

50-305

RESPONSE TO NUREG-0737 ITEM II.D.1

Docket # *50-305*

Control # *8403280048*

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

.2030	215.	2968.	177.	-876.	-575.	-2533.	-.0024	-.0166	-.0716	-.0527	.0678	.0108	1100.
.2040	230.	3342.	271.	-610.	-603.	-2167.	.0009	-.0117	-.0692	-.0527	.0771	.0099	1317.
.2050	426.	2539.	770.	-310.	-606.	-7629.	.0029	-.0060	-.0666	-.0527	.0826	.0095	1482.
.2060	491.	1686.	471.	-9.	-591.	-7660.	.0034	-.0000	-.0677	-.0525	.0845	.0095	1568.
.2070	515.	908.	568.	305.	-563.	-7837.	.0022	.0060	-.0604	-.0519	.0831	.0098	1561.
.2080	499.	225.	650.	604.	-530.	-7593.	-.0007	.0118	-.0566	-.0509	.0790	.0105	1462.
.2090	447.	-451.	710.	874.	-505.	-7037.	-.0043	.0173	-.0523	-.0492	.0740	.0115	1284.
.2100	366.	-1105.	746.	1115.	-505.	-7332.	-.0003	.0222	-.0473	-.0468	.0700	.0127	1057.
.2110	267.	-1934.	756.	1331.	-528.	-7502.	-.0150	.0263	-.0415	-.0435	.0672	.0142	833.
.2120	162.	-2586.	743.	1540.	-561.	-616.	-.0210	.0295	-.0349	-.0395	.0650	.0158	703.
.2130	62.	-3072.	710.	1759.	-594.	254.	-.0268	.0310	-.0274	-.0346	.0624	.0175	752.

ADLPIPE PAGE 1467

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.36.

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	35	MEMBER	1	SEQUENCE	850	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	-23.	-3198.	671.	2011.	-618.	1041.		-.0320	.0332	-.0189	-.0290	.0591	.0191	942.	
.2150	-84.	-3052.	623.	2312.	-624.	1687.		-.0362	.0335	-.0096	-.0228	.0548	.0207	1175.	
.2160	-116.	-2623.	576.	2669.	-609.	2148.		-.0391	.0331	.0005	-.0160	.0496	.0220	1397.	
.2170	-116.	-2040.	531.	3082.	-575.	2402.		-.0406	.0318	.0113	-.0087	.0441	.0230	1585.	
.2180	-88.	-1462.	489.	3532.	-527.	2447.		-.0405	.0297	.0224	-.0012	.0388	.0236	1737.	
.2190	-40.	-951.	449.	3993.	-471.	2304.		-.0389	.0269	.0337	.0064	.0339	.0237	1860.	
.2200	16.	-444.	408.	4474.	-412.	2012.		-.0357	.0237	.0446	.0140	.0298	.0231	1961.	
.2210	70.	146.	367.	4820.	-349.	1608.		-.0313	.0202	.0550	.0214	.0260	.0219	2044.	
.2220	116.	824.	321.	5116.	-277.	1126.		-.0258	.0166	.0643	.0284	.0221	.0200	2105.	
.2230	155.	1532.	269.	5284.	-192.	587.		-.0195	.0130	.0724	.0349	.0175	.0175	2135.	
.2240	187.	2207.	206.	5292.	-90.	12.		-.0125	.0097	.0789	.0408	.0118	.0145	2124.	
.2250	215.	2772.	129.	5115.	25.	-578.		-.0053	.0067	.0835	.0459	.0048	.0112	2066.	
.2260	236.	3153.	34.	4742.	143.	-1157.		.0021	.0043	.0863	.0503	-.0032	.0076	1960.	
.2270	248.	3354.	-75.	4177.	255.	-1696.		.0092	.0026	.0872	.0539	-.0116	.0039	1812.	
.2280	249.	3458.	-198.	3437.	355.	-2172.		.0159	.0015	.0863	.0567	-.0202	.0002	1638.	
.2290	239.	3523.	-328.	2557.	438.	-2572.		.0220	.0011	.0837	.0587	-.0287	-.0035	1466.	
.2300	224.	3518.	-458.	1582.	496.	-2892.		.0273	.0015	.0799	.0600	-.0363	-.0069	1338.	
.2310	208.	3386.	-531.	566.	526.	-3135.		.0316	.0024	.0751	.0606	-.0425	-.0100	1296.	
.2320	199.	3108.	-691.	-440.	531.	-3309.		.0349	.0040	.0698	.0606	-.0475	-.0125	1356.	
.2330	199.	2698.	-780.	-1380.	516.	-3411.		.0371	.0060	.0643	.0602	-.0516	-.0145	1491.	
.2340	206.	2188.	-844.	-2206.	485.	-3431.		.0382	.0085	.0590	.0595	-.0553	-.0159	1648.	
.2350	212.	1619.	-881.	-2879.	445.	-3350.		.0381	.0111	.0544	.0585	-.0589	-.0168	1781.	
.2360	211.	1016.	-889.	-3369.	402.	-3149.		.0369	.0139	.0507	.0576	-.0626	-.0172	1857.	
.2370	196.	364.	-869.	-3657.	356.	-2813.		.0345	.0168	.0482	.0568	-.0657	-.0172	1857.	
.2380	161.	-337.	-823.	-3735.	305.	-2340.		.0312	.0195	.0470	.0562	-.0573	-.0170	1773.	
.2390	105.	-1014.	-754.	-3608.	247.	-1742.		.0271	.0220	.0472	.0559	-.0571	-.0166	1611.	
.2400	31.	-1573.	-666.	-3206.	137.	-1043.		.0225	.0243	.0489	.0560	-.0550	-.0161	1389.	
.2410	-57.	-2000.	-565.	-2829.	124.	-277.		.0175	.0262	.0518	.0565	-.0512	-.0155	1142.	
.2420	-155.	-2357.	-459.	-2250.	60.	516.		.0125	.0277	.0558	.0574	-.0559	-.0150	927.	
.2430	-255.	-2672.	-358.	-1610.	0.	1290.		.0078	.0287	.0606	.0588	-.0495	-.0145	828.	
.2440	-350.	-2899.	-272.	-963.	-53.	1995.		.0036	.0290	.0661	.0606	-.0420	-.0142	889.	
.2450	-429.	-2991.	-213.	-367.	-97.	2532.		.0003	.0289	.0718	.0628	-.0336	-.0140	1047.	
.2460	-486.	-2959.	-191.	133.	-125.	3014.		-.0019	.0282	.0776	.0655	-.0247	-.0139	1212.	
.2470	-517.	-2847.	-211.	507.	-148.	3266.		-.0030	.0268	.0833	.0684	-.0158	-.0140	1328.	
.2480	-522.	-2660.	-269.	750.	-162.	3337.		-.0028	.0249	.0886	.0716	-.0069	-.0142	1374.	
.2490	-504.	-2355.	-358.	880.	-172.	3231.		-.0015	.0224	.0934	.0749	.0017	-.0147	1346.	
.2500	-463.	-1937.	-466.	926.	-174.	2964.		.0010	.0195	.0978	.0780	.0094	-.0153	1248.	
.2510	-404.	-1468.	-579.	928.	-165.	2559.		.0043	.0164	.1017	.0808	.0157	-.0161	1094.	

ADLPIPE PAGE 1468

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18.28.36.

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

.2410	-57.	-2000.	565.	-2829.	124.	-277.	.175	.0762	.0518	.0565	-.0512	-.0155	1142.
.2420	-155.	-2357.	-459.	-2250.	60.	516.	.125	.0277	.0558	.0574	-.0559	-.0150	927.
.2430	-255.	-2672.	-358.	-1610.	0.	1290.	.0078	.0287	.0606	.0588	-.0495	-.0145	828.
.2440	-350.	-2899.	-272.	-963.	-53.	1995.	.0036	.0290	.0661	.0606	-.0420	-.0142	889.
.2450	-429.	-2991.	-213.	-367.	-97.	2532.	.0003	.0289	.0710	.0625	-.0336	-.0140	1047.
.2460	-486.	-2959.	-191.	173.	-121.	3014.	-.0019	.0282	.0776	.0655	-.0247	-.0139	1212.
.2470	-517.	-2847.	-211.	507.	-148.	3266.	-.0030	.0268	.0833	.0684	-.0158	-.0140	1328.
.2480	-522.	-2660.	-269.	750.	-162.	3337.	-.0028	.0249	.0886	.0716	-.0069	-.0142	1374.
.2490	-504.	-2355.	-358.	880.	-172.	3231.	-.0015	.0224	.0934	.0749	.0017	-.0147	1346.
.2500	-463.	-1937.	-466.	926.	-174.	2964.	.0010	.0195	.0977	.0780	.0194	-.0153	1248.
.2510	-404.	-1462.	-579.	921.	-165.	2559.	.0043	.0164	.1017	.0802	.0157	-.0161	1094.

ADLPIPE PAGE 1468

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ADLPIPE STRESS ANALYSIS

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

SECTION	35	MEMBER	1	SEQUENCE	850	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)		
.2520	-332.	-1005.	-682.	930.	-144.	2053.	.0084	.0130	.1050	.0831	.0204	-.0170	906.		
.2530	-256.	-548.	-761.	969.	-113.	1493.	.0130	.0096	.1077	.0847	.0234	-.0180	716.		
.2540	-184.	-94.	-808.	1072.	-75.	924.	.0177	.0062	.1099	.0855	.0246	-.0191	569.		
.2550	-124.	317.	-820.	1245.	-34.	389.	.0223	.0031	.1114	.0853	.0242	-.0203	524.		
.2560	-79.	609.	-795.	1485.	4.	-81.	.0267	.0002	.1121	.0842	.0223	-.0214	597.		
.2570	-51.	683.	-738.	1775.	39.	-464.	.0305	-.0023	.1119	.0821	.0191	-.0226	736.		
.2580	-40.	557.	-651.	2092.	71.	-748.	.0337	-.0047	.1107	.0791	.0151	-.0236	892.		
.2590	-46.	389.	-542.	2403.	99.	-930.	.0362	-.0069	.1084	.0751	.0106	-.0245	1035.		
.2600	-63.	315.	-419.	2669.	126.	-1018.	.0378	-.0089	.1048	.0704	.0057	-.0251	1147.		
.2610	-87.	314.	-295.	2844.	154.	-1026.	.0387	-.0108	.0998	.0648	.0002	-.0255	1215.		
.2620	-112.	291.	-181.	2887.	183.	-973.	.0389	-.0126	.0933	.0587	-.0055	-.0255	1225.		
.2630	-135.	231.	-85.	2763.	215.	-877.	.0384	-.0146	.0852	.0521	-.0113	-.0252	1166.		
.2640	-151.	204.	-18.	2445.	254.	-756.	.0372	-.0166	.0756	.0452	-.0169	-.0245	1032.		
.2650	-158.	244.	14.	1922.	302.	-624.	.0355	-.0185	.0647	.0382	-.0221	-.0234	820.		
.2660	-154.	241.	8.	1200.	357.	-491.	.0334	-.0205	.0525	.0311	-.0267	-.0220	540.		
.2670	-139.	145.	-35.	306.	419.	-361.	.0308	-.0225	.0394	.0240	-.0306	-.0203	254.		
.2680	-116.	141.	-106.	-714.	489.	-233.	.0278	-.0244	.0257	.0172	-.0336	-.0183	360.		
.2690	-86.	402.	-199.	-1802.	569.	-102.	.0245	-.0262	.0119	.0106	-.0357	-.0161	759.		
.2700	-53.	787.	-302.	-2892.	659.	42.	.0210	-.0276	-.0016	.0044	-.0370	-.0138	1191.		
.2710	-21.	858.	-404.	-3917.	753.	209.	.0171	-.0287	-.0148	-.0014	-.0376	-.0114	1603.		
.2720	6.	404.	-492.	-4810.	844.	408.	.0131	-.0297	-.0267	-.0069	-.0373	-.0089	1967.		
.2730	25.	-252.	-556.	-5519.	927.	648.	.0089	-.0307	-.0373	-.0119	-.0361	-.0066	2261.		
.2740	33.	-650.	-589.	-6004.	1001.	934.	.0046	-.0312	-.0463	-.0166	-.0345	-.0043	2471.		
.2750	27.	-732.	-587.	-6243.	1061.	1267.	.0003	-.0313	-.0536	-.0208	-.0328	-.0022	2592.		
.2760	5.	-805.	-549.	-6236.	1101.	1641.	-.0039	-.0314	-.0591	-.0246	-.0308	-.0004	2625.		
.2770	-31.	-986.	-478.	-6000.	1119.	2041.	-.0078	-.0315	-.0630	-.0281	-.0288	.0011	2583.		
.2780	-78.	-1046.	-382.	-5573.	1117.	2446.	-.0112	-.0316	-.0652	-.0311	-.0271	.0022	2483.		
.2790	-132.	-891.	-271.	-5003.	1091.	2826.	-.0141	-.0312	-.0662	-.0308	-.0263	.0030	2347.		
.2800	-186.	-798.	-155.	-4343.	1037.	3149.	-.0162	-.0307	-.0660	-.0363	-.0266	.0034	2193.		
.2810	-232.	-1016.	-42.	-3644.	954.	3383.	-.0174	-.0304	-.0651	-.0381	-.0283	.0035	2032.		
.2820	-267.	-1339.	61.	-2950.	844.	3503.	-.0175	-.0301	-.0637	-.0397	-.0314	.0031	1869.		
.2830	-286.	-1370.	150.	-2300.	712.	3492.	-.0166	-.0295	-.0620	-.0411	-.0355	.0024	1702.		
.2840	-290.	-1053.	221.	-1719.	561.	3345.	-.0145	-.0286	-.0603	-.0423	-.0402	.0014	1526.		
.2850	-277.	-686.	274.	-1224.	395.	3063.	-.0114	-.0276	-.0587	-.0433	-.0454	-.0000	1333.		
.2860	-251.	-471.	310.	-821.	215.	2651.	-.0073	-.0266	-.0573	-.0443	-.0510	-.0017	1121.		
.2870	-216.	-324.	330.	-510.	27.	2160.	-.0024	-.0253	-.0563	-.0451	-.0570	-.0037	891.		
.2880	-175.	-106.	337.	-280.	-162.	1581.	.0032	-.0236	-.0555	-.0458	-.0634	-.0060	648.		
.2890	-131.	135.	335.	-112.	-342.	949.	.0092	-.0217	-.0550	-.0465	-.0701	-.0086	407.		

ADLPIPE PAGE 1469

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.2790	-132.	-891.	-271.	-5003.	1091.	2026.	-.0141	-.0312	-.0662	-.0338	-.0263	.0030	2347.
.2800	-188.	-728.	-155.	-4343.	1037.	3149.	-.0162	-.0307	-.0660	-.0361	-.0266	.0034	2193.
.2810	-232.	-1016.	-42.	-3644.	954.	3383.	-.0174	-.0304	-.0651	-.0381	-.0283	.0035	2032.
.2820	-267.	-1339.	61.	-2950.	844.	3503.	-.0175	-.0301	-.0637	-.0397	-.0314	.0031	1869.
.2830	-286.	-1370.	150.	-2300.	710.	3492.	-.0166	-.0295	-.0620	-.0411	-.0355	.0024	1702.
.2840	-290.	-1053.	221.	-1719.	561.	3345.	-.0145	-.0286	-.0603	-.0423	-.0402	.0014	1526.
.2850	-277.	-686.	274.	-1224.	395.	3063.	-.0114	-.0276	-.0587	-.0433	-.0454	-.0000	1333.
.2860	-251.	-471.	310.	-821.	215.	2661.	-.0073	-.0266	-.0573	-.0443	-.0510	-.0017	1121.
.2870	-216.	-324.	330.	-510.	27.	2160.	-.0024	-.0253	-.0563	-.0451	-.0570	-.0037	891.
.2880	-175.	-136.	337.	-290.	-162.	1581.	.0022	-.0236	-.0555	-.0458	-.0634	-.0060	648.
.2890	-131.	135.	335.	-112.	-342.	949.	.0092	-.0217	-.0550	-.0465	-.0701	-.0086	407.

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

SECTION	35	MEMBER	1	SEQUENCE	850	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	-87.	244.	331.	22.	-503.	289.	.0155	-.0196	-.0547	-.0472	-.0769	-.0112	233.			
.2910	-44.	182.	331.	148.	-637.	-373.	.0218	-.0172	-.0545	-.0478	-.0838	-.0139	302.			
.2920	-3.	86.	340.	291.	-740.	-1015.	.0279	-.0147	-.0543	-.0484	-.0905	-.0165	517.			
.2930	35.	112.	363.	465.	-811.	-1616.	.0335	-.0121	-.0541	-.0490	-.0963	-.0190	749.			
.2940	69.	257.	399.	673.	-855.	-2159.	.0385	-.0094	-.0538	-.0495	-.1010	-.0212	970.			
.2950	100.	339.	445.	906.	-877.	-2624.	.0428	-.0067	-.0536	-.0500	-.1039	-.0231	1168.			
.2960	126.	195.	496.	1145.	-888.	-2996.	.0460	-.0042	-.0533	-.0504	-.1044	-.0245	1336.			
.2970	148.	-116.	545.	1363.	-888.	-3265.	.0482	-.0020	-.0531	-.0506	-.1023	-.0255	1464.			
.2980	165.	-386.	584.	1530.	-879.	-3424.	.0492	-.0000	-.0532	-.0506	-.0975	-.0259	1546.			
.2990	179.	-524.	608.	1620.	-859.	-3466.	.0490	.0016	-.0535	-.0504	-.0904	-.0258	1574.			
.3000	187.	-644.	612.	1614.	-833.	-3388.	.0476	.0028	-.0541	-.0501	-.0814	-.0252	1543.			
.3010	189.	-830.	593.	1499.	-802.	-3187.	.0450	.0034	-.0551	-.0495	-.0713	-.0240	1450.			
.3020	182.	-971.	552.	1271.	-766.	-2863.	.0414	.0032	-.0565	-.0489	-.0607	-.0224	1294.			
.3030	163.	-940.	488.	933.	-726.	-2419.	.0367	.0026	-.0582	-.0480	-.0501	-.0204	1080.			
.3040	129.	-820.	404.	499.	-687.	-1860.	.0312	.0016	-.0603	-.0471	-.0396	-.0182	821.			
.3050	80.	-802.	305.	-9.	-654.	-1204.	.0251	-.0002	-.0626	-.0462	-.0295	-.0158	550.			
.3060	17.	-901.	197.	-564.	-631.	-472.	.0186	-.0025	-.0649	-.0452	-.0198	-.0134	389.			
.3070	-58.	-925.	88.	-1130.	-617.	302.	.0120	-.0052	-.0673	-.0443	-.0111	-.0109	531.			
.3080	-138.	-723.	-14.	-1672.	-613.	1077.	.0054	-.0081	-.0695	-.0435	-.0036	-.0086	835.			
.3090	-217.	-349.	-101.	-2154.	-618.	1809.	-.0006	-.0112	-.0714	-.0429	.0025	-.0065	1156.			
.3100	-287.	32.	-165.	-2547.	-628.	2459.	-.0061	-.0143	-.0729	-.0425	.0067	-.0046	1443.			
.3110	-344.	323.	-204.	-2834.	-642.	2991.	-.0106	-.0174	-.0739	-.0423	.0089	-.0029	1673.			
.3120	-384.	546.	-216.	-3009.	-655.	3379.	-.0140	-.0203	-.0745	-.0423	.0093	-.0016	1835.			
.3130	-405.	755.	-204.	-3078.	-669.	3609.	-.0163	-.0228	-.0746	-.0425	.0082	-.0005	1922.			
.3140	-408.	952.	-174.	-3056.	-683.	3673.	-.0174	-.0248	-.0743	-.0428	.0057	.0001	1937.			
.3150	-393.	1081.	-132.	-2965.	-695.	3578.	-.0172	-.0263	-.0736	-.0431	.0022	.0004	1885.			
.3160	-363.	1110.	-83.	-2827.	-707.	3335.	-.0160	-.0272	-.0725	-.0434	-.0019	.0003	1777.			
.3170	-320.	1092.	-32.	-2661.	-715.	2963.	-.0137	-.0274	-.0713	-.0436	-.0064	-.0001	1624.			
.3180	-267.	1095.	17.	-2485.	-714.	2488.	-.0106	-.0271	-.0698	-.0438	-.0109	-.0009	1440.			
.3190	-209.	1055.	59.	-2312.	-702.	1940.	-.0069	-.0261	-.0681	-.0438	-.0155	-.0018	1244.			
.3200	-149.	815.	93.	-2151.	-680.	1354.	-.0028	-.0246	-.0663	-.0436	-.0200	-.0030	1056.			
.3210	-95.	317.	117.	-2007.	-650.	763.	.0015	-.0227	-.0644	-.0432	-.0241	-.0043	900.			
.3220	-49.	-306.	131.	-1877.	-614.	202.	.0058	-.0206	-.0622	-.0425	-.0278	-.0057	797.			
.3230	-17.	-892.	135.	-1754.	-573.	-302.	.0098	-.0183	-.0598	-.0415	-.0306	-.0071	750.			
.3240	-1.	-1422.	132.	-1627.	-530.	-729.	.0134	-.0160	-.0570	-.0403	-.0323	-.0084	746.			
.3250	1.	-1961.	126.	-1477.	-486.	-1067.	.0165	-.0138	-.0539	-.0388	-.0327	-.0097	757.			
.3260	-12.	-2473.	123.	-1287.	-443.	-1317.	.0189	-.0120	-.0504	-.0371	-.0320	-.0107	760.			
.3270	-34.	-2838.	128.	-1044.	-398.	-1485.	.0207	-.0107	-.0464	-.0353	-.0306	-.0114	746.			

ADLPIPE PAGE 1470

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.36.

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	-320.	1093.	-32.	-2661.	-715.	2963.	-.0137	-.0274	-.0713	-.0436	-.0064	-.0001	1624.
.3180	-267.	1095.	17.	-2485.	-714.	2488.	-.0106	-.0271	-.0698	-.0438	-.0109	-.0009	1440.
.3190	-209.	1055.	59.	-2312.	-702.	1940.	-.0069	-.0261	-.0681	-.0438	-.0155	-.0018	1244.
.3200	-149.	815.	23.	-2151.	-680.	1354.	-.0028	-.0246	-.0663	-.0436	-.0200	-.0030	1056.
.3210	-95.	317.	117.	-2007.	-650.	763.	.0015	-.0227	-.0644	-.0432	-.0241	-.0043	900.
.3220	-49.	-306.	131.	-1877.	-614.	202.	.0058	-.0206	-.0622	-.0425	-.0278	-.0057	797.
.3230	-17.	-892.	135.	-1754.	-573.	-302.	.0098	-.0183	-.0598	-.0415	-.0306	-.0071	750.
.3240	-1.	-1422.	132.	-1627.	-530.	-729.	.0134	-.0160	-.0570	-.0403	-.0323	-.0084	746.
.3250	1.	-1961.	126.	-1477.	-486.	-1067.	.0165	-.0138	-.0539	-.0388	-.0327	-.0097	757.
.3260	-12.	-2473.	123.	-1287.	-443.	-1317.	.0189	-.0120	-.0504	-.0371	-.0320	-.0107	760.
.3270	-34.	-2878.	128.	-1044.	-398.	-1485.	.0207	-.0107	-.0464	-.0353	-.0306	-.0114	746.

ADLPIPE PAGE 1470

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.36.

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	35	MEMBER	1	SEQUENCE	050	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	-61.	-3028.	144.	-743.	-355.	-1587.	.0219	-.0098	-.0420	-.0334	-.0286	-.0118	718.		
.3290	-87.	-3138.	172.	-392.	-314.	-1642.	.0225	-.0096	-.0373	-.0314	-.0262	-.0117	689.		
.3300	-106.	-3244.	208.	-10.	-277.	-1671.	.0224	-.0102	-.0325	-.0294	-.0237	-.0111	680.		
.3310	-112.	-3276.	246.	375.	-243.	-1691.	.0213	-.0117	-.0276	-.0274	-.0212	-.0101	702.		
.3320	-104.	-3119.	280.	727.	-214.	-1713.	.0207	-.0138	-.0228	-.0254	-.0184	-.0084	752.		
.3330	-79.	-2760.	303.	1013.	-190.	-1743.	.0190	-.0166	-.0184	-.0235	-.0153	-.0062	813.		
.3340	-38.	-2279.	309.	1201.	-173.	-1781.	.0168	-.0201	-.0140	-.0216	-.0118	-.0035	865.		
.3350	18.	-1760.	295.	1270.	-161.	-1819.	.0140	-.0242	-.0114	-.0197	-.0080	-.0003	893.		
.3360	84.	-1234.	260.	1209.	-153.	-1841.	.0107	-.0286	-.0091	-.0179	-.0041	.0033	886.		
.3370	155.	-716.	204.	1016.	-150.	-1830.	.0067	-.0332	-.0076	-.0163	.0000	.0073	842.		
.3380	225.	-236.	131.	701.	-147.	-1762.	.0021	-.0378	-.0070	-.0149	.0043	.0115	763.		
.3390	287.	173.	45.	279.	-143.	-1617.	-.0033	-.0422	-.0073	-.0137	.0090	.0159	661.		
.3400	335.	500.	-50.	-225.	-137.	-1376.	-.0093	-.0463	-.0084	-.0127	.0143	.0203	562.		
.3410	363.	765.	-149.	-782.	-129.	-1027.	-.0159	-.0499	-.0101	-.0120	.0202	.0247	521.		
.3420	367.	1003.	-245.	-1359.	-118.	-568.	-.0231	-.0528	-.0123	-.0115	.0268	.0289	593.		
.3430	348.	1210.	-332.	-1921.	-103.	-7.	-.0306	-.0551	-.0148	-.0113	.0340	.0328	772.		
.3440	306.	1332.	-404.	-2432.	-83.	636.	-.0384	-.0565	-.0175	-.0113	.0416	.0365	1009.		
.3450	245.	1300.	-456.	-2863.	-58.	1331.	-.0461	-.0573	-.0201	-.0115	.0495	.0397	1267.		
.3460	173.	1115.	-485.	-3191.	-26.	2040.	-.0536	-.0572	-.0225	-.0119	.0575	.0424	1520.		
.3470	94.	851.	-487.	-3401.	12.	2724.	-.0606	-.0565	-.0246	-.0125	.0652	.0447	1749.		
.3480	15.	584.	-466.	-3494.	57.	3343.	-.0668	-.0552	-.0264	-.0132	.0726	.0465	1941.		
.3490	-56.	323.	-425.	-3477.	105.	3862.	-.0720	-.0534	-.0276	-.0139	.0794	.0478	2086.		
.3500	-116.	46.	-368.	-3370.	154.	4251.	-.0760	-.0512	-.0285	-.0147	.0854	.0486	2178.		
.3510	-160.	-240.	-302.	-3196.	201.	4490.	-.0788	-.0487	-.0290	-.0154	.0904	.0489	2213.		
.3520	-186.	-503.	-234.	-2982.	244.	4567.	-.0803	-.0461	-.0291	-.0161	.0942	.0487	2191.		
.3530	-193.	-729.	-170.	-2753.	282.	4482.	-.0805	-.0435	-.0289	-.0166	.0966	.0482	2114.		
.3540	-182.	-950.	-114.	-2532.	313.	4243.	-.0794	-.0408	-.0286	-.0170	.0974	.0473	1987.		
.3550	-153.	-1184.	-72.	-2337.	336.	3867.	-.0773	-.0383	-.0280	-.0171	.0965	.0461	1818.		
.3560	-110.	-1388.	-45.	-2180.	349.	3382.	-.0742	-.0359	-.0274	-.0170	.0938	.0448	1621.		
.3570	-57.	-1479.	-34.	-2063.	352.	2818.	-.0706	-.0338	-.0266	-.0167	.0893	.0433	1409.		
.3580	3.	-1418.	-38.	-1982.	344.	2213.	-.0665	-.0318	-.0255	-.0162	.0834	.0418	1200.		
.3590	64.	-1258.	-55.	-1928.	322.	1604.	-.0624	-.0299	-.0245	-.0155	.0762	.0403	1015.		
.3600	123.	-1094.	-81.	-1881.	289.	1028.	-.0583	-.0282	-.0232	-.0145	.0678	.0389	868.		
.3610	174.	-977.	-110.	-1822.	244.	516.	-.0547	-.0267	-.0216	-.0134	.0586	.0377	766.		
.3620	216.	-873.	-136.	-1728.	190.	95.	-.0516	-.0252	-.0197	-.0121	.0488	.0368	699.		
.3630	246.	-734.	-154.	-1581.	132.	-220.	-.0492	-.0237	-.0175	-.0107	.0384	.0361	643.		
.3640	264.	-577.	-160.	-1367.	72.	-418.	-.0476	-.0221	-.0149	-.0093	.0277	.0357	574.		
.3650	270.	-464.	-150.	-1079.	15.	-500.	-.0469	-.0204	-.0121	-.0080	.0167	.0356	477.		

ADLPIPE PAGE 1471

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.36.

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	-153.	-1134.	-72.	-2337.	336.	3867.	-0.773	-0.0383	-0.0280	-0.0171	.0965	.0461	1818.
.3560	-110.	-1388.	-45.	-2180.	349.	3382.	-0.742	-0.0359	-0.0274	-0.0170	.0938	.0448	1621.
.3570	-57.	-1479.	-34.	-2063.	352.	2818.	-0.706	-0.0338	-0.0265	-0.0167	.0893	.0433	1409.
.3580	3.	-1418.	-28.	-1982.	344.	2213.	-0.665	-0.0318	-0.0255	-0.0162	.0834	.0418	1200.
.3590	64.	-1258.	-55.	-1928.	322.	1604.	-0.624	-0.0299	-0.0245	-0.0155	.0762	.0403	1015.
.3600	123.	-1094.	-81.	-1881.	289.	1028.	-0.583	-0.0282	-0.0232	-0.0145	.0678	.0389	868.
.3610	174.	-977.	-110.	-1822.	244.	516.	-0.547	-0.0267	-0.0216	-0.0134	.0586	.0377	766.
.3620	216.	-873.	-136.	-1728.	190.	95.	-0.516	-0.0252	-0.0197	-0.0121	.0488	.0368	699.
.3630	246.	-734.	-154.	-1581.	132.	-220.	-0.492	-0.0237	-0.0175	-0.0107	.0384	.0361	643.
.3640	264.	-577.	-160.	-1367.	72.	-418.	-0.476	-0.0221	-0.0149	-0.0093	.0277	.0357	574.
.3650	270.	-464.	-157.	-1079.	15.	-500.	-0.469	-0.0204	-0.0121	-0.0080	.0167	.0356	477.

ADLPIPE PAGE 1471

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.36.

