

50-305

RESPONSE TO NUREG-0737 ITEM II.D.1

Docket # *50-305*

Control # *8403280048*

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

.1410	0.	0.	0.	0.	0.	0.	0.	0.	-.0602	.0425	-.0206	-.1402	-.1335	.0964	0.
.1420	0.	0.	0.	0.	0.	0.	0.	0.	-.0612	.0471	-.0116	-.1131	-.1373	.0899	0.
.1430	0.	0.	0.	0.	0.	0.	0.	0.	-.0628	.0527	-.0020	-.0850	-.1383	.0741	0.
.1440	0.	0.	0.	0.	0.	0.	0.	0.	-.0649	.0586	.0073	-.0575	-.1334	.0563	0.
.1450	0.	0.	0.	0.	0.	0.	0.	0.	-.0669	.0634	.0160	-.0338	-.1216	.0419	0.
.1460	0.	0.	0.	0.	0.	0.	0.	0.	-.0688	.0665	.0240	-.0164	-.1075	.0290	0.
.1470	0.	0.	0.	0.	0.	0.	0.	0.	-.0701	.0676	.0314	-.0042	-.0866	.0161	0.
.1480	0.	0.	0.	0.	0.	0.	0.	0.	-.0700	.0669	.0381	.0096	-.0661	.0050	0.
.1490	0.	0.	0.	0.	0.	0.	0.	0.	-.0679	.0643	.0440	.0269	-.0455	-.0024	0.
.1500	0.	0.	0.	0.	0.	0.	0.	0.	-.0640	.0597	.0492	.0440	-.0237	-.0075	0.
.1510	0.	0.	0.	0.	0.	0.	0.	0.	-.0589	.0532	.0528	.0579	-.0066	-.0108	0.

ADLPIPE PAGE 378 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.26.49.

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	19	MEMBER	1	SEQUENCE	36	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)		
.1520	0.	0.	0.	0.	0.	0.	-.0531	.0449	.0541	.0673	.0117	-.0078	0.		
.1530	0.	0.	0.	0.	0.	0.	-.0472	.0355	.0522	.0741	.0308	.0027	0.		
.1540	0.	0.	0.	0.	0.	0.	-.0422	.0254	.0474	.0778	.0562	.0184	0.		
.1550	0.	0.	0.	0.	0.	0.	-.0379	.0150	.0404	.0779	.0865	.0373	0.		
.1560	0.	0.	0.	0.	0.	0.	-.0338	.0042	.0317	.0754	.1128	.0587	0.		
.1570	0.	0.	0.	0.	0.	0.	-.0296	-.0066	.0226	.0698	.1406	.0821	0.		
.1580	0.	0.	0.	0.	0.	0.	-.0247	-.0171	.0135	.0628	.1626	.1031	0.		
.1590	0.	0.	0.	0.	0.	0.	-.0190	-.0270	.0047	.0558	.1713	.1175	0.		
.1600	0.	0.	0.	0.	0.	0.	-.0124	-.0361	-.0037	.0484	.1710	.1253	0.		
.1610	0.	0.	0.	0.	0.	0.	-.0050	-.0446	-.0114	.0410	.1555	.1285	0.		
.1620	0.	0.	0.	0.	0.	0.	.0030	-.0526	-.0188	.0333	.1525	.1278	0.		
.1630	0.	0.	0.	0.	0.	0.	.0113	-.0601	-.0256	.0214	.1380	.1239	0.		
.1640	0.	0.	0.	0.	0.	0.	.0198	-.0666	-.0318	.0070	.1193	.1160	0.		
.1650	0.	0.	0.	0.	0.	0.	.0286	-.0713	-.0373	-.0051	.0939	.1039	0.		
.1660	0.	0.	0.	0.	0.	0.	.0375	-.0737	-.0414	-.0142	.0566	.0881	0.		
.1670	0.	0.	0.	0.	0.	0.	.0462	-.0737	-.0440	-.0203	.0325	.0686	0.		
.1680	0.	0.	0.	0.	0.	0.	.0543	-.0714	-.0439	-.0229	-.0037	.0467	0.		
.1690	0.	0.	0.	0.	0.	0.	.0610	-.0667	-.0415	-.0195	-.0394	.0251	0.		
.1700	0.	0.	0.	0.	0.	0.	.0651	-.0601	-.0373	-.0105	-.0687	.0072	0.		
.1710	0.	0.	0.	0.	0.	0.	.0660	-.0521	-.0311	.0021	-.0847	-.0052	0.		
.1720	0.	0.	0.	0.	0.	0.	.0633	-.0429	-.0236	.0199	-.0939	-.0129	0.		
.1730	0.	0.	0.	0.	0.	0.	.0570	-.0333	-.0148	.0402	-.0900	-.0149	0.		
.1740	0.	0.	0.	0.	0.	0.	.0475	-.0238	-.0052	.0600	-.0759	-.0110	0.		
.1750	0.	0.	0.	0.	0.	0.	.0357	-.0147	.0049	.0787	-.0586	-.0042	0.		
.1760	0.	0.	0.	0.	0.	0.	.0227	-.0062	.0159	.0960	-.0377	.0017	0.		
.1770	0.	0.	0.	0.	0.	0.	.0094	.0015	.0273	.1123	-.0197	.0042	0.		
.1780	0.	0.	0.	0.	0.	0.	-.0034	.0080	.0391	.1253	-.0029	.0034	0.		
.1790	0.	0.	0.	0.	0.	0.	-.0152	.0130	.0506	.1345	.0082	-.0023	0.		
.1800	0.	0.	0.	0.	0.	0.	-.0250	.0165	.0610	.1386	.0130	-.0135	0.		
.1810	0.	0.	0.	0.	0.	0.	-.0357	.0184	.0699	.1361	.0177	-.0278	0.		
.1820	0.	0.	0.	0.	0.	0.	-.0442	.0186	.0767	.1294	.0109	-.0435	0.		
.1830	0.	0.	0.	0.	0.	0.	-.0514	.0174	.0817	.1204	.0140	-.0600	0.		
.1840	0.	0.	0.	0.	0.	0.	-.0574	.0153	.0848	.1102	.0087	-.0769	0.		
.1850	0.	0.	0.	0.	0.	0.	-.0619	.0122	.0867	.0995	-.0002	-.0918	0.		
.1860	0.	0.	0.	0.	0.	0.	-.0647	.0085	.0864	.0900	-.0105	-.1021	0.		
.1870	0.	0.	0.	0.	0.	0.	-.0657	.0044	.0852	.0839	-.0262	-.1078	0.		
.1880	0.	0.	0.	0.	0.	0.	-.0657	.0001	.0827	.0795	-.0428	-.1085	0.		
.1890	0.	0.	0.	0.	0.	0.	-.0637	-.0046	.0783	.0760	-.0595	-.1029	0.		

ADLPIPE PAGE 379 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.26.49.

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

.1790	0.	0.	0.	0.	0.	0.	0.	-.0152	.0130	.0506	.1345	.0082	-.0023	0.
.1800	0.	0.	0.	0.	0.	0.	0.	-.0260	.0165	.0610	.1386	.0130	-.0135	0.
.1810	0.	0.	0.	0.	0.	0.	0.	-.0357	.0184	.0699	.1361	.0177	-.0278	0.
.1820	0.	0.	0.	0.	0.	0.	0.	-.0442	.0186	.0767	.1294	.0169	-.0435	0.
.1830	0.	0.	0.	0.	0.	0.	0.	-.0514	.0174	.0817	.1204	.0140	-.0600	0.
.1840	0.	0.	0.	0.	0.	0.	0.	-.0574	.0153	.0848	.1102	.0087	-.0769	0.
.1850	0.	0.	0.	0.	0.	0.	0.	-.0619	.0122	.0862	.0995	-.0002	-.0918	0.
.1860	0.	0.	0.	0.	0.	0.	0.	-.0647	.0085	.0864	.0900	-.0105	-.1021	0.
.1870	0.	0.	0.	0.	0.	0.	0.	-.0657	.0044	.0852	.0839	-.0262	-.1078	0.
.1880	0.	0.	0.	0.	0.	0.	0.	-.0653	.0001	.0827	.0795	-.0428	-.1085	0.
.1890	0.	0.	0.	0.	0.	0.	0.	-.0637	-.0046	.0789	.0766	-.0598	-.1029	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.49.

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									
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)		
.1900	0.	0.	0.	0.	0.	0.	-.0612	-.0097	.0733	.0760	-.0754	-.0902	0.		
.1910	0.	0.	0.	0.	0.	0.	-.0580	-.0150	.0663	.0760	-.0335	-.0704	0.		
.1920	0.	0.	0.	0.	0.	0.	-.0543	-.0221	.0579	.0747	-.0361	-.0458	0.		
.1930	0.	0.	0.	0.	0.	0.	-.0498	-.0295	.0488	.0717	-.0830	-.0191	0.		
.1940	0.	0.	0.	0.	0.	0.	-.0443	-.0374	.0396	.0685	-.0739	.0068	0.		
.1950	0.	0.	0.	0.	0.	0.	-.0373	-.0455	.0306	.0658	-.0511	.0286	0.		
.1960	0.	0.	0.	0.	0.	0.	-.0289	-.0535	.0224	.0627	-.0474	.0436	0.		
.1970	0.	0.	0.	0.	0.	0.	-.0191	-.0612	.0150	.0584	-.0336	.0504	0.		
.1980	0.	0.	0.	0.	0.	0.	-.0081	-.0683	.0087	.0534	-.0191	.0497	0.		
.1990	0.	0.	0.	0.	0.	0.	.0036	-.0747	.0034	.0478	-.0040	.0433	0.		
.2000	0.	0.	0.	0.	0.	0.	.0155	-.0799	-.0010	.0421	.0120	.0323	0.		
.2010	0.	0.	0.	0.	0.	0.	.0270	-.0837	-.0047	.0376	.0294	.0179	0.		
.2020	0.	0.	0.	0.	0.	0.	.0378	-.0859	-.0081	.0352	.0473	.0029	0.		
.2030	0.	0.	0.	0.	0.	0.	.0477	-.0865	-.0108	.0351	.0538	-.0105	0.		
.2040	0.	0.	0.	0.	0.	0.	.0569	-.0856	-.0129	.0374	.0774	-.0216	0.		
.2050	0.	0.	0.	0.	0.	0.	.0653	-.0831	-.0140	.0435	.0369	-.0310	0.		
.2060	0.	0.	0.	0.	0.	0.	.0731	-.0793	-.0143	.0542	.0915	-.0379	0.		
.2070	0.	0.	0.	0.	0.	0.	.0802	-.0742	-.0139	.0687	.0915	-.0422	0.		
.2080	0.	0.	0.	0.	0.	0.	.0864	-.0684	-.0131	.0848	.0377	-.0448	0.		
.2090	0.	0.	0.	0.	0.	0.	.0915	-.0622	-.0122	.1001	.0809	-.0463	0.		
.2100	0.	0.	0.	0.	0.	0.	.0956	-.0560	-.0114	.1123	.0719	-.0469	0.		
.2110	0.	0.	0.	0.	0.	0.	.0984	-.0499	-.0108	.1209	.0522	-.0475	0.		
.2120	0.	0.	0.	0.	0.	0.	.0997	-.0440	-.0106	.1258	.0528	-.0502	0.		
.2130	0.	0.	0.	0.	0.	0.	.0997	-.0386	-.0103	.1270	.0436	-.0561	0.		
.2140	0.	0.	0.	0.	0.	0.	.0983	-.0339	-.0097	.1243	.0345	-.0645	0.		
.2150	0.	0.	0.	0.	0.	0.	.0956	-.0303	-.0085	.1180	.0261	-.0745	0.		
.2160	0.	0.	0.	0.	0.	0.	.0914	-.0277	-.0068	.1089	.0186	-.0854	0.		
.2170	0.	0.	0.	0.	0.	0.	.0855	-.0261	-.0046	.0976	.0121	-.0957	0.		
.2180	0.	0.	0.	0.	0.	0.	.0778	-.0256	-.0022	.0852	.0077	-.1030	0.		
.2190	0.	0.	0.	0.	0.	0.	.0682	-.0259	.0003	.0727	.0061	-.1051	0.		
.2200	0.	0.	0.	0.	0.	0.	.0563	-.0270	.0031	.0602	.0072	-.1008	0.		
.2210	0.	0.	0.	0.	0.	0.	.0440	-.0285	.0059	.0481	.0104	-.0897	0.		
.2220	0.	0.	0.	0.	0.	0.	.0302	-.0301	.0088	.0375	.0147	-.0723	0.		
.2230	0.	0.	0.	0.	0.	0.	.0160	-.0314	.0118	.0298	.0191	-.0502	0.		
.2240	0.	0.	0.	0.	0.	0.	.0019	-.0319	.0140	.0251	.0216	-.0258	0.		
.2250	0.	0.	0.	0.	0.	0.	-.0116	-.0317	.0176	.0224	.0207	-.0010	0.		
.2260	0.	0.	0.	0.	0.	0.	-.0240	-.0307	.0202	.0208	.0157	.0217	0.		
.2270	0.	0.	0.	0.	0.	0.	-.0351	-.0288	.0223	.0198	.0070	.0410	0.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.49.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.2170	0.	0.	0.	0.	0.	0.	0.	0.	.855	-.0261	-.0046	.0976	.0121	-.0957	0.
.2180	0.	0.	0.	0.	0.	0.	0.	0.	.778	-.0256	-.0022	.0852	.0077	-.1030	0.
.2190	0.	0.	0.	0.	0.	0.	0.	0.	.682	-.0259	.0003	.0727	.0061	-.1051	0.
.2200	0.	0.	0.	0.	0.	0.	0.	0.	.563	-.0270	.0031	.0602	.0072	-.1008	0.
.2210	0.	0.	0.	0.	0.	0.	0.	0.	.440	-.0285	.0059	.0481	.0104	-.0897	0.
.2220	0.	0.	0.	0.	0.	0.	0.	0.	.302	-.0301	.0088	.0375	.0147	-.0723	0.
.2230	0.	0.	0.	0.	0.	0.	0.	0.	.160	-.0314	.0118	.0298	.0191	-.0502	0.
.2240	0.	0.	0.	0.	0.	0.	0.	0.	.019	-.0319	.0148	.0251	.0216	-.0256	0.
.2250	0.	0.	0.	0.	0.	0.	0.	0.	-.0116	-.0317	.0176	.0224	.0207	-.0010	0.
.2260	0.	0.	0.	0.	0.	0.	0.	0.	-.0240	-.0307	.0202	.0208	.0157	.0217	0.
.2270	0.	0.	0.	0.	0.	0.	0.	0.	-.0351	-.0228	.0223	.0198	.0070	.0410	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.49.

S/RV PIPING KEWAUNEE GKWOOD 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	19	MEMBER	1	SEQUENCE	36	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)		
.2280	0.	0.	0.	0.	0.	0.	-.0448	-.0262	.0240	.0184	-.0042	.0556	0.		
.2290	0.	0.	0.	0.	0.	0.	-.0529	-.0229	.0250	.0161	-.0172	.0643	0.		
.2300	0.	0.	0.	0.	0.	0.	-.0595	-.0189	.0254	.0123	-.0312	.0667	0.		
.2310	0.	0.	0.	0.	0.	0.	-.0645	-.0144	.0254	.0068	-.0455	.0632	0.		
.2320	0.	0.	0.	0.	0.	0.	-.0679	-.0093	.0252	-.0005	-.0593	.0548	0.		
.2330	0.	0.	0.	0.	0.	0.	-.0698	-.0039	.0250	-.0090	-.0720	.0421	0.		
.2340	0.	0.	0.	0.	0.	0.	-.0702	.0018	.0249	-.0174	-.0832	.0262	0.		
.2350	0.	0.	0.	0.	0.	0.	-.0692	.0076	.0247	-.0250	-.0916	.0087	0.		
.2360	0.	0.	0.	0.	0.	0.	-.0672	.0133	.0249	-.0314	-.0961	-.0082	0.		
.2370	0.	0.	0.	0.	0.	0.	-.0642	.0185	.0247	-.0369	-.0963	-.0229	0.		
.2380	0.	0.	0.	0.	0.	0.	-.0604	.0233	.0239	-.0418	-.0921	-.0342	0.		
.2390	0.	0.	0.	0.	0.	0.	-.0560	.0276	.0222	-.0462	-.0836	-.0414	0.		
.2400	0.	0.	0.	0.	0.	0.	-.0509	.0315	.0196	-.0498	-.0717	-.0443	0.		
.2410	0.	0.	0.	0.	0.	0.	-.0451	.0353	.0161	-.0525	-.0574	-.0437	0.		
.2420	0.	0.	0.	0.	0.	0.	-.0386	.0391	.0118	-.0542	-.0422	-.0404	0.		
.2430	0.	0.	0.	0.	0.	0.	-.0313	.0429	.0068	-.0555	-.0270	-.0350	0.		
.2440	0.	0.	0.	0.	0.	0.	-.0234	.0468	.0013	-.0563	-.0126	-.0284	0.		
.2450	0.	0.	0.	0.	0.	0.	-.0150	.0505	-.0046	-.0569	.0003	-.0214	0.		
.2460	0.	0.	0.	0.	0.	0.	-.0064	.0539	-.0110	-.0577	.0116	-.0146	0.		
.2470	0.	0.	0.	0.	0.	0.	.0021	.0567	-.0176	-.0592	.0215	-.0081	0.		
.2480	0.	0.	0.	0.	0.	0.	.0103	.0588	-.0245	-.0618	.0295	-.0021	0.		
.2490	0.	0.	0.	0.	0.	0.	.0180	.0600	-.0316	-.0661	.0352	.0033	0.		
.2500	0.	0.	0.	0.	0.	0.	.0252	.0603	-.0388	-.0725	.0385	.0079	0.		
.2510	0.	0.	0.	0.	0.	0.	.0318	.0598	-.0458	-.0806	.0391	.0115	0.		
.2520	0.	0.	0.	0.	0.	0.	.0377	.0589	-.0525	-.0898	.0368	.0142	0.		
.2530	0.	0.	0.	0.	0.	0.	.0429	.0576	-.0586	-.0998	.0315	.0160	0.		
.2540	0.	0.	0.	0.	0.	0.	.0471	.0562	-.0642	-.1105	.0239	.0174	0.		
.2550	0.	0.	0.	0.	0.	0.	.0502	.0548	-.0690	-.1215	.0149	.0189	0.		
.2560	0.	0.	0.	0.	0.	0.	.0517	.0534	-.0731	-.1321	.0061	.0216	0.		
.2570	0.	0.	0.	0.	0.	0.	.0519	.0520	-.0764	-.1419	-.0015	.0260	0.		
.2580	0.	0.	0.	0.	0.	0.	.0501	.0507	-.0788	-.1505	-.0067	.0320	0.		
.2590	0.	0.	0.	0.	0.	0.	.0463	.0497	-.0803	-.1576	-.0091	.0398	0.		
.2600	0.	0.	0.	0.	0.	0.	.0407	.0490	-.0807	-.1630	-.0081	.0494	0.		
.2610	0.	0.	0.	0.	0.	0.	.0334	.0488	-.0800	-.1670	-.0043	.0601	0.		
.2620	0.	0.	0.	0.	0.	0.	.0246	.0493	-.0781	-.1697	.0015	.0708	0.		
.2630	0.	0.	0.	0.	0.	0.	.0148	.0507	-.0750	-.1712	.0084	.0803	0.		
.2640	0.	0.	0.	0.	0.	0.	.0043	.0529	-.0710	-.1716	.0157	.0879	0.		
.2650	0.	0.	0.	0.	0.	0.	-.0066	.0560	-.0661	-.1715	.0229	.0929	0.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.49.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

.2540	0.	0.	0.	0.	0.	0.	0.	.0471	.0562	-.0642	-.1105	.0239	.0174	0.
.2550	0.	0.	0.	0.	0.	0.	0.	.0502	.0548	-.0690	-.1215	.0149	.0189	0.
.2560	0.	0.	0.	0.	0.	0.	0.	.0519	.0534	-.0731	-.1321	.0061	.0216	0.
.2570	0.	0.	0.	0.	0.	0.	0.	.0519	.0520	-.0764	-.1419	-.0015	.0260	0.
.2580	0.	0.	0.	0.	0.	0.	0.	.0501	.0507	-.0788	-.1505	-.0067	.0320	0.
.2590	0.	0.	0.	0.	0.	0.	0.	.0463	.0497	-.0803	-.1576	-.0091	.0398	0.
.2600	0.	0.	0.	0.	0.	0.	0.	.0407	.0490	-.0807	-.1630	-.0081	.0494	0.
.2610	0.	0.	0.	0.	0.	0.	0.	.0334	.0488	-.0800	-.1670	-.0043	.0601	0.
.2620	0.	0.	0.	0.	0.	0.	0.	.0246	.0493	-.0781	-.1697	.0015	.0708	0.
.2630	0.	0.	0.	0.	0.	0.	0.	.0148	.0507	-.0750	-.1712	.0084	.0803	0.
.2640	0.	0.	0.	0.	0.	0.	0.	.0043	.0529	-.0710	-.1716	.0157	.0879	0.
.2650	0.	0.	0.	0.	0.	0.	0.	-.0066	.0560	-.0661	-.1715	.0229	.0929	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.49.

S/RV PIPING KEWAUHEE 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	MEMBER	SEQUENCE	LOCATION	DIS	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)	
.2660	0.	0.	0.	0.	0.	0.	-.0176	.0597	-.0608	-.1715	.0293	.0949	0.	
.2670	0.	0.	0.	0.	0.	0.	-.0283	.0637	-.0551	-.1721	.0345	.0938	0.	
.2680	0.	0.	0.	0.	0.	0.	-.0385	.0679	-.0493	-.1733	.0381	.0898	0.	
.2690	0.	0.	0.	0.	0.	0.	-.0477	.0721	-.0436	-.1746	.0396	.0830	0.	
.2700	0.	0.	0.	0.	0.	0.	-.0558	.0763	-.0380	-.1755	.0385	.0737	0.	
.2710	0.	0.	0.	0.	0.	0.	-.0624	.0803	-.0325	-.1757	.0342	.0626	0.	
.2720	0.	0.	0.	0.	0.	0.	-.0674	.0842	-.0273	-.1750	.0263	.0507	0.	
.2730	0.	0.	0.	0.	0.	0.	-.0709	.0880	-.0223	-.1729	.0149	.0388	0.	
.2740	0.	0.	0.	0.	0.	0.	-.0729	.0916	-.0177	-.1692	.0010	.0280	0.	
.2750	0.	0.	0.	0.	0.	0.	-.0737	.0949	-.0137	-.1640	-.0143	.0194	0.	
.2760	0.	0.	0.	0.	0.	0.	-.0735	.0977	-.0104	-.1576	-.0298	.0141	0.	
.2770	0.	0.	0.	0.	0.	0.	-.0726	.0999	-.0078	-.1504	-.0446	.0122	0.	
.2780	0.	0.	0.	0.	0.	0.	-.0710	.1013	-.0060	-.1427	-.0580	.0137	0.	
.2790	0.	0.	0.	0.	0.	0.	-.0688	.1018	-.0050	-.1345	-.0695	.0176	0.	
.2800	0.	0.	0.	0.	0.	0.	-.0661	.1013	-.0046	-.1260	-.0793	.0232	0.	
.2810	0.	0.	0.	0.	0.	0.	-.0629	.0999	-.0048	-.1175	-.0874	.0291	0.	
.2820	0.	0.	0.	0.	0.	0.	-.0591	.0977	-.0053	-.1094	-.0936	.0345	0.	
.2830	0.	0.	0.	0.	0.	0.	-.0548	.0945	-.0062	-.1021	-.0979	.0386	0.	
.2840	0.	0.	0.	0.	0.	0.	-.0501	.0906	-.0073	-.0958	-.0996	.0411	0.	
.2850	0.	0.	0.	0.	0.	0.	-.0453	.0859	-.0086	-.0908	-.0982	.0421	0.	
.2860	0.	0.	0.	0.	0.	0.	-.0404	.0805	-.0100	-.0871	-.0938	.0418	0.	
.2870	0.	0.	0.	0.	0.	0.	-.0356	.0744	-.0115	-.0843	-.0864	.0403	0.	
.2880	0.	0.	0.	0.	0.	0.	-.0311	.0677	-.0129	-.0819	-.0766	.0382	0.	
.2890	0.	0.	0.	0.	0.	0.	-.0269	.0605	-.0141	-.0794	-.0649	.0358	0.	
.2900	0.	0.	0.	0.	0.	0.	-.0230	.0529	-.0149	-.0762	-.0522	.0336	0.	
.2910	0.	0.	0.	0.	0.	0.	-.0196	.0449	-.0152	-.0716	-.0391	.0320	0.	
.2920	0.	0.	0.	0.	0.	0.	-.0165	.0368	-.0143	-.0653	-.0258	.0311	0.	
.2930	0.	0.	0.	0.	0.	0.	-.0138	.0287	-.0140	-.0573	-.0126	.0314	0.	
.2940	0.	0.	0.	0.	0.	0.	-.0115	.0207	-.0126	-.0477	.0005	.0329	0.	
.2950	0.	0.	0.	0.	0.	0.	-.0095	.0131	-.0109	-.0369	.0132	.0354	0.	
.2960	0.	0.	0.	0.	0.	0.	-.0076	.0057	-.0090	-.0254	.0252	.0384	0.	
.2970	0.	0.	0.	0.	0.	0.	-.0057	-.0011	-.0069	-.0132	.0361	.0412	0.	
.2980	0.	0.	0.	0.	0.	0.	-.0036	-.0076	-.0048	-.0007	.0452	.0432	0.	
.2990	0.	0.	0.	0.	0.	0.	-.0012	-.0136	-.0027	.0119	.0521	.0436	0.	
.3000	0.	0.	0.	0.	0.	0.	.0017	-.0192	-.0006	.0244	.0500	.0424	0.	
.3010	0.	0.	0.	0.	0.	0.	.0050	-.0245	.0014	.0363	.0500	.0394	0.	
.3020	0.	0.	0.	0.	0.	0.	.0086	-.0295	.0032	.0478	.0500	.0353	0.	
.3030	0.	0.	0.	0.	0.	0.	.0122	-.0343	.0050	.0587	.0585	.0305	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.50.

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

CONDITION 24
LOADS
SHOCK

.2920	0.	0.	0.	0.	0.	0.	0.	0.	-.1138	.0287	-.0140	-.0573	-.0126	.0314	0.
.2930	0.	0.	0.	0.	0.	0.	0.	0.	-.1115	.0207	-.0126	-.0477	.0005	.0329	0.
.2940	0.	0.	0.	0.	0.	0.	0.	0.	-.0095	.0131	-.0109	-.0369	.0132	.0354	0.
.2950	0.	0.	0.	0.	0.	0.	0.	0.	-.0076	.0057	-.0090	-.0254	.0252	.0384	0.
.2960	0.	0.	0.	0.	0.	0.	0.	0.	-.0057	-.0011	-.0069	-.0132	.0361	.0412	0.
.2970	0.	0.	0.	0.	0.	0.	0.	0.	-.0036	-.0076	-.0048	-.0007	.0452	.0432	0.
.2980	0.	0.	0.	0.	0.	0.	0.	0.	-.0012	-.0136	-.0027	.0119	.0521	.0436	0.
.2990	0.	0.	0.	0.	0.	0.	0.	0.	.0017	-.0192	-.0006	.0244	.0566	.0424	0.
.3000	0.	0.	0.	0.	0.	0.	0.	0.	.0050	-.0245	.0014	.0363	.0588	.0394	0.
.3010	0.	0.	0.	0.	0.	0.	0.	0.	.0086	-.0295	.0032	.0478	.0591	.0353	0.
.3020	0.	0.	0.	0.	0.	0.	0.	0.	.0122	-.0343	.0050	.0587	.0585	.0305	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.50.

S/RV PIPING KEWAUNEE GKW0FF 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	19	MEMBER	1	SEQUENCE	36	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)		
.3040	0.	0.	0.	0.	0.	0.	.0155	-.0388	.0066	.0689	.0577	.0261	0.		
.3050	0.	0.	0.	0.	0.	0.	.0185	-.0432	.0081	.0785	.0574	.0228	0.		
.3060	0.	0.	0.	0.	0.	0.	.0207	-.0474	.0096	.0874	.0580	.0212	0.		
.3070	0.	0.	0.	0.	0.	0.	.0222	-.0514	.0112	.0959	.0596	.0217	0.		
.3080	0.	0.	0.	0.	0.	0.	.0230	-.0552	.0131	.1042	.0619	.0240	0.		
.3090	0.	0.	0.	0.	0.	0.	.0230	-.0590	.0153	.1124	.0645	.0277	0.		
.3100	0.	0.	0.	0.	0.	0.	.0225	-.0626	.0178	.1205	.0668	.0322	0.		
.3110	0.	0.	0.	0.	0.	0.	.0215	-.0661	.0205	.1282	.0682	.0366	0.		
.3120	0.	0.	0.	0.	0.	0.	.0203	-.0695	.0235	.1352	.0682	.0402	0.		
.3130	0.	0.	0.	0.	0.	0.	.0189	-.0726	.0264	.1411	.0663	.0421	0.		
.3140	0.	0.	0.	0.	0.	0.	.0176	-.0754	.0292	.1455	.0622	.0415	0.		
.3150	0.	0.	0.	0.	0.	0.	.0165	-.0778	.0317	.1483	.0556	.0382	0.		
.3160	0.	0.	0.	0.	0.	0.	.0155	-.0797	.0338	.1472	.0464	.0317	0.		
.3170	0.	0.	0.	0.	0.	0.	.0149	-.0809	.0357	.1484	.0347	.0224	0.		
.3180	0.	0.	0.	0.	0.	0.	.0145	-.0816	.0372	.1463	.0209	.0104	0.		
.3190	0.	0.	0.	0.	0.	0.	.0143	-.0817	.0387	.1434	.0055	-.0034	0.		
.3200	0.	0.	0.	0.	0.	0.	.0141	-.0812	.0400	.1402	-.0104	-.0184	0.		
.3210	0.	0.	0.	0.	0.	0.	.0137	-.0804	.0414	.1372	-.0259	-.0333	0.		
.3220	0.	0.	0.	0.	0.	0.	.0129	-.0791	.0429	.1347	-.0398	-.0473	0.		
.3230	0.	0.	0.	0.	0.	0.	.0118	-.0777	.0445	.1330	-.0512	-.0595	0.		
.3240	0.	0.	0.	0.	0.	0.	.0102	-.0761	.0462	.1321	-.0594	-.0695	0.		
.3250	0.	0.	0.	0.	0.	0.	.0081	-.0743	.0480	.1320	-.0641	-.0770	0.		
.3260	0.	0.	0.	0.	0.	0.	.0059	-.0725	.0498	.1376	-.0655	-.0822	0.		
.3270	0.	0.	0.	0.	0.	0.	.0037	-.0707	.0516	.1339	-.0638	-.0854	0.		
.3280	0.	0.	0.	0.	0.	0.	.0017	-.0689	.0534	.1356	-.0598	-.0871	0.		
.3290	0.	0.	0.	0.	0.	0.	.0003	-.0673	.0550	.1374	-.0544	-.0880	0.		
.3300	0.	0.	0.	0.	0.	0.	-.0004	-.0659	.0564	.1391	-.0480	-.0884	0.		
.3310	0.	0.	0.	0.	0.	0.	-.0003	-.0643	.0574	.1405	-.0412	-.0886	0.		
.3320	0.	0.	0.	0.	0.	0.	.0007	-.0640	.0578	.1414	-.0343	-.0888	0.		
.3330	0.	0.	0.	0.	0.	0.	.0024	-.0637	.0577	.1417	-.0275	-.0887	0.		
.3340	0.	0.	0.	0.	0.	0.	.0049	-.0637	.0568	.1412	-.0206	-.0882	0.		
.3350	0.	0.	0.	0.	0.	0.	.0080	-.0641	.0552	.1399	-.0139	-.0870	0.		
.3360	0.	0.	0.	0.	0.	0.	.0116	-.0646	.0529	.1379	-.0074	-.0850	0.		
.3370	0.	0.	0.	0.	0.	0.	.0155	-.0653	.0498	.1353	-.0011	-.0821	0.		
.3380	0.	0.	0.	0.	0.	0.	.0196	-.0660	.0460	.1320	.0046	-.0783	0.		
.3390	0.	0.	0.	0.	0.	0.	.0238	-.0667	.0416	.1282	.0097	-.0738	0.		
.3400	0.	0.	0.	0.	0.	0.	.0282	-.0674	.0366	.1236	.0140	-.0685	0.		
.3410	0.	0.	0.	0.	0.	0.	.0325	-.0680	.0310	.1182	.0175	-.0629	0.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.50.

S/RV PIPING KEWAUNEE GKW0FF 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSVCONDITION 24
LOADS

.3310	0.	0.	0.	0.	0.	0.	0.	-.0004	-.0659	.0564	.1391	-.0480	-.0884	0.
.3320	0.	0.	0.	0.	0.	0.	0.	-.0007	-.0640	.0578	.1414	-.0243	-.0888	0.
.3330	0.	0.	0.	0.	0.	0.	0.	.0024	-.0637	.0577	.1417	-.0275	-.0887	0.
.3340	0.	0.	0.	0.	0.	0.	0.	.0049	-.0637	.0568	.1412	-.0206	-.0882	0.
.3350	0.	0.	0.	0.	0.	0.	0.	.0080	-.0641	.0552	.1399	-.0139	-.0870	0.
.3360	0.	0.	0.	0.	0.	0.	0.	.0116	-.0646	.0529	.1379	-.0074	-.0850	0.
.3370	0.	0.	0.	0.	0.	0.	0.	.0155	-.0653	.0498	.1353	-.0011	-.0821	0.
.3380	0.	0.	0.	0.	0.	0.	0.	.0196	-.0660	.0460	.1320	.0046	-.0783	0.
.3390	0.	0.	0.	0.	0.	0.	0.	.0238	-.0667	.0416	.1282	.0097	-.0738	0.
.3400	0.	0.	0.	0.	0.	0.	0.	.0282	-.0674	.0360	.1236	.0140	-.0685	0.
.3410	0.	0.	0.	0.	0.	0.	0.	.0325	-.0680	.0310	.1182	.0175	-.0629	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.50.

