

50-305

RESPONSE TO NUREG-0737 ITEM II.D.1

Docket # *50-305*

Control # *8403280048*

Date *3/23/84* of Document:
REGULATORY DOCKET FILE

.1050	-196.	-824.	493.	0.	0.	0.	.0245	-.0048	.0189	.1263	-.0493	-.0410	0.
.1060	-240.	-734.	514.	-0.	0.	0.	.0257	-.0024	.0196	.1219	-.0373	-.0300	0.
.1070	-255.	-636.	537.	-0.	0.	0.	.0271	.0006	.0199	.1190	-.0268	-.0223	0.
.1080	-230.	-571.	560.	0.	0.	0.	.0287	.0042	.0197	.1184	-.0189	-.0196	0.
.1090	-173.	-470.	570.	0.	0.	0.	.0305	.0082	.0191	.1181	-.0130	-.0205	0.
.1100	-118.	-357.	552.	0.	0.	0.	.0325	.0125	.0180	.1151	-.0071	-.0213	0.
.1110	-42.	-257.	500.	0.	0.	0.	.0345	.0171	.0165	.1068	-.0008	-.0234	0.
.1120	65.	-142.	418.	0.	0.	0.	.0365	.0218	.0146	.0928	.0052	-.0275	0.
.1130	164.	33.	317.	0.	0.	0.	.0384	.0267	.0124	.0763	.0099	-.0309	0.

ADLPIPE PAGE 2182

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.19.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	END	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ			DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.1140	231.	211.	222.	0.	0.	0.	.0403	.0315	.0099	.0626	.0118	-.0335	0.		
.1150	290.	300.	155.	0.	-0.	0.	.0419	.0361	.0073	.0543	.0091	-.0386	0.		
.1160	357.	350.	115.	0.	0.	0.	.0433	.0404	.0046	.0503	.0013	-.0474	0.		
.1170	421.	487.	85.	0.	0.	0.	.0443	.0445	.0018	.0482	-.0089	-.0577	0.		
.1180	448.	645.	57.	-0.	0.	-0.	.0451	.0481	-.0011	.0458	-.0165	-.0652	0.		
.1190	458.	767.	28.	-0.	-0.	-0.	.0455	.0511	-.0040	.0365	-.0191	-.0689	0.		
.1200	451.	857.	-24.	-0.	-0.	-0.	.0455	.0536	-.0070	.0140	-.0149	-.0662	0.		
.1210	392.	918.	-116.	-0.	0.	-0.	.0451	.0553	-.0098	-.0207	-.0024	-.0552	0.		
.1220	295.	938.	-235.	-0.	0.	-0.	.0444	.0563	-.0126	-.0619	.0152	-.0393	0.		
.1230	185.	852.	-340.	-0.	-0.	-0.	.0436	.0565	-.0152	-.1006	.0315	-.0232	0.		
.1240	98.	745.	-404.	-0.	0.	-0.	.0425	.0561	-.0175	-.1290	.0395	-.0127	0.		
.1250	44.	712.	-423.	-0.	0.	-0.	.0414	.0550	-.0194	-.1397	.0361	-.0112	0.		
.1260	2.	695.	-385.	-0.	0.	-0.	.0403	.0534	-.0211	-.1296	.0221	-.0178	0.		
.1270	-15.	666.	-291.	-0.	0.	-0.	.0391	.0512	-.0224	-.1061	.0003	-.0291	0.		
.1280	-20.	600.	-182.	-0.	0.	-0.	.0380	.0485	-.0234	-.0810	-.0228	-.0398	0.		
.1290	-16.	519.	-123.	-0.	0.	-0.	.0369	.0454	-.0244	-.0651	-.0392	-.0473	0.		
.1300	-3.	393.	-138.	-0.	0.	-0.	.0358	.0418	-.0252	-.0633	-.0447	-.0500	0.		
.1310	10.	177.	-198.	-0.	0.	-0.	.0347	.0380	-.0259	-.0752	-.0404	-.0462	0.		
.1320	48.	-6.	-279.	0.	0.	-0.	.0336	.0340	-.0265	-.0957	-.0318	-.0386	0.		
.1330	104.	-87.	-363.	0.	0.	-0.	.0325	.0301	-.0268	-.1135	-.0237	-.0319	0.		
.1340	168.	-93.	-418.	-0.	0.	0.	.0312	.0262	-.0268	-.1189	-.0209	-.0293	0.		
.1350	238.	-114.	-402.	0.	0.	0.	.0299	.0224	-.0265	-.1082	-.0272	-.0308	0.		
.1360	313.	-185.	-323.	0.	0.	0.	.0283	.0180	-.0259	-.0845	-.0417	-.0359	0.		
.1370	407.	-191.	-235.	0.	-0.	0.	.0265	.0152	-.0250	-.0550	-.0592	-.0448	0.		
.1380	482.	-117.	-168.	0.	-0.	0.	.0243	.0119	-.0240	-.0269	-.0728	-.0513	0.		
.1390	506.	-9.	-114.	0.	0.	0.	.0217	.0086	-.0228	-.0076	-.0785	-.0479	0.		
.1400	478.	58.	-75.	0.	-0.	0.	.0188	.0054	-.0215	-.0019	-.0752	-.0326	0.		
.1410	408.	21.	-72.	0.	-0.	0.	.0155	.0021	-.0202	-.0080	-.0633	-.0098	0.		
.1420	325.	-76.	-93.	0.	0.	0.	.0119	-.0012	-.0188	-.0196	-.0468	.0150	0.		
.1430	222.	-211.	-86.	0.	-0.	0.	.0080	-.0044	-.0174	-.0281	-.0308	.0413	0.		
.1440	109.	-322.	-27.	0.	0.	0.	.0039	-.0074	-.0159	-.0277	-.0199	.0668	0.		
.1450	6.	-397.	56.	0.	-0.	-0.	-.0002	-.0101	-.0144	-.0177	-.0153	.0869	0.		
.1460	-85.	-514.	145.	-0.	-0.	0.	-.0043	-.0125	-.0130	-.0003	-.0159	.1005	0.		
.1470	-165.	-684.	250.	-0.	0.	-0.	-.0083	-.0145	-.0117	.0195	-.0195	.1109	0.		
.1480	-254.	-888.	361.	-0.	0.	-0.	-.0121	-.0159	-.0106	.0358	-.0218	.1230	0.		
.1490	-340.	-1061.	428.	-0.	0.	-0.	-.0158	-.0165	-.0098	.0428	-.0190	.1360	0.		
.1500	-409.	-1240.	432.	-0.	0.	-0.	-.0191	-.0163	-.0093	.0374	-.0099	.1476	0.		
.1510	-473.	-1499.	401.	-0.	0.	-0.	-.0221	-.0151	-.0092	.0211	.0036	.1593	0.		

ADLPIPE PAGE 2183

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.19.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION 56 MEMBER 2 SEQUENCE 827 LOCATION END TYPE VA

.1430	222.	-211.	-86.	0.	-0.	0.	0.	.080	-.0044	-.0174	-.0281	-.0308	.0413	0.
.1440	109.	-322.	-27.	0.	0.	0.	0.	.039	-.0074	-.0159	-.0277	-.0199	.0668	0.
.1450	6.	-397.	56.	0.	-0.	-0.	-0.	-.0002	-.0101	-.0144	-.0177	-.0153	.0869	0.
.1460	-85.	-514.	145.	-0.	-0.	0.	0.	-.0043	-.0125	-.0130	-.0003	-.0159	.1005	0.
.1470	-165.	-684.	250.	-0.	0.	-0.	-0.	-.0083	-.0145	-.0117	.0195	-.0195	.1109	0.
.1480	-254.	-888.	361.	-0.	0.	-0.	-0.	-.0121	-.0159	-.0106	.0358	-.0218	.1230	0.
.1490	-340.	-1061.	428.	-0.	0.	-0.	-0.	-.0158	-.0165	-.0098	.0428	-.0190	.1360	0.
.1500	-409.	-1240.	432.	-0.	0.	-0.	-0.	-.0191	-.0163	-.0093	.0374	-.0099	.1476	0.
.1510	-473.	-1499.	401.	-0.	0.	-0.	-0.	-.0221	-.0151	-.0092	.0211	.0036	.1593	0.

ADLPIPE PAGE 2183

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.19.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
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ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	END	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.1520	-521.	-1720.	361.	-0.	0.	-0.	-0.	-.0247	-.0126	-.0094	-.0014	.0174	.1695	0.	
.1530	-545.	-1765.	306.	-0.	0.	-0.	-0.	-.0269	-.0089	-.0099	-.0229	.0284	.1737	0.	
.1540	-533.	-1613.	248.	-0.	0.	-0.	-0.	-.0287	-.0037	-.0106	-.0371	.0339	.1677	0.	
.1550	-501.	-1403.	221.	-0.	-0.	-0.	-0.	-.0300	.0028	-.0116	-.0417	.0315	.1530	0.	
.1560	-468.	-1241.	232.	-0.	-0.	-0.	-0.	-.0310	.0103	-.0127	-.0391	.0214	.1322	0.	
.1570	-403.	-1015.	240.	-0.	0.	-0.	-0.	-.0315	.0187	-.0139	-.0344	.0066	.1041	0.	
.1580	-322.	-637.	217.	-0.	0.	-0.	-0.	-.0318	.0279	-.0154	-.0310	.0077	.0716	0.	
.1590	-248.	-119.	172.	0.	-0.	-0.	-0.	-.0318	.0376	-.0170	-.0322	-.0184	.0409	0.	
.1600	-169.	471.	109.	-0.	0.	-0.	-0.	-.0316	.0472	-.0188	-.0421	-.0253	.0133	0.	
.1610	-70.	1021.	13.	0.	0.	-0.	-0.	-.0313	.0564	-.0206	-.0603	-.0278	-.0140	0.	
.1620	31.	1477.	-111.	0.	-0.	-0.	-0.	-.0310	.0647	-.0224	-.0819	-.0259	-.0408	0.	
.1630	124.	1921.	-226.	0.	0.	-0.	-0.	-.0307	.0717	-.0241	-.1030	-.0225	-.0642	0.	
.1640	197.	2349.	-307.	0.	-0.	-0.	-0.	-.0305	.0771	-.0257	-.1199	-.0194	-.0824	0.	
.1650	260.	2695.	-370.	0.	-0.	-0.	-0.	-.0304	.0806	-.0269	-.1308	-.0167	-.0979	0.	
.1660	333.	2945.	-435.	0.	0.	-0.	-0.	-.0306	.0819	-.0279	-.1374	-.0148	-.1131	0.	
.1670	390.	3056.	-488.	0.	0.	-0.	-0.	-.0311	.0808	-.0285	-.1401	-.0133	-.1238	0.	
.1680	425.	3029.	-516.	0.	0.	-0.	-0.	-.0319	.0773	-.0286	-.1390	-.0118	-.1273	0.	
.1690	432.	2859.	-533.	0.	0.	-0.	-0.	-.0330	.0714	-.0284	-.1341	-.0094	-.1249	0.	
.1700	428.	2559.	-549.	0.	-0.	-0.	-0.	-.0345	.0632	-.0278	-.1260	-.0068	-.1187	0.	
.1710	414.	2123.	-546.	0.	-0.	-0.	-0.	-.0363	.0530	-.0267	-.1146	-.0052	-.1085	0.	
.1720	362.	1520.	-504.	0.	-0.	-0.	-0.	-.0364	.0412	-.0252	-.0978	-.0043	-.0921	0.	
.1730	298.	876.	-443.	0.	-0.	-0.	-0.	-.0409	.0283	-.0232	-.0772	-.0040	-.0724	0.	
.1740	231.	248.	-383.	0.	-0.	-0.	-0.	-.0435	.0148	-.0210	-.0552	-.0032	-.0516	0.	
.1750	149.	-419.	-316.	0.	-0.	-0.	-0.	-.0463	.0012	-.0184	-.0333	-.0012	-.0285	0.	
.1760	49.	-1114.	-231.	0.	-0.	-0.	-0.	-.0492	-.0120	-.0156	-.0136	.0021	-.0822	0.	
.1770	-71.	-1766.	-142.	0.	-0.	-0.	-0.	-.0521	-.0242	-.0126	.0024	.0074	.0268	0.	
.1780	-196.	-2278.	-64.	0.	-0.	-0.	-0.	-.0550	-.0349	-.0096	.0141	.0149	.0558	0.	
.1790	-733.	-2675.	12.	-0.	-0.	-0.	-0.	-.0577	-.0437	-.0065	.0225	.0240	.0847	0.	
.1800	-473.	-2981.	98.	-0.	-0.	-0.	-0.	-.0601	-.0503	-.0034	.0270	.0331	.1121	0.	
.1810	-586.	-3136.	183.	-0.	-0.	-0.	-0.	-.0621	-.0544	-.0004	.0303	.0407	.1342	0.	
.1820	-679.	-3138.	253.	-0.	-0.	-0.	-0.	-.0636	-.0561	.0024	.0321	.0473	.1494	0.	
.1830	-750.	-2972.	316.	-0.	-0.	-0.	-0.	-.0645	-.0552	.0050	.0339	.0523	.1581	0.	
.1840	-799.	-2671.	381.	-0.	0.	-0.	-0.	-.0649	-.0520	.0073	.0348	.0549	.1612	0.	
.1850	-819.	-2270.	435.	-0.	-0.	-0.	-0.	-.0646	-.0467	.0093	.0342	.0557	.1582	0.	
.1860	-804.	-1772.	462.	-0.	0.	-0.	-0.	-.0636	-.0397	.0110	.0320	.0555	.1481	0.	
.1870	-769.	-1214.	467.	-0.	0.	-0.	-0.	-.0620	-.0313	.0123	.0289	.0547	.1330	0.	
.1880	-709.	-619.	465.	-0.	0.	-0.	-0.	-.0598	-.0220	.0132	.0255	.0520	.1140	0.	
.1890	-624.	-35.	456.	-0.	0.	-0.	-0.	-.0571	-.0123	.0137	.0232	.0475	.0908	0.	

ADLPIPE PAGE 2184

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.19.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION 56 MEMBER 2 SEQUENCE 827 LOCATION END TYPE VA

.1810	-586.	-3136.	183.	-0.	-0.	-0.	-0.	-.621	-.0544	-.0004	.0303	.0407	.1342	0.
.1820	-679.	-3136.	253.	-0.	-0.	-0.	-0.	-.636	-.0561	-.0024	.0321	.0473	.1494	0.
.1830	-750.	-2972.	316.	-0.	-0.	-0.	-0.	-.645	-.0552	.0050	.0339	.0523	.1581	0.
.1840	-799.	-2671.	361.	-0.	0.	-0.	-0.	-.649	-.0520	.0073	.0348	.0549	.1612	0.
.1850	-819.	-2270.	435.	-0.	-0.	-0.	-0.	-.646	-.0467	.0093	.0342	.0557	.1582	0.
.1860	-804.	-1772.	462.	-0.	0.	-0.	-0.	-.636	-.0397	.0110	.0320	.0555	.1481	0.
.1870	-769.	-1214.	467.	-0.	0.	-0.	-0.	-.620	-.0313	.0123	.0289	.0547	.1330	0.
.1880	-709.	-619.	465.	-0.	0.	-0.	-0.	-.598	-.0220	.0132	.0255	.0520	.1140	0.
.1890	-624.	-75.	456.	-0.	0.	-0.	-0.	-.571	-.0123	.0137	.0232	.0475	.0908	0.

ADLPIPE PAGE 2184

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.19.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	END	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.1900	-513.	522.	432.	-0.	-0.	-0.	-.0538	-.0027	.0139	.0232	.0416	.0631	0.		
.1910	-378.	1065.	400.	-0.	0.	-0.	-.0502	.0064	.0137	.0252	.0344	.0327	0.		
.1920	-241.	1532.	369.	-0.	-0.	-0.	-.0463	.0146	.0133	.0285	.0273	.0031	0.		
.1930	-104.	1872.	329.	-0.	0.	-0.	-.0422	.0215	.0125	.0308	.0219	-.0247	0.		
.1940	40.	2077.	259.	-0.	0.	0.	-.0381	.0269	.0115	.0290	.0197	-.0508	0.		
.1950	179.	2150.	160.	-0.	0.	0.	-.0340	.0305	.0103	.0221	.0212	-.0734	0.		
.1960	300.	2106.	47.	0.	0.	0.	-.0301	.0325	.0089	.0115	.0254	-.0905	0.		
.1970	399.	1978.	-69.	0.	0.	0.	-.0265	.0327	.0076	-.0002	.0308	-.1028	0.		
.1980	480.	1782.	-183.	0.	0.	0.	-.0232	.0314	.0063	-.0101	.0348	-.1125	0.		
.1990	539.	1504.	-280.	0.	-0.	0.	-.0203	.0286	.0052	-.0150	.0353	-.1209	0.		
.2000	572.	1154.	-338.	0.	-0.	0.	-.0178	.0247	.0043	-.0131	.0314	-.1275	0.		
.2010	574.	792.	-360.	0.	0.	0.	-.0158	.0199	.0037	-.0051	.0236	-.1316	0.		
.2020	547.	465.	-364.	0.	0.	0.	-.0143	.0145	.0034	.0057	.0145	-.1333	0.		
.2030	489.	166.	-363.	0.	0.	0.	-.0132	.0088	.0034	.0148	.0068	-.1308	0.		
.2040	400.	-124.	-361.	0.	0.	0.	-.0125	.0030	.0037	.0184	.0024	-.1227	0.		
.2050	286.	-388.	-365.	0.	0.	0.	-.0120	-.0027	.0042	.0145	.0024	-.1088	0.		
.2060	152.	-591.	-378.	0.	0.	0.	-.0118	-.0081	.0051	.0046	.0067	-.0907	0.		
.2070	11.	-726.	-392.	0.	-0.	-0.	-.0118	-.0129	.0063	-.0083	.0132	-.0706	0.		
.2080	-128.	-815.	-388.	0.	0.	0.	-.0117	-.0171	.0078	-.0201	.0190	-.0507	0.		
.2090	-251.	-865.	-357.	0.	0.	0.	-.0115	-.0207	.0096	-.0273	.0216	-.0334	0.		
.2100	-352.	-854.	-300.	0.	0.	0.	-.0110	-.0235	.0116	-.0273	.0202	-.0207	0.		
.2110	-426.	-773.	-222.	0.	0.	-0.	-.0103	-.0257	.0139	-.0200	.0152	-.0132	0.		
.2120	-472.	-656.	-128.	0.	0.	-0.	-.0093	-.0272	.0163	-.0077	.0080	-.0095	0.		
.2130	-492.	-555.	-28.	-0.	0.	-0.	-.0078	-.0282	.0189	.0059	.0008	-.0084	0.		
.2140	-487.	-479.	60.	-0.	0.	-0.	-.0060	-.0288	.0214	.0173	-.0039	-.0089	0.		
.2150	-461.	-407.	126.	-0.	0.	-0.	-.0038	-.0290	.0239	.0247	-.0047	-.0098	0.		
.2160	-421.	-327.	175.	-0.	0.	-0.	-.0012	-.0289	.0263	.0282	-.0017	-.0100	0.		
.2170	-369.	-254.	216.	-0.	-0.	-0.	.0017	-.0285	.0285	.0298	.0037	-.0102	0.		
.2180	-302.	-200.	252.	-0.	0.	-0.	.0049	-.0280	.0305	.0321	.0094	-.0123	0.		
.2190	-218.	-161.	290.	-0.	0.	-0.	.0084	-.0272	.0323	.0377	.0135	-.0176	0.		
.2200	-128.	-122.	341.	-0.	0.	-0.	.0119	-.0264	.0339	.0483	.0148	-.0255	0.		
.2210	-42.	-71.	405.	-0.	0.	0.	.0156	-.0255	.0352	.0636	.0135	-.0345	0.		
.2220	36.	-10.	470.	-0.	-0.	0.	.0193	-.0245	.0362	.0807	.0109	-.0439	0.		
.2230	105.	38.	521.	-0.	-0.	0.	.0229	-.0235	.0367	.0957	.0086	-.0524	0.		
.2240	160.	59.	548.	-0.	0.	-0.	.0265	-.0226	.0369	.1055	.0081	-.0584	0.		
.2250	197.	63.	549.	-0.	0.	0.	.0299	-.0217	.0366	.1085	.0103	-.0607	0.		
.2260	215.	65.	521.	0.	0.	0.	.0331	-.0209	.0359	.1053	.0145	-.0596	0.		
.2270	221.	55.	471.	-0.	0.	0.	.0362	-.0201	.0347	.0980	.0193	-.0565	0.		

ADLPIPE PAGE 2185

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.19.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	END	TYPE	VA
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.2190	-218.	-181.	290.	-0.	0.	-0.	.0084	-.0272	.0323	.0377	.0135	-.0176	0.
.2200	-128.	-122.	341.	-0.	0.	-0.	.0119	-.0264	.0339	.0483	.0148	-.0255	0.
.2210	-42.	-71.	405.	-0.	0.	0.	.0156	-.0255	.0352	.0636	.0135	-.0345	0.
.2220	36.	-10.	470.	-0.	-0.	0.	.0193	-.0245	.0362	.0807	.0109	-.0439	0.
.2230	105.	38.	521.	-0.	-0.	0.	.0229	-.0235	.0367	.0957	.0086	-.0524	0.
.2240	160.	59.	548.	-0.	0.	-0.	.0265	-.0226	.0369	.1055	.0081	-.0584	0.
.2250	197.	63.	549.	-0.	0.	0.	.0299	-.0217	.0366	.1085	.0103	-.0607	0.
.2260	215.	65.	521.	0.	0.	0.	.0331	-.0209	.0359	.1053	.0145	-.0596	0.
.2270	221.	55.	471.	-0.	0.	0.	.0362	-.0201	.0347	.0980	.0193	-.0565	0.

ADLPIPE PAGE 2185 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.29.19.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	END	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2280	217.	16.	412.	-0.	0.	0.	.0391	-.0193	.0332	.0894	.0222	-.0528	0.		
.2290	207.	-49.	356.	-0.	0.	0.	.0418	-.0186	.0314	.0823	.0215	-.0494	0.		
.2300	194.	-116.	304.	-0.	0.	0.	.0443	-.0178	.0293	.0781	.0167	-.0474	0.		
.2310	183.	-175.	250.	-0.	0.	-0.	.0467	-.0170	.0269	.0760	.0087	-.0469	0.		
.2320	176.	-243.	191.	-0.	0.	-0.	.0489	-.0159	.0244	.0739	-.0014	-.0475	0.		
.2330	174.	-333.	121.	0.	-0.	-0.	.0509	-.0147	.0218	.0690	-.0116	-.0482	0.		
.2340	174.	-433.	35.	-0.	0.	0.	.0529	-.0132	.0190	.0595	-.0202	-.0484	0.		
.2350	178.	-516.	-67.	0.	-0.	0.	.0546	-.0114	.0163	.0448	-.0259	-.0477	0.		
.2360	183.	-570.	-179.	0.	0.	-0.	.0563	-.0091	.0136	.0256	-.0286	-.0461	0.		
.2370	190.	-604.	-291.	0.	-0.	-0.	.0577	-.0064	.0111	.0035	-.0289	-.0442	0.		
.2380	201.	-618.	-395.	-0.	-0.	0.	.0590	-.0032	.0088	-.0191	-.0279	-.0434	0.		
.2390	218.	-593.	-484.	0.	-0.	-0.	.0602	.0005	.0069	-.0401	-.0264	-.0448	0.		
.2400	238.	-506.	-552.	0.	-0.	-0.	.0612	.0046	.0054	-.0576	-.0252	-.0484	0.		
.2410	260.	-354.	-594.	0.	0.	0.	.0620	.0091	.0043	-.0707	-.0244	-.0540	0.		
.2420	280.	-151.	-610.	0.	-0.	-0.	.0625	.0138	.0037	-.0797	-.0240	-.0612	0.		
.2430	299.	75.	-605.	0.	-0.	-0.	.0629	.0187	.0036	-.0853	-.0234	-.0697	0.		
.2440	316.	308.	-583.	0.	-0.	-0.	.0630	.0234	.0039	-.0882	-.0222	-.0790	0.		
.2450	331.	545.	-542.	0.	-0.	0.	.0628	.0279	.0048	-.0883	-.0204	-.0883	0.		
.2460	345.	790.	-486.	-0.	-0.	-0.	.0624	.0319	.0060	-.0856	-.0180	-.0974	0.		
.2470	358.	1031.	-416.	0.	-0.	0.	.0617	.0352	.0077	-.0794	-.0152	-.1060	0.		
.2480	371.	1241.	-332.	0.	-0.	0.	.0607	.0377	.0096	-.0697	-.0127	-.1138	0.		
.2490	379.	1394.	-234.	-0.	-0.	-0.	.0594	.0391	.0118	-.0563	-.0106	-.1202	0.		
.2500	385.	1486.	-125.	-0.	-0.	-0.	.0578	.0395	.0142	-.0395	-.0092	-.1247	0.		
.2510	387.	1522.	-13.	-0.	-0.	-0.	.0559	.0386	.0166	-.0202	-.0082	-.1269	0.		
.2520	382.	1501.	101.	-0.	0.	0.	.0537	.0366	.0191	.0009	-.0073	-.1257	0.		
.2530	365.	1411.	212.	-0.	-0.	0.	.0513	.0333	.0214	.0225	-.0064	-.1203	0.		
.2540	337.	1242.	318.	-0.	-0.	0.	.0485	.0290	.0235	.0436	-.0055	-.1106	0.		
.2550	300.	1002.	413.	-0.	-0.	-0.	.0455	.0236	.0254	.0636	-.0046	-.0969	0.		
.2560	254.	713.	495.	-0.	-0.	0.	.0422	.0176	.0269	.0820	-.0037	-.0794	0.		
.2570	199.	390.	565.	-0.	-0.	-0.	.0388	.0110	.0280	.0988	-.0030	-.0587	0.		
.2580	138.	39.	621.	-0.	-0.	0.	.0352	.0042	.0287	.1137	-.0027	-.0353	0.		
.2590	72.	-332.	661.	-0.	-0.	-0.	.0315	-.0026	.0288	.1259	-.0031	-.0104	0.		
.2600	5.	-699.	682.	0.	-0.	-0.	.0278	-.0091	.0284	.1351	-.0041	.0154	0.		
.2610	-61.	-1028.	687.	0.	-0.	-0.	.0241	-.0149	.0275	.1410	-.0058	.0415	0.		
.2620	-127.	-1298.	676.	-0.	-0.	-0.	.0204	-.0199	.0260	.1436	-.0078	.0673	0.		
.2630	-191.	-1512.	650.	0.	-0.	-0.	.0169	-.0238	.0239	.1427	-.0102	.0919	0.		
.2640	-249.	-1676.	609.	0.	-0.	0.	.0136	-.0264	.0214	.1381	-.0129	.1141	0.		
.2650	-298.	-1780.	557.	0.	-0.	0.	.0104	-.0277	.0183	.1303	-.0160	.1333	0.		

ADLPIPE PAGE 2186 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.29.19.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	END	TYPE	VA						
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.2570	199.	390.	565.	-0.	-0.	-0.	.338	.0110	.0280	.0988	-.0030	-.0587	0.
.2580	138.	39.	621.	-0.	-0.	0.	.352	.0042	.0287	.1137	-.0027	-.0353	0.
.2590	72.	-332.	661.	-0.	-0.	-0.	.0315	-.0026	.0288	.1259	-.0031	-.0104	0.
.2600	5.	-699.	682.	0.	-0.	-0.	.0278	-.0091	.0284	.1351	-.0041	.0154	0.
.2610	-61.	-1028.	687.	0.	-0.	-0.	.0241	-.149	.0275	.1410	-.0058	.0415	0.
.2620	-127.	-1298.	676.	-0.	-0.	-0.	.0204	-.0199	.0260	.1436	-.0078	.0673	0.
.2630	-191.	-1512.	650.	0.	-0.	-0.	.0169	-.0238	.0239	.1427	-.0102	.0919	0.
.2640	-249.	-1676.	609.	0.	-0.	0.	.0136	-.0264	.0214	.1381	-.0129	.1141	0.
.2650	-298.	-1780.	557.	0.	-0.	0.	.0104	-.0277	.0183	.1303	-.0160	.1333	0.

ADLPIPE PAGE 2186

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.19.

S/RV PIPING KEWAUNEE GKW02F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	END	TYPE	VA					STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ		(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
.2660	-339.	-1798.	496.	-0.	-0.	0.	.0075	-.0275	.0149	.1200	-.0192	.1494	0.	
.2670	-374.	-1720.	430.	0.	-0.	-0.	.0049	-.0259	.0110	.1078	-.0223	.1620	0.	
.2680	-398.	-1566.	360.	-0.	-0.	0.	.0027	-.0230	.0068	.0939	-.0251	.1706	0.	
.2690	-410.	-1364.	287.	0.	-0.	0.	.0007	-.0188	.0024	.0782	-.0274	.1751	0.	
.2700	-408.	-1122.	212.	0.	0.	-0.	-.0009	-.0135	-.0023	.0609	-.0290	.1754	0.	
.2710	-394.	-834.	136.	-0.	-0.	-0.	-.0022	-.0074	-.0071	.0427	-.0296	.1723	0.	
.2720	-373.	-514.	63.	-0.	-0.	-0.	-.0032	-.0006	-.0120	.0241	-.0290	.1664	0.	
.2730	-343.	-198.	-7.	-0.	-0.	-0.	-.0039	.0065	-.0169	.0056	-.0276	.1578	0.	
.2740	-298.	100.	-72.	-0.	-0.	-0.	-.0043	.0137	-.0219	-.0125	-.0257	.1462	0.	
.2750	-237.	391.	-135.	-0.	0.	-0.	-.0045	.0208	-.0267	-.0294	-.0238	.1319	0.	
.2760	-169.	679.	-192.	-0.	-0.	-0.	-.0045	.0276	-.0314	-.0440	-.0217	.1161	0.	
.2770	-98.	934.	-239.	0.	0.	-0.	-.0044	.0337	-.0360	-.0561	-.0196	.0999	0.	
.2780	-23.	1126.	-279.	-0.	0.	-0.	-.0042	.0391	-.0403	-.0664	-.0178	.0833	0.	
.2790	59.	1255.	-318.	-0.	0.	-0.	-.0040	.0435	-.0444	-.0758	-.0162	.0668	0.	
.2800	139.	1344.	-356.	0.	0.	-0.	-.0038	.0469	-.0482	-.0843	-.0144	.0517	0.	
.2810	208.	1396.	-392.	-0.	0.	-0.	-.0038	.0492	-.0517	-.0919	-.0124	.0392	0.	
.2820	266.	1397.	-424.	-0.	-0.	-0.	-.0040	.0503	-.0549	-.0990	-.0104	.0297	0.	
.2830	317.	1340.	-457.	0.	-0.	-0.	-.0043	.0504	-.0578	-.1059	-.0090	.0223	0.	
.2840	359.	1243.	-490.	0.	0.	0.	-.0050	.0494	-.0602	-.1118	-.0089	.0170	0.	
.2850	382.	1135.	-513.	0.	0.	-0.	-.0059	.0473	-.0623	-.1153	-.0101	.0145	0.	
.2860	380.	1026.	-522.	0.	0.	0.	-.0071	.0444	-.0640	-.1156	-.0129	.0153	0.	
.2870	357.	903.	-517.	0.	0.	0.	-.0086	.0407	-.0652	-.1135	-.0173	.0187	0.	
.2880	318.	755.	-505.	-0.	0.	-0.	-.0104	.0363	-.0660	-.1100	-.0227	.0241	0.	
.2890	259.	592.	-485.	0.	0.	0.	-.0125	.0314	-.0664	-.1056	-.0282	.0321	0.	
.2900	177.	438.	-456.	0.	0.	0.	-.0147	.0259	-.0665	-.1013	-.0327	.0438	0.	
.2910	75.	299.	-423.	-0.	0.	-0.	-.0171	.0202	-.0661	-.0977	-.0354	.0589	0.	
.2920	-38.	153.	-390.	-0.	0.	0.	-.0195	.0143	-.0654	-.0957	-.0361	.0761	0.	
.2930	-155.	-19.	-357.	0.	0.	0.	-.0219	.0082	-.0645	-.0948	-.0351	.0942	0.	
.2940	-273.	-204.	-319.	0.	0.	0.	-.0241	.0023	-.0632	-.0935	-.0330	.1125	0.	
.2950	-386.	-376.	-273.	0.	0.	-0.	-.0261	-.0035	-.0617	-.0905	-.0304	.1299	0.	
.2960	-486.	-537.	-219.	0.	0.	-0.	-.0277	-.0089	-.0600	-.0847	-.0279	.1447	0.	
.2970	-565.	-713.	-159.	-0.	0.	0.	-.0290	-.0139	-.0581	-.0761	-.0260	.1556	0.	
.2980	-618.	-912.	-92.	-0.	0.	0.	-.0298	-.0183	-.0561	-.0653	-.0249	.1621	0.	
.2990	-644.	-1103.	-23.	-0.	0.	-0.	-.0301	-.0218	-.0541	-.0533	-.0238	.1645	0.	
.3000	-643.	-1252.	39.	-0.	0.	-0.	-.0299	-.0245	-.0520	-.0414	-.0220	.1627	0.	
.3010	-618.	-1363.	90.	-0.	0.	-0.	-.0291	-.0262	-.0500	-.0308	-.0188	.1574	0.	
.3020	-568.	-1459.	131.	0.	0.	-0.	-.0279	-.0267	-.0481	-.0228	-.0144	.1485	0.	
.3030	-496.	-1532.	160.	0.	0.	-0.	-.0262	-.0261	-.0463	-.0179	-.0089	.1360	0.	