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	35	MEMBER	1	SEQUENCE	850	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	267.	-430.	-125.	-719.	-37.	-473.	-0.469	-0.0185	-0.0091	-0.0066	.0058	.0359	346.		
.3670	257.	-435.	-83.	-296.	-79.	-352.	-0.477	-0.0164	-0.0060	-0.0053	-0.0046	.0363	187.		
.3680	241.	-435.	-28.	170.	-110.	-156.	-0.491	-0.0141	-0.0029	-0.0042	-0.0143	.0370	103.		
.3690	223.	-463.	38.	654.	-131.	94.	-0.509	-0.0115	-0.0001	-0.0031	-0.0228	.0379	270.		
.3700	205.	-612.	109.	1124.	-141.	375.	-0.530	-0.0087	.0024	-0.0023	-0.0301	.0388	479.		
.3710	188.	-912.	180.	1546.	-142.	665.	-0.551	-0.0059	.0043	-0.0017	-0.0359	.0397	678.		
.3720	175.	-1275.	244.	1885.	-133.	941.	-0.572	-0.0031	.0054	-0.0012	-0.0400	.0406	847.		
.3730	165.	-1577.	296.	2104.	-110.	1186.	-0.589	-0.0004	.0056	-0.0010	-0.0425	.0413	970.		
.3740	161.	-1808.	327.	2177.	-75.	1385.	-0.603	.0022	.0049	-0.0010	-0.0434	.0418	1036.		
.3750	160.	-2061.	334.	2082.	-27.	1528.	-0.610	.0044	.0031	-0.0012	-0.0431	.0419	1036.		
.3760	163.	-2375.	314.	1812.	34.	1610.	-0.611	.0061	.0003	-0.0015	-0.0417	.0417	973.		
.3770	168.	-2657.	267.	1372.	106.	1632.	-0.605	.0072	-0.0035	-0.0019	-0.0395	.0411	856.		
.3780	174.	-2769.	194.	780.	189.	1594.	-0.592	.0077	-0.0079	-0.0025	-0.0367	.0401	716.		
.3790	180.	-2677.	101.	66.	280.	1505.	-0.572	.0076	-0.0130	-0.0032	-0.0335	.0387	615.		
.3800	185.	-2451.	-6.	-730.	376.	1373.	-0.545	.0067	-0.0184	-0.0039	-0.0298	.0369	642.		
.3810	188.	-2190.	-120.	-1562.	473.	1209.	-0.513	.0052	-0.0238	-0.0047	-0.0256	.0347	815.		
.3820	188.	-1893.	-231.	-2383.	568.	1024.	-0.477	.0031	-0.0290	-0.0055	-0.0207	.0323	1066.		
.3830	186.	-1530.	-334.	-3150.	656.	830.	-0.437	.0004	-0.0338	-0.0063	-0.0151	.0296	1333.		
.3840	180.	-1164.	-421.	-3823.	733.	642.	-0.396	-0.0026	-0.0378	-0.0071	-0.0090	.0268	1583.		
.3850	171.	-901.	-488.	-4371.	796.	475.	-0.354	-0.0060	-0.0409	-0.0078	-0.0025	.0239	1793.		
.3860	157.	-724.	-532.	-4771.	843.	343.	-0.314	-0.0096	-0.0430	-0.0025	.0044	.0209	1949.		
.3870	137.	-425.	-552.	-5013.	877.	259.	-0.276	-0.0134	-0.0440	-0.0091	.0119	.0180	2045.		
.3880	111.	193.	-550.	-5095.	899.	234.	-0.242	-0.0169	-0.0438	-0.0095	.0199	.0152	2078.		
.3890	78.	1043.	-527.	-5025.	911.	275.	-0.212	-0.0201	-0.0425	-0.0097	.0283	.0125	2052.		
.3900	36.	1804.	-487.	-4819.	913.	389.	-0.187	-0.0227	-0.0403	-0.0097	.0371	.0100	1974.		
.3910	-13.	2246.	-435.	-4497.	903.	573.	-0.167	-0.0249	-0.0370	-0.0094	.0459	.0076	1855.		
.3920	-70.	2434.	-375.	-4084.	883.	820.	-0.151	-0.0264	-0.0330	-0.0089	.0545	.0053	1709.		
.3930	-131.	2557.	-313.	-3603.	858.	1115.	-0.140	-0.0270	-0.0284	-0.0082	.0628	.0032	1552.		
.3940	-195.	2658.	-251.	-3077.	830.	1440.	-0.131	-0.0266	-0.0233	-0.0071	.0707	.0013	1404.		
.3950	-256.	2644.	-192.	-2524.	801.	1772.	-0.125	-0.0253	-0.0178	-0.0059	.0780	-0.0005	1279.		
.3960	-312.	2487.	-138.	-1956.	774.	2085.	-0.118	-0.0232	-0.0120	-0.0043	.0846	-0.0022	1188.		
.3970	-359.	2300.	-89.	-1379.	750.	2355.	-0.110	-0.0203	-0.0060	-0.0026	.0906	-0.0039	1136.		
.3980	-394.	2163.	-44.	-797.	731.	2562.	-0.098	-0.0166	.0001	-0.0007	.0956	-0.0055	1116.		
.3990	-416.	1973.	-0.	-207.	715.	2687.	-0.083	-0.0122	.0063	.0013	.0995	-0.0071	1119.		
.4000	-425.	1559.	43.	392.	700.	2720.	-0.061	-0.0074	.0126	.0034	.1021	-0.0088	1138.		

ADLPIPE PAGE 1472

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.36.

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

.3930	-131.	2557.	-313.	-3603.	858.	1115.	-.0140	-.0270	-.0284	-.0082	.0628	.0032	1552.
.3940	-195.	2658.	-251.	-3077.	830.	1440.	-.0131	-.0266	-.0233	-.0071	.0707	.0013	1404.
.3950	-256.	2644.	-192.	-2524.	801.	1772.	-.0125	-.0253	-.0178	-.0059	.0780	-.0005	1279.
.3960	-312.	2487.	-175.	-1956.	774.	2085.	-.0118	-.0237	-.0120	-.0043	.0846	-.0022	1188.
.3970	-359.	2300.	-89.	-1379.	750.	2355.	-.0110	-.0207	-.0060	-.0026	.0906	-.0039	1136.
.3980	-394.	2163.	-44.	-797.	731.	2562.	-.0098	-.0168	.0001	-.0007	.0956	-.0055	1116.
.3990	-416.	1973.	-0.	-207.	715.	2637.	-.0083	-.0122	.0063	.0013	.0995	-.0071	1119.
.4000	-425.	1559.	43.	392.	700.	2720.	-.0061	-.0074	.0126	.0034	.1021	-.0088	1138.

ADLPIPE PAGE 1472

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.36.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

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)
.1490	836.	3760.	-879.	-183.	693.	-7918.	.0904	.0006	.1006	.0795	-.0298	-.0356	3190.

SECTION	MEMBER	SEQUENCE	LOCATION	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)	
36	1	850	BEG			0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.	
						.0010	-0.	0.	-0.	0.	-0.	0.	-.0000	.0000	-.0000	.0000	-.0000	.0000	.0000	0.
						.0020	-0.	-0.	-0.	0.	-0.	-0.	-.0000	.0000	.0000	.0000	-.0000	-.0000	-.0000	0.
						.0030	-0.	-2.	-0.	0.	-1.	-0.	.0000	.0000	.0000	.0000	-.0000	-.0000	-.0000	0.
						.0040	-0.	-4.	-0.	0.	-1.	-1.	.0000	-.0000	.0000	.0000	-.0001	-.0000	-.0000	0.
						.0050	-0.	-8.	-0.	0.	-1.	-1.	.0000	-.0000	.0000	.0000	-.0001	-.0000	-.0000	1.
						.0060	-0.	-20.	0.	-0.	-1.	-1.	.0000	-.0000	.0000	.0000	-.0001	-.0000	-.0000	1.
						.0070	1.	-45.	1.	-1.	-2.	1.	.0000	-.0000	.0000	-.0000	-.0002	-.0000	-.0000	1.
						.0080	2.	-80.	2.	-3.	-5.	4.	.0000	-.0001	.0000	-.0000	-.0004	.0000	.0000	3.
						.0090	3.	-118.	4.	-5.	-6.	9.	.0000	-.0001	-.0000	-.0000	-.0005	.0000	.0000	5.
						.0100	5.	-146.	6.	-8.	-2.	12.	-.0000	-.0002	-.0000	-.0001	-.0002	.0001	.0001	6.
						.0110	7.	-164.	9.	-9.	12.	15.	-.0000	-.0003	-.0000	-.0001	.0009	.0001	.0001	8.
						.0120	9.	-192.	11.	-4.	36.	20.	-.0001	-.0004	-.0001	-.0001	.0029	.0002	.0002	17.
						.0130	12.	-256.	13.	9.	72.	27.	-.0001	-.0006	-.0001	-.0001	.0060	.0002	.0002	31.
						.0140	15.	-343.	15.	31.	117.	31.	-.0002	-.0009	-.0002	-.0001	.0099	.0003	.0003	50.
						.0150	15.	-408.	16.	58.	167.	20.	-.0004	-.0011	-.0003	-.0001	.0144	.0004	.0004	72.
						.0160	10.	-427.	18.	83.	216.	-20.	-.0006	-.0014	-.0004	-.0001	.0188	.0004	.0004	93.
						.0170	-3.	-415.	22.	97.	257.	-100.	-.0008	-.0017	-.0006	-.0001	.0225	.0003	.0003	117.
						.0180	-23.	-379.	27.	100.	285.	-222.	-.0011	-.0019	-.0007	-.0002	.0251	.0000	.0000	150.
						.0190	-49.	-281.	30.	102.	304.	-374.	-.0014	-.0021	-.0009	-.0004	.0270	-.0004	-.0004	198.
						.0200	-77.	-73.	26.	118.	319.	-537.	-.0015	-.0021	-.0011	-.0005	.0286	-.0010	-.0010	255.
						.0210	-102.	187.	11.	164.	342.	-634.	-.0014	-.0020	-.0014	-.0005	.0310	-.0018	-.0018	314.
						.0220	-118.	381.	-16.	245.	403.	-786.	-.0011	-.0016	-.0017	-.0004	.0367	-.0025	-.0025	368.
						.0230	-117.	445.	-53.	360.	480.	-795.	-.0004	-.0011	-.0019	-.0001	.0441	-.0032	-.0032	400.
						.0240	-88.	266.	-93.	487.	525.	-664.	.0007	-.0005	-.0021	.0003	.0492	-.0036	-.0036	392.
						.0250	-29.	-197.	-120.	574.	503.	-387.	.0022	.0001	-.0021	.0007	.0489	-.0036	-.0036	343.
						.0260	50.	-640.	-121.	558.	443.	-15.	.0038	.0005	-.0019	.0009	.0450	-.0035	-.0035	286.
						.0270	135.	-553.	-98.	439.	416.	394.	.0055	.0008	-.0014	.0038	.0430	-.0031	-.0031	289.
						.0280	222.	291.	-71.	297.	374.	839.	.0071	.0013	-.0008	.0007	.0393	-.0025	-.0025	388.
						.0290	302.	1459.	-59.	195.	243.	1298.	.0084	.0021	-.0000	.0009	.0279	-.0016	-.0016	536.
						.0300	352.	2165.	-58.	100.	128.	1649.	.0092	.0030	.0008	.0012	.0176	-.0007	-.0007	665.
						.0310	366.	1994.	-64.	23.	69.	1846.	.0093	.0038	.0016	.0015	.0118	.0001	.0001	741.
						.0320	350.	1473.	-87.	8.	-6.	1936.	.0087	.0048	.0026	.0022	.0052	.0011	.0011	777.

.0330	307.	1344.	-125.	28.	-92.	1934.	.0073	.0060	.0036	.0032	-.0019	.0023	777.
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.0100	-23.	-379.	27.	100.	285.	-222.	-.011	-.0019	-.0007	-.0002	.0251	.0000	150.
.0190	-49.	-261.	30.	102.	304.	-374.	-.014	-.0021	-.0009	-.0004	.0270	-.0004	198.
.0200	-77.	-73.	26.	118.	319.	-527.	-.0015	-.0021	-.0011	-.0005	.0286	-.0010	255.
.0210	-102.	187.	11.	164.	342.	-624.	-.0014	-.0020	-.0014	-.0005	.0310	-.0018	314.
.0220	-113.	381.	-16.	245.	403.	-756.	-.0011	-.0016	-.0017	-.0004	.0367	-.0025	368.
.0230	-117.	445.	-52.	310.	480.	-792.	-.0004	-.0011	-.0019	-.0001	.0441	-.0032	400.
.0240	-88.	266.	-93.	487.	525.	-664.	.0007	-.0005	-.0021	.0003	.0492	-.0036	392.
.0250	-29.	-197.	-120.	574.	503.	-387.	.0022	.0001	-.0021	.0007	.0489	-.0036	343.
.0260	50.	-640.	-121.	558.	443.	-15.	.0038	.0005	-.0019	.0009	.0450	-.0035	286.
.0270	135.	-553.	-98.	429.	416.	394.	.0055	.0008	-.0014	.0008	.0430	-.0031	289.
.0280	222.	291.	-71.	297.	374.	839.	.0071	.0013	-.0008	.0007	.0393	-.0025	388.
.0290	302.	1459.	-59.	195.	243.	1298.	.0084	.0021	-.0000	.0009	.0279	-.0016	536.
.0300	352.	2165.	-58.	100.	128.	1649.	.0092	.0030	.0008	.0012	.0176	-.0007	665.
.0310	366.	1994.	-64.	23.	69.	1846.	.0093	.0038	.0016	.0015	.0118	.0001	741.
.0320	350.	1473.	-87.	8.	-6.	1936.	.0087	.0048	.0026	.0022	.0052	.0011	777.

.0330	307.	1344.	-120.	28.	-92.	1934.	.0073	.0060	.0036	.0032	-.0019	.0023	777.
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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	36	MEMBER	1	SEQUENCE	850	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)			
.0340	232.	1592.	-151.	-19.	-147.	1810.	.0053	.0076	.0049	.0041	-.0062	.0035	729.			
.0350	129.	1665.	-144.	-219.	-217.	1551.	.0026	.0090	.0065	.0046	-.0122	.0048	635.			
.0360	1.	1432.	-94.	-596.	-340.	1159.	-.0006	.0100	.0083	.0045	-.0236	.0058	541.			
.0370	-150.	1363.	-11.	-1112.	-440.	634.	-.0041	.0109	.0103	.0039	-.0344	.0066	543.			
.0380	-315.	1802.	78.	-1655.	-461.	18.	-.0076	.0116	.0121	.0031	-.0395	.0071	689.			
.0390	-476.	2537.	142.	-2086.	-480.	-604.	-.0110	.0122	.0137	.0025	-.0438	.0073	893.			
.0400	-625.	2972.	167.	-2343.	-558.	-1205.	-.0138	.0127	.0147	.0021	-.0518	.0072	1081.			
.0410	-755.	2454.	163.	-2453.	-590.	-1783.	-.0158	.0129	.0151	.0019	-.0553	.0064	1240.			
.0420	-836.	970.	140.	-2402.	-575.	-2221.	-.0167	.0125	.0149	.0019	-.0551	.0053	1333.			
.0430	-833.	-354.	104.	-2186.	-586.	-2342.	-.0164	.0115	.0142	.0021	-.0576	.0044	1307.			
.0440	-746.	-324.	55.	-1845.	-610.	-2114.	-.0147	.0104	.0130	.0024	-.0617	.0039	1152.			
.0450	-595.	525.	7.	-1470.	-579.	-1617.	-.0118	.0094	.0115	.0027	-.0615	.0034	907.			
.0460	-390.	474.	-16.	-1117.	-526.	-934.	-.0080	.0078	.0098	.0027	-.0591	.0030	621.			
.0470	-148.	-862.	-10.	-777.	-527.	-142.	-.0036	.0052	.0080	.0027	-.0603	.0025	381.			
.0480	98.	-2069.	7.	-449.	-531.	645.	.0009	.0025	.0062	.0025	-.0611	.0019	381.			
.0490	317.	-2162.	21.	-152.	-440.	1330.	.0052	.0001	.0044	.0023	-.0535	.0011	565.			
.0500	501.	-1764.	30.	129.	-281.	1880.	.0088	-.0020	.0026	.0021	-.0398	.0002	765.			
.0510	648.	-1708.	35.	406.	-123.	2277.	.0114	-.0041	.0008	.0019	-.0255	-.0005	930.			
.0520	742.	-1973.	34.	667.	25.	2470.	.0130	-.0058	-.0008	.0018	-.0117	-.0012	1027.			
.0530	774.	-2420.	28.	892.	171.	2417.	.0133	-.0070	-.0023	.0017	.0023	-.0019	1036.			
.0540	744.	-3149.	28.	1077.	296.	2114.	.0124	-.0080	-.0036	.0016	.0152	-.0026	960.			
.0550	662.	-3743.	36.	1215.	395.	1601.	.0104	-.0087	-.0047	.0016	.0264	-.0033	822.			
.0560	533.	-3512.	50.	1286.	480.	937.	.0075	-.0089	-.0056	.0015	.0370	-.0038	667.			
.0570	374.	-2730.	73.	1265.	564.	200.	.0040	-.0086	-.0063	.0012	.0476	-.0041	562.			
.0580	207.	-2231.	109.	1159.	647.	-530.	.0003	-.0083	-.0068	.0007	.0577	-.0041	573.			
.0590	43.	-1797.	141.	1008.	723.	-1188.	-.0034	-.0077	-.0071	.0000	.0669	-.0039	689.			
.0600	-115.	-561.	140.	850.	795.	-1731.	-.0066	-.0061	-.0075	-.0007	.0752	-.0035	837.			
.0610	-260.	1087.	102.	704.	852.	-2125.	-.0092	-.0035	-.0073	-.0013	.0821	-.0030	961.			
.0620	-366.	1753.	43.	576.	873.	-2316.	-.0109	-.0007	-.0082	-.0019	.0861	-.0023	1020.			
.0630	-416.	1280.	-29.	472.	840.	-2238.	-.0117	.0020	-.0085	-.0025	.0859	-.0013	978.			
.0640	-410.	966.	-118.	383.	762.	-1855.	-.0113	.0053	-.0087	-.0030	.0820	.0001	819.			
.0650	-354.	1453.	-215.	281.	673.	-1196.	-.0101	.0090	-.0087	-.0034	.0763	.0020	562.			
.0660	-256.	2084.	-291.	124.	596.	-347.	-.0083	.0125	-.0084	-.0038	.0701	.0042	281.			
.0670	-137.	2421.	-326.	-131.	534.	563.	-.0061	.0153	-.0078	-.0045	.0633	.0065	316.			
.0680	-29.	2757.	-321.	-504.	492.	1392.	-.0041	.0173	-.0068	-.0055	.0569	.0086	626.			
.0690	44.	3039.	-289.	-957.	474.	2035.	-.0024	.0188	-.0055	-.0066	.0524	.0103	922.			
.0700	77.	2796.	-243.	-1402.	461.	2444.	-.0015	.0193	-.0041	-.0077	.0488	.0116	1146.			
.0710	67.	2132.	-197.	-1775.	443.	2592.	-.0014	.0188	-.0027	-.0086	.0450	.0125	1273.			

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

.0610	-260.	1087.	102.	704.	852.	-2125.	-0.0092	-0.0035	-0.0078	-0.0013	.0821	-0.0030	961.
.0620	-366.	1151.	43.	576.	872.	-2316.	-0.0109	-0.0007	-0.0082	-0.0019	.0861	-0.0023	1020.
.0630	-416.	1230.	-29.	472.	840.	-2238.	-0.0117	.0020	-0.0085	-0.0025	.0859	-0.0013	978.
.0640	-410.	966.	-110.	383.	762.	-1855.	-0.0113	.0057	-0.0087	-0.0030	.0820	.0001	819.
.0650	-754.	1458.	-210.	251.	673.	-1196.	-0.0101	.0090	-0.0087	-0.0034	.0763	.0020	562.
.0660	-254.	2084.	-221.	124.	596.	-347.	-0.0083	.0125	-0.0084	-0.0038	.0701	.0042	281.
.0670	-137.	2421.	-326.	-131.	534.	563.	-0.0061	.0153	-0.0078	-0.0045	.0633	.0065	316.
.0680	-29.	2757.	-321.	-504.	492.	1392.	-0.0041	.0173	-0.0068	-0.0055	.0569	.0086	626.
.0690	44.	3039.	-289.	-957.	474.	2035.	-0.0024	.0188	-0.0055	-0.0066	.0524	.0103	922.
.0700	77.	2796.	-243.	-1402.	461.	2444.	-0.0015	.0193	-0.0041	-0.0077	.0488	.0116	1146.
.0710	67.	2132.	-197.	-1775.	447.	2572.	-0.0014	.0186	-0.0027	-0.0086	.0450	.0125	1273.

ADLPIPE PAGE 1474

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

83/12/02. 18.28.36.

CONDITION 24
 LOADS
 SHOCK
 PRESSURE
 ENGLISH UNITS

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

SECTION	36	MEMBER	1	SEQUENCE	850	LOCATION	BEG	TYPE	RU	DX	DY	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ				(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)										
.0720	9.	1577.	-157.	-2063.	438.	2456.	-0.0021	.0177	-0.0014	-0.0092	.0418	.0130	1299.			
.0730	-85.	1073.	-114.	-2262.	435.	2065.	-0.0035	.0157	-0.0003	-0.0098	.0374	.0129	1241.			
.0740	-193.	225.	-61.	-2374.	377.	1494.	-0.0054	.0126	.0005	-0.0101	.0277	.0125	1136.			
.0750	-304.	-744.	7.	-2433.	247.	815.	-0.0076	.0088	.0010	-0.0105	.0121	.0118	1035.			
.0760	-412.	-1322.	90.	-2495.	87.	84.	-0.0098	.0047	.0012	-0.0112	-0.0052	.0108	1003.			
.0770	-499.	-1660.	190.	-2580.	-69.	-618.	-0.0115	.0005	.0010	-0.0122	-0.0210	.0095	1065.			
.0780	-544.	-2199.	302.	-2663.	-207.	-1185.	-0.0126	-0.0040	.0002	-0.0136	-0.0341	.0081	1173.			
.0790	-537.	-2773.	403.	-2704.	-300.	-1531.	-0.0129	-0.0083	-0.0012	-0.0152	-0.0422	.0069	1253.			
.0800	-477.	-2962.	464.	-2656.	-323.	-1606.	-0.0122	-0.0119	-0.0035	-0.0171	-0.0436	.0059	1252.			
.0810	-362.	-2945.	471.	-2475.	-308.	-1387.	-0.0105	-0.0145	-0.0066	-0.0191	-0.0403	.0052	1145.			
.0820	-197.	-3173.	427.	-2158.	-293.	-903.	-0.0081	-0.0164	-0.0107	-0.0211	-0.0356	.0049	946.			
.0830	0.	-3555.	336.	-1737.	-285.	-235.	-0.0051	-0.0176	-0.0156	-0.0232	-0.0301	.0048	713.			
.0840	210.	-3652.	205.	-1243.	-297.	537.	-0.0021	-0.0177	-0.0212	-0.0255	-0.0254	.0050	556.			
.0850	414.	-3373.	43.	-691.	-361.	1340.	.0007	-0.0169	-0.0272	-0.0279	-0.0247	.0055	622.			
.0860	592.	-2888.	-138.	-110.	-469.	2072.	.0029	-0.0155	-0.0336	-0.0302	-0.0279	.0062	854.			
.0870	717.	-2186.	-325.	463.	-569.	2614.	.0039	-0.0134	-0.0400	-0.0325	-0.0312	.0070	1089.			
.0880	766.	-1202.	-514.	1012.	-635.	2871.	.0036	-0.0108	-0.0461	-0.0347	-0.0324	.0077	1248.			
.0890	729.	-137.	-702.	1528.	-674.	2798.	.0019	-0.0078	-0.0518	-0.0366	-0.0319	.0083	1308.			
.0900	605.	746.	-884.	1983.	-687.	2391.	-0.0013	-0.0045	-0.0568	-0.0381	-0.0294	.0088	1277.			
.0910	403.	1412.	-1051.	2333.	-667.	1691.	-0.0057	-0.0009	-0.0609	-0.0393	-0.0248	.0091	1187.			
.0920	146.	1873.	-1191.	2532.	-628.	794.	-0.0109	.0028	-0.0638	-0.0402	-0.0197	.0093	1094.			
.0930	-139.	2026.	-1293.	2545.	-583.	-183.	-0.0166	.0066	-0.0655	-0.0409	-0.0159	.0097	1051.			
.0940	-426.	1885.	-1350.	2359.	-529.	-1139.	-0.0222	.0104	-0.0653	-0.0414	-0.0133	.0103	1072.			
.0950	-702.	1562.	-1368.	1990.	-460.	-2011.	-0.0273	.0144	-0.0647	-0.0416	-0.0109	.0108	1150.			
.0960	-956.	1074.	-1357.	1485.	-378.	-2763.	-0.0314	.0187	-0.0625	-0.0414	-0.0086	.0111	1268.			
.0970	-1179.	201.	-1327.	908.	-286.	-3367.	-0.0342	.0231	-0.0592	-0.0407	-0.0060	.0110	1404.			
.0980	-1358.	-1106.	-1289.	332.	-178.	-3783.	-0.0354	.0276	-0.0550	-0.0393	-0.0024	.0105	1526.			
.0990	-1481.	-2367.	-1257.	-134.	-49.	-3956.	-0.0346	.0322	-0.0500	-0.0372	.0024	.0094	1589.			
.1000	-1536.	-2872.	-1240.	-610.	89.	-3830.	-0.0318	.0371	-0.0445	-0.0342	.0076	.0079	1557.			
.1010	-1512.	-2345.	-1231.	-947.	219.	-3370.	-0.0268	.0419	-0.0384	-0.0304	.0115	.0061	1407.			
.1020	-1401.	-1189.	-1216.	-1209.	320.	-2530.	-0.0198	.0462	-0.0318	-0.0260	.0118	.0040	1151.			
.1030	-1211.	59.	-1184.	-1416.	373.	-1518.	-0.0110	.0497	-0.0247	-0.0211	.0072	.0016	846.			
.1040	-959.	1362.	-1129.	-1576.	377.	-274.	-0.0008	.0522	-0.0170	-0.0155	-0.0022	-0.0011	659.			
.1050	-662.	2356.	-1046.	-1680.	349.	1050.	.0104	.0535	-0.0088	-0.0094	-0.0143	-0.0043	807.			
.1060	-337.	2487.	-928.	-1716.	314.	2365.	.0219	.0533	-0.0001	-0.0027	-0.0260	-0.0078	1179.			
.1070	0.	1664.	-774.	-1695.	298.	3598.	.0334	.0516	.0092	.0047	-0.0349	-0.0116	1601.			
.1080	329.	1116.	-581.	-1656.	303.	4696.	.0443	.0489	.0189	.0126	-0.0407	-0.0156	2002.			
.1090	642.	2051.	-331.	-1669.	335.	5613.	.0541	.0450	.0291	.0206	-0.0434	-0.0194	2354.			

ADLPIPE PAGE 1475

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

83/12/02. 18.28.36.

CONDITION 24
 LOADS
 SHOCK
 PRESSURE
 ENGLISH UNITS

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

.0990	-1481.	-2367.	-1257.	-124.	-49.	-3956.	-.0346	.0322	-.0500	-.0372	.0024	.0094	1589.
.1000	-1536.	-2372.	-1240.	-610.	89.	-3830.	-.0318	.0371	-.0445	-.0342	.0076	.0079	1557.
.1010	-1512.	-2345.	-1231.	-947.	219.	-3370.	-.0268	.0419	-.0384	-.0304	.0115	.0061	1407.
.1020	-1401.	-1189.	-1216.	-1209.	320.	-2520.	-.0198	.0462	-.0318	-.0260	.0118	.0040	1151.
.1030	-1211.	59.	-1184.	-1416.	373.	-1518.	-.0110	.0497	-.0247	-.0211	.0072	.0016	846.
.1040	-959.	1368.	-1129.	-1576.	377.	-274.	-.0068	.0522	-.0170	-.0155	-.0022	-.0011	659.
.1050	-662.	2356.	-1046.	-1680.	349.	1050.	.0104	.0535	-.0088	-.0094	-.0143	-.0043	807.
.1060	-337.	2487.	-928.	-1716.	314.	2365.	.0219	.0533	-.0001	-.0027	-.0260	-.0078	1179.
.1070	0.	1664.	-774.	-1695.	298.	3598.	.0334	.0516	.0092	.0047	-.0349	-.0116	1601.
.1080	329.	1116.	-581.	-1656.	303.	4696.	.0443	.0489	.0189	.0126	-.0407	-.0156	2002.
.1090	442.	2051.	-331.	-1669.	335.	5613.	.0541	.0450	.0291	.0206	-.0434	-.0194	2354.

ADLPIPE PAGE 1475 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.28.36.

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	30	MEMBER	1	SEQUENCE	250	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)		
.1100	938.	707.	-1.	-1800.	454.	6313.	.0625	.0392	.0396	.0284	-.0384	-.0230	2641.		
.1110	1192.	-1690.	372.	-2072.	571.	6790.	.0691	.0328	.0502	.0357	-.0327	-.0262	2858.		
.1120	1372.	-2656.	742.	-2494.	625.	7012.	.0736	.0276	.0607	.0423	-.0306	-.0288	2997.		
.1130	1476.	-3776.	1115.	-3059.	658.	6930.	.0758	.0227	.0706	.0479	-.0279	-.0309	3051.		
.1140	1518.	-6834.	1493.	-3675.	689.	6535.	.0758	.0171	.0794	.0525	-.0225	-.0325	3021.		
.1150	1484.	-9428.	1809.	-4182.	699.	5854.	.0735	.0122	.0868	.0563	-.0164	-.0337	2901.		
.1160	1356.	-8565.	1989.	-4436.	709.	4917.	.0693	.0098	.0922	.0597	-.0088	-.0343	2673.		
.1170	1154.	-5713.	2032.	-4366.	739.	3780.	.0633	.0093	.0955	.0628	.0011	-.0346	2336.		
.1180	918.	-5145.	1974.	-3978.	783.	2529.	.0560	.0092	.0967	.0654	.0124	-.0344	1918.		
.1190	665.	-5966.	1812.	-3321.	715.	1284.	.0480	.0100	.0958	.0676	.0154	-.0337	1457.		
.1200	390.	-5007.	1539.	-2520.	526.	119.	.0396	.0133	.0934	.0691	.0102	-.0324	1034.		
.1210	118.	-2952.	1210.	-1728.	315.	-910.	.0314	.0183	.0897	.0697	.0050	-.0307	794.		
.1220	-107.	-2133.	880.	-1015.	76.	-1694.	.0237	.0234	.0854	.0694	-.0014	-.0284	793.		
.1230	-281.	-1200.	550.	-410.	-158.	-2197.	.0168	.0288	.0809	.0683	-.0081	-.0257	899.		
.1240	-431.	2096.	197.	74.	-355.	-2457.	.0108	.0358	.0765	.0668	-.0141	-.0227	997.		
.1250	-557.	5853.	-149.	420.	-470.	-2557.	.0059	.0433	.0726	.0650	-.0163	-.0198	1057.		
.1260	-650.	6902.	-439.	618.	-499.	-2576.	.0021	.0493	.0695	.0631	-.0133	-.0173	1082.		
.1270	-717.	6207.	-672.	684.	-543.	-2547.	-.0008	.0540	.0675	.0614	-.0117	-.0152	1080.		
.1280	-781.	6683.	-857.	586.	-578.	-2524.	-.0026	.0584	.0667	.0600	-.0090	-.0139	1065.		
.1290	-832.	7729.	-965.	307.	-591.	-2506.	-.0035	.0618	.0673	.0588	-.0051	-.0131	1041.		
.1300	-838.	7032.	-958.	-114.	-613.	-2450.	-.0034	.0625	.0692	.0580	-.0044	-.0129	1014.		
.1310	-803.	5456.	-854.	-608.	-642.	-2356.	-.0024	.0607	.0722	.0576	-.0088	-.0131	1010.		
.1320	-752.	5320.	-696.	-1090.	-699.	-2261.	-.0004	.0577	.0762	.0580	-.0202	-.0139	1046.		
.1330	-697.	5826.	-495.	-1507.	-722.	-2242.	.0024	.0532	.0808	.0591	-.0317	-.0154	1122.		
.1340	-627.	4573.	-242.	-1810.	-705.	-2321.	.0060	.0461	.0857	.0608	-.0400	-.0178	1214.		
.1350	-547.	2060.	30.	-1966.	-671.	-2467.	.0104	.0372	.0907	.0632	-.0447	-.0211	1294.		
.1360	-464.	398.	282.	-1983.	-607.	-2612.	.0156	.0283	.0954	.0660	-.0446	-.0250	1338.		
.1370	-353.	-841.	513.	-1874.	-545.	-2627.	.0219	.0193	.0998	.0692	-.0437	-.0292	1313.		
.1380	-182.	-3233.	747.	-1677.	-474.	-2417.	.0292	.0097	.1038	.0723	-.0432	-.0333	1196.		
.1390	50.	-5846.	976.	-1426.	-430.	-1937.	.0374	.0002	.1071	.0753	-.0462	-.0370	981.		
.1400	317.	-6688.	1169.	-1160.	-428.	-1206.	.0463	-.0076	.1097	.0780	-.0525	-.0404	693.		
.1410	607.	-6473.	1327.	-904.	-443.	-268.	.0557	-.0135	.1116	.0802	-.0577	-.0433	418.		
.1420	925.	-7354.	1457.	-641.	-520.	871.	.0650	-.0183	.1127	.0821	-.0636	-.0456	482.		
.1430	1249.	-8956.	1546.	-369.	-630.	2158.	.0740	-.0216	.1129	.0835	-.0583	-.0470	914.		
.1440	1544.	-9387.	1567.	-104.	-725.	3512.	.0820	-.0223	.1124	.0844	-.0696	-.0475	1440.		
.1450	1791.	-8737.	1528.	124.	-755.	4839.	.0885	-.0207	.1110	.0847	-.0553	-.0470	1966.		
.1460	1981.	-8371.	1454.	289.	-711.	6042.	.0929	-.0178	.1091	.0844	-.0554	-.0455	2444.		
.1470	2093.	-8001.	1345.	376.	-685.	7034.	.0950	-.0134	.1066	.0835	-.0464	-.0429	2840.		