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								
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)	
.3420	0.	0.	0.	0.	0.	0.	.0368	-.0686	.0250	.1119	.0204	-.0572	0.	
.3430	0.	0.	0.	0.	0.	0.	.0410	-.0691	.0187	.1048	.0229	-.0515	0.	
.3440	0.	0.	0.	0.	0.	0.	.0452	-.0697	.0121	.0967	.0251	-.0464	0.	
.3450	0.	0.	0.	0.	0.	0.	.0492	-.0703	.0056	.0879	.0271	-.0419	0.	
.3460	0.	0.	0.	0.	0.	0.	.0531	-.0707	-.0008	.0783	.0289	-.0385	0.	
.3470	0.	0.	0.	0.	0.	0.	.0569	-.0710	-.0068	.0682	.0305	-.0363	0.	
.3480	0.	0.	0.	0.	0.	0.	.0605	-.0709	-.0123	.0579	.0320	-.0354	0.	
.3490	0.	0.	0.	0.	0.	0.	.0638	-.0705	-.0170	.0476	.0333	-.0358	0.	
.3500	0.	0.	0.	0.	0.	0.	.0667	-.0696	-.0211	.0376	.0346	-.0374	0.	
.3510	0.	0.	0.	0.	0.	0.	.0690	-.0682	-.0243	.0280	.0361	-.0398	0.	
.3520	0.	0.	0.	0.	0.	0.	.0707	-.0660	-.0268	.0190	.0378	-.0427	0.	
.3530	0.	0.	0.	0.	0.	0.	.0715	-.0631	-.0285	.0109	.0399	-.0459	0.	
.3540	0.	0.	0.	0.	0.	0.	.0714	-.0594	-.0296	.0039	.0423	-.0491	0.	
.3550	0.	0.	0.	0.	0.	0.	.0704	-.0548	-.0299	-.0018	.0448	-.0520	0.	
.3560	0.	0.	0.	0.	0.	0.	.0685	-.0494	-.0296	-.0062	.0471	-.0547	0.	
.3570	0.	0.	0.	0.	0.	0.	.0659	-.0431	-.0288	-.0092	.0486	-.0570	0.	
.3580	0.	0.	0.	0.	0.	0.	.0627	-.0361	-.0275	-.0110	.0490	-.0589	0.	
.3590	0.	0.	0.	0.	0.	0.	.0589	-.0285	-.0257	-.0117	.0478	-.0602	0.	
.3600	0.	0.	0.	0.	0.	0.	.0548	-.0206	-.0237	-.0117	.0449	-.0610	0.	
.3610	0.	0.	0.	0.	0.	0.	.0503	-.0126	-.0215	-.0112	.0401	-.0611	0.	
.3620	0.	0.	0.	0.	0.	0.	.0457	-.0048	-.0191	-.0107	.0335	-.0604	0.	
.3630	0.	0.	0.	0.	0.	0.	.0408	.0027	-.0168	-.0105	.0252	-.0589	0.	
.3640	0.	0.	0.	0.	0.	0.	.0359	.0096	-.0144	-.0107	.0154	-.0565	0.	
.3650	0.	0.	0.	0.	0.	0.	.0308	.0158	-.0121	-.0115	.0044	-.0534	0.	
.3660	0.	0.	0.	0.	0.	0.	.0255	.0212	-.0099	-.0132	-.0072	-.0495	0.	
.3670	0.	0.	0.	0.	0.	0.	.0200	.0259	-.0077	-.0155	-.0191	-.0451	0.	
.3680	0.	0.	0.	0.	0.	0.	.0142	.0298	-.0057	-.0187	-.0306	-.0401	0.	
.3690	0.	0.	0.	0.	0.	0.	.0081	.0330	-.0038	-.0226	-.0410	-.0346	0.	
.3700	0.	0.	0.	0.	0.	0.	.0016	.0356	-.0020	-.0273	-.0499	-.0286	0.	
.3710	0.	0.	0.	0.	0.	0.	-.0052	.0377	-.0004	-.0325	-.0566	-.0222	0.	
.3720	0.	0.	0.	0.	0.	0.	-.0124	.0393	.0009	-.0382	-.0610	-.0155	0.	
.3730	0.	0.	0.	0.	0.	0.	-.0198	.0406	.0021	-.0440	-.0631	-.0086	0.	
.3740	0.	0.	0.	0.	0.	0.	-.0273	.0415	.0030	-.0498	-.0629	-.0016	0.	
.3750	0.	0.	0.	0.	0.	0.	-.0347	.0423	.0039	-.0554	-.0608	.0052	0.	
.3760	0.	0.	0.	0.	0.	0.	-.0418	.0429	.0045	-.0604	-.0572	.0119	0.	
.3770	0.	0.	0.	0.	0.	0.	-.0484	.0434	.0051	-.0649	-.0524	.0183	0.	
.3780	0.	0.	0.	0.	0.	0.	-.0543	.0438	.0055	-.0685	-.0467	.0244	0.	
.3790	0.	0.	0.	0.	0.	0.	-.0594	.0441	.0057	-.0714	-.0403	.0301	0.	

ADLPIPE PAGE 884

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.50.

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

.3690	0.	0.	0.	0.	0.	0.	0.	0.	.0081	.0330	-.0038	-.0226	-.0410	-.0346	0.
.3700	0.	0.	0.	0.	0.	0.	0.	0.	.0016	.0356	-.0020	-.0273	-.0499	-.0286	0.
.3710	0.	0.	0.	0.	0.	0.	0.	0.	-.0052	.0377	-.0004	-.0325	-.0566	-.0222	0.
.3720	0.	0.	0.	0.	0.	0.	0.	0.	-.0124	.0393	.0009	-.0382	-.0610	-.0155	0.
.3730	0.	0.	0.	0.	0.	0.	0.	0.	-.0198	.0406	.0021	-.0440	-.0631	-.0086	0.
.3740	0.	0.	0.	0.	0.	0.	0.	0.	-.0273	.0415	.0030	-.0498	-.0629	-.0016	0.
.3750	0.	0.	0.	0.	0.	0.	0.	0.	-.0347	.0423	.0039	-.0554	-.0608	.0052	0.
.3760	0.	0.	0.	0.	0.	0.	0.	0.	-.0418	.0429	.0045	-.0604	-.0572	.0119	0.
.3770	0.	0.	0.	0.	0.	0.	0.	0.	-.0484	.0434	.0051	-.0649	-.0524	.0183	0.
.3780	0.	0.	0.	0.	0.	0.	0.	0.	-.0543	.0438	.0055	-.0685	-.0467	.0244	0.
.3790	0.	0.	0.	0.	0.	0.	0.	0.	-.0594	.0441	.0057	-.0714	-.0403	.0301	0.

ADLPIPE PAGE 884 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.26.50.

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

CONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

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

SECTION	19	MEMBER	1	SEQUENCE	36	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)		
.3800	0.	0.	0.	0.	0.	0.	-.0636	.0444	.0059	-.0735	-.0337	.0355	0.		
.3810	0.	0.	0.	0.	0.	0.	-.0667	.0445	.0059	-.0751	-.0270	.0407	0.		
.3820	0.	0.	0.	0.	0.	0.	-.0686	.0445	.0057	-.0759	-.0206	.0454	0.		
.3830	0.	0.	0.	0.	0.	0.	-.0694	.0444	.0053	-.0760	-.0147	.0495	0.		
.3840	0.	0.	0.	0.	0.	0.	-.0689	.0443	.0047	-.0754	-.0095	.0531	0.		
.3850	0.	0.	0.	0.	0.	0.	-.0673	.0440	.0039	-.0742	-.0050	.0561	0.		
.3860	0.	0.	0.	0.	0.	0.	-.0646	.0437	.0028	-.0725	-.0014	.0586	0.		
.3870	0.	0.	0.	0.	0.	0.	-.0609	.0433	.0015	-.0705	.0017	.0607	0.		
.3880	0.	0.	0.	0.	0.	0.	-.0563	.0429	-.0003	-.0683	.0042	.0626	0.		
.3890	0.	0.	0.	0.	0.	0.	-.0512	.0424	-.0025	-.0660	.0064	.0644	0.		
.3900	0.	0.	0.	0.	0.	0.	-.0455	.0419	-.0051	-.0638	.0084	.0666	0.		
.3910	0.	0.	0.	0.	0.	0.	-.0396	.0414	-.0081	-.0619	.0104	.0691	0.		
.3920	0.	0.	0.	0.	0.	0.	-.0335	.0408	-.0114	-.0602	.0122	.0721	0.		
.3930	0.	0.	0.	0.	0.	0.	-.0276	.0400	-.0149	-.0585	.0139	.0755	0.		
.3940	0.	0.	0.	0.	0.	0.	-.0218	.0392	-.0185	-.0570	.0155	.0794	0.		
.3950	0.	0.	0.	0.	0.	0.	-.0164	.0383	-.0220	-.0556	.0169	.0836	0.		
.3960	0.	0.	0.	0.	0.	0.	-.0114	.0372	-.0252	-.0544	.0182	.0881	0.		
.3970	0.	0.	0.	0.	0.	0.	-.0072	.0361	-.0280	-.0533	.0194	.0925	0.		
.3980	0.	0.	0.	0.	0.	0.	-.0038	.0349	-.0304	-.0523	.0207	.0966	0.		
.3990	0.	0.	0.	0.	0.	0.	-.0012	.0338	-.0322	-.0514	.0222	.1003	0.		
.4000	0.	0.	0.	0.	0.	0.	.0004	.0327	-.0334	-.0508	.0238	.1031	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	19	MEMBER	1	SEQUENCE	36	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)		
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.		
.0010	-4.	8.	-4.	-11.	-1.	6.	-.0000	.0000	-.0000	-.0000	.0000	.0000	6.		
.0020	-26.	59.	-24.	-84.	-7.	47.	-.0001	.0000	-.0002	-.0002	.0002	.0001	45.		
.0030	-72.	164.	-59.	-245.	-21.	138.	-.0003	.0000	-.0005	-.0006	.0007	.0005	132.		

ADLPIPE PAGE 885 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.26.50.

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	19	MEMBER	1	SEQUENCE	36	LOCATION	END	TYPE	VA	DZ	RX	RY	RZ	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	-4.	8.	-4.	-11.	-1.	6.	-0.0000	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000	6.
.0020	-26.	59.	-24.	-84.	-7.	47.	-0.0001	0.0000	-0.0002	-0.0002	0.0002	0.0001	0.0001	45.
.0030	-72.	164.	-59.	-245.	-21.	138.	-0.0003	0.0000	-0.0005	-0.0006	0.0007	0.0005	0.0005	132.

ADLPIPE PAGE 885 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.26.50.
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
 2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
 LOADS
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INTERNAL FORCES IN THE PIPING
 FORCES AND MOMENTS ACT ON THE PIPING

SECTION	19	MEMBER	1	SEQUENCE	36	LOCATION	END	TYPE	VA	DZ	RX	RY	RZ	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)		
.0040	-138.	295.	-98.	-476.	-41.	268.	-0.0005	-0.0000	-0.0010	-0.0016	0.0014	0.0012	0.0012	257.
.0050	-213.	423.	-132.	-744.	-64.	420.	-0.0009	-0.0001	-0.0019	-0.0033	0.0023	0.0022	0.0022	402.
.0060	-267.	569.	-126.	-1072.	-88.	605.	-0.0014	-0.0002	-0.0030	-0.0056	0.0033	0.0036	0.0036	578.
.0070	-318.	814.	-48.	-1561.	-125.	883.	-0.0021	-0.0003	-0.0046	-0.0087	0.0048	0.0054	0.0054	842.
.0080	-447.	1226.	135.	-2315.	-208.	1322.	-0.0030	-0.0005	-0.0070	-0.0130	0.0077	0.0080	0.0080	1253.
.0090	-679.	1700.	492.	-3238.	-346.	1877.	-0.0042	-0.0008	-0.0102	-0.0191	0.0129	0.0119	0.0119	1762.
.0100	-1054.	2054.	930.	-4109.	-530.	2426.	-0.0053	-0.0013	-0.0142	-0.0272	0.0205	0.0170	0.0170	2250.
.0110	-1598.	2216.	1285.	-4799.	-736.	2884.	-0.0060	-0.0020	-0.0189	-0.0373	0.0300	0.0227	0.0227	2646.
.0120	-2178.	2269.	1554.	-5332.	-904.	3238.	-0.0060	-0.0027	-0.0241	-0.0486	0.0401	0.0281	0.0281	2954.
.0130	-2541.	2267.	1883.	-5704.	-950.	3447.	-0.0046	-0.0034	-0.0296	-0.0603	0.0492	0.0320	0.0320	3155.
.0140	-2457.	2035.	2435.	-5619.	-817.	3323.	-0.0016	-0.0040	-0.0348	-0.0716	0.0555	0.0335	0.0335	3083.
.0150	-1821.	1320.	3297.	-4687.	-501.	2648.	0.0036	-0.0045	-0.0392	-0.0815	0.0575	0.0316	0.0316	2534.
.0160	-614.	38.	4558.	-2742.	-47.	1341.	0.0110	-0.0046	-0.0422	-0.0886	0.0552	0.0257	0.0257	1431.
.0170	778.	-1566.	5735.	-75.	491.	-404.	0.0203	-0.0041	-0.0435	-0.0915	0.0501	0.0163	0.0163	300.
.0180	1664.	-3054.	5815.	2712.	1071.	-2210.	0.0311	-0.0026	-0.0433	-0.0897	0.0449	0.0045	0.0045	1715.
.0190	1513.	-4023.	4219.	4968.	1578.	-3696.	0.0423	0.0001	-0.0424	-0.0840	0.0430	-0.0076	-0.0076	2995.
.0200	-379.	-3965.	593.	5780.	1759.	-4343.	0.0526	0.0043	-0.0424	-0.0770	0.0501	-0.0169	-0.0169	3487.
.0210	-3699.	-3137.	-3985.	5218.	1484.	-4185.	0.0617	0.0097	-0.0441	-0.0712	0.0589	-0.0212	-0.0212	3211.
.0220	-6369.	-2686.	-8320.	4746.	1336.	-4096.	0.0705	0.0159	-0.0461	-0.0668	0.0870	-0.0229	-0.0229	3004.
.0230	-7515.	-2768.	-11880.	4927.	1531.	-4440.	0.0799	0.0231	-0.0474	-0.0640	0.0946	-0.0270	-0.0270	3190.
.0240	-5995.	-2710.	-11850.	5260.	1808.	-5048.	0.0899	0.0311	-0.0472	-0.0531	0.0879	-0.0381	-0.0381	3520.
.0250	-2981.	-1549.	-9816.	4525.	2273.	-5081.	0.0997	0.0397	-0.0455	-0.0349	0.0714	-0.0536	-0.0536	3362.
.0260	-717.	564.	-11184.	2601.	3496.	-4118.	0.1080	0.0479	-0.0433	-0.0134	0.0488	-0.0671	-0.0671	2810.
.0270	2557.	1417.	-14051.	1898.	5261.	-3589.	0.1140	0.0545	-0.0395	0.0046	0.0115	-0.0784	-0.0784	3114.
.0280	6619.	-412.	-12865.	4117.	5698.	-4647.	0.1159	0.0586	-0.0328	0.0173	-0.0287	-0.0885	-0.0885	3949.
.0290	8062.	-3106.	-9848.	7390.	4675.	-5852.	0.1122	0.0610	-0.0236	0.0306	-0.0497	-0.0917	-0.0917	4931.
.0300	9156.	-3520.	-7633.	8312.	4653.	-4912.	0.1022	0.0629	-0.0146	0.0500	-0.0581	-0.0849	-0.0849	5022.
.0310	9245.	-1299.	-6677.	5898.	4304.	-2048.	0.0858	0.0640	-0.0055	0.0680	-0.0508	-0.0754	-0.0754	3553.
.0320	4747.	1070.	-8979.	2404.	1861.	703.	0.0641	0.0634	0.0046	0.0759	-0.0552	-0.0676	-0.0676	1462.
.0330	-114.	766.	-9938.	1653.	-720.	1512.	0.0399	0.0604	0.0168	0.0777	-0.0463	-0.0590	-0.0590	1103.
.0340	-664.	-1223.	-6064.	3344.	-1403.	1057.	0.0153	0.0553	0.0303	0.0806	-0.0424	-0.0495	-0.0495	1770.
.0350	-630.	-1249.	-1794.	3242.	-1929.	1393.	-0.0097	0.0490	0.0435	0.0837	-0.0419	-0.0476	-0.0476	1885.
.0360	-3104.	1469.	6.	-36.	-3860.	2876.	-0.0348	0.0414	0.0548	0.0836	-0.0402	-0.0566	-0.0566	2256.
.0370	-3925.	3629.	3051.	-2934.	-5215.	3802.	-0.0584	0.0315	0.0639	0.0799	-0.0400	-0.0668	-0.0668	3322.
.0380	-1347.	2647.	7548.	-2576.	-4558.	2919.	-0.0790	0.0186	0.0710	0.0696	-0.0455	-0.0692	-0.0692	2809.
.0390	-426.	-25.	8512.	-511.	-3940.	1092.	-0.0975	0.0037	0.0763	0.0498	-0.0522	-0.0664	-0.0664	1931.
.0400	-2937.	-949.	7284.	-228.	-4819.	532.	-0.1148	-0.0115	0.0782	0.0281	-0.0459	-0.0609	-0.0609	2275.
.0410	-3001.	878.	8991.	-2871.	-5128.	2006.	-0.1304	-0.0256	0.0762	0.0139	-0.0343	-0.0491	-0.0491	2910.

ADLPIPE PAGE 886 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.26.50.
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
 2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
 LOADS
 SHOCK
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 ENGLISH UNITS

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

.0310	9245.	-1299.	-6677.	5898.	4304.	-2048.	.858	.0640	-.0055	.0680	-.0508	-.0754	3553.
.0320	4747.	1070.	-8979.	2404.	1861.	703.	.641	.0634	.0046	.0759	-.0552	-.0676	1462.
.0330	-114.	766.	-9938.	1653.	-720.	1512.	.0399	.0604	.0168	.0777	-.0463	-.0590	1103.
.0340	-664.	-1223.	-6064.	3344.	-1403.	1057.	.0153	.0553	.0303	.0806	-.0424	-.0495	1770.
.0350	-630.	-1249.	-1794.	3242.	-1929.	1393.	-.0097	.0490	.0435	.0837	-.0419	-.0476	1885.
.0360	-3104.	1469.	6.	-36.	-3760.	2876.	-.0348	.0414	.0548	.0836	-.0402	-.0566	2256.
.0370	-3925.	3629.	3051.	-2934.	-5215.	3802.	-.0584	.0315	.0639	.0799	-.0400	-.0668	3322.
.0380	-1347.	2647.	7548.	-2576.	-4558.	2919.	-.0790	.0186	.0710	.0696	-.0455	-.0692	2809.
.0390	-426.	-25.	8512.	-511.	-3940.	1092.	-.0975	.0037	.0763	.0498	-.0522	-.0664	1931.
.0400	-2537.	-949.	7284.	-228.	-4819.	532.	-.1148	-.0115	.0782	.0281	-.0459	-.0609	2275.
.0410	-3001.	878.	8991.	-2871.	-5128.	2006.	-.1304	-.0256	.0762	.0139	-.0343	-.0491	2910.

ADLPIPE PAGE 886

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.50.

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	19	MEMBER	1	SEQUENCE	36	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)	
.0420	-2004.	3577.	11049.	-6853.	-4580.	4369.	-.1432	-.0392	.0715	.0049	-.0187	-.0274	4372.	
.0430	-5125.	4853.	8285.	-9430.	-4987.	6131.	-.1524	-.0527	.0657	-.0070	.0079	.0027	5766.	
.0440	-8571.	3622.	6148.	-8490.	-5868.	6482.	-.1567	-.0664	.0600	-.0205	.0345	.0369	5711.	
.0450	-8750.	1350.	5926.	-5600.	-5594.	6102.	-.1547	-.0795	.0549	-.0287	.0458	.0701	4683.	
.0460	-7927.	168.	3990.	-3580.	-4559.	5894.	-.1466	-.0907	.0502	-.0263	.0413	.0947	3874.	
.0470	-7391.	158.	2313.	-2420.	-4010.	5706.	-.1329	-.0995	.0461	-.0127	.0298	.1065	3459.	
.0480	-4994.	-364.	4985.	-183.	-3289.	4761.	-.1142	-.1063	.0430	.0071	.0129	.1094	2713.	
.0490	-1680.	-2368.	6062.	3563.	-1569.	2725.	-.0915	-.1112	.0400	.0249	-.0109	.1087	2227.	
.0500	-771.	-4931.	2418.	7302.	-85.	84.	-.0665	-.1132	.0362	.0368	-.0345	.1024	3422.	
.0510	-1554.	-6119.	-1283.	9119.	235.	-2052.	-.0410	-.1114	.0316	.0474	-.0495	.0876	4382.	
.0520	-1608.	-4818.	-2334.	7932.	533.	-2836.	-.0150	-.1052	.0264	.0641	-.0556	.0660	3956.	
.0530	-1371.	-1791.	-3987.	4404.	1639.	-2631.	.0113	-.0952	.0212	.0877	-.0578	.0400	2524.	
.0540	-1252.	939.	-6014.	995.	2598.	-2736.	.0379	-.0832	.0174	.1123	-.0516	.0079	1828.	
.0550	3.	1973.	-4971.	-269.	2810.	-3894.	.0643	-.0709	.0161	.1347	-.0588	-.0298	2254.	
.0560	2350.	1777.	-2589.	-18.	3309.	-5467.	.0899	-.0591	.0162	.1578	-.0773	-.0667	2992.	
.0570	4872.	1863.	-2002.	-334.	4739.	-6298.	.1131	-.0483	.0162	.1840	-.0843	-.0981	3697.	
.0580	7514.	2939.	-1317.	-1917.	5959.	-5999.	.1323	-.0388	.0156	.2101	-.0873	-.1246	4063.	
.0590	9451.	4161.	513.	-3585.	5985.	-5015.	.1462	-.0314	.0146	.2300	-.0817	-.1444	4026.	
.0600	9463.	4177.	273.	-4002.	5864.	-4008.	.1548	-.0267	.0132	.2413	-.0652	-.1512	3754.	
.0610	8143.	2824.	-2002.	-3194.	5762.	-3202.	.1582	-.0244	.0118	.2454	-.0379	-.1430	3433.	
.0620	6821.	1518.	-2494.	-2570.	5459.	-2260.	.1567	-.0238	.0106	.2451	-.0023	-.1276	3020.	
.0630	4974.	1749.	-1320.	-3506.	4104.	-720.	.1507	-.0243	.0096	.2422	.0382	-.1126	2552.	
.0640	2669.	3249.	-970.	-5478.	2788.	1161.	.1417	-.0261	.0089	.2377	.0767	-.0981	2931.	
.0650	1867.	4273.	-14.	-6363.	2454.	2310.	.1310	-.0301	.0090	.2300	.1063	-.0831	3374.	
.0660	2537.	3794.	2872.	-5180.	2261.	2011.	.1191	-.0371	.0097	.2156	.1261	-.0702	2811.	
.0670	2295.	2543.	4842.	-3235.	1402.	811.	.1058	-.0468	.0100	.1932	.1403	-.0604	1695.	
.0680	1120.	1687.	4395.	-2000.	659.	-202.	.0911	-.0582	.0087	.1662	.1514	-.0501	991.	
.0690	806.	1336.	4106.	-1315.	572.	-704.	.0754	-.0703	.0059	.1374	.1601	-.0367	748.	
.0700	550.	871.	4816.	-464.	191.	-1117.	.0592	-.0823	.0021	.1060	.1679	-.0220	574.	
.0710	-986.	7.	4398.	436.	-872.	-1668.	.0429	-.0929	-.0022	.0704	.1727	-.0068	906.	
.0720	-2210.	-929.	2655.	837.	-1525.	-2087.	.0275	-.1013	-.0066	.0344	.1682	.0100	1273.	
.0730	-1844.	-1392.	1311.	494.	-1372.	-2055.	.0136	-.1066	-.0105	.0038	.1531	.0272	1181.	
.0740	-1094.	-1112.	965.	-463.	-1344.	-1550.	.0013	-.1085	-.0132	-.0186	.1312	.0413	985.	
.0750	-80.	-463.	1839.	-1444.	-1638.	-829.	-.0097	-.1077	-.0141	-.0327	.1033	.0519	1095.	
.0760	2175.	-177.	3984.	-1671.	-1553.	-183.	-.0193	-.1048	-.0133	-.0394	.0693	.0619	1072.	
.0770	4304.	-576.	5600.	-984.	-1204.	293.	-.0282	-.1004	-.0114	-.0414	.0354	.0733	741.	
.0780	4237.	-1277.	4926.	-36.	-1320.	755.	-.0371	-.0944	-.0088	-.0416	.0079	.0849	713.	
.0790	2881.	-1721.	3100.	572.	-1769.	1367.	-.0457	-.0862	-.0055	-.0403	-.0133	.0949	1082.	

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2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

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.0690	806.	1336.	4106.	-1315.	572.	-704.	.0754	-.0703	.0059	.1374	.1501	-.0367	991.
.0700	550.	871.	4816.	-464.	191.	-1117.	.0592	-.0823	.0021	.1060	.1579	-.0220	574.
.0710	-986.	7.	4398.	436.	-872.	-1668.	.0429	-.0929	-.0022	.0704	.1727	-.0068	906.
.0720	-2210.	-929.	2655.	377.	-1525.	-2087.	.0275	-.1013	-.0066	.0344	.1682	.0100	1273.
.0730	-1044.	-1392.	1711.	494.	-1372.	-2055.	.0136	-.1066	-.0105	.0038	.1531	.0272	1181.
.0740	-1094.	-1112.	965.	-463.	-1344.	-1550.	.0013	-.1085	-.0132	-.0186	.1312	.0413	985.
.0750	-80.	-463.	1839.	-1444.	-1638.	-829.	-.0097	-.1077	-.0141	-.0327	.1033	.0519	1095.
.0760	2175.	-177.	3984.	-1671.	-1553.	-183.	-.0193	-.1048	-.0133	-.0394	.0693	.0619	1072.
.0770	4304.	-576.	5600.	-984.	-1204.	293.	-.0282	-.1004	-.0114	-.0414	.0354	.0733	741.
.0780	4237.	-1277.	4926.	-76.	-1320.	755.	-.0371	-.0944	-.0088	-.0416	.0079	.0849	713.
.0790	2881.	-1721.	3100.	572.	-1769.	1367.	-.0457	-.0862	-.0055	-.0403	-.0133	.0949	1082.

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2 SAFETY COLD FKW24F--2 PSV

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

SECTION	19	MEMBER	1	SEQUENCE	36	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)	
.0800	1980.	-1630.	1876.	773.	-1991.	2095.	-.0536	-.0754	-.0013	-.0353	-.0312	.1011	1402.	
.0810	841.	-927.	780.	579.	-2157.	2814.	-.0600	-.0614	.0043	-.0262	-.0445	.1009	1684.	
.0820	-1069.	191.	-688.	52.	-2488.	3316.	-.0646	-.0448	.0116	-.0146	-.0535	.0926	1943.	
.0830	-2260.	1134.	-1508.	-302.	-2555.	3230.	-.0666	-.0263	.0207	-.0012	-.0629	.0763	1935.	
.0840	-2203.	1464.	-1303.	73.	-2188.	2361.	-.0661	-.0070	.0312	.0140	-.0739	.0529	1509.	
.0850	-2098.	1431.	-693.	1067.	-1843.	1080.	-.0638	.0119	.0420	.0299	-.0820	.0243	1119.	
.0860	-2138.	1483.	182.	2156.	-1640.	-21.	-.0606	.0293	.0517	.0445	-.0850	-.0059	1269.	
.0870	-1981.	1535.	647.	3078.	-1325.	-753.	-.0570	.0444	.0591	.0554	-.0844	-.0342	1609.	
.0880	-2630.	1137.	-790.	3928.	-1079.	-1275.	-.0536	.0568	.0636	.0605	-.0790	-.0577	2000.	
.0890	-4625.	121.	-3744.	4863.	-1210.	-1651.	-.0504	.0666	.0654	.0593	-.0664	-.0753	2473.	
.0900	-6620.	-1178.	-6034.	5819.	-1469.	-1746.	-.0469	.0744	.0651	.0543	-.0495	-.0874	2929.	
.0910	-7636.	-2152.	-6908.	6342.	-1548.	-1430.	-.0425	.0812	.0632	.0492	-.0336	-.0966	3132.	
.0920	-8032.	-2323.	-6989.	5874.	-1603.	-703.	-.0370	.0874	.0600	.0453	-.0223	-.1060	2872.	
.0930	-7827.	-1784.	-6104.	4466.	-1682.	231.	-.0300	.0927	.0557	.0416	-.0170	-.1162	2239.	
.0940	-6692.	-1136.	-4203.	2839.	-1447.	1008.	-.0217	.0964	.0501	.0366	-.0180	-.1252	1566.	
.0950	-5127.	-752.	-2288.	1505.	-830.	1421.	-.0123	.0974	.0425	.0290	-.0240	-.1317	1045.	
.0960	-3733.	-368.	-645.	238.	-233.	1647.	-.0026	.0954	.0326	.0175	-.0326	-.1357	788.	
.0970	-2403.	357.	1333.	-1360.	172.	1943.	.0070	.0899	.0199	.0015	-.0422	-.1370	1114.	
.0980	-1133.	1261.	3095.	-3244.	710.	2268.	.0162	.0813	.0047	-.0181	-.0524	-.1341	1885.	
.0990	-76.	1934.	3645.	-5077.	1620.	2396.	.0253	.0701	-.0125	-.0411	-.0644	-.1263	2738.	
.1000	1140.	2246.	3515.	-6619.	2694.	2239.	.0341	.0570	-.0306	-.0677	-.0800	-.1149	3509.	
.1010	2883.	2324.	3523.	-7782.	3683.	1892.	.0426	.0431	-.0484	-.0968	-.0996	-.1011	4131.	
.1020	4886.	2266.	3300.	-8545.	4663.	1503.	.0505	.0291	-.0649	-.1249	-.1201	-.0847	4616.	
.1030	6880.	2051.	2732.	-8886.	5702.	1188.	.0570	.0157	-.0792	-.1491	-.1371	-.0641	4979.	
.1040	8781.	1508.	2472.	-8623.	6495.	920.	.0615	.0028	-.0907	-.1692	-.1466	-.0391	5077.	
.1050	9903.	383.	2245.	-7432.	6631.	554.	.0632	-.0094	-.0992	-.1859	-.1452	-.0104	4675.	
.1060	9563.	-1374.	1097.	-5203.	6118.	36.	.0616	-.0208	-.1046	-.1993	-.1304	.0220	3764.	
.1070	8401.	-3361.	-330.	-2339.	5289.	-490.	.0570	-.0307	-.1071	-.2080	-.1034	.0565	2720.	
.1080	6370.	-4570.	-1427.	-101.	4030.	-544.	.0492	-.0382	-.1075	-.2110	-.0624	.0903	1906.	
.1090	2428.	-3899.	-2880.	-164.	2085.	555.	.0383	-.0421	-.1082	-.2104	-.0022	.1227	1014.	
.1100	35.	-3436.	-3609.	-208.	530.	1071.	.0275	-.0427	-.1058	-.2094	.0495	.1472	569.	
.1110	-1998.	-3977.	-4092.	1151.	-013.	382.	.0183	-.0392	-.0996	-.2046	.0926	.1604	684.	
.1120	-3431.	-4475.	-3080.	3055.	-1806.	-783.	.0114	-.0312	-.0903	-.1903	.1298	.1610	1703.	
.1130	-2830.	-3524.	-95.	3384.	-1999.	-1362.	.0069	-.0188	-.0791	-.1676	.1563	.1510	1949.	
.1140	-1519.	-1380.	2737.	1949.	-1872.	-1327.	.0041	-.0033	-.0672	-.1414	.1729	.1331	1411.	
.1150	-1379.	323.	4172.	826.	-2033.	-1391.	.0024	.0139	-.0558	-.1160	.1865	.1122	1217.	
.1160	-1763.	871.	4696.	921.	-2003.	-1585.	.0013	.0311	-.0457	-.0946	.1975	.0945	1272.	
.1170	-2767.	886.	3110.	1098.	-1605.	-1431.	.0008	.0473	-.0373	-.0789	.2033	.0824	1131.	

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2 SAFETY COLD FKW24F--2 PSV

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

.1070	8401.	-1361.	-330.	-2339.	5289.	-490.	.570	-.0307	-.1071	-.2080	-.1034	.0565	2720.
.1080	6370.	-4570.	-1427.	-101.	4030.	-544.	.492	-.0382	-.1075	-.2110	-.0624	.0903	1906.
.1090	2428.	-3899.	-2880.	-164.	2085.	555.	.0383	-.0421	-.1082	-.2104	-.0022	.1227	1014.
.1100	35.	-3476.	-2609.	-208.	530.	1071.	.0275	-.0427	-.1058	-.2094	.0495	.1472	569.
.1110	-1998.	-3977.	-4092.	1151.	-813.	382.	.0183	-.0392	-.0995	-.2046	.0926	.1604	684.
.1120	-3431.	-4475.	-3080.	3055.	-1206.	-783.	.0114	-.0312	-.0903	-.1903	.1298	.1610	1703.
.1130	-2830.	-3524.	-95.	3384.	-1999.	-1362.	.0069	-.0188	-.0791	-.1676	.1563	.1510	1949.
.1140	-1519.	-1380.	2737.	1949.	-1872.	-1327.	.0041	-.0033	-.0672	-.1414	.1729	.1331	1411.
.1150	-1379.	323.	4172.	826.	-2023.	-1391.	.0024	.0139	-.0558	-.1160	.1865	.1122	1217.
.1160	-1763.	871.	4696.	921.	-2003.	-1585.	.0013	.0311	-.0457	-.0946	.1975	.0945	1272.
.1170	-2767.	886.	3110.	1098.	-1605.	-1431.	.0008	.0473	-.0373	-.0789	.2033	.0824	1131.

