

50-305

RESPONSE TO NUREG-0737 ITEM II.D.1

Docket # *50-305*

Control # *8403280048*

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

.2190	-38.	960.	924.	767.	-0.	31.	-.0075	-.0454	.0151	-.1507	-.0242	.0779	2334.
.2200	35.	821.	1570.	1303.	-0.	-29.	-.0051	-.0437	.0136	-.1930	-.0411	.0913	3964.
.2210	176.	733.	2097.	1740.	-0.	-146.	-.0027	-.0415	.0110	-.2241	-.0587	.1037	5313.
.2220	367.	666.	2500.	2075.	0.	-305.	-.0002	-.0386	.0079	-.2442	-.0754	.1144	6379.
.2230	575.	579.	2793.	2310.	0.	-477.	.0021	-.0354	.0047	-.2547	-.0891	.1226	7200.
.2240	784.	471.	2983.	2476.	0.	-651.	.0044	-.0317	.0019	-.2568	-.0978	.1284	7788.
.2250	999.	360.	3064.	2543.	0.	-829.	.0070	-.0277	-.0003	-.2508	-.1008	.1322	8137.
.2260	1207.	239.	3033.	2517.	-0.	-1002.	.0099	-.0235	-.0019	-.2368	-.0984	.1334	8241.
.2270	1371.	102.	2891.	2400.	-0.	-1138.	.0129	-.0191	-.0030	-.2146	-.0918	.1309	8080.

ADLPIPE PAGE 2272

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.24.

S/RV PIPING KEWAUNEE GKW08F 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	58	MEMBER	1	SEQUENCE	82	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)		
.2280	1457.	-34.	2640.	2192.	0.	-1210.	.0160	-.0147	-.0037	-.1841	-.0822	.1242	7615.		
.2290	1451.	-142.	2275.	1888.	-0.	-1205.	.0192	-.0103	-.0042	-.1450	-.0707	.1132	6813.		
.2300	1352.	-217.	1800.	1494.	0.	-1122.	.0225	-.0061	-.0048	-.0978	-.0586	.0975	5684.		
.2310	1151.	-279.	1244.	1032.	0.	-955.	.0256	-.0020	-.0054	-.0446	-.0462	.0768	4277.		
.2320	834.	-345.	650.	540.	0.	-692.	.0284	.0018	-.0056	.0108	-.0326	.0517	2670.		
.2330	403.	-427.	68.	56.	0.	-335.	.0311	.0054	-.0052	.0647	-.0170	.0235	1033.		
.2340	-112.	-533.	-472.	-392.	0.	93.	.0334	.0086	-.0038	.1140	.0006	-.0065	1225.		
.2350	-665.	-659.	-952.	-790.	0.	552.	.0355	.0114	-.0016	.1566	.0200	-.0368	2932.		
.2360	-1214.	-784.	-1365.	-1133.	0.	1008.	.0372	.0137	.0013	.1913	.0404	-.0660	4613.		
.2370	-1733.	-889.	-1706.	-1416.	-0.	1438.	.0385	.0154	.0049	.2174	.0608	-.0927	6140.		
.2380	-2202.	-972.	-1972.	-1637.	-0.	1827.	.0390	.0165	.0087	.2350	.0797	-.1168	7462.		
.2390	-2587.	-1024.	-2171.	-1802.	-0.	2147.	.0386	.0169	.0127	.2446	.0957	-.1376	8526.		
.2400	-2841.	-1016.	-2318.	-1924.	-0.	2358.	.0373	.0165	.0163	.2470	.1078	-.1540	9257.		
.2410	-2931.	-921.	-2418.	-2007.	-0.	2433.	.0354	.0154	.0196	.2425	.1156	-.1646	9594.		
.2420	-2854.	-760.	-2460.	-2042.	0.	2369.	.0327	.0136	.0224	.2308	.1189	-.1691	9513.		
.2430	-2625.	-569.	-2424.	-2012.	-0.	2179.	.0293	.0113	.0250	.2115	.1181	-.1676	9021.		
.2440	-2260.	-362.	-2302.	-1911.	0.	1876.	.0254	.0086	.0272	.1848	.1135	-.1603	8145.		
.2450	-1767.	-138.	-2104.	-1746.	0.	1466.	.0212	.0057	.0291	.1520	.1055	-.1473	6935.		
.2460	-1166.	94.	-1842.	-1529.	-0.	968.	.0168	.0028	.0303	.1147	.0943	-.1292	5503.		
.2470	-497.	316.	-1528.	-1268.	-0.	413.	.0125	-.0001	.0308	.0748	.0803	-.1074	4057.		
.2480	191.	523.	-1173.	-973.	-0.	-158.	.0085	-.0027	.0305	.0342	.0640	-.0828	2999.		
.2490	855.	712.	-787.	-653.	-0.	-710.	.0049	-.0049	.0293	-.0056	.0462	-.0564	2934.		
.2500	1465.	863.	-387.	-321.	-0.	-1216.	.0020	-.0066	.0272	-.0428	.0273	-.0294	3826.		
.2510	2006.	961.	13.	11.	-0.	-1665.	.0001	-.0076	.0242	-.0762	.0080	-.0028	5066.		
.2520	2464.	1015.	398.	331.	-0.	-2045.	-.0007	-.0079	.0204	-.1049	-.0109	.0229	6302.		
.2530	2816.	1028.	763.	633.	-0.	-2337.	.0000	-.0075	.0160	-.1284	-.0285	.0475	7365.		
.2540	3034.	987.	1104.	916.	-0.	-2518.	.0021	-.0063	.0113	-.1465	-.0440	.0700	8151.		
.2550	3105.	887.	1408.	1169.	0.	-2577.	.0056	-.0044	.0063	-.1588	-.0570	.0893	8608.		
.2560	3031.	744.	1658.	1376.	-0.	-2516.	.0103	-.0018	.0011	-.1645	-.0671	.1048	8723.		
.2570	2821.	578.	1834.	1522.	0.	-2341.	.0162	.0013	-.0042	-.1631	-.0740	.1161	8494.		
.2580	2474.	396.	1932.	1604.	-0.	-2053.	.0230	.0048	-.0095	-.1550	-.0776	.1227	7925.		
.2590	1992.	201.	1960.	1627.	0.	-1653.	.0304	.0085	-.0145	-.1412	-.0778	.1242	7055.		
.2600	1403.	1.	1917.	1591.	-0.	-1165.	.0381	.0124	-.0191	-.1226	-.0749	.1210	5998.		
.2610	760.	-178.	1800.	1494.	-0.	-631.	.0459	.0163	-.0231	-.1002	-.0690	.1139	4932.		
.2620	108.	-318.	1611.	1337.	-0.	-89.	.0536	.0200	-.0264	-.0750	-.0609	.1039	4077.		
.2630	-532.	-427.	1370.	1137.	0.	442.	.0610	.0236	-.0289	-.0485	-.0511	.0913	3710.		
.2640	-1146.	-517.	1096.	910.	0.	951.	.0675	.0268	-.0305	-.0223	-.0399	.0763	4005.		
.2650	-1705.	-576.	798.	663.	0.	1415.	.0729	.0296	-.0311	.0027	-.0278	.0600	4753.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.24.

S/RV PIPING KEWAUNEE GKW08F 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 58 MEMBER 1 SEQUENCE 82 LOCATION BEG TYPE VA

.2570	2821.	578.	1834.	1522.	0.	-2341.	18162	.0013	-.0042	-.1631	-.0740	.1161	8494.
.2580	2474.	396.	1932.	1604.	-0.	-2053.	.0230	.0048	-.0095	-.1550	-.0776	.1227	7925.
.2590	1992.	201.	1960.	1627.	0.	-1653.	.0304	.0085	-.0145	-.1412	-.0778	.1242	7055.
.2600	1403.	1.	1917.	1591.	-0.	-1185.	.0381	.0124	-.0191	-.1226	-.0749	.1210	5998.
.2610	760.	-178.	1800.	1494.	-0.	-631.	.0459	.0163	-.0231	-.1002	-.0690	.1139	4932.
.2620	108.	-318.	1811.	1337.	-0.	-89.	.0536	.0200	-.0264	-.0750	-.0609	.1039	4077.
.2630	-532.	-427.	1370.	1137.	0.	442.	.0610	.0236	-.0289	-.0485	-.0511	.0913	3710.
.2640	-1146.	-517.	1096.	910.	0.	951.	.0675	.0268	-.0305	-.0223	-.0399	.0763	4005.
.2650	-1705.	-576.	798.	663.	0.	1415.	.0729	.0296	-.0311	.0027	-.0278	.0600	4753.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.24.

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	58	MEMBER	1	SEQUENCE	82	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)		
.2660	-2161.	-580.	473.	393.	0.	1794.	.0772	.0320	-.0310	.0264	-.0155	.0435	5586.		
.2670	-2485.	-523.	126.	104.	0.	2053.	.0803	.0340	-.0304	.0484	-.0036	.0277	6282.		
.2680	-2680.	-422.	-219.	-182.	0.	2224.	.0821	.0357	-.0293	.0678	.0076	.0130	6789.		
.2690	-2760.	-305.	-532.	-442.	0.	2291.	.0823	.0370	-.0276	.0832	.0177	-.0004	7098.		
.2700	-2722.	-189.	-796.	-661.	0.	2259.	.0810	.0382	-.0255	.0939	.0263	-.0121	7159.		
.2710	-2545.	-72.	-1007.	-836.	0.	2113.	.0785	.0392	-.0230	.1302	.0329	-.0212	6911.		
.2720	-2237.	53.	-1158.	-961.	0.	1857.	.0751	.0402	-.0204	.1023	.0372	-.0269	6359.		
.2730	-1838.	163.	-1229.	-1020.	0.	1526.	.0707	.0412	-.0178	.0998	.0392	-.0297	5583.		
.2740	-1392.	224.	-1213.	-1007.	0.	1156.	.0655	.0424	-.0151	.0929	.0390	-.0306	4662.		
.2750	-914.	238.	-1124.	-933.	0.	758.	.0597	.0437	-.0125	.0827	.0363	-.0301	3657.		
.2760	-403.	236.	-986.	-819.	0.	335.	.0536	.0452	-.0104	.0713	.0313	-.0278	2690.		
.2770	107.	223.	-810.	-672.	0.	-89.	.0476	.0468	-.0089	.0594	.0244	-.0238	2062.		
.2780	558.	167.	-585.	-486.	0.	-463.	.0417	.0486	-.0077	.0466	.0165	-.0193	2042.		
.2790	918.	49.	-315.	-261.	0.	-762.	.0359	.0506	-.0066	.0330	.0083	-.0154	2450.		
.2800	1201.	-104.	-26.	-21.	0.	-997.	.0307	.0525	-.0058	.0197	.0000	-.0115	3032.		
.2810	1424.	-255.	252.	209.	0.	-1182.	.0264	.0544	-.0052	.0080	-.0078	-.0072	3650.		
.2820	1562.	-407.	511.	424.	0.	-1297.	.0229	.0560	-.0047	-.0021	-.0145	-.0029	4150.		
.2830	1581.	-582.	753.	625.	0.	-1312.	.0201	.0573	-.0041	-.0109	-.0198	.0002	4421.		
.2840	1492.	-767.	953.	791.	0.	-1239.	.0180	.0582	-.0035	-.0173	-.0238	.0016	4471.		
.2850	1352.	-902.	1065.	884.	0.	-1122.	.0168	.0585	-.0031	-.0192	-.0269	.0027	4346.		
.2860	1190.	-946.	1067.	886.	0.	-988.	.0166	.0582	-.0031	-.0158	-.0292	.0045	4036.		
.2870	990.	-929.	974.	809.	0.	-822.	.0172	.0572	-.0033	-.0080	-.0303	.0062	3507.		
.2880	742.	-890.	809.	671.	0.	-616.	.0182	.0555	-.0035	.0026	-.0302	.0073	2771.		
.2890	484.	-815.	572.	475.	0.	-402.	.0198	.0531	-.0037	.0156	-.0289	.0086	1892.		
.2900	264.	-668.	265.	220.	0.	-219.	.0222	.0502	-.0040	.0306	-.0260	.0120	944.		
.2910	90.	-467.	-89.	-74.	0.	-75.	.0252	.0469	-.0043	.0462	-.0216	.0174	320.		
.2920	-67.	-270.	-448.	-372.	0.	56.	.0284	.0432	-.0046	.0606	-.0161	.0237	1145.		
.2930	-223.	-98.	-784.	-650.	0.	185.	.0316	.0393	-.0047	.0729	-.0099	.0305	2057.		
.2940	-363.	71.	-1089.	-904.	0.	301.	.0348	.0354	-.0051	.0833	-.0040	.0380	2897.		
.2950	-469.	244.	-1359.	-1128.	0.	390.	.0379	.0316	-.0060	.0919	.0004	.0463	3630.		
.2960	-556.	389.	-1572.	-1305.	0.	462.	.0406	.0280	-.0074	.0985	.0022	.0541	4210.		
.2970	-655.	480.	-1697.	-1408.	0.	543.	.0427	.0246	-.0091	.1016	.0010	.0607	4592.		
.2980	-777.	513.	-1713.	-1422.	0.	645.	.0439	.0216	-.0110	.1002	-.0030	.0660	4749.		
.2990	-901.	494.	-1621.	-1345.	-0.	746.	.0444	.0191	-.0131	.0938	-.0096	.0701	4682.		
.3000	-1000.	427.	-1426.	-1185.	0.	830.	.0441	.0168	-.0152	.0823	-.0185	.0730	4402.		
.3010	-1073.	313.	-1137.	-944.	0.	890.	.0428	.0149	-.0172	.0653	-.0288	.0748	3947.		
.3020	-1136.	156.	-749.	-622.	0.	942.	.0406	.0132	-.0187	.0424	-.0394	.0753	3435.		
.3030	-1190.	-36.	-283.	-235.	0.	987.	.0374	.0116	-.0196	.0142	-.0499	.0743	3088.		

ADLPIPE PAGE 2274

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.24.

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	58	MEMBER	1	SEQUENCE	82	LOCATION	BEG	TYPE	VA
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.2950	-469.	244.	-1559.	-1128.	0.	370.	.0379	.0316	-.0060	.0919	.0004	.0463	3630.
.2960	-556.	389.	-1572.	-1305.	0.	462.	.0406	.0280	-.0074	.0985	.0022	.0541	4210.
.2970	-655.	480.	-1697.	-1408.	0.	543.	.0427	.0246	-.0091	.1016	.0010	.0607	4592.
.2980	-777.	513.	-1713.	-1422.	0.	645.	.0439	.0216	-.0110	.1002	-.0030	.0660	4749.
.2990	-901.	494.	-1621.	-1345.	-0.	748.	.0444	.0191	-.0131	.0938	-.0096	.0701	4682.
.3000	-1000.	427.	-1428.	-1185.	0.	830.	.0441	.0168	-.0152	.0823	-.0185	.0730	4402.
.3010	-1073.	313.	-1137.	-944.	0.	890.	.0428	.0149	-.0172	.0653	-.0288	.0748	3947.
.3020	-1136.	156.	-749.	-627.	0.	942.	.0406	.0132	-.0187	.0424	-.0394	.0753	3435.
.3030	-1190.	-36.	-283.	-275.	0.	987.	.0374	.0116	-.0196	.0142	-.0499	.0743	3088.

ADLPIPE PAGE 2274

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.24.

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	58	MEMBER	1	SEQUENCE	82	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)		
.3040	-1203.	-238.	218.	181.	0.	998.	.0330	.0099	-.0199	-.0175	-.0502	.0718	3086.		
.3050	-1140.	-405.	709.	588.	-0.	946.	.0278	.0081	-.0198	-.0504	-.0705	.0683	3388.		
.3060	-1003.	-511.	1161.	964.	-0.	833.	.0219	.0060	-.0193	-.0833	-.0801	.0642	3874.		
.3070	-824.	-570.	1567.	1301.	-0.	684.	.0151	.0035	-.0180	-.1156	-.0385	.0589	4470.		
.3080	-611.	-598.	1914.	1588.	-0.	507.	.0076	.0006	-.0160	-.1465	-.0951	.0518	5072.		
.3090	-341.	-570.	2168.	1800.	0.	283.	-.0004	-.0027	-.0132	-.1743	-.0998	.0437	5542.		
.3100	-1.	-456.	2307.	1915.	-0.	1.	-.0085	-.0064	-.0099	-.1973	-.1018	.0357	5825.		
.3110	375.	-272.	2333.	1937.	0.	-312.	-.0164	-.0104	-.0061	-.2152	-.1004	.0279	5967.		
.3120	736.	-70.	2265.	1880.	-0.	-611.	-.0241	-.0145	-.0017	-.2278	-.0955	.0192	6012.		
.3130	1059.	134.	2104.	1746.	-0.	-879.	-.0315	-.0187	-.0030	-.2340	-.0875	.0095	5947.		
.3140	1355.	363.	1839.	1527.	-0.	-1125.	-.0382	-.0228	.0077	-.2325	-.0768	-.0001	5769.		
.3150	1622.	621.	1474.	1224.	-0.	-1346.	-.0437	-.0265	.0120	-.2226	-.0640	-.0089	5535.		
.3160	1821.	861.	1041.	864.	-0.	-1512.	-.0482	-.0298	.0158	-.2048	-.0497	-.0177	5297.		
.3170	1916.	1038.	578.	480.	-0.	-1590.	-.0516	-.0324	.0191	-.1806	-.0344	-.0268	5052.		
.3180	1902.	1152.	107.	89.	-0.	-1578.	-.0538	-.0342	.0217	-.1508	-.0182	-.0354	4809.		
.3190	1802.	1214.	-362.	-300.	-0.	-1496.	-.0546	-.0352	.0235	-.1160	-.0316	-.0427	4641.		
.3200	1628.	1213.	-810.	-672.	-0.	-1351.	-.0539	-.0354	.0244	-.0775	.0147	-.0485	4591.		
.3210	1367.	1126.	-1207.	-1002.	-0.	-1135.	-.0521	-.0346	.0244	-.0370	.0302	-.0531	4605.		
.3220	1011.	953.	-1530.	-1270.	-0.	-879.	-.0494	-.0330	.0236	.0035	.0448	-.0566	4630.		
.3230	583.	715.	-1774.	-1472.	-0.	-484.	-.0458	-.0308	.0221	.0426	.0580	-.0585	4715.		
.3240	131.	436.	-1947.	-1616.	-0.	-109.	-.0416	-.0281	.0198	.0797	.0689	-.0586	4926.		
.3250	-307.	137.	-2052.	-1703.	0.	255.	-.0370	-.0251	.0167	.1137	.0771	-.0566	5239.		
.3260	-719.	-166.	-2083.	-1729.	-0.	597.	-.0322	-.0220	.0131	.1426	.0826	-.0525	5563.		
.3270	-1098.	-466.	-2029.	-1684.	-0.	911.	-.0276	-.0191	.0094	.1646	.0857	-.0464	5825.		
.3280	-1414.	-750.	-1900.	-1577.	-0.	1173.	-.0234	-.0165	.0057	.1789	.0864	-.0384	5980.		
.3290	-1623.	-987.	-1718.	-1426.	0.	1347.	-.0196	-.0145	.0021	.1854	.0844	-.0285	5967.		
.3300	-1704.	-1143.	-1499.	-1244.	0.	1415.	-.0164	-.0132	-.0013	.1842	.0802	-.0163	5731.		
.3310	-1673.	-1218.	-1245.	-1033.	0.	1389.	-.0139	-.0128	-.0042	.1748	.0741	-.0025	5266.		
.3320	-1556.	-1232.	-955.	-793.	0.	1291.	-.0124	-.0133	-.0065	.1573	.0664	.0116	4609.		
.3330	-1354.	-1187.	-643.	-534.	0.	1124.	-.0119	-.0146	-.0082	.1326	.0572	.0253	3785.		
.3340	-1056.	-1058.	-335.	-278.	0.	876.	-.0121	-.0168	-.0093	.1024	.0468	.0389	2797.		
.3350	-674.	-841.	-40.	-33.	0.	560.	-.0130	-.0197	-.0100	.0680	.0358	.0522	1706.		
.3360	-254.	-577.	248.	206.	0.	211.	-.0144	-.0232	-.0100	.0302	.0246	.0642	896.		
.3370	166.	-304.	534.	443.	0.	-137.	-.0164	-.0271	-.0094	-.0099	.0137	.0739	1411.		
.3380	572.	-23.	804.	667.	0.	-475.	-.0186	-.0311	-.0084	-.0501	.0034	.0813	2491.		
.3390	965.	276.	1038.	861.	0.	-801.	-.0208	-.0351	-.0072	-.0882	-.0061	.0867	3577.		
.3400	1317.	570.	1231.	1022.	0.	-1093.	-.0227	-.0389	-.0060	-.1223	-.0147	.0897	4552.		
.3410	1569.	821.	1390.	1154.	0.	-1319.	-.0244	-.0422	-.0048	-.1512	-.0222	.0895	5331.		

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ADLPIPE STRESS ANALYSIS

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18.29.24.

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	58	MEMBER	1	SEQUENCE	82	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)		

.3330	-1354.	-1187.	-443.	-534.	0.	1124.	-.0119	-.0146	-.0082	.1326	.0572	.0253	3785.
.3340	-1056.	-1058.	-335.	-278.	0.	876.	-.0121	-.0168	-.0093	.1024	.0468	.0389	2797.
.3350	-674.	-841.	-40.	-33.	0.	560.	-.0130	-.0197	-.0100	.0680	.0358	.0522	1706.
.3360	-254.	-577.	248.	206.	0.	211.	-.0144	-.0232	-.0100	.0302	.0246	.0642	896.
.3370	166.	-304.	534.	442.	0.	-137.	-.0164	-.0271	-.0094	-.0099	.0137	.0739	1411.
.3380	572.	-23.	804.	667.	0.	-475.	-.0186	-.0311	-.0084	-.0501	.0034	.0813	2491.
.3390	965.	276.	1038.	861.	0.	-801.	-.0208	-.0351	-.0072	-.0882	-.0061	.0867	3577.
.3400	1317.	570.	1231.	1022.	0.	-1093.	-.0227	-.0389	-.0060	-.1223	-.0147	.0897	4552.
.3410	1589.	821.	1390.	1154.	0.	-1319.	-.0244	-.0422	-.0048	-.1512	-.0222	.0895	5331.

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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	58	MEMBER	1	SEQUENCE	82	LOCATION	BEG	TYPE	VA					STRESS
TIME	FX	FY	FZ	HX	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)		
.3420	1756.	1011.	1516.	1258.	0.	-1457.	-.0257	-.0449	-.0038	-.1738	-.0284	.0857		5857.
.3430	1821.	1150.	1598.	1326.	0.	-1511.	-.0265	-.0468	-.0031	-.1887	-.0330	.0792		6116.
.3440	1794.	1238.	1629.	1352.	0.	-1439.	-.0265	-.0479	-.0027	-.1952	-.0360	.0703		6117.
.3450	1675.	1255.	1613.	1339.	0.	-1390.	-.0259	-.0480	-.0028	-.1931	-.0371	.0589		5871.
.3460	1459.	1193.	1561.	1296.	0.	-1211.	-.0246	-.0473	-.0031	-.1831	-.0361	.0454		5394.
.3470	1152.	1060.	1478.	1227.	0.	-956.	-.0228	-.0457	-.0036	-.1659	-.0329	.0305		4731.
.3480	783.	872.	1358.	1127.	0.	-650.	-.0204	-.0433	-.0044	-.1417	-.0276	.0147		3957.
.3490	388.	644.	1192.	990.	0.	-322.	-.0177	-.0403	-.0054	-.1112	-.0209	-.0014		3165.
.3500	-9.	397.	980.	814.	0.	7.	-.0147	-.0368	-.0066	-.0750	-.0131	-.0172		2476.
.3510	-394.	147.	730.	606.	0.	327.	-.0116	-.0331	-.0080	-.0348	-.0045	-.0322		2094.
.3520	-755.	-98.	449.	373.	0.	627.	-.0085	-.0293	-.0094	.0079	.0046	-.0459		2219.
.3530	-1064.	-328.	143.	119.	0.	883.	-.0057	-.0256	-.0107	.0515	.0139	-.0581		2711.
.3540	-1292.	-520.	-186.	-154.	0.	1072.	-.0031	-.0221	-.0119	.0946	.0229	-.0679		3295.
.3550	-1425.	-658.	-525.	-436.	0.	1183.	-.0007	-.0190	-.0129	.1355	.0318	-.0749		3834.
.3560	-1474.	-750.	-853.	-708.	0.	1223.	.0013	-.0165	-.0136	.1721	.0404	-.0789		4299.
.3570	-1451.	-811.	-1148.	-953.	0.	1205.	.0027	-.0144	-.0138	.2028	.0483	-.0807		4673.
.3580	-1358.	-835.	-1404.	-1165.	0.	1127.	.0037	-.0130	-.0137	.2268	.0551	-.0900		4930.
.3590	-1189.	-808.	-1617.	-1342.	0.	987.	.0042	-.0122	-.0134	.2438	.0605	-.0769		5066.
.3600	-961.	-732.	-1778.	-1476.	0.	798.	.0045	-.0119	-.0128	.2535	.0540	-.0714		5103.
.3610	-706.	-634.	-1872.	-1554.	-0.	586.	.0044	-.0122	-.0121	.2555	.0655	-.0644		5052.
.3620	-449.	-530.	-1888.	-1567.	0.	373.	.0039	-.0129	-.0112	.2496	.0650	-.0565		4399.
.3630	-197.	-417.	-1826.	-1516.	0.	164.	.0034	-.0139	-.0103	.2363	.0525	-.0476		4637.
.3640	48.	-296.	-1693.	-1405.	0.	-40.	.0028	-.0153	-.0093	.2163	.0585	-.0378		4275.
.3650	270.	-182.	-1487.	-1235.	0.	-224.	.0024	-.0168	-.0083	.1902	.0533	-.0274		3817.
.3660	447.	-98.	-1209.	-1004.	-0.	-371.	.0021	-.0185	-.0072	.1585	.0473	-.0170		3255.
.3670	565.	-44.	-867.	-719.	0.	-469.	.0019	-.0202	-.0061	.1225	.0409	-.0070		2612.
.3680	632.	-13.	-482.	-400.	-0.	-524.	.0020	-.0220	-.0050	.0838	.0344	.0027		2007.
.3690	660.	3.	-82.	-68.	-0.	-548.	.0024	-.0237	-.0041	.0445	.0277	.0118		1680.
.3700	655.	8.	312.	259.	0.	-544.	.0030	-.0254	-.0033	.0064	.0207	.0201		1832.
.3710	613.	5.	684.	568.	-0.	-509.	.0039	-.0271	-.0028	-.0291	.0137	.0273		2319.
.3720	538.	-2.	1019.	845.	-0.	-446.	.0049	-.0288	-.0025	-.0609	.0070	.0334		2908.
.3730	446.	-8.	1296.	1076.	0.	-370.	.0061	-.0305	-.0024	-.0878	.0006	.0382		3460.
.3740	361.	-2.	1499.	1244.	-0.	-299.	.0074	-.0322	-.0024	-.1088	-.0052	.0420		3892.
.3750	291.	21.	1619.	1344.	-0.	-242.	.0088	-.0338	-.0026	-.1237	-.0099	.0448		4154.
.3760	232.	56.	1662.	1380.	0.	-192.	.0103	-.0355	-.0028	-.1325	-.0129	.0469		4237.
.3770	174.	90.	1634.	1356.	0.	-144.	.0118	-.0370	-.0030	-.1358	-.0140	.0477		4149.
.3780	125.	122.	1536.	1275.	0.	-104.	.0132	-.0385	-.0030	-.1336	-.0133	.0473		3892.
.3790	96.	163.	1368.	1136.	0.	-80.	.0145	-.0399	-.0030	-.1260	-.0109	.0459		3463.

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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	58	MEMBER	1	SEQUENCE	82	LOCATION	BEG	TYPE	VA					STRESS
TIME	FX	FY	FZ	HX	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)		

.3710	613.	5.	684.	568.	-0.	-509.	.0039	-.0271	-.0028	-.0291	.0137	.0273	2319.
.3720	538.	-2.	1019.	845.	-0.	-446.	.0049	-.0288	-.0025	-.0609	.0070	.0334	2908.
.3730	446.	-8.	1296.	1076.	0.	-370.	.0061	-.0305	-.0024	-.0878	.0006	.0382	3460.
.3740	361.	-2.	1499.	1244.	-0.	-299.	.0074	-.0322	-.0024	-.1088	-.0052	.0420	3892.
.3750	291.	21.	1619.	1344.	-0.	-242.	.0088	-.0338	-.0026	-.1237	-.0099	.0448	4154.
.3760	232.	56.	1662.	1380.	0.	-192.	.0103	-.0355	-.0028	-.1325	-.0129	.0469	4237.
.3770	174.	90.	1634.	1356.	0.	-144.	.0118	-.0370	-.0030	-.1358	-.0140	.0477	4149.
.3780	125.	122.	1536.	1275.	0.	-104.	.0132	-.0385	-.0030	-.1336	-.0133	.0473	3892.
.3790	96.	163.	1368.	1176.	0.	-80.	.0145	-.0399	-.0030	-.1260	-.0109	.0459	3463.

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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

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	58	MEMBER	1	SEQUENCE	82	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)		
.3800	87.	216.	1138.	944.	0.	-72.	.0158	-.0412	-.0030	-.1135	-.0072	.0437	2881.		
.3810	76.	263.	866.	719.	-0.	-63.	.0170	-.0423	-.0030	-.0971	-.0026	.0403	2195.		
.3820	46.	290.	575.	478.	-0.	-38.	.0179	-.0432	-.0030	-.0779	.0024	.0353	1457.		
.3830	-5.	296.	279.	231.	-0.	4.	.0185	-.0439	-.0028	-.0567	.0075	.0290	704.		
.3840	-66.	289.	-15.	-12.	-0.	54.	.0189	-.0444	-.0028	-.0345	.0121	.0217	170.		
.3850	-141.	267.	-290.	-241.	0.	117.	.0190	-.0447	-.0026	-.0124	.0161	.0136	814.		
.3860	-246.	216.	-523.	-434.	0.	204.	.0189	-.0447	-.0024	.0081	.0195	.0047	1460.		
.3870	-388.	131.	-700.	-581.	0.	322.	.0183	-.0447	-.0019	.0256	.0223	-.0049	2020.		
.3880	-551.	24.	-819.	-679.	0.	458.	.0174	-.0445	-.0013	.0394	.0242	-.0146	2492.		
.3890	-711.	-87.	-887.	-736.	0.	590.	.0162	-.0443	-.0004	.0494	.0253	-.0238	2870.		
.3900	-851.	-192.	-909.	-754.	-0.	707.	.0146	-.0443	.0006	.0553	.0252	-.0313	3143.		
.3910	-973.	-292.	-881.	-731.	-0.	808.	.0127	-.0443	.0019	.0567	.0240	-.0384	3315.		
.3920	-1076.	-382.	-805.	-668.	-0.	893.	.0105	-.0446	.0034	.0533	.0217	-.0434	3393.		
.3930	-1139.	-449.	-695.	-577.	-0.	945.	.0078	-.0451	.0052	.0454	.0184	-.0464	3369.		
.3940	-1135.	-475.	-570.	-473.	0.	942.	.0050	-.0460	.0072	.0339	.0139	-.0469	3207.		
.3950	-1052.	-451.	-444.	-368.	-0.	873.	.0019	-.0472	.0092	.0193	.0086	-.0447	2883.		
.3960	-907.	-380.	-314.	-260.	-0.	753.	-.0013	-.0488	.0115	.0019	.0028	-.0400	2424.		
.3970	-719.	-279.	-180.	-149.	-0.	597.	-.0047	-.0506	.0140	-.0180	-.0030	-.0332	1871.		
.3980	-486.	-152.	-54.	-45.	-0.	403.	-.0082	-.0526	.0167	-.0396	-.0086	-.0248	1234.		
.3990	-197.	13.	48.	40.	-0.	163.	-.0116	-.0546	.0193	-.0611	-.0142	-.0146	512.		
.4000	138.	219.	118.	98.	-0.	-115.	-.0147	-.0567	.0217	-.0817	-.0196	-.0028	459.		

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)
.2410	2931.	921.	2418.	2007.	-0.	-2433.	.0354	.0154	.0196	.2425	.1156	-.1646	9594.

SECTION	58	MEMBER	1	SEQUENCE	83	LOCATION	DIS	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.		
.0010	0.	0.	0.	0.	0.	0.	-.0000	.0000	.0000	-.0000	-.0000	-.0000	0.		
.0020	0.	0.	0.	0.	0.	0.	-.0000	.0000	.0000	-.0000	.0000	-.0000	0.		
.0030	0.	0.	0.	0.	0.	0.	.0000	-.0000	.0000	-.0000	.0000	.0000	0.		

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

CONDITION 24

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ENGLISH UNITS

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

SECTION 58 MEMBER 1 SEQUENCE 83 LOCATION DIS TYPE VA

SECTION	58	MEMBER	1	SEQUENCE	83	LOCATION	D15	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.	-0.0000	0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.		
.0020	0.	0.	0.	0.	0.	0.	-0.0000	0.0000	0.0000	-0.0000	0.0000	-0.0000	0.		
.0030	0.	0.	0.	0.	0.	0.	0.0000	-0.0000	0.0000	-0.0000	0.0000	0.0000	0.		

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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	58	MEMBER	1	SEQUENCE	83	LOCATION	D15	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)		
.0040	0.	0.	0.	0.	0.	0.	0.0000	-0.0000	0.0000	-0.0000	0.0000	0.0000	0.		
.0050	0.	0.	0.	0.	0.	0.	-0.0000	-0.0000	0.0000	-0.0001	0.0000	-0.0000	0.		
.0060	0.	0.	0.	0.	0.	0.	-0.0000	-0.0000	0.0000	-0.0001	0.0001	-0.0001	0.		
.0070	0.	0.	0.	0.	0.	0.	-0.0000	-0.0000	0.0000	-0.0003	0.0001	-0.0003	0.		
.0080	0.	0.	0.	0.	0.	0.	-0.0001	-0.0000	0.0000	-0.0004	0.0000	-0.0006	0.		
.0090	0.	0.	0.	0.	0.	0.	-0.0001	-0.0000	0.0001	-0.0005	-0.0002	-0.0011	0.		
.0100	0.	0.	0.	0.	0.	0.	-0.0002	-0.0000	0.0001	-0.0007	-0.0005	-0.0019	0.		
.0110	0.	0.	0.	0.	0.	0.	-0.0004	-0.0001	0.0002	-0.0010	-0.0010	-0.0032	0.		
.0120	0.	0.	0.	0.	0.	0.	-0.0007	-0.0001	0.0003	-0.0017	-0.0017	-0.0056	0.		
.0130	0.	0.	0.	0.	0.	0.	-0.0011	-0.0002	0.0005	-0.0024	-0.0028	-0.0088	0.		
.0140	0.	0.	0.	0.	0.	0.	-0.0018	-0.0003	0.0007	-0.0027	-0.0042	-0.0125	0.		
.0150	0.	0.	0.	0.	0.	0.	-0.0025	-0.0005	0.0009	-0.0023	-0.0061	-0.0158	0.		
.0160	0.	0.	0.	0.	0.	0.	-0.0034	-0.0007	0.0011	-0.0008	-0.0081	-0.0178	0.		
.0170	0.	0.	0.	0.	0.	0.	-0.0044	-0.0011	0.0013	0.0018	-0.0101	-0.0180	0.		
.0180	0.	0.	0.	0.	0.	0.	-0.0054	-0.0014	0.0015	0.0055	-0.0118	-0.0158	0.		
.0190	0.	0.	0.	0.	0.	0.	-0.0063	-0.0018	0.0017	0.0101	-0.0127	-0.0110	0.		
.0200	0.	0.	0.	0.	0.	0.	-0.0070	-0.0021	0.0017	0.0148	-0.0126	-0.0039	0.		
.0210	0.	0.	0.	0.	0.	0.	-0.0076	-0.0024	0.0018	0.0183	-0.0108	0.0047	0.		
.0220	0.	0.	0.	0.	0.	0.	-0.0078	-0.0024	0.0017	0.0213	-0.0075	0.0138	0.		
.0230	0.	0.	0.	0.	0.	0.	-0.0079	-0.0023	0.0016	0.0213	-0.0027	0.0212	0.		
.0240	0.	0.	0.	0.	0.	0.	-0.0077	-0.0020	0.0014	0.0193	0.0026	0.0262	0.		
.0250	0.	0.	0.	0.	0.	0.	-0.0071	-0.0016	0.0009	0.0182	0.0069	0.0307	0.		
.0260	0.	0.	0.	0.	0.	0.	-0.0057	-0.0010	-0.0001	0.0208	0.0088	0.0375	0.		
.0270	0.	0.	0.	0.	0.	0.	-0.0038	-0.0002	-0.0015	0.0248	0.0085	0.0447	0.		
.0280	0.	0.	0.	0.	0.	0.	-0.0017	0.0008	-0.0028	0.0245	0.0075	0.0456	0.		
.0290	0.	0.	0.	0.	0.	0.	0.0006	0.0019	-0.0042	0.0213	0.0053	0.0402	0.		
.0300	0.	0.	0.	0.	0.	0.	0.0035	0.0032	-0.0061	0.0225	0.0010	0.0379	0.		
.0310	0.	0.	0.	0.	0.	0.	0.0070	0.0044	-0.0081	0.0229	-0.0019	0.0376	0.		
.0320	0.	0.	0.	0.	0.	0.	0.0100	0.0058	-0.0093	0.0113	0.0001	0.0280	0.		
.0330	0.	0.	0.	0.	0.	0.	0.0124	0.0070	-0.0098	-0.0109	0.0059	0.0084	0.		
.0340	0.	0.	0.	0.	0.	0.	0.0145	0.0080	-0.0100	-0.0327	0.0129	-0.0093	0.		
.0350	0.	0.	0.	0.	0.	0.	0.0166	0.0086	-0.0102	-0.0476	0.0189	-0.0195	0.		
.0360	0.	0.	0.	0.	0.	0.	0.0181	0.0085	-0.0102	-0.0572	0.0212	-0.0276	0.		
.0370	0.	0.	0.	0.	0.	0.	0.0184	0.0080	-0.0097	-0.0642	0.0188	-0.0384	0.		
.0380	0.	0.	0.	0.	0.	0.	0.0177	0.0069	-0.0087	-0.0684	0.0129	-0.0500	0.		
.0390	0.	0.	0.	0.	0.	0.	0.0161	0.0053	-0.0076	-0.0650	0.0037	-0.0576	0.		
.0400	0.	0.	0.	0.	0.	0.	0.0142	0.0034	-0.0066	-0.0502	-0.0084	-0.0566	0.		
.0410	0.	0.	0.	0.	0.	0.	0.0120	0.0012	-0.0055	-0.0318	-0.0177	-0.0471	0.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.25.

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 58 MEMBER 1 SEQUENCE 83 LOCATION D15 TYPE VA

.0330	0.	0.	0.	0.	0.	0.	0.	.0124	.0070	-.0098	-.0109	.0059	.0084	0.
.0340	0.	0.	0.	0.	0.	0.	0.	.0145	.0080	-.0100	-.0327	.0129	-.0093	0.
.0350	0.	0.	0.	0.	0.	0.	0.	.0166	.0086	-.0102	-.0476	.0189	-.0195	0.
.0360	0.	0.	0.	0.	0.	0.	0.	.0181	.0085	-.0102	-.0572	.0212	-.0276	0.
.0370	0.	0.	0.	0.	0.	0.	0.	.0184	.0080	-.0097	-.0642	.0188	-.0384	0.
.0380	0.	0.	0.	0.	0.	0.	0.	.0177	.0069	-.0087	-.0684	.0129	-.0500	0.
.0390	0.	0.	0.	0.	0.	0.	0.	.0161	.0053	-.0076	-.0650	.0037	-.0576	0.
.0400	0.	0.	0.	0.	0.	0.	0.	.0142	.0034	-.0066	-.0502	-.0084	-.0566	0.
.0410	0.	0.	0.	0.	0.	0.	0.	.0120	.0012	-.0055	-.0318	-.0177	-.0471	0.