ADLPIPE PAGE 1476 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.28.36.

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

.1360	-464.	376.	502.	-1983.	-667.	-2612.	.0156	.0283	.0954	.0660	-.0446	-.0250	1338.
.1370	-353.	-841.	513.	-1874.	-545.	-2627.	.0219	.0193	.0998	.0692	-.0437	-.0292	1313.
.1380	-182.	-1233.	747.	-1677.	-474.	-2417.	.0292	.0097	.1038	.0723	-.0432	-.0333	1196.
.1390	50.	-5846.	976.	-1426.	-430.	-1937.	.0374	.0002	.1071	.0753	-.0462	-.0370	981.
.1400	717.	-6088.	1169.	-1160.	-428.	-1206.	.0463	-.0076	.1097	.0780	-.0525	-.0404	693.
.1410	607.	-6473.	1327.	-904.	-443.	-268.	.0557	-.0125	.1116	.0802	-.0577	-.0433	418.
.1420	925.	-7354.	1457.	-641.	-520.	871.	.0650	-.0183	.1127	.0821	-.0636	-.0456	482.
.1430	1249.	-8956.	1546.	-369.	-630.	2158.	.0740	-.0216	.1129	.0835	-.0583	-.0470	914.
.1440	1544.	-9387.	1567.	-104.	-725.	3512.	.0820	-.0223	.1124	.0844	-.0696	-.0475	1440.
.1450	1791.	-8737.	1528.	124.	-755.	4839.	.0885	-.0207	.1110	.0847	-.0553	-.0470	1966.
.1460	1981.	-8371.	1454.	269.	-711.	6042.	.0929	-.0178	.1091	.0844	-.0554	-.0455	2444.
.1470	2093.	-8001.	1345.	376.	-685.	7034.	.0950	-.0134	.1066	.0835	-.0464	-.0429	2840.

ADLPIPE PAGE 1476

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.36.

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 (SEC)	36 FX (LB)	MEMBER FY (LB)	1 FZ (LB)	SEQUENCE MX (FT-LB)	850 MY (FT-LB)	LOCATION MZ (FT-LB)	BEG DX (IN)	TYPE DY (IN)	RU DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.1480	2093.	-6394.	1197.	345.	-676.	7687.	.0942	-.0070	.1037	.0818	-.0377	-.0396	3100.
.1490	1974.	-4081.	1028.	183.	-693.	7918.	.0904	.0006	.1006	.0795	-.0298	-.0356	3190.
.1500	1746.	-2401.	862.	-91.	-737.	7694.	.0835	.0086	.0974	.0766	-.0240	-.0312	3102.
.1510	1406.	-1001.	697.	-452.	-761.	6998.	.0739	.0167	.0940	.0732	-.0180	-.0264	2831.
.1520	960.	1173.	518.	-870.	-759.	5863.	.0618	.0254	.0907	.0696	-.0122	-.0215	2398.
.1530	429.	3522.	337.	-1330.	-699.	4342.	.0479	.0342	.0873	.0657	-.0037	-.0167	1844.
.1540	-147.	4695.	179.	-1819.	-611.	2531.	.0329	.0418	.0840	.0616	.0059	-.0122	1275.
.1550	-736.	5020.	51.	-2335.	-502.	541.	.0176	.0481	.0807	.0573	.0167	-.0084	983.
.1560	-1307.	5775.	-54.	-2864.	-345.	-1489.	.0031	.0533	.0775	.0528	.0309	-.0053	1303.
.1570	-1802.	6819.	-133.	-3347.	-190.	-3346.	-.0099	.0568	.0742	.0483	.0434	-.0028	1901.
.1580	-2169.	7091.	-176.	-3733.	-29.	-4842.	-.0203	.0580	.0708	.0439	.0541	-.0008	2453.
.1590	-2380.	6707.	-190.	-3980.	143.	-5844.	-.0277	.0570	.0672	.0397	.0632	.0007	2838.
.1600	-2421.	6221.	-193.	-4045.	281.	-6272.	-.0316	.0543	.0634	.0359	.0577	.0017	2997.
.1610	-2293.	5534.	-180.	-3919.	377.	-6136.	-.0319	.0498	.0592	.0325	.0682	.0021	2926.
.1620	-2011.	4145.	-140.	-3627.	468.	-5515.	-.0290	.0433	.0547	.0295	.0685	.0019	2656.
.1630	-1599.	2327.	-77.	-3191.	517.	-4489.	-.0231	.0352	.0499	.0268	.0563	.0009	2220.
.1640	-1096.	825.	1.	-2662.	534.	-3166.	-.0151	.0263	.0449	.0243	.0523	-.0007	1674.
.1650	-539.	-494.	91.	-2108.	546.	-1660.	-.0055	.0172	.0397	.0218	.0581	-.0028	1099.
.1660	43.	-2315.	197.	-1588.	533.	-72.	.0047	.0080	.0344	.0191	.0520	-.0051	673.
.1670	606.	-4403.	312.	-1165.	522.	1462.	.0148	-.0006	.0290	.0160	.0466	-.0075	779.
.1680	1106.	-5911.	420.	-876.	499.	2811.	.0239	-.0081	.0235	.0124	.0414	-.0099	1199.
.1690	1509.	-6682.	514.	-735.	475.	3856.	.0312	-.0138	.0178	.0083	.0378	-.0121	1587.
.1700	1793.	-7320.	587.	-720.	440.	4520.	.0364	-.0180	.0118	.0035	.0353	-.0142	1845.
.1710	1946.	-7993.	623.	-786.	379.	4775.	.0390	-.0204	.0055	-.0017	.0321	-.0158	1948.
.1720	1956.	-8171.	606.	-899.	353.	4605.	.0390	-.0207	-.0014	-.0074	.0321	-.0170	1888.
.1730	1834.	-7711.	525.	-999.	339.	4084.	.0365	-.0187	-.0089	-.0133	.0327	-.0176	1693.
.1740	1607.	-6963.	385.	-1051.	340.	3302.	.0318	-.0149	-.0170	-.0194	.0336	-.0174	1397.
.1750	1299.	-6035.	193.	-1046.	354.	2359.	.0254	-.0097	-.0257	-.0255	.0352	-.0164	1045.
.1760	939.	-4684.	-45.	-985.	337.	1370.	.0177	-.0033	-.0348	-.0317	.0341	-.0145	690.
.1770	556.	-2925.	-317.	-883.	298.	429.	.0095	.0042	-.0443	-.0379	.0310	-.0118	412.
.1780	180.	-1187.	-606.	-747.	224.	-361.	.0011	.0119	-.0538	-.0440	.0240	-.0083	345.
.1790	-164.	407.	-901.	-583.	144.	-933.	-.0068	.0196	-.0632	-.0499	.0147	-.0040	445.
.1800	-457.	2115.	-1193.	-386.	71.	-1235.	-.0139	.0271	-.0722	-.0554	.0034	.0008	520.
.1810	-686.	3888.	-1469.	-156.	-10.	-1243.	-.0199	.0339	-.0806	-.0603	-.0108	.0061	503.
.1820	-850.	5305.	-1707.	74.	-47.	-1006.	-.0249	.0395	-.0880	-.0645	-.0225	.0116	405.
.1830	-953.	6126.	-1892.	278.	-60.	-576.	-.0286	.0437	-.0944	-.0681	-.0322	.0170	258.
.1840	-1005.	6556.	-2014.	474.	-68.	-25.	-.0314	.0465	-.0995	-.0709	-.0407	.0223	176.
.1850	-1020.	6658.	-2063.	511.	-68.	565.	-.0334	.0477	-.1032	-.0731	-.0479	.0271	307.

ADLPIPE PAGE 1477

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.36.

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

.1750	1299.	-6035.	193.	-1046.	354.	2359.	.0254	-.0097	-.0257	-.0255	.0352	-.0164	1045.
.1760	939.	-4684.	-45.	-985.	737.	1370.	.0177	-.0013	-.0348	-.0317	.0341	-.0145	690.
.1770	556.	-2925.	-317.	-883.	298.	429.	.0095	.0042	-.0443	-.0379	.0310	-.0118	412.
.1780	180.	-1187.	-696.	-747.	224.	-361.	.0011	.0119	-.0538	-.0440	.0240	-.0083	345.
.1790	-164.	407.	-901.	-583.	144.	-923.	-.0068	.0196	-.0632	-.0499	.0147	-.0040	445.
.1800	-457.	2115.	-1193.	-386.	71.	-1235.	-.0139	.0271	-.0722	-.0554	.0034	.0008	520.
.1810	-686.	3888.	-1469.	-156.	-10.	-1243.	-.0199	.0339	-.0806	-.0603	-.0108	.0061	503.
.1820	-850.	5305.	-1707.	74.	-47.	-1056.	-.0247	.0395	-.0880	-.0645	-.0225	.0116	405.
.1830	-953.	6126.	-1892.	278.	-60.	-576.	-.0286	.0437	-.0944	-.0681	-.0322	.0170	258.
.1840	-1065.	6556.	-2014.	474.	-65.	-25.	-.0314	.0465	-.0995	-.0709	-.0407	.0223	176.
.1850	-1020.	6658.	-2063.	511.	-68.	565.	-.0334	.0477	-.1032	-.0731	-.0479	.0271	307.

ADLPIPE PAGE 1477

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.36.

S/RV PIPING KEWAUNEE GKW03F 2 RUP DISK

2 SAFETY COLD FW24F--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)
36	1	850					.1860	-1008.	6228.	-2029.	494.	-61.	1114.	-.0348	.0472	-.1055	-.0745	-.0546	.0313	490.
							.1870	-984.	5402.	-1915.	379.	-18.	1541.	-.0358	.0448	-.1064	-.0754	-.0590	.0347	637.
							.1880	-960.	4561.	-1737.	203.	27.	1799.	-.0367	.0409	-.1061	-.0757	-.0630	.0373	727.
							.1890	-946.	3796.	-1515.	9.	78.	1849.	-.0375	.0357	-.1048	-.0754	-.0553	.0390	743.
							.1900	-944.	2791.	-1267.	-151.	139.	1671.	-.0383	.0293	-.1027	-.0745	-.0642	.0396	675.
							.1910	-953.	1415.	-1016.	-227.	186.	1285.	-.0390	.0220	-.1003	-.0730	-.0512	.0392	529.
							.1920	-971.	-28.	-780.	-197.	234.	729.	-.0396	.0142	-.0975	-.0710	-.0556	.0378	317.
							.1930	-986.	-1389.	-571.	-56.	281.	88.	-.0397	.0065	-.0948	-.0686	-.0483	.0356	120.
							.1940	-976.	-2756.	-392.	182.	321.	-523.	-.0392	-.0011	-.0921	-.0659	-.0402	.0329	257.
							.1950	-924.	-4039.	-243.	479.	354.	-992.	-.0378	-.0081	-.0895	-.0631	-.0314	.0298	464.
							.1960	-820.	-4947.	-126.	785.	378.	-1237.	-.0355	-.0141	-.0871	-.0604	-.0218	.0267	607.
							.1970	-663.	-5458.	-42.	1054.	392.	-1216.	-.0321	-.0189	-.0843	-.0580	-.0110	.0237	665.
							.1980	-458.	-5800.	10.	1250.	406.	-934.	-.0278	-.0223	-.0825	-.0561	.0014	.0209	647.
							.1990	-219.	-6034.	27.	1351.	429.	-431.	-.0228	-.0242	-.0803	-.0546	.0151	.0183	595.
							.2000	36.	-6080.	5.	1354.	459.	236.	-.0174	-.0245	-.0782	-.0536	.0293	.0159	582.
							.2010	289.	-5960.	-58.	1267.	492.	1000.	-.0119	-.0232	-.0760	-.0530	.0429	.0139	677.
							.2020	523.	-5710.	-159.	1102.	533.	1789.	-.0068	-.0205	-.0738	-.0527	.0559	.0122	870.
							.2030	723.	-5201.	-294.	876.	575.	2533.	-.0024	-.0166	-.0716	-.0527	.0678	.0108	1100.
							.2040	873.	-4290.	-457.	610.	603.	3167.	.0009	-.0117	-.0692	-.0527	.0771	.0099	1317.
							.2050	960.	-3112.	-637.	318.	606.	3629.	.0029	-.0060	-.0666	-.0527	.0826	.0095	1482.
							.2060	975.	-1977.	-822.	9.	591.	3862.	.0034	-.0000	-.0637	-.0525	.0845	.0095	1568.
							.2070	914.	-1012.	-1002.	-305.	563.	3837.	.0023	.0060	-.0604	-.0519	.0831	.0098	1561.
							.2080	778.	-122.	-1171.	-604.	530.	3553.	-.0003	.0118	-.0566	-.0509	.0790	.0105	1462.
							.2090	575.	768.	-1322.	-874.	505.	3037.	-.0043	.0173	-.0523	-.0492	.0740	.0115	1284.
							.2100	321.	1644.	-1448.	-1115.	505.	2333.	-.0093	.0222	-.0473	-.0468	.0700	.0127	1057.
							.2110	32.	2485.	-1539.	-1332.	528.	1502.	-.0150	.0263	-.0415	-.0435	.0672	.0142	833.
							.2120	-269.	3246.	-1589.	-1540.	561.	616.	-.0210	.0295	-.0349	-.0395	.0650	.0158	703.
							.2130	-563.	3760.	-1587.	-1759.	594.	-254.	-.0268	.0319	-.0274	-.0346	.0624	.0175	752.
							.2140	-830.	3876.	-1525.	-2011.	618.	-1041.	-.0320	.0332	-.0189	-.0290	.0591	.0191	942.
							.2150	-1051.	3644.	-1397.	-2312.	624.	-1687.	-.0362	.0335	-.0096	-.0228	.0548	.0207	1175.
							.2160	-1217.	3211.	-1203.	-2069.	609.	-2148.	-.0391	.0331	.0005	-.0160	.0496	.0220	1397.
							.2170	-1317.	2644.	-946.	-3082.	575.	-2402.	-.0406	.0318	.0113	-.0087	.0441	.0230	1585.
							.2180	-1350.	1949.	-631.	-3532.	527.	-2447.	-.0405	.0297	.0224	-.0012	.0388	.0236	1737.
							.2190	-1319.	1210.	-275.	-3993.	471.	-2304.	-.0389	.0269	.0337	.0064	.0339	.0237	1860.
							.2200	-1234.	536.	102.	-4434.	412.	-2012.	-.0357	.0237	.0446	.0140	.0298	.0231	1961.
							.2210	-1106.	-135.	480.	-4820.	349.	-1608.	-.0313	.0202	.0550	.0214	.0260	.0219	2044.
							.2220	-942.	-942.	837.	-5116.	277.	-1126.	-.0258	.0166	.0643	.0284	.0221	.0200	2105.
							.2230	-751.	-1862.	1157.	-5284.	192.	-587.	-.0195	.0130	.0724	.0349	.0175	.0175	2135.

ADLPIPE PAGE 1478

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.36.

S/RV PIPING KEWAUNEE GKW03F 2 RUP DISK

2 SAFETY COLD FW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

.2120	-264.	3740.	-1527.	-1759.	594.	-254.	-.0268	.0319	-.0274	-.0346	.0524	.0175	703.
.2130	-563.	3760.	-1527.	-2011.	618.	-1041.	-.0320	.0332	-.0189	-.0290	.0591	.0191	942.
.2140	-830.	3876.	-1397.	-2312.	624.	-1687.	-.0362	.0335	-.0096	-.0228	.0548	.0207	1175.
.2150	-1051.	3644.	-1203.	-2669.	609.	-2148.	-.0391	.0331	.0005	-.0160	.0496	.0220	1397.
.2160	-1217.	3211.	-946.	-3082.	575.	-2402.	-.0406	.0318	.0113	-.0087	.0441	.0230	1585.
.2170	-1317.	2644.	-631.	-3532.	527.	-2447.	-.0405	.0297	.0224	-.0012	.0388	.0236	1737.
.2180	-1350.	1949.	-275.	-3993.	471.	-2304.	-.0389	.0269	.0337	.0064	.0339	.0237	1860.
.2190	-1319.	1210.	102.	-4434.	412.	-2012.	-.0357	.0237	.0446	.0140	.0298	.0231	1961.
.2200	-1234.	536.	480.	-4820.	349.	-1608.	-.0313	.0202	.0550	.0214	.0260	.0219	2044.
.2210	-1106.	-135.	837.	-5116.	277.	-1126.	-.0258	.0166	.0643	.0284	.0221	.0200	2105.
.2220	-942.	1157.	-5284.	192.	-587.	-.0195	.0130	.0724	.0349	.0175	.0175	.0175	2135.

ADLPIPE PAGE 1478

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.36.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	RU							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)
.2240	-541.	-2717.	1419.	-5292.	90.	-12.	-.0125	.0097	.0789	.0408	.0118	.0145	2124.
.2250	-321.	-3370.	1610.	-5115.	-25.	578.	-.0053	.0067	.0835	.0459	.0048	.0112	2066.
.2260	-100.	-3825.	1722.	-4742.	-143.	1157.	.0021	.0043	.0863	.0503	-.0032	.0076	1960.
.2270	110.	-4108.	1753.	-4177.	-255.	1696.	.0092	.0026	.0872	.0539	-.0116	.0039	1812.
.2280	302.	-4231.	1704.	-3437.	-355.	2172.	.0159	.0015	.0863	.0567	-.0202	.0002	1638.
.2290	469.	-4253.	1581.	-2557.	-438.	2572.	.0220	.0011	.0837	.0587	-.0287	-.0035	1466.
.2300	607.	-4215.	1396.	-1582.	-496.	2892.	.0273	.0015	.0799	.0600	-.0363	-.0069	1338.
.2310	716.	-4053.	1161.	-566.	-526.	3135.	.0316	.0024	.0751	.0606	-.0425	-.0100	1296.
.2320	795.	-3672.	893.	440.	-531.	3309.	.0349	.0040	.0698	.0606	-.0475	-.0125	1356.
.2330	846.	-3118.	609.	1380.	-516.	3411.	.0371	.0060	.0643	.0602	-.0516	-.0145	1491.
.2340	866.	-2514.	326.	2206.	-485.	3431.	.0382	.0085	.0590	.0595	-.0553	-.0159	1648.
.2350	854.	-1871.	63.	2879.	-445.	3350.	.0381	.0111	.0544	.0585	-.0589	-.0168	1781.
.2360	808.	-1126.	-166.	3369.	-402.	3149.	.0369	.0139	.0507	.0576	-.0526	-.0172	1857.
.2370	726.	-302.	-347.	3657.	-356.	2813.	.0345	.0168	.0482	.0568	-.0557	-.0172	1857.
.2380	611.	479.	-470.	3735.	-305.	2340.	.0312	.0195	.0470	.0562	-.0573	-.0170	1773.
.2390	467.	1169.	-530.	3608.	-247.	1742.	.0271	.0220	.0472	.0559	-.0571	-.0166	1611.
.2400	300.	1315.	-530.	3296.	-187.	1043.	.0225	.0243	.0489	.0560	-.0550	-.0161	1389.
.2410	119.	2401.	-472.	2829.	-124.	277.	.0175	.0262	.0518	.0565	-.0512	-.0155	1142.
.2420	-63.	2867.	-364.	2250.	-60.	-516.	.0125	.0277	.0558	.0574	-.0559	-.0150	927.
.2430	-236.	3189.	-218.	1610.	-0.	-1290.	.0078	.0287	.0606	.0588	-.0495	-.0145	828.
.2440	-386.	3414.	-47.	963.	53.	-1995.	.0036	.0290	.0661	.0606	-.0420	-.0142	889.
.2450	-504.	3568.	133.	367.	97.	-2582.	.0003	.0289	.0718	.0628	-.0336	-.0140	1047.
.2460	-581.	3599.	312.	-133.	128.	-3014.	-.0019	.0282	.0776	.0655	-.0247	-.0139	1212.
.2470	-609.	3501.	483.	-507.	148.	-3266.	-.0030	.0268	.0833	.0684	-.0158	-.0140	1328.
.2480	-590.	3269.	643.	-750.	162.	-3337.	-.0028	.0249	.0886	.0716	-.0069	-.0142	1374.
.2490	-525.	2861.	791.	-380.	172.	-3231.	-.0015	.0224	.0934	.0749	.0017	-.0147	1346.
.2500	-420.	2344.	928.	-926.	174.	-2964.	.0010	.0195	.0978	.0780	.0094	-.0153	1248.
.2510	-282.	1811.	1056.	-928.	165.	-2559.	.0043	.0164	.1017	.0808	.0157	-.0161	1094.
.2520	-121.	1255.	1178.	-930.	144.	-2053.	.0084	.0130	.1050	.0831	.0204	-.0170	906.
.2530	50.	653.	1294.	-969.	113.	-1493.	.0130	.0096	.1077	.0847	.0234	-.0180	716.
.2540	220.	94.	1404.	-1072.	75.	-924.	.0177	.0062	.1099	.0855	.0246	-.0191	569.
.2550	377.	-338.	1501.	-1245.	34.	-389.	.0223	.0031	.1114	.0853	.0242	-.0203	524.
.2560	513.	-606.	1585.	-1485.	-4.	81.	.0267	.0002	.1121	.0842	.0223	-.0214	597.
.2570	622.	-561.	1651.	-1775.	-39.	464.	.0305	-.0023	.1119	.0821	.0191	-.0226	736.
.2580	703.	-332.	1698.	-2092.	-71.	748.	.0337	-.0047	.1107	.0791	.0151	-.0236	892.
.2590	754.	-178.	1724.	-2403.	-99.	930.	.0362	-.0069	.1084	.0751	.0106	-.0245	1035.
.2600	776.	-54.	1722.	-2669.	-126.	1018.	.0378	-.0089	.1048	.0704	.0057	-.0251	1147.
.2610	772.	154.	1686.	-2844.	-154.	1026.	.0387	-.0108	.0998	.0648	.0002	-.0255	1215.

ADLPIPE PAGE 1479

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.36.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.2510	-252.	1811.	1056.	-928.	165.	-2559.	.0043	.0164	.1017	.0808	.0157	-.0161	1094.
.2520	-121.	1255.	1178.	-920.	144.	-2053.	.0084	.0130	.1050	.0831	.0204	-.0170	906.
.2530	50.	653.	1294.	-969.	113.	-1493.	.0130	.0096	.1077	.0847	.0234	-.0180	716.
.2540	220.	94.	1404.	-1072.	75.	-924.	.0177	.0062	.1099	.0855	.0246	-.0191	569.
.2550	377.	-338.	1501.	-1245.	34.	-389.	.0223	.0031	.1114	.0853	.0242	-.0203	524.
.2560	513.	-606.	1585.	-1485.	-4.	81.	.0267	.0002	.1121	.0842	.0223	-.0214	597.
.2570	622.	-561.	1651.	-1775.	-39.	464.	.0305	-.0027	.1119	.0821	.0191	-.0226	736.
.2580	703.	-332.	1698.	-2092.	-71.	748.	.0337	-.0047	.1107	.0791	.0151	-.0236	892.
.2590	714.	-178.	1724.	-2403.	-99.	930.	.0362	-.0069	.1084	.0751	.0106	-.0245	1035.
.2600	777.	-54.	1722.	-2669.	-126.	1018.	.0378	-.0089	.1048	.0704	.0057	-.0251	1147.
.2610	772.	154.	1686.	-2844.	-154.	1026.	.0387	-.0108	.0996	.0648	.0002	-.0255	1215.

ADLPIPE PAGE 1477

DIS/ADLPIPE ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.36.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	36	MEMBER	1	SEQUENCE	850	LOCATION	DEG	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)	
.2620	748.	300.	1615.	-2887.	-183.	973.	.0389	-.0126	.0933	.0587	-.0055	-.0255	1225.	
.2630	710.	300.	1505.	-2763.	-215.	877.	.0384	-.0146	.0852	.0521	-.0113	-.0252	1166.	
.2640	662.	289.	1352.	-2445.	-254.	756.	.0372	-.0166	.0756	.0452	-.0169	-.0245	1032.	
.2650	607.	268.	1154.	-1922.	-302.	624.	.0355	-.0185	.0647	.0382	-.0221	-.0234	820.	
.2660	549.	273.	917.	-1200.	-357.	491.	.0334	-.0205	.0525	.0311	-.0267	-.0220	540.	
.2670	491.	275.	649.	-306.	-419.	361.	.0308	-.0225	.0394	.0240	-.0306	-.0203	254.	
.2680	433.	32.	362.	714.	-489.	233.	.0278	-.0244	.0257	.0172	-.0336	-.0183	360.	
.2690	373.	-423.	66.	1802.	-569.	102.	.0245	-.0262	.0119	.0106	-.0357	-.0161	759.	
.2700	308.	-741.	-225.	2892.	-659.	-42.	.0210	-.0276	-.0018	.0044	-.0370	-.0138	1191.	
.2710	238.	-616.	-488.	3917.	-753.	-209.	.0171	-.0287	-.0148	-.0014	-.0376	-.0114	1603.	
.2720	165.	-254.	-704.	4810.	-844.	-408.	.0131	-.0297	-.0267	-.0069	-.0373	-.0089	1967.	
.2730	85.	27.	-866.	5519.	-927.	-648.	.0089	-.0307	-.0373	-.0119	-.0361	-.0066	2261.	
.2740	-8.	354.	-975.	6004.	-1001.	-934.	.0046	-.0312	-.0463	-.0166	-.0345	-.0043	2471.	
.2750	-113.	807.	-1030.	6243.	-1061.	-1267.	.0003	-.0313	-.0536	-.0208	-.0328	-.0022	2592.	
.2760	-225.	1083.	-1025.	6236.	-1101.	-1641.	-.0039	-.0314	-.0591	-.0246	-.0308	-.0004	2625.	
.2770	-337.	957.	-964.	6000.	-1119.	-2041.	-.0078	-.0315	-.0630	-.0281	-.0288	.0011	2583.	
.2780	-447.	726.	-863.	5573.	-1117.	-2446.	-.0112	-.0316	-.0652	-.0311	-.0271	.0022	2483.	
.2790	-553.	804.	-741.	5003.	-1091.	-2826.	-.0141	-.0312	-.0662	-.0338	-.0263	.0030	2347.	
.2800	-643.	1042.	-606.	4343.	-1037.	-3149.	-.0162	-.0307	-.0660	-.0361	-.0266	.0034	2193.	
.2810	-705.	1112.	-461.	3644.	-954.	-3383.	-.0174	-.0304	-.0651	-.0381	-.0283	.0035	2032.	
.2820	-736.	1062.	-323.	2950.	-844.	-3503.	-.0175	-.0301	-.0637	-.0397	-.0314	.0031	1869.	
.2830	-738.	1089.	-209.	2300.	-712.	-3492.	-.0166	-.0295	-.0620	-.0411	-.0355	.0024	1702.	
.2840	-709.	1062.	-127.	1719.	-561.	-3345.	-.0145	-.0286	-.0603	-.0423	-.0402	.0014	1526.	
.2850	-645.	738.	-75.	1224.	-395.	-3063.	-.0114	-.0276	-.0587	-.0433	-.0454	-.0000	1333.	
.2860	-548.	263.	-51.	821.	-215.	-2651.	-.0073	-.0266	-.0573	-.0443	-.0510	-.0017	1121.	
.2870	-427.	-15.	-60.	510.	-27.	-2160.	-.0024	-.0253	-.0563	-.0451	-.0570	-.0037	891.	
.2880	-287.	-100.	-101.	280.	162.	-1581.	.0032	-.0236	-.0555	-.0458	-.0534	-.0060	648.	
.2890	-133.	-231.	-163.	112.	342.	-949.	.0092	-.0217	-.0550	-.0465	-.0701	-.0086	407.	
.2900	30.	-371.	-234.	-22.	503.	-289.	.0155	-.0196	-.0547	-.0472	-.0769	-.0112	233.	
.2910	196.	-315.	-305.	-148.	637.	373.	.0218	-.0172	-.0545	-.0478	-.0838	-.0139	302.	
.2920	358.	-150.	-365.	-291.	740.	1015.	.0279	-.0147	-.0543	-.0484	-.0905	-.0165	517.	
.2930	509.	-136.	-410.	-465.	811.	1616.	.0335	-.0121	-.0541	-.0490	-.0963	-.0190	749.	
.2940	644.	-228.	-434.	-673.	855.	2159.	.0385	-.0094	-.0538	-.0495	-.1010	-.0212	970.	
.2950	758.	-141.	-436.	-906.	877.	2624.	.0428	-.0067	-.0536	-.0500	-.1039	-.0231	1168.	
.2960	846.	157.	-418.	-1145.	888.	2996.	.0460	-.0042	-.0533	-.0504	-.1044	-.0245	1336.	
.2970	908.	453.	-383.	-1363.	888.	3265.	.0482	-.0020	-.0531	-.0506	-.1023	-.0255	1464.	
.2980	939.	701.	-342.	-1530.	879.	3424.	.0492	-.0000	-.0532	-.0506	-.0975	-.0259	1546.	
.2990	938.	1018.	-301.	-1620.	859.	3466.	.0490	.0016	-.0535	-.0504	-.0904	-.0258	1574.	