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CONDITION 24

LOADS

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ENGLISH UNITS

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

SECTION	19	MEMBER	1	SEQUENCE	36	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)	
.1180	-2534.	751.	1005.	1059.	-878.	-1188.		.0010	.0625	-.0300	-.0644	.1716	.0691	852.	
.1190	-3316.	1112.	-1499.	589.	-924.	-595.		.0016	.0768	-.0227	-.0465	.1724	.0519	584.	
.1200	-3441.	1361.	-2039.	179.	-969.	527.		.0028	.0897	-.0151	-.0243	.1501	.0351	524.	
.1210	-437.	2224.	96.	360.	-9.	1741.		.0039	.1007	-.0086	-.0029	.1197	.0220	833.	
.1220	707.	1356.	-96.	1317.	79.	2212.		.0042	.1094	-.0030	.0075	.0882	.0105	1207.	
.1230	749.	-379.	-935.	2769.	-834.	1945.		.0030	.1159	.0011	.0060	.0553	-.0017	1633.	
.1240	926.	-1576.	-1176.	3446.	-1580.	1926.		.0006	.1204	.0035	-.0016	.0262	-.0117	1993.	
.1250	1659.	-1484.	-1623.	2540.	-1520.	2466.		-.0029	.1232	.0039	-.0111	-.0002	-.0204	1806.	
.1260	3208.	-491.	-1371.	537.	-1482.	2942.		-.0080	.1241	.0024	-.0238	-.0292	-.0331	1564.	
.1270	1990.	773.	-1652.	-1914.	-2920.	3204.		-.0148	.1222	-.0006	-.0450	-.0467	-.0467	2221.	
.1280	1030.	1309.	-832.	-3536.	-3840.	3128.		-.0226	.1172	-.0055	-.0730	-.0551	-.0531	2852.	
.1290	240.	504.	-1314.	-3748.	-3500.	2388.		-.0302	.1093	-.0117	-.1052	-.0588	-.0505	2651.	
.1300	-1637.	-912.	-3310.	-3181.	-3341.	1045.		-.0371	.0997	-.0180	-.1386	-.0615	-.0466	2216.	
.1310	-2045.	-1642.	-2757.	-2694.	-3409.	-215.		-.0427	.0897	-.0235	-.1671	-.0711	-.0463	2039.	
.1320	-2167.	-1243.	-1825.	-2779.	-2891.	-643.		-.0465	.0799	-.0278	-.1864	-.0808	-.0433	1903.	
.1330	-903.	-975.	-1185.	-2342.	-847.	-774.		-.0485	.0706	-.0313	-.1967	-.0940	-.0334	1222.	
.1340	-178.	-2065.	-1323.	-481.	965.	-1433.		-.0496	.0615	-.0336	-.2047	-.1070	-.0187	840.	
.1350	-955.	-4250.	-1793.	2436.	1534.	-2428.		-.0507	.0528	-.0346	-.2130	-.1148	-.0003	1765.	
.1360	-1085.	-6211.	-2105.	5196.	2461.	-2820.		-.0520	.0457	-.0354	-.2157	-.1199	.0233	3001.	
.1370	-2156.	-6808.	-4489.	6446.	3760.	-2035.		-.0536	.0407	-.0358	-.2102	-.1187	.0507	3625.	
.1380	-2538.	-6129.	-5793.	6302.	4610.	-680.		-.0556	.0382	-.0353	-.1984	-.1193	.0732	3673.	
.1390	-3022.	-5071.	-6016.	5648.	4240.	421.		-.0577	.0378	-.0328	-.1837	-.1221	.0867	3316.	
.1400	-3483.	-4471.	-6604.	5436.	3749.	896.		-.0593	.0393	-.0277	-.1649	-.1258	.0942	3123.	
.1410	-1712.	-4228.	-5744.	5730.	4130.	856.		-.0602	.0425	-.0206	-.1402	-.1335	.0964	3334.	
.1420	-490.	-3426.	-3976.	5353.	3607.	739.		-.0612	.0471	-.0116	-.1131	-.1373	.0899	3045.	
.1430	520.	-1619.	-814.	3731.	1998.	813.		-.0628	.0527	-.0020	-.0850	-.1383	.0741	2020.	
.1440	925.	669.	1217.	1260.	380.	1176.		-.0649	.0586	.0073	-.0575	-.1334	.0563	827.	
.1450	721.	2375.	1178.	-938.	-692.	1499.		-.0669	.0634	.0160	-.0338	-.1216	.0419	890.	
.1460	567.	2906.	842.	-2015.	-1800.	1294.		-.0688	.0665	.0240	-.0164	-.1075	.0290	1404.	
.1470	-1699.	2750.	-941.	-2431.	-3811.	783.		-.0701	.0676	.0314	-.0042	-.0866	.0161	2150.	
.1480	-2828.	2498.	-1838.	-2501.	-5103.	384.		-.0700	.0669	.0381	.0096	-.0661	.0050	2669.	
.1490	-2504.	2322.	-1533.	-2315.	-5287.	259.		-.0679	.0643	.0440	.0269	-.0455	-.0024	2707.	
.1500	-2278.	1787.	-841.	-1483.	-5376.	-26.		-.0640	.0597	.0492	.0440	-.0237	-.0075	2613.	
.1510	-1262.	523.	582.	298.	-5335.	-814.		-.0589	.0532	.0528	.0579	-.0066	-.0108	2533.	
.1520	-733.	-934.	841.	2178.	-4960.	-1557.		-.0531	.0449	.0541	.0673	.0117	-.0078	2641.	
.1530	520.	-1839.	1294.	3357.	-3802.	-1720.		-.0472	.0355	.0522	.0741	.0308	.0027	2510.	
.1540	673.	-1753.	1285.	3240.	-2926.	-1120.		-.0422	.0254	.0474	.0778	.0562	.0184	2112.	
.1550	-386.	-1023.	764.	2148.	-2661.	-68.		-.0379	.0150	.0404	.0779	.0365	.0373	1603.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.50.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

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

.1440	925.	669.	117.	1260.	380.	1176.	-.0649	.0586	.0073	-.0575	-.1334	.0563	827.
.1450	721.	2375.	1178.	-938.	-692.	1499.	-.0669	.0634	.0160	-.0338	-.1216	.0419	890.
.1460	567.	2906.	842.	-2015.	-1800.	1294.	-.0688	.0665	.0240	-.0164	-.1075	.0290	1404.
.1470	-1699.	2750.	-941.	-2431.	-3811.	783.	-.0701	.0676	.0314	-.0042	-.0866	.0161	2150.
.1480	-2828.	2498.	-1838.	-2501.	-5103.	334.	-.0700	.0669	.0381	.0096	-.0661	.0050	2669.
.1490	-2504.	2322.	-1533.	-2315.	-5287.	259.	-.0679	.0643	.0440	.0269	-.0455	-.0024	2707.
.1500	-2278.	1787.	-841.	-1483.	-5376.	-26.	-.0640	.0597	.0492	.0440	-.0237	-.0075	2613.
.1510	-1262.	523.	582.	298.	-5335.	-814.	-.0589	.0532	.0528	.0579	-.0066	-.0108	2533.
.1520	-733.	-934.	841.	2178.	-4960.	-1557.	-.0531	.0449	.0541	.0673	.0117	-.0078	2641.
.1530	520.	-1839.	1294.	3357.	-3802.	-1720.	-.0472	.0355	.0522	.0741	.0308	.0027	2510.
.1540	673.	-1753.	1285.	3240.	-2926.	-1120.	-.0422	.0254	.0474	.0778	.0562	.0184	2112.
.1550	-386.	-1023.	764.	2148.	-2661.	-68.	-.0379	.0150	.0404	.0779	.0365	.0373	1603.

ADLPIPE PAGE 889 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.26.50.

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	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)
.1560	-197.	-386.	1280.	1032.	-2062.	958.	1170.
.1570	-1122.	-89.	885.	166.	-1651.	1820.	1154.
.1580	-1701.	-66.	1227.	-308.	-1359.	2321.	1269.
.1590	-735.	159.	2837.	-879.	-986.	2566.	1353.
.1600	-225.	965.	3310.	-2113.	-826.	2860.	1711.
.1610	58.	1675.	3465.	-3104.	-728.	2934.	2030.
.1620	1981.	1612.	5285.	-3040.	-256.	2447.	1833.
.1630	2289.	974.	5109.	-2591.	-257.	1585.	1429.
.1640	1825.	82.	3573.	-2031.	-448.	513.	1004.
.1650	2624.	-809.	2985.	-1297.	-169.	-657.	686.
.1660	2852.	-1243.	1449.	-1028.	222.	-1630.	909.
.1670	3655.	-1268.	-319.	-1205.	918.	-2497.	1368.
.1680	4597.	-1429.	-1856.	-1063.	1543.	-3536.	1875.
.1690	6559.	-1914.	-1767.	-170.	2385.	-4732.	2485.
.1700	8099.	-2015.	-1646.	423.	3273.	-5447.	2984.
.1710	7429.	-1363.	-2820.	61.	3541.	-5334.	3000.
.1720	7921.	-550.	-1635.	-254.	3763.	-4820.	2868.
.1730	7170.	196.	-667.	-372.	3459.	-3950.	2467.
.1740	4966.	1028.	-1058.	-682.	2082.	-2600.	1847.
.1750	3031.	1841.	-1217.	-1078.	2361.	-1002.	1304.
.1760	570.	2370.	-1456.	-1244.	1459.	473.	926.
.1770	-964.	2511.	-906.	-960.	716.	1610.	940.
.1780	-2718.	2361.	-965.	-434.	31.	2465.	1173.
.1790	-3397.	1769.	-350.	583.	-370.	2808.	1355.
.1800	-3422.	844.	493.	1863.	-714.	2589.	1532.
.1810	-5029.	-14.	-708.	2690.	-1435.	2139.	1746.
.1820	-5518.	-803.	-1446.	3281.	-1703.	1492.	1868.
.1830	-5804.	-1502.	-2101.	3765.	-1924.	670.	2006.
.1840	-6330.	-1857.	-2864.	3886.	-2393.	-156.	2140.
.1850	-6516.	-1768.	-3139.	3489.	-2880.	-793.	2152.
.1860	-6551.	-1590.	-3094.	2987.	-3258.	-1309.	2160.
.1870	-5120.	-1584.	-1839.	2327.	-3182.	-1854.	2175.
.1880	-4082.	-1325.	-1105.	2404.	-3288.	-2062.	2139.
.1890	-2824.	-590.	-161.	1483.	-3393.	-1682.	1906.
.1900	-813.	279.	1477.	491.	-3143.	-865.	1545.
.1910	73.	1050.	1975.	-504.	-2955.	253.	1410.
.1920	614.	1664.	2098.	-1477.	-2774.	1535.	1639.
.1930	841.	2053.	2107.	-2255.	-2650.	2795.	2092.

ADLPIPE PAGE 890 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.26.50.

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

.1820	-5518.	-503.	446.	3281.	-1703.	1472.	-.442	.0186	.0767	.1294	.0169	-.0433	1888.
.1830	-5804.	-1502.	2101.	3765.	-1924.	670.	-.514	.0174	.0817	.1204	.0140	-.0600	2006.
.1840	-6330.	-1857.	-2864.	3886.	-2393.	-156.	-.574	.0153	.0848	.1102	.0087	-.0769	2140.
.1850	-6516.	-1768.	-3139.	3489.	-2880.	-793.	-.0619	.0122	.0862	.0995	-.0002	-.0918	2152.
.1860	-6551.	-1590.	-3094.	2987.	-3258.	-1309.	-.0647	.0085	.0864	.0900	-.0105	-.1021	2160.
.1870	-5120.	-1584.	-1839.	2827.	-3182.	-1854.	-.0657	.0044	.0852	.0839	-.0262	-.1078	2175.
.1880	-4082.	-1325.	-1105.	2404.	-3238.	-2062.	-.0653	.0001	.0827	.0795	-.0428	-.1085	2139.
.1890	-2824.	-590.	-161.	1483.	-3393.	-1682.	-.0637	-.0046	.0788	.0766	-.0598	-.1029	1906.
.1900	-813.	279.	1477.	491.	-3143.	-865.	-.0612	-.0097	.0733	.0760	-.0754	-.0902	1545.
.1910	73.	1050.	1975.	-504.	-2955.	253.	-.0580	-.0155	.0663	.0760	-.0335	-.0704	1410.
.1920	614.	1664.	2098.	-1477.	-2774.	1535.	-.0543	-.0221	.0579	.0747	-.0361	-.0458	1639.
.1930	841.	2053.	2107.	-2255.	-2650.	2795.	-.0498	-.0295	.0488	.0717	-.0330	-.0191	2092.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
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CONDITION 24
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INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	19	MEMBER	1	SEQUENCE	36	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)	
.1940	699.	2142.	1908.	-2574.	-2441.	3791.	-.0443	-.0374	.0396	.0685	-.0739	.0068	2433.	
.1950	657.	2071.	1849.	-2537.	-1980.	4407.	-.0373	-.0455	.0306	.0658	-.0511	.0286	2557.	
.1960	965.	2051.	2146.	-2472.	-1361.	4620.	-.0289	-.0535	.0224	.0627	-.0474	.0436	2537.	
.1970	1260.	1942.	2348.	-2269.	-740.	4281.	-.0191	-.0612	.0150	.0584	-.0336	.0504	2297.	
.1980	1432.	1445.	2228.	-1570.	-27.	3268.	-.0081	-.0683	.0087	.0534	-.0191	.0497	1699.	
.1990	1750.	613.	2189.	-465.	839.	1751.	.0036	-.0747	.0034	.0478	-.0040	.0433	936.	
.2000	2016.	-193.	2343.	569.	1596.	57.	.0155	-.0799	-.0010	.0421	.0120	.0323	794.	
.2010	1802.	-703.	2296.	1198.	2024.	-1540.	.0270	-.0837	-.0047	.0376	.0294	.0179	1318.	
.2020	1283.	-843.	1917.	1327.	2293.	-2808.	.0378	-.0859	-.0081	.0352	.0473	.0029	1809.	
.2030	792.	-708.	1350.	1053.	2548.	-3638.	.0477	-.0865	-.0108	.0351	.0538	-.0105	2139.	
.2040	257.	-539.	705.	700.	2611.	-4139.	.0569	-.0856	-.0129	.0374	.0774	-.0216	2316.	
.2050	-167.	-447.	336.	499.	2417.	-4381.	.0653	-.0831	-.0140	.0435	.0869	-.0310	2356.	
.2060	-18.	-221.	591.	247.	2213.	-4185.	.0731	-.0793	-.0143	.0542	.0915	-.0379	2222.	
.2070	582.	299.	1259.	-296.	2124.	-3434.	.0802	-.0742	-.0139	.0687	.0915	-.0422	1897.	
.2080	1455.	868.	1894.	-913.	1977.	-2370.	.0864	-.0684	-.0131	.0848	.0377	-.0448	1508.	
.2090	2166.	1149.	2392.	-1279.	1716.	-1310.	.0915	-.0622	-.0122	.1001	.0809	-.0463	1176.	
.2100	2939.	1177.	2671.	-1494.	1533.	-309.	.0956	-.0560	-.0114	.1123	.0719	-.0469	1014.	
.2110	3528.	1253.	2389.	-1919.	1486.	696.	.0984	-.0499	-.0108	.1209	.0522	-.0475	1183.	
.2120	3771.	1554.	1670.	-2687.	1447.	1623.	.0997	-.0440	-.0106	.1258	.0528	-.0502	1620.	
.2130	3906.	2003.	1079.	-3638.	1387.	2284.	.0997	-.0386	-.0103	.1270	.0436	-.0561	2116.	
.2140	4087.	2368.	799.	-4458.	1420.	2513.	.0983	-.0339	-.0097	.1243	.0345	-.0645	2489.	
.2150	4233.	2438.	681.	-4824.	1580.	2198.	.0956	-.0303	-.0085	.1180	.0261	-.0745	2592.	
.2160	4294.	2239.	744.	-4708.	1756.	1403.	.0914	-.0277	-.0068	.1089	.0186	-.0854	2445.	
.2170	4269.	2007.	981.	-4392.	1866.	382.	.0855	-.0261	-.0046	.0976	.0121	-.0957	2243.	
.2180	4002.	1862.	1120.	-4047.	1919.	-612.	.0778	-.0256	-.0022	.0852	.0077	-.1030	2119.	
.2190	3398.	1662.	1042.	-3505.	1919.	-1488.	.0682	-.0259	.0003	.0727	.0061	-.1051	1998.	
.2200	2504.	1238.	844.	-2594.	1795.	-2212.	.0568	-.0270	.0031	.0602	.0072	-.1008	1805.	
.2210	1290.	600.	433.	-1404.	1476.	-2697.	.0440	-.0285	.0059	.0481	.0104	-.0897	1584.	
.2220	-190.	-130.	-218.	-114.	1014.	-2859.	.0302	-.0301	.0088	.0375	.0147	-.0723	1423.	
.2230	-1559.	-791.	-701.	1129.	540.	-2656.	.0160	-.0314	.0118	.0298	.0191	-.0502	1376.	
.2240	-2531.	-1218.	-737.	2136.	100.	-2088.	.0019	-.0319	.0148	.0251	.0216	-.0256	1401.	
.2250	-3161.	-1372.	-569.	2803.	-335.	-1254.	-.0116	-.0317	.0176	.0224	.0207	-.0010	1448.	
.2260	-3473.	-1394.	-378.	3229.	-716.	-348.	-.0240	-.0307	.0202	.0208	.0157	.0217	1558.	
.2270	-3365.	-1381.	-20.	3481.	-956.	495.	-.0351	-.0288	.0223	.0198	.0070	.0410	1707.	
.2280	-2963.	-1243.	495.	3409.	-1082.	1273.	-.0448	-.0262	.0240	.0184	-.0342	.0556	1779.	
.2290	-2512.	-893.	964.	2894.	-1184.	1988.	-.0529	-.0229	.0250	.0161	-.0172	.0643	1737.	
.2300	-2051.	-406.	1342.	2056.	-1273.	2567.	-.0595	-.0189	.0254	.0123	-.0312	.0667	1653.	
.2310	-1578.	67.	1610.	1094.	-1309.	2928.	-.0645	-.0144	.0254	.0068	-.0455	.0632	1588.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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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

.2200	2504.	1238.	444.	-2594.	1795.	-2212.	.0568	-.0270	.0031	.0602	.0072	-.1008	1805.
.2210	1290.	600.	433.	-1404.	1476.	-2697.	.0440	-.0285	.0059	.0481	.0104	-.0897	1584.
.2220	-190.	-130.	-218.	-114.	1014.	-2859.	.0302	-.0301	.0088	.0375	.0147	-.0723	1423.
.2230	-1559.	-791.	-701.	1129.	540.	-2656.	.0160	-.0314	.0118	.0298	.0191	-.0502	1376.
.2240	-2531.	-1218.	-737.	2136.	109.	-2088.	.0019	-.0319	.0148	.0251	.0216	-.0256	1401.
.2250	-3161.	-1372.	-569.	2803.	-335.	-1254.	-.0116	-.0317	.0176	.0224	.0207	-.0010	1448.
.2260	-3473.	-1394.	-378.	3229.	-716.	-348.	-.0240	-.0307	.0202	.0208	.0157	.0217	1558.
.2270	-3365.	-1381.	-20.	3481.	-956.	495.	-.0351	-.0288	.0223	.0198	.0070	.0410	1707.
.2280	-2963.	-1243.	495.	3409.	-1082.	1273.	-.0448	-.0262	.0240	.0184	-.0042	.0556	1779.
.2290	-2512.	-893.	964.	2894.	-1184.	1988.	-.0529	-.0229	.0250	.0161	-.0172	.0643	1737.
.2300	-2051.	-406.	1342.	2056.	-1273.	2567.	-.0595	-.0189	.0254	.0123	-.0312	.0667	1653.
.2310	-1578.	67.	1610.	1094.	-1309.	2928.	-.0645	-.0144	.0254	.0068	-.0455	.0632	1588.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.50.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

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INTERNAL 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)	
.2320	-1231.	429.	1622.	129.	-1303.	3036.	-.0679	-.0093	.0252	-.0005	-.0593	.0548	1550.	
.2330	-1017.	648.	1439.	-740.	-1295.	2886.	-.0698	-.0039	.0250	-.0090	-.0720	.0421	1523.	
.2340	-782.	759.	1351.	-1432.	-1295.	2535.	-.0702	.0018	.0249	-.0174	-.0832	.0262	1493.	
.2350	-540.	819.	1445.	-1917.	-1306.	2095.	-.0692	.0076	.0249	-.0250	-.0916	.0087	1465.	
.2360	-420.	784.	1602.	-2124.	-1341.	1628.	-.0672	.0133	.0249	-.0314	-.0961	-.0082	1403.	
.2370	-428.	522.	1750.	-1929.	-1403.	1114.	-.0642	.0185	.0247	-.0369	-.0963	-.0229	1234.	
.2380	-572.	20.	1753.	-1360.	-1491.	585.	-.0604	.0233	.0239	-.0418	-.0921	-.0342	984.	
.2390	-936.	-549.	1392.	-647.	-1590.	180.	-.0560	.0276	.0222	-.0462	-.0834	-.0414	809.	
.2400	-1431.	-1000.	713.	2.	-1651.	2.	-.0509	.0315	.0196	-.0498	-.0717	-.0443	774.	
.2410	-1815.	-1291.	20.	528.	-1632.	27.	-.0451	.0353	.0161	-.0525	-.0574	-.0437	804.	
.2420	-2010.	-1460.	-533.	920.	-1537.	171.	-.0386	.0391	.0118	-.0542	-.0422	-.0404	843.	
.2430	-2046.	-1531.	-974.	1161.	-1360.	372.	-.0313	.0429	.0068	-.0555	-.0270	-.0350	856.	
.2440	-1867.	-1501.	-1275.	1248.	-1068.	595.	-.0234	.0468	.0013	-.0563	-.0126	-.0284	819.	
.2450	-1477.	-1341.	-1381.	1163.	-686.	825.	-.0150	.0505	-.0046	-.0569	.0003	-.0214	742.	
.2460	-1024.	-1036.	-1328.	883.	-293.	1049.	-.0064	.0539	-.0110	-.0577	.0116	-.0146	657.	
.2470	-590.	-653.	-1095.	472.	81.	1229.	.0021	.0567	-.0176	-.0592	.0215	-.0081	618.	
.2480	-154.	-306.	-740.	52.	465.	1311.	.0103	.0588	-.0245	-.0618	.0295	-.0021	652.	
.2490	178.	-54.	-542.	-332.	833.	1271.	.0180	.0600	-.0316	-.0661	.0352	.0033	729.	
.2500	298.	81.	-623.	-665.	1130.	1104.	.0252	.0603	-.0388	-.0725	.0385	.0079	803.	
.2510	385.	69.	-739.	-871.	1388.	790.	.0318	.0598	-.0458	-.0806	.0391	.0115	853.	
.2520	650.	-74.	-716.	-922.	1677.	342.	.0377	.0589	-.0525	-.0898	.0368	.0142	911.	
.2530	1044.	-250.	-738.	-935.	1980.	-169.	.0429	.0576	-.0586	-.0998	.0315	.0160	1029.	
.2540	1471.	-404.	-928.	-982.	2239.	-686.	.0471	.0562	-.0642	-.1105	.0239	.0174	1190.	
.2550	1981.	-603.	-1124.	-960.	2458.	-1214.	.0502	.0548	-.0690	-.1215	.0149	.0189	1361.	
.2560	2577.	-882.	-1212.	-789.	2653.	-1729.	.0519	.0534	-.0731	-.1321	.0061	.0216	1529.	
.2570	3111.	-1139.	-1280.	-561.	2767.	-2125.	.0519	.0520	-.0764	-.1419	-.0015	.0260	1656.	
.2580	3472.	-1260.	-1375.	-388.	2730.	-2301.	.0501	.0507	-.0788	-.1505	-.0067	.0320	1683.	
.2590	3641.	-1257.	-1465.	-255.	2550.	-2241.	.0443	.0497	-.0803	-.1576	-.0091	.0398	1595.	
.2600	3586.	-1228.	-1547.	-82.	2263.	-1991.	.0407	.0490	-.0807	-.1630	-.0081	.0494	1413.	
.2610	3333.	-1253.	-1526.	193.	1884.	-1618.	.0334	.0488	-.0800	-.1670	-.0043	.0601	1167.	
.2620	2974.	-1325.	-1281.	555.	1415.	-1163.	.0246	.0493	-.0781	-.1697	.0015	.0708	897.	
.2630	2528.	-1334.	-892.	851.	893.	-614.	.0148	.0507	-.0750	-.1712	.0084	.0803	645.	
.2640	1988.	-1195.	-466.	931.	379.	40.	.0043	.0529	-.0710	-.1716	.0157	.0879	471.	
.2650	1414.	-977.	49.	831.	-92.	710.	-.0066	.0560	-.0661	-.1715	.0229	.0929	514.	
.2660	810.	-805.	615.	694.	-532.	1276.	-.0176	.0597	-.0608	-.1715	.0293	.0949	725.	
.2670	80.	-713.	988.	568.	-946.	1693.	-.0283	.0637	-.0551	-.1721	.0345	.0938	947.	
.2680	-771.	-655.	1056.	422.	-1305.	1980.	-.0385	.0679	-.0493	-.1733	.0381	.0898	1129.	
.2690	-1600.	-610.	981.	273.	-1588.	2127.	-.0477	.0721	-.0436	-.1746	.0396	.0830	1250.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.50.

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

.2580	3477.	-1260.	1171.	-389.	2730.	-2301.	.0501	.0507	-.0788	-.1505	-.0067	.0320	1683.
.2590	3641.	-1257.	-1465.	-255.	2550.	-2241.	.0463	.0497	-.0803	-.1576	-.0091	.0398	1595.
.2600	3586.	-1228.	-1547.	-82.	2263.	-1991.	.0407	.0490	-.0807	-.1630	-.0081	.0494	1413.
.2610	3333.	-1253.	-1526.	193.	1884.	-1618.	.0334	.0488	-.0800	-.1670	-.0043	.0601	1167.
.2620	2974.	-1325.	-1281.	555.	1415.	-1163.	.0246	.0493	-.0781	-.1697	.0015	.0708	897.
.2630	2528.	-1334.	-892.	851.	893.	-614.	.0148	.0507	-.0750	-.1712	.0084	.0803	645.
.2640	1988.	-1195.	-466.	931.	379.	40.	.0043	.0529	-.0710	-.1716	.0157	.0879	471.
.2650	1414.	-977.	49.	831.	-92.	710.	-.0066	.0560	-.0661	-.1715	.0229	.0929	514.
.2660	810.	-805.	615.	694.	-532.	1276.	-.0176	.0597	-.0608	-.1715	.0293	.0949	725.
.2670	80.	-713.	988.	568.	-946.	1693.	-.0283	.0637	-.0551	-.1721	.0345	.0938	947.
.2680	-771.	-655.	1056.	422.	-1305.	1980.	-.0385	.0679	-.0493	-.1733	.0381	.0898	1129.
.2690	-1600.	-610.	981.	273.	-1538.	2127.	-.0477	.0721	-.0436	-.1746	.0396	.0830	1250.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.50.

S/RV PIPING KEWAUNEE GKWOBF 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	19	MEMBER	1	SEQUENCE	36	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)			
.2700	-2317.	-603.	882.	186.	-1804.	2100.	-.0558	.0763	-.0380	-.1755	.0385	.0737	1300.			
.2710	-2881.	-654.	719.	202.	-1951.	1895.	-.0624	.0803	-.0325	-.1757	.0342	.0626	1278.			
.2720	-3203.	-761.	490.	336.	-2002.	1546.	-.0674	.0842	-.0273	-.1750	.0263	.0507	1196.			
.2730	-3234.	-891.	260.	570.	-1963.	1114.	-.0709	.0880	-.0223	-.1729	.0149	.0388	1091.			
.2740	-3081.	-978.	18.	821.	-1887.	699.	-.0729	.0916	-.0177	-.1692	.0010	.0280	1018.			
.2750	-2827.	-996.	-266.	1032.	-1799.	384.	-.0737	.0949	-.0137	-.1640	-.0143	.0194	988.			
.2760	-2529.	-998.	-625.	1239.	-1705.	190.	-.0735	.0977	-.0104	-.1576	-.0298	.0141	992.			
.2770	-2314.	-1024.	-1145.	1472.	-1633.	117.	-.0726	.0999	-.0078	-.1504	-.0446	.0122	1032.			
.2780	-2241.	-1048.	-1807.	1691.	-1601.	172.	-.0710	.1013	-.0060	-.1427	-.0580	.0137	1094.			
.2790	-2206.	-1041.	-2430.	1861.	-1574.	336.	-.0688	.1018	-.0050	-.1345	-.0595	.0176	1153.			
.2800	-2113.	-1019.	-2890.	1994.	-1505.	538.	-.0661	.1013	-.0046	-.1260	-.0793	.0232	1198.			
.2810	-1968.	-986.	-3216.	2088.	-1381.	715.	-.0629	.0999	-.0048	-.1175	-.0874	.0291	1220.			
.2820	-1753.	-924.	-3405.	2116.	-1192.	839.	-.0591	.0977	-.0053	-.1094	-.0936	.0345	1204.			
.2830	-1430.	-857.	-3399.	2097.	-931.	871.	-.0548	.0945	-.0062	-.1021	-.0979	.0386	1150.			
.2840	-1065.	-837.	-3250.	2071.	-608.	773.	-.0501	.0906	-.0073	-.0958	-.0996	.0411	1074.			
.2850	-768.	-857.	-3095.	2004.	-251.	561.	-.0453	.0859	-.0086	-.0908	-.0982	.0421	982.			
.2860	-569.	-850.	-3001.	1820.	111.	301.	-.0404	.0805	-.0100	-.0871	-.0938	.0418	866.			
.2870	-460.	-793.	-2960.	1527.	450.	32.	-.0356	.0744	-.0115	-.0843	-.0864	.0403	746.			
.2880	-437.	-734.	-2945.	1217.	739.	-253.	-.0311	.0677	-.0129	-.0819	-.0766	.0382	678.			
.2890	-452.	-717.	-2897.	966.	970.	-554.	-.0269	.0605	-.0141	-.0794	-.0649	.0358	692.			
.2900	-435.	-732.	-2760.	794.	1137.	-837.	-.0230	.0528	-.0149	-.0762	-.0522	.0336	759.			
.2910	-381.	-747.	-2520.	697.	1213.	-1059.	-.0196	.0449	-.0152	-.0716	-.0391	.0320	822.			
.2920	-311.	-749.	-2169.	679.	1176.	-1192.	-.0165	.0368	-.0148	-.0653	-.0258	.0311	847.			
.2930	-232.	-752.	-1694.	738.	1031.	-1224.	-.0138	.0287	-.0140	-.0573	-.0126	.0314	826.			
.2940	-179.	-764.	-1164.	849.	787.	-1158.	-.0115	.0207	-.0126	-.0477	.0005	.0329	767.			
.2950	-218.	-769.	-705.	952.	449.	-1001.	-.0095	.0131	-.0109	-.0369	.0132	.0354	681.			
.2960	-347.	-731.	-362.	978.	44.	-766.	-.0076	.0057	-.0090	-.0254	.0252	.0384	582.			
.2970	-477.	-626.	-81.	885.	-372.	-487.	-.0057	-.0011	-.0069	-.0132	.0361	.0412	504.			
.2980	-523.	-450.	198.	677.	-743.	-217.	-.0036	-.0076	-.0048	-.0007	.0452	.0432	482.			
.2990	-424.	-222.	501.	382.	-1033.	-9.	-.0012	-.0136	-.0027	.0119	.0521	.0436	516.			
.3000	-141.	20.	827.	41.	-1213.	89.	.0017	-.0192	-.0006	.0244	.0566	.0424	570.			
.3010	323.	245.	1153.	-301.	-1265.	55.	.0050	-.0245	.0014	.0363	.0588	.0394	610.			
.3020	921.	456.	1463.	-636.	-1195.	-87.	.0086	-.0295	.0032	.0478	.0591	.0353	636.			
.3030	1581.	689.	1766.	-993.	-1036.	-275.	.0122	-.0343	.0050	.0587	.0585	.0305	685.			
.3040	2202.	948.	2022.	-1380.	-831.	-452.	.0155	-.0388	.0066	.0689	.0577	.0261	784.			
.3050	2669.	1193.	2142.	-1747.	-619.	-595.	.0185	-.0432	.0081	.0785	.0574	.0228	912.			
.3060	2913.	1386.	2097.	-2038.	-426.	-689.	.0207	-.0474	.0096	.0874	.0580	.0212	1028.			
.3070	2940.	1531.	1967.	-2229.	-278.	-710.	.0222	-.0514	.0112	.0959	.0596	.0217	1104.			

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.50.

S/RV PIPING KEWAUNEE GKWOBF 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

.2970	-477.	-626.	-81.	885.	-372.	-437.	-.0057	-.0011	-.0069	-.0132	.0361	.0412	504.
.2980	-523.	-450.	198.	677.	-743.	-217.	-.0036	-.0076	-.0048	-.0007	.0452	.0432	482.
.2990	-424.	-222.	501.	382.	-1033.	-9.	-.0012	-.0136	-.0027	.0119	.0521	.0436	516.
.3000	-141.	20.	827.	41.	-1213.	89.	.0017	-.0192	-.0006	.0244	.0566	.0424	570.
.3010	323.	245.	1153.	-301.	-1265.	55.	.0050	-.0245	.0014	.0367	.0588	.0394	610.
.3020	921.	456.	1463.	-636.	-1195.	-87.	.0086	-.0295	.0032	.0478	.0591	.0353	636.
.3030	1581.	689.	1766.	-993.	-1036.	-275.	.0122	-.0343	.0050	.0587	.0585	.0305	685.
.3040	2202.	948.	2022.	-1380.	-831.	-452.	.0155	-.0388	.0066	.0689	.0577	.0261	784.
.3050	2669.	1193.	2142.	-1747.	-619.	-595.	.0185	-.0432	.0081	.0785	.0574	.0228	912.
.3060	2913.	1386.	2097.	-2038.	-426.	-689.	.0207	-.0474	.0096	.0874	.0580	.0212	1028.
.3070	2940.	1531.	1967.	-2229.	-278.	-710.	.0222	-.0514	.0112	.0959	.0596	.0217	1104.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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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	19	MEMBER	1	SEQUENCE	36	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)	
.3080	2774.	1637.	1828.	-2295.	-190.	-652.	.0230	-.0552	.0131	.1042	.0519	.0240	1122.	
.3090	2446.	1684.	1705.	-2189.	-160.	-546.	.0230	-.0590	.0153	.1124	.0645	.0277	1060.	
.3100	2013.	1645.	1619.	-1876.	-167.	-434.	.0225	-.0626	.0178	.1205	.0668	.0322	906.	
.3110	1532.	1519.	1595.	-1375.	-195.	-352.	.0215	-.0661	.0205	.1282	.0582	.0366	672.	
.3120	1033.	1329.	1616.	-752.	-230.	-320.	.0203	-.0695	.0235	.1352	.0682	.0402	398.	
.3130	551.	1114.	1641.	-97.	-247.	-344.	.0189	-.0726	.0264	.1411	.0663	.0421	204.	
.3140	137.	919.	1640.	489.	-219.	-414.	.0176	-.0754	.0292	.1455	.0622	.0415	317.	
.3150	-186.	780.	1580.	915.	-139.	-516.	.0165	-.0778	.0317	.1483	.0556	.0382	496.	
.3160	-398.	697.	1439.	1138.	-4.	-649.	.0155	-.0797	.0338	.1492	.0464	.0317	614.	
.3170	-460.	661.	1233.	1154.	191.	-804.	.0149	-.0809	.0357	.1484	.0347	.0224	665.	
.3180	-356.	671.	1005.	974.	432.	-953.	.0145	-.0816	.0372	.1463	.0209	.0104	670.	
.3190	-102.	720.	812.	641.	686.	-1070.	.0143	-.0817	.0387	.1434	.0055	-.0034	667.	
.3200	254.	787.	700.	215.	911.	-1136.	.0141	-.0812	.0400	.1402	-.0104	-.0184	690.	
.3210	662.	851.	695.	-248.	1080.	-1132.	.0137	-.0804	.0414	.1372	-.0259	-.0333	742.	
.3220	1042.	914.	782.	-715.	1163.	-1034.	.0129	-.0791	.0429	.1347	-.0398	-.0473	803.	
.3230	1297.	987.	916.	-1158.	1131.	-826.	.0118	-.0777	.0445	.1330	-.0512	-.0595	852.	
.3240	1370.	1070.	1065.	-1551.	975.	-517.	.0102	-.0761	.0462	.1321	-.0594	-.0695	892.	
.3250	1263.	1157.	1217.	-1870.	719.	-138.	.0081	-.0743	.0480	.1320	-.0641	-.0770	941.	
.3260	982.	1256.	1348.	-2107.	396.	277.	.0059	-.0725	.0498	.1326	-.0655	-.0822	1013.	
.3270	565.	1373.	1444.	-2255.	44.	684.	.0037	-.0707	.0516	.1339	-.0638	-.0854	1104.	
.3280	90.	1488.	1507.	-2284.	-287.	1025.	.0017	-.0689	.0534	.1356	-.0598	-.0871	1181.	
.3290	-378.	1565.	1527.	-2159.	-550.	1239.	.0003	-.0673	.0550	.1374	-.0544	-.0880	1195.	
.3300	-801.	1582.	1500.	-1869.	-716.	1291.	-.0004	-.0659	.0564	.1391	-.0480	-.0884	1116.	
.3310	-1131.	1548.	1446.	-1441.	-767.	1183.	-.0003	-.0648	.0574	.1405	-.0412	-.0886	945.	
.3320	-1360.	1485.	1359.	-926.	-705.	943.	.0007	-.0640	.0578	.1414	-.0343	-.0888	702.	
.3330	-1525.	1398.	1206.	-371.	-553.	609.	.0024	-.0637	.0577	.1417	-.0275	-.0887	423.	
.3340	-1652.	1278.	997.	195.	-342.	215.	.0049	-.0637	.0568	.1412	-.0206	-.0882	210.	
.3350	-1726.	1131.	798.	735.	-97.	-193.	.0080	-.0641	.0552	.1399	-.0139	-.0870	359.	
.3360	-1744.	989.	648.	1186.	149.	-561.	.0116	-.0646	.0529	.1379	-.0074	-.0850	619.	
.3370	-1713.	898.	559.	1475.	368.	-835.	.0155	-.0653	.0498	.1353	-.0011	-.0821	813.	
.3380	-1605.	886.	568.	1563.	548.	-985.	.0196	-.0660	.0460	.1320	.0046	-.0783	903.	
.3390	-1393.	943.	697.	1458.	686.	-1012.	.0238	-.0667	.0416	.1282	.0097	-.0738	892.	
.3400	-1084.	1048.	930.	1191.	777.	-937.	.0282	-.0674	.0366	.1236	.0140	-.0685	798.	
.3410	-697.	1193.	1234.	789.	822.	-779.	.0325	-.0680	.0310	.1182	.0175	-.0629	647.	
.3420	-250.	1387.	1569.	264.	832.	-549.	.0368	-.0686	.0250	.1119	.0204	-.0572	483.	
.3430	225.	1624.	1832.	-352.	823.	-272.	.0410	-.0691	.0187	.1048	.0229	-.0515	438.	
.3440	689.	1863.	2140.	-984.	804.	5.	.0452	-.0697	.0121	.0967	.0251	-.0464	596.	
.3450	1129.	2047.	2339.	-1540.	791.	228.	.0492	-.0703	.0056	.0879	.0271	-.0419	818.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.50.

