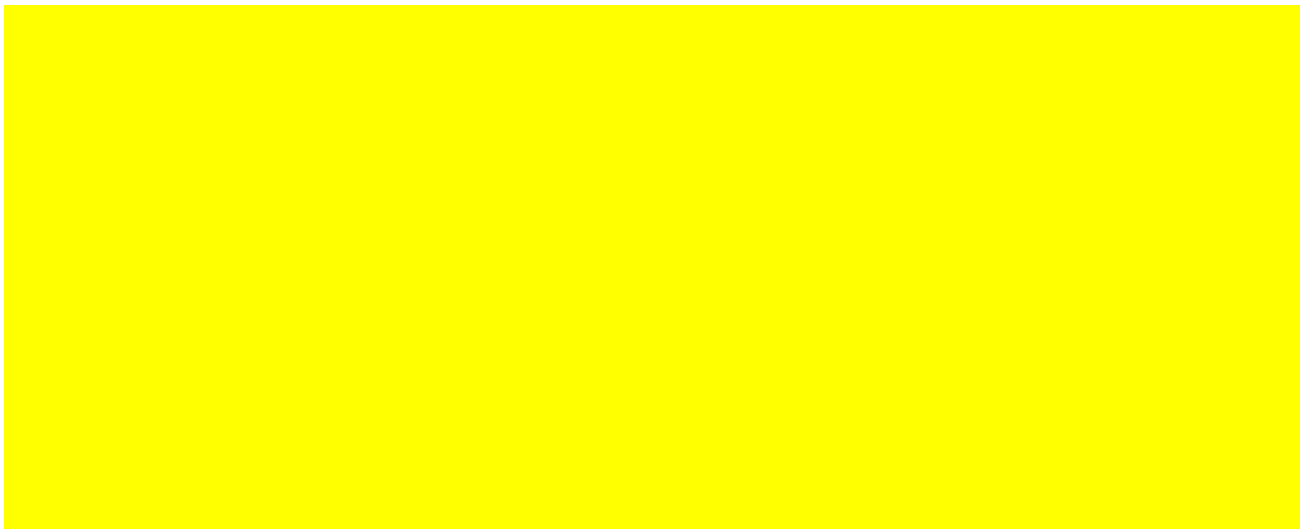
Case No.
2019-00435

CONFIDENTIAL INFORMATION

Project 12
Wilson Station FGD Replacement and Upgrade
Appendix CC – Phase 1 - Early Works Package

Filed pursuant to Ordering Paragraph No. 18
of Commission's August 6, 2020 Order
FILED: November 30, 2021

INFORMATION SUBMITTED with
MOTION FOR CONFIDENTIAL TREATMENT





In the Matter of:

ELECTRONIC APPLICATION OF)
BIG RIVERS ELECTRIC CORPORATION)
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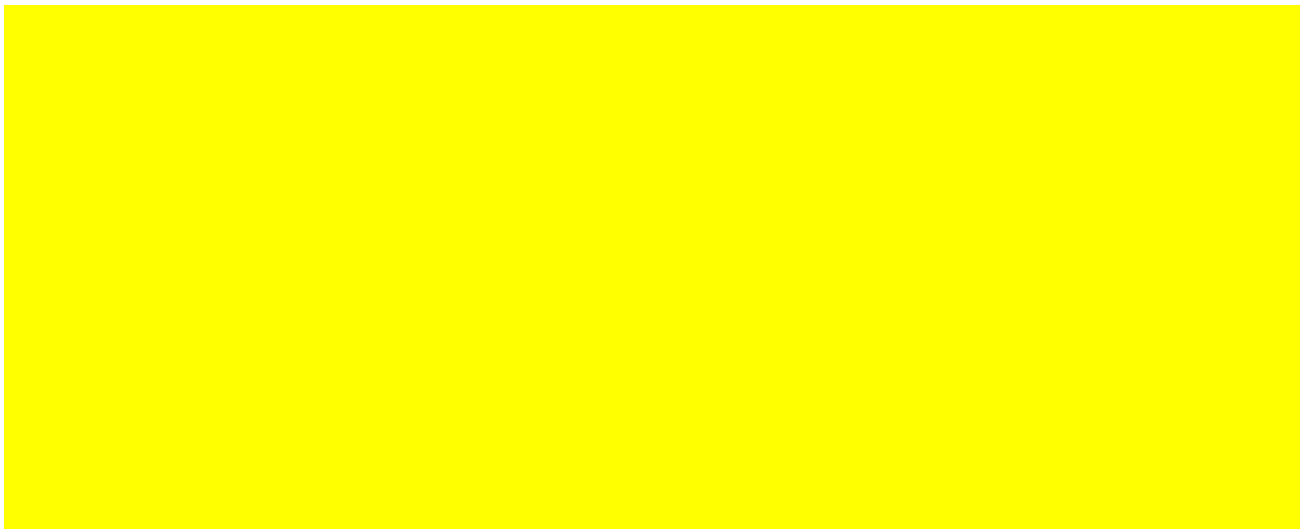
Case No.
2019-00435