ADLPIPE PAGE 2187

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.19.

S/RV PIPING KEWAUNEE GKW02F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION 56 MEMBER 2 SEQUENCE 827 LOCATION END TYPE VA

.2950	-386.	-376.	273.	0.	0.	-0.	-.261	-.0035	-.0617	-.0905	-.0304	.1299	0.
.2960	-486.	-537.	-219.	0.	0.	-0.	-.277	-.0089	-.0600	-.0847	-.0279	.1447	0.
.2970	-565.	-713.	-159.	-0.	0.	0.	-.0290	-.0139	-.0581	-.0761	-.0260	.1556	0.
.2980	-618.	-912.	-92.	-0.	0.	0.	-.0298	-.0183	-.0561	-.0653	-.0249	.1621	0.
.2990	-644.	-1103.	-23.	-0.	0.	-0.	-.0301	-.0218	-.0541	-.0533	-.0238	.1645	0.
.3000	-643.	-1252.	39.	-0.	0.	-0.	-.0299	-.0245	-.0520	-.0414	-.0220	.1627	0.
.3010	-618.	-1363.	90.	-0.	0.	-0.	-.0291	-.0262	-.0500	-.0308	-.0188	.1574	0.
.3020	-568.	-1459.	131.	0.	0.	-0.	-.0279	-.0267	-.0481	-.0228	-.0144	.1485	0.
.3030	-496.	-1532.	160.	0.	0.	-0.	-.0262	-.0261	-.0463	-.0179	-.0089	.1360	0.

ADLPIPE PAGE 2187

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.19.

S/RV PIPING KEWAUNEE GKW02F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	END	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.3040	-404.	-1543.	176.	-0.	0.	-0.	-.0242	-.0243	-.0446	-.0154	-.0028	.1200	0.		
.3050	-299.	-1463.	183.	0.	-0.	-0.	-.0218	-.0212	-.0430	-.0144	.0036	.1011	0.		
.3060	-189.	-1308.	185.	0.	-0.	-0.	-.0192	-.0170	-.0416	-.0147	.0095	.0797	0.		
.3070	-71.	-1100.	183.	0.	-0.	0.	-.0165	-.0118	-.0404	-.0165	.0142	.0558	0.		
.3080	51.	-838.	171.	0.	-0.	-0.	-.0138	-.0057	-.0393	-.0202	.0177	.0297	0.		
.3090	171.	-503.	148.	0.	-0.	0.	-.0111	.0010	-.0383	-.0260	.0204	.0029	0.		
.3100	277.	-100.	117.	-0.	-0.	0.	-.0085	.0080	-.0375	-.0337	.0225	-.0228	0.		
.3110	369.	336.	79.	-0.	-0.	0.	-.0062	.0150	-.0367	-.0438	.0242	-.0467	0.		
.3120	445.	764.	30.	-0.	-0.	0.	-.0043	.0218	-.0360	-.0561	.0252	-.0687	0.		
.3130	506.	1162.	-27.	0.	-0.	-0.	-.0026	.0278	-.0354	-.0697	.0254	-.0883	0.		
.3140	546.	1532.	-85.	0.	-0.	0.	-.0014	.0328	-.0347	-.0832	.0247	-.1045	0.		
.3150	565.	1867.	-140.	0.	-0.	-0.	-.0007	.0366	-.0339	-.0952	.0229	-.1167	0.		
.3160	565.	2135.	-192.	-0.	-0.	0.	-.0004	.0389	-.0330	-.1054	.0199	-.1252	0.		
.3170	551.	2299.	-242.	0.	-0.	0.	-.0005	.0394	-.0319	-.1134	.0160	-.1302	0.		
.3180	523.	2344.	-286.	0.	-0.	0.	-.0011	.0380	-.0307	-.1193	.0114	-.1311	0.		
.3190	479.	2288.	-323.	0.	-0.	0.	-.0021	.0348	-.0292	-.1226	.0067	-.1275	0.		
.3200	422.	2141.	-354.	0.	-0.	0.	-.0035	.0298	-.0274	-.1235	.0026	-.1195	0.		
.3210	356.	1891.	-381.	0.	-0.	0.	-.0052	.0231	-.0254	-.1219	-.0009	-.1078	0.		
.3220	285.	1525.	-399.	0.	-0.	0.	-.0072	.0150	-.0230	-.1180	-.0037	-.0933	0.		
.3230	212.	1070.	-406.	0.	-0.	0.	-.0094	.0056	-.0204	-.1115	-.0060	-.0766	0.		
.3240	140.	576.	-403.	0.	-0.	0.	-.0117	-.0045	-.0174	-.1021	-.0075	-.0584	0.		
.3250	70.	80.	-389.	0.	-0.	-0.	-.0141	-.0149	-.0141	-.0898	-.0082	-.0394	0.		
.3260	7.	-417.	-363.	0.	-0.	0.	-.0166	-.0254	-.0105	-.0753	-.0081	-.0202	0.		
.3270	-60.	-911.	-324.	0.	-0.	0.	-.0191	-.0354	-.0066	-.0594	-.0073	-.0018	0.		
.3280	-114.	-1364.	-277.	0.	-0.	0.	-.0215	-.0447	-.0025	-.0430	-.0057	.0154	0.		
.3290	-163.	-1730.	-224.	0.	-0.	-0.	-.0238	-.0528	.0019	-.0262	-.0031	.0309	0.		
.3300	-208.	-1990.	-164.	0.	-0.	-0.	-.0260	-.0594	.0064	-.0093	.0004	.0448	0.		
.3310	-247.	-2151.	-96.	0.	-0.	0.	-.0279	-.0644	.0110	.0071	.0044	.0564	0.		
.3320	-274.	-2219.	-24.	0.	-0.	0.	-.0297	-.0677	.0157	.0225	.0085	.0649	0.		
.3330	-289.	-2180.	48.	-0.	-0.	-0.	-.0313	-.0692	.0203	.0369	.0126	.0699	0.		
.3340	-297.	-2023.	121.	0.	-0.	0.	-.0326	-.0689	.0250	.0504	.0167	.0721	0.		
.3350	-299.	-1762.	195.	-0.	-0.	-0.	-.0336	-.0670	.0295	.0628	.0205	.0722	0.		
.3360	-295.	-1430.	265.	0.	-0.	-0.	-.0344	-.0638	.0338	.0735	.0242	.0700	0.		
.3370	-283.	-1057.	327.	0.	-0.	0.	-.0350	-.0595	.0379	.0822	.0275	.0657	0.		
.3380	-268.	-660.	381.	-0.	-0.	-0.	-.0353	-.0543	.0417	.0892	.0304	.0602	0.		
.3390	-252.	-246.	429.	0.	-0.	-0.	-.0355	-.0487	.0452	.0951	.0329	.0543	0.		
.3400	-237.	167.	469.	0.	-0.	0.	-.0354	-.0429	.0483	.1003	.0346	.0483	0.		
.3410	-219.	545.	499.	0.	-0.	-0.	-.0351	-.0373	.0511	.1050	.0354	.0420	0.		

ADLPIPE PAGE 2188

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	END	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS	

.3330	-289.	-2180.	48.	-0.	-0.	-0.	-.0313	-.0692	.0203	.0369	.0126	.0699	0.
.3340	-297.	-2023.	121.	0.	-0.	0.	-.0326	-.0689	.0250	.0504	.0167	.0721	0.
.3350	-299.	-1762.	195.	-0.	-0.	-0.	-.0336	-.0670	.0295	.0628	.0205	.0722	0.
.3360	-295.	-1470.	265.	0.	-0.	-0.	-.0344	-.0638	.0338	.0735	.0242	.0700	0.
.3370	-283.	-1057.	327.	0.	-0.	0.	-.0350	-.0595	.0379	.0822	.0275	.0657	0.
.3380	-268.	-660.	381.	-0.	-0.	-0.	-.0353	-.0543	.0417	.0892	.0304	.0602	0.
.3390	-252.	-248.	429.	0.	-0.	-0.	-.0355	-.0487	.0452	.0951	.0329	.0543	0.
.3400	-237.	167.	469.	0.	-0.	0.	-.0354	-.0429	.0483	.1003	.0346	.0483	0.
.3410	-219.	545.	499.	0.	-0.	-0.	-.0351	-.0373	.0511	.1050	.0354	.0420	0.

ADLPIPE PAGE 2188

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	END	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3420	-201.	856.	521.	-0.	-0.	-0.	-.0347	-.0322	.0535	.1095	.0351	.0358	0.		
.3430	-184.	1094.	536.	0.	-0.	0.	-.0341	-.0278	.0554	.1139	.0339	.0304	0.		
.3440	-171.	1264.	542.	-0.	-0.	0.	-.0333	-.0244	.0569	.1182	.0322	.0263	0.		
.3450	-161.	1362.	537.	0.	-0.	-0.	-.0324	-.0219	.0579	.1219	.0303	.0238	0.		
.3460	-155.	1369.	519.	-0.	-0.	0.	-.0314	-.0206	.0585	.1245	.0284	.0227	0.		
.3470	-153.	1280.	491.	-0.	-0.	-0.	-.0302	-.0203	.0587	.1256	.0268	.0234	0.		
.3480	-156.	1116.	453.	-0.	-0.	0.	-.0290	-.0211	.0586	.1256	.0253	.0255	0.		
.3490	-162.	910.	406.	0.	-0.	-0.	-.0276	-.0227	.0580	.1248	.0240	.0288	0.		
.3500	-172.	677.	355.	-0.	-0.	-0.	-.0260	-.0250	.0572	.1235	.0226	.0327	0.		
.3510	-185.	417.	302.	0.	-0.	0.	-.0244	-.0279	.0560	.1221	.0209	.0368	0.		
.3520	-200.	138.	250.	0.	-0.	-0.	-.0225	-.0310	.0547	.1205	.0188	.0406	0.		
.3530	-217.	-131.	199.	0.	-0.	0.	-.0206	-.0342	.0531	.1187	.0166	.0437	0.		
.3540	-235.	-363.	149.	0.	-0.	0.	-.0184	-.0373	.0514	.1163	.0145	.0461	0.		
.3550	-255.	-551.	102.	0.	-0.	0.	-.0161	-.0400	.0496	.1132	.0127	.0479	0.		
.3560	-274.	-699.	57.	0.	-0.	0.	-.0135	-.0423	.0477	.1089	.0115	.0489	0.		
.3570	-289.	-806.	14.	0.	-0.	0.	-.0108	-.0440	.0458	.1033	.0107	.0483	0.		
.3580	-298.	-860.	-27.	0.	-0.	0.	-.0078	-.0451	.0438	.0967	.0105	.0460	0.		
.3590	-301.	-852.	-62.	-0.	0.	0.	-.0045	-.0454	.0420	.0899	.0104	.0421	0.		
.3600	-296.	-789.	-89.	0.	-0.	-0.	-.0011	-.0451	.0401	.0836	.0103	.0365	0.		
.3610	-281.	-689.	-108.	0.	-0.	0.	.0026	-.0441	.0384	.0778	.0099	.0289	0.		
.3620	-255.	-567.	-119.	0.	-0.	0.	.0065	-.0426	.0367	.0728	.0092	.0191	0.		
.3630	-219.	-426.	-123.	-0.	0.	0.	.0106	-.0407	.0351	.0685	.0083	.0080	0.		
.3640	-174.	-267.	-119.	0.	-0.	0.	.0149	-.0384	.0337	.0647	.0077	-.0040	0.		
.3650	-123.	-98.	-112.	0.	-0.	0.	.0193	-.0360	.0323	.0608	.0076	-.0162	0.		
.3660	-65.	57.	-104.	-0.	0.	0.	.0238	-.0334	.0310	.0566	.0083	-.0286	0.		
.3670	-3.	182.	-95.	0.	0.	-0.	.0283	-.0310	.0298	.0518	.0095	-.0406	0.		
.3680	60.	282.	-84.	0.	0.	0.	.0328	-.0287	.0287	.0468	.0113	-.0519	0.		
.3690	123.	365.	-72.	-0.	0.	0.	.0372	-.0266	.0277	.0422	.0131	-.0625	0.		
.3700	183.	432.	-56.	0.	0.	0.	.0416	-.0249	.0267	.0387	.0146	-.0724	0.		
.3710	238.	468.	-37.	-0.	0.	0.	.0457	-.0235	.0258	.0365	.0154	-.0817	0.		
.3720	287.	468.	-13.	-0.	0.	0.	.0497	-.0225	.0248	.0356	.0150	-.0903	0.		
.3730	329.	448.	15.	-0.	0.	0.	.0534	-.0218	.0239	.0361	.0137	-.0982	0.		
.3740	363.	426.	42.	-0.	0.	0.	.0568	-.0215	.0230	.0374	.0118	-.1051	0.		
.3750	386.	404.	68.	-0.	0.	-0.	.0600	-.0216	.0221	.0390	.0095	-.1107	0.		
.3760	398.	368.	91.	-0.	0.	0.	.0628	-.0220	.0211	.0400	.0074	-.1147	0.		
.3770	402.	314.	108.	-0.	0.	0.	.0653	-.0227	.0200	.0397	.0056	-.1172	0.		
.3780	398.	255.	117.	-0.	0.	0.	.0674	-.0236	.0188	.0380	.0045	-.1185	0.		
.3790	389.	208.	119.	-0.	0.	-0.	.0693	-.0247	.0175	.0350	.0039	-.1185	0.		

ADLPIPE PAGE 2189

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION 56 MEMBER 2 SEQUENCE 827 LOCATION END TYPE VA

.3710	230.	468.	-13.	-0.	0.	0.	0.	.0497	-.0225	.0248	.0356	.0150	-.0903	0.
.3720	287.	448.	15.	-0.	0.	0.	0.	.0534	-.0218	.0239	.0361	.0137	-.0982	0.
.3730	329.	426.	42.	-0.	0.	0.	0.	.0568	-.0215	.0230	.0374	.0118	-.1051	0.
.3740	363.	404.	68.	-0.	0.	0.	-0.	.0600	-.0216	.0221	.0390	.0095	-.1107	0.
.3750	386.	368.	91.	-0.	0.	0.	0.	.0628	-.0220	.0211	.0400	.0074	-.1147	0.
.3760	402.	314.	108.	-0.	0.	0.	0.	.0653	-.0227	.0200	.0397	.0056	-.1172	0.
.3770	402.	255.	117.	-0.	0.	0.	0.	.0674	-.0236	.0188	.0380	.0045	-.1185	0.
.3780	398.	208.	119.	-0.	0.	-0.	0.	.0693	-.0247	.0175	.0350	.0039	-.1185	0.

ADLPIPE PAGE 2189

DIS/ADLPIPE ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	END	TYPE	VA	VA	VA	VA	VA	VA	STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ			(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)			
.3800	374.	170.	115.	-0.	0.	-0.	.0708	-.0259	.0162	.0311	.0038	-.1174	0.		
.3810	358.	128.	106.	-0.	0.	-0.	.0720	-.0273	.0147	.0267	.0038	-.1158	0.		
.3820	344.	74.	92.	-0.	0.	0.	.0729	-.0288	.0132	.0219	.0035	-.1143	0.		
.3830	335.	13.	75.	-0.	0.	0.	.0736	-.0303	.0116	.0172	.0029	-.1133	0.		
.3840	330.	-45.	56.	-0.	0.	0.	.0740	-.0319	.0100	.0129	.0020	-.1126	0.		
.3850	332.	-100.	34.	-0.	0.	0.	.0741	-.0333	.0083	.0088	.0008	-.1124	0.		
.3860	341.	-162.	10.	-0.	0.	0.	.0739	-.0347	.0065	.0046	-.0005	-.1128	0.		
.3870	358.	-239.	-18.	-0.	0.	0.	.0735	-.0360	.0048	-.0000	-.0019	-.1140	0.		
.3880	384.	-316.	-47.	-0.	0.	-0.	.0728	-.0370	.0031	-.0050	-.0031	-.1159	0.		
.3890	414.	-373.	-78.	-0.	0.	0.	.0717	-.0378	.0015	-.0103	-.0041	-.1181	0.		
.3900	446.	-409.	-107.	0.	0.	-0.	.0704	-.0382	-.0001	-.0155	-.0051	-.1204	0.		
.3910	475.	-443.	-131.	0.	0.	0.	.0686	-.0384	-.0016	-.0204	-.0060	-.1229	0.		
.3920	501.	-483.	-147.	0.	0.	0.	.0665	-.0381	-.0030	-.0250	-.0072	-.1256	0.		
.3930	523.	-512.	-156.	0.	0.	0.	.0640	-.0375	-.0043	-.0291	-.0088	-.1281	0.		
.3940	536.	-502.	-158.	0.	0.	-0.	.0611	-.0365	-.0054	-.0327	-.0105	-.1303	0.		
.3950	538.	-455.	-151.	0.	0.	-0.	.0577	-.0351	-.0064	-.0356	-.0122	-.1318	0.		
.3960	528.	-388.	-137.	0.	0.	0.	.0539	-.0333	-.0073	-.0383	-.0140	-.1322	0.		
.3970	506.	-315.	-116.	0.	0.	0.	.0497	-.0312	-.0081	-.0412	-.0158	-.1316	0.		
.3980	474.	-229.	-92.	0.	0.	0.	.0451	-.0289	-.0088	-.0442	-.0174	-.1298	0.		
.3990	429.	-116.	-64.	0.	0.	0.	.0402	-.0264	-.0094	-.0469	-.0188	-.1265	0.		
.4000	371.	14.	-31.	0.	0.	-0.	.0349	-.0239	-.0100	-.0492	-.0200	-.1212	0.		

MAXIMUM VALUE OF STRESS OCCURS AT

TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.1510	-473.	-1499.	401.	-0.	0.	-0.	-.0221	-.0151	-.0092	.0211	.0036	.1593	0.

SECTION	57	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA	VA	VA	VA	VA	STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ		(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	0.	0.	-0.	-0.	-0.	0.	-.0000	.0000	.0000	-.0000	-.0000	.0000	.0000	0.
.0020	0.	0.	-0.	0.	-0.	0.	.0000	-.0000	.0000	-.0000	-.0000	.0000	.0000	0.
.0030	0.	0.	-0.	0.	-0.	0.	.0000	-.0000	.0000	-.0000	.0000	.0000	.0000	0.

ADLPIPE PAGE 2190

DIS/ADLPIPE ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA	VA	VA	VA	VA	STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ		(PSI)

SECTION	57	MEMBER		1	SEQUENCE			76	LOCATION			BEG	TYPE		VA	STRESS			
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS						
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)						
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.						
.0010	0.	0.	-0.	-0.	-0.	-0.	-.0000	.0000	.0000	-.0000	-.0000	.0000	0.						
.0020	0.	0.	-0.	0.	-0.	0.	.0000	-.0000	.0000	-.0000	-.0000	.0000	0.						
.0030	0.	0.	-0.	0.	-0.	0.	.0000	-.0000	.0000	-.0000	.0000	.0000	0.						

ADLPIPE PAGE 2190

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER		1	SEQUENCE			76	LOCATION			BEG	TYPE		VA	STRESS			
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS						
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)						
.0040	0.	0.	0.	0.	-0.	0.	.0000	-.0000	.0000	-.0000	-.0000	.0000	1.						
.0050	-1.	-0.	1.	0.	-1.	-0.	.0000	-.0000	.0000	-.0000	-.0000	.0000	4.						
.0060	-4.	-2.	3.	-0.	-2.	-1.	-.0000	-.0000	.0000	.0000	-.0001	.0000	8.						
.0070	-9.	-4.	6.	-0.	-4.	-3.	-.0001	.0000	.0000	.0001	-.0003	-.0000	16.						
.0080	-16.	-8.	11.	-0.	-7.	-5.	-.0002	.0000	-.0001	.0003	-.0007	-.0001	25.						
.0090	-28.	-12.	17.	-0.	-10.	-7.	-.0004	.0000	-.0003	.0007	-.0014	-.0002	36.						
.0100	-51.	-20.	28.	-0.	-12.	-12.	-.0008	.0000	-.0006	.0013	-.0023	-.0005	51.						
.0110	-92.	-36.	48.	-2.	-15.	-21.	-.0014	.0000	-.0010	.0022	-.0037	-.0009	79.						
.0120	-154.	-63.	76.	-5.	-16.	-38.	-.0024	.0000	-.0016	.0036	-.0055	-.0016	126.						
.0130	-230.	-96.	109.	-10.	-15.	-57.	-.0037	.0001	-.0024	.0055	-.0079	-.0025	181.						
.0140	-305.	-127.	139.	-11.	-11.	-72.	-.0055	.0001	-.0035	.0080	-.0108	-.0035	223.						
.0150	-362.	-145.	156.	-7.	-4.	-76.	-.0075	.0002	-.0048	.0109	-.0141	-.0048	233.						
.0160	-386.	-143.	154.	2.	6.	-69.	-.0095	.0003	-.0064	.0138	-.0175	-.0064	211.						
.0170	-365.	-119.	127.	14.	18.	-51.	-.0114	.0004	-.0080	.0162	-.0204	-.0083	171.						
.0180	-286.	-71.	71.	28.	33.	-23.	-.0128	.0004	-.0093	.0176	-.0221	-.0103	151.						
.0190	-147.	1.	-13.	43.	52.	14.	-.0134	.0003	-.0100	.0176	-.0218	-.0121	209.						
.0200	46.	91.	-120.	55.	72.	58.	-.0131	.0002	-.0096	.0158	-.0188	-.0131	328.						
.0210	263.	183.	-231.	63.	91.	100.	-.0116	-.0001	-.0079	.0121	-.0128	-.0130	454.						
.0220	440.	256.	-313.	59.	110.	123.	-.0090	-.0005	-.0048	.0069	-.0039	-.0123	534.						
.0230	568.	292.	-359.	41.	122.	120.	-.0059	-.0010	-.0006	.0007	.0069	-.0105	537.						
.0240	677.	298.	-388.	16.	120.	106.	-.0026	-.0016	.0040	-.0057	.0175	-.0070	490.						
.0250	826.	316.	-435.	1.	112.	112.	.0008	-.0023	.0076	-.0108	.0266	-.0025	480.						
.0260	995.	373.	-502.	4.	113.	147.	.0044	-.0029	.0089	-.0135	.0333	.0012	563.						
.0270	1036.	414.	-512.	4.	125.	158.	.0078	-.0036	.0081	-.0140	.0371	.0023	612.						
.0280	939.	360.	-455.	-25.	124.	97.	.0100	-.0044	.0065	-.0136	.0369	.0031	485.						
.0290	862.	251.	-411.	-68.	114.	16.	.0112	-.0050	.0041	-.0124	.0337	.0061	407.						
.0300	776.	202.	-372.	-84.	137.	-9.	.0131	-.0054	.0002	-.0092	.0315	.0083	490.						
.0310	565.	172.	-260.	-82.	158.	-8.	.0162	-.0056	-.0027	-.0068	.0314	.0107	542.						
.0320	212.	5.	-53.	-118.	137.	-90.	.0191	-.0055	-.0015	-.0083	.0329	.0166	614.						
.0330	-236.	-301.	216.	-198.	92.	-262.	.0212	-.0051	.0033	-.0129	.0363	.0250	1038.						
.0340	-667.	-558.	486.	-248.	35.	-387.	.0238	-.0042	.0092	-.0174	.0414	.0329	1403.						
.0350	-947.	-655.	684.	-224.	-37.	-381.	.0265	-.0028	.0139	-.0198	.0447	.0392	1348.						
.0360	-1100.	-680.	790.	-171.	-94.	-329.	.0272	-.0009	.0154	-.0192	.0424	.0418	1163.						
.0370	-1307.	-736.	877.	-140.	-112.	-334.	.0243	.0013	.0132	-.0153	.0325	.0378	1153.						
.0380	-1574.	-785.	961.	-106.	-115.	-355.	.0182	.0039	.0078	-.0086	.0150	.0283	1181.						
.0390	-1627.	-704.	912.	-21.	-105.	-269.	.0105	.0069	-.0004	.0012	-.0069	.0173	881.						
.0400	-1314.	-435.	655.	122.	-51.	-30.	.0028	.0100	-.0106	.0127	-.0269	.0065	411.						
.0410	-972.	-91.	389.	271.	21.	246.	-.0029	.0131	-.0182	.0204	-.0397	-.0052	1117.						

ADLPIPE PAGE 2191

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION 57 MEMBER 1 SEQUENCE 76 LOCATION BEG TYPE VA

.0330	-236.	-301.	216.	-198.	92.	-262.	.212	-.0051	.0033	-.0129	.0363	.0250	1038.
.0340	-667.	-558.	486.	-248.	35.	-387.	.238	-.0042	.0092	-.0174	.0414	.0329	1403.
.0350	-947.	-655.	684.	-224.	-37.	-381.	.0265	-.0028	.0139	-.0198	.0447	.0392	1348.
.0360	-1100.	-680.	790.	-171.	-94.	-329.	.0272	-.0009	.0154	-.0192	.0424	.0418	1163.
.0370	-1307.	-736.	877.	-140.	-112.	-334.	.0243	.0013	.0132	-.0153	.0325	.0378	1153.
.0380	-1574.	-785.	961.	-106.	-115.	-355.	.0182	.0039	.0078	-.0086	.0150	.0283	1181.
.0390	-1627.	-704.	912.	-21.	-105.	-269.	.0105	.0069	-.0004	.0012	-.0069	.0173	881.
.0400	-1316.	-435.	655.	122.	-51.	-30.	.0028	.0100	-.0106	.0127	-.0269	.0065	411.
.0410	-972.	-91.	389.	271.	21.	246.	-.0029	.0131	-.0182	.0204	-.0397	-.0052	1117.

ADLPIPE PAGE 2191

DIS/ADLPIPE
S/RV PIPING KEWAUNEE GKN08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA						STRESS
TIME		FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	(PSI)
(SEC)		(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	
.0420		-845.	103.	289.	349.	20.	386.		-.0062	.0158	-.0175	.0179	-.0442	-.0137	1584.
.0430		-805.	78.	285.	328.	-41.	353.		-.0084	.0180	-.0081	.0063	-.0394	-.0163	1471.
.0440		-598.	49.	219.	289.	-97.	319.		-.0085	.0196	.0051	-.0078	-.0251	-.0151	1344.
.0450		-223.	212.	92.	323.	-159.	440.		-.0057	.0208	.0179	-.0200	-.0063	-.0128	1729.
.0460		123.	430.	-22.	380.	-230.	599.		-.0031	.0213	.0277	-.0287	.0081	-.0113	2269.
.0470		297.	451.	-103.	343.	-250.	581.		-.0053	.0209	.0320	-.0322	.0120	-.0131	2188.
.0480		303.	327.	-160.	230.	-208.	424.		-.0117	.0196	.0296	-.0293	.0049	-.0194	1599.
.0490		298.	318.	-229.	166.	-150.	355.		-.0187	.0176	.0210	-.0197	-.0092	-.0282	1278.
.0500		428.	456.	-371.	164.	-71.	413.		-.0244	.0150	.0089	-.0045	-.0239	-.0366	1370.
.0510		567.	510.	-520.	119.	39.	405.		-.0296	.0117	-.0020	.0108	-.0335	-.0430	1290.
.0520		475.	338.	-506.	-19.	101.	217.		-.0331	.0077	-.0059	.0180	-.0360	-.0447	729.
.0530		206.	51.	-330.	-195.	66.	-56.		-.0329	.0033	-.0015	.0152	-.0302	-.0402	649.
.0540		58.	-170.	-179.	-340.	16.	-270.		-.0291	-.0013	.0071	.0084	-.0151	-.0319	1320.
.0550		113.	-267.	-133.	-434.	-4.	-388.		-.0233	-.0059	.0158	.0021	.0051	-.0232	1771.
.0560		164.	-332.	-82.	-503.	-44.	-480.		-.0177	-.0104	.0234	-.0044	.0217	-.0150	2117.
.0570		76.	-459.	16.	-580.	-91.	-626.		-.0151	-.0145	.0281	-.0092	.0289	-.0100	2611.
.0580		-25.	-591.	53.	-652.	-60.	-791.		-.0165	-.0182	.0261	-.0072	.0266	-.0113	3123.
.0590		50.	-559.	-53.	-648.	35.	-827.		-.0198	-.0212	.0175	.0019	.0176	-.0175	3197.
.0600		309.	-314.	-254.	-542.	120.	-684.		-.0222	-.0234	.0064	.0124	.0055	-.0246	2680.
.0610		604.	-31.	-461.	-414.	186.	-510.		-.0233	-.0251	-.0027	.0192	-.0039	-.0311	2078.
.0620		790.	108.	-590.	-343.	241.	-458.		-.0231	-.0261	-.0061	.0193	-.0058	-.0361	1889.
.0630		802.	135.	-615.	-305.	236.	-486.		-.0201	-.0266	-.0017	.0104	.0016	-.0367	1888.
.0640		1018.	195.	-595.	-235.	157.	-458.		-.0133	-.0264	.0089	-.0053	.0175	-.0313	1636.
.0650		1249.	328.	-599.	-116.	66.	-344.		-.0045	-.0254	.0213	-.0215	.0384	-.0230	1122.
.0660		1437.	445.	-595.	17.	-3.	-224.		.0033	-.0238	.0315	-.0336	.0566	-.0155	684.
.0670		1431.	475.	-520.	136.	-67.	-161.		.0078	-.0216	.0370	-.0400	.0640	-.0109	672.
.0680		1252.	458.	-410.	243.	-93.	-131.		.0081	-.0199	.0344	-.0383	.0576	-.0114	887.
.0690		1035.	480.	-346.	366.	-43.	-62.		.0046	-.0157	.0224	-.0257	.0398	-.0173	1138.
.0700		855.	558.	-330.	518.	52.	78.		-.0010	-.0121	.0045	-.0047	.0154	-.0250	1602.
.0710		656.	622.	-315.	667.	136.	235.		-.0065	-.0081	-.0134	.0173	-.0091	-.0303	2191.
.0720		336.	587.	-199.	765.	192.	327.		-.0100	-.0040	-.0260	.0335	-.0264	-.0316	2597.
.0730		-86.	443.	21.	805.	201.	341.		-.0100	.0002	-.0301	.0408	-.0316	-.0272	2728.
.0740		-458.	257.	281.	815.	144.	338.		-.0060	.0044	-.0255	.0394	-.0243	-.0157	2721.
.0750		-678.	102.	504.	817.	49.	367.		.0012	.0086	-.0155	.0323	-.0074	.0005	2727.
.0760		-808.	-11.	686.	804.	-47.	414.		.0095	.0126	-.0042	.0234	.0125	.0167	2754.
.0770		-961.	-124.	852.	766.	-131.	439.		.0162	.0164	.0045	.0163	.0273	.0295	2714.
.0780		-1141.	-248.	973.	704.	-176.	435.		.0189	.0199	.0076	.0156	.0315	.0369	2574.
.0790		-1275.	-316.	993.	642.	-148.	455.		.0173	.0231	.0028	.0236	.0246	.0375	2434.