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

.3340	-1852.	1115.	798.	735.	-97.	-193.	.0080	-.0641	.0552	.1399	-.0139	-.0870	210.
.3350	-1726.	989.	648.	1186.	149.	-561.	.0116	-.0646	.0529	.1379	-.0074	-.0850	619.
.3370	-1713.	898.	559.	1475.	368.	-835.	.0155	-.0653	.0498	.1353	-.0011	-.0821	813.
.3380	-1605.	886.	568.	1563.	548.	-985.	.0176	-.0660	.0460	.1320	.0046	-.0783	903.
.3390	-1393.	943.	697.	1458.	636.	-1012.	.0238	-.0667	.0416	.1282	.0097	-.0738	892.
.3400	-1084.	1048.	930.	1191.	777.	-937.	.0282	-.0674	.0366	.1236	.0140	-.0685	798.
.3410	-697.	1193.	1234.	789.	822.	-779.	.0325	-.0680	.0310	.1182	.0175	-.0629	647.
.3420	-250.	1387.	1569.	264.	832.	-549.	.0368	-.0686	.0250	.1119	.0204	-.0572	483.
.3430	225.	1624.	1882.	-352.	823.	-272.	.0410	-.0691	.0187	.1048	.0229	-.0515	438.
.3440	689.	1863.	2140.	-984.	804.	5.	.0452	-.0697	.0121	.0967	.0251	-.0464	596.
.3450	1129.	2047.	2339.	-1540.	791.	228.	.0492	-.0703	.0056	.0879	.0271	-.0419	818.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.50.

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	19	MEMBER	1	SEQUENCE	36	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)		
.3460	1539.	2144.	2467.	-1956.	806.	362.	.0531	-.0707	-.0008	.0783	.0289	-.0385	1006.		
.3470	1903.	2153.	2498.	-2215.	861.	400.	.0569	-.0710	-.0068	.0682	.0305	-.0363	1129.		
.3480	2212.	2074.	2444.	-2310.	961.	341.	.0605	-.0709	-.0123	.0579	.0320	-.0354	1183.		
.3490	2469.	1898.	2346.	-2228.	1101.	186.	.0638	-.0705	-.0170	.0476	.0333	-.0358	1168.		
.3500	2658.	1619.	2208.	-1971.	1276.	-53.	.0667	-.0696	-.0211	.0376	.0346	-.0374	1101.		
.3510	2743.	1262.	2007.	-1584.	1466.	-342.	.0690	-.0682	-.0243	.0280	.0361	-.0398	1024.		
.3520	2702.	878.	1748.	-1142.	1644.	-631.	.0707	-.0660	-.0268	.0190	.0378	-.0427	984.		
.3530	2534.	515.	1469.	-716.	1788.	-879.	.0715	-.0631	-.0285	.0109	.0399	-.0459	992.		
.3540	2248.	207.	1205.	-352.	1881.	-1059.	.0714	-.0594	-.0296	.0039	.0423	-.0491	1025.		
.3550	1878.	-18.	993.	-87.	1916.	-1153.	.0704	-.0548	-.0299	-.0018	.0448	-.0520	1049.		
.3560	1469.	-131.	862.	46.	1890.	-1152.	.0685	-.0494	-.0296	-.0062	.0471	-.0547	1038.		
.3570	1060.	-118.	811.	31.	1806.	-1058.	.0659	-.0431	-.0288	-.0092	.0486	-.0570	981.		
.3580	687.	10.	828.	-115.	1679.	-886.	.0627	-.0361	-.0275	-.0110	.0490	-.0589	892.		
.3590	386.	223.	898.	-351.	1530.	-664.	.0589	-.0285	-.0257	-.0117	.0478	-.0602	799.		
.3600	165.	485.	978.	-628.	1369.	-418.	.0548	-.0206	-.0237	-.0117	.0449	-.0610	733.		
.3610	6.	756.	998.	-896.	1206.	-173.	.0503	-.0126	-.0215	-.0112	.0401	-.0611	709.		
.3620	-108.	989.	905.	-1094.	1055.	43.	.0457	-.0048	-.0191	-.0107	.0335	-.0604	713.		
.3630	-181.	1138.	689.	-1164.	929.	202.	.0408	.0027	-.0168	-.0105	.0252	-.0589	704.		
.3640	-225.	1170.	359.	-1070.	830.	283.	.0359	.0096	-.0144	-.0107	.0154	-.0565	648.		
.3650	-253.	1084.	-68.	-810.	756.	281.	.0308	.0158	-.0121	-.0115	.0044	-.0534	535.		
.3660	-264.	895.	-554.	-409.	707.	206.	.0255	.0212	-.0099	-.0132	-.0072	-.0495	395.		
.3670	-265.	631.	-1055.	87.	678.	75.	.0200	.0259	-.0077	-.0155	-.0191	-.0451	322.		
.3680	-280.	318.	-1535.	628.	652.	-90.	.0142	.0298	-.0057	-.0187	-.0306	-.0401	426.		
.3690	-328.	-19.	-1959.	1166.	613.	-254.	.0081	.0330	-.0038	-.0226	-.0410	-.0346	630.		
.3700	-420.	-356.	-2306.	1655.	549.	-421.	.0016	.0356	-.0020	-.0273	-.0499	-.0286	840.		
.3710	-570.	-661.	-2570.	2046.	448.	-532.	-.0052	.0377	-.0004	-.0325	-.0566	-.0222	1013.		
.3720	-777.	-906.	-2739.	2301.	304.	-573.	-.0124	.0393	.0009	-.0382	-.0510	-.0155	1120.		
.3730	-1018.	-1074.	-2791.	2403.	117.	-533.	-.0198	.0406	.0021	-.0440	-.0531	-.0086	1155.		
.3740	-1260.	-1168.	-2711.	2363.	-103.	-415.	-.0273	.0415	.0030	-.0498	-.0529	-.0016	1125.		
.3750	-1479.	-1199.	-2512.	2208.	-346.	-235.	-.0347	.0423	.0039	-.0554	-.0508	.0052	1053.		
.3760	-1658.	-1170.	-2211.	1958.	-602.	-3.	-.0418	.0429	.0045	-.0604	-.0572	.0119	960.		
.3770	-1781.	-1079.	-1823.	1628.	-859.	272.	-.0484	.0434	.0051	-.0649	-.0524	.0183	872.		
.3780	-1851.	-940.	-1385.	1251.	-1106.	574.	-.0543	.0438	.0055	-.0685	-.0467	.0244	827.		
.3790	-1890.	-788.	-952.	887.	-1339.	873.	-.0594	.0441	.0057	-.0714	-.0403	.0301	856.		
.3800	-1915.	-664.	-580.	593.	-1551.	1132.	-.0636	.0444	.0059	-.0735	-.0337	.0355	942.		
.3810	-1935.	-583.	-305.	401.	-1737.	1329.	-.0667	.0445	.0059	-.0751	-.0270	.0407	1042.		
.3820	-1949.	-541.	-140.	310.	-1890.	1450.	-.0686	.0445	.0057	-.0759	-.0206	.0454	1126.		
.3830	-1946.	-524.	-65.	313.	-2003.	1486.	-.0694	.0444	.0053	-.0760	-.0147	.0495	1178.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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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

.3720	-1018.	-1074.	-2791.	2403.	117.	-533.	-.0124	.0391	.0009	-.0382	-.0510	-.0155	1120.
.3730	-1260.	-1168.	-2711.	2363.	-103.	-415.	-.0273	.0415	.0030	-.0498	-.0629	-.0016	1125.
.3750	-1479.	-1199.	-2512.	2208.	-340.	-235.	-.0347	.0423	.0039	-.0554	-.0608	.0052	1053.
.3760	-1658.	-1170.	-2211.	1958.	-602.	-3.	-.0418	.0429	.0045	-.0604	-.0572	.0119	960.
.3770	-1781.	-1079.	-1823.	1628.	-859.	272.	-.0484	.0434	.0051	-.0649	-.0524	.0183	872.
.3780	-1851.	-940.	-1385.	1251.	-1106.	574.	-.0543	.0438	.0055	-.0685	-.0487	.0244	827.
.3790	-1890.	-788.	-952.	887.	-1339.	873.	-.0594	.0441	.0057	-.0714	-.0403	.0301	856.
.3800	-1915.	-664.	-580.	593.	-1551.	1132.	-.0636	.0444	.0059	-.0735	-.0337	.0355	942.
.3810	-1935.	-583.	-305.	401.	-1737.	1329.	-.0667	.0445	.0059	-.0751	-.0270	.0407	1042.
.3820	-1949.	-541.	-140.	310.	-1890.	1450.	-.0686	.0445	.0057	-.0759	-.0206	.0454	1126.
.3830	-1946.	-524.	-65.	313.	-2003.	1486.	-.0694	.0444	.0053	-.0760	-.0147	.0495	1178.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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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	19	MEMBER	1	SEQUENCE	36	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)	
.3840	-1902.	-528.	-45.	404.	-2073.	1428.	-.0689	.0443	.0047	-.0754	-.0095	.0531	1195.	
.3850	-1803.	-557.	-56.	584.	-2096.	1269.	-.0673	.0440	.0039	-.0742	-.0050	.0561	1180.	
.3860	-1648.	-608.	-86.	828.	-2072.	1015.	-.0646	.0437	.0028	-.0725	-.0014	.0586	1149.	
.3870	-1439.	-653.	-124.	1083.	-2005.	697.	-.0609	.0433	.0015	-.0705	.0017	.0607	1117.	
.3880	-1184.	-662.	-164.	1293.	-1897.	358.	-.0563	.0429	-.0003	-.0683	.0042	.0626	1089.	
.3890	-900.	-628.	-218.	1425.	-1754.	26.	-.0512	.0424	-.0025	-.0660	.0064	.0644	1059.	
.3900	-600.	-565.	-306.	1468.	-1579.	-280.	-.0455	.0419	-.0051	-.0638	.0084	.0666	1019.	
.3910	-291.	-478.	-432.	1410.	-1374.	-542.	-.0396	.0414	-.0081	-.0619	.0104	.0691	957.	
.3920	32.	-365.	-581.	1244.	-1141.	-738.	-.0335	.0408	-.0114	-.0602	.0122	.0721	863.	
.3930	375.	-236.	-725.	997.	-885.	-860.	-.0276	.0400	-.0149	-.0585	.0139	.0755	744.	
.3940	739.	-128.	-838.	728.	-814.	-923.	-.0218	.0392	-.0185	-.0570	.0155	.0794	622.	
.3950	1111.	-81.	-922.	495.	-336.	-952.	-.0164	.0383	-.0220	-.0556	.0169	.0836	527.	
.3960	1467.	-99.	-989.	321.	-64.	-954.	-.0114	.0372	-.0252	-.0544	.0182	.0881	473.	
.3970	1775.	-160.	-1043.	194.	188.	-928.	-.0072	.0361	-.0280	-.0533	.0194	.0925	453.	
.3980	2011.	-239.	-1080.	98.	402.	-872.	-.0038	.0349	-.0304	-.0523	.0207	.0966	452.	
.3990	2152.	-337.	-1100.	41.	566.	-803.	-.0012	.0338	-.0322	-.0514	.0222	.1003	461.	
.4000	2195.	-459.	-1109.	31.	674.	-744.	.0004	.0327	-.0334	-.0508	.0238	.1031	471.	

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)
.0430	-5125.	4853.	8285.	-9430.	-4987.	6131.	-.1524	-.0527	.0657	-.0070	.0079	.0027	5766.

SECTION	20	MEMBER	1	SEQUENCE	36	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)	
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.	
.0010	7.	-9.	10.	4.	0.	-3.	-.0000	.0000	-.0000	-.0000	.0000	.0000	3.	
.0020	51.	-54.	71.	32.	1.	-22.	-.0001	.0000	-.0002	-.0002	.0002	.0001	18.	
.0030	151.	-120.	206.	90.	3.	-65.	-.0003	.0000	-.0005	-.0006	.0007	.0005	52.	
.0040	304.	-177.	405.	173.	6.	-127.	-.0005	-.0000	-.0010	-.0016	.0014	.0012	101.	
.0050	486.	-217.	639.	269.	10.	-201.	-.0009	-.0001	-.0019	-.0033	.0023	.0022	157.	
.0060	680.	-264.	897.	374.	14.	-280.	-.0014	-.0002	-.0030	-.0056	.0033	.0036	219.	
.0070	936.	-376.	1213.	508.	20.	-355.	-.0021	-.0003	-.0046	-.0087	.0048	.0054	299.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/3/12/02. 18.26.51.

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

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)
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	7.	-9.	10.	4.	0.	-3.	-0.0000	.0000	-0.0000	-0.0000	.0000	.0000	3.
.0020	51.	-54.	71.	32.	1.	-22.	-0.0001	.0000	-0.0002	-0.0002	.0002	.0001	18.
.0030	151.	-120.	206.	90.	3.	-65.	-0.0003	.0000	-0.0005	-0.0006	.0007	.0005	52.
.0040	304.	-177.	405.	173.	6.	-127.	-0.0005	-0.0000	-0.0010	-0.0016	.0014	.0012	101.
.0050	486.	-217.	639.	269.	10.	-201.	-0.0009	-0.0001	-0.0019	-0.0033	.0023	.0022	157.
.0060	680.	-264.	897.	374.	14.	-280.	-0.0014	-0.0002	-0.0030	-0.0056	.0033	.0036	219.
.0070	936.	-376.	1213.	508.	20.	-355.	-0.0021	-0.0003	-0.0046	-0.0087	.0048	.0054	299.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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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	MEMBER	SEQUENCE	LOCATION	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)
20	1	36	BEG			.0080	1369.	-591.	1631.	689.	35.	-565.	-0.0030	-0.0005	-0.0070	-0.0130	.0077	.0080	418.
						.0090	1996.	-772.	2061.	872.	64.	-821.	-0.0042	-0.0008	-0.0102	-0.0191	.0129	.0119	562.
						.0100	2778.	-788.	2457.	1030.	106.	-1131.	-0.0053	-0.0013	-0.0142	-0.0272	.0205	.0170	719.
						.0110	3660.	-664.	2856.	1179.	154.	-1475.	-0.0060	-0.0020	-0.0189	-0.0373	.0300	.0227	888.
						.0120	4494.	-501.	3240.	1319.	200.	-1799.	-0.0060	-0.0027	-0.0241	-0.0486	.0401	.0281	1049.
						.0130	5027.	-339.	3458.	1393.	230.	-2003.	-0.0046	-0.0034	-0.0296	-0.0603	.0492	.0320	1149.
						.0140	4937.	-66.	3186.	1266.	235.	-1957.	-0.0016	-0.0040	-0.0348	-0.0716	.0555	.0335	1098.
						.0150	3978.	460.	2120.	806.	207.	-1556.	.0036	-0.0045	-0.0392	-0.0815	.0575	.0316	827.
						.0160	2081.	1313.	81.	-64.	149.	-772.	.0110	-0.0046	-0.0422	-0.0886	.0552	.0257	369.
						.0170	-315.	2275.	-2433.	-1130.	74.	215.	.0203	-0.0041	-0.0435	-0.0915	.0501	.0163	540.
						.0180	-2395.	2933.	-4337.	-1931.	-3.	1065.	.0311	-0.0026	-0.0423	-0.0897	.0449	.0045	1033.
						.0190	-3450.	3002.	-4793.	-2117.	-62.	1485.	.0423	.0001	-0.0424	-0.0840	.0430	-0.0076	1212.
						.0200	-2542.	2201.	-2893.	-1306.	-71.	1094.	.0526	.0043	-0.0424	-0.0770	.0501	-0.0169	799.
						.0210	154.	1261.	637.	160.	-14.	-11.	.0617	.0097	-0.0441	-0.0718	.0639	-0.0212	75.
						.0220	2452.	1192.	4013.	1501.	20.	-923.	.0705	.0159	-0.0461	-0.0688	.0870	-0.0229	826.
						.0230	3141.	1128.	6278.	2402.	-20.	-1198.	.0799	.0231	-0.0474	-0.0640	.0946	-0.0270	1258.
						.0240	1144.	642.	5484.	2124.	-135.	-427.	.0899	.0311	-0.0472	-0.0531	.0879	-0.0381	1017.
						.0250	-1961.	-726.	3537.	1453.	-284.	747.	.0997	.0397	-0.0455	-0.0349	.0714	-0.0536	777.
						.0260	-3753.	-3266.	4692.	2096.	-461.	1355.	.1080	.0479	-0.0433	-0.0134	.0488	-0.0671	1190.
						.0270	-6435.	-4571.	6550.	2927.	-732.	2365.	.1140	.0545	-0.0395	.0046	.0115	-0.0784	1797.
						.0280	-10855.	-2954.	4274.	1908.	-965.	4179.	.1159	.0586	-0.0328	.0173	-0.0287	-0.0885	2200.
						.0290	-13177.	-678.	168.	116.	-971.	5188.	.1122	.0610	-0.0236	.0306	-0.0497	-0.0917	2474.
						.0300	-13094.	-636.	-2605.	-985.	-855.	5157.	.1022	.0629	-0.0146	.0500	-0.0581	-0.0849	2493.
						.0310	-10960.	-2163.	-2595.	-869.	-699.	4252.	.0858	.0640	-0.0055	.0680	-0.0608	-0.0754	2060.
						.0320	-5900.	-3872.	1094.	717.	-475.	2181.	.0641	.0634	.0046	.0759	-0.0552	-0.0676	1099.
						.0330	-1514.	-3797.	2363.	1213.	-205.	448.	.0399	.0604	.0168	.0777	-0.0463	-0.0590	614.
						.0340	-459.	-2053.	-1771.	-551.	37.	100.	.0153	.0553	.0303	.0806	-0.0424	-0.0495	263.
						.0350	328.	-1764.	-5187.	-1924.	230.	-200.	-0.0097	.0490	.0435	.0837	-0.0419	-0.0476	913.
						.0360	2763.	-3997.	-4504.	-1490.	381.	-1253.	-0.0348	.0414	.0548	.0836	-0.0402	-0.0566	930.
						.0370	3720.	-5423.	-4688.	-1459.	459.	-1688.	-0.0584	.0315	.0639	.0799	-0.0400	-0.0668	1067.
						.0380	1913.	-3418.	-7491.	-2715.	438.	-893.	-0.0790	.0186	.0710	.0696	-0.0455	-0.0692	1355.
						.0390	827.	90.	-7926.	-3144.	376.	-324.	-0.0975	.0037	.0763	.0498	-0.0522	-0.0664	1491.
						.0400	2528.	1557.	-5480.	-2283.	403.	-939.	-0.1148	-0.0115	.0782	.0281	-0.0459	-0.0609	1172.
						.0410	3672.	1040.	-4139.	-1714.	434.	-1412.	-0.1304	-0.0256	.0762	.0139	-0.0343	-0.0491	1060.
						.0420	4922.	-16.	-2703.	-1069.	468.	-1949.	-0.1432	-0.0392	.0715	.0049	-0.0187	-0.0274	1064.
						.0430	8842.	-830.	1777.	764.	577.	-3533.	-0.1524	-0.0527	.0657	-0.0070	.0079	.0027	1715.
						.0440	12067.	277.	3916.	1530.	727.	-4765.	-0.1567	-0.0664	.0600	-0.0205	.0345	.0369	2370.
						.0450	12521.	2760.	3257.	1087.	787.	-4846.	-0.1547	-0.0795	.0549	-0.0287	.0458	.0701	2356.

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

CONDITION 24
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INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

.0340	-459.	-2053.	-1771.	-551.	37.	-200.	-.0153	.0553	.0303	.0806	-.0424	-.0495	263.
.0350	328.	-1764.	-5187.	-1924.	230.	-200.	-.0097	.0490	.0435	.0837	-.0419	-.0476	913.
.0360	2763.	-3297.	-4504.	-1490.	381.	-1253.	-.0348	.0414	.0548	.0836	-.0402	-.0566	930.
.0370	3720.	-5423.	-4688.	-1459.	459.	-1638.	-.0584	.0315	.0639	.0799	-.0400	-.0668	1067.
.0380	1913.	-3418.	-7491.	-2715.	438.	-893.	-.0790	.0186	.0710	.0696	-.0455	-.0692	1355.
.0390	827.	90.	-7926.	-3144.	776.	-324.	-.0275	.0037	.0763	.0498	-.0522	-.0664	1491.
.0400	2528.	1557.	-5480.	-2283.	403.	-939.	-.1148	-.0115	.0782	.0281	-.0459	-.0609	1172.
.0410	3672.	1040.	-4139.	-1714.	434.	-1412.	-.1304	-.0256	.0762	.0139	-.0343	-.0491	1060.
.0420	4922.	-16.	-2703.	-1069.	468.	-1949.	-.1432	-.0392	.0715	.0049	-.0187	-.0274	1064.
.0430	8842.	-830.	1777.	764.	577.	-3533.	-.1524	-.0527	.0657	-.0070	.0079	.0027	1715.
.0440	12067.	277.	3916.	1530.	727.	-4765.	-.1567	-.0664	.0600	-.0205	.0345	.0369	2370.
.0450	12521.	2760.	3257.	1087.	787.	-4846.	-.1547	-.0795	.0549	-.0287	.0458	.0701	2356.

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

SECTION	20	MEMBER	1	SEQUENCE	36	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)		
.0460	12062.	3693.	3971.	1301.	725.	-4627.	-.1466	-.0907	.0502	-.0263	.0413	.0947	2278.		
.0470	11255.	2857.	4409.	1536.	648.	-4341.	-.1329	-.0995	.0461	-.0127	.0298	.1065	2179.		
.0480	8597.	2964.	1194.	256.	582.	-3285.	-.1142	-.1063	.0430	.0071	.0129	.1094	1568.		
.0490	5103.	4779.	-1893.	-1099.	449.	-1830.	-.0915	-.1112	.0400	.0249	-.0109	.1087	1022.		
.0500	3144.	6738.	-1225.	-978.	279.	-976.	-.0665	-.1132	.0362	.0368	-.0345	.1024	661.		
.0510	2429.	7646.	505.	-360.	158.	-657.	-.0410	-.1114	.0316	.0474	-.0495	.0876	359.		
.0520	1926.	6744.	1279.	13.	90.	-494.	-.0150	-.1052	.0264	.0641	-.0556	.0660	235.		
.0530	1896.	3758.	3076.	942.	16.	-601.	.0113	-.0952	.0212	.0877	-.0578	.0400	524.		
.0540	1438.	457.	4921.	1914.	-91.	-551.	.0379	-.0832	.0174	.1123	-.0616	.0079	934.		
.0550	-996.	-1032.	3532.	1473.	-213.	353.	.0643	-.0709	.0161	.1347	-.0688	-.0298	717.		
.0560	-4495.	-1316.	418.	262.	-346.	1727.	.0899	-.0591	.0162	.1578	-.0773	-.0667	834.		
.0570	-7406.	-2153.	-1054.	-260.	-500.	2846.	.1131	-.0483	.0162	.1840	-.0843	-.0981	1359.		
.0580	-9814.	-3462.	-1610.	-386.	-654.	3747.	.1323	-.0388	.0156	.2101	-.0873	-.1246	1791.		
.0590	-11513.	-4186.	-2400.	-643.	-747.	4390.	.1462	-.0314	.0146	.2300	-.0817	-.1444	2109.		
.0600	-11439.	-3930.	-1882.	-457.	-762.	4371.	.1548	-.0267	.0132	.2413	-.0652	-.1512	2090.		
.0610	-9863.	-2823.	-426.	38.	-705.	3791.	.1582	-.0244	.0118	.2454	-.0379	-.1430	1807.		
.0620	-8141.	-1642.	-259.	18.	-586.	3157.	.1567	-.0238	.0106	.2451	-.0023	-.1276	1505.		
.0630	-6109.	-1930.	-555.	-78.	-425.	2341.	.1507	-.0243	.0096	.2422	.0382	-.1126	1116.		
.0640	-3616.	-3808.	193.	355.	-272.	1280.	.1417	-.0261	.0089	.2377	.0767	-.0981	635.		
.0650	-2315.	-5171.	-140.	323.	-164.	710.	.1310	-.0301	.0090	.2300	.1063	-.0831	374.		
.0660	-2800.	-4643.	-2647.	-708.	-100.	924.	.1191	-.0371	.0097	.2156	.1261	-.0702	547.		
.0670	-3149.	-3106.	-4196.	-1433.	-63.	1123.	.1058	-.0468	.0100	.1932	.1403	-.0604	854.		
.0680	-2337.	-1524.	-3097.	-1114.	-48.	864.	.0911	-.0582	.0087	.1662	.1514	-.0501	661.		
.0690	-1356.	228.	-1752.	-710.	-30.	546.	.0754	-.0703	.0059	.1374	.1501	-.0367	420.		
.0700	-329.	2120.	-1242.	-647.	25.	215.	.0592	-.0823	.0021	.1060	.1679	-.0220	319.		
.0710	1291.	3804.	74.	-249.	92.	-360.	.0429	-.0929	-.0022	.0704	.1727	-.0068	210.		
.0720	2664.	5149.	2306.	536.	103.	-850.	.0275	-.1013	-.0066	.0344	.1682	.0100	473.		
.0730	3008.	5660.	3987.	1164.	62.	-965.	.0136	-.1066	-.0105	.0038	.1531	.0272	709.		
.0740	2886.	4790.	4704.	1511.	24.	-952.	.0013	-.1085	-.0132	-.0186	.1312	.0413	837.		
.0750	2290.	3324.	4259.	1443.	-2.	-774.	-.0097	-.1077	-.0141	-.0327	.1033	.0519	767.		
.0760	809.	2611.	2382.	752.	-36.	-216.	-.0193	-.1048	-.0133	-.0394	.0693	.0619	367.		
.0770	-380.	2900.	564.	11.	-50.	266.	-.0282	-.1004	-.0114	-.0414	.0354	.0733	127.		
.0780	206.	3715.	687.	-0.	-12.	66.	-.0371	-.0944	-.0088	-.0416	.0079	.0849	32.		
.0790	1899.	4772.	2055.	464.	57.	-562.	-.0457	-.0862	-.0055	-.0403	-.0133	.0949	342.		
.0800	3295.	5498.	2927.	756.	125.	-1085.	-.0536	-.0754	-.0013	-.0353	-.0312	.1011	623.		
.0810	4578.	4994.	3394.	978.	200.	-1613.	-.0600	-.0614	.0043	-.0262	-.0445	.1009	889.		
.0820	5857.	3333.	3822.	1269.	277.	-2186.	-.0646	-.0448	.0116	-.0146	-.0535	.0926	1191.		
.0830	5900.	1411.	3212.	1168.	304.	-2279.	-.0666	-.0263	.0207	-.0012	-.0629	.0763	1209.		

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ENGLISH UNITS

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

.0730	3008.	5660.	3987.	1164.	62.	-965.	.0136	-.1066	-.0105	.0038	.1531	.0272	709.
.0740	2886.	4790.	4704.	1511.	24.	-952.	.0013	-.1085	-.0132	-.0186	.1312	.0413	837.
.0750	2290.	3324.	4259.	1443.	-2.	-774.	-.0097	-.1077	-.0141	-.0327	.1033	.0519	767.
.0760	809.	2611.	2382.	752.	-36.	-216.	-.0193	-.1048	-.0133	-.0394	.0693	.0619	367.
.0770	-380.	2900.	564.	11.	-50.	266.	-.0282	-.1004	-.0114	-.0414	.0354	.0733	127.
.0780	206.	3715.	687.	-0.	-12.	66.	-.0371	-.0944	-.0088	-.0416	.0079	.0849	32.
.0790	1899.	4772.	2055.	464.	57.	-562.	-.0457	-.0862	-.0055	-.0403	-.0133	.0949	342.
.0800	3295.	5498.	2927.	756.	125.	-1085.	-.0536	-.0754	-.0013	-.0353	-.0312	.1011	623.
.0810	4578.	4994.	3394.	978.	200.	-1613.	-.0600	-.0614	.0043	-.0262	-.0445	.1009	889.
.0820	5857.	3333.	3822.	1269.	277.	-2186.	-.0646	-.0448	.0116	-.0146	-.0535	.0926	1191.
.0830	5900.	1411.	3212.	1168.	304.	-2279.	-.0666	-.0263	.0207	-.0012	-.0629	.0763	1209.

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ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	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)	
.0840	4307.	-471.	1072.	459.	273.	-1723.	-.0661	-.0070	.0312	.0140	-.0739	.0529	846.	
.0850	2265.	-2409.	-1750.	-516.	235.	-992.	-.0638	.0119	.0420	.0299	-.0820	.0243	536.	
.0860	490.	-3925.	-4484.	-1487.	214.	-350.	-.0606	.0293	.0517	.0445	-.0850	-.0059	723.	
.0870	-907.	-4554.	-6274.	-2150.	183.	178.	-.0570	.0444	.0591	.0554	-.0844	-.0342	1015.	
.0880	-1238.	-4367.	-5991.	-2052.	148.	316.	-.0536	.0568	.0636	.0605	-.0790	-.0577	975.	
.0890	-208.	-3373.	-4099.	-1376.	148.	-52.	-.0504	.0666	.0654	.0593	-.0864	-.0753	649.	
.0900	1178.	-1798.	-2571.	-886.	189.	-538.	-.0469	.0744	.0651	.0543	-.0495	-.0874	494.	
.0910	2046.	-797.	-2165.	-799.	236.	-842.	-.0425	.0812	.0632	.0492	-.0336	-.0966	555.	
.0920	2401.	-1316.	-2253.	-795.	265.	-1003.	-.0370	.0874	.0600	.0453	-.0223	-.1060	613.	
.0930	2177.	-2815.	-2829.	-914.	272.	-974.	-.0300	.0927	.0557	.0416	-.0170	-.1162	639.	
.0940	1236.	-4273.	-4106.	-1312.	254.	-659.	-.0217	.0964	.0501	.0366	-.0180	-.1252	698.	
.0950	46.	-5356.	-5357.	-1728.	217.	-231.	-.0123	.0974	.0425	.0290	-.0240	-.1317	823.	
.0960	-828.	-5890.	-5908.	-1907.	175.	93.	-.0026	.0954	.0326	.0175	-.0326	-.1357	899.	
.0970	-1288.	-5575.	-5817.	-1894.	137.	288.	.0070	.0899	.0199	.0015	-.0422	-.1370	900.	
.0980	-1280.	-4586.	-4836.	-1578.	99.	324.	.0162	.0813	.0047	-.0181	-.0524	-.1341	756.	
.0990	-895.	-3281.	-2653.	-810.	40.	223.	.0253	.0701	-.0125	-.0411	-.0544	-.1263	394.	
.1000	-769.	-1686.	27.	134.	-57.	237.	.0341	.0570	-.0306	-.0677	-.0800	-.1149	131.	
.1010	-1417.	-87.	2313.	922.	-196.	557.	.0426	.0431	-.0484	-.0968	-.0996	-.1011	513.	
.1020	-2596.	785.	4152.	1586.	-355.	1059.	.0505	.0291	-.0649	-.1249	-.1201	-.0847	909.	
.1030	-3908.	827.	5486.	2111.	-504.	1580.	.0570	.0157	-.0792	-.1491	-.1371	-.0641	1258.	
.1040	-5215.	790.	5926.	2288.	-618.	2096.	.0615	.0028	-.0907	-.1692	-.1466	-.0391	1482.	
.1050	-6030.	1210.	5792.	2204.	-672.	2435.	.0632	-.0094	-.0992	-.1859	-.1452	-.0104	1571.	
.1060	-5705.	2195.	5902.	2175.	-652.	2345.	.0616	-.0208	-.1046	-.1993	-.1304	.0220	1530.	
.1070	-4494.	3806.	5998.	2095.	-568.	1930.	.0570	-.0307	-.1071	-.2080	-.1034	.0565	1361.	
.1080	-2176.	5232.	6249.	2091.	-408.	1069.	.0492	-.0382	-.1075	-.2110	-.0524	.0903	1117.	
.1090	2332.	5280.	8063.	2805.	-150.	-713.	.0383	-.0421	-.1082	-.2104	-.0022	.1227	1358.	
.1100	5153.	6502.	9332.	3218.	6.	-1781.	.0275	-.0427	-.1058	-.2094	.0495	.1472	1724.	
.1110	6466.	7693.	9217.	3085.	106.	-2253.	.0183	-.0392	-.0996	-.2046	.0926	.1604	1791.	
.1120	6452.	7213.	6845.	2181.	200.	-2267.	.0114	-.0312	-.0903	-.1903	.1298	.1610	1477.	
.1130	4873.	5596.	3221.	865.	229.	-1706.	.0069	-.0188	-.0791	-.1676	.1563	.1510	903.	
.1140	2740.	3148.	394.	-75.	185.	-959.	.0041	-.0033	-.0672	-.1414	.1729	.1331	459.	
.1150	1155.	168.	-1633.	-659.	150.	-451.	.0024	.0139	-.0558	-.1160	.1865	.1122	380.	
.1160	210.	-1666.	-3362.	-1209.	149.	-150.	.0013	.0311	-.0457	-.0946	.1975	.0945	575.	
.1170	522.	-1556.	-2911.	-1038.	154.	-268.	.0008	.0473	-.0373	-.0789	.2033	.0824	508.	
.1180	-11.	-1052.	-1725.	-606.	68.	-38.	.0010	.0625	-.0300	-.0644	.1916	.0691	286.	
.1190	23.	-2046.	-136.	96.	7.	-90.	.0016	.0768	-.0227	-.0465	.1724	.0519	62.	
.1200	22.	-3353.	-296.	128.	13.	-142.	.0028	.0897	-.0151	-.0243	.1501	.0351	90.	
.1210	-1680.	-3852.	-3095.	-943.	0.	512.	.0039	.1007	-.0086	-.0029	.1197	.0220	503.	

