

50-305

RESPONSE TO NUREG-0737 ITEM II.D.1

Docket # *50-305*

Control # *8403280048*

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

.0760	-80.	-900.	17.	2221.	2762.	-135.	-.346	-.0331	-.1065	-.0425	.0710	.0666	1755.
.0770	-262.	-410.	967.	3222.	2958.	1262.	-.447	-.0266	-.0796	-.0510	.0543	.0679	1827.
.0780	1713.	31.	-218.	4083.	2450.	2543.	-.520	-.0196	-.0515	-.0565	.0342	.0672	2166.
.0790	3212.	419.	-1287.	4952.	2061.	3743.	-.0567	-.0128	-.0236	-.0607	.0125	.0642	2625.
.0800	1941.	822.	-914.	6026.	1510.	4924.	-.0595	-.0075	.0037	-.0664	-.0081	.0589	3181.
.0810	350.	1352.	-253.	7274.	1004.	5921.	-.0605	-.0051	.0300	-.0751	-.0264	.0507	3773.
.0820	774.	2031.	-462.	8214.	744.	6695.	-.0598	-.0049	.0557	-.0824	-.0419	.0388	4263.
.0830	1891.	2730.	-878.	8672.	535.	7571.	-.0585	-.0043	.0798	-.0813	-.0538	.0229	4613.
.0840	2717.	3337.	-1026.	8454.	252.	8691.	-.0568	-.0028	.1033	-.0710	-.0618	.0033	4866.
.0850	3892.	3906.	-1286.	7855.	41.	9582.	-.0538	-.0041	.1242	-.0582	-.0571	-.0181	4972.
.0860	4720.	4495.	-1460.	6954.	-56.	9821.	-.0488	-.0107	.1415	-.0477	-.0719	-.0399	4829.
.0870	4516.	4951.	-1437.	5696.	-47.	9662.	-.0424	-.0200	.1547	-.0351	-.0786	-.0617	4501.

ADLPIPE PAGE 648 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.26.33.

S/RV PIPING KEVAUNEE 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	END	TYPE	RE	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)
13	3	401					.0880	4654.	5094.	-2028.	3983.	222.	9500.	-.0346	-.0279	.1636	-.0153	-.0887	-.0841	4135.
							.0890	5533.	5006.	-3294.	1924.	732.	9196.	-.0246	-.0346	.1679	.0083	-.1011	-.1065	3782.
							.0900	5463.	4892.	-4142.	-96.	1155.	8453.	-.0131	-.0426	.1688	.0284	-.1132	-.1276	3424.
							.0910	4345.	4784.	-4397.	-1694.	1278.	7364.	-.0013	-.0521	.1677	.0431	-.1232	-.1458	3075.
							.0920	3849.	4601.	-4845.	-2828.	1155.	6158.	.0098	-.0610	.1656	.0557	-.1306	-.1603	2758.
							.0930	4188.	4345.	-5498.	-3736.	793.	4905.	.0198	-.0676	.1631	.0688	-.1348	-.1705	2495.
							.0940	4602.	4052.	-5915.	-4534.	146.	3708.	.0284	-.0710	.1600	.0811	-.1352	-.1761	2351.
							.0950	5108.	3729.	-6138.	-5074.	-717.	2643.	.0355	-.0720	.1554	.0880	-.1323	-.1767	2314.
							.0960	5302.	3404.	-5996.	-5217.	-1702.	1498.	.0416	-.0726	.1479	.0852	-.1265	-.1718	2283.
							.0970	4347.	3089.	-5068.	-5062.	-2764.	108.	.0470	-.0736	.1369	.0735	-.1184	-.1611	2315.
							.0980	3020.	2685.	-3797.	-4854.	-3783.	-1216.	.0513	-.0724	.1226	.0593	-.1087	-.1458	2517.
							.0990	2499.	2136.	-2851.	-4757.	-4647.	-2107.	.0538	-.0666	.1058	.0473	-.0976	-.1278	2799.
							.1000	2132.	1575.	-1915.	-4751.	-5399.	-2701.	.0541	-.0578	.0872	.0344	-.0351	-.1076	3083.
							.1010	1188.	1136.	-640.	-4691.	-6065.	-3286.	.0522	-.0483	.0674	.0160	-.0706	-.0854	3348.
							.1020	560.	738.	450.	-4482.	-6504.	-3783.	.0482	-.0381	.0465	-.0063	-.0548	-.0615	3514.
							.1030	675.	207.	1075.	-4191.	-6594.	-4017.	.0428	-.0252	.0245	-.0275	-.0383	-.0363	3525.
							.1040	603.	-507.	1653.	-3918.	-6310.	-4081.	.0367	-.0097	.0011	-.0462	-.0218	-.0101	3401.
							.1050	314.	-1339.	2115.	-3587.	-5576.	-4141.	.0309	.0070	-.0240	-.0660	-.0063	.0169	3137.
							.1060	542.	-2206.	2013.	-3022.	-4331.	-4219.	.0258	.0234	-.0507	-.0906	.0070	.0437	2712.
							.1070	368.	-3047.	1841.	-2190.	-2764.	-4310.	.0213	.0388	-.0779	-.1194	.0182	.0698	2235.
							.1080	-465.	-3913.	1737.	-1247.	-920.	-4491.	.0186	.0533	-.1060	-.1472	.0263	.0941	1907.
							.1090	-1091.	-4922.	1152.	-333.	1353.	-4758.	.0199	.0675	-.1365	-.1685	.0288	.1145	1990.
							.1100	-3776.	-5657.	1570.	548.	3099.	-4510.	.0195	.0820	-.1619	-.1859	.0319	.1288	2207.
							.1110	-4891.	-5944.	1451.	1280.	4436.	-4099.	.0179	.0939	-.1805	-.2035	.0381	.1365	2477.
							.1120	-4158.	-5906.	791.	1740.	5394.	-3923.	.0161	.1018	-.1931	-.2163	.0474	.1389	2766.
							.1130	-4700.	-5827.	1077.	1959.	5719.	-3637.	.0135	.1083	-.2000	-.2142	.0596	.1362	2831.
							.1140	-6332.	-5800.	2043.	2030.	5593.	-2999.	.0103	.1145	-.2029	-.1977	.0729	.1275	2674.
							.1150	-7456.	-5576.	2859.	1938.	5377.	-2513.	.0080	.1170	-.2040	-.1800	.0858	.1131	2505.
							.1160	-9015.	-4981.	4003.	1636.	5058.	-2491.	.0065	.1139	-.2038	-.1682	.0975	.0940	2356.
							.1170	-10199.	-4282.	4960.	1128.	4720.	-2465.	.0047	.1091	-.2018	-.1548	.1072	.0713	2184.
							.1180	-12156.	-3666.	6335.	527.	4072.	-1999.	-.0004	.1055	-.1953	-.1321	.1155	.0476	1833.
							.1190	-10910.	-3188.	6280.	-65.	3604.	-1694.	-.0066	.1003	-.1855	-.1038	.1229	.0260	1598.
							.1200	-8556.	-2723.	5927.	-506.	3162.	-1943.	-.0130	.0912	-.1730	-.0777	.1305	.0080	1503.
							.1210	-9448.	-2234.	7205.	-676.	2360.	-2238.	-.0209	.0807	-.1581	-.0562	.1362	-.0076	1333.
							.1220	-7990.	-1756.	7066.	-710.	1882.	-2167.	-.0285	.0717	-.1421	-.0408	.1377	-.0230	1186.
							.1230	-5718.	-1133.	6278.	-830.	1627.	-2068.	-.0354	.0631	-.1248	-.0326	.1335	-.0375	1107.
							.1240	-3199.	-452.	5135.	-1070.	1545.	-2127.	-.0410	.0549	-.1063	-.0278	.1235	-.0495	1140.
							.1250	-358.	65.	3485.	-1226.	1548.	-1904.	-.0458	.0491	-.0863	-.0210	.1072	-.0582	1101.

ADLPIPE PAGE 649 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.26.33.

S/RV PIPING KEVAUNEE 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

.1150	-7456.	-1576.	4003.	1978.	5077.	-2513.	.0880	.1170	-2040	-.1800	.0858	.1131	2505.
.1160	-9015.	-4981.	4003.	1636.	5058.	-2491.	.0065	.1139	-2038	-.1682	.0975	.0940	2356.
.1170	-10199.	-4282.	4960.	1128.	4720.	-2465.	.0047	.1091	-2018	-.1548	.1072	.0713	2184.
.1180	-12156.	-3666.	6335.	527.	4072.	-1999.	-.0004	.1055	-1953	-.1321	.1155	.0476	1833.
.1190	-10910.	-3188.	6280.	-65.	3604.	-1694.	-.0066	.1003	-1855	-.1028	.1229	.0260	1598.
.1200	-8556.	-2723.	5927.	-506.	3162.	-1543.	-.0130	.0912	-1730	-.0777	.1305	.0080	1503.
.1210	-9448.	-2234.	7205.	-676.	2360.	-2238.	-.0209	.0807	-1581	-.0562	.1362	-.0076	1333.
.1220	-7990.	-1756.	7066.	-710.	1882.	-2167.	-.0285	.0717	-1421	-.0408	.1377	-.0230	1186.
.1230	-5718.	-1133.	6278.	-830.	1627.	-2068.	-.0354	.0631	-1248	-.0326	.1335	-.0375	1107.
.1240	-3199.	-452.	5135.	-1070.	1545.	-2127.	-.0410	.0549	-1063	-.0278	.1235	-.0495	1140.
.1250	-358.	65.	3485.	-1226.	1548.	-1904.	-.0458	.0491	-.0863	-.0210	.1072	-.0582	1101.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.33.

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

CONDITION 24

LOADS

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

SECTION	13	MEMBER	3	SEQUENCE	401	LOCATION	END	TYPE	RE						
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)	
.1260	670.	505.	2434.	-1131.	1349.	-1387.		-.0502	.0448	-.0645	-.0160	.0854	-.0634	899.	
.1270	2914.	1000.	643.	-1000.	1408.	-1208.		-.0507	.0390	-.0437	-.0209	.0591	-.0655	846.	
.1280	3248.	1580.	-274.	-1058.	1319.	-1168.		-.0482	.0336	-.0233	-.0340	.0293	-.0655	825.	
.1290	3599.	2027.	-1382.	-1338.	1126.	-559.		-.0440	.0329	-.0023	-.0483	-.0033	-.0642	737.	
.1300	5184.	2310.	-3197.	-1698.	926.	373.		-.0386	.0352	.0194	-.0633	-.0368	-.0605	791.	
.1310	4268.	2622.	-3557.	-1909.	260.	913.		-.0331	.0358	.0431	-.0825	-.0582	-.0519	855.	
.1320	4444.	2847.	-4213.	-1846.	-531.	1150.		-.0274	.0353	.0678	-.1030	-.0961	-.0391	898.	
.1330	4816.	2909.	-4819.	-1576.	-1533.	1719.		-.0231	.0377	.0933	-.1196	-.1207	-.0248	1120.	
.1340	5361.	2898.	-5380.	-1321.	-2493.	2475.		-.0191	.0430	.1172	-.1341	-.1417	-.0114	1512.	
.1350	5708.	2927.	-5705.	-1106.	-3215.	3001.		-.0143	.0484	.1371	-.1506	-.1589	.0006	1820.	
.1360	4639.	2957.	-5300.	-673.	-3848.	3366.		-.0104	.0534	.1532	-.1664	-.1732	.0116	2069.	
.1370	5524.	2867.	-5927.	70.	-4051.	3776.		-.0076	.0585	.1648	-.1771	-.1848	.0212	2223.	
.1380	4885.	2820.	-5707.	882.	-4207.	4062.		-.0070	.0626	.1730	-.1819	-.1923	.0292	2373.	
.1390	4025.	2876.	-5212.	1459.	-4229.	4221.		-.0084	.0664	.1780	-.1802	-.1943	.0347	2468.	
.1400	5251.	2978.	-5640.	1777.	-4024.	4641.		-.0125	.0714	.1804	-.1705	-.1904	.0367	2566.	
.1410	5816.	3185.	-5579.	2004.	-3950.	5299.		-.0201	.0766	.1808	-.1545	-.1800	.0354	2771.	
.1420	6843.	3479.	-5526.	2205.	-3717.	5648.		-.0285	.0793	.1770	-.1360	-.1635	.0323	2854.	
.1430	6423.	3745.	-4622.	2371.	-3428.	5636.		-.0374	.0798	.1687	-.1138	-.1427	.0285	2813.	
.1440	6206.	3800.	-3923.	2455.	-2892.	5659.		-.0466	.0809	.1556	-.0860	-.1201	.0240	2734.	
.1450	6508.	3710.	-3663.	2413.	-2078.	5726.		-.0556	.0828	.1378	-.0568	-.0964	.0185	2629.	
.1460	5162.	3649.	-2649.	2269.	-1258.	5479.		-.0641	.0834	.1165	-.0332	-.0714	.0134	2433.	
.1470	5135.	3458.	-2285.	2117.	-188.	4837.		-.0704	.0823	.0916	-.0150	-.0452	.0103	2120.	
.1480	3931.	3011.	-1246.	2094.	640.	4114.		-.0762	.0812	.0657	.0025	-.0172	.0107	1870.	
.1490	2336.	2342.	103.	2184.	1221.	3302.		-.0810	.0801	.0398	.0198	.0124	.0147	1663.	
.1500	1944.	1624.	916.	2259.	1748.	2236.		-.0838	.0780	.0141	.0331	.0421	.0216	1456.	
.1510	869.	976.	2014.	2255.	2008.	1123.		-.0856	.0758	-.0102	.0410	.0700	.0302	1293.	
.1520	730.	327.	2452.	2185.	2247.	182.		-.0853	.0746	-.0337	.0453	.0942	.0392	1260.	
.1530	-572.	-256.	3251.	2110.	2312.	-669.		-.0832	.0737	-.0565	.0466	.1133	.0483	1284.	
.1540	-1454.	-773.	3594.	2013.	2500.	-1663.		-.0779	.0720	-.0793	.0451	.1263	.0572	1451.	
.1550	-1938.	-1277.	3485.	1859.	2817.	-2673.		-.0697	.0704	-.1020	.0425	.1335	.0653	1728.	
.1560	-4507.	-1722.	4250.	1646.	2859.	-3428.		-.0608	.0699	-.1221	.0397	.1366	.0723	1909.	
.1570	-5167.	-2088.	4008.	1339.	3011.	-4057.		-.0503	.0698	-.1400	.0349	.1365	.0779	2097.	
.1580	-5706.	-2307.	3767.	944.	3022.	-4688.		-.0396	.0692	-.1541	.0281	.1345	.0832	2270.	
.1590	-7350.	-2492.	4144.	537.	2707.	-5170.		-.0304	.0689	-.1631	.0230	.1312	.0892	2352.	
.1600	-6914.	-2800.	3520.	191.	2436.	-5438.		-.0225	.0695	-.1679	.0213	.1263	.0965	2392.	
.1610	-5357.	-3160.	2482.	-97.	2211.	-5718.		-.0149	.0697	-.1695	.0194	.1212	.1047	2461.	
.1620	-6455.	-3466.	2966.	-300.	1717.	-6073.		-.0082	.0690	-.1684	.0145	.1163	.1133	2535.	
.1630	-6116.	-3836.	2826.	-374.	1428.	-6310.		-.0014	.0684	-.1659	.0080	.1109	.1211	2600.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.33.

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

.1530	-572.	-256.	3251.	2110.	2312.	-669.	-.0332	.0737	-.0565	.0466	.1133	.0483	1260.
.1540	-1454.	-773.	3594.	2012.	2500.	-1663.	-.0779	.0720	-.0793	.0451	.1263	.0572	1451.
.1550	-1938.	-1277.	3425.	1859.	2817.	-2673.	-.0697	.0704	-.1020	.0425	.1335	.0653	1728.
.1560	-4507.	-1722.	4250.	1646.	2659.	-3428.	-.0608	.0699	-.1221	.0397	.1366	.0723	1909.
.1570	-5167.	-2088.	4008.	1339.	3011.	-4657.	-.0503	.0698	-.1400	.0349	.1365	.0779	2097.
.1580	-5706.	-2307.	3767.	944.	3022.	-4688.	-.0396	.0692	-.1541	.0281	.1345	.0832	2270.
.1590	-7350.	-2492.	4144.	537.	2707.	-5170.	-.0304	.0689	-.1631	.0230	.1312	.0892	2352.
.1600	-6914.	-2800.	3520.	191.	2436.	-5438.	-.0225	.0695	-.1679	.0213	.1263	.0965	2392.
.1610	-5357.	-3160.	2482.	-97.	2211.	-5718.	-.0149	.0697	-.1695	.0194	.1212	.1047	2461.
.1620	-6455.	-3466.	2966.	-300.	1717.	-6073.	-.0082	.0690	-.1684	.0145	.1163	.1133	2535.
.1630	-6116.	-3676.	2826.	-374.	1428.	-6310.	-.0014	.0684	-.1659	.0080	.1109	.1211	2600.

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RE							STRESS
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	(PSI)
.1640	-5169.	-4241.	2472.	-328.	1227.	-6416.	.0047	.0676	-.1613	.0013	.1052	.1278	2625.
.1650	-5757.	-4554.	3036.	-237.	848.	-6547.	.0095	.0658	-.1538	-.0044	.0997	.1333	2651.
.1660	-4790.	-4802.	2912.	-141.	588.	-6601.	.0136	.0634	-.1436	-.0069	.0939	.1366	2660.
.1670	-3893.	-4940.	2860.	-35.	191.	-6329.	.0156	.0612	-.1297	-.0047	.0881	.1367	2541.
.1680	-2887.	-4882.	2806.	4.	-290.	-5858.	.0167	.0583	-.1127	-.0006	.0829	.1331	2354.
.1690	-3017.	-4530.	3358.	-45.	-951.	-5334.	.0167	.0536	-.0929	.0039	.0777	.1255	2174.
.1700	-2400.	-3990.	3435.	-137.	-1535.	-4652.	.0164	.0482	-.0715	.0115	.0710	.1138	1967.
.1710	420.	-3420.	2219.	-272.	-1762.	-3785.	.0170	.0429	-.0502	.0237	.0619	.0984	1679.
.1720	-151.	-2737.	2514.	-431.	-2170.	-2866.	.0174	.0367	-.0287	.0378	.0507	.0805	1453.
.1730	-492.	-1966.	2431.	-551.	-2330.	-2032.	.0187	.0291	-.0083	.0499	.0368	.0606	1260.
.1740	423.	-1126.	1420.	-560.	-2197.	-1225.	.0203	.0203	.0112	.0598	.0198	.0393	1034.
.1750	436.	-265.	662.	-510.	-2067.	-413.	.0210	.0112	.0306	.0692	.0012	.0178	870.
.1760	938.	491.	-424.	-485.	-1807.	352.	.0213	.0023	.0492	.0793	-.0175	-.0027	764.
.1770	718.	1146.	-1143.	-406.	-1642.	1088.	.0202	-.0064	.0678	.0897	-.0351	-.0213	807.
.1780	1745.	1706.	-2408.	-192.	-1376.	1707.	.0180	-.0158	.0854	.0976	-.0503	-.0375	883.
.1790	1894.	2241.	-3075.	134.	-1233.	2164.	.0141	-.0261	.1020	.1015	-.0625	-.0509	1001.
.1800	1359.	2717.	-3240.	460.	-1154.	2552.	.0086	-.0363	.1167	.1032	-.0718	-.0617	1139.
.1810	3118.	3048.	-4422.	695.	-765.	2967.	.0027	-.0453	.1281	.1048	-.0788	-.0705	1261.
.1820	3440.	3341.	-4706.	875.	-483.	3420.	-.0045	-.0532	.1368	.1058	-.0830	-.0774	1430.
.1830	3557.	3628.	-4694.	1070.	-172.	3807.	-.0121	-.0611	.1421	.1039	-.0841	-.0824	1589.
.1840	4086.	3923.	-4699.	1324.	175.	4121.	-.0199	-.0691	.1445	.0992	-.0824	-.0857	1738.
.1850	4405.	4232.	-4394.	1576.	425.	4436.	-.0280	-.0763	.1448	.0940	-.0780	-.0876	1897.
.1860	5242.	4525.	-4173.	1721.	634.	4826.	-.0357	-.0816	.1434	.0902	-.0712	-.0888	2072.
.1870	5117.	4818.	-3402.	1794.	609.	5343.	-.0435	-.0847	.1415	.0880	-.0630	-.0893	2275.
.1880	6145.	5066.	-3259.	1899.	625.	5841.	-.0503	-.0865	.1384	.0857	-.0550	-.0886	2477.
.1890	6759.	5286.	-2997.	2108.	563.	6177.	-.0558	-.0878	.1344	.0819	-.0477	-.0863	2629.
.1900	5950.	5436.	-2150.	2385.	364.	6390.	-.0594	-.0879	.1291	.0773	-.0418	-.0826	2741.
.1910	6142.	5389.	-2013.	2646.	360.	6553.	-.0601	-.0860	.1217	.0732	-.0382	-.0777	2840.
.1920	5889.	5154.	-1865.	2871.	409.	6626.	-.0581	-.0823	.1124	.0674	-.0369	-.0715	2902.
.1930	5140.	4772.	-1623.	3082.	497.	6480.	-.0534	-.0780	.1013	.0636	-.0368	-.0635	2887.
.1940	4533.	4255.	-1546.	3298.	640.	6115.	-.0461	-.0738	.0887	.0552	-.0370	-.0538	2800.
.1950	3781.	3591.	-1426.	3461.	752.	5609.	-.0368	-.0695	.0752	.0462	-.0367	-.0424	2662.
.1960	2592.	2783.	-1082.	3476.	773.	5006.	-.0263	-.0648	.0614	.0388	-.0352	-.0296	2465.
.1970	1697.	1881.	-875.	3296.	768.	4326.	-.0149	-.0601	.0475	.0333	-.0323	-.0164	2204.
.1980	1367.	964.	-922.	2943.	763.	3582.	-.0030	-.0557	.0335	.0284	-.0278	-.0038	1885.
.1990	721.	88.	-738.	2467.	685.	2771.	.0092	-.0522	.0193	.0237	-.0213	.0075	1514.
.2000	-586.	-749.	-146.	1910.	549.	1887.	.0215	-.0497	.0046	.0703	-.0131	.0171	1100.
.2010	-1921.	-1555.	487.	1301.	461.	958.	.0336	-.0481	-.0107	.0196	-.0040	.0245	674.

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18.26.33.

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

CONDITION 24
LOADS
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INTERNAL FORCES IN THE PIPING
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.1910	6142.	5389.	-2017.	2646.	360.	6553.	-10601	-10860	.1217	.0732	-0.0382	-0.0777	2840.
.1920	5289.	5154.	-1865.	2871.	409.	6626.	-10581	-10823	.1124	.0694	-0.0369	-0.0715	2902.
.1930	5140.	4772.	-1623.	3082.	497.	6490.	-10534	-10780	.1013	.0636	-0.0368	-0.0635	2887.
.1940	4533.	4255.	-1546.	3298.	640.	6115.	-10461	-10738	.0887	.0552	-0.0370	-0.0538	2800.
.1950	3781.	3591.	-1426.	3461.	752.	5609.	-10368	-10695	.0752	.0462	-0.0367	-0.0424	2662.
.1960	2592.	2793.	-1082.	3476.	777.	5006.	-10263	-10648	.0614	.0388	-0.0352	-0.0296	2465.
.1970	1697.	1881.	-875.	3296.	768.	4326.	-10149	-10601	.0475	.0333	-0.0323	-0.0164	2204.
.1980	1367.	964.	-922.	2943.	763.	3582.	-10030	-10557	.0335	.0284	-0.0278	-0.0038	1885.
.1990	721.	88.	-738.	2467.	685.	2771.	-10092	-10522	.0193	.0237	-0.0213	.0075	1514.
.2000	-586.	-749.	-146.	1910.	549.	1887.	.0215	-0.0497	.0046	.0203	-0.0131	.0171	1100.
.2010	-1921.	-1555.	487.	1301.	461.	958.	.0336	-0.0481	-0.0107	.0196	-0.0040	.0245	674.

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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSVCONDITION 24
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INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	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)
13	.2020	-3055.	-2291.	1014.	669.	443.	16.	.0451	-.0473	-.0263	.0223	.0053	.0293	322.
	.2030	-4181.	-2896.	1550.	37.	442.	-909.	.0551	-.0474	-.0415	.0277	.0151	.0311	406.
	.2040	-5113.	-3353.	2043.	-575.	440.	-1796.	.0636	-.0484	-.0558	.0350	.0255	.0299	777.
	.2050	-5768.	-3678.	2486.	-1139.	416.	-2646.	.0701	-.0503	-.0688	.0444	.0368	.0263	1168.
	.2060	-6296.	-3897.	2959.	-1626.	336.	-3469.	.0746	-.0532	-.0799	.0566	.0488	.0207	1543.
	.2070	-6464.	-4039.	3320.	-2036.	226.	-4258.	.0769	-.0569	-.0890	.0721	.0509	.0135	1896.
	.2080	-5993.	-4117.	3395.	-2405.	144.	-4989.	.0776	-.0609	-.0962	.0897	.0725	.0051	2223.
	.2090	-5318.	-4110.	3378.	-2770.	79.	-5639.	.0771	-.0652	-.1017	.1073	.0828	-.0046	2521.
	.2100	-4888.	-4004.	3453.	-3129.	0.	-6187.	.0754	-.0695	-.1054	.1234	.0914	-.0151	2782.
	.2110	-4306.	-3831.	3373.	-3456.	-43.	-6621.	.0732	-.0737	-.1073	.1377	.0974	-.0258	2997.
	.2120	-3402.	-3629.	3048.	-3742.	-42.	-6936.	.0706	-.0774	-.1073	.1502	.1005	-.0358	3163.
	.2130	-2684.	-3403.	2773.	-3982.	-85.	-7110.	.0679	-.0804	-.1051	.1599	.1010	-.0443	3270.
	.2140	-2300.	-3137.	2654.	-4155.	-234.	-7095.	.0650	-.0823	-.1001	.1655	.0994	-.0510	3301.
	.2150	-1917.	-2819.	2512.	-4229.	-471.	-6880.	.0620	-.0833	-.0923	.1657	.0957	-.0555	3246.
	.2160	-1508.	-2461.	2300.	-4184.	-764.	-6498.	.0588	-.0832	-.0818	.1601	.0895	-.0573	3116.
	.2170	-1327.	-2098.	2111.	-4001.	-1083.	-5957.	.0554	-.0818	-.0690	.1499	.0806	-.0562	2912.
	.2180	-1328.	-1765.	1898.	-3662.	-1369.	-5241.	.0518	-.0789	-.0546	.1361	.0688	-.0526	2624.
	.2190	-1453.	-1448.	1638.	-3159.	-1565.	-4381.	.0480	-.0748	-.0393	.1186	.0546	-.0468	2257.
	.2200	-1797.	-1115.	1402.	-2510.	-1642.	-3442.	.0439	-.0698	-.0237	.0975	.0384	-.0396	1832.
	.2210	-2128.	-763.	1098.	-1754.	-1566.	-2433.	.0393	-.0640	-.0082	.0743	.0209	-.0319	1358.
	.2220	-2102.	-415.	599.	-943.	-1315.	-1329.	.0340	-.0572	.0068	.0514	.0029	-.0243	840.
	.2230	-1854.	-71.	39.	-125.	-939.	-154.	.0278	-.0498	.0210	.0307	-.0145	-.0173	385.
	.2240	-1550.	293.	-444.	675.	-502.	1030.	.0207	-.0422	.0346	.0128	-.0304	-.0112	534.
	.2250	-908.	696.	-982.	1435.	-30.	2194.	.0124	-.0351	.0474	-.0022	-.0445	-.0064	1052.
	.2260	219.	1138.	-1640.	2105.	447.	3331.	.0032	-.0284	.0595	-.0139	-.0564	-.0033	1591.
	.2270	1527.	1601.	-2277.	2638.	870.	4415.	-.0067	-.0222	.0708	-.0218	-.0661	-.0018	2093.
	.2280	2791.	2044.	-2766.	3032.	1199.	5399.	-.0165	-.0165	.0810	-.0257	-.0735	-.0019	2531.
	.2290	3970.	2442.	-3129.	3335.	1419.	6225.	-.0259	-.0119	.0900	-.0266	-.0789	-.0032	2891.
	.2300	4876.	2799.	-3309.	3584.	1500.	6836.	-.0345	-.0085	.0979	-.0260	-.0825	-.0053	3155.
	.2310	5409.	3121.	-3283.	3771.	1423.	7215.	-.0419	-.0065	.1047	-.0248	-.0846	-.0082	3316.
	.2320	5749.	3386.	-3163.	3860.	1201.	7402.	-.0481	-.0052	.1104	-.0230	-.0853	-.0116	3385.
	.2330	5929.	3571.	-2985.	3841.	849.	7432.	-.0528	-.0044	.1151	-.0206	-.0846	-.0153	3374.
	.2340	5798.	3680.	-2679.	3741.	375.	7280.	-.0560	-.0043	.1186	-.0181	-.0824	-.0189	3288.
	.2350	5441.	3724.	-2296.	3592.	-166.	6913.	-.0576	-.0051	.1205	-.0168	-.0790	-.0221	3127.
	.2360	5029.	3701.	-1936.	3375.	-698.	6356.	-.0575	-.0067	.1203	-.0167	-.0746	-.0250	2901.
	.2370	4481.	3606.	-1582.	3032.	-1161.	5681.	-.0558	-.0085	.1176	-.0173	-.0594	-.0278	2626.
	.2380	3791.	3441.	-1259.	2533.	-1492.	4940.	-.0525	-.0099	.1120	-.0181	-.0540	-.0306	2307.
	.2390	3213.	3223.	-1108.	1901.	-1629.	4140.	-.0479	-.0110	.1034	-.0194	-.0587	-.0335	1941.

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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSVCONDITION 24
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INTERNAL FORCES IN THE PIPING
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.2290	3970.	2442.	-3129.	3335.	1419.	6225.	-.0259	-.0119	.0900	-.0266	-.0789	-.0032	2891.
.2300	4876.	2799.	-3309.	3584.	1500.	6836.	-.0345	-.0085	.0979	-.0260	-.0825	-.0053	3155.
.2310	5409.	3121.	-2283.	3771.	1423.	7215.	-.0419	-.0065	.1047	-.0248	-.0846	-.0082	3316.
.2320	5749.	3386.	-3167.	3860.	1201.	7402.	-.0481	-.0052	.1104	-.0230	-.0853	-.0116	3385.
.2330	5929.	3571.	-2985.	3841.	849.	7432.	-.0528	-.0044	.1151	-.0206	-.0846	-.0153	3374.
.2340	5758.	3680.	-2679.	3741.	375.	7280.	-.0560	-.0043	.1186	-.0181	-.0824	-.0189	3288.
.2350	5441.	3724.	-2296.	3592.	-166.	6913.	-.0576	-.0051	.1205	-.0168	-.0790	-.0221	3127.
.2360	5029.	3701.	-1936.	3375.	-698.	6356.	-.0575	-.0067	.1203	-.0167	-.0746	-.0250	2901.
.2370	4481.	3606.	-1582.	3022.	-1161.	5681.	-.0558	-.0085	.1176	-.0173	-.0694	-.0278	2626.
.2380	3791.	3441.	-1259.	2533.	-1492.	4940.	-.0525	-.0099	.1120	-.0181	-.0640	-.0306	2307.
.2390	3213.	3223.	-1100.	1901.	-1629.	4140.	-.0479	-.0110	.1034	-.0194	-.0587	-.0335	1941.

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

CONDITION 24

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

SECTION	13	MEMBER	3	SEQUENCE	401	LOCATION	END	TYPE	RE						
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)		
.2400	2795.	2971.	-1136.	1186.	-1562.	3277.	-.0422	-.0118	.0920	-.0212	-.0535	-.0364	1533.		
.2410	2322.	2692.	-1190.	419.	-1342.	2386.	-.0357	-.0120	.0780	-.0233	-.0482	-.0392	1111.		
.2420	1827.	2383.	-1234.	-382.	-1015.	1527.	-.0286	-.0111	.0621	-.0250	-.0425	-.0418	752.		
.2430	1558.	2044.	-1358.	-1183.	-613.	735.	-.0212	-.0088	.0450	-.0261	-.0362	-.0441	611.		
.2440	1520.	1679.	-1551.	-1926.	-187.	-1.	-.0138	-.0050	.0273	-.0271	-.0293	-.0454	777.		
.2450	1504.	1281.	-1692.	-2547.	203.	-701.	-.0065	.0001	.0097	-.0288	-.0221	-.0452	1063.		
.2460	1336.	832.	-1686.	-2998.	511.	-1372.	.0007	.0064	-.0076	-.0316	-.0145	-.0430	1339.		
.2470	901.	319.	-1460.	-3267.	695.	-2011.	.0078	.0138	-.0240	-.0356	-.0068	-.0385	1565.		
.2480	213.	-252.	-1036.	-3367.	734.	-2615.	.0146	.0222	-.0392	-.0409	.0008	-.0317	1736.		
.2490	-498.	-870.	-565.	-3319.	651.	-3179.	.0208	.0314	-.0529	-.0475	.0078	-.0227	1863.		
.2500	-1155.	-1516.	-91.	-3156.	465.	-3698.	.0263	.0412	-.0649	-.0553	.0142	-.0118	1960.		
.2510	-2050.	-2161.	554.	-2915.	161.	-4160.	.0309	.0511	-.0752	-.0643	.0203	.0003	2039.		
.2520	-3263.	-2771.	1411.	-2629.	-250.	-4544.	.0344	.0610	-.0838	-.0740	.0263	.0131	2109.		
.2530	-4352.	-3315.	2229.	-2328.	-685.	-4834.	.0365	.0705	-.0909	-.0839	.0319	.0258	2171.		
.2540	-4982.	-3764.	2816.	-2054.	-1064.	-5021.	.0372	.0795	-.0967	-.0937	.0371	.0378	2219.		
.2550	-5295.	-4099.	3242.	-1847.	-1351.	-5088.	.0363	.0878	-.1015	-.1030	.0419	.0486	2239.		
.2560	-5486.	-4311.	3602.	-1707.	-1520.	-5021.	.0340	.0954	-.1057	-.1122	.0462	.0577	2214.		
.2570	-5489.	-4403.	3836.	-1601.	-1527.	-4847.	.0306	.1018	-.1097	-.1215	.0499	.0651	2138.		
.2580	-5230.	-4375.	3874.	-1499.	-1344.	-4622.	.0260	.1066	-.1136	-.1312	.0526	.0708	2023.		
.2590	-4735.	-4246.	3713.	-1400.	-978.	-4360.	.0205	.1101	-.1171	-.1408	.0540	.0750	1879.		
.2600	-4069.	-4045.	3393.	-1312.	-472.	-4026.	.0144	.1125	-.1202	-.1497	.0542	.0774	1710.		
.2610	-3419.	-3779.	3030.	-1226.	98.	-3623.	.0078	.1139	-.1222	-.1578	.0533	.0780	1535.		
.2620	-2935.	-3432.	2710.	-1110.	660.	-3203.	.0009	.1142	-.1229	-.1656	.0515	.0770	1386.		
.2630	-2500.	-3012.	2370.	-946.	1172.	-2793.	-.0062	.1133	-.1217	-.1728	.0487	.0744	1273.		
.2640	-2025.	-2555.	1975.	-754.	1599.	-2370.	-.0134	.1115	-.1183	-.1780	.0448	.0704	1187.		
.2650	-1702.	-2087.	1644.	-576.	1895.	-1916.	-.0204	.1094	-.1128	-.1808	.0400	.0651	1106.		
.2660	-1644.	-1608.	1444.	-427.	2046.	-1449.	-.0270	.1069	-.1051	-.1818	.0343	.0587	1021.		
.2670	-1654.	-1112.	1270.	-297.	2080.	-1003.	-.0331	.1039	-.0956	-.1818	.0278	.0515	934.		
.2680	-1596.	-612.	1058.	-180.	2025.	-595.	-.0387	.1002	-.0845	-.1812	.0205	.0439	850.		
.2690	-1549.	-135.	868.	-99.	1891.	-211.	-.0436	.0963	-.0721	-.1794	.0126	.0364	765.		
.2700	-1487.	303.	708.	-69.	1693.	174.	-.0478	.0925	-.0586	-.1763	.0046	.0290	683.		
.2710	-1227.	717.	494.	-69.	1453.	570.	-.0515	.0890	-.0441	-.1722	-.0034	.0220	627.		
.2720	-695.	1139.	184.	-61.	1187.	966.	-.0548	.0856	-.0289	-.1680	-.0112	.0155	615.		
.2730	69.	1569.	-208.	-29.	906.	1357.	-.0577	.0826	-.0131	-.1640	-.0189	.0094	655.		
.2740	1030.	1968.	-680.	23.	635.	1757.	-.0600	.0802	.0027	-.1596	-.0264	.0041	750.		
.2750	2030.	2314.	-1174.	97.	386.	2173.	-.0615	.0787	.0182	-.1546	-.0340	-.0004	887.		
.2760	2906.	2620.	-1629.	213.	161.	2579.	-.0621	.0780	.0328	-.1498	-.0417	-.0041	1040.		
.2770	3671.	2893.	-2069.	383.	-32.	2943.	-.0618	.0778	.0463	-.1459	-.0496	-.0071	1191.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.33.

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

.2670	-1654.	-1112.	1444.	-297.	2080.	-1003.	-0.731	.1039	-.0956	-.1818	.0278	.0515	934.
.2680	-1596.	-612.	1052.	-180.	2025.	-595.	-.587	.1002	-.0845	-.1812	.0205	.0439	850.
.2690	-1549.	-135.	668.	-99.	1891.	-211.	-.0426	.0963	-.0721	-.1794	.0126	.0364	765.
.2700	-1487.	303.	708.	-69.	1623.	174.	-.0478	.0925	-.0586	-.1763	.0046	.0290	683.
.2710	-1227.	717.	494.	-69.	1453.	570.	-.0515	.0890	-.0441	-.1722	-.0034	.0220	627.
.2720	-695.	1139.	104.	-61.	1187.	956.	-.0540	.0856	-.0289	-.1680	-.0112	.0155	615.
.2730	69.	1569.	-208.	-29.	906.	1357.	-.0577	.0826	-.0131	-.1640	-.0189	.0094	655.
.2740	1030.	1968.	-680.	23.	635.	1757.	-.0600	.0802	.0027	-.1596	-.0264	.0041	750.
.2750	2030.	2314.	-1174.	97.	386.	2173.	-.0615	.0787	.0182	-.1546	-.0340	-.0004	887.
.2760	2906.	2620.	-1629.	213.	161.	2579.	-.0621	.0760	.0328	-.1498	-.0417	-.0041	1040.
.2770	3671.	2892.	-2069.	382.	-32.	2943.	-.0618	.0778	.0463	-.1459	-.0496	-.0071	1191.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.33.

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	1	MEMBER	3	SEQUENCE	401	LOCATION	END	TYPE	RE					
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	4313.	3111.	-2487.	589.	-195.	3258.	-.0606	.0781	.0583	-.1426	-.0575	-.0090	1331.	
.2790	4672.	3243.	-2787.	794.	-357.	3538.	-.0584	.0790	.0688	-.1390	-.0552	-.0099	1462.	
.2800	4716.	3290.	-2933.	975.	-541.	3721.	-.0554	.0805	.0776	-.1347	-.0721	-.0097	1582.	
.2810	4611.	3270.	-2992.	1132.	-739.	3964.	-.0519	.0822	.0847	-.1299	-.0780	-.0085	1681.	
.2820	4432.	3190.	-2992.	1258.	-947.	4064.	-.0480	.0838	.0899	-.1250	-.0824	-.0063	1749.	
.2830	4121.	3038.	-2890.	1331.	-1157.	4076.	-.0437	.0853	.0931	-.1197	-.0851	-.0032	1782.	
.2840	3710.	2811.	-2701.	1334.	-1343.	4004.	-.0392	.0867	.0938	-.1139	-.0859	.0006	1777.	
.2850	3291.	2523.	-2482.	1274.	-1468.	3843.	-.0346	.0877	.0920	-.1076	-.0848	.0048	1728.	
.2860	2879.	2191.	-2258.	1176.	-1517.	3572.	-.0299	.0882	.0877	-.1014	-.0821	.0095	1627.	
.2870	2475.	1825.	-2038.	1056.	-1486.	3185.	-.0253	.0878	.0808	-.0955	-.0778	.0145	1473.	
.2880	2113.	1437.	-1842.	915.	-1384.	2702.	-.0210	.0866	.0719	-.0897	-.0721	.0198	1272.	
.2890	1787.	1045.	-1662.	748.	-1236.	2151.	-.0171	.0847	.0613	-.0838	-.0548	.0251	1040.	
.2900	1488.	666.	-1492.	562.	-1068.	1553.	-.0139	.0821	.0494	-.0777	-.0561	.0305	789.	
.2910	1255.	310.	-1353.	372.	-896.	918.	-.0114	.0787	.0367	-.0712	-.0462	.0357	536.	
.2920	1061.	-13.	-1224.	186.	-732.	254.	-.0096	.0746	.0235	-.0644	-.0351	.0407	320.	
.2930	779.	-298.	-1032.	2.	-592.	-416.	-.0085	.0698	.0099	-.0569	-.0230	.0452	290.	
.2940	369.	-546.	-750.	-182.	-472.	-1063.	-.0081	.0648	-.0038	-.0487	-.0100	.0490	473.	
.2950	-84.	-761.	-420.	-362.	-355.	-1671.	-.0081	.0596	-.0175	-.0396	.0036	.0520	701.	
.2960	-548.	-942.	-51.	-523.	-233.	-2232.	-.0086	.0543	-.0312	-.0296	.0177	.0542	925.	
.2970	-1059.	-1094.	389.	-654.	-108.	-2739.	-.0095	.0491	-.0447	-.0189	.0321	.0557	1131.	
.2980	-1596.	-1235.	904.	-746.	17.	-3176.	-.0106	.0442	-.0575	-.0074	.0467	.0568	1309.	
.2990	-2083.	-1377.	1453.	-793.	143.	-3534.	-.0120	.0397	-.0695	.0047	.0613	.0576	1455.	
.3000	-2459.	-1522.	1997.	-789.	275.	-3816.	-.0135	.0356	-.0803	.0170	.0754	.0585	1568.	
.3010	-2692.	-1668.	2493.	-728.	416.	-4020.	-.0150	.0320	-.0897	.0290	.0886	.0595	1648.	
.3020	-2797.	-1824.	2920.	-606.	572.	-4141.	-.0161	.0289	-.0975	.0406	.1003	.0607	1695.	
.3030	-2851.	-1996.	3283.	-423.	740.	-4187.	-.0169	.0262	-.1036	.0515	.1099	.0621	1715.	
.3040	-2905.	-2169.	3571.	-181.	919.	-4166.	-.0169	.0239	-.1077	.0613	.1169	.0637	1714.	
.3050	-2927.	-2324.	3733.	100.	1109.	-4077.	-.0161	.0219	-.1098	.0698	.1208	.0651	1696.	
.3060	-2912.	-2447.	3749.	421.	1295.	-3913.	-.0144	.0200	-.1096	.0768	.1214	.0661	1663.	
.3070	-2926.	-2535.	3653.	732.	1453.	-3674.	-.0119	.0181	-.1070	.0827	.1188	.0666	1613.	
.3080	-2991.	-2578.	3471.	1023.	1558.	-3373.	-.0087	.0161	-.1020	.0875	.1132	.0666	1546.	
.3090	-3059.	-2564.	3200.	1282.	1592.	-3019.	-.0049	.0135	-.0946	.0911	.1050	.0660	1463.	
.3100	-3096.	-2484.	2853.	1494.	1546.	-2623.	-.0008	.0103	-.0848	.0937	.0948	.0647	1361.	
.3110	-3101.	-2341.	2465.	1642.	1415.	-2190.	.0034	.0063	-.0729	.0955	.0831	.0626	1237.	
.3120	-3049.	-2143.	2058.	1721.	1209.	-1729.	.0075	.0016	-.0593	.0970	.0705	.0597	1093.	
.3130	-2911.	-1893.	1645.	1741.	944.	-1257.	.0113	-.0041	-.0444	.0985	.0575	.0559	941.	
.3140	-2688.	-1596.	1250.	1719.	630.	-794.	.0147	-.0107	-.0287	.0999	.0445	.0511	802.	
.3150	-2361.	-1259.	876.	1665.	311.	-356.	.0174	-.0183	-.0127	.1016	.0320	.0453	695.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.33.