ADLPIPE PAGE 1480

DIS/ADLPIPE ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.36.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.2870	-133.	-271.	-167.	112.	342.	-949.	.0092	-.0217	-.0555	-.0457	-.0534	-.0060	648.
.2900	30.	-371.	-234.	-22.	503.	-289.	.0155	-.0196	-.0547	-.0472	-.0769	-.0112	233.
.2910	196.	-319.	-305.	-148.	637.	373.	.0218	-.0172	-.0545	-.0478	-.0838	-.0139	302.
.2920	358.	-150.	-265.	-291.	740.	1615.	.0279	-.0147	-.0543	-.0484	-.0905	-.0165	517.
.2930	509.	-136.	-410.	-465.	811.	1616.	.0335	-.0121	-.0541	-.0490	-.0963	-.0190	749.
.2940	644.	-228.	-434.	-673.	855.	2159.	.0385	-.0094	-.0538	-.0495	-.1010	-.0212	970.
.2950	758.	-141.	-436.	-906.	877.	2624.	.0428	-.0067	-.0536	-.0500	-.1039	-.0231	1168.
.2960	846.	157.	-418.	-1145.	888.	2996.	.0460	-.0042	-.0533	-.0504	-.1044	-.0245	1336.
.2970	908.	453.	-383.	-1363.	888.	3265.	.0482	-.0020	-.0531	-.0506	-.1023	-.0255	1464.
.2980	939.	701.	-342.	-1570.	879.	3424.	.0492	-.0000	-.0532	-.0506	-.0975	-.0259	1546.
.2990	938.	1012.	-301.	-1620.	859.	3466.	.0490	.0016	-.0535	-.0504	-.0904	-.0258	1574.

ADLPIPE PAGE 1480

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.36.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	36	MEMBER	1	SEQUENCE	850	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)			
.3000	905.	1362.	-264.	-1614.	833.	3388.	.0476	.0028	-.0541	-.0501	-.0814	-.0252	1543.			
.3010	844.	1526.	-231.	-1499.	802.	3187.	.0450	.0034	-.0551	-.0495	-.0713	-.0240	1450.			
.3020	755.	1508.	-205.	-1271.	766.	2863.	.0414	.0032	-.0565	-.0489	-.0607	-.0224	1294.			
.3030	637.	1496.	-192.	-933.	726.	2419.	.0367	.0026	-.0582	-.0480	-.0501	-.0204	1080.			
.3040	493.	1535.	-190.	-499.	687.	1860.	.0312	.0016	-.0603	-.0471	-.0396	-.0182	821.			
.3050	331.	1504.	-195.	9.	654.	1204.	.0251	-.0002	-.0626	-.0462	-.0295	-.0158	550.			
.3060	156.	1382.	-203.	564.	631.	472.	.0186	-.0025	-.0649	-.0452	-.0198	-.0134	389.			
.3070	-24.	1242.	-215.	1130.	617.	-302.	.0120	-.0052	-.0673	-.0443	-.0111	-.0109	531.			
.3080	-201.	1027.	-229.	1672.	613.	-1077.	.0054	-.0081	-.0695	-.0435	-.0036	-.0086	835.			
.3090	-364.	606.	-240.	2154.	618.	-1809.	-.0006	-.0112	-.0714	-.0429	.0025	-.0065	1156.			
.3100	-503.	58.	-243.	2547.	628.	-2459.	-.0061	-.0143	-.0729	-.0425	.0067	-.0046	1443.			
.3110	-610.	-403.	-236.	2834.	642.	-2991.	-.0106	-.0174	-.0739	-.0423	.0089	-.0029	1673.			
.3120	-681.	-736.	-221.	3009.	655.	-3379.	-.0140	-.0203	-.0745	-.0423	.0093	-.0016	1835.			
.3130	-712.	-1049.	-201.	3078.	669.	-3609.	-.0163	-.0228	-.0746	-.0425	.0082	-.0005	1922.			
.3140	-703.	-1338.	-180.	3056.	683.	-3673.	-.0174	-.0248	-.0743	-.0428	.0057	.0001	1937.			
.3150	-657.	-1487.	-162.	2965.	695.	-3578.	-.0172	-.0263	-.0736	-.0431	.0022	.0004	1885.			
.3160	-578.	-1516.	-152.	2827.	707.	-3335.	-.0160	-.0272	-.0725	-.0434	-.0019	.0003	1777.			
.3170	-469.	-1554.	-153.	2661.	715.	-2963.	-.0137	-.0274	-.0713	-.0436	-.0064	-.0001	1624.			
.3180	-339.	-1570.	-170.	2485.	714.	-2488.	-.0106	-.0271	-.0698	-.0438	-.0109	-.0009	1440.			
.3190	-196.	-1395.	-202.	2312.	702.	-1940.	-.0069	-.0261	-.0681	-.0438	-.0155	-.0018	1244.			
.3200	-47.	-969.	-249.	2151.	680.	-1354.	-.0028	-.0246	-.0663	-.0436	-.0200	-.0030	1056.			
.3210	102.	-408.	-303.	2007.	650.	-763.	.0015	-.0227	-.0644	-.0432	-.0241	-.0043	900.			
.3220	241.	225.	-363.	1877.	614.	-202.	.0058	-.0206	-.0622	-.0425	-.0278	-.0057	797.			
.3230	362.	974.	-425.	1754.	573.	302.	.0098	-.0183	-.0598	-.0415	-.0306	-.0071	750.			
.3240	462.	1780.	-480.	1627.	530.	729.	.0134	-.0160	-.0570	-.0403	-.0323	-.0084	746.			
.3250	538.	2489.	-518.	1477.	486.	1067.	.0165	-.0138	-.0539	-.0388	-.0327	-.0097	757.			
.3260	592.	3023.	-529.	1287.	443.	1317.	.0189	-.0120	-.0504	-.0371	-.0320	-.0107	760.			
.3270	623.	3460.	-511.	1044.	398.	1485.	.0207	-.0107	-.0464	-.0353	-.0306	-.0114	746.			
.3280	634.	3855.	-461.	743.	355.	1587.	.0219	-.0098	-.0420	-.0334	-.0286	-.0118	718.			
.3290	632.	4125.	-378.	392.	314.	1642.	.0225	-.0096	-.0373	-.0314	-.0262	-.0117	689.			
.3300	621.	4222.	-265.	10.	277.	1671.	.0224	-.0102	-.0325	-.0294	-.0237	-.0111	680.			
.3310	606.	4181.	-129.	-375.	243.	1691.	.0218	-.0117	-.0276	-.0274	-.0212	-.0101	702.			
.3320	588.	4016.	19.	-727.	214.	1713.	.0207	-.0138	-.0228	-.0254	-.0184	-.0084	752.			
.3330	569.	3666.	167.	-1013.	190.	1743.	.0190	-.0166	-.0184	-.0235	-.0153	-.0062	813.			
.3340	550.	3082.	310.	-1201.	173.	1781.	.0168	-.0201	-.0146	-.0216	-.0118	-.0035	865.			
.3350	529.	2384.	438.	-1270.	161.	1819.	.0140	-.0242	-.0114	-.0197	-.0080	-.0003	893.			
.3360	504.	1699.	544.	-1209.	153.	1841.	.0107	-.0286	-.0091	-.0179	-.0041	.0033	886.			
.3370	469.	1045.	622.	-1016.	150.	1830.	.0067	-.0332	-.0076	-.0163	.0000	.0073	842.			

ADLPIPE PAGE 1481

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.36.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.3640	457.	734.	115.	1367.	-72.	418.	-.0476	-.0221	-.0149	-.0093	.0277	.0357	574.
.3650	472.	615.	-61.	1079.	-15.	500.	-.0469	-.0204	-.0121	-.0080	.0167	.0356	477.
.3660	409.	533.	12.	719.	37.	473.	-.0469	-.0185	-.0091	-.0066	.0058	.0359	346.
.3670	313.	476.	101.	296.	79.	352.	-.0477	-.0164	-.0060	-.0053	-.0046	.0363	187.
.3680	190.	450.	199.	-170.	110.	156.	-.0491	-.0141	-.0029	-.0042	-.0143	.0370	103.
.3690	46.	537.	301.	-654.	121.	-94.	-.0509	-.0115	-.0001	-.0031	-.0228	.0379	270.
.3700	-109.	735.	401.	-1124.	141.	-375.	-.0530	-.0087	.0024	-.0022	-.0301	.0388	479.
.3710	-265.	1149.	493.	-1546.	142.	-665.	-.0551	-.0059	.0043	-.0017	-.0359	.0397	678.
.3720	-414.	1532.	567.	-1885.	133.	-941.	-.0572	-.0031	.0054	-.0012	-.0400	.0406	847.
.3730	-550.	1928.	614.	-2104.	110.	-1186.	-.0589	-.0004	.0056	-.0010	-.0425	.0413	970.
.3740	-665.	2298.	629.	-2177.	75.	-1335.	-.0603	.0022	.0049	-.0010	-.0434	.0418	1036.
.3750	-752.	2723.	610.	-2092.	27.	-1528.	-.0610	.0044	.0031	-.0012	-.0431	.0419	1036.

ADLPIPE PAGE 1482

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

83/12/02. 18.28.36.

CONDITION 24
 LOADS
 SHOCK
 PRESSURE
 ENGLISH UNITS

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

SECTION	36	MEMBER	1	SEQUENCE	850	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)		
.3760	-809.	3098.	559.	-1812.	-34.	-1610.	-.0611	.0061	.0003	-.0015	-.0417	.0417	973.		
.3770	-832.	3362.	477.	-1372.	-106.	-1632.	-.0605	.0072	-.0035	-.0019	-.0395	.0411	856.		
.3780	-822.	3483.	368.	-780.	-189.	-1594.	-.0592	.0077	-.0079	-.0025	-.0367	.0401	716.		
.3790	-780.	3425.	239.	-66.	-280.	-1505.	-.0572	.0076	-.0130	-.0032	-.0335	.0387	615.		
.3800	-709.	3167.	100.	730.	-376.	-1373.	-.0545	.0067	-.0184	-.0039	-.0298	.0369	642.		
.3810	-613.	2830.	-40.	1562.	-473.	-1209.	-.0513	.0052	-.0238	-.0047	-.0256	.0347	815.		
.3820	-497.	2419.	-170.	2383.	-568.	-1024.	-.0477	.0031	-.0290	-.0055	-.0207	.0323	1066.		
.3830	-366.	1926.	-286.	3150.	-656.	-830.	-.0437	.0004	-.0338	-.0063	-.0151	.0296	1333.		
.3840	-227.	1499.	-380.	3823.	-733.	-642.	-.0396	-.0026	-.0378	-.0071	-.0090	.0268	1583.		
.3850	-86.	1194.	-446.	4371.	-796.	-475.	-.0354	-.0060	-.0409	-.0078	-.0025	.0239	1793.		
.3860	51.	846.	-480.	4771.	-843.	-343.	-.0314	-.0096	-.0430	-.0085	.0044	.0209	1949.		
.3870	178.	252.	-485.	5013.	-877.	-259.	-.0276	-.0134	-.0440	-.0091	.0119	.0180	2045.		
.3880	285.	-582.	-466.	5095.	-899.	-234.	-.0242	-.0169	-.0438	-.0095	.0199	.0152	2078.		
.3890	368.	-1470.	-429.	5025.	-911.	-275.	-.0212	-.0201	-.0425	-.0097	.0283	.0125	2052.		
.3900	423.	-2265.	-375.	4819.	-913.	-389.	-.0187	-.0227	-.0403	-.0097	.0371	.0100	1974.		
.3910	450.	-2905.	-307.	4497.	-903.	-573.	-.0167	-.0249	-.0370	-.0094	.0459	.0076	1855.		
.3920	447.	-3336.	-236.	4084.	-883.	-820.	-.0151	-.0264	-.0330	-.0089	.0545	.0053	1709.		
.3930	415.	-3527.	-173.	3603.	-858.	-1115.	-.0140	-.0270	-.0284	-.0082	.0628	.0032	1552.		
.3940	357.	-3528.	-121.	3077.	-830.	-1440.	-.0131	-.0266	-.0233	-.0071	.0707	.0013	1404.		
.3950	281.	-3453.	-84.	2524.	-801.	-1772.	-.0125	-.0253	-.0178	-.0059	.0780	-.0005	1279.		
.3960	193.	-3343.	-60.	1956.	-774.	-2085.	-.0118	-.0232	-.0120	-.0043	.0846	-.0022	1188.		
.3970	99.	-3168.	-51.	1379.	-750.	-2355.	-.0110	-.0203	-.0060	-.0026	.0906	-.0039	1136.		
.3980	4.	-2893.	-56.	797.	-731.	-2562.	-.0098	-.0166	.0001	-.0007	.0956	-.0055	1116.		
.3990	-84.	-2474.	-68.	207.	-715.	-2687.	-.0083	-.0122	.0063	.0013	.0995	-.0071	1119.		
.4000	-158.	-1870.	-80.	-392.	-700.	-2720.	-.0061	-.0074	.0126	.0034	.1021	-.0088	1138.		

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)
.1490	-1974.	4081.	-1028.	-183.	693.	-7918.	.0904	.0006	.1006	.0795	-.0298	-.0356	3190.

SECTION	36	MEMBER	1	SEQUENCE	59	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)		

ADLPIPE PAGE 1483

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

83/12/02. 18.28.37.

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)
.1490	-1974.	4081.	-1020.	-183.	693.	-7918.	.0904	.0006	.1006	.0795	-.0298	-.0356	3190.

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)
36	1	59																		

ADLPIPE PAGE 1483

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.37.

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)
36	1	59					0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
							.0010	0.	-0.	0.	0.	0.	-0.	.0000	.0000	-.0000	.0000	-.0000	-.0000	0.
							.0020	0.	0.	0.	0.	0.	-0.	-.0000	.0000	-.0000	.0000	-.0000	-.0000	0.
							.0030	0.	2.	0.	0.	1.	0.	-.0000	.0000	-.0000	.0000	-.0000	-.0000	0.
							.0040	0.	4.	0.	-0.	1.	0.	-.0000	.0000	-.0000	.0000	-.0001	-.0000	0.
							.0050	0.	8.	0.	-0.	1.	1.	-.0000	-.0000	.0000	.0000	-.0001	-.0000	1.
							.0060	0.	20.	-0.	-1.	1.	1.	.0000	-.0000	.0000	-.0000	-.0001	-.0000	1.
							.0070	-1.	45.	-1.	-1.	2.	1.	.0000	-.0000	.0000	-.0000	-.0002	.0000	1.
							.0080	-2.	80.	-2.	-3.	5.	1.	.0000	-.0001	.0000	-.0000	-.0004	.0000	2.
							.0090	-3.	118.	-4.	-6.	6.	1.	.0000	-.0001	.0000	-.0000	-.0005	.0000	3.
							.0100	-5.	146.	-6.	-10.	2.	2.	.0000	-.0002	.0000	-.0001	-.0002	.0000	4.
							.0110	-7.	164.	-9.	-16.	-12.	3.	.0000	-.0003	.0000	-.0001	.0008	.0001	8.
							.0120	-9.	192.	-11.	-27.	-36.	5.	-.0000	-.0004	-.0000	-.0002	.0027	.0001	18.
							.0130	-12.	256.	-13.	-45.	-72.	7.	-.0000	-.0006	-.0001	-.0003	.0055	.0002	34.
							.0140	-15.	343.	-15.	-71.	-117.	10.	-.0001	-.0008	-.0001	-.0004	.0091	.0003	55.
							.0150	-15.	408.	-16.	-102.	-167.	22.	-.0001	-.0011	-.0002	-.0005	.0132	.0004	79.
							.0160	-10.	427.	-18.	-133.	-216.	47.	-.0003	-.0014	-.0003	-.0006	.0172	.0006	104.
							.0170	3.	415.	-22.	-158.	-257.	92.	-.0005	-.0016	-.0003	-.0008	.0207	.0008	126.
							.0180	23.	379.	-27.	-176.	-285.	157.	-.0008	-.0019	-.0004	-.0010	.0231	.0010	148.
							.0190	49.	281.	-30.	-186.	-304.	237.	-.0011	-.0021	-.0005	-.0011	.0249	.0012	172.
							.0200	77.	73.	-26.	-191.	-319.	323.	-.0013	-.0021	-.0006	-.0013	.0264	.0013	198.
							.0210	102.	-187.	-11.	-195.	-342.	400.	-.0015	-.0020	-.0008	-.0015	.0286	.0012	225.
							.0220	118.	-381.	16.	-201.	-403.	457.	-.0014	-.0017	-.0011	-.0016	.0338	.0008	257.
							.0230	117.	-445.	53.	-212.	-480.	471.	-.0011	-.0011	-.0014	-.0016	.0407	.0002	283.
							.0240	88.	-266.	93.	-228.	-525.	421.	-.0004	-.0005	-.0016	-.0016	.0455	-.0007	285.
							.0250	29.	197.	120.	-239.	-503.	308.	.0006	.0001	-.0018	-.0015	.0454	-.0018	255.
							.0260	-50.	640.	121.	-221.	-443.	155.	.0019	.0005	-.0016	-.0012	.0419	-.0030	208.
							.0270	-135.	553.	98.	-167.	-416.	-18.	.0032	.0009	-.0013	-.0008	.0401	-.0042	180.
							.0280	-222.	-291.	71.	-98.	-374.	-222.	.0045	.0013	-.0008	-.0003	.0366	-.0054	179.
							.0290	-302.	-1459.	59.	-29.	-243.	-459.	.0057	.0019	-.0003	.0003	.0262	-.0064	209.
							.0300	-352.	-2105.	58.	60.	-128.	-671.	.0065	.0027	.0002	.0011	.0167	-.0070	275.
							.0310	-366.	-1994.	64.	155.	-69.	-830.	.0067	.0036	.0007	.0019	.0114	-.0071	340.
							.0320	-350.	-1473.	87.	233.	6.	-961.	.0065	.0046	.0012	.0029	.0052	-.0068	397.
							.0330	-307.	-1344.	123.	315.	92.	-1079.	.0059	.0059	.0017	.0040	-.0012	-.0059	453.
							.0340	-232.	-1592.	151.	439.	147.	-1164.	.0047	.0074	.0023	.0053	-.0052	-.0045	503.
							.0350	-129.	-1665.	144.	620.	217.	-1193.	.0031	.0088	.0033	.0068	-.0107	-.0026	547.
							.0360	-1.	-1432.	94.	857.	340.	-1157.	.0010	.0099	.0047	.0084	-.0213	-.0004	594.
							.0370	150.	-1363.	11.	1142.	440.	-1051.	-.0013	.0107	.0062	.0100	-.0313	.0021	647.

ADLPIPE PAGE 1484

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.37.

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

.0260	-50.	340.	121.	-221.	-443.	155.	.0019	.0005	-.0016	-.0012	.0419	-.0030	208.
.0270	-135.	553.	98.	-167.	-416.	-18.	.0032	.0009	-.0013	-.0008	.0401	-.0042	180.
.0280	-222.	-291.	71.	-98.	-374.	-222.	.0045	.0013	-.0008	-.0003	.0366	-.0054	179.
.0290	-302.	-1459.	59.	-79.	-243.	-459.	.0057	.0019	-.0003	.0003	.0262	-.0064	209.
.0300	-352.	-2165.	58.	60.	-128.	-671.	.0065	.0027	.0002	.0011	.0167	-.0070	275.
.0310	-366.	-1994.	64.	155.	-69.	-830.	.0067	.0036	.0007	.0019	.0114	-.0071	340.
.0320	-350.	-1473.	87.	233.	6.	-961.	.0065	.0046	.0012	.0029	.0052	-.0068	397.
.0330	-307.	-1344.	123.	315.	92.	-1079.	.0059	.0059	.0017	.0040	-.0012	-.0059	453.
.0340	-232.	-1592.	151.	479.	147.	-1164.	.0047	.0074	.0023	.0053	-.0052	-.0045	503.
.0350	-129.	-1665.	144.	620.	217.	-1193.	.0031	.0088	.0033	.0068	-.0107	-.0026	547.
.0360	-1.	-1432.	94.	857.	340.	-1157.	.0010	.0099	.0047	.0084	-.0213	-.0004	594.
.0370	150.	-1363.	11.	1142.	440.	-1051.	-.0013	.0107	.0062	.0100	-.0313	.0021	647.

ADLPIPE PAGE 1484

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.37.

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	DX	DY	DZ	RX	RY	RZ	STRESS
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.0380	315.	-1802.	-78.	1437.	461.	-894.	-.0038	.0114	.0078	.0114	-.0362	.0046	704.
.0390	476.	-2537.	-142.	1691.	480.	-720.	-.0062	.0119	.0091	.0127	-.0404	.0070	762.
.0400	625.	-2972.	-167.	1880.	558.	-534.	-.0083	.0124	.0099	.0136	-.0479	.0090	816.
.0410	755.	-2454.	-163.	2001.	590.	-317.	-.0099	.0127	.0103	.0140	-.0512	.0104	847.
.0420	836.	-970.	-140.	2012.	575.	-104.	-.0109	.0124	.0102	.0138	-.0511	.0110	841.
.0430	833.	354.	-104.	1895.	586.	27.	-.0109	.0115	.0096	.0131	-.0535	.0108	796.
.0440	746.	324.	-55.	1693.	610.	40.	-.0098	.0105	.0087	.0120	-.0574	.0097	722.
.0450	595.	-525.	-7.	1451.	579.	-36.	-.0078	.0094	.0076	.0106	-.0574	.0077	627.
.0460	390.	-474.	16.	1160.	526.	-150.	-.0051	.0077	.0064	.0089	-.0554	.0051	515.
.0470	148.	862.	10.	805.	527.	-269.	-.0020	.0053	.0052	.0069	-.0566	.0021	401.
.0480	-98.	2069.	-7.	430.	531.	-374.	.0011	.0027	.0040	.0049	-.0574	-.0009	313.
.0490	-317.	2162.	-21.	93.	440.	-450.	.0040	.0003	.0028	.0030	-.0504	-.0037	255.
.0500	-501.	1764.	-30.	-213.	281.	-487.	.0064	-.0018	.0016	.0012	-.0378	-.0062	241.
.0510	-648.	1708.	-35.	-503.	123.	-476.	.0081	-.0039	.0004	-.0005	-.0247	-.0080	282.
.0520	-742.	1973.	-34.	-760.	-25.	-407.	.0091	-.0055	-.0008	-.0021	-.0118	-.0090	346.
.0530	-774.	2420.	-28.	-971.	-171.	-266.	.0091	-.0067	-.0019	-.0033	.0011	-.0091	410.
.0540	-744.	3149.	-28.	-1155.	-296.	-45.	.0082	-.0077	-.0028	-.0044	.0131	-.0084	479.
.0550	-662.	3743.	-36.	-1316.	-395.	239.	.0066	-.0083	-.0037	-.0053	.0236	-.0069	560.
.0560	-533.	3512.	-50.	-1425.	-480.	544.	.0043	-.0085	-.0044	-.0059	.0336	-.0048	642.
.0570	-374.	2730.	-73.	-1467.	-564.	839.	.0017	-.0083	-.0049	-.0062	.0436	-.0023	715.
.0580	-207.	2231.	-109.	-1461.	-647.	1105.	-.0011	-.0080	-.0052	-.0064	.0532	.0003	780.
.0590	-43.	1797.	-141.	-1399.	-723.	1308.	-.0037	-.0075	-.0054	-.0065	.0618	.0028	822.
.0600	115.	561.	-140.	-1241.	-795.	1410.	-.0060	-.0060	-.0056	-.0063	.0696	.0050	818.
.0610	260.	-1087.	-102.	-988.	-852.	1403.	-.0079	-.0036	-.0058	-.0059	.0761	.0065	769.
.0620	366.	-1753.	-43.	-695.	-873.	1299.	-.0090	-.0009	-.0061	-.0054	.0799	.0075	687.
.0630	416.	-1280.	29.	-392.	-840.	1081.	-.0093	.0019	-.0063	-.0040	.0800	.0077	571.
.0640	410.	-966.	118.	-55.	-762.	715.	-.0087	.0052	-.0065	-.0042	.0766	.0071	420.
.0650	354.	-1453.	215.	317.	-673.	213.	-.0074	.0089	-.0065	-.0033	.0715	.0058	310.
.0660	256.	-2084.	291.	686.	-596.	-363.	-.0055	.0123	-.0063	-.0023	.0659	.0042	393.
.0670	137.	-2421.	326.	1037.	-534.	-943.	-.0033	.0150	-.0057	-.0014	.0596	.0024	602.
.0680	29.	-2757.	321.	1398.	-492.	-1473.	-.0013	.0171	-.0047	-.0003	.0535	.0008	838.
.0690	-44.	-3039.	289.	1761.	-474.	-1912.	.0004	.0185	-.0034	.0007	.0491	-.0004	1060.
.0700	-77.	-2796.	243.	2079.	-461.	-2229.	.0015	.0190	-.0020	.0017	.0455	-.0010	1237.
.0710	-67.	-2132.	197.	2324.	-443.	-2406.	.0019	.0186	-.0007	.0025	.0419	-.0010	1354.
.0720	-9.	-1577.	157.	2499.	-438.	-2431.	.0016	.0175	.0006	.0031	.0387	-.0002	1410.
.0730	85.	-1073.	114.	2580.	-435.	-2300.	.0007	.0155	.0017	.0033	.0344	.0011	1398.
.0740	193.	-225.	61.	2542.	-377.	-2031.	-.0007	.0126	.0026	.0031	.0250	.0030	1314.
.0750	304.	744.	-7.	2413.	-247.	-1661.	-.0023	.0089	.0034	.0026	.0103	.0051	1180.

ADLPIPE PAGE 1485

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.37.

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

.1020	1401.	-59.	1184.	4707.	-373.	-1850.	-0007	.0497	-.0157	-.0045	.0046	.0007	2035.
.1030	1211.	-1362.	1129.	4715.	-377.	-2392.	-.0013	.0521	-.0114	.0015	-.0049	-.0068	2127.
.1050	662.	-2356.	1046.	4588.	-349.	-2891.	.0056	.0533	-.0069	.0075	-.0167	-.0149	2181.
.1060	737.	-2487.	928.	4297.	-314.	-3300.	.0134	.0530	-.0021	.0136	-.0282	-.0231	2178.
.1070	-0.	-1664.	774.	3846.	-295.	-3597.	.0210	.0514	.0030	.0197	-.0370	-.0311	2117.
.1080	-329.	-1116.	501.	3272.	-303.	-3780.	.0281	.0488	.0004	.0259	-.0428	-.0385	2010.
.1090	-642.	-2051.	331.	2588.	-335.	-3827.	.0346	.0448	.0141	.0322	-.0458	-.0449	1859.
.1100	-938.	-707.	1.	1802.	-454.	-3705.	.0400	.0391	.0202	.0382	-.0416	-.0501	1663.
.1110	-1192.	1690.	-372.	1038.	-571.	-3476.	.0442	.0330	.0265	.0441	-.0367	-.0540	1474.
.1120	-1372.	2656.	-742.	432.	-625.	-3199.	.0470	.0279	.0328	.0503	-.0350	-.0564	1319.
.1130	-1476.	3776.	-1115.	-42.	-658.	-2626.	.0493	.0231	.0389	.0561	-.0325	-.0573	1165.

ADLPIPE PAGE 1486

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.37.

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	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)
.1140	-1518.	6834.	-1492.	-476.	-689.	-2316.	.0480	.0179	.0445	.0611	-.0274	-.0565	988.							
.1150	-1484.	9428.	-1809.	-847.	-699.	-1729.	.0461	.0132	.0491	.0653	-.0213	-.0542	822.							
.1160	-1356.	8565.	-1989.	-1095.	-709.	-1148.	.0428	.0107	.0523	.0687	-.0137	-.0507	697.							
.1170	-1154.	5713.	-2032.	-1224.	-739.	-572.	.0383	.0099	.0540	.0711	-.0041	-.0463	637.							
.1180	-918.	5145.	-1974.	-1510.	-783.	24.	.0329	.0097	.0541	.0720	.0069	-.0412	683.							
.1190	-665.	5966.	-1812.	-1716.	-715.	565.	.0270	.0106	.0529	.0719	.0104	-.0356	780.							
.1200	-390.	5007.	-1539.	-1760.	-526.	965.	.0209	.0132	.0506	.0712	.0065	-.0301	833.							
.1210	-118.	2952.	-1210.	-1634.	-315.	1237.	.0151	.0186	.0475	.0700	.0028	-.0249	832.							
.1220	107.	2133.	-880.	-1431.	-76.	1398.	.0097	.0236	.0443	.0682	-.0019	-.0201	803.							
.1230	281.	1200.	-550.	-1118.	158.	1415.	.0050	.0290	.0410	.0664	-.0070	-.0159	726.							
.1240	431.	-2096.	-197.	-623.	355.	1259.	.0011	.0356	.0379	.0649	-.0116	-.0127	581.							
.1250	557.	-5853.	149.	-6.	470.	1008.	-.0020	.0427	.0352	.0638	-.0130	-.0101	446.							
.1260	650.	-6902.	439.	603.	499.	768.	-.0045	.0486	.0333	.0631	-.0098	-.0082	440.							
.1270	717.	-6207.	672.	1184.	543.	554.	-.0063	.0533	.0322	.0628	-.0079	-.0069	568.							
.1280	781.	-6683.	857.	1797.	578.	352.	-.0075	.0577	.0319	.0633	-.0049	-.0061	770.							
.1290	832.	-7729.	965.	2376.	591.	193.	-.0080	.0609	.0326	.0644	-.0009	-.0058	985.							
.1300	838.	-7032.	958.	2779.	613.	120.	-.0079	.0617	.0344	.0658	-.0001	-.0060	1143.							
.1310	803.	-5456.	854.	2982.	642.	123.	-.0070	.0602	.0369	.0673	-.0043	-.0064	1225.							
.1320	752.	-5320.	696.	3025.	699.	170.	-.0056	.0572	.0401	.0691	-.0153	-.0073	1248.							
.1330	697.	-5826.	495.	2882.	722.	305.	-.0037	.0526	.0436	.0709	-.0266	-.0085	1199.							
.1340	627.	-4573.	242.	2484.	705.	579.	-.0013	.0456	.0472	.0724	-.0351	-.0100	1062.							
.1350	547.	-2060.	-30.	1881.	671.	947.	.0015	.0370	.0508	.0736	-.0400	-.0119	887.							
.1360	464.	-398.	-282.	1198.	607.	1322.	.0047	.0282	.0541	.0746	-.0403	-.0144	756.							
.1370	353.	841.	-513.	448.	545.	1646.	.0087	.0194	.0571	.0754	-.0399	-.0177	719.							
.1380	182.	3233.	-747.	-400.	474.	1912.	.0134	.0100	.0597	.0758	-.0399	-.0216	807.							
.1390	-50.	5846.	-976.	-1287.	430.	2076.	.0189	.0008	.0619	.0757	-.0432	-.0262	995.							
.1400	-317.	6688.	-1169.	-2092.	428.	2088.	.0250	-.0068	.0635	.0755	-.0495	-.0315	1198.							
.1410	-607.	6473.	-1327.	-2784.	443.	1956.	.0314	-.0128	.0647	.0752	-.0546	-.0373	1377.							
.1420	-925.	7354.	-1457.	-3410.	520.	1700.	.0380	-.0175	.0652	.0746	-.0600	-.0433	1543.							
.1430	-1249.	8956.	-1546.	-3929.	630.	1313.	.0443	-.0207	.0651	.0738	-.0638	-.0493	1681.							
.1440	-1544.	9387.	-1567.	-4252.	725.	731.	.0502	-.0213	.0645	.0732	-.0545	-.0549	1759.							
.1450	-1791.	8737.	-1528.	-4372.	755.	141.	.0551	-.0198	.0633	.0726	-.0600	-.0597	1781.							
.1460	-1981.	8371.	-1454.	-4331.	711.	-534.	.0587	-.0169	.0617	.0719	-.0504	-.0633	1774.							
.1470	-2093.	8001.	-1345.	-4115.	685.	-1215.	.0608	-.0125	.0598	.0713	-.0416	-.0652	1744.							
.1480	-2093.	6394.	-1197.	-3673.	676.	-1867.	.0609	-.0064	.0577	.0709	-.0329	-.0654	1675.							
.1490	-1974.	4081.	-1028.	-3041.	693.	-2429.	.0590	.0011	.0556	.0708	-.0249	-.0636	1586.							
.1500	-1746.	2401.	-862.	-2307.	737.	-2840.	.0549	.0088	.0534	.0706	-.0188	-.0596	1498.							
.1510	-1406.	1001.	-697.	-1435.	761.	-3088.	.0488	.0168	.0513	.0704	-.0127	-.0536	1409.							