ADLPIPE PAGE 2192

DIS/ADLPIPE
S/RV PIPING KEWAUNEE GKN08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION 57 MEMBER 1 SEQUENCE 76 LOCATION BEG TYPE VA

.0700	455.	551.	-338.	512.	51.	72.	-.0010	-.0121	.0045	-.0047	.0154	-.0250	1602.
.0710	656.	622.	-315.	667.	136.	235.	-.0065	-.0081	-.0134	.0173	-.0091	-.0303	2191.
.0720	336.	587.	-199.	765.	192.	327.	-.0100	-.0040	-.0260	.0335	-.0264	-.0316	2597.
.0730	-86.	443.	21.	805.	201.	341.	-.0100	.0002	-.0301	.0408	-.0316	-.0272	2728.
.0740	-458.	257.	281.	815.	144.	338.	-.0060	.0044	-.0255	.0394	-.0243	-.0157	2721.
.0750	-678.	102.	504.	817.	49.	367.	.0012	.0086	-.0155	.0323	-.0074	.0005	2727.
.0760	-808.	-11.	686.	804.	-47.	414.	.0095	.0126	-.0042	.0234	.0125	.0167	2754.
.0770	-961.	-124.	852.	766.	-131.	439.	.0162	.0164	.0045	.0163	.0273	.0295	2714.
.0780	-1141.	-248.	973.	704.	-176.	435.	.0189	.0199	.0076	.0156	.0315	.0369	2574.
.0790	-1275.	-316.	993.	642.	-148.	455.	.0173	.0231	.0028	.0236	.0246	.0375	2434.

ADLPIPE PAGE 2192

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

S/RV PIPING KEWAUNEE GKWO8F 2 RUP DISK
2 SAFETY COLD FKN24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	VA	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS
TIME (SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(DEG)	(DEG)	(DEG)	(DEG)	(DEG)	(DEG)	(PSI)
.0800	-1328.	-276.	914.	599.	-64.	546.	.0130	.0259	-.0085	.0388	.0095	.0328	2473.						
.0810	-1322.	-187.	787.	561.	25.	667.	.0074	.0282	-.0215	.0561	-.0089	.0263	2653.						
.0820	-1301.	-155.	656.	481.	105.	726.	.0018	.0299	-.0316	.0705	-.0243	.0203	2667.						
.0830	-1294.	-198.	560.	345.	161.	693.	-.0016	.0309	-.0354	.0774	-.0311	.0157	2406.						
.0840	-1258.	-244.	504.	189.	157.	630.	-.0012	.0312	-.0313	.0741	-.0273	.0144	2056.						
.0850	-1094.	-243.	435.	42.	95.	585.	.0029	.0308	-.0209	.0629	-.0146	.0170	1807.						
.0860	-793.	-209.	306.	-101.	34.	548.	.0084	.0299	-.0080	.0486	.0034	.0208	1697.						
.0870	-474.	-165.	154.	-244.	-1.	493.	.0134	.0283	.0038	.0347	.0207	.0226	1673.						
.0880	-228.	-122.	18.	-385.	-26.	418.	.0167	.0263	.0125	.0226	.0317	.0217	1731.						
.0890	-19.	-77.	-134.	-514.	-16.	336.	.0174	.0237	.0161	.0152	.0349	.0177	1869.						
.0900	202.	-10.	-331.	-621.	49.	267.	.0158	.0209	.0145	.0138	.0325	.0107	2061.						
.0910	395.	83.	-515.	-696.	125.	219.	.0138	.0177	.0108	.0150	.0278	.0029	2250.						
.0920	488.	137.	-613.	-755.	154.	148.	.0126	.0144	.0090	.0142	.0240	-.0028	2387.						
.0930	477.	84.	-614.	-827.	142.	-2.	.0123	.0109	.0109	.0104	.0240	-.0058	2553.						
.0940	413.	-51.	-550.	-898.	104.	-209.	.0129	.0073	.0159	.0051	.0284	-.0066	2822.						
.0950	352.	-171.	-451.	-926.	30.	-395.	.0145	.0039	.0220	-.0002	.0340	-.0058	3065.						
.0960	315.	-235.	-355.	-901.	-55.	-532.	.0157	.0008	.0257	-.0031	.0363	-.0058	3188.						
.0970	274.	-276.	-286.	-848.	-101.	-656.	.0146	-.0020	.0241	-.0005	.0314	-.0097	3276.						
.0980	199.	-315.	-241.	-777.	-102.	-785.	.0103	-.0044	.0162	.0082	.0175	-.0183	3373.						
.0990	128.	-313.	-223.	-674.	-83.	-881.	.0039	-.0063	.0034	.0213	-.0038	-.0300	3384.						
.1000	143.	-236.	-257.	-534.	-48.	-914.	-.0029	-.0075	-.0121	.0367	-.0274	-.0434	3222.						
.1010	268.	-107.	-335.	-369.	-10.	-899.	-.0086	-.0082	-.0269	.0512	-.0474	-.0562	2957.						
.1020	447.	19.	-400.	-202.	-6.	-879.	-.0117	-.0082	-.0371	.0607	-.0602	-.0660	2743.						
.1030	635.	107.	-420.	-51.	-51.	-875.	-.0116	-.0077	-.0411	.0626	-.0641	-.0714	2671.						
.1040	848.	182.	-418.	88.	-120.	-868.	-.0085	-.0065	-.0402	.0581	-.0595	-.0729	2679.						
.1050	1098.	281.	-421.	231.	-188.	-815.	-.0032	-.0047	-.0367	.0505	-.0493	-.0711	2641.						
.1060	1332.	395.	-421.	379.	-242.	-712.	.0028	-.0023	-.0330	.0426	-.0373	-.0669	2561.						
.1070	1460.	471.	-391.	507.	-264.	-598.	.0080	.0008	-.0305	.0363	-.0268	-.0615	2517.						
.1080	1450.	473.	-323.	598.	-251.	-499.	.0118	.0043	-.0298	.0322	-.0189	-.0551	2490.						
.1090	1324.	429.	-219.	668.	-221.	-392.	.0146	.0082	-.0299	.0303	-.0130	-.0472	2448.						
.1100	1025.	353.	-34.	723.	-185.	-282.	.0176	.0125	-.0298	.0301	-.0071	-.0394	2426.						
.1110	660.	219.	185.	748.	-163.	-189.	.0206	.0171	-.0282	.0298	-.0008	-.0299	2398.						
.1120	309.	39.	400.	748.	-169.	-105.	.0232	.0219	-.0247	.0284	.0052	-.0175	2354.						
.1130	-54.	-116.	619.	751.	-191.	0.	.0260	.0267	-.0207	.0275	.0099	-.0057	2356.						
.1140	-428.	-226.	817.	753.	-194.	116.	.0283	.0314	-.0182	.0284	.0118	.0022	2392.						
.1150	-779.	-329.	962.	727.	-165.	205.	.0287	.0360	-.0181	.0304	.0091	.0061	2353.						
.1160	-1103.	-427.	1058.	677.	-121.	277.	.0271	.0404	-.0198	.0325	.0013	.0075	2255.						
.1170	-1350.	-469.	1090.	629.	-63.	373.	.0243	.0444	-.0223	.0352	-.0089	.0072	2234.						

ADLPIPE PAGE 2193

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

S/RV PIPING KEWAUNEE GKWO8F 2 RUP DISK
2 SAFETY COLD FKN24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION 57 MEMBER 1 SEQUENCE 76 LOCATION BEG TYPE VA

.1080	1450.	473.	227.	598.	-251.	-499.	.118	.0043	-.0298	.0322	-.0189	-.0551	2490.
.1090	1324.	429.	-219.	668.	-221.	-392.	.0146	.0082	-.0299	.0303	-.0130	-.0472	2448.
.1100	1025.	353.	-34.	723.	-105.	-282.	.0176	.0125	-.0298	.0301	-.0071	-.0394	2426.
.1110	660.	219.	185.	748.	-163.	-189.	.0206	.0171	-.0282	.0298	-.0008	-.0299	2398.
.1120	366.	39.	400.	748.	-169.	-105.	.0232	.0219	-.0247	.0284	.0052	-.0175	2354.
.1130	-54.	-116.	619.	751.	-191.	0.	.0260	.0267	-.0207	.0275	.0099	-.0057	2356.
.1140	-428.	-226.	817.	753.	-194.	116.	.0283	.0314	-.0182	.0284	.0118	.0022	2392.
.1150	-779.	-329.	962.	727.	-165.	205.	.0287	.0360	-.0181	.0304	.0091	.0061	2353.
.1160	-1103.	-427.	1058.	677.	-121.	277.	.0271	.0404	-.0198	.0325	.0013	.0075	2255.
.1170	-1350.	-469.	1090.	629.	-63.	373.	.0243	.0444	-.0223	.0352	-.0089	.0072	2234.

ADLPIPE PAGE 2193

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKM24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	VA	STRESS
TIME	FX	FY	FZ	MX	MY	MZ	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(PSI)
.1180	-1496.	-438.	1047.	578.	29.	488.	.0216
.1190	-1469.	-372.	926.	501.	102.	594.	.0203
.1200	-1314.	-292.	786.	404.	101.	681.	.0215
.1210	-1101.	-187.	655.	302.	58.	740.	.0256
.1220	-773.	-75.	486.	190.	-0.	756.	.0310
.1230	-395.	30.	295.	62.	-65.	724.	.0359
.1240	-24.	131.	96.	-62.	-138.	673.	.0383
.1250	318.	246.	-141.	-161.	-153.	628.	.0365
.1260	604.	381.	-421.	-241.	-70.	585.	.0306
.1270	853.	521.	-706.	-312.	30.	547.	.0228
.1280	981.	632.	-905.	-378.	95.	498.	.0157
.1290	1009.	656.	-1009.	-452.	131.	400.	.0107
.1300	981.	562.	-1030.	-546.	141.	230.	.0084
.1310	855.	384.	-926.	-653.	88.	16.	.0098
.1320	675.	173.	-730.	-741.	-42.	-183.	.0138
.1330	460.	-31.	-519.	-791.	-152.	-348.	.0179
.1340	233.	-206.	-349.	-803.	-187.	-476.	.0198
.1350	-41.	-336.	-192.	-791.	-185.	-562.	.0195
.1360	-381.	-436.	-27.	-763.	-169.	-618.	.0172
.1370	-645.	-528.	76.	-722.	-125.	-647.	.0130
.1380	-772.	-576.	102.	-659.	-52.	-636.	.0093
.1390	-762.	-538.	102.	-574.	-25.	-564.	.0094
.1400	-673.	-450.	127.	-482.	-82.	-465.	.0140
.1410	-567.	-398.	174.	-414.	-160.	-416.	.0212
.1420	-389.	-399.	190.	-375.	-227.	-421.	.0289
.1430	-164.	-371.	179.	-340.	-285.	-416.	.0366
.1440	64.	-277.	150.	-292.	-336.	-362.	.0434
.1450	227.	-185.	105.	-239.	-332.	-304.	.0475
.1460	264.	-157.	68.	-206.	-255.	-297.	.0483
.1470	222.	-169.	60.	-194.	-179.	-316.	.0478
.1480	110.	-177.	110.	-190.	-137.	-327.	.0482
.1490	-31.	-222.	197.	-195.	-112.	-355.	.0493
.1500	-204.	-359.	319.	-225.	-90.	-443.	.0504
.1510	-482.	-554.	515.	-272.	-93.	-570.	.0520
.1520	-811.	-728.	760.	-300.	-144.	-662.	.0537
.1530	-1098.	-836.	960.	-283.	-173.	-678.	.0531
.1540	-1258.	-873.	1037.	-224.	-137.	-619.	.0484
.1550	-1359.	-837.	1038.	-142.	-68.	-503.	.0399

ADLPIPE PAGE 2194

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKM24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITSINTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

.1470	222.	-169.	60.	-194.	-179.	-316.	.0478	-.0144	-.0155	-.0191	-.0195	.0855	1252.
.1480	110.	-177.	110.	-190.	-137.	-327.	.0482	-.0157	-.0203	-.0197	-.0218	.0839	1225.
.1490	-31.	-222.	197.	-195.	-112.	-355.	.0493	-.0163	-.0215	-.0231	-.0190	.0836	1280.
.1500	-204.	-359.	318.	-225.	-90.	-443.	.0504	-.0161	-.0180	-.0291	-.0099	.0846	1535.
.1510	-482.	-554.	515.	-272.	-93.	-570.	.0520	-.0148	-.0098	-.0406	.0036	.0864	1941.
.1520	-811.	-728.	760.	-300.	-144.	-662.	.0537	-.0124	.0012	-.0570	.0174	.0892	2253.
.1530	-1098.	-836.	960.	-283.	-173.	-678.	.0531	-.0086	.0110	-.0701	.0284	.0898	2296.
.1540	-1258.	-873.	1037.	-224.	-137.	-619.	.0484	-.0034	.0164	-.0753	.0339	.0857	2046.
.1550	-1359.	-837.	1038.	-142.	-68.	-503.	.0399	.0030	.0172	-.0757	.0315	.0758	1603.

ADLPIPE PAGE 2194

DIS/ADLPIPE
S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

ADLPIPE STRESS ANAL' S

83/12/02. 18.29.20.

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ			DY		(DEG)	(DEG)	(DEG)	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(IN)				
.1560	-1506.	-745.	1037.	-50.	-2.	-352.	.0286	.0105	.0150	-.0748	.0214	.0602	1083.	
.1570	-1587.	-626.	979.	54.	62.	-175.	.0144	.0189	.0114	-.0714	.0066	.0420	587.	
.1580	-1511.	-448.	816.	186.	158.	58.	-.0014	.0281	.0074	-.0644	-.0077	.0220	764.	
.1590	-1301.	-160.	596.	357.	242.	381.	-.0162	.0376	.0052	-.0587	-.0184	.0026	1750.	
.1600	-1010.	185.	379.	541.	257.	756.	-.0289	.0471	.0072	-.0589	-.0253	-.0127	2934.	
.1610	-684.	478.	166.	694.	247.	1089.	-.0408	.0562	.0127	-.0622	-.0278	-.0247	3999.	
.1620	-353.	702.	-57.	802.	269.	1349.	-.0524	.0644	.0193	-.0648	-.0259	-.0361	4844.	
.1630	32.	938.	-296.	887.	278.	1604.	-.0624	.0714	.0260	-.0682	-.0225	-.0452	5639.	
.1640	446.	1222.	-536.	958.	260.	1877.	-.0701	.0767	.0315	-.0726	-.0194	-.0520	6459.	
.1650	842.	1475.	-777.	988.	264.	2104.	-.0769	.0802	.0345	-.0738	-.0167	-.0579	7118.	
.1660	1207.	1624.	-1014.	959.	289.	2235.	-.0833	.0814	.0354	-.0704	-.0148	-.0618	7449.	
.1670	1479.	1691.	-1192.	876.	301.	2277.	-.0880	.0803	.0348	-.0650	-.0133	-.0633	7478.	
.1680	1678.	1708.	-1303.	751.	280.	2253.	-.0899	.0768	.0333	-.0596	-.0118	-.0619	7274.	
.1690	1799.	1645.	-1360.	579.	259.	2138.	-.0895	.0709	.0303	-.0521	-.0094	-.0583	6783.	
.1700	1824.	1463.	-1364.	359.	249.	1905.	-.0877	.0627	.0262	-.0415	-.0068	-.0528	5946.	
.1710	1741.	1184.	-1300.	99.	225.	1576.	-.0843	.0527	.0211	-.0305	-.0052	-.0447	4853.	
.1720	1501.	863.	-1148.	-183.	202.	1187.	-.0789	.0410	.0145	-.0201	-.0043	-.0363	3704.	
.1730	1196.	510.	-960.	-469.	182.	765.	-.0723	.0282	.0069	-.0090	-.0040	-.0265	2786.	
.1740	859.	117.	-761.	-749.	180.	315.	-.0654	.0147	-.0012	.0038	-.0032	-.0160	2533.	
.1750	469.	-293.	-533.	-1018.	186.	-152.	-.0578	.0012	-.0088	.0154	-.0012	-.0056	3180.	
.1760	63.	-681.	-279.	-1258.	165.	-604.	-.0491	-.0118	-.0145	.0219	.0021	.0053	4274.	
.1770	-329.	-1017.	-19.	-1446.	130.	-1015.	-.0395	-.0239	-.0178	.0242	.0074	.0158	5389.	
.1780	-623.	-1283.	194.	-1562.	100.	-1361.	-.0298	-.0345	-.0190	.0239	.0149	.0256	6310.	
.1790	-839.	-1456.	366.	-1600.	77.	-1626.	-.0205	-.0432	-.0184	.0206	.0240	.0334	6943.	
.1800	-1005.	-1531.	522.	-1561.	39.	-1801.	-.0117	-.0498	-.0159	.0127	.0331	.0393	7250.	
.1810	-1091.	-1532.	638.	-1448.	-13.	-1887.	-.0047	-.0539	-.0120	.0022	.0407	.0440	7235.	
.1820	-1119.	-1460.	700.	-1263.	-28.	-1888.	-.0004	-.0556	-.0083	-.0068	.0473	.0449	6910.	
.1830	-1078.	-1299.	707.	-1008.	-21.	-1787.	.0015	-.0548	-.0049	-.0148	.0523	.0426	6242.	
.1840	-995.	-1049.	690.	-694.	-29.	-1585.	.0015	-.0516	-.0013	-.0239	.0549	.0383	5263.	
.1850	-881.	-751.	654.	-341.	-43.	-1315.	-.0004	-.0464	.0025	-.0328	.0557	.0321	4134.	
.1860	-714.	-441.	578.	32.	-43.	-1007.	-.0046	-.0394	.0061	-.0392	.0555	.0242	3068.	
.1870	-529.	-116.	489.	415.	-33.	-669.	-.0103	-.0311	.0092	-.0431	.0547	.0145	2397.	
.1880	-328.	220.	401.	795.	-42.	-304.	-.0168	-.0219	.0119	-.0462	.0520	.0048	2591.	
.1890	-140.	532.	315.	1146.	-48.	54.	-.0244	-.0123	.0135	-.0470	.0475	-.0052	3494.	
.1900	24.	793.	223.	1452.	-25.	380.	-.0333	-.0028	.0130	-.0434	.0416	-.0158	4567.	
.1910	177.	1006.	126.	1703.	11.	678.	-.0426	.0062	.0109	-.0364	.0344	-.0255	5575.	
.1920	281.	1179.	54.	1885.	47.	942.	-.0512	.0144	.0077	-.0282	.0273	-.0340	6411.	
.1930	322.	1273.	16.	1977.	81.	1139.	-.0586	.0212	.0046	-.0198	.0219	-.0407	6943.	

ADLPIPE PAGE 2195

DIS/ADLPIPE
S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION 57 MEMBER 1 SEQUENCE 76 LOCATION BEG TYPE VA

.1850	-281.	-751.	654.	-341.	-43.	-1315.	-.0004	-.0464	.0025	-.0328	.0557	.0321	4134.
.1860	-714.	-441.	578.	32.	-43.	-1007.	-.0046	-.0394	.0061	-.0392	.0555	.0242	3068.
.1870	-529.	-116.	489.	415.	-33.	-669.	-.0103	-.0311	.0092	-.0431	.0547	.0145	2397.
.1880	-328.	220.	401.	795.	-42.	-304.	-.0168	-.0219	.0119	-.0462	.0520	.0048	2591.
.1890	-140.	572.	315.	1146.	-48.	54.	-.0244	-.0123	.0135	-.0470	.0475	-.0052	3494.
.1900	24.	793.	223.	1452.	-25.	380.	-.0333	-.0028	.0130	-.0434	.0416	-.0158	4567.
.1910	177.	1006.	126.	1703.	11.	678.	-.0426	.0062	.0109	-.0364	.0344	-.0255	5575.
.1920	281.	1174.	54.	1885.	47.	942.	-.0512	.0144	.0077	-.0282	.0273	-.0340	6411.
.1930	322.	1273.	16.	1977.	81.	1139.	-.0586	.0212	.0046	-.0198	.0219	-.0407	6943.

ADLPIPE PAGE 2195

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.20.

S/RV PIPING KEWAUNEE GKM08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSVCONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITSINTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	76	LOCATION		BEG	TYPE		VA	STRESS		
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	PSI	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
.1940	298.	1246.	15.	1965.	113.	1234.	-.0648	.0265	.0026	-.0109	.0197	-.0447	7067.	
.1950	217.	1110.	55.	1856.	133.	1236.	-.0692	.0302	.0025	-.0025	.0212	-.0457	6794.	
.1960	100.	914.	128.	1669.	131.	1175.	-.0714	.0321	.0039	.0042	.0254	-.0443	6223.	
.1970	-25.	688.	208.	1423.	116.	1071.	-.0718	.0324	.0058	.0104	.0308	-.0413	5428.	
.1980	-145.	430.	272.	1127.	108.	919.	-.0716	.0311	.0069	.0181	.0348	-.0387	4436.	
.1990	-263.	155.	307.	791.	120.	727.	-.0717	.0284	.0058	.0280	.0353	-.0378	3288.	
.2000	-357.	-96.	302.	434.	142.	523.	-.0719	.0245	.0023	.0389	.0314	-.0395	2112.	
.2010	-387.	-287.	241.	80.	174.	340.	-.0722	.0198	-.0033	.0503	.0236	-.0434	1187.	
.2020	-332.	-414.	115.	-256.	219.	188.	-.0722	.0144	-.0096	.0616	.0145	-.0491	1175.	
.2030	-207.	-487.	-55.	-565.	267.	62.	-.0713	.0087	-.0146	.0707	.0068	-.0556	1910.	
.2040	-30.	-513.	-234.	-840.	287.	-41.	-.0686	.0030	-.0162	.0740	.0024	-.0611	2703.	
.2050	197.	-490.	-409.	-1069.	271.	-117.	-.0637	-.0027	-.0136	.0707	.0024	-.0649	3374.	
.2060	474.	-425.	-588.	-1239.	239.	-163.	-.0573	-.0080	-.0077	.0628	.0067	-.0673	3871.	
.2070	775.	-321.	-763.	-1343.	202.	-183.	-.0500	-.0128	.0001	.0521	.0132	-.0690	4169.	
.2080	1051.	-189.	-912.	-1379.	159.	-179.	-.0428	-.0170	.0082	.0397	.0190	-.0703	4258.	
.2090	1261.	-39.	-1025.	-1348.	119.	-158.	-.0365	-.0205	.0148	.0276	.0216	-.0721	4145.	
.2100	1395.	117.	-1108.	-1252.	104.	-122.	-.0320	-.0234	.0184	.0189	.0202	-.0750	3838.	
.2110	1454.	272.	-1161.	-1094.	117.	-75.	-.0291	-.0256	.0188	.0142	.0152	-.0787	3354.	
.2120	1427.	410.	-1161.	-890.	136.	-28.	-.0273	-.0271	.0171	.0120	.0080	-.0821	2740.	
.2130	1298.	503.	-1086.	-660.	149.	-7.	-.0258	-.0282	.0149	.0102	.0008	-.0841	2058.	
.2140	1083.	529.	-939.	-417.	152.	-29.	-.0241	-.0287	.0136	.0081	-.0039	-.0838	1354.	
.2150	818.	501.	-731.	-166.	140.	-86.	-.0216	-.0290	.0138	.0053	-.0047	-.0807	711.	
.2160	533.	445.	-478.	94.	109.	-159.	-.0181	-.0289	.0156	.0012	-.0017	-.0748	654.	
.2170	241.	370.	-197.	353.	64.	-245.	-.0139	-.0285	.0181	-.0034	.0077	-.0670	1321.	
.2180	-44.	269.	88.	595.	22.	-351.	-.0100	-.0279	.0198	-.0067	.0094	-.0587	2103.	
.2190	-303.	151.	348.	813.	-5.	-471.	-.0072	-.0272	.0196	-.0070	.0135	-.0512	2859.	
.2200	-507.	51.	562.	1007.	-17.	-579.	-.0055	-.0264	.0168	-.0042	.0148	-.0452	3533.	
.2210	-633.	-4.	714.	1175.	-17.	-655.	-.0044	-.0255	.0115	.0012	.0135	-.0410	4092.	
.2220	-674.	-25.	800.	1309.	-9.	-705.	-.0037	-.0245	.0049	.0082	.0109	-.0383	4522.	
.2230	-638.	-34.	832.	1396.	-0.	-744.	-.0028	-.0235	-.0014	.0155	.0086	-.0362	4812.	
.2240	-535.	-27.	825.	1430.	-6.	-777.	-.0011	-.0226	-.0058	.0211	.0081	-.0337	4949.	
.2250	-366.	-28.	785.	1413.	-34.	-793.	.0021	-.0217	-.0078	.0240	.0103	-.0304	4930.	
.2260	-142.	-11.	710.	1348.	-77.	-793.	.0064	-.0209	-.0075	.0250	.0145	-.0265	4763.	
.2270	102.	2.	608.	1232.	-122.	-784.	.0113	-.0201	-.0060	.0254	.0193	-.0226	4459.	
.2280	324.	0.	491.	1068.	-165.	-770.	.0161	-.0193	-.0044	.0259	.0222	-.0194	4036.	
.2290	500.	0.	366.	862.	-200.	-744.	.0204	-.0186	-.0039	.0275	.0215	-.0176	3515.	
.2300	621.	-9.	231.	622.	-219.	-702.	.0237	-.0178	-.0051	.0313	.0167	-.0174	2930.	
.2310	677.	-32.	96.	358.	-219.	-649.	.0260	-.0169	-.0078	.0375	.0087	-.0187	2350.	

ADLPIPE PAGE 2196

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.20.

S/RV PIPING KEWAUNEE GKM08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSVCONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITSINTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	76	LOCATION		BEG	TYPE		VA	STRESS		
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.2230	-638.	-34.	832.	1396.	-0.	-744.	-.028	-.0235	-.0014	.0155	.0086	-.0362	4812.
.2240	-535.	-17.	825.	1430.	-6.	-777.	-.0011	-.0226	-.0058	.0211	.0081	-.0337	4949.
.2250	-766.	-28.	785.	1413.	-34.	-793.	.0021	-.0217	-.0078	.0240	.0103	-.0304	4930.
.2260	-142.	-11.	710.	1341.	-77.	-773.	.0064	-.0209	-.0075	.0250	.0145	-.0265	4763.
.2270	102.	2.	608.	1232.	-122.	-784.	.0113	-.0201	-.0060	.0254	.0193	-.0226	4459.
.2280	324.	4.	491.	1068.	-165.	-770.	.0161	-.0193	-.0044	.0259	.0222	-.0194	4036.
.2290	500.	0.	366.	862.	-200.	-744.	.0204	-.0186	-.0039	.0275	.0215	-.0176	3515.
.2300	621.	-9.	231.	622.	-219.	-702.	.0237	-.0178	-.0051	.0313	.0167	-.0174	2930.
.2310	677.	-32.	96.	358.	-219.	-649.	.0260	-.0169	-.0078	.0375	.0087	-.0187	2350.

ADLPIPE PAGE 2196

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE		VA						STRESS (PSI)
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	
.2320	650.	-84.	-16.	73.	-211.	-597.	.0277	-.0159	-.0108	.0445	-.0014	-.0203	1938.
.2330	526.	-174.	-84.	-227.	-207.	-556.	.0293	-.0147	-.0127	.0504	-.0116	-.0214	1931.
.2340	320.	-299.	-104.	-528.	-209.	-526.	.0312	-.0131	-.0125	.0541	-.0202	-.0215	2355.
.2350	64.	-444.	-87.	-814.	-216.	-501.	.0334	-.0113	-.0100	.0552	-.0259	-.0203	2981.
.2360	-216.	-590.	-42.	-1072.	-229.	-471.	.0361	-.0090	-.0053	.0532	-.0286	-.0179	3630.
.2370	-509.	-726.	26.	-1293.	-247.	-435.	.0387	-.0063	.0012	.0483	-.0289	-.0150	4219.
.2380	-798.	-846.	103.	-1470.	-261.	-396.	.0408	-.0031	.0085	.0417	-.0279	-.0125	4698.
.2390	-1053.	-934.	169.	-1591.	-263.	-346.	.0416	.0006	.0156	.0345	-.0264	-.0113	5017.
.2400	-1240.	-966.	206.	-1645.	-255.	-289.	.0412	.0047	.0218	.0275	-.0252	-.0117	5129.
.2410	-1337.	-926.	208.	-1624.	-238.	-161.	.0395	.0091	.0267	.0207	-.0244	-.0140	5018.
.2420	-1340.	-821.	175.	-1533.	-215.	-30.	.0367	.0139	.0306	.0143	-.0240	-.0181	4711.
.2430	-1257.	-671.	115.	-1381.	-191.	102.	.0329	.0187	.0337	.0079	-.0234	-.0237	4251.
.2440	-1095.	-487.	37.	-1175.	-169.	228.	.0284	.0234	.0363	.0015	-.0222	-.0304	3677.
.2450	-861.	-273.	-55.	-924.	-154.	348.	.0235	.0278	.0383	-.0049	-.0204	-.0374	3038.
.2460	-559.	-75.	-160.	-636.	-143.	460.	.0185	.0317	.0395	-.0107	-.0180	-.0443	2427.
.2470	-211.	211.	-272.	-326.	-133.	558.	.0135	.0350	.0397	-.0154	-.0152	-.0508	2009.
.2480	147.	448.	-378.	-12.	-125.	633.	.0086	.0375	.0386	-.0186	-.0127	-.0568	1962.
.2490	485.	660.	-465.	292.	-120.	675.	.0041	.0389	.0362	-.0203	-.0106	-.0618	2268.
.2500	795.	836.	-532.	571.	-119.	683.	.0001	.0392	.0324	-.0202	-.0092	-.0655	2732.
.2510	1076.	970.	-580.	818.	-120.	658.	-.0029	.0384	.0273	-.0182	-.0082	-.0673	3213.
.2520	1318.	1062.	-606.	1025.	-125.	603.	-.0045	.0363	.0213	-.0146	-.0073	-.0669	3637.
.2530	1499.	1106.	-598.	1185.	-138.	518.	-.0045	.0331	.0149	-.0102	-.0064	-.0641	3955.
.2540	1604.	1091.	-552.	1289.	-159.	398.	-.0028	.0287	.0084	-.0053	-.0055	-.0586	4133.
.2550	1626.	1015.	-471.	1335.	-185.	249.	.0007	.0235	.0019	-.0000	-.0046	-.0507	4168.
.2560	1574.	890.	-361.	1324.	-214.	83.	.0057	.0175	-.0044	.0058	-.0037	-.0403	4086.
.2570	1454.	725.	-229.	1259.	-245.	-86.	.0121	.0109	-.0106	.0118	-.0030	-.0280	3911.
.2580	1261.	527.	-78.	1145.	-276.	-254.	.0196	.0042	-.0165	.0180	-.0027	-.0141	3665.
.2590	995.	296.	92.	986.	-304.	-418.	.0278	-.0026	-.0220	.0242	-.0031	.0007	3387.
.2600	673.	49.	270.	795.	-331.	-565.	.0363	-.0090	-.0268	.0300	-.0041	.0162	3132.
.2610	329.	-192.	441.	587.	-356.	-678.	.0451	-.0148	-.0309	.0352	-.0058	.0321	2934.
.2620	-14.	-406.	595.	375.	-377.	-747.	.0537	-.0197	-.0341	.0395	-.0078	.0477	2789.
.2630	-345.	-593.	727.	168.	-394.	-775.	.0619	-.0236	-.0364	.0426	-.0102	.0624	2694.
.2640	-657.	-754.	836.	-31.	-406.	-771.	.0691	-.0262	-.0375	.0444	-.0129	.0758	2652.
.2650	-934.	-878.	916.	-211.	-414.	-729.	.0752	-.0274	-.0377	.0447	-.0160	.0875	2629.
.2660	-1148.	-944.	954.	-361.	-415.	-638.	.0799	-.0273	-.0372	.0436	-.0192	.0971	2562.
.2670	-1281.	-944.	942.	-473.	-406.	-497.	.0833	-.0257	-.0362	.0416	-.0223	.1044	2425.
.2680	-1340.	-889.	888.	-549.	-388.	-321.	.0850	-.0227	-.0347	.0385	-.0251	.1093	2266.
.2690	-1340.	-798.	804.	-594.	-364.	-128.	.0852	-.0185	-.0325	.0340	-.0274	.1119	2155.