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

.3050	-2927.	-2324.	1733.	108.	1109.	-4077.	-.0161	.0219	-.1098	.0698	.1208	.0651	1696.
.3060	-2912.	-2447.	3749.	421.	1295.	-3913.	-.0144	.0200	-.1096	.0768	.1214	.0661	1663.
.3070	-2926.	-2535.	3653.	732.	1453.	-3674.	-.0119	.0181	-.1070	.0827	.1188	.0666	1613.
.3080	-2991.	-2578.	3471.	1023.	1558.	-3373.	-.0087	.0161	-.1020	.0875	.1132	.0666	1546.
.3090	-3059.	-2564.	3200.	1282.	1592.	-3019.	-.0049	.0135	-.0946	.0911	.1050	.0660	1463.
.3100	-3096.	-2484.	2857.	1494.	1546.	-2623.	-.0008	.0103	-.0848	.0937	.0948	.0647	1361.
.3110	-3101.	-2341.	2465.	1642.	1415.	-2190.	.0034	.0063	-.0729	.0955	.0931	.0626	1237.
.3120	-3049.	-2143.	2058.	1721.	1209.	-1729.	.0075	.0016	-.0593	.0970	.0705	.0597	1093.
.3130	-2911.	-1893.	1645.	1741.	944.	-1257.	.0113	-.0041	-.0444	.0985	.0575	.0559	941.
.3140	-2688.	-1596.	1250.	1719.	638.	-794.	.0147	-.0107	-.0287	.0999	.0445	.0511	802.
.3150	-2361.	-1259.	876.	1665.	311.	-356.	.0174	-.0183	-.0127	.1016	.0320	.0453	695.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.33.

S/RV PIPING KEWAUNEE GKWC8F 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	13	MEMBER	3	SEQUENCE	401	LOCATION	END	TYPE	RE						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3160	-1915.	-895.	525.	1586.	-18.	56.	.0193	-.0267	.0033	.1039	.0202	.0384	637.		
.3170	-1354.	-514.	197.	1483.	-338.	443.	.0205	-.0356	.0190	.1073	.0094	.0305	636.		
.3180	-681.	-128.	-115.	1367.	-638.	794.	.0208	-.0451	.0342	.1118	-.0004	.0217	684.		
.3190	85.	256.	-417.	1244.	-911.	1098.	.0204	-.0551	.0487	.1172	-.0090	.0121	760.		
.3200	901.	632.	-708.	1119.	-1150.	1354.	.0194	-.0653	.0623	.1234	-.0166	.0018	842.		
.3210	1693.	994.	-977.	985.	-1353.	1574.	.0180	-.0757	.0749	.1304	-.0234	-.0089	922.		
.3220	2431.	1337.	-1239.	838.	-1510.	1769.	.0164	-.0859	.0862	.1379	-.0295	-.0199	992.		
.3230	3117.	1658.	-1520.	675.	-1612.	1937.	.0148	-.0958	.0963	.1454	-.0353	-.0310	1047.		
.3240	3708.	1961.	-1816.	503.	-1658.	2084.	.0135	-.1052	.1049	.1526	-.0408	-.0420	1088.		
.3250	4132.	2250.	-2093.	330.	-1659.	2222.	.0126	-.1141	.1121	.1587	-.0460	-.0527	1121.		
.3260	4395.	2517.	-2347.	159.	-1621.	2360.	.0123	-.1221	.1179	.1636	-.0510	-.0629	1150.		
.3270	4538.	2754.	-2587.	-3.	-1549.	2498.	.0124	-.1291	.1222	.1670	-.0555	-.0721	1179.		
.3280	4577.	2952.	-2800.	-146.	-1457.	2636.	.0132	-.1349	.1251	.1686	-.0594	-.0800	1210.		
.3290	4527.	3108.	-2967.	-256.	-1358.	2773.	.0144	-.1396	.1268	.1682	-.0623	-.0865	1243.		
.3300	4403.	3211.	-3074.	-322.	-1260.	2902.	.0160	-.1431	.1271	.1658	-.0640	-.0912	1276.		
.3310	4193.	3249.	-3097.	-342.	-1167.	3015.	.0179	-.1453	.1260	.1614	-.0544	-.0939	1305.		
.3320	3916.	3206.	-3036.	-313.	-1077.	3103.	.0202	-.1463	.1234	.1554	-.0635	-.0947	1324.		
.3330	3617.	3080.	-2913.	-236.	-980.	3157.	.0226	-.1461	.1194	.1483	-.0513	-.0937	1330.		
.3340	3286.	2877.	-2722.	-118.	-874.	3171.	.0253	-.1448	.1139	.1402	-.0579	-.0910	1321.		
.3350	2862.	2602.	-2432.	30.	-762.	3143.	.0280	-.1425	.1068	.1317	-.0534	-.0870	1298.		
.3360	2355.	2265.	-2058.	192.	-644.	3074.	.0308	-.1394	.0983	.1233	-.0479	-.0822	1263.		
.3370	1827.	1878.	-1644.	359.	-517.	2964.	.0335	-.1357	.0884	.1155	-.0416	-.0768	1216.		
.3380	1290.	1459.	-1208.	502.	-381.	2813.	.0361	-.1314	.0775	.1086	-.0347	-.0712	1157.		
.3390	728.	1027.	-753.	620.	-241.	2630.	.0385	-.1268	.0656	.1027	-.0275	-.0657	1088.		
.3400	155.	598.	-295.	695.	-99.	2417.	.0406	-.1221	.0530	.0976	-.0200	-.0606	1010.		
.3410	-399.	186.	143.	721.	51.	2174.	.0426	-.1174	.0398	.0931	-.0125	-.0559	919.		
.3420	-910.	-202.	539.	695.	212.	1894.	.0443	-.1131	.0262	.0889	-.0052	-.0517	814.		
.3430	-1350.	-561.	878.	618.	386.	1578.	.0459	-.1092	.0124	.0849	.0019	-.0480	698.		
.3440	-1716.	-889.	1161.	489.	570.	1229.	.0474	-.1058	-.0014	.0805	.0087	-.0447	578.		
.3450	-2033.	-1182.	1408.	312.	750.	845.	.0489	-.1030	-.0149	.0755	.0151	-.0418	470.		
.3460	-2295.	-1476.	1622.	89.	914.	429.	.0503	-.1009	-.0279	.0697	.0213	-.0393	407.		
.3470	-2461.	-1656.	1782.	-174.	1050.	-13.	.0517	-.0993	-.0399	.0632	.0271	-.0371	427.		
.3480	-2542.	-1845.	1894.	-475.	1145.	-470.	.0531	-.0983	-.0507	.0563	.0325	-.0352	532.		
.3490	-2606.	-2006.	1990.	-808.	1182.	-932.	.0545	-.0976	-.0600	.0493	.0373	-.0336	686.		
.3500	-2688.	-2136.	2084.	-1164.	1154.	-1388.	.0559	-.0972	-.0677	.0422	.0414	-.0325	862.		
.3510	-2781.	-2235.	2159.	-1531.	1068.	-1825.	.0573	-.0969	-.0735	.0353	.0446	-.0319	1047.		
.3520	-2890.	-2305.	2206.	-1896.	934.	-2230.	.0586	-.0966	-.0775	.0291	.0466	-.0318	1233.		
.3530	-3030.	-2349.	2229.	-2247.	765.	-2589.	.0598	-.0961	-.0796	.0238	.0472	-.0324	1410.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.33.

S/RV PIPING KEWAUNEE GKWC8F 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

.3430	-1350.	-561.	878.	618.	386.	1578.	.0459	-.1092	.0124	.0849	.0019	-.0480	698.
.3440	-1716.	-889.	1161.	489.	570.	1229.	.0474	-.1058	-.0014	.0805	.0087	-.0447	578.
.3450	-2033.	-1182.	1408.	312.	750.	845.	.0489	-.1030	-.0149	.0755	.0151	-.0418	470.
.3460	-2295.	-1476.	1622.	19.	914.	429.	.0503	-.1009	-.0279	.0697	.0213	-.0393	407.
.3470	-2461.	-1656.	1762.	-174.	1050.	-13.	.0517	-.0993	-.0399	.0632	.0271	-.0371	427.
.3480	-2542.	-1845.	1894.	-475.	1145.	-470.	.0531	-.0983	-.0507	.0563	.0325	-.0352	532.
.3490	-2606.	-2006.	1990.	-808.	1182.	-932.	.0545	-.0976	-.0600	.0493	.0373	-.0336	686.
.3500	-2688.	-2136.	2084.	-1164.	1154.	-1388.	.0559	-.0972	-.0677	.0422	.0414	-.0325	862.
.3510	-2761.	-2235.	2159.	-1571.	1068.	-1825.	.0573	-.0969	-.0735	.0353	.0446	-.0319	1047.
.3520	-2850.	-2305.	2206.	-1896.	934.	-2230.	.0586	-.0966	-.0775	.0291	.0466	-.0318	1233.
.3530	-3030.	-2349.	2229.	-2247.	765.	-2589.	.0598	-.0961	-.0796	.0238	.0472	-.0324	1410.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.33.

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	13	MEMBER	3	SEQUENCE	401	LOCATION	END	TYPE	RE						
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)		
.3540	-3195.	-2365.	2228.	-2568.	576.	-2886.	.0609	-.0951	-.0800	.0196	.0466	-.0336	1567.		
.3550	-3363.	-2349.	2199.	-2839.	383.	-3109.	.0616	-.0937	-.0788	.0164	.0446	-.0353	1696.		
.3560	-3493.	-2295.	2129.	-3044.	200.	-3250.	.0620	-.0917	-.0759	.0141	.0415	-.0376	1789.		
.3570	-3520.	-2202.	1997.	-3174.	42.	-3302.	.0618	-.0890	-.0715	.0126	.0373	-.0402	1838.		
.3580	-3403.	-2074.	1795.	-3226.	-79.	-3253.	.0610	-.0855	-.0658	.0119	.0323	-.0431	1839.		
.3590	-3156.	-1912.	1541.	-3198.	-162.	-3103.	.0595	-.0812	-.0589	.0116	.0267	-.0460	1789.		
.3600	-2796.	-1716.	1251.	-3091.	-208.	-2860.	.0573	-.0762	-.0509	.0113	.0205	-.0487	1692.		
.3610	-2322.	-1489.	925.	-2910.	-217.	-2536.	.0544	-.0707	-.0420	.0105	.0140	-.0510	1551.		
.3620	-1754.	-1239.	574.	-2668.	-199.	-2141.	.0508	-.0646	-.0324	.0091	.0071	-.0528	1375.		
.3630	-1144.	-973.	224.	-2386.	-169.	-1681.	.0467	-.0580	-.0222	.0068	.0001	-.0538	1173.		
.3640	-541.	-695.	-103.	-2080.	-144.	-1171.	.0420	-.0511	-.0115	.0035	-.0070	-.0540	959.		
.3650	30.	-407.	-395.	-1758.	-141.	-625.	.0370	-.0439	-.0005	-.0008	-.0141	-.0533	751.		
.3660	542.	-109.	-648.	-1428.	-171.	-60.	.0316	-.0367	.0107	-.0062	-.0211	-.0518	578.		
.3670	980.	195.	-860.	-1099.	-238.	512.	.0259	-.0294	.0220	-.0124	-.0280	-.0495	496.		
.3680	1341.	496.	-1038.	-779.	-337.	1079.	.0200	-.0220	.0330	-.0191	-.0347	-.0465	551.		
.3690	1615.	790.	-1184.	-470.	-456.	1627.	.0140	-.0148	.0434	-.0261	-.0411	-.0429	704.		
.3700	1798.	1073.	-1302.	-169.	-580.	2135.	.0080	-.0076	.0529	-.0334	-.0472	-.0389	890.		
.3710	1913.	1342.	-1409.	129.	-687.	2586.	.0020	-.0007	.0612	-.0407	-.0529	-.0346	1075.		
.3720	1992.	1585.	-1521.	419.	-758.	2968.	-.0040	.0060	.0679	-.0477	-.0580	-.0300	1241.		
.3730	2054.	1796.	-1640.	695.	-781.	3276.	-.0100	.0125	.0730	-.0542	-.0623	-.0252	1380.		
.3740	2117.	1970.	-1765.	950.	-749.	3505.	-.0160	.0187	.0762	-.0599	-.0655	-.0204	1488.		
.3750	2213.	2112.	-1901.	1179.	-660.	3651.	-.0219	.0246	.0775	-.0648	-.0676	-.0155	1562.		
.3760	2353.	2222.	-2042.	1377.	-521.	3714.	-.0278	.0303	.0769	-.0688	-.0682	-.0106	1603.		
.3770	2521.	2297.	-2169.	1532.	-339.	3696.	-.0335	.0357	.0745	-.0719	-.0672	-.0058	1611.		
.3780	2696.	2331.	-2266.	1635.	-129.	3605.	-.0391	.0409	.0704	-.0739	-.0647	-.0009	1590.		
.3790	2856.	2327.	-2317.	1683.	95.	3444.	-.0443	.0459	.0646	-.0751	-.0606	.0039	1539.		
.3800	2963.	2290.	-2306.	1675.	316.	3217.	-.0491	.0508	.0576	-.0759	-.0550	.0088	1461.		
.3810	2991.	2221.	-2220.	1617.	517.	2930.	-.0534	.0555	.0494	-.0764	-.0481	.0139	1359.		
.3820	2927.	2118.	-2060.	1514.	684.	2594.	-.0570	.0603	.0404	-.0768	-.0402	.0192	1236.		
.3830	2770.	1978.	-1827.	1377.	804.	2220.	-.0598	.0651	.0309	-.0770	-.0313	.0248	1097.		
.3840	2516.	1803.	-1526.	1220.	868.	1812.	-.0618	.0701	.0210	-.0773	-.0218	.0308	943.		
.3850	2173.	1597.	-1169.	1058.	874.	1378.	-.0629	.0753	.0111	-.0779	-.0120	.0373	781.		
.3860	1780.	1364.	-777.	904.	827.	927.	-.0631	.0806	.0012	-.0787	-.0020	.0441	617.		
.3870	1341.	1099.	-372.	764.	739.	465.	-.0624	.0863	-.0085	-.0797	.0077	.0514	466.		
.3880	878.	799.	26.	643.	626.	-3.	-.0609	.0922	-.0180	-.0806	.0169	.0589	360.		
.3890	404.	468.	399.	546.	504.	-473.	-.0586	.0984	-.0273	-.0814	.0254	.0666	353.		
.3900	-72.	115.	738.	474.	386.	-939.	-.0555	.1048	-.0363	-.0821	.0328	.0743	450.		
.3910	-544.	-251.	1034.	424.	282.	-1392.	-.0519	.1113	-.0449	-.0825	.0393	.0818	595.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.33.

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

.3800	2991.	2221.	2220.	1617.	517.	2920.	-.0534	.0555	.0494	-.0764	-.0481	.0139	1461.
.3810	2991.	2221.	2220.	1617.	517.	2920.	-.0534	.0555	.0494	-.0764	-.0481	.0139	1359.
.3820	2927.	2118.	-2060.	1514.	684.	2594.	-.0570	.0603	.0404	-.0768	-.0402	.0192	1236.
.3830	2770.	1978.	-1827.	1377.	804.	2220.	-.0598	.0651	.0309	-.0770	-.0313	.0248	1097.
.3840	2516.	1803.	-1526.	1220.	868.	1813.	-.0618	.0701	.0210	-.0773	-.0218	.0308	943.
.3850	2178.	1597.	-1169.	1058.	874.	1378.	-.0629	.0753	.0111	-.0779	-.0120	.0373	781.
.3860	1780.	1364.	-777.	904.	827.	927.	-.0631	.0806	.0012	-.0787	-.0020	.0441	617.
.3870	1341.	1099.	-372.	764.	739.	465.	-.0624	.0863	-.0085	-.0797	.0077	.0514	466.
.3880	878.	799.	26.	643.	626.	-3.	-.0609	.0922	-.0180	-.0806	.0169	.0589	360.
.3890	404.	468.	399.	546.	504.	-473.	-.0586	.0984	-.0273	-.0814	.0254	.0666	353.
.3900	-72.	115.	738.	474.	386.	-939.	-.0555	.1048	-.0363	-.0821	.0328	.0743	450.
.3910	-544.	-251.	1034.	424.	282.	-1392.	-.0519	.1113	-.0449	-.0825	.0393	.0818	595.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.33.

S/RV PIPING KEMAUNLE GKWOFF 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

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

SECTION	13	MEMBER	3	SEQUENCE	401	LOCATION	END	TYPE	RE					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.3920	-987.	-630.	1277.	389.	190.	-1825.	-.0478	.1170	-.0532	-.0823	.0447	.0890	753.	
.3930	-1382.	-1019.	1465.	361.	136.	-2234.	-.0435	.1242	-.0609	-.0813	.0491	.0957	910.	
.3940	-1733.	-1406.	1610.	334.	92.	-2616.	-.0392	.1303	-.0681	-.0797	.0526	.1020	1059.	
.3950	-2049.	-1775.	1724.	307.	60.	-2966.	-.0350	.1360	-.0745	-.0777	.0553	.1077	1197.	
.3960	-2321.	-2115.	1812.	278.	38.	-3279.	-.0311	.1410	-.0801	-.0756	.0575	.1128	1321.	
.3970	-2538.	-2421.	1872.	246.	27.	-3549.	-.0276	.1453	-.0849	-.0732	.0591	.1170	1428.	
.3980	-2706.	-2685.	1913.	211.	25.	-3776.	-.0246	.1488	-.0888	-.0707	.0602	.1205	1518.	
.3990	-2840.	-2894.	1946.	180.	29.	-3958.	-.0222	.1514	-.0917	-.0684	.0609	.1231	1590.	
.4000	-2954.	-3034.	1981.	160.	34.	-4093.	-.0205	.1528	-.0936	-.0666	.0613	.1248	1644.	

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)
.0640	-6628.	-5655.	3778.	-7811.	-2042.	-10011.	.1155	-.0565	-.0979	.3115	.1108	-.0498	5161.

SECTION	13	MEMBER	4	SEQUENCE	235	LOCATION	END	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.	
.0010	1.	-0.	-2.	0.	2.	-1.	.0000	-.0000	-.0000	.0000	-.0000	-.0000	1.	
.0020	-5.	-3.	-9.	2.	13.	-7.	.0000	-.0000	-.0002	.0000	-.0001	-.0000	6.	
.0030	-48.	-4.	-9.	-0.	34.	-21.	.0000	-.0000	-.0005	.0001	-.0004	-.0001	16.	
.0040	-140.	-4.	6.	-14.	62.	-40.	.0000	-.0000	-.0011	.0001	-.0007	-.0003	30.	
.0050	-267.	-1.	31.	-42.	92.	-62.	.0000	.0001	-.0020	-.0000	-.0012	-.0006	48.	
.0060	-445.	2.	74.	-84.	118.	-92.	-.0000	.0003	-.0032	-.0003	-.0016	-.0009	69.	
.0070	-723.	-1.	155.	-141.	145.	-155.	-.0001	.0006	-.0051	-.0007	-.0022	-.0012	102.	
.0080	-1217.	-23.	323.	-228.	188.	-286.	.0001	.0009	-.0079	-.0013	-.0029	-.0016	165.	
.0090	-2131.	-75.	683.	-367.	235.	-496.	.0008	.0014	-.0121	-.0025	-.0038	-.0021	265.	
.0100	-3341.	-158.	1170.	-571.	285.	-784.	.0024	.0022	-.0175	-.0051	-.0048	-.0026	406.	
.0110	-4456.	-275.	1579.	-834.	361.	-1165.	.0048	.0033	-.0240	-.0094	-.0058	-.0030	593.	
.0120	-5285.	-438.	1820.	-1143.	456.	-1651.	.0081	.0045	-.0312	-.0153	-.0068	-.0030	826.	
.0130	-5953.	-667.	1982.	-1404.	514.	-2228.	.0121	.0059	-.0386	-.0226	-.0074	-.0022	1094.	
.0140	-6668.	-940.	2249.	-1849.	635.	-2855.	.0167	.0073	-.0454	-.0314	-.0070	-.0004	1376.	
.0150	-7523.	-1247.	2705.	-2226.	736.	-3511.	.0217	.0088	-.0510	-.0420	-.0046	.0024	1669.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.33.

S/RV PIPING KEMAUNLE GKWOFF 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	-267.	-1.	71.	-42.	92.	-62.	.0000	.0001	-.0020	-.0000	-.0012	-.0006	48.
.0060	-445.	2.	74.	-84.	118.	-92.	-.0000	.0003	-.0033	-.0003	-.0016	-.0009	69.
.0070	-723.	-1.	155.	-141.	145.	-155.	-.0001	.0006	-.0051	-.0007	-.0022	-.0012	102.
.0080	-1217.	-23.	323.	-228.	188.	-256.	.0001	.0009	-.0075	-.0013	-.0029	-.0016	165.
.0090	-2131.	-75.	623.	-367.	275.	-496.	.0008	.0014	-.0121	-.0025	-.0038	-.0021	265.
.0100	-3341.	-158.	1170.	-571.	285.	-784.	.0024	.0022	-.0175	-.0051	-.0048	-.0026	406.
.0110	-4456.	-275.	1579.	-834.	361.	-1165.	.0048	.0037	-.0240	-.0094	-.0058	-.0030	593.
.0120	-5285.	-438.	1820.	-1143.	456.	-1651.	.0081	.0045	-.0312	-.0153	-.0068	-.0030	826.
.0130	-5953.	-662.	1988.	-1424.	514.	-2228.	.0121	.0059	-.0386	-.0226	-.0074	-.0022	1094.
.0140	-6668.	-940.	2249.	-1849.	435.	-2855.	.0167	.0073	-.0454	-.0314	-.0070	-.0004	1376.
.0150	-7523.	-1247.	2705.	-2226.	136.	-3511.	.0217	.0088	-.0510	-.0420	-.0046	.0024	1669.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/3/12/02.

18.26.33.

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	TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	FX	RY	RZ	STRESS
13	(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
	.0160	-8737.	-1575.	3510.	-2613.	-437.	-4200.	.0270	.0101	-.0553	-.0541	.0006	.0062	1993.
	.0170	-9832.	-1741.	4399.	-3008.	-1190.	-4942.	.0327	.0112	-.0587	-.0661	.0087	.0106	2370.
	.0180	-9668.	-2346.	4685.	-7404.	-1871.	-5762.	.0387	.0122	-.0618	-.0761	.0187	.0150	2789.
	.0190	-7910.	-2787.	4051.	-3793.	-2223.	-6667.	.0456	.0131	-.0656	-.0832	.0286	.0186	3205.
	.0200	-4691.	-3293.	2395.	-4156.	-1905.	-7674.	.0544	.0142	-.0723	-.0870	.0356	.0199	3585.
	.0210	-2104.	-3864.	785.	-4464.	-965.	-8697.	.0661	.0161	-.0831	-.0894	.0389	.0178	3942.
	.0220	-1136.	-4287.	-165.	-4573.	174.	-9383.	.0782	.0185	-.0937	-.0934	.0398	.0124	4189.
	.0230	64.	-4453.	-1276.	-4428.	1322.	-9672.	.0882	.0201	-.1003	-.0984	.0384	.0051	4302.
	.0240	-980.	-4530.	-946.	-4168.	1904.	-9629.	.0953	.0205	-.1016	-.0982	.0380	-.0027	4279.
	.0250	-2239.	-4669.	-225.	-3914.	2088.	-9370.	.0993	.0195	-.0987	-.0876	.0389	-.0104	4160.
	.0260	3170.	-4690.	-3080.	-3643.	2833.	-8930.	.0989	.0165	-.0924	-.0691	.0370	-.0190	4033.
	.0270	10639.	-4328.	-7123.	-3377.	3739.	-7913.	.0919	.0123	-.0808	-.0495	.0326	-.0293	3764.
	.0280	10504.	-3792.	-6767.	-3307.	3712.	-6240.	.0822	.0091	-.0666	-.0325	.0324	-.0413	3202.
	.0290	6176.	-3282.	-3716.	-3256.	3133.	-4391.	.0738	.0054	-.0541	-.0179	.0367	-.0547	2528.
	.0300	2461.	-2535.	-1172.	-2709.	2828.	-2741.	.0626	-.0030	-.0422	-.0034	.0377	-.0680	1918.
	.0310	384.	-1590.	185.	-1863.	2902.	-1230.	.0478	-.0149	-.0302	.0143	.0347	-.0810	1469.
	.0320	3101.	-613.	-1016.	-1396.	3278.	619.	.0318	-.0242	-.0174	.0373	.0290	-.0942	1451.
	.0330	4022.	449.	-1021.	-1449.	2899.	3167.	.0153	-.0282	-.0010	.0608	.0246	-.1067	1818.
	.0340	-950.	1732.	2247.	-1240.	1357.	5995.	-.0031	-.0318	.0203	.0760	.0221	-.1157	2516.
	.0350	-3945.	3080.	4338.	-117.	-161.	8153.	-.0225	-.0412	.0433	.0807	.0172	-.1183	3273.
	.0360	-713.	4165.	2841.	1499.	-834.	9318.	-.0409	-.0547	.0648	.0825	.0073	-.1142	3802.
	.0370	1129.	4845.	1832.	2743.	-1314.	10265.	-.0581	-.0641	.0847	.0883	-.0051	-.1051	4296.
	.0380	-1525.	5303.	3040.	3563.	-1997.	11772.	-.0751	-.0660	.1038	.0929	-.0175	-.0934	5000.
	.0390	-1103.	5882.	2507.	4635.	-2119.	13323.	-.0912	-.0665	.1201	.0833	-.0305	-.0799	5724.
	.0400	4043.	6554.	-606.	6166.	-1262.	13690.	-.1026	-.0724	.1292	.0601	-.0455	-.0649	6046.
	.0410	5477.	6915.	-2030.	7698.	-116.	13319.	-.1106	-.0789	.1321	.0426	-.0618	-.0482	6173.
	.0420	5056.	6677.	-2553.	8656.	1063.	13317.	-.1156	-.0784	.1307	.0409	-.0774	-.0317	6388.
	.0430	8761.	6230.	-5341.	8881.	2953.	13407.	-.1149	-.0733	.1237	.0396	-.0922	-.0181	6562.
	.0440	11002.	6210.	-7176.	8699.	4506.	13013.	-.1095	-.0706	.1155	.0229	-.1035	-.0072	6536.
	.0450	9551.	6346.	-6974.	8390.	5170.	12479.	-.1028	-.0694	.1104	.0018	-.1111	.0034	6381.
	.0460	9744.	5992.	-7651.	7881.	5417.	12106.	-.0957	-.0661	.1086	-.0050	-.1168	.0159	6191.
	.0470	11538.	5209.	-8854.	6962.	5136.	11298.	-.0855	-.0625	.1089	.0016	-.1190	.0298	5710.
	.0480	9949.	4455.	-7833.	5765.	3870.	9903.	-.0720	-.0603	.1113	.0096	-.1161	.0429	4854.
	.0490	6717.	3793.	-5944.	4743.	2227.	8689.	-.0574	-.0567	.1142	.0136	-.1107	.0535	4072.
	.0500	5845.	3131.	-5422.	4135.	922.	7730.	-.0414	-.0515	.1146	.0133	-.1042	.0604	3537.
	.0510	4657.	2498.	-4646.	3728.	-145.	6185.	-.0222	-.0482	.1104	.0119	-.0960	.0638	2898.
	.0520	1247.	1713.	-2535.	3254.	-1204.	4027.	-.0007	-.0459	.1020	.0202	-.0951	.0646	2133.
	.0530	-642.	520.	-1138.	2750.	-2096.	2048.	.0203	-.0415	.0915	.0440	-.0716	.0626	1613.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/3/12/02.

18.26.33.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSVCONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

.0420	5056.	6677.	-5153.	8656.	1683.	13317.	-1156.	-0784.	.1307.	.0409.	-0774.	-0317.	6388.
.0430	8761.	6270.	-5341.	8881.	2953.	13407.	-1149.	-0733.	.1237.	.0396.	-0922.	-0181.	6562.
.0440	11002.	6210.	-7176.	8699.	4506.	13013.	-1095.	-0706.	.1155.	.0229.	-1035.	-0072.	6536.
.0450	9551.	6346.	-6974.	8390.	5170.	12479.	-1028.	-0694.	.1104.	.0018.	-1111.	.0034.	6381.
.0460	9744.	5992.	-7651.	7881.	5417.	12106.	-0957.	-0661.	.1086.	-0050.	-1168.	.0159.	6191.
.0470	11538.	5209.	-8854.	6962.	5176.	11298.	-0855.	-0625.	.1085.	.0016.	-1190.	.0298.	5710.
.0480	9949.	4455.	-7833.	5765.	3870.	9903.	-0720.	-0603.	.1113.	.0096.	-1161.	.0429.	4854.
.0490	6717.	3793.	-5944.	4743.	2227.	8689.	-0574.	-0567.	.1142.	.0136.	-1107.	.0535.	4072.
.0500	5845.	3131.	-5422.	4135.	922.	7730.	-0414.	-0515.	.1146.	.0133.	-1042.	.0604.	3537.
.0510	4657.	2498.	-4646.	3728.	-145.	6185.	-0222.	-0482.	.1104.	.0119.	-0960.	.0638.	2898.
.0520	1247.	1713.	-2535.	3254.	-1204.	4027.	-0007.	-0459.	.1020.	.0202.	-0851.	.0646.	2133.
.0530	-642.	580.	-1138.	2750.	-2096.	2048.	.0203.	-0415.	.0915.	.0440.	-0716.	.0626.	1613.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.33.

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	13	MEMBER	4	SEQUENCE	235	LOCATION	END	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	PX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.0540	-408.	-532.	-680.	2337.	-2957.	260.	.0349	-0376	.0803	.0713	-0543	.0571	1516.	
.0550	-1034.	-1183.	526.	1860.	-4131.	-1862.	.0579	-0387	.0696	.0908	-0324	.0479	1966.	
.0560	-1287.	-1682.	1625.	966.	-5358.	-4021.	.0738	-0418	.0595	.1130	-0083	.0359	2716.	
.0570	518.	-2558.	1376.	-497.	-6158.	-5714.	.0865	-0425	.0487	.1513	.0142	.0227	3377.	
.0580	1210.	-3636.	1346.	-2297.	-6523.	-7394.	.0968	-0442	.0357	.1978	.0340	.0091	4063.	
.0590	-479.	-4419.	2272.	-4065.	-6507.	-9509.	.1062	-0510	.0196	.2346	.0509	-0055	4903.	
.0600	-1422.	-4858.	2524.	-5639.	-5970.	-11396.	.1139	-0594	.0011	.2582	.0651	-0215	5637.	
.0610	-1489.	-5190.	2147.	-7139.	-5095.	-12460.	.1194	-0643	-0189	.2758	.0772	-0381	6115.	
.0620	-3587.	-5462.	2830.	-8601.	-4209.	-13115.	.1234	-0668	-0400	.2903	.0885	-0530	6516.	
.0630	-6195.	-5629.	3846.	-9707.	-3231.	-13789.	.1257	-0700	-0614	.2985	.0985	-0637	6890.	
.0640	-6628.	-5655.	3778.	-10059.	-2174.	-14152.	.1244	-0738	-0810	.2964	.1075	-0685	7022.	
.0650	-7123.	-5421.	3975.	-9686.	-1528.	-13936.	.1185	-0772	-0964	.2798	.1172	-0672	6838.	
.0660	-9220.	-4929.	5288.	-9923.	-1341.	-13379.	.1092	-0798	-1079	.2499	.1276	-0604	6498.	
.0670	-9656.	-4476.	5801.	-8370.	-993.	-12645.	.0977	-0801	-1176	.2156	.1361	-0486	6098.	
.0680	-7600.	-4275.	4875.	-7588.	-206.	-11716.	.0843	-0780	-1267	.1823	.1407	-0325	5602.	
.0690	-6750.	-4133.	4499.	-6424.	657.	-10819.	.0698	-0763	-1350	.1453	.1424	-0138	5056.	
.0700	-7760.	-3811.	5137.	-4948.	1426.	-10133.	.0558	-0762	-1423	.1007	.1419	.0049	4561.	
.0710	-7851.	-3378.	5268.	-3507.	2265.	-9284.	.0424	-0748	-1474	.0558	.1383	.0212	4085.	
.0720	-6562.	-2972.	4522.	-2352.	3116.	-7838.	.0280	-0689	-1482	.0217	.1307	.0345	3514.	
.0730	-4716.	-2554.	3387.	-1420.	3753.	-5991.	.0127	-0603	-1432	-0002	.1197	.0449	2894.	
.0740	-2083.	-2038.	1918.	-499.	4043.	-4213.	-0019	-0524	-1326	-0157	.1064	.0530	2352.	
.0750	-16.	-1461.	870.	617.	3820.	-2545.	-0155	-0462	-1164	-0285	.0720	.0598	1858.	
.0760	-80.	-908.	952.	1868.	3096.	-800.	-0284	-0400	-0951	-0384	.0764	.0654	1486.	
.0770	-202.	-410.	967.	3059.	2330.	962.	-0399	-0332	-0708	-0450	.0585	.0692	1591.	
.0780	1713.	31.	-218.	4095.	1928.	2566.	-0489	-0258	-0459	-0490	.0377	.0707	2088.	
.0790	3212.	419.	-1287.	5119.	1726.	4050.	-0554	-0184	-0215	-0516	.0155	.0698	2710.	
.0800	1941.	822.	-914.	6353.	1408.	5526.	-0600	-0119	.0026	-0554	-0058	.0665	3426.	
.0810	350.	1352.	-253.	7772.	1050.	6911.	-0626	-0076	.0261	-0617	-0248	.0601	4195.	
.0820	774.	2031.	-462.	9021.	775.	8182.	-0632	-0051	.0489	-0670	-0407	.0498	4897.	
.0830	1891.	2730.	-878.	9717.	426.	9571.	-0629	-0022	.0716	-0651	-0531	.0356	5476.	
.0840	2717.	3337.	-1026.	9781.	-77.	11134.	-0619	.0014	.0939	-0551	-0617	.0184	5947.	
.0850	3892.	3906.	-1286.	9408.	-565.	12443.	-0592	.0023	.1140	-0435	-0676	-0011	6264.	
.0860	4720.	4495.	-1460.	8741.	-864.	13113.	-0546	-0018	.1305	-0346	-0727	-0220	6333.	
.0870	4516.	4951.	-1437.	7664.	-790.	13287.	-0488	-0085	.1427	-0243	-0793	-0436	6164.	
.0880	4654.	5094.	-2028.	6009.	-143.	13231.	-0418	-0145	.1500	-0078	-0886	-0658	5832.	
.0890	5533.	5006.	-3294.	3915.	945.	12862.	-0328	-0196	.1524	.0118	-0998	-0884	5408.	
.0900	5463.	4892.	-4142.	1849.	2016.	12035.	-0223	-0258	.1514	.0281	-1107	-1103	4953.	
.0910	4345.	4784.	-4797.	208.	2770.	10867.	-0114	-0335	.1487	.0398	-1200	-1302	4501.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.34.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSVCONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.0810	350.	1352.	-253.	7772.	1050.	6911.	-.0626	-.0076	.0261	-.0617	-.0248	.0601	4195.
.0820	774.	2031.	-462.	9021.	775.	8182.	-.0632	-.0051	.0489	-.0670	-.0407	.0498	4897.
.0830	1291.	2730.	-872.	9717.	426.	9571.	-.0629	-.0022	.0716	-.0651	-.0531	.0356	5476.
.0840	2717.	3337.	-1026.	9781.	-77.	11134.	-.0619	.0014	.0935	-.0551	-.0617	.0184	5947.
.0850	3892.	3906.	-1286.	9408.	-565.	12443.	-.0592	.0023	.1140	-.0435	-.0676	-.0011	6264.
.0860	4720.	4455.	-1460.	8741.	-864.	13113.	-.0546	-.0018	.1305	-.0346	-.0727	-.0220	6333.
.0870	4516.	4951.	-1437.	7664.	-790.	13287.	-.0488	-.0085	.1427	-.0243	-.0793	-.0436	6164.
.0880	4654.	5094.	-2028.	6009.	-143.	13231.	-.0418	-.0145	.1500	-.0078	-.0886	-.0658	5832.
.0890	5533.	5006.	-3294.	3915.	945.	12862.	-.0328	-.0196	.1524	.0118	-.0998	-.0884	5408.
.0900	5463.	4892.	-4142.	1649.	2016.	12035.	-.0223	-.0258	.1514	.0281	-.1107	-.1103	4953.
.0910	4345.	4784.	-4397.	208.	2770.	10867.	-.0114	-.0335	.1487	.0398	-.1200	-.1302	4501.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.34.

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	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU								
TIME (SEC)	FY (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)	
.0920	3849.	4601.	-4845.	-999.	3173.	9527.	-.0010	-.0410	.1454	.0504	-.1272	-.1466	4049.	
.0930	4188.	4345.	-5498.	-2009.	3155.	8087.	.0086	-.0470	.1421	.0619	-.1316	-.1588	3575.	
.0940	4602.	4052.	-5915.	-2923.	2648.	6675.	.0171	-.0504	.1388	.0727	-.1330	-.1665	3111.	
.0950	5108.	3729.	-6138.	-3592.	1747.	5373.	.0245	-.0518	.1346	.0787	-.1314	-.1691	2687.	
.0960	5302.	3404.	-5996.	-3863.	581.	3991.	.0310	-.0528	.1279	.0757	-.1274	-.1662	2241.	
.0970	4347.	3089.	-5068.	-3834.	-781.	2370.	.0370	-.0543	.1181	.0645	-.1212	-.1581	1836.	
.0980	3020.	2685.	-3797.	-3787.	-2203.	750.	.0421	-.0542	.1052	.0509	-.1134	-.1454	1784.	
.0990	2499.	2136.	-2851.	-3908.	-3553.	-542.	.0454	-.0501	.0901	.0391	-.1042	-.1292	2131.	
.1000	2132.	1575.	-1915.	-4125.	-4845.	-1548.	.0467	-.0433	.0734	.0261	-.0932	-.1103	2628.	
.1010	1188.	1136.	-640.	-4240.	-6068.	-2455.	.0460	-.0357	.0558	.0078	-.0803	-.0894	3130.	
.1020	560.	738.	450.	-4188.	-7056.	-3243.	.0433	-.0273	.0374	-.0141	-.0656	-.0666	3541.	
.1030	675.	207.	1075.	-4108.	-7650.	-3865.	.0392	-.0166	.0180	-.0348	-.0496	-.0422	3814.	
.1040	603.	-507.	1653.	-4120.	-7761.	-4453.	.0346	-.0036	-.0028	-.0532	-.0329	-.0165	3953.	
.1050	314.	-1339.	2115.	-4120.	-7250.	-5121.	.0301	.0105	-.0254	-.0726	-.0165	.0098	3927.	
.1060	542.	-2206.	2013.	-3899.	-6021.	-5834.	.0262	.0246	-.0499	-.0964	-.0013	.0359	3710.	
.1070	368.	-3047.	1841.	-3401.	-4258.	-6541.	.0227	.0383	-.0753	-.1238	.0126	.0611	3417.	
.1080	-465.	-3913.	1737.	-2803.	-2007.	-7356.	.0208	.0513	-.1019	-.1500	.0240	.0844	3260.	
.1090	-1091.	-4922.	1152.	-2290.	943.	-8363.	.0223	.0640	-.1319	-.1697	.0306	.1036	3500.	
.1100	-3776.	-5657.	1570.	-1701.	3451.	-8652.	.0222	.0776	-.1566	-.1858	.0372	.1177	3800.	
.1110	-4891.	-5944.	1451.	-1083.	5318.	-8452.	.0211	.0896	-.1742	-.2020	.0458	.1258	4031.	
.1120	-4158.	-5906.	791.	-608.	6467.	-8248.	.0202	.0981	-.1852	-.2139	.0569	.1285	4213.	
.1130	-4700.	-5827.	1077.	-357.	6800.	-7904.	.0186	.1048	-.1902	-.2114	.0695	.1262	4186.	
.1140	-6332.	-5800.	2043.	-276.	6614.	-7247.	.0165	.1110	-.1910	-.1949	.0326	.1186	3939.	
.1150	-7456.	-5576.	2859.	-278.	6247.	-6596.	.0153	.1141	-.1902	-.1775	.0950	.1052	3647.	
.1160	-9015.	-4981.	4007.	-345.	5711.	-6138.	.0146	.1131	-.1881	-.1661	.1061	.0865	3367.	
.1170	-10199.	-4282.	4960.	-574.	5143.	-5600.	.0136	.1107	-.1847	-.1535	.1150	.0644	3060.	
.1180	-12156.	-3666.	6335.	-931.	4266.	-4684.	.0091	.1089	-.1769	-.1318	.1221	.0420	2570.	
.1190	-10910.	-3188.	6280.	-1333.	3343.	-4028.	.0036	.1048	-.1660	-.1046	.1284	.0213	2167.	
.1200	-8556.	-2723.	5927.	-1589.	2223.	-3937.	-.0022	.0964	-.1524	-.0792	.1348	.0032	1923.	
.1210	-9448.	-2234.	7205.	-1565.	840.	-3874.	-.0096	.0866	-.1365	-.0578	.1388	-.0126	1710.	
.1220	-7990.	-1756.	7066.	-1408.	-115.	-3453.	-.0170	.0787	-.1203	-.0423	.1391	-.0276	1497.	
.1230	-5718.	-1133.	6278.	-1281.	-697.	-2897.	-.0243	.0717	-.1037	-.0342	.1343	-.0415	1302.	
.1240	-3199.	-452.	5135.	-1258.	-944.	-2459.	-.0306	.0651	-.0868	-.0296	.1240	-.0531	1171.	
.1250	-358.	65.	3485.	-1200.	-862.	-1857.	-.0366	.0601	-.0694	-.0230	.1078	-.0612	952.	
.1260	670.	505.	2434.	-930.	-699.	-1017.	-.0429	.0562	-.0509	-.0178	.0859	-.0652	620.	
.1270	2914.	1000.	643.	-602.	-222.	-475.	-.0455	.0512	-.0342	-.0223	.0500	-.0668	320.	
.1280	3248.	1580.	-274.	-429.	228.	-11.	-.0455	.0469	-.0185	-.0353	.0305	-.0663	195.	
.1290	3599.	2027.	-1382.	-532.	707.	925.	-.0441	.0471	-.0026	-.0501	-.0018	-.0637	514.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.34.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSVCONDITION 24
LOADS
SHOCK

.1180	-12156.	-3666.	6280.	-931.	4266.	-4084.	.0091	.1089	-.1769	-.1318	.1221	.0420	2570.
.1190	-10910.	-3188.	6280.	-1333.	3343.	-4028.	.0036	.1048	-.1660	-.1046	.1284	.0213	2167.
.1200	-8556.	-2723.	5927.	-1589.	2223.	-3937.	-.0022	.0964	-.1524	-.0792	.1348	.0032	1923.
.1210	-9448.	-2234.	7205.	-1565.	840.	-3874.	-.0096	.0866	-.1365	-.0578	.1388	-.0126	1710.
.1220	-7990.	-1756.	7066.	-1408.	-115.	-3453.	-.0170	.0787	-.1203	-.0427	.1391	-.0276	1497.
.1230	-5718.	-1133.	6278.	-1281.	-697.	-2897.	-.0243	.0717	-.1037	-.0342	.1343	-.0415	1302.
.1240	-3199.	-452.	5135.	-1258.	-944.	-2459.	-.0306	.0651	-.0868	-.0296	.1240	-.0531	1171.
.1250	-358.	65.	3485.	-1200.	-862.	-1857.	-.0366	.0601	-.0694	-.0230	.1078	-.0612	952.
.1260	670.	505.	2434.	-930.	-699.	-1017.	-.0429	.0562	-.0509	-.0178	.0859	-.0652	620.
.1270	2914.	1000.	643.	-602.	-222.	-475.	-.0455	.0512	-.0342	-.0223	.0600	-.0668	320.
.1280	3248.	1580.	-274.	-429.	228.	-11.	-.0455	.0469	-.0185	-.0353	.0305	-.0663	195.
.1290	3599.	2027.	-1382.	-532.	707.	925.	-.0441	.0471	-.0026	-.0501	-.0018	-.0637	514.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.34.