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

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LOADS

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ENGLISH UNITS

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

.1100	5153.	6562.	222.	3218.	6.	-1781.	.0275	-.0427	-.1058	-.2094	.0495	.1472	1724.
.1110	6466.	7693.	9217.	3085.	106.	-2253.	.0183	-.0392	-.0996	-.2046	.0926	.1604	1791.
.1120	6452.	7213.	6845.	2181.	200.	-2267.	.0114	-.0312	-.0903	-.1903	.1298	.1610	1477.
.1130	4873.	5596.	3221.	865.	229.	-1706.	.0069	-.0188	-.0791	-.1676	.1563	.1510	903.
.1140	2740.	3148.	394.	-75.	185.	-959.	.0041	-.0033	-.0672	-.1414	.1729	.1331	459.
.1150	1155.	168.	-1633.	-659.	150.	-451.	.0024	.0139	-.0558	-.1160	.1865	.1122	380.
.1160	210.	-1666.	-3362.	-1209.	149.	-150.	.0013	.0311	-.0457	-.0946	.1975	.0945	575.
.1170	522.	-1556.	-2911.	-1038.	154.	-268.	.0008	.0473	-.0373	-.0789	.2033	.0824	508.
.1180	-11.	-1052.	-1725.	-606.	68.	-38.	.0010	.0625	-.0300	-.0644	.1916	.0691	286.
.1190	23.	-2046.	-136.	96.	7.	-90.	.0016	.0768	-.0227	-.0465	.1724	.0519	62.
.1200	22.	-3353.	-296.	128.	13.	-142.	.0028	.0897	-.0151	-.0243	.1501	.0351	90.
.1210	-1680.	-3852.	-3095.	-943.	0.	512.	.0039	.1007	-.0086	-.0029	.1197	.0220	503.

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SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	20	MEMBER	1	SEQUENCE	36	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)		
.1220	-2420.	-3589.	-4195.	-1398.	-10.	815.	.0042	.1094	-.0030	.0075	.0382	.0105	758.		
.1230	-2972.	-3057.	-4879.	-1707.	-23.	1055.	.0030	.1159	.0011	.0060	.0553	-.0017	940.		
.1240	-3126.	-2643.	-5646.	-2041.	-4.	1132.	.0006	.1204	.0035	-.0016	.0262	-.0117	1094.		
.1250	-2840.	-3038.	-5475.	-1945.	10.	1003.	-.0029	.1232	.0039	-.0111	-.0002	-.0204	1025.		
.1260	-3283.	-4426.	-5057.	-1678.	-39.	1123.	-.0080	.1241	.0024	-.0238	-.0292	-.0331	946.		
.1270	-2050.	-5664.	-3309.	-895.	-18.	586.	-.0148	.1222	-.0006	-.0450	-.0467	-.0467	501.		
.1280	-667.	-5248.	-2406.	-568.	47.	55.	-.0226	.1172	-.0055	-.0730	-.0551	-.0531	268.		
.1290	864.	-3199.	-934.	-135.	100.	-469.	-.0302	.1093	-.0117	-.1052	-.0588	-.0505	234.		
.1300	2524.	-972.	1641.	721.	119.	-1038.	-.0371	.0997	-.0180	-.1386	-.0515	-.0466	595.		
.1310	2277.	435.	2295.	877.	75.	-884.	-.0427	.0897	-.0235	-.1671	-.0711	-.0463	584.		
.1320	1942.	631.	2572.	972.	40.	-743.	-.0465	.0799	-.0278	-.1864	-.0808	-.0433	574.		
.1330	854.	208.	2249.	875.	-27.	-330.	-.0485	.0706	-.0313	-.1967	-.0940	-.0334	438.		
.1340	-371.	659.	1860.	688.	-101.	173.	-.0496	.0615	-.0336	-.2047	-.1070	-.0187	336.		
.1350	-1017.	2368.	1512.	425.	-135.	497.	-.0507	.0528	-.0346	-.2130	-.1148	-.0003	313.		
.1360	-1546.	3904.	878.	62.	-148.	767.	-.0520	.0457	-.0354	-.2157	-.1199	.0233	367.		
.1370	-257.	4186.	2294.	602.	-110.	268.	-.0536	.0407	-.0358	-.2102	-.1187	.0507	313.		
.1380	792.	3700.	3531.	1127.	-83.	-166.	-.0556	.0382	-.0353	-.1984	-.1193	.0732	535.		
.1390	1460.	3211.	4277.	1458.	-63.	-450.	-.0577	.0378	-.0328	-.1837	-.1221	.0867	716.		
.1400	1925.	2875.	4738.	1665.	-48.	-648.	-.0593	.0393	-.0277	-.1649	-.1258	.0942	838.		
.1410	885.	2583.	3215.	1083.	-63.	-247.	-.0602	.0425	-.0206	-.1402	-.1335	.0964	522.		
.1420	121.	2055.	1252.	345.	-41.	34.	-.0612	.0471	-.0116	-.1131	-.1373	.0899	164.		
.1430	-688.	645.	-1155.	-505.	-4.	298.	-.0628	.0527	-.0020	-.0850	-.1383	.0741	275.		
.1440	-703.	-1459.	-2421.	-851.	45.	220.	-.0649	.0586	.0073	-.0575	-.1334	.0563	413.		
.1450	184.	-2964.	-2270.	-682.	104.	-191.	-.0669	.0634	.0160	-.0338	-.1216	.0419	335.		
.1460	757.	-3258.	-2200.	-632.	143.	-429.	-.0688	.0665	.0240	-.0164	-.1075	.0290	364.		
.1470	2339.	-3157.	-951.	-145.	209.	-1051.	-.0701	.0676	.0314	-.0042	-.0866	.0161	507.		
.1480	3018.	-3255.	-651.	-19.	247.	-1324.	-.0700	.0669	.0381	.0096	-.0561	.0050	631.		
.1490	2776.	-3482.	-1576.	-369.	266.	-1237.	-.0679	.0643	.0440	.0269	-.0455	-.0024	618.		
.1500	2195.	-3508.	-2939.	-907.	278.	-1008.	-.0640	.0597	.0492	.0440	-.0237	-.0075	649.		
.1510	385.	-2991.	-5010.	-1764.	228.	-271.	-.0589	.0532	.0528	.0579	-.0066	-.0108	843.		
.1520	-982.	-1971.	-5854.	-2173.	161.	310.	-.0531	.0449	.0541	.0673	.0117	-.0078	1031.		
.1530	-2252.	-943.	-6300.	-2424.	86.	854.	-.0472	.0355	.0522	.0741	.0308	.0027	1205.		
.1540	-2185.	-529.	-5435.	-2113.	56.	844.	-.0422	.0254	.0474	.0778	.0562	.0184	1066.		
.1550	-938.	-482.	-3380.	-1303.	66.	352.	-.0379	.0150	.0404	.0779	.0865	.0373	633.		
.1560	-371.	-135.	-2108.	-824.	57.	142.	-.0338	.0042	.0317	.0754	.1128	.0587	393.		
.1570	1175.	483.	-301.	-154.	98.	-446.	-.0296	-.0066	.0226	.0698	.1406	.0821	226.		
.1580	2283.	1084.	533.	132.	146.	-861.	-.0247	-.0171	.0135	.0628	.1626	.1031	414.		
.1590	1985.	1326.	204.	-16.	137.	-733.	-.0190	-.0270	.0047	.0558	.1713	.1175	349.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.51.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

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INTERNAL FORCES IN THE PIPING
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.1490	2776.	-3482.	-1576.	-369.	266.	-1237.	-.0679	.0643	.0440	.0269	-.0455	-.0024	618.
.1500	2195.	-3508.	-2939.	-907.	278.	-1008.	-.0640	.0597	.0492	.0440	-.0237	-.0075	649.
.1510	385.	-2991.	-5010.	-1764.	228.	-271.	-.0589	.0532	.0528	.0579	-.0066	-.0108	843.
.1520	-962.	-1971.	-5854.	-2173.	161.	310.	-.0531	.0449	.0541	.0673	.0117	-.0078	1031.
.1530	-2252.	-943.	-6300.	-2424.	87.	854.	-.0472	.0355	.0522	.0741	.0308	.0027	1205.
.1540	-2185.	-529.	-5435.	-2113.	56.	844.	-.0422	.0254	.0474	.0778	.0562	.0184	1066.
.1550	-938.	-482.	-3380.	-1303.	66.	352.	-.0379	.0150	.0404	.0779	.0365	.0373	633.
.1560	-371.	-135.	-2108.	-824.	57.	142.	-.0338	.0042	.0317	.0754	.1128	.0587	393.
.1570	1175.	483.	-301.	-154.	98.	-446.	-.0296	-.0066	.0226	.0698	.1406	.0821	226.
.1580	2283.	1084.	533.	132.	146.	-861.	-.0247	-.0171	.0135	.0628	.1626	.1031	414.
.1590	1985.	1326.	204.	-16.	137.	-733.	-.0190	-.0270	.0047	.0558	.1713	.1175	349.

ADLPIPE PAGE 900 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.26.51.

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

CONDITION 24
LOADS
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INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	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)	
.1600	1990.	960.	996.	324.	106.	-749.	-.0124	-.0361	-.0037	.0484	.1710	.1253	386.	
.1610	2155.	554.	1736.	647.	89.	-831.	-.0050	-.0446	-.0114	.0410	.1655	.1285	495.	
.1620	1001.	727.	437.	120.	56.	-367.	.0030	-.0526	-.0188	.0333	.1525	.1278	183.	
.1630	917.	1633.	679.	149.	40.	-298.	.0113	-.0601	-.0256	.0214	.1380	.1239	157.	
.1640	1285.	2917.	2024.	587.	14.	-392.	.0198	-.0666	-.0318	.0070	.1193	.1160	331.	
.1650	609.	3951.	2290.	617.	-47.	-84.	.0286	-.0713	-.0373	-.0051	.0939	.1039	293.	
.1660	295.	4282.	3305.	995.	-110.	54.	.0375	-.0737	-.0414	-.0142	.0566	.0881	470.	
.1670	-688.	4129.	4537.	1493.	-231.	436.	.0462	-.0737	-.0440	-.0203	.0325	.0686	737.	
.1680	-2241.	3914.	5261.	1796.	-373.	1043.	.0543	-.0714	-.0439	-.0229	-.0037	.0467	989.	
.1690	-4855.	3576.	4047.	1340.	-516.	2064.	.0610	-.0667	-.0415	-.0195	-.0394	.0251	1178.	
.1700	-6905.	2861.	2861.	923.	-619.	2847.	.0651	-.0601	-.0373	-.0105	-.0687	.0072	1432.	
.1710	-6849.	1963.	3338.	1178.	-634.	2789.	.0660	-.0521	-.0311	.0021	-.0847	-.0052	1450.	
.1720	-7429.	1072.	1926.	684.	-620.	2983.	.0633	-.0429	-.0236	.0199	-.0939	-.0129	1463.	
.1730	-6828.	166.	683.	258.	-527.	2709.	.0570	-.0333	-.0148	.0402	-.0900	-.0149	1299.	
.1740	-4695.	-505.	801.	354.	-376.	1838.	.0475	-.0238	-.0052	.0600	-.0759	-.0110	895.	
.1750	-2546.	-844.	867.	405.	-221.	974.	.0357	-.0147	.0049	.0787	-.0586	-.0042	505.	
.1760	-268.	-1301.	826.	422.	-52.	54.	.0227	-.0062	.0159	.0960	-.0377	.0017	201.	
.1770	980.	-1987.	-248.	47.	82.	-467.	.0094	.0015	.0273	.1123	-.0197	.0042	223.	
.1780	2236.	-2428.	-991.	-214.	203.	-981.	-.0034	.0080	.0391	.1253	-.0029	.0034	480.	
.1790	2402.	-2548.	-2572.	-832.	278.	-1052.	-.0152	.0130	.0506	.1345	.0082	-.0023	642.	
.1800	1703.	-2739.	-4475.	-1571.	303.	-783.	-.0260	.0165	.0610	.1386	.0130	-.0135	835.	
.1810	2158.	-2800.	-4283.	-1490.	328.	-965.	-.0357	.0184	.0699	.1361	.0177	-.0278	846.	
.1820	2040.	-2316.	-4146.	-1471.	314.	-900.	-.0442	.0186	.0767	.1294	.0169	-.0435	822.	
.1830	1921.	-1726.	-3884.	-1411.	295.	-829.	-.0514	.0174	.0817	.1204	.0140	-.0600	779.	
.1840	2036.	-1471.	-3226.	-1169.	277.	-865.	-.0574	.0153	.0848	.1102	.0087	-.0769	694.	
.1850	2116.	-1181.	-2543.	-920.	256.	-884.	-.0619	.0122	.0862	.0995	-.0002	-.0918	610.	
.1860	2315.	-654.	-2013.	-749.	250.	-942.	-.0647	.0085	.0864	.0900	-.0105	-.1021	576.	
.1870	1445.	-349.	-2769.	-1070.	216.	-586.	-.0657	.0044	.0852	.0839	-.0262	-.1078	581.	
.1880	915.	-437.	-2960.	-1140.	185.	-380.	-.0653	.0001	.0827	.0795	-.0428	-.1085	570.	
.1890	480.	-632.	-2975.	-1131.	153.	-215.	-.0637	-.0046	.0788	.0766	-.0598	-.1029	544.	
.1900	-209.	-946.	-3522.	-1325.	125.	45.	-.0612	-.0097	.0733	.0760	-.0754	-.0902	624.	
.1910	172.	-1401.	-3089.	-1120.	136.	-124.	-.0580	-.0155	.0663	.0760	-.0835	-.0704	532.	
.1920	944.	-1447.	-2148.	-744.	155.	-431.	-.0543	-.0221	.0579	.0747	-.0861	-.0458	410.	
.1930	1930.	-931.	-1004.	-329.	181.	-801.	-.0498	-.0295	.0488	.0717	-.0830	-.0191	415.	
.1940	2991.	-402.	59.	53.	217.	-1200.	-.0443	-.0374	.0396	.0685	-.0739	.0068	572.	
.1950	3683.	-7.	736.	292.	240.	-1458.	-.0373	-.0455	.0306	.0658	-.0611	.0286	706.	
.1960	3726.	473.	1103.	402.	229.	-1456.	-.0289	-.0535	.0224	.0627	-.0474	.0436	716.	
.1970	3239.	902.	1414.	494.	181.	-1246.	-.0191	-.0612	.0150	.0584	-.0336	.0504	634.	

ADLPIPE PAGE 901 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.26.51.

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

CONDITION 24
LOADS
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INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

.1860	2315.	-654.	213.	-749.	250.	-942.	-.647	.0085	.0864	.0900	-.0105	-.1021	576.
.1870	1445.	-349.	-2769.	-1070.	216.	-586.	-.657	.0044	.0852	.0839	-.0262	-.1078	581.
.1880	915.	-437.	-2960.	-1140.	185.	-380.	-.0653	.0001	.0827	.0795	-.0428	-.1085	570.
.1890	480.	-632.	-2975.	-1131.	153.	-215.	-.0637	-.0046	.0788	.0766	-.0598	-.1029	544.
.1900	-209.	-946.	-3522.	-1525.	125.	45.	-.0612	-.0097	.0733	.0760	-.0754	-.0902	624.
.1910	172.	-1401.	-3089.	-1120.	136.	-124.	-.0580	-.0155	.0663	.0760	-.0835	-.0704	532.
.1920	944.	-1447.	-2148.	-744.	155.	-431.	-.0543	-.0221	.0579	.0747	-.0861	-.0458	410.
.1930	1930.	-931.	-1004.	-329.	181.	-801.	-.0498	-.0295	.0488	.0717	-.0830	-.0191	115.
.1940	2991.	-402.	59.	53.	217.	-1200.	-.0443	-.0374	.0396	.0685	-.0739	.0068	572.
.1950	3683.	-7.	736.	292.	240.	-1458.	-.0373	-.0455	.0306	.0658	-.0511	.0286	706.
.1960	3726.	472.	1103.	402.	229.	-1456.	-.0289	-.0535	.0224	.0627	-.0474	.0436	716.
.1970	3239.	902.	1414.	494.	181.	-1246.	-.0191	-.0612	.0150	.0584	-.0336	.0504	634.

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

CONDITION 24
LOADS
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INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	20	MEMBER	1	SEQUENCE	36	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)		
.1980	2331.	1220.	1546.	523.	109.	-874.	-.0081	-.0683	.0087	.0534	-.0191	.0497	480.		
.1990	1049.	1784.	1280.	376.	26.	-344.	.0036	-.0747	.0034	.0478	-.0040	.0433	239.		
.2000	-282.	2533.	867.	158.	-55.	212.	.0155	-.0799	-.0010	.0421	.0120	.0323	127.		
.2010	-1246.	2893.	735.	79.	-120.	608.	.0270	-.0837	-.0047	.0376	.0294	.0179	293.		
.2020	-1745.	2795.	982.	184.	-167.	802.	.0378	-.0859	-.0081	.0352	.0473	.0029	393.		
.2030	-1870.	2709.	1507.	398.	-197.	848.	.0477	-.0865	-.0108	.0351	.0638	-.0105	449.		
.2040	-1738.	2712.	2085.	627.	-210.	796.	.0569	-.0856	-.0129	.0374	.0774	-.0216	485.		
.2050	-1630.	2524.	2235.	700.	-208.	746.	.0653	-.0831	-.0140	.0435	.0869	-.0310	489.		
.2060	-1738.	2108.	1747.	537.	-177.	722.	.0731	-.0793	-.0143	.0542	.0915	-.0379	450.		
.2070	-1922.	1538.	961.	268.	-179.	822.	.0802	-.0742	-.0139	.0687	.0915	-.0422	414.		
.2080	-2030.	822.	185.	13.	-156.	836.	.0864	-.0684	-.0131	.0848	.0877	-.0448	399.		
.2090	-2151.	199.	-592.	-249.	-134.	859.	.0915	-.0622	-.0122	.1001	.0809	-.0463	424.		
.2100	-2301.	-64.	-1190.	-466.	-121.	908.	.0956	-.0560	-.0114	.1123	.0719	-.0469	482.		
.2110	-2231.	-219.	-1157.	-442.	-117.	874.	.0984	-.0499	-.0108	.1209	.0522	-.0475	462.		
.2120	-1969.	-563.	-546.	-168.	-122.	753.	.0997	-.0440	-.0106	.1258	.0528	-.0502	366.		
.2130	-1838.	-1268.	134.	146.	-140.	677.	.0997	-.0386	-.0103	.1270	.0436	-.0561	331.		
.2140	-1982.	-1670.	593.	357.	-169.	718.	.0983	-.0339	-.0097	.1243	.0345	-.0645	384.		
.2150	-2378.	-1817.	751.	430.	-204.	869.	.0956	-.0303	-.0085	.1180	.0261	-.0745	464.		
.2160	-2996.	-1825.	582.	364.	-242.	1113.	.0914	-.0277	-.0068	.1089	.0186	-.0854	561.		
.2170	-3685.	-1707.	295.	242.	-281.	1390.	.0855	-.0261	-.0046	.0976	.0121	-.0957	674.		
.2180	-4122.	-1510.	190.	186.	-309.	1571.	.0778	-.0256	-.0022	.0852	.0077	-.1030	756.		
.2190	-4144.	-1271.	211.	177.	-312.	1589.	.0682	-.0259	.0003	.0727	.0061	-.1051	764.		
.2200	-3777.	-846.	193.	138.	-284.	1461.	.0568	-.0270	.0031	.0602	.0072	-.1008	701.		
.2210	-2977.	-145.	272.	118.	-229.	1172.	.0440	-.0285	.0059	.0481	.0104	-.0897	563.		
.2220	-1758.	608.	485.	147.	-148.	720.	.0302	-.0301	.0088	.0375	.0147	-.0723	351.		
.2230	-405.	1136.	477.	106.	-49.	206.	.0160	-.0314	.0118	.0298	.0191	-.0502	111.		
.2240	821.	1384.	122.	-53.	55.	-270.	.0019	-.0319	.0148	.0251	.0216	-.0256	132.		
.2250	1873.	1419.	-274.	-212.	148.	-885.	-.0116	-.0317	.0176	.0224	.0207	-.0010	343.		
.2260	2677.	1339.	-589.	-331.	219.	-1006.	-.0240	-.0307	.0202	.0208	.0157	.0217	507.		
.2270	3139.	1268.	-963.	-474.	268.	-1192.	-.0351	-.0288	.0223	.0198	.0070	.0410	614.		
.2280	3376.	1247.	-1278.	-597.	298.	-1287.	-.0448	-.0262	.0240	.0184	-.0042	.0556	679.		
.2290	3550.	1180.	-1293.	-598.	311.	-1358.	-.0529	-.0229	.0250	.0161	-.0172	.0643	710.		
.2300	3626.	1023.	-1065.	-407.	308.	-1395.	-.0595	-.0189	.0254	.0123	-.0312	.0667	709.		
.2310	3566.	856.	-728.	-351.	290.	-1377.	-.0645	-.0144	.0254	.0068	-.0455	.0632	680.		
.2320	3436.	718.	-261.	-156.	262.	-1331.	-.0679	-.0093	.0252	-.0005	-.0593	.0548	640.		
.2330	3186.	527.	196.	39.	225.	-1240.	-.0698	-.0039	.0250	-.0090	-.0720	.0421	591.		
.2340	2706.	197.	351.	124.	184.	-1063.	-.0702	.0018	.0249	-.0174	-.0832	.0262	509.		
.2350	2095.	-243.	149.	77.	147.	-839.	-.0692	.0076	.0249	-.0250	-.0916	.0087	401.		

ADLPIPE PAGE 902 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.26.51.

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

.2240	821.	1384.	-127.	-53.	55.	-270.	.0017	-.0317	.0148	.0251	.0216	-.0256	132.
.2250	1873.	1419.	-274.	-212.	148.	-685.	-.0116	-.0317	.0176	.0224	.0207	-.0010	343.
.2260	2677.	1339.	-589.	-331.	219.	-1006.	-.0240	-.0307	.0202	.0208	.0157	-.0217	507.
.2270	3139.	1268.	-963.	-474.	268.	-1192.	-.0351	-.0288	.0223	.0198	.0070	-.0410	614.
.2280	3376.	1247.	-1278.	-597.	298.	-1287.	-.0448	-.0262	.0240	.0184	-.0042	-.0556	679.
.2290	3550.	1180.	-1293.	-598.	311.	-1358.	-.0529	-.0229	.0250	.0161	-.0172	-.0643	710.
.2300	3626.	1023.	-1065.	-497.	308.	-1395.	-.0595	-.0189	.0254	.0123	-.0312	-.0667	709.
.2310	3566.	856.	-728.	-351.	290.	-1377.	-.0645	-.0144	.0254	.0068	-.0455	-.0632	680.
.2320	3436.	718.	-261.	-156.	262.	-1331.	-.0679	-.0093	.0252	-.0005	-.0593	-.0548	640.
.2330	3186.	527.	196.	39.	225.	-1240.	-.0698	-.0039	.0250	-.0090	-.0720	-.0421	591.
.2340	2706.	197.	351.	124.	184.	-1063.	-.0702	.0018	.0249	-.0174	-.0832	-.0262	509.
.2350	2095.	-243.	149.	77.	147.	-839.	-.0692	.0076	.0249	-.0250	-.0916	.0087	401.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.51.

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	20	MEMBER	1	SEQUENCE	36	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)		
.2360	1534.	-660.	-289.	-66.	124.	-633.	-.0672	.0133	.0249	-.0314	-.0961	-.0082		304.
.2370	1050.	-878.	-900.	-292.	113.	-451.	-.0642	.0185	.0247	-.0369	-.0963	-.0229		257.
.2380	693.	-808.	-1493.	-532.	110.	-307.	-.0604	.0233	.0239	-.0418	-.0921	-.0342		292.
.2390	618.	-523.	-1740.	-650.	114.	-265.	-.0560	.0276	.0222	-.0462	-.0836	-.0414		333.
.2400	802.	-205.	-1597.	-617.	122.	-326.	-.0509	.0315	.0196	-.0498	-.0717	-.0443		332.
.2410	1008.	11.	-1338.	-530.	127.	-398.	-.0451	.0353	.0161	-.0525	-.0574	-.0437		317.
.2420	1091.	95.	-1115.	-448.	124.	-428.	-.0386	.0391	.0118	-.0542	-.0422	-.0404		296.
.2430	1036.	54.	-920.	-368.	112.	-408.	-.0313	.0429	.0068	-.0555	-.0270	-.0350		263.
.2440	800.	-136.	-796.	-305.	90.	-322.	-.0234	.0468	.0013	-.0563	-.0126	-.0284		212.
.2450	393.	-491.	-770.	-269.	59.	-175.	-.0150	.0505	-.0046	-.0569	.0003	-.0214		153.
.2460	-49.	-940.	-751.	-228.	26.	-18.	-.0064	.0539	-.0110	-.0577	.0116	-.0146		108.
.2470	-430.	-1330.	-735.	-194.	-2.	117.	.0021	.0567	-.0176	-.0592	.0215	-.0081		106.
.2480	-748.	-1544.	-718.	-171.	-26.	235.	.0103	.0588	-.0245	-.0618	.0295	-.0021		137.
.2490	-934.	-1548.	-493.	-82.	-49.	308.	.0180	.0600	-.0316	-.0661	.0352	.0033		151.
.2500	-942.	-1338.	26.	108.	-70.	320.	.0252	.0603	-.0388	-.0725	.0385	.0079		162.
.2510	-947.	-960.	546.	286.	-91.	337.	.0318	.0598	-.0458	-.0806	.0391	.0115		211.
.2520	-1138.	-561.	832.	370.	-116.	428.	.0377	.0589	-.0525	-.0898	.0368	.0142		271.
.2530	-1486.	-288.	1058.	440.	-151.	577.	.0429	.0576	-.0586	-.0998	.0315	.0160		347.
.2540	-1918.	-151.	1371.	554.	-195.	753.	.0471	.0562	-.0642	-.1105	.0239	.0174		448.
.2550	-2459.	-66.	1601.	638.	-244.	971.	.0502	.0548	-.0690	-.1215	.0149	.0189		556.
.2560	-3052.	35.	1639.	646.	-289.	1209.	.0519	.0534	-.0731	-.1321	.0061	.0216		657.
.2570	-3508.	181.	1661.	644.	-323.	1396.	.0519	.0520	-.0764	-.1419	-.0015	.0260		736.
.2580	-3694.	353.	1803.	688.	-342.	1476.	.0501	.0507	-.0788	-.1505	-.0067	.0320		780.
.2590	-3583.	533.	2026.	763.	-343.	1439.	.0463	.0497	-.0803	-.1576	-.0091	.0398		780.
.2600	-3168.	776.	2264.	839.	-322.	1285.	.0407	.0490	-.0807	-.1630	-.0081	.0494		735.
.2610	-2537.	1126.	2377.	858.	-280.	1049.	.0334	.0488	-.0800	-.1670	-.0043	.0601		649.
.2620	-1851.	1470.	2224.	773.	-224.	791.	.0246	.0493	-.0781	-.1697	.0015	.0708		529.
.2630	-1160.	1599.	1887.	630.	-160.	523.	.0148	.0507	-.0750	-.1712	.0084	.0803		391.
.2640	-451.	1436.	1505.	491.	-93.	236.	.0043	.0529	-.0710	-.1716	.0157	.0879		259.
.2650	204.	1082.	1035.	331.	-26.	-38.	-.0066	.0560	-.0661	-.1715	.0229	.0929		156.
.2660	753.	670.	477.	140.	36.	-272.	-.0176	.0597	-.0608	-.1715	.0293	.0949		144.
.2670	1282.	295.	50.	-2.	92.	-496.	-.0283	.0637	-.0551	-.1721	.0345	.0938		236.
.2680	1843.	24.	-99.	-41.	139.	-729.	-.0385	.0679	-.0493	-.1733	.0381	.0898		348.
.2690	2347.	-138.	-104.	-31.	176.	-934.	-.0477	.0721	-.0436	-.1746	.0396	.0830		446.
.2700	2693.	-227.	-113.	-28.	202.	-1075.	-.0558	.0763	-.0380	-.1755	.0385	.0737		513.
.2710	2837.	-254.	-135.	-35.	213.	-1133.	-.0624	.0803	-.0325	-.1757	.0342	.0626		540.
.2720	2726.	-235.	-211.	-66.	208.	-1088.	-.0674	.0842	-.0273	-.1750	.0263	.0507		520.
.2730	2346.	-270.	-416.	-145.	188.	-939.	-.0709	.0880	-.0223	-.1729	.0149	.0388		454.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.51.

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

.2620	-1851.	1470.	1224.	773.	-224.	791.	0146	.0493	-.0731	-.1697	.0015	.0708	529.
.2630	-1160.	1599.	1887.	630.	-160.	523.	.0148	.0507	-.0750	-.1712	.0084	.0803	391.
.2640	-451.	1476.	1505.	491.	-93.	236.	.0043	.0529	-.0710	-.1716	.0157	.0879	259.
.2650	204.	1082.	1033.	331.	-26.	-36.	-.0066	.0560	-.0661	-.1715	.0229	.0929	156.
.2660	753.	670.	477.	140.	36.	-272.	-.0176	.0597	-.0608	-.1715	.0293	.0949	144.
.2670	1262.	295.	50.	-2.	92.	-496.	-.0283	.0637	-.0551	-.1721	.0345	.0938	236.
.2680	1843.	74.	-99.	-41.	139.	-729.	-.0385	.0679	-.0493	-.1733	.0381	.0898	348.
.2690	2347.	-138.	-104.	-31.	176.	-934.	-.0477	.0721	-.0436	-.1746	.0396	.0830	446.
.2700	2693.	-227.	-113.	-28.	202.	-1075.	-.0558	.0763	-.0380	-.1755	.0385	.0737	513.
.2710	2837.	-254.	-135.	-35.	213.	-1133.	-.0624	.0803	-.0325	-.1757	.0342	.0626	540.
.2720	2726.	-235.	-211.	-66.	208.	-1068.	-.0674	.0842	-.0273	-.1750	.0263	.0507	520.
.2730	2346.	-270.	-416.	-145.	182.	-939.	-.0709	.0880	-.0223	-.1729	.0149	.0388	454.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.51.

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	20	MEMBER	1	SEQUENCE	36	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)		
.2740	1826.	-463.	-709.	-247.	162.	-741.	-.0729	.0916	-.0177	-.1692	.0010	.0280	374.		
.2750	1305.	-771.	-1008.	-342.	136.	-547.	-.0737	.0949	-.0137	-.1640	-.0143	.0194	309.		
.2760	875.	-1085.	-1260.	-419.	114.	-389.	-.0735	.0977	-.0104	-.1576	-.0298	.0141	273.		
.2770	642.	-1352.	-1371.	-444.	102.	-308.	-.0726	.0999	-.0078	-.1504	-.0446	.0122	258.		
.2780	655.	-1547.	-1293.	-398.	99.	-321.	-.0710	.1013	-.0060	-.1427	-.0580	.0137	244.		
.2790	821.	-1636.	-1124.	-325.	105.	-390.	-.0688	.1018	-.0050	-.1345	-.0595	.0176	243.		
.2800	1007.	-1635.	-974.	-266.	112.	-463.	-.0661	.1013	-.0046	-.1260	-.0793	.0232	256.		
.2810	1143.	-1597.	-831.	-212.	117.	-516.	-.0629	.0999	-.0048	-.1175	-.0874	.0291	267.		
.2820	1166.	-1540.	-694.	-162.	113.	-523.	-.0591	.0977	-.0053	-.1094	-.0936	.0345	262.		
.2830	1012.	-1462.	-631.	-143.	99.	-459.	-.0548	.0945	-.0062	-.1021	-.0979	.0386	230.		
.2840	713.	-1373.	-635.	-151.	77.	-337.	-.0501	.0906	-.0073	-.0958	-.0996	.0411	177.		
.2850	369.	-1279.	-582.	-137.	50.	-197.	-.0453	.0859	-.0086	-.0908	-.0982	.0421	115.		
.2860	53.	-1182.	-376.	-62.	19.	-68.	-.0404	.0805	-.0100	-.0871	-.0938	.0418	44.		
.2870	-211.	-1105.	-30.	69.	-14.	40.	-.0356	.0744	-.0115	-.0843	-.0864	.0403	38.		
.2880	-416.	-1023.	383.	226.	-46.	124.	-.0311	.0677	-.0129	-.0819	-.0766	.0382	123.		
.2890	-577.	-860.	778.	371.	-73.	194.	-.0269	.0605	-.0141	-.0794	-.0649	.0358	199.		
.2900	-720.	-606.	1082.	473.	-96.	261.	-.0230	.0528	-.0149	-.0762	-.0522	.0336	257.		
.2910	-837.	-340.	1256.	522.	-111.	318.	-.0196	.0449	-.0152	-.0716	-.0391	.0320	291.		
.2920	-894.	-99.	1271.	510.	-116.	350.	-.0165	.0368	-.0148	-.0653	-.0258	.0311	295.		
.2930	-864.	154.	1113.	429.	-108.	348.	-.0138	.0287	-.0140	-.0573	-.0126	.0314	264.		
.2940	-716.	408.	834.	300.	-86.	300.	-.0115	.0207	-.0126	-.0477	.0005	.0329	203.		
.2950	-423.	601.	549.	173.	-53.	191.	-.0095	.0131	-.0109	-.0369	.0132	.0354	123.		
.2960	-5.	716.	338.	81.	-14.	31.	-.0076	.0057	-.0090	-.0254	.0252	.0384	41.		
.2970	447.	767.	194.	21.	25.	-147.	-.0057	-.0011	-.0069	-.0132	.0351	.0412	70.		
.2980	822.	735.	72.	-25.	57.	-296.	-.0036	-.0076	-.0048	-.0007	.0452	.0432	142.		
.2990	1019.	626.	-53.	-67.	77.	-378.	-.0012	-.0136	-.0027	.0119	.0521	.0436	184.		
.3000	976.	518.	-173.	-106.	78.	-366.	.0017	-.0192	-.0006	.0244	.0566	.0424	182.		
.3010	687.	465.	-267.	-140.	61.	-253.	.0050	-.0245	.0014	.0363	.0588	.0394	139.		
.3020	207.	441.	-327.	-162.	28.	-64.	.0086	-.0295	.0032	.0478	.0591	.0353	83.		
.3030	-375.	409.	-346.	-167.	-14.	165.	.0122	-.0343	.0050	.0587	.0585	.0305	110.		
.3040	-942.	373.	-291.	-143.	-57.	388.	.0155	-.0388	.0066	.0689	.0577	.0261	195.		
.3050	-1379.	345.	-123.	-74.	-96.	560.	.0185	-.0432	.0081	.0785	.0574	.0228	268.		
.3060	-1621.	319.	133.	29.	-124.	654.	.0207	-.0474	.0096	.0874	.0580	.0212	312.		
.3070	-1658.	286.	388.	132.	-137.	668.	.0222	-.0514	.0112	.0959	.0596	.0217	325.		
.3080	-1509.	239.	560.	204.	-133.	607.	.0230	-.0552	.0131	.1042	.0619	.0240	306.		
.3090	-1213.	187.	605.	226.	-113.	488.	.0230	-.0590	.0153	.1124	.0645	.0277	257.		
.3100	-832.	173.	498.	184.	-81.	336.	.0225	-.0626	.0178	.1205	.0668	.0322	184.		
.3110	-423.	238.	246.	80.	-41.	177.	.0215	-.0661	.0205	.1282	.0682	.0366	93.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.51.