ADLPIPE PAGE 2197

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE		VA					
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.2610	329.	-192.	441.	587.	-356.	-678.	.0451	-.0148	-.0309	.0352	-.0058	.0321	2934.
.2620	-14.	-406.	595.	375.	-377.	-747.	.0537	-.0197	-.0341	.0395	-.0078	.0477	2789.
.2630	-345.	-593.	727.	168.	-394.	-775.	.0619	-.0236	-.0364	.0426	-.0102	.0624	2694.
.2640	-657.	-754.	836.	-51.	-406.	-771.	.0691	-.0262	-.0375	.0444	-.0129	.0758	2652.
.2650	-934.	-878.	916.	-211.	-414.	-729.	.0752	-.0274	-.0377	.0447	-.0160	.0875	2629.
.2660	-1148.	-944.	954.	-361.	-415.	-638.	.0799	-.0273	-.0372	.0436	-.0192	.0971	2562.
.2670	-1281.	-944.	942.	-473.	-406.	-497.	.0833	-.0257	-.0362	.0416	-.0223	.1044	2425.
.2680	-1340.	-889.	888.	-549.	-388.	-321.	.0850	-.0227	-.0347	.0385	-.0251	.1093	2266.
.2690	-1340.	-798.	804.	-594.	-364.	-128.	.0852	-.0185	-.0325	.0340	-.0274	.1119	2155.

ADLPIPE PAGE 2197

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

S/RV PIPING KEWAUNEE GKWOSE 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA	VA	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.2700	-1277.	-677.	693.	-608.	-335.	72.	.0838	-.0133	-.0298	.0283	-.0290	.1127	2123.	
.2710	-1146.	-525.	556.	-589.	-300.	276.	.0812	-.0072	-.0267	.0217	-.0296	.1116	2179.	
.2720	-962.	-345.	403.	-540.	-259.	478.	.0775	-.0005	-.0235	.0145	-.0290	.1089	2330.	
.2730	-756.	-161.	250.	-470.	-214.	658.	.0730	.0065	-.0202	.0066	-.0276	.1049	2546.	
.2740	-547.	4.	109.	-390.	-167.	805.	.0674	.0137	-.0170	-.0013	-.0257	.1003	2769.	
.2750	-338.	151.	-24.	-301.	-116.	922.	.0611	.0208	-.0143	-.0086	-.0238	.0954	2971.	
.2760	-130.	288.	-148.	-205.	-59.	1016.	.0544	.0275	-.0126	-.0145	-.0217	.0902	3158.	
.2770	52.	406.	-252.	-112.	3.	1081.	.0475	.0336	-.0118	-.0193	-.0196	.0848	3306.	
.2780	177.	479.	-320.	-35.	63.	1101.	.0407	.0389	-.0116	-.0234	-.0178	.0798	3355.	
.2790	238.	497.	-349.	19.	119.	1072.	.0341	.0433	-.0116	-.0268	-.0162	.0759	3281.	
.2800	250.	473.	-348.	56.	172.	1010.	.0282	.0467	-.0118	-.0295	-.0144	.0731	3122.	
.2810	223.	428.	-323.	75.	220.	930.	.0233	.0489	-.0122	-.0316	-.0124	.0713	2916.	
.2820	149.	356.	-268.	74.	258.	829.	.0195	.0501	-.0124	-.0336	-.0104	.0707	2650.	
.2830	20.	243.	-187.	46.	285.	702.	.0165	.0502	-.0124	-.0354	-.0090	.0712	2308.	
.2840	-143.	106.	-94.	-3.	306.	561.	.0141	.0492	-.0125	-.0364	-.0089	.0723	1943.	
.2850	-301.	-19.	-15.	-63.	326.	433.	.0124	.0472	-.0133	-.0362	-.0101	.0733	1661.	
.2860	-437.	-109.	41.	-127.	344.	335.	.0116	.0443	-.0150	-.0353	-.0129	.0737	1509.	
.2870	-549.	-175.	74.	-200.	357.	255.	.0113	.0406	-.0172	-.0339	-.0173	.0736	1467.	
.2880	-637.	-233.	83.	-283.	369.	182.	.0114	.0362	-.0197	-.0322	-.0227	.0730	1520.	
.2890	-680.	-269.	63.	-371.	378.	124.	.0121	.0313	-.0219	-.0310	-.0282	.0721	1654.	
.2900	-656.	-261.	13.	-453.	376.	95.	.0140	.0259	-.0235	-.0310	-.0327	.0711	1814.	
.2910	-564.	-213.	-62.	-525.	363.	92.	.0171	.0202	-.0242	-.0327	-.0354	.0705	1962.	
.2920	-427.	-156.	-150.	-594.	341.	92.	.0210	.0142	-.0238	-.0357	-.0361	.0703	2102.	
.2930	-270.	-106.	-237.	-663.	311.	80.	.0254	.0082	-.0224	-.0397	-.0351	.0703	2240.	
.2940	-101.	-55.	-316.	-723.	274.	63.	.0299	.0023	-.0208	-.0444	-.0330	.0704	2361.	
.2950	76.	1.	-390.	-769.	236.	49.	.0344	-.0034	-.0197	-.0485	-.0304	.0704	2451.	
.2960	243.	47.	-452.	-799.	208.	25.	.0381	-.0088	-.0197	-.0509	-.0279	.0698	2514.	
.2970	360.	59.	-483.	-821.	189.	-24.	.0406	-.0138	-.0209	-.0516	-.0260	.0686	2563.	
.2980	405.	31.	-469.	-832.	176.	-104.	.0420	-.0181	-.0230	-.0511	-.0249	.0669	2607.	
.2990	392.	-29.	-413.	-827.	165.	-203.	.0422	-.0217	-.0256	-.0497	-.0238	.0653	2638.	
.3000	343.	-107.	-328.	-797.	161.	-307.	.0416	-.0243	-.0284	-.0473	-.0220	.0637	2644.	
.3010	259.	-202.	-212.	-744.	160.	-416.	.0400	-.0260	-.0307	-.0447	-.0188	.0623	2638.	
.3020	130.	-318.	-59.	-673.	155.	-532.	.0378	-.0265	-.0320	-.0430	-.0144	.0610	2653.	
.3030	-33.	-448.	120.	-585.	145.	-649.	.0346	-.0259	-.0321	-.0426	-.0089	.0597	2695.	
.3040	-192.	-566.	296.	-474.	139.	-743.	.0304	-.0240	-.0314	-.0425	-.0028	.0579	2715.	
.3050	-316.	-643.	448.	-353.	142.	-793.	.0253	-.0210	-.0302	-.0426	.0036	.0550	2652.	
.3060	-404.	-669.	568.	-167.	149.	-793.	.0192	-.0168	-.0286	-.0432	.0095	.0506	2508.	
.3070	-463.	-655.	659.	14.	159.	-753.	.0120	-.0116	-.0264	-.0447	.0142	.0448	2341.	

ADLPIPE PAGE 2198

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

S/RV PIPING KEWAUNEE GKWOSE 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA	VA	RX	RY	RZ	STRESS
---------	----	--------	---	----------	----	----------	-----	------	----	----	----	----	----	--------

.2990	392.	-29.	-413.	-827.	165.	-203.	.422	-.0217	-.0256	-.0497	-.0238	.0653	2638.
.3000	343.	-107.	-328.	-797.	161.	-307.	.416	-.0243	-.0284	-.0473	-.0220	.0637	2644.
.3010	259.	-202.	-212.	-744.	160.	-416.	.0400	-.0260	-.0307	-.0447	-.0188	.0623	2638.
.3020	130.	-318.	-59.	-673.	155.	-532.	.0373	-.0265	-.0320	-.0430	-.0144	.0610	2653.
.3030	-37.	-448.	120.	-585.	145.	-649.	.0346	-.0259	-.0321	-.0426	-.0089	.0597	2695.
.3040	-192.	-566.	296.	-474.	139.	-743.	.0304	-.0240	-.0314	-.0425	-.0028	.0579	2715.
.3050	-316.	-643.	448.	-333.	142.	-793.	.0253	-.0210	-.0302	-.0426	.0036	.0550	2652.
.3060	-404.	-669.	568.	-167.	149.	-793.	.0192	-.0168	-.0286	-.0432	.0095	.0506	2508.
.3070	-463.	-655.	659.	14.	159.	-753.	.0120	-.0116	-.0264	-.0447	.0142	.0448	2341.

ADLPIPE PAGE 2198

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

S/RV PIPING KEWAUNEE GKW08I 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.3080	-484.	-606.	710.	204.	174.	-673.	.0039	-.0056	-.0236	-.0466	.0177	.0377	2204.	
.3090	-440.	-503.	707.	402.	192.	-543.	-.0048	.0011	-.0201	-.0488	.0204	.0293	2137.	
.3100	-320.	-336.	648.	607.	209.	-355.	-.0135	.0080	-.0159	-.0518	.0225	.0199	2530.	
.3110	-145.	-121.	544.	802.	218.	-127.	-.0217	.0150	-.0107	-.0560	.0242	.0100	2259.	
.3120	60.	107.	408.	972.	222.	113.	-.0297	.0216	-.0046	-.0608	.0252	-.0001	3052.	
.3130	281.	334.	246.	1105.	223.	350.	-.0371	.0276	.0020	-.0656	.0254	-.0104	3590.	
.3140	518.	566.	58.	1200.	221.	588.	-.0437	.0326	.0085	-.0701	.0247	-.0204	4120.	
.3150	762.	799.	-146.	1254.	215.	821.	-.0491	.0363	.0143	-.0737	.0229	-.0298	4607.	
.3160	985.	1004.	-353.	1258.	210.	1025.	-.0534	.0385	.0194	-.0758	.0199	-.0382	4976.	
.3170	1154.	1149.	-541.	1201.	205.	1170.	-.0567	.0390	.0235	-.0762	.0160	-.0453	5138.	
.3180	1256.	1227.	-697.	1084.	196.	1250.	-.0585	.0376	.0267	-.0753	.0114	-.0506	5069.	
.3190	1299.	1246.	-816.	916.	179.	1271.	-.0587	.0344	.0291	-.0729	.0067	-.0537	4797.	
.3200	1287.	1205.	-899.	703.	160.	1232.	-.0573	.0295	.0304	-.0689	.0026	-.0545	4342.	
.3210	1208.	1091.	-937.	448.	140.	1121.	-.0544	.0228	.0309	-.0632	-.0009	-.0531	3697.	
.3220	1046.	899.	-918.	156.	115.	935.	-.0504	.0147	.0306	-.0565	-.0037	-.0495	2906.	
.3230	814.	647.	-846.	-157.	86.	690.	-.0454	.0055	.0295	-.0489	-.0060	-.0439	2168.	
.3240	547.	360.	-742.	-470.	59.	410.	-.0398	-.0045	.0274	-.0400	-.0075	-.0368	1906.	
.3250	271.	63.	-619.	-766.	38.	115.	-.0338	-.0149	.0244	-.0299	-.0082	-.0286	2359.	
.3260	-9.	-236.	-479.	-1034.	20.	-187.	-.0276	-.0253	.0208	-.0194	-.0081	-.0199	3196.	
.3270	-287.	-528.	-322.	-1263.	-1.	-489.	-.0217	-.0353	.0170	-.0095	-.0073	-.0110	4121.	
.3280	-537.	-795.	-164.	-1441.	-20.	-772.	-.0162	-.0445	.0135	-.0002	-.0057	-.0023	4973.	
.3290	-725.	-1008.	-25.	-1550.	-36.	-1010.	-.0114	-.0525	.0101	.0084	-.0031	.0058	5629.	
.3300	-838.	-1145.	88.	-1582.	-49.	-1184.	-.0071	-.0591	.0070	.0159	.0004	.0128	6013.	
.3310	-896.	-1210.	178.	-1539.	-63.	-1294.	-.0038	-.0641	.0045	.0218	.0044	.0185	6119.	
.3320	-882.	-1214.	246.	-1426.	-75.	-1345.	-.0017	-.0673	.0027	.0262	.0085	.0227	5966.	
.3330	-822.	-1156.	287.	-1244.	-81.	-1333.	-.0010	-.0688	.0015	.0295	.0126	.0253	5552.	
.3340	-699.	-1024.	294.	-997.	-83.	-1246.	-.0012	-.0686	.0007	.0317	.0167	.0264	4861.	
.3350	-525.	-822.	275.	-694.	-83.	-1089.	-.0023	-.0668	.0005	.0327	.0205	.0261	3935.	
.3360	-324.	-578.	240.	-353.	-82.	-883.	-.0042	-.0636	.0009	.0326	.0242	.0246	2904.	
.3370	-118.	-320.	198.	5.	-80.	-651.	-.0068	-.0593	.0019	.0318	.0275	.0221	1994.	
.3380	84.	-53.	153.	368.	-77.	-399.	-.0097	-.0542	.0033	.0305	.0304	.0190	1667.	
.3390	270.	222.	105.	724.	-76.	-129.	-.0127	-.0486	.0049	.0291	.0329	.0155	2249.	
.3400	456.	487.	59.	1057.	-75.	144.	-.0155	-.0429	.0063	.0281	.0346	.0118	3254.	
.3410	591.	716.	23.	1349.	-70.	396.	-.0181	-.0374	.0073	.0281	.0354	.0082	4282.	
.3420	667.	891.	5.	1584.	-62.	612.	-.0206	-.0324	.0078	.0293	.0351	.0049	5168.	
.3430	683.	1014.	6.	1755.	-55.	789.	-.0225	-.0280	.0077	.0314	.0339	.0021	5854.	
.3440	652.	1086.	23.	1859.	-48.	926.	-.0235	-.0246	.0070	.0347	.0322	.0001	6319.	
.3450	577.	1101.	53.	1892.	-39.	1017.	-.0238	-.0221	.0059	.0392	.0303	-.0010	6535.	

ADLPIPE PAGE 2199

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION 57 MEMBER 1 SEQUENCE 76 LOCATION BEG TYPE VA

.3750	-837.	-217.	641.	681.	-123.	-635.	.0100	-.0217	.0026	.0285	.0095	-.0512	2857.
.3760	-872.	-237.	679.	703.	-141.	-675.	.0110	-.0220	.0017	.0260	.0074	-.0533	2997.
.3770	-858.	-247.	685.	698.	-162.	-707.	.0122	-.0227	.0012	.0231	.0056	-.0553	3060.
.3780	-790.	-245.	659.	667.	-186.	-724.	.0135	-.0236	.0012	.0199	.0045	-.0571	3049.
.3790	-666.	-223.	598.	617.	-211.	-722.	.0151	-.0247	.0017	.0167	.0039	-.0586	2960.
.3800	-496.	-183.	509.	550.	-238.	-700.	.0169	-.0260	.0023	.0135	.0038	-.0598	2803.
.3810	-303.	-139.	404.	465.	-263.	-670.	.0185	-.0273	.0030	.0104	.0038	-.0607	2605.
.3820	-112.	-104.	293.	361.	-286.	-641.	.0198	-.0288	.0037	.0078	.0035	-.0614	2402.
.3830	68.	-81.	184.	245.	-305.	-616.	.0208	-.0303	.0042	.0057	.0029	-.0618	2218.

ADLPIPE PAGE 2200

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.20.

S/RV PIPING KEWAUNEE GKM08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA					
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.3840	231.	-66.	81.	122.	-319.	-589.		.0214	-.0318	.0044	.0044	.0020	-.0617	2072.
.3850	365.	-63.	-9.	-2.	-329.	-566.		.0217	-.0333	.0044	.0036	.0008	-.0613	1992.
.3860	453.	-83.	-74.	-127.	-336.	-555.		.0216	-.0347	.0043	.0031	-.0005	-.0603	2011.
.3870	484.	-133.	-107.	-249.	-339.	-562.		.0209	-.0359	.0043	.0027	-.0019	-.0588	2137.
.3880	465.	-202.	-111.	-362.	-340.	-580.		.0199	-.0369	.0046	.0023	-.0031	-.0568	2324.
.3890	416.	-277.	-96.	-457.	-338.	-599.		.0185	-.0377	.0050	.0017	-.0041	-.0543	2512.
.3900	345.	-350.	-66.	-528.	-331.	-617.		.0167	-.0382	.0054	.0009	-.0051	-.0518	2668.
.3910	251.	-423.	-23.	-578.	-319.	-640.		.0144	-.0383	.0060	-.0003	-.0060	-.0497	2797.
.3920	137.	-494.	32.	-605.	-304.	-670.		.0115	-.0381	.0067	-.0023	-.0072	-.0483	2897.
.3930	24.	-549.	86.	-605.	-285.	-695.		.0082	-.0374	.0074	-.0051	-.0088	-.0477	2935.
.3940	-61.	-571.	126.	-571.	-260.	-703.		.0044	-.0364	.0082	-.0084	-.0105	-.0478	2867.
.3950	-105.	-552.	143.	-504.	-230.	-689.		.0003	-.0350	.0089	-.0123	-.0122	-.0489	2689.
.3960	-118.	-501.	143.	-409.	-200.	-658.		-.0039	-.0333	.0099	-.0172	-.0140	-.0509	2435.
.3970	-104.	-425.	130.	-295.	-170.	-618.		-.0084	-.0312	.0113	-.0233	-.0158	-.0536	2147.
.3980	-53.	-323.	97.	-164.	-140.	-566.		-.0129	-.0289	.0129	-.0300	-.0174	-.0568	1841.
.3990	45.	-189.	37.	-18.	-108.	-492.		-.0173	-.0264	.0145	-.0371	-.0188	-.0604	1534.
.4000	185.	-23.	-45.	137.	-77.	-400.		-.0213	-.0239	.0161	-.0444	-.0200	-.0642	1307.

MAXIMUM VALUE OF STRESS OCCURS AT

TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.1670	-1479.	-1691.	1192.	-876.	-301.	-2277.		-.0880	.0803	.0348	-.0650	-.0133	-.0633	7478.

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	DIS	TYPE	VA					
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
0.0000	0.	0.	0.	0.	0.	0.		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	0.	0.	0.	0.	0.	0.		-.0000	.0000	.0000	-.0000	-.0000	.0000	0.
.0020	0.	0.	0.	0.	0.	0.		-.0000	.0000	.0000	-.0000	.0000	.0000	0.
.0030	0.	0.	0.	0.	0.	0.		.0000	.0000	.0000	-.0000	.0000	.0000	0.
.0040	0.	0.	0.	0.	0.	0.		.0000	.0000	.0000	-.0000	.0000	.0000	0.
.0050	0.	0.	0.	0.	0.	0.		.0000	.0000	.0000	-.0000	-.0000	.0000	0.
.0060	0.	0.	0.	0.	0.	0.		-.0000	.0000	.0000	.0000	-.0001	.0000	0.
.0070	0.	0.	0.	0.	0.	0.		-.0001	.0000	.0000	.0001	-.0003	.0000	0.

ADLPIPE PAGE 2201

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.20.

S/RV PIPING KEWAUNEE GKM08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	DIS	TYPE	VA
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0.0000	0.	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	0.	0.	0.	0.	0.	0.	0.	-.0000	.0000	.0000	-.0000	-.0000	.0000	0.
.0020	0.	0.	0.	0.	0.	0.	0.	-.0000	.0000	.0000	-.0000	.0000	.0000	0.
.0030	0.	0.	0.	0.	0.	0.	0.	.0000	.0000	.0000	-.0000	.0000	.0000	0.
.0040	0.	0.	0.	0.	0.	0.	0.	.0000	.0000	.0000	-.0000	.0000	.0000	0.
.0050	0.	0.	0.	0.	0.	0.	0.	.0000	.0000	.0000	-.0000	-.0000	.0000	0.
.0060	0.	0.	0.	0.	0.	0.	0.	-.0000	.0000	.0000	.0000	-.0001	.0000	0.
.0070	0.	0.	0.	0.	0.	0.	0.	-.0001	.0000	.0000	.0001	-.0003	.0000	0.

ADLPIPE PAGE 2201

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

S/RV PIPING KEWAUNEE GKM08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	DIS	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ				DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)			(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.0080	0.	0.	0.	0.	0.	0.	0.	-.0002	.0000	-.0000	.0003	-.0006	.0000	0.	
.0090	0.	0.	0.	0.	0.	0.	0.	-.0004	.0000	-.0001	.0006	-.0012	-.0001	0.	
.0100	0.	0.	0.	0.	0.	0.	0.	-.0007	.0000	-.0003	.0012	-.0020	-.0003	0.	
.0110	0.	0.	0.	0.	0.	0.	0.	-.0012	.0001	-.0006	.0021	-.0033	-.0006	0.	
.0120	0.	0.	0.	0.	0.	0.	0.	-.0021	.0001	-.0010	.0035	-.0051	-.0009	0.	
.0130	0.	0.	0.	0.	0.	0.	0.	-.0033	.0002	-.0016	.0054	-.0075	-.0015	0.	
.0140	0.	0.	0.	0.	0.	0.	0.	-.0049	.0003	-.0024	.0078	-.0105	-.0023	0.	
.0150	0.	0.	0.	0.	0.	0.	0.	-.0067	.0004	-.0034	.0106	-.0138	-.0035	0.	
.0160	0.	0.	0.	0.	0.	0.	0.	-.0085	.0005	-.0047	.0132	-.0173	-.0052	0.	
.0170	0.	0.	0.	0.	0.	0.	0.	-.0102	.0005	-.0059	.0154	-.0204	-.0074	0.	
.0180	0.	0.	0.	0.	0.	0.	0.	-.0115	.0003	-.0070	.0165	-.0224	-.0098	0.	
.0190	0.	0.	0.	0.	0.	0.	0.	-.0121	.0001	-.0077	.0164	-.0226	-.0122	0.	
.0200	0.	0.	0.	0.	0.	0.	0.	-.0119	-.0003	-.0076	.0145	-.0200	-.0139	0.	
.0210	0.	0.	0.	0.	0.	0.	0.	-.0107	-.0008	-.0065	.0110	-.0145	-.0145	0.	
.0220	0.	0.	0.	0.	0.	0.	0.	-.0087	-.0015	-.0043	.0061	-.0060	-.0141	0.	
.0230	0.	0.	0.	0.	0.	0.	0.	-.0061	-.0021	-.0011	.0004	.0043	-.0121	0.	
.0240	0.	0.	0.	0.	0.	0.	0.	-.0033	-.0027	.0025	-.0053	.0149	-.0084	0.	
.0250	0.	0.	0.	0.	0.	0.	0.	-.0005	-.0031	.0052	-.0099	.0240	-.0040	0.	
.0260	0.	0.	0.	0.	0.	0.	0.	.0027	-.0037	.0058	-.0125	.0306	-.0010	0.	
.0270	0.	0.	0.	0.	0.	0.	0.	.0059	-.0043	.0047	-.0129	.0340	-.0000	0.	
.0280	0.	0.	0.	0.	0.	0.	0.	.0082	-.0048	.0031	-.0120	.0338	.0020	0.	
.0290	0.	0.	0.	0.	0.	0.	0.	.0095	-.0050	.0010	-.0100	.0308	.0063	0.	
.0300	0.	0.	0.	0.	0.	0.	0.	.0114	-.0050	-.0027	-.0066	.0281	.0089	0.	
.0310	0.	0.	0.	0.	0.	0.	0.	.0145	-.0049	-.0055	-.0043	.0276	.0113	0.	
.0320	0.	0.	0.	0.	0.	0.	0.	.0173	-.0042	-.0045	-.0053	.0294	.0185	0.	
.0330	0.	0.	0.	0.	0.	0.	0.	.0192	-.0030	-.0001	-.0088	.0338	.0295	0.	
.0340	0.	0.	0.	0.	0.	0.	0.	.0213	-.0015	.0053	-.0128	.0399	.0392	0.	
.0350	0.	0.	0.	0.	0.	0.	0.	.0238	.0004	.0095	-.0160	.0447	.0451	0.	
.0360	0.	0.	0.	0.	0.	0.	0.	.0246	.0024	.0111	-.0166	.0436	.0465	0.	
.0370	0.	0.	0.	0.	0.	0.	0.	.0222	.0045	.0099	-.0138	.0342	.0425	0.	
.0380	0.	0.	0.	0.	0.	0.	0.	.0171	.0066	.0062	-.0082	.0170	.0335	0.	
.0390	0.	0.	0.	0.	0.	0.	0.	.0106	.0089	.0001	-.0004	-.0047	.0212	0.	
.0400	0.	0.	0.	0.	0.	0.	0.	.0041	.0112	-.0080	-.0083	-.0255	.0061	0.	
.0410	0.	0.	0.	0.	0.	0.	0.	-.0007	.0132	-.0143	.0134	-.0396	-.0104	0.	
.0420	0.	0.	0.	0.	0.	0.	0.	-.0038	.0148	-.0132	.0095	-.0138	-.0212	0.	
.0430	0.	0.	0.	0.	0.	0.	0.	-.0062	.0162	-.0045	-.0016	-.0378	-.0233	0.	
.0440	0.	0.	0.	0.	0.	0.	0.	-.0071	.0173	.0072	-.0148	-.0224	-.0216	0.	
.0450	0.	0.	0.	0.	0.	0.	0.	-.0053	.0179	.0181	-.0272	-.0025	-.0215	0.	

ADLPIPE PAGE 2202

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

S/RV PIPING KEWAUNEE GKM08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	DIS	TYPE	VA
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.0370	0.	0.	0.	0.	0.	0.	0.	.0045	.0099	-.0138	.0342	.0425	0.
.0380	0.	0.	0.	0.	0.	0.	0.	.0171	.0066	-.0082	.0170	.0335	0.
.0390	0.	0.	0.	0.	0.	0.	0.	.0106	.0089	-.0004	-.0047	.0212	0.
.0400	0.	0.	0.	0.	0.	0.	0.	.0041	.0112	-.0080	.0083	-.0255	.0061
.0410	0.	0.	0.	0.	0.	0.	0.	-.0007	.0132	-.0143	.0134	-.0396	-.0104
.0420	0.	0.	0.	0.	0.	0.	0.	-.0038	.0148	-.0132	.0095	-.0438	-.0212
.0430	0.	0.	0.	0.	0.	0.	0.	-.0062	.0162	-.0045	-.0016	-.0378	-.0233
.0440	0.	0.	0.	0.	0.	0.	0.	-.0071	.0173	.0072	-.0148	-.0224	-.0216
.0450	0.	0.	0.	0.	0.	0.	0.	-.0053	.0179	.0181	-.0272	-.0025	-.0215

ADLPIPE PAGE 2202

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.20.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	DIS	TYPE	VA					STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ		(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
.0460	0.	0.	0.	0.	0.	0.	-.0035	.0179	.0264	-.0365	.0132	-.0229	0.	
.0470	0.	0.	0.	0.	0.	0.	-.0058	.0172	.0303	-.0389	.0175	-.0244	0.	
.0480	0.	0.	0.	0.	0.	0.	-.0119	.0157	.0286	-.0337	.0097	-.0278	0.	
.0490	0.	0.	0.	0.	0.	0.	-.0180	.0135	.0215	-.0225	-.0054	-.0351	0.	
.0500	0.	0.	0.	0.	0.	0.	-.0229	.0108	.0110	-.0069	-.0214	-.0442	0.	
.0510	0.	0.	0.	0.	0.	0.	-.0274	.0077	.0013	.0097	-.0333	-.0503	0.	
.0520	0.	0.	0.	0.	0.	0.	-.0308	.0042	-.0022	.0198	-.0370	-.0486	0.	
.0530	0.	0.	0.	0.	0.	0.	-.0310	.0005	.0016	.0205	-.0305	-.0392	0.	
.0540	0.	0.	0.	0.	0.	0.	-.0280	-.0034	.0086	.0167	-.0146	-.0272	0.	
.0550	0.	0.	0.	0.	0.	0.	-.0234	-.0073	.0154	.0125	.0057	-.0163	0.	
.0560	0.	0.	0.	0.	0.	0.	-.0188	-.0112	.0214	.0075	.0228	-.0065	0.	
.0570	0.	0.	0.	0.	0.	0.	-.0166	-.0149	.0252	.0042	.0308	.0013	0.	
.0580	0.	0.	0.	0.	0.	0.	-.0178	-.0184	.0235	.0075	.0280	.0033	0.	
.0590	0.	0.	0.	0.	0.	0.	-.0206	-.0215	.0160	.0163	.0170	-.0019	0.	
.0600	0.	0.	0.	0.	0.	0.	-.0223	-.0241	.0062	.0247	.0033	-.0110	0.	
.0610	0.	0.	0.	0.	0.	0.	-.0227	-.0262	-.0019	.0291	-.0074	-.0201	0.	
.0620	0.	0.	0.	0.	0.	0.	-.0224	-.0278	-.0050	.0275	-.0105	-.0256	0.	
.0630	0.	0.	0.	0.	0.	0.	-.0198	-.0288	-.0014	.0175	-.0031	-.0253	0.	
.0640	0.	0.	0.	0.	0.	0.	-.0139	-.0289	.0075	.0002	.0141	-.0202	0.	
.0650	0.	0.	0.	0.	0.	0.	-.0063	-.0282	.0176	-.0186	.0364	-.0139	0.	
.0660	0.	0.	0.	0.	0.	0.	.0005	-.0267	.0259	-.0338	.0556	-.0085	0.	
.0670	0.	0.	0.	0.	0.	0.	.0045	-.0246	.0305	-.0433	.0641	-.0049	0.	
.0680	0.	0.	0.	0.	0.	0.	.0052	-.0219	.0285	-.0445	.0582	-.0058	0.	
.0690	0.	0.	0.	0.	0.	0.	.0027	-.0188	.0184	-.0351	.0394	-.0129	0.	
.0700	0.	0.	0.	0.	0.	0.	-.0015	-.0151	.0030	-.0178	.0133	-.0231	0.	
.0710	0.	0.	0.	0.	0.	0.	-.0057	-.0107	-.0122	.0005	-.0128	-.0313	0.	
.0720	0.	0.	0.	0.	0.	0.	-.0082	-.0060	-.0230	.0141	-.0311	-.0345	0.	
.0730	0.	0.	0.	0.	0.	0.	-.0080	-.0011	-.0266	.0200	-.0365	-.0309	0.	
.0740	0.	0.	0.	0.	0.	0.	-.0045	.0041	-.0228	.0180	-.0281	-.0201	0.	
.0750	0.	0.	0.	0.	0.	0.	.0017	.0094	-.0145	.0107	-.0096	-.0053	0.	
.0760	0.	0.	0.	0.	0.	0.	.0088	.0144	-.0053	.0021	.0120	.0091	0.	
.0770	0.	0.	0.	0.	0.	0.	.0145	.0190	.0019	-.0039	.0283	.0207	0.	
.0780	0.	0.	0.	0.	0.	0.	.0169	.0232	.0045	-.0032	.0335	.0275	0.	
.0790	0.	0.	0.	0.	0.	0.	.0157	.0269	.0005	.0065	.0262	.0272	0.	
.0800	0.	0.	0.	0.	0.	0.	.0123	.0300	-.0091	.0231	.0098	.0204	0.	
.0810	0.	0.	0.	0.	0.	0.	.0077	.0325	-.0202	.0420	-.0100	.0112	0.	
.0820	0.	0.	0.	0.	0.	0.	.0031	.0343	-.0285	.0589	-.0265	.0037	0.	
.0830	0.	0.	0.	0.	0.	0.	-.0000	.0353	-.0316	.0693	-.0341	-.0007	0.	

ADLPIPE PAGE 2203

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION 57 MEMBER 1 SEQUENCE 78 LOCATION DIS TYPE VA

.0740	0.	0.	0.	0.	0.	0.	0.	0.	-.0045	.0041	-.0228	.0180	-.0291	-.0201	0.
.0750	0.	0.	0.	0.	0.	0.	0.	0.	.0017	.0094	-.0145	.0107	-.0096	-.0053	0.
.0760	0.	0.	0.	0.	0.	0.	0.	0.	.0038	.0144	-.0053	.0021	.0120	.0091	0.
.0770	0.	0.	0.	0.	0.	0.	0.	0.	.0145	.0190	.0019	-.0039	.0283	.0207	0.
.0780	0.	0.	0.	0.	0.	0.	0.	0.	.0189	.0232	.0045	-.0032	.0325	.0275	0.
.0790	0.	0.	0.	0.	0.	0.	0.	0.	.0157	.0269	.0005	.0065	.0262	.0272	0.
.0800	0.	0.	0.	0.	0.	0.	0.	0.	.0123	.0300	-.0091	.0231	.0098	.0204	0.
.0810	0.	0.	0.	0.	0.	0.	0.	0.	.0077	.0325	-.0202	.0420	-.0100	.0112	0.
.0820	0.	0.	0.	0.	0.	0.	0.	0.	.0031	.0343	-.0285	.0589	-.0265	.0037	0.
.0830	0.	0.	0.	0.	0.	0.	0.	0.	-.0000	.0353	-.0316	.0693	-.0341	-.0007	0.