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	13	MEMBER	4	SEQUENCE	235	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.1300	5184.	2310.	-3197.	-780.	1206.	2065.	-.0414	.0501	.0138	-.0660	-.0351	-.0582	1009.		
.1310	4268.	2622.	-3557.	-866.	1168.	2834.	-.0387	.0510	.0325	-.0856	-.0670	-.0485	1278.		
.1320	4444.	2847.	-4213.	-714.	787.	3235.	-.0354	.0502	.0527	-.1060	-.0959	-.0351	1366.		
.1330	4816.	2909.	-4819.	-419.	81.	3850.	-.0332	.0517	.0743	-.1221	-.1219	-.0199	1554.		
.1340	5361.	2898.	-5380.	-169.	-685.	4618.	-.0310	.0561	.0948	-.1363	-.1442	-.0052	1875.		
.1350	5708.	2927.	-5705.	57.	-1307.	5145.	-.0276	.0610	.1120	-.1524	-.1625	.0076	2130.		
.1360	4639.	2957.	-5300.	503.	-1811.	5531.	-.0251	.0655	.1258	-.1674	-.1777	.0192	2344.		
.1370	5524.	2867.	-5927.	1210.	-1907.	5875.	-.0232	.0698	.1356	-.1769	-.1895	.0292	2526.		
.1380	4885.	2820.	-5707.	2004.	-1971.	6127.	-.0233	.0731	.1426	-.1801	-.1972	.0376	2705.		
.1390	4025.	2876.	-5212.	2603.	-2012.	6327.	-.0249	.0758	.1473	-.1773	-.1993	.0433	2862.		
.1400	5251.	2978.	-5640.	2961.	-1982.	6821.	-.0285	.0796	.1503	-.1670	-.1952	.0459	3088.		
.1410	5816.	3185.	-5579.	3271.	-2177.	7631.	-.0352	.0837	.1523	-.1507	-.1849	.0458	3444.		
.1420	6843.	3479.	-5526.	3588.	-2391.	8196.	-.0422	.0853	.1512	-.1317	-.1684	.0434	3716.		
.1430	6423.	3745.	-4622.	3860.	-2597.	8379.	-.0494	.0845	.1462	-.1091	-.1475	.0398	3846.		
.1440	6206.	3800.	-3923.	3966.	-2487.	8442.	-.0566	.0840	.1366	-.0811	-.1244	.0353	3874.		
.1450	6508.	3710.	-3663.	3888.	-1983.	8443.	-.0635	.0843	.1227	-.0521	-.0996	.0299	3814.		
.1460	5162.	3649.	-2649.	3720.	-1371.	8151.	-.0699	.0837	.1053	-.0287	-.0735	.0243	3637.		
.1470	5135.	3458.	-2285.	3492.	-557.	7369.	-.0740	.0817	.0846	-.0108	-.0458	.0201	3280.		
.1480	3931.	3011.	-1246.	3291.	-11.	6319.	-.0774	.0791	.0632	.0067	-.0167	.0190	2859.		
.1490	2336.	2342.	103.	3116.	216.	5017.	-.0798	.0759	.0420	.0241	.0136	.0213	2372.		
.1500	1944.	1624.	916.	2905.	304.	3426.	-.0801	.0717	.0209	.0375	.0437	.0259	1807.		
.1510	869.	976.	2014.	2643.	188.	1837.	-.0795	.0676	.0011	.0455	.0718	.0322	1294.		
.1520	730.	327.	2452.	2315.	161.	421.	-.0772	.0647	-.0187	.0496	.0961	.0392	947.		
.1530	-572.	-256.	3251.	2008.	158.	-857.	-.0735	.0623	-.0385	.0507	.1152	.0466	878.		
.1540	-1454.	-773.	3594.	1706.	446.	-2230.	-.0671	.0595	-.0593	.0491	.1286	.0535	1141.		
.1550	-1938.	-1277.	3485.	1351.	1036.	-3608.	-.0583	.0569	-.0808	.0463	.1366	.0596	1601.		
.1560	-4507.	-1722.	4250.	962.	1539.	-4689.	-.0493	.0556	-.1006	.0431	.1401	.0651	2018.		
.1570	-5167.	-2088.	4008.	509.	2131.	-5586.	-.0388	.0551	-.1185	.0377	.1406	.0695	2408.		
.1580	-5706.	-2307.	3767.	27.	2532.	-6377.	-.0283	.0543	-.1329	.0302	.1389	.0737	2753.		
.1590	-7350.	-2492.	4144.	-454.	2594.	-6995.	-.0196	.0536	-.1425	.0243	.1354	.0789	3000.		
.1600	-6914.	-2800.	3520.	-923.	2607.	-7409.	-.0120	.0532	-.1481	.0219	.1304	.0856	3203.		
.1610	-5357.	-3160.	2482.	-1354.	2523.	-8033.	-.0049	.0524	-.1506	.0194	.1250	.0932	3422.		
.1620	-2455.	-3466.	2966.	-1678.	2111.	-8611.	.0014	.0508	-.1503	.0141	.1193	.1010	3621.		
.1630	-6116.	-3836.	2826.	-1899.	1789.	-9119.	.0077	.0494	-.1487	.0073	.1135	.1082	3806.		
.1640	-5169.	-4241.	2472.	-2015.	1471.	-9522.	.0134	.0482	-.1450	.0006	.1074	.1145	3950.		
.1650	-5757.	-4554.	3036.	-2048.	914.	-9882.	.0177	.0460	-.1383	-.0050	.1011	.1196	4066.		
.1660	-4790.	-4802.	2912.	-2050.	361.	-10118.	.0213	.0432	-.1290	-.0073	.0947	.1226	4145.		
.1670	-3893.	-4940.	2860.	-1999.	-356.	-9947.	.0229	.0408	-.1160	-.0050	.0880	.1231	4074.		

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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

.1570	-5167.	-2088.	4008.	509.	2131.	-5586.	-0388.	.0551	-.1185	.0377	.1406	.0695	2408.
.1580	-5706.	-2307.	3767.	17.	2532.	-6377.	-.0283	.0543	-.1329	.0302	.1389	.0737	2753.
.1590	-7350.	-2492.	4144.	-454.	2594.	-6995.	-.0196	.0536	-.1425	.0243	.1354	.0789	3000.
.1600	-6914.	-2800.	3520.	-923.	2607.	-7489.	-.0120	.0532	-.1481	.0219	.1304	.0856	3203.
.1610	-5357.	-3160.	2482.	-1354.	2523.	-8033.	-.0049	.0524	-.1506	.0194	.1250	.0932	3422.
.1620	-6455.	-3466.	2966.	-1678.	2111.	-8611.	.0014	.0508	-.1503	.0141	.1193	.1010	3621.
.1630	-6116.	-3836.	2826.	-1899.	1789.	-9119.	.0077	.0494	-.1487	.0073	.1135	.1082	3806.
.1640	-5169.	-4241.	2472.	-2015.	1471.	-9522.	.0134	.0482	-.1450	.0006	.1074	.1145	3950.
.1650	-5757.	-4554.	3036.	-2048.	914.	-9882.	.0177	.0460	-.1383	-.0050	.1011	.1196	4066.
.1660	-4790.	-4802.	2912.	-2050.	561.	-10118.	.0213	.0432	-.1290	-.0073	.0947	.1226	4145.
.1670	-3893.	-4940.	2860.	-1999.	-356.	-9947.	.0229	.0408	-.1160	-.0050	.0880	.1231	4074.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.34.

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	13	MEMBER	4	SEQUENCE	235	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LBS)	(LBS)	(LBS)	(FT-LBS)	(FT-LBS)	(FT-LBS)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.1680	-2887.	-4882.	2806.	-1937.	-1197.	-9434.		.0235	.0380	-.0998	-.0009	.0817	.1203	3894.	
.1690	-3017.	-4530.	3358.	-1847.	-2210.	-8652.		.0231	.0342	-.0809	.0035	.0752	.1138	3659.	
.1700	-2400.	-3990.	3435.	-1724.	-2097.	-7574.		.0222	.0299	-.0605	.0109	.0673	.1036	3356.	
.1710	420.	-3420.	2219.	-1632.	-3554.	-6290.		.0221	.0259	-.0407	.0229	.0576	.0900	2972.	
.1720	-151.	-2737.	2514.	-1519.	-3952.	-4871.		.0216	.0213	-.0209	.0367	.0458	.0741	2590.	
.1730	-492.	-1966.	2431.	-1333.	-3915.	-3472.		.0217	.0157	-.0027	.0486	.0318	.0561	2167.	
.1740	423.	-1126.	1420.	-1008.	-3406.	-2050.		.0219	.0093	.0141	.0586	.0154	.0366	1646.	
.1750	436.	-265.	662.	-615.	-2725.	-607.		.0210	.0027	.0306	.0682	-.0026	.0170	1147.	
.1760	938.	491.	-424.	-290.	-1869.	712.		.0198	-.0038	.0463	.0784	-.0204	-.0018	811.	
.1770	718.	1146.	-1143.	50.	-1091.	1927.		.0171	-.0106	.0622	.0890	-.0372	-.0187	889.	
.1780	1745.	1706.	-2408.	486.	-307.	2956.		.0137	-.0182	.0774	.0974	-.0517	-.0335	1208.	
.1790	1894.	2241.	-3075.	1025.	266.	3805.		.0088	-.0267	.0920	.1021	-.0632	-.0459	1585.	
.1800	1359.	2717.	-3240.	1540.	678.	4542.		.0025	-.0354	.1053	.1045	-.0722	-.0559	1944.	
.1810	3118.	3048.	-4422.	1907.	1234.	5199.		-.0039	-.0432	.1156	.1066	-.0785	-.0639	2277.	
.1820	3440.	3341.	-4706.	2203.	1595.	5867.		-.0114	-.0502	.1237	.1078	-.0821	-.0698	2595.	
.1830	3557.	3628.	-4694.	2512.	1851.	6484.		-.0191	-.0572	.1289	.1064	-.0827	-.0741	2880.	
.1840	4086.	3923.	-4699.	2884.	1992.	6994.		-.0267	-.0644	.1315	.1023	-.0807	-.0767	3139.	
.1850	4405.	4232.	-4394.	3258.	1891.	7536.		-.0344	-.0708	.1326	.0976	-.0761	-.0779	3381.	
.1860	5242.	4525.	-4173.	3520.	1605.	8140.		-.0414	-.0756	.1324	.0940	-.0694	-.0783	3617.	
.1870	5117.	4816.	-3402.	3709.	1066.	8871.		-.0486	-.0785	.1317	.0919	-.0617	-.0777	3882.	
.1880	6145.	5066.	-3259.	3913.	569.	9551.		-.0547	-.0803	.1300	.0899	-.0540	-.0761	4148.	
.1890	6759.	5286.	-2997.	4210.	70.	10049.		-.0595	-.0816	.1271	.0865	-.0472	-.0732	4372.	
.1900	5950.	5436.	-2150.	4547.	-427.	10371.		-.0620	-.0820	.1228	.0824	-.0418	-.0691	4547.	
.1910	6142.	5389.	-2013.	4789.	-608.	10499.		-.0630	-.0805	.1159	.0788	-.0384	-.0640	4637.	
.1920	5889.	5154.	-1865.	4920.	-567.	10400.		-.0609	-.0775	.1069	.0753	-.0370	-.0578	4623.	
.1930	5140.	4772.	-1623.	4979.	-358.	9975.		-.0562	-.0740	.0958	.0698	-.0367	-.0503	4476.	
.1940	4533.	4255.	-1546.	4990.	-31.	9231.		-.0489	-.0706	.0831	.0618	-.0366	-.0415	4211.	
.1950	3781.	3591.	-1426.	4889.	293.	8239.		-.0397	-.0673	.0696	.0530	-.0359	-.0314	3846.	
.1960	2592.	2783.	-1082.	4583.	535.	7044.		-.0291	-.0640	.0561	.0455	-.0341	-.0202	3379.	
.1970	1697.	1881.	-875.	4044.	734.	5703.		-.0175	-.0608	.0426	.0394	-.0311	-.0087	2821.	
.1980	1367.	964.	-922.	3326.	894.	4288.		-.0052	-.0580	.0293	.0338	-.0265	.0023	2207.	
.1990	721.	88.	-738.	2502.	939.	2835.		.0075	-.0558	.0160	.0280	-.0200	.0118	1563.	
.2000	-526.	-749.	-146.	1612.	889.	1339.		.0204	-.0545	.0026	.0234	-.0120	.0195	913.	
.2010	-1921.	-1555.	487.	682.	868.	-181.		.0332	-.0539	-.0113	.0215	-.0030	.0250	449.	
.2020	-3055.	-2291.	1014.	-242.	915.	-1661.		.0454	-.0540	-.0254	.0229	.0064	.0278	767.	
.2030	-4181.	-2896.	1550.	-1115.	969.	-3030.		.0563	-.0547	-.0391	.0270	.0162	.0278	1353.	
.2040	-5117.	-3353.	2043.	-1908.	976.	-4252.		.0655	-.0560	-.0518	.0332	.0267	.0250	1911.	
.2050	-5768.	-3678.	2486.	-2601.	889.	-5339.		.0730	-.0581	-.0630	.0415	.0379	.0199	2410.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

.1950	3721.	3391.	-1426.	4879.	200.	8239.	-.0097	-.0673	.0696	.0530	-.0359	-.0314	4211.
.1960	4592.	2733.	-1082.	4513.	535.	7044.	-.0091	-.0640	.0561	.0455	-.0341	-.0202	3379.
.1970	1697.	1881.	-875.	4844.	734.	5793.	-.0175	-.0608	.0426	.0394	-.0311	-.0087	2821.
.1980	1367.	964.	-922.	3326.	894.	4288.	-.0052	-.0580	.0293	.0338	-.0265	.0023	2207.
.1990	721.	81.	-738.	2502.	939.	8839.	.0075	-.0558	.0160	.0280	-.0200	.0118	1563.
.2000	-526.	-749.	-146.	1612.	879.	1339.	.0204	-.0040	.0026	.0234	-.0120	.0195	913.
.2010	-1921.	-1555.	487.	683.	862.	-181.	.0332	-.0539	-.0113	.0215	-.0030	.0250	449.
.2020	-3059.	-2291.	1014.	-242.	915.	-1661.	.0454	-.0540	-.0254	.0229	.0064	.0278	767.
.2030	-4181.	-2896.	1550.	-1115.	969.	-3030.	.0563	-.0547	-.0391	.0270	.0162	.0278	1353.
.2040	-5117.	-3353.	2043.	-1908.	976.	-4252.	.0655	-.0560	-.0518	.0332	.0267	.0250	1911.
.2050	-5760.	-3678.	2486.	-2601.	889.	-5339.	.0730	-.0581	-.0630	.0415	.0379	.0199	2410.

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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	13	MEMBER	4	SEQUENCE	235	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2060	-6296.	-3897.	2959.	-3176.	672.	-6322.	.0784	-.0611	-.0723	.0529	.0496	.0128	2852.		
.2070	-6464.	-4039.	3320.	-3642.	365.	-7217.	.0618	-.0648	-.0795	.0677	.0514	.0044	3247.		
.2080	-5993.	-4117.	3395.	-4042.	41.	-8004.	.0835	-.0689	-.0850	.0847	.0726	-.0053	3598.		
.2090	-5318.	-4110.	3378.	-4404.	-281.	-8648.	.0838	-.0730	-.0888	.1017	.0827	-.0160	3896.		
.2100	-4888.	-4004.	3453.	-4721.	-585.	-9119.	.0829	-.0770	-.0912	.1172	.0910	-.0273	4127.		
.2110	-4306.	-3831.	3373.	-4979.	-801.	-9426.	.0812	-.0806	-.0922	.1311	.0967	-.0386	4290.		
.2120	-3402.	-3629.	3048.	-5184.	-921.	-9594.	.0789	-.0837	-.0917	.1431	.0997	-.0489	4392.		
.2130	-2684.	-3403.	2773.	-5335.	-1048.	-9602.	.0763	-.0862	-.0894	.1525	.1001	-.0576	4428.		
.2140	-2300.	-3137.	2654.	-5402.	-1263.	-9392.	.0733	-.0876	-.0847	.1578	.0982	-.0641	4377.		
.2150	-1917.	-2819.	2512.	-5350.	-1549.	-8944.	.0699	-.0878	-.0775	.1579	.0941	-.0680	4228.		
.2160	-1508.	-2461.	2300.	-5162.	-1848.	-8300.	.0662	-.0869	-.0680	.1525	.0874	-.0689	3992.		
.2170	-1327.	-2098.	2111.	-4835.	-2101.	-7494.	.0620	-.0849	-.0567	.1426	.0780	-.0668	3677.		
.2180	-1328.	-1765.	1898.	-4363.	-2231.	-6533.	.0574	-.0816	-.0441	.1294	.0560	-.0617	3277.		
.2190	-1453.	-1448.	1638.	-3734.	-2187.	-5441.	.0524	-.0769	-.0310	.1129	.0516	-.0544	2790.		
.2200	-1797.	-1115.	1402.	-2953.	-1954.	-4259.	.0469	-.0714	-.0179	.0930	.0355	-.0456	2223.		
.2210	-2128.	-763.	1098.	-2057.	-1524.	-2992.	.0408	-.0649	-.0051	.0711	.0184	-.0361	1580.		
.2220	-2102.	-415.	599.	-1108.	-918.	-1632.	.0340	-.0576	.0071	.0496	.0012	-.0266	873.		
.2230	-1854.	-71.	39.	-153.	-230.	-206.	.0265	-.0496	.0186	.0304	-.0154	-.0175	138.		
.2240	-1550.	293.	-444.	792.	439.	1245.	.0180	-.0417	.0297	.0140	-.0305	-.0094	618.		
.2250	-908.	696.	-982.	1711.	1050.	2704.	.0086	-.0342	.0404	.0004	-.0437	-.0026	1351.		
.2260	219.	1138.	-1648.	2558.	1567.	4165.	-.0016	-.0271	.0507	-.0101	-.0548	.0026	2060.		
.2270	1527.	1601.	-2277.	3275.	1930.	5588.	-.0121	-.0206	.0606	-.0170	-.0539	.0061	2712.		
.2280	2751.	2044.	-2766.	3845.	2115.	6896.	-.0225	-.0147	.0697	-.0202	-.0708	.0078	3280.		
.2290	3970.	2442.	-3129.	4305.	2132.	8013.	-.0323	-.0098	.0779	-.0205	-.0760	.0082	3749.		
.2300	4876.	2799.	-3309.	4696.	1985.	8885.	-.0411	-.0063	.0853	-.0194	-.0798	.0072	4111.		
.2310	5409.	3121.	-3283.	5011.	1676.	9500.	-.0487	-.0039	.0917	-.0179	-.0822	.0052	4362.		
.2320	5749.	3386.	-3163.	5207.	1232.	9882.	-.0549	-.0023	.0974	-.0159	-.0833	.0022	4509.		
.2330	5929.	3571.	-2985.	5261.	677.	10048.	-.0596	-.0011	.1022	-.0134	-.0833	-.0013	4559.		
.2340	5798.	3680.	-2679.	5204.	31.	9975.	-.0627	-.0005	.1059	-.0111	-.0821	-.0051	4515.		
.2350	5441.	3724.	-2296.	5073.	-649.	9640.	-.0640	-.0009	.1083	-.0099	-.0797	-.0089	4379.		
.2360	5029.	3701.	-1936.	4846.	-1280.	9066.	-.0636	-.0020	.1087	-.0101	-.0761	-.0127	4157.		
.2370	4481.	3606.	-1582.	4466.	-1784.	8321.	-.0615	-.0032	.1068	-.0113	-.0717	-.0166	3857.		
.2380	3751.	3441.	-1252.	3901.	-2077.	7450.	-.0578	-.0040	.1020	-.0131	-.0668	-.0207	3480.		
.2390	3213.	3223.	-1108.	3183.	-2095.	6500.	-.0528	-.0045	.0943	-.0155	-.0616	-.0250	3024.		
.2400	2795.	2971.	-1136.	2367.	-1841.	5453.	-.0467	-.0046	.0836	-.0186	-.0562	-.0294	2497.		
.2410	2322.	2692.	-1190.	1489.	-1394.	4357.	-.0397	-.0041	.0704	-.0221	-.0504	-.0357	1931.		
.2420	1827.	2383.	-1234.	566.	-838.	3272.	-.0322	-.0025	.0554	-.0253	-.0440	-.0378	1374.		
.2430	1558.	2044.	-1358.	-370.	-238.	2231.	-.0243	.0004	.0393	-.0279	-.0369	-.0414	913.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.34.

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

.2330	5729.	3771.	-1875.	5261.	677.	10048.	-0.096	-0.0011	.1022	-0.0134	-0.0833	-0.0013	4559.
.2340	5750.	3680.	-2670.	5204.	31.	9975.	-0.627	-0.0005	.1059	-0.0111	-0.0821	-0.0051	4515.
.2350	5441.	3724.	-2296.	5073.	-645.	9640.	-0.640	-0.0009	.1083	-0.0099	-0.0797	-0.0089	4379.
.2360	5029.	3701.	-1936.	4846.	-1280.	9066.	-0.636	-0.0020	.1087	-0.0101	-0.0761	-0.0127	4157.
.2370	4481.	3606.	-1582.	4466.	-1704.	8321.	-0.615	-0.0032	.1068	-0.0113	-0.0717	-0.0166	3857.
.2380	3791.	3441.	-1259.	3901.	-2077.	7450.	-0.578	-0.0040	.1020	-0.0131	-0.0668	-0.0207	3480.
.2390	3213.	3223.	-1108.	3183.	-2095.	6500.	-0.528	-0.0045	.0943	-0.0155	-0.0616	-0.0250	3024.
.2400	2755.	2971.	-1136.	2367.	-1841.	5453.	-0.467	-0.0046	.0836	-0.0186	-0.0562	-0.0294	2497.
.2410	2322.	2692.	-1190.	1489.	-1394.	4357.	-0.397	-0.0041	.0704	-0.0221	-0.0504	-0.0337	1931.
.2420	1827.	2383.	-1234.	566.	-838.	3272.	-0.322	-0.0035	.0554	-0.0253	-0.0440	-0.0378	1374.
.2430	1558.	2044.	-1358.	-370.	-238.	2211.	-0.243	.0004	.0393	-0.0279	-0.0369	-0.0414	913.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.34.

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	13	MEMBER	4	SEQUENCE	235	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2440	1520.	1679.	-1551.	-1259.	344.	1228.	-0.0163	.0046	.0227	-0.0304	-0.0292	-0.0440	719.		
.2450	1504.	1281.	-1692.	-2037.	845.	237.	-0.0083	.0099	-0.0062	-0.0332	-0.0212	-0.0451	890.		
.2460	1336.	832.	-1686.	-2667.	1215.	-763.	-0.0004	.0161	-0.0099	-0.0369	-0.0131	-0.0443	1215.		
.2470	901.	319.	-1460.	-3141.	1406.	-1777.	.0073	.0232	-0.0251	-0.0415	-0.0051	-0.0411	1554.		
.2480	213.	-252.	-1036.	-3468.	1408.	-2799.	.0147	.0310	-0.0391	-0.0470	.0025	-0.0356	1876.		
.2490	-498.	-870.	-565.	-3665.	1263.	-3816.	.0214	.0393	-0.0517	-0.0536	.0093	-0.0279	2183.		
.2500	-1155.	-1516.	-91.	-3759.	991.	-4808.	.0274	.0480	-0.0627	-0.0612	.0154	-0.0184	2481.		
.2510	-2050.	-2161.	554.	-3774.	570.	-5742.	.0325	.0569	-0.0721	-0.0698	.0209	-0.0075	2767.		
.2520	-3263.	-2771.	1411.	-3731.	15.	-6573.	.0365	.0656	-0.0798	-0.0791	.0261	.0042	3033.		
.2530	-4352.	-3315.	2229.	-3646.	-587.	-7262.	.0390	.0739	-0.0860	-0.0886	.0309	.0161	3269.		
.2540	-4982.	-3764.	2816.	-3551.	-1145.	-7778.	.0400	.0818	-0.0910	-0.0979	.0354	.0275	3462.		
.2550	-5295.	-4099.	3242.	-3477.	-1620.	-8090.	.0395	.0892	-0.0951	-0.1069	.0395	.0379	3593.		
.2560	-5486.	-4311.	3602.	-3422.	-1976.	-8178.	.0376	.0961	-0.0987	-0.1159	.0435	.0470	3645.		
.2570	-5489.	-4403.	3836.	-3352.	-2154.	-8071.	.0345	.1021	-0.1021	-0.1250	.0470	.0546	3612.		
.2580	-5230.	-4375.	3874.	-3238.	-2102.	-7827.	.0302	.1068	-0.1055	-0.1346	.0499	.0607	3502.		
.2590	-4735.	-4246.	3713.	-3088.	-1814.	-7470.	.0249	.1104	-0.1088	-0.1440	.0518	.0654	3324.		
.2600	-4069.	-4045.	3393.	-2921.	-1339.	-6989.	.0188	.1131	-0.1117	-0.1527	.0527	.0684	3057.		
.2610	-3419.	-3779.	3030.	-2728.	-761.	-6390.	.0122	.1152	-0.1139	-0.1607	.0528	.0699	2805.		
.2620	-2935.	-3432.	2710.	-2474.	-157.	-5716.	.0052	.1162	-0.1147	-0.1682	.0519	.0697	2500.		
.2630	-2500.	-3012.	2370.	-2143.	431.	-4998.	-0.0021	.1163	-0.1139	-0.1750	.0500	.0681	2189.		
.2640	-2025.	-2555.	1975.	-1770.	958.	-4241.	-0.0096	.1156	-0.1111	-0.1799	.0468	.0650	1884.		
.2650	-1702.	-2087.	1644.	-1405.	1368.	-3444.	-0.0170	.1145	-0.1063	-0.1822	.0426	.0607	1590.		
.2660	-1644.	-1608.	1444.	-1066.	1643.	-2626.	-0.0240	.1131	-0.0995	-0.1828	.0373	.0554	1315.		
.2670	-1654.	-1112.	1270.	-739.	1807.	-1818.	-0.0307	.1111	-0.0910	-0.1825	.0309	.0492	1071.		
.2680	-1596.	-612.	1058.	-423.	1885.	-1043.	-0.0369	.1086	-0.0811	-0.1816	.0236	.0426	881.		
.2690	-1549.	-135.	868.	-153.	1872.	-310.	-0.0424	.1057	-0.0699	-0.1796	.0156	.0359	764.		
.2700	-1487.	303.	708.	51.	1765.	396.	-0.0474	.1028	-0.0576	-0.1764	.0073	.0295	726.		
.2710	-1227.	717.	494.	216.	1579.	1095.	-0.0518	.1000	-0.0444	-0.1722	-0.0010	.0234	776.		
.2720	-695.	1139.	184.	392.	1328.	1800.	-0.0557	.0973	-0.0304	-0.1680	-0.0092	.0178	911.		
.2730	69.	1569.	-208.	595.	1030.	2506.	-0.0592	.0948	-0.0159	-0.1639	-0.0173	.0127	1113.		
.2740	1030.	1968.	-680.	806.	723.	3199.	-0.0621	.0929	-0.0013	-0.1593	-0.0253	.0083	1355.		
.2750	2030.	2314.	-1174.	1017.	439.	3868.	-0.0642	.0917	.0130	-0.1541	-0.0333	.0046	1615.		
.2760	2906.	2620.	-1629.	1254.	198.	4497.	-0.0655	.0911	.0264	-0.1491	-0.0414	.0017	1875.		
.2770	3671.	2893.	-2069.	1534.	24.	5062.	-0.0659	.0910	.0386	-0.1449	-0.0496	-0.0005	2122.		
.2780	4313.	3111.	-2487.	1826.	-88.	5536.	-0.0652	.0913	.0494	-0.1411	-0.0577	-0.0018	2340.		
.2790	4672.	3243.	-2787.	2083.	-174.	5912.	-0.0637	.0920	.0587	-0.1371	-0.0556	-0.0022	2516.		
.2800	4716.	3290.	-2933.	2283.	-268.	6190.	-0.0614	.0931	.0664	-0.1325	-0.0728	-0.0015	2650.		
.2810	4611.	3270.	-2992.	2432.	-381.	6359.	-0.0583	.0942	.0726	-0.1275	-0.0789	-0.0001	2736.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.34.

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

.2710	-1227.	717.	494.	216.	1579.	1095.	-0.474	.1000	-0.0444	-0.1722	-0.0010	.0234	776.
.2720	-495.	1139.	104.	392.	1328.	1800.	-0.557	.0973	-0.0304	-0.1680	-0.0092	.0178	911.
.2730	69.	1569.	-208.	595.	1030.	2506.	-0.0592	.0948	-0.0159	-0.1639	-0.0173	.0127	1113.
.2740	1030.	1988.	-680.	806.	723.	3199.	-0.0621	.0929	-0.0017	-0.1593	-0.0253	.0083	1355.
.2750	2020.	2214.	-1174.	1017.	429.	3868.	-0.0642	.0917	.0130	-0.1541	-0.0333	.0046	1615.
.2760	2906.	2620.	-1629.	1204.	198.	4497.	-0.0655	.0911	.0264	-0.1491	-0.0414	.0017	1875.
.2770	3671.	2893.	-2069.	1534.	24.	5062.	-0.0659	.0910	.0386	-0.1449	-0.0496	-0.0005	2122.
.2780	4313.	3111.	-2487.	1826.	-82.	5536.	-0.0652	.0913	.0494	-0.1411	-0.0577	-0.0018	2340.
.2790	4672.	3243.	-2787.	2083.	-174.	5912.	-0.0637	.0920	.0587	-0.1371	-0.0556	-0.0022	2516.
.2800	4716.	3290.	-2933.	2283.	-268.	6190.	-0.0614	.0931	.0664	-0.1325	-0.0728	-0.0015	2650.
.2810	4611.	3270.	-2992.	2432.	-381.	6359.	-0.0583	.0942	.0726	-0.1275	-0.0789	-0.0001	2736.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.34.

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	END	TYPE	RU	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)
.2820	4432.	3190.	-2992.	2526.	-518.	6400.	-0.0548	.0950	.0771	-0.1224	-0.0836	.0022	2769.							
.2830	4121.	3038.	-2890.	2539.	-680.	6301.	-0.0508	.0956	.0797	-0.1170	-0.0865	.0052	2740.							
.2840	3710.	2811.	-2701.	2452.	-840.	6063.	-0.0464	.0959	.0803	-0.1112	-0.0876	.0087	2646.							
.2850	3291.	2523.	-2482.	2277.	-959.	5691.	-0.0417	.0957	.0787	-0.1051	-0.0868	.0126	2489.							
.2860	2879.	2191.	-2258.	2047.	-1008.	5176.	-0.0367	.0949	.0748	-0.0991	-0.0841	.0166	2270.							
.2870	2475.	1825.	-2038.	1782.	-977.	4521.	-0.0318	.0933	.0686	-0.0934	-0.0798	.0208	1989.							
.2880	2113.	1437.	-1842.	1487.	-876.	3754.	-0.0270	.0909	.0606	-0.0880	-0.0739	.0250	1658.							
.2890	1787.	1045.	-1662.	1163.	-730.	2917.	-0.0225	.0877	.0511	-0.0824	-0.0664	.0292	1294.							
.2900	1488.	666.	-1492.	827.	-567.	2041.	-0.0186	.0838	.0405	-0.0767	-0.0574	.0334	912.							
.2910	1255.	310.	-1353.	495.	-404.	1145.	-0.0153	.0791	.0294	-0.0706	-0.0472	.0374	526.							
.2920	1061.	-13.	-1224.	181.	-258.	245.	-0.0126	.0737	.0179	-0.0641	-0.0359	.0411	160.							
.2930	779.	-298.	-1032.	-116.	-146.	-634.	-0.0105	.0677	.0063	-0.0570	-0.0236	.0443	265.							
.2940	369.	-546.	-750.	-399.	-69.	-1464.	-0.0090	.0614	-0.0054	-0.0490	-0.0104	.0469	609.							
.2950	-84.	-761.	-420.	-664.	-14.	-2228.	-0.0079	.0550	-0.0171	-0.0402	.0033	.0488	933.							
.2960	-548.	-942.	-51.	-898.	22.	-2921.	-0.0072	.0486	-0.0286	-0.0305	.0176	.0500	1226.							
.2970	-1059.	-1094.	389.	-1089.	28.	-3540.	-0.0069	.0424	-0.0397	-0.0200	.0321	.0506	1486.							
.2980	-1596.	-1235.	904.	-1237.	-11.	-4080.	-0.0068	.0364	-0.0503	-0.0086	.0467	.0508	1711.							
.2990	-2083.	-1377.	1453.	-1341.	-93.	-4543.	-0.0069	.0308	-0.0600	.0034	.0613	.0510	1901.							
.3000	-2459.	-1522.	1997.	-1394.	-210.	-4931.	-0.0073	.0256	-0.0686	.0157	.0755	.0513	2058.							
.3010	-2692.	-1668.	2493.	-1391.	-339.	-5241.	-0.0076	.0208	-0.0759	.0279	.0886	.0518	2180.							
.3020	-2797.	-1824.	2920.	-1331.	-455.	-5477.	-0.0078	.0165	-0.0819	.0397	.1004	.0527	2269.							
.3030	-2851.	-1996.	3283.	-1216.	-531.	-5648.	-0.0077	.0127	-0.0864	.0509	.1100	.0539	2322.							
.3040	-2905.	-2169.	3571.	-1043.	-540.	-5755.	-0.0071	.0093	-0.0894	.0611	.1172	.0554	2357.							
.3050	-2927.	-2324.	3733.	-816.	-461.	-5779.	-0.0060	.0063	-0.0908	.0700	.1213	.0568	2349.							
.3060	-2912.	-2447.	3749.	-552.	-292.	-5705.	-0.0042	.0036	-0.0905	.0777	.1222	.0579	2303.							
.3070	-2926.	-2535.	3653.	-275.	-59.	-5531.	-0.0019	.0011	-0.0884	.0841	.1199	.0588	2222.							
.3080	-2991.	-2573.	3471.	-2.	205.	-5261.	.0008	-0.0014	-0.0843	.0894	.1146	.0592	2113.							
.3090	-3059.	-2564.	3200.	263.	465.	-4897.	.0039	-0.0042	-0.0781	.0934	.1067	.0591	1977.							
.3100	-3096.	-2484.	2853.	507.	688.	-4442.	.0071	-0.0075	-0.0699	.0963	.0966	.0585	1815.							
.3110	-3101.	-2341.	2465.	712.	843.	-3904.	.0104	-0.0114	-0.0598	.0984	.0849	.0572	1628.							
.3120	-3049.	-2143.	2058.	870.	914.	-3299.	.0134	-0.0159	-0.0482	.1001	.0722	.0552	1417.							
.3130	-2911.	-1893.	1645.	989.	896.	-2644.	.0161	-0.0211	-0.0354	.1015	.0590	.0523	1188.							
.3140	-2688.	-1596.	1250.	1084.	791.	-1963.	.0183	-0.0271	-0.0218	.1029	.0457	.0485	954.							
.3150	-2361.	-1259.	876.	1165.	608.	-1279.	.0200	-0.0339	-0.0078	.1045	.0327	.0436	736.							
.3160	-1915.	-895.	525.	1230.	359.	-599.	.0209	-0.0414	.0064	.1068	.0205	.0377	568.							
.3170	-1354.	-514.	197.	1279.	56.	66.	.0212	-0.0495	.0204	.1100	.0091	.0307	514.							
.3180	-681.	-128.	-115.	1316.	-283.	700.	.0207	-0.0579	.0340	.1142	-0.0011	.0227	609.							
.3190	85.	256.	-417.	1346.	-640.	1285.	.0196	-0.0668	.0472	.1195	-0.0103	.0138	790.							

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.34.

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

.3090	-3059.	-2564.	3200.	263.	465.	-4827.	.039	-.0042	-.0781	.0934	.1067	.0591	1977.
.3100	-3096.	-2484.	2853.	507.	688.	-4442.	.071	-.0075	-.0699	.0963	.0966	.0585	1815.
.3110	-3101.	-2341.	2465.	712.	845.	-3904.	.104	-.0114	-.0598	.0984	.0849	.0572	1628.
.3120	-3049.	-2143.	2058.	870.	914.	-3299.	.134	-.0159	-.0482	.1001	.0722	.0552	1417.
.3130	-2911.	-1893.	1645.	989.	996.	-2644.	.161	-.0211	-.0354	.1015	.0590	.0523	1188.
.3140	-2682.	-1596.	1250.	1084.	791.	-1963.	.183	-.0271	-.0218	.1029	.0457	.0485	954.
.3150	-2361.	-1259.	876.	1165.	608.	-1279.	.200	-.0339	-.0078	.1045	.0327	.0436	736.
.3160	-1915.	-895.	525.	1230.	359.	-599.	.209	-.0414	.0064	.1068	.0205	.0377	568.
.3170	-1354.	-514.	197.	1279.	56.	56.	.212	-.0495	.0204	.1100	.0091	.0307	514.
.3180	-681.	-128.	-115.	1316.	-283.	700.	.207	-.0579	.0340	.1142	-.0011	.0227	609.
.3190	85.	256.	-417.	1346.	-640.	1285.	.196	-.0668	.0472	.1195	-.0103	.0138	790.