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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	58	MEMBER	1	SEQUENCE	83	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)		
.0420	0.	0.	0.	0.	0.	0.	.0091	-.0008	-.0033	-.0268	-.0163	-.0406	0.		
.0430	0.	0.	0.	0.	0.	0.	.0052	-.0024	.0002	-.0380	-.0052	-.0441	0.		
.0440	0.	0.	0.	0.	0.	0.	.0011	-.0038	.0033	-.0498	.0093	-.0466	0.		
.0450	0.	0.	0.	0.	0.	0.	-.0023	-.0050	.0067	-.0505	.0238	-.0360	0.		
.0460	0.	0.	0.	0.	0.	0.	-.0053	-.0061	.0092	-.0449	.0356	-.0210	0.		
.0470	0.	0.	0.	0.	0.	0.	-.0089	-.0067	.0117	-.0403	.0404	-.0185	0.		
.0480	0.	0.	0.	0.	0.	0.	-.0127	-.0071	.0138	-.0326	.0367	-.0250	0.		
.0490	0.	0.	0.	0.	0.	0.	-.0157	-.0073	.0150	-.0129	.0270	-.0246	0.		
.0500	0.	0.	0.	0.	0.	0.	-.0177	-.0073	.0151	.0181	.0135	-.0163	0.		
.0510	0.	0.	0.	0.	0.	0.	-.0194	-.0070	.0150	.0469	.0002	-.0123	0.		
.0520	0.	0.	0.	0.	0.	0.	-.0212	-.0064	.0155	.0596	-.0050	-.0176	0.		
.0530	0.	0.	0.	0.	0.	0.	-.0227	-.0055	.0166	.0571	.0006	-.0246	0.		
.0540	0.	0.	0.	0.	0.	0.	-.0234	-.0048	.0174	.0525	.0108	-.0251	0.		
.0550	0.	0.	0.	0.	0.	0.	-.0235	-.0043	.0176	.0523	.0200	-.0179	0.		
.0560	0.	0.	0.	0.	0.	0.	-.0234	-.0042	.0177	.0511	.0283	-.0090	0.		
.0570	0.	0.	0.	0.	0.	0.	-.0237	-.0045	.0180	.0461	.0333	-.0054	0.		
.0580	0.	0.	0.	0.	0.	0.	-.0244	-.0054	.0178	.0451	.0296	-.0058	0.		
.0590	0.	0.	0.	0.	0.	0.	-.0249	-.0068	.0169	.0550	.0175	-.0006	0.		
.0600	0.	0.	0.	0.	0.	0.	-.0247	-.0089	.0152	.0722	.0035	.0152	0.		
.0610	0.	0.	0.	0.	0.	0.	-.0243	-.0112	.0135	.0857	-.0078	.0333	0.		
.0620	0.	0.	0.	0.	0.	0.	-.0241	-.0134	.0122	.0859	-.0133	.0461	0.		
.0630	0.	0.	0.	0.	0.	0.	-.0238	-.0155	.0114	.0709	-.0101	.0543	0.		
.0640	0.	0.	0.	0.	0.	0.	-.0228	-.0174	.0107	.0476	.0007	.0654	0.		
.0650	0.	0.	0.	0.	0.	0.	-.0212	-.0190	.0094	.0235	.0129	.0795	0.		
.0660	0.	0.	0.	0.	0.	0.	-.0192	-.0203	.0078	-.0012	.0220	.0897	0.		
.0670	0.	0.	0.	0.	0.	0.	-.0171	-.0211	.0060	-.0271	.0258	.0916	0.		
.0680	0.	0.	0.	0.	0.	0.	-.0148	-.0214	.0035	-.0474	.0207	.0868	0.		
.0690	0.	0.	0.	0.	0.	0.	-.0121	-.0212	.0001	-.0552	.0046	.0790	0.		
.0700	0.	0.	0.	0.	0.	0.	-.0089	-.0205	-.0041	-.0530	-.0183	.0691	0.		
.0710	0.	0.	0.	0.	0.	0.	-.0055	-.0191	-.0083	-.0504	-.0404	.0556	0.		
.0720	0.	0.	0.	0.	0.	0.	-.0019	-.0169	-.0120	-.0545	-.0558	.0382	0.		
.0730	0.	0.	0.	0.	0.	0.	.0018	-.0140	-.0149	-.0686	-.0610	.0181	0.		
.0740	0.	0.	0.	0.	0.	0.	.0055	-.0104	-.0169	-.0902	-.0554	-.0019	0.		
.0750	0.	0.	0.	0.	0.	0.	.0094	-.0063	-.0183	-.1122	-.0429	-.0183	0.		
.0760	0.	0.	0.	0.	0.	0.	.0132	-.0020	-.0194	-.1286	-.0285	-.0306	0.		
.0770	0.	0.	0.	0.	0.	0.	.0165	.0023	-.0199	-.1384	-.0157	-.0429	0.		
.0780	0.	0.	0.	0.	0.	0.	.0190	.0065	-.0199	-.1392	-.0085	-.0583	0.		
.0790	0.	0.	0.	0.	0.	0.	.0209	.0105	-.0198	-.1249	-.0098	-.0739	0.		

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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	58	MEMBER	1	SEQUENCE	83	LOCATION	DIS	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		

.0710	0.	0.	0.	0.	0.	0.	0.	0.	-.0055	-.0191	-.0083	-.0504	-.0404	.0556	0.
.0720	0.	0.	0.	0.	0.	0.	0.	0.	-.0019	-.0169	-.0120	-.0545	-.0558	.0382	0.
.0730	0.	0.	0.	0.	0.	0.	0.	0.	.0018	-.0140	-.0149	-.0686	-.0610	.0181	0.
.0740	0.	0.	0.	0.	0.	0.	0.	0.	.0055	-.0104	-.0169	-.0902	-.0554	-.0019	0.
.0750	0.	0.	0.	0.	0.	0.	0.	0.	.0094	-.0063	-.0183	-.1122	-.0429	-.0183	0.
.0760	0.	0.	0.	0.	0.	0.	0.	0.	.0132	-.0020	-.0194	-.1286	-.0285	-.0306	0.
.0770	0.	0.	0.	0.	0.	0.	0.	0.	.0165	.0023	-.0199	-.1384	-.0157	-.0429	0.
.0780	0.	0.	0.	0.	0.	0.	0.	0.	.0190	.0065	-.0199	-.1392	-.0085	-.0583	0.
.0790	0.	0.	0.	0.	0.	0.	0.	0.	.0209	.0105	-.0198	-.1249	-.0098	-.0739	0.

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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	58	MEMBER	1	SEQUENCE	83	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)	
.0800	0.	0.	0.	0.	0.	0.	0.	.0222	.0140	-.0197	-.0949	-.0176	-.0857	0.	
.0810	0.	0.	0.	0.	0.	0.	0.	.0230	.0173	-.0191	-.0576	-.0265	-.0958	0.	
.0820	0.	0.	0.	0.	0.	0.	0.	.0229	.0203	-.0175	-.0224	-.0318	-.1075	0.	
.0830	0.	0.	0.	0.	0.	0.	0.	.0221	.0230	-.0149	.0066	-.0298	-.1179	0.	
.0840	0.	0.	0.	0.	0.	0.	0.	.0211	.0254	-.0114	.0289	-.0181	-.1210	0.	
.0850	0.	0.	0.	0.	0.	0.	0.	.0200	.0274	-.0073	.0465	.0013	-.1160	0.	
.0860	0.	0.	0.	0.	0.	0.	0.	.0186	.0291	-.0030	.0631	.0227	-.1057	0.	
.0870	0.	0.	0.	0.	0.	0.	0.	.0169	.0302	.0013	.0806	.0422	-.0926	0.	
.0880	0.	0.	0.	0.	0.	0.	0.	.0149	.0309	.0053	.0991	.0578	-.0783	0.	
.0890	0.	0.	0.	0.	0.	0.	0.	.0127	.0311	.0088	.1200	.0670	-.0647	0.	
.0900	0.	0.	0.	0.	0.	0.	0.	.0103	.0309	.0114	.1447	.0589	-.0513	0.	
.0910	0.	0.	0.	0.	0.	0.	0.	.0082	.0304	.0133	.1688	.0675	-.0362	0.	
.0920	0.	0.	0.	0.	0.	0.	0.	.0062	.0296	.0149	.1843	.0678	-.0214	0.	
.0930	0.	0.	0.	0.	0.	0.	0.	.0041	.0288	.0163	.1865	.0710	-.0108	0.	
.0940	0.	0.	0.	0.	0.	0.	0.	.0021	.0278	.0175	.1772	.0758	-.0036	0.	
.0950	0.	0.	0.	0.	0.	0.	0.	-.0003	.0266	.0180	.1615	.0805	.0052	0.	
.0960	0.	0.	0.	0.	0.	0.	0.	-.0011	.0251	.0177	.1448	.0815	.0170	0.	
.0970	0.	0.	0.	0.	0.	0.	0.	-.0024	.0234	.0165	.1299	.0749	.0283	0.	
.0980	0.	0.	0.	0.	0.	0.	0.	-.0038	.0213	.0144	.1173	.0598	.0370	0.	
.0990	0.	0.	0.	0.	0.	0.	0.	-.0051	.0191	.0116	.1075	.0386	.0454	0.	
.1000	0.	0.	0.	0.	0.	0.	0.	-.0061	.0166	.0080	.1013	.0137	.0562	0.	
.1010	0.	0.	0.	0.	0.	0.	0.	-.0066	.0142	.0040	.0953	-.0111	.0691	0.	
.1020	0.	0.	0.	0.	0.	0.	0.	-.0067	.0119	.0000	.0833	-.0309	.0823	0.	
.1030	0.	0.	0.	0.	0.	0.	0.	-.0063	.0099	-.0037	.0625	-.0436	.0947	0.	
.1040	0.	0.	0.	0.	0.	0.	0.	-.0052	.0083	-.0072	.0363	-.0507	.1069	0.	
.1050	0.	0.	0.	0.	0.	0.	0.	-.0032	.0070	-.0108	.0095	-.0550	.1190	0.	
.1060	0.	0.	0.	0.	0.	0.	0.	-.0004	.0062	-.0144	-.0155	-.0586	.1280	0.	
.1070	0.	0.	0.	0.	0.	0.	0.	.0031	.0058	-.0180	-.0383	-.0633	.1295	0.	
.1080	0.	0.	0.	0.	0.	0.	0.	.0070	.0060	-.0213	-.0591	-.0692	.1205	0.	
.1090	0.	0.	0.	0.	0.	0.	0.	.0115	.0066	-.0244	-.0774	-.0750	.1030	0.	
.1100	0.	0.	0.	0.	0.	0.	0.	.0165	.0076	-.0270	-.0927	-.0789	.0803	0.	
.1110	0.	0.	0.	0.	0.	0.	0.	.0217	.0089	-.0288	-.1082	-.0798	.0508	0.	
.1120	0.	0.	0.	0.	0.	0.	0.	.0268	.0105	-.0297	-.1245	-.0773	.0153	0.	
.1130	0.	0.	0.	0.	0.	0.	0.	.0320	.0122	-.0298	-.1374	-.0728	-.0193	0.	
.1140	0.	0.	0.	0.	0.	0.	0.	.0369	.0138	-.0293	-.1430	-.0692	-.0498	0.	
.1150	0.	0.	0.	0.	0.	0.	0.	.0413	.0152	-.0280	-.1421	-.0678	-.0788	0.	
.1160	0.	0.	0.	0.	0.	0.	0.	.0446	.0165	-.0258	-.1364	-.0675	-.1069	0.	
.1170	0.	0.	0.	0.	0.	0.	0.	.0469	.0175	-.0229	-.1247	-.0671	-.1309	0.	

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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	58	MEMBER	1	SEQUENCE	83	LOCATION	DIS	TYPE	VA
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.1170	0.	0.	0.	0.	0.	0.	0.	.0165	.0076	-.0270	-.0927	-.0789	.1030	0.
.1100	0.	0.	0.	0.	0.	0.	0.	.0217	.0089	-.0268	-.1082	-.0798	.0508	0.
.1110	0.	0.	0.	0.	0.	0.	0.	.0268	.0105	-.0297	-.1245	-.0773	.0153	0.
.1120	0.	0.	0.	0.	0.	0.	0.	.0320	.0122	-.0298	-.1374	-.0728	-.0193	0.
.1130	0.	0.	0.	0.	0.	0.	0.	.0369	.0138	-.0293	-.1430	-.0692	-.0498	0.
.1140	0.	0.	0.	0.	0.	0.	0.	.0413	.0152	-.0280	-.1421	-.0678	-.0788	0.
.1150	0.	0.	0.	0.	0.	0.	0.	.0446	.0165	-.0258	-.1364	-.0675	-.1069	0.
.1160	0.	0.	0.	0.	0.	0.	0.	.0469	.0175	-.0229	-.1247	-.0671	-.1309	0.
.1170	0.	0.	0.	0.	0.	0.	0.							0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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18.29.25.

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	58	MEMBER	1	SEQUENCE	83	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)	
.1180	0.	0.	0.	0.	0.	0.	.0483	.0183	-.0195	-.1055	-.0561	-.1471	0.	
.1190	0.	0.	0.	0.	0.	0.	.0487	.0188	-.0153	-.0854	-.0598	-.1563	0.	
.1200	0.	0.	0.	0.	0.	0.	.0481	.0192	-.0100	-.0702	-.0444	-.1579	0.	
.1210	0.	0.	0.	0.	0.	0.	.0467	.0195	-.0041	-.0582	-.0217	-.1499	0.	
.1220	0.	0.	0.	0.	0.	0.	.0446	.0197	.0022	-.0473	.0038	-.1349	0.	
.1230	0.	0.	0.	0.	0.	0.	.0417	.0200	.0085	-.0354	.0280	-.1157	0.	
.1240	0.	0.	0.	0.	0.	0.	.0382	.0202	.0144	-.0209	.0472	-.0957	0.	
.1250	0.	0.	0.	0.	0.	0.	.0342	.0204	.0196	.0004	.0561	-.0771	0.	
.1260	0.	0.	0.	0.	0.	0.	.0300	.0208	.0235	.0318	.0527	-.0591	0.	
.1270	0.	0.	0.	0.	0.	0.	.0261	.0214	.0263	.0668	.0432	-.0410	0.	
.1280	0.	0.	0.	0.	0.	0.	.0226	.0223	.0284	.0981	.0342	-.0227	0.	
.1290	0.	0.	0.	0.	0.	0.	.0196	.0237	.0299	.1196	.0288	-.0079	0.	
.1300	0.	0.	0.	0.	0.	0.	.0170	.0255	.0310	.1283	.0284	.0019	0.	
.1310	0.	0.	0.	0.	0.	0.	.0153	.0278	.0317	.1239	.0344	.0102	0.	
.1320	0.	0.	0.	0.	0.	0.	.0143	.0303	.0321	.1081	.0451	.0178	0.	
.1330	0.	0.	0.	0.	0.	0.	.0139	.0329	.0317	.0890	.0528	.0237	0.	
.1340	0.	0.	0.	0.	0.	0.	.0141	.0352	.0303	.0738	.0521	.0276	0.	
.1350	0.	0.	0.	0.	0.	0.	.0147	.0373	.0280	.0647	.0438	.0310	0.	
.1360	0.	0.	0.	0.	0.	0.	.0157	.0388	.0249	.0604	.0302	.0329	0.	
.1370	0.	0.	0.	0.	0.	0.	.0167	.0400	.0216	.0585	.0130	.0295	0.	
.1380	0.	0.	0.	0.	0.	0.	.0177	.0407	.0179	.0588	-.0043	.0255	0.	
.1390	0.	0.	0.	0.	0.	0.	.0193	.0408	.0143	.0580	-.0154	.0288	0.	
.1400	0.	0.	0.	0.	0.	0.	.0215	.0406	.0110	.0514	-.0169	.0400	0.	
.1410	0.	0.	0.	0.	0.	0.	.0238	.0400	.0083	.0380	-.0124	.0525	0.	
.1420	0.	0.	0.	0.	0.	0.	.0259	.0392	.0059	.0206	-.0066	.0619	0.	
.1430	0.	0.	0.	0.	0.	0.	.0282	.0380	.0034	.0064	-.0021	.0732	0.	
.1440	0.	0.	0.	0.	0.	0.	.0307	.0366	.0006	-.0013	-.0010	.0873	0.	
.1450	0.	0.	0.	0.	0.	0.	.0331	.0350	-.0023	-.0041	-.0054	.0974	0.	
.1460	0.	0.	0.	0.	0.	0.	.0351	.0332	-.0052	-.0045	-.0149	.0998	0.	
.1470	0.	0.	0.	0.	0.	0.	.0368	.0315	-.0080	-.0050	-.0248	.0980	0.	
.1480	0.	0.	0.	0.	0.	0.	.0385	.0297	-.0107	-.0064	-.0318	.0971	0.	
.1490	0.	0.	0.	0.	0.	0.	.0399	.0280	-.0128	-.0129	-.0351	.0933	0.	
.1500	0.	0.	0.	0.	0.	0.	.0406	.0264	-.0141	-.0287	-.0345	.0828	0.	
.1510	0.	0.	0.	0.	0.	0.	.0405	.0247	-.0145	-.0530	-.0290	.0696	0.	
.1520	0.	0.	0.	0.	0.	0.	.0397	.0229	-.0141	-.0821	-.0198	.0570	0.	
.1530	0.	0.	0.	0.	0.	0.	.0379	.0207	-.0132	-.1090	-.0124	.0431	0.	
.1540	0.	0.	0.	0.	0.	0.	.0348	.0182	-.0120	-.1287	-.0110	.0250	0.	
.1550	0.	0.	0.	0.	0.	0.	.0304	.0151	-.0104	-.1397	-.0144	.0057	0.	

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ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.25.

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	58	MEMBER	1	SEQUENCE	83	LOCATION	DIS	TYPE	VA					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	

.1470	0.	0.	0.	0.	0.	0.	0.	.0368	.0315	-.0080	-.0050	-.0248	.0980	0.
.1480	0.	0.	0.	0.	0.	0.	0.	.0385	.0297	-.0107	-.0064	-.0318	.0971	0.
.1490	0.	0.	0.	0.	0.	0.	0.	.0399	.0280	-.0128	-.0129	-.0351	.0933	0.
.1500	0.	0.	0.	0.	0.	0.	0.	.0406	.0264	-.0141	-.0287	-.0345	.0828	0.
.1510	0.	0.	0.	0.	0.	0.	0.	.0405	.0247	-.0145	-.0530	-.0290	.0696	0.
.1520	0.	0.	0.	0.	0.	0.	0.	.0397	.0229	-.0141	-.0821	-.0198	.0570	0.
.1530	0.	0.	0.	0.	0.	0.	0.	.0379	.0207	-.0132	-.1090	-.0124	.0431	0.
.1540	0.	0.	0.	0.	0.	0.	0.	.0348	.0182	-.0120	-.1287	-.0110	.0250	0.
.1550	0.	0.	0.	0.	0.	0.	0.	.0304	.0151	-.0104	-.1397	-.0144	.0057	0.

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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

SECTION	58	MEMBER	1	SEQUENCE	83	LOCATION	DIS	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ									STRESS
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.1560	0.	0.	0.	0.	0.	0.	.0248	.0117	-.0084	-.1440	-.0196	-.0130	0.		
.1570	0.	0.	0.	0.	0.	0.	.0178	.0080	-.0056	-.1455	-.0256	-.0347	0.		
.1580	0.	0.	0.	0.	0.	0.	.0096	.0041	-.0023	-.1427	-.0323	-.0570	0.		
.1590	0.	0.	0.	0.	0.	0.	.0009	.0001	.0014	-.1358	-.0365	-.0727	0.		
.1600	0.	0.	0.	0.	0.	0.	-.0082	-.0037	.0057	-.1303	-.0346	-.0827	0.		
.1610	0.	0.	0.	0.	0.	0.	-.0179	-.0071	.0107	-.1285	-.0287	-.0939	0.		
.1620	0.	0.	0.	0.	0.	0.	-.0277	-.0099	.0159	-.1264	-.0221	-.1065	0.		
.1630	0.	0.	0.	0.	0.	0.	-.0371	-.0122	.0208	-.1195	-.0143	-.1144	0.		
.1640	0.	0.	0.	0.	0.	0.	-.0455	-.0137	.0250	-.1045	-.0054	-.1143	0.		
.1650	0.	0.	0.	0.	0.	0.	-.0529	-.0145	.0284	-.0824	.0019	-.1121	0.		
.1660	0.	0.	0.	0.	0.	0.	-.0595	-.0143	.0312	-.0570	.0076	-.1134	0.		
.1670	0.	0.	0.	0.	0.	0.	-.0646	-.0132	.0331	-.0286	.0131	-.1139	0.		
.1680	0.	0.	0.	0.	0.	0.	-.0680	-.0112	.0339	.0029	.0191	-.1099	0.		
.1690	0.	0.	0.	0.	0.	0.	-.0696	-.0084	.0336	.0359	.0237	-.1037	0.		
.1700	0.	0.	0.	0.	0.	0.	-.0697	-.0048	.0324	.0669	.0264	-.0993	0.		
.1710	0.	0.	0.	0.	0.	0.	-.0683	-.0008	.0304	.0945	.0284	-.0949	0.		
.1720	0.	0.	0.	0.	0.	0.	-.0653	.0035	.0272	.1218	.0292	-.0863	0.		
.1730	0.	0.	0.	0.	0.	0.	-.0611	.0078	.0232	.1468	.0287	-.0769	0.		
.1740	0.	0.	0.	0.	0.	0.	-.0563	.0118	.0185	.1674	.0270	-.0696	0.		
.1750	0.	0.	0.	0.	0.	0.	-.0511	.0153	.0132	.1826	.0253	-.0620	0.		
.1760	0.	0.	0.	0.	0.	0.	-.0457	.0179	.0078	.1901	.0255	-.0515	0.		
.1770	0.	0.	0.	0.	0.	0.	-.0403	.0196	.0023	.1891	.0273	-.0373	0.		
.1780	0.	0.	0.	0.	0.	0.	-.0354	.0202	-.0031	.1791	.0295	-.0207	0.		
.1790	0.	0.	0.	0.	0.	0.	-.0312	.0194	-.0082	.1612	.0313	-.0004	0.		
.1800	0.	0.	0.	0.	0.	0.	-.0279	.0174	-.0130	.1352	.0337	.0232	0.		
.1810	0.	0.	0.	0.	0.	0.	-.0258	.0142	-.0171	.1008	.0358	.0456	0.		
.1820	0.	0.	0.	0.	0.	0.	-.0251	.0099	-.0209	.0620	.0355	.0650	0.		
.1830	0.	0.	0.	0.	0.	0.	-.0257	.0046	-.0242	.0211	.0332	.0824	0.		
.1840	0.	0.	0.	0.	0.	0.	-.0274	-.0014	-.0271	-.0214	.0309	.0985	0.		
.1850	0.	0.	0.	0.	0.	0.	-.0301	-.0078	-.0293	-.0651	.0283	.1112	0.		
.1860	0.	0.	0.	0.	0.	0.	-.0337	-.0142	-.0311	-.1091	.0244	.1180	0.		
.1870	0.	0.	0.	0.	0.	0.	-.0382	-.0204	-.0323	-.1507	.0191	.1210	0.		
.1880	0.	0.	0.	0.	0.	0.	-.0428	-.0261	-.0331	-.1891	.0133	.1216	0.		
.1890	0.	0.	0.	0.	0.	0.	-.0475	-.0310	-.0334	-.2223	.0061	.1182	0.		
.1900	0.	0.	0.	0.	0.	0.	-.0522	-.0348	-.0335	-.2482	-.0035	.1090	0.		
.1910	0.	0.	0.	0.	0.	0.	-.0564	-.0374	-.0332	-.2655	-.0141	.0952	0.		
.1920	0.	0.	0.	0.	0.	0.	-.0599	-.0388	-.0326	-.2721	-.0239	.0796	0.		
.1930	0.	0.	0.	0.	0.	0.	-.0625	-.0388	-.0317	-.2693	-.0316	.0607	0.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.25.

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 58 MEMBER 1 SEQUENCE 83 LOCATION DIS TYPE VA

.1860	0.	0.	0.	0.	0.	0.	0.	-.0339	-.0142	-.0311	-.1091	.0244	.1180	0.
.1870	0.	0.	0.	0.	0.	0.	0.	-.0382	-.0204	-.0323	-.1507	.0191	.1210	0.
.1880	0.	0.	0.	0.	0.	0.	0.	-.0428	-.0261	-.0331	-.1891	.0133	.1216	0.
.1890	0.	0.	0.	0.	0.	0.	0.	-.0475	-.0310	-.0334	-.2223	.0061	.1182	0.
.1900	0.	0.	0.	0.	0.	0.	0.	-.0522	-.0348	-.0335	-.2482	-.0035	.1090	0.
.1910	0.	0.	0.	0.	0.	0.	0.	-.0569	-.0374	-.0332	-.2655	-.0141	.0952	0.
.1920	0.	0.	0.	0.	0.	0.	0.	-.0599	-.0388	-.0326	-.2721	-.0239	.0796	0.
.1930	0.	0.	0.	0.	0.	0.	0.	-.0625	-.0388	-.0317	-.2693	-.0316	.0607	0.

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ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.25.

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)
.1940	0.	0.	0.	0.	0.	0.	-.0643	-.0376	-.0303	-.2599	-.0361	.0358	0.
.1950	0.	0.	0.	0.	0.	0.	-.0653	-.0351	-.0282	-.2444	-.0366	.0066	0.
.1960	0.	0.	0.	0.	0.	0.	-.0653	-.0318	-.0255	-.2217	-.0331	-.0224	0.
.1970	0.	0.	0.	0.	0.	0.	-.0642	-.0279	-.0222	-.1912	-.0271	-.0501	0.
.1980	0.	0.	0.	0.	0.	0.	-.0625	-.0237	-.0184	-.1532	-.0208	-.0775	0.
.1990	0.	0.	0.	0.	0.	0.	-.0602	-.0196	-.0140	-.1076	-.0157	-.1044	0.
.2000	0.	0.	0.	0.	0.	0.	-.0574	-.0158	-.0093	-.0539	-.0119	-.1281	0.
.2010	0.	0.	0.	0.	0.	0.	-.0543	-.0128	-.0044	-.0066	-.0091	-.1471	0.
.2020	0.	0.	0.	0.	0.	0.	-.0511	-.0106	.0008	.0705	-.0063	-.1616	0.
.2030	0.	0.	0.	0.	0.	0.	-.0479	-.0094	.0061	.1329	-.0017	-.1712	0.
.2040	0.	0.	0.	0.	0.	0.	-.0447	-.0093	.0117	.1884	.0071	-.1747	0.
.2050	0.	0.	0.	0.	0.	0.	-.0415	-.0102	.0174	.2336	.0200	-.1717	0.
.2060	0.	0.	0.	0.	0.	0.	-.0385	-.0121	.0228	.2672	.0351	-.1629	0.
.2070	0.	0.	0.	0.	0.	0.	-.0357	-.0149	.0277	.2889	.0499	-.1492	0.
.2080	0.	0.	0.	0.	0.	0.	-.0331	-.0183	.0318	.2986	.0627	-.1313	0.
.2090	0.	0.	0.	0.	0.	0.	-.0307	-.0223	.0348	.2973	.0713	-.1109	0.
.2100	0.	0.	0.	0.	0.	0.	-.0286	-.0267	.0364	.2867	.0739	-.0898	0.
.2110	0.	0.	0.	0.	0.	0.	-.0268	-.0311	.0365	.2679	.0702	-.0690	0.
.2120	0.	0.	0.	0.	0.	0.	-.0250	-.0353	.0351	.2404	.0619	-.0485	0.
.2130	0.	0.	0.	0.	0.	0.	-.0235	-.0391	.0323	.2027	.0512	-.0289	0.
.2140	0.	0.	0.	0.	0.	0.	-.0220	-.0422	.0284	.1542	.0393	-.0110	0.
.2150	0.	0.	0.	0.	0.	0.	-.0207	-.0446	.0236	.0961	.0273	.0062	0.
.2160	0.	0.	0.	0.	0.	0.	-.0193	-.0461	.0179	.0315	.0157	.0246	0.
.2170	0.	0.	0.	0.	0.	0.	-.0179	-.0467	.0117	-.0358	.0039	.0439	0.
.2180	0.	0.	0.	0.	0.	0.	-.0167	-.0465	.0051	-.1022	-.0092	.0619	0.
.2190	0.	0.	0.	0.	0.	0.	-.0157	-.0455	-.0016	-.1634	-.0242	.0774	0.
.2200	0.	0.	0.	0.	0.	0.	-.0147	-.0438	-.0082	-.2146	-.0411	.0918	0.
.2210	0.	0.	0.	0.	0.	0.	-.0137	-.0415	-.0146	-.2530	-.0587	.1061	0.
.2220	0.	0.	0.	0.	0.	0.	-.0126	-.0387	-.0202	-.2786	-.0754	.1195	0.
.2230	0.	0.	0.	0.	0.	0.	-.0113	-.0354	-.0248	-.2932	-.0891	.1305	0.
.2240	0.	0.	0.	0.	0.	0.	-.0098	-.0317	-.0279	-.2979	-.0978	.1392	0.
.2250	0.	0.	0.	0.	0.	0.	-.0078	-.0277	-.0296	-.2930	-.1008	.1460	0.
.2260	0.	0.	0.	0.	0.	0.	-.0053	-.0235	-.0297	-.2786	-.0984	.1501	0.
.2270	0.	0.	0.	0.	0.	0.	-.0022	-.0191	-.0284	-.2545	-.0918	.1498	0.
.2280	0.	0.	0.	0.	0.	0.	.0016	-.0147	-.0256	-.2205	-.0822	.1443	0.
.2290	0.	0.	0.	0.	0.	0.	.0059	-.0103	-.0217	-.1764	-.0707	.1332	0.
.2300	0.	0.	0.	0.	0.	0.	.0109	-.0061	-.0169	-.1226	-.0586	.1161	0.
.2310	0.	0.	0.	0.	0.	0.	.0164	-.0020	-.0113	-.0618	-.0462	.0926	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.25.

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)

.2230	0.	0.	0.	0.	0.	0.	0.	-.113	-.0354	-.0248	-.2932	-.0891	.1305	0.
.2240	0.	0.	0.	0.	0.	0.	0.	-.098	-.0317	-.0279	-.2979	-.0978	.1392	0.
.2250	0.	0.	0.	0.	0.	0.	0.	-.0078	-.0277	-.0296	-.2930	-.1008	.1460	0.
.2260	0.	0.	0.	0.	0.	0.	0.	-.0053	-.0235	-.0297	-.2786	-.0984	.1501	0.
.2270	0.	0.	0.	0.	0.	0.	0.	-.0022	-.0191	-.0214	-.2545	-.0918	.1498	0.
.2280	0.	0.	0.	0.	0.	0.	0.	.0016	-.0147	-.0256	-.2205	-.0822	.1443	0.
.2290	0.	0.	0.	0.	0.	0.	0.	.0059	-.0103	-.0217	-.1764	-.0707	.1332	0.
.2300	0.	0.	0.	0.	0.	0.	0.	.0109	-.0061	-.0169	-.1226	-.0586	.1161	0.
.2310	0.	0.	0.	0.	0.	0.	0.	.0164	-.0020	-.0113	-.0618	-.0462	.0926	0.

ADLPIPE PAGE 2283 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.29.25.
 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	58	MEMBER	1	SEQUENCE	83	LOCATION	DIS	TYPE	VA						STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ		(PSI)	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)			
.2320	0.	0.	0.	0.	0.	0.	.0222	.0018	-.0051	.0019	-.0326	.0632	0.		
.2330	0.	0.	0.	0.	0.	0.	.0282	.0054	.0016	.0638	-.0170	.0291	0.		
.2340	0.	0.	0.	0.	0.	0.	.0342	.0086	.0086	.1205	.0006	-.0080	0.		
.2350	0.	0.	0.	0.	0.	0.	.0400	.0114	.0157	.1697	.0200	-.0460	0.		
.2360	0.	0.	0.	0.	0.	0.	.0453	.0137	.0227	.2101	.0404	-.0827	0.		
.2370	0.	0.	0.	0.	0.	0.	.0499	.0155	.0293	.2409	.0608	-.1166	0.		
.2380	0.	0.	0.	0.	0.	0.	.0534	.0165	.0353	.2622	.0797	-.1471	0.		
.2390	0.	0.	0.	0.	0.	0.	.0556	.0169	.0404	.2745	.0957	-.1733	0.		
.2400	0.	0.	0.	0.	0.	0.	.0563	.0165	.0445	.2789	.1078	-.1932	0.		
.2410	0.	0.	0.	0.	0.	0.	.0555	.0154	.0474	.2758	.1156	-.2050	0.		
.2420	0.	0.	0.	0.	0.	0.	.0532	.0136	.0491	.2647	.1189	-.2084	0.		
.2430	0.	0.	0.	0.	0.	0.	.0495	.0113	.0496	.2449	.1181	-.2038	0.		
.2440	0.	0.	0.	0.	0.	0.	.0444	.0087	.0489	.2165	.1135	-.1915	0.		
.2450	0.	0.	0.	0.	0.	0.	.0384	.0057	.0471	.1810	.1055	-.1716	0.		
.2460	0.	0.	0.	0.	0.	0.	.0315	.0028	.0442	.1401	.0943	-.1453	0.		
.2470	0.	0.	0.	0.	0.	0.	.0243	-.0001	.0402	.0959	.0803	-.1143	0.		
.2480	0.	0.	0.	0.	0.	0.	.0170	-.0028	.0353	.0503	.0640	-.0802	0.		
.2490	0.	0.	0.	0.	0.	0.	.0100	-.0050	.0295	.0053	.0462	-.0446	0.		
.2500	0.	0.	0.	0.	0.	0.	.0037	-.0066	.0231	-.0375	.0273	-.0092	0.		
.2510	0.	0.	0.	0.	0.	0.	-.0016	-.0076	.0162	-.0764	.0080	.0248	0.		
.2520	0.	0.	0.	0.	0.	0.	-.0055	-.0079	.0090	-.1104	-.0109	.0569	0.		
.2530	0.	0.	0.	0.	0.	0.	-.0078	-.0075	.0018	-.1389	-.0285	.0863	0.		
.2540	0.	0.	0.	0.	0.	0.	-.0082	-.0063	-.0052	-.1617	-.0440	.1119	0.		
.2550	0.	0.	0.	0.	0.	0.	-.0069	-.0044	-.0118	-.1782	-.0570	.1321	0.		
.2560	0.	0.	0.	0.	0.	0.	-.0037	-.0018	-.0178	-.1873	-.0671	.1466	0.		
.2570	0.	0.	0.	0.	0.	0.	.0012	.0013	-.0231	-.1884	-.0740	.1550	0.		
.2580	0.	0.	0.	0.	0.	0.	.0077	.0047	-.0277	-.1817	-.0776	.1568	0.		
.2590	0.	0.	0.	0.	0.	0.	.0154	.0085	-.0313	-.1682	-.0778	.1517	0.		
.2600	0.	0.	0.	0.	0.	0.	.0240	.0124	-.0338	-.1490	-.0749	.1404	0.		
.2610	0.	0.	0.	0.	0.	0.	.0332	.0163	-.0353	-.1250	-.0690	.1244	0.		
.2620	0.	0.	0.	0.	0.	0.	.0427	.0201	-.0358	-.0972	-.0609	.1054	0.		
.2630	0.	0.	0.	0.	0.	0.	.0519	.0236	-.0353	-.0674	-.0511	.0839	0.		
.2640	0.	0.	0.	0.	0.	0.	.0606	.0268	-.0339	-.0375	-.0399	.0605	0.		
.2650	0.	0.	0.	0.	0.	0.	.0683	.0296	-.0316	-.0083	-.0278	.0365	0.		
.2660	0.	0.	0.	0.	0.	0.	.0748	.0320	-.0288	.0199	-.0155	.0137	0.		
.2670	0.	0.	0.	0.	0.	0.	.0799	.0340	-.0255	.0467	-.0036	-.0066	0.		
.2680	0.	0.	0.	0.	0.	0.	.0834	.0357	-.0220	.0708	.0076	-.0239	0.		
.2690	0.	0.	0.	0.	0.	0.	.0851	.0370	-.0184	.0905	.0177	-.0385	0.		

ADLPIPE PAGE 2284 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.29.25.
 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	58	MEMBER	1	SEQUENCE	83	LOCATION	DIS	TYPE	VA						STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ		(PSI)	

.2610	0.	0.	0.	0.	0.	0.	0.	.0332	.0163	-.0353	-.1250	-.0590	.1244	0.
.2620	0.	0.	0.	0.	0.	0.	0.	.0427	.0201	-.0358	-.0972	-.0509	.1054	0.
.2630	0.	0.	0.	0.	0.	0.	0.	.0519	.0236	-.0353	-.0674	-.0511	.0839	0.
.2640	0.	0.	0.	0.	0.	0.	0.	.0606	.0268	-.0379	-.0375	-.0399	.0605	0.
.2650	0.	0.	0.	0.	0.	0.	0.	.0683	.0296	-.0316	-.0083	-.0278	.0365	0.
.2660	0.	0.	0.	0.	0.	0.	0.	.0748	.0320	-.0288	.0199	-.0155	.0137	0.
.2670	0.	0.	0.	0.	0.	0.	0.	.0799	.0340	-.0255	.0467	-.0036	-.0066	0.
.2680	0.	0.	0.	0.	0.	0.	0.	.0834	.0357	-.0220	.0708	.0076	-.0239	0.
.2690	0.	0.	0.	0.	0.	0.	0.	.0851	.0370	-.0184	.0905	.0177	-.0385	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.25.