ADLPIPE PAGE 1487

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.37.

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

.2540	-2.0	-94.	-1404.	-2830.	-75.	1577.	.0002	.0062	.0597	.0807	.0241	-.0124	1293.
.2550	-377.	338.	-1501.	-2929.	-34.	1438.	.0115	.0031	.0611	.0808	.0239	-.0153	1309.
.2560	-517.	506.	-1585.	-3100.	4.	1245.	.0145	.0003	.0621	.0803	.0223	-.0180	1290.
.2570	-622.	561.	-1651.	-3214.	39.	1266.	.0172	-.0023	.0628	.0793	.0194	-.0204	1239.
.2580	-763.	332.	-1698.	-3270.	1.	1207.	.0194	-.0047	.0629	.0776	.0156	-.0224	1162.
.2590	-754.	173.	-1724.	-3301.	9.	1167.	.0211	-.0069	.0624	.0752	.0113	-.0238	1068.
.2600	-776.	54.	-1712.	-3316.	126.	1140.	.0223	-.0082	.0612	.0718	.0066	-.0248	967.
.2610	-772.	-154.	-1686.	-3343.	154.	1121.	.0230	-.0108	.0591	.0676	.0013	-.0252	868.
.2620	-748.	-306.	-1615.	-3402.	183.	1108.	.0232	-.0127	.0560	.0622	-.0042	-.0251	785.
.2630	-710.	-300.	-1505.	-3421.	215.	1098.	.0230	-.0146	.0518	.0558	-.0098	-.0246	726.
.2640	-662.	-239.	-1352.	-3413.	254.	1054.	.0224	-.0166	.0467	.0483	-.0151	-.0236	691.
.2650	-607.	-266.	-1154.	-3296.	302.	1032.	.0215	-.0185	.0405	.0399	-.0200	-.0222	680.

ADLPIPE PAGE 1490

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

83/12/02. 18.28.37.

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 (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	(PSI)
.2660	-549.	-273.	-917.	-1349.	357.	1034.	697.
.2670	-491.	-275.	-649.	-1498.	419.	1004.	743.
.2680	-433.	-32.	-362.	-1720.	489.	971.	817.
.2690	-373.	423.	-66.	-1985.	569.	936.	910.
.2700	-308.	741.	225.	-2268.	659.	898.	1014.
.2710	-238.	616.	488.	-2560.	753.	871.	1127.
.2720	-165.	254.	704.	-2852.	844.	866.	1243.
.2730	-85.	-27.	866.	-3111.	927.	884.	1350.
.2740	8.	-354.	975.	-3293.	1001.	912.	1429.
.2750	113.	-807.	1030.	-3380.	1061.	952.	1472.
.2760	225.	-1093.	1025.	-3385.	1101.	1015.	1486.
.2770	337.	-957.	964.	-3321.	1119.	1104.	1475.
.2780	447.	-726.	863.	-3174.	1117.	1202.	1434.
.2790	553.	-804.	741.	-2942.	1091.	1288.	1361.
.2800	643.	-1042.	606.	-2659.	1037.	1362.	1269.
.2810	705.	-1112.	461.	-2361.	954.	1423.	1171.
.2820	736.	-1062.	323.	-2052.	844.	1456.	1065.
.2830	738.	-1089.	209.	-1718.	712.	1440.	944.
.2840	709.	-1062.	127.	-1365.	561.	1375.	809.
.2850	645.	-738.	75.	-1016.	395.	1271.	672.
.2860	548.	-263.	51.	-650.	215.	1133.	539.
.2870	427.	15.	60.	-344.	27.	973.	414.
.2880	287.	100.	101.	-1.	-162.	782.	321.
.2890	133.	231.	163.	342.	-342.	578.	302.
.2900	-30.	371.	234.	674.	-503.	372.	369.
.2910	-196.	315.	305.	995.	-637.	172.	479.
.2920	-358.	150.	365.	1306.	-740.	-21.	603.
.2930	-509.	136.	410.	1603.	-811.	-201.	726.
.2940	-644.	228.	434.	1878.	-855.	-368.	841.
.2950	-758.	141.	436.	2119.	-877.	-518.	944.
.2960	-846.	-157.	418.	2307.	-888.	-643.	1025.
.2970	-908.	-453.	383.	2429.	-888.	-741.	1080.
.2980	-939.	-701.	342.	2480.	-879.	-813.	1105.
.2990	-938.	-1018.	301.	2457.	-859.	-859.	1100.
.3000	-905.	-1362.	264.	2348.	-833.	-871.	1059.
.3010	-844.	-1526.	231.	2140.	-802.	-840.	977.
.3020	-755.	-1506.	205.	1840.	-766.	-764.	856.
.3030	-637.	-1496.	192.	1466.	-726.	-648.	706.

ADLPIPE PAGE 1491

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

83/12/02. 18.28.37.

CONDITION 24
 LOADS
 SHOCK
 PRESSURE
 ENGLISH UNITS

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

.2930	-509.	136.	410.	1607.	-811.	-201.	.0204	-.0121	-.0267	-.0434	-.1020	-.0239	726.
.2940	-644.	226.	434.	1876.	-855.	-368.	.0234	-.0094	-.0264	-.0426	-.1070	-.0280	841.
.2950	-758.	141.	436.	2119.	-877.	-518.	.0259	-.0067	-.0263	-.0418	-.1100	-.0315	944.
.2960	-846.	-157.	418.	2307.	-888.	-642.	.0278	-.0042	-.0262	-.0410	-.1107	-.0343	1025.
.2970	-909.	-452.	383.	2429.	-882.	-741.	.0290	-.0020	-.0262	-.0403	-.1086	-.0363	1080.
.2980	-939.	-701.	347.	2489.	-879.	-813.	.0296	-.0001	-.0264	-.0398	-.1037	-.0374	1105.
.2990	-938.	-1018.	301.	2457.	-859.	-859.	.0294	.0015	-.0269	-.0394	-.0964	-.0375	1100.
.3000	-905.	-1362.	264.	2348.	-833.	-871.	.0285	.0027	-.0277	-.0394	-.0873	-.0367	1059.
.3010	-844.	-1526.	231.	2140.	-802.	-840.	.0263	.0032	-.0288	-.0397	-.0769	-.0349	977.
.3020	-755.	-1506.	205.	1840.	-756.	-764.	.0245	.0031	-.0302	-.0405	-.0661	-.0322	856.
.3030	-637.	-1496.	192.	1466.	-726.	-648.	.0216	.0025	-.0319	-.0416	-.0552	-.0287	706.

ADLPIPE PAGE 1491

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.37.

S/RV PIPING KEWAUNEE GRW00F 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	36	MEMBER	1	SEQUENCE	59	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)	
.3040	-493.	-1535.	190.	1026.	-687.	-490.	.0182	.0014	-.0338	-.0430	-.0445	-.0245	534.	
.3050	-331.	-1504.	195.	534.	-654.	-284.	.0143	-.0003	-.0358	-.0448	-.0341	-.0198	358.	
.3060	-156.	-1382.	203.	1.	-631.	-37.	.0102	-.0026	-.0379	-.0467	-.0243	-.0147	254.	
.3070	24.	-1242.	215.	-532.	-617.	235.	.0060	-.0053	-.0399	-.0488	-.0154	-.0095	340.	
.3080	201.	-1027.	229.	-1034.	-613.	517.	.0019	-.0082	-.0417	-.0508	-.0079	-.0043	525.	
.3090	364.	-606.	240.	-1486.	-618.	796.	-.0019	-.0112	-.0432	-.0527	-.0019	.0005	721.	
.3100	503.	-58.	243.	-1873.	-628.	1080.	-.0053	-.0143	-.0444	-.0544	.0023	.0049	900.	
.3110	610.	403.	236.	-2180.	-642.	1294.	-.0081	-.0174	-.0451	-.0559	.0044	.0087	1049.	
.3120	687.	736.	221.	-2396.	-655.	1487.	-.0102	-.0202	-.0454	-.0569	.0047	.0116	1162.	
.3130	712.	1049.	201.	-2520.	-669.	1630.	-.0116	-.0227	-.0452	-.0576	.0035	.0136	1234.	
.3140	703.	1338.	180.	-2557.	-683.	1718.	-.0122	-.0247	-.0448	-.0579	.0009	.0147	1266.	
.3150	657.	1487.	162.	-2514.	-695.	1750.	-.0120	-.0261	-.0440	-.0579	-.0027	.0148	1260.	
.3160	578.	1516.	152.	-2403.	-707.	1729.	-.0111	-.0270	-.0430	-.0575	-.0069	.0140	1221.	
.3170	469.	1554.	153.	-2234.	-715.	1659.	-.0095	-.0273	-.0418	-.0569	-.0114	.0124	1153.	
.3180	339.	1570.	170.	-2013.	-714.	1545.	-.0075	-.0269	-.0405	-.0559	-.0159	.0101	1058.	
.3190	196.	1395.	202.	-1749.	-702.	1396.	-.0051	-.0259	-.0392	-.0548	-.0204	.0072	941.	
.3200	47.	969.	249.	-1460.	-680.	1224.	-.0024	-.0245	-.0378	-.0533	-.0247	.0040	812.	
.3210	-102.	408.	303.	-1163.	-650.	1046.	.0003	-.0227	-.0364	-.0517	-.0287	.0006	680.	
.3220	-241.	-225.	363.	-866.	-614.	871.	.0030	-.0207	-.0348	-.0499	-.0321	-.0028	551.	
.3230	-362.	-974.	425.	-572.	-573.	704.	.0055	-.0184	-.0332	-.0478	-.0347	-.0060	431.	
.3240	-462.	-1780.	480.	-291.	-530.	554.	.0077	-.0162	-.0314	-.0455	-.0361	-.0089	329.	
.3250	-538.	-2489.	518.	-37.	-486.	429.	.0096	-.0141	-.0294	-.0429	-.0362	-.0114	261.	
.3260	-592.	-3023.	529.	184.	-443.	329.	.0112	-.0124	-.0272	-.0401	-.0352	-.0133	233.	
.3270	-623.	-3460.	511.	376.	-398.	247.	.0123	-.0110	-.0246	-.0371	-.0334	-.0148	241.	
.3280	-634.	-3855.	461.	539.	-355.	176.	.0132	-.0102	-.0218	-.0339	-.0310	-.0156	268.	
.3290	-632.	-4125.	378.	660.	-314.	114.	.0136	-.0101	-.0188	-.0307	-.0284	-.0158	297.	
.3300	-621.	-4222.	265.	726.	-277.	55.	.0139	-.0107	-.0156	-.0275	-.0257	-.0155	313.	
.3310	-606.	-4181.	129.	732.	-243.	-7.	.0139	-.0121	-.0123	-.0244	-.0229	-.0146	310.	
.3320	-588.	-4016.	-19.	675.	-214.	-79.	.0136	-.0142	-.0091	-.0217	-.0199	-.0133	286.	
.3330	-569.	-3666.	-167.	547.	-190.	-162.	.0131	-.0170	-.0062	-.0193	-.0166	-.0114	241.	
.3340	-550.	-3032.	-210.	340.	-173.	-253.	.0124	-.0205	-.0036	-.0174	-.0130	-.0090	184.	
.3350	-529.	-2384.	-438.	53.	-161.	-347.	.0115	-.0244	-.0016	-.0161	-.0091	-.0062	155.	
.3360	-504.	-1699.	-544.	-303.	-153.	-441.	.0102	-.0288	-.0000	-.0155	-.0052	-.0029	223.	
.3370	-469.	-1045.	-622.	-714.	-150.	-525.	.0085	-.0333	.0009	-.0155	-.0011	.0009	361.	
.3380	-422.	-407.	-671.	-1165.	-147.	-589.	.0064	-.0378	.0012	-.0162	.0033	.0051	527.	
.3390	-357.	173.	-688.	-1634.	-143.	-625.	.0038	-.0422	.0009	-.0174	.0080	.0098	704.	
.3400	-271.	640.	-674.	-2100.	-137.	-622.	.0006	-.0462	.0000	-.0190	.0133	.0149	881.	
.3410	-163.	1015.	-632.	-2540.	-129.	-574.	-.0030	-.0498	-.0013	-.0210	.0193	.0204	1046.	

ADLPIPE PAGE 1492

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.37.

S/RV PIPING KEWAUNEE GRW00F 2 RUP DISK
2 SAFETY COLL FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.3300	-621.	-4232.	-129.	772.	-277.	-7.	.0139	-.0121	-.0123	-.0244	-.0229	-.0146	313.
.3310	-606.	-4181.	-129.	772.	-277.	-7.	.0139	-.0121	-.0123	-.0244	-.0229	-.0146	310.
.3320	-588.	-4016.	-19.	675.	-214.	-79.	.0136	-.0142	-.0091	-.0217	-.0199	-.0133	286.
.3330	-569.	-3866.	-167.	547.	-190.	-162.	.0131	-.0170	-.0062	-.0193	-.0166	-.0114	241.
.3340	-550.	-3012.	-710.	340.	-173.	-253.	.0124	-.0205	-.0036	-.0174	-.0130	-.0090	184.
.3350	-529.	-2384.	-438.	53.	-161.	-347.	.0115	-.0244	-.0016	-.0161	-.0091	-.0062	155.
.3360	-504.	-1679.	-544.	-307.	-152.	-441.	.0102	-.0288	-.0000	-.0155	-.0052	-.0029	223.
.3370	-469.	-1045.	-622.	-714.	-150.	-525.	.0085	-.0333	.0009	-.0155	-.0011	.0009	361.
.3380	-422.	-407.	-671.	-1165.	-147.	-589.	.0064	-.0378	.0012	-.0162	.0033	.0051	527.
.3390	-357.	173.	-688.	-1634.	-143.	-625.	.0038	-.0422	.0009	-.0174	.0080	.0098	704.
.3400	-271.	640.	-674.	-2100.	-137.	-622.	.0006	-.0462	.0000	-.0190	.0133	.0149	881.
.3410	-163.	1015.	-682.	-2540.	-120.	-574.	-.0030	-.0498	-.0013	-.0210	.0193	.0204	1046.

ADLPIPE PAGE 1492

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.37.

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

CONDITION 24
 LOADS
 SHOCK
 PRESSURE
 ENGLISH UNITS

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

SECTION	36	MEMBER	1	SEQUENCE	59	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)					
.3420	-33.	1348.	-566.	-2934.	-118.	-476.	-.0071	-.0527	-.0029	-.0231	.0260	.0261	1194.				
.3430	116.	1611.	-485.	-3264.	-103.	-320.	-.0116	-.0549	-.0048	-.0253	.0333	.0319	1317.				
.3440	278.	1729.	-391.	-3519.	-83.	-136.	-.0164	-.0564	-.0067	-.0274	.0410	.0378	1413.				
.3450	445.	1654.	-298.	-3691.	-58.	93.	-.0214	-.0571	-.0086	-.0292	.0491	.0435	1482.				
.3460	608.	1430.	-212.	-3781.	-26.	350.	-.0263	-.0571	-.0104	-.0308	.0573	.0489	1524.				
.3470	757.	1121.	-139.	-3768.	12.	620.	-.0309	-.0564	-.0119	-.0319	.0653	.0537	1540.				
.3480	883.	755.	-81.	-3718.	57.	688.	-.0352	-.0551	-.0131	-.0327	.0730	.0579	1534.				
.3490	978.	352.	-37.	-3580.	105.	1143.	-.0390	-.0533	-.0140	-.0330	.0801	.0613	1509.				
.3500	1035.	-46.	-8.	-3392.	154.	1374.	-.0420	-.0512	-.0146	-.0330	.0865	.0638	1470.				
.3510	1049.	-404.	10.	-3169.	201.	1573.	-.0442	-.0488	-.0150	-.0326	.0918	.0653	1422.				
.3520	1019.	-737.	21.	-2923.	244.	1733.	-.0456	-.0462	-.0151	-.0320	.0959	.0658	1367.				
.3530	947.	-1064.	31.	-2667.	282.	1848.	-.0462	-.0436	-.0150	-.0313	.0986	.0653	1307.				
.3540	836.	-1384.	42.	-2416.	313.	1918.	-.0459	-.0410	-.0148	-.0307	.0996	.0640	1244.				
.3550	692.	-1667.	55.	-2184.	336.	1944.	-.0449	-.0385	-.0145	-.0293	.0989	.0619	1181.				
.3560	522.	-1870.	72.	-1979.	349.	1929.	-.0433	-.0361	-.0141	-.0283	.0962	.0591	1118.				
.3570	338.	-1949.	94.	-1802.	352.	1877.	-.0412	-.0340	-.0137	-.0272	.0918	.0560	1054.				
.3580	152.	-1891.	118.	-1654.	344.	1792.	-.0389	-.0320	-.0132	-.0260	.0858	.0526	988.				
.3590	-28.	-1734.	143.	-1531.	322.	1681.	-.0363	-.0301	-.0126	-.0248	.0784	.0492	922.				
.3600	-189.	-1539.	162.	-1431.	289.	1552.	-.0339	-.0284	-.0119	-.0234	.0699	.0459	855.				
.3610	-322.	-1349.	172.	-1344.	244.	1412.	-.0316	-.0268	-.0111	-.0219	.0604	.0430	788.				
.3620	-421.	-1159.	169.	-1259.	190.	1266.	-.0296	-.0253	-.0101	-.0202	.0501	.0405	720.				
.3630	-480.	-948.	150.	-1162.	132.	1115.	-.0281	-.0238	-.0089	-.0182	.0394	.0385	649.				
.3640	-497.	-754.	115.	-1047.	72.	963.	-.0270	-.0222	-.0075	-.0159	.0282	.0372	572.				
.3650	-472.	-615.	61.	-910.	15.	813.	-.0265	-.0204	-.0059	-.0133	.0168	.0365	490.				
.3660	-409.	-533.	-12.	-753.	-37.	665.	-.0264	-.0185	-.0041	-.0106	.0055	.0364	403.				
.3670	-313.	-476.	-101.	-576.	-79.	518.	-.0268	-.0164	-.0023	-.0077	-.0052	.0368	313.				
.3680	-190.	-450.	-199.	-384.	-110.	371.	-.0276	-.0141	-.0006	-.0047	-.0150	.0376	219.				
.3690	-46.	-537.	-301.	-184.	-131.	222.	-.0287	-.0115	.0010	-.0019	-.0238	.0387	127.				
.3700	109.	-785.	-401.	8.	-141.	73.	-.0299	-.0088	.0023	.0008	-.0311	.0400	64.				
.3710	265.	-1149.	-495.	177.	-142.	-71.	-.0312	-.0061	.0032	.0030	-.0369	.0413	96.				
.3720	414.	-1532.	-567.	309.	-133.	-210.	-.0324	-.0033	.0037	.0047	-.0410	.0426	159.				
.3730	550.	-1898.	-614.	397.	-110.	-342.	-.0335	-.0006	.0035	.0057	-.0433	.0436	215.				
.3740	665.	-2298.	-629.	428.	-75.	-463.	-.0344	.0019	.0026	.0060	-.0440	.0442	255.				
.3750	753.	-2723.	-610.	386.	-27.	-565.	-.0349	.0041	.0010	.0055	-.0433	.0445	275.				
.3760	809.	-3098.	-559.	258.	34.	-639.	-.0351	.0058	-.0012	.0041	-.0414	.0443	277.				
.3770	832.	-3362.	-477.	46.	106.	-681.	-.0348	.0069	-.0040	.0019	-.0388	.0437	277.				
.3780	822.	-3483.	-368.	-243.	189.	-690.	-.0341	.0073	-.0074	-.0011	-.0354	.0425	303.				
.3790	780.	-3425.	-239.	-597.	280.	-663.	-.0330	.0072	-.0110	-.0046	-.0315	.0409	375.				

ADLPIPE PAGE 1493

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.37.

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

CONDITION 24
 LOADS
 SHOCK
 PRESSURE
 ENGLISH UNITS

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

.3600	-150.	-450.	-100.	-354.	-110.	-450.	371.	-.0276	-.0141	-.0006	-.0047	-.0150	.0376	219.
.3690	-46.	-537.	-301.	-184.	-131.	222.	-.0227	-.0115	.0010	-.0019	-.0238	.0387	127.	
.3700	109.	-785.	-401.	8.	-141.	73.	-.0299	-.0082	.0023	.0008	-.0311	.0400	64.	
.3710	265.	-1149.	-493.	177.	-142.	-71.	-.0312	-.0061	.0032	.0030	-.0369	.0413	96.	
.3720	414.	-1532.	-567.	309.	-123.	-210.	-.0324	-.0033	.0037	.0047	-.0410	.0426	159.	
.3730	550.	-1898.	-614.	397.	-110.	-342.	-.0335	-.0006	.0035	.0057	-.0433	.0436	215.	
.3740	665.	-2298.	-629.	478.	-75.	-463.	-.0344	.0019	.0026	.0060	-.0440	.0442	255.	
.3750	753.	-2723.	-610.	386.	-27.	-565.	-.0349	.0041	.0019	.0055	-.0433	.0445	275.	
.3760	809.	-3098.	-559.	258.	34.	-639.	-.0351	.0058	-.0012	.0041	-.0414	.0443	277.	
.3770	832.	-3362.	-477.	46.	106.	-681.	-.0348	.0069	-.0040	.0019	-.0388	.0437	277.	
.3780	822.	-3453.	-368.	-243.	189.	-690.	-.0341	.0073	-.0074	-.0011	-.0354	.0425	303.	
.3790	720.	-3425.	-229.	-597.	280.	-663.	-.0330	.0072	-.0110	-.0046	-.0315	.0409	375.	

ADLPIPE PAGE 1493

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.37.

S/RV PIPING KEWAUNEE GKW05F 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	36	MEMBER	1	SEQUENCE	59	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)
.3800	709.	-3167.	-100.	-1006.	376.	-599.		-.0316	.0064	-.0149	-.0026	-.0271	.0390	493.
.3810	613.	-2830.	40.	-1451.	473.	-496.		-.0298	.0049	-.0187	-.0128	-.0222	.0366	644.
.3820	497.	-2419.	170.	-1910.	568.	-358.		-.0277	.0028	-.0222	-.0171	-.0167	.0341	812.
.3830	366.	-1926.	286.	-2356.	656.	-188.		-.0255	.0002	-.0254	-.0212	-.0105	.0313	984.
.3840	227.	-1499.	380.	-2768.	733.	10.		-.0232	-.0028	-.0280	-.0249	-.0039	.0285	1149.
.3850	86.	-1194.	446.	-3132.	796.	235.		-.0209	-.0061	-.0299	-.0281	.0031	.0258	1300.
.3860	-51.	-846.	480.	-3436.	843.	455.		-.0181	-.0097	-.0310	-.0307	.0103	.0232	1433.
.3870	-178.	-252.	485.	-3664.	877.	753.		-.0165	-.0134	-.0312	-.0325	.0180	.0208	1542.
.3880	-285.	582.	466.	-3798.	899.	1026.		-.0147	-.0169	-.0307	-.0335	.0262	.0186	1620.
.3890	-368.	1470.	429.	-3833.	911.	1297.		-.0131	-.0199	-.0294	-.0336	.0347	.0168	1664.
.3900	-423.	2265.	375.	-3777.	913.	1564.		-.0119	-.0225	-.0274	-.0329	.0435	.0152	1681.
.3910	-450.	2905.	307.	-3642.	903.	1823.		-.0109	-.0246	-.0248	-.0314	.0522	.0140	1674.
.3920	-447.	3336.	236.	-3426.	883.	2063.		-.0103	-.0261	-.0216	-.0292	.0607	.0131	1644.
.3930	-415.	3527.	173.	-3123.	858.	2270.		-.0100	-.0266	-.0181	-.0263	.0688	.0124	1587.
.3940	-357.	3528.	121.	-2740.	830.	2434.		-.0098	-.0262	-.0144	-.0229	.0765	.0118	1508.
.3950	-281.	3453.	84.	-2291.	801.	2553.		-.0097	-.0249	-.0104	-.0189	.0836	.0112	1413.
.3960	-193.	3343.	60.	-1789.	774.	2621.		-.0096	-.0229	-.0064	-.0145	.0901	.0105	1311.
.3970	-99.	3168.	51.	-1237.	750.	2630.		-.0094	-.0200	-.0023	-.0097	.0959	.0096	1204.
.3980	-4.	2893.	56.	-642.	731.	2573.		-.0090	-.0163	.0018	-.0046	.1007	.0084	1104.
.3990	84.	2474.	68.	-18.	715.	2455.		-.0083	-.0119	.0058	.0007	.1045	.0068	1026.
.4000	158.	1870.	80.	613.	700.	2280.		-.0071	-.0072	.0099	.0061	.1070	.0047	988.

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)
.1870	984.	-5402.	1915.	4943.	18.	-4278.		-.0189	.0442	-.0636	-.0631	-.0589	.0190	2623.

SECTION	37	MEMBER	1	SEQUENCE	59	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	-0.	0.	-0.	-0.	-0.	0.		.0000	.0000	-.0000	.0000	-.0000	-.0000	0.
.0020	0.	0.	0.	0.	-0.	0.		-.0000	.0000	-.0000	.0000	-.0000	-.0000	0.
.0030	-0.	0.	-0.	-0.	-0.	0.		-.0000	.0000	-.0000	.0000	-.0000	-.0000	0.

ADLPIPE PAGE 1494

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.37.

S/RV PIPING KEWAUNEE GKW05F 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	37	MEMBER	1	SEQUENCE	59	LOCATION	BEG	TYPE	RU	DZ	FX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)					
0.0000	0.	0.	0.	0.	0.	0.		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	-0.	0.	-0.	-0.	-0.	-0.		.0000	.0000	-0.0000	.0000	-0.0000	-0.0000	0.
.0020	0.	0.	0.	0.	0.	0.		-0.0000	.0000	-0.0000	.0000	-0.0000	-0.0000	0.
.0030	-0.	0.	-0.	-0.	-0.	-0.		-0.0000	.0000	-0.0000	.0000	-0.0000	-0.0000	0.

ADLPIPE PAGE 1494 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.28.37.

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	37	MEMBER	1	SEQUENCE	59	LOCATION	BEG	TYPE	RU	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)					
.0040	-0.	0.	0.	-0.	-0.	0.		-0.0000	.0000	-0.0000	.0000	-0.0001	-0.0000	0.
.0050	-0.	-0.	-0.	0.	-0.	-0.		-0.0000	-0.0000	.0000	.0000	-0.0001	-0.0000	0.
.0060	-0.	-2.	-0.	2.	-0.	-1.		.0000	-0.0000	.0000	-0.0000	-0.0001	-0.0000	1.
.0070	-0.	-5.	-0.	5.	-0.	-2.		.0000	-0.0000	.0000	-0.0000	-0.0002	.0000	2.
.0080	-0.	-12.	-0.	10.	-0.	-6.		.0000	-0.0001	.0000	-0.0000	-0.0004	.0000	5.
.0090	-0.	-23.	-0.	20.	-0.	-11.		.0000	-0.0001	.0000	-0.0000	-0.0005	.0000	9.
.0100	-0.	-38.	-0.	33.	-0.	-18.		.0000	-0.0002	.0000	-0.0001	-0.0002	.0000	15.
.0110	-0.	-57.	-0.	51.	-0.	-27.		.0000	-0.0003	.0000	-0.0001	.0000	.0001	23.
.0120	-0.	-83.	0.	73.	-0.	-40.		-0.0000	-0.0004	-0.0000	-0.0002	.0002	.0001	33.
.0130	0.	-118.	0.	104.	-0.	-56.		-0.0000	-0.0006	-0.0001	-0.0003	.0005	.0002	47.
.0140	0.	-161.	0.	142.	0.	-77.		-0.0001	-0.0008	-0.0001	-0.0004	.0009	.0003	65.
.0150	0.	-210.	0.	185.	-0.	-100.		-0.0001	-0.0011	-0.0002	-0.0005	.0132	.0004	84.
.0160	0.	-261.	-0.	229.	-0.	-125.		-0.0003	-0.0014	-0.0003	-0.0006	.0172	.0006	105.
.0170	-0.	-311.	-0.	273.	0.	-148.		-0.0005	-0.0016	-0.0003	-0.0008	.0207	.0008	125.
.0180	0.	-356.	0.	313.	0.	-170.		-0.0008	-0.0019	-0.0004	-0.0010	.0231	.0010	143.
.0190	-0.	-386.	0.	339.	-0.	-184.		-0.0011	-0.0021	-0.0005	-0.0011	.0249	.0012	155.
.0200	0.	-387.	-0.	340.	-0.	-185.		-0.0013	-0.0021	-0.0006	-0.0013	.0264	.0013	155.
.0210	0.	-352.	0.	310.	0.	-168.		-0.0015	-0.0020	-0.0008	-0.0015	.0286	.0012	141.
.0220	0.	-292.	0.	247.	0.	-134.		-0.0014	-0.0017	-0.0011	-0.0016	.0338	.0008	113.
.0230	-0.	-177.	-0.	155.	0.	-84.		-0.0011	-0.0011	-0.0014	-0.0016	.0407	.0002	71.
.0240	-0.	-58.	-0.	51.	-0.	-28.		-0.0004	-0.0005	-0.0016	-0.0016	.0455	-0.0007	23.
.0250	-0.	40.	0.	-36.	-0.	19.		.0006	.0001	-0.0018	-0.0015	.0454	-0.0018	16.
.0260	-0.	101.	0.	-89.	0.	48.		.0019	.0005	-0.0016	-0.0012	.0419	-0.0030	41.
.0270	-0.	136.	-0.	-119.	0.	65.		.0032	.0009	-0.0013	-0.0008	.0401	-0.0042	54.
.0280	-0.	180.	-0.	-159.	-0.	86.		.0045	.0013	-0.0003	-0.0003	.0366	-0.0054	72.
.0290	-0.	269.	0.	-237.	-0.	128.		.0057	.0019	-0.0003	.0003	.0262	-0.0064	108.
.0300	0.	405.	0.	-356.	-0.	193.		.0065	.0027	.0002	.0011	.0167	-0.0070	163.
.0310	-0.	562.	-0.	-493.	0.	268.		.0067	.0036	.0007	.0019	.0114	-0.0071	225.
.0320	-0.	750.	-0.	-659.	0.	358.		.0065	.0046	.0012	.0029	.0052	-0.0068	301.
.0330	-0.	1002.	-0.	-881.	0.	478.		.0059	.0059	.0017	.0040	-0.0012	-0.0059	402.
.0340	-0.	1303.	-0.	-1145.	-0.	622.		.0047	.0074	.0023	.0053	-0.0052	-0.0045	523.
.0350	-0.	1590.	-0.	-1397.	-0.	759.		.0031	.0088	.0033	.0068	-0.0107	-0.0026	638.
.0360	-0.	1819.	-0.	-1599.	-0.	868.		.0010	.0099	.0047	.0084	-0.0213	-0.0004	730.
.0370	-0.	1995.	-0.	-1753.	-0.	952.		-0.0013	.0107	.0062	.0100	-0.0313	.0021	801.
.0380	-0.	2136.	-0.	-1877.	-0.	1019.		-0.0038	.0114	.0078	.0114	-0.0362	.0046	857.
.0390	-0.	2257.	-0.	-1984.	-0.	1077.		-0.0062	.0119	.0091	.0127	-0.0404	.0070	906.
.0400	-0.	2371.	-0.	-2083.	-0.	1131.		-0.0083	.0124	.0099	.0136	-0.0479	.0090	951.
.0410	0.	2440.	0.	-2145.	-0.	1165.		-0.0099	.0127	.0103	.0140	-0.0512	.0104	979.