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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	13	MEMBER	4	SEQUENCE	235	LOCATION	END	TYPE	RU						
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)		
.3200	901.	632.	-708.	1370.	-990.	1816.	.0180	-.0760	.0596	.1255	-.0183	.0043	996.		
.3210	1693.	994.	-977.	1381.	-1310.	2302.	.0160	-.0853	.0711	.1323	-.0255	-.0058	1199.		
.3220	2431.	1337.	-1239.	1370.	-1569.	2748.	.0139	-.0944	.0815	.1396	-.0320	-.0163	1384.		
.3230	3117.	1658.	-1520.	1334.	-1738.	3152.	.0119	-.1032	.0907	.1469	-.0379	-.0269	1540.		
.3240	3708.	1961.	-1816.	1283.	-1803.	3521.	.0101	-.1116	.0984	.1537	-.0435	-.0374	1669.		
.3250	4132.	2250.	-2093.	1224.	-1770.	3870.	.0088	-.1192	.1048	.1596	-.0488	-.0477	1777.		
.3260	4395.	2517.	-2347.	1160.	-1649.	4203.	.0080	-.1260	.1098	.1642	-.0536	-.0574	1871.		
.3270	4538.	2754.	-2587.	1092.	-1459.	4515.	.0079	-.1319	.1134	.1673	-.0579	-.0662	1954.		
.3280	4577.	2952.	-2800.	1028.	-1227.	4798.	.0083	-.1367	.1158	.1687	-.0615	-.0738	2030.		
.3290	4527.	3108.	-2967.	980.	-985.	5048.	.0092	-.1403	.1169	.1682	-.0641	-.0799	2101.		
.3300	4403.	3211.	-3074.	955.	-760.	5253.	.0107	-.1429	.1169	.1656	-.0656	-.0843	2164.		
.3310	4193.	3249.	-3097.	950.	-567.	5394.	.0126	-.1443	.1158	.1611	-.0658	-.0869	2210.		
.3320	3916.	3206.	-3036.	962.	-410.	5451.	.0149	-.1447	.1134	.1552	-.0647	-.0875	2227.		
.3330	3617.	3080.	-2913.	989.	-285.	5413.	.0175	-.1441	.1098	.1482	-.0623	-.0865	2211.		
.3340	3286.	2877.	-2722.	1026.	-187.	5278.	.0205	-.1425	.1047	.1403	-.0588	-.0839	2159.		
.3350	2862.	2602.	-2432.	1064.	-119.	5048.	.0236	-.1402	.0984	.1320	-.0541	-.0802	2071.		
.3360	2355.	2265.	-2058.	1092.	-74.	4732.	.0268	-.1372	.0907	.1238	-.0484	-.0757	1949.		
.3370	1827.	1878.	-1644.	1101.	-39.	4338.	.0300	-.1337	.0819	.1162	-.0420	-.0707	1796.		
.3380	1270.	1459.	-1208.	1082.	-8.	3882.	.0332	-.1297	.0720	.1095	-.0350	-.0656	1617.		
.3390	728.	1027.	-753.	1028.	21.	3381.	.0362	-.1255	.0613	.1037	-.0276	-.0608	1418.		
.3400	155.	598.	-295.	932.	56.	2855.	.0390	-.1212	.0499	.0987	-.0200	-.0563	1205.		
.3410	-399.	186.	143.	794.	105.	2310.	.0415	-.1169	.0379	.0941	-.0124	-.0523	981.		
.3420	-910.	-202.	539.	615.	179.	1746.	.0439	-.1129	.0255	.0899	-.0049	-.0488	746.		
.3430	-1350.	-561.	878.	395.	280.	1168.	.0461	-.1092	.0128	.0856	.0024	-.0458	507.		
.3440	-1716.	-889.	1161.	136.	402.	578.	.0481	-.1060	.0001	.0809	.0094	-.0433	288.		
.3450	-2033.	-1182.	1408.	-158.	527.	-20.	.0501	-.1032	-.0124	.0756	.0162	-.0412	221.		
.3460	-2295.	-1436.	1622.	-482.	639.	-623.	.0521	-.1009	-.0244	.0693	.0226	-.0394	407.		
.3470	-2461.	-1656.	1782.	-833.	724.	-1225.	.0540	-.0991	-.0355	.0624	.0286	-.0380	662.		
.3480	-2542.	-1845.	1894.	-1209.	769.	-1821.	.0559	-.0977	-.0455	.0549	.0340	-.0369	930.		
.3490	-2606.	-2006.	1990.	-1606.	760.	-2401.	.0577	-.0966	-.0541	.0472	.0389	-.0362	1199.		
.3500	-2688.	-2136.	2084.	-2013.	697.	-2952.	.0594	-.0958	-.0611	.0395	.0429	-.0359	1461.		
.3510	-2781.	-2235.	2159.	-2419.	593.	-3451.	.0610	-.0949	-.0664	.0320	.0459	-.0360	1711.		
.3520	-2890.	-2305.	2206.	-2813.	468.	-3918.	.0625	-.0941	-.0701	.0251	.0477	-.0366	1944.		
.3530	-3030.	-2349.	2229.	-3181.	337.	-4309.	.0637	-.0929	-.0722	.0192	.0481	-.0377	2154.		
.3540	-3195.	-2365.	2228.	-3508.	215.	-4618.	.0647	-.0914	-.0727	.0144	.0472	-.0393	2329.		
.3550	-3363.	-2349.	2199.	-3773.	110.	-4829.	.0653	-.0894	-.0718	.0107	.0450	-.0414	2459.		
.3560	-3493.	-2295.	2129.	-3956.	30.	-4931.	.0653	-.0868	-.0694	.0080	.0417	-.0438	2537.		
.3570	-3520.	-2202.	1997.	-4050.	-21.	-4915.	.0648	-.0835	-.0657	.0064	.0373	-.0465	2556.		

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2 SAFETY COLD FKW24F--2 PSV

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.3470	-2461.	-1856.	1712.	-833.	724.	-1225.	.0540	-.0991	-.0355	.0624	.0286	-.0380	662.
.3480	-2542.	-1845.	1894.	-1209.	769.	-1821.	.0559	-.0977	-.0455	.0549	.0340	-.0369	930.
.3490	-2606.	-2006.	1790.	-1606.	760.	-2401.	.0577	-.0966	-.0541	.0472	.0389	-.0362	1199.
.3500	-2688.	-2176.	2084.	-2013.	697.	-2952.	.0594	-.0958	-.0611	.0395	.0429	-.0359	1461.
.3510	-2781.	-2335.	2159.	-2419.	593.	-3461.	.0610	-.0949	-.0664	.0320	.0459	-.0360	1711.
.3520	-2890.	-2305.	2206.	-2813.	468.	-3910.	.0625	-.0941	-.0701	.0251	.0477	-.0366	1944.
.3530	-3030.	-2349.	2229.	-3181.	337.	-4309.	.0637	-.0929	-.0722	.0192	.0481	-.0377	2154.
.3540	-3195.	-2365.	2228.	-3508.	215.	-4618.	.0647	-.0914	-.0727	.0144	.0472	-.0393	2329.
.3550	-3363.	-2349.	2199.	-3773.	110.	-4829.	.0653	-.0894	-.0718	.0107	.0450	-.0414	2459.
.3560	-3493.	-2295.	2129.	-3956.	30.	-4931.	.0653	-.0868	-.0694	.0080	.0417	-.0438	2537.
.3570	-3520.	-2202.	1997.	-4050.	-21.	-4915.	.0648	-.0835	-.0657	.0064	.0373	-.0465	2556.

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2 SAFETY COLD FKW24F--2 PSV

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

SECTION	13	MEMBER	4	SEQUENCE	235	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.3580	-3403.	-2074.	1795.	-4051.	-41.	-4772.		.0636	-.0795	-.0609	.0056	.0322	-.0492	2512.	
.3590	-3156.	-1912.	1541.	-3959.	-36.	-4503.		.0616	-.0748	-.0548	.0054	.0265	-.0517	2406.	
.3600	-2796.	-1716.	1251.	-3773.	-12.	-4116.		.0589	-.0694	-.0477	.0053	.0203	-.0539	2241.	
.3610	-2322.	-1489.	925.	-3502.	29.	-3627.		.0554	-.0634	-.0399	.0049	.0138	-.0556	2023.	
.3620	-1754.	-1239.	574.	-3161.	78.	-3048.		.0513	-.0569	-.0314	.0039	.0070	-.0566	1762.	
.3630	-1144.	-973.	224.	-2773.	122.	-2394.		.0466	-.0501	-.0222	.0021	.0001	-.0567	1471.	
.3640	-541.	-695.	-103.	-2356.	146.	-1680.		.0414	-.0429	-.0127	-.0006	-.0070	-.0560	1163.	
.3650	30.	-407.	-395.	-1920.	136.	-923.		.0358	-.0355	-.0027	-.0043	-.0141	-.0542	857.	
.3660	542.	-109.	-648.	-1471.	88.	-140.		.0298	-.0281	.0074	-.0090	-.0212	-.0517	594.	
.3670	980.	195.	-860.	-1021.	2.	655.		.0235	-.0207	.0176	-.0146	-.0282	-.0483	487.	
.3680	1341.	496.	-1038.	-582.	-110.	1443.		.0171	-.0133	.0275	-.0207	-.0350	-.0442	626.	
.3690	1615.	790.	-1184.	-156.	-231.	2205.		.0106	-.0061	.0369	-.0271	-.0417	-.0396	892.	
.3700	1798.	1073.	-1302.	258.	-341.	2921.		.0041	.0010	.0455	-.0338	-.0480	-.0346	1185.	
.3710	1913.	1342.	-1409.	662.	-416.	3568.		-.0024	.0079	.0529	-.0405	-.0538	-.0294	1466.	
.3720	1993.	1585.	-1521.	1049.	-437.	4129.		-.0089	.0144	.0589	-.0470	-.0589	-.0241	1719.	
.3730	2054.	1796.	-1640.	1409.	-397.	4591.		-.0152	.0206	.0633	-.0529	-.0632	-.0188	1934.	
.3740	2117.	1970.	-1765.	1733.	-298.	4948.		-.0214	.0266	.0660	-.0581	-.0664	-.0135	2107.	
.3750	2213.	2112.	-1901.	2019.	-148.	5198.		-.0275	.0322	.0670	-.0625	-.0682	-.0083	2238.	
.3760	2353.	2222.	-2042.	2260.	39.	5341.		-.0334	.0374	.0663	-.0662	-.0685	-.0033	2327.	
.3770	2521.	2297.	-2169.	2445.	247.	5378.		-.0391	.0423	.0640	-.0689	-.0673	.0015	2373.	
.3780	2696.	2331.	-2266.	2562.	458.	5312.		-.0444	.0469	.0603	-.0707	-.0644	.0062	2374.	
.3790	2856.	2327.	-2317.	2608.	657.	5149.		-.0493	.0513	.0552	-.0718	-.0600	.0108	2331.	
.3800	2963.	2290.	-2306.	2586.	827.	4894.		-.0536	.0555	.0491	-.0725	-.0541	.0153	2246.	
.3810	2991.	2221.	-2220.	2500.	954.	4556.		-.0573	.0596	.0420	-.0731	-.0470	.0198	2120.	
.3820	2927.	2118.	-2060.	2356.	1028.	4145.		-.0602	.0636	.0343	-.0736	-.0388	.0245	1957.	
.3830	2770.	1978.	-1827.	2164.	1041.	3668.		-.0622	.0676	.0261	-.0741	-.0298	.0294	1759.	
.3840	2516.	1803.	-1526.	1937.	986.	3132.		-.0634	.0718	.0177	-.0747	-.0204	.0347	1530.	
.3850	2178.	1597.	-1169.	1693.	864.	2548.		-.0637	.0760	.0093	-.0755	-.0106	.0403	1276.	
.3860	1780.	1364.	-777.	1446.	689.	1925.		-.0632	.0804	.0010	-.0767	-.0008	.0463	1005.	
.3870	1341.	1099.	-372.	1201.	479.	1269.		-.0617	.0851	-.0073	-.0779	.0087	.0527	727.	
.3880	878.	799.	26.	961.	258.	582.		-.0594	.0900	-.0153	-.0791	.0176	.0592	463.	
.3890	404.	468.	399.	732.	51.	-131.		-.0564	.0951	-.0233	-.0801	.0258	.0660	299.	
.3900	-72.	115.	738.	519.	-125.	-855.		-.0527	.1003	-.0311	-.0810	.0331	.0727	404.	
.3910	-544.	-251.	1034.	324.	-259.	-1576.		-.0486	.1057	-.0388	-.0815	.0393	.0792	654.	
.3920	-987.	-630.	1277.	139.	-345.	-2286.		-.0441	.1111	-.0462	-.0813	.0446	.0854	930.	
.3930	-1382.	-1019.	1465.	-44.	-387.	-2980.		-.0395	.1164	-.0533	-.0804	.0489	.0913	1206.	
.3940	-1733.	-1406.	1610.	-225.	-397.	-3645.		-.0349	.1214	-.0599	-.0789	.0523	.0967	1474.	
.3950	-2049.	-1775.	1724.	-399.	-388.	-4266.		-.0304	.1260	-.0659	-.0771	.0551	.1016	1727.	

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CONDITION 24
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INTERNAL FORCES IN THE PIPING
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.3850	2178.	1597.	169.	1693.	264.	2548.	-.637	.0760	.0093	-.0755	-.0106	.0403	1276.
.3860	1780.	1364.	-777.	1446.	689.	1925.	-.632	.0804	.0010	-.0767	-.0008	.0463	1005.
.3870	1341.	1099.	-372.	1201.	479.	1269.	-.617	.0851	-.0073	-.0779	.0087	.0527	727.
.3880	878.	799.	26.	961.	258.	582.	-.554	.0900	-.0153	-.0791	.0176	.0592	463.
.3890	404.	488.	399.	772.	51.	-131.	-.564	.0951	-.0233	-.0801	.0258	.0660	299.
.3900	-72.	115.	738.	519.	-125.	-855.	-.527	.1003	-.0311	-.0810	.0331	.0727	404.
.3910	-544.	-251.	1034.	324.	-259.	-1576.	-.486	.1057	-.0388	-.0815	.0393	.0792	654.
.3920	-987.	-630.	1277.	139.	-345.	-2286.	-.441	.1111	-.0462	-.0813	.0446	.0854	930.
.3930	-1382.	-1019.	1465.	-44.	-387.	-2980.	-.395	.1164	-.0533	-.0804	.0489	.0913	1208.
.3940	-1723.	-1406.	1610.	-225.	-397.	-3645.	-.349	.1214	-.0599	-.0789	.0523	.0967	1474.
.3950	-2049.	-1775.	1724.	-399.	-388.	-4266.	-.304	.1260	-.0659	-.0771	.0551	.1016	1727.

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

SECTION	13	MEMBER	4	SEQUENCE	235	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3960	-2321.	-2115.	1812.	-563.	-366.	-4828.	-.0264	.1301	-.0712	-.0750	.0572	.1059	1956.		
.3970	-2538.	-2421.	1872.	-717.	-335.	-5322.	-.0227	.1336	-.0757	-.0728	.0589	.1096	2159.		
.3980	-2706.	-2685.	1913.	-857.	-300.	-5743.	-.0197	.1364	-.0795	-.0704	.0600	.1125	2333.		
.3990	-2840.	-2894.	1946.	-970.	-267.	-6078.	-.0172	.1383	-.0823	-.0682	.0607	.1147	2472.		
.4000	-2954.	-3034.	1981.	-1046.	-243.	-6315.	-.0155	.1393	-.0842	-.0664	.0611	.1160	2570.		

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)		
.0640	-6628.	-5655.	3778.	-10059.	-2174.	-14152.	.1244	-.0738	-.0810	.2964	.1075	-.0685	7022.		

SECTION	14	MEMBER	1	SEQUENCE	235	LOCATION	BEG	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.		
.0010	1.	0.	-1.	1.	0.	1.	.0000	-.0000	-.0000	.0000	-.0000	-.0000	1.		
.0020	9.	3.	-5.	4.	0.	8.	.0000	-.0000	-.0002	.0000	-.0001	-.0000	4.		
.0030	27.	8.	-15.	14.	0.	25.	.0000	-.0000	-.0005	.0001	-.0004	-.0001	11.		
.0040	58.	17.	-32.	29.	0.	53.	.0000	-.0000	-.0011	.0001	-.0007	-.0003	24.		
.0050	101.	29.	-55.	50.	0.	93.	.0000	.0001	-.0020	-.0000	-.0012	-.0006	42.		
.0060	156.	44.	-85.	78.	0.	143.	-.0000	.0003	-.0033	-.0003	-.0016	-.0009	65.		
.0070	239.	68.	-130.	119.	0.	219.	-.0001	.0006	-.0051	-.0007	-.0022	-.0012	100.		
.0080	396.	113.	-215.	197.	-0.	363.	.0001	.0009	-.0079	-.0013	-.0029	-.0016	166.		
.0090	671.	191.	-364.	334.	-0.	615.	.0008	.0014	-.0121	-.0025	-.0038	-.0021	281.		
.0100	1082.	308.	-587.	538.	-0.	992.	.0024	.0022	-.0175	-.0051	-.0048	-.0026	453.		
.0110	1624.	462.	-882.	808.	-0.	1489.	.0048	.0033	-.0240	-.0094	-.0058	-.0030	680.		
.0120	2280.	648.	-1238.	1135.	-0.	2090.	.0081	.0045	-.0312	-.0153	-.0068	-.0030	954.		
.0130	3016.	858.	-1638.	1501.	-0.	2765.	.0121	.0059	-.0386	-.0226	-.0074	-.0022	1263.		
.0140	3785.	1077.	-2055.	1884.	-0.	3470.	.0167	.0073	-.0454	-.0314	-.0070	-.0004	1584.		
.0150	4531.	1289.	-2460.	2255.	-0.	4154.	.0217	.0088	-.0510	-.0420	-.0046	.0024	1897.		
.0160	5238.	1490.	-2844.	2607.	0.	4802.	.0270	.0101	-.0553	-.0541	.0006	.0062	2193.		
.0170	5936.	1688.	-3223.	2954.	-0.	5442.	.0327	.0112	-.0587	-.0661	.0087	.0106	2485.		
.0180	6674.	1898.	-3624.	3322.	0.	6118.	.0387	.0122	-.0618	-.0761	.0187	.0150	2794.		
.0190	7540.	2144.	-4094.	3753.	0.	6912.	.0456	.0131	-.0656	-.0832	.0286	.0186	3156.		

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.0090	671.	191.	-764.	334.	-0.	615.	.0008	.0014	-.0121	-.0025	-.0038	-.0021	281.
.0100	1082.	308.	-587.	538.	-0.	992.	.0024	.0022	-.0175	-.0051	-.0048	-.0026	453.
.0110	1624.	462.	-882.	808.	-0.	1489.	.0048	.0033	-.0240	-.0094	-.0058	-.0030	680.
.0120	2280.	648.	-1238.	1135.	-0.	2090.	.0081	.0045	-.0312	-.0153	-.0068	-.0030	954.
.0130	3016.	858.	-1638.	1501.	-0.	2765.	.0121	.0059	-.0386	-.0226	-.0074	-.0022	1263.
.0140	3785.	1077.	-2055.	1884.	-0.	3470.	.0167	.0073	-.0454	-.0314	-.0070	-.0004	1584.
.0150	4531.	1289.	-2460.	2255.	-0.	4154.	.0217	.0088	-.0510	-.0420	-.0046	.0024	1897.
.0160	5238.	1490.	-2844.	2607.	0.	4802.	.0270	.0101	-.0553	-.0541	.0006	.0062	2193.
.0170	5936.	1688.	-3223.	2954.	-0.	5442.	.0327	.0112	-.0587	-.0661	.0087	.0106	2485.
.0180	6674.	1898.	-3624.	3322.	0.	6118.	.0387	.0122	-.0618	-.0761	.0187	.0150	2794.
.0190	7540.	2144.	-4094.	3753.	0.	6912.	.0456	.0131	-.0656	-.0832	.0286	.0186	3156.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.34.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	RU	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)
.0200	8733.	2484.	-4742.	4347.	0.	8006.	.0544	.0142	-.0723	-.0870	.0356	.0199	3656.							
.0210	10384.	2953.	-5638.	5168.	0.	9519.	.0661	.0161	-.0831	-.0894	.0389	.0178	4347.							
.0220	11991.	3410.	-6510.	5968.	-0.	10992.	.0782	.0185	-.0937	-.0934	.0398	.0124	5019.							
.0230	13132.	3735.	-7130.	6536.	0.	12038.	.0882	.0201	-.1003	-.0984	.0384	.0051	5497.							
.0240	13741.	3908.	-7460.	6839.	-0.	12596.	.0953	.0205	-.1016	-.0982	.0380	-.0027	5752.							
.0250	13912.	3957.	-7553.	6924.	-0.	12753.	.0993	.0195	-.0987	-.0876	.0389	-.0104	5823.							
.0260	13497.	3839.	-7328.	6718.	-0.	12373.	.0989	.0165	-.0924	-.0691	.0370	-.0190	5650.							
.0270	12135.	3452.	-6588.	6040.	-0.	11124.	.0919	.0123	-.0808	-.0495	.0326	-.0293	5080.							
.0280	10356.	2945.	-5623.	5154.	-0.	9493.	.0822	.0091	-.0666	-.0325	.0324	-.0413	4335.							
.0290	8725.	2482.	-4737.	4342.	-0.	7998.	.0738	.0054	-.0541	-.0179	.0367	-.0547	3652.							
.0300	6726.	1913.	-3652.	3348.	-0.	6166.	.0626	-.0030	-.0422	-.0034	.0377	-.0680	2815.							
.0310	4332.	1233.	-2353.	2157.	-0.	3972.	.0478	-.0149	-.0302	.0143	.0347	-.0810	1814.							
.0320	1905.	542.	-1034.	948.	-0.	1746.	.0318	-.0242	-.0174	.0373	.0290	-.0942	797.							
.0330	-603.	-172.	327.	-300.	-0.	-553.	.0153	-.0282	-.0010	.0608	.0246	-.1067	252.							
.0340	-3538.	-1006.	1921.	-1761.	-0.	-3243.	-.0031	-.0318	.0203	.0760	.0221	-.1157	1481.							
.0350	-6800.	-1934.	3692.	-3384.	0.	-6234.	-.0225	-.0412	.0433	.0807	.0172	-.1183	2846.							
.0360	-9911.	-2819.	5381.	-4933.	0.	-9086.	-.0409	-.0547	.0648	.0825	.0073	-.1142	4149.							
.0370	-12592.	-3581.	6836.	-6267.	0.	-11543.	-.0581	-.0641	.0847	.0883	-.0051	-.1051	5271.							
.0380	-14966.	-4257.	8125.	-7448.	0.	-13719.	-.0751	-.0660	.1038	.0929	-.0175	-.0934	6264.							
.0390	-17189.	-4889.	9332.	-8555.	0.	-15757.	-.0912	-.0665	.1201	.0833	-.0305	-.0799	7195.							
.0400	-18842.	-5359.	10230.	-9378.	0.	-17272.	-.1026	-.0724	.1292	.0601	-.0455	-.0649	7887.							
.0410	-19798.	-5631.	10749.	-9854.	0.	-18149.	-.1106	-.0789	.1321	.0426	-.0618	-.0482	8287.							
.0420	-19895.	-5659.	10802.	-9902.	-0.	-18238.	-.1156	-.0784	.1307	.0409	-.0774	-.0317	8328.							
.0430	-19107.	-5434.	10374.	-9509.	0.	-17515.	-.1149	-.0733	.1237	.0396	-.0922	-.0181	7998.							
.0440	-18066.	-5138.	9809.	-8991.	0.	-16561.	-.1095	-.0706	.1155	.0229	-.1035	-.0072	7562.							
.0450	-17152.	-4879.	9312.	-8537.	0.	-15723.	-.1028	-.0694	.1104	.0018	-.1111	.0034	7180.							
.0460	-16137.	-4590.	8761.	-8032.	0.	-14793.	-.0957	-.0661	.1086	-.0050	-.1168	.0159	6755.							
.0470	-14780.	-4204.	8025.	-7356.	0.	-13549.	-.0855	-.0625	.1089	.0016	-.1190	.0298	6187.							
.0480	-13248.	-3768.	7193.	-6594.	0.	-12145.	-.0720	-.0603	.1113	.0096	-.1161	.0429	5546.							
.0490	-11698.	-3327.	6351.	-5822.	0.	-10724.	-.0574	-.0567	.1142	.0136	-.1107	.0535	4897.							
.0500	-9948.	-2830.	5401.	-4951.	0.	-9120.	-.0414	-.0515	.1146	.0133	-.1042	.0604	4164.							
.0510	-7777.	-2212.	4222.	-3871.	0.	-7129.	-.0222	-.0482	.1104	.0119	-.0960	.0638	3255.							
.0520	-5163.	-1469.	2803.	-2570.	0.	-4733.	-.0007	-.0459	.1020	.0202	-.0851	.0646	2161.							
.0530	-2313.	-658.	1256.	-1151.	-0.	-2120.	.0203	-.0415	.0915	.0440	-.0716	.0626	968.							
.0540	376.	107.	-204.	187.	0.	345.	.0399	-.0376	.0803	.0713	-.0543	.0571	158.							
.0550	2625.	747.	-1425.	1307.	-0.	2407.	.0579	-.0387	.0696	.0908	-.0324	.0479	1099.							
.0560	4539.	1297.	-2475.	2269.	-0.	4180.	.0738	-.0418	.0595	.1130	-.0083	.0359	1908.							
.0570	6431.	1829.	-3491.	3201.	-0.	5895.	.0865	-.0425	.0487	.1513	.0142	.0227	2692.							

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.34.

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

.0470	-14780.	-4204.	4025.	-7356.	0.	-13549.	.0855	-.0625	.1089	.0016	-.1190	.0298	6187.
.0480	-13248.	-3768.	7193.	-6574.	0.	-12145.	-.0720	-.0603	.1113	.0096	-.1161	.0429	5546.
.0490	-11698.	-3327.	6351.	-5822.	0.	-10724.	-.0574	-.0567	.1142	.0136	-.1107	.0535	4897.
.0500	-9948.	-2870.	5401.	-4951.	0.	-9120.	-.0414	-.0515	.1146	.0133	-.1042	.0604	4164.
.0510	-7777.	-2212.	4222.	-3871.	0.	-7129.	-.0222	-.0482	.1104	.0119	-.0960	.0638	3255.
.0520	-5163.	-1469.	2803.	-2570.	0.	-4733.	-.0007	-.0459	.1020	.0202	-.0851	.0646	2161.
.0530	-2313.	-.658.	1256.	-1151.	-0.	-2120.	.0203	-.0415	.0915	.0440	-.0716	.0626	968.
.0540	376.	107.	-204.	187.	0.	345.	.0399	-.0376	.0803	.0713	-.0543	.0571	158.
.0550	2625.	747.	-1425.	1307.	-0.	2407.	.0579	-.0387	.0696	.0908	-.0324	.0479	1099.
.0560	4559.	1297.	-2475.	2269.	-0.	4180.	.0738	-.0418	.0595	.1130	-.0083	.0359	1908.
.0570	6431.	1829.	-3491.	3201.	-0.	5895.	.0865	-.0425	.0487	.1513	.0142	.0227	2692.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.34.

S/RV PIPING KEWAUNEE GKWOEF 2 RUP DISK

2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

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

SECTION	14	MEMBER	1	SEQUENCE	235	LOCATION	BEG	TYPE	RU	DZ	FX	RY	RZ	STRESS
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)	
.0580	8243.	2344.	-4475.	4103.	-0.	7556.	.0968	-.0442	.0357	.1978	.0340	.0091	3450.	
.0590	9866.	2806.	-5356.	4910.	-0.	9044.	.1062	-.0510	.0196	.2346	.0509	-.0055	4130.	
.0600	11256.	3202.	-6111.	5602.	-0.	10318.	.1139	-.0594	.0011	.2582	.0551	-.0215	4712.	
.0610	12545.	3568.	-6811.	6244.	0.	11500.	.1194	-.0643	-.0189	.2758	.0772	-.0381	5251.	
.0620	13806.	3927.	-7495.	6871.	0.	12656.	.1234	-.0668	-.0400	.2903	.0885	-.0530	5779.	
.0630	14922.	4244.	-8102.	7427.	0.	13679.	.1257	-.0700	-.0614	.2985	.0985	-.0637	6246.	
.0640	15591.	4434.	-8465.	7760.	-0.	14292.	.1244	-.0738	-.0810	.2964	.1075	-.0685	6526.	
.0650	15594.	4435.	-8467.	7761.	-0.	14295.	.1185	-.0772	-.0964	.2798	.1172	-.0672	6528.	
.0660	15070.	4286.	-8182.	7500.	0.	13815.	.1092	-.0798	-.1079	.2499	.1276	-.0604	6308.	
.0670	14350.	4081.	-7791.	7142.	0.	13154.	.0977	-.0801	-.1176	.2156	.1361	-.0486	6006.	
.0680	13564.	3858.	-7364.	6751.	0.	12434.	.0843	-.0780	-.1267	.1823	.1407	-.0325	5678.	
.0690	12641.	3595.	-6863.	6291.	0.	11588.	.0698	-.0763	-.1350	.1453	.1424	-.0138	5291.	
.0700	11597.	3298.	-6296.	5772.	0.	10631.	.0558	-.0762	-.1423	.1007	.1419	.0049	4854.	
.0710	10487.	2983.	-5694.	5220.	-0.	9614.	.0424	-.0748	-.1474	.0558	.1383	.0212	4390.	
.0720	9229.	2625.	-5011.	4593.	0.	8461.	.0280	-.0689	-.1482	.0217	.1307	.0345	3863.	
.0730	7733.	2199.	-4198.	3849.	0.	7089.	.0127	-.0603	-.1432	-.0002	.1197	.0449	3237.	
.0740	6015.	1711.	-3266.	2994.	-0.	5514.	-.0019	-.0524	-.1326	-.0157	.1064	.0530	2518.	
.0750	4069.	1157.	-2209.	2025.	0.	3730.	-.0155	-.0462	-.1164	-.0285	.0920	.0598	1703.	
.0760	1926.	548.	-1046.	959.	0.	1765.	-.0284	-.0400	-.0951	-.0384	.0764	.0654	806.	
.0770	-221.	-63.	120.	-110.	0.	-203.	-.0399	-.0332	-.0708	-.0450	.0585	.0692	92.	
.0780	-2159.	-614.	1172.	-1075.	0.	-1980.	-.0489	-.0258	-.0459	-.0490	.0377	.0707	904.	
.0790	-3868.	-1100.	2100.	-1925.	0.	-3545.	-.0554	-.0184	-.0215	-.0516	.0155	.0698	1619.	
.0800	-5462.	-1554.	2966.	-2719.	0.	-5007.	-.0600	-.0119	.0026	-.0554	-.0058	.0665	2286.	
.0810	-6974.	-1984.	3786.	-3471.	0.	-6393.	-.0626	-.0076	.0261	-.0617	-.0248	.0601	2919.	
.0820	-8373.	-2382.	4546.	-4167.	0.	-7676.	-.0632	-.0051	.0489	-.0670	-.0407	.0498	3505.	
.0830	-9663.	-2748.	5246.	-4809.	0.	-8858.	-.0629	-.0022	.0716	-.0651	-.0531	.0356	4045.	
.0840	-10828.	-3080.	5879.	-5389.	0.	-9926.	-.0619	.0014	.0939	-.0551	-.0617	.0184	4533.	
.0850	-11825.	-3363.	6420.	-5885.	0.	-10840.	-.0592	.0023	.1140	-.0435	-.0676	-.0011	4950.	
.0860	-12638.	-3594.	6861.	-6290.	0.	-11585.	-.0546	-.0018	.1305	-.0346	-.0727	-.0220	5290.	
.0870	-13184.	-3750.	7158.	-6562.	0.	-12086.	-.0488	-.0085	.1427	-.0243	-.0793	-.0436	5519.	
.0880	-13293.	-3781.	7217.	-6616.	0.	-12186.	-.0418	-.0145	.1500	-.0078	-.0886	-.0658	5564.	
.0890	-12928.	-3677.	7019.	-6434.	0.	-11851.	-.0328	-.0196	.1524	.0118	-.0998	-.0884	5411.	
.0900	-12286.	-3494.	6670.	-6115.	0.	-11262.	-.0223	-.0258	.1514	.0281	-.1107	-.1103	5143.	
.0910	-11568.	-3290.	6281.	-5758.	0.	-10605.	-.0114	-.0335	.1487	.0398	-.1200	-.1302	4842.	
.0920	-10815.	-3076.	5872.	-5383.	-0.	-9914.	-.0010	-.0410	.1454	.0504	-.1272	-.1466	4527.	
.0930	-10009.	-2847.	5434.	-4981.	0.	-9175.	.0086	-.0470	.1421	.0619	-.1316	-.1588	4189.	
.0940	-9159.	-2605.	4973.	-4559.	0.	-8396.	.0171	-.0504	.1388	.0727	-.1330	-.1665	3834.	
.0950	-8270.	-2352.	4490.	-4116.	0.	-7581.	.0245	-.0518	.1346	.0787	-.1314	-.1691	3462.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.34.

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

.0850	-11825.	-3363.	6420.	-5885.	0.	-10840.	-2592.	.0023	.1140	-.0435	-.0576	-.0011	4950.
.0860	-12638.	-3594.	6861.	-6290.	0.	-11585.	-2546.	-.0018	.1305	-.0346	-.0727	-.0220	5290.
.0870	-13184.	-3750.	7158.	-6562.	0.	-12086.	-2048.	-.0085	.1427	-.0243	-.0793	-.0436	5519.
.0880	-13293.	-3761.	7217.	-6616.	0.	-12186.	-2041.	-.0145	.1500	-.0077	-.0886	-.0658	5564.
.0890	-12928.	-3677.	7019.	-6434.	0.	-11851.	-2032.	-.0196	.1524	.0111	-.0998	-.0884	5411.
.0900	-12286.	-3494.	6670.	-6115.	0.	-11262.	-2023.	-.0258	.1514	.0281	-.1107	-.1103	5143.
.0910	-11568.	-3290.	6281.	-5758.	0.	-10605.	-2014.	-.0335	.1487	.0398	-.1200	-.1302	4842.
.0920	-10815.	-3076.	5872.	-5383.	-0.	-9914.	-2010.	-.0410	.1454	.0504	-.1272	-.1466	4527.
.0930	-10009.	-2847.	5434.	-4981.	0.	-9175.	-2006.	-.0470	.1421	.0619	-.1316	-.1588	4189.
.0940	-9159.	-2605.	4973.	-4559.	0.	-8396.	-2017.	-.0504	.1388	.0727	-.1330	-.1665	3834.
.0950	-8270.	-2352.	4490.	-4116.	0.	-7581.	-2045.	-.0518	.1346	.0787	-.1314	-.1691	3462.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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S/RV PIPING KEWAUNEE GKWO8F 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	14	MEMBER	1	SEQUENCE	235	LOCATION	BEG	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.0960	-7315.	-2081.	3972.	-3641.	-0.	-6706.	.0310	-.0528	.1279	.0757	-.1274	-.1662	3062.	
.0970	-6249.	-1777.	3393.	-3110.	-0.	-5728.	.0370	-.0543	.1181	.0645	-.1212	-.1581	2616.	
.0980	-5014.	-1426.	2722.	-2495.	-0.	-4596.	.0421	-.0542	.1052	.0509	-.1134	-.1454	2099.	
.0990	-3634.	-1034.	1973.	-1809.	-0.	-3332.	.0454	-.0501	.0901	.0391	-.1042	-.1292	1521.	
.1000	-2257.	-642.	1226.	-1124.	-0.	-2069.	.0467	-.0433	.0734	.0261	-.0932	-.1103	945.	
.1010	-1021.	-290.	554.	-508.	-0.	-936.	.0460	-.0357	.0558	.0078	-.0803	-.0894	427.	
.1020	95.	27.	-52.	47.	0.	87.	.0433	-.0273	.0374	-.0141	-.0556	-.0666	40.	
.1030	1232.	350.	-669.	613.	-0.	1130.	.0392	-.0166	.0180	-.0348	-.0496	-.0422	516.	
.1040	2492.	709.	-1353.	1240.	-0.	2284.	.0346	-.0036	-.0028	-.0532	-.0329	-.0165	1043.	
.1050	3890.	1107.	-2112.	1936.	-0.	3566.	.0301	.0105	-.0254	-.0726	-.0165	.0098	1628.	
.1060	5392.	1534.	-2927.	2683.	0.	4943.	.0262	.0246	-.0499	-.0964	-.0013	.0359	2257.	
.1070	6922.	1969.	-3758.	3445.	0.	6346.	.0227	.0383	-.0753	-.1238	.0126	.0611	2898.	
.1080	8616.	2451.	-4678.	4288.	-0.	7898.	.0208	.0513	-.1019	-.1500	.0240	.0844	3607.	
.1090	10798.	3071.	-5862.	5374.	0.	9898.	.0223	.0640	-.1319	-.1697	.0306	.1036	4520.	
.1100	12513.	3559.	-6794.	6228.	-0.	11471.	.0222	.0776	-.1566	-.1858	.0372	.1177	5238.	
.1110	13627.	3876.	-7398.	6782.	0.	12491.	.0211	.0896	-.1742	-.2020	.0458	.1258	5704.	
.1120	14267.	4058.	-7746.	7101.	0.	13078.	.0202	.0981	-.1852	-.2139	.0569	.1285	5972.	
.1130	14535.	4134.	-7891.	7234.	0.	13324.	.0186	.1048	-.1902	-.2114	.0595	.1262	6084.	
.1140	14568.	4143.	-7909.	7250.	0.	13354.	.0165	.1110	-.1910	-.1949	.0826	.1186	6098.	
.1150	14420.	4101.	-7829.	7177.	0.	13219.	.0153	.1141	-.1902	-.1775	.0950	.1052	6036.	
.1160	13999.	3982.	-7601.	6967.	0.	12833.	.0146	.1131	-.1881	-.1661	.1061	.0865	5860.	
.1170	13381.	3806.	-7265.	6660.	0.	12266.	.0136	.1107	-.1847	-.1535	.1150	.0644	5601.	
.1180	12319.	3504.	-6688.	6131.	0.	11293.	.0091	.1089	-.1769	-.1318	.1221	.0420	5156.	
.1190	11020.	3134.	-5983.	5485.	0.	10102.	.0036	.1048	-.1660	-.1046	.1284	.0213	4613.	
.1200	9477.	2695.	-5145.	4716.	0.	8687.	-.0022	.0964	-.1524	-.0792	.1348	.0032	3967.	
.1210	7624.	2168.	-4139.	3794.	0.	6989.	-.0096	.0866	-.1365	-.0578	.1388	-.0126	3191.	
.1220	5761.	1639.	-3128.	2867.	0.	5281.	-.0170	.0787	-.1203	-.0423	.1391	-.0276	2411.	
.1230	3861.	1098.	-2096.	1922.	0.	3539.	-.0243	.0717	-.1037	-.0342	.1343	-.0415	1616.	
.1240	2050.	583.	-1113.	1020.	0.	1879.	-.0306	.0651	-.0868	-.0296	.1240	-.0531	858.	
.1250	378.	107.	-205.	188.	-0.	346.	-.0366	.0601	-.0694	-.0230	.1078	-.0612	158.	
.1260	-1290.	-367.	700.	-642.	0.	-1182.	-.0429	.0562	-.0509	-.0178	.0859	-.0652	540.	
.1270	-2601.	-740.	1412.	-1295.	-0.	-2384.	-.0455	.0512	-.0342	-.0223	.0600	-.0668	1089.	
.1280	-3636.	-1034.	1974.	-1809.	0.	-3333.	-.0455	.0469	-.0185	-.0353	.0305	-.0663	1522.	
.1290	-4412.	-1255.	2395.	-2196.	-0.	-4044.	-.0441	.0471	-.0026	-.0501	-.0018	-.0637	1847.	
.1300	-4978.	-1416.	2703.	-2478.	-0.	-4563.	-.0414	.0501	.0138	-.0660	-.0351	-.0582	2084.	
.1310	-5672.	-1613.	3079.	-2823.	0.	-5199.	-.0387	.0510	.0325	-.0856	-.0670	-.0485	2374.	
.1320	-6377.	-1814.	3462.	-3174.	0.	-5846.	-.0354	.0502	.0527	-.1060	-.0959	-.0351	2669.	
.1330	-7121.	-2025.	3866.	-3544.	-0.	-6528.	-.0332	.0517	.0743	-.1221	-.1219	-.0199	2981.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.34.

S/RV PIPING KEWAUNEE GKWO8F 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

.1230	3861.	1098.	596.	1922.	0.	3539.	-.6243	.0717	-.1037	-.0342	.1343	-.0415	1616.
.1240	2957.	583.	-1113.	1020.	0.	1879.	-.3306	.0651	-.0868	-.0296	.1240	-.0531	858.
.1250	372.	107.	-265.	188.	-0.	346.	-.366	.0601	-.0694	-.0230	.1078	-.0612	158.
.1260	-1290.	-367.	700.	-642.	0.	-1182.	-.0429	.0562	-.0509	-.0178	.0859	-.0652	540.
.1270	-2601.	-740.	1412.	-1295.	-0.	-7384.	-.0455	.0512	-.0342	-.0223	.0600	-.0668	1089.
.1280	-3636.	-1034.	1974.	-1809.	0.	-3323.	-.0455	.0469	-.0189	-.0352	.0305	-.0663	1522.
.1290	-4412.	-1255.	2395.	-2196.	-0.	-4044.	-.0441	.0471	-.0026	-.0501	-.0018	-.0637	1847.
.1300	-4978.	-1416.	2703.	-2478.	-0.	-4563.	-.0414	.0501	.0138	-.0660	-.0351	-.0582	2084.
.1310	-5672.	-1611.	3079.	-2823.	0.	-5199.	-.0387	.0510	.0325	-.0856	-.0570	-.0485	2374.
.1320	-6177.	-1814.	3462.	-3174.	0.	-5846.	-.0354	.0502	.0527	-.1060	-.0959	-.0351	2669.
.1330	-7121.	-2025.	3866.	-3544.	-0.	-6528.	-.0332	.0517	.0743	-.1221	-.1219	-.0199	2981.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.34.

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	14	MEMBER	1	SEQUENCE	235	LOCATION	BEG	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.1340	-7723.	-2197.	4193.	-3844.	0.	-7079.	-.0310	.0561	.0948	-.1363	-.1442	-.0052	3233.	
.1350	-8078.	-2297.	4386.	-4020.	-0.	-7405.	-.0276	.0610	.1120	-.1524	-.1625	.0076	3381.	
.1360	-8360.	-2378.	4539.	-4161.	0.	-7663.	-.0251	.0655	.1258	-.1674	-.1777	.0192	3499.	
.1370	-8481.	-2412.	4605.	-4221.	0.	-7775.	-.0232	.0698	.1356	-.1769	-.1895	.0292	3550.	
.1380	-8638.	-2457.	4690.	-4299.	-0.	-7919.	-.0233	.0731	.1426	-.1801	-.1972	.0376	3616.	
.1390	-8826.	-2510.	4792.	-4393.	0.	-8091.	-.0249	.0758	.1473	-.1773	-.1993	.0433	3694.	
.1400	-9076.	-2581.	4928.	-4517.	0.	-8320.	-.0285	.0796	.1503	-.1670	-.1952	.0459	3799.	
.1410	-9542.	-2714.	5180.	-4749.	-0.	-8747.	-.0352	.0837	.1523	-.1507	-.1849	.0458	3994.	
.1420	-9955.	-2831.	5405.	-4955.	0.	-9126.	-.0422	.0853	.1512	-.1317	-.1684	.0434	4167.	
.1430	-10241.	-2913.	5560.	-5097.	0.	-9388.	-.0494	.0845	.1462	-.1091	-.1475	.0398	4287.	
.1440	-10258.	-2918.	5569.	-5105.	0.	-9403.	-.0566	.0840	.1366	-.0811	-.1244	.0353	4294.	
.1450	-9996.	-2843.	5427.	-4975.	0.	-9164.	-.0635	.0843	.1227	-.0521	-.0996	.0299	4184.	
.1460	-9599.	-2730.	5212.	-4777.	0.	-8799.	-.0699	.0837	.1053	-.0287	-.0735	.0243	4018.	
.1470	-8880.	-2526.	4821.	-4419.	0.	-8140.	-.0740	.0817	.0846	-.0108	-.0458	.0201	3717.	
.1480	-8019.	-2281.	4354.	-3991.	-0.	-7351.	-.0774	.0791	.0632	.0067	-.0167	.0190	3357.	
.1490	-7022.	-1997.	3812.	-3495.	0.	-6437.	-.0798	.0759	.0420	.0241	.0136	.0213	2939.	
.1500	-5868.	-1669.	3186.	-2921.	-0.	-5379.	-.0801	.0717	.0209	.0375	.0437	.0259	2456.	
.1510	-4713.	-1340.	2559.	-2346.	0.	-4320.	-.0795	.0676	.0011	.0455	.0718	.0322	1973.	
.1520	-3390.	-964.	1840.	-1687.	0.	-3107.	-.0772	.0647	-.0187	.0496	.0961	.0392	1419.	
.1530	-1951.	-555.	1059.	-971.	0.	-1789.	-.0735	.0623	-.0385	.0507	.1152	.0466	817.	
.1540	-248.	-70.	135.	-123.	0.	-227.	-.0671	.0595	-.0593	.0491	.1286	.0535	104.	
.1550	1702.	484.	-924.	847.	0.	1560.	-.0583	.0569	-.0808	.0463	.1366	.0596	712.	
.1560	3603.	1025.	-1956.	1793.	0.	3303.	-.0493	.0556	-.1006	.0431	.1401	.0651	1508.	
.1570	5523.	1571.	-2999.	2749.	0.	5063.	-.0388	.0551	-.1185	.0377	.1406	.0695	2312.	
.1580	7234.	2058.	-3928.	3600.	0.	6631.	-.0283	.0543	-.1329	.0302	.1389	.0737	3028.	
.1590	8571.	2438.	-4653.	4266.	0.	7857.	-.0196	.0536	-.1425	.0243	.1354	.0789	3587.	
.1600	9657.	2747.	-5243.	4806.	0.	8852.	-.0120	.0532	-.1481	.0219	.1304	.0856	4042.	
.1610	10551.	3001.	-5728.	5251.	0.	9672.	-.0049	.0524	-.1506	.0194	.1250	.0932	4416.	
.1620	11172.	3178.	-6066.	5560.	0.	10242.	.0014	.0508	-.1503	.0141	.1193	.1010	4677.	
.1630	11713.	3331.	-6359.	5829.	0.	10737.	.0077	.0494	-.1487	.0073	.1135	.1082	4903.	
.1640	12075.	3434.	-6556.	6010.	0.	11069.	.0134	.0482	-.1450	.0006	.1074	.1145	5054.	
.1650	12113.	3445.	-6577.	6029.	0.	11104.	.0177	.0460	-.1383	-.0050	.1011	.1196	5070.	
.1660	11937.	3395.	-6461.	5941.	0.	10943.	.0213	.0432	-.1290	-.0073	.0947	.1226	4997.	
.1670	11389.	3239.	-6183.	5668.	-0.	10440.	.0229	.0408	-.1160	-.0050	.0880	.1231	4767.	
.1680	10529.	2995.	-5717.	5240.	0.	9652.	.0235	.0380	-.0998	-.0009	.0817	.1203	4407.	
.1690	9342.	2657.	-5072.	4650.	-0.	8564.	.0231	.0342	-.0809	.0035	.0752	.1138	3910.	
.1700	7988.	2272.	-4337.	3976.	0.	7323.	.0222	.0299	-.0605	.0109	.0673	.1036	3344.	
.1710	6729.	1914.	-3653.	3349.	-0.	6168.	.0221	.0259	-.0407	.0229	.0576	.0900	2817.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.34.