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	58	MEMBER	1	SEQUENCE	83	LOCATION	DIS	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ				DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.2700	0.	0.	0.	0.	0.	0.	.0850	.0382	-.0148	.1049	.0263	-.0496	0.		
.2710	0.	0.	0.	0.	0.	0.	.0833	.0392	-.0115	.1141	.0329	-.0563	0.		
.2720	0.	0.	0.	0.	0.	0.	.0801	.0402	-.0086	.1182	.0372	-.0577	0.		
.2730	0.	0.	0.	0.	0.	0.	.0757	.0412	-.0061	.1168	.0392	-.0550	0.		
.2740	0.	0.	0.	0.	0.	0.	.0701	.0423	-.0041	.1096	.0390	-.0498	0.		
.2750	0.	0.	0.	0.	0.	0.	.0637	.0437	-.0027	.0982	.0363	-.0427	0.		
.2760	0.	0.	0.	0.	0.	0.	.0569	.0452	-.0020	.0849	.0313	-.0333	0.		
.2770	0.	0.	0.	0.	0.	0.	.0500	.0468	-.0019	.0705	.0244	-.0223	0.		
.2780	0.	0.	0.	0.	0.	0.	.0431	.0486	-.0022	.0547	.0165	-.0117	0.		
.2790	0.	0.	0.	0.	0.	0.	.0366	.0506	-.0028	.0373	.0083	-.0027	0.		
.2800	0.	0.	0.	0.	0.	0.	.0307	.0525	-.0037	.0201	.0000	.0050	0.		
.2810	0.	0.	0.	0.	0.	0.	.0257	.0544	-.0046	.0045	-.0078	.0124	0.		
.2820	0.	0.	0.	0.	0.	0.	.0217	.0560	-.0055	-.0092	-.0145	.0187	0.		
.2830	0.	0.	0.	0.	0.	0.	.0185	.0573	-.0060	-.0213	-.0198	.0219	0.		
.2840	0.	0.	0.	0.	0.	0.	.0163	.0582	-.0063	-.0304	-.0238	.0222	0.		
.2850	0.	0.	0.	0.	0.	0.	.0151	.0585	-.0062	-.0339	-.0269	.0214	0.		
.2860	0.	0.	0.	0.	0.	0.	.0149	.0582	-.0059	-.0305	-.0292	.0209	0.		
.2870	0.	0.	0.	0.	0.	0.	.0155	.0572	-.0052	-.0215	-.0303	.0199	0.		
.2880	0.	0.	0.	0.	0.	0.	.0167	.0555	-.0040	-.0086	-.0302	.0175	0.		
.2890	0.	0.	0.	0.	0.	0.	.0184	.0531	-.0026	.0077	-.0289	.0153	0.		
.2900	0.	0.	0.	0.	0.	0.	.0207	.0502	-.0010	.0269	-.0260	.0156	0.		
.2910	0.	0.	0.	0.	0.	0.	.0232	.0469	.0006	.0474	-.0216	.0186	0.		
.2920	0.	0.	0.	0.	0.	0.	.0260	.0432	.0022	.0668	-.0161	.0228	0.		
.2930	0.	0.	0.	0.	0.	0.	.0286	.0393	.0037	.0837	-.0099	.0274	0.		
.2940	0.	0.	0.	0.	0.	0.	.0312	.0354	.0047	.0983	-.0040	.0330	0.		
.2950	0.	0.	0.	0.	0.	0.	.0335	.0316	.0050	.1107	.0004	.0398	0.		
.2960	0.	0.	0.	0.	0.	0.	.0355	.0279	.0045	.1202	.0022	.0464	0.		
.2970	0.	0.	0.	0.	0.	0.	.0370	.0246	.0032	.1250	.0010	.0517	0.		
.2980	0.	0.	0.	0.	0.	0.	.0373	.0216	.0012	.1238	-.0030	.0553	0.		
.2990	0.	0.	0.	0.	0.	0.	.0380	.0190	-.0017	.1161	-.0096	.0576	0.		
.3000	0.	0.	0.	0.	0.	0.	.0374	.0168	-.0052	.1020	-.0185	.0592	0.		
.3010	0.	0.	0.	0.	0.	0.	.0361	.0149	-.0092	.0810	-.0288	.0600	0.		
.3020	0.	0.	0.	0.	0.	0.	.0339	.0132	-.0135	.0528	-.0394	.0597	0.		
.3030	0.	0.	0.	0.	0.	0.	.0308	.0116	-.0178	.0181	-.0499	.0579	0.		
.3040	0.	0.	0.	0.	0.	0.	.0267	.0099	-.0220	-.0205	-.0602	.0552	0.		
.3050	0.	0.	0.	0.	0.	0.	.0218	.0081	-.0258	-.0602	-.0705	.0526	0.		
.3060	0.	0.	0.	0.	0.	0.	.0162	.0060	-.0292	-.0993	-.0801	.0504	0.		
.3070	0.	0.	0.	0.	0.	0.	.0098	.0035	-.0317	-.1372	-.0885	.0476	0.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.25.

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	58	MEMBER	1	SEQUENCE	83	LOCATION	DIS	TYPE	VA
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.2990	0.	0.	0.	0.	0.	0.	0.	.0380	.0190	-.0017	.1161	-.0096	.0576	0.
.3000	0.	0.	0.	0.	0.	0.	0.	.0374	.0168	-.0052	.1020	-.0195	.0592	0.
.3010	0.	0.	0.	0.	0.	0.	0.	.0361	.0149	-.0092	.0810	-.0288	.0600	0.
.3020	0.	0.	0.	0.	0.	0.	0.	.0339	.0132	-.0135	.0528	-.0394	.0597	0.
.3030	0.	0.	0.	0.	0.	0.	0.	.0308	.0116	-.0178	.0181	-.0499	.0579	0.
.3040	0.	0.	0.	0.	0.	0.	0.	.0267	.0099	-.0220	-.0205	-.0502	.0552	0.
.3050	0.	0.	0.	0.	0.	0.	0.	.0218	.0081	-.0258	-.0602	-.0705	.0526	0.
.3060	0.	0.	0.	0.	0.	0.	0.	.0162	.0060	-.0292	-.0993	-.0801	.0504	0.
.3070	0.	0.	0.	0.	0.	0.	0.	.0098	.0035	-.0317	-.1372	-.0885	.0476	0.

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DIS/ADLPIPE ADLPIPE STRESS ANALYSIS
 S/RV PIPING KEWAUNEE GKW03F 2 RUP DISK
 2 SAFETY COLD FKW24F--2 PSV

83/12/02. 18.29.25.

CONDITION 24
 LOADS
 SHOCK
 PRESSURE
 ENGLISH UNITS

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

SECTION	58	MEMBER	1	SEQUENCE	83	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)		
.3080	0.	0.	0.	0.	0.	0.	-.0028	.0007	-.0332	-.1729	-.0951	.0434	0.		
.3090	0.	0.	0.	0.	0.	0.	-.0047	-.0026	-.0336	-.2042	-.0998	.0390	0.		
.3100	0.	0.	0.	0.	0.	0.	-.0122	-.0063	-.0329	-.2291	-.1018	.0357	0.		
.3110	0.	0.	0.	0.	0.	0.	-.0197	-.0103	-.0310	-.2474	-.1004	.0331	0.		
.3120	0.	0.	0.	0.	0.	0.	-.0269	-.0145	-.0278	-.2590	-.0955	.0293	0.		
.3130	0.	0.	0.	0.	0.	0.	-.0336	-.0187	-.0236	-.2630	-.0875	.0241	0.		
.3140	0.	0.	0.	0.	0.	0.	-.0395	-.0228	-.0185	-.2579	-.0768	.0186	0.		
.3150	0.	0.	0.	0.	0.	0.	-.0444	-.0265	-.0128	-.2429	-.0640	.0134	0.		
.3160	0.	0.	0.	0.	0.	0.	-.0482	-.0298	-.0067	-.2192	-.0497	.0074	0.		
.3170	0.	0.	0.	0.	0.	0.	-.0507	-.0324	-.0004	-.1886	-.0344	-.0004	0.		
.3180	0.	0.	0.	0.	0.	0.	-.0520	-.0343	.0058	-.1523	-.0182	-.0092	0.		
.3190	0.	0.	0.	0.	0.	0.	-.0519	-.0353	.0118	-.1111	-.0016	-.0179	0.		
.3200	0.	0.	0.	0.	0.	0.	-.0505	-.0354	.0171	-.0664	.0147	-.0260	0.		
.3210	0.	0.	0.	0.	0.	0.	-.0479	-.0346	.0217	-.0204	.0302	-.0343	0.		
.3220	0.	0.	0.	0.	0.	0.	-.0444	-.0331	.0255	.0245	.0448	-.0427	0.		
.3230	0.	0.	0.	0.	0.	0.	-.0403	-.0308	.0283	.0671	.0580	-.0504	0.		
.3240	0.	0.	0.	0.	0.	0.	-.0356	-.0281	.0300	.1066	.0689	-.0568	0.		
.3250	0.	0.	0.	0.	0.	0.	-.0308	-.0251	.0306	.1419	.0771	-.0609	0.		
.3260	0.	0.	0.	0.	0.	0.	-.0260	-.0220	.0301	.1713	.0826	-.0624	0.		
.3270	0.	0.	0.	0.	0.	0.	-.0217	-.0190	.0286	.1926	.0857	-.0615	0.		
.3280	0.	0.	0.	0.	0.	0.	-.0179	-.0165	.0263	.2051	.0864	-.0579	0.		
.3290	0.	0.	0.	0.	0.	0.	-.0150	-.0145	.0232	.2091	.0844	-.0508	0.		
.3300	0.	0.	0.	0.	0.	0.	-.0130	-.0132	.0195	.2048	.0802	-.0398	0.		
.3310	0.	0.	0.	0.	0.	0.	-.0120	-.0128	.0153	.1920	.0771	-.0255	0.		
.3320	0.	0.	0.	0.	0.	0.	-.0121	-.0132	.0109	.1704	.0564	-.0098	0.		
.3330	0.	0.	0.	0.	0.	0.	-.0132	-.0146	.0063	.1414	.0572	.0067	0.		
.3340	0.	0.	0.	0.	0.	0.	-.0151	-.0167	.0017	.1070	.0468	.0243	0.		
.3350	0.	0.	0.	0.	0.	0.	-.0173	-.0197	-.0028	.0686	.0358	.0429	0.		
.3360	0.	0.	0.	0.	0.	0.	-.0209	-.0232	-.0071	.0268	.0246	.0607	0.		
.3370	0.	0.	0.	0.	0.	0.	-.0243	-.0270	-.0110	-.0172	.0137	.0762	0.		
.3380	0.	0.	0.	0.	0.	0.	-.0277	-.0311	-.0145	-.0612	.0034	.0892	0.		
.3390	0.	0.	0.	0.	0.	0.	-.0308	-.0351	-.0175	-.1025	-.0061	.1000	0.		
.3400	0.	0.	0.	0.	0.	0.	-.0334	-.0389	-.0200	-.1392	-.0147	.1079	0.		
.3410	0.	0.	0.	0.	0.	0.	-.0353	-.0422	-.0221	-.1703	-.0222	.1113	0.		
.3420	0.	0.	0.	0.	0.	0.	-.0364	-.0449	-.0235	-.1947	-.0284	.1099	0.		
.3430	0.	0.	0.	0.	0.	0.	-.0366	-.0469	-.0244	-.2107	-.0330	.1043	0.		
.3440	0.	0.	0.	0.	0.	0.	-.0356	-.0479	-.0248	-.2176	-.0360	.0950	0.		
.3450	0.	0.	0.	0.	0.	0.	-.0337	-.0481	-.0246	-.2153	-.0371	.0820	0.		

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DIS/ADLPIPE ADLPIPE STRESS ANALYSIS
 S/RV PIPING KEWAUNEE GKW03F 2 RUP DISK
 2 SAFETY COLD FKW24F--2 PSV

83/12/02. 18.29.25.

CONDITION 24
 LOADS
 SHOCK
 PRESSURE
 ENGLISH UNITS

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

SECTION 58 MEMBER 1 SEQUENCE 83 LOCATION DIS TYPE VA

.3370	0.	0.	0.	0.	0.	0.	0.	-.0243	-.0270	-.0110	-.0172	.0137	.0762	0.
.3380	0.	0.	0.	0.	0.	0.	0.	-.0277	-.0311	-.0145	-.0612	.0034	.0892	0.
.3390	0.	0.	0.	0.	0.	0.	0.	-.0308	-.0351	-.0175	-.1025	-.0061	.1000	0.
.3400	0.	0.	0.	0.	0.	0.	0.	-.0334	-.0389	-.0200	-.1392	-.0147	.1079	0.
.3410	0.	0.	0.	0.	0.	0.	0.	-.0353	-.0422	-.0221	-.1703	-.0222	.1113	0.
.3420	0.	0.	0.	0.	0.	0.	0.	-.0364	-.0449	-.0235	-.1947	-.0284	.1099	0.
.3430	0.	0.	0.	0.	0.	0.	0.	-.0366	-.0469	-.0244	-.2107	-.0330	.1043	0.
.3440	0.	0.	0.	0.	0.	0.	0.	-.0356	-.0479	-.0248	-.2176	-.0360	.0950	0.
.3450	0.	0.	0.	0.	0.	0.	0.	-.0337	-.0481	-.0246	-.2153	-.0371	.0820	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.25.

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	58	MEMBER	1	SEQUENCE	83	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)	
.3460	0.	0.	0.	0.	0.	0.	0.	-.0308	-.0473	-.0238	-.2047	-.0361	.0655	0.	
.3470	0.	0.	0.	0.	0.	0.	0.	-.0271	-.0457	-.0225	-.1862	-.0329	.0464	0.	
.3480	0.	0.	0.	0.	0.	0.	0.	-.0228	-.0433	-.0206	-.1605	-.0276	.0255	0.	
.3490	0.	0.	0.	0.	0.	0.	0.	-.0180	-.0403	-.0182	-.1276	-.0209	.0040	0.	
.3500	0.	0.	0.	0.	0.	0.	0.	-.0129	-.0368	-.0155	-.0885	-.0131	-.0173	0.	
.3510	0.	0.	0.	0.	0.	0.	0.	-.0078	-.0331	-.0124	-.0448	-.0045	-.0376	0.	
.3520	0.	0.	0.	0.	0.	0.	0.	-.0030	-.0293	-.0090	.0017	.0046	-.0563	0.	
.3530	0.	0.	0.	0.	0.	0.	0.	.0015	-.0256	-.0054	.0495	.0139	-.0727	0.	
.3540	0.	0.	0.	0.	0.	0.	0.	.0053	-.0221	-.0018	.0972	.0229	-.0857	0.	
.3550	0.	0.	0.	0.	0.	0.	0.	.0086	-.0190	.0018	.1427	.0318	-.0945	0.	
.3560	0.	0.	0.	0.	0.	0.	0.	.0110	-.0164	.0053	.1838	.0404	-.0993	0.	
.3570	0.	0.	0.	0.	0.	0.	0.	.0126	-.0144	.0085	.2186	.0483	-.1007	0.	
.3580	0.	0.	0.	0.	0.	0.	0.	.0134	-.0130	.0114	.2461	.0551	-.0987	0.	
.3590	0.	0.	0.	0.	0.	0.	0.	.0135	-.0121	.0138	.2661	.0605	-.0932	0.	
.3600	0.	0.	0.	0.	0.	0.	0.	.0129	-.0119	.0155	.2780	.0640	-.0846	0.	
.3610	0.	0.	0.	0.	0.	0.	0.	.0118	-.0121	.0165	.2813	.0555	-.0742	0.	
.3620	0.	0.	0.	0.	0.	0.	0.	.0103	-.0128	.0168	.2756	.0650	-.0627	0.	
.3630	0.	0.	0.	0.	0.	0.	0.	.0086	-.0139	.0163	.2615	.0525	-.0504	0.	
.3640	0.	0.	0.	0.	0.	0.	0.	.0067	-.0153	.0150	.2397	.0585	-.0371	0.	
.3650	0.	0.	0.	0.	0.	0.	0.	.0050	-.0168	.0131	.2107	.0533	-.0236	0.	
.3660	0.	0.	0.	0.	0.	0.	0.	.0034	-.0185	.0106	.1752	.0473	-.0109	0.	
.3670	0.	0.	0.	0.	0.	0.	0.	.0021	-.0202	.0076	.1344	.0409	.0008	0.	
.3680	0.	0.	0.	0.	0.	0.	0.	.0011	-.0220	.0043	.0904	.0344	.0114	0.	
.3690	0.	0.	0.	0.	0.	0.	0.	.0005	-.0237	.0007	.0456	.0277	.0209	0.	
.3700	0.	0.	0.	0.	0.	0.	0.	.0003	-.0254	-.0030	.0021	.0207	.0291	0.	
.3710	0.	0.	0.	0.	0.	0.	0.	.0004	-.0271	-.0066	-.0386	.0137	.0358	0.	
.3720	0.	0.	0.	0.	0.	0.	0.	.0009	-.0288	-.0099	-.0750	.0070	.0408	0.	
.3730	0.	0.	0.	0.	0.	0.	0.	.0016	-.0305	-.0129	-.1057	.0006	.0444	0.	
.3740	0.	0.	0.	0.	0.	0.	0.	.0026	-.0322	-.0153	-.1295	-.0052	.0469	0.	
.3750	0.	0.	0.	0.	0.	0.	0.	.0038	-.0338	-.0172	-.1460	-.0099	.0489	0.	
.3760	0.	0.	0.	0.	0.	0.	0.	.0052	-.0355	-.0184	-.1554	-.0129	.0500	0.	
.3770	0.	0.	0.	0.	0.	0.	0.	.0066	-.0370	-.0188	-.1583	-.0140	.0501	0.	
.3780	0.	0.	0.	0.	0.	0.	0.	.0081	-.0385	-.0185	-.1548	-.0133	.0490	0.	
.3790	0.	0.	0.	0.	0.	0.	0.	.0096	-.0399	-.0176	-.1449	-.0109	.0473	0.	
.3800	0.	0.	0.	0.	0.	0.	0.	.0112	-.0412	-.0161	-.1292	-.0072	.0449	0.	
.3810	0.	0.	0.	0.	0.	0.	0.	.0127	-.0423	-.0141	-.1090	-.0026	.0413	0.	
.3820	0.	0.	0.	0.	0.	0.	0.	.0141	-.0432	-.0117	-.0858	.0024	.0360	0.	
.3830	0.	0.	0.	0.	0.	0.	0.	.0154	-.0439	-.0091	-.0606	.0075	.0289	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.25.

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	58	MEMBER	1	SEQUENCE	83	LOCATION	DIS	TYPE	VA
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.3750	0.	0.	0.	0.	0.	0.	0.	0.	.0038	-.0338	-.0172	-.1460	-.0099	.0489	0.
.3760	0.	0.	0.	0.	0.	0.	0.	0.	.0052	-.0355	-.0184	-.1554	-.0129	.0500	0.
.3770	0.	0.	0.	0.	0.	0.	0.	0.	.0066	-.0370	-.0188	-.1583	-.0140	.0501	0.
.3780	0.	0.	0.	0.	0.	0.	0.	0.	.0081	-.0385	-.0185	-.1548	-.0133	.0490	0.
.3790	0.	0.	0.	0.	0.	0.	0.	0.	.0096	-.0399	-.0176	-.1449	-.0109	.0473	0.
.3800	0.	0.	0.	0.	0.	0.	0.	0.	.0112	-.0412	-.0161	-.1292	-.0072	.0449	0.
.3810	0.	0.	0.	0.	0.	0.	0.	0.	.0127	-.0423	-.0141	-.1090	-.0026	.0413	0.
.3820	0.	0.	0.	0.	0.	0.	0.	0.	.0141	-.0432	-.0117	-.0858	.0024	.0360	0.
.3830	0.	0.	0.	0.	0.	0.	0.	0.	.0154	-.0439	-.0091	-.0606	.0075	.0289	0.

ADLPIPE PAGE 2287 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.29.25.
 S/RV PIPING KEWAUNEE GKW00F 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	58	MEMBER	1	SEQUENCE	83	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)		
.3840	0.	0.	0.	0.	0.	0.	.0167	-.0444	-.0064	-.0343	.0121	.0208	0.		
.3850	0.	0.	0.	0.	0.	0.	.0178	-.0447	-.0037	-.0084	.0161	.0117	0.		
.3860	0.	0.	0.	0.	0.	0.	.0186	-.0447	-.0010	.0153	.0195	.0013	0.		
.3870	0.	0.	0.	0.	0.	0.	.0192	-.0447	.0014	.0352	.0223	-.0102	0.		
.3880	0.	0.	0.	0.	0.	0.	.0195	-.0445	.0037	.0507	.0242	-.0222	0.		
.3890	0.	0.	0.	0.	0.	0.	.0194	-.0443	.0057	.0616	.0253	-.0335	0.		
.3900	0.	0.	0.	0.	0.	0.	.0188	-.0442	.0073	.0678	.0252	-.0435	0.		
.3910	0.	0.	0.	0.	0.	0.	.0177	-.0443	.0087	.0688	.0240	-.0519	0.		
.3920	0.	0.	0.	0.	0.	0.	.0161	-.0446	.0098	.0643	.0217	-.0583	0.		
.3930	0.	0.	0.	0.	0.	0.	.0138	-.0451	.0106	.0550	.0184	-.0621	0.		
.3940	0.	0.	0.	0.	0.	0.	.0110	-.0460	.0113	.0417	.0139	-.0625	0.		
.3950	0.	0.	0.	0.	0.	0.	.0077	-.0472	.0117	.0254	.0086	-.0592	0.		
.3960	0.	0.	0.	0.	0.	0.	.0038	-.0488	.0120	.0063	.0028	-.0525	0.		
.3970	0.	0.	0.	0.	0.	0.	-.0005	-.0506	.0123	-.0156	-.0030	-.0431	0.		
.3980	0.	0.	0.	0.	0.	0.	-.0051	-.0526	.0126	-.0388	-.0086	-.0315	0.		
.3990	0.	0.	0.	0.	0.	0.	-.0098	-.0546	.0128	-.0618	-.0142	-.0173	0.		
.4000	0.	0.	0.	0.	0.	0.	-.0145	-.0567	.0130	-.0833	-.0196	-.0009	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	58	MEMBER	1	SEQUENCE	83	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	-0.	0.	0.	0.	0.	0.	-.0000	.0000	.0000	-.0000	-.0000	-.0000	0.		
.0020	-0.	0.	0.	0.	0.	0.	-.0000	.0000	.0000	-.0000	.0000	-.0000	0.		
.0030	-0.	0.	0.	0.	0.	0.	.0000	-.0000	.0000	-.0000	.0000	.0000	0.		
.0040	-0.	0.	-0.	-0.	0.	0.	.0000	-.0000	.0000	-.0000	.0000	.0000	0.		
.0050	0.	0.	-1.	-0.	0.	-0.	-.0000	-.0000	.0000	-.0001	.0000	-.0000	1.		
.0060	3.	1.	-2.	-1.	0.	-1.	-.0000	-.0000	.0000	-.0001	.0001	-.0001	3.		
.0070	7.	3.	-5.	-2.	0.	-2.	-.0000	-.0000	.0000	-.0003	.0001	-.0003	9.		

ADLPIPE PAGE 2288 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.29.25.
 S/RV PIPING KEWAUNEE GKW00F 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	58	MEMBER	1	SEQUENCE	83	LOCATION	END	TYPE	VA
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0.0000	0.	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	-0.	0.	0.	0.	0.	0.	0.	-.0000	.0000	.0000	-.0000	-.0000	-.0000	0.
.0020	-0.	0.	0.	0.	0.	0.	0.	-.0000	.0000	.0000	-.0000	.0000	-.0000	0.
.0030	-0.	0.	0.	0.	0.	0.	0.	.0000	-.0000	.0000	-.0000	.0000	.0000	0.
.0040	-0.	0.	-0.	-0.	0.	0.	0.	.0000	-.0000	.0000	-.0000	.0000	.0000	0.
.0050	0.	0.	-1.	-0.	0.	0.	-0.	-.0000	-.0000	.0000	-.0001	.0000	-.0000	1.
.0060	3.	1.	-2.	-1.	0.	0.	-1.	-.0000	-.0000	.0000	-.0001	.0001	-.0001	3.
.0070	7.	3.	-5.	-2.	0.	0.	-2.	-.0000	-.0000	.0000	-.0003	.0001	-.0003	9.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

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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	58	MEMBER	1	SEQUENCE	83	LOCATION	END	TYPE	VA					STRESS
TIME	FX	FY	FZ	MX	MY	MZ								(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
.0080	14.	7.	-8.	-3.	0.	-5.	-.0001	-.0000	.0000	-.0004	.0000	-.0006		16.
.0090	23.	10.	-13.	-4.	0.	-7.	-.0001	-.0000	.0001	-.0005	-.0002	-.0011		26.
.0100	38.	14.	-20.	-7.	0.	-13.	-.0002	-.0000	.0001	-.0007	-.0005	-.0019		44.
.0110	69.	22.	-34.	-11.	0.	-23.	-.0004	-.0001	.0002	-.0010	-.0010	-.0032		77.
.0120	118.	41.	-58.	-19.	0.	-39.	-.0007	-.0001	.0003	-.0017	-.0017	-.0056		132.
.0130	183.	67.	-86.	-28.	0.	-60.	-.0011	-.0002	.0005	-.0024	-.0028	-.0088		203.
.0140	246.	91.	-110.	-36.	0.	-81.	-.0018	-.0003	.0007	-.0027	-.0042	-.0125		271.
.0150	292.	101.	-121.	-40.	0.	-96.	-.0025	-.0005	.0009	-.0023	-.0061	-.0158		317.
.0160	305.	90.	-113.	-37.	0.	-101.	-.0034	-.0007	.0011	-.0008	-.0081	-.0178		326.
.0170	276.	59.	-81.	-27.	-0.	-91.	-.0044	-.0011	.0013	.0018	-.0101	-.0180		289.
.0180	195.	12.	-24.	-8.	-0.	-64.	-.0054	-.0014	.0015	.0055	-.0118	-.0158		197.
.0190	59.	-50.	56.	19.	-0.	-20.	-.0063	-.0018	.0017	.0101	-.0127	-.0110		82.
.0200	-120.	-115.	152.	50.	-0.	40.	-.0070	-.0021	.0017	.0148	-.0126	-.0039		195.
.0210	-316.	-176.	245.	81.	0.	104.	-.0076	-.0024	.0018	.0188	-.0108	.0047		401.
.0220	-482.	-238.	308.	102.	0.	159.	-.0078	-.0024	.0017	.0213	-.0075	.0138		574.
.0230	-585.	-262.	330.	109.	0.	193.	-.0079	-.0023	.0016	.0213	-.0027	.0212		674.
.0240	-633.	-235.	320.	105.	0.	209.	-.0077	-.0020	.0014	.0193	.0026	.0262		712.
.0250	-698.	-196.	326.	108.	0.	230.	-.0071	-.0016	.0009	.0182	.0069	.0307		773.
.0260	-828.	-213.	378.	125.	0.	273.	-.0057	-.0010	-.0001	.0208	.0088	.0375		913.
.0270	-906.	-305.	410.	135.	-0.	299.	-.0038	-.0002	-.0015	.0248	.0085	.0447		999.
.0280	-806.	-295.	353.	117.	-0.	266.	-.0017	.0008	-.0028	.0245	.0075	.0456		884.
.0290	-632.	-117.	266.	88.	-0.	208.	.0006	.0019	-.0042	.0213	.0053	.0402		688.
.0300	-552.	-63.	236.	78.	-0.	182.	.0035	.0032	-.0061	.0225	.0010	.0379		602.
.0310	-453.	-153.	188.	62.	-0.	149.	.0070	.0044	-.0081	.0229	-.0019	.0376		492.
.0320	-123.	-25.	-11.	-3.	-0.	40.	.0100	.0058	-.0093	.0113	.0001	.0280		123.
.0330	405.	369.	-340.	-112.	0.	-134.	.0124	.0070	-.0098	-.0109	.0059	.0084		531.
.0340	870.	661.	-645.	-213.	0.	-287.	.0145	.0080	-.0100	-.0327	.0129	-.0093		1087.
.0350	1108.	707.	-818.	-270.	0.	-366.	.0166	.0086	-.0102	-.0476	.0189	-.0195		1383.
.0360	1212.	710.	-895.	-295.	-0.	-400.	.0181	.0085	-.0102	-.0572	.0212	-.0276		1512.
.0370	1358.	750.	-960.	-317.	-0.	-448.	.0184	.0080	-.0097	-.0642	.0188	-.0384		1669.
.0380	1545.	705.	-1009.	-333.	-0.	-510.	.0177	.0069	-.0087	-.0684	.0129	-.0500		1852.
.0390	1540.	549.	-920.	-304.	-0.	-508.	.0161	.0053	-.0076	-.0650	.0037	-.0576		1801.
.0400	1163.	293.	-610.	-201.	-0.	-384.	.0142	.0034	-.0066	-.0502	-.0084	-.0566		1319.
.0410	649.	-138.	-244.	-80.	0.	-214.	.0120	.0012	-.0055	-.0318	-.0177	-.0471		696.
.0420	398.	-463.	-77.	-26.	-0.	-131.	.0091	-.0008	-.0033	-.0268	-.0163	-.0406		407.
.0430	427.	-379.	-128.	-42.	0.	-141.	.0052	-.0024	.0002	-.0380	-.0052	-.0441		447.
.0440	348.	-145.	-166.	-55.	0.	-115.	.0011	-.0038	.0038	-.0498	.0093	-.0466		387.
.0450	-29.	-242.	-53.	-17.	0.	10.	-.0023	-.0050	.0067	-.0505	.0238	-.0360		60.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.25.

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 58 MEMBER 1 SEQUENCE 83 LOCATION END TYPE VA

.0370	1258.	750.	-960.	-317.	-0.	-448.	.0184	.0080	-.0097	-.0642	.0188	-.0384	1669.
.0380	1545.	705.	-1009.	-333.	-0.	-510.	.0177	.0069	-.0087	-.0684	.0129	-.0500	1852.
.0390	1540.	549.	-920.	-304.	-0.	-508.	.0161	.0053	-.0076	-.0650	.0037	-.0576	1801.
.0400	1167.	293.	-610.	-201.	-0.	-384.	.0142	.0034	-.0066	-.0502	-.0084	-.0566	1319.
.0410	649.	-138.	-244.	-80.	0.	-214.	.0120	.0012	-.0055	-.0318	-.0177	-.0471	696.
.0420	398.	-463.	-77.	-26.	-0.	-131.	.0091	-.0008	-.0033	-.0268	-.0163	-.0406	407.
.0430	427.	-379.	-128.	-42.	0.	-141.	.0052	-.0024	.0002	-.0380	-.0052	-.0441	447.
.0440	348.	-145.	-166.	-55.	0.	-115.	.0011	-.0038	.0038	-.0498	.0093	-.0466	387.
.0450	-29.	-242.	-53.	-17.	0.	10.	-.0023	-.0050	.0067	-.0505	.0238	-.0360	60.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.25.

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	58	MEMBER	1	SEQUENCE	83	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)		
.0460	-439.	-514.	102.	34.	0.	145.	-.0053	-.0061	.0092	-.0449	.0356	-.0210	453.		
.0470	-571.	-453.	157.	52.	0.	188.	-.0089	-.0067	.0117	-.0403	.0404	-.0185	594.		
.0480	-488.	-182.	160.	53.	-0.	161.	-.0127	-.0071	.0138	-.0326	.0367	-.0250	515.		
.0490	-506.	-212.	275.	91.	-0.	167.	-.0157	-.0073	.0150	-.0129	.0270	-.0246	578.		
.0500	-739.	-472.	534.	176.	-0.	244.	-.0177	-.0073	.0151	.0181	.0135	-.0163	915.		
.0510	-914.	-516.	750.	248.	-0.	302.	-.0194	-.0070	.0150	.0469	.0002	-.0123	1187.		
.0520	-741.	-263.	730.	241.	-0.	244.	-.0212	-.0064	.0155	.0596	-.0050	-.0176	1044.		
.0530	-335.	64.	522.	172.	0.	111.	-.0227	-.0055	.0166	.0571	.0006	-.0246	622.		
.0540	-73.	337.	341.	113.	0.	24.	-.0234	-.0048	.0174	.0525	.0108	-.0251	350.		
.0550	-64.	516.	277.	91.	0.	21.	-.0235	-.0043	.0176	.0523	.0200	-.0179	285.		
.0560	-57.	605.	222.	73.	-0.	19.	-.0234	-.0042	.0177	.0511	.0283	-.0090	230.		
.0570	125.	715.	108.	36.	-0.	-41.	-.0237	-.0045	.0180	.0461	.0333	-.0054	166.		
.0580	323.	865.	38.	13.	-0.	-106.	-.0244	-.0054	.0178	.0451	.0296	-.0058	326.		
.0590	280.	811.	151.	50.	-0.	-92.	-.0249	-.0068	.0169	.0550	.0175	-.0006	320.		
.0600	-25.	419.	431.	142.	-0.	8.	-.0247	-.0089	.0152	.0722	.0035	.0152	434.		
.0610	-373.	-28.	714.	236.	-0.	123.	-.0243	-.0112	.0135	.0857	-.0078	.0338	809.		
.0620	-546.	-231.	838.	276.	-0.	180.	-.0241	-.0134	.0122	.0859	-.0133	.0461	1004.		
.0630	-560.	-269.	791.	261.	-0.	185.	-.0238	-.0155	.0114	.0709	-.0101	.0543	973.		
.0640	-621.	-354.	692.	228.	0.	205.	-.0228	-.0174	.0107	.0476	.0007	.0654	934.		
.0650	-826.	-495.	618.	204.	-0.	272.	-.0212	-.0190	.0094	.0235	.0129	.0795	1035.		
.0660	-1009.	-591.	516.	170.	-0.	333.	-.0192	-.0203	.0078	-.0012	.0220	.0897	1137.		
.0670	-999.	-619.	334.	110.	-0.	330.	-.0171	-.0211	.0060	-.0271	.0258	.0916	1057.		
.0680	-862.	-651.	145.	48.	-0.	284.	-.0148	-.0214	.0035	-.0474	.0207	.0868	877.		
.0690	-768.	-760.	53.	18.	-0.	254.	-.0121	-.0212	.0001	-.0552	.0046	.0790	773.		
.0700	-745.	-935.	48.	16.	0.	246.	-.0089	-.0205	-.0041	-.0530	-.0183	.0691	749.		
.0710	-680.	-1074.	28.	9.	0.	224.	-.0055	-.0191	-.0083	-.0504	-.0404	.0556	683.		
.0720	-479.	-1080.	-105.	-35.	0.	158.	-.0019	-.0169	-.0120	-.0545	-.0558	.0382	492.		
.0730	-143.	-932.	-379.	-125.	0.	47.	.0018	-.0140	-.0149	-.0686	-.0610	.0181	406.		
.0740	211.	-665.	-731.	-241.	0.	-70.	.0055	-.0104	-.0169	-.0902	-.0554	-.0019	764.		
.0750	451.	-364.	-1059.	-349.	0.	-149.	.0094	-.0063	-.0183	-.1122	-.0429	-.0183	1155.		
.0760	582.	-105.	-1315.	-434.	-0.	-192.	.0132	-.0020	-.0194	-.1286	-.0285	-.0306	1443.		
.0770	730.	119.	-1522.	-502.	-0.	-241.	.0165	.0023	-.0199	-.1384	-.0157	-.0429	1694.		
.0780	927.	346.	-1658.	-547.	-0.	-306.	.0190	.0065	-.0199	-.1392	-.0085	-.0583	1907.		
.0790	1054.	493.	-1635.	-540.	0.	-348.	.0209	.0105	-.0198	-.1249	-.0098	-.0739	1953.		
.0800	1041.	450.	-1427.	-471.	0.	-343.	.0222	.0140	-.0197	-.0949	-.0176	-.0857	1773.		
.0810	977.	318.	-1125.	-371.	0.	-323.	.0230	.0173	-.0191	-.0576	-.0265	-.0958	1496.		
.0820	972.	308.	-844.	-278.	0.	-321.	.0229	.0203	-.0175	-.0224	-.0318	-.1075	1292.		
.0830	1018.	421.	-625.	-206.	0.	-336.	.0221	.0230	-.0149	.0066	-.0298	-.1179	1199.		

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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

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ENGLISH UNITS

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

SECTION 58 MEMBER 1 SEQUENCE 83 LOCATION END TYPE VA

.0740	211.	-364.	-1059.	-349.	0.	-149.	.0094	-.0063	-.0183	-.1122	-.0429	-.0183	1155.
.0750	451.	-105.	-1315.	-434.	-0.	-192.	.0132	-.0020	-.0194	-.1286	-.0285	-.0306	1443.
.0760	582.	119.	-1522.	-502.	-0.	-241.	.0165	.0023	-.0199	-.1384	-.0157	-.0429	1694.
.0770	730.	346.	-1658.	-547.	-0.	-306.	.0190	.0065	-.0199	-.1392	-.0085	-.0583	1907.
.0780	927.	493.	-1635.	-540.	0.	-348.	.0209	.0105	-.0198	-.1249	-.0098	-.0739	1953.
.0790	1054.	450.	-1427.	-471.	0.	-343.	.0222	.0140	-.0197	-.0949	-.0176	-.0857	1773.
.0800	1041.	318.	-1125.	-371.	0.	-323.	.0230	.0173	-.0191	-.0576	-.0265	-.0958	1496.
.0810	977.	308.	-846.	-278.	0.	-321.	.0229	.0203	-.0175	-.0224	-.0318	-.1075	1292.
.0820	972.	421.	-625.	-206.	0.	-336.	.0221	.0230	-.0149	.0066	-.0298	-.1179	1199.

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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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PRESSURE

ENGLISH UNITS

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

SECTION	58	MEMBER	1	SEQUENCE	83	LOCATION	END	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ			DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.0840	1034.	508.	-446.	-147.	0.	-341.	.0211	.0254	-.0114	.0289	-.0181	-.1210	1131.		
.0850	944.	551.	-263.	-87.	0.	-312.	.0200	.0274	-.0073	.0465	.0013	-.1160	984.		
.0860	739.	617.	-48.	-16.	-0.	-244.	.0186	.0291	-.0030	.0631	.0227	-.1057	743.		
.0870	500.	661.	190.	63.	-0.	-165.	.0169	.0302	.0013	.0806	.0422	-.0926	537.		
.0880	311.	628.	430.	142.	-0.	-103.	.0149	.0309	.0053	.0991	.0578	-.0783	533.		
.0890	154.	564.	632.	228.	0.	-51.	.0127	.0311	.0088	.1200	.0670	-.0647	711.		
.0900	-40.	479.	998.	329.	0.	13.	.0103	.0309	.0114	.1447	.0589	-.0513	1003.		
.0910	-249.	316.	1302.	430.	0.	82.	.0082	.0304	.0133	.1688	.0675	-.0362	1331.		
.0920	-367.	145.	1503.	496.	0.	121.	.0062	.0296	.0149	.1843	.0678	-.0214	1553.		
.0930	-340.	135.	1539.	508.	0.	112.	.0041	.0288	.0163	.1865	.0710	-.0108	1582.		
.0940	-228.	275.	1434.	473.	-0.	75.	.0021	.0278	.0175	.1772	.0758	-.0036	1457.		
.0950	-139.	385.	1265.	418.	0.	46.	.0003	.0266	.0180	.1615	.0805	.0052	1278.		
.0960	-123.	391.	1097.	362.	-0.	41.	-.0011	.0251	.0177	.1448	.0815	.0170	1108.		
.0970	-140.	369.	943.	311.	-0.	46.	-.0024	.0234	.0165	.1299	.0749	.0283	957.		
.0980	-139.	339.	796.	263.	-0.	46.	-.0038	.0213	.0144	.1173	.0598	.0370	811.		
.0990	-159.	230.	678.	224.	-0.	52.	-.0051	.0191	.0116	.1075	.0386	.0454	699.		
.1000	-289.	29.	620.	205.	-0.	95.	-.0061	.0166	.0080	.1013	.0137	.0562	686.		
.1010	-527.	-198.	591.	195.	0.	174.	-.0066	.0142	.0040	.0953	-.0111	.0691	795.		
.1020	-776.	-378.	512.	169.	0.	256.	-.0067	.0119	.0000	.0833	-.0309	.0823	933.		
.1030	-980.	-479.	346.	114.	0.	324.	-.0063	.0099	-.0037	.0625	-.0436	.0947	1044.		
.1040	-1182.	-523.	135.	45.	-0.	390.	-.0052	.0083	-.0072	.0363	-.0507	.1069	1194.		
.1050	-1415.	-574.	-65.	-22.	-0.	467.	-.0032	.0070	-.0108	.0095	-.0550	.1190	1422.		
.1060	-1626.	-650.	-244.	-81.	-0.	537.	-.0004	.0062	-.0144	-.0155	-.0586	.1280	1651.		
.1070	-1712.	-691.	-423.	-140.	-0.	565.	.0031	.0058	-.0180	-.0383	-.0633	.1295	1770.		
.1080	-1619.	-639.	-613.	-202.	0.	534.	.0070	.0060	-.0213	-.0591	-.0692	.1205	1738.		
.1090	-1384.	-540.	-798.	-263.	0.	457.	.0115	.0066	-.0244	-.0774	-.0750	.1030	1604.		
.1100	-1016.	-512.	-992.	-327.	0.	335.	.0165	.0076	-.0270	-.0927	-.0789	.0803	1425.		
.1110	-540.	-385.	-1198.	-395.	0.	178.	.0217	.0089	-.0288	-.1082	-.0798	.0508	1319.		
.1120	2.	-116.	-1406.	-464.	0.	-1.	.0268	.0105	-.0297	-.1245	-.0773	.0153	1411.		
.1130	528.	84.	-1575.	-520.	-0.	-174.	.0320	.0122	-.0298	-.1374	-.0728	-.0193	1667.		
.1140	977.	161.	-1667.	-550.	-0.	-323.	.0369	.0138	-.0293	-.1430	-.0692	-.0498	1940.		
.1150	1373.	247.	-1684.	-556.	-0.	-453.	.0413	.0152	-.0280	-.1421	-.0678	-.0788	2181.		
.1160	1745.	342.	-1639.	-541.	-0.	-576.	.0446	.0165	-.0258	-.1364	-.0675	-.1069	2403.		
.1170	2028.	359.	-1509.	-498.	-0.	-669.	.0469	.0175	-.0229	-.1247	-.0671	-.1309	2537.		
.1180	2142.	263.	-1272.	-420.	-0.	-707.	.0483	.0183	-.0195	-.1055	-.0661	-.1471	2500.		
.1190	2111.	203.	-972.	-321.	0.	-697.	.0487	.0188	-.0153	-.0854	-.0598	-.1563	2333.		
.1200	1998.	170.	-681.	-225.	-0.	-659.	.0481	.0192	-.0100	-.0702	-.0444	-.1579	2119.		
.1210	1787.	70.	-414.	-137.	0.	-590.	.0467	.0195	-.0041	-.0582	-.0217	-.1499	1841.		