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

.3010	687.	465.	267.	-140.	61.	-253.	267.	.0050	-.0245	.0014	.0363	.0588	.0394	139.
.3020	207.	441.	-327.	-162.	28.	-64.	28.	.0066	-.0295	.0032	.0478	.0591	.0353	83.
.3030	-375.	409.	-346.	-167.	-14.	165.	-14.	.0122	-.0343	.0050	.0587	.0585	.0305	110.
.3040	-942.	373.	-291.	-143.	-57.	388.	-57.	.0155	-.0388	.0066	.0689	.0577	.0261	195.
.3050	-1379.	345.	-123.	-74.	-96.	560.	-96.	.0185	-.0432	.0081	.0785	.0574	.0228	268.
.3060	-1621.	319.	133.	29.	-124.	654.	29.	.0207	-.0474	.0096	.0874	.0580	.0212	312.
.3070	-1658.	286.	388.	132.	-137.	668.	132.	.0222	-.0514	.0112	.0959	.0596	.0217	325.
.3080	-1509.	239.	560.	204.	-133.	607.	204.	.0230	-.0552	.0131	.1042	.0519	.0240	306.
.3090	-1213.	187.	605.	226.	-113.	488.	226.	.0230	-.0590	.0153	.1124	.0545	.0277	257.
.3100	-832.	173.	498.	184.	-61.	376.	184.	.0225	-.0626	.0178	.1205	.0568	.0322	184.
.3110	-423.	238.	246.	80.	-41.	177.	80.	.0215	-.0661	.0205	.1282	.0582	.0366	93.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.51.

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	20	MEMBER	1	SEQUENCE	36	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)		
.3120	-23.	376.	-95.	-65.	2.	24.	.0203	-.0695	.0235	.1352	.0682	.0402	33.		
.3130	338.	556.	-440.	-215.	42.	-112.	.0189	-.0726	.0264	.1411	.0663	.0421	115.		
.3140	625.	751.	-711.	-337.	74.	-218.	.0176	-.0754	.0292	.1455	.0622	.0415	191.		
.3150	816.	923.	-843.	-401.	93.	-286.	.0165	-.0778	.0317	.1483	.0556	.0382	235.		
.3160	882.	1037.	-814.	-398.	97.	-308.	.0155	-.0797	.0338	.1492	.0464	.0317	240.		
.3170	794.	1079.	-648.	-335.	84.	-271.	.0149	-.0809	.0357	.1484	.0347	.0224	206.		
.3180	555.	1045.	-396.	-233.	56.	-178.	.0145	-.0816	.0372	.1463	.0209	.0104	140.		
.3190	193.	939.	-128.	-119.	19.	-39.	.0143	-.0817	.0387	.1434	.0055	-.0034	60.		
.3200	-236.	779.	89.	-22.	-21.	124.	.0141	-.0812	.0400	.1402	-.0104	-.0184	60.		
.3210	-662.	611.	217.	41.	-57.	286.	.0137	-.0804	.0414	.1372	-.0259	-.0333	138.		
.3220	-988.	465.	266.	71.	-83.	410.	.0129	-.0791	.0429	.1347	-.0398	-.0473	199.		
.3230	-1124.	340.	267.	81.	-93.	458.	.0118	-.0777	.0445	.1330	-.0512	-.0595	222.		
.3240	-1031.	234.	238.	77.	-85.	417.	.0102	-.0761	.0462	.1321	-.0594	-.0695	203.		
.3250	-733.	154.	174.	57.	-61.	296.	.0081	-.0743	.0480	.1320	-.0641	-.0770	144.		
.3260	-269.	68.	80.	27.	-23.	109.	.0059	-.0725	.0498	.1326	-.0655	-.0822	54.		
.3270	284.	-61.	-45.	-13.	23.	-115.	.0037	-.0707	.0516	.1339	-.0638	-.0854	55.		
.3280	816.	-223.	-213.	-68.	68.	-332.	.0017	-.0689	.0534	.1356	-.0598	-.0871	162.		
.3290	1234.	-387.	-429.	-141.	107.	-504.	.0003	-.0673	.0550	.1374	-.0544	-.0880	250.		
.3300	1486.	-526.	-682.	-231.	136.	-609.	-.0004	-.0659	.0564	.1391	-.0480	-.0884	312.		
.3310	1546.	-626.	-959.	-334.	151.	-637.	-.0003	-.0648	.0574	.1405	-.0412	-.0886	344.		
.3320	1440.	-673.	-1209.	-429.	154.	-597.	.0007	-.0640	.0578	.1414	-.0343	-.0888	352.		
.3330	1233.	-657.	-1370.	-494.	145.	-514.	.0024	-.0637	.0577	.1417	-.0275	-.0887	341.		
.3340	986.	-560.	-1434.	-527.	129.	-412.	.0049	-.0637	.0568	.1412	-.0206	-.0882	319.		
.3350	726.	-388.	-1446.	-544.	111.	-303.	.0080	-.0641	.0552	.1399	-.0139	-.0870	296.		
.3360	484.	-191.	-1421.	-549.	92.	-200.	.0116	-.0646	.0529	.1379	-.0074	-.0850	277.		
.3370	298.	-33.	-1353.	-533.	76.	-119.	.0155	-.0653	.0498	.1353	-.0011	-.0821	258.		
.3380	160.	55.	-1263.	-504.	62.	-61.	.0196	-.0660	.0460	.1320	.0046	-.0783	240.		
.3390	52.	81.	-1179.	-473.	51.	-17.	.0238	-.0667	.0416	.1282	.0097	-.0738	223.		
.3400	-33.	69.	-1099.	-440.	41.	16.	.0282	-.0674	.0366	.1236	.0140	-.0685	207.		
.3410	-88.	42.	-994.	-396.	33.	37.	.0325	-.0680	.0310	.1182	.0175	-.0629	187.		
.3420	-108.	18.	-825.	-328.	25.	43.	.0368	-.0686	.0250	.1119	.0204	-.0572	155.		
.3430	-88.	8.	-562.	-223.	16.	35.	.0410	-.0691	.0187	.1048	.0229	-.0515	106.		
.3440	-41.	34.	-216.	-88.	6.	17.	.0452	-.0697	.0121	.0967	.0251	-.0464	42.		
.3450	-4.	126.	160.	54.	-7.	7.	.0492	-.0703	.0056	.0879	.0271	-.0419	26.		
.3460	-15.	283.	527.	188.	-22.	17.	.0531	-.0707	-.0008	.0783	.0289	-.0385	89.		
.3470	-92.	465.	871.	311.	-41.	55.	.0569	-.0710	-.0068	.0682	.0305	-.0363	149.		
.3480	-250.	639.	1159.	412.	-64.	125.	.0605	-.0709	-.0123	.0579	.0320	-.0354	204.		
.3490	-499.	805.	1343.	473.	-90.	229.	.0638	-.0705	-.0170	.0476	.0333	-.0358	250.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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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

.3370	120.	55.	-1179.	-473.	51.	-17.	.0238	-.0667	.0416	.1282	.0097	-.0738	223.
.3390	52.	81.	-1099.	-440.	41.	16.	.0282	-.0674	.0366	.1236	.0140	-.0685	207.
.3410	-33.	69.	-994.	-396.	33.	42.	.0325	-.0680	.0310	.1182	.0175	-.0629	187.
.3420	-108.	18.	-825.	-328.	25.	43.	.0368	-.0686	.0250	.1119	.0204	-.0572	155.
.3430	-88.	8.	-762.	-223.	16.	35.	.0410	-.0691	.0187	.1048	.0229	-.0515	106.
.3440	-41.	34.	-216.	-86.	6.	17.	.0452	-.0697	.0121	.0967	.0251	-.0464	42.
.3450	-4.	126.	160.	54.	-7.	7.	.0492	-.0703	.0056	.0879	.0271	-.0419	26.
.3460	-15.	283.	527.	188.	-22.	17.	.0531	-.0707	-.0008	.0783	.0289	-.0385	89.
.3470	-92.	465.	871.	311.	-41.	55.	.0569	-.0710	-.0068	.0682	.0305	-.0363	149.
.3480	-250.	639.	1159.	412.	-64.	125.	.0605	-.0709	-.0123	.0579	.0320	-.0354	204.
.3490	-499.	805.	1343.	473.	-90.	229.	.0638	-.0705	-.0170	.0476	.0333	-.0358	250.

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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

2 SAFETY COLD FKW24F--2 PSV

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ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	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)
.3500	20	1	36				.3500	-813.	975.	1418.	490.	-116.	360.	.0667	-.0096	-.0211	.0376	.0346	-.0374	290.
.3510							.3510	-1134.	1143.	1431.	483.	-140.	494.	.0690	-.0682	-.0243	.0280	.0361	-.0398	330.
.3520							.3520	-1405.	1297.	1423.	468.	-159.	608.	.0707	-.0660	-.0268	.0190	.0378	-.0427	367.
.3530							.3530	-1581.	1424.	1409.	453.	-172.	682.	.0715	-.0631	-.0285	.0109	.0399	-.0459	392.
.3540							.3540	-1638.	1511.	1383.	437.	-175.	708.	.0714	-.0594	-.0296	.0039	.0423	-.0491	399.
.3550							.3550	-1582.	1540.	1332.	414.	-169.	687.	.0704	-.0548	-.0299	-.0018	.0448	-.0520	384.
.3560							.3560	-1442.	1483.	1240.	382.	-155.	630.	.0685	-.0494	-.0296	-.0062	.0471	-.0547	353.
.3570							.3570	-1249.	1317.	1109.	342.	-136.	547.	.0659	-.0431	-.0288	-.0092	.0486	-.0570	309.
.3580							.3580	-1037.	1038.	936.	294.	-113.	452.	.0627	-.0361	-.0275	-.0110	.0490	-.0589	258.
.3590							.3590	-844.	668.	716.	235.	-90.	361.	.0589	-.0285	-.0257	-.0117	.0478	-.0602	206.
.3600							.3600	-690.	242.	470.	168.	-69.	283.	.0548	-.0206	-.0237	-.0117	.0449	-.0610	158.
.3610							.3610	-570.	-202.	246.	112.	-52.	217.	.0503	-.0126	-.0215	-.0112	.0401	-.0611	117.
.3620							.3620	-480.	-615.	75.	75.	-38.	166.	.0457	-.0048	-.0191	-.0107	.0335	-.0604	87.
.3630							.3630	-427.	-947.	-46.	51.	-29.	131.	.0408	.0027	-.0168	-.0105	.0252	-.0589	67.
.3640							.3640	-412.	-1169.	-132.	33.	-25.	116.	.0359	.0096	-.0144	-.0107	.0154	-.0565	58.
.3650							.3650	-436.	-1285.	-192.	18.	-21.	121.	.0308	.0158	-.0121	-.0115	.0044	-.0534	59.
.3660							.3660	-498.	-1313.	-242.	0.	-17.	145.	.0255	.0212	-.0099	-.0132	-.0072	-.0495	69.
.3670							.3670	-586.	-1276.	-292.	-22.	-31.	181.	.0200	.0259	-.0077	-.0155	-.0191	-.0451	87.
.3680							.3680	-672.	-1196.	-345.	-49.	-35.	218.	.0142	.0298	-.0057	-.0187	-.0306	-.0401	106.
.3690							.3690	-727.	-1087.	-401.	-79.	-37.	244.	.0081	.0330	-.0038	-.0226	-.0410	-.0346	122.
.3700							.3700	-722.	-954.	-447.	-107.	-35.	248.	.0016	.0356	-.0020	-.0273	-.0499	-.0286	128.
.3710							.3710	-630.	-807.	-459.	-123.	-28.	217.	-.0052	.0377	-.0004	-.0325	-.0566	-.0222	118.
.3720							.3720	-438.	-662.	-423.	-119.	-15.	147.	-.0124	.0393	.0009	-.0382	-.0510	-.0155	89.
.3730							.3730	-159.	-527.	-355.	-102.	2.	42.	-.0198	.0406	.0021	-.0440	-.0631	-.0086	52.
.3740							.3740	174.	-403.	-277.	-80.	24.	-85.	-.0273	.0415	.0030	-.0498	-.0629	-.0016	56.
.3750							.3750	528.	-294.	-205.	-60.	47.	-221.	-.0347	.0423	.0039	-.0554	-.0608	.0052	109.
.3760							.3760	873.	-211.	-151.	-44.	70.	-354.	-.0418	.0429	.0045	-.0604	-.0572	.0119	170.
.3770							.3770	1189.	-171.	-125.	-37.	92.	-477.	-.0484	.0434	.0051	-.0649	-.0524	.0183	228.
.3780							.3780	1466.	-177.	-126.	-37.	112.	-587.	-.0543	.0438	.0055	-.0685	-.0467	.0244	281.
.3790							.3790	1707.	-209.	-147.	-43.	131.	-684.	-.0594	.0441	.0057	-.0714	-.0403	.0301	327.
.3800							.3800	1909.	-231.	-176.	-53.	147.	-765.	-.0636	.0444	.0059	-.0735	-.0337	.0355	366.
.3810							.3810	2069.	-229.	-200.	-62.	159.	-828.	-.0667	.0445	.0059	-.0751	-.0270	.0407	396.
.3820							.3820	2181.	-215.	-214.	-69.	168.	-872.	-.0686	.0445	.0057	-.0759	-.0206	.0454	417.
.3830							.3830	2230.	-199.	-232.	-77.	173.	-891.	-.0694	.0444	.0053	-.0760	-.0147	.0495	427.
.3840							.3840	2197.	-179.	-279.	-97.	172.	-877.	-.0689	.0443	.0047	-.0754	-.0095	.0531	421.
.3850							.3850	2066.	-150.	-370.	-135.	166.	-824.	-.0673	.0440	.0039	-.0742	-.0050	.0561	399.
.3860							.3860	1841.	-113.	-497.	-189.	155.	-733.	-.0646	.0437	.0028	-.0725	-.0014	.0586	362.
.3870							.3870	1543.	-79.	-636.	-246.	138.	-614.	-.0609	.0433	.0015	-.0705	.0017	.0607	317.

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ADLPIPE STRESS ANALYSIS

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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

.3770	1189.	-171.	-125.	-37.	92.	-477.	-.0484	.0434	.0051	-.0649	-.0524	.0183	228.
.3780	1466.	-177.	-126.	-37.	112.	-527.	-.0543	.0438	.0055	-.0685	-.0467	.0244	281.
.3790	1707.	-209.	-147.	-43.	131.	-684.	-.0594	.0441	.0057	-.0714	-.0403	.0301	327.
.3800	1909.	-231.	-176.	-53.	147.	-765.	-.0636	.0444	.0059	-.0735	-.0337	.0355	366.
.3810	2069.	-229.	-200.	-62.	159.	-828.	-.0667	.0445	.0059	-.0751	-.0270	.0407	396.
.3820	2181.	-215.	-214.	-69.	160.	-872.	-.0686	.0445	.0057	-.0759	-.0206	.0454	417.
.3830	2230.	-199.	-232.	-77.	173.	-891.	-.0694	.0444	.0053	-.0760	-.0147	.0495	427.
.3840	2197.	-179.	-279.	-97.	172.	-877.	-.0689	.0443	.0047	-.0754	-.0095	.0531	421.
.3850	2066.	-150.	-370.	-135.	166.	-824.	-.0673	.0440	.0039	-.0742	-.0050	.0561	399.
.3860	1841.	-113.	-497.	-189.	155.	-733.	-.0646	.0437	.0028	-.0725	-.0014	.0586	362.
.3870	1543.	-79.	-626.	-246.	138.	-614.	-.0609	.0433	.0015	-.0705	.0017	.0607	317.

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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
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CONDITION 24
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INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	20	MEMBER	1	SEQUENCE	36	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)			
.3880	1204.	-66.	-752.	-293.	118.	-479.	-.0563	.0429	-.0003	-.0683	.0042	.0026	269.			
.3890	855.	-76.	-809.	-315.	95.	-341.	-.0512	.0424	-.0025	-.0660	.0064	.0644	222.			
.3900	515.	-95.	-779.	-301.	69.	-208.	-.0455	.0419	-.0051	-.0638	.0084	.0666	175.			
.3910	198.	-114.	-647.	-248.	40.	-83.	-.0396	.0414	-.0081	-.0619	.0104	.0691	124.			
.3920	-93.	-143.	-423.	-157.	10.	31.	-.0335	.0408	-.0114	-.0602	.0122	.0721	75.			
.3930	-365.	-188.	-146.	-44.	-21.	137.	-.0276	.0400	-.0149	-.0585	.0139	.0755	68.			
.3940	-630.	-220.	134.	69.	-51.	240.	-.0218	.0392	-.0185	-.0570	.0155	.0794	120.			
.3950	-893.	-208.	384.	167.	-81.	345.	-.0164	.0383	-.0220	-.0556	.0169	.0836	184.			
.3960	-1140.	-150.	599.	248.	-107.	445.	-.0114	.0372	-.0252	-.0544	.0182	.0881	244.			
.3970	-1346.	-72.	782.	315.	-130.	530.	-.0072	.0361	-.0280	-.0533	.0194	.0925	295.			
.3980	-1486.	13.	935.	369.	-146.	589.	-.0038	.0349	-.0304	-.0523	.0207	.0966	333.			
.3990	-1550.	109.	1052.	409.	-155.	618.	-.0012	.0338	-.0322	-.0514	.0222	.1003	355.			
.4000	-1543.	219.	1128.	470.	-158.	620.	.0004	.0327	-.0334	-.0508	.0238	.1031	361.			

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)
.0300	13094.	636.	2605.	985.	855.	-5157.	.1022	.0629	-.0146	.0500	-.0581	-.0849	2493.

SECTION	20	MEMBER	1	SEQUENCE	37	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.	-.0001	.0000	-.0002	-.0002	.0002	.0001	0.			
.0030	0.	0.	0.	0.	0.	0.	-.0003	.0000	-.0005	-.0007	.0007	.0005	0.			
.0040	0.	0.	0.	0.	0.	0.	-.0007	-.0000	-.0012	-.0018	.0014	.0013	0.			
.0050	0.	0.	0.	0.	0.	0.	-.0011	-.0001	-.0022	-.0035	.0023	.0024	0.			
.0060	0.	0.	0.	0.	0.	0.	-.0018	-.0002	-.0035	-.0059	.0033	.0038	0.			
.0070	0.	0.	0.	0.	0.	0.	-.0026	-.0003	-.0054	-.0091	.0047	.0057	0.			
.0080	0.	0.	0.	0.	0.	0.	-.0038	-.0005	-.0082	-.0136	.0076	.0085	0.			
.0090	0.	0.	0.	0.	0.	0.	-.0053	-.0008	-.0119	-.0198	.0128	.0126	0.			
.0100	0.	0.	0.	0.	0.	0.	-.0069	-.0013	-.0166	-.0281	.0203	.0179	0.			
.0110	0.	0.	0.	0.	0.	0.	-.0081	-.0020	-.0222	-.0382	.0296	.0238	0.			

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DIS/ADLPIPE

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18.26.51.

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

CONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

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

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.	-.0001	.0000	-.0002	-.0002	.0002	.0001	0.
.0030	0.	0.	0.	0.	0.	0.	0.	-.0003	.0000	-.0005	-.0007	.0007	.0005	0.
.0040	0.	0.	0.	0.	0.	0.	0.	-.0007	-.0000	-.0012	-.0018	.0014	.0013	0.
.0050	0.	0.	0.	0.	0.	0.	0.	-.0011	-.0001	-.0022	-.0035	.0023	.0024	0.
.0060	0.	0.	0.	0.	0.	0.	0.	-.0018	-.0002	-.0035	-.0059	.0033	.0038	0.
.0070	0.	0.	0.	0.	0.	0.	0.	-.0026	-.0003	-.0054	-.0091	.0047	.0057	0.
.0080	0.	0.	0.	0.	0.	0.	0.	-.0038	-.0005	-.0082	-.0136	.0076	.0085	0.
.0090	0.	0.	0.	0.	0.	0.	0.	-.0053	-.0008	-.0119	-.0198	.0128	.0126	0.
.0100	0.	0.	0.	0.	0.	0.	0.	-.0069	-.0013	-.0166	-.0281	.0203	.0179	0.
.0110	0.	0.	0.	0.	0.	0.	0.	-.0081	-.0020	-.0222	-.0382	.0296	.0238	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.51.

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	20	MEMBER	1	SEQUENCE	37	LOCATION	DIS	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)
.0120	0.	0.	0.	0.	0.	0.	0.	-.0085	-.0027	-.0283	-.0496	.0397	.0294	0.
.0130	0.	0.	0.	0.	0.	0.	0.	-.0076	-.0034	-.0348	-.0614	.0487	.0336	0.
.0140	0.	0.	0.	0.	0.	0.	0.	-.0047	-.0040	-.0410	-.0726	.0550	.0350	0.
.0150	0.	0.	0.	0.	0.	0.	0.	.0007	-.0045	-.0461	-.0821	.0571	.0328	0.
.0160	0.	0.	0.	0.	0.	0.	0.	.0087	-.0046	-.0496	-.0884	.0549	.0263	0.
.0170	0.	0.	0.	0.	0.	0.	0.	.0190	-.0041	-.0509	-.0905	.0500	.0160	0.
.0180	0.	0.	0.	0.	0.	0.	0.	.0308	-.0026	-.0505	-.0881	.0449	.0036	0.
.0190	0.	0.	0.	0.	0.	0.	0.	.0431	.0001	-.0490	-.0822	.0431	-.0088	0.
.0200	0.	0.	0.	0.	0.	0.	0.	.0542	.0043	-.0486	-.0759	.0502	-.0178	0.
.0210	0.	0.	0.	0.	0.	0.	0.	.0634	.0096	-.0501	-.0719	.0690	-.0212	0.
.0220	0.	0.	0.	0.	0.	0.	0.	.0723	.0159	-.0520	-.0698	.0869	-.0222	0.
.0230	0.	0.	0.	0.	0.	0.	0.	.0820	.0231	-.0531	-.0658	.0947	-.0261	0.
.0240	0.	0.	0.	0.	0.	0.	0.	.0930	.0311	-.0519	-.0546	.0882	-.0378	0.
.0250	0.	0.	0.	0.	0.	0.	0.	.1042	.0397	-.0486	-.0360	.0720	-.0542	0.
.0260	0.	0.	0.	0.	0.	0.	0.	.1138	.0480	-.0447	-.0152	.0497	-.0680	0.
.0270	0.	0.	0.	0.	0.	0.	0.	.1208	.0545	-.0395	.0021	.0130	-.0801	0.
.0280	0.	0.	0.	0.	0.	0.	0.	.1238	.0586	-.0316	.0157	-.0268	-.0916	0.
.0290	0.	0.	0.	0.	0.	0.	0.	.1206	.0610	-.0211	.0305	-.0478	-.0956	0.
.0300	0.	0.	0.	0.	0.	0.	0.	.1100	.0629	-.0103	.0508	-.0564	-.0889	0.
.0310	0.	0.	0.	0.	0.	0.	0.	.0927	.0640	.0002	.0686	-.0594	-.0786	0.
.0320	0.	0.	0.	0.	0.	0.	0.	.0701	.0634	.0108	.0751	-.0543	-.0692	0.
.0330	0.	0.	0.	0.	0.	0.	0.	.0449	.0604	.0230	.0766	-.0459	-.0592	0.
.0340	0.	0.	0.	0.	0.	0.	0.	.0194	.0553	.0371	.0809	-.0425	-.0496	0.
.0350	0.	0.	0.	0.	0.	0.	0.	-.0057	.0490	.0507	.0851	-.0423	-.0474	0.
.0360	0.	0.	0.	0.	0.	0.	0.	-.0303	.0414	.0620	.0845	-.0409	-.0556	0.
.0370	0.	0.	0.	0.	0.	0.	0.	-.0530	.0316	.0708	.0807	-.0409	-.0654	0.
.0380	0.	0.	0.	0.	0.	0.	0.	-.0734	.0187	.0772	.0715	-.0464	-.0684	0.
.0390	0.	0.	0.	0.	0.	0.	0.	-.0920	.0037	.0809	.0522	-.0529	-.0662	0.
.0400	0.	0.	0.	0.	0.	0.	0.	-.1099	-.0115	.0809	.0300	-.0467	-.0602	0.
.0410	0.	0.	0.	0.	0.	0.	0.	-.1266	-.0256	.0777	.0153	-.0351	-.0480	0.
.0420	0.	0.	0.	0.	0.	0.	0.	-.1412	-.0392	.0721	.0057	-.0196	-.0259	0.
.0430	0.	0.	0.	0.	0.	0.	0.	-.1532	-.0527	.0650	-.0076	.0068	.0054	0.
.0440	0.	0.	0.	0.	0.	0.	0.	-.1605	-.0664	.0581	-.0217	.0330	.0405	0.
.0450	0.	0.	0.	0.	0.	0.	0.	-.1613	-.0796	.0524	-.0294	.0443	.0737	0.
.0460	0.	0.	0.	0.	0.	0.	0.	-.1551	-.0908	.0478	-.0271	.0398	.0982	0.
.0470	0.	0.	0.	0.	0.	0.	0.	-.1424	-.0996	.0448	-.0137	.0285	.1097	0.
.0480	0.	0.	0.	0.	0.	0.	0.	-.1238	-.1064	.0435	.0070	.0117	.1118	0.
.0490	0.	0.	0.	0.	0.	0.	0.	-.1007	-.1112	.0422	.0260	-.0118	.1099	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.51.

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

.0380	0.	0.	0.	0.	0.	0.	0.	0.	-.0754	.0187	.0772	.0715	-.0464	-.0684	0.
.0390	0.	0.	0.	0.	0.	0.	0.	0.	-.0920	.0037	.0809	.0522	-.0529	-.0662	0.
.0400	0.	0.	0.	0.	0.	0.	0.	0.	-.1099	-.0115	.0809	.0300	-.0467	-.0602	0.
.0410	0.	0.	0.	0.	0.	0.	0.	0.	-.1266	-.0256	.0777	.0153	-.0351	-.0480	0.
.0420	0.	0.	0.	0.	0.	0.	0.	0.	-.1412	-.0392	.0721	.0057	-.0196	-.0259	0.
.0430	0.	0.	0.	0.	0.	0.	0.	0.	-.1532	-.0527	.0650	-.0076	.0068	.0054	0.
.0440	0.	0.	0.	0.	0.	0.	0.	0.	-.1605	-.0664	.0581	-.0217	.0330	.0405	0.
.0450	0.	0.	0.	0.	0.	0.	0.	0.	-.1613	-.0796	.0524	-.0294	.0443	.0737	0.
.0460	0.	0.	0.	0.	0.	0.	0.	0.	-.1551	-.0908	.0478	-.0271	.0398	.0982	0.
.0470	0.	0.	0.	0.	0.	0.	0.	0.	-.1424	-.0996	.0448	-.0137	.0285	.1097	0.
.0480	0.	0.	0.	0.	0.	0.	0.	0.	-.1238	-.1064	.0435	.0070	.0117	.1118	0.
.0490	0.	0.	0.	0.	0.	0.	0.	0.	-.1007	-.1112	.0422	.0260	-.0118	.1099	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

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S/RV PIPING KEWAUNEE GKW03F 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	MEMBER	SEQUENCE	LOCATION	DIS	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)		
.0500	0.	0.	0.	0.	0.	0.	-.0752	-.1133	.0393	.0379	-.0350	.1030	0.		
.0510	0.	0.	0.	0.	0.	0.	-.0483	-.1114	.0355	.0481	-.0498	.0878	0.		
.0520	0.	0.	0.	0.	0.	0.	-.0206	-.1052	.0316	.0645	-.0557	.0662	0.		
.0530	0.	0.	0.	0.	0.	0.	.0079	-.0952	.0283	.0872	-.0578	.0404	0.		
.0540	0.	0.	0.	0.	0.	0.	.0371	-.0832	.0265	.1109	-.0514	.0083	0.		
.0550	0.	0.	0.	0.	0.	0.	.0669	-.0709	.0270	.1335	-.0584	-.0300	0.		
.0560	0.	0.	0.	0.	0.	0.	.0957	-.0591	.0292	.1575	-.0766	-.0679	0.		
.0570	0.	0.	0.	0.	0.	0.	.1217	-.0483	.0315	.1841	-.0833	-.1002	0.		
.0580	0.	0.	0.	0.	0.	0.	.1432	-.0388	.0331	.2102	-.0860	-.1273	0.		
.0590	0.	0.	0.	0.	0.	0.	.1588	-.0314	.0338	.2303	-.0803	-.1476	0.		
.0600	0.	0.	0.	0.	0.	0.	.1680	-.0266	.0333	.2414	-.0637	-.1544	0.		
.0610	0.	0.	0.	0.	0.	0.	.1706	-.0243	.0322	.2453	-.0365	-.1458	0.		
.0620	0.	0.	0.	0.	0.	0.	.1678	-.0237	.0309	.2450	-.0011	-.1300	0.		
.0630	0.	0.	0.	0.	0.	0.	.1604	-.0242	.0297	.2421	.0390	-.1143	0.		
.0640	0.	0.	0.	0.	0.	0.	.1500	-.0260	.0286	.2372	.0773	-.0990	0.		
.0650	0.	0.	0.	0.	0.	0.	.1380	-.0301	.0280	.2295	.1067	-.0835	0.		
.0660	0.	0.	0.	0.	0.	0.	.1251	-.0371	.0277	.2159	.1263	-.0708	0.		
.0670	0.	0.	0.	0.	0.	0.	.1110	-.0468	.0262	.1942	.1404	-.0612	0.		
.0680	0.	0.	0.	0.	0.	0.	.0953	-.0582	.0227	.1669	.1515	-.0507	0.		
.0690	0.	0.	0.	0.	0.	0.	.0785	-.0704	.0174	.1380	.1501	-.0371	0.		
.0700	0.	0.	0.	0.	0.	0.	.0610	-.0823	.0110	.1066	.1578	-.0222	0.		
.0710	0.	0.	0.	0.	0.	0.	.0434	-.0929	.0037	.0708	.1725	-.0066	0.		
.0720	0.	0.	0.	0.	0.	0.	.0265	-.1013	-.0038	.0343	.1580	.0105	0.		
.0730	0.	0.	0.	0.	0.	0.	.0112	-.1066	-.0104	.0032	.1530	.0277	0.		
.0740	0.	0.	0.	0.	0.	0.	-.0023	-.1086	-.0150	-.0195	.1312	.0419	0.		
.0750	0.	0.	0.	0.	0.	0.	-.0141	-.1077	-.0170	-.0336	.1033	.0524	0.		
.0760	0.	0.	0.	0.	0.	0.	-.0245	-.1049	-.0167	-.0398	.0694	.0620	0.		
.0770	0.	0.	0.	0.	0.	0.	-.0343	-.1004	-.0148	-.0412	.0355	.0730	0.		
.0780	0.	0.	0.	0.	0.	0.	-.0441	-.0944	-.0122	-.0414	.0080	.0847	0.		
.0790	0.	0.	0.	0.	0.	0.	-.0537	-.0863	-.0090	-.0403	-.0134	.0952	0.		
.0800	0.	0.	0.	0.	0.	0.	-.0621	-.0754	-.0044	-.0355	-.0315	.1017	0.		
.0810	0.	0.	0.	0.	0.	0.	-.0687	-.0615	.0019	-.0266	-.0449	.1019	0.		
.0820	0.	0.	0.	0.	0.	0.	-.0726	-.0448	.0102	-.0154	-.0541	.0942	0.		
.0830	0.	0.	0.	0.	0.	0.	-.0733	-.0263	.0204	-.0020	-.0635	.0780	0.		
.0840	0.	0.	0.	0.	0.	0.	-.0708	-.0070	.0323	.0136	-.0744	.0542	0.		
.0850	0.	0.	0.	0.	0.	0.	-.0660	.0119	.0445	.0302	-.0824	.0252	0.		
.0860	0.	0.	0.	0.	0.	0.	-.0601	.0293	.0556	.0454	-.0854	-.0055	0.		
.0870	0.	0.	0.	0.	0.	0.	-.0541	.0444	.0641	.0568	-.0848	-.0342	0.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.51.

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

.0760	0.	0.	0.	0.	0.	0.	0.	0.	-.0245	-.1049	-.0167	-.0398	.0594	.0620	0.
.0770	0.	0.	0.	0.	0.	0.	0.	0.	-.0343	-.1004	-.0148	-.0412	.0355	.0730	0.
.0780	0.	0.	0.	0.	0.	0.	0.	0.	-.0441	-.0944	-.0122	-.0414	.0080	.0847	0.
.0790	0.	0.	0.	0.	0.	0.	0.	0.	-.0537	-.0863	-.0090	-.0403	-.0134	.0952	0.
.0800	0.	0.	0.	0.	0.	0.	0.	0.	-.0621	-.0754	-.0044	-.0355	-.0315	.1017	0.
.0810	0.	0.	0.	0.	0.	0.	0.	0.	-.0687	-.0615	.0019	-.0266	-.0449	.1019	0.
.0820	0.	0.	0.	0.	0.	0.	0.	0.	-.0726	-.0448	.0102	-.0154	-.0541	.0942	0.
.0830	0.	0.	0.	0.	0.	0.	0.	0.	-.0733	-.0263	.0204	-.0020	-.0635	.0780	0.
.0840	0.	0.	0.	0.	0.	0.	0.	0.	-.0708	-.0070	.0323	.0136	-.0744	.0542	0.
.0850	0.	0.	0.	0.	0.	0.	0.	0.	-.0660	.0119	.0445	.0302	-.0824	.0252	0.
.0860	0.	0.	0.	0.	0.	0.	0.	0.	-.0601	.0293	.0556	.0454	-.0854	-.0055	0.
.0870	0.	0.	0.	0.	0.	0.	0.	0.	-.0541	.0444	.0641	.0568	-.0848	-.0342	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.51.