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

.1610	10551.	3001.	-5728.	5251.	0.	9672.	-.0049	.0524	-.1506	.0194	.1250	.0932	4416.
.1620	11172.	3178.	-6066.	5560.	0.	10242.	.0014	.0508	-.1503	.0141	.1193	.1010	4677.
.1630	11713.	3331.	-6359.	5829.	0.	10737.	.0077	.0494	-.1487	.0073	.1135	.1082	4903.
.1640	12075.	3434.	-6556.	6010.	0.	11069.	.0134	.0482	-.1450	.0006	.1074	.1145	5054.
.1650	12113.	3445.	-6577.	6029.	0.	11104.	.0177	.0460	-.1383	-.0050	.1011	.1196	5070.
.1660	11937.	3395.	-6481.	5941.	0.	10943.	.0213	.0432	-.1290	-.0073	.0947	.1226	4997.
.1670	11389.	3239.	-6183.	5668.	-0.	10440.	.0229	.0408	-.1160	-.0050	.0880	.1231	4767.
.1680	10529.	2995.	-5717.	5240.	0.	9652.	.0235	.0380	-.0998	-.0009	.0817	.1203	4407.
.1690	9342.	2657.	-5072.	4650.	-0.	8564.	.0231	.0342	-.0809	.0035	.0752	.1138	3910.
.1700	7988.	2272.	-4337.	3976.	0.	7323.	.0222	.0299	-.0605	.0109	.0673	.1036	3344.
.1710	6729.	1914.	-3653.	3349.	-0.	6168.	.0221	.0259	-.0407	.0229	.0576	.0900	2817.

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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	14	MEMBER	1	SEQUENCE	235	LOCATION	BEG	TYPE	RU						
TIME	FX	FY	FZ	HX	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)		
.1720	5385.	1532.	-2924.	2680.	0.	4937.	.0216	.0213	-.0209	.0367	.0458	.0741	2254.		
.1730	4107.	1168.	-2230.	2044.	-0.	3764.	.0217	.0157	-.0027	.0486	.0318	.0561	1719.		
.1740	2834.	806.	-1539.	1411.	-0.	2598.	.0219	.0093	.0141	.0586	.0154	.0366	1186.		
.1750	1467.	417.	-797.	730.	-0.	1345.	.0210	.0027	.0306	.0682	-.0026	.0170	614.		
.1760	133.	38.	-72.	66.	-0.	122.	.0198	-.0038	.0463	.0784	-.0204	-.0018	56.		
.1770	-1316.	-374.	714.	-655.	-0.	-1206.	.0171	-.0106	.0622	.0890	-.0372	-.0187	551.		
.1780	-2811.	-800.	1526.	-1399.	0.	-2577.	.0137	-.0182	.0774	.0974	-.0517	-.0335	1177.		
.1790	-4432.	-1261.	2406.	-2206.	-0.	-4063.	.0088	-.0267	.0920	.1021	-.0632	-.0459	1855.		
.1800	-6100.	-1735.	3312.	-3036.	-0.	-5592.	.0025	-.0354	.1053	.1045	-.0722	-.0559	2553.		
.1810	-7563.	-2151.	4106.	-3764.	-0.	-6933.	-.0039	-.0432	.1156	.1066	-.0785	-.0639	3166.		
.1820	-8971.	-2552.	4871.	-4465.	0.	-8224.	-.0114	-.0502	.1237	.1078	-.0821	-.0698	3755.		
.1830	-10242.	-2913.	5561.	-5097.	0.	-9389.	-.0191	-.0572	.1289	.1064	-.0827	-.0741	4287.		
.1840	-11380.	-3237.	6179.	-5664.	0.	-10432.	-.0267	-.0644	.1315	.1023	-.0807	-.0767	4764.		
.1850	-12406.	-3529.	6736.	-6174.	0.	-11372.	-.0344	-.0708	.1326	.0976	-.0761	-.0779	5193.		
.1860	-13227.	-3762.	7182.	-6583.	-0.	-12126.	-.0414	-.0756	.1324	.0940	-.0694	-.0783	5537.		
.1870	-13958.	-3970.	7578.	-6947.	-0.	-12795.	-.0486	-.0785	.1317	.0919	-.0617	-.0777	5842.		
.1880	-14479.	-4118.	7861.	-7206.	0.	-13273.	-.0547	-.0803	.1300	.0899	-.0540	-.0761	6061.		
.1890	-14797.	-4209.	8034.	-7364.	0.	-13564.	-.0595	-.0816	.1271	.0865	-.0472	-.0732	6194.		
.1900	-14855.	-4225.	8065.	-7393.	0.	-13617.	-.0626	-.0820	.1228	.0824	-.0418	-.0691	6218.		
.1910	-14440.	-4107.	7840.	-7187.	0.	-13237.	-.0630	-.0805	.1159	.0788	-.0384	-.0640	6044.		
.1920	-13617.	-3873.	7393.	-6777.	0.	-12483.	-.0609	-.0775	.1069	.0753	-.0370	-.0578	5700.		
.1930	-12428.	-3535.	6748.	-6186.	0.	-11393.	-.0562	-.0740	.0958	.0698	-.0367	-.0503	5202.		
.1940	-10923.	-3107.	5930.	-5436.	0.	-10013.	-.0489	-.0706	.0831	.0618	-.0366	-.0415	4572.		
.1950	-9175.	-2610.	4981.	-4566.	0.	-8411.	-.0397	-.0673	.0696	.0530	-.0359	-.0314	3840.		
.1960	-7261.	-2065.	3942.	-3614.	0.	-6656.	-.0291	-.0640	.0561	.0455	-.0341	-.0202	3039.		
.1970	-5241.	-1491.	2846.	-2609.	0.	-4805.	-.0175	-.0608	.0426	.0394	-.0311	-.0087	2194.		
.1980	-3179.	-904.	1726.	-1582.	0.	-2914.	-.0052	-.0580	.0293	.0338	-.0265	.0023	1331.		
.1990	-1126.	-320.	611.	-560.	0.	-1032.	.0075	-.0558	.0160	.0280	-.0200	.0118	471.		
.2000	913.	260.	-496.	455.	0.	837.	.0204	-.0545	.0026	.0234	-.0120	.0195	382.		
.2010	2936.	835.	-1594.	1461.	0.	2692.	.0332	-.0539	-.0113	.0215	-.0030	.0250	1229.		
.2020	4872.	1386.	-2645.	2425.	-0.	4466.	.0454	-.0540	-.0254	.0229	.0064	.0278	2039.		
.2030	6622.	1884.	-3595.	3296.	0.	6071.	.0563	-.0547	-.0391	.0270	.0162	.0278	2772.		
.2040	8123.	2310.	-4410.	4043.	0.	7446.	.0655	-.0560	-.0518	.0332	.0267	.0250	3400.		
.2050	9334.	2655.	-5068.	4646.	-0.	8557.	.0730	-.0581	-.0630	.0415	.0379	.0199	3907.		
.2060	10227.	2909.	-5552.	5090.	-0.	9375.	.0784	-.0611	-.0723	.0529	.0496	.0128	4281.		
.2070	10811.	3075.	-5869.	5380.	-0.	9910.	.0818	-.0648	-.0795	.0677	.0514	.0044	4525.		
.2080	11130.	3166.	-6043.	5540.	-0.	10203.	.0835	-.0689	-.0850	.0847	.0726	-.0053	4659.		
.2090	11219.	3191.	-6091.	5584.	0.	10284.	.0838	-.0730	-.0888	.1017	.0827	-.0160	4696.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.35.

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

.1990	-1126.	-320.	611.	-560.	0.	-1032.	.075	-.0550	.0160	.0280	-.0200	.0118	471.
.2000	913.	260.	-496.	455.	0.	837.	.0204	-.0545	.0026	.0234	-.0120	.0195	382.
.2010	2936.	835.	-1594.	1461.	0.	2692.	.0332	-.0539	-.0113	.0215	-.0030	.0250	1229.
.2020	4872.	1386.	-2645.	2425.	-0.	4466.	.0454	-.0540	-.0254	.0229	.0064	.0278	2039.
.2030	6622.	1884.	-3595.	3296.	0.	6071.	.0563	-.0547	-.0391	.0270	.0162	.0278	2772.
.2040	8123.	2310.	-4410.	4043.	0.	7446.	.0655	-.0560	-.0518	.0332	.0267	.0250	3400.
.2050	9334.	2655.	-5068.	4646.	-0.	8557.	.0730	-.0581	-.0630	.0415	.0379	.0199	3907.
.2060	10227.	2909.	-5552.	5090.	-0.	9375.	.0784	-.0611	-.0723	.0529	.0496	.0128	4281.
.2070	10811.	3075.	-5869.	5380.	-0.	9910.	.0818	-.0648	-.0795	.0677	.0514	.0044	4525.
.2080	11130.	3166.	-6043.	5540.	-0.	10203.	.0835	-.0689	-.0850	.0847	.0726	-.0053	4659.
.2090	11210.	3191.	-6091.	5584.	0.	10284.	.0838	-.0730	-.0888	.1017	.0827	-.0160	4696.

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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	14	MEMBER	1	SEQUENCE	235	LOCATION	BEG	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2100	11099.	3157.	-6026.	5524.	0.	10174.	.0829	-.0770	-.0912	.1172	.0910	-.0273	4646.		
.2110	10822.	3078.	-5875.	5386.	-0.	9920.	.0812	-.0806	-.0922	.1311	.0967	-.0386	4530.		
.2120	10431.	2967.	-5663.	5192.	-0.	9562.	.0789	-.0837	-.0917	.1431	.0997	-.0489	4366.		
.2130	9930.	2824.	-5392.	4942.	-0.	9103.	.0763	-.0862	-.0894	.1525	.1001	-.0576	4157.		
.2140	9303.	2646.	-5051.	4630.	0.	8528.	.0733	-.0876	-.0847	.1578	.0982	-.0641	3894.		
.2150	8539.	2429.	-4636.	4250.	0.	7828.	.0699	-.0878	-.0775	.1579	.0941	-.0680	3574.		
.2160	7652.	2176.	-4154.	3808.	-0.	7015.	.0662	-.0869	-.0680	.1525	.0874	-.0689	3203.		
.2170	6672.	1898.	-3622.	3321.	-0.	6116.	.0620	-.0849	-.0567	.1426	.0780	-.0668	2793.		
.2180	5645.	1606.	-3065.	2810.	0.	5175.	.0574	-.0816	-.0441	.1294	.0660	-.0617	2363.		
.2190	4596.	1307.	-2495.	2287.	-0.	4213.	.0524	-.0769	-.0310	.1129	.0516	-.0544	1924.		
.2200	3519.	1001.	-1911.	1751.	0.	3226.	.0469	-.0714	-.0179	.0930	.0355	-.0456	1473.		
.2210	2419.	688.	-1313.	1204.	-0.	2218.	.0408	-.0649	-.0051	.0711	.0184	-.0361	1013.		
.2220	1312.	373.	-712.	653.	-0.	1203.	.0340	-.0576	.0071	.0496	.0012	-.0266	549.		
.2230	191.	54.	-104.	95.	-0.	175.	.0265	-.0496	.0186	.0304	-.0154	-.0175	80.		
.2240	-979.	-279.	532.	-487.	-0.	-698.	.0180	-.0417	.0297	.0140	-.0305	-.0094	410.		
.2250	-2222.	-632.	1206.	-1106.	0.	-2037.	.0086	-.0342	.0404	.0004	-.0437	-.0026	930.		
.2260	-3529.	-1004.	1916.	-1757.	0.	-3235.	-.0016	-.0271	.0507	-.0101	-.0548	.0026	1477.		
.2270	-4859.	-1382.	2638.	-2418.	0.	-4454.	-.0121	-.0206	.0606	-.0170	-.0639	.0061	2034.		
.2280	-6151.	-1749.	3339.	-3061.	0.	-5638.	-.0225	-.0147	.0697	-.0202	-.0708	.0078	2575.		
.2290	-7363.	-2094.	3997.	-3664.	0.	-6749.	-.0323	-.0098	.0779	-.0205	-.0760	.0082	3082.		
.2300	-8483.	-2413.	4606.	-4222.	0.	-7776.	-.0411	-.0063	.0853	-.0194	-.0798	.0072	3551.		
.2310	-9494.	-2700.	5155.	-4725.	0.	-8703.	-.0487	-.0039	.0917	-.0179	-.0822	.0052	3974.		
.2320	-10360.	-2947.	5625.	-5156.	0.	-9497.	-.0549	-.0023	.0974	-.0159	-.0833	.0022	4336.		
.2330	-11052.	-3143.	6000.	-5501.	0.	-10131.	-.0596	-.0011	.1022	-.0134	-.0833	-.0013	4626.		
.2340	-11565.	-3289.	6279.	-5756.	0.	-10602.	-.0627	-.0005	.1059	-.0111	-.0821	-.0051	4841.		
.2350	-11882.	-3380.	6451.	-5914.	0.	-10893.	-.0640	-.0009	.1083	-.0099	-.0797	-.0089	4974.		
.2360	-11966.	-3403.	6497.	-5955.	0.	-10969.	-.0636	-.0020	.1087	-.0101	-.0761	-.0127	5009.		
.2370	-11779.	-3350.	6395.	-5862.	0.	-10798.	-.0615	-.0032	.1068	-.0113	-.0717	-.0166	4930.		
.2380	-11303.	-3215.	6136.	-5625.	0.	-10361.	-.0578	-.0040	.1020	-.0131	-.0668	-.0207	4731.		
.2390	-10543.	-2999.	5724.	-5247.	-0.	-9664.	-.0528	-.0045	.0943	-.0155	-.0616	-.0250	4413.		
.2400	-9528.	-2710.	5173.	-4742.	0.	-8734.	-.0467	-.0046	.0836	-.0186	-.0562	-.0294	3988.		
.2410	-8296.	-2360.	4504.	-4129.	0.	-7605.	-.0397	-.0041	.0704	-.0221	-.0504	-.0337	3473.		
.2420	-6880.	-1957.	3736.	-3424.	0.	-6307.	-.0322	-.0025	.0554	-.0253	-.0440	-.0378	2880.		
.2430	-5321.	-1514.	2889.	-2648.	0.	-4878.	-.0243	.0004	.0393	-.0279	-.0369	-.0414	2227.		
.2440	-3674.	-1045.	1995.	-1829.	-0.	-3368.	-.0163	.0046	.0227	-.0304	-.0292	-.0440	1538.		
.2450	-1983.	-564.	1076.	-987.	0.	-1818.	-.0083	.0099	.0062	-.0332	-.0212	-.0451	830.		
.2460	-268.	-76.	146.	-134.	0.	-246.	-.0004	.0161	-.0099	-.0369	-.0131	-.0443	112.		
.2470	1445.	411.	-784.	719.	-0.	1324.	.0073	.0232	-.0251	-.0415	-.0051	-.0411	605.		

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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

.2370	-11779.	-3390.	6395.	-5062.	0.	-10798.	-10615.	-0032	.1068	-.0113	-.0717	-.0166	4930.
.2380	-11303.	-3215.	6136.	-5623.	0.	-10361.	-10578.	-0040	.1020	-.0131	-.0668	-.0207	4731.
.2390	-10543.	-2999.	5724.	-5247.	-0.	-9664.	-10528.	-0045	.0943	-.0155	-.0516	-.0250	4413.
.2400	-9528.	-2710.	5173.	-4742.	0.	-8734.	-10467.	-0046	.0836	-.0186	-.0562	-.0294	3988.
.2410	-8296.	-2360.	4504.	-4129.	0.	-7605.	-10397.	-0041	.0704	-.0221	-.0504	-.0337	3473.
.2420	-6880.	-1957.	3736.	-3424.	0.	-6307.	-10322.	-0025	.0554	-.0253	-.0440	-.0378	2880.
.2430	-5321.	-1514.	2889.	-2648.	0.	-4878.	-10243.	.0004	.0393	-.0279	-.0369	-.0414	2227.
.2440	-3674.	-1045.	1995.	-1829.	-0.	-3368.	-10163.	.0046	.0227	-.0304	-.0292	-.0440	1538.
.2450	-1983.	-564.	1076.	-987.	0.	-1818.	-10083.	.0099	.0062	-.0332	-.0212	-.0451	830.
.2460	-268.	-76.	146.	-134.	0.	-246.	-10004.	.0161	-.0099	-.0369	-.0131	-.0443	112.
.2470	1445.	411.	-784.	719.	-0.	1324.	-.0073	.0232	-.0251	-.0415	-.0051	-.0411	605.

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

SECTION	14	MEMBER	1	SEQUENCE	235	LOCATION	BEG	TYPE	RU					STRESS
TIME	FX	FY	FZ	MX	MY	MZ				DZ	RX	RY	RZ	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)			(IN)	(IN)	(DEG)	(DEG)	(DEG)	
.2480	3113.	885.	-1690.	1549.	-0.	2854.	.0147	.0310	-.0391	-.0470	.0025	-.0356	1303.	
.2490	4695.	1335.	-2549.	2337.	-0.	4304.	.0214	.0393	-.0517	-.0536	.0093	-.0279	1965.	
.2500	6160.	1752.	-3344.	3066.	-0.	5647.	.0274	.0480	-.0627	-.0612	.0154	-.0184	2578.	
.2510	7473.	2125.	-4057.	3719.	-0.	6850.	.0325	.0569	-.0721	-.0698	.0209	-.0075	3128.	
.2520	8596.	2445.	-4667.	4278.	-0.	7880.	.0365	.0656	-.0798	-.0791	.0261	.0042	3598.	
.2530	9501.	2702.	-5158.	4729.	-0.	8709.	.0390	.0739	-.0860	-.0886	.0309	.0161	3977.	
.2540	10179.	2895.	-5526.	5066.	0.	9331.	.0400	.0818	-.0910	-.0979	.0354	.0275	4261.	
.2550	10640.	3026.	-5777.	5296.	-0.	9754.	.0395	.0892	-.0951	-.1069	.0395	.0379	4454.	
.2560	10906.	3102.	-5921.	5428.	0.	9997.	.0376	.0961	-.0987	-.1159	.0435	.0470	4565.	
.2570	10990.	3126.	-5967.	5470.	0.	10074.	.0345	.1021	-.1021	-.1250	.0470	.0546	4600.	
.2580	10901.	3101.	-5918.	5425.	0.	9993.	.0302	.1068	-.1055	-.1346	.0499	.0607	4563.	
.2590	10658.	3031.	-5787.	5304.	0.	9770.	.0249	.1104	-.1088	-.1440	.0518	.0654	4461.	
.2600	10282.	2924.	-5582.	5117.	0.	9425.	.0188	.1131	-.1117	-.1527	.0527	.0684	4304.	
.2610	9770.	2779.	-5305.	4863.	0.	8956.	.0122	.1152	-.1139	-.1607	.0528	.0699	4090.	
.2620	9102.	2589.	-4942.	4530.	0.	8344.	.0052	.1162	-.1147	-.1682	.0519	.0697	3810.	
.2630	8272.	2353.	-4491.	4117.	0.	7583.	-.0021	.1163	-.1139	-.1750	.0500	.0681	3463.	
.2640	7305.	2078.	-3966.	3636.	0.	6696.	-.0096	.1156	-.1111	-.1799	.0468	.0650	3058.	
.2650	6232.	1773.	-3384.	3102.	0.	5713.	-.0170	.1145	-.1063	-.1822	.0426	.0607	2609.	
.2660	5075.	1444.	-2756.	2526.	0.	4653.	-.0240	.1131	-.0995	-.1828	.0373	.0554	2124.	
.2670	3849.	1095.	-2090.	1916.	0.	3528.	-.0307	.1111	-.0910	-.1825	.0309	.0492	1611.	
.2680	2578.	733.	-1399.	1283.	0.	2363.	-.0369	.1086	-.0811	-.1816	.0236	.0426	1079.	
.2690	1299.	369.	-705.	646.	0.	1191.	-.0424	.1057	-.0699	-.1796	.0156	.0359	544.	
.2700	41.	12.	-22.	20.	0.	37.	-.0474	.1028	-.0576	-.1764	.0073	.0295	17.	
.2710	-1195.	-340.	649.	-595.	-0.	-1096.	-.0518	.1000	-.0444	-.1722	-.0010	.0234	500.	
.2720	-2419.	-688.	1313.	-1204.	0.	-2217.	-.0557	.0973	-.0304	-.1680	-.0092	.0178	1012.	
.2730	-3612.	-1027.	1961.	-1798.	-0.	-3312.	-.0592	.0948	-.0159	-.1639	-.0173	.0127	1512.	
.2740	-4722.	-1343.	2564.	-2350.	-0.	-4328.	-.0621	.0929	-.0013	-.1593	-.0253	.0083	1976.	
.2750	-5700.	-1621.	3095.	-2837.	0.	-5225.	-.0642	.0917	.0130	-.1541	-.0333	.0046	2386.	
.2760	-6527.	-1856.	3544.	-3249.	0.	-5983.	-.0655	.0911	.0264	-.1491	-.0414	.0017	2732.	
.2770	-7189.	-2045.	3903.	-3578.	0.	-6590.	-.0659	.0910	.0386	-.1449	-.0496	-.0005	3009.	
.2780	-7664.	-2180.	4161.	-3814.	0.	-7026.	-.0652	.0913	.0494	-.1411	-.0577	-.0018	3208.	
.2790	-7942.	-2259.	4312.	-3953.	0.	-7280.	-.0637	.0920	.0587	-.1371	-.0656	-.0022	3324.	
.2800	-8031.	-2284.	4360.	-3997.	0.	-7362.	-.0614	.0931	.0664	-.1325	-.0728	-.0015	3362.	
.2810	-7956.	-2263.	4320.	-3960.	0.	-7293.	-.0583	.0942	.0726	-.1275	-.0789	-.0001	3330.	
.2820	-7736.	-2200.	4200.	-3850.	-0.	-7091.	-.0548	.0950	.0771	-.1224	-.0836	.0022	3238.	
.2830	-7373.	-2097.	4003.	-3670.	0.	-6759.	-.0508	.0956	.0797	-.1170	-.0865	.0052	3086.	
.2840	-6862.	-1952.	3725.	-3415.	0.	-6290.	-.0464	.0959	.0803	-.1112	-.0876	.0087	2872.	
.2850	-6206.	-1765.	3369.	-3089.	0.	-5689.	-.0417	.0957	.0787	-.1051	-.0868	.0126	2598.	

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

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

.2750	-5700.	-1621.	3095.	-2837.	0.	-5225.	-.0642	.0917	.0130	-.1541	-.0333	.0046	2386.
.2760	-6527.	-1856.	3544.	-3249.	0.	-5983.	-.0655	.0911	.0264	-.1491	-.0414	.0017	2732.
.2770	-7187.	-2045.	3907.	-3578.	0.	-6590.	-.0659	.0910	.0386	-.1449	-.0496	-.0005	3009.
.2780	-7664.	-2180.	4161.	-3814.	0.	-7020.	-.0652	.0913	.0494	-.1411	-.0577	-.0018	3208.
.2790	-7942.	-2259.	4312.	-3953.	0.	-7280.	-.0637	.0920	.0587	-.1371	-.0656	-.0022	3324.
.2800	-8031.	-2284.	4360.	-3997.	0.	-7362.	-.0614	.0931	.0664	-.1325	-.0728	-.0015	3362.
.2810	-7956.	-2263.	4320.	-3960.	0.	-7293.	-.0583	.0942	.0726	-.1275	-.0789	-.0001	3330.
.2820	-7736.	-2200.	4200.	-3850.	-0.	-7091.	-.0548	.0950	.0771	-.1224	-.0836	.0022	3238.
.2830	-7373.	-2097.	4003.	-3670.	0.	-6759.	-.0508	.0956	.0797	-.1170	-.0865	.0052	3086.
.2840	-6862.	-1952.	3725.	-3415.	0.	-6290.	-.0464	.0959	.0803	-.1112	-.0876	.0087	2872.
.2850	-6206.	-1765.	3369.	-3089.	0.	-5689.	-.0417	.0957	.0787	-.1051	-.0868	.0126	2598.

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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	RU	TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS
14	1	235					(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.2860	-5428.	-1544.	2947.	-2702.	-0.	-4976.	-.0367	.0949	.0748	-.0991	-.0341	.0166	2272.							
.2870	-4560.	-1297.	2476.	-2269.	-0.	-4180.	-.0318	.0933	.0686	-.0934	-.0798	.0208	1909.							
.2880	-3629.	-1032.	1971.	-1806.	-0.	-3327.	-.0270	.0909	.0606	-.0880	-.0739	.0250	1519.							
.2890	-2674.	-761.	1452.	-1331.	0.	-2451.	-.0225	.0877	.0511	-.0824	-.0564	.0292	1119.							
.2900	-1734.	-493.	941.	-863.	-0.	-1590.	-.0186	.0838	.0405	-.0767	-.0574	.0334	726.							
.2910	-842.	-240.	457.	-419.	-0.	-772.	-.0153	.0791	.0294	-.0706	-.0472	.0374	353.							
.2920	-15.	-4.	8.	-7.	0.	-13.	-.0126	.0737	.0179	-.0641	-.0359	.0411	6.							
.2930	747.	212.	-406.	372.	0.	685.	-.0105	.0677	.0063	-.0570	-.0236	.0443	313.							
.2940	1449.	412.	-787.	721.	0.	1328.	-.0090	.0614	-.0054	-.0490	-.0104	.0469	607.							
.2950	2098.	597.	-1139.	1044.	0.	1924.	-.0072	.0550	-.0171	-.0402	.0033	.0488	878.							
.2960	2698.	767.	-1465.	1343.	0.	2473.	-.0079	.0486	-.0286	-.0305	.0176	.0500	1129.							
.2970	3248.	924.	-1764.	1617.	0.	2978.	-.0069	.0424	-.0397	-.0200	.0321	.0506	1360.							
.2980	3751.	1067.	-2037.	1867.	0.	3439.	-.0068	.0364	-.0503	-.0086	.0467	.0508	1570.							
.2990	4205.	1196.	-2283.	2093.	-0.	3855.	-.0069	.0308	-.0600	.0034	.0613	.0510	1760.							
.3000	4604.	1310.	-2500.	2291.	0.	4221.	-.0073	.0256	-.0686	.0157	.0755	.0513	1927.							
.3010	4949.	1408.	-2687.	2463.	0.	4537.	-.0076	.0208	-.0759	.0279	.0886	.0518	2072.							
.3020	5252.	1494.	-2851.	2614.	0.	4814.	-.0078	.0165	-.0819	.0397	.1004	.0527	2198.							
.3030	5524.	1571.	-2999.	2749.	0.	5064.	-.0077	.0127	-.0864	.0509	.1100	.0539	2312.							
.3040	5769.	1641.	-3132.	2871.	0.	5288.	-.0071	.0093	-.0894	.0611	.1172	.0554	2415.							
.3050	5982.	1701.	-3248.	2977.	0.	5484.	-.0060	.0063	-.0908	.0700	.1213	.0568	2504.							
.3060	6155.	1751.	-3342.	3063.	0.	5642.	-.0042	.0036	-.0905	.0777	.1222	.0579	2576.							
.3070	6272.	1784.	-3405.	3122.	0.	5750.	-.0019	.0011	-.0884	.0841	.1199	.0588	2626.							
.3080	6313.	1796.	-3428.	3142.	-0.	5787.	.0008	-.0014	-.0843	.0894	.1146	.0592	2643.							
.3090	6251.	1778.	-3394.	3111.	0.	5730.	.0039	-.0042	-.0781	.0934	.1067	.0591	2617.							
.3100	6065.	1725.	-3293.	3018.	0.	5560.	.0071	-.0075	-.0699	.0963	.0966	.0585	2539.							
.3110	5746.	1634.	-3120.	2860.	0.	5267.	.0104	-.0114	-.0598	.0984	.0849	.0572	2405.							
.3120	5295.	1506.	-2875.	2636.	0.	4854.	.0134	-.0159	-.0482	.1001	.0722	.0552	2217.							
.3130	4716.	1341.	-2561.	2347.	-0.	4323.	.0161	-.0211	-.0354	.1015	.0590	.0523	1974.							
.3140	4011.	1141.	-2178.	1986.	0.	3677.	.0183	-.0271	-.0218	.1029	.0457	.0485	1679.							
.3150	3191.	908.	-1733.	1598.	-0.	2926.	.0200	-.0339	-.0078	.1045	.0327	.0436	1336.							
.3160	2271.	646.	-1233.	1130.	-0.	2082.	.0209	-.0414	.0064	.1068	.0205	.0377	951.							
.3170	1265.	360.	-687.	629.	-0.	1159.	.0212	-.0495	.0204	.1100	.0091	.0307	529.							
.3180	189.	54.	-103.	94.	-0.	173.	.0207	-.0579	.0340	.1142	-.0011	.0227	79.							
.3190	-938.	-267.	509.	-467.	-0.	-860.	.0196	-.0668	.0472	.1195	-.0103	.0138	393.							
.3200	-2088.	-594.	1134.	-1039.	-0.	-1914.	.0180	-.0760	.0596	.1255	-.0183	.0043	874.							
.3210	-3228.	-918.	1753.	-1607.	0.	-2959.	.0160	-.0853	.0711	.1323	-.0255	-.0058	1351.							
.3220	-4323.	-1230.	2347.	-2152.	-0.	-3963.	.0139	-.0944	.0815	.1396	-.0320	-.0163	1810.							
.3230	-5340.	-1519.	2899.	-2658.	-0.	-4895.	.0119	-.1032	.0907	.1469	-.0379	-.0269	2235.							

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.3120	5295.	1596.	75.	2626.	0.	4854.	.0134	-.0159	-.0482	.1001	.0722	.0552	2217.
.3130	4716.	1341.	-2561.	2347.	-0.	4323.	.0161	-.0211	-.0354	.1015	.0590	.0523	1974.
.3140	4011.	1141.	-2178.	1996.	0.	3677.	.0183	-.0271	-.0218	.1029	.0457	.0485	1679.
.3150	3191.	908.	-1733.	1588.	-0.	2926.	.0200	-.0339	-.0078	.1045	.0327	.0436	1336.
.3160	2271.	646.	-1233.	1130.	-0.	2082.	.0209	-.0414	.0064	.1068	.0205	.0377	951.
.3170	1265.	360.	-687.	629.	-0.	1159.	.0212	-.0495	.0204	.1100	.0091	.0307	529.
.3180	189.	54.	-103.	94.	-0.	173.	.0207	-.0579	.0340	.1142	-.0011	.0227	79.
.3190	-938.	-267.	509.	-467.	-0.	-860.	.0196	-.0668	.0472	.1195	-.0103	.0138	393.
.3200	-2088.	-594.	1134.	-1039.	-0.	-1914.	.0180	-.0760	.0596	.1255	-.0183	.0043	874.
.3210	-3228.	-918.	1753.	-1607.	0.	-2959.	.0160	-.0853	.0711	.1323	-.0255	-.0058	1351.
.3220	-4323.	-1230.	2347.	-2152.	-0.	-3963.	.0139	-.0944	.0815	.1396	-.0320	-.0163	1810.
.3230	-5340.	-1519.	2899.	-2658.	-0.	-4895.	.0119	-.1032	.0907	.1469	-.0379	-.0269	2235.

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INTERNAL FORCES IN THE PIPING
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SECTION	14	MEMBER	1	SEQUENCE	235	LOCATION	BEG	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3240	-6251.	-1778.	3394.	-3111.	-0.	-5730.	.0101	-.1116	.0984	.1537	-.0435	-.0374	2617.		
.3250	-7037.	-2002.	3821.	-3502.	-0.	-6451.	.0088	-.1192	.1048	.1596	-.0488	-.0477	2946.		
.3260	-7680.	-2184.	4170.	-3822.	0.	-7040.	.0080	-.1260	.1098	.1642	-.0536	-.0574	3215.		
.3270	-8168.	-2323.	4435.	-4065.	0.	-7487.	.0079	-.1319	.1134	.1673	-.0579	-.0662	3419.		
.3280	-8502.	-2418.	4616.	-4232.	-0.	-7794.	.0083	-.1367	.1158	.1687	-.0615	-.0738	3559.		
.3290	-8688.	-2471.	4717.	-4324.	-0.	-7964.	.0092	-.1403	.1169	.1682	-.0641	-.0799	3636.		
.3300	-8724.	-2481.	4737.	-4342.	0.	-7997.	.0107	-.1429	.1169	.1656	-.0656	-.0843	3652.		
.3310	-8612.	-2450.	4676.	-4286.	0.	-7895.	.0126	-.1443	.1158	.1611	-.0658	-.0869	3605.		
.3320	-8353.	-2376.	4535.	-4157.	0.	-7657.	.0149	-.1447	.1134	.1552	-.0647	-.0875	3496.		
.3330	-7950.	-2261.	4316.	-3957.	0.	-7287.	.0175	-.1441	.1098	.1482	-.0623	-.0865	3328.		
.3340	-7408.	-2107.	4022.	-3687.	-0.	-6791.	.0205	-.1425	.1047	.1403	-.0588	-.0839	3101.		
.3350	-6739.	-1917.	3659.	-3354.	0.	-6178.	.0236	-.1402	.0984	.1320	-.0541	-.0802	2821.		
.3360	-5960.	-1695.	3236.	-2966.	0.	-5463.	.0268	-.1372	.0907	.1238	-.0484	-.0757	2495.		
.3370	-5090.	-1448.	2764.	-2533.	0.	-4666.	.0300	-.1337	.0819	.1162	-.0420	-.0707	2131.		
.3380	-4155.	-1182.	2256.	-2068.	0.	-3809.	.0332	-.1297	.0720	.1095	-.0350	-.0656	1739.		
.3390	-3178.	-904.	1725.	-1582.	0.	-2913.	.0362	-.1255	.0613	.1037	-.0276	-.0608	1330.		
.3400	-2181.	-620.	1184.	-1086.	0.	-1999.	.0390	-.1212	.0499	.0987	-.0200	-.0563	913.		
.3410	-1181.	-336.	641.	-588.	0.	-1083.	.0415	-.1169	.0379	.0941	-.0124	-.0523	495.		
.3420	-193.	-55.	105.	-96.	0.	-177.	.0439	-.1129	.0255	.0899	-.0049	-.0488	81.		
.3430	774.	220.	-420.	385.	-0.	709.	.0461	-.1092	.0128	.0856	.0024	-.0458	324.		
.3440	1709.	486.	-928.	851.	0.	1567.	.0481	-.1060	.0001	.0809	.0094	-.0433	716.		
.3450	2600.	739.	-1411.	1294.	0.	2383.	.0501	-.1032	-.0124	.0756	.0162	-.0412	1088.		
.3460	3429.	975.	-1862.	1706.	0.	3143.	.0521	-.1009	-.0244	.0693	.0226	-.0394	1435.		
.3470	4184.	1190.	-2271.	2082.	0.	3835.	.0540	-.0991	-.0355	.0624	.0286	-.0380	1751.		
.3480	4854.	1381.	-2635.	2416.	0.	4449.	.0559	-.0977	-.0455	.0549	.0340	-.0369	2032.		
.3490	5430.	1545.	-2948.	2703.	-0.	4978.	.0577	-.0966	-.0541	.0472	.0389	-.0362	2273.		
.3500	5907.	1680.	-3207.	2940.	-0.	5415.	.0594	-.0958	-.0611	.0395	.0429	-.0359	2472.		
.3510	6280.	1786.	-3410.	3126.	0.	5757.	.0610	-.0949	-.0664	.0320	.0459	-.0360	2629.		
.3520	6553.	1864.	-3558.	3261.	0.	6007.	.0625	-.0941	-.0701	.0251	.0477	-.0366	2743.		
.3530	6729.	1914.	-3653.	3349.	0.	6189.	.0637	-.0929	-.0722	.0192	.0481	-.0377	2817.		
.3540	6812.	1937.	-3698.	3390.	0.	6244.	.0647	-.0914	-.0727	.0144	.0472	-.0393	2851.		
.3550	6798.	1934.	-3691.	3383.	-0.	6232.	.0653	-.0894	-.0718	.0107	.0450	-.0414	2846.		
.3560	6683.	1901.	-3629.	3326.	0.	6127.	.0653	-.0868	-.0694	.0080	.0417	-.0438	2798.		
.3570	6466.	1839.	-3510.	3218.	0.	5927.	.0648	-.0835	-.0657	.0064	.0373	-.0465	2706.		
.3580	6147.	1748.	-3338.	3059.	0.	5635.	.0636	-.0795	-.0608	.0056	.0322	-.0492	2573.		
.3590	5730.	1630.	-3111.	2852.	-0.	5253.	.0616	-.0748	-.0548	.0054	.0265	-.0517	2399.		
.3600	5218.	1484.	-2833.	2597.	-0.	4783.	.0589	-.0694	-.0477	.0053	.0203	-.0539	2184.		
.3610	4616.	1313.	-2506.	2298.	-0.	4232.	.0554	-.0634	-.0399	.0049	.0138	-.0556	1932.		

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.3510	6280.	1786.	3410.	3126.	0.	5757.	.0610	-.0949	-.0664	.0320	.0459	-.0360	2629.
.3520	6553.	1864.	-2558.	3261.	0.	6007.	.0625	-.0941	-.0701	.0251	.0477	-.0366	2743.
.3530	6729.	1914.	-3653.	3349.	0.	6169.	.0637	-.0929	-.0722	.0192	.0481	-.0377	2817.
.3540	6812.	1937.	-3698.	3390.	0.	6244.	.0647	-.0914	-.0727	.0144	.0472	-.0393	2851.
.3550	6798.	1934.	-3691.	3383.	-0.	6232.	.0653	-.0394	-.0718	.0107	.0450	-.0414	2846.
.3560	6683.	1901.	-3629.	3326.	0.	6127.	.0653	-.0868	-.0694	.0080	.0417	-.0438	2798.
.3570	6466.	1839.	-3510.	3218.	0.	5927.	.0648	-.0835	-.0657	.0064	.0373	-.0465	2706.
.3580	6147.	1748.	-3338.	3059.	0.	5635.	.0636	-.0795	-.0608	.0056	.0322	-.0492	2573.
.3590	5730.	1630.	-3111.	2852.	-0.	5253.	.0616	-.0748	-.0548	.0054	.0265	-.0517	2399.
.3600	5218.	1484.	-2833.	2597.	-0.	4783.	.0589	-.0694	-.0477	.0053	.0203	-.0539	2184.
.3610	4616.	1313.	-2506.	2298.	-0.	4232.	.0554	-.0634	-.0399	.0049	.0138	-.0556	1932.