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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
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ENGLISH UNITS

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

SECTION 58 MEMBER 1 SEQUENCE 83 LOCATION END TYPE VA

.1120	2.	-116.	1408.	-464.	0.	-1.	.0268	.0105	-.0277	-.1245	-.0773	.0153	1411.
.1130	528.	84.	-1575.	-520.	-0.	-174.	.0320	.0122	-.0298	-.1374	-.0728	-.0193	1667.
.1140	977.	161.	-1667.	-550.	-0.	-323.	.0369	.0138	-.0293	-.1430	-.0692	-.0498	1940.
.1150	1373.	247.	-1684.	-556.	-0.	-453.	.0413	.0152	-.0280	-.1421	-.0678	-.0788	2181.
.1160	1745.	342.	-1639.	-541.	-0.	-576.	.0446	.0165	-.0258	-.1364	-.0675	-.1069	2403.
.1170	2028.	359.	-1509.	-498.	-0.	-669.	.0469	.0175	-.0229	-.1247	-.0571	-.1309	2537.
.1180	2142.	263.	-1272.	-420.	-0.	-707.	.0483	.0183	-.0195	-.1055	-.0661	-.1471	2500.
.1190	2111.	203.	-972.	-321.	0.	-697.	.0487	.0188	-.0153	-.0854	-.0598	-.1563	2333.
.1200	1998.	170.	-681.	-225.	-0.	-659.	.0481	.0192	-.0100	-.0702	-.0444	-.1579	2119.
.1210	1787.	70.	-414.	-137.	0.	-590.	.0467	.0195	-.0041	-.0582	-.0217	-.1499	1841.

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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	58	MEMBER	1	SEQUENCE	83	LOCATION	END	TYPE	VA					STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ		(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
.1220	1450.	14.	-153.	-50.	-0.	-479.	.0446	.0197	.0022	-.0473	.0038	-.1349	1464.	
.1230	1043.	-12.	108.	36.	-0.	-344.	.0417	.0200	.0085	-.0354	.0280	-.1157	1053.	
.1240	640.	-55.	369.	122.	-0.	-211.	.0382	.0202	.0144	-.0209	.0472	-.0957	741.	
.1250	235.	-134.	663.	219.	-0.	-77.	.0342	.0204	.0196	.0004	.0561	-.0771	706.	
.1260	-200.	-274.	1016.	335.	-0.	66.	.0300	.0208	.0235	.0318	.0527	-.0591	1040.	
.1270	-619.	-440.	1388.	458.	-0.	204.	.0261	.0214	.0263	.0668	.0432	-.0410	1526.	
.1280	-942.	-652.	1691.	558.	0.	311.	.0226	.0223	.0284	.0981	.0342	-.0227	1943.	
.1290	-1134.	-744.	1847.	610.	0.	374.	.0196	.0237	.0299	.1196	.0288	-.0079	2176.	
.1300	-1206.	-599.	1832.	604.	0.	398.	.0170	.0255	.0310	.1283	.0284	.0019	2201.	
.1310	-1166.	-358.	1654.	546.	0.	385.	.0153	.0278	.0317	.1239	.0344	.0102	2032.	
.1320	-1040.	-82.	1358.	448.	0.	343.	.0143	.0303	.0321	.1081	.0451	.0178	1717.	
.1330	-891.	199.	1021.	337.	-0.	294.	.0139	.0329	.0317	.0890	.0528	.0237	1360.	
.1340	-763.	457.	719.	237.	-0.	252.	.0141	.0352	.0303	.0738	.0521	.0276	1052.	
.1350	-625.	586.	482.	159.	-0.	206.	.0147	.0373	.0280	.0647	.0438	.0310	792.	
.1360	-432.	576.	298.	98.	-0.	143.	.0157	.0388	.0249	.0604	.0302	.0329	527.	
.1370	-210.	620.	159.	52.	-0.	69.	.0167	.0400	.0216	.0585	.0130	.0295	264.	
.1380	-58.	677.	79.	26.	0.	19.	.0177	.0407	.0179	.0588	-.0043	.0255	98.	
.1390	-26.	609.	54.	18.	0.	9.	.0193	.0408	.0143	.0580	-.0154	.0288	60.	
.1400	-56.	436.	27.	9.	0.	18.	.0215	.0406	.0110	.0514	-.0169	.0400	62.	
.1410	-59.	333.	-59.	-20.	0.	19.	.0238	.0400	.0083	.0380	-.0124	.0525	84.	
.1420	-38.	404.	-182.	-60.	0.	13.	.0259	.0392	.0059	.0206	-.0066	.0619	187.	
.1430	-73.	425.	-254.	-84.	-0.	24.	.0282	.0380	.0034	.0064	-.0021	.0732	266.	
.1440	-168.	285.	-240.	-79.	-0.	55.	.0307	.0366	.0006	-.0013	-.0010	.0873	294.	
.1450	-218.	127.	-191.	-63.	-0.	72.	.0331	.0350	-.0023	-.0041	-.0054	.0974	290.	
.1460	-144.	54.	-160.	-53.	0.	48.	.0351	.0332	-.0052	-.0045	-.0149	.0998	216.	
.1470	9.	19.	-142.	-47.	0.	-3.	.0368	.0315	-.0080	-.0050	-.0248	.0980	143.	
.1480	173.	-99.	-132.	-44.	0.	-57.	.0385	.0297	-.0107	-.0064	-.0318	.0971	219.	
.1490	362.	-146.	-182.	-60.	0.	-119.	.0399	.0280	-.0128	-.0129	-.0351	.0933	406.	
.1500	625.	28.	-346.	-114.	0.	-206.	.0406	.0264	-.0141	-.0287	-.0345	.0828	718.	
.1510	957.	267.	-610.	-201.	0.	-316.	.0405	.0247	-.0145	-.0530	-.0290	.0696	1139.	
.1520	1285.	432.	-906.	-299.	0.	-424.	.0397	.0229	-.0141	-.0821	-.0198	.0570	1578.	
.1530	1529.	524.	-1156.	-381.	0.	-504.	.0379	.0207	-.0132	-.1090	-.0124	.0431	1924.	
.1540	1649.	622.	-1301.	-429.	0.	-544.	.0348	.0182	-.0120	-.1287	-.0110	.0250	2108.	
.1550	1675.	622.	-1333.	-440.	0.	-553.	.0304	.0151	-.0104	-.1397	-.0144	.0057	2149.	
.1560	1677.	435.	-1288.	-425.	0.	-553.	.0248	.0117	-.0084	-.1440	-.0196	-.0130	2123.	
.1570	1652.	262.	-1197.	-395.	0.	-545.	.0178	.0080	-.0056	-.1455	-.0256	-.0347	2048.	
.1580	1494.	119.	-1032.	-340.	0.	-493.	.0096	.0041	-.0023	-.1427	-.0323	-.0570	1822.	
.1590	1142.	-161.	-784.	-259.	0.	-377.	.0009	.0001	.0014	-.1358	-.0365	-.0727	1391.	

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	50	MEMBER	1	SEQUENCE	83	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)	
.1600	699.	-529.	-523.	-173.	-0.	-231.		-.0082	-.0037	.0057	-.1303	-.0346	-.0827	876.	
.1610	285.	-751.	-318.	-105.	-0.	-94.		-.0179	-.0071	.0107	-.1285	-.0287	-.0939	429.	
.1620	-103.	-813.	-153.	-50.	-0.	34.		-.0277	-.0099	.0159	-.1264	-.0221	-.1065	184.	
.1630	-536.	-891.	48.	16.	-0.	177.		-.0371	-.0122	.0208	-.1195	-.0143	-.1144	541.	
.1640	-1033.	-1105.	320.	106.	-0.	341.		-.0455	-.0137	.0250	-.1045	-.0054	-.1143	1085.	
.1650	-1498.	-1296.	620.	205.	-0.	494.		-.0529	-.0145	.0284	-.0824	.0019	-.1121	1628.	
.1660	-1837.	-1289.	885.	292.	-0.	605.		-.0595	-.0143	.0312	-.0570	.0076	-.1134	2044.	
.1670	-2044.	-1225.	1111.	367.	-0.	675.		-.0646	-.0132	.0331	-.0286	.0131	-.1139	2335.	
.1680	-2185.	-1176.	1314.	434.	-0.	721.		-.0680	-.0112	.0339	.0029	.0191	-.1099	2559.	
.1690	-2240.	-1054.	1469.	485.	-0.	739.		-.0696	-.0084	.0336	.0359	.0237	-.1037	2689.	
.1700	-2145.	-762.	1535.	506.	-0.	708.		-.0697	-.0048	.0324	.0669	.0264	-.0993	2648.	
.1710	-1902.	-368.	1518.	501.	-0.	628.		-.0683	-.0008	.0304	.0945	.0284	-.0949	2443.	
.1720	-1567.	-51.	1463.	483.	-0.	517.		-.0653	.0035	.0272	.1218	.0292	-.0863	2152.	
.1730	-1158.	270.	1379.	455.	-0.	382.		-.0611	.0078	.0232	.1468	.0287	-.0769	1807.	
.1740	-670.	657.	1255.	414.	-0.	221.		-.0563	.0118	.0185	.1674	.0270	-.0696	1428.	
.1750	-131.	1033.	1095.	361.	-0.	43.		-.0511	.0153	.0132	.1826	.0253	-.0620	1107.	
.1760	409.	1338.	910.	300.	0.	-135.		-.0457	.0179	.0078	.1901	.0255	-.0515	1002.	
.1770	896.	1544.	705.	233.	-0.	-296.		-.0403	.0196	.0023	.1891	.0273	-.0373	1144.	
.1780	1274.	1712.	489.	162.	0.	-420.		-.0354	.0202	-.0031	.1791	.0295	-.0207	1370.	
.1790	1510.	1773.	280.	92.	-0.	-498.		-.0312	.0194	-.0082	.1612	.0313	-.0004	1541.	
.1800	1627.	1601.	74.	24.	-0.	-537.		-.0279	.0174	-.0130	.1352	.0337	.0232	1635.	
.1810	1660.	1535.	-136.	-45.	-0.	-548.		-.0258	.0142	-.0171	.1008	.0358	.0456	1672.	
.1820	1602.	1333.	-331.	-109.	-0.	-529.		-.0251	.0099	-.0209	.0620	.0355	.0650	1642.	
.1830	1436.	1040.	-487.	-161.	0.	-474.		-.0257	.0046	-.0242	.0211	.0332	.0824	1522.	
.1840	1187.	617.	-607.	-200.	0.	-392.		-.0274	-.0014	-.0271	-.0214	.0309	.0985	1338.	
.1850	894.	145.	-714.	-236.	0.	-295.		-.0301	-.0078	-.0293	-.0651	.0283	.1112	1148.	
.1860	566.	-261.	-824.	-272.	0.	-187.		-.0339	-.0142	-.0311	-.1091	.0244	.1180	1003.	
.1870	197.	-657.	-930.	-307.	0.	-65.		-.0382	-.0204	-.0323	-.1507	.0191	.1210	955.	
.1880	-201.	-1054.	-1032.	-340.	0.	66.		-.0428	-.0261	-.0331	-.1891	.0133	.1216	1055.	
.1890	-589.	-1394.	-1134.	-374.	-0.	194.		-.0475	-.0310	-.0334	-.2223	.0061	.1182	1283.	
.1900	-935.	-1617.	-1238.	-408.	-0.	309.		-.0522	-.0348	-.0335	-.2482	-.0035	.1090	1557.	
.1910	-1235.	-1737.	-1322.	-436.	-0.	407.		-.0564	-.0374	-.0332	-.2655	-.0141	.0952	1816.	
.1920	-1482.	-1832.	-1371.	-452.	-0.	489.		-.0599	-.0388	-.0326	-.2721	-.0239	.0796	2027.	
.1930	-1631.	-1833.	-1404.	-463.	-0.	538.		-.0625	-.0388	-.0317	-.2693	-.0316	.0607	2161.	
.1940	-1627.	-1642.	-1456.	-481.	-0.	537.		-.0643	-.0376	-.0303	-.2599	-.0361	.0358	2192.	
.1950	-1483.	-1291.	-1522.	-502.	0.	489.		-.0653	-.0351	-.0282	-.2444	-.0366	.0066	2133.	
.1960	-1266.	-886.	-1563.	-516.	-0.	418.		-.0653	-.0318	-.0255	-.2217	-.0331	-.0224	2019.	
.1970	-1010.	-460.	-1554.	-513.	-0.	333.		-.0642	-.0279	-.0222	-.1912	-.0271	-.0501	1860.	

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

.1060	166.	-261.	176.	-277.	0.	-187.	-.0329	-.0142	-.0311	-.1091	.0244	.1180	1003.
.1870	197.	-657.	-930.	-307.	0.	-65.	-.0482	-.0204	-.0323	-.1507	.0191	.1210	955.
.1880	-701.	-1054.	-1032.	-240.	0.	66.	-.0426	-.0267	-.0331	-.1891	.0133	.1216	1055.
.1890	-580.	-1394.	-1134.	-374.	-0.	194.	-.0475	-.0310	-.0334	-.2223	.0061	.1182	1283.
.1900	-935.	-1817.	-1230.	-408.	-0.	309.	-.0522	-.0348	-.0335	-.2482	-.0035	.1090	1557.
.1910	-1235.	-1777.	-1770.	-424.	-0.	407.	-.0564	-.0374	-.0332	-.2655	-.0141	.0952	1816.
.1920	-1480.	-1832.	-1271.	-450.	-0.	489.	-.0599	-.0388	-.0326	-.2721	-.0239	.0796	2027.
.1930	-1631.	-1833.	-1404.	-463.	-0.	538.	-.0625	-.0388	-.0317	-.2693	-.0315	.0607	2161.
.1940	-1627.	-1642.	-1456.	-401.	-0.	527.	-.0643	-.0376	-.0303	-.2599	-.0361	.0358	2192.
.1950	-1487.	-1291.	-1522.	-502.	0.	489.	-.0653	-.0351	-.0282	-.2444	-.0366	.0066	2133.
.1960	-1266.	-886.	-1563.	-516.	-0.	418.	-.0653	-.0318	-.0255	-.2217	-.0331	-.0224	2019.
.1970	-1010.	-460.	-1554.	-513.	-0.	323.	-.0642	-.0279	-.0222	-.1912	-.0271	-.0501	1860.

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S/RV PIPING KEWAUNEE GKHOOF 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	58	MEMBER	1	SEQUENCE	03	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)		
.1980	-713.	9.	-1489.	-491.	-0.	235.	-.0625	-.0237	-.0184	-.1532	-.0208	-.0775	1657.		
.1990	-380.	485.	-1351.	-446.	-0.	125.	-.0602	-.0196	-.0140	-.1076	-.0157	-.1044	1408.		
.2000	-54.	882.	-1107.	-365.	-0.	18.	-.0574	-.0158	-.0093	-.0539	-.0119	-.1281	1112.		
.2010	222.	1158.	-740.	-244.	-0.	-73.	-.0543	-.0128	-.0044	.0066	-.0091	-.1471	776.		
.2020	435.	1332.	-272.	-90.	-0.	-143.	-.0511	-.0106	.0008	.0705	-.0063	-.1616	514.		
.2030	596.	1423.	255.	84.	-0.	-197.	-.0479	-.0094	.0061	.1329	-.0017	-.1712	651.		
.2040	712.	1423.	794.	262.	-0.	-235.	-.0447	-.0093	.0117	.1884	.0071	-.1747	1071.		
.2050	773.	1341.	1310.	432.	0.	-255.	-.0415	-.0102	.0174	.2336	.0200	-.1717	1526.		
.2060	760.	1205.	1781.	588.	0.	-251.	-.0385	-.0121	.0228	.2672	.0351	-.1629	1944.		
.2070	680.	1075.	2190.	723.	-0.	-225.	-.0357	-.0149	.0277	.2889	.0499	-.1492	2302.		
.2080	567.	782.	2519.	821.	-0.	-186.	-.0331	-.0183	.0318	.2986	.0627	-.1313	2591.		
.2090	437.	480.	2759.	911.	-0.	-144.	-.0307	-.0223	.0348	.2973	.0715	-.1109	2804.		
.2100	311.	146.	2908.	960.	-0.	-103.	-.0286	-.0267	.0364	.2867	.0739	-.0898	2936.		
.2110	190.	-199.	2962.	977.	-0.	-63.	-.0268	-.0311	.0365	.2679	.0702	-.0690	2979.		
.2120	92.	-548.	2904.	958.	0.	-30.	-.0250	-.0353	.0351	.2404	.0619	-.0485	2916.		
.2130	44.	-853.	2704.	892.	-0.	-14.	-.0235	-.0391	.0323	.2027	.0512	-.0289	2714.		
.2140	52.	-1055.	2342.	773.	0.	-17.	-.0220	-.0422	.0284	.1542	.0393	-.0110	2352.		
.2150	84.	-1151.	1834.	605.	0.	-28.	-.0207	-.0446	.0236	.0961	.0273	.0062	1843.		
.2160	99.	-1188.	1216.	401.	0.	-33.	-.0193	-.0461	.0179	.0315	.0157	.0246	1225.		
.2170	87.	-1182.	526.	174.	0.	-29.	-.0179	-.0467	.0117	-.0358	.0039	.0439	535.		
.2180	67.	-1103.	-204.	-67.	-0.	-22.	-.0167	-.0465	.0051	-.1022	-.0092	.0619	215.		
.2190	38.	-960.	-924.	-305.	-0.	-12.	-.0157	-.0455	-.0016	-.1634	-.0242	.0774	928.		
.2200	-35.	-821.	-1570.	-518.	-0.	12.	-.0147	-.0438	-.0082	-.2146	-.0411	.0918	1576.		
.2210	-176.	-733.	-2097.	-692.	-0.	58.	-.0137	-.0415	-.0146	-.2530	-.0587	.1061	2112.		
.2220	-367.	-666.	-2500.	-825.	0.	121.	-.0126	-.0387	-.0202	-.2786	-.0754	.1195	2536.		
.2230	-575.	-579.	-2793.	-922.	0.	190.	-.0113	-.0354	-.0248	-.2932	-.0891	.1305	2862.		
.2240	-784.	-471.	-2983.	-984.	0.	259.	-.0098	-.0317	-.0279	-.2979	-.0978	.1392	3096.		
.2250	-999.	-360.	-3064.	-1011.	0.	330.	-.0078	-.0277	-.0296	-.2930	-.1008	.1460	3235.		
.2260	-1207.	-239.	-3033.	-1001.	-0.	398.	-.0053	-.0235	-.0297	-.2786	-.0984	.1501	3276.		
.2270	-1371.	-102.	-2891.	-954.	-0.	453.	-.0022	-.0191	-.0284	-.2545	-.0918	.1498	3212.		
.2280	-1457.	34.	-2640.	-871.	0.	481.	.0016	-.0147	-.0256	-.2205	-.0822	.1443	3027.		
.2290	-1451.	142.	-2275.	-751.	-0.	479.	.0059	-.0103	-.0217	-.1764	-.0707	.1332	2709.		
.2300	-1352.	217.	-1800.	-594.	0.	446.	.0109	-.0061	-.0169	-.1226	-.0586	.1161	2260.		
.2310	-1151.	279.	-1244.	-410.	0.	380.	.0164	-.0020	-.0113	-.0618	-.0462	.0926	1701.		
.2320	-834.	345.	-650.	-215.	0.	275.	.0222	.0018	-.0051	.0019	-.0326	.0632	1062.		
.2330	-403.	427.	-68.	-22.	0.	133.	.0282	.0054	.0016	.0638	-.0170	.0291	411.		
.2340	117.	533.	472.	156.	0.	-37.	.0342	.0086	.0086	.1205	.0006	-.0080	487.		
.2350	665.	659.	952.	314.	0.	-219.	.0400	.0114	.0157	.1697	.0200	-.0460	1166.		

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ADLPIPE STRESS ANALYSIS

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S/RV PIPING KEWAUNEE GKHOOF 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

.2250	-299.	-360.	3064.	-1011.	0.	370.	-.0078	-.0277	-.0296	-.2930	-.1008	.1460	3235.
.2260	-1207.	-279.	-3030.	-1001.	-0.	398.	-.0053	-.0255	-.0297	-.2786	-.0984	.1501	3276.
.2270	-1371.	-102.	-2791.	-954.	-0.	453.	-.0022	-.0191	-.0284	-.2545	-.0918	.1498	3212.
.2280	-1457.	34.	-2740.	-871.	0.	481.	.0016	-.0147	-.0256	-.2205	-.0822	.1443	3027.
.2290	-1451.	142.	-2275.	-751.	-0.	479.	.0059	-.0103	-.0217	-.1764	-.0707	.1332	2709.
.2300	-1352.	217.	-1000.	-504.	0.	446.	.0109	-.0061	-.0169	-.1226	-.0586	.1161	2260.
.2310	-1151.	279.	-1244.	-410.	0.	380.	.0164	-.0020	-.0113	-.0618	-.0462	.0926	1701.
.2320	-834.	345.	-650.	-215.	0.	275.	.0222	.0018	-.0051	.0019	-.0326	.0632	1062.
.2330	-403.	427.	-68.	-22.	0.	133.	.0282	.0054	.0016	.0638	-.0170	.0291	411.
.2340	110.	533.	472.	156.	0.	-37.	.0342	.0086	.0086	.1205	.0006	-.0080	487.
.2350	661.	659.	652.	314.	0.	-219.	.0400	.0114	.0157	.1697	.0200	-.0460	1166.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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S/RV PIPING KEWAUNEE CKN00F 2 RUF 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	50	MEMBER	1	SEQUENCE	83	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)		
.2360	1214.	794.	1365.	450.	0.	-401.	.0453	.0137	.0227	.2101	.0404	-.0827	1834.		
.2370	1733.	889.	1706.	563.	-0.	-572.	.0499	.0155	.0293	.2409	.0608	-.1166	2441.		
.2380	2202.	972.	1972.	651.	-0.	-727.	.0534	.0165	.0353	.2622	.0797	-.1471	2967.		
.2390	2587.	1024.	2171.	716.	-0.	-854.	.0556	.0169	.0404	.2745	.0957	-.1733	3390.		
.2400	2841.	1016.	2310.	765.	-0.	-938.	.0563	.0165	.0445	.2789	.1078	-.1932	3681.		
.2410	2931.	921.	2418.	798.	-0.	-967.	.0555	.0154	.0474	.2758	.1156	-.2050	3815.		
.2420	2854.	760.	2460.	812.	0.	-942.	.0532	.0136	.0491	.2647	.1189	-.2084	3782.		
.2430	2625.	569.	2424.	800.	-0.	-866.	.0495	.0113	.0496	.2449	.1181	-.2038	3587.		
.2440	2260.	362.	2302.	760.	0.	-746.	.0444	.0087	.0489	.2165	.1135	-.1915	3238.		
.2450	1767.	138.	2104.	694.	0.	-583.	.0384	.0057	.0471	.1810	.1055	-.1716	2757.		
.2460	1166.	-94.	1842.	608.	-0.	-385.	.0315	.0028	.0442	.1401	.0943	-.1453	2188.		
.2470	497.	-316.	1528.	504.	-0.	-164.	.0243	-.0001	.0402	.0959	.0803	-.1143	1613.		
.2480	-191.	-523.	1173.	387.	-0.	63.	.0170	-.0028	.0353	.0503	.0640	-.0802	1192.		
.2490	-855.	-712.	787.	260.	-0.	282.	.0100	-.0050	.0295	.0053	.0462	-.0446	1167.		
.2500	-1465.	-863.	387.	128.	-0.	484.	.0037	-.0066	.0231	-.0375	.0273	-.0092	1521.		
.2510	-2006.	-961.	-13.	-4.	-0.	662.	-.0016	-.0076	.0162	-.0764	.0080	.0248	2014.		
.2520	-2464.	-1015.	-398.	-131.	-0.	813.	-.0055	-.0079	.0090	-.1104	-.0109	.0569	2506.		
.2530	-2816.	-1028.	-763.	-252.	-0.	929.	-.0078	-.0075	.0018	-.1389	-.0285	.0863	2928.		
.2540	-3034.	-987.	-1104.	-364.	-0.	1001.	-.0082	-.0063	-.0052	-.1617	-.0440	.1119	3241.		
.2550	-3105.	-887.	-1408.	-465.	0.	1025.	-.0069	-.0044	-.0118	-.1782	-.0570	.1321	3422.		
.2560	-3031.	-744.	-1658.	-547.	-0.	1000.	-.0037	-.0018	-.0178	-.1873	-.0671	.1466	3468.		
.2570	-2821.	-578.	-1834.	-605.	0.	931.	.0012	.0013	-.0231	-.1884	-.0740	.1550	3377.		
.2580	-2474.	-396.	-1932.	-638.	-0.	816.	.0077	.0047	-.0277	-.1817	-.0776	.1568	3151.		
.2590	-1992.	-201.	-1960.	-647.	0.	657.	.0154	.0085	-.0313	-.1682	-.0778	.1517	2805.		
.2600	-1403.	-1.	-1917.	-633.	-0.	463.	.0240	.0124	-.0338	-.1490	-.0749	.1404	2385.		
.2610	-760.	178.	-1800.	-594.	-0.	251.	.0332	.0163	-.0353	-.1250	-.0690	.1244	1961.		
.2620	-100.	318.	-1611.	-532.	-0.	35.	.0427	.0201	-.0358	-.0972	-.0609	.1054	1621.		
.2630	532.	427.	-1370.	-452.	0.	-176.	.0519	.0236	-.0353	-.0674	-.0511	.0839	1475.		
.2640	1146.	517.	-1096.	-362.	0.	-378.	.0606	.0268	-.0339	-.0375	-.0599	.0605	1592.		
.2650	1705.	576.	-798.	-263.	0.	-563.	.0683	.0296	-.0316	-.0083	-.0278	.0365	1890.		
.2660	2161.	590.	-473.	-156.	0.	-713.	.0748	.0320	-.0288	.0199	-.0155	.0137	2221.		
.2670	2485.	523.	-126.	-41.	0.	-820.	.0799	.0340	-.0255	.0467	-.0036	-.0066	2498.		
.2680	2680.	422.	219.	72.	0.	-884.	.0834	.0357	-.0220	.0708	.0076	-.0239	2699.		
.2690	2760.	305.	532.	176.	0.	-911.	.0851	.0370	-.0184	.0905	.0177	-.0385	2822.		
.2700	2722.	189.	796.	263.	0.	-898.	.0850	.0382	-.0148	.1049	.0263	-.0496	2846.		
.2710	2545.	72.	1007.	332.	0.	-840.	.0833	.0392	-.0115	.1141	.0329	-.0563	2748.		
.2720	2237.	-53.	1158.	302.	0.	-778.	.0801	.0402	-.0086	.1182	.0372	-.0577	2528.		
.2730	1830.	-163.	1229.	406.	0.	-607.	.0757	.0412	-.0061	.1168	.0392	-.0550	2220.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/12/02.

18.29.25.

S/RV PIPING KEWAUNEE CKN00F 2 RUF 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

.2625	-15.	512.	1711.	-31.	-0.	35.	.7427	.0201	-.0358	-.0972	-.0609	.1054	1621.
.2630	530.	427.	-1270.	-452.	0.	-176.	.519	.0236	-.0353	-.0674	-.0511	.0839	1475.
.2640	1146.	517.	-1056.	-302.	0.	-378.	.606	.0268	-.0339	-.0375	-.0394	.0605	1592.
.2650	1701.	576.	-799.	-263.	0.	-563.	.683	.0296	-.0316	-.0083	-.0278	.0365	1890.
.2660	2161.	570.	-477.	-156.	0.	-713.	.748	.0320	-.0288	.0199	-.0155	.0137	2221.
.2670	2485.	503.	-126.	-61.	0.	-820.	.799	.0340	-.0255	.0467	-.0036	-.0066	2498.
.2680	2680.	422.	219.	72.	0.	-894.	.834	.0357	-.0220	.0708	.0076	-.0239	2699.
.2690	2760.	305.	532.	176.	0.	-911.	.851	.0370	-.0184	.0905	.0177	-.0385	2822.
.2700	2722.	189.	796.	263.	0.	-800.	.850	.0382	-.0148	.1049	.0263	-.0496	2846.
.2710	2545.	72.	1007.	332.	0.	-840.	.833	.0392	-.0115	.1141	.0329	-.0563	2748.
.2720	2237.	-53.	1158.	302.	0.	-778.	.801	.0402	-.0086	.1182	.0372	-.0577	2528.
.2730	1938.	-163.	1229.	406.	0.	-607.	.757	.0412	-.0061	.1168	.0392	-.0550	2220.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.25.

S/RV PIPING KEWAUNEE CRK00F 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	58	MEMBER	1	SEQUENCE	03	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)
.2740	1392.	-224.	1213.	400.	0.	-459.	.0701	.0423	-.0041	.1096	.0390	-.0498	1854.	
.2750	914.	-238.	1124.	371.	0.	-301.	.0637	.0437	-.0027	.0982	.0363	-.0427	1454.	
.2760	407.	-236.	966.	325.	0.	-123.	.0569	.0452	-.0020	.0849	.0313	-.0333	1070.	
.2770	-107.	-223.	810.	267.	0.	35.	.0500	.0468	-.0019	.0705	.0244	-.0223	820.	
.2780	-558.	-167.	585.	193.	0.	184.	.0431	.0486	-.0022	.0547	.0165	-.0117	812.	
.2790	-918.	-49.	315.	104.	0.	303.	.0366	.0506	-.0028	.0373	.0083	-.0027	974.	
.2800	-1201.	104.	26.	9.	0.	396.	.0307	.0525	-.0037	.0201	.0000	.0050	1206.	
.2810	-1424.	255.	-252.	-83.	0.	470.	.0257	.0544	-.0046	.0045	-.0078	.0124	1451.	
.2820	-1562.	407.	-511.	-169.	0.	516.	.0217	.0560	-.0055	-.0092	-.0145	.0187	1650.	
.2830	-1581.	582.	-753.	-249.	0.	522.	.0185	.0573	-.0060	-.0213	-.0198	.0219	1758.	
.2840	-1492.	767.	-953.	-314.	0.	493.	.0163	.0582	-.0063	-.0304	-.0238	.0222	1777.	
.2850	-1352.	902.	-1065.	-351.	0.	446.	.0151	.0585	-.0062	-.0339	-.0269	.0214	1728.	
.2860	-1190.	946.	-1067.	-352.	0.	393.	.0149	.0582	-.0059	-.0305	-.0292	.0209	1605.	
.2870	-990.	929.	-974.	-322.	0.	327.	.0155	.0572	-.0052	-.0215	-.0305	.0199	1394.	
.2880	-742.	890.	-509.	-267.	0.	245.	.0167	.0555	-.0040	-.0086	-.0302	.0175	1102.	
.2890	-484.	815.	-572.	-189.	0.	160.	.0184	.0531	-.0026	.0077	-.0289	.0153	752.	
.2900	-264.	668.	-265.	-87.	0.	87.	.0207	.0502	-.0010	.0269	-.0260	.0156	375.	
.2910	-90.	467.	89.	29.	0.	30.	.0232	.0469	.0006	.0474	-.0216	.0186	127.	
.2920	67.	270.	440.	148.	0.	-22.	.0260	.0432	.0022	.0668	-.0161	.0228	455.	
.2930	223.	98.	784.	259.	0.	-74.	.0286	.0393	.0037	.0837	-.0099	.0274	818.	
.2940	362.	-71.	1089.	359.	0.	-120.	.0312	.0354	.0047	.0983	-.0040	.0330	1152.	
.2950	469.	-244.	1750.	448.	0.	-155.	.0335	.0316	.0050	.1107	.0004	.0398	1443.	
.2960	556.	-389.	1572.	519.	0.	-184.	.0355	.0279	.0045	.1202	.0022	.0464	1674.	
.2970	655.	-480.	1697.	560.	0.	-216.	.0370	.0246	.0032	.1250	.0010	.0517	1826.	
.2980	777.	-513.	1713.	565.	0.	-256.	.0378	.0216	.0012	.1238	-.0030	.0553	1888.	
.2990	901.	-494.	1621.	535.	-0.	-297.	.0380	.0190	-.0017	.1161	-.0096	.0576	1862.	
.3000	1000.	-427.	1428.	471.	0.	-370.	.0374	.0168	-.0052	.1020	-.0185	.0592	1750.	
.3010	1077.	-313.	1137.	375.	0.	-354.	.0361	.0149	-.0092	.0810	-.0288	.0600	1569.	
.3020	1136.	-156.	749.	247.	0.	-375.	.0339	.0132	-.0135	.0528	-.0394	.0597	1366.	
.3030	1190.	36.	283.	92.	0.	-393.	.0308	.0116	-.0178	.0181	-.0499	.0579	1228.	
.3040	1207.	238.	-210.	-72.	0.	-397.	.0267	.0099	-.0220	-.0205	-.0602	.0552	1227.	
.3050	1140.	405.	-709.	-234.	-0.	-376.	.0218	.0081	-.0258	-.0602	-.0705	.0526	1347.	
.3060	1007.	511.	-1161.	-383.	-0.	-371.	.0162	.0060	-.0292	-.0993	-.0801	.0504	1540.	
.3070	824.	570.	-1567.	-517.	-0.	-272.	.0098	.0035	-.0317	-.1372	-.0885	.0476	1777.	
.3080	611.	598.	-1914.	-632.	-0.	-202.	.0028	.0007	-.0332	-.1729	-.0951	.0434	2016.	
.3090	341.	570.	-2168.	-716.	0.	-113.	-.0047	-.0026	-.0336	-.2042	-.0998	.0390	2204.	
.3100	1.	456.	-2307.	-761.	-0.	0.	-.0122	-.0063	-.0329	-.2291	-.1018	.0357	2316.	
.3110	-375.	272.	-2333.	-770.	0.	124.	-.0197	-.0103	-.0310	-.2474	-.1004	.0331	2372.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.25.

S/RV PIPING KEWAUNEE CRK00F 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

.3010	1077.	-313.	1137.	375.	0.	-354.	.0361	.0149	-.0092	.0810	-.0288	.0600	1569.
.3020	1137.	-156.	749.	247.	0.	-375.	.0339	.0132	-.0175	.0528	-.0394	.0597	1366.
.3030	1190.	36.	383.	92.	0.	-393.	.0308	.0116	-.0178	.0181	-.0499	.0579	1228.
.3040	1207.	278.	-210.	-72.	0.	-397.	.0267	.0099	-.0220	-.0205	-.0602	.0552	1227.
.3050	1140.	405.	-709.	-224.	-0.	-376.	.0218	.0081	-.0258	-.0602	-.0705	.0526	1347.
.3060	1007.	511.	-1161.	-303.	-0.	-321.	.0162	.0060	-.0292	-.0993	-.0801	.0504	1540.
.3070	824.	570.	-1567.	-517.	-0.	-272.	.0098	.0035	-.0317	-.1372	-.0885	.0476	1777.
.3080	611.	598.	-1914.	-632.	-0.	-202.	.0028	.0007	-.0332	-.1729	-.0951	.0434	2016.
.3090	341.	570.	-2168.	-716.	0.	-113.	-.0047	-.0026	-.0336	-.2042	-.0998	.0390	2204.
.3100	1.	456.	-2307.	-761.	-0.	0.	-.0122	-.0063	-.0329	-.2291	-.1018	.0357	2316.
.3110	-375.	272.	-2732.	-770.	0.	124.	-.0197	-.0103	-.0310	-.2474	-.1004	.0331	2372.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/3/12/02. 18.29.25.

S/RV PIPING KEWAUNEE CKW00F 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	58	MEMBER	1	SEQUENCE	03	LOCATION	END	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	FX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3120	-736.	70.	-2265.	-747.	-0.	243.	-.0269	-.0145	-.0278	-.2590	-.0955	.0293	2390.		
.3130	-1059.	-134.	-2104.	-694.	-0.	349.	-.0336	-.0187	-.0236	-.2630	-.0875	.0241	2365.		
.3140	-1355.	-363.	-1839.	-607.	-0.	447.	-.0395	-.0228	-.0185	-.2579	-.0768	.0186	2294.		
.3150	-1622.	-621.	-1474.	-487.	-0.	535.	-.0444	-.0265	-.0128	-.2429	-.0640	.0134	2200.		
.3160	-1921.	-861.	-1041.	-344.	-0.	601.	-.0482	-.0298	-.0067	-.2192	-.0497	.0074	2106.		
.3170	-2216.	-1038.	-578.	-191.	-0.	632.	-.0507	-.0324	-.0004	-.1886	-.0344	-.0004	2008.		
.3180	-1902.	-1152.	-107.	-35.	-0.	628.	-.0520	-.0343	.0058	-.1523	-.0182	-.0092	1912.		
.3190	-1802.	-1214.	362.	119.	-0.	595.	-.0519	-.0353	.0118	-.1111	-.0016	-.0179	1845.		
.3200	-1628.	-1213.	810.	267.	-0.	537.	-.0505	-.0354	.0171	-.0664	.0147	-.0260	1825.		
.3210	-1367.	-1126.	1207.	398.	-0.	451.	-.0479	-.0346	.0217	-.0204	.0302	-.0343	1831.		
.3220	-1011.	-953.	1530.	505.	-0.	334.	-.0444	-.0331	.0255	.0245	.0448	-.0427	1841.		
.3230	-583.	-715.	1774.	585.	-0.	192.	-.0403	-.0308	.0283	.0671	.0580	-.0504	1874.		
.3240	-131.	-436.	1947.	642.	-0.	43.	-.0356	-.0281	.0300	.1066	.0689	-.0568	1959.		
.3250	307.	-137.	2052.	677.	0.	-101.	-.0308	-.0251	.0306	.1419	.0771	-.0609	2083.		
.3260	719.	166.	2083.	687.	-0.	-237.	-.0260	-.0220	.0301	.1713	.0826	-.0624	2212.		
.3270	1090.	466.	2029.	670.	-0.	-362.	-.0217	-.0190	.0286	.1926	.0857	-.0615	2316.		
.3280	1414.	750.	1900.	627.	-0.	-467.	-.0179	-.0165	.0263	.2051	.0864	-.0579	2378.		
.3290	1623.	987.	1710.	567.	0.	-536.	-.0150	-.0145	.0232	.2091	.0844	-.0508	2372.		
.3300	1704.	1143.	1499.	495.	0.	-562.	-.0130	-.0132	.0195	.2048	.0802	-.0398	2279.		
.3310	1677.	1218.	1245.	411.	0.	-552.	-.0120	-.0128	.0153	.1920	.0741	-.0255	2094.		
.3320	1556.	1232.	955.	315.	0.	-513.	-.0121	-.0132	.0109	.1704	.0664	-.0098	1833.		
.3330	1354.	1187.	643.	212.	0.	-447.	-.0132	-.0146	.0063	.1414	.0572	.0067	1505.		
.3340	1056.	1058.	335.	110.	0.	-348.	-.0151	-.0167	.0017	.1070	.0468	.0243	1112.		
.3350	674.	841.	40.	13.	0.	-223.	-.0178	-.0197	-.0028	.0686	.0358	.0429	678.		
.3360	254.	577.	-248.	-82.	0.	-84.	-.0209	-.0232	-.0071	.0268	.0246	.0607	356.		
.3370	-166.	304.	-534.	-176.	0.	55.	-.0243	-.0270	-.0110	-.0172	.0137	.0762	561.		
.3380	-572.	23.	-804.	-265.	0.	189.	-.0277	-.0311	-.0145	-.0612	.0034	.0892	990.		
.3390	-965.	-276.	-1038.	-343.	0.	318.	-.0308	-.0351	-.0175	-.1025	-.0061	.1000	1422.		
.3400	-1317.	-570.	-1231.	-406.	0.	435.	-.0334	-.0389	-.0200	-.1392	-.0147	.1079	1810.		
.3410	-1589.	-821.	-1390.	-459.	0.	524.	-.0353	-.0422	-.0221	-.1703	-.0222	.1113	2120.		
.3420	-1756.	-1011.	-1516.	-500.	0.	579.	-.0364	-.0449	-.0235	-.1947	-.0284	.1099	2329.		
.3430	-1921.	-1150.	-1598.	-527.	0.	601.	-.0366	-.0469	-.0244	-.2107	-.0330	.1043	2431.		
.3440	-1794.	-1238.	-1629.	-537.	0.	592.	-.0356	-.0479	-.0248	-.2176	-.0360	.0950	2432.		
.3450	-1675.	-1255.	-1613.	-532.	0.	553.	-.0337	-.0481	-.0246	-.2153	-.0371	.0820	2334.		
.3460	-1459.	-1193.	-1561.	-515.	0.	481.	-.0308	-.0473	-.0238	-.2047	-.0361	.0655	2145.		
.3470	-1152.	-1060.	-1478.	-488.	0.	380.	-.0271	-.0457	-.0225	-.1862	-.0329	.0464	1881.		
.3480	-783.	-872.	-1358.	-448.	0.	258.	-.0228	-.0433	-.0206	-.1605	-.0276	.0255	1573.		
.3490	-388.	-644.	-1192.	-393.	0.	128.	-.0180	-.0403	-.0182	-.1276	-.0209	.0040	1259.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/3/12/02. 18.29.26.