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)
.0880	0.	0.	0.	0.	0.	0.	-.0487	.0568	.0689	.0618	-.0792	-.0579	0.
.0890	0.	0.	0.	0.	0.	0.	-.0441	.0666	.0705	.0601	-.0667	-.0752	0.
.0900	0.	0.	0.	0.	0.	0.	-.0397	.0744	.0697	.0549	-.0499	-.0869	0.
.0910	0.	0.	0.	0.	0.	0.	-.0347	.0812	.0674	.0498	-.0341	-.0959	0.
.0920	0.	0.	0.	0.	0.	0.	-.0283	.0874	.0639	.0459	-.0229	-.1052	0.
.0930	0.	0.	0.	0.	0.	0.	-.0205	.0928	.0593	.0421	-.0175	-.1153	0.
.0940	0.	0.	0.	0.	0.	0.	-.0114	.0964	.0533	.0373	-.0185	-.1246	0.
.0950	0.	0.	0.	0.	0.	0.	-.0014	.0975	.0452	.0300	-.0244	-.1314	0.
.0960	0.	0.	0.	0.	0.	0.	.0087	.0954	.0343	.0186	-.0329	-.1356	0.
.0970	0.	0.	0.	0.	0.	0.	.0184	.0900	.0204	.0026	-.0425	-.1370	0.
.0980	0.	0.	0.	0.	0.	0.	.0274	.0813	.0035	-.0172	-.0526	-.1342	0.
.0990	0.	0.	0.	0.	0.	0.	.0358	.0701	-.0158	-.0407	-.0545	-.1264	0.
.1000	0.	0.	0.	0.	0.	0.	.0437	.0570	-.0363	-.0679	-.0799	-.1150	0.
.1010	0.	0.	0.	0.	0.	0.	.0511	.0431	-.0566	-.0975	-.0992	-.1016	0.
.1020	0.	0.	0.	0.	0.	0.	.0576	.0291	-.0754	-.1261	-.1194	-.0855	0.
.1030	0.	0.	0.	0.	0.	0.	.0625	.0157	-.0919	-.1507	-.1361	-.0653	0.
.1040	0.	0.	0.	0.	0.	0.	.0651	.0028	-.1051	-.1709	-.1454	-.0408	0.
.1050	0.	0.	0.	0.	0.	0.	.0644	-.0094	-.1150	-.1876	-.1439	-.0123	0.
.1060	0.	0.	0.	0.	0.	0.	.0601	-.0208	-.1215	-.2009	-.1291	.0201	0.
.1070	0.	0.	0.	0.	0.	0.	.0526	-.0308	-.1247	-.2094	-.1022	.0549	0.
.1080	0.	0.	0.	0.	0.	0.	.0419	-.0382	-.1254	-.2123	-.0616	.0894	0.
.1090	0.	0.	0.	0.	0.	0.	.0280	-.0422	-.1261	-.2122	-.0019	.1231	0.
.1100	0.	0.	0.	0.	0.	0.	.0150	-.0427	-.1237	-.2115	.0495	.1484	0.
.1110	0.	0.	0.	0.	0.	0.	.0047	-.0393	-.1171	-.2065	.0924	.1619	0.
.1120	0.	0.	0.	0.	0.	0.	-.0023	-.0312	-.1065	-.1916	.1294	.1625	0.
.1130	0.	0.	0.	0.	0.	0.	-.0059	-.0189	-.0932	-.1679	.1559	.1521	0.
.1140	0.	0.	0.	0.	0.	0.	-.0071	-.0033	-.0790	-.1412	.1725	.1338	0.
.1150	0.	0.	0.	0.	0.	0.	-.0070	.0139	-.0653	-.1155	.1862	.1125	0.
.1160	0.	0.	0.	0.	0.	0.	-.0066	.0312	-.0534	-.0937	.1972	.0947	0.
.1170	0.	0.	0.	0.	0.	0.	-.0061	.0474	-.0437	-.0782	.2030	.0826	0.
.1180	0.	0.	0.	0.	0.	0.	-.0048	.0625	-.0352	-.0640	.1915	.0691	0.
.1190	0.	0.	0.	0.	0.	0.	-.0027	.0768	-.0266	-.0467	.1724	.0521	0.
.1200	0.	0.	0.	0.	0.	0.	-.0001	.0897	-.0171	-.0246	.1501	.0353	0.
.1210	0.	0.	0.	0.	0.	0.	.0022	.1008	-.0087	-.0024	.1197	.0217	0.
.1220	0.	0.	0.	0.	0.	0.	.0034	.1094	-.0022	.0083	.0883	.0100	0.
.1230	0.	0.	0.	0.	0.	0.	.0033	.1159	.0019	.0071	.0554	-.0024	0.
.1240	0.	0.	0.	0.	0.	0.	.0018	.1205	.0037	-.0002	.0262	-.0125	0.
.1250	0.	0.	0.	0.	0.	0.	-.0011	.1232	.0033	-.0097	-.0002	-.0211	0.

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ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.51.

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

.1140	0.	0.	0.	0.	0.	0.	0.	0.	-.071	-.0033	-.0790	-.1412	.1725	.1338	0.
.1150	0.	0.	0.	0.	0.	0.	0.	0.	-.070	.0139	-.0653	-.1155	.1562	.1125	0.
.1160	0.	0.	0.	0.	0.	0.	0.	0.	-.0066	.0312	-.0534	-.0937	.1972	.0947	0.
.1170	0.	0.	0.	0.	0.	0.	0.	0.	-.0061	.0474	-.0437	-.0782	.2030	.0826	0.
.1180	0.	0.	0.	0.	0.	0.	0.	0.	-.0048	.0625	-.0352	-.0640	.1915	.0691	0.
.1190	0.	0.	0.	0.	0.	0.	0.	0.	-.0027	.0768	-.0266	-.0467	.1724	.0521	0.
.1200	0.	0.	0.	0.	0.	0.	0.	0.	-.0001	.0897	-.0171	-.0246	.1501	.0353	0.
.1210	0.	0.	0.	0.	0.	0.	0.	0.	.0022	.1008	-.0087	-.0024	.1197	.0217	0.
.1220	0.	0.	0.	0.	0.	0.	0.	0.	.0034	.1094	-.0022	.0083	.0883	.0100	0.
.1230	0.	0.	0.	0.	0.	0.	0.	0.	.0033	.1159	.0019	.0071	.0554	-.0024	0.
.1240	0.	0.	0.	0.	0.	0.	0.	0.	.0018	.1205	.0037	-.0002	.0262	-.0125	0.
.1250	0.	0.	0.	0.	0.	0.	0.	0.	-.0011	.1232	.0033	-.0097	-.0002	-.0211	0.

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2 SAFETY COLD FKW24F--2 PSV

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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)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)	
.1260	0.	0.	0.	0.	0.	0.	-.0051	.1241	.0007	-.0228	-.0292	-.0338	0.	
.1270	0.	0.	0.	0.	0.	0.	-.0109	.1222	-.0041	-.0447	-.0467	-.0470	0.	
.1280	0.	0.	0.	0.	0.	0.	-.0182	.1172	-.0114	-.0729	-.0552	-.0530	0.	
.1290	0.	0.	0.	0.	0.	0.	-.0261	.1094	-.0204	-.1052	-.0590	-.0500	0.	
.1300	0.	0.	0.	0.	0.	0.	-.0334	.0997	-.0295	-.1392	-.0618	-.0458	0.	
.1310	0.	0.	0.	0.	0.	0.	-.0390	.0897	-.0375	-.1677	-.0712	-.0457	0.	
.1320	0.	0.	0.	0.	0.	0.	-.0430	.0799	-.0434	-.1872	-.0809	-.0428	0.	
.1330	0.	0.	0.	0.	0.	0.	-.0458	.0706	-.0477	-.1973	-.0939	-.0332	0.	
.1340	0.	0.	0.	0.	0.	0.	-.0481	.0615	-.0507	-.2051	-.1068	-.0188	0.	
.1350	0.	0.	0.	0.	0.	0.	-.0506	.0528	-.0523	-.2132	-.1145	-.0008	0.	
.1360	0.	0.	0.	0.	0.	0.	-.0538	.0456	-.0533	-.2155	-.1197	.0226	0.	
.1370	0.	0.	0.	0.	0.	0.	-.0578	.0407	-.0533	-.2105	-.1185	.0504	0.	
.1380	0.	0.	0.	0.	0.	0.	-.0617	.0382	-.0519	-.1991	-.1191	.0732	0.	
.1390	0.	0.	0.	0.	0.	0.	-.0650	.0378	-.0483	-.1846	-.1219	.0869	0.	
.1400	0.	0.	0.	0.	0.	0.	-.0672	.0393	-.0416	-.1660	-.1257	.0946	0.	
.1410	0.	0.	0.	0.	0.	0.	-.0682	.0424	-.0324	-.1409	-.1334	.0965	0.	
.1420	0.	0.	0.	0.	0.	0.	-.0686	.0470	-.0211	-.1133	-.1373	.0898	0.	
.1430	0.	0.	0.	0.	0.	0.	-.0689	.0527	-.0090	-.0846	-.1383	.0739	0.	
.1440	0.	0.	0.	0.	0.	0.	-.0695	.0586	.0027	-.0569	-.1335	.0562	0.	
.1450	0.	0.	0.	0.	0.	0.	-.0704	.0635	.0133	-.0335	-.1218	.0422	0.	
.1460	0.	0.	0.	0.	0.	0.	-.0713	.0665	.0227	-.0161	-.1078	.0294	0.	
.1470	0.	0.	0.	0.	0.	0.	-.0716	.0676	.0311	-.0043	-.0870	.0170	0.	
.1480	0.	0.	0.	0.	0.	0.	-.0706	.0669	.0389	.0094	-.0566	.0061	0.	
.1490	0.	0.	0.	0.	0.	0.	-.0678	.0643	.0463	.0270	-.0460	-.0013	0.	
.1500	0.	0.	0.	0.	0.	0.	-.0635	.0598	.0530	.0445	-.0243	-.0066	0.	
.1510	0.	0.	0.	0.	0.	0.	-.0580	.0532	.0578	.0590	-.0071	-.0105	0.	
.1520	0.	0.	0.	0.	0.	0.	-.0524	.0449	.0600	.0669	.0113	-.0080	0.	
.1530	0.	0.	0.	0.	0.	0.	-.0473	.0355	.0587	.0759	.0307	.0021	0.	
.1540	0.	0.	0.	0.	0.	0.	-.0436	.0254	.0542	.0794	.0561	.0178	0.	
.1550	0.	0.	0.	0.	0.	0.	-.0409	.0150	.0471	.0788	.0863	.0370	0.	
.1560	0.	0.	0.	0.	0.	0.	-.0387	.0042	.0381	.0761	.1127	.0586	0.	
.1570	0.	0.	0.	0.	0.	0.	-.0365	-.0066	.0284	.0700	.1404	.0825	0.	
.1580	0.	0.	0.	0.	0.	0.	-.0334	-.0171	.0187	.0627	.1523	.1037	0.	
.1590	0.	0.	0.	0.	0.	0.	-.0289	-.0270	.0093	.0559	.1711	.1180	0.	
.1600	0.	0.	0.	0.	0.	0.	-.0229	-.0361	.0002	.0482	.1708	.1259	0.	
.1610	0.	0.	0.	0.	0.	0.	-.0158	-.0446	-.0081	.0406	.1553	.1291	0.	
.1620	0.	0.	0.	0.	0.	0.	-.0076	-.0526	-.0160	.0333	.1524	.1281	0.	
.1630	0.	0.	0.	0.	0.	0.	.0010	-.0601	-.0238	.0213	.1379	.1241	0.	

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INTERNAL FORCES IN THE PIPING
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.1520	0.	0.	0.	0.	0.	0.	0.	-.0574	.0449	.0600	.0689	.0113	-.0080	0.
.1530	0.	0.	0.	0.	0.	0.	0.	-.0473	.0355	.0587	.0759	.0307	-.0021	0.
.1540	0.	0.	0.	0.	0.	0.	0.	-.0436	.0254	.0542	.0794	.0561	.0178	0.
.1550	0.	0.	0.	0.	0.	0.	0.	-.0409	.0150	.0471	.0788	.0362	.0370	0.
.1560	0.	0.	0.	0.	0.	0.	0.	-.0387	.0042	.0381	.0761	.1127	.0586	0.
.1570	0.	0.	0.	0.	0.	0.	0.	-.0365	-.0066	.0284	.0700	.1404	.0825	0.
.1580	0.	0.	0.	0.	0.	0.	0.	-.0334	-.0171	.0187	.0627	.1523	.1037	0.
.1590	0.	0.	0.	0.	0.	0.	0.	-.0289	-.0270	.0093	.0559	.1711	.1180	0.
.1600	0.	0.	0.	0.	0.	0.	0.	-.0229	-.0361	.0002	.0482	.1708	.1259	0.
.1610	0.	0.	0.	0.	0.	0.	0.	-.0158	-.0446	-.0081	.0406	.1553	.1291	0.
.1620	0.	0.	0.	0.	0.	0.	0.	-.0076	-.0526	-.0160	.0333	.1524	.1281	0.
.1630	0.	0.	0.	0.	0.	0.	0.	.0010	-.0601	-.0238	.0213	.1379	.1241	0.

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INTERNAL FORCES IN THE PIPING
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SECTION	20	MEMBER	1	SEQUENCE	37	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)
.1640	0.	0.	0.	0.	0.	0.	0.	.0101	-.0666	-.0313	.0067	.1193	.1163	0.
.1650	0.	0.	0.	0.	0.	0.	0.	.0199	-.0713	-.0378	-.0053	.0740	.1038	0.
.1660	0.	0.	0.	0.	0.	0.	0.	.0301	-.0738	-.0428	-.0147	.0668	.0879	0.
.1670	0.	0.	0.	0.	0.	0.	0.	.0405	-.0738	-.0459	-.0213	.0330	.0681	0.
.1680	0.	0.	0.	0.	0.	0.	0.	.0505	-.0714	-.0461	-.0241	-.0029	.0458	0.
.1690	0.	0.	0.	0.	0.	0.	0.	.0592	-.0668	-.0434	-.0203	-.0383	.0234	0.
.1700	0.	0.	0.	0.	0.	0.	0.	.0650	-.0602	-.0383	-.0111	-.0675	.0049	0.
.1710	0.	0.	0.	0.	0.	0.	0.	.0669	-.0521	-.0311	.0013	-.0835	-.0074	0.
.1720	0.	0.	0.	0.	0.	0.	0.	.0648	-.0429	-.0221	.0194	-.0926	-.0153	0.
.1730	0.	0.	0.	0.	0.	0.	0.	.0586	-.0333	-.0115	.0400	-.0890	-.0170	0.
.1740	0.	0.	0.	0.	0.	0.	0.	.0487	-.0238	-.0003	.0597	-.0752	-.0124	0.
.1750	0.	0.	0.	0.	0.	0.	0.	.0362	-.0147	.0114	.0783	-.0581	-.0049	0.
.1760	0.	0.	0.	0.	0.	0.	0.	.0226	-.0062	.0238	.0956	-.0376	.0017	0.
.1770	0.	0.	0.	0.	0.	0.	0.	.0089	.0015	.0366	.1121	-.0199	.0046	0.
.1780	0.	0.	0.	0.	0.	0.	0.	-.0038	.0080	.0495	.1253	-.0033	.0042	0.
.1790	0.	0.	0.	0.	0.	0.	0.	-.0152	.0130	.0619	.1350	.0077	-.0014	0.
.1800	0.	0.	0.	0.	0.	0.	0.	-.0249	.0166	.0727	.1397	.0124	-.0128	0.
.1810	0.	0.	0.	0.	0.	0.	0.	-.0335	.0184	.0814	.1370	.0170	-.0270	0.
.1820	0.	0.	0.	0.	0.	0.	0.	-.0407	.0186	.0876	.1304	.0162	-.0428	0.
.1830	0.	0.	0.	0.	0.	0.	0.	-.0466	.0174	.0919	.1214	.0134	-.0593	0.
.1840	0.	0.	0.	0.	0.	0.	0.	-.0511	.0153	.0941	.1110	.0082	-.0762	0.
.1850	0.	0.	0.	0.	0.	0.	0.	-.0544	.0122	.0946	.1001	-.0007	-.0911	0.
.1860	0.	0.	0.	0.	0.	0.	0.	-.0564	.0085	.0940	.0905	-.0110	-.1014	0.
.1870	0.	0.	0.	0.	0.	0.	0.	-.0569	.0045	.0923	.0847	-.0266	-.1074	0.
.1880	0.	0.	0.	0.	0.	0.	0.	-.0564	.0001	.0895	.0803	-.0431	-.1082	0.
.1890	0.	0.	0.	0.	0.	0.	0.	-.0552	-.0046	.0853	.0774	-.0601	-.1027	0.
.1900	0.	0.	0.	0.	0.	0.	0.	-.0537	-.0097	.0798	.0770	-.0756	-.0902	0.
.1910	0.	0.	0.	0.	0.	0.	0.	-.0522	-.0155	.0727	.0768	-.0837	-.0702	0.
.1920	0.	0.	0.	0.	0.	0.	0.	-.0505	-.0220	.0642	.0752	-.0864	-.0454	0.
.1930	0.	0.	0.	0.	0.	0.	0.	-.0483	-.0295	.0548	.0719	-.0833	-.0185	0.
.1940	0.	0.	0.	0.	0.	0.	0.	-.0450	-.0374	.0453	.0684	-.0743	.0077	0.
.1950	0.	0.	0.	0.	0.	0.	0.	-.0399	-.0455	.0360	.0656	-.0616	.0297	0.
.1960	0.	0.	0.	0.	0.	0.	0.	-.0327	-.0535	.0275	.0624	-.0479	.0447	0.
.1970	0.	0.	0.	0.	0.	0.	0.	-.0235	-.0612	.0198	.0581	-.0340	.0513	0.
.1980	0.	0.	0.	0.	0.	0.	0.	-.0124	-.0683	.0130	.0530	-.0194	.0503	0.
.1990	0.	0.	0.	0.	0.	0.	0.	-.0000	-.0747	.0073	.0476	-.0041	.0435	0.
.2000	0.	0.	0.	0.	0.	0.	0.	.0129	-.0800	.0025	.0421	.0121	.0321	0.
.2010	0.	0.	0.	0.	0.	0.	0.	.0256	-.0838	-.0017	.0377	.0297	.0174	0.

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.1910	0.	0.	0.	0.	0.	0.	0.	-.522	-.0155	.0727	.0768	-.0837	-.0702	0.
.1920	0.	0.	0.	0.	0.	0.	0.	-.505	-.0220	.0642	.0752	-.0864	-.0454	0.
.1930	0.	0.	0.	0.	0.	0.	0.	-.0483	-.0295	.0548	.0719	-.0833	-.0185	0.
.1940	0.	0.	0.	0.	0.	0.	0.	-.0450	-.0374	.0453	.0684	-.0743	.0077	0.
.1950	0.	0.	0.	0.	0.	0.	0.	-.0399	-.0455	.0360	.0656	-.0616	.0297	0.
.1960	0.	0.	0.	0.	0.	0.	0.	-.0327	-.0535	.0275	.0624	-.0479	.0447	0.
.1970	0.	0.	0.	0.	0.	0.	0.	-.0235	-.0612	.0198	.0581	-.0340	.0513	0.
.1980	0.	0.	0.	0.	0.	0.	0.	-.0124	-.0683	.0130	.0530	-.0194	.0503	0.
.1990	0.	0.	0.	0.	0.	0.	0.	-.0000	-.0747	.0073	.0476	-.0041	.0435	0.
.2000	0.	0.	0.	0.	0.	0.	0.	.0129	-.0800	.0025	.0421	.0121	.0321	0.
.2010	0.	0.	0.	0.	0.	0.	0.	.0256	-.0838	-.0017	.0377	.0297	.0174	0.

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CONDITION 24

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INTERNAL FORCES IN THE PIPING
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SECTION	20	MEMBER	1	SEQUENCE	37	LOCATION	DIS	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	0.	0.	0.	0.	0.	0.	0.	.0376	-.0860	-.0052	.0352	.0477	.0022	0.	
.2030	0.	0.	0.	0.	0.	0.	0.	.0487	-.0865	-.0080	.0349	.0642	-.0112	0.	
.2040	0.	0.	0.	0.	0.	0.	0.	.0588	-.0856	-.0099	.0371	.0778	-.0223	0.	
.2050	0.	0.	0.	0.	0.	0.	0.	.0680	-.0832	-.0105	.0431	.0873	-.0316	0.	
.2060	0.	0.	0.	0.	0.	0.	0.	.0763	-.0793	-.0099	.0539	.0919	-.0386	0.	
.2070	0.	0.	0.	0.	0.	0.	0.	.0838	-.0743	-.0083	.0686	.0918	-.0429	0.	
.2080	0.	0.	0.	0.	0.	0.	0.	.0902	-.0684	-.0061	.0849	.0880	-.0454	0.	
.2090	0.	0.	0.	0.	0.	0.	0.	.0955	-.0622	-.0039	.1003	.0812	-.0469	0.	
.2100	0.	0.	0.	0.	0.	0.	0.	.0996	-.0560	-.0020	.1127	.0721	-.0476	0.	
.2110	0.	0.	0.	0.	0.	0.	0.	.1024	-.0499	-.0007	.1212	.0524	-.0482	0.	
.2120	0.	0.	0.	0.	0.	0.	0.	.1040	-.0440	-.0001	.1259	.0530	-.0508	0.	
.2130	0.	0.	0.	0.	0.	0.	0.	.1044	-.0386	.0002	.1269	.0438	-.0565	0.	
.2140	0.	0.	0.	0.	0.	0.	0.	.1038	-.0339	.0006	.1239	.0349	-.0650	0.	
.2150	0.	0.	0.	0.	0.	0.	0.	.1019	-.0303	.0012	.1175	.0265	-.0751	0.	
.2160	0.	0.	0.	0.	0.	0.	0.	.0987	-.0277	.0022	.1085	.0191	-.0862	0.	
.2170	0.	0.	0.	0.	0.	0.	0.	.0936	-.0261	.0034	.0973	.0127	-.0967	0.	
.2180	0.	0.	0.	0.	0.	0.	0.	.0865	-.0256	.0048	.0850	.0083	-.1042	0.	
.2190	0.	0.	0.	0.	0.	0.	0.	.0771	-.0259	.0063	.0724	.0067	-.1063	0.	
.2200	0.	0.	0.	0.	0.	0.	0.	.0654	-.0269	.0080	.0600	.0078	-.1019	0.	
.2210	0.	0.	0.	0.	0.	0.	0.	.0516	-.0285	.0099	.0480	.0108	-.0905	0.	
.2220	0.	0.	0.	0.	0.	0.	0.	.0363	-.0301	.0119	.0374	.0150	-.0729	0.	
.2230	0.	0.	0.	0.	0.	0.	0.	.0202	-.0314	.0143	.0297	.0192	-.0504	0.	
.2240	0.	0.	0.	0.	0.	0.	0.	.0040	-.0320	.0169	.0252	.0215	-.0254	0.	
.2250	0.	0.	0.	0.	0.	0.	0.	-.0116	-.0317	.0195	.0226	.0204	-.0005	0.	
.2260	0.	0.	0.	0.	0.	0.	0.	-.0260	-.0307	.0219	.0212	.0153	.0224	0.	
.2270	0.	0.	0.	0.	0.	0.	0.	-.0387	-.0288	.0240	.0202	.0065	.0419	0.	
.2280	0.	0.	0.	0.	0.	0.	0.	-.0496	-.0262	.0256	.0189	-.0048	.0565	0.	
.2290	0.	0.	0.	0.	0.	0.	0.	-.0584	-.0229	.0264	.0166	-.0178	.0653	0.	
.2300	0.	0.	0.	0.	0.	0.	0.	-.0652	-.0189	.0265	.0127	-.0318	.0677	0.	
.2310	0.	0.	0.	0.	0.	0.	0.	-.0699	-.0144	.0260	.0071	-.0461	.0643	0.	
.2320	0.	0.	0.	0.	0.	0.	0.	-.0726	-.0093	.0252	-.0004	-.0598	.0558	0.	
.2330	0.	0.	0.	0.	0.	0.	0.	-.0734	-.0039	.0243	-.0090	-.0725	.0430	0.	
.2340	0.	0.	0.	0.	0.	0.	0.	-.0725	.0018	.0235	-.0175	-.0836	.0270	0.	
.2350	0.	0.	0.	0.	0.	0.	0.	-.0701	.0076	.0228	-.0250	-.0919	.0094	0.	
.2360	0.	0.	0.	0.	0.	0.	0.	-.0666	.0133	.0223	-.0314	-.0964	-.0077	0.	
.2370	0.	0.	0.	0.	0.	0.	0.	-.0624	.0185	.0216	-.0368	-.0965	-.0225	0.	
.2380	0.	0.	0.	0.	0.	0.	0.	-.0576	.0233	.0205	-.0414	-.0923	-.0340	0.	
.2390	0.	0.	0.	0.	0.	0.	0.	-.0526	.0276	.0185	-.0457	-.0839	-.0411	0.	

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ADLPIPE STRESS ANALYSIS

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18.26.52.

S/RV PIPING KEWAUNEE GKX08F 2 RUP DISK
2 SAFETY COLD FKX24F--2 PSV

CONDITION 24

LOADS

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

.2290	0.	0.	0.	0.	0.	0.	0.	0.	-.0496	-.0262	.0256	.0189	-.0048	.0565	0.
.2290	0.	0.	0.	0.	0.	0.	0.	0.	-.0584	-.0229	.0264	.0166	-.0178	.0653	0.
.2300	0.	0.	0.	0.	0.	0.	0.	0.	-.0652	-.0189	.0265	.0127	-.0318	.0677	0.
.2310	0.	0.	0.	0.	0.	0.	0.	0.	-.0699	-.0144	.0260	.0071	-.0461	.0643	0.
.2320	0.	0.	0.	0.	0.	0.	0.	0.	-.0726	-.0093	.0252	-.0004	-.0598	.0558	0.
.2330	0.	0.	0.	0.	0.	0.	0.	0.	-.0734	-.0039	.0243	-.0090	-.0725	.0430	0.
.2340	0.	0.	0.	0.	0.	0.	0.	0.	-.0725	.0018	.0235	-.0175	-.0836	.0270	0.
.2350	0.	0.	0.	0.	0.	0.	0.	0.	-.0701	.0076	.0228	-.0250	-.0919	.0094	0.
.2360	0.	0.	0.	0.	0.	0.	0.	0.	-.0666	.0133	.0223	-.0314	-.0964	-.0077	0.
.2370	0.	0.	0.	0.	0.	0.	0.	0.	-.0624	.0185	.0216	-.0368	-.0965	-.0225	0.
.2380	0.	0.	0.	0.	0.	0.	0.	0.	-.0576	.0233	.0205	-.0414	-.0923	-.0340	0.
.2390	0.	0.	0.	0.	0.	0.	0.	0.	-.0526	.0276	.0185	-.0457	-.0839	-.0411	0.

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

CONDITION 24
LOADS
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INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	MEMBER	SEQUENCE	LOCATION	DIS	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)
20	1	37					.2400	0.	0.	0.	0.	0.	0.	-.0473	.0315	.0156	-.0494	-.0719	-.0441	0.
							.2410	0.	0.	0.	0.	0.	0.	-.0415	.0353	.0118	-.0521	-.0577	-.0434	0.
							.2420	0.	0.	0.	0.	0.	0.	-.0353	.0391	.0073	-.0539	-.0425	-.0400	0.
							.2430	0.	0.	0.	0.	0.	0.	-.0285	.0429	.0023	-.0552	-.0272	-.0347	0.
							.2440	0.	0.	0.	0.	0.	0.	-.0211	.0468	-.0033	-.0560	-.0128	-.0282	0.
							.2450	0.	0.	0.	0.	0.	0.	-.0133	.0505	-.0093	-.0567	.0001	-.0213	0.
							.2460	0.	0.	0.	0.	0.	0.	-.0052	.0539	-.0157	-.0576	.0116	-.0145	0.
							.2470	0.	0.	0.	0.	0.	0.	.0028	.0567	-.0225	-.0591	.0215	-.0081	0.
							.2480	0.	0.	0.	0.	0.	0.	.0105	.0588	-.0296	-.0618	.0296	-.0022	0.
							.2490	0.	0.	0.	0.	0.	0.	.0178	.0600	-.0371	-.0661	.0353	.0031	0.
							.2500	0.	0.	0.	0.	0.	0.	.0246	.0603	-.0448	-.0727	.0386	.0077	0.
							.2510	0.	0.	0.	0.	0.	0.	.0309	.0593	-.0525	-.0809	.0393	.0113	0.
							.2520	0.	0.	0.	0.	0.	0.	.0366	.0589	-.0600	-.0902	.0370	.0139	0.
							.2530	0.	0.	0.	0.	0.	0.	.0416	.0576	-.0670	-.1002	.0318	.0156	0.
							.2540	0.	0.	0.	0.	0.	0.	.0458	.0562	-.0734	-.1110	.0243	.0168	0.
							.2550	0.	0.	0.	0.	0.	0.	.0488	.0548	-.0792	-.1220	.0154	.0182	0.
							.2560	0.	0.	0.	0.	0.	0.	.0503	.0534	-.0842	-.1326	.0066	.0207	0.
							.2570	0.	0.	0.	0.	0.	0.	.0500	.0520	-.0882	-.1424	-.0008	.0249	0.
							.2580	0.	0.	0.	0.	0.	0.	.0477	.0507	-.0914	-.1510	-.0060	.0309	0.
							.2590	0.	0.	0.	0.	0.	0.	.0432	.0497	-.0934	-.1581	-.0084	.0387	0.
							.2600	0.	0.	0.	0.	0.	0.	.0366	.0490	-.0944	-.1636	-.0075	.0484	0.
							.2610	0.	0.	0.	0.	0.	0.	.0285	.0488	-.0940	-.1676	-.0038	.0593	0.
							.2620	0.	0.	0.	0.	0.	0.	.0189	.0493	-.0923	-.1702	.0019	.0702	0.
							.2630	0.	0.	0.	0.	0.	0.	.0082	.0507	-.0893	-.1716	.0087	.0799	0.
							.2640	0.	0.	0.	0.	0.	0.	-.0030	.0529	-.0853	-.1719	.0159	.0877	0.
							.2650	0.	0.	0.	0.	0.	0.	-.0144	.0560	-.0804	-.1717	.0230	.0929	0.
							.2660	0.	0.	0.	0.	0.	0.	-.0255	.0597	-.0750	-.1716	.0292	.0951	0.
							.2670	0.	0.	0.	0.	0.	0.	-.0362	.0637	-.0693	-.1721	.0343	.0942	0.
							.2680	0.	0.	0.	0.	0.	0.	-.0460	.0679	-.0637	-.1733	.0378	.0903	0.
							.2690	0.	0.	0.	0.	0.	0.	-.0547	.0721	-.0580	-.1746	.0392	.0837	0.
							.2700	0.	0.	0.	0.	0.	0.	-.0620	.0763	-.0525	-.1755	.0381	.0746	0.
							.2710	0.	0.	0.	0.	0.	0.	-.0677	.0803	-.0471	-.1757	.0338	.0635	0.
							.2720	0.	0.	0.	0.	0.	0.	-.0718	.0842	-.0418	-.1749	.0259	.0515	0.
							.2730	0.	0.	0.	0.	0.	0.	-.0742	.0880	-.0366	-.1728	.0145	.0395	0.
							.2740	0.	0.	0.	0.	0.	0.	-.0753	.0916	-.0317	-.1690	.0007	.0286	0.
							.2750	0.	0.	0.	0.	0.	0.	-.0754	.0949	-.0272	-.1637	-.0145	.0199	0.
							.2760	0.	0.	0.	0.	0.	0.	-.0747	.0977	-.0233	-.1573	-.0301	.0144	0.
							.2770	0.	0.	0.	0.	0.	0.	-.0736	.0999	-.0202	-.1501	-.0448	.0125	0.

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

.2650	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.2670	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.2680	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.2690	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.2700	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.2710	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.2720	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.2730	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.2740	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.2750	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.2760	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.2770	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

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

CONDITION 24
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INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	20	MEMBER	1	SEQUENCE	37	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)		
.2780	0.	0.	0.	0.	0.	0.	-.0722	.1013	-.0178	-.1425	-.0582	.0139	0.		
.2790	0.	0.	0.	0.	0.	0.	-.0703	.1018	-.0161	-.1344	-.0697	.0180	0.		
.2800	0.	0.	0.	0.	0.	0.	-.0681	.1013	-.0150	-.1259	-.0796	.0236	0.		
.2810	0.	0.	0.	0.	0.	0.	-.0653	.1000	-.0145	-.1174	-.0876	.0295	0.		
.2820	0.	0.	0.	0.	0.	0.	-.0620	.0977	-.0143	-.1093	-.0938	.0349	0.		
.2830	0.	0.	0.	0.	0.	0.	-.0580	.0945	-.0146	-.1021	-.0981	.0390	0.		
.2840	0.	0.	0.	0.	0.	0.	-.0536	.0906	-.0152	-.0958	-.0997	.0414	0.		
.2850	0.	0.	0.	0.	0.	0.	-.0488	.0859	-.0160	-.0907	-.0983	.0423	0.		
.2860	0.	0.	0.	0.	0.	0.	-.0438	.0805	-.0172	-.0871	-.0938	.0419	0.		
.2870	0.	0.	0.	0.	0.	0.	-.0390	.0744	-.0185	-.0844	-.0864	.0404	0.		
.2880	0.	0.	0.	0.	0.	0.	-.0343	.0677	-.0198	-.0822	-.0765	.0381	0.		
.2890	0.	0.	0.	0.	0.	0.	-.0299	.0605	-.0208	-.0798	-.0648	.0357	0.		
.2900	0.	0.	0.	0.	0.	0.	-.0258	.0528	-.0213	-.0766	-.0520	.0334	0.		
.2910	0.	0.	0.	0.	0.	0.	-.0222	.0449	-.0212	-.0720	-.0389	.0317	0.		
.2920	0.	0.	0.	0.	0.	0.	-.0190	.0368	-.0203	-.0657	-.0256	.0308	0.		
.2930	0.	0.	0.	0.	0.	0.	-.0164	.0287	-.0188	-.0576	-.0124	.0311	0.		
.2940	0.	0.	0.	0.	0.	0.	-.0142	.0207	-.0166	-.0479	-.0006	.0326	0.		
.2950	0.	0.	0.	0.	0.	0.	-.0124	.0131	-.0140	-.0370	.0133	.0352	0.		
.2960	0.	0.	0.	0.	0.	0.	-.0108	.0057	-.0111	-.0254	.0253	.0383	0.		
.2970	0.	0.	0.	0.	0.	0.	-.0092	-.0012	-.0080	-.0132	.0360	.0413	0.		
.2980	0.	0.	0.	0.	0.	0.	-.0073	-.0076	-.0049	-.0007	.0451	.0434	0.		
.2990	0.	0.	0.	0.	0.	0.	-.0049	-.0136	-.0017	.0120	.0520	.0439	0.		
.3000	0.	0.	0.	0.	0.	0.	-.0019	-.0192	.0014	.0245	.0565	.0426	0.		
.3010	0.	0.	0.	0.	0.	0.	.0017	-.0245	.0044	.0365	.0586	.0396	0.		
.3020	0.	0.	0.	0.	0.	0.	.0056	-.0295	.0072	.0479	.0591	.0353	0.		
.3030	0.	0.	0.	0.	0.	0.	.0096	-.0343	.0099	.0588	.0586	.0304	0.		
.3040	0.	0.	0.	0.	0.	0.	.0134	-.0388	.0123	.0691	.0579	.0258	0.		
.3050	0.	0.	0.	0.	0.	0.	.0166	-.0432	.0146	.0785	.0576	.0223	0.		
.3060	0.	0.	0.	0.	0.	0.	.0191	-.0474	.0168	.0874	.0583	.0207	0.		
.3070	0.	0.	0.	0.	0.	0.	.0205	-.0514	.0191	.0958	.0599	.0212	0.		
.3080	0.	0.	0.	0.	0.	0.	.0211	-.0552	.0217	.1040	.0622	.0235	0.		
.3090	0.	0.	0.	0.	0.	0.	.0208	-.0590	.0245	.1123	.0648	.0273	0.		
.3100	0.	0.	0.	0.	0.	0.	.0199	-.0626	.0277	.1204	.0570	.0319	0.		
.3110	0.	0.	0.	0.	0.	0.	.0185	-.0661	.0312	.1282	.0683	.0365	0.		
.3120	0.	0.	0.	0.	0.	0.	.0169	-.0695	.0347	.1353	.0682	.0402	0.		
.3130	0.	0.	0.	0.	0.	0.	.0154	-.0726	.0381	.1413	.0662	.0421	0.		
.3140	0.	0.	0.	0.	0.	0.	.0141	-.0755	.0413	.1458	.0621	.0417	0.		
.3150	0.	0.	0.	0.	0.	0.	.0132	-.0778	.0440	.1486	.0554	.0384	0.		