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FORCES AND MOMENTS ACT ON THE PIPING

SECTION	14	MEMBER	1	SEQUENCE	235	LOCATION	BEG	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3620	3936.	1120.	-2137.	1959.	-0.	3608.	.0513	-.0569	-.0314	.0039	.0070	-.0566	1648.		
.3630	3190.	907.	-1732.	1587.	-0.	2924.	.0466	-.0501	-.0222	.0021	.0001	-.0567	1335.		
.3640	2387.	679.	-1296.	1188.	0.	2188.	.0414	-.0429	-.0127	-.0006	-.0070	-.0560	999.		
.3650	1537.	437.	-835.	765.	-0.	1409.	.0358	-.0355	-.0027	-.0043	-.0141	-.0542	644.		
.3660	651.	185.	-354.	324.	0.	597.	.0298	-.0281	.0074	-.0090	-.0212	-.0517	273.		
.3670	-255.	-72.	138.	-127.	-0.	-234.	.0235	-.0207	.0176	-.0146	-.0282	-.0483	107.		
.3680	-1159.	-330.	629.	-577.	0.	-1063.	.0171	-.0133	.0275	-.0207	-.0350	-.0442	485.		
.3690	-2041.	-581.	1108.	-1016.	0.	-1871.	.0106	-.0061	.0369	-.0271	-.0417	-.0396	854.		
.3700	-2882.	-820.	1565.	-1434.	0.	-2642.	.0041	.0010	.0455	-.0338	-.0480	-.0346	1206.		
.3710	-3665.	-1042.	1990.	-1824.	0.	-3359.	-.0024	.0079	.0529	-.0405	-.0538	-.0294	1534.		
.3720	-4371.	-1243.	2373.	-2175.	0.	-4007.	-.0089	.0144	.0589	-.0470	-.0589	-.0241	1829.		
.3730	-4987.	-1419.	2708.	-2482.	0.	-4572.	-.0152	.0206	.0633	-.0529	-.0632	-.0188	2088.		
.3740	-5509.	-1567.	2991.	-2742.	-0.	-5050.	-.0214	.0266	.0660	-.0581	-.0664	-.0135	2306.		
.3750	-5935.	-1688.	3222.	-2954.	0.	-5441.	-.0275	.0322	.0670	-.0625	-.0682	-.0083	2484.		
.3760	-6264.	-1782.	3401.	-3117.	0.	-5742.	-.0334	.0374	.0663	-.0662	-.0685	-.0033	2622.		
.3770	-6491.	-1846.	3524.	-3230.	-0.	-5950.	-.0391	.0423	.0640	-.0689	-.0673	.0015	2717.		
.3780	-6611.	-1880.	3589.	-3290.	0.	-6060.	-.0444	.0469	.0603	-.0707	-.0644	.0062	2767.		
.3790	-6622.	-1883.	3595.	-3296.	0.	-6070.	-.0493	.0513	.0552	-.0718	-.0600	.0108	2772.		
.3800	-6526.	-1856.	3543.	-3248.	0.	-5982.	-.0536	.0555	.0491	-.0725	-.0541	.0153	2732.		
.3810	-6323.	-1798.	3433.	-3147.	0.	-5796.	-.0573	.0596	.0420	-.0731	-.0470	.0198	2646.		
.3820	-6012.	-1710.	3264.	-2992.	0.	-5511.	-.0602	.0636	.0343	-.0736	-.0388	.0245	2516.		
.3830	-5595.	-1591.	3038.	-2785.	0.	-5129.	-.0622	.0676	.0261	-.0741	-.0298	.0294	2342.		
.3840	-5078.	-1444.	2757.	-2527.	-0.	-4655.	-.0634	.0718	.0177	-.0747	-.0204	.0347	2126.		
.3850	-4467.	-1271.	2425.	-2223.	0.	-4095.	-.0637	.0760	.0093	-.0755	-.0106	.0403	1870.		
.3860	-3768.	-1072.	2046.	-1875.	0.	-3454.	-.0632	.0804	.0010	-.0767	-.0008	.0463	1577.		
.3870	-2982.	-848.	1619.	-1484.	0.	-2734.	-.0617	.0851	-.0073	-.0779	.0087	.0527	1248.		
.3880	-2114.	-601.	1148.	-1052.	0.	-1938.	-.0594	.0900	-.0153	-.0791	.0176	.0592	885.		
.3890	-1171.	-333.	636.	-583.	-0.	-1073.	-.0564	.0951	-.0233	-.0801	.0258	.0660	490.		
.3900	-169.	-48.	92.	-84.	0.	-155.	-.0527	.1003	-.0311	-.0810	.0331	.0727	71.		
.3910	874.	248.	-474.	435.	0.	801.	-.0486	.1057	-.0388	-.0815	.0393	.0792	366.		
.3920	1936.	551.	-1051.	964.	0.	1775.	-.0441	.1111	-.0462	-.0813	.0446	.0854	811.		
.3930	2995.	852.	-1626.	1490.	0.	2745.	-.0395	.1164	-.0533	-.0804	.0489	.0913	1253.		
.3940	4017.	1143.	-2181.	1999.	-0.	3683.	-.0349	.1214	-.0599	-.0789	.0523	.0967	1682.		
.3950	4974.	1415.	-2700.	2475.	0.	4559.	-.0304	.1260	-.0659	-.0771	.0551	.1016	2082.		
.3960	5839.	1661.	-3170.	2906.	-0.	5352.	-.0264	.1301	-.0712	-.0750	.0572	.1059	2444.		
.3970	6594.	1876.	-3580.	3282.	0.	6045.	-.0227	.1336	-.0757	-.0728	.0589	.1096	2760.		
.3980	7225.	2055.	-3923.	3596.	0.	6623.	-.0197	.1364	-.0795	-.0704	.0600	.1125	3024.		
.3990	7714.	2194.	-4188.	3839.	0.	7071.	-.0172	.1383	-.0823	-.0682	.0607	.1147	3229.		

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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSVCONDITION 24
LOADS
SHOCK
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ENGLISH UNITSINTERNAL FORCES IN THE PIPING
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.3880	-2114.	-501.	1143.	-1052.	0.	-1928.	-.0594	.0900	-.0153	-.0791	.0176	.0592	885.
.3890	-1171.	-333.	636.	-583.	-0.	-1073.	-.0564	.0951	-.0233	-.0801	.0258	.0660	490.
.3900	-169.	-48.	92.	-84.	0.	-155.	-.0527	.1003	-.0311	-.0810	.0331	.0727	71.
.3910	874.	248.	-474.	435.	0.	801.	-.0486	.1057	-.0388	-.0815	.0393	.0792	366.
.3920	1936.	551.	-1051.	964.	0.	1775.	-.0441	.1111	-.0462	-.0813	.0446	.0854	811.
.3930	2995.	852.	-1626.	1490.	0.	2745.	-.0395	.1164	-.0533	-.0804	.0489	.0913	1253.
.3940	4017.	1143.	-2181.	1999.	-0.	3683.	-.0349	.1214	-.0599	-.0789	.0523	.0967	1682.
.3950	4974.	1415.	-2700.	2475.	0.	4559.	-.0304	.1260	-.0659	-.0771	.0551	.1016	2082.
.3960	5839.	1661.	-3170.	2906.	-0.	5352.	-.0264	.1301	-.0712	-.0750	.0572	.1059	2444.
.3970	6594.	1876.	-3580.	3282.	0.	6045.	-.0227	.1336	-.0757	-.0728	.0589	.1096	2760.
.3980	7225.	2055.	-3923.	3596.	0.	6623.	-.0197	.1364	-.0795	-.0704	.0600	.1125	3024.
.3990	7714.	2194.	-4188.	3829.	0.	7071.	-.0172	.1382	-.0823	-.0682	.0607	.1147	3229.

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SECTION	14	MEMBER	1	SEQUENCE	235	LOCATION	BEG	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.4000	8046.	2288.	-4368.	4004.	0.	7376.	-.0155	.1393	-.0842	-.0664	.0511	.1160	3368.		

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)
.0420	19895.	5659.	-10802.	9902.	0.	18238.	-.1156	-.0784	.1307	.0409	-.0774	-.0317	8328.

SECTION	14	MEMBER	1	SEQUENCE	236	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.		
.0010	-1.	-0.	1.	-1.	0.	-1.	.0000	-.0000	-.0000	.0000	-.0000	-.0000	0.		
.0020	-9.	-3.	5.	-4.	0.	-8.	.0000	-.0000	-.0002	.0000	-.0001	-.0000	4.		
.0030	-27.	-8.	15.	-13.	0.	-25.	.0000	-.0000	-.0005	.0001	-.0004	-.0001	11.		
.0040	-58.	-17.	32.	-29.	0.	-53.	.0000	-.0000	-.0011	.0001	-.0007	-.0003	24.		
.0050	-101.	-29.	55.	-50.	0.	-92.	.0000	.0001	-.0020	-.0000	-.0012	-.0006	42.		
.0060	-156.	-44.	85.	-77.	0.	-141.	-.0000	.0003	-.0033	-.0003	-.0016	-.0009	65.		
.0070	-239.	-68.	130.	-118.	0.	-216.	-.0001	.0006	-.0051	-.0007	-.0022	-.0013	99.		
.0080	-396.	-113.	215.	-195.	0.	-359.	.0001	.0009	-.0079	-.0013	-.0029	-.0016	164.		
.0090	-671.	-191.	364.	-330.	0.	-608.	.0008	.0014	-.0121	-.0026	-.0038	-.0021	278.		
.0100	-1082.	-308.	587.	-533.	0.	-981.	.0023	.0022	-.0175	-.0051	-.0048	-.0026	448.		
.0110	-1624.	-462.	882.	-800.	0.	-1473.	.0048	.0033	-.0240	-.0094	-.0058	-.0031	673.		
.0120	-2280.	-648.	1238.	-1122.	0.	-2067.	.0081	.0045	-.0312	-.0154	-.0068	-.0031	944.		
.0130	-3016.	-858.	1638.	-1485.	0.	-2735.	.0121	.0059	-.0385	-.0227	-.0074	-.0023	1249.		
.0140	-3785.	-1077.	2055.	-1863.	0.	-3432.	.0167	.0073	-.0453	-.0314	-.0070	-.0005	1567.		
.0150	-4531.	-1289.	2460.	-2231.	0.	-4109.	.0217	.0088	-.0509	-.0421	-.0046	.0023	1876.		
.0160	-5238.	-1490.	2844.	-2579.	-0.	-4749.	.0270	.0101	-.0552	-.0542	.0006	.0061	2169.		
.0170	-5936.	-1688.	3223.	-2922.	0.	-5382.	.0327	.0112	-.0585	-.0661	.0087	.0105	2458.		
.0180	-6674.	-1898.	3624.	-3286.	-0.	-6052.	.0387	.0122	-.0616	-.0762	.0187	.0149	2763.		
.0190	-7540.	-2144.	4094.	-3712.	0.	-6836.	.0457	.0131	-.0654	-.0833	.0286	.0184	3122.		
.0200	-8733.	-2484.	4742.	-4299.	0.	-7919.	.0544	.0142	-.0721	-.0871	.0356	.0197	3616.		
.0210	-10384.	-2953.	5638.	-5112.	0.	-9415.	.0662	.0161	-.0829	-.0895	.0389	.0176	4299.		
.0220	-11991.	-3410.	6510.	-5903.	0.	-10872.	.0782	.0185	-.0935	-.0935	.0398	.0122	4964.		
.0230	-13122.	-3735.	7130.	-6465.	0.	-11907.	.0881	.0201	-.1001	-.0985	.0384	.0048	5437.		

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.0130	-3016.	-858.	1638.	-1485.	0.	-2735.	.0121	.0059	-.0385	-.0227	-.0074	-.0023	1249.
.0140	-3785.	-1077.	2055.	-1863.	0.	-3432.	.0167	.0073	-.0453	-.0314	-.0070	-.0005	1567.
.0150	-4531.	-1289.	2460.	-2231.	0.	-4109.	.0217	.0088	-.0509	-.0421	-.0046	.0023	1876.
.0160	-5238.	-1496.	2844.	-2579.	-0.	-4749.	.0270	.0101	-.0552	-.0542	.0006	.0061	2169.
.0170	-5936.	-1688.	3223.	-2922.	0.	-5382.	.0327	.0112	-.0585	-.0661	.0087	.0105	2458.
.0180	-6674.	-1898.	3624.	-3286.	-0.	-6052.	.0387	.0122	-.0616	-.0762	.0187	.0149	2763.
.0190	-7540.	-2144.	4094.	-3712.	0.	-6836.	.0457	.0131	-.0654	-.0833	.0286	.0184	3122.
.0200	-8733.	-2484.	4742.	-4299.	0.	-7919.	.0544	.0142	-.0721	-.0871	.0356	.0197	3616.
.0210	-10384.	-2953.	5628.	-5112.	0.	-9415.	.0662	.0161	-.0829	-.0895	.0389	.0176	4299.
.0220	-11991.	-3410.	6510.	-5903.	0.	-10872.	.0782	.0185	-.0935	-.0935	.0398	.0122	4964.
.0230	-13132.	-3735.	7130.	-6465.	0.	-11907.	.0881	.0201	-.1001	-.0995	.0384	.0048	5437.

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SECTION	14	MEMBER	1	SEQUENCE	236	LOCATION	END	TYPE	RU						
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)		
.0240	-13741.	-3908.	7460.	-6764.	0.	-12459.	.0952	.0205	-.1014	-.0983	.0380	-.0029	5689.		
.0250	-13912.	-3957.	7553.	-6849.	0.	-12614.	.0992	.0195	-.0985	-.0877	.0389	-.0106	5760.		
.0260	-13497.	-3839.	7328.	-6644.	0.	-12238.	.0989	.0165	-.0922	-.0692	.0370	-.0193	5588.		
.0270	-12135.	-3452.	6588.	-5974.	0.	-11003.	.0918	.0123	-.0807	-.0496	.0326	-.0295	5024.		
.0280	-10356.	-2945.	5623.	-5098.	0.	-9390.	.0821	.0091	-.0665	-.0326	.0324	-.0415	4288.		
.0290	-8725.	-2482.	4737.	-4295.	0.	-7911.	.0737	.0054	-.0541	-.0180	.0367	-.0548	3612.		
.0300	-6726.	-1913.	3652.	-3311.	0.	-6098.	.0624	-.0030	-.0422	-.0035	.0377	-.0681	2785.		
.0310	-4333.	-1233.	2353.	-2133.	0.	-3929.	.0476	-.0149	-.0302	.0143	.0347	-.0811	1794.		
.0320	-1905.	-542.	1034.	-938.	0.	-1727.	.0316	-.0242	-.0174	.0373	.0290	-.0942	789.		
.0330	603.	172.	-327.	297.	0.	547.	.0150	-.0282	-.0011	.0608	.0246	-.1067	250.		
.0340	3538.	1006.	-1921.	174.	0.	3207.	-.0034	-.0318	.0201	.0761	.0221	-.1156	1465.		
.0350	6800.	1934.	-3692.	3347.	-0.	6166.	-.0227	-.0412	.0431	.0808	.0172	-.1182	2815.		
.0360	9911.	2819.	-5381.	4879.	-0.	8987.	-.0411	-.0547	.0646	.0825	.0073	-.1140	4103.		
.0370	12592.	3581.	-6836.	6198.	-0.	11417.	-.0583	-.0641	.0845	.0885	-.0051	-.1049	5213.		
.0380	14966.	4257.	-8125.	7367.	-0.	13569.	-.0753	-.0660	.1035	.0931	-.0175	-.0932	6196.		
.0390	17189.	4889.	-9332.	8461.	-0.	15585.	-.0914	-.0665	.1199	.0835	-.0305	-.0796	7116.		
.0400	18842.	5359.	-10230.	9275.	-0.	17084.	-.1027	-.0724	.1291	.0603	-.0455	-.0646	7801.		
.0410	19798.	5631.	-10749.	9746.	0.	17951.	-.1107	-.0789	.1320	.0428	-.0618	-.0478	8197.		
.0420	19895.	5659.	-10802.	9794.	0.	18039.	-.1156	-.0784	.1306	.0411	-.0774	-.0314	8237.		
.0430	19107.	5434.	-10374.	9406.	-0.	17324.	-.1149	-.0733	.1236	.0398	-.0922	-.0177	7910.		
.0440	18066.	5138.	-9809.	8893.	-0.	16380.	-.1095	-.0706	.1155	.0231	-.1035	-.0069	7480.		
.0450	17152.	4879.	-9312.	8444.	0.	15552.	-.1028	-.0693	.1104	.0019	-.1111	.0037	7101.		
.0460	16137.	4590.	-8761.	7944.	0.	14632.	-.0956	-.0661	.1086	-.0049	-.1168	.0162	6681.		
.0470	14780.	4204.	-8025.	7276.	0.	13401.	-.0854	-.0625	.1089	.0018	-.1190	.0300	6119.		
.0480	13248.	3768.	-7193.	6522.	0.	12012.	-.0719	-.0603	.1112	.0097	-.1161	.0432	5485.		
.0490	11698.	3327.	-6351.	5759.	0.	10607.	-.0573	-.0567	.1142	.0137	-.1107	.0537	4843.		
.0500	9949.	2830.	-5401.	4897.	0.	9020.	-.0413	-.0515	.1146	.0134	-.1042	.0606	4119.		
.0510	7777.	2212.	-4222.	3828.	0.	7051.	-.0221	-.0482	.1103	.0120	-.0960	.0640	3220.		
.0520	5163.	1469.	-2803.	2542.	0.	4682.	-.0006	-.0459	.1020	.0203	-.0851	.0646	2138.		
.0530	2313.	658.	-1256.	1139.	0.	2097.	.0205	-.0415	.0914	.0440	-.0716	.0626	958.		
.0540	-376.	-107.	204.	-185.	0.	-341.	.0400	-.0376	.0801	.0713	-.0543	.0571	156.		
.0550	-2625.	-747.	1425.	-1292.	0.	-2380.	.0580	-.0387	.0694	.0908	-.0324	.0479	1087.		
.0560	-4559.	-1297.	2475.	-2244.	0.	-4134.	.0739	-.0418	.0592	.1129	-.0083	.0358	1888.		
.0570	-6431.	-1829.	3491.	-3166.	0.	-5831.	.0865	-.0425	.0484	.1512	.0142	.0226	2662.		
.0580	-8243.	-2344.	4475.	-4058.	0.	-7474.	.0968	-.0442	.0352	.1977	.0340	.0090	3413.		
.0590	-9866.	-2806.	5356.	-4857.	0.	-8945.	.1062	-.0510	.0191	.2345	.0509	-.0056	4085.		
.0600	-11256.	-3202.	6111.	-5541.	0.	-10206.	.1138	-.0594	.0005	.2581	.0551	-.0217	4660.		
.0610	-12545.	-3568.	6811.	-6176.	0.	-11375.	.1193	-.0643	-.0195	.2757	.0772	-.0383	5194.		

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.0510	7777.	2212.	4222.	3828.	0.	7051.	-1221.	-0482.	.1103	.0120	-0960	.0640	3220.
.0520	5163.	1469.	-1800.	2542.	0.	4682.	-0006.	-0459.	.1020	.0203	-0851	.0646	2138.
.0530	2313.	658.	-1256.	1139.	0.	2097.	.0205	-0415.	.0914	.0440	-0716	.0626	95.
.0540	-376.	-107.	204.	-185.	0.	-341.	.0400	-0376.	.0801	.0713	-0543	.0571	156.
.0550	-2625.	-747.	1425.	-1292.	0.	-2330.	.0580	-0387.	.0694	.0908	-0324	.0479	1087.
.0560	-4559.	-1297.	2475.	-2244.	0.	-4134.	.0739	-0418.	.0592	.1129	-0383	.0358	1888.
.0570	-6431.	-1829.	3491.	-3166.	0.	-5831.	.0865	-0425.	.0484	.1512	.0142	.0226	2662.
.0580	-8243.	-2344.	4475.	-4058.	0.	-7474.	.0968	-0442.	.0352	.1977	.0340	.0090	3413.
.0590	-9866.	-2806.	5356.	-4857.	0.	-8945.	.1062	-0510.	.0191	.2345	.0509	-0056	4085.
.0600	-11256.	-3202.	6111.	-5541.	0.	-10206.	.1138	-0594.	.0005	.2581	.0551	-0217	4660.
.0610	-12545.	-3568.	6811.	-6176.	0.	-11375.	.1193	-0643.	-0195	.2757	.0772	-0383	5194.

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INTERNAL FORCES IN THE PIPING
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SECTION	14	NUMBER	1	SEQUENCE	236	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.0620	-13806.	-3927.	7495.	-6796.	0.	-12518.	.1232	-0668	-0406	.2901	.0885	-0533	5716.		
.0630	-14927.	-4244.	8102.	-7346.	0.	-13530.	.1255	-0700	-0620	.2984	.0985	-0640	6178.		
.0640	-15591.	-4434.	8465.	-7675.	0.	-14136.	.1242	-0738	-0816	.2963	.1075	-0688	6455.		
.0650	-15594.	-4435.	8467.	-7677.	0.	-14139.	.1183	-0772	-0970	.2797	.1172	-0675	6456.		
.0660	-15070.	-4286.	8182.	-7419.	0.	-13664.	.1091	-0798	-1084	.2498	.1276	-0607	6239.		
.0670	-14350.	-4081.	7791.	-7064.	0.	-13011.	.0976	-0801	-1181	.2154	.1361	-0489	5941.		
.0680	-13564.	-3858.	7364.	-6677.	0.	-12298.	.0842	-0780	-1270	.1822	.1407	-0327	5616.		
.0690	-12641.	-3595.	6863.	-6223.	0.	-11462.	.0697	-0763	-1352	.1452	.1424	-0140	5234.		
.0700	-11597.	-3298.	6296.	-5709.	0.	-10515.	.0558	-0762	-1425	.1005	.1419	.0047	4801.		
.0710	-10487.	-2983.	5694.	-5163.	0.	-9509.	.0424	-0748	-1475	.0557	.1383	.0210	4342.		
.0720	-9229.	-2625.	5011.	-4543.	0.	-8368.	.0280	-0689	-1482	.0216	.1307	.0343	3821.		
.0730	-7733.	-2199.	4198.	-3807.	0.	-7012.	.0127	-0603	-1432	-0003	.1197	.0448	3202.		
.0740	-6015.	-1711.	3266.	-2961.	0.	-5454.	-0018	-0524	-1326	-0158	.1064	.0529	2490.		
.0750	-4069.	-1157.	2209.	-2003.	0.	-3689.	-0154	-0462	-1163	-0286	.0920	.0597	1684.		
.0760	-1926.	-548.	1046.	-948.	0.	-1746.	-0283	-0400	-0950	-0385	.0764	.0653	797.		
.0770	221.	63.	-120.	109.	0.	200.	-0398	-0332	-0707	-0450	.0585	.0692	91.		
.0780	2159.	614.	-1172.	1063.	0.	1958.	-0488	-0258	-0458	-0489	.0377	.0707	894.		
.0790	3868.	1100.	-2100.	1904.	0.	3507.	-0552	-0184	-0214	-0516	.0155	.0699	1601.		
.0800	5462.	1554.	-2966.	2689.	0.	4953.	-0599	-0119	.0027	-0553	-0058	.0666	2261.		
.0810	6974.	1984.	-3786.	3433.	0.	6323.	-0625	-0076	.0262	-0616	-0248	.0602	2887.		
.0820	8373.	2382.	-4546.	4122.	0.	7592.	-0631	-0051	.0490	-0669	-0407	.0499	3467.		
.0830	9663.	2748.	-5246.	4757.	0.	8761.	-0628	-0022	.0717	-0650	-0531	.0358	4001.		
.0840	10828.	3080.	-5879.	5331.	0.	9818.	-0618	-0014	.0940	-0550	-0617	.0185	4483.		
.0850	11825.	3363.	-6420.	5821.	0.	10722.	-0592	.0023	.1141	-0434	-0676	-0009	4896.		
.0860	12638.	3594.	-6861.	6221.	0.	11459.	-0547	-0017	.1306	-0345	-0727	-0218	5232.		
.0870	13184.	3750.	-7158.	6490.	0.	11954.	-0489	-0085	.1427	-0242	-0793	-0434	5459.		
.0880	13293.	3781.	-7217.	6544.	0.	12053.	-0419	-0145	.1500	-0077	-0886	-0656	5504.		
.0890	12928.	3677.	-7019.	6364.	0.	11722.	-0330	-0196	.1523	.0119	-0998	-0881	5352.		
.0900	12286.	3494.	-6670.	6048.	0.	11140.	-0225	-0258	.1513	.0282	-1107	-1101	5087.		
.0910	11568.	3290.	-6281.	5695.	0.	10489.	-0117	-0335	.1486	.0399	-1200	-1300	4789.		
.0920	10815.	3076.	-5872.	5324.	0.	9806.	-0013	-0410	.1453	.0505	-1272	-1464	4478.		
.0930	10009.	2847.	-5434.	4927.	0.	9075.	.0083	-0470	.1420	.0620	-1316	-1587	4144.		
.0940	9159.	2605.	-4973.	4509.	0.	8305.	.0168	-0504	.1387	.0728	-1330	-1663	3792.		
.0950	8270.	2352.	-4490.	4071.	0.	7498.	.0241	-0518	.1344	.0787	-1314	-1689	3424.		
.0960	7315.	2081.	-3972.	3601.	0.	6633.	.0307	-0528	.1277	.0758	-1274	-1661	3029.		
.0970	6249.	1777.	-3393.	3076.	0.	5666.	.0367	-0543	.1179	.0646	-1212	-1580	2587.		
.0980	5014.	1426.	-2722.	2468.	0.	4546.	.0418	-0542	.1051	.0510	-1134	-1453	2076.		
.0990	3634.	1034.	-1973.	1789.	0.	3295.	.0451	-0501	.0900	.0391	-1042	-1291	1505.		

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ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.35.

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

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INTERNAL FORCES IN THE PIPING
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.0890	12528.	3677.	7019.	6364.	0.	11722.	-.330	-.0196	.1523	.0119	-.0998	-.0881	5352.
.0900	12286.	3494.	-6670.	6048.	0.	11140.	-.225	-.0258	.1513	.0282	-.1107	-.1101	5087.
.0910	11568.	3290.	-6281.	5695.	0.	10489.	-.0117	-.0335	.1486	.0399	-.1200	-.1300	4789.
.0920	10815.	3076.	-5872.	5324.	0.	9806.	-.0013	-.0410	.1453	.0505	-.1272	-.1464	4478.
.0930	10069.	2847.	-5434.	4927.	0.	9075.	.0083	-.0470	.1420	.0620	-.1316	-.1587	4144.
.0940	9159.	2605.	-4973.	4509.	0.	8305.	.0168	-.0504	.1387	.0728	-.1330	-.1663	3792.
.0950	8270.	2352.	-4490.	4071.	-0.	7498.	.0241	-.0518	.1344	.0787	-.1314	-.1689	3424.
.0960	7315.	2081.	-3972.	3601.	0.	6633.	.0307	-.0528	.1277	.0758	-.1274	-.1661	3029.
.0970	6249.	1777.	-3393.	3076.	0.	5666.	.0367	-.0543	.1179	.0646	-.1212	-.1580	2587.
.0980	5014.	1426.	-2722.	2468.	0.	4546.	.0418	-.0542	.1051	.0510	-.1134	-.1453	2076.
.0990	3634.	1034.	-1973.	1789.	0.	3295.	.0451	-.0501	.0900	.0391	-.1042	-.1291	1505.

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

SECTION	14	MEMBER	1	SEQUENCE	236	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.1000	2257.	642.	-1226.	1111.	0.	2047.		.0465	-.0433	.0733	.0261	-.0932	-.1103	935.	
.1010	1021.	290.	-554.	503.	0.	926.		.0458	-.0357	.0558	.0078	-.0303	-.0894	423.	
.1020	-95.	-27.	52.	-47.	-0.	-36.		.0432	-.0273	.0374	-.0141	-.0556	-.0666	39.	
.1030	-1232.	-350.	669.	-607.	0.	-1117.		.0392	-.0166	.0180	-.0348	-.0496	-.0422	510.	
.1040	-2492.	-709.	1353.	-1227.	0.	-2259.		.0346	-.0036	-.0027	-.0532	-.0329	-.0166	1032.	
.1050	-3890.	-1107.	2112.	-1915.	0.	-3527.		.0301	.0105	-.0253	-.0726	-.0165	.0097	1611.	
.1060	-5392.	-1534.	2927.	-2654.	-0.	-4889.		.0262	.0246	-.0497	-.0964	-.0013	.0358	2232.	
.1070	-6922.	-1969.	3758.	-3408.	-0.	-6276.		.0228	.0383	-.0750	-.1239	.0126	.0610	2866.	
.1080	-8616.	-2451.	4678.	-4242.	0.	-7812.		.0209	.0513	-.1016	-.1501	.0240	.0843	3567.	
.1090	-10798.	-3071.	5862.	-5315.	-0.	-9790.		.0225	.0640	-.1315	-.1698	.0306	.1034	4470.	
.1100	-12513.	-3559.	6794.	-6160.	0.	-11345.		.0224	.0776	-.1562	-.1859	.0372	.1175	5181.	
.1110	-13627.	-3876.	7398.	-6708.	-0.	-12355.		.0214	.0896	-.1738	-.2021	.0458	.1256	5642.	
.1120	-14267.	-4058.	7746.	-7023.	-0.	-12936.		.0205	.0981	-.1848	-.2141	.0569	.1283	5907.	
.1130	-14535.	-4134.	7891.	-7155.	-0.	-13179.		.0189	.1048	-.1897	-.2116	.0695	.1260	6018.	
.1140	-14568.	-4143.	7909.	-7171.	0.	-13209.		.0167	.1110	-.1906	-.1951	.0826	.1184	6031.	
.1150	-14420.	-4101.	7829.	-7098.	0.	-13074.		.0155	.1141	-.1898	-.1776	.0950	.1050	5970.	
.1160	-13999.	-3982.	7601.	-6891.	-0.	-12693.		.0148	.1131	-.1878	-.1662	.1061	.0863	5796.	
.1170	-13381.	-3806.	7265.	-6587.	-0.	-12132.		.0137	.1107	-.1843	-.1536	.1150	.0642	5540.	
.1180	-12319.	-3504.	6688.	-6064.	-0.	-11169.		.0092	.1089	-.1766	-.1319	.1221	.0418	5100.	
.1190	-11020.	-3134.	5983.	-5425.	0.	-9992.		.0036	.1048	-.1658	-.1047	.1284	.0211	4562.	
.1200	-9477.	-2695.	5145.	-4665.	0.	-8592.		-.0022	.0964	-.1522	-.0793	.1348	.0031	3923.	
.1210	-7624.	-2168.	4139.	-3753.	0.	-6912.		-.0096	.0866	-.1364	-.0578	.1388	-.0127	3156.	
.1220	-5761.	-1639.	3128.	-2836.	-0.	-5223.		-.0171	.0787	-.1203	-.0423	.1391	-.0277	2385.	
.1230	-3861.	-1098.	2096.	-1901.	0.	-3501.		-.0244	.0717	-.1036	-.0342	.1343	-.0416	1598.	
.1240	-2050.	-583.	1113.	-1009.	0.	-1859.		-.0307	.0651	-.0867	-.0297	.1240	-.0532	849.	
.1250	-378.	-107.	205.	-186.	0.	-342.		-.0367	.0601	-.0693	-.0231	.1078	-.0612	156.	
.1260	1290.	367.	-700.	635.	-0.	1169.		-.0430	.0562	-.0509	-.0178	.0859	-.0652	534.	
.1270	2601.	740.	-1412.	1280.	0.	2358.		-.0457	.0512	-.0342	-.0222	.0600	-.0667	1077.	
.1280	3636.	1034.	-1974.	1790.	0.	3296.		-.0456	.0469	-.0184	-.0353	.0305	-.0662	1505.	
.1290	4412.	1255.	-2395.	2172.	0.	4000.		-.0442	.0471	-.0025	-.0501	-.0018	-.0637	1827.	
.1300	4978.	1416.	-2703.	2451.	0.	4514.		-.0415	.0501	.0139	-.0659	-.0351	-.0581	2061.	
.1310	5672.	1613.	-3079.	2792.	0.	5143.		-.0388	.0510	.0326	-.0855	-.0670	-.0484	2348.	
.1320	6377.	1814.	-3462.	3139.	0.	5782.		-.0355	.0502	.0529	-.1059	-.0959	-.0350	2640.	
.1330	7121.	2025.	-3866.	3505.	0.	6456.		-.0332	.0517	.0746	-.1220	-.1219	-.0197	2948.	
.1340	7723.	2197.	-4193.	3802.	0.	7002.		-.0310	.0561	.0951	-.1362	-.1442	-.0051	3197.	
.1350	8078.	2297.	-4386.	3976.	0.	7324.		-.0276	.0610	.1123	-.1523	-.1525	.0078	3344.	
.1360	8360.	2378.	-4539.	4115.	0.	7580.		-.0250	.0655	.1262	-.1673	-.1777	.0193	3461.	
.1370	8481.	2412.	-4605.	4175.	0.	7690.		-.0232	.0699	.1360	-.1768	-.1895	.0294	3511.	

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

.1270	2601.	740.	-1412.	1280.	0.	2358.	-.0457	.0512	-.0342	-.0222	.0500	-.0667	1077.
.1280	3636.	1034.	-1974.	1790.	0.	3296.	-.0456	.0469	-.0184	-.0353	.0305	-.0662	1505.
.1290	4412.	1255.	-2395.	2172.	0.	4000.	-.0442	.0471	-.0025	-.0501	-.0018	-.0637	1827.
.1300	4978.	1416.	-2707.	2451.	0.	4514.	-.0415	.0501	.0139	-.0659	-.0351	-.0581	2061.
.1310	5672.	1613.	-3079.	2792.	0.	5143.	-.0388	.0510	.0326	-.0855	-.0670	-.0484	2348.
.1320	6377.	1814.	-3462.	3139.	0.	5782.	-.0355	.0502	.0529	-.1059	-.0959	-.0350	2640.
.1330	7121.	2025.	-3866.	3505.	0.	6456.	-.0332	.0517	.0746	-.1220	-.1219	-.0197	2948.
.1340	7723.	2197.	-4193.	3802.	0.	7002.	-.0310	.0561	.0951	-.1362	-.1442	-.0051	3197.
.1350	8078.	2297.	-4386.	3976.	0.	7324.	-.0276	.0610	.1123	-.1523	-.1525	.0078	3344.
.1360	8360.	2378.	-4539.	4115.	0.	7580.	-.0250	.0655	.1262	-.1673	-.1777	.0193	3461.
.1370	8481.	2412.	-4605.	4175.	0.	7690.	-.0232	.0699	.1360	-.1768	-.1895	.0294	3511.

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

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

SECTION	14	MEMBER	1	SEQUENCE	236	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.1380	8638.	2457.	-4690.	4252.	0.	7832.	-.0232	.0731	.1430	-.1800	-.1972	.0377	3576.		
.1390	8826.	2510.	-4792.	4345.	0.	8002.	-.0248	.0758	.1477	-.1772	-.1993	.0435	3654.		
.1400	9076.	2581.	-4928.	4468.	0.	8229.	-.0284	.0796	.1507	-.1669	-.1952	.0461	3758.		
.1410	9542.	2714.	-5180.	4697.	0.	8651.	-.0351	.0837	.1526	-.1506	-.1849	.0460	3950.		
.1420	9955.	2831.	-5405.	4901.	-0.	9026.	-.0421	.0853	.1514	-.1316	-.1684	.0436	4122.		
.1430	10241.	2913.	-5560.	5042.	0.	9286.	-.0493	.0845	.1464	-.1090	-.1475	.0400	4240.		
.1440	10258.	2918.	-5569.	5050.	-0.	9301.	-.0566	.0840	.1368	-.0810	-.1244	.0355	4247.		
.1450	9996.	2843.	-5427.	4921.	0.	9064.	-.0635	.0843	.1228	-.0520	-.0996	.0300	4139.		
.1460	9599.	2730.	-5212.	4725.	0.	8703.	-.0699	.0837	.1054	-.0286	-.0735	.0245	3974.		
.1470	8880.	2526.	-4821.	4371.	-0.	8051.	-.0740	.0817	.0846	-.0107	-.0458	.0203	3676.		
.1480	8019.	2281.	-4354.	3947.	0.	7271.	-.0774	.0791	.0632	.0068	-.0167	.0192	3320.		
.1490	7022.	1997.	-3812.	3457.	-0.	6367.	-.0797	.0759	.0419	.0242	.0136	.0214	2907.		
.1500	5868.	1669.	-3186.	2889.	0.	5321.	-.0800	.0717	.0209	.0376	.0437	.0260	2430.		
.1510	4713.	1340.	-2559.	2320.	-0.	4273.	-.0794	.0676	.0010	.0456	.0718	.0323	1951.		
.1520	3390.	964.	-1840.	1669.	0.	3073.	-.0771	.0647	-.0189	.0497	.0961	.0393	1403.		
.1530	1951.	555.	-1059.	960.	-0.	1769.	-.0734	.0623	-.0386	.0508	.1152	.0466	808.		
.1540	248.	70.	-135.	122.	0.	225.	-.0670	.0595	-.0594	.0491	.1286	.0535	103.		
.1550	-1702.	-484.	924.	-838.	0.	-1543.	-.0582	.0569	-.0809	.0463	.1366	.0596	705.		
.1560	-3603.	-1025.	1956.	-1774.	-0.	-3267.	-.0491	.0556	-.1007	.0431	.1401	.0651	1492.		
.1570	-5523.	-1571.	2999.	-2719.	0.	-5008.	-.0387	.0551	-.1186	.0376	.1406	.0694	2287.		
.1580	-7234.	-2058.	3928.	-3561.	0.	-6559.	-.0282	.0543	-.1330	.0301	.1389	.0736	2995.		
.1590	-8571.	-2438.	4653.	-4219.	0.	-7771.	-.0194	.0536	-.1426	.0243	.1354	.0788	3548.		
.1600	-9657.	-2747.	5243.	-4754.	-0.	-8756.	-.0119	.0532	-.1482	.0218	.1304	.0854	3998.		
.1610	-10551.	-3001.	5728.	-5194.	0.	-9567.	-.0047	.0524	-.1506	.0193	.1250	.0930	4368.		
.1620	-11172.	-3178.	6066.	-5500.	0.	-10130.	.0016	.0508	.1504	.0140	.1193	.1008	4626.		
.1630	-11713.	-3331.	6359.	-5766.	-0.	-10620.	.0079	.0494	-.1487	.0072	.1135	.1080	4849.		
.1640	-12075.	-3434.	6556.	-5944.	0.	-10948.	.0136	.0482	-.1450	.0005	.1074	.1143	4999.		
.1650	-12113.	-3445.	6577.	-5963.	0.	-10983.	.0179	.0460	-.1383	-.0051	.1011	.1194	5015.		
.1660	-11937.	-3395.	6481.	-5876.	0.	-10824.	.0215	.0432	-.1290	-.0074	.0947	.1224	4942.		
.1670	-11389.	-3239.	6183.	-5606.	0.	-10326.	.0231	.0408	-.1160	-.0051	.0880	.1229	4715.		
.1680	-10529.	-2995.	5717.	-5183.	-0.	-9547.	.0237	.0380	-.0998	-.0010	.0817	.1201	4359.		
.1690	-9342.	-2657.	5072.	-4599.	0.	-8470.	.0233	.0342	-.0809	.0034	.0752	.1137	3868.		
.1700	-7986.	-2272.	4337.	-3932.	-0.	-7243.	.0224	.0299	-.0605	.0108	.0673	.1035	3307.		
.1710	-6729.	-1914.	3653.	-3312.	0.	-6101.	.0223	.0259	-.0407	.0228	.0576	.0899	2786.		
.1720	-5365.	-1532.	2924.	-2651.	-0.	-4883.	.0217	.0213	-.0210	.0366	.0458	.0740	2230.		
.1730	-4107.	-1168.	2230.	-2022.	0.	-3723.	.0218	.0157	-.0028	.0486	.0318	.0560	1700.		
.1740	-2834.	-806.	1539.	-1395.	0.	-2570.	.0219	.0093	.0140	.0586	.0154	.0366	1174.		
.1750	-1467.	-417.	797.	-722.	0.	-1331.	.0210	.0027	.0304	.0681	-.0026	.0170	608.		

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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
FORCES AND MOMENTS ACT ON THE PIPING

.1270	2601.	740.	-1412.	1280.	0.	2358.	-.457	.0512	-.0342	-.0222	.0500	-.0667	1077.
.1280	3636.	1034.	-1974.	1790.	0.	3296.	-.456	.0469	-.0184	-.0353	.0305	-.0662	1505.
.1290	4412.	1255.	-2395.	2172.	0.	4000.	-.0442	.0471	-.0025	-.0501	-.0018	-.0637	1827.
.1300	4978.	1416.	-2703.	2451.	0.	4514.	-.0415	.0501	.0139	-.0659	-.0351	-.0581	2061.
.1310	5672.	1613.	-3079.	2792.	0.	5143.	-.0388	.0510	.0326	-.0855	-.0670	-.0484	2348.
.1320	6377.	1814.	-3462.	3139.	0.	5782.	-.0355	.0502	.0529	-.1059	-.0759	-.0350	2640.
.1330	7121.	2025.	-3866.	3505.	0.	6456.	-.0332	.0517	.0746	-.1220	-.1219	-.0197	2948.
.1340	7723.	2197.	-4193.	3802.	0.	7002.	-.0310	.0561	.0951	-.1362	-.1442	-.0051	3197.
.1350	8078.	2297.	-4386.	3976.	0.	7324.	-.0276	.0610	.1123	-.1523	-.1525	.0078	3344.
.1360	8360.	2378.	-4539.	4115.	0.	7580.	-.0250	.0655	.1262	-.1673	-.1777	.0193	3461.
.1370	8481.	2412.	-4605.	4175.	0.	7690.	-.0232	.0699	.1360	-.1768	-.1895	.0294	3511.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.35.