S/RV PIPING KEWAUNEE CKW00F 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

.3390	-965.	-276.	-1030.	-343.	0.	318.	-.0308	-.0351	-.0175	-.1025	-.0061	.1000	1422.
.3400	-1317.	-570.	-1231.	-406.	0.	435.	-.0334	-.0389	-.0200	-.1392	-.0147	.1079	1810.
.3410	-1580.	-821.	-1390.	-459.	0.	524.	-.0353	-.0422	-.0271	-.1703	-.0222	.1113	2120.
.3420	-1757.	-1011.	-1516.	-500.	0.	579.	-.0364	-.0449	-.0235	-.1947	-.0284	.1099	2329.
.3430	-1921.	-1150.	-1598.	-527.	0.	601.	-.0366	-.0469	-.0244	-.2107	-.0330	.1043	2431.
.3440	-1794.	-1238.	-1620.	-537.	0.	592.	-.0350	-.0479	-.0248	-.2176	-.0360	.0950	2432.
.3450	-1675.	-1255.	-1613.	-532.	0.	553.	-.0337	-.0481	-.0246	-.2153	-.0371	.0820	2334.
.3460	-1459.	-1193.	-1561.	-515.	0.	481.	-.0308	-.0473	-.0238	-.2047	-.0361	.0655	2145.
.3470	-1152.	-1060.	-1478.	-488.	0.	380.	-.0271	-.0457	-.0225	-.1862	-.0329	.0464	1881.
.3480	-787.	-872.	-1350.	-448.	0.	258.	-.0228	-.0433	-.0206	-.1605	-.0276	.0255	1573.
.3490	-388.	-644.	-1192.	-393.	0.	128.	-.0180	-.0403	-.0182	-.1276	-.0209	.0040	1259.

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ADLPIPE STRESS ANALYSIS

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18.29.26.

S/RV PIPING KEWAUNEE GKWOEF 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	58	MEMBER	1	SEQUENCE	03	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)	
.3500	9.	-397.	-980.	-324.	0.	-3.		-.0129	-.0368	-.0155	-.0885	-.0131	-.0173	984.	
.3510	394.	-147.	-730.	-241.	0.	-130.		-.0078	-.0331	-.0124	-.0448	-.0045	-.0376	833.	
.3520	755.	98.	-440.	-148.	0.	-249.		-.0030	-.0293	-.0090	.0017	.0046	-.0563	882.	
.3530	1064.	328.	-143.	-47.	0.	-351.		.0015	-.0256	-.0054	.0495	.0139	-.0727	1078.	
.3540	1292.	520.	186.	61.	0.	-426.		.0053	-.0221	-.0018	.0972	.0229	-.0857	1310.	
.3550	1425.	658.	525.	173.	0.	-470.		.0086	-.0190	.0018	.1427	.0318	-.0945	1524.	
.3560	1474.	750.	853.	282.	0.	-486.		.0110	-.0164	.0053	.1838	.0404	-.0993	1709.	
.3570	1451.	811.	1140.	379.	0.	-479.		.0126	-.0144	.0085	.2186	.0483	-.1007	1858.	
.3580	1258.	835.	1404.	463.	0.	-448.		.0134	-.0130	.0114	.2461	.0551	-.0987	1960.	
.3590	1189.	808.	1617.	533.	0.	-392.		.0135	-.0121	.0138	.2661	.0605	-.0932	2014.	
.3600	961.	732.	1778.	587.	0.	-317.		.0129	-.0119	.0155	.2780	.0640	-.0846	2029.	
.3610	706.	634.	1872.	618.	-0.	-233.		.0118	-.0121	.0165	.2813	.0655	-.0742	2009.	
.3620	449.	530.	1888.	623.	0.	-148.		.0103	-.0128	.0168	.2756	.0650	-.0627	1948.	
.3630	197.	417.	1826.	603.	0.	-65.		.0086	-.0139	.0163	.2615	.0625	-.0504	1844.	
.3640	-40.	298.	1693.	559.	0.	16.		.0067	-.0153	.0150	.2397	.0585	-.0371	1700.	
.3650	-270.	182.	1487.	491.	0.	89.		.0050	-.0168	.0131	.2107	.0533	-.0236	1518.	
.3660	-447.	98.	1209.	399.	-0.	147.		.0034	-.0185	.0106	.1752	.0473	-.0109	1294.	
.3670	-565.	44.	867.	286.	0.	186.		.0021	-.0202	.0076	.1344	.0409	.0008	1039.	
.3680	-632.	13.	482.	159.	-0.	209.		.0011	-.0220	.0043	.0904	.0344	.0114	798.	
.3690	-660.	-3.	82.	27.	-0.	218.		.0005	-.0237	.0007	.0456	.0277	.0209	668.	
.3700	-655.	-8.	-312.	-103.	0.	216.		.0003	-.0254	-.0030	.0021	.0207	.0291	728.	
.3710	-613.	-5.	-684.	-226.	-0.	202.		.0004	-.0271	-.0066	-.0386	.0137	.0358	922.	
.3720	-538.	2.	-1019.	-336.	-0.	177.		.0009	-.0288	-.0099	-.0750	.0070	.0408	1156.	
.3730	-446.	8.	-1296.	-428.	0.	147.		.0016	-.0305	-.0129	-.1057	.0006	.0444	1376.	
.3740	-361.	2.	-1490.	-495.	-0.	119.		.0026	-.0322	-.0153	-.1295	-.0052	.0469	1547.	
.3750	-291.	-21.	-1619.	-534.	-0.	96.		.0038	-.0338	-.0172	-.1460	-.0099	.0489	1652.	
.3760	-232.	-56.	-1662.	-548.	0.	76.		.0052	-.0355	-.0184	-.1554	-.0129	.0500	1685.	
.3770	-174.	-90.	-1634.	-539.	0.	57.		.0066	-.0370	-.0188	-.1583	-.0140	.0501	1650.	
.3780	-125.	-122.	-1536.	-507.	0.	41.		.0081	-.0385	-.0185	-.1548	-.0133	.0490	1547.	
.3790	-96.	-163.	-1368.	-452.	0.	32.		.0096	-.0399	-.0176	-.1449	-.0109	.0473	1377.	
.3800	-87.	-216.	-1138.	-375.	0.	29.		.0112	-.0412	-.0161	-.1292	-.0072	.0449	1145.	
.3810	-76.	-263.	-866.	-286.	-0.	25.		.0127	-.0423	-.0141	-.1090	-.0026	.0413	873.	
.3820	-46.	-290.	-575.	-190.	-0.	15.		.0141	-.0432	-.0117	-.0858	.0024	.0360	579.	
.3830	5.	-296.	-279.	-92.	-0.	-1.		.0154	-.0439	-.0091	-.0606	.0075	.0289	280.	
.3840	66.	-289.	15.	5.	-0.	-22.		.0167	-.0444	-.0064	-.0343	.0121	.0208	68.	
.3850	141.	-267.	290.	96.	0.	-47.		.0178	-.0447	-.0037	-.0084	.0161	.0117	324.	
.3860	246.	-216.	523.	173.	0.	-81.		.0186	-.0447	-.0010	.0153	.0195	.0013	580.	
.3870	388.	-131.	700.	231.	0.	-128.		.0192	-.0447	.0014	.0352	.0223	-.0102	803.	

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ENGLISH UNITS

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

.3765	-137.	-70.	-1634.	-579.	0.	76.	.0052	-.0355	-.0184	-.1554	-.0129	.0500	1685.
.3770	-174.	-70.	-1634.	-579.	0.	57.	.0066	-.0370	-.0188	-.1583	-.0140	.0501	1650.
.3780	-125.	-122.	-1536.	-507.	0.	41.	.0001	-.0385	-.0185	-.1548	-.0133	.0490	1547.
.3790	-96.	-163.	-1368.	-452.	0.	32.	.0096	-.0399	-.0176	-.1449	-.0109	.0473	1377.
.3800	-87.	-216.	-1138.	-375.	0.	29.	.0112	-.0412	-.0161	-.1292	-.0072	.0449	1145.
.3810	-76.	-263.	-866.	-276.	-0.	25.	.0127	-.0423	-.0141	-.1090	-.0026	.0413	873.
.3820	-46.	-290.	-575.	-190.	-0.	15.	.0141	-.0432	-.0117	-.0858	.0024	.0360	579.
.3830	5.	-296.	-279.	-92.	-0.	-1.	.0154	-.0439	-.0091	-.0606	.0075	.0289	280.
.3840	66.	-289.	15.	5.	-0.	-22.	.0167	-.0444	-.0064	-.0343	.0121	.0208	68.
.3850	141.	-267.	290.	96.	0.	-47.	.0178	-.0447	-.0037	-.0084	.0161	.0117	324.
.3860	246.	-216.	523.	173.	0.	-81.	.0186	-.0447	-.0010	.0153	.0195	.0013	580.
.3870	380.	-131.	700.	271.	0.	-128.	.0192	-.0447	.0014	.0352	.0225	-.0102	803.

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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	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)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.3880	551.	-24.	819.	270.	0.	-182.	.0195	-.0445	.0037	.0507	.0242	-.0222	991.						
.3890	711.	87.	887.	293.	0.	-235.	.0194	-.0443	.0057	.0616	.0253	-.0335	1141.						
.3900	851.	192.	909.	300.	-0.	-281.	.0188	-.0442	.0073	.0678	.0252	-.0435	1250.						
.3910	973.	292.	881.	291.	-0.	-321.	.0177	-.0443	.0087	.0688	.0240	-.0519	1318.						
.3920	1076.	382.	805.	266.	-0.	-355.	.0161	-.0446	.0098	.0643	.0217	-.0583	1349.						
.3930	1139.	449.	695.	229.	-0.	-376.	.0138	-.0451	.0106	.0550	.0184	-.0621	1340.						
.3940	1135.	475.	570.	188.	0.	-374.	.0110	-.0460	.0113	.0417	.0139	-.0625	1275.						
.3950	1052.	451.	444.	146.	-0.	-347.	.0077	-.0472	.0117	.0254	.0086	-.0592	1146.						
.3960	907.	380.	314.	104.	-0.	-299.	.0038	-.0488	.0120	.0063	.0028	-.0525	964.						
.3970	719.	279.	180.	59.	-0.	-237.	-.0005	-.0506	.0123	-.0156	-.0030	-.0431	744.						
.3980	486.	152.	54.	18.	-0.	-160.	-.0051	-.0526	.0126	-.0388	-.0086	-.0315	491.						
.3990	197.	-13.	-48.	-16.	-0.	-65.	-.0098	-.0546	.0128	-.0618	-.0142	-.0173	203.						
.4000	-130.	-219.	-118.	-39.	-0.	46.	-.0145	-.0567	.0130	-.0833	-.0196	-.0009	183.						

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)
.2410	2931.	921.	2418.	798.	-0.	-967.	.0555	.0154	.0474	.2758	.1156	-.2050	3815.

SECTION	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	VA	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)	(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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	0.	0.	0.	0.	0.	0.	-.0000	.0000	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0020	0.	0.	0.	0.	0.	0.	-.0000	.0000	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0030	0.	0.	0.	0.	0.	0.	-.0000	-.0000	.0000	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0040	0.	0.	0.	0.	0.	0.	-.0000	-.0000	.0000	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0050	0.	0.	0.	0.	0.	0.	-.0000	-.0000	.0000	-.0001	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0060	0.	0.	0.	0.	0.	0.	-.0000	-.0000	.0000	-.0001	.0001	-.0001	-.0000	-.0000	-.0000	-.0001	.0001	-.0001	0.
.0070	0.	0.	0.	0.	0.	0.	-.0000	-.0000	.0000	-.0003	.0001	-.0003	-.0000	-.0000	-.0000	-.0003	.0001	-.0003	0.
.0080	0.	0.	0.	0.	0.	0.	-.0000	-.0000	.0000	-.0004	.0000	-.0006	-.0000	-.0000	-.0000	-.0004	.0000	-.0006	0.
.0090	0.	0.	0.	0.	0.	0.	-.0000	-.0000	.0000	-.0006	-.0002	-.0012	-.0000	-.0000	-.0000	-.0006	-.0002	-.0012	0.
.0100	0.	0.	0.	0.	0.	0.	-.0001	-.0000	.0000	-.0007	-.0005	-.0019	-.0000	-.0000	-.0000	-.0007	-.0005	-.0019	0.
.0110	0.	0.	0.	0.	0.	0.	-.0001	-.0001	.0001	-.0011	-.0010	-.0034	-.0000	-.0000	-.0000	-.0011	-.0010	-.0034	0.

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2 SAFETY COLD FKW24F--2 PSV

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FORCES AND MOMENTS ACT ON THE PIPING

0.0000	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.0010	0.	0.	0.	0.	0.	0.	0.	-.0000	.0000	.0000	-.0000	-.0000	-.0000	0.
.0020	0.	0.	0.	0.	0.	0.	0.	-.0000	.0000	.0000	-.0000	.0000	-.0000	0.
.0030	0.	0.	0.	0.	0.	0.	0.	-.0000	-.0000	.0000	-.0000	.0000	.0000	0.
.0040	0.	0.	0.	0.	0.	0.	0.	-.0000	-.0000	.0000	-.0000	.0000	.0000	0.
.0050	0.	0.	0.	0.	0.	0.	0.	-.0000	-.0000	.0000	-.0001	.0000	-.0000	0.
.0060	0.	0.	0.	0.	0.	0.	0.	-.0000	-.0000	.0000	-.0001	.0001	-.0001	0.
.0070	0.	0.	0.	0.	0.	0.	0.	-.0000	-.0000	.0000	-.0003	.0001	-.0003	0.
.0080	0.	0.	0.	0.	0.	0.	0.	-.0000	-.0000	.0000	-.0004	.0000	-.0006	0.
.0090	0.	0.	0.	0.	0.	0.	0.	-.0000	-.0000	.0000	-.0006	-.0002	-.0012	0.
.0100	0.	0.	0.	0.	0.	0.	0.	-.0001	-.0000	.0000	-.0007	-.0005	-.0019	0.
.0110	0.	0.	0.	0.	0.	0.	0.	-.0001	-.0001	.0001	-.0011	-.0010	-.0034	0.

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ADLPIPE STRESS ANALYSIS

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S/RV PIPING KEWAUNEE GKW00F 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	58	MEMBER	2	SEQUENCE	028	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)	
.0120	0.	0.	0.	0.	0.	0.	-.0003	-.0001	.0002	-.0018	-.0017	-.0059	0.	
.0130	0.	0.	0.	0.	0.	0.	-.0005	-.0002	.0003	-.0026	-.0028	-.0093	0.	
.0140	0.	0.	0.	0.	0.	0.	-.0008	-.0003	.0004	-.0030	-.0042	-.0131	0.	
.0150	0.	0.	0.	0.	0.	0.	-.0014	-.0005	.0007	-.0026	-.0061	-.0165	0.	
.0160	0.	0.	0.	0.	0.	0.	-.0021	-.0007	.0010	-.0011	-.0081	-.0186	0.	
.0170	0.	0.	0.	0.	0.	0.	-.0031	-.0011	.0014	.0016	-.0101	-.0187	0.	
.0180	0.	0.	0.	0.	0.	0.	-.0042	-.0014	.0019	.0054	-.0118	-.0163	0.	
.0190	0.	0.	0.	0.	0.	0.	-.0055	-.0018	.0024	.0102	-.0127	-.0112	0.	
.0200	0.	0.	0.	0.	0.	0.	-.0068	-.0021	.0028	.0152	-.0126	-.0036	0.	
.0210	0.	0.	0.	0.	0.	0.	-.0080	-.0024	.0031	.0195	-.0108	.0056	0.	
.0220	0.	0.	0.	0.	0.	0.	-.0089	-.0025	.0032	.0221	-.0075	.0150	0.	
.0230	0.	0.	0.	0.	0.	0.	-.0095	-.0023	.0031	.0222	-.0027	.0227	0.	
.0240	0.	0.	0.	0.	0.	0.	-.0097	-.0020	.0028	.0202	.0026	.0278	0.	
.0250	0.	0.	0.	0.	0.	0.	-.0093	-.0016	.0022	.0191	.0069	.0325	0.	
.0260	0.	0.	0.	0.	0.	0.	-.0085	-.0010	.0014	.0218	.0088	.0396	0.	
.0270	0.	0.	0.	0.	0.	0.	-.0071	-.0002	.0003	.0259	.0085	.0470	0.	
.0280	0.	0.	0.	0.	0.	0.	-.0050	.0008	-.0010	.0255	.0075	.0477	0.	
.0290	0.	0.	0.	0.	0.	0.	-.0023	.0019	-.0027	.0220	.0055	.0418	0.	
.0300	0.	0.	0.	0.	0.	0.	.0008	.0032	-.0045	.0231	.0010	.0393	0.	
.0310	0.	0.	0.	0.	0.	0.	.0043	.0044	-.0065	.0233	-.0019	.0387	0.	
.0320	0.	0.	0.	0.	0.	0.	.0080	.0058	-.0085	.0113	.0001	.0283	0.	
.0330	0.	0.	0.	0.	0.	0.	.0119	.0071	-.0106	-.0118	.0059	.0074	0.	
.0340	0.	0.	0.	0.	0.	0.	.0154	.0081	-.0124	-.0344	.0129	-.0116	0.	
.0350	0.	0.	0.	0.	0.	0.	.0182	.0086	-.0137	-.0498	.0189	-.0223	0.	
.0360	0.	0.	0.	0.	0.	0.	.0203	.0085	-.0144	-.0595	.0212	-.0307	0.	
.0370	0.	0.	0.	0.	0.	0.	.0214	.0080	-.0144	-.0667	.0188	-.0419	0.	
.0380	0.	0.	0.	0.	0.	0.	.0215	.0069	-.0137	-.0710	.0129	-.0540	0.	
.0390	0.	0.	0.	0.	0.	0.	.0205	.0053	-.0123	-.0673	.0037	-.0616	0.	
.0400	0.	0.	0.	0.	0.	0.	.0184	.0034	-.0103	-.0518	-.0084	-.0596	0.	
.0410	0.	0.	0.	0.	0.	0.	.0154	.0012	-.0078	-.0324	-.0177	-.0488	0.	
.0420	0.	0.	0.	0.	0.	0.	.0120	-.0008	-.0051	-.0270	-.0165	-.0416	0.	
.0430	0.	0.	0.	0.	0.	0.	.0083	-.0024	-.0024	-.0384	-.0052	-.0452	0.	
.0440	0.	0.	0.	0.	0.	0.	.0044	-.0038	.0003	-.0502	.0093	-.0476	0.	
.0450	0.	0.	0.	0.	0.	0.	.0002	-.0051	.0032	-.0507	.0238	-.0359	0.	
.0460	0.	0.	0.	0.	0.	0.	-.0039	-.0061	.0061	-.0447	.0356	-.0199	0.	
.0470	0.	0.	0.	0.	0.	0.	-.0077	-.0068	.0089	-.0399	.0404	-.0170	0.	
.0480	0.	0.	0.	0.	0.	0.	-.0111	-.0071	.0116	-.0322	.0567	-.0257	0.	
.0490	0.	0.	0.	0.	0.	0.	-.0141	-.0073	.0142	-.0122	.0270	-.0253	0.	

ADLPIPE PAGE 2700

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/12/02. 18.29.26.

S/RV PIPING KEWAUNEE GKW00F 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

.0390	0.	0.	0.	0.	0.	0.	0.	.0205	.0053	-.0123	-.0673	.0037	-.0616	0.
.0400	0.	0.	0.	0.	0.	0.	0.	.0184	.0034	-.0103	-.0518	-.0084	-.0596	0.
.0410	0.	0.	0.	0.	0.	0.	0.	.0154	.0012	-.0078	-.0324	-.0177	-.0488	0.
.0420	0.	0.	0.	0.	0.	0.	0.	.0120	-.0008	-.0051	-.0270	-.0163	-.0416	0.
.0430	0.	0.	0.	0.	0.	0.	0.	.0083	-.0024	-.0024	-.0384	-.0052	-.0452	0.
.0440	0.	0.	0.	0.	0.	0.	0.	.0044	-.0038	.0003	-.0502	.0093	-.0476	0.
.0450	0.	0.	0.	0.	0.	0.	0.	.0002	-.0051	.0032	-.0507	.0238	-.0359	0.
.0460	0.	0.	0.	0.	0.	0.	0.	-.0039	-.0061	.0061	-.0447	.0356	-.0199	0.
.0470	0.	0.	0.	0.	0.	0.	0.	-.0077	-.0068	.0089	-.0399	.0404	-.0170	0.
.0480	0.	0.	0.	0.	0.	0.	0.	-.0111	-.0071	.0116	-.0322	.0367	-.0237	0.
.0490	0.	0.	0.	0.	0.	0.	0.	-.0141	-.0073	.0142	-.0122	.0270	-.0233	0.

ADLPIPE PAGE 2700

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/12/02.

18.29.26.

S/RV PIPING KEWAUNEE CKW08F 2 RUP DISK
2 SAFETY COLD FRW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	58	MEMBER	2	SEQUENCE	828	LOCATION	DIS	TYPE	VA	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.0500	0.	0.	0.	0.	0.	0.	-.0167	-.0073	.0165	.0195	.0135	-.0144	0.	
.0510	0.	0.	0.	0.	0.	0.	-.0188	-.0070	.0184	.0489	.0002	-.0100	0.	
.0520	0.	0.	0.	0.	0.	0.	-.0202	-.0064	.0198	.0614	-.0050	-.0157	0.	
.0530	0.	0.	0.	0.	0.	0.	-.0211	-.0055	.0206	.0584	.0006	-.0238	0.	
.0540	0.	0.	0.	0.	0.	0.	-.0217	-.0048	.0211	.0534	.0108	-.0249	0.	
.0550	0.	0.	0.	0.	0.	0.	-.0223	-.0043	.0213	.0531	.0200	-.0178	0.	
.0560	0.	0.	0.	0.	0.	0.	-.0228	-.0042	.0215	.0517	.0283	-.0089	0.	
.0570	0.	0.	0.	0.	0.	0.	-.0233	-.0045	.0212	.0464	.0333	-.0057	0.	
.0580	0.	0.	0.	0.	0.	0.	-.0239	-.0053	.0210	.0452	.0296	-.0066	0.	
.0590	0.	0.	0.	0.	0.	0.	-.0248	-.0068	.0207	.0554	.0175	-.0013	0.	
.0600	0.	0.	0.	0.	0.	0.	-.0258	-.0089	.0203	.0733	.0035	-.0153	0.	
.0610	0.	0.	0.	0.	0.	0.	-.0267	-.0112	.0196	.0876	-.0078	.0347	0.	
.0620	0.	0.	0.	0.	0.	0.	-.0274	-.0134	.0184	.0881	-.0133	.0475	0.	
.0630	0.	0.	0.	0.	0.	0.	-.0277	-.0155	.0165	.0729	-.0101	.0557	0.	
.0640	0.	0.	0.	0.	0.	0.	-.0275	-.0174	.0141	.0494	.0007	.0670	0.	
.0650	0.	0.	0.	0.	0.	0.	-.0269	-.0190	.0112	.0251	.0129	.0816	0.	
.0660	0.	0.	0.	0.	0.	0.	-.0256	-.0203	.0079	.0001	.0220	.0923	0.	
.0670	0.	0.	0.	0.	0.	0.	-.0237	-.0211	.0042	-.0262	.0258	.0942	0.	
.0680	0.	0.	0.	0.	0.	0.	-.0210	-.0214	.0003	-.0470	.0207	.0891	0.	
.0690	0.	0.	0.	0.	0.	0.	-.0177	-.0213	-.0037	-.0550	.0046	.0810	0.	
.0700	0.	0.	0.	0.	0.	0.	-.0138	-.0205	-.0078	-.0529	-.0183	.0710	0.	
.0710	0.	0.	0.	0.	0.	0.	-.0095	-.0191	-.0118	-.0503	-.0404	.0574	0.	
.0720	0.	0.	0.	0.	0.	0.	-.0046	-.0169	-.0158	-.0548	-.0558	.0395	0.	
.0730	0.	0.	0.	0.	0.	0.	.0005	-.0140	-.0197	-.0695	-.0610	.0185	0.	
.0740	0.	0.	0.	0.	0.	0.	.0057	-.0104	-.0233	-.0921	-.0554	-.0024	0.	
.0750	0.	0.	0.	0.	0.	0.	.0107	-.0063	-.0263	-.1149	-.0429	-.0195	0.	
.0760	0.	0.	0.	0.	0.	0.	.0154	-.0020	-.0285	-.1320	-.0283	-.0321	0.	
.0770	0.	0.	0.	0.	0.	0.	.0196	.0023	-.0298	-.1424	-.0157	-.0448	0.	
.0780	0.	0.	0.	0.	0.	0.	.0233	.0065	-.0299	-.1435	-.0085	-.0607	0.	
.0790	0.	0.	0.	0.	0.	0.	.0262	.0105	-.0288	-.1292	-.0098	-.0766	0.	
.0800	0.	0.	0.	0.	0.	0.	.0284	.0141	-.0266	-.0986	-.0176	-.0884	0.	
.0810	0.	0.	0.	0.	0.	0.	.0298	.0173	-.0233	-.0605	-.0265	-.0983	0.	
.0820	0.	0.	0.	0.	0.	0.	.0305	.0203	-.0192	-.0245	-.0318	-.1100	0.	
.0830	0.	0.	0.	0.	0.	0.	.0305	.0230	-.0146	.0050	-.0298	-.1205	0.	
.0840	0.	0.	0.	0.	0.	0.	.0298	.0254	-.0095	.0278	-.0181	-.1237	0.	
.0850	0.	0.	0.	0.	0.	0.	.0284	.0275	-.0041	.0459	.0013	-.1184	0.	
.0860	0.	0.	0.	0.	0.	0.	.0261	.0291	.0014	.0630	.0227	-.1077	0.	
.0870	0.	0.	0.	0.	0.	0.	.0234	.0302	.0069	.0811	.0422	-.0939	0.	

ADLPIPE PAGE 2701

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/12/02.

18.29.26.

S/RV PIPING KEWAUNEE CKW08F 2 RUP DISK
2 SAFETY COLD FRW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

.0770	0.	0.	0.	0.	0.	0.	0.	.0196	.0023	-.0298	-.1424	-.0157	-.0448	0.
.0780	0.	0.	0.	0.	0.	0.	0.	.0273	.0065	-.0299	-.1435	-.0085	-.0607	0.
.0790	0.	0.	0.	0.	0.	0.	0.	.0262	.0105	-.0288	-.1292	-.0098	-.0766	0.
.0800	0.	0.	0.	0.	0.	0.	0.	.0284	.0141	-.0266	-.0986	-.0176	-.0884	0.
.0810	0.	0.	0.	0.	0.	0.	0.	.0298	.0173	-.0233	-.0605	-.0265	-.0983	0.
.0820	0.	0.	0.	0.	0.	0.	0.	.0305	.0203	-.0192	-.0245	-.0318	-.1100	0.
.0830	0.	0.	0.	0.	0.	0.	0.	.0305	.0230	-.0146	.0030	-.0298	-.1205	0.
.0840	0.	0.	0.	0.	0.	0.	0.	.0298	.0254	-.0095	.0278	-.0181	-.1257	0.
.0850	0.	0.	0.	0.	0.	0.	0.	.0283	.0275	-.0041	.0459	.0013	-.1184	0.
.0860	0.	0.	0.	0.	0.	0.	0.	.0261	.0291	.0014	.0630	.0227	-.1077	0.
.0870	0.	0.	0.	0.	0.	0.	0.	.0234	.0302	.0069	.0811	.0422	-.0939	0.

ADLPIPE PAGE 2701

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/12/02.

18.29.26.

S/RV PIPING KEWAUNEE CRUCIF 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	SR	MEMBER	2	SEQUENCE	828	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)	
.0880	0.	0.	0.	0.	0.	0.	0.	.0204	.0309	.0122	.1002	.0578	-.0791	0.	
.0890	0.	0.	0.	0.	0.	0.	0.	.0172	.0311	.0172	.1218	.0670	-.0651	0.	
.0900	0.	0.	0.	0.	0.	0.	0.	.0139	.0309	.0216	.1473	.0689	-.0512	0.	
.0910	0.	0.	0.	0.	0.	0.	0.	.0106	.0304	.0253	.1722	.0675	-.0356	0.	
.0920	0.	0.	0.	0.	0.	0.	0.	.0076	.0296	.0280	.1882	.0678	-.0204	0.	
.0930	0.	0.	0.	0.	0.	0.	0.	.0048	.0288	.0296	.1905	.0710	-.0099	0.	
.0940	0.	0.	0.	0.	0.	0.	0.	.0023	.0278	.0300	.1809	.0758	-.0030	0.	
.0950	0.	0.	0.	0.	0.	0.	0.	-.0001	.0266	.0295	.1648	.0805	.0056	0.	
.0960	0.	0.	0.	0.	0.	0.	0.	-.0023	.0251	.0280	.1476	.0815	.0173	0.	
.0970	0.	0.	0.	0.	0.	0.	0.	-.0044	.0234	.0257	.1324	.0749	.0287	0.	
.0980	0.	0.	0.	0.	0.	0.	0.	-.0064	.0213	.0227	.1193	.0598	.0374	0.	
.0990	0.	0.	0.	0.	0.	0.	0.	-.0083	.0191	.0192	.1093	.0386	.0458	0.	
.1000	0.	0.	0.	0.	0.	0.	0.	-.0100	.0167	.0152	.1029	.0137	.0569	0.	
.1010	0.	0.	0.	0.	0.	0.	0.	-.0115	.0142	.0108	.0969	-.0111	.0705	0.	
.1020	0.	0.	0.	0.	0.	0.	0.	-.0126	.0119	.0059	.0846	-.0309	.0843	0.	
.1030	0.	0.	0.	0.	0.	0.	0.	-.0131	.0099	.0007	.0634	-.0436	.0972	0.	
.1040	0.	0.	0.	0.	0.	0.	0.	-.0129	.0083	-.0047	.0367	-.0507	.1100	0.	
.1050	0.	0.	0.	0.	0.	0.	0.	-.0117	.0070	-.0101	.0094	-.0550	.1226	0.	
.1060	0.	0.	0.	0.	0.	0.	0.	-.0096	.0062	-.0155	-.0161	-.0586	.1323	0.	
.1070	0.	0.	0.	0.	0.	0.	0.	-.0062	.0058	-.0207	-.0394	-.0633	.1339	0.	
.1080	0.	0.	0.	0.	0.	0.	0.	-.0017	.0060	-.0255	-.0607	-.0692	.1247	0.	
.1090	0.	0.	0.	0.	0.	0.	0.	.0041	.0066	-.0299	-.0795	-.0750	.1065	0.	
.1100	0.	0.	0.	0.	0.	0.	0.	.0107	.0075	-.0336	-.0953	-.0789	.0830	0.	
.1110	0.	0.	0.	0.	0.	0.	0.	.0181	.0089	-.0366	-.1113	-.0798	.0522	0.	
.1120	0.	0.	0.	0.	0.	0.	0.	.0258	.0105	-.0387	-.1281	-.0773	.0153	0.	
.1130	0.	0.	0.	0.	0.	0.	0.	.0334	.0122	-.0397	-.1415	-.0728	-.0207	0.	
.1140	0.	0.	0.	0.	0.	0.	0.	.0406	.0138	-.0396	-.1473	-.0692	-.0524	0.	
.1150	0.	0.	0.	0.	0.	0.	0.	.0470	.0152	-.0382	-.1464	-.0678	-.0823	0.	
.1160	0.	0.	0.	0.	0.	0.	0.	.0524	.0165	-.0356	-.1406	-.0675	-.1114	0.	
.1170	0.	0.	0.	0.	0.	0.	0.	.0564	.0175	-.0319	-.1286	-.0671	-.1362	0.	
.1180	0.	0.	0.	0.	0.	0.	0.	.0590	.0183	-.0271	-.1088	-.0661	-.1526	0.	
.1190	0.	0.	0.	0.	0.	0.	0.	.0600	.0188	-.0214	-.0879	-.0598	-.1617	0.	
.1200	0.	0.	0.	0.	0.	0.	0.	.0594	.0192	-.0150	-.0720	-.0444	-.1631	0.	
.1210	0.	0.	0.	0.	0.	0.	0.	.0575	.0195	-.0082	-.0592	-.0217	-.1545	0.	
.1220	0.	0.	0.	0.	0.	0.	0.	.0542	.0197	-.0011	-.0477	.0038	-.1387	0.	
.1230	0.	0.	0.	0.	0.	0.	0.	.0500	.0200	.0060	-.0351	.0280	-.1184	0.	
.1240	0.	0.	0.	0.	0.	0.	0.	.0450	.0202	.0170	-.0200	.0472	-.0973	0.	
.1250	0.	0.	0.	0.	0.	0.	0.	.0396	.0204	.0197	.0022	.0561	-.0777	0.	

ADLPIPE PAGE 2701

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/12/02.

18.29.26.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

.1150	0.	0.	0.	0.	0.	0.	0.	.0470	.0152	-.0382	-.1484	-.0678	-.0823	0.
.1160	0.	0.	0.	0.	0.	0.	0.	.0524	.0165	-.0356	-.1406	-.0675	-.1114	0.
.1170	0.	0.	0.	0.	0.	0.	0.	.0564	.0175	-.0319	-.1286	-.0671	-.1362	0.
.1180	0.	0.	0.	0.	0.	0.	0.	.0590	.0183	-.0271	-.1088	-.0661	-.1526	0.
.1190	0.	0.	0.	0.	0.	0.	0.	.0600	.0188	-.0214	-.0879	-.0598	-.1617	0.
.1200	0.	0.	0.	0.	0.	0.	0.	.0594	.0192	-.0150	-.0720	-.0444	-.1631	0.
.1210	0.	0.	0.	0.	0.	0.	0.	.0575	.0195	-.0082	-.0592	-.0217	-.1545	0.
.1220	0.	0.	0.	0.	0.	0.	0.	.0542	.0197	-.0011	-.0477	.0038	-.1387	0.
.1230	0.	0.	0.	0.	0.	0.	0.	.0500	.0200	.0060	-.0351	.0280	-.1184	0.
.1240	0.	0.	0.	0.	0.	0.	0.	.0450	.0202	.0130	-.0200	.0472	-.0973	0.
.1250	0.	0.	0.	0.	0.	0.	0.	.0396	.0204	.0197	.0022	.0561	-.0777	0.

ADLPIPE PAGE 2702

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/12/02.

18.29.26.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	58	MEMBER	2	SEQUENCE	828	LOCATION	DIS	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	PX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.1260	0.	0.	0.	0.	0.	0.	.0341	.0208	.0259	.0344	.0527	-.0585	0.		
.1270	0.	0.	0.	0.	0.	0.	.0288	.0214	.0313	.0704	.0432	-.0394	0.		
.1280	0.	0.	0.	0.	0.	0.	.0240	.0223	.0356	.1025	.0342	-.0203	0.		
.1290	0.	0.	0.	0.	0.	0.	.0199	.0236	.0386	.1244	.0288	-.0049	0.		
.1300	0.	0.	0.	0.	0.	0.	.0166	.0255	.0403	.1330	.0284	.0050	0.		
.1310	0.	0.	0.	0.	0.	0.	.0143	.0278	.0407	.1282	.0344	.0133	0.		
.1320	0.	0.	0.	0.	0.	0.	.0128	.0303	.0399	.1116	.0451	.0205	0.		
.1330	0.	0.	0.	0.	0.	0.	.0121	.0329	.0381	.0917	.0528	.0260	0.		
.1340	0.	0.	0.	0.	0.	0.	.0120	.0353	.0356	.0757	.0521	.0295	0.		
.1350	0.	0.	0.	0.	0.	0.	.0125	.0373	.0325	.0659	.0438	.0326	0.		
.1360	0.	0.	0.	0.	0.	0.	.0134	.0389	.0292	.0612	.0302	.0341	0.		
.1370	0.	0.	0.	0.	0.	0.	.0146	.0400	.0256	.0589	.0130	.0300	0.		
.1380	0.	0.	0.	0.	0.	0.	.0159	.0407	.0220	.0590	-.0043	.0256	0.		
.1390	0.	0.	0.	0.	0.	0.	.0173	.0409	.0183	.0581	-.0154	.0289	0.		
.1400	0.	0.	0.	0.	0.	0.	.0187	.0406	.0146	.0515	-.0169	.0402	0.		
.1410	0.	0.	0.	0.	0.	0.	.0202	.0400	.0109	.0379	-.0124	.0526	0.		
.1420	0.	0.	0.	0.	0.	0.	.0216	.0392	.0073	.0202	-.0066	.0620	0.		
.1430	0.	0.	0.	0.	0.	0.	.0231	.0380	.0038	.0057	-.0021	.0734	0.		
.1440	0.	0.	0.	0.	0.	0.	.0247	.0366	.0005	-.0019	-.0010	.0878	0.		
.1450	0.	0.	0.	0.	0.	0.	.0263	.0350	-.0026	-.0046	-.0054	.0980	0.		
.1460	0.	0.	0.	0.	0.	0.	.0281	.0332	-.0056	-.0049	-.0149	.1001	0.		
.1470	0.	0.	0.	0.	0.	0.	.0300	.0315	-.0084	-.0053	-.0248	.0980	0.		
.1480	0.	0.	0.	0.	0.	0.	.0319	.0297	-.0111	-.0067	-.0318	.0967	0.		
.1490	0.	0.	0.	0.	0.	0.	.0336	.0280	-.0137	-.0134	-.0351	.0924	0.		
.1500	0.	0.	0.	0.	0.	0.	.0350	.0264	-.0162	-.0296	-.0345	.0812	0.		
.1510	0.	0.	0.	0.	0.	0.	.0359	.0247	-.0183	-.0546	-.0290	.0672	0.		
.1520	0.	0.	0.	0.	0.	0.	.0361	.0229	-.0200	-.0845	-.0198	.0537	0.		
.1530	0.	0.	0.	0.	0.	0.	.0353	.0207	-.0210	-.1120	-.0124	.0391	0.		
.1540	0.	0.	0.	0.	0.	0.	.0334	.0182	-.0212	-.1321	-.0110	.0208	0.		
.1550	0.	0.	0.	0.	0.	0.	.0304	.0152	-.0204	-.1431	-.0144	.0014	0.		
.1560	0.	0.	0.	0.	0.	0.	.0261	.0117	-.0187	-.1474	-.0196	-.0173	0.		
.1570	0.	0.	0.	0.	0.	0.	.0205	.0080	-.0160	-.1486	-.0256	-.0390	0.		
.1580	0.	0.	0.	0.	0.	0.	.0139	.0041	-.0124	-.1454	-.0323	-.0609	0.		
.1590	0.	0.	0.	0.	0.	0.	.0061	.0001	-.0082	-.1379	-.0363	-.0757	0.		
.1600	0.	0.	0.	0.	0.	0.	-.0023	-.0037	-.0034	-.1316	-.0346	-.0845	0.		
.1610	0.	0.	0.	0.	0.	0.	-.0113	-.0071	.0018	-.1294	-.0287	-.0946	0.		
.1620	0.	0.	0.	0.	0.	0.	-.0204	-.0100	.0071	-.1268	-.0221	-.1062	0.		
.1630	0.	0.	0.	0.	0.	0.	-.0293	-.0122	.0125	-.1194	-.0143	-.1130	0.		