ADLPIPE PAGE 2203

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	DIS	TYPE	VA					STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ		(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
.0840	0.	0.	0.	0.	0.	0.	.0003	.0355	-.0279	.0701	-.0300	-.0011	0.	
.0850	0.	0.	0.	0.	0.	0.	.0036	.0349	-.0188	.0629	-.0158	.0021	0.	
.0860	0.	0.	0.	0.	0.	0.	.0081	.0337	-.0078	.0526	.0035	.0064	0.	
.0870	0.	0.	0.	0.	0.	0.	.0122	.0318	.0023	.0427	.0215	.0092	0.	
.0880	0.	0.	0.	0.	0.	0.	.0149	.0292	.0097	.0344	.0332	.0098	0.	
.0890	0.	0.	0.	0.	0.	0.	.0155	.0261	.0130	.0305	.0364	.0076	0.	
.0900	0.	0.	0.	0.	0.	0.	.0141	.0227	.0117	.0320	.0329	.0022	0.	
.0910	0.	0.	0.	0.	0.	0.	.0124	.0189	.0086	.0353	.0269	-.0042	0.	
.0920	0.	0.	0.	0.	0.	0.	.0115	.0151	.0072	.0360	.0227	-.0082	0.	
.0930	0.	0.	0.	0.	0.	0.	.0112	.0113	.0090	.0337	.0230	-.0079	0.	
.0940	0.	0.	0.	0.	0.	0.	.0116	.0077	.0135	.0295	.0281	-.0044	0.	
.0950	0.	0.	0.	0.	0.	0.	.0128	.0043	.0189	.0242	.0350	.0002	0.	
.0960	0.	0.	0.	0.	0.	0.	.0139	.0012	.0223	.0202	.0388	.0033	0.	
.0970	0.	0.	0.	0.	0.	0.	.0130	-.0018	.0211	.0209	.0348	.0024	0.	
.0980	0.	0.	0.	0.	0.	0.	.0095	-.0044	.0146	.0271	.0208	-.0029	0.	
.0990	0.	0.	0.	0.	0.	0.	.0042	-.0067	.0040	.0370	-.0010	-.0120	0.	
.1000	0.	0.	0.	0.	0.	0.	-.0012	-.0085	-.0091	.0484	-.0254	-.0237	0.	
.1010	0.	0.	0.	0.	0.	0.	-.0057	-.0097	-.0219	.0586	-.0463	-.0358	0.	
.1020	0.	0.	0.	0.	0.	0.	-.0080	-.0103	-.0309	.0637	-.0594	-.0450	0.	
.1030	0.	0.	0.	0.	0.	0.	-.0077	-.0102	-.0345	.0616	-.0627	-.0498	0.	
.1040	0.	0.	0.	0.	0.	0.	-.0049	-.0095	-.0341	.0534	-.0573	-.0508	0.	
.1050	0.	0.	0.	0.	0.	0.	-.0003	-.0080	-.0318	.0422	-.0462	-.0496	0.	
.1060	0.	0.	0.	0.	0.	0.	.0051	-.0058	-.0293	.0308	-.0337	-.0471	0.	
.1070	0.	0.	0.	0.	0.	0.	.0098	-.0028	-.0280	.0215	-.0232	-.0438	0.	
.1080	0.	0.	0.	0.	0.	0.	.0131	.0010	-.0280	.0151	-.0160	-.0395	0.	
.1090	0.	0.	0.	0.	0.	0.	.0156	.0054	-.0287	.0114	-.0110	-.0342	0.	
.1100	0.	0.	0.	0.	0.	0.	.0182	.0103	-.0291	.0098	-.0060	-.0292	0.	
.1110	0.	0.	0.	0.	0.	0.	.0208	.0156	-.0281	.0088	-.0003	-.0224	0.	
.1120	0.	0.	0.	0.	0.	0.	.0231	.0213	-.0251	.0073	.0057	-.0128	0.	
.1130	0.	0.	0.	0.	0.	0.	.0255	.0271	-.0216	.0063	.0109	-.0042	0.	
.1140	0.	0.	0.	0.	0.	0.	.0276	.0325	-.0193	.0073	.0129	.0005	0.	
.1150	0.	0.	0.	0.	0.	0.	.0281	.0375	-.0189	.0100	.0098	.0018	0.	
.1160	0.	0.	0.	0.	0.	0.	.0269	.0420	-.0198	.0136	.0014	.0011	0.	
.1170	0.	0.	0.	0.	0.	0.	.0247	.0461	-.0212	.0177	-.0095	-.0019	0.	
.1180	0.	0.	0.	0.	0.	0.	.0226	.0493	-.0227	.0213	-.0186	-.0080	0.	
.1190	0.	0.	0.	0.	0.	0.	.0214	.0519	-.0211	.0191	-.0222	-.0126	0.	
.1200	0.	0.	0.	0.	0.	0.	.0224	.0536	-.0137	.0077	-.0176	-.0132	0.	
.1210	0.	0.	0.	0.	0.	0.	.0258	.0545	-.0015	-.0095	-.0040	-.0126	0.	

ADLPIPE PAGE 2204

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION 57 MEMBER 1 SEQUENCE 78 LOCATION DIS TYPE VA

.1130	0.	0.	0.	0.	0.	0.	0.	.0255	.0271	-.0216	.0063	.0109	-.0042	0.
.1140	0.	0.	0.	0.	0.	0.	0.	.0276	.0325	-.0193	.0073	.0129	.0005	0.
.1150	0.	0.	0.	0.	0.	0.	0.	.0231	.0375	-.0169	.0100	.0398	.0018	0.
.1160	0.	0.	0.	0.	0.	0.	0.	.0269	.0420	-.0195	.0136	.0014	.0011	0.
.1170	0.	0.	0.	0.	0.	0.	0.	.0247	.0461	-.0212	.0177	-.0095	-.0019	0.
.1180	0.	0.	0.	0.	0.	0.	0.	.0226	.0497	-.0227	.0213	-.0186	-.0080	0.
.1190	0.	0.	0.	0.	0.	0.	0.	.0214	.0519	-.0211	.0191	-.0222	-.0126	0.
.1200	0.	0.	0.	0.	0.	0.	0.	.0224	.0536	-.0137	.0077	-.0176	-.0132	0.
.1210	0.	0.	0.	0.	0.	0.	0.	.0258	.0545	-.0015	-.0095	-.0040	-.0126	0.

ADLPIPE PAGE 2204

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	73	LOCATION	DIS	TYPE	VA	DX	DY	DZ	FX	RY	RZ	STRESS
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	HX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)			
.1220	0.	0.	0.	0.	0.	0.	.0303	.0545	.0131	-.0288	.0150	-.0119	0.			
.1230	0.	0.	0.	0.	0.	0.	.0343	.0536	.0270	-.0477	.0328	-.0121	0.			
.1240	0.	0.	0.	0.	0.	0.	.0362	.0521	.0375	-.0626	.0425	-.0136	0.			
.1250	0.	0.	0.	0.	0.	0.	.0347	.0501	.0411	-.0676	.0397	-.0194	0.			
.1260	0.	0.	0.	0.	0.	0.	.0297	.0476	.0365	-.0609	.0246	-.0311	0.			
.1270	0.	0.	0.	0.	0.	0.	.0232	.0447	.0271	-.0498	.0012	-.0437	0.			
.1280	0.	0.	0.	0.	0.	0.	.0174	.0414	.0176	-.0396	-.0227	-.0535	0.			
.1290	0.	0.	0.	0.	0.	0.	.0132	.0382	.0112	-.0309	-.0395	-.0580	0.			
.1300	0.	0.	0.	0.	0.	0.	.0112	.0350	.0096	-.0250	-.0450	-.0553	0.			
.1310	0.	0.	0.	0.	0.	0.	.0123	.0319	.0133	-.0256	-.0396	-.0454	0.			
.1320	0.	0.	0.	0.	0.	0.	.0157	.0291	.0207	-.0321	-.0286	-.0283	0.			
.1330	0.	0.	0.	0.	0.	0.	.0191	.0265	.0269	-.0364	-.0184	-.0101	0.			
.1340	0.	0.	0.	0.	0.	0.	.0207	.0241	.0281	-.0337	-.0151	.0048	0.			
.1350	0.	0.	0.	0.	0.	0.	.0206	.0217	.0236	-.0264	-.0215	.0157	0.			
.1360	0.	0.	0.	0.	0.	0.	.0190	.0193	.0149	-.0160	-.0363	.0232	0.			
.1370	0.	0.	0.	0.	0.	0.	.0157	.0171	.0039	-.0016	-.0547	.0293	0.			
.1380	0.	0.	0.	0.	0.	0.	.0127	.0150	-.0070	.0143	-.0698	.0340	0.			
.1390	0.	0.	0.	0.	0.	0.	.0130	.0129	-.0143	.0232	-.0762	.0400	0.			
.1400	0.	0.	0.	0.	0.	0.	.0173	.0105	-.0155	.0209	-.0720	.0492	0.			
.1410	0.	0.	0.	0.	0.	0.	.0238	.0079	-.0120	.0128	-.0588	.0604	0.			
.1420	0.	0.	0.	0.	0.	0.	.0304	.0053	-.0065	.0033	-.0413	.0725	0.			
.1430	0.	0.	0.	0.	0.	0.	.0372	.0026	-.0019	-.0071	-.0246	.0829	0.			
.1440	0.	0.	0.	0.	0.	0.	.0434	-.0001	-.0002	-.0168	-.0130	.0902	0.			
.1450	0.	0.	0.	0.	0.	0.	.0472	-.0027	-.0024	-.0207	-.0088	.0935	0.			
.1460	0.	0.	0.	0.	0.	0.	.0480	-.0050	-.0079	-.0179	-.0110	.0930	0.			
.1470	0.	0.	0.	0.	0.	0.	.0478	-.0069	-.0140	-.0148	-.0163	.0916	0.			
.1480	0.	0.	0.	0.	0.	0.	.0463	-.0084	-.0186	-.0156	-.0195	.0904	0.			
.1490	0.	0.	0.	0.	0.	0.	.0493	-.0092	-.0201	-.0190	-.0174	.0906	0.			
.1500	0.	0.	0.	0.	0.	0.	.0500	-.0091	-.0174	-.0248	-.0089	.0931	0.			
.1510	0.	0.	0.	0.	0.	0.	.0509	-.0081	-.0107	-.0357	.0045	.0971	0.			
.1520	0.	0.	0.	0.	0.	0.	.0518	-.0060	-.0011	-.0519	.0190	.1013	0.			
.1530	0.	0.	0.	0.	0.	0.	.0506	-.0029	.0074	-.0657	.0305	.1019	0.			
.1540	0.	0.	0.	0.	0.	0.	.0457	.0016	.0123	-.0725	.0352	.0965	0.			
.1550	0.	0.	0.	0.	0.	0.	.0375	.0068	.0134	-.0748	.0314	.0842	0.			
.1560	0.	0.	0.	0.	0.	0.	.0269	.0127	.0122	-.0759	.0203	.0658	0.			
.1570	0.	0.	0.	0.	0.	0.	.0137	.0194	.0101	-.0747	.0045	.0442	0.			
.1580	0.	0.	0.	0.	0.	0.	-.0011	.0267	.0076	-.0704	-.0114	.0197	0.			
.1590	0.	0.	0.	0.	0.	0.	-.0151	.0342	.0066	-.0680	-.0235	-.0058	0.			

ADLPIPE PAGE 2205

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	73	LOCATION	DIS	TYPE	VA	DX	DY	DZ	FX	RY	RZ	STRESS
---------	----	--------	---	----------	----	----------	-----	------	----	----	----	----	----	----	----	--------

.1510	0.	0.	0.	0.	0.	0.	0.	.0509	-.0081	-.0107	-.0357	.0045	.0971	0.
.1520	0.	0.	0.	0.	0.	0.	0.	.0518	-.0060	-.0011	-.0519	.0190	.1013	0.
.1530	0.	0.	0.	0.	0.	0.	0.	.0506	-.0029	.0074	-.0657	.0305	.1019	0.
.1540	0.	0.	0.	0.	0.	0.	0.	.0457	.0016	.0123	-.0725	.0352	.0965	0.
.1550	0.	0.	0.	0.	0.	0.	0.	.0375	.0068	.0134	-.0748	.0314	.0842	0.
.1560	0.	0.	0.	0.	0.	0.	0.	.0269	.0127	.0122	-.0759	.0203	.0658	0.
.1570	0.	0.	0.	0.	0.	0.	0.	.0137	.0194	.0101	-.0747	.0045	.0442	0.
.1580	0.	0.	0.	0.	0.	0.	0.	-.0011	.0267	.0076	-.0704	-.0114	.0197	0.
.1590	0.	0.	0.	0.	0.	0.	0.	-.0151	.0342	.0066	-.0680	-.0235	-.0058	0.

ADLPIPE PAGE 2205

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	VA	STRESS
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	(PSI)
.1600	0.	0.	0.	0.	0.	0.	0.
.1610	0.	0.	0.	0.	0.	0.	0.
.1620	0.	0.	0.	0.	0.	0.	0.
.1630	0.	0.	0.	0.	0.	0.	0.
.1640	0.	0.	0.	0.	0.	0.	0.
.1650	0.	0.	0.	0.	0.	0.	0.
.1660	0.	0.	0.	0.	0.	0.	0.
.1670	0.	0.	0.	0.	0.	0.	0.
.1680	0.	0.	0.	0.	0.	0.	0.
.1690	0.	0.	0.	0.	0.	0.	0.
.1700	0.	0.	0.	0.	0.	0.	0.
.1710	0.	0.	0.	0.	0.	0.	0.
.1720	0.	0.	0.	0.	0.	0.	0.
.1730	0.	0.	0.	0.	0.	0.	0.
.1740	0.	0.	0.	0.	0.	0.	0.
.1750	0.	0.	0.	0.	0.	0.	0.
.1760	0.	0.	0.	0.	0.	0.	0.
.1770	0.	0.	0.	0.	0.	0.	0.
.1780	0.	0.	0.	0.	0.	0.	0.
.1790	0.	0.	0.	0.	0.	0.	0.
.1800	0.	0.	0.	0.	0.	0.	0.
.1810	0.	0.	0.	0.	0.	0.	0.
.1820	0.	0.	0.	0.	0.	0.	0.
.1830	0.	0.	0.	0.	0.	0.	0.
.1840	0.	0.	0.	0.	0.	0.	0.
.1850	0.	0.	0.	0.	0.	0.	0.
.1860	0.	0.	0.	0.	0.	0.	0.
.1870	0.	0.	0.	0.	0.	0.	0.
.1880	0.	0.	0.	0.	0.	0.	0.
.1890	0.	0.	0.	0.	0.	0.	0.
.1900	0.	0.	0.	0.	0.	0.	0.
.1910	0.	0.	0.	0.	0.	0.	0.
.1920	0.	0.	0.	0.	0.	0.	0.
.1930	0.	0.	0.	0.	0.	0.	0.
.1940	0.	0.	0.	0.	0.	0.	0.
.1950	0.	0.	0.	0.	0.	0.	0.
.1960	0.	0.	0.	0.	0.	0.	0.
.1970	0.	0.	0.	0.	0.	0.	0.

ADLPIPE PAGE 2206

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION 57 MEMBER 1 SEQUENCE 78 LOCATION DIS TYPE VA

.1890	0.	0.	0.	0.	0.	0.	0.	-.0268	-.0159	.0084	-.0777	.0467	-.0004	0.
.1900	0.	0.	0.	0.	0.	0.	0.	-.0352	-.0077	.0085	-.0812	.0402	-.0169	0.
.1910	0.	0.	0.	0.	0.	0.	0.	-.0440	.0003	.0071	-.0799	.0322	-.0322	0.
.1920	0.	0.	0.	0.	0.	0.	0.	-.0521	.0077	.0047	-.0758	.0243	-.0459	0.
.1930	0.	0.	0.	0.	0.	0.	0.	-.0591	.0141	.0022	-.0691	.0183	-.0566	0.
.1940	0.	0.	0.	0.	0.	0.	0.	-.0651	.0194	.0006	-.0597	.0155	-.0632	0.
.1950	0.	0.	0.	0.	0.	0.	0.	-.0696	.0234	.0004	-.0486	.0165	-.0652	0.
.1960	0.	0.	0.	0.	0.	0.	0.	-.0721	.0260	.0015	-.0372	.0209	-.0638	0.
.1970	0.	0.	0.	0.	0.	0.	0.	-.0727	.0271	.0030	-.0250	.0266	-.0601	0.

ADLPIPE PAGE 2206

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	VA	DX	DY	DZ	RX	RY	RZ	STRESS
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.1980	0.	0.	0.	0.	0.	0.	-.0728	.0267	.0038	-.0100	.0309	-.0558	0.
.1990	0.	0.	0.	0.	0.	0.	-.0729	.0250	.0028	.0082	.0315	-.0525	0.
.2000	0.	0.	0.	0.	0.	0.	-.0730	.0220	-.0002	.0279	.0274	-.0514	0.
.2010	0.	0.	0.	0.	0.	0.	-.0728	.0178	-.0048	.0482	.0195	-.0528	0.
.2020	0.	0.	0.	0.	0.	0.	-.0723	.0129	-.0100	.0682	.0100	-.0564	0.
.2030	0.	0.	0.	0.	0.	0.	-.0710	.0074	-.0141	.0853	.0019	-.0610	0.
.2040	0.	0.	0.	0.	0.	0.	-.0679	.0015	-.0152	.0960	-.0024	-.0650	0.
.2050	0.	0.	0.	0.	0.	0.	-.0631	-.0044	-.0127	.0989	-.0017	-.0676	0.
.2060	0.	0.	0.	0.	0.	0.	-.0588	-.0102	-.0072	.0958	.0035	-.0692	0.
.2070	0.	0.	0.	0.	0.	0.	-.0499	-.0156	-.0002	.0883	.0110	-.0704	0.
.2080	0.	0.	0.	0.	0.	0.	-.0430	-.0206	.0072	.0772	.0178	-.0714	0.
.2090	0.	0.	0.	0.	0.	0.	-.0369	-.0249	.0133	.0647	.0213	-.0730	0.
.2100	0.	0.	0.	0.	0.	0.	-.0322	-.0286	.0170	.0537	.0203	-.0758	0.
.2110	0.	0.	0.	0.	0.	0.	-.0291	-.0315	.0178	.0451	.0150	-.0794	0.
.2120	0.	0.	0.	0.	0.	0.	-.0268	-.0336	.0167	.0376	.0073	-.0826	0.
.2130	0.	0.	0.	0.	0.	0.	-.0249	-.0351	.0152	.0296	-.0003	-.0839	0.
.2140	0.	0.	0.	0.	0.	0.	-.0230	-.0359	.0142	.0208	-.0053	-.0822	0.
.2150	0.	0.	0.	0.	0.	0.	-.0205	-.0360	.0145	.0107	-.0064	-.0769	0.
.2160	0.	0.	0.	0.	0.	0.	-.0172	-.0357	.0159	-.0010	-.0034	-.0686	0.
.2170	0.	0.	0.	0.	0.	0.	-.0134	-.0349	.0177	-.0133	.0022	-.0582	0.
.2180	0.	0.	0.	0.	0.	0.	-.0099	-.0337	.0189	-.0238	.0081	-.0469	0.
.2190	0.	0.	0.	0.	0.	0.	-.0074	-.0323	.0182	-.0308	.0120	-.0363	0.
.2200	0.	0.	0.	0.	0.	0.	-.0058	-.0308	.0152	-.0340	.0129	-.0275	0.
.2210	0.	0.	0.	0.	0.	0.	-.0047	-.0292	.0101	-.0337	.0111	-.0212	0.
.2220	0.	0.	0.	0.	0.	0.	-.0039	-.0277	.0038	-.0306	.0078	-.0169	0.
.2230	0.	0.	0.	0.	0.	0.	-.0029	-.0261	-.0022	-.0259	.0050	-.0136	0.
.2240	0.	0.	0.	0.	0.	0.	-.0012	-.0247	-.0066	-.0214	.0045	-.0104	0.
.2250	0.	0.	0.	0.	0.	0.	.0018	-.0233	-.0087	-.0181	.0070	-.0067	0.
.2260	0.	0.	0.	0.	0.	0.	.0058	-.0220	-.0088	-.0151	.0120	-.0030	0.
.2270	0.	0.	0.	0.	0.	0.	.0104	-.0208	-.0078	-.0115	.0177	.0003	0.
.2280	0.	0.	0.	0.	0.	0.	.0150	-.0196	-.0065	-.0063	.0217	.0024	0.
.2290	0.	0.	0.	0.	0.	0.	.0193	-.0186	-.0059	.0012	.0221	.0029	0.
.2300	0.	0.	0.	0.	0.	0.	.0228	-.0175	-.0066	.0118	.0183	.0012	0.
.2310	0.	0.	0.	0.	0.	0.	.0256	-.0163	-.0085	.0256	.0109	-.0022	0.
.2320	0.	0.	0.	0.	0.	0.	.0278	-.0149	-.0104	.0406	.0015	-.0062	0.
.2330	0.	0.	0.	0.	0.	0.	.0299	-.0134	-.0112	.0548	-.0079	-.0096	0.
.2340	0.	0.	0.	0.	0.	0.	.0322	-.0115	-.0103	.0668	-.0156	-.0119	0.
.2350	0.	0.	0.	0.	0.	0.	.0347	-.0094	-.0072	.0757	-.0203	-.0127	0.

ADLPIPE PAGE 2207

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION 57 MEMBER 1 SEQUENCE 78 LOCATION DIS TYPE VA

.2270	0.	0.	0.	0.	0.	0.	0.	.0104	-.0208	-.0078	-.0115	.0177	.0003	0.
.2280	0.	0.	0.	0.	0.	0.	0.	.0150	-.0196	-.0065	-.0063	.0217	.0024	0.
.2290	0.	0.	0.	0.	0.	0.	0.	.0193	-.0186	-.0059	.0012	.0221	.0029	0.
.2300	0.	0.	0.	0.	0.	0.	0.	.0228	-.0175	-.0066	.0118	.0183	.0012	0.
.2310	0.	0.	0.	0.	0.	0.	0.	.0256	-.0167	-.0085	.0256	.0109	-.0022	0.
.2320	0.	0.	0.	0.	0.	0.	0.	.0278	-.0149	-.0104	.0406	.0015	-.0062	0.
.2330	0.	0.	0.	0.	0.	0.	0.	.0299	-.0134	-.0112	.0548	-.0079	-.0096	0.
.2340	0.	0.	0.	0.	0.	0.	0.	.0322	-.0115	-.0103	.0668	-.0156	-.0119	0.
.2350	0.	0.	0.	0.	0.	0.	0.	.0347	-.0094	-.0072	.0757	-.0203	-.0127	0.

ADLPIPE PAGE 2207

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	DIS	TYPE	VA	VA	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	RY	RZ	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(DEG)	(DEG)	
.2360	0.	0.	0.	0.	0.	0.	.0375	-.0069	-.0022	.0808	-.0220	-.0124			0.
.2370	0.	0.	0.	0.	0.	0.	.0402	-.0040	.0043	.0820	-.0213	-.0115			0.
.2380	0.	0.	0.	0.	0.	0.	.0421	-.0009	.0114	.0801	-.0194	-.0110			0.
.2390	0.	0.	0.	0.	0.	0.	.0429	.0025	.0183	.0763	-.0174	-.0116			0.
.2400	0.	0.	0.	0.	0.	0.	.0424	.0062	.0243	.0710	-.0160	-.0142			0.
.2410	0.	0.	0.	0.	0.	0.	.0408	.0100	.0291	.0641	-.0154	-.0188			0.
.2420	0.	0.	0.	0.	0.	0.	.0380	.0138	.0329	.0557	-.0152	-.0253			0.
.2430	0.	0.	0.	0.	0.	0.	.0342	.0175	.0359	.0457	-.0152	-.0330			0.
.2440	0.	0.	0.	0.	0.	0.	.0298	.0210	.0383	.0343	-.0147	-.0413			0.
.2450	0.	0.	0.	0.	0.	0.	.0249	.0242	.0401	.0217	-.0135	-.0496			0.
.2460	0.	0.	0.	0.	0.	0.	.0199	.0269	.0410	.0086	-.0118	-.0574			0.
.2470	0.	0.	0.	0.	0.	0.	.0148	.0291	.0409	-.0040	-.0098	-.0644			0.
.2480	0.	0.	0.	0.	0.	0.	.0098	.0306	.0395	-.0153	-.0080	-.0702			0.
.2490	0.	0.	0.	0.	0.	0.	.0052	.0312	.0368	-.0250	-.0068	-.0745			0.
.2500	0.	0.	0.	0.	0.	0.	.0013	.0310	.0328	-.0324	-.0061	-.0768			0.
.2510	0.	0.	0.	0.	0.	0.	-.0018	.0300	.0277	-.0371	-.0057	-.0768			0.
.2520	0.	0.	0.	0.	0.	0.	-.0035	.0281	.0216	-.0393	-.0054	-.0741			0.
.2530	0.	0.	0.	0.	0.	0.	-.0036	.0253	.0151	-.0395	-.0048	-.0686			0.
.2540	0.	0.	0.	0.	0.	0.	-.0020	.0218	.0085	-.0380	-.0041	-.0601			0.
.2550	0.	0.	0.	0.	0.	0.	.0013	.0177	.0020	-.0345	-.0031	-.0487			0.
.2560	0.	0.	0.	0.	0.	0.	.0061	.0132	-.0044	-.0292	-.0020	-.0349			0.
.2570	0.	0.	0.	0.	0.	0.	.0124	.0083	-.0106	-.0222	-.0009	-.0194			0.
.2580	0.	0.	0.	0.	0.	0.	.0197	.0034	-.0165	-.0137	-.0002	-.0026			0.
.2590	0.	0.	0.	0.	0.	0.	.0277	-.0014	-.0219	-.0040	-.0000	.0147			0.
.2600	0.	0.	0.	0.	0.	0.	.0361	-.0058	-.0266	.0063	-.0004	.0322			0.
.2610	0.	0.	0.	0.	0.	0.	.0447	-.0096	-.0304	.0165	-.0013	.0492			0.
.2620	0.	0.	0.	0.	0.	0.	.0533	-.0127	-.0334	.0261	-.0025	.0650			0.
.2630	0.	0.	0.	0.	0.	0.	.0615	-.0148	-.0354	.0346	-.0042	.0790			0.
.2640	0.	0.	0.	0.	0.	0.	.0607	-.0160	-.0363	.0417	-.0062	.0910			0.
.2650	0.	0.	0.	0.	0.	0.	.0748	-.0161	-.0362	.0469	-.0086	.1007			0.
.2660	0.	0.	0.	0.	0.	0.	.0796	-.0151	-.0354	.0502	-.0113	.1074			0.
.2670	0.	0.	0.	0.	0.	0.	.0831	-.0130	-.0341	.0518	-.0140	.1110			0.
.2680	0.	0.	0.	0.	0.	0.	.0850	-.0099	-.0323	.0514	-.0167	.1117			0.
.2690	0.	0.	0.	0.	0.	0.	.0853	-.0059	-.0300	.0489	-.0191	.1099			0.
.2700	0.	0.	0.	0.	0.	0.	.0840	-.0011	-.0271	.0445	-.0209	.1063			0.
.2710	0.	0.	0.	0.	0.	0.	.0814	.0044	-.0240	.0383	-.0218	.1009			0.
.2720	0.	0.	0.	0.	0.	0.	.0778	.0102	-.0209	.0306	-.0219	.0943			0.
.2730	0.	0.	0.	0.	0.	0.	.0733	.0163	-.0177	.0217	-.0213	.0869			0.

ADLPIPE PAGE 2208

DIS/ADLPIPE

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83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION 57 MEMBER 1 SEQUENCE 78 LOCATION DIS TYPE VA

.2640	0.	0.	0.	0.	0.	0.	0.	0.	.687	-.0160	-.0363	.0417	-.0262	.0910	0.
.2650	0.	0.	0.	0.	0.	0.	0.	0.	.748	-.0161	-.0362	.0469	-.0286	.1007	0.
.2660	0.	0.	0.	0.	0.	0.	0.	0.	.0796	-.0151	-.0354	.0502	-.0113	.1074	0.
.2670	0.	0.	0.	0.	0.	0.	0.	0.	.0831	-.0130	-.0341	.0518	-.0140	.1110	0.
.2680	0.	0.	0.	0.	0.	0.	0.	0.	.0850	-.0099	-.0323	.0514	-.0167	.1117	0.
.2690	0.	0.	0.	0.	0.	0.	0.	0.	.0853	-.0059	-.0300	.0489	-.0191	.1099	0.
.2700	0.	0.	0.	0.	0.	0.	0.	0.	.0840	-.0011	-.0271	.0445	-.0209	.1063	0.
.2710	0.	0.	0.	0.	0.	0.	0.	0.	.0814	.0044	-.0240	.0383	-.0218	.1009	0.
.2720	0.	0.	0.	0.	0.	0.	0.	0.	.0778	.0102	-.0209	.0306	-.0219	.0943	0.
.2730	0.	0.	0.	0.	0.	0.	0.	0.	.0733	.0163	-.0177	.0217	-.0213	.0869	0.

ADLPIPE PAGE 2208

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	DIS	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2740	0.	0.	0.	0.	0.	0.	.0677	.0224	-.0148	.0122	-.0204	.0796	0.		
.2750	0.	0.	0.	0.	0.	0.	.0614	.0284	-.0123	.0031	-.0195	.0727	0.		
.2760	0.	0.	0.	0.	0.	0.	.0546	.0342	-.0108	-.0050	-.0187	.0661	0.		
.2770	0.	0.	0.	0.	0.	0.	.0478	.0394	-.0102	-.0120	-.0181	.0599	0.		
.2780	0.	0.	0.	0.	0.	0.	.0410	.0440	-.0101	-.0181	-.0177	.0550	0.		
.2790	0.	0.	0.	0.	0.	0.	.0344	.0479	-.0103	-.0232	-.0175	.0520	0.		
.2800	0.	0.	0.	0.	0.	0.	.0284	.0509	-.0106	-.0271	-.0170	.0507	0.		
.2810	0.	0.	0.	0.	0.	0.	.0234	.0530	-.0111	-.0301	-.0162	.0508	0.		
.2820	0.	0.	0.	0.	0.	0.	.0195	.0541	-.0115	-.0326	-.0152	.0523	0.		
.2830	0.	0.	0.	0.	0.	0.	.0165	.0542	-.0116	-.0343	-.0145	.0554	0.		
.2840	0.	0.	0.	0.	0.	0.	.0140	.0535	-.0117	-.0346	-.0149	.0592	0.		
.2850	0.	0.	0.	0.	0.	0.	.0124	.0517	-.0124	-.0335	-.0165	.0626	0.		
.2860	0.	0.	0.	0.	0.	0.	.0117	.0491	-.0138	-.0312	-.0196	.0649	0.		
.2870	0.	0.	0.	0.	0.	0.	.0116	.0456	-.0156	-.0281	-.0242	.0663	0.		
.2880	0.	0.	0.	0.	0.	0.	.0120	.0414	-.0175	-.0244	-.0297	.0670	0.		
.2890	0.	0.	0.	0.	0.	0.	.0131	.0365	-.0192	-.0210	-.0351	.0671	0.		
.2900	0.	0.	0.	0.	0.	0.	.0152	.0311	-.0204	-.0188	-.0393	.0666	0.		
.2910	0.	0.	0.	0.	0.	0.	.0184	.0253	-.0208	-.0183	-.0416	.0660	0.		
.2920	0.	0.	0.	0.	0.	0.	.0224	.0192	-.0203	-.0192	-.0417	.0658	0.		
.2930	0.	0.	0.	0.	0.	0.	.0266	.0131	-.0191	-.0213	-.0400	.0661	0.		
.2940	0.	0.	0.	0.	0.	0.	.0311	.0070	-.0178	-.0241	-.0370	.0667	0.		
.2950	0.	0.	0.	0.	0.	0.	.0353	.0011	-.0170	-.0269	-.0336	.0670	0.		
.2960	0.	0.	0.	0.	0.	0.	.0389	-.0045	-.0173	-.0284	-.0306	.0671	0.		
.2970	0.	0.	0.	0.	0.	0.	.0413	-.0095	-.0187	-.0286	-.0285	.0670	0.		
.2980	0.	0.	0.	0.	0.	0.	.0426	-.0138	-.0209	-.0281	-.0272	.0671	0.		
.2990	0.	0.	0.	0.	0.	0.	.0428	-.0174	-.0236	-.0272	-.0262	.0676	0.		
.3000	0.	0.	0.	0.	0.	0.	.0421	-.0200	-.0265	-.0261	-.0246	.0683	0.		
.3010	0.	0.	0.	0.	0.	0.	.0404	-.0215	-.0292	-.0255	-.0219	.0692	0.		
.3020	0.	0.	0.	0.	0.	0.	.0379	-.0220	-.0309	-.0264	-.0178	.0705	0.		
.3030	0.	0.	0.	0.	0.	0.	.0344	-.0214	-.0315	-.0291	-.0127	.0717	0.		
.3040	0.	0.	0.	0.	0.	0.	.0300	-.0197	-.0313	-.0327	-.0069	.0721	0.		
.3050	0.	0.	0.	0.	0.	0.	.0245	-.0170	-.0307	-.0371	-.0011	.0705	0.		
.3060	0.	0.	0.	0.	0.	0.	.0182	-.0133	-.0297	-.0424	.0040	.0665	0.		
.3070	0.	0.	0.	0.	0.	0.	.0109	-.0089	-.0280	-.0488	.0081	.0604	0.		
.3080	0.	0.	0.	0.	0.	0.	.0027	-.0038	-.0256	-.0557	.0110	.0521	0.		
.3090	0.	0.	0.	0.	0.	0.	-.0061	.0017	-.0224	-.0629	.0131	.0415	0.		
.3100	0.	0.	0.	0.	0.	0.	-.0147	.0073	-.0183	-.0708	.0148	.0289	0.		
.3110	0.	0.	0.	0.	0.	0.	-.0229	.0128	-.0134	-.0793	.0162	.0150	0.		