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	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU								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)		
.1380	8638.	2457.	-4690.	4252.	0.	7832.	-.0232	.0731	.1430	-.1800	-.1972	.0377	3576.	
.1390	8826.	2510.	-4792.	4345.	0.	8002.	-.0248	.0758	.1477	-.1772	-.1993	.0435	3654.	
.1400	9076.	2581.	-4928.	4468.	0.	8229.	-.0284	.0796	.1507	-.1669	-.1952	.0461	3758.	
.1410	9542.	2714.	-5180.	4697.	0.	8651.	-.0351	.0837	.1526	-.1506	-.1849	.0460	3950.	
.1420	9955.	2831.	-5405.	4901.	-0.	9026.	-.0421	.0853	.1514	-.1316	-.1684	.0436	4122.	
.1430	10241.	2913.	-5560.	5042.	0.	9286.	-.0493	.0845	.1464	-.1090	-.1475	.0400	4240.	
.1440	10258.	2918.	-5569.	5050.	-0.	9301.	-.0566	.0840	.1368	-.0810	-.1244	.0355	4247.	
.1450	9996.	2843.	-5427.	4921.	0.	9064.	-.0635	.0843	.1228	-.0520	-.0996	.0300	4139.	
.1460	9599.	2730.	-5212.	4725.	0.	8703.	-.0699	.0837	.1054	-.0286	-.0735	.0245	3974.	
.1470	8880.	2526.	-4821.	4371.	-0.	8051.	-.0740	.0817	.0846	-.0107	-.0458	.0203	3676.	
.1480	8019.	2281.	-4354.	3947.	0.	7271.	-.0774	.0791	.0632	.0068	-.0167	.0192	3320.	
.1490	7022.	1997.	-3812.	3457.	-0.	6367.	-.0797	.0759	.0419	.0242	.0136	.0214	2907.	
.1500	5868.	1669.	-3186.	2889.	0.	5321.	-.0800	.0717	.0209	.0376	.0437	.0260	2430.	
.1510	4713.	1340.	-2559.	2320.	-0.	4273.	-.0794	.0676	.0010	.0456	.0718	.0323	1951.	
.1520	3390.	964.	-1840.	1669.	0.	3073.	-.0771	.0647	-.0189	.0497	.0961	.0393	1403.	
.1530	1951.	555.	-1059.	960.	-0.	1769.	-.0734	.0623	-.0386	.0508	.1152	.0466	808.	
.1540	248.	70.	-135.	122.	0.	225.	-.0670	.0595	-.0594	.0491	.1286	.0535	103.	
.1550	-1702.	-484.	924.	-838.	0.	-1543.	-.0582	.0569	-.0809	.0463	.1366	.0596	705.	
.1560	-3603.	-1025.	1956.	-1774.	-0.	-3267.	-.0491	.0556	-.1007	.0431	.1401	.0651	1492.	
.1570	-5523.	-1571.	2999.	-2719.	0.	-5008.	-.0387	.0551	-.1186	.0376	.1406	.0694	2287.	
.1580	-7234.	-2058.	3928.	-3561.	0.	-6559.	-.0282	.0543	-.1330	.0301	.1389	.0736	2995.	
.1590	-8571.	-2438.	4653.	-4219.	0.	-7771.	-.0194	.0536	-.1426	.0243	.1354	.0788	3548.	
.1600	-9657.	-2747.	5243.	-4754.	-0.	-8756.	-.0119	.0532	-.1482	.0218	.1304	.0854	3998.	
.1610	-10551.	-3001.	5728.	-5194.	0.	-9567.	-.0047	.0524	-.1506	.0193	.1250	.0930	4368.	
.1620	-11172.	-3178.	6066.	-5500.	0.	-10130.	.0016	.0509	-.1504	.0140	.1193	.1008	4626.	
.1630	-11713.	-3331.	6359.	-5766.	-0.	-10620.	.0079	.0494	-.1487	.0072	.1135	.1080	4849.	
.1640	-12075.	-3434.	6556.	-5944.	0.	-10948.	.0136	.0482	-.1450	.0005	.1074	.1143	4999.	
.1650	-12113.	-3445.	6577.	-5963.	0.	-10983.	.0179	.0460	-.1383	-.0051	.1011	.1194	5015.	
.1660	-11937.	-3395.	6481.	-5876.	0.	-10824.	.0215	.0432	-.1290	-.0074	.0947	.1224	4942.	
.1670	-11389.	-3239.	6183.	-5606.	0.	-10326.	.0231	.0408	-.1160	-.0051	.0880	.1229	4715.	
.1680	-10529.	-2995.	5717.	-5183.	-0.	-9547.	.0237	.0380	-.0998	-.0010	.0817	.1201	4359.	
.1690	-9342.	-2657.	5072.	-4599.	0.	-8470.	.0233	.0342	-.0809	.0034	.0752	.1137	3868.	
.1700	-7988.	-2272.	4337.	-3932.	-0.	-7243.	.0224	.0299	-.0605	.0108	.0673	.1035	3307.	
.1710	-6729.	-1914.	3653.	-3312.	0.	-6101.	.0223	.0259	-.0407	.0220	.0576	.0899	2786.	
.1720	-5385.	-1532.	2924.	-2651.	-0.	-4883.	.0217	.0213	-.0210	.0366	.0458	.0740	2230.	
.1730	-4107.	-1168.	2230.	-2022.	0.	-3723.	.0218	.0157	-.0028	.0486	.0318	.0560	1700.	
.1740	-2834.	-806.	1539.	-1395.	0.	-2570.	.0219	.0093	.0140	.0586	.0154	.0366	1174.	
.1750	-1467.	-417.	797.	-722.	0.	-1331.	.0210	.0027	.0304	.0681	-.0026	.0170	608.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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S/RV PIPING KEWAUNEE GKW02F 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

.1650	-12113.	-3445.	6577.	-5963.	0.	-10983.	.0179	.0460	-.1383	-.0051	.1011	.1194	5015.
.1660	-11937.	-3395.	6481.	-5876.	0.	-10824.	.0215	.0432	-.1290	-.0074	.0947	.1224	4942.
.1670	-11389.	-3239.	6183.	-5606.	0.	-10326.	.0231	.0408	-.1160	-.0051	.0880	.1229	4715.
.1680	-10529.	-2995.	5717.	-5183.	-0.	-9547.	.0237	.0380	-.0998	-.0010	.0817	.1201	4359.
.1690	-9342.	-2657.	5072.	-4599.	0.	-8470.	.0233	.0342	-.0809	.0034	.0752	.1137	3868.
.1700	-7986.	-2272.	4337.	-3932.	-0.	-7243.	.0224	.0299	-.0605	.0108	.0573	.1035	3307.
.1710	-6729.	-1914.	3653.	-3312.	0.	-6101.	.0223	.0259	-.0407	.0228	.0576	.0899	2786.
.1720	-5385.	-1532.	2924.	-2651.	-0.	-4853.	.0217	.0213	-.0210	.0366	.0458	.0740	2230.
.1730	-4107.	-1168.	2230.	-2022.	0.	-3723.	.0218	.0157	-.0028	.0486	.0318	.0560	1700.
.1740	-2834.	-806.	1539.	-1395.	0.	-2570.	.0219	.0093	.0140	.0586	.0154	.0366	1174.
.1750	-1467.	-417.	797.	-722.	0.	-1331.	.0210	.0027	.0304	.0681	-.0026	.0170	608.

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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	14	MEMBER	1	SEQUENCE	236	LOCATION	END	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.1760	-133.	-38.	72.	-65.	0.	-120.	.0198	-.0038	.0461	.0784	-.0204	-.0018	55.	
.1770	1316.	374.	-714.	648.	0.	1193.	.0171	-.0106	.0620	.0890	-.0372	-.0187	545.	
.1780	2811.	800.	-1526.	1384.	0.	2549.	.0136	-.0182	.0772	.0975	-.0517	-.0335	1164.	
.1790	4432.	1261.	-2406.	2182.	0.	4018.	.0087	-.0267	.0918	.1021	-.0632	-.0459	1835.	
.1800	6100.	1735.	-3312.	3003.	0.	5531.	.0024	-.0354	.1050	.1045	-.0722	-.0558	2525.	
.1810	7563.	2151.	-4106.	3723.	0.	6858.	-.0040	-.0432	.1154	.1066	-.0785	-.0637	3131.	
.1820	8971.	2552.	-4871.	4416.	-0.	8134.	-.0115	-.0502	.1234	.1079	-.0821	-.0697	3714.	
.1830	10242.	2913.	-5561.	5042.	-0.	9286.	-.0192	-.0572	.1286	.1065	-.0827	-.0739	4240.	
.1840	11380.	3237.	-6179.	5602.	0.	10319.	-.0269	-.0644	.1313	.1024	-.0807	-.0765	4712.	
.1850	12406.	3529.	-6736.	6107.	0.	11248.	-.0346	-.0708	.1324	.0977	-.0761	-.0777	5136.	
.1860	13227.	3762.	-7182.	6511.	0.	11993.	-.0416	-.0756	.1321	.0941	-.0694	-.0781	5476.	
.1870	13958.	3970.	-7578.	6871.	0.	12655.	-.0487	-.0785	.1315	.0921	-.0617	-.0775	5779.	
.1880	14479.	4118.	-7861.	7128.	0.	13128.	-.0548	-.0803	.1298	.0900	-.0540	-.0758	5995.	
.1890	14797.	4209.	-8034.	7284.	-0.	13416.	-.0596	-.0816	.1269	.0866	-.0472	-.0729	6126.	
.1900	14855.	4225.	-8065.	7313.	0.	13469.	-.0628	-.0820	.1226	.0825	-.0418	-.0688	6150.	
.1910	14440.	4107.	-7840.	7108.	0.	13092.	-.0631	-.0805	.1158	.0789	-.0384	-.0637	5978.	
.1920	13617.	3873.	-7393.	6703.	0.	12347.	-.0610	-.0774	.1067	.0755	-.0370	-.0575	5638.	
.1930	12428.	3535.	-6748.	6118.	-0.	11269.	-.0563	-.0740	.0956	.0700	-.0367	-.0501	5145.	
.1940	10923.	3107.	-5930.	5377.	-0.	9904.	-.0490	-.0706	.0829	.0619	-.0366	-.0414	4522.	
.1950	9175.	2610.	-4981.	4517.	-0.	8319.	-.0397	-.0673	.0695	.0531	-.0359	-.0313	3799.	
.1960	7261.	2065.	-3942.	3574.	-0.	6584.	-.0291	-.0640	.0560	.0456	-.0341	-.0201	3006.	
.1970	5241.	1491.	-2846.	2580.	-0.	4752.	-.0175	-.0608	.0425	.0395	-.0311	-.0086	2170.	
.1980	3179.	904.	-1726.	1565.	-0.	2882.	-.0052	-.0580	.0292	.0338	-.0265	.0023	1316.	
.1990	1126.	320.	-611.	554.	-0.	1021.	.0075	-.0558	.0160	.0281	-.0200	.0118	466.	
.2000	-913.	-260.	496.	-450.	-0.	-828.	.0204	-.0545	.0025	.0234	-.0120	.0195	378.	
.2010	-2936.	-835.	1594.	-1445.	-0.	-2662.	.0333	-.0539	-.0114	.0215	-.0030	.0249	1216.	
.2020	-4872.	-1386.	2645.	-2399.	0.	-4418.	.0455	-.0540	-.0255	.0228	.0064	.0278	2017.	
.2030	-6622.	-1884.	3595.	-3260.	-0.	-6005.	.0563	-.0547	-.0392	.0270	.0162	.0277	2742.	
.2040	-8123.	-2310.	4410.	-3999.	-0.	-7365.	.0656	-.0560	-.0519	.0331	.0267	.0249	3363.	
.2050	-9334.	-2655.	5068.	-4595.	0.	-8463.	.0730	-.0581	-.0631	.0414	.0379	.0197	3864.	
.2060	-10227.	-2909.	5552.	-5034.	0.	-9272.	.0784	-.0611	-.0724	.0528	.0496	.0126	4234.	
.2070	-10811.	-3075.	5869.	-5322.	0.	-9802.	.0818	-.0648	-.0797	.0676	.0614	.0042	4476.	
.2080	-11130.	-3166.	6043.	-5479.	0.	-10092.	.0835	-.0689	-.0851	.0846	.0726	-.0055	4608.	
.2090	-11219.	-3191.	6091.	-5523.	0.	-10172.	.0838	-.0730	-.0890	.1016	.0827	-.0162	4645.	
.2100	-11099.	-3157.	6026.	-5464.	0.	-10063.	.0829	-.0770	-.0914	.1171	.0910	-.0275	4595.	
.2110	-10822.	-3078.	5875.	-5327.	0.	-9812.	.0811	-.0806	-.0925	.1310	.0967	-.0388	4480.	
.2120	-10431.	-2967.	5667.	-5135.	0.	-9458.	.0788	-.0838	-.0920	.1430	.0997	-.0491	4319.	
.2130	-9930.	-2824.	5392.	-4888.	0.	-9004.	.0762	-.0862	-.0897	.1524	.1001	-.0578	4111.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.35.

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

.2020	-1020.	-1304.	590.	-3260.	0.	-6005.	.563	-.0547	-.0792	.0270	.0162	.0277	2742.
.2040	-8127.	-2310.	4410.	-3999.	0.	-7355.	.656	-.0560	-.0519	.0331	.0267	.0249	3363.
.2050	-9334.	-2655.	5068.	-4595.	0.	-8463.	.0730	-.0581	-.0631	.0414	.0379	.0197	3864.
.2060	-10227.	-2909.	5557.	-5074.	0.	-9272.	.0784	-.0611	-.0724	.0528	.0496	.0126	4234.
.2070	-10811.	-3075.	5869.	-5322.	0.	-9802.	.0818	-.0648	-.0797	.0676	.0514	.0042	4476.
.2080	-11130.	-3166.	6047.	-5479.	0.	-10092.	.0835	-.0689	-.0851	.0846	.0726	-.0055	4608.
.2090	-11219.	-3191.	6091.	-5523.	0.	-10172.	.0838	-.0730	-.0890	.1016	.0827	-.0162	4645.
.2100	-11099.	-3157.	6026.	-5464.	0.	-10063.	.0829	-.0770	-.0914	.1171	.0910	-.0275	4595.
.2110	-10822.	-3078.	5975.	-5327.	0.	-9812.	.0811	-.0806	-.0925	.1310	.0967	-.0388	4480.
.2120	-10431.	-2967.	5662.	-5135.	0.	-9458.	.0788	-.0838	-.0920	.1430	.0997	-.0491	4319.
.2130	-9930.	-2824.	5392.	-4888.	0.	-9004.	.0762	-.0862	-.0897	.1524	.1001	-.0578	4111.

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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

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CONDITION 24

LOADS

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ENGLISH UNITS

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

SECTION	14	MEMBER	1	SEQUENCE	236	LOCATION	END	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.2140	-9303.	-2646.	5051.	-4580.	0.	-8435.	.0731	-.0876	-.0850	.1577	.0982	-.0642	3852.	
.2150	-8539.	-2429.	4636.	-4204.	0.	-7743.	.0698	-.0878	-.0778	.1578	.0941	-.0681	3535.	
.2160	-7652.	-2176.	4154.	-3767.	0.	-6938.	.0660	-.0869	-.0683	.1524	.0874	-.0691	3168.	
.2170	-6672.	-1898.	3622.	-3284.	0.	-6050.	.0619	-.0849	-.0569	.1425	.0780	-.0669	2762.	
.2180	-5645.	-1606.	3065.	-2779.	0.	-5118.	.0573	-.0816	-.0444	.1293	.0560	-.0618	2337.	
.2190	-4596.	-1307.	2495.	-2262.	0.	-4167.	.0523	-.0769	-.0312	.1128	.0516	-.0545	1903.	
.2200	-3519.	-1001.	1911.	-1732.	0.	-3191.	.0468	-.0714	-.0181	.0929	.0355	-.0457	1457.	
.2210	-2419.	-688.	1313.	-1191.	0.	-2193.	.0408	-.0649	-.0053	.0711	.0184	-.0362	1002.	
.2220	-1312.	-373.	712.	-646.	0.	-1190.	.0340	-.0576	.0070	.0496	.0012	-.0266	543.	
.2230	-191.	-54.	104.	-94.	0.	-173.	.0264	-.0496	.0186	.0304	-.0154	-.0175	79.	
.2240	979.	279.	-532.	482.	0.	888.	.0180	-.0417	.0297	.0140	-.0305	-.0094	405.	
.2250	2222.	632.	-1206.	1094.	0.	2015.	.0086	-.0342	.0404	.0004	-.0437	-.0025	920.	
.2260	3529.	1004.	-1916.	1737.	0.	3200.	-.0016	-.0271	.0507	-.0100	-.0548	.0027	1461.	
.2270	4859.	1382.	-2638.	2392.	0.	4406.	-.0121	-.0206	.0606	-.0170	-.0539	.0062	2012.	
.2280	6151.	1749.	-3339.	3028.	0.	5577.	-.0225	-.0147	.0697	-.0202	-.0708	.0079	2546.	
.2290	7363.	2094.	-3997.	3624.	0.	6676.	-.0322	-.0098	.0780	-.0205	-.0760	.0083	3048.	
.2300	8483.	2413.	-4606.	4176.	0.	7691.	-.0411	-.0063	.0853	-.0193	-.0798	.0074	3512.	
.2310	9494.	2700.	-5155.	4674.	0.	8608.	-.0487	-.0039	.0918	-.0178	-.0822	.0053	3931.	
.2320	10360.	2947.	-5625.	5100.	0.	9393.	-.0549	-.0023	.0974	-.0158	-.0833	.0024	4289.	
.2330	11052.	3143.	-6000.	5441.	0.	10021.	-.0596	-.0011	.1022	-.0133	-.0833	-.0011	4576.	
.2340	11565.	3289.	-6279.	5693.	0.	10486.	-.0626	-.0005	.1059	-.0110	-.0821	-.0049	4788.	
.2350	11882.	3380.	-6451.	5849.	0.	10774.	-.0640	-.0009	.1083	-.0098	-.0797	-.0087	4919.	
.2360	11966.	3403.	-6497.	5891.	0.	10850.	-.0636	-.0020	.1087	-.0100	-.0761	-.0125	4954.	
.2370	11779.	3350.	-6395.	5798.	0.	10680.	-.0615	-.0032	.1068	-.0112	-.0717	-.0164	4877.	
.2380	11303.	3215.	-6136.	5564.	0.	10248.	-.0578	-.0040	.1020	-.0130	-.0568	-.0205	4679.	
.2390	10543.	2999.	-5724.	5190.	0.	9559.	-.0528	-.0045	.0943	-.0154	-.0516	-.0248	4365.	
.2400	9528.	2710.	-5173.	4690.	0.	8639.	-.0467	-.0046	.0836	-.0185	-.0562	-.0292	3945.	
.2410	8296.	2360.	-4504.	4084.	0.	7522.	-.0398	-.0041	.0704	-.0220	-.0504	-.0335	3435.	
.2420	6880.	1957.	-3736.	3387.	0.	6238.	-.0322	-.0025	.0555	-.0252	-.0440	-.0377	2849.	
.2430	5321.	1514.	-2889.	2620.	0.	4825.	-.0243	-.0004	.0394	-.0279	-.0369	-.0413	2203.	
.2440	3674.	1045.	-1995.	1809.	0.	3332.	-.0164	.0046	.0228	-.0303	-.0292	-.0440	1521.	
.2450	1983.	564.	-1076.	976.	0.	1798.	-.0084	.0099	.0062	-.0332	-.0212	-.0451	821.	
.2460	268.	76.	-146.	132.	0.	243.	-.0005	.0161	-.0098	-.0369	-.0131	-.0443	111.	
.2470	-1445.	-411.	784.	-711.	0.	-1310.	.0072	.0232	-.0250	-.0415	-.0051	-.0411	598.	
.2480	-3113.	-885.	1690.	-1533.	0.	-2823.	.0146	.0310	-.0390	-.0471	.0025	-.0357	1289.	
.2490	-4695.	-1335.	2549.	-2311.	0.	-4257.	.0213	.0393	-.0516	-.0536	.0093	-.0280	1944.	
.2500	-6160.	-1752.	3344.	-3032.	0.	-5585.	.0274	.0480	-.0626	-.0613	.0154	-.0185	2550.	
.2510	-7473.	-2125.	4057.	-3679.	0.	-6776.	.0325	.0569	-.0720	-.0699	.0209	-.0076	3094.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.35.

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

.2410	8296.	2367.	-4504.	4074.	-0.	7522.	-0.398	-0.0041	.0704	-0.0220	-0.0504	-0.0335	3435.
.2420	6880.	1957.	-3736.	3387.	-0.	6238.	-0.322	-0.0025	.0555	-0.0252	-0.0440	-0.0377	2849.
.2430	5321.	1514.	-2889.	2620.	0.	4825.	-0.243	.0004	.0394	-0.0279	-0.0369	-0.0413	2203.
.2440	3674.	1045.	-1995.	1809.	0.	3332.	-0.164	.0046	.0228	-0.0303	-0.0292	-0.0440	1521.
.2450	1983.	564.	-1076.	976.	0.	1798.	-0.084	.0099	.0062	-0.0332	-0.0212	-0.0451	821.
.2460	268.	76.	-146.	132.	0.	243.	-0.005	.0161	-0.0098	-0.0369	-0.0131	-0.0443	111.
.2470	-1445.	-411.	784.	-711.	0.	-1310.	.0072	.0232	-0.0250	-0.0415	-0.0051	-0.0411	598.
.2480	-3113.	-885.	1698.	-1533.	0.	-2823.	.0146	.0310	-0.0390	-0.0471	.0025	-0.0357	1289.
.2490	-4695.	-1335.	2549.	-2311.	0.	-4257.	.0213	.0393	-0.0516	-0.0536	.0093	-0.0280	1944.
.2500	-6160.	-1752.	3344.	-3032.	0.	-5585.	.0274	.0480	-0.0626	-0.0613	.0154	-0.0185	2550.
.2510	-7473.	-2125.	4057.	-3679.	0.	-6776.	.0325	.0569	-0.0720	-0.0699	.0209	-0.0076	3094.

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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	14	MEMBER	1	SEQUENCE	236	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2520	-8596.	-2445.	4667.	-4232.	0.	-7794.	.0365	.0655	-0.0796	-0.0792	.0261	.0041	3559.		
.2530	-9501.	-2702.	5158.	-4677.	0.	-8614.	.0390	.0739	-0.0858	-0.0887	.0309	.0159	3933.		
.2540	-10179.	-2895.	5526.	-5011.	0.	-9229.	.0401	.0818	-0.0908	-0.0980	.0354	.0273	4214.		
.2550	-10640.	-3026.	5777.	-5238.	0.	-9647.	.0396	.0892	-0.0949	-0.1070	.0395	.0377	4405.		
.2560	-10906.	-3102.	5921.	-5369.	-0.	-9888.	.0377	.0961	-0.0984	-0.1160	.0435	.0468	4515.		
.2570	-10990.	-3126.	5967.	-5410.	0.	-9964.	.0346	.1021	-0.1018	-0.1251	.0470	.0544	4550.		
.2580	-10901.	-3101.	5918.	-5366.	-0.	-9884.	.0303	.1068	-0.1052	-0.1347	.0499	.0605	4513.		
.2590	-10658.	-3031.	5787.	-5247.	0.	-9664.	.0250	.1104	-0.1085	-0.1441	.0518	.0652	4413.		
.2600	-10282.	-2924.	5582.	-5061.	0.	-9322.	.0189	.1131	-0.1114	-0.1528	.0527	.0683	4257.		
.2610	-9770.	-2779.	5305.	-4810.	-0.	-8859.	.0123	.1152	-0.1135	-0.1608	.0528	.0697	4045.		
.2620	-9102.	-2589.	4942.	-4481.	-0.	-8253.	.0053	.1162	-0.1144	-0.1683	.0519	.0696	3768.		
.2630	-8272.	-2353.	4491.	-4072.	-0.	-7500.	-0.0020	.1163	-0.1135	-0.1751	.0500	.0679	3425.		
.2640	-7305.	-2078.	3966.	-3596.	0.	-6623.	-0.0095	.1156	-0.1108	-0.1799	.0468	.0649	3024.		
.2650	-6232.	-1773.	3384.	-3068.	-0.	-5651.	-0.0168	.1145	-0.1059	-0.1823	.0426	.0606	2580.		
.2660	-5075.	-1444.	2756.	-2498.	-0.	-4602.	-0.0239	.1131	-0.0992	-0.1829	.0373	.0553	2101.		
.2670	-3849.	-1095.	2090.	-1895.	-0.	-3490.	-0.0306	.1111	-0.0907	-0.1825	.0309	.0491	1593.		
.2680	-2578.	-733.	1399.	-1269.	-0.	-2337.	-0.0368	.1086	-0.0807	-0.1816	.0236	.0426	1067.		
.2690	-1299.	-369.	705.	-639.	-0.	-1178.	-0.0423	.1057	-0.0695	-0.1797	.0156	.0359	538.		
.2700	-41.	-12.	22.	-20.	-0.	-37.	-0.0473	.1028	-0.0573	-0.1764	.0073	.0295	17.		
.2710	1195.	340.	-649.	588.	0.	1084.	-0.0517	.1000	-0.0441	-0.1722	-0.0010	.0235	495.		
.2720	2419.	688.	-1313.	1191.	-0.	2193.	-0.0557	.0973	-0.0301	-0.1680	-0.0092	.0178	1001.		
.2730	3612.	1027.	-1961.	1778.	0.	3275.	-0.0592	.0948	-0.0156	-0.1638	-0.0173	.0127	1496.		
.2740	4722.	1343.	-2564.	2324.	0.	4281.	-0.0621	.0929	-0.0009	-0.1593	-0.0253	.0083	1955.		
.2750	5700.	1621.	-3095.	2806.	0.	5168.	-0.0642	.0917	.0133	-0.1541	-0.0333	.0047	2360.		
.2760	6527.	1856.	-3544.	3213.	0.	5918.	-0.0655	.0911	.0267	-0.1490	-0.0414	.0018	2702.		
.2770	7189.	2045.	-3903.	3539.	0.	6518.	-0.0659	.0910	.0389	-0.1448	-0.0496	-0.0003	2976.		
.2780	7664.	2180.	-4161.	3773.	0.	6949.	-0.0652	.0913	.0497	-0.1411	-0.0577	-0.0017	3173.		
.2790	7942.	2259.	-4312.	3910.	0.	7201.	-0.0637	.0920	.0589	-0.1370	-0.0656	-0.0020	3288.		
.2800	8031.	2284.	-4360.	3954.	-0.	7282.	-0.0613	.0931	.0667	-0.1324	-0.0728	-0.0014	3325.		
.2810	7956.	2263.	-4320.	3917.	-0.	7214.	-0.0583	.0942	.0728	-0.1274	-0.0789	.0001	3294.		
.2820	7736.	2200.	-4200.	3808.	0.	7014.	-0.0548	.0950	.0773	-0.1223	-0.0836	.0023	3203.		
.2830	7373.	2097.	-4003.	3630.	0.	6685.	-0.0508	.0956	.0800	-0.1169	-0.0865	.0053	3053.		
.2840	6862.	1952.	-3725.	3378.	0.	6221.	-0.0464	.0959	.0806	-0.1111	-0.0876	.0089	2841.		
.2850	6206.	1765.	-3369.	3055.	0.	5627.	-0.0416	.0957	.0789	-0.1050	-0.0868	.0127	2569.		
.2860	5428.	1544.	-2947.	2672.	0.	4922.	-0.0367	.0949	.0750	-0.0991	-0.0841	.0167	2247.		
.2870	4560.	1297.	-2476.	2245.	0.	4134.	-0.0318	.0933	.0688	-0.0934	-0.0798	.0208	1888.		
.2880	3629.	1032.	-1971.	1787.	0.	3291.	-0.0270	.0909	.0608	-0.0879	-0.0739	.0251	1503.		
.2890	2674.	761.	-1452.	1316.	0.	2424.	-0.0225	.0877	.0512	-0.0824	-0.0664	.0293	1107.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.35.

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

.2790	7942.	2259.	-4312.	3910.	0.	7201.	-.0637	.0920	.0589	-.1370	-.0656	-.0020	3288.
.2800	8031.	2284.	-4360.	3954.	-0.	7282.	-.0613	.0731	.0667	-.1324	-.0728	-.0014	3325.
.2810	7956.	2263.	-4320.	3917.	-0.	7214.	-.0583	.0942	.0728	-.1274	-.0789	.0001	3294.
.2820	7736.	2200.	-4200.	3802.	0.	7014.	-.0543	.0950	.0773	-.1223	-.0836	.0023	3203.
.2830	7773.	2097.	-4003.	3630.	0.	6685.	-.0508	.0956	.0800	-.1169	-.0865	.0053	3053.
.2840	6862.	1952.	-3725.	3378.	0.	6221.	-.0464	.0959	.0806	-.1111	-.0876	.0089	2841.
.2850	6206.	1765.	-3369.	3055.	0.	5627.	-.0416	.0957	.0789	-.1050	-.0868	.0127	2569.
.2860	5428.	1544.	-2947.	2672.	0.	4922.	-.0367	.0949	.0750	-.0991	-.0841	.0167	2247.
.2870	4560.	1297.	-2476.	2245.	0.	4134.	-.0318	.0933	.0688	-.0934	-.0798	.0208	1888.
.2880	3629.	1032.	-1971.	1787.	0.	3291.	-.0270	.0909	.0608	-.0879	-.0739	.0251	1503.
.2890	2674.	761.	-1452.	1316.	0.	2424.	-.0225	.0877	.0512	-.0824	-.0664	.0293	1107.

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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	14	MEMBER	1	SEQUENCE	236	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2900	1734.	493.	-941.	854.	0.	1572.	-.0185	.0838	.0407	-.0767	-.0574	.0334	718.		
.2910	842.	240.	-457.	415.	0.	764.	-.0152	.0791	.0296	-.0706	-.0472	.0374	349.		
.2920	15.	4.	-8.	7.	-0.	13.	-.0125	.0737	.0180	-.0641	-.0359	.0411	6.		
.2930	-747.	-212.	406.	-368.	0.	-677.	-.0104	.0677	.0064	-.0570	-.0236	.0443	309.		
.2940	-1449.	-412.	787.	-713.	0.	-1314.	-.0089	.0614	-.0053	-.0491	-.0104	.0469	600.		
.2950	-2098.	-597.	1139.	-1033.	-0.	-1903.	-.0078	.0550	-.0170	-.0402	.0033	.0488	869.		
.2960	-2698.	-767.	1465.	-1328.	-0.	-2446.	-.0071	.0486	-.0285	-.0305	.0176	.0499	1117.		
.2970	-3248.	-924.	1764.	-1599.	0.	-2945.	-.0068	.0424	-.0397	-.0200	.0321	.0505	1345.		
.2980	-3751.	-1067.	2037.	-1847.	0.	-3401.	-.0067	.0364	-.0503	-.0087	.0467	.0507	1553.		
.2990	-4205.	-1196.	2283.	-2070.	0.	-3813.	-.0069	.0308	-.0600	.0034	.0613	.0509	1741.		
.3000	-4604.	-1310.	2500.	-2266.	-0.	-4174.	-.0072	.0256	-.0686	.0157	.0755	.0512	1906.		
.3010	-4949.	-1408.	2687.	-2436.	0.	-4487.	-.0075	.0208	-.0760	.0278	.0886	.0517	2049.		
.3020	-5252.	-1494.	2851.	-2585.	-0.	-4762.	-.0077	.0165	-.0820	.0396	.1004	.0526	2174.		
.3030	-5524.	-1571.	2999.	-2719.	-0.	-5008.	-.0076	.0127	-.0865	.0508	.1100	.0538	2287.		
.3040	-5769.	-1641.	3132.	-2840.	0.	-5231.	-.0070	.0093	-.0895	.0610	.1172	.0553	2388.		
.3050	-5982.	-1701.	3248.	-2945.	0.	-5424.	-.0059	.0063	-.0910	.0700	.1213	.0567	2477.		
.3060	-6155.	-1751.	3342.	-3030.	0.	-5580.	-.0041	.0036	-.0907	.0776	.1222	.0578	2548.		
.3070	-6272.	-1784.	3405.	-3088.	0.	-5687.	-.0018	.0011	-.0886	.0840	.1199	.0587	2597.		
.3080	-6313.	-1796.	3428.	-3108.	0.	-5724.	.0009	-.0014	-.0844	.0893	.1146	.0591	2614.		
.3090	-6251.	-1778.	3394.	-3077.	0.	-5668.	.0040	-.0042	-.0783	.0934	.1067	.0590	2588.		
.3100	-6065.	-1725.	3293.	-2986.	0.	-5499.	.0073	-.0075	-.0701	.0963	.0966	.0584	2511.		
.3110	-5746.	-1634.	3120.	-2829.	0.	-5210.	.0105	-.0114	-.0600	.0984	.0849	.0571	2379.		
.3120	-5295.	-1506.	2875.	-2607.	0.	-4801.	.0135	-.0159	-.0484	.1000	.0722	.0551	2192.		
.3130	-4716.	-1341.	2561.	-2322.	0.	-4276.	.0162	-.0211	-.0356	.1015	.0590	.0522	1953.		
.3140	-4011.	-1141.	2178.	-1975.	0.	-3637.	.0184	-.0271	-.0220	.1029	.0457	.0484	1661.		
.3150	-3191.	-908.	1733.	-1571.	0.	-2894.	.0200	-.0339	-.0080	.1045	.0327	.0436	1321.		
.3160	-2271.	-646.	1233.	-1118.	0.	-2059.	.0210	-.0414	.0062	.1067	.0205	.0377	940.		
.3170	-1265.	-360.	687.	-623.	0.	-1147.	.0212	-.0495	.0201	.1100	.0091	.0307	524.		
.3180	-189.	-54.	103.	-93.	-0.	-171.	.0207	-.0579	.0338	.1142	-.0011	.0227	78.		
.3190	938.	267.	-509.	462.	0.	851.	.0196	-.0668	.0469	.1195	-.0103	.0138	388.		
.3200	2088.	594.	-1134.	1028.	0.	1893.	.0180	-.0760	.0593	.1255	-.0183	.0043	864.		
.3210	3228.	918.	-1753.	1589.	0.	2927.	.0160	-.0853	.0708	.1323	-.0255	-.0058	1337.		
.3220	4323.	1230.	-2347.	2128.	0.	3920.	.0139	-.0944	.0812	.1396	-.0320	-.0162	1790.		
.3230	5340.	1519.	-2897.	2629.	0.	4841.	.0118	-.1032	.0903	.1470	-.0379	-.0268	2211.		
.3240	6251.	1778.	-3394.	3077.	0.	5668.	.0101	-.1116	.0981	.1538	-.0435	-.0373	2588.		
.3250	7037.	2002.	-3821.	3464.	0.	6381.	.0087	-.1192	.1045	.1597	-.0488	-.0476	2914.		
.3260	7680.	2184.	-4170.	3781.	-0.	6963.	.0079	-.1260	.1094	.1643	-.0536	-.0573	3180.		
.3270	8168.	2323.	-4435.	4021.	0.	7406.	.0077	-.1319	.1130	.1674	-.0579	-.0661	3382.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.36.

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

.3170	-1265.	-360.	667.	-623.	0.	-1147.	.212	-.0495	.0201	.1100	.0091	.0307	524.
.3180	-189.	-54.	103.	-93.	-0.	-171.	.207	-.0579	.0338	.1142	-.0011	.0227	78.
.3190	938.	267.	-509.	462.	0.	851.	.0196	-.0668	.0469	.1195	-.0103	.0138	388.
.3200	2088.	594.	-1134.	1028.	0.	1893.	.0180	-.0760	.0593	.1255	-.0183	.0043	864.
.3210	3228.	918.	-1753.	1589.	0.	2927.	.0160	-.0853	.0708	.1323	-.0255	-.0058	1337.
.3220	4323.	1270.	-2347.	2128.	0.	3920.	.0139	-.0944	.0812	.1396	-.0320	-.0162	1790.
.3230	5340.	1519.	-2899.	2629.	0.	4841.	.0118	-.1032	.0903	.1470	-.0379	-.0268	2211.
.3240	6251.	1778.	-3394.	3077.	0.	5668.	.0101	-.1116	.0981	.1538	-.0435	-.0373	2588.
.3250	7037.	2002.	-3821.	3464.	0.	6381.	.0087	-.1192	.1045	.1597	-.0488	-.0476	2914.
.3260	7680.	2184.	-4170.	3791.	-0.	6963.	.0079	-.1260	.1094	.1643	-.0536	-.0573	3180.
.3270	8168.	2323.	-4435.	4021.	0.	7406.	.0077	-.1319	.1130	.1674	-.0579	-.0661	3382.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.36.

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	14	MEMBER	1	SEQUENCE	236	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.3280	8502.	2418.	-4616.	4186.	0.	7709.		.0081	-.1366	.1154	.1688	-.0515	-.0736	3520.	
.3290	8688.	2471.	-4717.	4277.	0.	7877.		.0091	-.1403	.1166	.1683	-.0641	-.0797	3597.	
.3300	8724.	2481.	-4737.	4295.	0.	7910.		.0105	-.1428	.1166	.1656	-.0656	-.0842	3612.	
.3310	8612.	2450.	-4676.	4240.	-0.	7809.		.0124	-.1443	.1154	.1612	-.0658	-.0867	3566.	
.3320	8353.	2376.	-4535.	4112.	0.	7574.		.0147	-.1447	.1131	.1553	-.0647	-.0874	3458.	
.3330	7950.	2261.	-4316.	3913.	0.	7208.		.0174	-.1441	.1094	.1482	-.0623	-.0863	3291.	
.3340	7408.	2107.	-4022.	3647.	0.	6716.		.0203	-.1425	.1044	.1404	-.0588	-.0838	3067.	
.3350	6739.	1917.	-3659.	3317.	-0.	6110.		.0234	-.1402	.0981	.1321	-.0541	-.0801	2790.	
.3360	5960.	1695.	-3236.	2934.	0.	5403.		.0267	-.1372	.0905	.1239	-.0484	-.0756	2467.	
.3370	5090.	1448.	-2764.	2506.	0.	4615.		.0299	-.1337	.0816	.1163	-.0420	-.0706	2107.	
.3380	4155.	1182.	-2256.	2045.	0.	3767.		.0331	-.1297	.0718	.1095	-.0350	-.0656	1720.	
.3390	3178.	904.	-1725.	1564.	0.	2882.		.0361	-.1255	.0611	.1037	-.0276	-.0607	1316.	
.3400	2181.	620.	-1184.	1074.	-0.	1978.		.0389	-.1212	.0497	.0987	-.0200	-.0562	903.	
.3410	1181.	336.	-641.	582.	-0.	1071.		.0414	-.1169	.0377	.0941	-.0124	-.0522	489.	
.3420	193.	55.	-105.	95.	-0.	175.		.0438	-.1129	.0253	.0899	-.0049	-.0488	80.	
.3430	-774.	-220.	420.	-381.	-0.	-702.		.0460	-.1092	.0126	.0856	.0024	-.0458	320.	
.3440	-1709.	-486.	928.	-841.	-0.	-1550.		.0480	-.1060	-.0001	.0809	.0094	-.0433	708.	
.3450	-2600.	-739.	1411.	-1280.	-0.	-2357.		.0501	-.1032	-.0126	.0756	.0162	-.0412	1076.	
.3460	-3429.	-975.	1862.	-1688.	0.	-3109.		.0520	-.1009	-.0245	.0693	.0226	-.0395	1420.	
.3470	-4184.	-1190.	2271.	-2059.	0.	-3793.		.0539	-.0991	-.0356	.0623	.0286	-.0381	1732.	
.3480	-4854.	-1381.	2635.	-2389.	-0.	-4401.		.0558	-.0977	-.0456	.0549	.0340	-.0370	2009.	
.3490	-5430.	-1545.	2948.	-2673.	0.	-4924.		.0576	-.0966	-.0542	.0472	.0389	-.0363	2248.	
.3500	-5907.	-1680.	3207.	-2908.	0.	-5356.		.0593	-.0958	-.0611	.0394	.0429	-.0360	2445.	
.3510	-6280.	-1786.	3410.	-3092.	0.	-5694.		.0609	-.0949	-.0665	.0319	.0459	-.0361	2600.	
.3520	-6553.	-1864.	3558.	-3226.	0.	-5941.		.0624	-.0941	-.0702	.0251	.0477	-.0367	2713.	
.3530	-6729.	-1914.	3653.	-3313.	-0.	-6101.		.0636	-.0929	-.0722	.0191	.0481	-.0378	2786.	
.3540	-6812.	-1937.	3698.	-3353.	0.	-6176.		.0646	-.0914	-.0727	.0143	.0472	-.0395	2820.	
.3550	-6798.	-1934.	3691.	-3347.	0.	-6164.		.0652	-.0894	-.0718	.0106	.0450	-.0415	2815.	
.3560	-6683.	-1901.	3629.	-3290.	0.	-6060.		.0652	-.0868	-.0694	.0080	.0417	-.0440	2767.	
.3570	-6466.	-1839.	3510.	-3183.	0.	-5863.		.0647	-.0835	-.0657	.0063	.0373	-.0466	2677.	
.3580	-6147.	-1748.	3338.	-3026.	0.	-5574.		.0634	-.0795	-.0608	.0055	.0322	-.0493	2545.	
.3590	-5730.	-1630.	3111.	-2821.	0.	-5196.		.0615	-.0748	-.0548	.0053	.0265	-.0518	2372.	
.3600	-5218.	-1484.	2833.	-2569.	0.	-4731.		.0587	-.0694	-.0478	.0052	.0203	-.0540	2160.	
.3610	-4416.	-1313.	2506.	-2272.	0.	-4186.		.0553	-.0634	-.0399	.0048	.0138	-.0557	1911.	
.3620	-3236.	-1120.	2137.	-1938.	0.	-3569.		.0512	-.0569	-.0314	.0038	.0070	-.0567	1630.	
.3630	-3190.	-907.	1732.	-1570.	0.	-2892.		.0465	-.0501	-.0222	.0021	.0001	-.0568	1321.	
.3640	-2387.	-679.	1296.	-1175.	0.	-2164.		.0413	-.0429	-.0127	-.0006	-.0070	-.0560	988.	
.3650	-1537.	-437.	835.	-757.	0.	-1394.		.0357	-.0355	-.0027	-.0043	-.0141	-.0543	637.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.36.

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

.3550	-6798.	-1934.	3691.	-3347.	0.	-6164.	.652	-.0894	-.0718	.0106	.0450	-.0415	2820.
.3560	-6683.	-1901.	3629.	-3290.	0.	-6060.	.652	-.0868	-.0694	.0080	.0417	-.0440	2767.
.3570	-6466.	-1839.	3510.	-3183.	0.	-5863.	.6647	-.0835	-.0657	.0063	.0373	-.0466	2677.
.3580	-6147.	-1748.	3337.	-3026.	0.	-5574.	.6674	-.0795	-.0608	.0055	.0322	-.0493	2545.
.3590	-5730.	-1630.	3111.	-2821.	0.	-5196.	.6615	-.0748	-.0548	.0053	.0265	-.0518	2372.
.3600	-5218.	-1484.	2833.	-2569.	0.	-4731.	.6587	-.0694	-.0478	.0052	.0203	-.0540	2160.
.3610	-4616.	-1313.	2506.	-2272.	0.	-4186.	.6553	-.0634	-.0399	.0048	.0138	-.0557	1911.
.3620	-3936.	-1120.	2137.	-1938.	0.	-3569.	.6512	-.0569	-.0314	.0038	.0070	-.0567	1630.
.3630	-3190.	-907.	1732.	-1570.	0.	-2892.	.6465	-.0501	-.0222	.0021	.0001	-.0568	1321.
.3640	-2387.	-679.	1296.	-1175.	0.	-2164.	.6413	-.0429	-.0127	-.0006	-.0070	-.0560	988.
.3650	-1537.	-437.	835.	-757.	0.	-1394.	.6357	-.0355	-.0027	-.0043	-.0141	-.0543	637.

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ADLPIPE STRESS ANALYSIS

83/12/02.