ADLPIPE PAGE 2707

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/12/02.

18.29.26.

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

CONDITION 24
LOADS
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INTERNAL FORCES IN THE PIPING

.1520	0.	0.	0.	0.	0.	0.	0.	0.	.0361	.0229	-.0200	-.0845	-.0198	.0537	0.
.1530	0.	0.	0.	0.	0.	0.	0.	0.	.0353	.0207	-.0210	-.1120	-.0124	.0391	0.
.1540	0.	0.	0.	0.	0.	0.	0.	0.	.0334	.0182	-.0212	-.1321	-.0110	.0208	0.
.1550	0.	0.	0.	0.	0.	0.	0.	0.	.0304	.0152	-.0204	-.1431	-.0144	.0014	0.
.1560	0.	0.	0.	0.	0.	0.	0.	0.	.0261	.0117	-.0187	-.1474	-.0196	-.0173	0.
.1570	0.	0.	0.	0.	0.	0.	0.	0.	.0205	.0080	-.0160	-.1486	-.0256	-.0390	0.
.1580	0.	0.	0.	0.	0.	0.	0.	0.	.0139	.0041	-.0124	-.1454	-.0323	-.0609	0.
.1590	0.	0.	0.	0.	0.	0.	0.	0.	.0061	.0001	-.0082	-.1379	-.0363	-.0757	0.
.1600	0.	0.	0.	0.	0.	0.	0.	0.	-.0023	-.0037	-.0034	-.1316	-.0346	-.0845	0.
.1610	0.	0.	0.	0.	0.	0.	0.	0.	-.0113	-.0071	.0018	-.1294	-.0287	-.0946	0.
.1620	0.	0.	0.	0.	0.	0.	0.	0.	-.0204	-.0100	.0071	-.1268	-.0221	-.1062	0.
.1630	0.	0.	0.	0.	0.	0.	0.	0.	-.0293	-.0122	.0125	-.1194	-.0143	-.1130	0.

ADLPIPE PAGE 2707 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 8/12/02. 18.29.26.
 S/RV PIPING KEWAUNEE CRK WDF 2 RUP DISK
 2 SAFETY COLD FKWD4F--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	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	VA	DX	DY	DZ	PX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)							
.1640	0.	0.	0.	0.	0.	0.	-.0378	-.0138	.0178	-.1037	-.0054	-.1116	0.
.1650	0.	0.	0.	0.	0.	0.	-.0455	-.0145	.0229	-.0808	.0019	-.1082	0.
.1660	0.	0.	0.	0.	0.	0.	-.0521	-.0143	.0275	-.0547	.0076	-.1087	0.
.1670	0.	0.	0.	0.	0.	0.	-.0572	-.0132	.0313	-.0257	.0131	-.1086	0.
.1680	0.	0.	0.	0.	0.	0.	-.0609	-.0112	.0344	.0063	.0191	-.1042	0.
.1690	0.	0.	0.	0.	0.	0.	-.0629	-.0084	.0364	.0397	.0237	-.0979	0.
.1700	0.	0.	0.	0.	0.	0.	-.0633	-.0049	.0374	.0708	.0264	-.0937	0.
.1710	0.	0.	0.	0.	0.	0.	-.0622	-.0008	.0372	.0985	.0284	-.0900	0.
.1720	0.	0.	0.	0.	0.	0.	-.0597	.0035	.0360	.1256	.0292	-.0823	0.
.1730	0.	0.	0.	0.	0.	0.	-.0561	.0078	.0336	.1503	.0287	-.0739	0.
.1740	0.	0.	0.	0.	0.	0.	-.0517	.0118	.0303	.1706	.0270	-.0678	0.
.1750	0.	0.	0.	0.	0.	0.	-.0469	.0153	.0261	.1854	.0253	-.0617	0.
.1760	0.	0.	0.	0.	0.	0.	-.0420	.0180	.0211	.1924	.0253	-.0526	0.
.1770	0.	0.	0.	0.	0.	0.	-.0375	.0197	.0155	.1909	.0273	-.0396	0.
.1780	0.	0.	0.	0.	0.	0.	-.0337	.0202	.0094	.1804	.0293	-.0240	0.
.1790	0.	0.	0.	0.	0.	0.	-.0308	.0195	.0030	.1619	.0313	-.0043	0.
.1800	0.	0.	0.	0.	0.	0.	-.0291	.0175	-.0036	.1354	.0337	.0190	0.
.1810	0.	0.	0.	0.	0.	0.	-.0285	.0142	-.0102	.1004	.0358	.0413	0.
.1820	0.	0.	0.	0.	0.	0.	-.0292	.0099	-.0167	.0611	.0353	.0609	0.
.1830	0.	0.	0.	0.	0.	0.	-.0310	.0046	-.0229	.0198	.0332	.0786	0.
.1840	0.	0.	0.	0.	0.	0.	-.0339	-.0014	-.0287	-.0229	.0309	.0955	0.
.1850	0.	0.	0.	0.	0.	0.	-.0376	-.0078	-.0340	-.0670	.0283	.1089	0.
.1860	0.	0.	0.	0.	0.	0.	-.0419	-.0142	-.0388	-.1112	.0244	.1165	0.
.1870	0.	0.	0.	0.	0.	0.	-.0465	-.0204	-.0429	-.1531	.0191	.1205	0.
.1880	0.	0.	0.	0.	0.	0.	-.0513	-.0261	-.0464	-.1917	.0133	.1221	0.
.1890	0.	0.	0.	0.	0.	0.	-.0559	-.0310	-.0491	-.2252	.0061	.1197	0.
.1900	0.	0.	0.	0.	0.	0.	-.0599	-.0348	-.0509	-.2514	-.0035	.1114	0.
.1910	0.	0.	0.	0.	0.	0.	-.0633	-.0375	-.0518	-.2689	-.0141	.0984	0.
.1920	0.	0.	0.	0.	0.	0.	-.0657	-.0388	-.0517	-.2756	-.0239	.0834	0.
.1930	0.	0.	0.	0.	0.	0.	-.0671	-.0389	-.0507	-.2730	-.0316	.0649	0.
.1940	0.	0.	0.	0.	0.	0.	-.0672	-.0376	-.0486	-.2637	-.0361	.0400	0.
.1950	0.	0.	0.	0.	0.	0.	-.0661	-.0352	-.0454	-.2484	-.0366	.0105	0.
.1960	0.	0.	0.	0.	0.	0.	-.0640	-.0318	-.0412	-.2257	-.0331	-.0192	0.
.1970	0.	0.	0.	0.	0.	0.	-.0610	-.0279	-.0358	-.1952	-.0271	-.0475	0.
.1980	0.	0.	0.	0.	0.	0.	-.0573	-.0237	-.0293	-.1570	-.0208	-.0757	0.
.1990	0.	0.	0.	0.	0.	0.	-.0531	-.0196	-.0218	-.1111	-.0157	-.1034	0.
.2000	0.	0.	0.	0.	0.	0.	-.0486	-.0158	-.0133	-.0568	-.0119	-.1280	0.
.2010	0.	0.	0.	0.	0.	0.	-.0441	-.0128	-.0041	.0046	-.0091	-.1477	0.

ADLPIPE PAGE 2708 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 8/12/02. 18.29.26.
 S/RV PIPING KEWAUNEE CRK WDF 2 RUP DISK
 2 SAFETY COLD FKWD4F--2 PSV

CONDITION 24
 LOADS
 SHOCK
 PRESSURE
 ENGLISH UNITS

INTERNAL FORCES IN THE PIPING

.1910	0.	0.	0.	0.	0.	0.	0.	0.	-.0599	-.0348	-.0509	-.2514	-.0035	.1114	0.
.1920	0.	0.	0.	0.	0.	0.	0.	0.	-.0673	-.0375	-.0518	-.2689	-.0141	.0984	0.
.1930	0.	0.	0.	0.	0.	0.	0.	0.	-.0657	-.0388	-.0517	-.2756	-.0239	.0834	0.
.1940	0.	0.	0.	0.	0.	0.	0.	0.	-.0671	-.0389	-.0507	-.2730	-.0316	.0649	0.
.1950	0.	0.	0.	0.	0.	0.	0.	0.	-.0672	-.0376	-.0486	-.2637	-.0361	.0400	0.
.1960	0.	0.	0.	0.	0.	0.	0.	0.	-.0661	-.0352	-.0454	-.2484	-.0366	.0105	0.
.1960	0.	0.	0.	0.	0.	0.	0.	0.	-.0640	-.0318	-.0412	-.2257	-.0331	-.0192	0.
.1970	0.	0.	0.	0.	0.	0.	0.	0.	-.0610	-.0279	-.0358	-.1952	-.0271	-.0475	0.
.1980	0.	0.	0.	0.	0.	0.	0.	0.	-.0573	-.0237	-.0293	-.1570	-.0208	-.0757	0.
.1990	0.	0.	0.	0.	0.	0.	0.	0.	-.0531	-.0196	-.0218	-.1111	-.0157	-.1034	0.
.2000	0.	0.	0.	0.	0.	0.	0.	0.	-.0486	-.0158	-.0133	-.0568	-.0119	-.1280	0.
.2010	0.	0.	0.	0.	0.	0.	0.	0.	-.0441	-.0128	-.0041	.0046	-.0091	-.1477	0.

ADLPIPE PAGE 2304

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/12/02.

18.29.26.

S/RV PIPING KEWAUNEE CRK W/OF 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	SO	MEMBER	Z	SEQUENCE	828	LOCATION	DIS	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	FX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2020	0.	0.	0.	0.	0.	0.	-.0398	-.0106	.0056	.0698	-.0063	-.1627	0.		
.2030	0.	0.	0.	0.	0.	0.	-.0359	-.0094	.0154	.1335	-.0017	-.1727	0.		
.2040	0.	0.	0.	0.	0.	0.	-.0324	-.0093	.0249	.1904	.0071	-.1766	0.		
.2050	0.	0.	0.	0.	0.	0.	-.0295	-.0102	.0338	.2370	.0200	-.1737	0.		
.2060	0.	0.	0.	0.	0.	0.	-.0271	-.0121	.0417	.2718	.0351	-.1649	0.		
.2070	0.	0.	0.	0.	0.	0.	-.0253	-.0148	.0482	.2946	.0499	-.1510	0.		
.2080	0.	0.	0.	0.	0.	0.	-.0239	-.0182	.0530	.3051	.0627	-.1328	0.		
.2090	0.	0.	0.	0.	0.	0.	-.0230	-.0223	.0560	.3044	.0713	-.1120	0.		
.2100	0.	0.	0.	0.	0.	0.	-.0224	-.0267	.0569	.2943	.0739	-.0906	0.		
.2110	0.	0.	0.	0.	0.	0.	-.0219	-.0311	.0558	.2756	.0702	-.0695	0.		
.2120	0.	0.	0.	0.	0.	0.	-.0217	-.0353	.0524	.2479	.0619	-.0487	0.		
.2130	0.	0.	0.	0.	0.	0.	-.0215	-.0391	.0470	.2097	.0512	-.0290	0.		
.2140	0.	0.	0.	0.	0.	0.	-.0213	-.0422	.0396	.1602	.0393	-.0111	0.		
.2150	0.	0.	0.	0.	0.	0.	-.0211	-.0446	.0306	.1008	.0273	.0060	0.		
.2160	0.	0.	0.	0.	0.	0.	-.0210	-.0461	.0204	.0347	.0157	.0243	0.		
.2170	0.	0.	0.	0.	0.	0.	-.0209	-.0467	.0093	-.0344	.0039	.0437	0.		
.2180	0.	0.	0.	0.	0.	0.	-.0210	-.0465	-.0020	-.1028	-.0092	.0617	0.		
.2190	0.	0.	0.	0.	0.	0.	-.0210	-.0455	-.0131	-.1658	-.0242	.0773	0.		
.2200	0.	0.	0.	0.	0.	0.	-.0211	-.0438	-.0234	-.2187	-.0411	.0919	0.		
.2210	0.	0.	0.	0.	0.	0.	-.0211	-.0415	-.0325	-.2584	-.0587	.1066	0.		
.2220	0.	0.	0.	0.	0.	0.	-.0209	-.0387	-.0400	-.2851	-.0754	.1204	0.		
.2230	0.	0.	0.	0.	0.	0.	-.0205	-.0354	-.0457	-.3004	-.0891	.1320	0.		
.2240	0.	0.	0.	0.	0.	0.	-.0196	-.0317	-.0492	-.3056	-.0978	.1412	0.		
.2250	0.	0.	0.	0.	0.	0.	-.0182	-.0277	-.0506	-.3010	-.1008	.1486	0.		
.2260	0.	0.	0.	0.	0.	0.	-.0160	-.0235	-.0497	-.2864	-.0984	.1532	0.		
.2270	0.	0.	0.	0.	0.	0.	-.0129	-.0191	-.0466	-.2619	-.0918	.1534	0.		
.2280	0.	0.	0.	0.	0.	0.	-.0088	-.0147	-.0414	-.2273	-.0822	.1481	0.		
.2290	0.	0.	0.	0.	0.	0.	-.0036	-.0103	-.0344	-.1822	-.0707	.1370	0.		
.2300	0.	0.	0.	0.	0.	0.	.0026	-.0061	-.0258	-.1273	-.0586	.1196	0.		
.2310	0.	0.	0.	0.	0.	0.	.0097	-.0020	-.0159	-.0650	-.0462	.0956	0.		
.2320	0.	0.	0.	0.	0.	0.	.0176	.0018	-.0052	.0002	-.0326	.0653	0.		
.2330	0.	0.	0.	0.	0.	0.	.0261	.0054	.0059	.0636	-.0170	.0301	0.		
.2340	0.	0.	0.	0.	0.	0.	.0348	.0086	.0170	.1218	.0006	-.0083	0.		
.2350	0.	0.	0.	0.	0.	0.	.0433	.0114	.0277	.1722	.0200	-.0477	0.		
.2360	0.	0.	0.	0.	0.	0.	.0513	.0138	.0376	.2136	.0404	-.0858	0.		
.2370	0.	0.	0.	0.	0.	0.	.0584	.0155	.0464	.2453	.0608	-.1211	0.		
.2380	0.	0.	0.	0.	0.	0.	.0641	.0166	.0539	.2673	.0797	-.1528	0.		
.2390	0.	0.	0.	0.	0.	0.	.0682	.0169	.0599	.2802	.0957	-.1800	0.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/12/02.

18.29.26.

S/RV PIPING KEWAUNEE CRK W/OF 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

INTERNAL FORCES IN THE PIPING

.2290	0.	0.	0.	0.	0.	0.	0.	0.	-.0036	-.0103	-.0344	-.1822	-.0707	.1370	0.
.2300	0.	0.	0.	0.	0.	0.	0.	0.	.0026	-.0061	-.0258	-.1273	-.0586	.1196	0.
.2310	0.	0.	0.	0.	0.	0.	0.	0.	.0097	-.0020	-.0159	-.0650	-.0462	.0956	0.
.2320	0.	0.	0.	0.	0.	0.	0.	0.	.0176	.0018	-.0052	.0002	-.0326	.0653	0.
.2330	0.	0.	0.	0.	0.	0.	0.	0.	.0261	.0054	.0059	.0636	-.0170	.0301	0.
.2340	0.	0.	0.	0.	0.	0.	0.	0.	.0348	.0086	.0170	.1218	.0006	-.0083	0.
.2350	0.	0.	0.	0.	0.	0.	0.	0.	.0433	.0114	.0277	.1722	.0200	-.0477	0.
.2360	0.	0.	0.	0.	0.	0.	0.	0.	.0513	.0138	.0376	.2136	.0404	-.0858	0.
.2370	0.	0.	0.	0.	0.	0.	0.	0.	.0584	.0155	.0464	.2453	.0608	-.1211	0.
.2380	0.	0.	0.	0.	0.	0.	0.	0.	.0641	.0166	.0539	.2673	.0797	-.1528	0.
.2390	0.	0.	0.	0.	0.	0.	0.	0.	.0682	.0169	.0599	.2802	.0957	-.1800	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/12/02.

18.29.26.

S/RV PIPING KEWAUNEE GKWOOF 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	58	MEMBER	2	SEQUENCE	828	LOCATION	DIS	TYPE	VA						
TIME	FX	FY	FZ	FX	MY	MZ			DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)			(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2400	0.	0.	0.	0.	0.	0.	0.	.0703	.0165	.0643	.2849	.1078	-.2005	0.	
.2410	0.	0.	0.	0.	0.	0.	0.	.0704	.0154	.0670	.2820	.1156	-.2126	0.	
.2420	0.	0.	0.	0.	0.	0.	0.	.0683	.0136	.0679	.2711	.1189	-.2158	0.	
.2430	0.	0.	0.	0.	0.	0.	0.	.0642	.0113	.0670	.2511	.1181	-.2106	0.	
.2440	0.	0.	0.	0.	0.	0.	0.	.0582	.0087	.0644	.2225	.1135	-.1973	0.	
.2450	0.	0.	0.	0.	0.	0.	0.	.0506	.0057	.0601	.1864	.1055	-.1762	0.	
.2460	0.	0.	0.	0.	0.	0.	0.	.0418	.0028	.0543	.1449	.0943	-.1483	0.	
.2470	0.	0.	0.	0.	0.	0.	0.	.0323	-.0001	.0472	.0998	.0803	-.1156	0.	
.2480	0.	0.	0.	0.	0.	0.	0.	.0225	-.0028	.0390	.0534	.0640	-.0797	0.	
.2490	0.	0.	0.	0.	0.	0.	0.	.0128	-.0050	.0301	.0073	.0462	-.0424	0.	
.2500	0.	0.	0.	0.	0.	0.	0.	.0040	-.0066	.0206	-.0365	.0273	-.0054	0.	
.2510	0.	0.	0.	0.	0.	0.	0.	-.0038	-.0077	.0109	-.0764	.0080	.0300	0.	
.2520	0.	0.	0.	0.	0.	0.	0.	-.0100	-.0080	.0013	-.1114	-.0109	.0632	0.	
.2530	0.	0.	0.	0.	0.	0.	0.	-.0144	-.0075	-.0080	-.1409	-.0285	.0936	0.	
.2540	0.	0.	0.	0.	0.	0.	0.	-.0167	-.0063	-.0166	-.1646	-.0440	.1197	0.	
.2550	0.	0.	0.	0.	0.	0.	0.	-.0167	-.0044	-.0244	-.1818	-.0570	.1402	0.	
.2560	0.	0.	0.	0.	0.	0.	0.	-.0145	-.0018	-.0311	-.1916	-.0671	.1544	0.	
.2570	0.	0.	0.	0.	0.	0.	0.	-.0101	.0012	-.0366	-.1931	-.0740	.1623	0.	
.2580	0.	0.	0.	0.	0.	0.	0.	-.0037	.0047	-.0407	-.1867	-.0776	.1632	0.	
.2590	0.	0.	0.	0.	0.	0.	0.	.0044	.0085	-.0433	-.1732	-.0778	.1568	0.	
.2600	0.	0.	0.	0.	0.	0.	0.	.0140	.0124	-.0446	-.1540	-.0749	.1440	0.	
.2610	0.	0.	0.	0.	0.	0.	0.	.0244	.0163	-.0444	-.1297	-.0690	.1264	0.	
.2620	0.	0.	0.	0.	0.	0.	0.	.0354	.0201	-.0429	-.1014	-.0609	.1057	0.	
.2630	0.	0.	0.	0.	0.	0.	0.	.0463	.0236	-.0403	-.0710	-.0511	.0826	0.	
.2640	0.	0.	0.	0.	0.	0.	0.	.0567	.0268	-.0367	-.0403	-.0399	.0576	0.	
.2650	0.	0.	0.	0.	0.	0.	0.	.0662	.0296	-.0324	-.0104	-.0278	.0321	0.	
.2660	0.	0.	0.	0.	0.	0.	0.	.0744	.0320	-.0275	.0186	-.0155	.0081	0.	
.2670	0.	0.	0.	0.	0.	0.	0.	.0809	.0340	-.0223	.0464	-.0036	-.0130	0.	
.2680	0.	0.	0.	0.	0.	0.	0.	.0856	.0357	-.0171	.0714	.0076	-.0309	0.	
.2690	0.	0.	0.	0.	0.	0.	0.	.0884	.0370	-.0120	.0919	.0177	-.0456	0.	
.2700	0.	0.	0.	0.	0.	0.	0.	.0890	.0382	-.0074	.1070	.0263	-.0567	0.	
.2710	0.	0.	0.	0.	0.	0.	0.	.0877	.0392	-.0034	.1167	.0329	-.0629	0.	
.2720	0.	0.	0.	0.	0.	0.	0.	.0846	.0402	-.0001	.1212	.0372	-.0635	0.	
.2730	0.	0.	0.	0.	0.	0.	0.	.0799	.0412	.0022	.1199	.0392	-.0598	0.	
.2740	0.	0.	0.	0.	0.	0.	0.	.0739	.0423	.0037	.1127	.0390	-.0534	0.	
.2750	0.	0.	0.	0.	0.	0.	0.	.0669	.0437	.0043	.1011	.0363	-.0430	0.	
.2760	0.	0.	0.	0.	0.	0.	0.	.0593	.0452	.0041	.0874	.0313	-.0344	0.	
.2770	0.	0.	0.	0.	0.	0.	0.	.0515	.0468	.0032	.0726	.0244	-.0221	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/12/02.

18.29.26.

S/RV PIPING KEWAUNEE GKWOOF 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

.2660	0.	0.	0.	0.	0.	0.	0.	.744	.0320	-.0275	.0186	-.0155	.0081	0.
.2670	0.	0.	0.	0.	0.	0.	0.	.809	.0340	-.0223	.0464	-.0036	-.0130	0.
.2680	0.	0.	0.	0.	0.	0.	0.	.856	.0357	-.0171	.0714	.0076	-.0309	0.
.2690	0.	0.	0.	0.	0.	0.	0.	.884	.0370	-.0120	.0919	.0177	-.0456	0.
.2700	0.	0.	0.	0.	0.	0.	0.	.890	.0382	-.0074	.1070	.0265	-.0567	0.
.2710	0.	0.	0.	0.	0.	0.	0.	.877	.0392	-.0034	.1167	.0329	-.0629	0.
.2720	0.	0.	0.	0.	0.	0.	0.	.846	.0402	-.0001	.1212	.0372	-.0635	0.
.2730	0.	0.	0.	0.	0.	0.	0.	.799	.0412	.0022	.1199	.0392	-.0598	0.
.2740	0.	0.	0.	0.	0.	0.	0.	.739	.0423	.0037	.1127	.0390	-.0534	0.
.2750	0.	0.	0.	0.	0.	0.	0.	.669	.0437	.0045	.1011	.0365	-.0450	0.
.2760	0.	0.	0.	0.	0.	0.	0.	.593	.0452	.0041	.0874	.0315	-.0344	0.
.2770	0.	0.	0.	0.	0.	0.	0.	.515	.0468	.0032	.0726	.0244	-.0221	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/12/02.

18.29.26.

S/RV PIPING KEWAUNEE OXWOOD 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	58	MEMBER	2	SEQUENCE	828	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.	0.	.0438	.0486	.0017	.0562	.0165	-.0102	0.	
.2790	0.	0.	0.	0.	0.	0.	0.	.0366	.0506	-.0002	.0382	.0085	-.0003	0.	
.2800	0.	0.	0.	0.	0.	0.	0.	.0301	.0525	-.0023	.0201	.0000	.0081	0.	
.2810	0.	0.	0.	0.	0.	0.	0.	.0245	.0544	-.0044	.0039	-.0078	.0161	0.	
.2820	0.	0.	0.	0.	0.	0.	0.	.0200	.0560	-.0062	-.0105	-.0145	.0227	0.	
.2830	0.	0.	0.	0.	0.	0.	0.	.0166	.0574	-.0077	-.0233	-.0198	.0260	0.	
.2840	0.	0.	0.	0.	0.	0.	0.	.0144	.0582	-.0086	-.0329	-.0238	.0260	0.	
.2850	0.	0.	0.	0.	0.	0.	0.	.0133	.0586	-.0088	-.0366	-.0269	.0249	0.	
.2860	0.	0.	0.	0.	0.	0.	0.	.0132	.0582	-.0082	-.0332	-.0292	.0240	0.	
.2870	0.	0.	0.	0.	0.	0.	0.	.0139	.0572	-.0069	-.0240	-.0305	.0224	0.	
.2880	0.	0.	0.	0.	0.	0.	0.	.0153	.0555	-.0048	-.0107	-.0302	.0194	0.	
.2890	0.	0.	0.	0.	0.	0.	0.	.0173	.0532	-.0022	.0062	-.0289	.0165	0.	
.2900	0.	0.	0.	0.	0.	0.	0.	.0195	.0503	.0008	.0262	-.0260	.0163	0.	
.2910	0.	0.	0.	0.	0.	0.	0.	.0219	.0469	.0039	.0476	-.0216	.0189	0.	
.2920	0.	0.	0.	0.	0.	0.	0.	.0244	.0432	.0070	.0680	-.0161	.0226	0.	
.2930	0.	0.	0.	0.	0.	0.	0.	.0268	.0393	.0096	.0857	-.0099	.0268	0.	
.2940	0.	0.	0.	0.	0.	0.	0.	.0290	.0354	.0117	.1011	-.0040	.0321	0.	
.2950	0.	0.	0.	0.	0.	0.	0.	.0309	.0316	.0130	.1142	.0004	.0386	0.	
.2960	0.	0.	0.	0.	0.	0.	0.	.0324	.0279	.0132	.1242	.0022	.0450	0.	
.2970	0.	0.	0.	0.	0.	0.	0.	.0336	.0246	.0123	.1294	.0010	.0500	0.	
.2980	0.	0.	0.	0.	0.	0.	0.	.0342	.0216	.0101	.1283	-.0030	.0532	0.	
.2990	0.	0.	0.	0.	0.	0.	0.	.0342	.0190	.0067	.1203	-.0096	.0553	0.	
.3000	0.	0.	0.	0.	0.	0.	0.	.0336	.0168	.0022	.1057	-.0185	.0566	0.	
.3010	0.	0.	0.	0.	0.	0.	0.	.0322	.0149	-.0033	.0839	-.0288	.0572	0.	
.3020	0.	0.	0.	0.	0.	0.	0.	.0300	.0132	-.0097	.0547	-.0394	.0567	0.	
.3030	0.	0.	0.	0.	0.	0.	0.	.0270	.0116	-.0165	.0188	-.0499	.0549	0.	
.3040	0.	0.	0.	0.	0.	0.	0.	.0232	.0099	-.0234	-.0211	-.0602	.0521	0.	
.3050	0.	0.	0.	0.	0.	0.	0.	.0185	.0081	-.0302	-.0620	-.0705	.0497	0.	
.3060	0.	0.	0.	0.	0.	0.	0.	.0129	.0060	-.0365	-.1023	-.0801	.0478	0.	
.3070	0.	0.	0.	0.	0.	0.	0.	.0067	.0036	-.0416	-.1412	-.0885	.0454	0.	
.3080	0.	0.	0.	0.	0.	0.	0.	-.0001	.0007	-.0456	-.1778	-.0951	.0418	0.	
.3090	0.	0.	0.	0.	0.	0.	0.	-.0073	-.0026	-.0482	-.2098	-.0998	.0381	0.	
.3100	0.	0.	0.	0.	0.	0.	0.	-.0147	-.0063	-.0493	-.2351	-.1018	.0357	0.	
.3110	0.	0.	0.	0.	0.	0.	0.	-.0220	-.0103	-.0486	-.2534	-.1004	.0340	0.	
.3120	0.	0.	0.	0.	0.	0.	0.	-.0291	-.0145	-.0462	-.2648	-.0955	.0312	0.	
.3130	0.	0.	0.	0.	0.	0.	0.	-.0355	-.0187	-.0422	-.2685	-.0875	.0269	0.	
.3140	0.	0.	0.	0.	0.	0.	0.	-.0411	-.0228	-.0367	-.2627	-.0768	.0221	0.	
.3150	0.	0.	0.	0.	0.	0.	0.	-.0457	-.0265	-.0299	-.2467	-.0640	.0176	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/12/02.

18.29.26.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNIT

INTERNAL FORCES IN THE PIPING

.3040	0.	0.	0.	0.	0.	0.	0.	.272	.0099	-.0274	-.0211	-.0602	.0521	0.
.3050	0.	0.	0.	0.	0.	0.	0.	.185	.0081	-.0302	-.0620	-.0705	.0497	0.
.3060	0.	0.	0.	0.	0.	0.	0.	.0129	.0060	-.0363	-.1023	-.0801	.0478	0.
.3070	0.	0.	0.	0.	0.	0.	0.	.0067	.0036	-.0416	-.1412	-.0885	.0454	0.
.3080	0.	0.	0.	0.	0.	0.	0.	-.0001	.0007	-.0456	-.1778	-.0951	.0418	0.
.3090	0.	0.	0.	0.	0.	0.	0.	-.0073	-.0026	-.0482	-.2098	-.0998	.0381	0.
.3100	0.	0.	0.	0.	0.	0.	0.	-.0147	-.0063	-.0493	-.2351	-.1018	.0357	0.
.3110	0.	0.	0.	0.	0.	0.	0.	-.0220	-.0103	-.0486	-.2534	-.1004	.0340	0.
.3120	0.	0.	0.	0.	0.	0.	0.	-.0291	-.0145	-.0462	-.2648	-.0955	.0312	0.
.3130	0.	0.	0.	0.	0.	0.	0.	-.0355	-.0187	-.0422	-.2685	-.0875	.0269	0.
.3140	0.	0.	0.	0.	0.	0.	0.	-.0411	-.0228	-.0367	-.2627	-.0768	.0221	0.
.3150	0.	0.	0.	0.	0.	0.	0.	-.0457	-.0265	-.0299	-.2467	-.0640	.0176	0.

ADLPIPE PAGE 2307 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 8/12/02. 18.29.26.

S/RV PIPING KEWAUNEE CROWDF 2 SUP 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	FX	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)
.3160	0.	0.	0.	0.	0.	0.	-.0491	-.0298	-.0221	-.2219	-.0497	.0121	0.
.3170	0.	0.	0.	0.	0.	0.	-.0512	-.0325	-.0136	-.1901	-.0344	.0046	0.
.3180	0.	0.	0.	0.	0.	0.	-.0518	-.0343	-.0047	-.1525	-.0182	-.0043	0.
.3190	0.	0.	0.	0.	0.	0.	-.0511	-.0333	.0042	-.1101	-.0016	-.0132	0.
.3200	0.	0.	0.	0.	0.	0.	-.0491	-.0354	.0127	-.0643	.0147	-.0218	0.
.3210	0.	0.	0.	0.	0.	0.	-.0459	-.0347	.0206	-.0173	.0302	-.0308	0.
.3220	0.	0.	0.	0.	0.	0.	-.0417	-.0331	.0276	.0285	.0448	-.0400	0.
.3230	0.	0.	0.	0.	0.	0.	-.0369	-.0308	.0334	.0717	.0580	-.0489	0.
.3240	0.	0.	0.	0.	0.	0.	-.0317	-.0281	.0379	.1116	.0689	-.0564	0.
.3250	0.	0.	0.	0.	0.	0.	-.0265	-.0251	.0409	.1473	.0771	-.0617	0.
.3260	0.	0.	0.	0.	0.	0.	-.0215	-.0220	.0424	.1767	.0826	-.0643	0.
.3270	0.	0.	0.	0.	0.	0.	-.0171	-.0190	.0424	.1979	.0857	-.0643	0.
.3280	0.	0.	0.	0.	0.	0.	-.0136	-.0165	.0409	.2100	.0864	-.0616	0.
.3290	0.	0.	0.	0.	0.	0.	-.0111	-.0145	.0381	.2135	.0844	-.0550	0.
.3300	0.	0.	0.	0.	0.	0.	-.0099	-.0132	.0340	.2087	.0802	-.0442	0.
.3310	0.	0.	0.	0.	0.	0.	-.0098	-.0127	.0289	.1952	.0741	-.0298	0.
.3320	0.	0.	0.	0.	0.	0.	-.0110	-.0132	.0229	.1729	.0664	-.0138	0.
.3330	0.	0.	0.	0.	0.	0.	-.0133	-.0145	.0162	.1431	.0572	.0032	0.
.3340	0.	0.	0.	0.	0.	0.	-.0166	-.0167	.0092	.1078	.0468	.0216	0.
.3350	0.	0.	0.	0.	0.	0.	-.0206	-.0196	.0019	.0687	.0358	.0412	0.
.3360	0.	0.	0.	0.	0.	0.	-.0250	-.0232	-.0053	.0262	.0246	.0601	0.
.3370	0.	0.	0.	0.	0.	0.	-.0296	-.0270	-.0123	-.0186	.0137	.0766	0.
.3380	0.	0.	0.	0.	0.	0.	-.0340	-.0311	-.0189	-.0633	.0034	.0906	0.
.3390	0.	0.	0.	0.	0.	0.	-.0380	-.0351	-.0248	-.1052	-.0061	.1025	0.
.3400	0.	0.	0.	0.	0.	0.	-.0412	-.0389	-.0300	-.1424	-.0147	.1113	0.
.3410	0.	0.	0.	0.	0.	0.	-.0434	-.0423	-.0342	-.1759	-.0222	.1155	0.
.3420	0.	0.	0.	0.	0.	0.	-.0444	-.0450	-.0373	-.1986	-.0284	.1145	0.
.3430	0.	0.	0.	0.	0.	0.	-.0442	-.0469	-.0393	-.2149	-.0330	.1090	0.
.3440	0.	0.	0.	0.	0.	0.	-.0426	-.0480	-.0402	-.2218	-.0360	.0996	0.
.3450	0.	0.	0.	0.	0.	0.	-.0397	-.0481	-.0399	-.2195	-.0371	.0863	0.
.3460	0.	0.	0.	0.	0.	0.	-.0357	-.0473	-.0383	-.2087	-.0361	.0693	0.
.3470	0.	0.	0.	0.	0.	0.	-.0306	-.0457	-.0357	-.1901	-.0329	.0494	0.
.3480	0.	0.	0.	0.	0.	0.	-.0247	-.0433	-.0320	-.1640	-.0276	.0275	0.
.3490	0.	0.	0.	0.	0.	0.	-.0183	-.0403	-.0273	-.1307	-.0209	.0050	0.
.3500	0.	0.	0.	0.	0.	0.	-.0117	-.0368	-.0218	-.0911	-.0131	-.0174	0.
.3510	0.	0.	0.	0.	0.	0.	-.0051	-.0331	-.0156	-.0467	-.0045	-.0386	0.
.3520	0.	0.	0.	0.	0.	0.	.0011	-.0293	-.0090	.0005	.0046	-.0583	0.
.3530	0.	0.	0.	0.	0.	0.	.0068	-.0255	-.0020	.0492	.0139	-.0755	0.

ADLPIPE PAGE 2307 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 8/12/02. 18.29.26.

S/RV PIPING KEWAUNEE CROWDF 2 SUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING

.3430	0.	0.	0.	0.	0.	0.	0.	0.	-.0442	-.0469	-.0393	-.2149	-.0330	.1090	0.
.3440	0.	0.	0.	0.	0.	0.	0.	0.	-.0426	-.0480	-.0402	-.2218	-.0360	.0996	0.
.3450	0.	0.	0.	0.	0.	0.	0.	0.	-.0397	-.0481	-.0399	-.2195	-.0371	.0863	0.
.3460	0.	0.	0.	0.	0.	0.	0.	0.	-.0357	-.0473	-.0383	-.2087	-.0361	.0693	0.
.3470	0.	0.	0.	0.	0.	0.	0.	0.	-.0306	-.0457	-.0357	-.1901	-.0329	.0494	0.
.3480	0.	0.	0.	0.	0.	0.	0.	0.	-.0247	-.0433	-.0320	-.1640	-.0276	.0275	0.
.3490	0.	0.	0.	0.	0.	0.	0.	0.	-.0183	-.0403	-.0273	-.1307	-.0209	.0050	0.
.3500	0.	0.	0.	0.	0.	0.	0.	0.	-.0117	-.0368	-.0218	-.0911	-.0131	-.0174	0.
.3510	0.	0.	0.	0.	0.	0.	0.	0.	-.0051	-.0331	-.0156	-.0467	-.0043	-.0386	0.
.3520	0.	0.	0.	0.	0.	0.	0.	0.	.0011	-.0293	-.0090	.0005	.0046	-.0583	0.
.3530	0.	0.	0.	0.	0.	0.	0.	0.	.0068	-.0255	-.0020	.0492	.0139	-.0755	0.

ADLPIPE PAGE 2300

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/12/02.

18.29.26.