ADLPIPE PAGE 1495 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.28.37.

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

.0310	-0.	562.	-0.	-493.	0.	268.	.0067	.0036	.0007	.0019	.0114	-.0071	225.
.0320	-0.	750.	-0.	-659.	0.	358.	.0065	.0046	.0012	.0029	.0052	-.0068	301.
.0330	-0.	1002.	-0.	-881.	0.	478.	.0059	.0059	.0017	.0040	-.0012	-.0059	402.
.0340	-0.	1303.	-0.	-1145.	-0.	622.	.0047	.0074	.0023	.0057	-.0052	-.0045	523.
.0350	-0.	1590.	-0.	-1397.	-0.	759.	.0071	.0088	.0033	.0068	-.0107	-.0026	638.
.0360	-0.	1819.	-0.	-1599.	-0.	868.	.0010	.0099	.0047	.0084	-.0213	-.0004	730.
.0370	-0.	1995.	-0.	-1753.	-0.	952.	-.0013	.0107	.0062	.0100	-.0313	.0021	801.
.0380	-0.	2136.	-0.	-1877.	-0.	1013.	-.0038	.0114	.0078	.0114	-.0362	.0046	857.
.0390	-0.	2257.	-0.	-1984.	-0.	1077.	-.0062	.0119	.0091	.0127	-.0404	.0070	906.
.0400	-0.	2371.	-0.	-2083.	-0.	1131.	-.0083	.0124	.0099	.0136	-.0479	.0090	951.
.0410	0.	2440.	0.	-2145.	-0.	1155.	-.0099	.0127	.0103	.0140	-.0512	.0104	979.

ADLPIPE PAGE 1495

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.37.

S/RV PIPING KEWAUNEE 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

SECTION	37	MEMBER	1	SEQUENCE	59	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)	
.0420	-0.	2396.	-0.	-2106.	-0.	1144.	-.0109	.0124	.0102	.0138	-.0511	.0110	962.	
.0430	-0.	2229.	-0.	-1959.	-0.	1064.	-.0109	.0115	.0096	.0131	-.0535	.0108	894.	
.0440	-0.	2021.	-0.	-1776.	-0.	964.	-.0098	.0105	.0087	.0120	-.0574	.0097	811.	
.0450	-0.	1791.	-0.	-1573.	-0.	854.	-.0078	.0094	.0076	.0106	-.0574	.0077	719.	
.0460	-0.	1443.	-0.	-1268.	-0.	688.	-.0051	.0077	.0064	.0089	-.0554	.0051	579.	
.0470	-0.	935.	0.	-822.	-0.	446.	-.0020	.0053	.0052	.0069	-.0566	.0021	375.	
.0480	-0.	374.	-0.	-329.	-0.	179.	.0011	.0027	.0040	.0049	-.0574	-.0009	150.	
.0490	-0.	-132.	-0.	116.	-0.	-63.	.0040	.0003	.0028	.0030	-.0504	-.0037	53.	
.0500	-0.	-585.	-0.	514.	-0.	-279.	.0064	-.0018	.0016	.0012	-.0378	-.0062	235.	
.0510	-0.	-999.	-0.	878.	-0.	-477.	.0081	-.0039	.0004	-.0005	-.0247	-.0080	401.	
.0520	-0.	-1328.	-0.	1167.	-0.	-634.	.0091	-.0055	-.0008	-.0021	-.0118	-.0090	533.	
.0530	-0.	-1542.	-0.	1355.	-0.	-736.	.0091	-.0067	-.0019	-.0033	.0011	-.0091	619.	
.0540	-0.	-1683.	0.	1479.	-0.	-803.	.0082	-.0077	-.0028	-.0044	.0131	-.0084	675.	
.0550	-0.	-1763.	0.	1549.	-0.	-841.	.0066	-.0083	-.0037	-.0053	.0236	-.0069	707.	
.0560	0.	-1737.	-0.	1527.	0.	-829.	.0043	-.0085	-.0044	-.0059	.0336	-.0048	697.	
.0570	-0.	-1623.	-0.	1427.	0.	-775.	.0017	-.0083	-.0049	-.0062	.0436	-.0023	651.	
.0580	0.	-1493.	0.	1312.	0.	-713.	-.0011	-.0080	-.0052	-.0064	.0532	.0003	599.	
.0590	0.	-1312.	0.	1153.	0.	-626.	-.0037	-.0075	-.0054	-.0065	.0618	.0028	526.	
.0600	0.	-953.	-0.	837.	0.	-455.	-.0060	-.0060	-.0056	-.0063	.0696	.0050	382.	
.0610	0.	-411.	0.	361.	0.	-196.	-.0079	-.0036	-.0058	-.0059	.0761	.0065	165.	
.0620	0.	182.	0.	-160.	0.	87.	-.0090	-.0009	-.0061	-.0054	.0799	.0075	73.	
.0630	0.	778.	0.	-683.	0.	371.	-.0093	.0019	-.0063	-.0049	.0800	.0077	312.	
.0640	0.	1453.	0.	-1277.	0.	694.	-.0087	.0052	-.0065	-.0042	.0766	.0071	583.	
.0650	0.	2203.	0.	-1936.	0.	1051.	-.0074	.0089	-.0065	-.0033	.0715	.0058	884.	
.0660	0.	2881.	0.	-2532.	0.	1375.	-.0055	.0123	-.0063	-.0023	.0659	.0042	1156.	
.0670	0.	3395.	0.	-2984.	0.	1620.	-.0033	.0150	-.0057	-.0014	.0596	.0024	1363.	
.0680	0.	3767.	0.	-3311.	-0.	1798.	-.0013	.0171	-.0047	-.0003	.0535	.0008	1512.	
.0690	0.	4004.	0.	-3519.	0.	1911.	.0004	.0185	-.0034	.0007	.0491	-.0004	1607.	
.0700	-0.	4064.	0.	-3572.	-0.	1940.	.0015	.0190	-.0020	.0017	.0455	-.0010	1631.	
.0710	-0.	3954.	-0.	-3475.	0.	1887.	.0019	.0186	-.0007	.0025	.0419	-.0010	1587.	
.0720	-0.	3707.	0.	-3257.	0.	1769.	.0016	.0175	.0006	.0031	.0387	-.0002	1487.	
.0730	-0.	3296.	-0.	-2696.	0.	1573.	.0007	.0155	.0017	.0033	.0344	.0011	1322.	
.0740	-0.	2689.	-0.	-2363.	0.	1283.	-.0007	.0126	.0026	.0031	.0250	.0030	1079.	
.0750	-0.	1948.	-0.	-1712.	-0.	930.	-.0023	.0089	.0034	.0026	.0103	.0051	782.	
.0760	-0.	1163.	-0.	-1022.	-0.	555.	-.0040	.0049	.0039	.0016	-.0059	.0072	467.	
.0770	0.	339.	0.	-298.	-0.	162.	-.0055	.0007	.0042	.0003	-.0205	.0091	136.	
.0780	0.	-531.	0.	467.	-0.	-253.	-.0065	-.0037	.0042	-.0014	-.0326	.0104	213.	
.0790	0.	-1382.	0.	1197.	-0.	-650.	-.0070	-.0080	.0038	-.0037	-.0401	.0111	547.	

ADLPIPE PAGE 1496

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.37.

S/RV PIPING KEWAUNEE 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

.0690	0.	4004.	0.	-3519.	0.	1911.	.0004	.0185	-.0034	.0007	.0491	-.0004	1607.
.0700	-0.	4064.	0.	-3572.	-0.	1940.	.0015	.0190	-.0020	.0017	.0455	-.0010	1631.
.0710	-0.	3954.	-0.	-3475.	0.	1887.	.0019	.0186	-.0007	.0025	.0419	-.0010	1587.
.0720	-0.	3797.	0.	-3257.	0.	1769.	.0016	.0175	.0006	.0031	.0387	-.0002	1487.
.0730	-0.	3202.	-0.	-2096.	0.	1573.	.0007	.0155	.0017	.0033	.0344	.0011	1322.
.0740	-0.	2655.	-0.	-2267.	0.	1233.	-.0007	.0126	.0026	.0031	.0250	.0030	1079.
.0750	-0.	1948.	-0.	-1712.	-0.	930.	-.0023	.0089	.0034	.0026	.0103	.0051	782.
.0760	-0.	1163.	-0.	-1022.	-0.	555.	-.0040	.0049	.0039	.0016	-.0059	.0072	467.
.0770	0.	339.	0.	-292.	-0.	162.	-.0055	.0007	.0042	.0003	-.0205	.0091	136.
.0780	0.	-521.	0.	467.	-0.	-253.	-.0065	-.0037	.0042	-.0014	-.0326	.0104	213.
.0790	0.	-1332.	0.	1197.	-0.	-650.	-.0070	-.0080	.0038	-.0037	-.0401	.0111	547.

ADLPIPE PAGE 1496

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.37.

S/RV PIPING KEWAUNEE GKWCRF 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	37	MEMBER	1	SEQUENCE	59	LOCATION	BEG	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)		
.0800	0.	-2037.	-0.	1790.	0.	-972.	-.0067	-.0115	.0027	-.0063	-.0413	.0110		817.
.0810	0.	-2521.	0.	2215.	0.	-1203.	-.0056	-.0142	.0010	-.0092	-.0381	.0100		1012.
.0820	0.	-2837.	0.	2493.	-0.	-1354.	-.0040	-.0161	-.0014	-.0126	-.0335	.0083		1138.
.0830	0.	-2971.	0.	2610.	-0.	-1418.	-.0020	-.0172	-.0045	-.0164	-.0281	.0061		1192.
.0840	0.	-2892.	0.	2541.	0.	-1380.	.0002	-.0173	-.0081	-.0204	-.0233	.0037		1160.
.0850	0.	-2613.	0.	2296.	0.	-1247.	.0022	-.0166	-.0121	-.0245	-.0222	.0014		1049.
.0860	0.	-2176.	0.	1913.	0.	-1039.	.0038	-.0151	-.0163	-.0286	-.0246	-.0005		873.
.0870	0.	-1606.	0.	1411.	0.	-766.	.0045	-.0132	-.0206	-.0326	-.0272	-.0017		644.
.0880	0.	-917.	0.	306.	0.	-438.	.0043	-.0107	-.0248	-.0363	-.0280	-.0020		368.
.0890	0.	-139.	0.	122.	0.	-66.	.0030	-.0078	-.0288	-.0396	-.0271	-.0013		56.
.0900	0.	704.	0.	-619.	0.	336.	.0006	-.0046	-.0323	-.0422	-.0246	.0004		283.
.0910	0.	1601.	0.	-1407.	0.	764.	-.0027	-.0011	-.0353	-.0440	-.0201	.0029		642.
.0920	0.	2524.	0.	-2218.	0.	1204.	-.0066	.0026	-.0375	-.0450	-.0153	.0061		1013.
.0930	0.	3430.	0.	-3014.	0.	1637.	-.0108	.0064	-.0388	-.0450	-.0118	.0097		1376.
.0940	0.	4306.	0.	-3784.	0.	2055.	-.0148	.0102	-.0392	-.0440	-.0095	.0132		1728.
.0950	0.	5178.	0.	-4551.	0.	2471.	-.0185	.0143	-.0386	-.0421	-.0076	.0164		2078.
.0960	0.	6066.	0.	-5331.	0.	2895.	-.0215	.0186	-.0373	-.0393	-.0059	.0189		2434.
.0970	0.	6945.	0.	-6103.	0.	3314.	-.0236	.0231	-.0352	-.0357	-.0040	.0204		2787.
.0980	0.	7792.	0.	-6847.	0.	3718.	-.0245	.0277	-.0327	-.0314	-.0012	.0207		3127.
.0990	0.	8617.	0.	-7573.	0.	4112.	-.0243	.0325	-.0298	-.0267	.0028	.0197		3458.
.1000	0.	9426.	0.	-8284.	0.	4498.	-.0225	.0374	-.0267	-.0215	.0070	.0171		3783.
.1010	0.	10162.	0.	-8930.	0.	4849.	-.0193	.0422	-.0233	-.0160	.0099	.0130		4078.
.1020	0.	10734.	0.	-9433.	0.	5122.	-.0146	.0464	-.0197	-.0103	.0096	.0074		4307.
.1030	0.	11085.	0.	-9742.	0.	5290.	-.0087	.0497	-.0157	-.0045	.0046	.0007		4448.
.1040	0.	11200.	0.	-9842.	0.	5344.	-.0018	.0521	-.0114	.0015	-.0049	-.0068		4494.
.1050	0.	11038.	-0.	-9790.	0.	5267.	.0056	.0533	-.0069	.0075	-.0167	-.0149		4429.
.1060	-0.	10557.	-0.	-9270.	-0.	5038.	.0134	.0530	-.0021	.0136	-.0282	-.0231		4237.
.1070	-0.	9785.	-0.	-8599.	-0.	4670.	.0210	.0514	.0030	.0197	-.0370	-.0311		3927.
.1080	-0.	8792.	-0.	-7726.	-0.	4195.	.0281	.0488	.0084	.0259	-.0428	-.0385		3528.
.1090	-0.	7532.	-0.	-6619.	-0.	3594.	.0346	.0448	.0141	.0322	-.0458	-.0449		3023.
.1100	-0.	5932.	-0.	-5213.	-0.	2831.	.0400	.0391	.0202	.0382	-.0416	-.0501		2381.
.1110	-0.	4267.	-0.	-3750.	-0.	2036.	.0442	.0330	.0265	.0441	-.0367	-.0540		1712.
.1120	-0.	2840.	-0.	-2496.	-0.	1355.	.0470	.0279	.0328	.0503	-.0350	-.0564		1140.
.1130	-0.	1545.	-0.	-1358.	-0.	737.	.0483	.0231	.0389	.0561	-.0325	-.0573		620.
.1140	-0.	214.	-0.	-188.	-0.	102.	.0480	.0179	.0445	.0611	-.0274	-.0565		86.
.1150	-0.	-921.	-0.	809.	-0.	-439.	.0461	.0132	.0491	.0653	-.0213	-.0542		369.
.1160	-0.	-1532.	-0.	1346.	-0.	-731.	.0423	.0107	.0523	.0687	-.0137	-.0507		615.
.1170	-0.	-1702.	-0.	1496.	-0.	-812.	.0383	.0099	.0540	.0711	-.0041	-.0463		683.

ADLPIPE PAGE 1497

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.37.

S/RV PIPING KEWAUNEE GKWCRF 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

.1070	-0.	7755.	-0.	-8599.	-0.	4670.	.0210	.0514	.0030	.0197	-.0370	-.0311	3927.
.1080	-0.	3722.	-0.	-7726.	-0.	4175.	.0251	.0486	.0084	.0259	-.0428	-.0385	3528.
.1090	-0.	7532.	-0.	-6619.	-0.	3594.	.0346	.0448	.0141	.0322	-.0458	-.0449	3023.
.1100	-0.	5932.	-0.	-5217.	-0.	2831.	.0400	.0391	.0202	.0322	-.0416	-.0501	2381.
.1110	-0.	4267.	-0.	-3750.	-0.	2036.	.0442	.0330	.0265	.0441	-.0367	-.0540	1712.
.1120	-0.	2640.	-0.	-2496.	-0.	1255.	.0470	.0279	.0328	.0503	-.0350	-.0564	1140.
.1130	-0.	1545.	-0.	-1318.	-0.	737.	.0483	.0231	.0389	.0561	-.0325	-.0573	620.
.1140	-0.	214.	-0.	-122.	-0.	102.	.0480	.0172	.0445	.0611	-.0274	-.0565	86.
.1150	-0.	-921.	-0.	809.	-0.	-439.	.0461	.0132	.0491	.0653	-.0213	-.0542	369.
.1160	-0.	-1532.	-0.	1340.	-0.	-731.	.0423	.0107	.0523	.0687	-.0137	-.0507	615.
.1170	-0.	-1702.	-0.	1496.	-0.	-812.	.0383	.0099	.0540	.0711	-.0041	-.0463	683.

ADLPIPE PAGE 1497

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.37.

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

SECTION	37	MEMBER	1	SEQUENCE	59	LOCATION	BEG	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)			
.1180	-0.	-1681.	-0.	1477.	-0.	-802.	.0329	.0097	.0541	.0720	.0069	-.0412	674.		
.1190	-0.	-1356.	-0.	1192.	-0.	-647.	.0270	.0106	.0529	.0719	.0104	-.0356	544.		
.1200	-0.	-501.	-0.	440.	-0.	-239.	.0209	.0138	.0506	.0712	.0065	-.0301	201.		
.1210	-0.	720.	-0.	-633.	-0.	344.	.0151	.0186	.0475	.0700	.0028	-.0249	289.		
.1220	-0.	1920.	-0.	-1740.	-0.	945.	.0097	.0236	.0443	.0682	-.0019	-.0201	795.		
.1230	-0.	3318.	-0.	-2916.	-0.	1583.	.0050	.0290	.0410	.0664	-.0070	-.0159	1331.		
.1240	-0.	4903.	-0.	-4309.	-0.	2340.	.0011	.0356	.0379	.0649	-.0116	-.0127	1968.		
.1250	-0.	6548.	-0.	-5754.	-0.	3125.	-.0020	.0427	.0352	.0638	-.0130	-.0101	2628.		
.1260	-0.	7913.	-0.	-6954.	-0.	3776.	-.0045	.0486	.0333	.0631	-.0098	-.0082	3176.		
.1270	-0.	8992.	-0.	-7902.	-0.	4291.	-.0063	.0533	.0322	.0628	-.0079	-.0069	3608.		
.1280	-0.	9945.	-0.	-8740.	0.	4746.	-.0075	.0577	.0319	.0633	-.0049	-.0061	3991.		
.1290	-0.	10623.	-0.	-9336.	0.	5069.	-.0080	.0609	.0326	.0644	-.0009	-.0058	4263.		
.1300	-0.	10737.	-0.	-9436.	0.	5124.	-.0079	.0617	.0344	.0658	-.0001	-.0060	4309.		
.1310	-0.	10320.	-0.	-9069.	-0.	4925.	-.0070	.0602	.0369	.0673	-.0043	-.0064	4141.		
.1320	-0.	9579.	-0.	-8418.	-0.	4571.	-.0056	.0572	.0401	.0691	-.0153	-.0073	3844.		
.1330	-0.	8476.	-0.	-7449.	-0.	4045.	-.0037	.0526	.0436	.0709	-.0266	-.0085	3401.		
.1340	-0.	6861.	-0.	-6029.	-0.	3274.	-.0013	.0456	.0472	.0724	-.0351	-.0100	2753.		
.1350	-0.	4885.	-0.	-4293.	-0.	2331.	.0015	.0370	.0508	.0736	-.0400	-.0119	1960.		
.1360	-0.	2859.	-0.	-2513.	-0.	1365.	.0047	.0282	.0541	.0746	-.0403	-.0144	1147.		
.1370	-0.	322.	-0.	-723.	-0.	392.	.0087	.0194	.0571	.0754	-.0399	-.0177	330.		
.1380	-0.	-1327.	-0.	1166.	-0.	-633.	.0134	.0100	.0597	.0758	-.0399	-.0216	533.		
.1390	-0.	-3441.	-0.	3024.	-0.	-1642.	.0189	.0008	.0619	.0757	-.0432	-.0262	1381.		
.1400	-0.	-5230.	-0.	4596.	-0.	-2496.	.0250	-.0068	.0635	.0755	-.0495	-.0315	2099.		
.1410	-0.	-6645.	-0.	5840.	-0.	-3171.	.0314	-.0128	.0647	.0752	-.0546	-.0373	2667.		
.1420	-0.	-7791.	-0.	6847.	-0.	-3718.	.0380	-.0175	.0652	.0746	-.0600	-.0433	3127.		
.1430	-0.	-8579.	0.	7540.	-0.	-4094.	.0443	-.0207	.0651	.0738	-.0638	-.0493	3443.		
.1440	-0.	-8827.	-0.	7757.	-0.	-4212.	.0502	-.0213	.0645	.0732	-.0645	-.0549	3542.		
.1450	-0.	-8574.	-0.	7534.	-0.	-4091.	.0551	-.0198	.0633	.0726	-.0600	-.0597	3440.		
.1460	-0.	-7982.	-0.	7014.	-0.	-3809.	.0587	-.0169	.0617	.0719	-.0504	-.0633	3203.		
.1470	-0.	-7047.	-0.	6193.	-0.	-3363.	.0608	-.0125	.0598	.0713	-.0416	-.0652	2828.		
.1480	-0.	-5685.	-0.	4996.	-0.	-2713.	.0609	-.0064	.0577	.0709	-.0329	-.0654	2281.		
.1490	-0.	-4011.	-0.	3525.	-0.	-1914.	.0590	.0011	.0556	.0708	-.0249	-.0636	1610.		
.1500	-0.	-2222.	-0.	1953.	-0.	-1060.	.0549	.0082	.0534	.0706	-.0188	-.0596	892.		
.1510	-0.	-337.	-0.	296.	-0.	-161.	.0488	.0168	.0513	.0704	-.0127	-.0536	135.		
.1520	-0.	1698.	-0.	-1492.	-0.	810.	.0410	.0253	.0492	.0704	-.0068	-.0459	681.		
.1530	-0.	3760.	-0.	-3304.	-0.	1794.	.0317	.0338	.0472	.0704	.0012	-.0369	1509.		
.1540	-0.	5633.	-0.	-4950.	-0.	2638.	.0216	.0413	.0454	.0701	.0102	-.0270	2261.		
.1550	-0.	7246.	-0.	-6367.	-0.	3458.	.0112	.0476	.0437	.0695	.0202	-.0168	2908.		

ADLPIPE PAGE 1498

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.37.

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

.1450	-0.	-7574.	-0.	7574.	-0.	-4091.	.001	-.0198	.0633	.0726	-.0600	-.0597	3440.
.1460	-0.	-7932.	-0.	7932.	-0.	-7109.	.007	-.0169	.0617	.0719	-.0504	-.0633	3203.
.1470	-0.	-7047.	-0.	7047.	-0.	-7363.	.0008	-.0125	.0590	.0713	-.0416	-.0652	2828.
.1480	-0.	-5685.	-0.	4926.	-0.	-1713.	.000	-.0064	.0577	.0709	-.0229	-.0654	2281.
.1490	-0.	-4011.	-0.	3525.	-0.	-1514.	.0098	-.0111	.0556	.0708	-.0249	-.0636	1610.
.1500	-0.	-2200.	-0.	1953.	-0.	-1060.	.0149	-.0087	.0534	.0706	-.0188	-.0596	892.
.1510	-0.	-837.	-0.	296.	-0.	-161.	.0480	-.0160	.0512	.0704	-.0127	-.0536	135.
.1520	-0.	1698.	-0.	-1492.	-0.	810.	.0410	.0253	.0492	.0704	-.0068	-.0459	681.
.1530	-0.	3760.	-0.	-3304.	-0.	1794.	.0317	.0338	.0473	.0704	.0012	-.0369	1509.
.1540	-0.	5633.	-0.	-4950.	-0.	2618.	.0116	.0413	.0454	.0701	.0102	-.0270	2261.
.1550	-0.	7246.	-0.	-6067.	-0.	3451.	.0112	.0473	.0477	.0699	.0202	-.0168	2908.

ADLPIPE PAGE 1490

DIG/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.37.

S/RV PIPING KENAUWEE GRWOTF 2 RUP DISK
2 SAFETY COLD FKN24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	RU	DX	DY	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)							
.1560	-0.	8607.	-0.	-7564.	-0.	4107.	.0311	.0527	.0422	.0687	.0333	-.0071	3454.
.1570	-0.	9607.	-0.	-8443.	-0.	4555.	-.0072	.0561	.0407	.0674	.0447	.0018	3855.
.1580	-0.	10108.	-0.	-8883.	-0.	4824.	-.0151	.0573	.0392	.0654	.0543	.0091	4056.
.1590	-0.	10124.	-0.	-8897.	-0.	4831.	-.0202	.0563	.0377	.0627	.0622	.0144	4063.
.1600	0.	9740.	-0.	-8559.	-0.	4648.	-.0229	.0536	.0359	.0592	.0657	.0174	3908.
.1610	-0.	8949.	-0.	-7864.	-0.	4270.	-.0231	.0492	.0339	.0551	.0655	.0181	3591.
.1620	0.	7720.	-0.	-6784.	-0.	3684.	-.0210	.0428	.0317	.0501	.0652	.0166	3098.
.1630	-0.	6138.	-0.	-5394.	-0.	2929.	-.0170	.0349	.0292	.0446	.0627	.0132	2463.
.1640	-0.	4372.	-0.	-3842.	-0.	2036.	-.0115	.0263	.0266	.0386	.0585	.0082	1754.
.1650	-0.	2527.	-0.	-2221.	-0.	1206.	-.0050	.0173	.0238	.0325	.0542	.0022	1014.
.1660	-0.	665.	-0.	-585.	-0.	317.	.0019	.0083	.0209	.0262	.0483	-.0044	267.
.1670	-0.	-1082.	-0.	950.	-0.	-516.	.0087	-.0002	.0191	.0200	.0429	-.0108	434.
.1680	-0.	-2557.	-0.	2247.	-0.	-1220.	.0147	-.0074	.0152	.0140	.0378	-.0168	1026.
.1690	-0.	-3685.	-0.	3236.	-0.	-1750.	.0195	-.0131	.0123	.0084	.0344	-.0216	1479.
.1700	-0.	-4449.	-0.	3910.	-0.	-2123.	.0227	-.0172	.0092	.0030	.0322	-.0251	1785.
.1710	-0.	-4797.	-0.	4215.	-0.	-2239.	.0241	-.0196	.0058	-.0021	.0294	-.0270	1925.
.1720	-0.	-4648.	-0.	4084.	-0.	-2218.	.0236	-.0198	.0020	-.0071	.0296	-.0272	1865.
.1730	-0.	-4005.	-0.	3519.	-0.	-1911.	.0215	-.0179	-.0023	-.0118	.0303	-.0259	1607.
.1740	-0.	-2949.	-0.	2591.	-0.	-1407.	.0179	-.0142	-.0070	-.0166	.0312	-.0232	1183.
.1750	0.	-1555.	-0.	1367.	-0.	-742.	.0133	-.0091	-.0123	-.0213	.0327	-.0194	624.
.1760	0.	122.	-0.	-107.	-0.	58.	.0080	-.0028	-.0180	-.0261	.0317	-.0149	49.
.1770	0.	2002.	-0.	-1759.	-0.	955.	.0024	.0045	-.0239	-.0307	.0289	-.0099	803.
.1780	0.	3959.	-0.	-3479.	-0.	1839.	-.0029	.0121	-.0299	-.0354	.0225	-.0049	1589.
.1790	0.	5877.	-0.	-5182.	-0.	2814.	-.0078	.0196	-.0359	-.0400	.0137	-.0002	2366.
.1800	0.	7753.	-0.	-6813.	-0.	3700.	-.0119	.0268	-.0416	-.0443	.0029	.0040	3111.
.1810	0.	9441.	-0.	-8297.	-0.	4505.	-.0151	.0334	-.0471	-.0484	-.0107	.0076	3789.
.1820	0.	10862.	-0.	-9546.	-0.	5134.	-.0173	.0389	-.0519	-.0521	-.0222	.0106	4359.
.1830	0.	11954.	-0.	-10505.	-0.	5704.	-.0187	.0431	-.0561	-.0554	-.0318	.0130	4797.
.1840	0.	12706.	-0.	-11166.	-0.	6063.	-.0193	.0458	-.0594	-.0581	-.0402	.0149	5099.
.1850	0.	13093.	-0.	-11506.	-0.	6248.	-.0195	.0470	-.0618	-.0603	-.0474	.0164	5254.
.1860	0.	13070.	-0.	-11486.	-0.	6237.	-.0192	.0465	-.0632	-.0619	-.0542	.0177	5245.
.1870	0.	12643.	-0.	-11111.	-0.	6033.	-.0189	.0442	-.0636	-.0631	-.0589	.0190	5074.
.1880	0.	11869.	-0.	-10471.	-0.	5664.	-.0187	.0404	-.0632	-.0630	-.0632	.0204	4763.
.1890	0.	10796.	-0.	-9458.	-0.	5152.	-.0186	.0353	-.0622	-.0641	-.0659	.0219	4332.
.1900	0.	9456.	-0.	-8310.	-0.	4513.	-.0187	.0295	-.0607	-.0642	-.0652	.0235	3795.
.1910	0.	7917.	-0.	-6957.	-0.	3778.	-.0191	.0218	-.0590	-.0642	-.0625	.0251	3177.
.1920	0.	6275.	-0.	-5523.	-0.	2979.	-.0196	.0142	-.0572	-.0641	-.0572	.0266	2522.
.1930	0.	4940.	-0.	-4073.	-0.	2214.	-.0200	.0068	-.0555	-.0640	-.0502	.0277	1862.

ADLPIPE PAGE 1490

DIG/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.38.

S/RV PIPING KENAUWEE GRWOTF 2 RUP DISK
2 SAFETY COLD FKN24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.1730	0.	11364.	0.	-10505.	0.	5704.	-0.187	.0431	-.0561	-.0554	-.0318	.0130	4359.
.1840	0.	12706.	0.	-11166.	0.	6063.	-0.193	.0458	-.0594	-.0581	-.0402	.0149	5099.
.1850	0.	13093.	0.	-11506.	0.	6248.	-0.195	.0470	-.0618	-.0603	-.0474	.0164	5254.
.1760	0.	13070.	0.	-11456.	0.	6237.	-0.192	.0467	-.0632	-.0619	-.0542	.0177	5245.
.1870	0.	12643.	0.	-11111.	0.	6033.	-0.189	.0442	-.0636	-.0631	-.0589	.0190	5074.
.1780	0.	11849.	0.	-10471.	0.	5864.	-0.187	.0434	-.0632	-.0632	-.0532	.0204	4763.
.1890	0.	10796.	0.	-9478.	0.	5152.	-0.186	.0353	-.0622	-.0641	-.0559	.0219	4332.
.1900	0.	9456.	0.	-8310.	0.	4513.	-0.187	.0290	-.0607	-.0642	-.0552	.0235	3795.
.1910	0.	7917.	0.	-6957.	0.	3776.	-0.191	.0218	-.0590	-.0642	-.0525	.0251	3177.
.1920	0.	6295.	0.	-5523.	0.	2979.	-0.196	.0142	-.0572	-.0641	-.0572	.0266	2522.
.1930	0.	4640.	0.	-4073.	0.	2214.	-0.200	.0066	-.0555	-.0640	-.0502	.0277	1862.

ADLPIPE PAGE 1499 DIC/ADLPIPE ADLPIPE STRESS ANALYSIS 8/31/02 18.28.38.