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S/RV PIPING KEWAUNEE GKW07F 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	14	MEMBER	1	SEQUENCE	236	LOCATION	END	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.3660	-651.	-185.	354.	-321.	-0.	-590.	.0297	-.0281	.0075	-.0090	-.0212	-.0517	270.	
.3670	255.	72.	-138.	125.	0.	231.	.0234	-.0207	.0176	-.0146	-.0282	-.0483	106.	
.3680	1159.	330.	-629.	571.	0.	1051.	.0170	-.0133	.0276	-.0207	-.0350	-.0442	480.	
.3690	2041.	581.	-1108.	1005.	0.	1851.	.0105	-.0061	.0370	-.0271	-.0417	-.0396	845.	
.3700	2882.	820.	-1565.	1419.	0.	2613.	.0040	-.0010	.0456	-.0338	-.0480	-.0346	1193.	
.3710	3665.	1042.	-1990.	1804.	0.	3323.	-.0025	.0079	.0530	-.0405	-.0538	-.0294	1517.	
.3720	4371.	1243.	-2373.	2152.	-0.	3963.	-.0089	.0144	.0590	-.0470	-.0589	-.0240	1809.	
.3730	4987.	1419.	-2708.	2455.	-0.	4522.	-.0152	.0206	.0634	-.0529	-.0632	-.0187	2065.	
.3740	5509.	1567.	-2991.	2712.	0.	4995.	-.0214	.0266	.0661	-.0581	-.0664	-.0134	2281.	
.3750	5935.	1688.	-3222.	2922.	-0.	5381.	-.0275	.0322	.0671	-.0625	-.0682	-.0082	2457.	
.3760	6264.	1782.	-3401.	3083.	0.	5679.	-.0334	.0374	.0664	-.0661	-.0685	-.0032	2593.	
.3770	6491.	1846.	-3524.	3195.	0.	5885.	-.0391	.0423	.0642	-.0689	-.0673	.0017	2687.	
.3780	6611.	1880.	-3589.	3254.	-0.	5994.	-.0444	.0469	.0604	-.0706	-.0644	.0063	2737.	
.3790	6622.	1883.	-3595.	3260.	0.	6004.	-.0493	.0513	.0554	-.0717	-.0600	.0109	2742.	
.3800	6526.	1856.	-3543.	3212.	-0.	5917.	-.0536	.0555	.0492	-.0725	-.0541	.0154	2702.	
.3810	6323.	1798.	-3433.	3112.	0.	5733.	-.0572	.0596	.0421	-.0731	-.0470	.0199	2618.	
.3820	6012.	1710.	-3264.	2959.	-0.	5451.	-.0601	.0636	.0344	-.0736	-.0388	.0246	2489.	
.3830	5595.	1591.	-3032.	2754.	-0.	5073.	-.0622	.0676	.0262	-.0741	-.0298	.0295	2317.	
.3840	5078.	1444.	-2757.	2500.	0.	4604.	-.0634	.0718	.0179	-.0747	-.0204	.0348	2102.	
.3850	4467.	1271.	-2425.	2199.	0.	4050.	-.0637	.0760	.0094	-.0755	-.0106	.0404	1849.	
.3860	3768.	1072.	-2046.	1855.	-0.	3416.	-.0631	.0804	.0011	-.0766	-.0008	.0464	1560.	
.3870	2982.	848.	-1619.	1468.	-0.	2704.	-.0616	.0851	-.0071	-.0779	.0087	.0527	1235.	
.3880	2114.	601.	-1148.	1040.	-0.	1916.	-.0593	.0900	-.0152	-.0791	.0176	.0593	875.	
.3890	1171.	333.	-636.	576.	0.	1061.	-.0563	.0951	-.0231	-.0801	.0258	.0660	485.	
.3900	169.	48.	-92.	83.	0.	153.	-.0526	.1003	-.0309	-.0809	.0331	.0727	70.	
.3910	-874.	-248.	474.	-430.	-0.	-792.	-.0484	.1057	-.0386	-.0815	.0393	.0792	362.	
.3920	-1936.	-551.	1051.	-953.	0.	-1756.	-.0439	.1111	-.0460	-.0813	.0446	.0854	802.	
.3930	-2995.	-852.	1626.	-1474.	0.	-2715.	-.0393	.1164	-.0531	-.0805	.0489	.0912	1240.	
.3940	-4017.	-1143.	2181.	-1978.	0.	-3643.	-.0347	.1214	-.0597	-.0790	.0523	.0966	1663.	
.3950	-4974.	-1415.	2700.	-2448.	0.	-4510.	-.0302	.1260	-.0657	-.0771	.0551	.1015	2059.	
.3960	-5839.	-1661.	3170.	-2874.	0.	-5294.	-.0262	.1301	-.0711	-.0751	.0572	.1058	2417.	
.3970	-6594.	-1876.	3580.	-3246.	-0.	-5979.	-.0225	.1336	-.0756	-.0728	.0589	.1094	2730.	
.3980	-7225.	-2055.	3923.	-3557.	0.	-6551.	-.0195	.1364	-.0793	-.0705	.0600	.1124	2991.	
.3990	-7714.	-2194.	4188.	-3797.	0.	-6994.	-.0170	.1383	-.0821	-.0683	.0607	.1146	3194.	
.4000	-8046.	-2288.	4368.	-3961.	0.	-7295.	-.0153	.1393	-.0840	-.0665	.0611	.1159	3331.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.26.36.

S/RV PIPING KEWAUNEE GKW07F 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

.3930	-2993.	-892.	2628.	-1474.	0.	-2713.	-1393.	.1164	-1.0551	-1.0805	.0489	.0912	1240.
.3940	-4017.	-1143.	2181.	-1978.	0.	-3643.	-1347	.1214	-1.0597	-1.0790	.0523	.0966	1663.
.3950	-4974.	-1415.	2700.	-2448.	0.	-4510.	-1302	.1260	-1.0657	-1.0771	.0551	.1015	2059.
.3960	-5839.	-1661.	3176.	-2874.	0.	-5294.	-1262	.1301	-1.0711	-1.0751	.0572	.1058	2417.
.3970	-6594.	-1876.	3580.	-3246.	0.	-5979.	-1225	.1336	-1.0756	-1.0728	.0589	.1094	2730.
.3980	-7225.	-2055.	3927.	-3557.	0.	-6551.	-1195	.1364	-1.0793	-1.0705	.0500	.1124	2991.
.3990	-7714.	-2194.	4188.	-3797.	0.	-6994.	-1170	.1383	-1.0821	-1.0683	.0607	.1146	3194.
.4000	-8046.	-2288.	4368.	-3961.	0.	-7295.	-1153	.1393	-1.0840	-1.0665	.0511	.1159	3331.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.26.36.

S/RV PIPING KEWAUNEE GKW0FF 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

MAXIMUM VALUE OF STRESS OCCURS AT

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)
.0420	19895.	5659.	-10802.	9794.	0.	18039.	-1.1156	-0.0784	.1306	.0411	-0.0774	-0.0314	8237.

SECTION	14	MEMBER	2	SEQUENCE	237	LOCATION	DIS	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)	
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.	
.0010	-1.	-0.	1.	0.	0.	0.	.0000	-0.0000	-0.0000	.0000	-0.0000	-0.0000	-0.0000	0.	0.	0.	.0000	-0.0000	-0.0002	.0000	-0.0001	-0.0000	-0.0000	0.
.0020	-9.	-3.	5.	0.	0.	0.	.0000	-0.0000	-0.0002	.0000	-0.0000	-0.0001	-0.0000	0.	0.	0.	.0000	-0.0000	-0.0002	.0000	-0.0001	-0.0000	-0.0000	0.
.0030	-27.	-8.	15.	0.	0.	0.	.0000	-0.0000	-0.0005	.0001	-0.0004	-0.0001	-0.0000	0.	0.	0.	.0000	-0.0000	-0.0005	.0001	-0.0004	-0.0001	-0.0001	0.
.0040	-58.	-17.	32.	0.	0.	0.	-0.0000	-0.0000	-0.0012	.0001	-0.0007	-0.0003	-0.0000	0.	0.	0.	-0.0001	-0.0000	-0.0012	.0001	-0.0007	-0.0003	-0.0003	0.
.0050	-101.	-29.	55.	0.	0.	0.	-0.0001	.0001	-0.0020	-0.0000	-0.0012	-0.0006	-0.0000	0.	0.	0.	-0.0001	.0001	-0.0020	-0.0000	-0.0012	-0.0006	-0.0006	0.
.0060	-156.	-44.	85.	0.	0.	0.	-0.0002	.0003	-0.0032	-0.0003	-0.0016	-0.0009	-0.0000	0.	0.	0.	-0.0002	.0003	-0.0032	-0.0003	-0.0016	-0.0009	-0.0009	0.
.0070	-239.	-68.	130.	0.	0.	0.	-0.0003	.0006	-0.0050	-0.0007	-0.0022	-0.0013	-0.0000	0.	0.	0.	-0.0003	.0006	-0.0050	-0.0007	-0.0022	-0.0013	-0.0013	0.
.0080	-396.	-113.	215.	0.	0.	0.	-0.0002	.0009	-0.0077	-0.0013	-0.0029	-0.0016	-0.0000	0.	0.	0.	-0.0002	.0009	-0.0077	-0.0013	-0.0029	-0.0016	-0.0016	0.
.0090	-671.	-191.	364.	0.	0.	0.	.0004	.0014	-0.0116	-0.0026	-0.0038	-0.0021	-0.0000	0.	0.	0.	.0004	.0014	-0.0116	-0.0026	-0.0038	-0.0021	-0.0021	0.
.0100	-1082.	-308.	587.	0.	0.	0.	.0018	.0022	-0.0165	-0.0051	-0.0048	-0.0026	-0.0000	0.	0.	0.	.0018	.0022	-0.0165	-0.0051	-0.0048	-0.0026	-0.0026	0.
.0110	-1624.	-462.	882.	0.	0.	0.	.0042	.0033	-0.0222	-0.0094	-0.0058	-0.0031	-0.0000	0.	0.	0.	.0042	.0033	-0.0222	-0.0094	-0.0058	-0.0031	-0.0031	0.
.0120	-2280.	-648.	1238.	0.	0.	0.	.0075	.0045	-0.0283	-0.0154	-0.0068	-0.0031	-0.0000	0.	0.	0.	.0075	.0045	-0.0283	-0.0154	-0.0068	-0.0031	-0.0031	0.
.0130	-3016.	-858.	1638.	0.	0.	0.	.0117	.0059	-0.0342	-0.0227	-0.0074	-0.0023	-0.0000	0.	0.	0.	.0117	.0059	-0.0342	-0.0227	-0.0074	-0.0023	-0.0023	0.
.0140	-3785.	-1077.	2055.	0.	0.	0.	.0166	.0073	-0.0394	-0.0314	-0.0070	-0.0005	-0.0000	0.	0.	0.	.0166	.0073	-0.0394	-0.0314	-0.0070	-0.0005	-0.0005	0.
.0150	-4531.	-1289.	2460.	0.	0.	0.	.0221	.0088	-0.0430	-0.0421	-0.0046	.0023	-0.0000	0.	0.	0.	.0221	.0088	-0.0430	-0.0421	-0.0046	.0023	.0023	0.
.0160	-5238.	-1490.	2844.	0.	0.	0.	.0282	.0101	-0.0449	-0.0542	.0006	.0061	-0.0000	0.	0.	0.	.0282	.0101	-0.0449	-0.0542	.0006	.0061	.0061	0.
.0170	-5936.	-1688.	3223.	0.	0.	0.	.0347	.0112	-0.0460	-0.0661	.0087	.0105	-0.0000	0.	0.	0.	.0347	.0112	-0.0460	-0.0661	.0087	.0105	.0105	0.
.0180	-6674.	-1898.	3624.	0.	0.	0.	.0416	.0122	-0.0471	-0.0762	.0187	.0149	-0.0000	0.	0.	0.	.0416	.0122	-0.0471	-0.0762	.0187	.0149	.0149	0.
.0190	-7540.	-2144.	4094.	0.	0.	0.	.0491	.0131	-0.0496	-0.0833	.0286	.0184	-0.0000	0.	0.	0.	.0491	.0131	-0.0496	-0.0833	.0286	.0184	.0184	0.
.0200	-8733.	-2484.	4742.	0.	0.	0.	.0582	.0142	-0.0556	-0.0871	.0356	.0197	-0.0000	0.	0.	0.	.0582	.0142	-0.0556	-0.0871	.0356	.0197	.0197	0.
.0210	-10384.	-2953.	5638.	0.	0.	0.	.0695	.0161	-0.0659	-0.0895	.0389	.0176	-0.0000	0.	0.	0.	.0695	.0161	-0.0659	-0.0895	.0389	.0176	.0176	0.
.0220	-11991.	-3410.	6510.	0.	0.	0.	.0805	.0185	-0.0758	-0.0935	.0398	.0122	-0.0000	0.	0.	0.	.0805	.0185	-0.0758	-0.0935	.0398	.0122	.0122	0.
.0230	-13132.	-3735.	7130.	0.	0.	0.	.0891	.0201	-0.0814	-0.0985	.0384	.0048	-0.0000	0.	0.	0.	.0891	.0201	-0.0814	-0.0985	.0384	.0048	.0048	0.
.0240	-13741.	-3908.	7460.	0.	0.	0.	.0947	.0205	-0.0827	-0.0983	.0380	-0.0029	-0.0000	0.	0.	0.	.0947	.0205	-0.0827	-0.0983	.0380	-0.0029	-0.0029	0.
.0250	-13912.	-3957.	7553.	0.	0.	0.	.0972	.0195	-0.0818	-0.0877	.0389	-0.0106	-0.0000	0.	0.	0.	.0972	.0195	-0.0818	-0.0877	.0389	-0.0106	-0.0106	0.
.0260	-13497.	-3839.	7328.	0.	0.	0.	.0952	.0165	-0.0791	-0.0692	.0370	-0.0193	-0.0000	0.	0.	0.	.0952	.0165	-0.0791	-0.0692	.0370	-0.0193	-0.0193	0.
.0270	-12135.	-3452.	6588.	0.	0.	0.	.0862	.0123	-0.0712	-0.0496	.0326	-0.0295	-0.0000	0.	0.	0.	.0862	.0123	-0.0712	-0.0496	.0326	-0.0295	-0.0295	0.
.0280	-10356.	-2945.	5623.	0.	0.	0.	.0743	.0091	-0.0603	-0.0326	.0324	-0.0415	-0.0000	0.	0.	0.	.0743	.0091	-0.0603	-0.0326	.0324	-0.0415	-0.0415	0.
.0290	-8725.	-2482.	4737.	0.	0.	0.	.0633	.0054	-0.0506	-0.0180	.0367	-0.0548	-0.0000	0.	0.	0.	.0633	.0054	-0.0506	-0.0180	.0367	-0.0548	-0.0548	0.
.0300	-6726.	-1913.	3652.	0.	0.	0.	.0495	-0.0030	-0.0415	-0.0035	.0377	-0.0681	-0.0000	0.	0.	0.	.0495	-0.0030	-0.0415	-0.0035	.0377	-0.0681	-0.0681	0.
.0310	-4333.	-1233.	2353.	0.	0.	0.	.0322	-0.0149	-0.0330	.0143	.0347	-0.0811	-0.0000	0.	0.	0.	.0322	-0.0149	-0.0330	.0143	.0347	-0.0811	-0.0811	0.
.0320	-1905.	-542.	1034.	0.	0.	0.	.0137	-0.0242	-0.0245	.0373	.0290	-0.0942	-0.0000	0.	0.	0.	.0137	-0.0242	-0.0245	.0373	.0290	-0.0942	-0.0942	0.

.0330	603.	172.	-327.	0.	0.	0.	-0.0052	-0.0282	-0.0126	.0608	.0246	-0.1067	0.
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.0170	-5936.	-1688.	223.	0.	0.	0.	.0347	.0112	-.0460	-.0661	.0087	.0105	0.
.0180	-6674.	-1898.	3624.	0.	0.	0.	.0416	.0122	-.0471	-.0762	.0187	.0149	0.
.0190	-7540.	-2144.	4094.	0.	0.	0.	.0491	.0131	-.0496	-.0833	.0286	.0184	0.
.0200	-8733.	-2484.	4742.	0.	0.	0.	.0582	.0142	-.0556	-.0871	.0356	.0197	0.
.0210	-10384.	-2953.	5638.	0.	0.	0.	.0695	.0161	-.0659	-.0895	.0389	.0176	0.
.0220	-11991.	-3410.	6510.	0.	0.	0.	.0805	.0185	-.0758	-.0935	.0398	.0122	0.
.0230	-13132.	-3735.	7130.	0.	0.	0.	.0891	.0201	-.0814	-.0985	.0384	.0048	0.
.0240	-13741.	-3908.	7460.	0.	0.	0.	.0947	.0205	-.0827	-.0983	.0380	-.0029	0.
.0250	-13912.	-3957.	7553.	0.	0.	0.	.0972	.0195	-.0818	-.0877	.0389	-.0106	0.
.0260	-13497.	-3839.	7328.	0.	0.	0.	.0952	.0165	-.0791	-.0692	.0370	-.0193	0.
.0270	-12135.	-3452.	6588.	0.	0.	0.	.0862	.0123	-.0712	-.0496	.0326	-.0295	0.
.0280	-10356.	-2945.	5623.	0.	0.	0.	.0743	.0091	-.0603	-.0326	.0324	-.0415	0.
.0290	-8725.	-2482.	4737.	0.	0.	0.	.0633	.0054	-.0506	-.0180	.0367	-.0548	0.
.0300	-6726.	-1913.	3652.	0.	0.	0.	.0495	-.0030	-.0415	-.0035	.0377	-.0681	0.
.0310	-4333.	-1233.	2353.	0.	0.	0.	.0322	-.0149	-.0330	.0143	.0347	-.0811	0.
.0320	-1905.	-542.	1034.	0.	0.	0.	.0137	-.0242	-.0245	.0373	.0290	-.0942	0.

.0330 603. 172. -327. 0. 0. 0. -.0052 -.0282 -.0126 .0608 .0246 -.1067 0.

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

83/12/02. 18.26.36.

CONDITION 24
 LOADS
 SHOCK
 PRESSURE
 ENGLISH UNITS

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

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	14	MEMBER	2	SEQUENCE	237	LOCATION	DIS	TYPE	RU						
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)		
.0340	3538.	1006.	-1921.	0.	0.	0.	-.0253	-.0318	.0057	.0761	.0221	-.1156	0.		
.0350	6800.	1934.	-3692.	0.	0.	0.	-.0452	-.0412	.0278	.0808	.0172	-.1182	0.		
.0360	9911.	2819.	-5381.	0.	0.	0.	-.0628	-.0547	.0489	.0825	.0073	-.1140	0.		
.0370	12592.	3581.	-6836.	0.	0.	0.	-.0782	-.0641	.0677	.0885	-.0051	-.1049	0.		
.0380	14966.	4257.	-8125.	0.	0.	0.	-.0930	-.0660	.0859	.0931	-.0175	-.0932	0.		
.0390	17189.	4889.	-9332.	0.	0.	0.	-.1065	-.0665	.1040	.0835	-.0305	-.0796	0.		
.0400	18842.	5359.	-10230.	0.	0.	0.	-.1149	-.0724	.1176	.0603	-.0455	-.0646	0.		
.0410	19798.	5631.	-10749.	0.	0.	0.	-.1198	-.0789	.1239	.0428	-.0618	-.0478	0.		
.0420	19895.	5659.	-10802.	0.	0.	0.	-.1216	-.0784	.1228	.0411	-.0774	-.0314	0.		
.0430	19107.	5434.	-10374.	0.	0.	0.	-.1183	-.0733	.1161	.0398	-.0922	-.0177	0.		
.0440	18066.	5138.	-9809.	0.	0.	0.	-.1108	-.0706	.1111	.0231	-.1035	-.0069	0.		
.0450	17152.	4879.	-9312.	0.	0.	0.	-.1020	-.0693	.1100	.0019	-.1111	.0037	0.		
.0460	16137.	4590.	-8761.	0.	0.	0.	-.0925	-.0661	.1095	-.0049	-.1168	.0162	0.		
.0470	14780.	4204.	-8025.	0.	0.	0.	-.0797	-.0625	.1085	.0018	-.1190	.0300	0.		
.0480	13248.	3768.	-7193.	0.	0.	0.	-.0637	-.0603	.1094	.0097	-.1161	.0432	0.		
.0490	11698.	3327.	-6351.	0.	0.	0.	-.0471	-.0567	.1116	.0137	-.1107	.0537	0.		
.0500	9948.	2830.	-5401.	0.	0.	0.	-.0298	-.0515	.1121	.0134	-.1042	.0606	0.		
.0510	7777.	2212.	-4222.	0.	0.	0.	-.0099	-.0482	.1081	.0120	-.0960	.0640	0.		
.0520	5163.	1469.	-2803.	0.	0.	0.	.0117	-.0459	.0981	.0203	-.0851	.0646	0.		
.0530	2313.	658.	-1256.	0.	0.	0.	.0324	-.0415	.0830	.0440	-.0716	.0626	0.		
.0540	-376.	-107.	204.	0.	0.	0.	.0508	-.0376	.0666	.0713	-.0543	.0571	0.		
.0550	-2625.	-747.	1425.	0.	0.	0.	.0671	-.0387	.0522	.0908	-.0324	.0479	0.		
.0560	-4559.	-1297.	2475.	0.	0.	0.	.0807	-.0418	.0378	.1129	-.0083	.0358	0.		
.0570	-6431.	-1829.	3491.	0.	0.	0.	.0908	-.0425	.0196	.1512	.0142	.0226	0.		
.0580	-8243.	-2344.	4475.	0.	0.	0.	.0986	-.0442	-.0023	.1977	.0340	.0090	0.		
.0590	-9866.	-2806.	5356.	0.	0.	0.	.1051	-.0510	-.0254	.2345	.0509	-.0056	0.		
.0600	-11256.	-3202.	6111.	0.	0.	0.	.1097	-.0594	-.0485	.2581	.0651	-.0217	0.		
.0610	-12545.	-3568.	6811.	0.	0.	0.	.1120	-.0643	-.0719	.2757	.0772	-.0383	0.		
.0620	-13806.	-3927.	7495.	0.	0.	0.	.1131	-.0668	-.0957	.2901	.0885	-.0533	0.		
.0630	-14922.	-4244.	8102.	0.	0.	0.	.1134	-.0700	-.1187	.2984	.0985	-.0640	0.		
.0640	-15591.	-4434.	8465.	0.	0.	0.	.1111	-.0738	-.1379	.2963	.1075	-.0688	0.		
.0650	-15594.	-4435.	8467.	0.	0.	0.	.1055	-.0772	-.1501	.2797	.1172	-.0675	0.		
.0660	-15070.	-4286.	8182.	0.	0.	0.	.0975	-.0798	-.1559	.2498	.1276	-.0607	0.		
.0670	-14350.	-4081.	7791.	0.	0.	0.	.0883	-.0801	-.1590	.2154	.1361	-.0489	0.		
.0680	-13564.	-3858.	7364.	0.	0.	0.	.0780	-.0780	-.1616	.1822	.1407	-.0327	0.		
.0690	-12641.	-3595.	6863.	0.	0.	0.	.0671	-.0763	-.1628	.1452	.1424	-.0140	0.		
.0700	-11597.	-3298.	6296.	0.	0.	0.	.0567	-.0762	-.1615	.1005	.1419	.0047	0.		
.0710	-10487.	-2983.	5694.	0.	0.	0.	.0464	-.0748	-.1581	.0557	.1383	.0210	0.		

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

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

.0610	-12545.	-3568.	8811.	0.	0.	0.	.1120	-.0643	-.0719	.2757	.0772	-.0383	0.
.0620	-13806.	-3927.	7495.	0.	0.	0.	.1131	-.0668	-.0957	.2901	.0885	-.0533	0.
.0630	-14922.	-4244.	8102.	0.	0.	0.	.1134	-.0700	-.1187	.2984	.0985	-.0640	0.
.0640	-15591.	-4434.	8465.	0.	0.	0.	.1111	-.0738	-.1379	.2963	.1075	-.0688	0.
.0650	-15594.	-4435.	8467.	0.	0.	0.	.1055	-.0772	-.1501	.2797	.1172	-.0675	0.
.0660	-15070.	-4206.	8182.	0.	0.	0.	.0975	-.0798	-.1559	.2498	.1276	-.0607	0.
.0670	-14350.	-4081.	7791.	0.	0.	0.	.0883	-.0801	-.1590	.2154	.1361	-.0489	0.
.0680	-13564.	-3858.	7364.	0.	0.	0.	.0780	-.0780	-.1616	.1822	.1407	-.0327	0.
.0690	-12641.	-3595.	6863.	0.	0.	0.	.0671	-.0763	-.1628	.1452	.1424	-.0140	0.
.0700	-11597.	-3298.	6296.	0.	0.	0.	.0567	-.0762	-.1615	.1005	.1419	.0047	0.
.0710	-10487.	-2983.	5694.	0.	0.	0.	.0464	-.0748	-.1581	.0557	.1383	.0210	0.

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

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

SECTION	14	MEMBER	2	SEQUENCE	237	LOCATION	DIS	TYPE	RU						
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)		
.0720	-9229.	-2625.	5011.	0.	0.	0.	.0346	-.0689	-.1523	.0216	.1307	.0343	0.		
.0730	-7733.	-2199.	4198.	0.	0.	0.	.0212	-.0603	-.1432	-.0003	.1197	.0448	0.		
.0740	-6015.	-1711.	3266.	0.	0.	0.	.0082	-.0524	-.1296	-.0158	.1064	.0529	0.		
.0750	-4069.	-1157.	2209.	0.	0.	0.	-.0040	-.0462	-.1109	-.0286	.0920	.0597	0.		
.0760	-1926.	-548.	1046.	0.	0.	0.	-.0159	-.0400	-.0877	-.0385	.0764	.0653	0.		
.0770	221.	63.	-120.	0.	0.	0.	-.0267	-.0332	-.0622	-.0450	.0585	.0692	0.		
.0780	2159.	614.	-1172.	0.	0.	0.	-.0354	-.0258	-.0365	-.0489	.0377	.0707	0.		
.0790	3868.	1100.	-2100.	0.	0.	0.	-.0420	-.0184	-.0116	-.0516	.0155	.0699	0.		
.0800	5462.	1554.	-2966.	0.	0.	0.	-.0472	-.0119	.0133	-.0553	-.0058	.0666	0.		
.0810	6974.	1984.	-3786.	0.	0.	0.	-.0510	-.0076	.0379	-.0616	-.0248	.0602	0.		
.0820	8373.	2382.	-4546.	0.	0.	0.	-.0536	-.0051	.0617	-.0669	-.0407	.0499	0.		
.0830	9663.	2748.	-5246.	0.	0.	0.	-.0560	-.0022	.0841	-.0650	-.0531	.0358	0.		
.0840	10828.	3080.	-5879.	0.	0.	0.	-.0583	.0014	.1044	-.0550	-.0617	.0185	0.		
.0850	11825.	3363.	-6420.	0.	0.	0.	-.0594	.0023	.1223	-.0434	-.0676	-.0009	0.		
.0860	12638.	3594.	-6861.	0.	0.	0.	-.0588	-.0017	.1371	-.0345	-.0727	-.0218	0.		
.0870	13184.	3750.	-7158.	0.	0.	0.	-.0571	-.0085	.1473	-.0242	-.0793	-.0434	0.		
.0880	13293.	3781.	-7217.	0.	0.	0.	-.0543	-.0145	.1514	-.0077	-.0886	-.0656	0.		
.0890	12928.	3677.	-7019.	0.	0.	0.	-.0497	-.0196	.1501	.0119	-.0998	-.0881	0.		
.0900	12286.	3494.	-6670.	0.	0.	0.	-.0434	-.0258	.1459	.0282	-.1107	-.1101	0.		
.0910	11568.	3290.	-6281.	0.	0.	0.	-.0363	-.0335	.1410	.0399	-.1200	-.1300	0.		
.0920	10815.	3076.	-5872.	0.	0.	0.	-.0291	-.0410	.1357	.0505	-.1272	-.1464	0.		
.0930	10009.	2847.	-5434.	0.	0.	0.	-.0219	-.0470	.1302	.0620	-.1316	-.1587	0.		
.0940	9159.	2605.	-4973.	0.	0.	0.	-.0148	-.0504	.1249	.0728	-.1330	-.1663	0.		
.0950	8270.	2352.	-4490.	0.	0.	0.	-.0080	-.0518	.1194	.0787	-.1314	-.1689	0.		
.0960	7315.	2081.	-3972.	0.	0.	0.	-.0009	-.0528	.1133	.0758	-.1274	-.1661	0.		
.0970	6249.	1777.	-3393.	0.	0.	0.	.0067	-.0543	.1057	.0646	-.1212	-.1580	0.		
.0980	5014.	1426.	-2722.	0.	0.	0.	.0142	-.0542	.0954	.0510	-.1134	-.1453	0.		
.0990	3634.	1034.	-1973.	0.	0.	0.	.0206	-.0501	.0826	.0391	-.1042	-.1291	0.		
.1000	2257.	642.	-1226.	0.	0.	0.	.0255	-.0433	.0684	.0261	-.0932	-.1103	0.		
.1010	1021.	290.	-554.	0.	0.	0.	.0288	-.0357	.0543	.0078	-.0803	-.0894	0.		
.1020	-95.	-27.	52.	0.	0.	0.	.0305	-.0273	.0401	-.0141	-.0656	-.0666	0.		
.1030	-1232.	-350.	669.	0.	0.	0.	.0311	-.0166	.0247	-.0348	-.0496	-.0422	0.		
.1040	-2492.	-709.	1353.	0.	0.	0.	.0314	-.0036	.0074	-.0532	-.0329	-.0166	0.		
.1050	-3890.	-1107.	2112.	0.	0.	0.	.0320	.0105	-.0115	-.0726	-.0165	.0097	0.		
.1060	-5392.	-1534.	2927.	0.	0.	0.	.0330	.0246	-.0314	-.0964	-.0013	.0358	0.		
.1070	-6922.	-1969.	3758.	0.	0.	0.	.0344	.0383	-.0515	-.1239	.0126	.0610	0.		
.1080	-8616.	-2451.	4678.	0.	0.	0.	.0369	.0513	-.0731	-.1501	.0240	.0843	0.		
.1090	-10798.	-3071.	5862.	0.	0.	0.	.0422	.0640	-.0992	-.1698	.0306	.1034	0.		

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.0990	3634.	1034.	-1973.	0.	0.	0.	.0206	-.0501	.0826	.0391	-.1042	-.1291	0.
.1000	2257.	642.	-1226.	0.	0.	0.	.0255	-.0433	.0684	.0261	-.0932	-.1103	0.
.1010	1021.	290.	-554.	0.	0.	0.	.0288	-.0357	.0543	.0078	-.0803	-.0894	0.
.1020	-95.	-27.	52.	0.	0.	0.	.0305	-.0273	.0401	-.0141	-.0656	-.0666	0.
.1030	-1232.	-350.	669.	0.	0.	0.	.0311	-.0166	.0247	-.0348	-.0496	-.0422	0.
.1040	-2492.	-709.	1350.	0.	0.	0.	.0314	-.0036	.0074	-.0532	-.0329	-.0166	0.
.1050	-3890.	-1107.	2112.	0.	0.	0.	.0320	.0105	-.0115	-.0726	-.0165	.0097	0.
.1060	-5392.	-1524.	2927.	0.	0.	0.	.0330	.0246	-.0314	-.0964	-.0013	.0358	0.
.1070	-6922.	-1969.	3758.	0.	0.	0.	.0344	.0383	-.0515	-.1239	.0126	.0610	0.
.1080	-8616.	-2451.	4678.	0.	0.	0.	.0369	.0513	-.0731	-.1501	.0240	.0843	0.
.1090	-10758.	-3071.	5862.	0.	0.	0.	.0422	.0640	-.0992	-.1698	.0306	.1034	0.

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SECTION	14	MEMBER	2	SEQUENCE	237	LOCATION	DIS	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.1100	-12513.	-3559.	6794.	0.	0.	0.	.0447	.0776	-.1209	-.1859	.0372	.1175	0.		
.1110	-13627.	-3876.	7398.	0.	0.	0.	.0452	.0896	-.1354	-.2021	.0458	.1256	0.		
.1120	-14267.	-4058.	7746.	0.	0.	0.	.0448	.0981	-.1441	-.2141	.0569	.1283	0.		
.1130	-14535.	-4134.	7891.	0.	0.	0.	.0428	.1048	-.1495	-.2116	.0695	.1260	0.		
.1140	-14568.	-4143.	7909.	0.	0.	0.	.0392	.1110	-.1536	-.1951	.0826	.1184	0.		
.1150	-14420.	-4101.	7829.	0.	0.	0.	.0354	.1141	-.1561	-.1776	.0950	.1050	0.		
.1160	-13999.	-3982.	7601.	0.	0.	0.	.0312	.1131	-.1562	-.1662	.1061	.0863	0.		
.1170	-13381.	-3806.	7265.	0.	0.	0.	.0259	.1107	-.1552	-.1536	.1150	.0642	0.		
.1180	-12319.	-3504.	6688.	0.	0.	0.	.0171	.1089	-.1515	-.1319	.1221	.0418	0.		
.1190	-11020.	-3134.	5983.	0.	0.	0.	.0076	.1048	-.1459	-.1047	.1284	.0211	0.		
.1200	-9477.	-2695.	5145.	0.	0.	0.	-.0016	.0964	-.1371	-.0793	.1348	.0031	0.		
.1210	-7624.	-2168.	4139.	0.	0.	0.	-.0120	.0866	-.1254	-.0578	.1388	-.0127	0.		
.1220	-5761.	-1639.	3128.	0.	0.	0.	-.0223	.0787	-.1122	-.0423	.1391	-.0277	0.		
.1230	-3861.	-1098.	2096.	0.	0.	0.	-.0323	.0717	-.0971	-.0342	.1343	-.0416	0.		
.1240	-2050.	-583.	1113.	0.	0.	0.	-.0408	.0651	-.0811	-.0297	.1240	-.0532	0.		
.1250	-378.	-107.	205.	0.	0.	0.	-.0483	.0601	-.0649	-.0231	.1078	-.0612	0.		
.1260	1290.	367.	-700.	0.	0.	0.	-.0554	.0562	-.0475	-.0178	.0859	-.0652	0.		
.1270	2601.	740.	-1412.	0.	0.	0.	-.0583	.0512	-.0300	-.0222	.0600	-.0667	0.		
.1280	3636.	1034.	-1974.	0.	0.	0.	-.0582	.0469	-.0117	-.0353	.0305	-.0662	0.		
.1290	4412.	1255.	-2395.	0.	0.	0.	-.0563	.0471	.0070	-.0501	-.0018	-.0637	0.		
.1300	4978.	1416.	-2703.	0.	0.	0.	-.0526	.0501	.0264	-.0659	-.0351	-.0581	0.		
.1310	5672.	1613.	-3079.	0.	0.	0.	-.0480	.0510	.0489	-.0855	-.0670	-.0484	0.		
.1320	6377.	1814.	-3462.	0.	0.	0.	-.0421	.0502	.0731	-.1059	-.0959	-.0350	0.		
.1330	7121.	2025.	-3866.	0.	0.	0.	-.0370	.0517	.0977	-.1220	-.1219	-.0197	0.		
.1340	7723.	2197.	-4193.	0.	0.	0.	-.0320	.0561	.1210	-.1362	-.1442	-.0051	0.		
.1350	8078.	2297.	-4386.	0.	0.	0.	-.0261	.0610	.1412	-.1523	-.1625	.0078	0.		
.1360	8360.	2378.	-4539.	0.	0.	0.	-.0214	.0655	.1579	-.1673	-.1777	.0193	0.		
.1370	8481.	2412.	-4605.	0.	0.	0.	-.0176	.0699	.1695	-.1768	-.1895	.0294	0.		
.1380	8638.	2457.	-4690.	0.	0.	0.	-.0160	.0731	.1772	-.1800	-.1972	.0377	0.		
.1390	8826.	2510.	-4792.	0.	0.	0.	-.0165	.0758	.1813	-.1772	-.1993	.0435	0.		
.1400	9076.	2581.	-4928.	0.	0.	0.	-.0197	.0796	.1824	-.1669	-.1952	.0461	0.		
.1410	9542.	2714.	-5180.	0.	0.	0.	-.0264	.0837	.1812	-.1506	-.1849	.0460	0.		
.1420	9955.	2831.	-5405.	0.	0.	0.	-.0338	.0853	.1764	-.1316	-.1684	.0436	0.		
.1430	10241.	2913.	-5560.	0.	0.	0.	-.0417	.0845	.1671	-.1090	-.1475	.0400	0.		
.1440	10258.	2918.	-5569.	0.	0.	0.	-.0498	.0840	.1522	-.0810	-.1244	.0355	0.		
.1450	9996.	2843.	-5427.	0.	0.	0.	-.0578	.0843	.1326	-.0520	-.0996	.0300	0.		
.1460	9599.	2730.	-5212.	0.	0.	0.	-.0652	.0837	.1108	-.0286	-.0735	.0245	0.		
.1470	8880.	2526.	-4821.	0.	0.	0.	-.0701	.0817	.0867	-.0107	-.0458	.0203	0.		

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.1360	8360.	2378.	-4609.	0.	0.	0.	-.0214	.0655	.1579	-.1673	-.1777	.0193	0.
.1370	8481.	2412.	-4605.	0.	0.	0.	-.176	.0699	.1695	-.1768	-.1895	.0294	0.
.1380	8638.	2457.	-4690.	0.	0.	0.	-.0160	.0731	.1772	-.1800	-.1972	.0377	0.
.1390	8826.	2510.	-4792.	0.	0.	0.	-.0165	.0758	.1813	-.1772	-.1993	.0435	0.
.1400	9076.	2581.	-4928.	0.	0.	0.	-.0197	.0796	.1824	-.1669	-.1952	.0461	0.
.1410	9542.	2714.	-5180.	0.	0.	0.	-.0264	.0837	.1812	-.1506	-.1849	.0460	0.
.1420	9955.	2831.	-5405.	0.	0.	0.	-.0330	.0853	.1764	-.1316	-.1684	.0436	0.
.1430	10241.	2913.	-5560.	0.	0.	0.	-.0417	.0845	.1671	-.1090	-.1475	.0400	0.
.1440	10258.	2918.	-5569.	0.	0.	0.	-.0498	.0840	.1522	-.0810	-.1244	.0355	0.
.1450	9996.	2843.	-5427.	0.	0.	0.	-.0578	.0843	.1326	-.0520	-.0996	.0300	0.
.1460	9599.	2730.	-5212.	0.	0.	0.	-.0652	.0837	.1108	-.0286	-.0735	.0245	0.
.1470	8880.	2526.	-4821.	0.	0.	0.	-.0701	.0817	.0867	-.0107	-.0458	.0203	0.

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SECTION	14	MEMBER	2	SEQUENCE	237	LOCATION	DIS	TYPE	RU						
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)		
.1480	8019.	2281.	-4354.	0.	0.	0.	-.0737	.0791	.0619	.0068	-.0167	.0192	0.		
.1490	7022.	1997.	-3812.	0.	0.	0.	-.0756	.0759	.0373	.0242	.0136	.0214	0.		
.1500	5868.	1669.	-3186.	0.	0.	0.	-.0751	.0717	.0137	.0376	.0437	.0260	0.		
.1510	4713.	1340.	-2559.	0.	0.	0.	-.0733	.0676	-.0077	.0456	.0718	.0323	0.		
.1520	3390.	964.	-1840.	0.	0.	0.	-.0696	.0647	-.0283	.0497	.0961	.0393	0.		
.1530	1951.	555.	-1059.	0.	0.	0.	-.0646	.0623	-.0482	.0508	.1152	.0466	0.		
.1540	248.	70.	-135.	0.	0.	0.	-.0569	.0595	-.0688	.0491	.1286	.0535	0.		
.1550	-1702.	-484.	924.	0.	0.	0.	-.0469	.0569	-.0897	.0463	.1366	.0596	0.		
.1560	-3603.	-1025.	1956.	0.	0.	0.	-.0368	.0556	-.1088	.0431	.1401	.0651	0.		
.1570	-5523.	-1571.	2999.	0.	0.	0.	-.0255	.0551	-.1257	.0376	.1406	.0694	0.		
.1580	-7234.	-2058.	3928.	0.	0.	0.	-.0142	.0543	-.1387	.0301	.1389	.0736	0.		
.1590	-8571.	-2438.	4653.	0.	0.	0.	-.0045	.0536	-.1472	.0243	.1354	.0788	0.		
.1600	-9657.	-2747.	5243.	0.	0.	0.	.0044	.0532	-.1523	.0218	.1304	.0854	0.		
.1610	-10551.	-3001.	5728.	0.	0.	0.	.0130	.0524	-.1543	.0193	.1250	.0930	0.		
.1620	-11172.	-3178.	6066.	0.	0.	0.	.0207	.0508	-.1530	.0140	.1193	.1008	0.		
.1630	-11713.	-3331.	6359.	0.	0.	0.	.0284	.0494	-.1500	.0072	.1135	.1080	0.		
.1640	-12075.	-3434.	6556.	0.	0.	0.	.0353	.0482	-.1451	.0005	.1074	.1143	0.		
.1650	-12113.	-3445.	6577.	0.	0.	0.	.0406	.0460	-.1373	-.0051	.1011	.1194	0.		
.1660	-11937.	-3395.	6481.	0.	0.	0.	.0448	.0432	-.1276	-.0074	.0947	.1224	0.		
.1670	-11389.	-3239.	6183.	0.	0.	0.	.0465	.0408	-.1150	-.0051	.0880	.1229	0.		
.1680	-10529.	-2995.	5717.	0.	0.	0.	.0465	.0380	-.0996	-.0010	.0817	.1201	0.		
.1690	-9342.	-2657.	5072.	0.	0.	0.	.0449	.0342	-.0815	.0034	.0752	.1137	0.		
.1700	-7988.	-2272.	4337.	0.	0.	0.	.0420	.0299	-.0626	.0108	.0673	.1035	0.		
.1710	-6729.	-1914.	3653.	0.	0.	0.	.0394	.0259	-.0450	.0228	.0576	.0899	0.		
.1720	-5385.	-1532.	2924.	0.	0.	0.	.0358	.0213	-.0279	.0366	.0458	.0740	0.		
.1730	-4107.	-1168.	2230.	0.	0.	0.	.0324	.0157	-.0121	.0486	.0318	.0560	0.		
.1740	-2834.	-806.	1539.	0.	0.	0.	.0289	.0093	.0029	.0586	.0154	.0366	0.		
.1750	-1467.	-417.	797.	0.	0.	0.	.0242	.0027	.0175	.0681	-.0026	.0170	0.		
.1760	-133.	-38.	72.	0.	0.	0.	.0195	-.0038	.0313	.0784	-.0204	-.0018	0.		
.1770	1316.	374.	-714.	0.	0.	0.	.0136	-.0106	.0451	.0890	-.0372	-.0187	0.		
.1780	2811.	800.	-1526.	0.	0.	0.	.0073	-.0182	.0587	.0975	-.0517	-.0335	0.		
.1790	4432.	1261.	-2406.	0.	0.	0.	-.0000	-.0267	.0724	.1021	-.0632	-.0459	0.		
.1800	6100.	1735.	-3312.	0.	0.	0.	-.0082	-.0354	.0852	.1045	-.0722	-.0558	0.		
.1810	7563.	2151.	-4106.	0.	0.	0.	-.0161	-.0432	.0951	.1066	-.0785	-.0637	0.		
.1820	8971.	2552.	-4871.	0.	0.	0.	-.0248	-.0502	.1029	.1079	-.0821	-.0697	0.		
.1830	10242.	2913.	-5561.	0.	0.	0.	-.0332	-.0572	.1084	.1065	-.0827	-.0739	0.		
.1840	11380.	3237.	-6179.	0.	0.	0.	-.0414	-.0644	.1119	.1024	-.0807	-.0765	0.		
.1850	12406.	3529.	-6736.	0.	0.	0.	-.0493	-.0708	.1139	.0977	-.0761	-.0777	0.		

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