S/RV PIPING KEWAUNEE CKW00F 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	SB	MEMBER	2	SEQUENCE	828	LOCATION	DIS	TYPE	VA						STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ			(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)			
.3540	0.	0.	0.	0.	0.	0.	.0116	-.0221	.0050	.0977	.0229	-.0891			0.
.3550	0.	0.	0.	0.	0.	0.	.0154	-.0190	.0118	.1441	.0318	-.0982			0.
.3560	0.	0.	0.	0.	0.	0.	.0182	-.0164	.0182	.1860	.0404	-.1031			0.
.3570	0.	0.	0.	0.	0.	0.	.0199	-.0144	.0239	.2216	.0483	-.1044			0.
.3580	0.	0.	0.	0.	0.	0.	.0205	-.0129	.0288	.2497	.0551	-.1023			0.
.3590	0.	0.	0.	0.	0.	0.	.0202	-.0121	.0325	.2702	.0605	-.0963			0.
.3600	0.	0.	0.	0.	0.	0.	.0190	-.0119	.0351	.2826	.0640	-.0871			0.
.3610	0.	0.	0.	0.	0.	0.	.0171	-.0121	.0364	.2862	.0653	-.0760			0.
.3620	0.	0.	0.	0.	0.	0.	.0147	-.0128	.0363	.2805	.0650	-.0639			0.
.3630	0.	0.	0.	0.	0.	0.	.0121	-.0139	.0348	.2662	.0623	-.0509			0.
.3640	0.	0.	0.	0.	0.	0.	.0093	-.0153	.0320	.2440	.0583	-.0370			0.
.3650	0.	0.	0.	0.	0.	0.	.0066	-.0168	.0280	.2145	.0533	-.0229			0.
.3660	0.	0.	0.	0.	0.	0.	.0041	-.0185	.0230	.1783	.0473	-.0097			0.
.3670	0.	0.	0.	0.	0.	0.	.0019	-.0202	.0171	.1367	.0409	.0022			0.
.3680	0.	0.	0.	0.	0.	0.	.0001	-.0220	.0106	.0917	.0344	.0130			0.
.3690	0.	0.	0.	0.	0.	0.	-.0011	-.0237	.0039	.0459	.0277	.0226			0.
.3700	0.	0.	0.	0.	0.	0.	-.0019	-.0254	-.0029	.0013	.0207	.0308			0.
.3710	0.	0.	0.	0.	0.	0.	-.0022	-.0271	-.0094	-.0403	.0137	.0374			0.
.3720	0.	0.	0.	0.	0.	0.	-.0021	-.0288	-.0153	-.0776	.0070	.0422			0.
.3730	0.	0.	0.	0.	0.	0.	-.0016	-.0305	-.0205	-.1090	.0006	.0455			0.
.3740	0.	0.	0.	0.	0.	0.	-.0007	-.0322	-.0246	-.1334	-.0052	.0479			0.
.3750	0.	0.	0.	0.	0.	0.	.0004	-.0338	-.0277	-.1502	-.0099	.0496			0.
.3760	0.	0.	0.	0.	0.	0.	.0017	-.0355	-.0295	-.1597	-.0129	.0506			0.
.3770	0.	0.	0.	0.	0.	0.	.0031	-.0371	-.0301	-.1625	-.0140	.0505			0.
.3780	0.	0.	0.	0.	0.	0.	.0047	-.0386	-.0296	-.1587	-.0133	.0493			0.
.3790	0.	0.	0.	0.	0.	0.	.0063	-.0400	-.0279	-.1484	-.0109	.0475			0.
.3800	0.	0.	0.	0.	0.	0.	.0080	-.0412	-.0252	-.1321	-.0072	.0451			0.
.3810	0.	0.	0.	0.	0.	0.	.0098	-.0423	-.0218	-.1113	-.0026	.0415			0.
.3820	0.	0.	0.	0.	0.	0.	.0116	-.0432	-.0177	-.0873	.0024	.0361			0.
.3830	0.	0.	0.	0.	0.	0.	.0134	-.0439	-.0133	-.0613	.0073	.0289			0.
.3840	0.	0.	0.	0.	0.	0.	.0152	-.0444	-.0087	-.0343	.0121	.0206			0.
.3850	0.	0.	0.	0.	0.	0.	.0170	-.0447	-.0042	-.0077	.0161	.0113			0.
.3860	0.	0.	0.	0.	0.	0.	.0186	-.0447	.0001	.0166	.0193	.0007			0.
.3870	0.	0.	0.	0.	0.	0.	.0200	-.0447	.0040	.0370	.0223	-.0112			0.
.3880	0.	0.	0.	0.	0.	0.	.0212	-.0445	.0074	.0528	.0242	-.0236			0.
.3890	0.	0.	0.	0.	0.	0.	.0219	-.0443	.0101	.0639	.0253	-.0354			0.
.3900	0.	0.	0.	0.	0.	0.	.0220	-.0442	.0122	.0702	.0252	-.0457			0.
.3910	0.	0.	0.	0.	0.	0.	.0215	-.0443	.0136	.0711	.0240	-.0544			0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/12/02.

18.29.27.

S/RV PIPING KEWAUNEE CKW00F 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

.3800	0.	0.	0.	0.	0.	0.	0.	.0080	-.0412	-.0252	-.1321	-.0072	.0451	0.
.3810	0.	0.	0.	0.	0.	0.	0.	.0098	-.0423	-.0218	-.1113	-.0026	.0415	0.
.3820	0.	0.	0.	0.	0.	0.	0.	.0116	-.0432	-.0177	-.0873	.0024	.0361	0.
.3830	0.	0.	0.	0.	0.	0.	0.	.0134	-.0439	-.0135	-.0613	.0075	.0289	0.
.3840	0.	0.	0.	0.	0.	0.	0.	.0152	-.0444	-.0097	-.0343	.0121	.0206	0.
.3850	0.	0.	0.	0.	0.	0.	0.	.0170	-.0447	-.0042	-.0077	.0161	.0113	0.
.3860	0.	0.	0.	0.	0.	0.	0.	.0186	-.0447	.0001	.0166	.0195	.0007	0.
.3870	0.	0.	0.	0.	0.	0.	0.	.0200	-.0447	.0040	.0370	.0223	-.0112	0.
.3880	0.	0.	0.	0.	0.	0.	0.	.0212	-.0445	.0074	.0528	.0242	-.0236	0.
.3890	0.	0.	0.	0.	0.	0.	0.	.0219	-.0443	.0101	.0639	.0253	-.0354	0.
.3900	0.	0.	0.	0.	0.	0.	0.	.0220	-.0442	.0122	.0702	.0252	-.0457	0.
.3910	0.	0.	0.	0.	0.	0.	0.	.0215	-.0443	.0136	.0711	.0240	-.0544	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/12/02.

18.29.27.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	58	MEMBER	2	SEQUENCE	828	LOCATION	DIS	TYPE	VA						STRESS
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ		(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
.3920	0.	0.	0.	0.	0.	0.		.0204	-.0446	.0144	.0664	.0217	-.0610		0.
.3930	0.	0.	0.	0.	0.	0.		.0184	-.0451	.0146	.0568	.0184	-.0650		0.
.3940	0.	0.	0.	0.	0.	0.		.0156	-.0460	.0143	.0432	.0139	-.0655		0.
.3950	0.	0.	0.	0.	0.	0.		.0120	-.0472	.0136	.0266	.0063	-.0619		0.
.3960	0.	0.	0.	0.	0.	0.		.0076	-.0488	.0125	.0071	.0028	-.0548		0.
.3970	0.	0.	0.	0.	0.	0.		.0027	-.0506	.0113	-.0151	-.0030	-.0450		0.
.3980	0.	0.	0.	0.	0.	0.		-.0028	-.0526	.0099	-.0387	-.0086	-.0327		0.
.3990	0.	0.	0.	0.	0.	0.		-.0086	-.0546	.0086	-.0619	-.0142	-.0178		0.
.4000	0.	0.	0.	0.	0.	0.		-.0145	-.0567	.0072	-.0836	-.0196	-.0005		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	58	MEMBER	2	SEQUENCE	828	LOCATION	END	TYPE	VA						STRESS
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ		(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
0.0000	0.	0.	0.	0.	0.	0.		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.
.0010	-0.	0.	0.	0.	0.	-0.		-.0000	.0000	.0000	-.0000	-.0000	-.0000		0.
.0020	-0.	0.	0.	0.	0.	-0.		-.0000	.0000	.0000	-.0000	.0000	-.0000		0.
.0030	-0.	0.	0.	0.	0.	-0.		-.0000	-.0000	.0000	-.0000	.0000	.0000		0.
.0040	-0.	0.	-0.	0.	0.	-0.		-.0000	-.0000	.0000	-.0000	.0000	.0000		0.
.0050	0.	0.	-1.	0.	0.	-0.		-.0000	-.0000	.0000	-.0001	.0000	-.0000		0.
.0060	3.	1.	-2.	0.	0.	-0.		-.0000	-.0000	.0000	-.0001	.0001	-.0001		0.
.0070	7.	3.	-5.	0.	0.	-0.		-.0000	-.0000	.0000	-.0003	.0001	-.0003		0.
.0080	14.	7.	-8.	0.	0.	-0.		-.0000	-.0000	.0000	-.0004	.0000	-.0006		0.
.0090	27.	10.	-13.	0.	0.	-0.		-.0000	-.0000	.0000	-.0006	-.0002	-.0012		0.
.0100	30.	14.	-20.	0.	0.	-0.		-.0001	-.0000	.0000	-.0007	-.0005	-.0019		0.
.0110	60.	22.	-34.	0.	0.	-0.		-.0001	-.0001	.0001	-.0011	-.0010	-.0034		0.
.0120	118.	41.	-58.	0.	0.	-0.		-.0003	-.0001	.0002	-.0018	-.0017	-.0059		0.
.0130	183.	67.	-86.	0.	0.	-0.		-.0005	-.0002	.0003	-.0026	-.0028	-.0093		0.
.0140	243.	91.	-110.	0.	0.	-0.		-.0008	-.0003	.0004	-.0030	-.0042	-.0131		0.
.0150	292.	101.	-121.	0.	0.	-0.		-.0014	-.0005	.0007	-.0026	-.0061	-.0165		0.

ADLPIPE PAGE 2310

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/12/02.

18.29.27.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.0050	0.	0.	-1.	0.	0.	-0.	-0.000	-0.000	.0000	-0.0001	.0000	-0.0000	0.
.0060	0.	1.	-2.	0.	0.	-0.	-0.000	-0.000	.0000	-0.0001	.0000	-0.0001	0.
.0070	0.	3.	-5.	0.	0.	-0.	-0.000	-0.000	.0000	-0.0003	.0001	-0.0003	0.
.0080	14.	7.	-8.	0.	0.	-0.	-0.000	-0.000	.0000	-0.0004	.0000	-0.0004	0.
.0090	27.	10.	-13.	0.	0.	-0.	-0.000	-0.000	.0000	-0.0006	-0.0002	-0.0012	0.
.0100	30.	14.	-20.	0.	0.	-0.	-0.0001	-0.000	.0000	-0.0007	-0.0005	-0.0019	0.
.0110	69.	22.	-34.	0.	0.	-0.	-0.0001	-0.0001	.0001	-0.0011	-0.0010	-0.0034	0.
.0120	110.	41.	-50.	0.	0.	-0.	-0.0003	-0.0001	.0002	-0.0018	-0.0017	-0.0059	0.
.0130	183.	67.	-86.	0.	0.	-0.	-0.0005	-0.0002	.0003	-0.0026	-0.0028	-0.0093	0.
.0140	241.	91.	-110.	0.	0.	-0.	-0.0008	-0.0003	.0004	-0.0030	-0.0042	-0.0131	0.
.0150	292.	101.	-121.	0.	0.	-0.	-0.0014	-0.0005	.0007	-0.0026	-0.0061	-0.0165	0.

ADLPIPE PAGE 2310

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/3/12/02.

18.29.27.

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	58	MEMBER	2	SEQUENCE	828	LOCATION	END	TYPE	VA					
TIME	FA	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	305.	50.	-113.	0.	0.	0.		-0.0021	-0.0007	.0010	-0.0011	-0.0081	-0.0186	0.
.0170	276.	59.	-81.	0.	-0.	-0.		-0.0031	-0.0011	.0014	.0016	-0.0101	-0.0187	0.
.0180	195.	12.	-24.	0.	-0.	0.		-0.0042	-0.0014	.0019	.0054	-0.0118	-0.0163	0.
.0190	59.	-50.	56.	-0.	-0.	0.		-0.0055	-0.0018	.0024	.0102	-0.0127	-0.0112	0.
.0200	-120.	-115.	152.	0.	-0.	0.		-0.0068	-0.0021	.0028	.0152	-0.0126	-0.0036	0.
.0210	-316.	-176.	245.	0.	0.	-0.		-0.0080	-0.0024	.0031	.0195	-0.0108	.0056	0.
.0220	-482.	-230.	308.	0.	0.	-0.		-0.0089	-0.0025	.0032	.0221	-0.0075	.0150	0.
.0230	-585.	-262.	330.	0.	0.	-0.		-0.0095	-0.0023	.0031	.0222	-0.0027	.0227	0.
.0240	-633.	-235.	320.	0.	0.	-0.		-0.0097	-0.0020	.0028	.0202	.0026	.0278	0.
.0250	-698.	-196.	326.	0.	0.	-0.		-0.0093	-0.0016	.0022	.0191	.0069	.0325	0.
.0260	-828.	-213.	370.	0.	0.	-0.		-0.0085	-0.0010	.0014	.0218	.0088	.0396	0.
.0270	-906.	-305.	410.	0.	-0.	0.		-0.0071	-0.0002	.0003	.0259	.0085	.0470	0.
.0280	-800.	-295.	353.	0.	-0.	0.		-0.0050	.0008	-0.0010	.0255	.0075	.0477	0.
.0290	-632.	-117.	266.	-0.	-0.	0.		-0.0023	.0019	-0.0027	.0220	.0053	.0418	0.
.0300	-552.	-63.	236.	0.	-0.	0.		.0008	.0032	-0.0045	.0231	.0010	.0393	0.
.0310	-453.	-153.	188.	-0.	-0.	0.		.0043	.0044	-0.0065	.0233	-0.0019	.0387	0.
.0320	-123.	-25.	-11.	0.	-0.	-0.		.0000	.0058	-0.0085	.0113	.0001	.0283	0.
.0330	405.	369.	-340.	0.	0.	-0.		.0119	.0071	-0.0106	-0.0118	.0059	.0074	0.
.0340	870.	661.	-645.	0.	0.	-0.		.0154	.0081	-0.0124	-0.0344	.0129	-0.0116	0.
.0350	1108.	707.	-818.	0.	0.	-0.		.0182	.0086	-0.0137	-0.0498	.0189	-0.0223	0.
.0360	1212.	710.	-895.	0.	-0.	-0.		.0203	.0085	-0.0144	-0.0595	.0212	-0.0307	0.
.0370	1350.	750.	-960.	-0.	-0.	-0.		.0214	.0080	-0.0144	-0.0667	.0188	-0.0419	0.
.0380	1545.	755.	-1009.	-0.	-0.	-0.		.0215	.0069	-0.0137	-0.0710	.0129	-0.0540	0.
.0390	1540.	549.	-920.	-0.	-0.	-0.		.0205	.0053	-0.0123	-0.0673	.0037	-0.0616	0.
.0400	1163.	293.	-610.	-0.	-0.	-0.		.0184	.0034	-0.0103	-0.0518	-0.0084	-0.0596	0.
.0410	649.	-138.	-244.	-0.	0.	-0.		.0154	.0012	-0.0078	-0.0324	-0.0177	-0.0488	0.
.0420	392.	-463.	-77.	-0.	-0.	-0.		.0120	-0.0008	-0.0051	-0.0270	-0.0163	-0.0416	0.
.0430	427.	-379.	-128.	-0.	0.	-0.		.0083	-0.0024	-0.0024	-0.0384	-0.0052	-0.0452	0.
.0440	348.	-145.	-166.	-0.	0.	-0.		.0044	-0.0038	.0003	-0.0502	.0093	-0.0476	0.
.0450	-29.	-242.	-53.	-0.	0.	-0.		.0002	-0.0051	.0032	-0.0507	.0238	-0.0359	0.
.0460	-439.	-514.	102.	-0.	0.	-0.		-0.0039	-0.0061	.0061	-0.0447	.0356	-0.0199	0.
.0470	-571.	-453.	157.	-0.	0.	0.		-0.0077	-0.0068	.0089	-0.0399	.0404	-0.0170	0.
.0480	-480.	-102.	160.	-0.	-0.	-0.		-0.0111	-0.0071	.0116	-0.0322	.0367	-0.0237	0.
.0490	-506.	-212.	275.	-0.	-0.	0.		-0.0141	-0.0073	.0142	-0.0122	.0270	-0.0233	0.
.0500	-739.	-472.	534.	-0.	-0.	0.		-0.0167	-0.0073	.0165	.0195	.0135	-0.0144	0.
.0510	-914.	-516.	750.	-0.	-0.	0.		-0.0188	-0.0070	.0184	.0489	.0002	-0.0100	0.
.0520	-741.	-263.	730.	-0.	-0.	-0.		-0.0202	-0.0064	.0198	.0614	-0.0050	-0.0157	0.
.0530	-335.	64.	522.	-0.	0.	0.		-0.0211	-0.0055	.0206	.0584	.0006	-0.0238	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/3/12/02.

18.29.27.

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

.0420	427.	-379.	-128.	-0.	0.	-0.	0.	0.083	-0.0024	-0.0024	-0.0384	-0.0052	-0.0452	0.
.0430	427.	-379.	-128.	-0.	0.	-0.	0.	0.083	-0.0024	-0.0024	-0.0384	-0.0052	-0.0452	0.
.0440	348.	-145.	-166.	-0.	0.	-0.	0.	0.044	-0.0038	0.0003	-0.0502	0.0093	-0.0476	0.
.0450	-20.	-242.	-53.	-0.	0.	-0.	0.	0.0002	-0.0051	0.0032	-0.0507	0.0238	-0.0359	0.
.0460	-439.	-514.	102.	-0.	0.	-0.	0.	-0.0039	-0.0061	0.0061	-0.0447	0.0356	-0.0199	0.
.0470	-571.	-453.	157.	-0.	0.	-0.	0.	-0.0077	-0.0068	0.0089	-0.0399	0.0404	-0.0170	0.
.0480	-480.	-102.	160.	-0.	-0.	-0.	0.	-0.0111	-0.0071	0.0116	-0.0322	0.0367	-0.0237	0.
.0490	-506.	-212.	275.	-0.	-0.	-0.	0.	-0.0141	-0.0073	0.0142	-0.0122	0.0270	-0.0233	0.
.0500	-739.	-472.	534.	-0.	-0.	-0.	0.	-0.0167	-0.0073	0.0165	0.0195	0.0135	-0.0144	0.
.0510	-914.	-516.	750.	-0.	-0.	-0.	0.	-0.0188	-0.0070	0.0184	0.0489	0.0002	-0.0100	0.
.0520	-741.	-263.	730.	-0.	-0.	-0.	0.	-0.0202	-0.0064	0.0198	0.0614	-0.0050	-0.0157	0.
.0530	-335.	64.	522.	-0.	0.	-0.	0.	-0.0211	-0.0055	0.0206	0.0584	0.0006	-0.0238	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

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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	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	-73.	337.	341.	0.	0.	-0.	-0.0217	-0.0048	0.0211	0.0534	0.0108	-0.0249	0.	
.0550	-64.	516.	277.	0.	0.	0.	-0.0223	-0.0043	0.0213	0.0531	0.0200	-0.0178	0.	
.0560	-57.	605.	222.	0.	-0.	0.	-0.0228	-0.0042	0.0213	0.0517	0.0283	-0.0089	0.	
.0570	125.	715.	108.	0.	-0.	0.	-0.0233	-0.0045	0.0212	0.0464	0.0333	-0.0057	0.	
.0580	323.	865.	38.	0.	-0.	0.	-0.0239	-0.0053	0.0210	0.0452	0.0296	-0.0066	0.	
.0590	280.	811.	151.	0.	-0.	0.	-0.0248	-0.0068	0.0207	0.0554	0.0175	-0.0013	0.	
.0600	-25.	419.	431.	0.	-0.	0.	-0.0258	-0.0089	0.0203	0.0733	0.0035	0.0153	0.	
.0610	-373.	-28.	714.	0.	-0.	0.	-0.0267	-0.0112	0.0196	0.0876	-0.0078	0.0347	0.	
.0620	-546.	-271.	830.	0.	-0.	0.	-0.0274	-0.0134	0.0194	0.0881	-0.0133	0.0475	0.	
.0630	-560.	-269.	791.	0.	-0.	0.	-0.0277	-0.0155	0.0165	0.0729	-0.0101	0.0557	0.	
.0640	-621.	-354.	692.	0.	0.	0.	-0.0275	-0.0174	0.0141	0.0494	0.0007	0.0670	0.	
.0650	-826.	-495.	618.	0.	-0.	0.	-0.0269	-0.0190	0.0112	0.0251	0.0129	0.0816	0.	
.0660	-1009.	-591.	516.	0.	-0.	0.	-0.0256	-0.0203	0.0079	0.0001	0.0220	0.0923	0.	
.0670	-999.	-619.	334.	-0.	-0.	0.	-0.0237	-0.0211	0.0042	-0.0262	0.0258	0.0942	0.	
.0680	-862.	-651.	145.	-0.	-0.	0.	-0.0210	-0.0214	0.0003	-0.0470	0.0207	0.0891	0.	
.0690	-768.	-760.	53.	-0.	-0.	0.	-0.0177	-0.0213	-0.0037	-0.0550	0.0046	0.0810	0.	
.0700	-745.	-935.	48.	-0.	0.	0.	-0.0138	-0.0205	-0.0078	-0.0529	-0.0183	0.0710	0.	
.0710	-680.	-1074.	28.	0.	0.	-0.	-0.0095	-0.0191	-0.0118	-0.0503	-0.0404	0.0574	0.	
.0720	-479.	-1080.	-105.	0.	0.	-0.	-0.0046	-0.0169	-0.0158	-0.0548	-0.0558	0.0395	0.	
.0730	-143.	-932.	-379.	0.	0.	-0.	0.0005	-0.0140	-0.0197	-0.0695	-0.0610	0.0185	0.	
.0740	211.	-665.	-731.	-0.	0.	-0.	0.0057	-0.0104	-0.0233	-0.0921	-0.0554	-0.0024	0.	
.0750	451.	-364.	-1059.	0.	0.	0.	0.0107	-0.0063	-0.0263	-0.1149	-0.0429	-0.0195	0.	
.0760	582.	-105.	-1315.	-0.	-0.	-0.	0.0154	-0.0020	-0.0285	-0.1320	-0.0285	-0.0321	0.	
.0770	730.	119.	-1522.	-0.	-0.	-0.	0.0196	0.0023	-0.0298	-0.1424	-0.0157	-0.0448	0.	
.0780	927.	346.	-1658.	-0.	-0.	-0.	0.0233	0.0065	-0.0299	-0.1435	-0.0085	-0.0607	0.	
.0790	1054.	493.	-1635.	-0.	0.	-0.	0.0262	0.0105	-0.0288	-0.1292	-0.0098	-0.0766	0.	
.0800	1041.	450.	-1427.	-0.	0.	-0.	0.0284	0.0141	-0.0266	-0.0986	-0.0176	-0.0884	0.	
.0810	977.	318.	-1125.	-0.	0.	-0.	0.0298	0.0173	-0.0233	-0.0605	-0.0265	-0.0983	0.	
.0820	972.	308.	-844.	0.	0.	-0.	0.0305	0.0203	-0.0192	-0.0245	-0.0318	-0.1100	0.	
.0830	1018.	421.	-625.	-0.	0.	-0.	0.0305	0.0230	-0.0146	-0.0050	-0.0298	-0.1205	0.	
.0840	1034.	508.	-446.	-0.	0.	-0.	0.0298	0.0254	-0.0095	0.0278	-0.0181	-0.1237	0.	
.0850	944.	551.	-263.	-0.	0.	-0.	0.0283	0.0275	-0.0041	0.0459	0.0013	-0.1184	0.	
.0860	739.	617.	-48.	-0.	-0.	-0.	0.0261	0.0291	0.0014	0.0630	0.0227	-0.1077	0.	
.0870	500.	661.	190.	-0.	-0.	-0.	0.0234	0.0302	0.0069	0.0811	0.0422	-0.0939	0.	
.0880	311.	628.	430.	0.	-0.	0.	0.0204	0.0309	0.0122	0.1002	0.0578	-0.0791	0.	
.0890	154.	564.	692.	0.	0.	-0.	0.0172	0.0311	0.0172	0.1218	0.0670	-0.0651	0.	
.0900	-40.	479.	998.	0.	0.	-0.	0.0139	0.0309	0.0216	0.1473	0.0689	-0.0512	0.	
.0910	-249.	316.	1302.	0.	0.	-0.	0.0106	0.0304	0.0253	0.1722	0.0675	-0.0356	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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18.29.27.

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

.0810	077.	210.	-1125.	-0.	0.	-0.	0.	0.	.0298	.0173	-.0233	-.0605	-.0265	-.0983	0.
.0820	070.	308.	-846.	0.	0.	-0.	0.	-0.	.0305	.0203	-.0192	-.0245	-.0318	-.1100	0.
.0830	1010.	421.	-625.	-0.	0.	-0.	0.	-0.	.0305	.0230	-.0146	.0050	-.0298	-.1205	0.
.0840	1034.	508.	-446.	-0.	0.	-0.	0.	-0.	.0298	.0254	-.0095	.0278	-.0181	-.1237	0.
.0850	944.	551.	-263.	-0.	0.	-0.	0.	-0.	.0293	.0275	-.0041	.0459	.0013	-.1184	0.
.0860	739.	617.	-40.	-0.	-0.	-0.	-0.	-0.	.0261	.0291	.0014	.0630	.0227	-.1077	0.
.0870	500.	661.	190.	-0.	-0.	-0.	-0.	-0.	.0234	.0302	.0069	.0811	.0422	-.0939	0.
.0880	311.	628.	430.	0.	-0.	0.	0.	0.	.0204	.0309	.0122	.1002	.0578	-.0791	0.
.0890	154.	564.	692.	0.	0.	-0.	0.	-0.	.0172	.0311	.0172	.1218	.0670	-.0651	0.
.0900	-40.	479.	998.	0.	0.	-0.	0.	-0.	.0139	.0309	.0216	.1473	.0689	-.0512	0.
.0910	-240.	316.	1302.	0.	0.	-0.	0.	-0.	.0106	.0304	.0253	.1722	.0675	-.0356	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.27.

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	58	MEMBER	2	SEQUENCE	028	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)		
.0920	-767.	145.	1503.	0.	0.	-0.	.0076	.0296	.0280	.1882	.0678	-.0204	0.		
.0930	-740.	135.	1539.	0.	0.	-0.	.0048	.0288	.0296	.1905	.0710	-.0099	0.		
.0940	-220.	275.	1434.	0.	-0.	-0.	.0023	.0278	.0300	.1809	.0758	-.0030	0.		
.0950	-139.	305.	1265.	0.	0.	-0.	-.0001	.0266	.0295	.1648	.0805	.0056	0.		
.0960	-123.	391.	1097.	0.	-0.	0.	-.0023	.0251	.0280	.1476	.0815	.0173	0.		
.0970	-140.	369.	943.	-0.	-0.	0.	-.0044	.0234	.0257	.1324	.0749	.0287	0.		
.0980	-139.	339.	796.	0.	-0.	-0.	-.0064	.0213	.0227	.1193	.0598	.0374	0.		
.0990	-159.	270.	670.	0.	-0.	-0.	-.0083	.0191	.0192	.1093	.0386	.0458	0.		
.1000	-289.	29.	620.	0.	-0.	0.	-.0100	.0167	.0152	.1029	.0137	.0569	0.		
.1010	-527.	-198.	591.	0.	0.	0.	-.0115	.0142	.0108	.0969	-.0111	.0705	0.		
.1020	-776.	-378.	512.	0.	0.	-0.	-.0126	.0119	.0059	.0846	-.0309	.0843	0.		
.1030	-980.	-479.	346.	0.	0.	-0.	-.0131	.0099	.0007	.0634	-.0436	.0972	0.		
.1040	-1182.	-523.	135.	0.	-0.	-0.	-.0129	.0083	-.0047	.0367	-.0507	.1100	0.		
.1050	-1415.	-574.	-65.	0.	-0.	0.	-.0117	.0070	-.0101	.0094	-.0550	.1226	0.		
.1060	-1626.	-650.	-244.	-0.	-0.	0.	-.0096	.0062	-.0155	-.0161	-.0586	.1323	0.		
.1070	-1712.	-691.	-423.	0.	-0.	0.	-.0062	.0058	-.0207	-.0394	-.0633	.1339	0.		
.1080	-1619.	-639.	-613.	-0.	0.	0.	-.0017	.0060	-.0255	-.0607	-.0692	.1247	0.		
.1090	-1384.	-540.	-798.	0.	0.	0.	.0041	.0066	-.0299	-.0795	-.0750	.1065	0.		
.1100	-1016.	-512.	-992.	0.	0.	-0.	.0107	.0075	-.0336	-.0953	-.0789	.0830	0.		
.1110	-540.	-305.	-1198.	0.	0.	-0.	.0181	.0089	-.0366	-.1113	-.0798	.0522	0.		
.1120	2.	-116.	-1406.	-0.	0.	-0.	.0258	.0105	-.0387	-.1281	-.0773	.0153	0.		
.1130	528.	84.	-1575.	0.	-0.	-0.	.0334	.0122	-.0397	-.1415	-.0728	-.0207	0.		
.1140	977.	161.	-1667.	0.	-0.	0.	.0406	.0138	-.0376	-.1473	-.0692	-.0524	0.		
.1150	1373.	247.	-1684.	-0.	-0.	-0.	.0470	.0152	-.0382	-.1464	-.0678	-.0823	0.		
.1160	1745.	342.	-1639.	-0.	-0.	0.	.0524	.0165	-.0356	-.1406	-.0675	-.1114	0.		
.1170	2029.	359.	-1509.	-0.	-0.	0.	.0564	.0175	-.0319	-.1286	-.0671	-.1362	0.		
.1180	2142.	263.	-1272.	-0.	-0.	-0.	.0590	.0183	-.0271	-.1088	-.0661	-.1526	0.		
.1190	2111.	203.	-972.	-0.	0.	0.	.0600	.0188	-.0214	-.0879	-.0598	-.1617	0.		
.1200	1998.	170.	-681.	0.	-0.	-0.	.0594	.0192	-.0150	-.0720	-.0444	-.1631	0.		
.1210	1787.	70.	-414.	-0.	0.	-0.	.0575	.0195	-.0082	-.0592	-.0217	-.1545	0.		
.1220	1450.	14.	-153.	-0.	-0.	-0.	.0542	.0197	-.0011	-.0477	.0038	-.1387	0.		
.1230	1043.	-12.	108.	-0.	-0.	0.	.0500	.0200	.0060	-.0351	.0280	-.1184	0.		
.1240	640.	-55.	769.	-0.	-0.	0.	.0450	.0202	.0130	-.0200	.0472	-.0973	0.		
.1250	235.	-134.	663.	0.	-0.	0.	.0396	.0204	.0197	.0022	.0561	-.0777	0.		
.1260	-200.	-274.	1016.	0.	-0.	-0.	.0341	.0208	.0259	.0344	.0527	-.0585	0.		
.1270	-619.	-440.	1380.	-0.	-0.	0.	.0288	.0214	.0313	.0704	.0432	-.0394	0.		
.1280	-942.	-652.	1691.	0.	0.	0.	.0240	.0223	.0356	.1025	.0342	-.0203	0.		
.1290	-1134.	-744.	1847.	-0.	0.	-0.	.0199	.0236	.0386	.1244	.0288	-.0049	0.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.27.

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

.1180	2140.	203.	-272.	-0.	-0.	-0.	.590	.0183	-.0271	-.1088	-.0661	-.1526	0.
.1190	2111.	203.	-272.	-0.	-0.	-0.	.600	.0188	-.0214	-.0879	-.0598	-.1617	0.
.1200	1090.	170.	-681.	0.	-0.	-0.	.0594	.0192	-.0150	-.0720	-.0444	-.1631	0.
.1210	1787.	70.	-414.	-0.	0.	-0.	.0575	.0195	-.0082	-.0592	-.0217	-.1545	0.
.1220	1450.	14.	-153.	-0.	-0.	-0.	.0542	.0197	-.0011	-.0477	.0038	-.1387	0.
.1230	1047.	-12.	100.	-0.	-0.	0.	.0500	.0200	.0060	-.0351	.0280	-.1184	0.
.1240	640.	-55.	369.	-0.	-0.	0.	.0450	.0202	.0130	-.0200	.0472	-.0973	0.
.1250	235.	-134.	663.	0.	-0.	0.	.0396	.0204	.0197	.0022	.0561	-.0777	0.
.1260	-200.	-274.	1016.	0.	-0.	-0.	.0341	.0208	.0259	.0344	.0527	-.0585	0.
.1270	-610.	-440.	1380.	-0.	-0.	0.	.0288	.0214	.0313	.0704	.0432	-.0394	0.
.1280	-940.	-652.	1691.	0.	0.	0.	.0240	.0223	.0356	.1025	.0342	-.0203	0.
.1290	-1134.	-744.	1847.	-0.	0.	-0.	.0199	.0236	.0386	.1244	.0288	-.0049	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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S/RV PIPING KEWAUNEE CKW00F 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	END	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)
.1300	-1206.	-599.	1832.	0.	0.	-0.	.0166	.0255	.0403	.1330	.0284	.0050	0.
.1310	-1166.	-358.	1654.	-0.	0.	-0.	.0143	.0278	.0407	.1282	.0344	.0133	0.
.1320	-1040.	-82.	1350.	0.	0.	0.	.0128	.0303	.0399	.1116	.0451	.0205	0.
.1330	-891.	199.	1021.	0.	-0.	0.	.0121	.0329	.0381	.0917	.0528	.0260	0.
.1340	-767.	457.	719.	-0.	-0.	0.	.0120	.0353	.0356	.0757	.0521	.0295	0.
.1350	-625.	586.	482.	0.	-0.	0.	.0125	.0373	.0325	.0659	.0438	.0326	0.
.1360	-432.	576.	298.	-0.	-0.	0.	.0134	.0389	.0292	.0612	.0302	.0341	0.
.1370	-210.	620.	159.	0.	-0.	-0.	.0146	.0400	.0256	.0589	.0130	.0300	0.
.1380	-58.	677.	79.	0.	0.	-0.	.0159	.0407	.0220	.0590	-.0043	.0256	0.
.1390	-26.	609.	54.	0.	0.	-0.	.0173	.0409	.0185	.0581	-.0154	.0289	0.
.1400	-56.	436.	27.	0.	0.	-0.	.0187	.0406	.0146	.0515	-.0169	.0402	0.
.1410	-59.	333.	-59.	0.	0.	0.	.0202	.0400	.0109	.0379	-.0124	.0526	0.
.1420	-30.	404.	-182.	-0.	0.	0.	.0216	.0392	.0073	.0202	-.0066	.0620	0.
.1430	-73.	425.	-254.	-0.	-0.	0.	.0231	.0380	.0038	.0057	-.0021	.0734	0.
.1440	-168.	285.	-240.	-0.	-0.	-0.	.0247	.0366	.0005	-.0019	-.0010	.0878	0.
.1450	-218.	127.	-191.	0.	-0.	0.	.0263	.0350	-.0026	-.0046	-.0054	.0980	0.
.1460	-144.	54.	-160.	-0.	0.	0.	.0281	.0332	-.0056	-.0049	-.0149	.1001	0.
.1470	0.	19.	-142.	-0.	0.	-0.	.0300	.0315	-.0084	-.0053	-.0248	.0980	0.
.1480	173.	-99.	-132.	-0.	0.	0.	.0319	.0297	-.0111	-.0067	-.0318	.0967	0.
.1490	362.	-146.	-182.	-0.	0.	-0.	.0336	.0280	-.0137	-.0134	-.0351	.0924	0.
.1500	625.	28.	-346.	-0.	0.	-0.	.0350	.0264	-.0162	-.0296	-.0345	.0812	0.
.1510	957.	267.	-610.	-0.	0.	-0.	.0359	.0247	-.0185	-.0546	-.0290	.0672	0.
.1520	1285.	432.	-906.	-0.	0.	-0.	.0361	.0229	-.0200	-.0845	-.0198	.0537	0.
.1530	1529.	524.	-1156.	-0.	0.	0.	.0353	.0207	-.0210	-.1120	-.0124	.0391	0.
.1540	1649.	622.	-1301.	-0.	0.	-0.	.0334	.0182	-.0212	-.1321	-.0110	.0208	0.
.1550	1675.	622.	-1333.	-0.	0.	0.	.0304	.0152	-.0204	-.1431	-.0144	.0014	0.
.1560	1677.	435.	-1288.	-0.	0.	0.	.0261	.0117	-.0187	-.1474	-.0196	-.0173	0.
.1570	1652.	262.	-1197.	-0.	0.	0.	.0205	.0080	-.0160	-.1486	-.0256	-.0390	0.
.1580	1494.	119.	-1032.	-0.	0.	0.	.0139	.0041	-.0124	-.1454	-.0323	-.0609	0.
.1590	1142.	-161.	-784.	-0.	0.	0.	.0061	.0001	-.0082	-.1379	-.0365	-.0757	0.
.1600	699.	-529.	-523.	-0.	-0.	0.	-.0023	-.0037	-.0034	-.1316	-.0346	-.0845	0.
.1610	285.	-751.	-318.	-0.	-0.	0.	-.0113	-.0071	.0018	-.1294	-.0287	-.0946	0.
.1620	-103.	-813.	-153.	-0.	-0.	0.	-.0204	-.0100	.0071	-.1268	-.0221	-.1062	0.
.1630	-536.	-891.	48.	-0.	-0.	0.	-.0293	-.0122	.0125	-.1194	-.0143	-.1130	0.
.1640	-1033.	-1105.	320.	-0.	-0.	0.	-.0378	-.0138	.0178	-.1037	-.0054	-.1116	0.
.1650	-1490.	-1296.	620.	-0.	-0.	0.	-.0455	-.0145	.0229	-.0808	.0019	-.1082	0.
.1660	-1833.	-1289.	885.	-0.	-0.	-0.	-.0521	-.0143	.0275	-.0547	.0076	-.1087	0.
.1670	-2044.	-1225.	1111.	0.	-0.	-0.	-.0572	-.0132	.0313	-.0257	.0131	-.1086	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.27.