S/RV PIPING KEVAUNLE GKWOPF 2 RUP BISK
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	TYPE	RU	DZ	RX	RY	RZ	STRESS
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	(PSI)
.1940	0.	3030.	0.	-2663.	0.	1446.	-.0201	-.0008	-.0538	1216.
.1950	0.	1518.	0.	-1074.	0.	724.	-.0197	-.0076	-.0523	609.
.1960	0.	189.	0.	-166.	0.	90.	-.0187	-.0136	-.0508	76.
.1970	0.	-399.	0.	790.	0.	-429.	-.0170	-.0123	-.0493	361.
.1980	0.	-1720.	0.	1511.	0.	-821.	-.0146	-.0217	-.0479	690.
.1990	0.	-2241.	0.	1970.	0.	-1069.	-.0116	-.0236	-.0464	899.
.2000	0.	-2476.	0.	2140.	0.	-1152.	-.0084	-.0230	-.0448	977.
.2010	0.	-2310.	0.	2030.	0.	-1102.	-.0051	-.0225	-.0432	927.
.2020	0.	-1900.	0.	1669.	0.	-907.	-.0021	-.0199	-.0415	762.
.2030	0.	-1236.	0.	1086.	0.	-590.	.0006	-.0161	-.0398	496.
.2040	0.	-354.	0.	311.	0.	-169.	.0025	-.0112	-.0379	142.
.2050	0.	687.	0.	-604.	0.	328.	.0036	-.0057	-.0360	276.
.2060	0.	1815.	0.	-1595.	0.	868.	.0037	.0002	-.0338	728.
.2070	0.	2968.	-0.	-2608.	0.	1416.	.0028	.0061	-.0315	1191.
.2080	0.	4097.	-0.	-3600.	0.	1955.	.0009	.0118	-.0290	1644.
.2090	0.	5150.	0.	-4526.	0.	2458.	-.0019	.0172	-.0262	2067.
.2100	0.	6075.	0.	-5338.	0.	2899.	-.0053	.0220	-.0231	2438.
.2110	0.	6832.	0.	-6004.	0.	3260.	-.0091	.0260	-.0196	2742.
.2120	0.	7396.	0.	-6499.	0.	3529.	-.0130	.0292	-.0158	2968.
.2130	0.	7739.	0.	-6801.	0.	3693.	-.0168	.0315	-.0114	3106.
.2140	0.	7949.	0.	-6898.	0.	3745.	-.0200	.0328	-.0066	3150.
.2150	0.	7732.	0.	-6794.	0.	3689.	-.0225	.0332	-.0012	3103.
.2160	0.	7401.	-0.	-6504.	0.	3532.	-.0241	.0327	.0045	2970.
.2170	-0.	6863.	-0.	-6031.	0.	3275.	-.0246	.0315	.0107	2754.
.2180	-0.	6124.	-0.	-5392.	0.	2922.	-.0241	.0295	.0170	2458.
.2190	0.	5221.	-0.	-4588.	0.	2491.	-.0226	.0268	.0234	2095.
.2200	0.	4210.	0.	-3700.	0.	2009.	-.0202	.0236	.0296	1690.
.2210	-0.	3145.	-0.	-2764.	-0.	1501.	-.0171	.0202	.0353	1262.
.2220	-0.	2064.	-0.	-1814.	-0.	985.	-.0133	.0167	.0405	828.
.2230	0.	1011.	0.	-888.	-0.	482.	-.0091	.0132	.0448	406.
.2240	-0.	40.	-0.	-35.	-0.	19.	-.0046	.0099	.0421	16.
.2250	-0.	-802.	-0.	705.	-0.	-383.	.0001	.0071	.0502	322.
.2260	-0.	-1487.	-0.	1306.	-0.	-709.	.0046	.0047	.0511	597.
.2270	-0.	-1991.	-0.	1749.	-0.	-950.	.0089	.0030	.0508	799.
.2280	-0.	-2296.	-0.	2018.	-0.	-1096.	.0129	.0019	.0494	921.
.2290	-0.	-2400.	-0.	2109.	-0.	-1145.	.0164	.0016	.0470	963.
.2300	-0.	-2316.	-0.	2026.	-0.	-1103.	.0192	.0019	.0438	930.
.2310	-0.	-2061.	-0.	1812.	-0.	-984.	.0215	.0028	.0400	827.

ADLPIPE PAGE 1500 DIC/ADLPIPE ADLPIPE STRESS ANALYSIS 8/31/02 18.28.38.

S/RV PIPING KEVAUNLE GKWOPF 2 RUP BISK
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

.2210	-0.	1145.	-0.	-2764.	-0.	1501.	-0.0171	.0202	.0353	.0439	.0236	.0223	1262.
.2220	-0.	2064.	-0.	-1814.	-0.	985.	-0.0133	.0167	.0405	.0498	.0202	.0190	828.
.2230	0.	1011.	0.	-878.	-0.	482.	-0.0091	.0132	.0448	.0548	.0162	.0150	406.
.2240	-0.	40.	-0.	-75.	-0.	19.	-0.0046	.0099	.0471	.0587	.0111	.0105	16.
.2250	-0.	-802.	-0.	705.	-0.	-283.	.0001	.0071	.0502	.0615	.0049	.0057	322.
.2260	-0.	-1487.	-0.	1306.	-0.	-709.	.0046	.0047	.0511	.0630	-0.0022	.0006	597.
.2270	-0.	-1991.	-0.	1749.	-0.	-950.	.0079	.0030	.0508	.0633	-0.0098	-0.0044	799.
.2280	-0.	-2296.	-0.	2018.	-0.	-1096.	.0129	.0019	.0494	.0625	-0.0177	-0.0093	921.
.2290	-0.	-2400.	-0.	2109.	-0.	-1145.	.0164	.0016	.0470	.0606	-0.0257	-0.0139	963.
.2300	-0.	-2316.	-0.	2037.	-0.	-1105.	.0192	.0019	.0431	.0580	-0.0328	-0.0180	930.
.2310	-0.	-2061.	-0.	1812.	-0.	-924.	.0215	.0028	.0400	.0549	-0.0388	-0.0215	827.

ADLPIPE PAGE 1500

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.38.

S/RV PIPING KEWAUNEE GRCOST 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	37	MEMBER	1	SEQUENCE	59	LOCATION	BEG	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)		
.2320	-0.	-1655.	-0.	1454.	-0.	-790.	.0231	.0044	.0360	.0515	-.0437	-.0244	664.	
.2330	-0.	-1128.	-0.	992.	-0.	-538.	.0241	.0064	.0319	.0482	-.0480	-.0266	453.	
.2340	-0.	-520.	-0.	457.	-0.	-248.	.0243	.0087	.0282	.0451	-.0519	-.0279	208.	
.2350	-0.	141.	-0.	-124.	-0.	67.	.0238	.0113	.0249	.0425	-.0558	-.0285	57.	
.2360	-0.	826.	-0.	-726.	-0.	394.	.0226	.0141	.0223	.0406	-.0598	-.0281	332.	
.2370	-0.	1498.	-0.	-1317.	-0.	715.	.0207	.0168	.0206	.0396	-.0532	-.0270	601.	
.2380	-0.	2121.	-0.	-1864.	-0.	1012.	.0182	.0195	.0198	.0395	-.0552	-.0251	851.	
.2390	-0.	2675.	-0.	-2350.	-0.	1276.	.0151	.0219	.0199	.0404	-.0654	-.0225	1073.	
.2400	-0.	3152.	-0.	-2770.	-0.	1504.	.0117	.0241	.0210	.0421	-.0637	-.0195	1265.	
.2410	-0.	3534.	-0.	-3105.	-0.	1686.	.0081	.0260	.0229	.0447	-.0503	-.0161	1418.	
.2420	-0.	3793.	-0.	-3334.	-0.	1810.	.0045	.0274	.0256	.0480	-.0555	-.0127	1522.	
.2430	-0.	3914.	-0.	-3440.	-0.	1868.	.0011	.0283	.0288	.0517	-.0495	-.0093	1571.	
.2440	-0.	3398.	0.	-3426.	-0.	1860.	-.0013	.0287	.0323	.0557	-.0424	-.0063	1564.	
.2450	-0.	3752.	-0.	-3297.	-0.	1790.	-.0042	.0285	.0360	.0598	-.0343	-.0038	1505.	
.2460	-0.	3471.	-0.	-3050.	-0.	1656.	-.0058	.0270	.0396	.0638	-.0256	-.0020	1393.	
.2470	-0.	3052.	0.	-2682.	-0.	1457.	-.0065	.0265	.0431	.0676	-.0168	-.0009	1225.	
.2480	-0.	2505.	-0.	-2201.	-0.	1195.	-.0064	.0245	.0463	.0709	-.0080	-.0006	1005.	
.2490	-0.	1846.	-0.	-1622.	-0.	881.	-.0054	.0221	.0492	.0737	.0005	-.0012	741.	
.2500	-0.	1105.	-0.	-971.	-0.	527.	-.0037	.0193	.0518	.0761	.0082	-.0024	443.	
.2510	-0.	306.	-0.	-269.	-0.	148.	-.0012	.0162	.0541	.0779	.0145	-.0044	123.	
.2520	-0.	-526.	-0.	462.	-0.	-251.	.0017	.0129	.0562	.0792	.0194	-.0068	211.	
.2530	-0.	-1363.	-0.	1197.	-0.	-650.	.0049	.0095	.0581	.0802	.0226	-.0095	547.	
.2540	-0.	-2166.	-0.	1903.	-0.	-1033.	.0082	.0062	.0597	.0807	.0241	-.0124	869.	
.2550	-0.	-2905.	-0.	2553.	-0.	-1386.	.0115	.0031	.0611	.0808	.0239	-.0153	1166.	
.2560	-0.	-3566.	-0.	3134.	-0.	-1702.	.0145	.0003	.0621	.0803	.0223	-.0180	1431.	
.2570	-0.	-4143.	-0.	3641.	-0.	-1977.	.0172	-.0023	.0628	.0793	.0194	-.0204	1663.	
.2580	-0.	-4642.	-0.	4080.	-0.	-2215.	.0194	-.0047	.0629	.0776	.0156	-.0224	1863.	
.2590	-0.	-5063.	-0.	4450.	-0.	-2416.	.0211	-.0069	.0624	.0752	.0113	-.0230	2032.	
.2600	-0.	-5395.	-0.	4741.	-0.	-2574.	.0223	-.0089	.0612	.0718	.0066	-.0248	2165.	
.2610	-0.	-5642.	-0.	4958.	-0.	-2693.	.0230	-.0108	.0591	.0676	.0013	-.0252	2264.	
.2620	-0.	-5835.	-0.	5127.	-0.	-2784.	.0232	-.0127	.0560	.0622	-.0042	-.0251	2341.	
.2630	-0.	-5988.	-0.	5262.	-0.	-2857.	.0230	-.0146	.0518	.0558	-.0098	-.0246	2403.	
.2640	-0.	-6095.	-0.	5356.	-0.	-2908.	.0224	-.0166	.0467	.0483	-.0151	-.0236	2446.	
.2650	-0.	-6152.	-0.	5407.	-0.	-2936.	.0215	-.0185	.0405	.0399	-.0200	-.0222	2469.	
.2660	-0.	-6175.	-0.	5426.	-0.	-2947.	.0203	-.0205	.0334	.0307	-.0242	-.0205	2478.	
.2670	-0.	-6174.	-0.	5425.	-0.	-2946.	.0189	-.0225	.0255	.0208	-.0277	-.0185	2477.	
.2680	-0.	-6139.	-0.	5395.	-0.	-2930.	.0172	-.0244	.0172	.0106	-.0302	-.0163	2464.	
.2690	-0.	-6044.	-0.	5311.	0.	-2884.	.0153	-.0261	.0086	.0004	-.0317	-.0139	2425.	

ADLPIPE PAGE 1501

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.38.

S/RV PIPING KEWAUNEE GRCOST 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

.2590	-0.	-7063.	-0.	4450.	-0.	-2416.	.0211	-.0069	.0624	.0752	.0113	-.0238	2032.
.2600	-0.	-5395.	-0.	4741.	-0.	-2574.	.0223	-.0039	.0612	.0715	.0066	-.0248	2165.
.2610	-0.	-5642.	-0.	4958.	-0.	-2693.	.0230	-.0108	.0591	.0676	.0013	-.0252	2264.
.2620	-0.	-5375.	-0.	5117.	-0.	-2754.	.0232	-.0127	.0560	.0622	-.0042	-.0251	2341.
.2630	-0.	-5298.	-0.	5262.	-0.	-2857.	.0230	-.0147	.0515	.0558	-.0098	-.0246	2403.
.2640	-0.	-5055.	-0.	5356.	-0.	-2930.	.0224	-.0166	.0467	.0483	-.0151	-.0236	2446.
.2650	-0.	-5152.	-0.	5407.	-0.	-2936.	.0215	-.0185	.0405	.0399	-.0200	-.0222	2469.
.2660	-0.	-4175.	-0.	5426.	-0.	-2947.	.0203	-.0205	.0334	.0307	-.0242	-.0205	2478.
.2670	-0.	-6174.	-0.	5429.	-0.	-2946.	.0189	-.0225	.0255	.0208	-.0277	-.0185	2477.
.2680	-0.	-6139.	-0.	5385.	-0.	-2930.	.0172	-.0244	.0172	.0106	-.0302	-.0163	2464.
.2690	-0.	-6044.	-0.	5311.	0.	-2884.	.0153	-.0261	.0086	.0004	-.0317	-.0139	2425.

ADLPIPE PAGE 1501

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

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.38.

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	37	MEMBER	1	SEQUENCE	59	LOCATION	BEG	TYPE	RU	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ				(IN)	(DEG)	(DEG)	(DEG)	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)			(IN)					
.2700	-0.	-5080.	-0.	5167.	0.	-2006.	.0133	-.0275	.0000	-.0095	-.0324	-.0112	2360.	
.2710	0.	-5888.	0.	4999.	-0.	-2714.	.0111	-.0286	-.0082	-.0189	-.0323	-.0085	2283.	
.2720	0.	-5516.	0.	4847.	0.	-2632.	.0087	-.0297	-.0158	-.0276	-.0313	-.0055	2213.	
.2730	0.	-5354.	0.	4705.	0.	-2555.	.0062	-.0307	-.0225	-.0353	-.0296	-.0024	2148.	
.2740	0.	-5150.	0.	4526.	0.	-2458.	.0036	-.0313	-.0281	-.0417	-.0275	.0007	2067.	
.2750	0.	-4909.	0.	4314.	0.	-2343.	.0009	-.0314	-.0326	-.0468	-.0253	.0038	1970.	
.2760	0.	-4704.	0.	4174.	0.	-2245.	-.0017	-.0315	-.0359	-.0506	-.0231	.0068	1888.	
.2770	0.	-4570.	0.	4016.	0.	-2181.	-.0042	-.0316	-.0380	-.0533	-.0209	.0096	1834.	
.2780	0.	-4456.	0.	3918.	0.	-2126.	-.0065	-.0316	-.0391	-.0548	-.0193	.0121	1788.	
.2790	0.	-4318.	0.	3795.	0.	-2061.	-.0084	-.0313	-.0393	-.0553	-.0186	.0141	1733.	
.2800	0.	-4198.	0.	3689.	0.	-2003.	-.0098	-.0309	-.0387	-.0550	-.0193	.0156	1685.	
.2810	0.	-4143.	0.	3641.	0.	-1977.	-.0107	-.0306	-.0376	-.0543	-.0216	.0164	1663.	
.2820	0.	-4119.	0.	3620.	0.	-1966.	-.0109	-.0303	-.0362	-.0532	-.0255	.0165	1653.	
.2830	0.	-4054.	0.	3562.	0.	-1934.	-.0103	-.0297	-.0346	-.0520	-.0305	.0158	1627.	
.2840	0.	-3939.	0.	3462.	0.	-1890.	-.0091	-.0287	-.0330	-.0506	-.0362	.0141	1581.	
.2850	0.	-3818.	0.	3355.	0.	-1822.	-.0072	-.0277	-.0316	-.0494	-.0426	.0117	1532.	
.2860	0.	-3697.	0.	3249.	0.	-1764.	-.0047	-.0266	-.0303	-.0483	-.0495	.0085	1483.	
.2870	0.	-3529.	0.	3101.	0.	-1684.	-.0016	-.0253	-.0292	-.0474	-.0568	.0047	1416.	
.2880	0.	-3286.	0.	2888.	0.	-1558.	.0019	-.0236	-.0284	-.0466	-.0545	.0003	1319.	
.2890	0.	-2937.	0.	2625.	0.	-1425.	.0056	-.0216	-.0279	-.0459	-.0725	-.0044	1199.	
.2900	0.	-2652.	0.	2371.	0.	-1256.	.0094	-.0195	-.0274	-.0453	-.0804	-.0094	1064.	
.2910	0.	-2281.	0.	2005.	0.	-1089.	.0133	-.0172	-.0271	-.0447	-.0883	-.0144	915.	
.2920	0.	-1871.	0.	1644.	0.	-893.	.0170	-.0147	-.0269	-.0441	-.0957	-.0193	751.	
.2930	0.	-1426.	0.	1254.	0.	-681.	.0204	-.0121	-.0267	-.0434	-.1020	-.0239	572.	
.2940	-0.	-956.	-0.	840.	0.	-456.	.0234	-.0094	-.0264	-.0426	-.1070	-.0280	384.	
.2950	0.	-477.	0.	419.	-0.	-228.	.0259	-.0067	-.0263	-.0418	-.1100	-.0315	191.	
.2960	0.	-21.	0.	18.	-0.	-10.	.0278	-.0042	-.0262	-.0410	-.1107	-.0343	8.	
.2970	-0.	391.	-0.	-343.	0.	186.	.0290	-.0020	-.0262	-.0403	-.1086	-.0363	157.	
.2980	0.	764.	0.	-671.	0.	365.	.0296	-.0001	-.0264	-.0398	-.1037	-.0374	307.	
.2990	-0.	1102.	-0.	-988.	0.	526.	.0294	.0015	-.0269	-.0394	-.0964	-.0375	442.	
.3000	0.	1371.	0.	-1205.	0.	654.	.0285	.0027	-.0277	-.0394	-.0873	-.0367	550.	
.3010	0.	1536.	0.	-1350.	0.	753.	.0268	.0032	-.0288	-.0397	-.0769	-.0349	616.	
.3020	0.	1601.	0.	-1407.	-0.	764.	.0245	.0031	-.0302	-.0405	-.0661	-.0322	643.	
.3030	0.	1593.	0.	-1400.	0.	760.	.0216	.0025	-.0319	-.0416	-.0552	-.0287	639.	
.3040	0.	1502.	0.	-1320.	0.	717.	.0182	.0014	-.0338	-.0430	-.0445	-.0245	603.	
.3050	0.	1300.	0.	-1142.	0.	620.	.0143	-.0003	-.0358	-.0448	-.0341	-.0198	522.	
.3060	0.	976.	0.	-866.	0.	470.	.0102	-.0026	-.0379	-.0467	-.0243	-.0147	396.	
.3070	0.	597.	0.	-525.	0.	285.	.0060	-.0053	-.0399	-.0488	-.0154	-.0095	240.	

ADLPIPE PAGE 1502

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

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.38.

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING

.2979	-0.	391.	-0.	-343.	0.	136.	.0020	-0.0262	-0.0403	-0.1036	-0.0363	157.	
.2989	0.	764.	0.	-671.	0.	355.	.0056	-0.0001	-0.0264	-0.0398	-0.1037	-0.0374	307.
.2999	-0.	1137.	-0.	-968.	0.	526.	.0294	.0015	-0.0269	-0.0394	-0.0964	-0.0375	442.
.3000	0.	1511.	0.	-1265.	0.	654.	.0285	.0027	-0.0277	-0.0394	-0.0873	-0.0367	550.
.3010	0.	1876.	0.	-1558.	0.	793.	.0268	.0032	-0.0298	-0.0397	-0.0769	-0.0349	616.
.3020	0.	1531.	0.	-1407.	-0.	764.	.0245	.0031	-0.0301	-0.0405	-0.0661	-0.0322	643.
.3030	0.	1593.	0.	-1400.	0.	760.	.0216	.0025	-0.0319	-0.0416	-0.0552	-0.0287	639.
.3040	0.	1592.	0.	-1320.	0.	717.	.0122	.0014	-0.0338	-0.0430	-0.0445	-0.0245	603.
.3050	0.	1330.	0.	-1142.	0.	620.	.0143	-0.0007	-0.0358	-0.0448	-0.0341	-0.0198	522.
.3060	0.	996.	0.	-966.	0.	470.	.0102	-0.0026	-0.0279	-0.0467	-0.0243	-0.0147	396.
.3070	0.	597.	0.	-520.	0.	210.	.0060	-0.0053	-0.0399	-0.0488	-0.0154	-0.0095	240.

ADLPIPE PAGE 1502

D15/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.38.

57KV PIPING KEWAUNEE KKW0FF 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	37	MEMBER	1	SEQUENCE	59	LOCATION	BEG	TYPE	RU	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.3080	0.	161.	0.	-142.	0.	77.	.0019	-0.0082	-0.0417	-0.0508	-0.0079	-0.0043	65.	
.3090	0.	-319.	0.	260.	0.	-152.	-0.0019	-0.0112	-0.0432	-0.0527	-0.0019	.0005	128.	
.3100	0.	-378.	0.	736.	0.	-430.	-0.0053	-0.0143	-0.0444	-0.0544	.0023	.0049	336.	
.3110	0.	-1370.	0.	1204.	0.	-654.	-0.0081	-0.0174	-0.0451	-0.0559	.0044	.0087	550.	
.3120	0.	-1884.	0.	1656.	0.	-899.	-0.0102	-0.0202	-0.0454	-0.0569	.0047	.0116	756.	
.3130	0.	-2353.	0.	2068.	0.	-1123.	-0.0116	-0.0227	-0.0452	-0.0576	.0035	.0136	944.	
.3140	0.	-2754.	0.	2420.	0.	-1314.	-0.0122	-0.0247	-0.0448	-0.0579	.0009	.0147	1105.	
.3150	0.	-3069.	0.	2697.	0.	-1464.	-0.0120	-0.0261	-0.0440	-0.0579	-0.0027	.0148	1232.	
.3160	0.	-3291.	0.	2892.	0.	-1570.	-0.0111	-0.0270	-0.0430	-0.0575	-0.0069	.0140	1321.	
.3170	0.	-3413.	0.	2999.	0.	-1628.	-0.0095	-0.0273	-0.0418	-0.0569	-0.0114	.0124	1369.	
.3180	0.	-3420.	0.	3005.	0.	-1632.	-0.0075	-0.0269	-0.0405	-0.0559	-0.0159	.0101	1372.	
.3190	0.	-3313.	0.	2912.	0.	-1531.	-0.0051	-0.0259	-0.0392	-0.0548	-0.0204	.0072	1330.	
.3200	0.	-3119.	0.	2741.	0.	-1438.	-0.0074	-0.0245	-0.0378	-0.0533	-0.0247	.0040	1252.	
.3210	0.	-2870.	0.	2522.	0.	-1369.	.0003	-0.0227	-0.0364	-0.0517	-0.0287	.0006	1152.	
.3220	0.	-2575.	0.	2263.	0.	-1229.	.0030	-0.0207	-0.0348	-0.0499	-0.0321	-0.0028	1033.	
.3230	0.	-2241.	0.	1970.	-0.	-1069.	.0055	-0.0184	-0.0332	-0.0478	-0.0347	-0.0060	899.	
.3240	0.	-1900.	0.	1669.	0.	-907.	.0077	-0.0162	-0.0314	-0.0455	-0.0361	-0.0089	762.	
.3250	0.	-1602.	0.	1408.	0.	-765.	.0096	-0.0141	-0.0294	-0.0429	-0.0362	-0.0114	643.	
.3260	0.	-1382.	0.	1214.	0.	-659.	.0112	-0.0124	-0.0272	-0.0401	-0.0352	-0.0133	555.	
.3270	0.	-1246.	0.	1095.	-0.	-595.	.0123	-0.0110	-0.0246	-0.0371	-0.0334	-0.0148	500.	
.3280	0.	-1211.	0.	1064.	-0.	-578.	.0132	-0.0102	-0.0218	-0.0339	-0.0310	-0.0156	486.	
.3290	0.	-1311.	0.	1152.	-0.	-625.	.0136	-0.0101	-0.0188	-0.0307	-0.0284	-0.0158	526.	
.3300	-0.	-1571.	0.	1381.	-0.	-750.	.0139	-0.0107	-0.0156	-0.0275	-0.0257	-0.0155	630.	
.3310	-0.	-1985.	0.	1745.	-0.	-947.	.0139	-0.0121	-0.0123	-0.0244	-0.0229	-0.0146	797.	
.3320	-0.	-2573.	0.	2229.	-0.	-1209.	.0136	-0.0142	-0.0091	-0.0217	-0.0199	-0.0133	1016.	
.3330	-0.	-3201.	-0.	2813.	-0.	-1527.	.0131	-0.0170	-0.0062	-0.0193	-0.0166	-0.0114	1284.	
.3340	-0.	-3979.	-0.	3497.	-0.	-1899.	.0124	-0.0205	-0.0036	-0.0174	-0.0130	-0.0090	1597.	
.3350	-0.	-4839.	0.	4253.	-0.	-2309.	.0115	-0.0244	-0.0016	-0.0161	-0.0091	-0.0062	1942.	
.3360	-0.	-5741.	0.	5045.	-0.	-2740.	.0102	-0.0288	-0.0000	-0.0155	-0.0052	-0.0029	2304.	
.3370	-0.	-6645.	0.	5829.	-0.	-3171.	.0085	-0.0333	.0009	-0.0155	-0.0011	.0009	2666.	
.3380	-0.	-7516.	0.	6605.	-0.	-3587.	.0064	-0.0378	.0012	-0.0162	.0033	.0051	3016.	
.3390	-0.	-8302.	-0.	7343.	-0.	-4071.	.0038	-0.0422	.0009	-0.0174	.0080	.0078	3339.	
.3400	0.	-9087.	0.	7973.	-0.	-4538.	.0000	-0.0462	.0000	-0.0190	.0133	.0149	3622.	
.3410	0.	-9670.	0.	8440.	-0.	-4983.	-0.0030	-0.0498	-0.0010	-0.0210	.0193	.0204	3854.	
.3420	0.	-10035.	0.	8819.	-0.	-4789.	-0.0071	-0.0527	-0.0029	-0.0231	.0260	.0261	4027.	
.3430	0.	-10305.	0.	9056.	-0.	-4918.	-0.0116	-0.0549	-0.0048	-0.0253	.0333	.0319	4135.	
.3440	0.	-10414.	0.	9170.	0.	-4970.	-0.0164	-0.0564	-0.0067	-0.0274	.0410	.0378	4179.	
.3450	0.	-10271.	0.	9114.	-0.	-4949.	-0.0214	-0.0571	-0.0084	-0.0292	.0491	.0435	4162.	

ADLPIPE PAGE 1507

D15/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.38.

57KV PIPING KEWAUNEE KKW0FF 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.3350	-0.	-4839.	0.	2497.	-0.	-1299.	0.115	-.0244	-.0016	-.0161	-.0091	-.0062	1942.
.3360	-0.	-5741.	0.	5045.	-0.	-2740.	.0102	-.0208	-.0090	-.0155	-.0052	-.0029	2304.
.3370	-0.	-6645.	0.	5839.	-0.	-3171.	.0085	-.0333	.0009	-.0155	-.0011	.0009	2666.
.3380	-0.	-7516.	0.	6607.	-0.	-3537.	.0064	-.0370	.0012	-.0162	.0033	.0051	3016.
.3390	-0.	-8382.	-0.	7317.	-0.	-3971.	.0038	-.0432	.0007	-.0174	.0080	.0098	3339.
.3400	0.	-9227.	0.	7973.	-0.	-4328.	.0006	-.0462	.0000	-.0190	.0133	.0149	3622.
.3410	0.	-9603.	0.	8440.	-0.	-4583.	-.0030	-.0492	-.0013	-.0210	.0193	.0204	3854.
.3420	0.	-10335.	0.	8319.	-0.	-4789.	-.0071	-.0527	-.0029	-.0231	.0260	.0261	4027.
.3430	0.	-10305.	0.	9056.	0.	-4918.	-.0116	-.0549	-.0048	-.0253	.0333	.0319	4135.
.3440	0.	-10414.	0.	9170.	0.	-4979.	-.0164	-.0564	-.0067	-.0274	.0410	.0378	4179.
.3450	0.	-10571.	0.	9114.	-0.	-4949.	-.0214	-.0571	-.0084	-.0290	.0491	.0435	4162.

ADLPIPE PAGE 1003

DIG/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/3/12/02.

18.28.38.

S/RV PIPING KEWAUNEE GKW02F 2 RUP DICK
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	37	MEMBER	1	SEQUENCE	59	LOCATION	BEG	TYPE	RU	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
.3460	0.	-10192.	0.	8957.	0.	-4864.	-.0263	-.0571	-.0104	-.0308	.0573	.0489	4090.	
.3470	0.	-9893.	0.	8694.	0.	-4721.	-.0309	-.0564	-.0119	-.0319	.0553	.0537	3970.	
.3480	0.	-9491.	0.	8340.	0.	-4529.	-.0352	-.0551	-.0131	-.0327	.0730	.0579	3808.	
.3490	0.	-9010.	0.	7918.	0.	-4300.	-.0390	-.0533	-.0140	-.0330	.0801	.0613	3616.	
.3500	0.	-8484.	0.	7455.	0.	-4048.	-.0420	-.0512	-.0146	-.0330	.0865	.0638	3404.	
.3510	0.	-7958.	0.	6976.	0.	-3788.	-.0442	-.0488	-.0150	-.0326	.0918	.0653	3185.	
.3520	0.	-7390.	0.	6494.	0.	-3526.	-.0456	-.0462	-.0151	-.0320	.0959	.0658	2965.	
.3530	0.	-6853.	0.	6023.	0.	-3270.	-.0462	-.0436	-.0150	-.0313	.0986	.0653	2750.	
.3540	0.	-6347.	0.	5578.	0.	-3029.	-.0459	-.0410	-.0148	-.0303	.0996	.0640	2547.	
.3550	0.	-5889.	0.	5175.	0.	-2810.	-.0449	-.0385	-.0145	-.0293	.0989	.0619	2363.	
.3560	0.	-5481.	0.	4817.	0.	-2616.	-.0433	-.0361	-.0141	-.0283	.0962	.0591	2200.	
.3570	0.	-5121.	0.	4500.	0.	-2444.	-.0412	-.0340	-.0137	-.0272	.0918	.0560	2055.	
.3580	0.	-4800.	0.	4218.	0.	-2291.	-.0389	-.0320	-.0132	-.0260	.0858	.0526	1926.	
.3590	0.	-4518.	0.	3970.	0.	-2156.	-.0363	-.0301	-.0126	-.0248	.0784	.0492	1813.	
.3600	0.	-4273.	0.	3755.	0.	-2039.	-.0339	-.0284	-.0119	-.0234	.0699	.0459	1715.	
.3610	0.	-4057.	0.	3565.	0.	-1936.	-.0316	-.0268	-.0111	-.0219	.0604	.0430	1628.	
.3620	0.	-3882.	0.	3385.	0.	-1838.	-.0296	-.0253	-.0101	-.0202	.0501	.0405	1546.	
.3630	0.	-3639.	0.	3198.	0.	-1736.	-.0281	-.0238	-.0089	-.0182	.0394	.0385	1460.	
.3640	0.	-3403.	0.	2991.	0.	-1624.	-.0270	-.0222	-.0075	-.0159	.0282	.0372	1366.	
.3650	0.	-3138.	0.	2757.	0.	-1497.	-.0265	-.0204	-.0059	-.0133	.0168	.0365	1259.	
.3660	0.	-2836.	0.	2492.	0.	-1353.	-.0264	-.0185	-.0041	-.0106	.0055	.0364	1138.	
.3670	0.	-2486.	0.	2185.	0.	-1187.	-.0268	-.0164	-.0023	-.0077	-.0052	.0368	998.	
.3680	0.	-2077.	0.	1825.	0.	-991.	-.0276	-.0141	-.0006	-.0047	-.0150	.0376	834.	
.3690	0.	-1606.	0.	1412.	0.	-767.	-.0287	-.0115	.0010	-.0019	-.0238	.0387	645.	
.3700	0.	-1078.	0.	956.	0.	-519.	-.0299	-.0088	.0023	.0008	-.0311	.0400	437.	
.3710	0.	-543.	0.	477.	0.	-259.	-.0312	-.0061	.0032	.0030	-.0369	.0413	218.	
.3720	0.	18.	-0.	-16.	-0.	8.	-.0324	-.0033	.0037	.0047	-.0410	.0426	7.	
.3730	0.	587.	0.	-516.	0.	280.	-.0335	-.0006	.0035	.0057	-.0433	.0436	235.	
.3740	0.	1144.	0.	-1005.	0.	546.	-.0344	.0019	.0026	.0060	-.0440	.0442	459.	
.3750	0.	1650.	0.	-1450.	0.	788.	-.0349	.0041	.0010	.0055	-.0433	.0445	662.	
.3760	0.	2068.	0.	-1810.	0.	987.	-.0351	.0050	-.0012	.0041	-.0417	.0443	830.	
.3770	0.	2331.	0.	-2090.	0.	1136.	-.0340	.0060	-.0040	.0019	-.0388	.0437	955.	
.3780	0.	2583.	0.	-2370.	0.	1233.	-.0341	.0073	-.0074	-.0011	-.0354	.0425	1036.	
.3790	0.	2683.	0.	-2340.	0.	1271.	-.0330	.0072	-.0110	-.0046	-.0315	.0409	1068.	
.3800	0.	2692.	0.	-2287.	0.	1242.	-.0316	.0064	-.0149	-.0086	-.0271	.0390	1044.	
.3810	0.	2397.	0.	-2100.	0.	1144.	-.0295	.0049	-.0187	-.0128	-.0222	.0366	962.	
.3820	0.	2083.	0.	-1874.	0.	930.	-.0277	.0038	-.0222	-.0171	-.0167	.0341	824.	
.3830	0.	1599.	0.	-1396.	0.	758.	-.0255	.0002	-.0254	-.0212	-.0105	.0313	638.	