ADLPIPE PAGE 2209

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	DIS	TYPE	VA						
---------	----	--------	---	----------	----	----------	-----	------	----	--	--	--	--	--	--

.3030	0.	0.	0.	0.	0.	0.	0.	0.	.0344	-.0214	-.0315	-.0291	-.0127	.0717	0.
.3040	0.	0.	0.	0.	0.	0.	0.	0.	.0300	-.0197	-.0313	-.0327	-.0069	.0721	0.
.3050	0.	0.	0.	0.	0.	0.	0.	0.	.0245	-.0170	-.0307	-.0371	-.0011	.0705	0.
.3060	0.	0.	0.	0.	0.	0.	0.	0.	.0182	-.0133	-.0297	-.0424	.0040	.0665	0.
.3070	0.	0.	0.	0.	0.	0.	0.	0.	.0109	-.0089	-.0280	-.0488	.0081	.0604	0.
.3080	0.	0.	0.	0.	0.	0.	0.	0.	.0027	-.0038	-.0256	-.0557	.0110	.0521	0.
.3090	0.	0.	0.	0.	0.	0.	0.	0.	-.0061	.0017	-.0224	-.0629	.0131	.0415	0.
.3100	0.	0.	0.	0.	0.	0.	0.	0.	-.0147	.0073	-.0183	-.0708	.0148	.0289	0.
.3110	0.	0.	0.	0.	0.	0.	0.	0.	-.0279	.0128	-.0134	-.0793	.0162	.0150	0.

ADLPIPE PAGE 2209

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	DIS	TYPE	VA						STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ		(PSI)	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)			
.3120	0.	0.	0.	0.	0.	0.	-.0308	.0178	-.0074	-.0877	.0172	.0005	0.		
.3130	0.	0.	0.	0.	0.	0.	-.0381	.0223	-.0009	-.0951	.0176	-.0142	0.		
.3140	0.	0.	0.	0.	0.	0.	-.0445	.0258	.0056	-.1010	.0173	-.0238	0.		
.3150	0.	0.	0.	0.	0.	0.	-.0497	.0282	.0116	-.1049	.0160	-.0427	0.		
.3160	0.	0.	0.	0.	0.	0.	-.0538	.0293	.0168	-.1061	.0137	-.0552	0.		
.3170	0.	0.	0.	0.	0.	0.	-.0568	.0290	.0213	-.1042	.0105	-.0654	0.		
.3180	0.	0.	0.	0.	0.	0.	-.0584	.0271	.0250	-.0995	.0067	-.0727	0.		
.3190	0.	0.	0.	0.	0.	0.	-.0583	.0238	.0278	-.0924	.0030	-.0767	0.		
.3200	0.	0.	0.	0.	0.	0.	-.0567	.0191	.0296	-.0826	-.0001	-.0774	0.		
.3210	0.	0.	0.	0.	0.	0.	-.0537	.0132	.0304	-.0703	-.0026	-.0745	0.		
.3220	0.	0.	0.	0.	0.	0.	-.0496	.0061	.0305	-.0563	-.0044	-.0680	0.		
.3230	0.	0.	0.	0.	0.	0.	-.0446	-.0018	.0297	-.0412	-.0056	-.0585	0.		
.3240	0.	0.	0.	0.	0.	0.	-.0390	-.0102	.0278	-.0249	-.0062	-.0467	0.		
.3250	0.	0.	0.	0.	0.	0.	-.0330	-.0188	.0250	-.0080	-.0062	-.0335	0.		
.3260	0.	0.	0.	0.	0.	0.	-.0270	-.0274	.0215	.0085	-.0055	-.0195	0.		
.3270	0.	0.	0.	0.	0.	0.	-.0213	-.0355	.0178	.0233	-.0043	-.0051	0.		
.3280	0.	0.	0.	0.	0.	0.	-.0160	-.0430	.0141	.0362	-.0023	.0088	0.		
.3290	0.	0.	0.	0.	0.	0.	-.0114	-.0496	.0105	.0467	.0005	.0214	0.		
.3300	0.	0.	0.	0.	0.	0.	-.0074	-.0549	.0072	.0543	.0040	.0319	0.		
.3310	0.	0.	0.	0.	0.	0.	-.0044	-.0590	.0044	.0585	.0079	.0402	0.		
.3320	0.	0.	0.	0.	0.	0.	-.0026	-.0616	.0023	.0596	.0118	.0460	0.		
.3330	0.	0.	0.	0.	0.	0.	-.0020	-.0628	.0007	.0579	.0156	.0491	0.		
.3340	0.	0.	0.	0.	0.	0.	-.0025	-.0626	-.0005	.0538	.0192	.0494	0.		
.3350	0.	0.	0.	0.	0.	0.	-.0038	-.0611	-.0011	.0472	.0226	.0470	0.		
.3360	0.	0.	0.	0.	0.	0.	-.0058	-.0585	-.0011	.0387	.0257	.0425	0.		
.3370	0.	0.	0.	0.	0.	0.	-.0085	-.0549	-.0005	.0290	.0284	.0366	0.		
.3380	0.	0.	0.	0.	0.	0.	-.0116	-.0507	.0007	.0189	.0309	.0295	0.		
.3390	0.	0.	0.	0.	0.	0.	-.0146	-.0460	.0020	.0089	.0328	.0217	0.		
.3400	0.	0.	0.	0.	0.	0.	-.0174	-.0412	.0032	-.0001	.0342	.0135	0.		
.3410	0.	0.	0.	0.	0.	0.	-.0200	-.0364	.0041	-.0070	.0346	.0057	0.		
.3420	0.	0.	0.	0.	0.	0.	-.0224	-.0320	.0046	-.0114	.0339	-.0015	0.		
.3430	0.	0.	0.	0.	0.	0.	-.0242	-.0281	.0046	-.0133	.0325	-.0075	0.		
.3440	0.	0.	0.	0.	0.	0.	-.0251	-.0249	.0041	-.0124	.0305	-.0122	0.		
.3450	0.	0.	0.	0.	0.	0.	-.0252	-.0224	.0033	-.0084	.0285	-.0153	0.		
.3460	0.	0.	0.	0.	0.	0.	-.0245	-.0208	.0022	-.0019	.0266	-.0166	0.		
.3470	0.	0.	0.	0.	0.	0.	-.0229	-.0201	.0012	.0065	.0251	-.0159	0.		
.3480	0.	0.	0.	0.	0.	0.	-.0204	-.0202	.0003	.0167	.0239	-.0137	0.		
.3490	0.	0.	0.	0.	0.	0.	-.0174	-.0210	-.0009	.0286	.0229	-.0106	0.		

ADLPIPE PAGE 2210

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	DIS	TYPE	VA						STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ		(PSI)	

.3410	0.	0.	0.	0.	0.	0.	0.	0.	-.0200	-.0364	.0041	-.0070	.0346	.0057	0.
.3420	0.	0.	0.	0.	0.	0.	0.	0.	-.0224	-.0320	.0046	-.0114	.0339	-.0015	0.
.3430	0.	0.	0.	0.	0.	0.	0.	0.	-.0242	-.0281	.0046	-.0133	.0325	-.0075	0.
.3440	0.	0.	0.	0.	0.	0.	0.	0.	-.0251	-.0249	.0041	-.0124	.0305	-.0122	0.
.3450	0.	0.	0.	0.	0.	0.	0.	0.	-.0252	-.0224	.0033	-.0084	.0285	-.0153	0.
.3460	0.	0.	0.	0.	0.	0.	0.	0.	-.0245	-.0202	.0022	-.0019	.0266	-.0166	0.
.3470	0.	0.	0.	0.	0.	0.	0.	0.	-.0229	-.0201	.0012	.0065	.0251	-.0159	0.
.3480	0.	0.	0.	0.	0.	0.	0.	0.	-.0204	-.0202	.0003	.0167	.0239	-.0137	0.
.3490	0.	0.	0.	0.	0.	0.	0.	0.	-.0174	-.0210	-.0009	.0286	.0229	-.0106	0.

ADLPIPE PAGE 2210

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	DIS	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.3500	0.	0.	0.	0.	0.	0.	0.	-.0140	-.0225	-.0023	.0420	.0219	-.0070	0.	
.3510	0.	0.	0.	0.	0.	0.	0.	-.0104	-.0244	-.0038	.0559	.0206	-.0034	0.	
.3520	0.	0.	0.	0.	0.	0.	0.	-.0068	-.0267	-.0054	.0699	.0190	-.0002	0.	
.3530	0.	0.	0.	0.	0.	0.	0.	-.0035	-.0292	-.0070	.0836	.0171	.0021	0.	
.3540	0.	0.	0.	0.	0.	0.	0.	-.0004	-.0317	-.0085	.0963	.0153	.0033	0.	
.3550	0.	0.	0.	0.	0.	0.	0.	.0025	-.0341	-.0097	.1071	.0138	.0034	0.	
.3560	0.	0.	0.	0.	0.	0.	0.	.0051	-.0362	-.0103	.1155	.0129	.0023	0.	
.3570	0.	0.	0.	0.	0.	0.	0.	.0072	-.0380	-.0102	.1214	.0125	.0003	0.	
.3580	0.	0.	0.	0.	0.	0.	0.	.0087	-.0392	-.0096	.1248	.0125	-.0027	0.	
.3590	0.	0.	0.	0.	0.	0.	0.	.0098	-.0400	-.0087	.1258	.0126	-.0066	0.	
.3600	0.	0.	0.	0.	0.	0.	0.	.0104	-.0402	-.0078	.1246	.0126	-.0114	0.	
.3610	0.	0.	0.	0.	0.	0.	0.	.0104	-.0399	-.0070	.1216	.0122	-.0167	0.	
.3620	0.	0.	0.	0.	0.	0.	0.	.0098	-.0392	-.0062	.1170	.0114	-.0222	0.	
.3630	0.	0.	0.	0.	0.	0.	0.	.0089	-.0381	-.0054	.1108	.0104	-.0274	0.	
.3640	0.	0.	0.	0.	0.	0.	0.	.0079	-.0366	-.0047	.1031	.0095	-.0321	0.	
.3650	0.	0.	0.	0.	0.	0.	0.	.0070	-.0349	-.0038	.0942	.0092	-.0358	0.	
.3660	0.	0.	0.	0.	0.	0.	0.	.0063	-.0331	-.0027	.0842	.0096	-.0383	0.	
.3670	0.	0.	0.	0.	0.	0.	0.	.0059	-.0313	-.0012	.0733	.0107	-.0393	0.	
.3680	0.	0.	0.	0.	0.	0.	0.	.0059	-.0295	.0004	.0619	.0123	-.0391	0.	
.3690	0.	0.	0.	0.	0.	0.	0.	.0062	-.0279	.0019	.0507	.0141	-.0381	0.	
.3700	0.	0.	0.	0.	0.	0.	0.	.0066	-.0265	.0031	.0403	.0156	-.0368	0.	
.3710	0.	0.	0.	0.	0.	0.	0.	.0072	-.0255	.0037	.0310	.0163	-.0354	0.	
.3720	0.	0.	0.	0.	0.	0.	0.	.0078	-.0248	.0039	.0229	.0160	-.0343	0.	
.3730	0.	0.	0.	0.	0.	0.	0.	.0084	-.0244	.0035	.0163	.0148	-.0336	0.	
.3740	0.	0.	0.	0.	0.	0.	0.	.0091	-.0244	.0027	.0112	.0129	-.0336	0.	
.3750	0.	0.	0.	0.	0.	0.	0.	.0099	-.0247	.0018	.0072	.0108	-.0343	0.	
.3760	0.	0.	0.	0.	0.	0.	0.	.0110	-.0254	.0010	.0038	.0090	-.0354	0.	
.3770	0.	0.	0.	0.	0.	0.	0.	.0123	-.0264	.0007	.0010	.0076	-.0367	0.	
.3780	0.	0.	0.	0.	0.	0.	0.	.0137	-.0275	.0007	-.0013	.0070	-.0382	0.	
.3790	0.	0.	0.	0.	0.	0.	0.	.0154	-.0289	.0012	-.0031	.0070	-.0399	0.	
.3800	0.	0.	0.	0.	0.	0.	0.	.0171	-.0304	.0018	-.0043	.0075	-.0417	0.	
.3810	0.	0.	0.	0.	0.	0.	0.	.0187	-.0320	.0024	-.0047	.0081	-.0435	0.	
.3820	0.	0.	0.	0.	0.	0.	0.	.0201	-.0337	.0031	-.0043	.0085	-.0451	0.	
.3830	0.	0.	0.	0.	0.	0.	0.	.0211	-.0353	.0037	-.0029	.0085	-.0464	0.	
.3840	0.	0.	0.	0.	0.	0.	0.	.0217	-.0368	.0039	-.0008	.0081	-.0474	0.	
.3850	0.	0.	0.	0.	0.	0.	0.	.0220	-.0383	.0040	.0020	.0073	-.0480	0.	
.3860	0.	0.	0.	0.	0.	0.	0.	.0219	-.0395	.0040	.0050	.0063	-.0478	0.	
.3870	0.	0.	0.	0.	0.	0.	0.	.0214	-.0405	.0042	.0080	.0052	-.0468	0.	

ADLPIPE PAGE 2211

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION 57 MEMBER 1 SEQUENCE 78 LOCATION DIS TYPE VA

.3790	0.	0.	0.	0.	0.	0.	0.	.154	-.0289	.0012	-.0031	.0070	-.0399	0.
.3800	0.	0.	0.	0.	0.	0.	0.	.171	-.0304	.0018	-.0043	.0075	-.0417	0.
.3810	0.	0.	0.	0.	0.	0.	0.	.187	-.0320	.0024	-.0047	.0081	-.0435	0.
.3820	0.	0.	0.	0.	0.	0.	0.	.201	-.0337	.0031	-.0043	.0085	-.0451	0.
.3830	0.	0.	0.	0.	0.	0.	0.	.211	-.0353	.0037	-.0029	.0085	-.0464	0.
.3840	0.	0.	0.	0.	0.	0.	0.	.220	-.0368	.0039	-.0008	.0081	-.0474	0.
.3850	0.	0.	0.	0.	0.	0.	0.	.220	-.0383	.0040	.0020	.0073	-.0480	0.
.3860	0.	0.	0.	0.	0.	0.	0.	.219	-.0395	.0040	.0050	.0063	-.0478	0.
.3870	0.	0.	0.	0.	0.	0.	0.	.214	-.0405	.0042	.0080	.0052	-.0468	0.

ADLPIPE PAGE 2211

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.21.

S/RV PIPING KEWAUNEE GKWJRF 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	DIS	TYPE	VA						STRESS
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ		(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
.3880	0.	0.	0.	0.	0.	0.	0.	.0204	-.0413	.0046	.0105	.0041	-.0449	0.	
.3890	0.	0.	0.	0.	0.	0.	0.	.0190	-.0418	.0051	.0123	.0031	-.0426	0.	
.3900	0.	0.	0.	0.	0.	0.	0.	.0172	-.0420	.0056	.0134	.0021	-.0402	0.	
.3910	0.	0.	0.	0.	0.	0.	0.	.0149	-.0420	.0063	.0133	.0009	-.0380	0.	
.3920	0.	0.	0.	0.	0.	0.	0.	.0122	-.0417	.0071	.0118	-.0006	-.0363	0.	
.3930	0.	0.	0.	0.	0.	0.	0.	.0089	-.0411	.0080	.0088	-.0026	-.0352	0.	
.3940	0.	0.	0.	0.	0.	0.	0.	.0052	-.0403	.0088	.0044	-.0048	-.0351	0.	
.3950	0.	0.	0.	0.	0.	0.	0.	.0013	-.0392	.0098	-.0013	-.0073	-.0363	0.	
.3960	0.	0.	0.	0.	0.	0.	0.	-.0029	-.0380	.0109	-.0087	-.0098	-.0384	0.	
.3970	0.	0.	0.	0.	0.	0.	0.	-.0072	-.0366	.0123	-.0177	-.0123	-.0414	0.	
.3980	0.	0.	0.	0.	0.	0.	0.	-.0116	-.0350	.0140	-.0277	-.0146	-.0450	0.	
.3990	0.	0.	0.	0.	0.	0.	0.	-.0158	-.0334	.0158	-.0384	-.0168	-.0493	0.	
.4000	0.	0.	0.	0.	0.	0.	0.	-.0197	-.0318	.0174	-.0495	-.0187	-.0541	0.	

MAXIMUM VALUE OF DISCONTINUITY FORCE OCCURS AT

TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	FORCE
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(LB)
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	END	TYPE	VA						STRESS
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ		(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
0.0000	0.	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.	
.0010	-0.	-0.	0.	-0.	0.	-0.	-0.	-.0000	.0000	.0000	-.0000	-.0000	.0000	0.	
.0020	-0.	-0.	0.	-0.	0.	-0.	-0.	-.0000	.0000	.0000	-.0000	-.0000	.0000	0.	
.0030	-0.	-0.	0.	-0.	0.	-0.	-0.	.0000	.0000	.0000	-.0000	.0000	.0000	0.	
.0040	-0.	-0.	-0.	-0.	0.	-0.	-0.	.0000	.0000	.0000	-.0000	.0000	.0000	1.	
.0050	1.	0.	-1.	-0.	1.	0.	0.	.0000	.0000	.0000	-.0000	-.0000	.0000	3.	
.0060	4.	2.	-3.	-0.	2.	1.	-0.	-.0000	.0000	.0000	.0000	-.0001	.0000	7.	
.0070	9.	4.	-6.	-0.	4.	1.	-0.	-.0001	.0000	.0000	.0001	-.0003	.0000	12.	
.0080	16.	8.	-11.	-1.	8.	2.	-0.	-.0002	.0000	-.0000	.0003	-.0006	.0000	20.	
.0090	28.	12.	-17.	-2.	9.	3.	-0.	-.0004	.0000	-.0001	.0006	-.0012	-.0001	29.	
.0100	51.	20.	-28.	-4.	12.	5.	-0.	-.0007	.0000	-.0003	.0012	-.0020	-.0003	41.	
.0110	92.	36.	-48.	-5.	16.	10.	-0.	-.0012	.0001	-.0006	.0021	-.0033	-.0006	58.	

ADLPIPE PAGE 2212

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.21.

S/RV PIPING KEWAUNEE GKWJRF 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

.0030	-0.	-0.	0.	-0.	0.	-0.	.0000	.0000	.0000	-.0000	.0000	.0000	0.
.0040	-0.	-0.	-0.	-0.	0.	-0.	.0000	.0000	.0000	-.0000	.0000	.0000	1.
.0050	1.	0.	-1.	-0.	1.	0.	.0000	.0000	.0000	-.0000	-.0000	.0000	3.
.0060	4.	2.	-2.	-0.	2.	1.	-.0000	.0000	.0000	.0000	-.0001	.0000	7.
.0070	0.	4.	-0.	-0.	4.	1.	-.0001	.0000	.0000	.0001	-.0003	.0000	12.
.0080	16.	8.	-11.	-1.	6.	2.	-.0002	.0000	-.0000	.0003	-.0006	.0000	20.
.0090	28.	12.	-17.	-2.	9.	3.	-.0004	.0000	-.0001	.0006	-.0012	-.0001	29.
.0100	51.	20.	-28.	-4.	12.	5.	-.0007	.0000	-.0003	.0012	-.0020	-.0003	41.
.0110	92.	36.	-48.	-5.	16.	10.	-.0012	.0001	-.0006	.0021	-.0033	-.0006	58.

ADLPIPE PAGE 2212

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	END	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.0120	154.	63.	-76.	-6.	19.	17.	-.0021	.0001	-.0010	.0035	-.0051	-.0009	81.		
.0130	230.	96.	-109.	-8.	22.	25.	-.0023	.0002	-.0016	.0054	-.0075	-.0015	105.		
.0140	305.	127.	-139.	-13.	23.	30.	-.0049	.0003	-.0024	.0078	-.0105	-.0023	121.		
.0150	362.	145.	-156.	-20.	22.	29.	-.0067	.0004	-.0034	.0106	-.0138	-.0035	128.		
.0160	386.	143.	-154.	-29.	19.	24.	-.0085	.0005	-.0047	.0132	-.0173	-.0052	128.		
.0170	365.	119.	-127.	-37.	14.	16.	-.0102	.0005	-.0059	.0154	-.0204	-.0074	129.		
.0180	286.	71.	-71.	-42.	4.	6.	-.0115	.0003	-.0070	.0165	-.0224	-.0098	129.		
.0190	147.	-1.	13.	-43.	-10.	-6.	-.0121	.0001	-.0077	.0164	-.0226	-.0122	136.		
.0200	-46.	-91.	120.	-39.	-29.	-20.	-.0119	-.0003	-.0076	.0145	-.0200	-.0139	161.		
.0210	-263.	-183.	231.	-29.	-52.	-31.	-.0107	-.0008	-.0065	.0110	-.0145	-.0145	205.		
.0220	-440.	-256.	313.	-12.	-77.	-30.	-.0087	-.0015	-.0043	.0061	-.0060	-.0141	256.		
.0230	-568.	-292.	359.	12.	-100.	-18.	-.0061	-.0021	-.0011	.0004	.0043	-.0121	310.		
.0240	-677.	-298.	388.	37.	-111.	-6.	-.0033	-.0027	.0025	-.0053	.0149	-.0084	357.		
.0250	-826.	-316.	435.	54.	-117.	-11.	-.0005	-.0031	.0052	-.0099	.0240	-.0040	394.		
.0260	-995.	-373.	502.	62.	-130.	-29.	.0027	-.0037	.0058	-.0125	.0306	-.0010	446.		
.0270	-1036.	-414.	512.	71.	-147.	-24.	.0059	-.0043	.0047	-.0129	.0340	-.0000	502.		
.0280	-939.	-360.	455.	90.	-148.	17.	.0082	-.0048	.0031	-.0120	.0338	.0020	530.		
.0290	-862.	-251.	411.	109.	-140.	54.	.0095	-.0050	.0010	-.0100	.0308	.0063	563.		
.0300	-776.	-202.	372.	115.	-159.	61.	.0114	-.0050	-.0027	-.0066	.0281	.0089	626.		
.0310	-565.	-172.	260.	111.	-179.	57.	.0145	-.0049	-.0055	-.0043	.0276	.0113	663.		
.0320	-212.	-5.	53.	116.	-164.	82.	.0173	-.0042	-.0045	-.0053	.0294	.0185	661.		
.0330	236.	301.	-216.	176.	-131.	140.	.0192	-.0030	-.0001	-.0088	.0335	.0295	713.		
.0340	667.	558.	-486.	137.	-90.	171.	.0213	-.0015	.0053	-.0128	.0399	.0392	720.		
.0350	947.	655.	-684.	98.	-39.	135.	.0238	.0004	.0095	-.0160	.0447	.0451	520.		
.0360	1100.	680.	-790.	45.	8.	79.	.0246	.0024	.0111	-.0166	.0436	.0465	278.		
.0370	1307.	736.	-877.	4.	37.	69.	.0222	.0045	.0099	-.0138	.0342	.0425	240.		
.0380	1574.	785.	-961.	-37.	67.	82.	.0171	.0066	.0062	-.0082	.0170	.0335	342.		
.0390	1627.	704.	-912.	-105.	92.	34.	.0106	.0089	.0001	-.0004	-.0047	.0212	437.		
.0400	1316.	435.	-655.	-195.	77.	-100.	.0041	.0112	-.0080	.0083	-.0255	.0061	707.		
.0410	972.	91.	-389.	-274.	41.	-239.	-.0007	.0132	-.0143	.0134	-.0396	-.0104	1114.		
.0420	845.	-103.	-289.	-310.	55.	-299.	-.0038	.0148	-.0132	.0095	-.0438	-.0212	1321.		
.0430	805.	-78.	-285.	-295.	108.	-279.	-.0062	.0162	-.0045	-.0016	-.0378	-.0233	1279.		
.0440	598.	-49.	-219.	-266.	144.	-268.	-.0071	.0173	.0072	-.0148	-.0224	-.0216	1231.		
.0450	223.	-212.	-92.	-267.	172.	-334.	-.0053	.0179	.0181	-.0272	-.0025	-.0215	1403.		
.0460	-123.	-430.	22.	-277.	210.	-413.	-.0035	.0179	.0264	-.0365	.0132	-.0229	1642.		
.0470	-297.	-451.	103.	-238.	224.	-394.	-.0058	.0172	.0303	-.0389	.0175	-.0244	1558.		
.0480	-303.	-327.	160.	-159.	206.	-293.	-.0119	.0157	.0286	-.0337	.0097	-.0278	1192.		
.0490	-298.	-318.	229.	-100.	180.	-228.	-.0180	.0135	.0215	-.0225	-.0054	-.0351	935.		

ADLPIPE PAGE 2213

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

.0410	772.	91.	219.	-274.	41.	-239.	-.0007	.0132	-.0143	.0134	-.0396	-.0104	1114.
.0420	845.	-103.	-280.	-310.	55.	-299.	-.0338	.0148	-.0132	.0095	-.0438	-.0212	1321.
.0430	805.	-78.	-285.	-295.	108.	-279.	-.0662	.0162	-.0045	-.0016	-.0378	-.0233	1279.
.0440	599.	-46.	-219.	-176.	144.	-262.	-.0071	.0173	.0072	-.0148	-.0224	-.0216	1231.
.0450	223.	-212.	-92.	-267.	170.	-374.	-.0053	.0179	.0181	-.0272	-.0025	-.0215	1403.
.0460	-123.	-430.	22.	-277.	210.	-413.	-.0035	.0179	.0264	-.0365	.0132	-.0229	1642.
.0470	-297.	-451.	103.	-278.	224.	-394.	-.0058	.0172	.0303	-.0389	.0175	-.0244	1558.
.0480	-303.	-327.	160.	-179.	206.	-293.	-.0119	.0157	.0286	-.0337	.0097	-.0278	1192.
.0490	-298.	-318.	229.	-100.	180.	-228.	-.0180	.0135	.0215	-.0225	-.0054	-.0351	935.

ADLPIPE PAGE 2213

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKW03F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	END	TYPE	VA					STRESS
TIME	FX	FY	FZ	MX	MY	MZ			DY	DZ	RX	RY	RZ	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	
.0500	-428.	-456.	371.	-72.	133.	-230.	-.0229	.0108	.0110	-.0069	-.0214	-.0442	838.	
.0510	-567.	-510.	520.	-21.	55.	-205.	-.0274	.0077	.0013	.0097	-.0333	-.0503	649.	
.0520	-475.	-338.	506.	76.	10.	-89.	-.0308	.0042	-.0022	.0198	-.0370	-.0486	358.	
.0530	-206.	-51.	330.	191.	31.	68.	-.0310	.0025	.0016	.0205	-.0305	-.0392	625.	
.0540	-58.	170.	179.	290.	50.	191.	-.0280	-.0034	.0086	.0167	-.0146	-.0272	1067.	
.0550	-113.	267.	133.	363.	36.	263.	-.0234	-.0073	.0154	.0125	.0057	-.0163	1368.	
.0560	-164.	332.	82.	418.	41.	323.	-.0188	-.0112	.0214	.0075	.0228	-.0065	1613.	
.0570	-76.	459.	-16.	469.	65.	418.	-.0166	-.0149	.0252	.0042	.0308	.0013	1922.	
.0580	25.	591.	-53.	511.	42.	528.	-.0178	-.0184	.0235	.0075	.0280	.0033	2239.	
.0590	-50.	559.	53.	510.	-24.	575.	-.0206	-.0215	.0160	.0163	.0170	-.0019	2339.	
.0600	-309.	314.	254.	454.	-81.	529.	-.0223	-.0241	.0062	.0247	.0033	-.0110	2135.	
.0610	-604.	31.	461.	384.	-126.	467.	-.0227	-.0262	-.0019	.0291	-.0074	-.0201	1880.	
.0620	-790.	-108.	590.	340.	-169.	468.	-.0224	-.0278	-.0050	.0275	-.0105	-.0256	1834.	
.0630	-882.	-135.	615.	308.	-176.	503.	-.0198	-.0288	-.0014	.0175	-.0031	-.0253	1873.	
.0640	-1018.	-195.	595.	253.	-138.	495.	-.0139	-.0289	.0075	.0002	.0141	-.0202	1744.	
.0650	-1249.	-328.	599.	167.	-102.	479.	-.0063	-.0282	.0176	-.0186	.0364	-.0139	1434.	
.0660	-1437.	-445.	595.	62.	-79.	352.	.0005	-.0267	.0259	-.0338	.0556	-.0085	1115.	
.0670	-1431.	-475.	520.	-46.	-48.	303.	.0045	-.0246	.0305	-.0433	.0641	-.0049	944.	
.0680	-1252.	-458.	410.	-152.	-27.	274.	.0052	-.0219	.0285	-.0445	.0582	-.0058	958.	
.0690	-1035.	-480.	346.	-267.	-54.	226.	.0027	-.0188	.0184	-.0351	.0394	-.0129	1076.	
.0700	-855.	-558.	338.	-399.	-109.	130.	-.0015	-.0151	.0030	-.0178	.0133	-.0231	1320.	
.0710	-656.	-622.	310.	-532.	-155.	11.	-.0057	-.0107	-.0122	.0005	-.0128	-.0313	1684.	
.0720	-336.	-587.	199.	-632.	-184.	-81.	-.0002	-.0060	-.0230	.0141	-.0311	-.0345	2019.	
.0730	86.	-443.	-21.	-696.	-189.	-139.	-.0080	-.0011	-.0266	.0200	-.0365	-.0309	2236.	
.0740	458.	-257.	-261.	-739.	-158.	-201.	-.0045	.0041	-.0228	.0180	-.0281	-.0201	2381.	
.0750	678.	-102.	-504.	-767.	-110.	-288.	.0017	.0094	-.0145	.0107	-.0096	-.0053	2515.	
.0760	808.	11.	-686.	-773.	-63.	-379.	.0088	.0144	-.0053	.0021	.0120	.0091	2625.	
.0770	961.	124.	-852.	-754.	-17.	-447.	.0145	.0190	.0019	-.0039	.0283	.0207	2667.	
.0780	1141.	248.	-973.	-717.	12.	-490.	.0169	.0232	.0045	-.0032	.0335	.0275	2642.	
.0790	1275.	316.	-993.	-670.	13.	-534.	.0157	.0269	.0005	.0065	.0262	.0272	2606.	
.0800	1328.	276.	-914.	-622.	-22.	-604.	.0123	.0300	-.0091	.0231	.0098	.0204	2637.	
.0810	1322.	187.	-787.	-568.	-56.	-686.	.0077	.0325	-.0202	.0420	-.0100	.0112	2714.	
.0820	1301.	155.	-656.	-486.	-82.	-732.	.0031	.0343	-.0285	.0589	-.0265	.0037	2684.	
.0830	1294.	198.	-560.	-365.	-98.	-718.	-.0000	.0353	-.0316	.0693	-.0341	-.0007	2470.	
.0840	1258.	244.	-504.	-223.	-77.	-677.	.0003	.0355	-.0279	.0701	-.0300	-.0011	2181.	
.0850	1094.	243.	-435.	-79.	-24.	-640.	.0036	.0349	-.0188	.0629	-.0158	.0021	1963.	
.0860	793.	209.	-306.	65.	21.	-602.	.0081	.0337	-.0078	.0526	.0035	.0064	1843.	
.0870	474.	165.	-154.	212.	47.	-543.	.0122	.0316	.0023	.0437	.0215	.0092	1779.	