S/RV PIPING KEWAUNEE CKW00F 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

.1570	1652.	262.	-1197.	-0.	0.	0.	0.	.205	.0080	-.0160	-.1486	-.0256	-.0390	0.
.1580	1494.	119.	-1032.	-0.	0.	0.	0.	.139	.0041	-.0124	-.1454	-.0525	-.0609	0.
.1590	1142.	-161.	-784.	-0.	0.	0.	0.	.0061	.0001	-.0082	-.1379	-.0365	-.0757	0.
.1600	699.	-529.	-523.	-0.	-0.	0.	0.	-.0023	-.0037	-.0034	-.1316	-.0346	-.0845	0.
.1610	285.	-751.	-318.	-0.	-0.	0.	0.	-.0113	-.0071	.0018	-.1294	-.0287	-.0946	0.
.1620	-103.	-813.	-153.	-0.	-0.	0.	0.	-.0204	-.0100	.0071	-.1268	-.0221	-.1062	0.
.1630	-536.	-891.	48.	-0.	-0.	0.	0.	-.0293	-.0122	.0125	-.1194	-.0145	-.1130	0.
.1640	-1033.	-1105.	320.	-0.	-0.	0.	0.	-.0378	-.0138	.0178	-.1037	-.0054	-.1116	0.
.1650	-1498.	-1296.	620.	-0.	-0.	0.	0.	-.0455	-.0145	.0229	-.0808	.0019	-.1082	0.
.1660	-1833.	-1289.	885.	-0.	-0.	-0.	-0.	-.0521	-.0143	.0275	-.0547	.0076	-.1087	0.
.1670	-2044.	-1225.	1111.	-0.	-0.	-0.	-0.	-.0572	-.0132	.0313	-.0257	.0131	-.1086	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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	SB	MEMBER	2	SEQUENCE	828	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)	
.1680	-2185.	-1176.	1314.	-0.	-0.	-0.		-.0609	-.0112	.0344	.0063	.0191	-.1042	0.	
.1690	-2240.	-1054.	1469.	0.	-0.	0.		-.0629	-.0084	.0364	.0397	.0237	-.0979	0.	
.1700	-2145.	-762.	1535.	-0.	-0.	0.		-.0633	-.0049	.0374	.0708	.0264	-.0937	0.	
.1710	-1902.	-368.	1518.	-0.	-0.	-0.		-.0622	-.0008	.0372	.0985	.0284	-.0900	0.	
.1720	-1567.	-51.	1463.	-0.	-0.	0.		-.0597	.0035	.0360	.1256	.0292	-.0823	0.	
.1730	-1158.	270.	1379.	0.	-0.	0.		-.0561	.0078	.0336	.1503	.0287	-.0739	0.	
.1740	-670.	657.	1255.	0.	-0.	0.		-.0517	.0118	.0303	.1706	.0270	-.0678	0.	
.1750	-131.	1033.	1095.	0.	-0.	-0.		-.0469	.0153	.0261	.1854	.0253	-.0617	0.	
.1760	409.	1338.	910.	0.	0.	0.		-.0420	.0180	.0211	.1924	.0255	-.0526	0.	
.1770	896.	1544.	705.	0.	-0.	-0.		-.0375	.0197	.0155	.1909	.0273	-.0396	0.	
.1780	1274.	1712.	489.	0.	0.	0.		-.0337	.0202	.0094	.1804	.0295	-.0240	0.	
.1790	1510.	1773.	280.	0.	-0.	0.		-.0308	.0195	.0030	.1619	.0313	-.0043	0.	
.1800	1627.	1681.	74.	0.	-0.	-0.		-.0291	.0175	-.0036	.1354	.0337	.0190	0.	
.1810	1660.	1575.	-136.	-0.	-0.	0.		-.0285	.0142	-.0102	.1004	.0358	.0413	0.	
.1820	1602.	1333.	-331.	-0.	-0.	-0.		-.0292	.0099	-.0167	.0611	.0355	.0609	0.	
.1830	1436.	1040.	-487.	-0.	0.	-0.		-.0310	.0046	-.0229	.0198	.0332	.0786	0.	
.1840	1187.	617.	-607.	-0.	0.	-0.		-.0339	-.0014	-.0287	-.0229	.0309	.0955	0.	
.1850	894.	145.	-714.	0.	0.	-0.		-.0376	-.0078	-.0340	-.0670	.0283	.1089	0.	
.1860	566.	-261.	-824.	0.	0.	0.		-.0419	-.0142	-.0388	-.1112	.0244	.1165	0.	
.1870	197.	-657.	-930.	0.	0.	-0.		-.0465	-.0204	-.0429	-.1531	.0191	.1205	0.	
.1880	-201.	-1054.	-1032.	-0.	0.	-0.		-.0513	-.0261	-.0464	-.1917	.0133	.1221	0.	
.1890	-589.	-1394.	-1134.	0.	-0.	-0.		-.0559	-.0310	-.0491	-.2252	.0061	.1197	0.	
.1900	-935.	-1617.	-1238.	-0.	-0.	-0.		-.0599	-.0348	-.0509	-.2514	-.0035	.1114	0.	
.1910	-1235.	-1737.	-1322.	-0.	-0.	-0.		-.0633	-.0375	-.0518	-.2689	-.0141	.0984	0.	
.1920	-1480.	-1832.	-1371.	-0.	-0.	-0.		-.0657	-.0388	-.0517	-.2756	-.0239	.0834	0.	
.1930	-1631.	-1833.	-1404.	0.	-0.	0.		-.0671	-.0389	-.0507	-.2730	-.0316	.0649	0.	
.1940	-1627.	-1642.	-1456.	0.	-0.	-0.		-.0672	-.0376	-.0486	-.2637	-.0361	.0400	0.	
.1950	-1483.	-1291.	-1522.	-0.	0.	-0.		-.0661	-.0352	-.0454	-.2484	-.0366	.0105	0.	
.1960	-1264.	-886.	-1563.	0.	-0.	-0.		-.0640	-.0318	-.0412	-.2257	-.0331	-.0192	0.	
.1970	-1010.	-460.	-1554.	0.	-0.	0.		-.0610	-.0279	-.0358	-.1952	-.0271	-.0475	0.	
.1980	-717.	9.	-1489.	-0.	-0.	-0.		-.0573	-.0237	-.0293	-.1570	-.0208	-.0757	0.	
.1990	-380.	485.	-1351.	-0.	-0.	0.		-.0531	-.0196	-.0218	-.1111	-.0157	-.1034	0.	
.2000	-54.	882.	-1107.	-0.	-0.	-0.		-.0486	-.0158	-.0133	-.0568	-.0119	-.1280	0.	
.2010	222.	1158.	-740.	-0.	-0.	-0.		-.0441	-.0128	-.0041	.0046	-.0091	-.1477	0.	
.2020	435.	1332.	-272.	-0.	-0.	-0.		-.0398	-.0106	-.0056	.0698	-.0063	-.1627	0.	
.2030	596.	1423.	255.	-0.	-0.	-0.		-.0359	-.0094	.0154	.1335	-.0017	-.1727	0.	
.2040	712.	1423.	794.	-0.	-0.	-0.		-.0324	-.0093	.0249	.1904	.0071	-.1766	0.	
.2050	773.	1341.	1310.	0.	0.	-0.		-.0295	-.0102	.0338	.2370	.0200	-.1737	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.27.

S/RV PIPING KEWAUNEE GKW00F 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

.1940	-1027.	-1642.	1456.	0.	-0.	-0.	-0.	-.0672	-.0376	-.0486	-.2637	-.0361	.0400	0.
.1950	-1483.	-1291.	-1522.	-0.	0.	-0.	-0.	-.0661	-.0352	-.0454	-.2484	-.0366	.0105	0.
.1960	-1266.	-886.	-1563.	0.	-0.	-0.	-0.	-.0640	-.0318	-.0412	-.2257	-.0331	-.0192	0.
.1970	-1010.	-460.	-1554.	0.	-0.	-0.	-0.	-.0610	-.0279	-.0358	-.1952	-.0271	-.0475	0.
.1980	-717.	9.	-1489.	0.	-0.	-0.	-0.	-.0573	-.0237	-.0293	-.1570	-.0208	-.0757	0.
.1990	-380.	405.	-1751.	-0.	-0.	-0.	-0.	-.0531	-.0196	-.0218	-.1111	-.0157	-.1034	0.
.2000	-54.	882.	-1107.	-0.	-0.	-0.	-0.	-.0486	-.0158	-.0133	-.0568	-.0119	-.1280	0.
.2010	222.	1158.	-740.	-0.	-0.	-0.	-0.	-.0441	-.0128	-.0041	.0046	-.0091	-.1477	0.
.2020	435.	1332.	-272.	-0.	-0.	-0.	-0.	-.0398	-.0106	.0056	.0698	-.0063	-.1627	0.
.2030	596.	1423.	255.	-0.	-0.	-0.	-0.	-.0359	-.0094	.0154	.1335	-.0017	-.1727	0.
.2040	712.	1423.	794.	-0.	-0.	-0.	-0.	-.0324	-.0093	.0249	.1904	.0071	-.1766	0.
.2050	777.	1341.	1210.	0.	0.	-0.	-0.	-.0295	-.0102	.0338	.2370	.0200	-.1737	0.

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

ADLPIPE STRESS ANALYSIS

8/12/02. 18.29.27.

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

SECTION	58	MEMBER	2	SEQUENCE	828	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)
.2060	760.	1205.	1781.	0.	0.	-0.		-.0271	-.0121	.0417	.2718	.0351	-.1649	0.
.2070	680.	1025.	2190.	0.	-0.	-0.		-.0253	-.0148	.0482	.2946	.0499	-.1510	0.
.2080	563.	782.	2519.	0.	-0.	0.		-.0239	-.0183	.0530	.3051	.0627	-.1328	0.
.2090	437.	480.	2759.	-0.	-0.	0.		-.0230	-.0223	.0560	.3044	.0713	-.1120	0.
.2100	311.	146.	2908.	0.	-0.	0.		-.0224	-.0267	.0569	.2943	.0739	-.0906	0.
.2110	190.	-199.	2962.	0.	-0.	0.		-.0219	-.0311	.0558	.2756	.0702	-.0695	0.
.2120	92.	-548.	2904.	-0.	0.	0.		-.0217	-.0353	.0524	.2479	.0619	-.0487	0.
.2130	44.	-853.	2704.	0.	-0.	-0.		-.0215	-.0391	.0470	.2097	.0512	-.0290	0.
.2140	52.	-1055.	2342.	-0.	0.	0.		-.0213	-.0422	.0396	.1602	.0393	-.0111	0.
.2150	84.	-1151.	1834.	0.	0.	0.		-.0211	-.0446	.0306	.1008	.0273	.0060	0.
.2160	99.	-1188.	1216.	0.	0.	0.		-.0210	-.0461	.0204	.0347	.0157	.0243	0.
.2170	87.	-1182.	526.	0.	0.	0.		-.0209	-.0467	.0093	-.0344	.0039	.0437	0.
.2180	67.	-1103.	-204.	-0.	-0.	0.		-.0210	-.0465	-.0020	-.1028	-.0092	.0617	0.
.2190	38.	-960.	-924.	-0.	-0.	0.		-.0210	-.0455	-.0131	-.1658	-.0242	.0773	0.
.2200	-35.	-821.	-1570.	-0.	-0.	0.		-.0211	-.0438	-.0234	-.2187	-.0411	.0919	0.
.2210	-176.	-733.	-2097.	0.	-0.	-0.		-.0211	-.0415	-.0325	-.2584	-.0587	.1066	0.
.2220	-367.	-666.	-2500.	-0.	0.	-0.		-.0209	-.0387	-.0400	-.2851	-.0754	.1204	0.
.2230	-575.	-579.	-2793.	-0.	0.	-0.		-.0205	-.0354	-.0457	-.3004	-.0891	.1320	0.
.2240	-784.	-471.	-2983.	0.	0.	0.		-.0196	-.0317	-.0492	-.3056	-.0978	.1412	0.
.2250	-999.	-360.	-3064.	0.	0.	0.		-.0182	-.0277	-.0506	-.3010	-.1008	.1486	0.
.2260	-1207.	-239.	-3033.	-0.	-0.	-0.		-.0160	-.0235	-.0497	-.2864	-.0984	.1532	0.
.2270	-1371.	-102.	-2891.	-0.	-0.	-0.		-.0129	-.0191	-.0466	-.2619	-.0918	.1534	0.
.2280	-1457.	34.	-2640.	-0.	0.	0.		-.0088	-.0147	-.0414	-.2273	-.0822	.1481	0.
.2290	-1451.	142.	-2275.	-0.	-0.	0.		-.0036	-.0103	-.0344	-.1822	-.0707	.1370	0.
.2300	-1352.	217.	-1800.	-0.	0.	-0.		.0026	-.0061	-.0258	-.1273	-.0586	.1196	0.
.2310	-1151.	279.	-1244.	-0.	0.	0.		.0097	-.0020	-.0159	-.0650	-.0462	.0956	0.
.2320	-834.	345.	-650.	-0.	0.	-0.		.0176	.0018	-.0052	.0002	-.0326	.0653	0.
.2330	-403.	427.	-68.	0.	0.	-0.		.0261	.0054	.0059	.0636	-.0170	.0301	0.
.2340	112.	533.	472.	0.	0.	-0.		.0348	.0086	.0170	.1218	.0006	-.0083	0.
.2350	665.	659.	952.	0.	0.	-0.		.0433	.0114	.0277	.1722	.0200	-.0477	0.
.2360	1214.	784.	1365.	-0.	0.	-0.		.0513	.0138	.0376	.2136	.0404	-.0858	0.
.2370	1733.	889.	1706.	-0.	-0.	-0.		.0584	.0155	.0464	.2453	.0608	-.1211	0.
.2380	2202.	972.	1972.	0.	-0.	-0.		.0641	.0166	.0539	.2673	.0797	-.1528	0.
.2390	2587.	1024.	2171.	0.	-0.	-0.		.0682	.0169	.0599	.2802	.0957	-.1800	0.
.2400	2841.	1016.	2318.	0.	-0.	0.		.0703	.0165	.0643	.2849	.1078	-.2005	0.
.2410	2931.	921.	2418.	0.	-0.	0.		.0704	.0154	.0670	.2820	.1156	-.2126	0.
.2420	2854.	760.	2460.	0.	0.	-0.		.0683	.0136	.0679	.2711	.1189	-.2158	0.
.2430	2625.	569.	2424.	0.	-0.	0.		.0642	.0113	.0670	.2511	.1181	-.2106	0.

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

ADLPIPE STRESS ANALYSIS

8/12/02. 18.29.27.

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

.2320	-834.	345.	450.	-0.	0.	-0.	0.	.0176	.0018	-.0052	.0002	-.0326	.0653	0.
.2330	-407.	427.	-60.	0.	0.	-0.	0.	.0261	.0054	.0059	.0636	-.0170	.0301	0.
.2340	112.	533.	472.	0.	0.	-0.	0.	.0348	.0086	.0170	.1218	.0006	-.0083	0.
.2350	665.	659.	952.	0.	0.	-0.	0.	.0433	.0114	.0277	.1722	.0200	-.0477	0.
.2360	1214.	704.	1365.	-0.	0.	-0.	0.	.0513	.0138	.0376	.2136	.0404	-.0858	0.
.2370	1737.	889.	1706.	-0.	-0.	-0.	0.	.0584	.0155	.0464	.2453	.0608	-.1211	0.
.2380	2202.	972.	1972.	0.	-0.	-0.	0.	.0641	.0166	.0539	.2673	.0797	-.1528	0.
.2390	2587.	1024.	2171.	0.	-0.	-0.	0.	.0682	.0169	.0599	.2802	.0957	-.1800	0.
.2400	2841.	1016.	2318.	0.	-0.	0.	0.	.0703	.0165	.0643	.2849	.1078	-.2005	0.
.2410	2931.	921.	2418.	0.	-0.	0.	0.	.0704	.0154	.0670	.2820	.1156	-.2126	0.
.2420	2854.	760.	2460.	0.	0.	-0.	0.	.0683	.0136	.0679	.2711	.1189	-.2158	0.
.2430	2625.	569.	2424.	0.	-0.	0.	0.	.0642	.0113	.0670	.2511	.1181	-.2106	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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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	58	MEMBER	2	SEQUENCE	828	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)	
.2440	2260.	362.	2302.	-0.	0.	0.		.0582	.0087	.0644	.2225	.1135	-.1973	0.	
.2450	1767.	138.	2104.	0.	0.	-0.		.0506	.0057	.0601	.1864	.1055	-.1762	0.	
.2460	1166.	-94.	1842.	0.	-0.	0.		.0418	.0028	.0543	.1449	.0943	-.1483	0.	
.2470	497.	-316.	1528.	0.	-0.	0.		.0323	-.0001	.0472	.0998	.0803	-.1156	0.	
.2480	-191.	-523.	1173.	0.	-0.	0.		.0225	-.0028	.0390	.0534	.0640	-.0797	0.	
.2490	-855.	-712.	787.	0.	-0.	0.		.0128	-.0050	.0301	.0073	.0462	-.0424	0.	
.2500	-1465.	-863.	387.	0.	-0.	0.		.0040	-.0066	.0206	-.0365	.0273	-.0054	0.	
.2510	-2006.	-961.	-13.	-0.	-0.	0.		-.0038	-.0077	.0109	-.0764	.0080	.0300	0.	
.2520	-2464.	-1015.	-398.	0.	-0.	0.		-.0100	-.0080	.0013	-.1114	-.0109	.0632	0.	
.2530	-2816.	-1028.	-763.	-0.	-0.	0.		-.0144	-.0075	-.0080	-.1409	-.0285	.0936	0.	
.2540	-3034.	-987.	-1104.	0.	-0.	0.		-.0167	-.0063	-.0166	-.1646	-.0440	.1197	0.	
.2550	-3105.	-887.	-1400.	-0.	0.	0.		-.0167	-.0044	-.0244	-.1818	-.0570	.1402	0.	
.2560	-3031.	-744.	-1658.	-0.	-0.	0.		-.0145	-.0018	-.0311	-.1916	-.0671	.1544	0.	
.2570	-2821.	-578.	-1834.	0.	0.	0.		-.0101	.0012	-.0366	-.1931	-.0740	.1623	0.	
.2580	-2474.	-396.	-1932.	-0.	-0.	0.		-.0037	.0047	-.0407	-.1867	-.0776	.1632	0.	
.2590	-1992.	-201.	-1960.	0.	0.	0.		.0044	.0085	-.0433	-.1732	-.0778	.1568	0.	
.2600	-1403.	-1.	-1917.	0.	-0.	0.		.0140	.0124	-.0446	-.1540	-.0749	.1440	0.	
.2610	-760.	178.	-1800.	0.	-0.	-0.		.0244	.0163	-.0444	-.1297	-.0690	.1264	0.	
.2620	-108.	318.	-1611.	0.	-0.	-0.		.0354	.0201	-.0429	-.1014	-.0609	.1057	0.	
.2630	532.	427.	-1370.	-0.	0.	0.		.0463	.0236	-.0403	-.0710	-.0511	.0826	0.	
.2640	1146.	517.	-1096.	0.	0.	0.		.0567	.0268	-.0367	-.0403	-.0399	.0576	0.	
.2650	1705.	576.	-798.	-0.	0.	-0.		.0662	.0296	-.0324	-.0104	-.0278	.0321	0.	
.2660	2161.	580.	-473.	0.	0.	-0.		.0744	.0320	-.0275	.0186	-.0155	.0081	0.	
.2670	2485.	523.	-126.	-0.	0.	0.		.0809	.0340	-.0223	.0464	-.0036	-.0130	0.	
.2680	2680.	422.	219.	0.	0.	-0.		.0856	.0357	-.0171	.0714	.0076	-.0309	0.	
.2690	2760.	305.	532.	0.	0.	-0.		.0884	.0370	-.0120	.0919	.0177	-.0456	0.	
.2700	2722.	189.	796.	0.	0.	0.		.0890	.0382	-.0074	.1070	.0263	-.0567	0.	
.2710	2545.	72.	1007.	0.	0.	0.		.0877	.0392	-.0034	.1167	.0329	-.0629	0.	
.2720	2237.	-53.	1158.	-0.	0.	-0.		.0846	.0402	-.0001	.1212	.0372	-.0635	0.	
.2730	1838.	-163.	1229.	0.	0.	0.		.0799	.0412	.0022	.1199	.0392	-.0598	0.	
.2740	1392.	-224.	1213.	0.	0.	0.		.0739	.0423	.0037	.1127	.0390	-.0534	0.	
.2750	914.	-238.	1124.	-0.	0.	-0.		.0669	.0437	.0043	.1011	.0363	-.0450	0.	
.2760	403.	-236.	986.	0.	0.	-0.		.0593	.0452	.0041	.0874	.0313	-.0344	0.	
.2770	-107.	-223.	810.	0.	0.	-0.		.0515	.0468	.0032	.0726	.0244	-.0221	0.	
.2780	-558.	-167.	585.	0.	0.	0.		.0438	.0486	.0017	.0562	.0165	-.0102	0.	
.2790	-918.	-49.	315.	0.	0.	0.		.0366	.0506	-.0002	.0382	.0083	-.0003	0.	
.2800	-1201.	104.	26.	0.	0.	0.		.0301	.0525	-.0023	.0201	.0000	.0081	0.	
.2810	-1424.	255.	-252.	0.	0.	-0.		.0245	.0544	-.0044	.0039	-.0078	.0161	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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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

.2700	2722.	189.	1007.	0.	0.	0.	.0890	.0382	-.0074	.1070	.0263	-.0567	0.
.2710	2545.	72.	1007.	0.	0.	0.	.0877	.0392	-.0034	.1167	.0329	-.0629	0.
.2720	2237.	-53.	1158.	-0.	0.	-0.	.0846	.0402	-.0001	.1212	.0372	-.0635	0.
.2730	1838.	-163.	1229.	0.	0.	0.	.0799	.0412	.0022	.1199	.0392	-.0598	0.
.2740	1797.	-224.	1213.	0.	0.	0.	.0739	.0423	.0037	.1127	.0390	-.0534	0.
.2750	914.	-238.	1124.	-0.	0.	-0.	.0669	.0437	.0043	.1011	.0363	-.0450	0.
.2760	403.	-236.	986.	0.	0.	-0.	.0593	.0452	.0041	.0874	.0313	-.0344	0.
.2770	-107.	-223.	810.	0.	0.	-0.	.0515	.0468	.0032	.0726	.0244	-.0221	0.
.2780	-558.	-167.	585.	0.	0.	0.	.0438	.0486	.0017	.0562	.0165	-.0102	0.
.2790	-918.	-49.	315.	0.	0.	0.	.0366	.0506	-.0002	.0382	.0083	-.0003	0.
.2800	-1201.	104.	26.	0.	0.	0.	.0301	.0525	-.0023	.0201	.0000	.0081	0.
.2810	-1424.	255.	-252.	0.	0.	-0.	.0245	.0544	-.0044	.0039	-.0078	.0161	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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	58	MEMBER	2	SEQUENCE	228	LOCATION	END	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ									STRESS
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.2820	-1562.	407.	-511.	0.	0.	-0.	.0200	.0560	-.0062	-.0105	-.0145	.0227	0.		
.2830	-1581.	582.	-753.	0.	0.	-0.	.0166	.0574	-.0077	-.0233	-.0198	.0260	0.		
.2840	-1492.	767.	-953.	-0.	0.	-0.	.0144	.0582	-.0086	-.0329	-.0238	.0260	0.		
.2850	-1352.	902.	-1065.	0.	0.	-0.	.0133	.0586	-.0088	-.0366	-.0269	.0249	0.		
.2860	-1190.	946.	-1067.	-0.	0.	-0.	.0132	.0582	-.0082	-.0332	-.0292	.0240	0.		
.2870	-990.	929.	-974.	-0.	0.	-0.	.0139	.0572	-.0069	-.0240	-.0303	.0224	0.		
.2880	-742.	890.	-809.	-0.	0.	-0.	.0153	.0555	-.0048	-.0107	-.0302	.0194	0.		
.2890	-484.	815.	-572.	-0.	0.	-0.	.0173	.0532	-.0022	.0062	-.0289	.0165	0.		
.2900	-264.	668.	-265.	0.	0.	-0.	.0195	.0503	.0008	.0262	-.0260	.0163	0.		
.2910	-90.	467.	89.	-0.	0.	-0.	.0219	.0469	.0039	.0476	-.0216	.0189	0.		
.2920	67.	270.	448.	0.	0.	-0.	.0244	.0432	.0070	.0680	-.0161	.0226	0.		
.2930	223.	98.	784.	-0.	0.	0.	.0268	.0393	.0096	.0857	-.0099	.0268	0.		
.2940	367.	-71.	1089.	-0.	0.	-0.	.0290	.0354	.0117	.1011	-.0040	.0321	0.		
.2950	469.	-244.	1359.	0.	0.	0.	.0309	.0316	.0130	.1142	.0004	.0386	0.		
.2960	556.	-389.	1572.	-0.	0.	0.	.0324	.0279	.0132	.1242	.0022	.0450	0.		
.2970	655.	-480.	1697.	0.	0.	-0.	.0336	.0246	.0123	.1294	.0010	.0500	0.		
.2980	777.	-513.	1713.	0.	0.	-0.	.0342	.0216	.0101	.1283	-.0030	.0532	0.		
.2990	901.	-494.	1621.	0.	-0.	-0.	.0342	.0190	.0067	.1203	-.0096	.0553	0.		
.3000	1000.	-427.	1428.	-0.	0.	-0.	.0336	.0168	.0022	.1057	-.0185	.0566	0.		
.3010	1077.	-313.	1137.	-0.	0.	-0.	.0322	.0149	-.0033	.0839	-.0288	.0572	0.		
.3020	1136.	-156.	749.	0.	0.	-0.	.0300	.0132	-.0097	.0547	-.0394	.0567	0.		
.3030	1190.	36.	283.	-0.	0.	-0.	.0270	.0116	-.0165	.0188	-.0499	.0549	0.		
.3040	1207.	238.	-218.	0.	0.	-0.	.0232	.0099	-.0234	-.0211	-.0602	.0521	0.		
.3050	1140.	405.	-709.	-0.	-0.	-0.	.0185	.0081	-.0302	-.0620	-.0705	.0497	0.		
.3060	1007.	511.	-1161.	-0.	-0.	0.	.0129	.0060	-.0363	-.1023	-.0801	.0478	0.		
.3070	824.	570.	-1567.	-0.	-0.	-0.	.0067	.0036	-.0416	-.1412	-.0885	.0454	0.		
.3080	611.	598.	-1914.	-0.	-0.	-0.	-.0001	.0007	-.0456	-.1778	-.0951	.0418	0.		
.3090	341.	570.	-2168.	-0.	0.	-0.	-.0073	-.0026	-.0482	-.2098	-.0998	.0381	0.		
.3100	1.	456.	-2307.	-0.	-0.	-0.	-.0147	-.0063	-.0493	-.2351	-.1018	.0357	0.		
.3110	-375.	272.	-2333.	-0.	0.	0.	-.0220	-.0103	-.0486	-.2534	-.1004	.0340	0.		
.3120	-736.	70.	-2265.	-0.	-0.	0.	-.0291	-.0145	-.0462	-.2648	-.0955	.0312	0.		
.3130	-1059.	-134.	-2104.	-0.	-0.	-0.	-.0355	-.0187	-.0422	-.2685	-.0875	.0269	0.		
.3140	-1355.	-363.	-1839.	-0.	-0.	0.	-.0411	-.0228	-.0367	-.2627	-.0768	.0221	0.		
.3150	-1622.	-621.	-1474.	-0.	-0.	0.	-.0457	-.0265	-.0299	-.2467	-.0640	.0176	0.		
.3160	-1821.	-861.	-1041.	-0.	-0.	-0.	-.0491	-.0298	-.0221	-.2219	-.0497	.0121	0.		
.3170	-1916.	-1038.	-578.	0.	-0.	0.	-.0512	-.0325	-.0136	-.1901	-.0344	.0046	0.		
.3180	-1902.	-1152.	-107.	-0.	-0.	-0.	-.0518	-.0343	-.0047	-.1525	-.0182	-.0043	0.		
.3190	-1802.	-1214.	362.	-0.	-0.	-0.	-.0511	-.0353	.0042	-.1101	-.0016	-.0132	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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

.3090	341.	570.	-2163.	-0.	0.	-0.	-0.	-0.0073	-0.0026	-0.0482	-0.2098	-0.0998	.0381	0.
.3100	1.	456.	-2707.	-0.	-0.	-0.	-0.	-0.0147	-0.0063	-0.0493	-0.2351	-0.1018	.0357	0.
.3110	-375.	272.	-2332.	-0.	0.	0.	0.	-0.0220	-0.0103	-0.0486	-0.2534	-0.1004	.0340	0.
.3120	-736.	70.	-2265.	-0.	-0.	-0.	-0.	-0.0291	-0.0145	-0.0462	-0.2648	-0.0955	.0312	0.
.3130	-1059.	-134.	-2104.	-0.	-0.	-0.	-0.	-0.0355	-0.0187	-0.0422	-0.2685	-0.0875	.0269	0.
.3140	-1355.	-363.	-1839.	-0.	-0.	-0.	-0.	-0.0411	-0.0228	-0.0367	-0.2627	-0.0768	.0221	0.
.3150	-1627.	-621.	-1474.	-0.	-0.	-0.	-0.	-0.0457	-0.0265	-0.0299	-0.2467	-0.0640	.0176	0.
.3160	-1821.	-861.	-1041.	-0.	-0.	-0.	-0.	-0.0491	-0.0298	-0.0221	-0.2219	-0.0497	.0121	0.
.3170	-1916.	-1038.	-578.	0.	-0.	0.	0.	-0.0512	-0.0325	-0.0136	-0.1901	-0.0344	.0046	0.
.3180	-1902.	-1152.	-107.	-0.	-0.	-0.	-0.	-0.0518	-0.0343	-0.0047	-0.1525	-0.0182	-0.0043	0.
.3190	-1802.	-1214.	362.	-0.	-0.	-0.	-0.	-0.0511	-0.0353	.0042	-0.1101	-0.0016	-0.0152	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.27.

S/RV PIPING KEWAUNEE CKW00F 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	50	MEMBER	2	SEQUENCE	828	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)
.3200	-1620.	-1213.	810.	-0.	-0.	0.		-0.0491	-0.0354	.0127	-0.0643	.0147	-0.0218	0.
.3210	-1367.	-1126.	1207.	-0.	-0.	0.		-0.0459	-0.0347	.0206	-0.0173	.0302	-0.0308	0.
.3220	-1011.	-953.	1530.	-0.	-0.	0.		-0.0417	-0.0331	.0276	.0285	.0448	-0.0400	0.
.3230	-583.	-715.	1774.	0.	-0.	0.		-0.0369	-0.0308	.0334	.0717	.0580	-0.0489	0.
.3240	-131.	-436.	1947.	-0.	-0.	-0.		-0.0317	-0.0281	.0379	.1116	.0689	-0.0564	0.
.3250	307.	-137.	2052.	0.	0.	0.		-0.0265	-0.0251	.0409	.1473	.0771	-0.0617	0.
.3260	719.	166.	2083.	-0.	-0.	-0.		-0.0215	-0.0220	.0424	.1767	.0826	-0.0643	0.
.3270	1090.	456.	2029.	-0.	-0.	-0.		-0.0171	-0.0190	.0424	.1979	.0857	-0.0643	0.
.3280	1414.	750.	1900.	0.	-0.	0.		-0.0136	-0.0165	.0409	.2100	.0864	-0.0616	0.
.3290	1627.	987.	1718.	0.	0.	0.		-0.0111	-0.0145	.0381	.2135	.0844	-0.0550	0.
.3300	1704.	1143.	1499.	0.	0.	-0.		-0.0099	-0.0132	.0340	.2087	.0802	-0.0442	0.
.3310	1673.	1218.	1245.	-0.	0.	-0.		-0.0098	-0.0127	.0289	.1952	.0741	-0.0298	0.
.3320	1556.	1232.	955.	0.	0.	-0.		-0.0110	-0.0132	.0229	.1729	.0664	-0.0138	0.
.3330	1354.	1187.	643.	0.	0.	-0.		-0.0133	-0.0145	.0162	.1431	.0572	.0032	0.
.3340	1056.	1058.	335.	0.	0.	-0.		-0.0166	-0.0167	.0092	.1078	.0468	.0216	0.
.3350	674.	841.	40.	-0.	0.	-0.		-0.0206	-0.0196	.0019	.0687	.0358	.0412	0.
.3360	254.	577.	-248.	-0.	0.	-0.		-0.0250	-0.0232	-0.0053	.0262	.0246	.0601	0.
.3370	-166.	304.	-534.	-0.	0.	-0.		-0.0296	-0.0270	-0.0123	-0.0186	.0137	.0766	0.
.3380	-572.	23.	-804.	-0.	0.	-0.		-0.0340	-0.0311	-0.0189	-0.0633	.0034	.0906	0.
.3390	-965.	-276.	-1038.	0.	0.	-0.		-0.0380	-0.0351	-0.0248	-0.1052	-0.0061	.1025	0.
.3400	-1317.	-570.	-1231.	0.	0.	-0.		-0.0412	-0.0389	-0.0300	-0.1424	-0.0147	.1113	0.
.3410	-1589.	-821.	-1390.	-0.	0.	-0.		-0.0434	-0.0423	-0.0342	-0.1739	-0.0222	.1155	0.
.3420	-1756.	-1011.	-1516.	0.	0.	-0.		-0.0444	-0.0450	-0.0373	-0.1986	-0.0284	.1145	0.
.3430	-1821.	-1150.	-1598.	-0.	0.	0.		-0.0442	-0.0469	-0.0393	-0.2149	-0.0330	.1090	0.
.3440	-1794.	-1238.	-1629.	0.	0.	0.		-0.0426	-0.0480	-0.0402	-0.2218	-0.0360	.0996	0.
.3450	-1675.	-1255.	-1613.	0.	0.	0.		-0.0397	-0.0481	-0.0399	-0.2195	-0.0371	.0863	0.
.3460	-1450.	-1193.	-1561.	0.	0.	0.		-0.0357	-0.0473	-0.0383	-0.2087	-0.0361	.0693	0.
.3470	-1152.	-1060.	-1478.	0.	0.	0.		-0.0306	-0.0457	-0.0357	-0.1901	-0.0329	.0494	0.
.3480	-783.	-872.	-1358.	-0.	0.	-0.		-0.0247	-0.0433	-0.0320	-0.1640	-0.0276	.0275	0.
.3490	-380.	-644.	-1192.	0.	0.	-0.		-0.0183	-0.0403	-0.0273	-0.1307	-0.0209	.0050	0.
.3500	9.	-397.	-980.	0.	0.	0.		-0.0117	-0.0368	-0.0218	-0.0911	-0.0131	-0.0174	0.
.3510	394.	-147.	-730.	0.	0.	0.		-0.0051	-0.0331	-0.0156	-0.0467	-0.0045	-0.0386	0.
.3520	755.	98.	-449.	-0.	0.	0.		.0011	-0.0293	-0.0090	.0005	.0046	-0.0583	0.
.3530	1064.	328.	-143.	0.	0.	0.		.0068	-0.0255	-0.0020	.0492	.0139	-0.0755	0.
.3540	1292.	520.	186.	0.	0.	-0.		.0116	-0.0221	.0050	.0977	.0229	-0.0891	0.
.3550	1425.	658.	525.	0.	0.	-0.		.0154	-0.0190	.0118	.1441	.0318	-0.0982	0.
.3560	1474.	750.	853.	0.	0.	-0.		.0182	-0.0164	.0182	.1860	.0404	-0.1031	0.
.3570	1451.	811.	1148.	0.	0.	0.		.0199	-0.0144	.0239	.2216	.0483	-0.1044	0.

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ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.27.

S/RV PIPING KEWAUNEE CKW00F 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

.3470	-1152.	-1060.	-1478.	0.	0.	0.	0.	-.306	-.0457	-.0357	-.1901	-.0329	.0494	0.
.3480	-787.	-872.	-1758.	0.	0.	0.	0.	-.247	-.0433	-.0320	-.1640	-.0276	.0275	0.
.3490	-380.	-644.	-1192.	0.	0.	0.	0.	-.0183	-.0403	-.0273	-.1307	-.0209	.0050	0.
.3500	0.	-397.	-580.	0.	0.	0.	0.	-.0117	-.0368	-.0218	-.0911	-.0131	-.0174	0.
.3510	394.	-147.	-730.	0.	0.	0.	0.	-.0051	-.0731	-.0156	-.0467	-.0045	-.0386	0.
.3520	755.	98.	-449.	0.	0.	0.	0.	.0011	-.0293	-.0090	.0005	.0046	-.0583	0.
.3530	1064.	328.	-143.	0.	0.	0.	0.	.0068	-.0255	-.0020	.0492	.0139	-.0755	0.
.3540	1292.	520.	186.	0.	0.	0.	0.	.0116	-.0221	.0050	.0977	.0229	-.0891	0.
.3550	1425.	658.	525.	0.	0.	0.	0.	.0154	-.0190	.0118	.1441	.0318	-.0982	0.
.3560	1474.	750.	853.	0.	0.	0.	0.	.0182	-.0164	.0182	.1860	.0404	-.1031	0.
.3570	1451.	811.	1140.	0.	0.	0.	0.	.0199	-.0144	.0239	.2216	.0483	-.1044	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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18.29.27.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	58	MEMBER	2	SEQUENCE	828	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)		
.3580	1350.	835.	1404.	0.	0.	0.	.0205	-.0129	.0288	.2497	.0551	-.1023	0.		
.3590	1189.	808.	1617.	0.	0.	0.	.0202	-.0121	.0325	.2702	.0605	-.0963	0.		
.3600	961.	732.	1778.	0.	0.	0.	.0190	-.0119	.0351	.2826	.0640	-.0871	0.		
.3610	706.	634.	1872.	0.	-0.	-0.	.0171	-.0121	.0364	.2862	.0655	-.0760	0.		
.3620	449.	530.	1888.	0.	0.	0.	.0147	-.0128	.0363	.2805	.0650	-.0639	0.		
.3630	197.	417.	1826.	-0.	0.	0.	.0121	-.0139	.0348	.2662	.0625	-.0509	0.		
.3640	-48.	296.	1693.	0.	0.	0.	.0093	-.0153	.0320	.2440	.0585	-.0370	0.		
.3650	-270.	102.	1487.	0.	0.	0.	.0066	-.0168	.0280	.2145	.0533	-.0229	0.		
.3660	-447.	98.	1209.	0.	-0.	0.	.0041	-.0185	.0230	.1783	.0475	-.0097	0.		
.3670	-565.	44.	867.	0.	0.	0.	.0019	-.0202	.0171	.1367	.0409	.0022	0.		
.3680	-632.	13.	482.	0.	-0.	0.	.0001	-.0220	.0106	.0917	.0344	.0130	0.		
.3690	-660.	-3.	82.	-0.	-0.	-0.	-.0011	-.0237	.0039	.0459	.0277	.0226	0.		
.3700	-655.	-8.	-312.	-0.	0.	-0.	-.0019	-.0254	-.0029	.0013	.0207	.0308	0.		
.3710	-617.	-5.	-684.	0.	-0.	-0.	-.0022	-.0271	-.0094	-.0403	.0137	.0374	0.		
.3720	-538.	2.	-1019.	-0.	-0.	-0.	-.0021	-.0288	-.0153	-.0776	.0070	.0422	0.		
.3730	-446.	8.	-1296.	0.	0.	0.	-.0016	-.0305	-.0205	-.1090	.0006	.0455	0.		
.3740	-361.	2.	-1499.	0.	-0.	0.	-.0007	-.0322	-.0246	-.1334	-.0052	.0479	0.		
.3750	-291.	-21.	-1619.	-0.	-0.	-0.	.0004	-.0338	-.0277	-.1502	-.0099	.0496	0.		
.3760	-232.	-56.	-1662.	0.	0.	-0.	.0017	-.0355	-.0295	-.1597	-.0129	.0506	0.		
.3770	-174.	-90.	-1634.	-0.	0.	0.	.0031	-.0371	-.0301	-.1625	-.0140	.0505	0.		
.3780	-125.	-122.	-1536.	-0.	0.	-0.	.0047	-.0386	-.0296	-.1587	-.0133	.0493	0.		
.3790	-96.	-163.	-1368.	0.	0.	-0.	.0063	-.0400	-.0279	-.1484	-.0109	.0475	0.		
.3800	-87.	-216.	-1138.	-0.	0.	-0.	.0080	-.0412	-.0252	-.1321	-.0072	.0451	0.		
.3810	-76.	-263.	-866.	0.	-0.	0.	.0098	-.0423	-.0218	-.1113	-.0026	.0415	0.		
.3820	-46.	-290.	-575.	-0.	-0.	-0.	.0116	-.0432	-.0177	-.0873	.0024	.0361	0.		
.3830	0.	-206.	-279.	-0.	-0.	-0.	.0134	-.0439	-.0133	-.0613	.0075	.0289	0.		
.3840	66.	-209.	15.	0.	-0.	0.	.0152	-.0444	-.0087	-.0343	.0121	.0206	0.		
.3850	141.	-267.	290.	0.	0.	0.	.0170	-.0447	-.0042	-.0077	.0161	.0113	0.		
.3860	246.	-216.	523.	0.	0.	-0.	.0186	-.0447	.0001	.0166	.0195	.0007	0.		
.3870	388.	-131.	700.	0.	0.	0.	.0200	-.0447	.0040	.0370	.0223	-.0112	0.		
.3880	551.	-24.	819.	0.	0.	0.	.0212	-.0445	.0074	.0528	.0242	-.0236	0.		
.3890	711.	87.	887.	0.	0.	0.	.0219	-.0443	.0101	.0639	.0253	-.0354	0.		
.3900	851.	192.	909.	0.	-0.	0.	.0220	-.0442	.0122	.0702	.0252	-.0457	0.		
.3910	973.	292.	881.	0.	-0.	0.	.0215	-.0443	.0136	.0711	.0240	-.0544	0.		
.3920	1076.	382.	805.	0.	-0.	0.	.0204	-.0446	.0144	.0664	.0217	-.0610	0.		
.3930	1139.	449.	695.	0.	-0.	0.	.0184	-.0451	.0146	.0568	.0184	-.0650	0.		
.3940	1135.	475.	570.	0.	0.	0.	.0156	-.0460	.0143	.0432	.0139	-.0655	0.		
.3950	1052.	451.	444.	0.	-0.	0.	.0120	-.0472	.0136	.0266	.0086	-.0619	0.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.27.

S/RV PIPING KEWAUNEE GKWOSE 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