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18.26.52.

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

CONDITION 24
LOADS
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INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

.3050	0.	0.	0.	0.	0.	0.	0.	.0168	-.0432	.0146	.0785	.0576	.0223	0.
.3060	0.	0.	0.	0.	0.	0.	0.	.0191	-.0474	.0168	.0874	.0583	.0207	0.
.3070	0.	0.	0.	0.	0.	0.	0.	.0205	-.0514	.0191	.0958	.0599	.0212	0.
.3080	0.	0.	0.	0.	0.	0.	0.	.0211	-.0552	.0217	.1040	.0622	.0235	0.
.3090	0.	0.	0.	0.	0.	0.	0.	.0208	-.0590	.0245	.1123	.0648	.0273	0.
.3100	0.	0.	0.	0.	0.	0.	0.	.0199	-.0626	.0277	.1204	.0670	.0319	0.
.3110	0.	0.	0.	0.	0.	0.	0.	.0185	-.0661	.0312	.1282	.0683	.0365	0.
.3120	0.	0.	0.	0.	0.	0.	0.	.0169	-.0695	.0347	.1353	.0682	.0402	0.
.3130	0.	0.	0.	0.	0.	0.	0.	.0154	-.0726	.0381	.1413	.0662	.0421	0.
.3140	0.	0.	0.	0.	0.	0.	0.	.0141	-.0755	.0413	.1458	.0621	.0417	0.
.3150	0.	0.	0.	0.	0.	0.	0.	.0132	-.0778	.0440	.1486	.0554	.0384	0.

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

CONDITION 24
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INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	20	MEMBER	1	SEQUENCE	37	LOCATION	DIS	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)		
.3160	0.	0.	0.	0.	0.	0.	.0129	-.0797	.0463	.1495	.0462	.0319	0.		
.3170	0.	0.	0.	0.	0.	0.	.0130	-.0810	.0480	.1487	.0345	.0225	0.		
.3180	0.	0.	0.	0.	0.	0.	.0136	-.0816	.0494	.1465	.0207	.0105	0.		
.3190	0.	0.	0.	0.	0.	0.	.0146	-.0817	.0506	.1435	.0054	-.0034	0.		
.3200	0.	0.	0.	0.	0.	0.	.0156	-.0812	.0516	.1403	-.0104	-.0185	0.		
.3210	0.	0.	0.	0.	0.	0.	.0165	-.0804	.0528	.1372	-.0258	-.0335	0.		
.3220	0.	0.	0.	0.	0.	0.	.0169	-.0792	.0541	.1347	-.0397	-.0476	0.		
.3230	0.	0.	0.	0.	0.	0.	.0168	-.0777	.0555	.1330	-.0510	-.0599	0.		
.3240	0.	0.	0.	0.	0.	0.	.0160	-.0761	.0571	.1321	-.0592	-.0698	0.		
.3250	0.	0.	0.	0.	0.	0.	.0146	-.0743	.0589	.1320	-.0640	-.0773	0.		
.3260	0.	0.	0.	0.	0.	0.	.0127	-.0725	.0608	.1326	-.0654	-.0822	0.		
.3270	0.	0.	0.	0.	0.	0.	.0107	-.0707	.0627	.1339	-.0638	-.0853	0.		
.3280	0.	0.	0.	0.	0.	0.	.0089	-.0689	.0646	.1356	-.0600	-.0869	0.		
.3290	0.	0.	0.	0.	0.	0.	.0075	-.0673	.0664	.1375	-.0546	-.0876	0.		
.3300	0.	0.	0.	0.	0.	0.	.0068	-.0659	.0679	.1392	-.0482	-.0879	0.		
.3310	0.	0.	0.	0.	0.	0.	.0069	-.0648	.0691	.1407	-.0415	-.0881	0.		
.3320	0.	0.	0.	0.	0.	0.	.0079	-.0640	.0696	.1417	-.0346	-.0883	0.		
.3330	0.	0.	0.	0.	0.	0.	.0097	-.0637	.0695	.1420	-.0277	-.0883	0.		
.3340	0.	0.	0.	0.	0.	0.	.0122	-.0637	.0686	.1416	-.0209	-.0879	0.		
.3350	0.	0.	0.	0.	0.	0.	.0152	-.0641	.0669	.1413	-.0141	-.0868	0.		
.3360	0.	0.	0.	0.	0.	0.	.0186	-.0646	.0644	.1383	-.0075	-.0848	0.		
.3370	0.	0.	0.	0.	0.	0.	.0223	-.0653	.0611	.1357	-.0013	-.0820	0.		
.3380	0.	0.	0.	0.	0.	0.	.0261	-.0660	.0571	.1324	.0045	-.0783	0.		
.3390	0.	0.	0.	0.	0.	0.	.0300	-.0667	.0523	.1285	.0096	-.0738	0.		
.3400	0.	0.	0.	0.	0.	0.	.0339	-.0674	.0469	.1239	.0139	-.0686	0.		
.3410	0.	0.	0.	0.	0.	0.	.0377	-.0680	.0409	.1185	.0174	-.0630	0.		
.3420	0.	0.	0.	0.	0.	0.	.0416	-.0686	.0344	.1122	.0204	-.0572	0.		
.3430	0.	0.	0.	0.	0.	0.	.0453	-.0691	.0274	.1050	.0229	-.0516	0.		
.3440	0.	0.	0.	0.	0.	0.	.0490	-.0697	.0201	.0968	.0251	-.0464	0.		
.3450	0.	0.	0.	0.	0.	0.	.0527	-.0703	.0128	.0878	.0271	-.0419	0.		
.3460	0.	0.	0.	0.	0.	0.	.0563	-.0707	.0056	.0781	.0289	-.0385	0.		
.3470	0.	0.	0.	0.	0.	0.	.0599	-.0710	-.0012	.0680	.0306	-.0363	0.		
.3480	0.	0.	0.	0.	0.	0.	.0634	-.0710	-.0075	.0576	.0321	-.0355	0.		
.3490	0.	0.	0.	0.	0.	0.	.0668	-.0705	-.0132	.0473	.0335	-.0360	0.		
.3500	0.	0.	0.	0.	0.	0.	.0698	-.0696	-.0180	.0373	.0349	-.0377	0.		
.3510	0.	0.	0.	0.	0.	0.	.0724	-.0682	-.0221	.0277	.0363	-.0402	0.		
.3520	0.	0.	0.	0.	0.	0.	.0743	-.0660	-.0253	.0187	.0381	-.0432	0.		
.3530	0.	0.	0.	0.	0.	0.	.0754	-.0631	-.0277	.0107	.0402	-.0465	0.		

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

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

.3420	0.	0.	0.	0.	0.	0.	0.	0.	.0418	-.0688	.0344	.1122	.0104	-.0372	0.
.3430	0.	0.	0.	0.	0.	0.	0.	0.	.0453	-.0691	.0274	.1050	.0229	-.0516	0.
.3440	0.	0.	0.	0.	0.	0.	0.	0.	.0490	-.0697	.0201	.0968	.0251	-.0464	0.
.3450	0.	0.	0.	0.	0.	0.	0.	0.	.0527	-.0703	.0128	.0878	.0271	-.0419	0.
.3460	0.	0.	0.	0.	0.	0.	0.	0.	.0563	-.0707	.0056	.0781	.0289	-.0385	0.
.3470	0.	0.	0.	0.	0.	0.	0.	0.	.0599	-.0710	-.0012	.0680	.0306	-.0363	0.
.3480	0.	0.	0.	0.	0.	0.	0.	0.	.0634	-.0710	-.0075	.0576	.0321	-.0355	0.
.3490	0.	0.	0.	0.	0.	0.	0.	0.	.0668	-.0705	-.0132	.0473	.0335	-.0360	0.
.3500	0.	0.	0.	0.	0.	0.	0.	0.	.0698	-.0696	-.0180	.0373	.0349	-.0377	0.
.3510	0.	0.	0.	0.	0.	0.	0.	0.	.0724	-.0682	-.0221	.0277	.0363	-.0402	0.
.3520	0.	0.	0.	0.	0.	0.	0.	0.	.0743	-.0660	-.0253	.0187	.0381	-.0432	0.
.3530	0.	0.	0.	0.	0.	0.	0.	0.	.0754	-.0631	-.0277	.0107	.0402	-.0465	0.

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S/RV PIPING KEWAUNEE GKW00F 2 RUP DISK
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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)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	(PSI)
.3540	0.	0.	0.	0.	0.	0.	.0755	-.0594	-.0293	.0037	.0426	-.0497	0.
.3550	0.	0.	0.	0.	0.	0.	.0748	-.0548	-.0301	-.0020	.0452	-.0526	0.
.3560	0.	0.	0.	0.	0.	0.	.0731	-.0494	-.0302	-.0064	.0474	-.0552	0.
.3570	0.	0.	0.	0.	0.	0.	.0707	-.0431	-.0296	-.0094	.0489	-.0575	0.
.3580	0.	0.	0.	0.	0.	0.	.0676	-.0361	-.0284	-.0112	.0492	-.0592	0.
.3590	0.	0.	0.	0.	0.	0.	.0640	-.0285	-.0268	-.0119	.0480	-.0605	0.
.3600	0.	0.	0.	0.	0.	0.	.0599	-.0206	-.0247	-.0118	.0450	-.0612	0.
.3610	0.	0.	0.	0.	0.	0.	.0554	-.0126	-.0224	-.0113	.0402	-.0613	0.
.3620	0.	0.	0.	0.	0.	0.	.0507	-.0047	-.0200	-.0108	.0336	-.0605	0.
.3630	0.	0.	0.	0.	0.	0.	.0458	.0027	-.0176	-.0105	.0252	-.0590	0.
.3640	0.	0.	0.	0.	0.	0.	.0406	.0096	-.0153	-.0108	.0154	-.0566	0.
.3650	0.	0.	0.	0.	0.	0.	.0357	.0158	-.0131	-.0116	.0045	-.0534	0.
.3660	0.	0.	0.	0.	0.	0.	.0296	.0212	-.0110	-.0122	-.0072	-.0496	0.
.3670	0.	0.	0.	0.	0.	0.	.0238	.0259	-.0090	-.0156	-.0191	-.0452	0.
.3680	0.	0.	0.	0.	0.	0.	.0176	.0298	-.0072	-.0187	-.0306	-.0402	0.
.3690	0.	0.	0.	0.	0.	0.	.0110	.0330	-.0056	-.0226	-.0410	-.0347	0.
.3700	0.	0.	0.	0.	0.	0.	.0040	.0357	-.0042	-.0272	-.0498	-.0288	0.
.3710	0.	0.	0.	0.	0.	0.	-.0034	.0377	-.0031	-.0325	-.0566	-.0223	0.
.3720	0.	0.	0.	0.	0.	0.	-.0111	.0393	-.0022	-.0381	-.0610	-.0156	0.
.3730	0.	0.	0.	0.	0.	0.	-.0191	.0406	-.0016	-.0440	-.0631	-.0086	0.
.3740	0.	0.	0.	0.	0.	0.	-.0272	.0415	-.0011	-.0498	-.0630	-.0016	0.
.3750	0.	0.	0.	0.	0.	0.	-.0352	.0423	-.0007	-.0553	-.0609	.0054	0.
.3760	0.	0.	0.	0.	0.	0.	-.0428	.0429	-.0005	-.0604	-.0574	.0122	0.
.3770	0.	0.	0.	0.	0.	0.	-.0500	.0434	-.0003	-.0649	-.0526	.0187	0.
.3780	0.	0.	0.	0.	0.	0.	-.0564	.0438	-.0002	-.0685	-.0469	.0248	0.
.3790	0.	0.	0.	0.	0.	0.	-.0620	.0441	-.0002	-.0714	-.0406	.0306	0.
.3800	0.	0.	0.	0.	0.	0.	-.0667	.0444	-.0002	-.0735	-.0340	.0361	0.
.3810	0.	0.	0.	0.	0.	0.	-.0702	.0445	-.0004	-.0750	-.0273	.0413	0.
.3820	0.	0.	0.	0.	0.	0.	-.0725	.0445	-.0006	-.0758	-.0210	.0460	0.
.3830	0.	0.	0.	0.	0.	0.	-.0736	.0444	-.0010	-.0759	-.0151	.0502	0.
.3840	0.	0.	0.	0.	0.	0.	-.0735	.0443	-.0015	-.0753	-.0098	.0538	0.
.3850	0.	0.	0.	0.	0.	0.	-.0721	.0440	-.0022	-.0741	-.0054	.0568	0.
.3860	0.	0.	0.	0.	0.	0.	-.0696	.0437	-.0031	-.0724	-.0017	.0592	0.
.3870	0.	0.	0.	0.	0.	0.	-.0660	.0433	-.0043	-.0703	.0014	.0612	0.
.3880	0.	0.	0.	0.	0.	0.	-.0616	.0429	-.0059	-.0681	.0039	.0629	0.
.3890	0.	0.	0.	0.	0.	0.	-.0566	.0424	-.0079	-.0657	.0062	.0647	0.
.3900	0.	0.	0.	0.	0.	0.	-.0511	.0419	-.0103	-.0636	.0083	.0667	0.
.3910	0.	0.	0.	0.	0.	0.	-.0453	.0414	-.0132	-.0617	.0103	.0691	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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

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

.3700	0.	0.	0.	0.	0.	0.	0.	0.	-.0667	.0444	-.0002	-.0735	-.0340	.0361	0.
.3810	0.	0.	0.	0.	0.	0.	0.	0.	-.0702	.0445	-.0004	-.0750	-.0273	.0413	0.
.3820	0.	0.	0.	0.	0.	0.	0.	0.	-.0725	.0445	-.0006	-.0758	-.0210	.0460	0.
.3830	0.	0.	0.	0.	0.	0.	0.	0.	-.0736	.0444	-.0010	-.0759	-.0151	.0502	0.
.3840	0.	0.	0.	0.	0.	0.	0.	0.	-.0735	.0443	-.0015	-.0753	-.0098	.0538	0.
.3850	0.	0.	0.	0.	0.	0.	0.	0.	-.0721	.0440	-.0022	-.0741	-.0054	.0568	0.
.3860	0.	0.	0.	0.	0.	0.	0.	0.	-.0696	.0437	-.0031	-.0724	-.0017	.0592	0.
.3870	0.	0.	0.	0.	0.	0.	0.	0.	-.0660	.0433	-.0043	-.0703	.0014	.0612	0.
.3880	0.	0.	0.	0.	0.	0.	0.	0.	-.0616	.0429	-.0059	-.0681	.0039	.0629	0.
.3890	0.	0.	0.	0.	0.	0.	0.	0.	-.0566	.0424	-.0079	-.0657	.0062	.0647	0.
.3900	0.	0.	0.	0.	0.	0.	0.	0.	-.0511	.0419	-.0103	-.0636	.0083	.0667	0.
.3910	0.	0.	0.	0.	0.	0.	0.	0.	-.0453	.0414	-.0132	-.0617	.0103	.0691	0.

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

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

SECTION	20	MEMBER	1	SEQUENCE	37	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)		
.3920	0.	0.	0.	0.	0.	0.	-.0395	.0408	-.0164	-.0600	.0122	.0721	0.		
.3930	0.	0.	0.	0.	0.	0.	-.0338	.0400	-.0198	-.0585	.0140	.0754	0.		
.3940	0.	0.	0.	0.	0.	0.	-.0283	.0392	-.0232	-.0571	.0156	.0792	0.		
.3950	0.	0.	0.	0.	0.	0.	-.0232	.0383	-.0266	-.0558	.0171	.0834	0.		
.3960	0.	0.	0.	0.	0.	0.	-.0187	.0372	-.0297	-.0546	.0184	.0877	0.		
.3970	0.	0.	0.	0.	0.	0.	-.0148	.0361	-.0325	-.0536	.0197	.0921	0.		
.3980	0.	0.	0.	0.	0.	0.	-.0117	.0349	-.0348	-.0526	.0210	.0962	0.		
.3990	0.	0.	0.	0.	0.	0.	-.0094	.0338	-.0365	-.0517	.0226	.0998	0.		
.4000	0.	0.	0.	0.	0.	0.	-.0081	.0327	-.0377	-.0512	.0241	.1026	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	20	MEMBER	1	SEQUENCE	37	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)		
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.		
.0010	-7.	9.	-10.	-1.	-0.	0.	-.0000	.0000	-.0000	-.0000	.0000	.0000	0.		
.0020	-51.	54.	-71.	-4.	-1.	2.	-.0001	.0000	-.0002	-.0002	.0002	.0001	2.		
.0030	-151.	120.	-206.	-9.	-3.	5.	-.0003	.0000	-.0005	-.0007	.0007	.0005	5.		
.0040	-304.	177.	-405.	-13.	-6.	7.	-.0007	-.0000	-.0012	-.0018	.0014	.0013	7.		
.0050	-486.	217.	-639.	-16.	-10.	9.	-.0011	-.0001	-.0022	-.0035	.0023	.0024	10.		
.0060	-680.	264.	-897.	-19.	-14.	11.	-.0018	-.0002	-.0035	-.0059	.0033	.0038	12.		
.0070	-936.	376.	-1213.	-28.	-20.	15.	-.0026	-.0003	-.0054	-.0091	.0047	.0057	17.		
.0080	-1369.	591.	-1631.	-43.	-35.	24.	-.0038	-.0005	-.0082	-.0136	.0076	.0085	28.		
.0090	-1998.	772.	-2061.	-57.	-64.	31.	-.0053	-.0008	-.0119	-.0198	.0128	.0126	43.		
.0100	-2778.	788.	-2457.	-58.	-106.	31.	-.0069	-.0013	-.0166	-.0281	.0203	.0179	58.		
.0110	-3660.	664.	-2856.	-49.	-154.	26.	-.0081	-.0020	-.0222	-.0382	.0296	.0238	77.		
.0120	-4494.	501.	-3240.	-37.	-200.	20.	-.0085	-.0027	-.0283	-.0496	.0397	.0294	96.		
.0130	-5027.	339.	-3458.	-25.	-230.	13.	-.0076	-.0034	-.0348	-.0614	.0487	.0336	109.		
.0140	-4937.	66.	-3180.	-5.	-235.	3.	-.0047	-.0040	-.0410	-.0726	.0550	.0350	110.		
.0150	-3978.	-460.	-2120.	34.	-207.	-18.	.0007	-.0045	-.0461	-.0821	.0571	.0328	99.		

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

83/12/02. 18.26.52.

CONDITION 24
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INTERNAL FORCES IN THE PIPING
 FORCES AND MOMENTS ACT ON THE PIPING

.0050	-486.	217.	-639.	-16.	-10.	9.	-.0011	-.0001	-.0022	-.0035	.0023	.0024	10.
.0060	-680.	264.	-897.	-19.	-14.	11.	-.0018	-.0002	-.0035	-.0059	.0033	.0038	12.
.0070	-936.	376.	-1213.	-28.	-20.	15.	-.0026	-.0003	-.0054	-.0091	.0047	.0057	17.
.0080	-1369.	591.	-1631.	-43.	-35.	24.	-.0038	-.0005	-.0082	-.0136	.0076	.0085	28.
.0090	-1946.	772.	-2061.	-57.	-64.	31.	-.0053	-.0008	-.0119	-.0198	.0128	.0126	43.
.0100	-2778.	788.	-2457.	-58.	-106.	31.	-.0069	-.0013	-.0166	-.0281	.0203	.0179	58.
.0110	-3660.	664.	-2856.	-49.	-154.	26.	-.0081	-.0020	-.0222	-.0382	.0296	.0238	77.
.0120	-4474.	501.	-3240.	-37.	-200.	20.	-.0085	-.0027	-.0283	-.0496	.0397	.0294	96.
.0130	-5027.	339.	-3458.	-25.	-230.	13.	-.0076	-.0034	-.0348	-.0614	.0687	.0336	109.
.0140	-4937.	66.	-3186.	-5.	-235.	3.	-.0047	-.0040	-.0410	-.0726	.0550	.0350	110.
.0150	-3978.	-460.	-2120.	34.	-207.	-18.	.0007	-.0045	-.0461	-.0821	.0571	.0328	99.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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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	20	MEMBER	.1	SEQUENCE	37	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)		
.0160	-2081.	-1313.	-81.	96.	-149.	-52.	.0087	-.0046	-.0496	-.0884	.0549	.0263	87.		
.0170	315.	-2275.	2433.	167.	-74.	-91.	.0190	-.0041	-.0509	-.0905	.0500	.0160	95.		
.0180	2395.	-2933.	4337.	215.	3.	-117.	.0308	-.0026	-.0505	-.0881	.0449	.0036	115.		
.0190	3450.	-3002.	4793.	220.	0.	-119.	.0431	.0001	-.0490	-.0822	.0431	-.0088	121.		
.0200	2542.	-2201.	2893.	161.	71.	-88.	.0542	.0043	-.0486	-.0759	.0502	-.0178	92.		
.0210	-154.	-1261.	-637.	92.	14.	-50.	.0634	.0096	-.0501	-.0719	.0590	-.0212	50.		
.0220	-2452.	-1192.	-4013.	87.	-20.	-47.	.0723	.0159	-.0520	-.0698	.0869	-.0222	47.		
.0230	-3141.	-1128.	-6278.	83.	20.	-45.	.0820	.0231	-.0531	-.0658	.0947	-.0261	45.		
.0240	-1144.	-642.	-5484.	47.	135.	-26.	.0930	.0311	-.0519	-.0546	.0882	-.0378	68.		
.0250	1961.	726.	-3537.	-53.	284.	29.	.1042	.0397	-.0486	-.0360	.0720	-.0542	136.		
.0260	3753.	3266.	-4692.	-239.	461.	130.	.1138	.0480	-.0447	-.0152	.0497	-.0680	251.		
.0270	6435.	4571.	-6550.	-335.	732.	182.	.1208	.0545	-.0395	.0021	.0130	-.0801	387.		
.0280	10855.	2954.	-4274.	-216.	965.	118.	.1238	.0586	-.0316	.0157	-.0268	-.0916	467.		
.0290	13177.	678.	-168.	-50.	971.	27.	.1206	.0610	-.0211	.0305	-.0478	-.0956	456.		
.0300	13094.	636.	2605.	-47.	855.	25.	.1100	.0629	-.0103	.0508	-.0564	-.0889	401.		
.0310	10960.	2163.	2595.	-158.	699.	86.	.0927	.0640	.0002	.0686	-.0574	-.0786	338.		
.0320	5900.	3872.	-1094.	-283.	475.	154.	.0701	.0634	.0108	.0751	-.0543	-.0692	269.		
.0330	1514.	3797.	-2363.	-278.	205.	151.	.0449	.0604	.0230	.0766	-.0459	-.0592	177.		
.0340	459.	2053.	1771.	-150.	-37.	82.	.0194	.0553	.0371	.0809	-.0425	-.0496	82.		
.0350	-328.	1764.	5187.	-129.	-230.	70.	-.0057	.0490	.0507	.0851	-.0423	-.0474	128.		
.0360	-2763.	3997.	4504.	-293.	-381.	159.	-.0303	.0414	.0620	.0845	-.0409	-.0556	237.		
.0370	-3720.	5423.	4688.	-397.	-459.	216.	-.0530	.0316	.0708	.0807	-.0409	-.0654	302.		
.0380	-1913.	3418.	7491.	-250.	-438.	136.	-.0734	.0187	.0772	.0715	-.0464	-.0684	245.		
.0390	-827.	-90.	7926.	7.	-376.	-4.	-.0920	.0037	.0809	.0522	-.0529	-.0662	176.		
.0400	-2528.	-1557.	5480.	114.	-403.	-62.	-.1099	-.0115	.0809	.0300	-.0467	-.0602	198.		
.0410	-3672.	-1040.	4139.	76.	-434.	-41.	-.1266	-.0256	.0777	.0153	-.0351	-.0480	207.		
.0420	-4922.	16.	2703.	-1.	-468.	1.	-.1412	-.0392	.0721	.0057	-.0196	-.0259	219.		
.0430	-8842.	830.	-1777.	-61.	-577.	33.	-.1532	-.0527	.0650	-.0076	.0368	.0054	772.		
.0440	-12067.	-277.	-3916.	20.	-727.	-11.	-.1605	-.0664	.0581	-.0217	.0330	.0405	341.		
.0450	-12521.	-2760.	-3257.	202.	-787.	-110.	-.1613	-.0796	.0524	-.0294	.0443	.0737	384.		
.0460	-12062.	-3693.	-3971.	270.	-725.	-147.	-.1551	-.0908	.0478	-.0271	.0398	.0982	369.		
.0470	-11255.	-2857.	-4409.	209.	-648.	-114.	-.1424	-.0996	.0448	-.0137	.0285	.1097	324.		
.0480	-8597.	-2964.	-1194.	217.	-582.	-118.	-.1238	-.1064	.0435	.0070	.0117	.1118	296.		
.0490	-5103.	-4779.	1893.	350.	-449.	-190.	-.1007	-.1112	.0422	.0260	-.0118	.1099	281.		
.0500	-3144.	-6738.	1225.	493.	-279.	-268.	-.0752	-.1133	.0393	.0379	-.0350	.1030	294.		
.0510	-2429.	-7646.	-505.	560.	-158.	-304.	-.0483	-.1114	.0355	.0481	-.0498	.0878	308.		
.0520	-1926.	-6744.	-1279.	494.	-90.	-268.	-.0206	-.1052	.0316	.0645	-.0557	.0662	267.		
.0530	-1896.	-3756.	-3076.	275.	-16.	-150.	.0079	-.0952	.0283	.0872	-.0578	.0404	147.		

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

CONDITION 24

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.0430	-8842.	830.	-977.	-61.	-577.	33.	-.1532	-.0527	.0650	-.0076	.0068	.0054	272.
.0440	-12067.	-277.	-3916.	20.	-727.	-11.	-.1605	-.0664	.0581	-.0217	.0330	.0405	341.
.0450	-12521.	-2760.	-3257.	202.	-787.	-110.	-.1613	-.0796	.0524	-.0294	.0443	.0737	384.
.0460	-12062.	-3693.	-3971.	270.	-725.	-147.	-.1551	-.0908	.0478	-.0271	.0398	.0982	369.
.0470	-11255.	-2857.	-4409.	209.	-648.	-114.	-.1424	-.0996	.0448	-.0137	.0285	.1097	324.
.0480	-8597.	-2964.	-1194.	217.	-582.	-110.	-.1230	-.1064	.0435	.0070	.0117	.1118	296.
.0490	-5103.	-4779.	1893.	350.	-449.	-190.	-.1007	-.1112	.0422	.0260	-.0118	.1099	281.
.0500	-3144.	-6738.	1225.	497.	-279.	-268.	-.0752	-.1133	.0393	.0379	-.0350	.1030	294.
.0510	-2429.	-7646.	-505.	560.	-158.	-304.	-.0483	-.1114	.0355	.0481	-.0498	.0878	308.
.0520	-1926.	-6744.	-1279.	494.	-90.	-268.	-.0206	-.1052	.0316	.0645	-.0557	.0662	267.
.0530	-1896.	-3756.	-3076.	275.	-10.	-150.	.0079	-.0952	.0283	.0872	-.0578	.0404	147.

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INTERNAL FORCES IN THE PIPING
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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)	
.0540	-1438.	-457.	-4921.	33.	91.	-18.	.0371	-.0832	.0265	.1109	-.0514	.0083	46.	
.0550	996.	1032.	-3532.	-76.	213.	41.	.0669	-.0709	.0270	.1335	-.0684	-.0300	108.	
.0560	4495.	1316.	-418.	-96.	246.	52.	.0957	-.0591	.0292	.1575	-.0766	-.0679	170.	
.0570	7406.	2153.	1054.	-158.	500.	86.	.1217	-.0483	.0315	.1841	-.0833	-.1002	249.	
.0580	9814.	3462.	1616.	-253.	654.	138.	.1432	-.0388	.0331	.2102	-.0860	-.1273	335.	
.0590	11513.	4186.	2400.	-306.	747.	167.	.1588	-.0314	.0338	.2303	-.0803	-.1476	386.	
.0600	11439.	3930.	1882.	-288.	762.	156.	.1680	-.0266	.0333	.2414	-.0537	-.1544	389.	
.0610	9863.	2823.	426.	-207.	705.	112.	.1706	-.0243	.0322	.2453	-.0365	-.1458	348.	
.0620	8141.	1642.	259.	-120.	586.	65.	.1678	-.0237	.0309	.2450	-.0011	-.1300	282.	
.0630	6109.	1930.	555.	-141.	425.	77.	.1604	-.0242	.0297	.2421	.0390	-.1143	213.	
.0640	3616.	3808.	-193.	-279.	272.	152.	.1500	-.0260	.0286	.2372	.0773	-.0990	196.	
.0650	2315.	5171.	140.	-378.	164.	206.	.1380	-.0301	.0280	.2295	.1067	-.0835	216.	
.0660	2800.	4643.	2647.	-340.	100.	185.	.1251	-.0371	.0277	.2159	.1263	-.0708	187.	
.0670	3149.	3106.	4196.	-227.	63.	124.	.1110	-.0468	.0262	.1942	.1404	-.0612	125.	
.0680	2337.	1524.	3097.	-112.	48.	61.	.0953	-.0582	.0227	.1669	.1515	-.0507	64.	
.0690	1056.	-228.	1752.	17.	30.	-9.	.0785	-.0704	.0174	.1380	.1601	-.0371	16.	
.0700	329.	-2120.	1242.	155.	-25.	-84.	.0610	-.0823	.0110	.1066	.1678	-.0222	84.	
.0710	-1291.	-3804.	-74.	278.	-92.	-151.	.0434	-.0929	.0037	.0708	.1725	-.0066	155.	
.0720	-2664.	-5149.	-2306.	377.	-103.	-205.	.0265	-.1013	-.0038	.0343	.1680	.0105	207.	
.0730	-3008.	-5660.	-3987.	414.	-62.	-225.	.0112	-.1066	-.0104	.0032	.1530	.0277	223.	
.0740	-2886.	-4790.	-4704.	351.	-24.	-191.	-.0023	-.1086	-.0150	-.0195	.1312	.0419	187.	
.0750	-2290.	-3324.	-4259.	243.	2.	-132.	-.0141	-.1077	-.0170	-.0336	.1033	.0524	130.	
.0760	-809.	-2611.	-2382.	191.	36.	-104.	-.0245	-.1049	-.0167	-.0398	.0694	.0620	103.	
.0770	380.	-2900.	-564.	212.	50.	-115.	-.0343	-.1004	-.0148	-.0412	.0355	.0730	116.	
.0780	-206.	-3715.	-687.	272.	12.	-148.	-.0441	-.0944	-.0122	-.0414	.0080	.0847	145.	
.0790	-1899.	-4772.	-2055.	349.	-57.	-190.	-.0537	-.0863	-.0090	-.0403	-.0134	.0952	188.	
.0800	-3295.	-5498.	-2927.	402.	-125.	-219.	-.0621	-.0754	-.0044	-.0355	-.0315	.1017	222.	
.0810	-4578.	-4994.	-3394.	366.	-200.	-199.	-.0687	-.0615	.0019	-.0266	-.0449	.1019	216.	
.0820	-5857.	-3333.	-3822.	244.	-277.	-133.	-.0726	-.0448	.0102	-.0154	-.0541	.0942	184.	
.0830	-5900.	-1411.	-3212.	103.	-304.	-56.	-.0733	-.0263	.0204	-.0020	-.0635	.0780	153.	
.0840	-4307.	471.	-1072.	-35.	-275.	19.	-.0708	-.0070	.0323	.0136	-.0744	.0542	129.	
.0850	-2265.	2409.	1750.	-176.	-235.	96.	-.0660	.0119	.0445	.0302	-.0824	.0252	145.	
.0860	-490.	3925.	4484.	-287.	-214.	156.	-.0601	.0293	.0556	.0454	-.0354	-.0055	183.	
.0870	907.	4554.	6274.	-333.	-183.	181.	-.0541	.0444	.0641	.0568	-.0848	-.0342	197.	
.0880	1238.	4367.	5991.	-320.	-148.	174.	-.0487	.0568	.0689	.0618	-.0792	-.0579	184.	
.0890	208.	3373.	4099.	-247.	-148.	134.	-.0441	.0666	.0705	.0601	-.0667	-.0752	149.	
.0900	-1178.	1798.	2571.	-122.	-189.	72.	-.0397	.0744	.0697	.0549	-.0499	-.0869	113.	
.0910	-2046.	797.	2165.	-58.	-236.	32.	-.0347	.0812	.0674	.0498	-.0341	-.0959	115.	

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S/RV PIPING KEWAUNEE CKW08F 2 RUP DISK
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