ADLPIPE PAGE 2214

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKW03F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

.0790	1275.	316.	-993.	-670.	13.	-534.	.0157	.0269	.0005	.0065	.0262	.0272	2606.
.0800	1328.	276.	-914.	-622.	-22.	-604.	.0123	.0300	-.0091	.0231	.0098	.0204	2637.
.0810	1322.	187.	-787.	-568.	-56.	-686.	.0077	.0325	-.0202	.0420	-.0100	.0112	2714.
.0820	1301.	155.	-656.	-486.	-82.	-732.	.0031	.0343	-.0285	.0589	-.0265	.0037	2684.
.0830	1294.	198.	-560.	-365.	-98.	-718.	-.0000	.0353	-.0316	.0693	-.0341	-.0007	2470.
.0840	1258.	244.	-504.	-223.	-77.	-677.	.0003	.0355	-.0279	.0701	-.0300	-.0011	2181.
.0850	1094.	243.	-435.	-79.	-24.	-640.	.0036	.0349	-.0188	.0629	-.0158	.0021	1963.
.0860	793.	209.	-306.	65.	21.	-602.	.0081	.0337	-.0078	.0526	.0035	.0064	1843.
.0870	474.	165.	-154.	212.	47.	-543.	.0122	.0318	.0023	.0427	.0215	.0092	1779.

ADLPIPE PAGE 2214

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.21.

S/RV PIPING KEWAUNEE GKM08F 2 RUP DISK

2 SAFETY COLD FKM24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	END	TYPE	VA					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.0880	228.	122.	-10.	356.	73.	-461.	.0149	.0292	.0097	.0344	.0332	.0098	1787.	
.0890	19.	77.	134.	489.	80.	-369.	.0155	.0261	.0130	.0305	.0364	.0076	1880.	
.0900	-202.	10.	731.	603.	49.	-281.	.0141	.0227	.0117	.0320	.0329	.0022	2028.	
.0910	-395.	-83.	515.	690.	10.	-201.	.0124	.0184	.0086	.0353	.0269	-.0042	2188.	
.0920	-488.	-137.	613.	759.	1.	-111.	.0115	.0151	.0072	.0360	.0227	-.0082	2332.	
.0930	-477.	-84.	614.	817.	16.	16.	.0112	.0113	.0090	.0337	.0230	-.0079	2487.	
.0940	-413.	51.	550.	859.	41.	166.	.0116	.0077	.0135	.0295	.0281	-.0044	2663.	
.0950	-352.	171.	451.	863.	86.	302.	.0128	.0043	.0189	.0242	.0350	.0002	2792.	
.0960	-315.	235.	355.	827.	137.	411.	.0139	.0012	.0223	.0202	.0388	.0033	2841.	
.0970	-274.	276.	286.	767.	162.	519.	.0130	-.0018	.0211	.0209	.0348	.0024	2861.	
.0980	-199.	315.	241.	689.	162.	635.	.0095	-.0044	.0146	.0271	.0208	-.0029	2891.	
.0990	-128.	313.	223.	587.	151.	735.	.0042	-.0067	.0040	.0370	-.0010	-.0120	2899.	
.1000	-143.	236.	257.	464.	128.	801.	-.0012	-.0085	-.0091	.0484	-.0254	-.0237	2843.	
.1010	-268.	107.	335.	327.	94.	839.	-.0057	-.0097	-.0219	.0586	-.0463	-.0358	2753.	
.1020	-447.	-19.	400.	187.	76.	855.	-.0050	-.0103	-.0309	.0637	-.0594	-.0450	2703.	
.1030	-635.	-107.	420.	56.	85.	892.	-.0077	-.0102	-.0345	.0616	-.0627	-.0498	2732.	
.1040	-848.	-182.	418.	-65.	101.	908.	-.0049	-.0095	-.0341	.0534	-.0573	-.0508	2786.	
.1050	-1098.	-281.	421.	-184.	110.	887.	-.0003	-.0080	-.0318	.0422	-.0462	-.0496	2775.	
.1060	-1332.	-395.	421.	-304.	107.	823.	.0051	-.0058	-.0293	.0308	-.0337	-.0471	2689.	
.1070	-1460.	-471.	391.	-412.	85.	737.	.0098	-.0028	-.0280	.0215	-.0232	-.0438	2581.	
.1080	-1450.	-473.	323.	-500.	44.	639.	.0131	.0010	-.0280	.0151	-.0160	-.0395	2471.	
.1090	-1324.	-429.	219.	-574.	-3.	518.	.0156	.0054	-.0287	.0114	-.0110	-.0342	2353.	
.1100	-1025.	-353.	34.	-639.	-48.	389.	.0182	.0103	-.0291	.0098	-.0060	-.0292	2280.	
.1110	-660.	-219.	-185.	-686.	-80.	254.	.0208	.0156	-.0281	.0088	-.0003	-.0224	2238.	
.1120	-309.	-39.	-400.	-719.	-85.	107.	.0231	.0213	-.0251	.0073	.0057	-.0128	2226.	
.1130	54.	116.	-619.	-749.	-72.	-50.	.0255	.0271	-.0216	.0063	.0109	-.0042	2293.	
.1140	428.	226.	-817.	-768.	-66.	-196.	.0276	.0325	-.0193	.0073	.0129	.0005	2420.	
.1150	779.	329.	-962.	-760.	-75.	-314.	.0281	.0375	-.0189	.0100	.0098	.0018	2511.	
.1160	1163.	427.	-1053.	-729.	-85.	-413.	.0269	.0420	-.0198	.0136	.0014	.0011	2562.	
.1170	1350.	469.	-1090.	-690.	-96.	-516.	.0247	.0461	-.0212	.0177	-.0095	-.0019	2637.	
.1180	1496.	438.	-1047.	-633.	-134.	-610.	.0226	.0493	-.0227	.0213	-.0186	-.0080	2705.	
.1190	1469.	372.	-926.	-546.	-159.	-689.	.0214	.0519	-.0211	.0191	-.0222	-.0126	2717.	
.1200	1314.	292.	-786.	-436.	-133.	-747.	.0224	.0536	-.0137	.0077	-.0176	-.0132	2664.	
.1210	1101.	187.	-655.	-315.	-93.	-770.	.0258	.0545	-.0015	-.0095	-.0040	-.0126	2544.	
.1220	773.	75.	-486.	-185.	-29.	-752.	.0303	.0545	.0131	-.0288	.0150	-.0119	2357.	
.1230	395.	-30.	-295.	-41.	29.	-691.	.0343	.0536	.0270	-.0477	.0328	-.0121	2108.	
.1240	24.	-131.	-96.	98.	99.	-614.	.0362	.0521	.0375	-.0626	.0425	-.0136	1914.	
.1250	-318.	-246.	141.	214.	138.	-534.	.0347	.0501	.0411	-.0676	.0397	-.0194	1800.	

ADLPIPE PAGE 2215

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.21.

S/RV PIPING KEWAUNEE GKM08F 2 RUP DISK

2 SAFETY COLD FKM24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

.1170	1350.	469.	-1090.	-690.	-96.	-516.	.0247	.0461	-.0212	.0177	-.0095	-.0019	2637.
.1180	1496.	438.	-1047.	-673.	-134.	-610.	.0226	.0493	-.0227	.0213	-.0186	-.0080	2705.
.1190	1469.	372.	-926.	-546.	-159.	-689.	.0214	.0519	-.0211	.0191	-.0222	-.0126	2717.
.1200	1714.	292.	-786.	-476.	-137.	-747.	.0224	.0536	-.0137	.0077	-.0176	-.0132	2664.
.1210	1101.	187.	-655.	-315.	-77.	-770.	.0258	.0545	-.0015	-.0095	-.0040	-.0126	2544.
.1220	773.	75.	-486.	-185.	-29.	-752.	.0303	.0545	.0131	-.0288	.0150	-.0119	2357.
.1230	395.	-30.	-295.	-41.	29.	-691.	.0343	.0536	.0270	-.0477	.0328	-.0121	2108.
.1240	24.	-131.	-96.	98.	99.	-614.	.0362	.0521	.0375	-.0626	.0425	-.0136	1914.
.1250	-318.	-246.	141.	214.	138.	-534.	.0347	.0501	.0411	-.0676	.0397	-.0194	1800.

ADLPIPE PAGE 2215

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKMOOF 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	END	TYPE	VA						STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ			(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)			
.1260	-604.	-381.	421.	313.	112.	-445.	.0297	.0476	.0365	-.0609	.0246	-.0311	1688.		
.1270	-853.	-521.	706.	403.	78.	-356.	.0232	.0447	.0271	-.0498	.0012	-.0437	1654.		
.1280	-981.	-632.	905.	487.	71.	-263.	.0174	.0414	.0176	-.0396	-.0227	-.0535	1699.		
.1290	-1009.	-656.	1009.	562.	75.	-156.	.0132	.0382	.0112	-.0309	-.0395	-.0580	1788.		
.1300	-981.	-562.	1030.	632.	81.	-27.	.0112	.0350	.0096	-.0250	-.0450	-.0553	1940.		
.1310	-855.	-384.	926.	700.	118.	113.	.0123	.0319	.0133	-.0256	-.0396	-.0454	2187.		
.1320	-675.	-173.	730.	747.	204.	228.	.0157	.0291	.0207	-.0321	-.0286	-.0283	2456.		
.1330	-460.	31.	519.	758.	272.	312.	.0191	.0265	.0269	-.0364	-.0184	-.0101	2627.		
.1340	-233.	206.	349.	736.	286.	372.	.0207	.0241	.0281	-.0337	-.0151	.0048	2657.		
.1350	41.	336.	192.	700.	281.	414.	.0206	.0217	.0236	-.0264	-.0215	.0157	2617.		
.1360	361.	436.	27.	656.	273.	442.	.0190	.0193	.0149	-.0160	-.0363	.0232	2545.		
.1370	645.	528.	-76.	597.	248.	443.	.0157	.0171	.0039	-.0016	-.0547	.0293	2384.		
.1380	772.	576.	-102.	525.	193.	416.	.0127	.0150	-.0070	.0143	-.0698	.0340	2120.		
.1390	762.	538.	-102.	448.	164.	360.	.0130	.0129	-.0143	.0232	-.0762	.0400	1819.		
.1400	673.	450.	-127.	380.	189.	297.	.0173	.0105	-.0155	.0209	-.0720	.0492	1575.		
.1410	567.	398.	-174.	326.	220.	266.	.0233	.0079	-.0120	.0128	-.0588	.0604	1444.		
.1420	389.	399.	-190.	287.	236.	262.	.0304	.0053	-.0065	.0033	-.0413	.0725	1383.		
.1430	164.	371.	-179.	259.	245.	259.	.0372	.0026	-.0019	-.0071	-.0246	.0829	1341.		
.1440	-64.	277.	-150.	232.	253.	235.	.0434	-.0001	-.0002	-.0168	-.0130	.0902	1267.		
.1450	-227.	185.	-105.	199.	230.	211.	.0472	-.0027	-.0024	-.0207	-.0088	.0935	1125.		
.1460	-264.	157.	-68.	171.	161.	214.	.0480	-.0050	-.0079	-.0179	-.0110	.0930	966.		
.1470	-222.	169.	-60.	156.	99.	229.	.0478	-.0069	-.0140	-.0148	-.0163	.0916	896.		
.1480	-110.	177.	-110.	153.	62.	243.	.0483	-.0084	-.0186	-.0156	-.0195	.0904	893.		
.1490	31.	222.	-197.	151.	31.	258.	.0493	-.0092	-.0201	-.0190	-.0174	.0906	914.		
.1500	204.	359.	-318.	153.	-3.	292.	.0500	-.0091	-.0174	-.0248	-.0089	.0931	1004.		
.1510	482.	554.	-515.	162.	-20.	346.	.0509	-.0081	-.0107	-.0357	.0045	.0971	1164.		
.1520	811.	728.	-760.	161.	1.	376.	.0518	-.0060	-.0011	-.0519	.0190	.1013	1244.		
.1530	1098.	836.	-960.	127.	11.	359.	.0506	-.0029	.0074	-.0657	.0305	.1019	1158.		
.1540	1258.	873.	-1037.	63.	-22.	291.	.0457	.0016	.0123	-.0725	.0352	.0965	909.		
.1550	1359.	837.	-1038.	-10.	-67.	195.	.0375	.0068	.0134	-.0748	.0314	.0842	629.		
.1560	1506.	745.	-1037.	-80.	-96.	93.	.0269	.0127	.0122	-.0759	.0203	.0658	474.		
.1570	1587.	626.	-979.	-158.	-115.	-28.	.0137	.0194	.0101	-.0747	.0045	.0442	601.		
.1580	1511.	448.	-816.	-255.	-156.	-185.	-.0011	.0267	.0076	-.0704	-.0114	.0197	1069.		
.1590	1301.	160.	-596.	-366.	-193.	-389.	-.0151	.0342	.0066	-.0680	-.0235	-.0058	1728.		
.1600	1010.	-185.	-379.	-478.	-181.	-624.	-.0273	.0418	.0091	-.0715	-.0304	-.0282	2453.		
.1610	684.	-478.	-166.	-570.	-155.	-842.	-.0389	.0492	.0148	-.0775	-.0325	-.0466	3129.		
.1620	353.	-702.	57.	-634.	-156.	-1019.	-.0504	.0559	.0212	-.0819	-.0309	-.0631	3682.		
.1630	-32.	-938.	296.	-674.	-153.	-1187.	-.0604	.0615	.0276	-.0865	-.0275	-.0773	4178.		

ADLPIPE PAGE 2216

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKMOOF 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

.1550	1359.	337.	-1038.	-10.	-67.	195.	.0375	.0068	.0124	-.0748	.0314	.0842	629.
.1560	1506.	745.	-1037.	-80.	-96.	93.	.0269	.0127	.0122	-.0759	.0203	.0558	474.
.1570	1587.	626.	-979.	-158.	-115.	-28.	.0137	.0194	.0101	-.0747	.0045	.0442	601.
.1580	1511.	448.	-816.	-275.	-156.	-115.	-.0011	.0267	.0076	-.0704	-.0114	.0197	1069.
.1590	1301.	180.	-596.	-366.	-197.	-389.	-.0151	.0342	.0066	-.0680	-.0235	-.0058	1728.
.1600	1010.	-135.	-379.	-478.	-181.	-824.	-.0273	.0418	.0091	-.0715	-.0304	-.0282	2453.
.1610	684.	-478.	-166.	-570.	-155.	-842.	-.0389	.0492	.0148	-.0775	-.0325	-.0466	3129.
.1620	357.	-732.	57.	-634.	-158.	-1019.	-.0504	.0559	.0212	-.0819	-.0309	-.0631	3682.
.1630	-32.	-938.	296.	-674.	-153.	-1167.	-.0604	.0615	.0276	-.0865	-.0275	-.0773	4178.

ADLPIPE PAGE 2216

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKM24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	VA	STRESS
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	(PSI)
.1640	-446.	-1022.	536.	-688.	-129.	-1353.	4634.
.1650	-842.	-1475.	777.	-669.	-121.	-1487.	4973.
.1660	-1207.	-1824.	1014.	-615.	-129.	-1569.	5140.
.1670	-1479.	-1691.	1192.	-525.	-128.	-1595.	5121.
.1680	-1678.	-1708.	1303.	-400.	-105.	-1573.	4947.
.1690	-1799.	-1545.	1360.	-247.	-88.	-1491.	4605.
.1700	-1824.	-1463.	1364.	-71.	-82.	-1341.	4092.
.1710	-1741.	-1184.	1300.	124.	-67.	-1133.	3472.
.1720	-1501.	-863.	1148.	336.	-53.	-875.	2855.
.1730	-1196.	-510.	960.	546.	-44.	-596.	2462.
.1740	-859.	-117.	761.	740.	-49.	-305.	2441.
.1750	-469.	293.	533.	921.	-61.	-2.	2806.
.1760	-63.	681.	279.	1079.	-55.	297.	3409.
.1770	329.	1017.	19.	1198.	-42.	577.	4048.
.1780	623.	1283.	-194.	1260.	-55.	819.	4573.
.1790	839.	1456.	-766.	1265.	-37.	1017.	4938.
.1800	1005.	1531.	-522.	1215.	-29.	1166.	5124.
.1810	1091.	1532.	-638.	1108.	-8.	1256.	5095.
.1820	1119.	1460.	-700.	943.	-13.	1291.	4863.
.1830	1078.	1299.	-707.	728.	-33.	1260.	4427.
.1840	995.	1049.	-690.	473.	-36.	1165.	3827.
.1850	881.	751.	-654.	191.	-35.	1023.	3166.
.1860	714.	441.	-578.	-111.	-42.	845.	2596.
.1870	529.	116.	-489.	-420.	-58.	643.	2342.
.1880	328.	-220.	-401.	-722.	-58.	418.	2544.
.1890	140.	-532.	-315.	-1002.	-58.	190.	3108.
.1900	-24.	-793.	-223.	-1249.	-81.	-27.	3808.
.1910	-177.	-1006.	-126.	-1453.	-110.	-237.	4490.
.1920	-281.	-1179.	-54.	-1596.	-139.	-429.	5046.
.1930	-322.	-1273.	-16.	-1667.	-166.	-586.	5399.
.1940	-298.	-1246.	-15.	-1662.	-192.	-693.	5509.
.1950	-217.	-1110.	-55.	-1584.	-210.	-751.	5371.
.1960	-100.	-914.	-125.	-1441.	-212.	-772.	5015.
.1970	25.	-688.	-200.	-1246.	-203.	-783.	4486.
.1980	145.	-430.	-272.	-1009.	-195.	-720.	3818.
.1990	263.	-155.	-307.	-739.	-193.	-645.	3039.
.2000	357.	96.	-302.	-443.	-191.	-548.	2221.
.2010	387.	287.	-241.	-137.	-188.	-450.	1540.

ADLPIPE PAGE 2217

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKM24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

.1930	-322.	-1270.	-16.	-1567.	-166.	-586.	-591.	.0077	.0047	-.0691	.0183	-.0566	5399.
.1940	-298.	-1246.	-15.	-1662.	-192.	-693.	-.651	.0194	.0066	-.0597	.0155	-.0632	5509.
.1950	-217.	-1110.	-55.	-1584.	-210.	-751.	-.0696	.0234	.0004	-.0486	.0165	-.0652	5371.
.1960	-100.	-914.	-121.	-1441.	-210.	-772.	-.0721	.0260	.0015	-.0372	.0209	-.0638	5015.
.1970	25.	-688.	-230.	-1246.	-203.	-763.	-.0727	.0271	.0030	-.0250	.0266	-.0601	4486.
.1980	145.	-430.	-272.	-1009.	-195.	-720.	-.0728	.0267	.0038	-.0100	.0309	-.0558	3818.
.1990	263.	-155.	-307.	-739.	-193.	-645.	-.0729	.0250	.0028	.0082	.0315	-.0525	3039.
.2000	357.	96.	-302.	-443.	-191.	-548.	-.0730	.0220	-.0002	.0279	.0274	-.0514	2221.
.2010	387.	287.	-241.	-137.	-188.	-450.	-.0728	.0178	-.0048	.0482	.0195	-.0528	1540.

ADLPIPE PAGE 2217

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKW00F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITSINTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	VA									
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)		
.2020	332.	414.	-115.	161.	-190.	-357.	-.0723	.0129	-.0100	.0682	.0100	-.0564	1324.		
.2030	207.	487.	55.	444.	-192.	-269.	-.0710	.0074	-.0141	.0853	.0019	-.0610	1684.		
.2040	30.	513.	234.	704.	-175.	-186.	-.0679	.0015	-.0152	.0960	-.0024	-.0650	2280.		
.2050	-197.	490.	409.	930.	-136.	-112.	-.0631	-.0044	-.0127	.0989	-.0017	-.0676	2880.		
.2060	-474.	425.	588.	1107.	-92.	-49.	-.0568	-.0102	-.0072	.0958	.0035	-.0692	3383.		
.2070	-775.	321.	763.	1228.	-50.	2.	-.0499	-.0156	-.0002	.0883	.0110	-.0704	3738.		
.2080	-1051.	189.	912.	1289.	-6.	43.	-.0430	-.0206	.0072	.0772	.0178	-.0714	3923.		
.2090	-1261.	39.	1025.	1289.	33.	79.	-.0369	-.0249	.0133	.0647	.0213	-.0730	3929.		
.2100	-1395.	-117.	1108.	1226.	53.	106.	-.0322	-.0286	.0170	.0537	.0203	-.0758	3746.		
.2110	-1454.	-272.	1161.	1103.	49.	125.	-.0291	-.0315	.0178	.0451	.0150	-.0794	3380.		
.2120	-1427.	-410.	1161.	933.	36.	141.	-.0268	-.0336	.0167	.0376	.0073	-.0826	2871.		
.2130	-1298.	-503.	1086.	729.	22.	168.	-.0245	-.0351	.0152	.0296	-.0003	-.0839	2275.		
.2140	-1083.	-529.	939.	500.	5.	213.	-.0230	-.0359	.0142	.0208	-.0053	-.0822	1652.		
.2150	-818.	-501.	731.	251.	-12.	270.	-.0205	-.0360	.0145	.0107	-.0064	-.0769	1122.		
.2160	-533.	-445.	478.	-10.	-25.	332.	-.0172	-.0357	.0159	-.0010	-.0034	-.0686	1012.		
.2170	-241.	-370.	197.	-273.	-35.	398.	-.0134	-.0349	.0177	-.0133	.0022	-.0582	1473.		
.2180	44.	-269.	-88.	-526.	-51.	474.	-.0099	-.0337	.0189	-.0238	.0081	-.0469	2158.		
.2190	303.	-151.	-348.	-760.	-77.	553.	-.0074	-.0323	.0182	-.0308	.0120	-.0353	2868.		
.2200	507.	-51.	-562.	-967.	-111.	626.	-.0058	-.0308	.0152	-.0340	.0129	-.0275	3521.		
.2210	633.	4.	-714.	-1141.	-148.	684.	-.0047	-.0292	.0101	-.0337	.0111	-.0212	4072.		
.2220	674.	25.	-800.	-1276.	-185.	726.	-.0039	-.0277	.0038	-.0306	.0078	-.0169	4502.		
.2230	638.	34.	-832.	-1363.	-217.	761.	-.0029	-.0261	-.0022	-.0259	.0050	-.0136	4794.		
.2240	535.	37.	-825.	-1390.	-233.	786.	-.0012	-.0247	-.0066	-.0214	.0045	-.0104	4931.		
.2250	366.	28.	-785.	-1381.	-227.	799.	.0018	-.0233	-.0087	-.0181	.0070	-.0067	4903.		
.2260	142.	11.	-710.	-1316.	-206.	795.	.0058	-.0220	-.0088	-.0151	.0120	-.0030	4718.		
.2270	-102.	-2.	-608.	-1202.	-175.	720.	.0104	-.0208	-.0078	-.0115	.0177	-.0003	4392.		
.2280	-324.	-4.	-491.	-1043.	-133.	756.	.0150	-.0196	-.0065	-.0063	.0217	.0024	3939.		
.2290	-500.	-0.	-366.	-844.	-04.	719.	.0193	-.0186	-.0059	.0012	.0221	.0029	3382.		
.2300	-621.	9.	-231.	-613.	-15.	667.	.0228	-.0175	-.0066	.0118	.0183	.0012	2759.		
.2310	-677.	32.	-96.	-361.	11.	601.	.0256	-.0163	-.0085	.0256	.0109	-.0022	2134.		
.2320	-650.	84.	16.	-94.	60.	527.	.0278	-.0149	-.0104	.0406	.0015	-.0062	1640.		
.2330	-526.	174.	84.	180.	117.	452.	.0299	-.0134	-.0112	.0548	-.0079	-.0096	1522.		
.2340	-320.	299.	104.	450.	178.	377.	.0322	-.0115	-.0103	.0668	-.0156	-.0119	1866.		
.2350	-84.	444.	87.	702.	239.	301.	.0347	-.0094	-.0072	.0757	-.0203	-.0127	2434.		
.2360	216.	590.	42.	927.	300.	217.	.0375	-.0069	-.0022	.0808	-.0220	-.0124	3039.		
.2370	509.	726.	-26.	1119.	359.	136.	.0402	-.0040	.0043	.0820	-.0213	-.0115	3598.		
.2380	798.	846.	-103.	1270.	408.	57.	.0421	-.0009	.0114	.0801	-.0194	-.0110	4061.		
.2390	1053.	934.	-169.	1373.	443.	-20.	.0429	.0025	.0183	.0763	-.0174	-.0116	4389.		

ADLPIPE PAGE 2217

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKW00F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITSINTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

.2310	-277.	32.	-96.	-261.	11.	601.	.0256	-.0163	-.0085	.0256	.0109	-.0022	2134.
.2320	-650.	84.	16.	-94.	60.	527.	.0278	-.0149	-.0104	.0406	.0015	-.0062	1640.
.2330	-526.	174.	34.	106.	117.	452.	.0299	-.0134	-.0112	.0548	-.0079	-.0096	1522.
.2340	-720.	209.	104.	450.	178.	377.	.0302	-.0115	-.0103	.0668	-.015	-.0119	1866.
.2350	-64.	444.	37.	752.	239.	300.	.0347	-.0094	-.0072	.0757	-.0203	-.0127	2434.
.2360	216.	590.	42.	927.	300.	218.	.0375	-.0069	-.0022	.0808	-.0220	-.0124	3039.
.2370	509.	726.	-26.	1119.	359.	136.	.0402	-.0040	.0043	.0820	-.0213	-.0115	3598.
.2380	798.	846.	-103.	1270.	408.	57.	.0421	-.0009	.0114	.0801	-.0194	-.0110	4061.
.2390	1053.	934.	-169.	1373.	443.	-20.	.0429	.0025	.0183	.0763	-.0174	-.0116	4389.

ADLPIPE PAGE 2218 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.29.21.
 S/RV PIPING KEWAUNEE GKM08F 2 RUP DIK
 2 SAFETY COLL FKW24F--2 PSV

CONDITION 24
 LOADS
 SHOCK
 PRESSURE
 ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
 FORCES AND MOMENTS ACT ON THE PIPING

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	VA									
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	FZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2400	1240.	966.	-206.	1421.	463.	-101.	.0424	.0062	.0243	.0710	-.0160	-.0142	4556.		
.2410	1337.	926.	-208.	1410.	469.	-187.	.0408	.0100	.0291	.0641	-.0154	-.0188	4557.		
.2420	1340.	821.	-175.	1343.	462.	-270.	.0380	.0138	.0329	.0557	-.0152	-.0253	4398.		
.2430	1257.	671.	-115.	1224.	444.	-340.	.0342	.0175	.0359	.0457	-.0152	-.0330	4093.		
.2440	1095.	487.	-37.	1059.	418.	-392.	.0298	.0210	.0383	.0343	-.0147	-.0413	3663.		
.2450	861.	273.	55.	855.	387.	-427.	.0249	.0242	.0401	.0217	-.0135	-.0496	3136.		
.2460	559.	35.	160.	620.	349.	-448.	.0199	.0269	.0410	.0086	-.0118	-.0574	2558.		
.2470	211.	-211.	272.	364.	306.	-454.	.0148	.0291	.0409	-.0040	-.0098	-.0644	2000.		
.2480	-147.	-448.	378.	102.	258.	-440.	.0098	.0306	.0395	-.0153	-.0080	-.0702	1582.		
.2490	-485.	-660.	465.	-154.	210.	-404.	.0052	.0312	.0368	-.0250	-.0068	-.0745	1464.		
.2500	-795.	-836.	532.	-394.	163.	-349.	.0013	.0310	.0328	-.0324	-.0061	-.0768	1677.		
.2510	-1076.	-970.	580.	-611.	118.	-277.	-.0018	.0300	.0277	-.0371	-.0057	-.0768	2071.		
.2520	-1318.	-1062.	606.	-797.	76.	-193.	-.0035	.0281	.0216	-.0393	-.0054	-.0741	2505.		
.2530	-1499.	-1106.	598.	-946.	42.	-97.	-.0036	.0253	.0151	-.0395	-.0048	-.0686	2896.		
.2540	-1604.	-1091.	552.	-1052.	17.	10.	-.0020	.0218	.0085	-.0380	-.0041	-.0601	3200.		
.2550	-1626.	-1019.	471.	-1112.	1.	125.	.0013	.0177	.0020	-.0345	-.0031	-.0487	3403.		
.2560	-1574.	-890.	361.	-1126.	-7.	237.	.0061	.0132	-.0044	-.0292	-.0020	-.0349	3499.		
.2570	-1454.	-725.	229.	-1095.	-5.	339.	.0124	.0083	-.0106	-.0222	-.0009	-.0194	3486.		
.2580	-1261.	-527.	78.	-1021.	5.	428.	.0197	.0034	-.0165	-.0137	-.0002	-.0026	3367.		
.2590	-995.	-296.	-92.	-910.	22.	501.	.0277	-.0014	-.0219	-.0040	-.0000	.0147	3161.		
.2600	-673.	-49.	-270.	-770.	47.	554.	.0361	-.0058	-.0266	.0063	-.0004	.0322	2888.		
.2610	-329.	192.	-441.	-611.	79.	576.	.0447	-.0096	-.0304	.0165	-.0013	.0492	2567.		
.2620	14.	406.	-595.	-445.	115.	586.	.0533	-.0127	-.0334	.0261	-.0025	.0650	2218.		
.2630	345.	593.	-727.	-276.	153.	528.	.0615	-.0148	-.0354	.0346	-.0042	.0790	1870.		
.2640	657.	754.	-836.	-111.	192.	466.	.0687	-.0160	-.0363	.0417	-.0062	.0910	1571.		
.2650	934.	878.	-916.	43.	232.	382.	.0748	-.0161	-.0362	.0469	-.0086	.1007	1366.		
.2660	1148.	944.	-954.	179.	267.	273.	.0796	-.0151	-.0354	.0502	-.0113	.1074	1282.		
.2670	1281.	944.	-942.	290.	296.	136.	.0831	-.0130	-.0341	.0518	-.0140	.1110	1329.		
.2680	1340.	889.	-883.	377.	316.	-11.	.0850	-.0099	-.0323	.0514	-.0167	.1117	1498.		
.2690	1340.	798.	-804.	440.	330.	-163.	.0853	-.0059	-.0300	.0489	-.0191	.1079	1745.		
.2700	1277.	677.	-693.	478.	335.	-312.	.0840	-.0011	-.0271	.0445	-.0209	.1063	2012.		
.2710	1146.	525.	-556.	489.	329.	-454.	.0814	.0044	-.0240	.0383	-.0218	.1009	2265.		
.2720	962.	345.	-403.	476.	312.	-585.	.0778	.0102	-.0209	.0306	-.0219	.0943	2482.		
.2730	756.	161.	-250.	443.	286.	-694.	.0733	.0163	-.0177	.0217	-.0213	.0869	2651.		
.2740	547.	-4.	-100.	396.	151.	-777.	.0677	.0224	-.0148	.0122	-.0204	.0796	2760.		
.2750	338.	-151.	24.	336.	209.	-838.	.0614	.0284	-.0123	.0031	-.0195	.0727	2819.		
.2760	130.	-298.	148.	267.	156.	-881.	.0546	.0342	-.0108	-.0050	-.0187	.0661	2841.		
.2770	-52.	-406.	252.	198.	97.	-902.	.0478	.0394	-.0102	-.0120	-.0181	.0599	2825.		