CONFIDENTIAL INFORMATION

Project 12
Wilson Station FGD Replacement and Upgrade
Appendix DD – Field Routed Fiber

Filed pursuant to Ordering Paragraph No. 18
of Commission's August 6, 2020 Order
FILED: November 30, 2021

INFORMATION SUBMITTED with
MOTION FOR CONFIDENTIAL TREATMENT





In the Matter of:

ELECTRONIC APPLICATION OF)
BIG RIVERS ELECTRIC CORPORATION)
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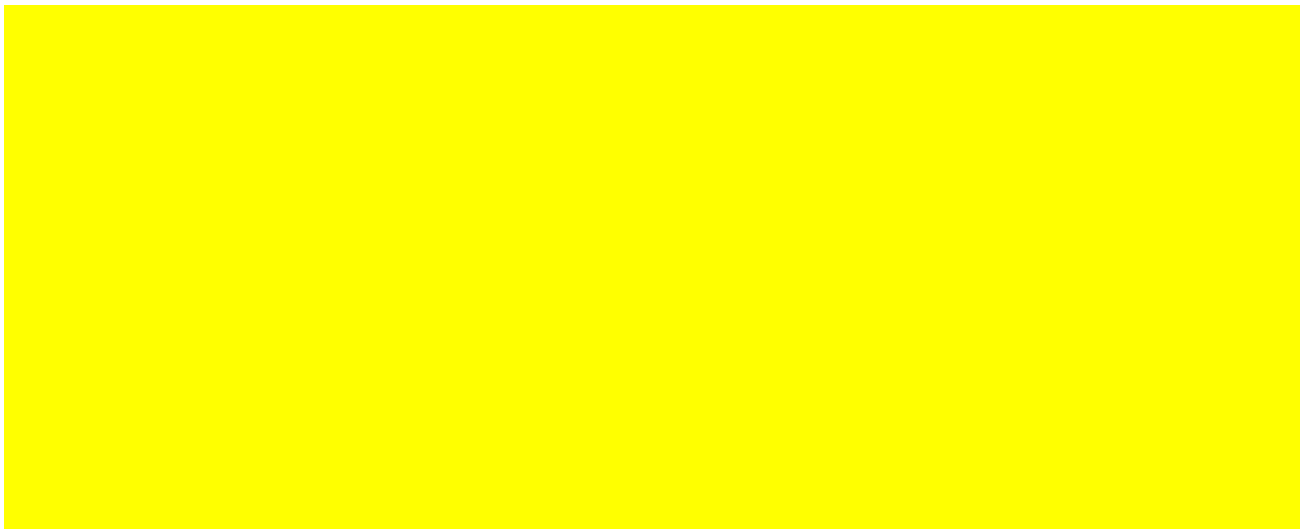
Case No.
2019-00435

CONFIDENTIAL INFORMATION

Project 12
Wilson Station FGD Replacement and Upgrade
Appendix EE – Electrical Demolition Package

Filed pursuant to Ordering Paragraph No. 18
of Commission's August 6, 2020 Order
FILED: November 30, 2021

INFORMATION SUBMITTED with
MOTION FOR CONFIDENTIAL TREATMENT





In the Matter of:

ELECTRONIC APPLICATION OF)
BIG RIVERS ELECTRIC CORPORATION)
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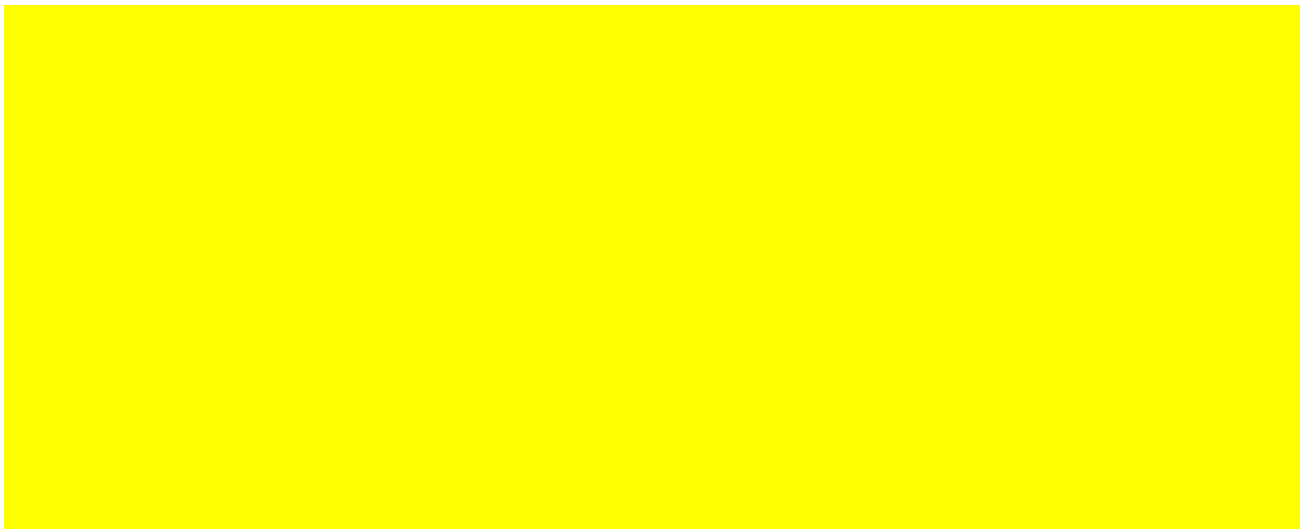
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Project 12
Wilson Station FGD Replacement and Upgrade

Appendix GG – Spool Drawings

Filed pursuant to Ordering Paragraph No. 18
of Commission's August 6, 2020 Order
FILED: November 30, 2021

INFORMATION SUBMITTED with
MOTION FOR CONFIDENTIAL TREATMENT





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ELECTRONIC APPLICATION OF)
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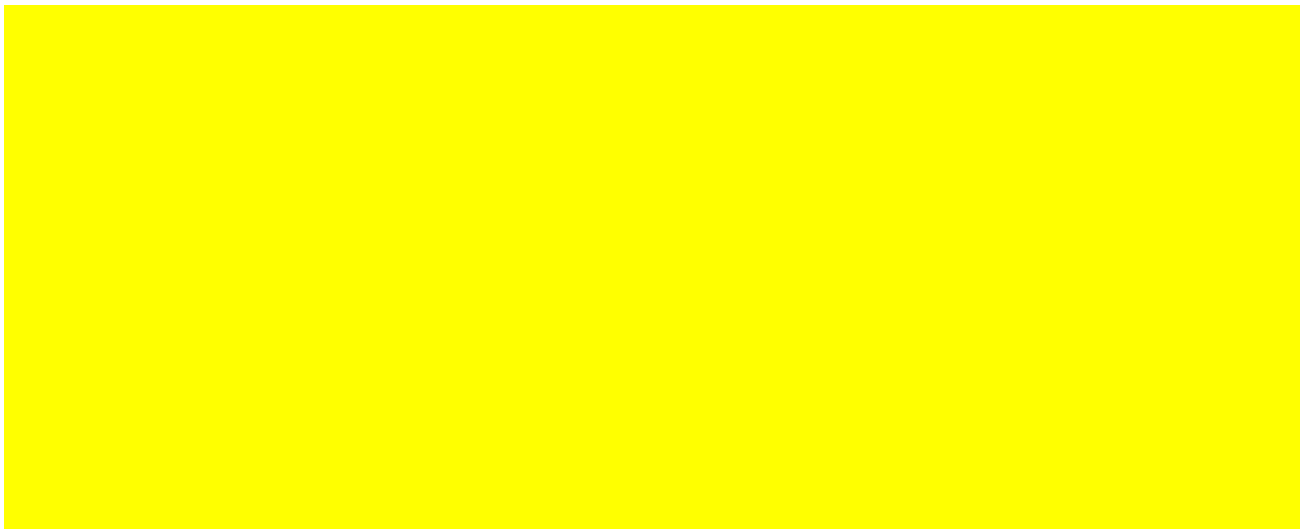
Project 12

Wilson Station FGD Replacement and Upgrade

Appendix HH – Pipe Gaskets and Expansion Joints w/ Drawings

**Filed pursuant to Ordering Paragraph No. 18
of Commission's August 6, 2020 Order
FILED: November 30, 2021**

INFORMATION SUBMITTED with
MOTION FOR CONFIDENTIAL TREATMENT





In the Matter of:

ELECTRONIC APPLICATION OF)
BIG RIVERS ELECTRIC CORPORATION)
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2019-00435

CONFIDENTIAL INFORMATION

Project 12
Wilson Station FGD Replacement and Upgrade

Appendix II – Interconnection Diagrams

Filed pursuant to Ordering Paragraph No. 18
of Commission's August 6, 2020 Order
FILED: November 30, 2021

INFORMATION SUBMITTED with
MOTION FOR CONFIDENTIAL TREATMENT