ADLPIPE PAGE 2219 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.29.21.
 S/RV PIPING KEWAUNEE GKM08F 2 RUP DIK
 2 SAFETY COLL FKW24F--2 PSV

CONDITION 24
 LOADS
 SHOCK
 PRESSURE
 ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
 FORCES AND MOMENTS ACT ON THE PIPING

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	VA
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.2699	1740.	708.	104.	440.	330.	-163.	.0853	-.0059	-.0300	.0489	-.0191	.1099	1745.
.2700	1277.	677.	-693.	478.	335.	-312.	.0840	-.0011	-.0271	.0445	-.0209	.1063	2012.
.2710	1146.	525.	-556.	459.	329.	-454.	.0814	.0044	-.0240	.0383	-.0218	.1009	2265.
.2720	962.	345.	-407.	476.	317.	-585.	.0779	.0102	-.0209	.0306	-.0219	.0943	2482.
.2730	756.	161.	-259.	442.	296.	-694.	.0733	.0163	-.0177	.0217	-.0213	.0869	2651.
.2740	547.	-4.	-109.	396.	251.	-777.	.0677	.0224	-.0148	.0122	-.0204	.0796	2760.
.2750	338.	-151.	24.	336.	209.	-838.	.0614	.0284	-.0123	.0031	-.0195	.0727	2819.
.2760	130.	-288.	140.	267.	156.	-881.	.0544	.0342	-.0108	-.0050	-.0187	.0661	2841.
.2770	-52.	-406.	252.	198.	97.	-902.	.0478	.0394	-.0102	-.0120	-.0181	.0599	2825.

ADLPIPE PAGE 2219

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKM24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	END	TYPE	VA					
TIME	FX	FY	FZ	NX	MY	MZ	DY	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.2780	-177.	-479.	320.	136.	37.	-895.	.0410	.0440	-.0101	-.0181	-.0177	.0550	2757.	
.2790	-238.	-497.	349.	84.	-21.	-862.	.0344	.0479	-.0103	-.0232	-.0175	.0520	2635.	
.2800	-250.	-473.	348.	42.	-77.	-811.	.0284	.0509	-.0106	-.0271	-.0170	.0507	2482.	
.2810	-223.	-428.	323.	13.	-130.	-749.	.0234	.0530	-.0111	-.0301	-.0162	.0508	2314.	
.2820	-149.	-356.	268.	-1.	-174.	-677.	.0195	.0541	-.0115	-.0326	-.0152	.0523	2127.	
.2830	-20.	-243.	187.	4.	-206.	-594.	.0165	.0542	-.0116	-.0343	-.0145	.0554	1913.	
.2840	143.	-106.	94.	24.	-230.	-506.	.0140	.0535	-.0117	-.0346	-.0149	.0592	1693.	
.2850	301.	19.	15.	57.	-247.	-427.	.0124	.0517	-.0124	-.0335	-.0165	.0626	1510.	
.2860	437.	109.	-41.	103.	-256.	-362.	.0117	.0491	-.0138	-.0312	-.0196	.0649	1385.	
.2870	549.	175.	-74.	161.	-257.	-307.	.0116	.0456	-.0156	-.0281	-.0242	.0663	1312.	
.2880	637.	233.	-33.	230.	-252.	-255.	.0120	.0414	-.0175	-.0244	-.0297	.0670	1297.	
.2890	680.	269.	5.	309.	-241.	-211.	.0131	.0365	-.0192	-.0210	-.0351	.0671	1353.	
.2900	656.	261.	43.	390.	-223.	-179.	.0152	.0311	-.0204	-.0188	-.0393	.0666	1472.	
.2910	564.	213.	62.	471.	-199.	-160.	.0184	.0253	-.0208	-.0183	-.0416	.0660	1628.	
.2920	427.	156.	150.	549.	-170.	-140.	.0224	.0192	-.0203	-.0192	-.0417	.0658	1801.	
.2930	270.	106.	237.	625.	-140.	-114.	.0266	.0131	-.0191	-.0213	-.0400	.0661	1980.	
.2940	101.	55.	316.	694.	-108.	-83.	.0311	.0070	-.0178	-.0241	-.0370	.0667	2153.	
.2950	-76.	-1.	390.	750.	-81.	-52.	.0353	.0011	-.0170	-.0269	-.0336	.0670	2300.	
.2960	-243.	-47.	452.	789.	-65.	-17.	.0389	-.0045	-.0173	-.0284	-.0306	.0671	2408.	
.2970	-360.	-59.	483.	811.	-61.	33.	.0413	-.0095	-.0187	-.0286	-.0285	.0670	2477.	
.2980	-405.	-31.	469.	817.	-65.	98.	.0426	-.0138	-.0209	-.0281	-.0272	.0671	2510.	
.2990	-392.	29.	413.	800.	-76.	171.	.0428	-.0174	-.0236	-.0272	-.0262	.0676	2498.	
.3000	-343.	107.	328.	755.	-98.	243.	.0421	-.0200	-.0265	-.0261	-.0246	.0683	2431.	
.3010	-259.	202.	212.	685.	-128.	313.	.0404	-.0215	-.0292	-.0255	-.0219	.0692	2323.	
.3020	-130.	318.	59.	593.	-160.	384.	.0379	-.0220	-.0309	-.0264	-.0178	.0705	2204.	
.3030	37.	448.	-120.	483.	-191.	450.	.0344	-.0214	-.0315	-.0291	-.0127	.0717	2090.	
.3040	192.	566.	-296.	351.	-225.	500.	.0300	-.0197	-.0313	-.0327	-.0069	.0721	1980.	
.3050	316.	643.	-448.	199.	-265.	522.	.0245	-.0170	-.0307	-.0371	-.0011	.0705	1880.	
.3060	404.	669.	-568.	32.	-305.	515.	.0182	-.0133	-.0297	-.0424	.0040	.0665	1823.	
.3070	463.	655.	-659.	-141.	-341.	483.	.0109	-.0089	-.0280	-.0488	.0081	.0604	1849.	
.3080	484.	606.	-710.	-316.	-373.	427.	.0027	-.0038	-.0256	-.0557	.0110	.0521	1974.	
.3090	440.	503.	-707.	-490.	-401.	340.	-.0061	.0017	-.0224	-.0629	.0131	.0415	2186.	
.3100	320.	376.	-648.	-656.	-420.	221.	-.0147	.0073	-.0183	-.0708	.0148	.0289	2464.	
.3110	145.	121.	-544.	-805.	-426.	80.	-.0229	.0128	-.0134	-.0793	.0162	.0150	2781.	
.3120	-60.	-107.	-408.	-926.	-419.	-68.	-.0308	.0178	-.0074	-.0877	.0172	.0005	3098.	
.3130	-281.	-334.	-246.	-1012.	-401.	-215.	-.0381	.0223	-.0009	-.0951	.0176	-.0142	3375.	
.3140	-518.	-566.	-58.	-1060.	-373.	-360.	-.0445	.0258	.0056	-.1010	.0173	-.0288	3590.	
.3150	-762.	-799.	146.	-1068.	-335.	-502.	-.0497	.0282	.0116	-.1049	.0160	-.0427	3730.	

ADLPIPE PAGE 2220

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKM24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	END	TYPE	VA
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.3070	463.	655.	-659.	-141.	-341.	483.	.109	-.0089	-.0280	-.0488	.0081	.0604	1849.
.3080	484.	606.	-710.	-316.	-373.	427.	.027	-.0038	-.0256	-.0557	.0110	.0521	1974.
.3090	440.	503.	-707.	-490.	-401.	340.	-.0061	.0017	-.0224	-.0629	.0131	.0415	2186.
.3100	320.	376.	-648.	-656.	-420.	221.	-.0147	.0073	-.0183	-.0708	.0148	.0289	2464.
.3110	145.	121.	-544.	-605.	-426.	30.	-.0229	.0128	-.0134	-.0793	.0162	.0150	2781.
.3120	-20.	-107.	-408.	-926.	-419.	-88.	-.0300	.0178	-.0074	-.0877	.0172	.0005	3098.
.3130	-281.	-374.	-246.	-1012.	-401.	-215.	-.0381	.0223	-.0009	-.0951	.0176	-.0142	3375.
.3140	-518.	-566.	-58.	-1060.	-373.	-360.	-.0445	.0258	.0056	-.1010	.0173	-.0288	3590.
.3150	-762.	-799.	146.	-1068.	-335.	-502.	-.0497	.0282	.0116	-.1049	.0160	-.0427	3730.

ADLPIPE PAGE 2220

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKM08F 2 RUP DISK
2 SAFETY COLD FKM24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	VA								
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.3160	-985.	-1004.	353.	-1032.	-291.	-624.	-.0538	.0293	.0168	-.1061	.0137	-.0552	3774.	
.3170	-1154.	-1149.	541.	-949.	-243.	-713.	-.0568	.0290	.0213	-.1042	.0105	-.0654	3686.	
.3180	-1256.	-1227.	697.	-821.	-189.	-764.	-.0584	.0271	.0250	-.0995	.0087	-.0727	3459.	
.3190	-1299.	-1246.	816.	-654.	-130.	-774.	-.0583	.0238	.0278	-.0924	.0030	-.0767	3117.	
.3200	-1287.	-1205.	899.	-455.	-70.	-757.	-.0567	.0191	.0296	-.0826	-.0001	-.0774	2695.	
.3210	-1208.	-1091.	937.	-229.	-14.	-693.	-.0537	.0132	.0304	-.0703	-.0026	-.0745	2221.	
.3220	-1046.	-899.	918.	17.	41.	-585.	-.0496	.0061	.0305	-.0563	-.0044	-.0680	1785.	
.3230	-814.	-647.	846.	272.	95.	-441.	-.0446	-.0018	.0297	-.0412	-.0056	-.0585	1603.	
.3240	-547.	-360.	742.	521.	140.	-276.	-.0390	-.0102	.0278	-.0249	-.0062	-.0467	1844.	
.3250	-271.	-63.	619.	751.	173.	-100.	-.0330	-.0188	.0250	-.0080	-.0062	-.0335	2363.	
.3260	9.	236.	479.	953.	196.	82.	-.0270	-.0274	.0215	.0085	-.0055	-.0195	2970.	
.3270	267.	528.	322.	1120.	214.	267.	-.0213	-.0355	.0178	.0235	-.0043	-.0051	3561.	
.3280	537.	795.	164.	1240.	224.	443.	-.0160	-.0430	.0141	.0362	-.0023	.0088	4064.	
.3290	725.	1008.	25.	1305.	222.	595.	-.0114	-.0496	.0105	.0467	.0005	.0214	4415.	
.3300	838.	1145.	-88.	1309.	213.	714.	-.0074	-.0549	.0072	.0543	.0040	.0319	4582.	
.3310	886.	1210.	-178.	1254.	198.	797.	-.0044	-.0590	.0044	.0585	.0079	.0402	4561.	
.3320	882.	1214.	-246.	1143.	179.	846.	-.0026	-.0616	.0023	.0596	.0118	.0460	4360.	
.3330	822.	1156.	-287.	978.	153.	857.	-.0020	-.0628	.0007	.0579	.0156	.0491	3982.	
.3340	699.	1024.	-294.	763.	121.	823.	-.0025	-.0626	-.0005	.0538	.0192	.0494	3434.	
.3350	525.	822.	-275.	508.	87.	747.	-.0038	-.0611	-.0011	.0472	.0226	.0470	2762.	
.3360	324.	578.	-240.	225.	53.	641.	-.0058	-.0585	-.0011	.0387	.0257	.0425	2072.	
.3370	118.	320.	-198.	-73.	20.	514.	-.0085	-.0549	-.0005	.0290	.0284	.0366	1580.	
.3380	-84.	53.	-153.	-373.	-11.	371.	-.0116	-.0507	.0007	.0189	.0309	.0295	1601.	
.3390	-279.	-222.	-105.	-665.	-38.	215.	-.0146	-.0460	.0020	.0089	.0328	.0217	2128.	
.3400	-456.	-487.	-59.	-936.	-62.	52.	-.0174	-.0412	.0032	-.0001	.0342	.0135	2859.	
.3410	-591.	-716.	-23.	-1174.	-84.	-105.	-.0200	-.0364	.0041	-.0070	.0346	.0057	3596.	
.3420	-667.	-891.	-5.	-1367.	-102.	-246.	-.0224	-.0320	.0046	-.0114	.0339	-.0015	4238.	
.3430	-683.	-1014.	-6.	-1509.	-114.	-369.	-.0242	-.0281	.0046	-.0133	.0325	-.0075	4737.	
.3440	-652.	-1086.	-23.	-1594.	-121.	-473.	-.0251	-.0249	.0041	-.0124	.0305	-.0122	5072.	
.3450	-577.	-1101.	-53.	-1622.	-125.	-554.	-.0252	-.0224	.0033	-.0084	.0285	-.0153	5228.	
.3460	-453.	-1051.	-100.	-1590.	-123.	-605.	-.0245	-.0208	.0022	-.0019	.0266	-.0166	5189.	
.3470	-282.	-941.	-167.	-1500.	-113.	-625.	-.0229	-.0201	.0012	.0065	.0251	-.0159	4954.	
.3480	-86.	-784.	-242.	-1358.	-97.	-619.	-.0204	-.0202	.0003	.0167	.0239	-.0137	4549.	
.3490	108.	-600.	-309.	-1174.	-79.	-594.	-.0174	-.0210	-.0009	.0286	.0229	-.0106	4011.	
.3500	285.	-405.	-360.	-958.	-59.	-556.	-.0140	-.0225	-.0023	.0420	.0219	-.0070	3374.	
.3510	442.	-208.	-395.	-717.	-36.	-504.	-.0104	-.0244	-.0038	.0559	.0206	-.0034	2667.	
.3520	571.	-16.	-409.	-461.	-11.	-440.	-.0068	-.0267	-.0054	.0699	.0190	-.0002	1939.	
.3530	653.	157.	-394.	-202.	12.	-373.	-.0035	-.0292	-.0070	.0836	.0171	.0021	1290.	

ADLPIPE PAGE 2221

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKM08F 2 RUP DISK
2 SAFETY COLD FKM24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

.3450	-577.	-1101.	-53.	-1622.	-125.	-554.	-.0252	-.0224	.0033	-.0084	.0285	-.0153	5228.
.3460	-453.	-1051.	-100.	-1590.	-123.	-605.	-.0245	-.0208	.0022	-.0019	.0266	-.0166	5189.
.3470	-282.	-941.	-167.	-1500.	-113.	-625.	-.0229	-.0201	.0012	.0065	.0251	-.0159	4954.
.3480	-86.	-784.	-242.	-1377.	-97.	-619.	-.0204	-.0202	.0003	.0167	.0239	-.0137	4549.
.3490	108.	-600.	-309.	-1174.	-79.	-594.	-.0174	-.0210	-.0009	.0286	.0229	-.0106	4011.
.3500	285.	-405.	-360.	-958.	-59.	-556.	-.0140	-.0225	-.0023	.0420	.0219	-.0070	3374.
.3510	442.	-208.	-395.	-717.	-36.	-504.	-.0104	-.0244	-.0038	.0559	.0206	-.0034	2667.
.3520	571.	-16.	-409.	-461.	-11.	-440.	-.0068	-.0267	-.0054	.0699	.0190	-.0002	1939.
.3530	653.	157.	-394.	-202.	12.	-373.	-.0035	-.0292	-.0070	.0836	.0171	.0021	1290.

ADLPIPE PAGE 2221 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	END	TYPE	VA	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ					(DEG)	(DEG)	(DEG)	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)				
.3540	671.	291.	-344.	47.	34.	-308.		-.0004	-.0317	-.0085	.0963	.0153	.0033	954.
.3550	625.	379.	-263.	277.	55.	-250.		.0025	-.0341	-.0097	.1071	.0138	.0034	1147.
.3560	528.	428.	-161.	481.	76.	-197.		.0051	-.0362	-.0103	.1155	.0129	.0023	1597.
.3570	392.	445.	-44.	653.	95.	-147.		.0072	-.0380	-.0102	.1214	.0125	.0003	2056.
.3580	224.	429.	82.	785.	112.	-105.		.0087	-.0392	-.0096	.1248	.0125	-.0027	2433.
.3590	30.	373.	215.	874.	125.	-73.		.0098	-.0400	-.0087	.1258	.0126	-.0066	2695.
.3600	-173.	287.	344.	919.	133.	-51.		.0104	-.0402	-.0078	.1246	.0126	-.0114	2828.
.3610	-358.	189.	457.	921.	136.	-31.		.0104	-.0399	-.0070	.1216	.0122	-.0167	2833.
.3620	-508.	92.	545.	884.	134.	-10.		.0098	-.0392	-.0062	.1170	.0114	-.0222	2719.
.3630	-614.	0.	601.	810.	127.	12.		.0089	-.0381	-.0054	.1108	.0104	-.0274	2496.
.3640	-678.	-86.	623.	705.	117.	34.		.0079	-.0366	-.0047	.1031	.0095	-.0321	2176.
.3650	-693.	-157.	609.	573.	105.	58.		.0070	-.0349	-.0038	.0942	.0092	-.0358	1782.
.3660	-650.	-198.	552.	424.	91.	91.		.0063	-.0331	-.0027	.0842	.0096	-.0383	1349.
.3670	-544.	-205.	452.	265.	79.	135.		.0059	-.0313	-.0012	.0733	.0107	-.0393	937.
.3680	-389.	-183.	318.	103.	69.	186.		.0059	-.0295	.0004	.0619	.0123	-.0391	680.
.3690	-205.	-143.	163.	-58.	59.	241.		.0062	-.0279	.0019	.0507	.0141	-.0381	776.
.3700	-6.	-89.	1.	-212.	50.	299.		.0066	-.0265	.0031	.0403	.0156	-.0368	1125.
.3710	205.	-23.	-164.	-352.	42.	360.		.0072	-.0255	.0037	.0310	.0163	-.0354	1537.
.3720	417.	51.	-323.	-473.	38.	424.		.0078	-.0248	.0039	.0229	.0160	-.0343	1935.
.3730	607.	123.	-463.	-572.	36.	485.		.0084	-.0244	.0035	.0163	.0148	-.0336	2285.
.3740	750.	180.	-571.	-650.	37.	538.		.0091	-.0244	.0027	.0112	.0129	-.0336	2567.
.3750	837.	217.	-641.	-702.	40.	579.		.0099	-.0247	.0018	.0072	.0108	-.0343	2772.
.3760	872.	237.	-679.	-728.	49.	612.		.0110	-.0254	.0010	.0038	.0090	-.0354	2896.
.3770	858.	247.	-685.	-724.	64.	638.		.0123	-.0264	.0007	.0010	.0076	-.0367	2942.
.3780	790.	245.	-659.	-694.	83.	654.		.0137	-.0275	.0007	-.0013	.0070	-.0382	2912.
.3790	666.	223.	-598.	-642.	106.	655.		.0154	-.0289	.0012	-.0031	.0070	-.0399	2808.
.3800	496.	183.	-509.	-570.	131.	642.		.0171	-.0304	.0018	-.0043	.0075	-.0417	2642.
.3810	303.	139.	-404.	-478.	156.	623.		.0187	-.0320	.0024	-.0047	.0081	-.0435	2435.
.3820	112.	104.	-293.	-372.	182.	600.		.0201	-.0337	.0031	-.0043	.0085	-.0451	2218.
.3830	-68.	81.	-184.	-255.	206.	576.		.0211	-.0353	.0037	-.0029	.0085	-.0464	2017.
.3840	-231.	66.	-81.	-134.	227.	549.		.0217	-.0368	.0039	-.0008	.0081	-.0474	1852.
.3850	-365.	63.	9.	-14.	245.	520.		.0220	-.0383	.0040	.0020	.0073	-.0480	1749.
.3860	-453.	83.	74.	103.	259.	496.		.0219	-.0395	.0040	.0050	.0063	-.0478	1730.
.3870	-484.	133.	107.	213.	270.	479.		.0214	-.0405	.0042	.0080	.0052	-.0468	1793.
.3880	-465.	202.	111.	308.	277.	467.		.0204	-.0413	.0046	.0105	.0041	-.0449	1899.
.3890	-416.	277.	96.	385.	280.	455.		.0190	-.0418	.0051	.0123	.0031	-.0426	2003.
.3900	-345.	350.	66.	440.	277.	444.		.0172	-.0420	.0056	.0134	.0021	-.0402	2080.
.3910	-251.	423.	23.	474.	269.	439.		.0149	-.0420	.0063	.0133	.0009	-.0380	2129.

ADLPIPE PAGE 2222 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	END	TYPE	VA
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.3830	-68.	81.	184.	-255.	206.	576.	.0211	-.0353	.0037	-.0029	.0085	-.0464	2017.
.3840	-231.	66.	-81.	-134.	227.	549.	.0217	-.0368	.0039	-.0008	.0081	-.0474	1852.
.3850	-365.	63.	9.	-14.	245.	520.	.0220	-.0383	.0040	.0020	.0073	-.0480	1749.
.3860	-457.	51.	74.	103.	259.	496.	.0219	-.0395	.0040	.0050	.0063	-.0478	1730.
.3870	-484.	133.	107.	212.	276.	479.	.0214	-.0405	.0042	.0080	.0052	-.0468	1793.
.3880	-465.	202.	111.	308.	277.	467.	.0204	-.0413	.0046	.0105	.0041	-.0449	1899.
.3890	-416.	277.	96.	385.	280.	455.	.0190	-.0418	.0051	.0123	.0031	-.0426	2003.
.3900	-345.	350.	66.	440.	277.	444.	.0172	-.0420	.0056	.0134	.0021	-.0402	2080.
.3910	-251.	423.	23.	474.	269.	439.	.0149	-.0420	.0063	.0133	.0009	-.0380	2129.

ADLPIPE PAGE 2222 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.29.21.
S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	1	SEQUENCE	78	LOCATION	END	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3920	-137.	494.	-32.	407.	256.	443.	.0122	-.0417	.0071	.0118	-.0006	-.0363	2149.		
.3930	-24.	549.	-86.	476.	240.	449.	.0089	-.0411	.0080	.0088	-.0026	-.0352	2122.		
.3940	61.	571.	-126.	439.	219.	451.	.0052	-.0403	.0088	.0044	-.0048	-.0351	2028.		
.3950	105.	552.	-143.	377.	192.	447.	.0013	-.0392	.0098	-.0013	-.0073	-.0363	1873.		
.3960	118.	501.	-143.	295.	164.	440.	-.0029	-.0380	.0109	-.0087	-.0098	-.0384	1688.		
.3970	104.	425.	-130.	199.	137.	434.	-.0072	-.0366	.0123	-.0177	-.0123	-.0414	1510.		
.3980	53.	323.	-97.	91.	110.	424.	-.0116	-.0350	.0140	-.0277	-.0146	-.0450	1360.		
.3990	-45.	189.	-37.	-26.	81.	406.	-.0158	-.0334	.0158	-.0384	-.0168	-.0495	1261.		
.4000	-185.	23.	45.	-145.	52.	380.	-.0197	-.0318	.0174	-.0495	-.0187	-.0541	1248.		

MAXIMUM VALUE OF STRESS OCCURS AT

TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.1940	-298.	-1246.	-15.	-1662.	-192.	-693.	-.0651	.0194	.0006	-.0597	.0155	-.0632	5509.

SECTION	57	MEMBER	2	SEQUENCE	80	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.		
.0010	-0.	-0.	0.	-0.	0.	-0.	-.0000	.0000	.0000	-.0000	-.0000	.0000	0.		
.0020	-0.	-0.	0.	0.	0.	-0.	-.0000	.0000	.0000	-.0000	.0000	.0000	0.		
.0030	-0.	-0.	0.	0.	0.	-0.	.0000	.0000	.0000	-.0000	.0000	.0000	0.		
.0040	-0.	-0.	-0.	-0.	0.	-0.	.0000	.0000	.0000	-.0000	.0000	.0000	1.		
.0050	1.	0.	-1.	-0.	1.	-0.	.0000	.0000	.0000	-.0000	.0000	.0000	2.		
.0060	4.	2.	-3.	-1.	1.	-0.	-.0000	.0000	.0000	-.0000	.0000	.0000	6.		
.0070	9.	4.	-6.	-2.	3.	-1.	-.0000	.0000	.0001	.0000	-.0001	.0000	14.		
.0080	16.	8.	-11.	-3.	5.	-2.	-.0001	.0000	.0001	.0001	-.0003	.0000	26.		
.0090	28.	12.	-17.	-6.	8.	-4.	-.0003	.0001	.0000	.0004	-.0007	-.0001	44.		
.0100	51.	20.	-28.	-9.	12.	-6.	-.0005	.0001	-.0001	.0008	-.0014	-.0003	68.		
.0110	92.	36.	-48.	-16.	17.	-10.	-.0010	.0002	-.0002	.0015	-.0024	-.0005	105.		
.0120	154.	63.	-76.	-25.	25.	-16.	-.0017	.0003	-.0003	.0025	-.0039	-.0008	162.		
.0130	230.	96.	-109.	-38.	33.	-27.	-.0027	.0004	-.0005	.0039	-.0060	-.0014	238.		
.0140	305.	127.	-139.	-52.	43.	-39.	-.0040	.0006	-.0008	.0057	-.0087	-.0023	325.		
.0150	362.	145.	-156.	-66.	52.	-48.	-.0055	.0007	-.0013	.0078	-.0118	-.0038	403.		

ADLPIPE PAGE 2223 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.29.21.
S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	2	SEQUENCE	80	LOCATION	END	TYPE	RU						
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.0070	9.	4.	-6.	-2.	3.	-1.	-.0000	.0000	.0001	.0000	-.0001	.0000	14.
.0080	16.	8.	-11.	-3.	5.	-2.	-.0001	.0000	.0001	.0001	-.0003	.0000	26.
.0090	28.	12.	-17.	-6.	8.	-4.	-.0003	.0001	.0000	.0004	-.0007	-.0001	44.
.0100	51.	20.	-28.	-9.	12.	-6.	-.0005	.0001	-.0001	.0008	-.0014	-.0003	68.
.0110	92.	36.	-48.	-16.	17.	-10.	-.0010	.0002	-.0002	.0015	-.0024	-.0005	105.
.0120	154.	63.	-76.	-25.	25.	-16.	-.0017	.0003	-.0003	.0025	-.0039	-.0008	162.
.0130	230.	96.	-109.	-38.	33.	-27.	-.0027	.0004	-.0005	.0039	-.0060	-.0014	238.
.0140	305.	127.	-139.	-52.	43.	-39.	-.0040	.0006	-.0008	.0057	-.0087	-.0023	325.
.0150	362.	145.	-156.	-66.	52.	-48.	-.0055	.0007	-.0013	.0078	-.0118	-.0038	403.

ADLPIPE PAGE 2223

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/31/02.

18.29.21.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	2	SEQUENCE	80	LOCATION	END	TYPE	RU	DX	DY	DZ	RX	RY	RZ	STRESS
TIME	(SEC)	FX	FY	FZ	MX	MY	MZ	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.0160	386.	143.	-154.	-74.	60.	-50.	-.0070	.0007	-.0019	.0099	-.0152	-.0057	450.			
.0170	365.	119.	-127.	-74.	66.	-43.	-.0084	.0005	-.0027	.0118	-.0183	-.0079	452.			
.0180	286.	71.	-71.	-65.	66.	-24.	-.0095	.0001	-.0034	.0131	-.0206	-.0100	399.			
.0190	147.	-1.	13.	-43.	58.	7.	-.0100	-.0006	-.0040	.0135	-.0213	-.0119	305.			
.0200	-46.	-91.	120.	-12.	41.	44.	-.0100	-.0014	-.0042	.0127	-.0198	-.0130	254.			
.0210	-263.	-183.	231.	25.	13.	83.	-.0092	-.0022	-.0039	.0106	-.0156	-.0130	365.			
.0220	-440.	-256.	313.	65.	-23.	123.	-.0078	-.0031	-.0029	.0075	-.0088	-.0115	589.			
.0230	-568.	-292.	359.	100.	-62.	151.	-.0061	-.0038	-.0013	.0036	-.0001	-.0085	800.			
.0240	-677.	-298.	388.	125.	-96.	159.	-.0043	-.0042	.0006	-.0005	.0092	-.0044	934.			
.0250	-826.	-316.	435.	145.	-127.	155.	-.0022	-.0043	.0019	-.0039	.0173	-.0004	1033.			
.0260	-995.	-373.	502.	171.	-158.	165.	.0004	-.0046	.0015	-.0053	.0227	.0023	1191.			
.0270	-1036.	-414.	512.	195.	-184.	198.	.0033	-.0051	-.0000	-.0047	.0250	.0043	1392.			
.0280	-939.	-360.	455.	197.	-189.	207.	.0055	-.0050	-.0016	-.0033	.0246	.0077	1431.			
.0290	-862.	-251.	411.	176.	-182.	170.	.0070	-.0043	-.0032	-.0014	.0220	.0120	1273.			
.0300	-776.	-202.	372.	166.	-196.	148.	.0092	-.0036	-.0063	.0020	.0184	.0142	1237.			
.0310	-565.	-172.	260.	159.	-213.	178.	.0124	-.0029	-.0090	.0039	.0168	.0163	1251.			
.0320	-212.	-5.	53.	114.	-210.	68.	.0149	-.0012	-.0084	.0017	.0192	.0222	1037.			
.0330	236.	301.	-216.	32.	-195.	-63.	.0161	.0015	-.0048	-.0034	.0249	.0313	866.			
.0340	667.	558.	-486.	-48.	-182.	-187.	.0176	.0041	-.0007	-.0099	.0325	.0386	1106.			
.0350	947.	653.	-684.	-109.	-164.	-272.	.0195	.0063	.0025	-.0160	.0391	.0412	1403.			
.0360	1100.	680.	-790.	-164.	-134.	-334.	.0203	.0082	.0041	-.0199	.0401	.0395	1649.			
.0370	1307.	736.	-877.	-220.	-86.	-368.	.0187	.0097	.0042	-.0201	.0328	.0345	1825.			
.0380	1574.	785.	-961.	-274.	-11.	-370.	.0152	.0108	.0031	-.0177	.0185	.0261	1923.			
.0390	1627.	704.	-912.	-314.	71.	-354.	.0106	.0116	.0003	-.0134	-.0004	.0131	1997.			
.0400	1316.	435.	-655.	-316.	121.	-315.	.0061	.0118	-.0045	-.0074	-.0202	-.0045	1931.			
.0410	972.	91.	-389.	-279.	144.	-228.	.0028	.0111	-.0084	-.0036	-.0347	-.0223	1618.			
.0420	845.	-103.	-289.	-246.	180.	-155.	.0003	.0105	-.0068	-.0076	-.0375	-.0327	1427.			
.0430	805.	-78.	-285.	-241.	221.	-157.	-.0027	.0107	.0006	-.0180	-.0289	-.0343	1513.			
.0440	598.	-49.	-219.	-229.	222.	-184.	-.0050	.0111	.0096	-.0297	-.0124	-.0333	1536.			
.0450	223.	-212.	-92.	-175.	194.	-160.	-.0050	.0105	.0172	-.0402	.0074	-.0347	1277.			
.0460	-123.	-430.	22.	-106.	176.	-106.	-.0045	.0093	.0228	-.0474	.0237	-.0370	966.			
.0470	-297.	-451.	103.	-66.	181.	-86.	-.0072	.0083	.0259	-.0473	.0286	-.0376	880.			
.0480	-303.	-327.	160.	-41.	202.	-76.	-.0126	.0072	.0256	-.0389	.0209	-.0381	919.			
.0490	-296.	-318.	229.	9.	230.	-17.	-.0173	.0052	.0211	-.0245	.0059	-.0421	963.			
.0500	-428.	-456.	371.	81.	236.	72.	-.0206	.0026	.0136	-.0058	-.0112	-.0491	1083.			
.0510	-567.	-510.	520.	141.	212.	126.	-.0240	.0002	.0063	.0142	-.0258	-.0532	1185.			
.0520	-475.	-338.	506.	171.	194.	123.	-.0270	-.0016	.0037	.0282	-.0312	-.0486	1194.			
.0530	-206.	-51.	330.	185.	192.	89.	-.0280	-.0031	.0065	.0328	-.0241	-.0359	1172.			

ADLPIPE PAGE 2224

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/31/02.

18.29.22.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	57	MEMBER	2	SEQUENCE	80	LOCATION	END	TYPE	RU
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