ADLPIPE PAGE 1004

DIG/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/3/12/02.

18.28.38.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.3730	0.	587.	0.	-516.	0.	280.	-0.035	-0.0036	.0035	.0057	-.0433	.0436	235.
.3740	0.	1144.	0.	-1005.	0.	548.	-.0344	.0019	.0076	.0060	-.0440	.0442	459.
.3750	0.	1650.	0.	-1450.	0.	788.	-.0349	.0041	.0010	.0055	-.0433	.0445	662.
.3760	0.	2081.	0.	-1910.	0.	937.	-.0351	.0050	-.0012	.0041	-.0414	.0443	830.
.3770	0.	2531.	0.	-2690.	0.	1136.	-.0340	.0069	-.0040	.0019	-.0388	.0437	955.
.3780	0.	2983.	0.	-3270.	0.	1283.	-.0341	.0073	-.0074	-.0011	-.0354	.0425	1036.
.3790	0.	2663.	0.	-2340.	0.	1271.	-.0370	.0077	-.0110	-.0046	-.0315	.0409	1068.
.3800	0.	2672.	0.	-2287.	0.	1242.	-.0316	.0064	-.0149	-.0086	-.0271	.0390	1044.
.3810	0.	2397.	0.	-2106.	0.	1144.	-.0295	.0049	-.0137	-.0128	-.0227	.0366	962.
.3820	0.	2053.	0.	-1804.	0.	930.	-.0277	.0024	-.0232	-.0171	-.0167	.0341	824.
.3830	0.	1589.	0.	-1296.	0.	758.	-.0255	.0007	-.0254	-.0212	-.0105	.0313	638.

ADLPIPE PAGE 1304

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.38.

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	37	MEMBER	1	SEQUENCE	59	LOCATION	BEG	TYPE	RU	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	HX	MY	MZ	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)								
.3840	0.	1021.	0.	-897.	0.	487.	-.0232	-.0028	-.0280	-.0249	-.0039	.0285	410.	
.3850	0.	358.	0.	-314.	0.	171.	-.0209	-.0011	-.0299	-.0281	.0031	.0258	144.	
.3860	0.	-327.	0.	340.	0.	-135.	-.0186	-.0097	-.0310	-.0307	.0103	.0232	155.	
.3870	0.	-1172.	0.	1030.	0.	-559.	-.0165	-.0134	-.0312	-.0325	.0180	.0208	470.	
.3880	0.	-1935.	0.	1701.	0.	-923.	-.0147	-.0169	-.0307	-.0335	.0262	.0186	777.	
.3890	0.	-2637.	0.	2317.	0.	-1258.	-.0131	-.0199	-.0294	-.0336	.0347	.0168	1058.	
.3900	0.	-3269.	0.	2872.	0.	-1560.	-.0119	-.0225	-.0274	-.0329	.0435	.0152	1312.	
.3910	0.	-3819.	0.	3356.	0.	-1822.	-.0109	-.0246	-.0248	-.0314	.0522	.0140	1532.	
.3920	0.	-4244.	0.	3720.	0.	-2025.	-.0103	-.0261	-.0216	-.0292	.0607	.0131	1703.	
.3930	0.	-4497.	0.	3952.	0.	-2146.	-.0100	-.0266	-.0181	-.0263	.0688	.0124	1805.	
.3940	0.	-4563.	0.	4010.	0.	-2177.	-.0098	-.0262	-.0144	-.0229	.0765	.0118	1831.	
.3950	0.	-4459.	0.	3919.	0.	-2128.	-.0097	-.0249	-.0104	-.0189	.0836	.0112	1789.	
.3960	0.	-4198.	0.	3669.	0.	-2003.	-.0096	-.0229	-.0064	-.0145	.0901	.0105	1685.	
.3970	0.	-3776.	0.	3318.	0.	-1802.	-.0094	-.0200	-.0023	-.0097	.0959	.0096	1515.	
.3980	0.	-3195.	0.	2800.	0.	-1525.	-.0090	-.0163	-.0018	-.0046	.1007	.0084	1282.	
.3990	-0.	-2490.	-0.	2180.	0.	-1188.	-.0083	-.0119	.0058	.0007	.1045	.0068	999.	
.4000	-0.	-1713.	-0.	1506.	0.	-818.	-.0071	-.0072	.0099	.0061	.1070	.0047	688.	

MAXIMUM VALUE OF STRESS OCCURS AT

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)
.1850	-0.	-13093.	-0.	11506.	-0.	-6248.	-.0195	.0470	-.0618	-.0603	-.0474	.0164	5254.

SECTION	37	MEMBER	1	SEQUENCE	59	LOCATION	END	TYPE	RU	DZ	FX	RY	RZ	STRESS
TIME	FX	FY	FZ	HX	MY	MZ	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)								
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	-0.	-0.	-0.	0.	-0.	-0.	-.0000	.0000	.0000	.0000	-.0000	-.0000	-.0000	0.
.0020	0.	-0.	0.	0.	-0.	-0.	-.0000	.0000	.0000	.0000	-.0000	-.0000	-.0000	0.
.0030	-0.	-0.	-0.	0.	-0.	-0.	-.0000	.0000	.0000	.0000	-.0000	-.0000	-.0000	0.
.0040	-0.	-0.	0.	0.	-0.	-0.	-.0000	.0000	.0000	.0000	-.0001	-.0000	-.0000	0.
.0050	-0.	0.	-0.	-0.	-0.	0.	-.0000	-.0000	.0000	-.0000	-.0001	-.0000	-.0000	0.
.0060	-0.	0.	-0.	-1.	-0.	0.	-.0000	-.0000	.0000	-.0000	-.0001	.0000	-.0000	0.
.0070	-0.	0.	-0.	-0.	-0.	1.	-.0000	-.0000	.0000	-.0000	-.0002	.0000	-.0000	1.

ADLPIPE PAGE 1305

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.38.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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)
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.
.0010	-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.
.0020	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.
.0030	-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.
.0040	-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	-0.0001	-0.0000	0.
.0050	-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	-0.0001	-0.0000	0.
.0060	-0.	2.	-0.	-0.	-1.	-0.	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0001	-0.0000	0.
.0070	-0.	5.	-0.	-0.	-2.	-0.	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0002	-0.0000	1.

ADLPIPE PAGE 1005

DIG/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.38.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	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)
.0080	-0.	12.	-0.	-5.	-0.	3.	-0.0000	-0.0001	.0000	-0.0000	-0.0004	.0000	2.							
.0090	-0.	23.	-0.	-10.	-0.	5.	-0.0000	-0.0001	.0000	-0.0000	-0.0005	.0000	5.							
.0100	-0.	38.	-0.	-17.	-0.	9.	-0.0000	-0.0002	.0000	-0.0001	-0.0002	.0000	8.							
.0110	-0.	57.	-0.	-25.	-0.	14.	.0001	-0.0003	-0.0000	-0.0001	.0008	.0001	12.							
.0120	-0.	83.	0.	-37.	-0.	20.	.0002	-0.0004	-0.0002	-0.0002	.0027	.0001	17.							
.0130	0.	118.	0.	-52.	-0.	28.	.0005	-0.0006	-0.0003	-0.0003	.0055	.0002	24.							
.0140	-0.	161.	-0.	-71.	0.	39.	.0008	-0.0008	-0.0006	-0.0005	.0091	.0003	32.							
.0150	0.	210.	0.	-92.	-0.	50.	.0011	-0.0010	-0.0008	-0.0006	.0132	.0005	42.							
.0160	0.	241.	0.	-115.	-0.	62.	.0013	-0.0012	-0.0011	-0.0008	.0172	.0007	52.							
.0170	-0.	311.	-0.	-137.	0.	74.	.0014	-0.0015	-0.0014	-0.0010	.0207	.0009	62.							
.0180	-0.	356.	-0.	-156.	0.	85.	.0013	-0.0017	-0.0016	-0.0012	.0231	.0012	71.							
.0190	-0.	386.	0.	-170.	0.	92.	.0012	-0.0019	-0.0017	-0.0014	.0249	.0013	77.							
.0200	0.	387.	0.	-170.	-0.	92.	.0011	-0.0019	-0.0019	-0.0015	.0264	.0014	78.							
.0210	-0.	352.	-0.	-155.	0.	84.	.0012	-0.0018	-0.0023	-0.0017	.0286	.0013	71.							
.0220	0.	282.	0.	-124.	0.	67.	.0017	-0.0014	-0.0028	-0.0018	.0338	.0009	57.							
.0230	0.	177.	0.	-78.	-0.	42.	.0027	-0.0009	-0.0034	-0.0017	.0407	.0003	35.							
.0240	-0.	58.	0.	-26.	-0.	14.	.0033	-0.0004	-0.0039	-0.0016	.0455	-0.0006	12.							
.0250	0.	-40.	0.	18.	-0.	-10.	.0048	.0001	-0.0040	-0.0014	.0454	-0.0018	8.							
.0260	0.	-101.	0.	44.	-0.	-24.	.0057	.0005	-0.0037	-0.0011	.0419	-0.0030	20.							
.0270	0.	-136.	0.	60.	-0.	-32.	.0069	.0007	-0.0033	-0.0008	.0401	-0.0043	27.							
.0280	0.	-180.	0.	79.	-0.	-43.	.0079	.0010	-0.0026	-0.0002	.0366	-0.0055	36.							
.0290	-0.	-239.	0.	118.	-0.	-64.	.0081	.0015	-0.0016	.0005	.0262	-0.0065	54.							
.0300	-0.	-405.	-0.	178.	0.	-97.	.0080	.0022	-0.0006	.0013	.0167	-0.0071	81.							
.0310	-0.	-562.	-0.	247.	0.	-134.	.0078	.0030	.0002	.0023	.0114	-0.0073	113.							
.0320	0.	-750.	0.	329.	0.	-179.	.0070	.0039	.0009	.0033	.0052	-0.0070	150.							
.0330	0.	-1002.	0.	440.	0.	-239.	.0052	.0051	.0017	.0046	-0.0012	-0.0062	201.							
.0340	0.	-1303.	0.	573.	0.	-311.	.0042	.0065	.0026	.0062	-0.0052	-0.0049	261.							
.0350	0.	-1590.	0.	699.	0.	-379.	.0021	.0078	.0039	.0079	-0.0107	-0.0032	319.							
.0360	0.	-1819.	0.	799.	0.	-434.	-0.0002	.0088	.0057	.0096	-0.0213	-0.0010	365.							
.0370	0.	-1995.	0.	877.	0.	-476.	-0.0042	.0096	.0078	.0113	-0.0313	.0014	400.							
.0380	0.	-2136.	0.	929.	0.	-510.	-0.0071	.0103	.0098	.0128	-0.0362	.0039	429.							
.0390	0.	-2257.	0.	982.	0.	-539.	-0.0099	.0108	.1101	.0141	-0.0404	.0062	453.							
.0400	0.	-2371.	0.	1040.	0.	-586.	-0.0127	.0117	.0123	.0151	-0.0479	.0082	476.							
.0410	-0.	-2440.	-0.	1072.	0.	-582.	-0.0147	.0116	.0128	.0155	-0.0512	.0095	490.							
.0420	0.	-2396.	0.	1053.	0.	-573.	-0.0156	.0113	.0127	.0154	-0.0511	.0102	481.							
.0430	0.	-2229.	0.	979.	0.	-522.	-0.0158	.0105	.0123	.0145	-0.0535	.0100	447.							
.0440	0.	-2021.	-0.	808.	0.	-482.	-0.0151	.0096	.0116	.0137	-0.0574	.0090	405.							
.0450	0.	-1791.	0.	737.	0.	-427.	-0.0131	.0085	.0104	.0110	-0.0574	.0071	359.							

ADLPIPE PAGE 1006

DIG/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.38.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

.0350	0.	-1590.	0.	699.	0.	-379.	.0021	.0078	.0039	.0079	-.0107	-.0032	319.
.0360	0.	-1819.	0.	709.	0.	-434.	-.0009	.0088	.0057	.0096	-.0213	-.0010	365.
.0370	0.	-1995.	0.	877.	0.	-476.	-.0042	.0096	.0078	.0113	-.0313	.0014	400.
.0380	0.	-2136.	0.	979.	0.	-510.	-.0071	.0103	.0096	.0128	-.0362	.0039	429.
.0390	0.	-2257.	0.	992.	0.	-579.	-.0099	.0108	.0111	.0141	-.0404	.0062	453.
.0400	0.	-2371.	0.	1042.	0.	-568.	-.0127	.0113	.0123	.0151	-.0479	.0082	476.
.0410	-0.	-2440.	-0.	1072.	0.	-582.	-.0147	.0116	.0128	.0155	-.0512	.0095	490.
.0420	0.	-2396.	0.	1053.	0.	-572.	-.0156	.0113	.0127	.0154	-.0511	.0102	481.
.0430	0.	-2229.	0.	979.	0.	-532.	-.0158	.0105	.0123	.0145	-.0535	.0100	447.
.0440	0.	-2021.	-0.	888.	0.	-482.	-.0151	.0096	.0116	.0132	-.0574	.0090	405.
.0450	0.	-1791.	0.	787.	0.	-427.	-.0131	.0085	.0104	.0110	-.0574	.0071	359.

ADLPIPE PAGE 1506

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.38.

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	37	MEMBER	1	SEQUENCE	559	LOCATION	END	TYPE				RU			STRESS (PSI)
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)			
.0460	0.	-1443.	0.	634.	0.	-344.	-.0102	.0069	.0092	.0098	-.0554	.0046	289.		
.0470	0.	-935.	-0.	411.	0.	-223.	-.0073	.0047	.0080	.0075	-.0566	.0018	188.		
.0480	0.	-374.	0.	165.	0.	-39.	-.0042	.0022	.0069	.0051	-.0574	-.0010	75.		
.0490	0.	132.	0.	-58.	0.	32.	-.0007	-.0001	.0053	.0029	-.0504	-.0037	27.		
.0500	0.	585.	0.	-257.	0.	139.	.0029	-.0022	.0035	.0008	-.0378	-.0060	117.		
.0510	0.	999.	0.	-439.	0.	238.	.0059	-.0041	.0016	-.0012	-.0247	-.0076	201.		
.0520	0.	1328.	0.	-584.	-0.	317.	.0080	-.0056	-.0002	-.0029	-.0118	-.0085	267.		
.0530	0.	1542.	0.	-678.	-0.	368.	.0092	-.0067	-.0019	-.0043	.0011	-.0086	309.		
.0540	0.	1683.	-0.	-739.	-0.	402.	.0094	-.0074	-.0035	-.0055	.0131	-.0079	338.		
.0550	0.	1763.	-0.	-774.	-0.	421.	.0088	-.0079	-.0049	-.0064	.0236	-.0063	354.		
.0560	0.	1737.	-0.	-763.	-0.	414.	.0074	-.0080	-.0061	-.0070	.0336	-.0042	349.		
.0570	-0.	1623.	0.	-712.	-0.	387.	.0057	-.0076	-.0071	-.0073	.0436	-.0018	326.		
.0580	-0.	1493.	-0.	-656.	-0.	356.	.0038	-.0072	-.0079	-.0074	.0532	.0008	300.		
.0590	-0.	1312.	-0.	-576.	-0.	313.	.0020	-.0065	-.0085	-.0073	.0618	.0033	263.		
.0600	-0.	953.	0.	-419.	-0.	227.	.0004	-.0050	-.0091	-.0069	.0696	.0053	191.		
.0610	-0.	411.	-0.	-181.	-0.	98.	-.0009	-.0027	-.0096	-.0062	.0761	.0067	82.		
.0620	-0.	-182.	-0.	80.	-0.	-43.	-.0016	-.0001	-.0101	-.0053	.0799	.0074	36.		
.0630	-0.	-778.	0.	342.	-0.	-186.	-.0019	.0026	-.0103	-.0044	.0800	.0074	156.		
.0640	-0.	-1453.	-0.	639.	-0.	-347.	-.0017	.0057	-.0103	-.0032	.0766	.0066	292.		
.0650	-0.	-2203.	-0.	969.	-0.	-526.	-.0008	.0092	-.0101	-.0019	.0715	.0051	442.		
.0660	-0.	-2881.	-0.	1266.	-0.	-688.	.0006	.0123	-.0096	-.0005	.0659	.0032	578.		
.0670	-0.	-3395.	-0.	1492.	-0.	-810.	.0021	.0148	-.0086	.0008	.0596	.0012	681.		
.0680	-0.	-3767.	-0.	1655.	-0.	-899.	.0036	.0168	-.0074	.0021	.0535	-.0005	756.		
.0690	-0.	-4004.	-0.	1759.	-0.	-955.	.0049	.0178	-.0059	.0033	.0491	-.0018	803.		
.0700	-0.	-4084.	-0.	1796.	-0.	-970.	.0057	.0182	-.0043	.0043	.0455	-.0024	816.		
.0710	0.	-3954.	0.	1737.	-0.	-943.	.0058	.0178	-.0027	.0050	.0419	-.0023	793.		
.0720	0.	-3707.	0.	1629.	-0.	-884.	.0052	.0167	-.0013	.0055	.0387	-.0015	744.		
.0730	0.	-3206.	0.	1448.	-0.	-786.	.0039	.0148	-.0000	.0054	.0344	-.0000	661.		
.0740	0.	-2619.	0.	1101.	0.	-642.	.0016	.0120	.0014	.0049	.0250	.0021	539.		
.0750	0.	-1948.	0.	856.	0.	-485.	-.0013	.0086	.0028	.0038	.0103	.0045	391.		
.0760	0.	-1163.	0.	511.	0.	-277.	-.0045	.0049	.0042	.0024	-.0059	.0068	233.		
.0770	-0.	-339.	-0.	149.	0.	-81.	-.0074	.0011	.0052	.0006	-.0205	.0090	68.		
.0780	-0.	511.	-0.	-237.	0.	127.	-.0095	-.0030	.0058	-.0018	-.0326	.0106	107.		
.0790	-0.	1362.	-0.	-598.	0.	325.	-.0107	-.0069	.0058	-.0045	-.0401	.0116	273.		
.0800	-0.	2037.	0.	-895.	0.	486.	-.0105	-.0101	.0048	-.0076	-.0413	.0117	409.		
.0810	-0.	2521.	-0.	-1108.	0.	601.	-.0092	-.0125	.0029	-.0108	-.0381	.0108	506.		
.0820	-0.	2837.	-0.	-1248.	0.	677.	-.0071	-.0141	.0003	-.0144	-.0335	.0093	569.		
.0830	-0.	2971.	-0.	-1305.	0.	709.	-.0045	-.0150	-.0031	-.0183	-.0281	.0071	76.		

ADLPIPE PAGE 1507

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.38.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.0730	0.	-1296.	0.	1448.	-0.	-736.	.0039	.0148	-.0000	.0054	.0344	-.0000	661.
.0740	0.	-2639.	0.	1181.	0.	-642.	.0016	.0120	.0014	.0049	.0250	.0021	539.
.0750	0.	-1948.	0.	856.	0.	-465.	-.0013	.0006	.0028	.0038	.0103	.0045	391.
.0760	0.	-1163.	0.	511.	0.	-277.	-.0045	.0049	.0042	.0024	-.0059	.0068	233.
.0770	-0.	-339.	-0.	149.	0.	-31.	-.0074	.0011	.0052	.0006	-.0205	.0090	68.
.0780	-0.	511.	-0.	-217.	0.	127.	-.0009	-.0030	.0058	-.0018	-.0326	.0106	107.
.0790	-0.	1362.	-0.	-598.	0.	325.	-.0107	-.0069	.0058	-.0045	-.0401	.0116	273.
.0800	-0.	2037.	0.	-895.	0.	456.	-.0105	-.0101	.0045	-.0076	-.0413	.0117	409.
.0810	-0.	2521.	-0.	-1108.	0.	601.	-.0092	-.0125	.0029	-.0108	-.0381	.0108	506.
.0820	-0.	2837.	-0.	-1246.	0.	777.	-.0071	-.0141	.0003	-.0144	-.0335	.0093	569.
.0830	-0.	2971.	-0.	-1305.	0.	799.	-.0045	-.0150	-.0031	-.0183	-.0281	.0071	596.

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	37	MEMBER	1	SEQUENCE	559	LOCATION	END	TYPE	RU							
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)			
.0840	-0.	2892.	-0.	-1271.	-0.	690.	-.0019	-.0149	-.0069	-.0222	-.0233	.0047	580.			
.0850	-0.	2613.	-0.	-1148.	0.	623.	.0002	-.0139	-.0109	-.0261	-.0222	.0023	524.			
.0860	-0.	2176.	-0.	-956.	-0.	519.	.0015	-.0122	-.0151	-.0300	-.0246	-.0002	437.			
.0870	-0.	1606.	-0.	-706.	-0.	383.	.0020	-.0100	-.0192	-.0336	-.0272	.0012	322.			
.0880	-0.	917.	-0.	-403.	-0.	219.	.0017	-.0073	-.0234	-.0369	-.0280	-.0017	184.			
.0890	-0.	139.	-0.	-61.	-0.	33.	.0005	-.0042	-.0274	-.0396	-.0271	-.0013	28.			
.0900	-0.	-704.	-0.	309.	-0.	-168.	-.0017	-.0008	-.0311	-.0417	-.0246	.0001	141.			
.0910	-0.	-1601.	-0.	703.	-0.	-382.	-.0045	.0029	-.0343	-.0430	-.0201	.0024	321.			
.0920	-0.	-2524.	-0.	1109.	-0.	-602.	-.0080	.0067	-.0367	-.0433	-.0153	.0053	506.			
.0930	-0.	-3430.	-0.	1507.	-0.	-818.	-.0119	.0106	-.0382	-.0428	-.0118	.0085	688.			
.0940	-0.	-4306.	-0.	1892.	-0.	-1027.	-.0157	.0143	-.0387	-.0412	-.0095	.0117	864.			
.0950	-0.	-5178.	-0.	2275.	-0.	-1236.	-.0192	.0182	-.0382	-.0388	-.0076	.0146	1039.			
.0960	-0.	-6066.	-0.	2665.	-0.	-1447.	-.0220	.0223	-.0370	-.0354	-.0059	.0168	1217.			
.0970	-0.	-6945.	-0.	3051.	-0.	-1657.	-.0239	.0264	-.0350	-.0312	-.0040	.0180	1393.			
.0980	-0.	-7792.	-0.	3424.	-0.	-1859.	-.0247	.0305	-.0327	-.0265	-.0012	.0180	1563.			
.0990	-0.	-8617.	-0.	3786.	0.	-2056.	-.0240	.0347	-.0300	-.0212	.0028	.0167	1729.			
.1000	-0.	-9426.	-0.	4142.	-0.	-2249.	-.0219	.0389	-.0270	-.0155	.0070	.0138	1891.			
.1010	-0.	-10162.	-0.	4465.	0.	-2425.	-.0184	.0428	-.0238	-.0095	.0099	.0094	2039.			
.1020	-0.	-10734.	-0.	4716.	0.	-2561.	-.0138	.0462	-.0201	-.0035	.0096	.0037	2154.			
.1030	-0.	-11085.	-0.	4871.	-0.	-2645.	-.0083	.0486	-.0159	.0026	.0046	-.0031	2224.			
.1040	-0.	-11200.	-0.	4921.	-0.	-2672.	-.0023	.0500	-.0112	.0086	-.0049	-.0107	2247.			
.1050	-0.	-11038.	0.	4850.	0.	-2634.	.0041	.0503	-.0060	.0146	-.0167	-.0188	2215.			
.1060	0.	-10557.	0.	4639.	0.	-2519.	.0108	.0491	-.0006	.0204	-.0282	-.0268	2118.			
.1070	0.	-9785.	0.	4300.	0.	-2335.	.0176	.0467	.0049	.0260	-.0370	-.0345	1963.			
.1080	0.	-8792.	0.	3863.	0.	-2098.	.0242	.0432	.0106	.0316	-.0428	-.0415	1764.			
.1090	0.	-7532.	0.	3310.	0.	-1797.	.0304	.0385	.0164	.0370	-.0458	-.0475	1511.			
.1100	0.	-5932.	0.	2607.	0.	-1415.	.0362	.0323	.0223	.0420	-.0416	-.0522	1190.			
.1110	0.	-4267.	0.	1875.	0.	-1018.	.0408	.0256	.0283	.0469	-.0367	-.0554	856.			
.1120	0.	-2840.	0.	1248.	0.	-678.	.0438	.0200	.0345	.0521	-.0350	-.0574	570.			
.1130	0.	-1545.	0.	679.	0.	-369.	.0453	.0149	.0405	.0571	-.0325	-.0578	310.			
.1140	0.	-214.	0.	94.	0.	-51.	.0454	.0094	.0458	.0613	-.0274	-.0565	43.			
.1150	0.	921.	0.	-404.	0.	220.	.0441	.0046	.0502	.0647	-.0213	-.0539	185.			
.1160	0.	1532.	0.	-673.	0.	365.	.0415	.0021	.0530	.0677	-.0137	-.0502	307.			
.1170	0.	1702.	0.	-748.	0.	406.	.0379	.0013	.0542	.0700	-.0041	-.0457	342.			
.1180	0.	1681.	0.	-738.	0.	401.	.0335	.0013	.0538	.0710	.0069	-.0406	337.			
.1190	0.	1356.	0.	-596.	0.	324.	.0279	.0024	.0524	.0710	.0104	-.0351	272.			
.1200	0.	501.	0.	-220.	0.	120.	.0215	.0058	.0502	.0708	.0065	-.0299	100.			
.1210	0.	-720.	0.	316.	0.	-172.	.0153	.0109	.0474	.0704	.0028	-.0251	145.			

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

.1110	0.	-4267.	0.	1875.	0.	-1012.	.0408	.0256	.0283	.0469	-.0367	-.0554	856.
.1120	0.	-2840.	0.	1240.	0.	-678.	.0438	.0200	.0345	.0521	-.0350	-.0574	570.
.1130	0.	-1545.	0.	679.	0.	-369.	.0453	.0149	.0405	.0571	-.0325	-.0578	310.
.1140	0.	-214.	0.	94.	0.	-51.	.0454	.0094	.0458	.0613	-.0274	-.0565	43.
.1150	0.	921.	0.	-404.	0.	220.	.0441	.0146	.0502	.0647	-.0213	-.0539	185.
.1160	0.	1532.	0.	-673.	0.	365.	.0415	.0021	.0530	.0677	-.0137	-.0502	307.
.1170	0.	1703.	0.	-748.	0.	406.	.0379	.0013	.0542	.0700	-.0041	-.0457	342.
.1180	0.	1621.	0.	-738.	0.	401.	.0335	.0013	.0532	.0710	.0039	-.0406	337.
.1190	0.	1358.	0.	-596.	0.	324.	.0279	.0024	.0524	.0710	.0104	-.0351	272.
.1200	0.	501.	0.	-220.	0.	120.	.0215	.0028	.0507	.0700	.0065	-.0299	100.
.1210	0.	-720.	0.	316.	0.	-172.	.0153	.0109	.0474	.0704	.0028	-.0251	145.

ADLPIPE PAGE 1502

DIS/ADLPIPE ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.38.

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	DX	DY	DZ	RX	RY	RZ	STRESS
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.1220	0.	-1980.	0.	670.	0.	-473.	.0095	.0160	.0444	.0695	-.0019	-.0208	397.
.1230	0.	-3318.	0.	1458.	0.	-772.	.0044	.0216	.0413	.0685	-.0070	-.0171	666.
.1240	0.	-4903.	0.	2154.	0.	-1170.	.0000	.0283	.0385	.0680	-.0116	-.0144	984.
.1250	0.	-6548.	0.	2877.	0.	-1562.	-.0032	.0353	.0359	.0680	-.0130	-.0124	1314.
.1260	0.	-7913.	0.	3477.	0.	-1888.	-.0054	.0412	.0338	.0681	-.0098	-.0110	1588.
.1270	0.	-8992.	0.	3951.	0.	-2146.	-.0070	.0459	.0326	.0685	-.0079	-.0100	1804.
.1280	0.	-9945.	0.	4370.	0.	-2373.	-.0079	.0501	.0322	.0696	-.0049	-.0095	1995.
.1290	0.	-10623.	0.	4668.	0.	-2535.	-.0081	.0532	.0327	.0712	-.0009	-.0095	2132.
.1300	0.	-10737.	0.	4718.	0.	-2562.	-.0079	.0539	.0344	.0727	-.0001	-.0097	2154.
.1310	0.	-10320.	0.	4535.	0.	-2462.	-.0074	.0522	.0372	.0739	-.0043	-.0100	2071.
.1320	0.	-9579.	0.	4209.	0.	-2286.	-.0070	.0491	.0408	.0752	-.0153	-.0106	1922.
.1330	0.	-8476.	0.	3724.	0.	-2022.	-.0061	.0445	.0449	.0763	-.0266	-.0114	1701.
.1340	0.	-6861.	0.	3015.	0.	-1637.	-.0046	.0375	.0490	.0768	-.0351	-.0124	1377.
.1350	0.	-4885.	0.	2146.	0.	-1166.	-.0022	.0290	.0528	.0767	-.0400	-.0136	980.
.1360	0.	-2859.	0.	1256.	0.	-682.	.0010	.0202	.0561	.0764	-.0403	-.0154	574.
.1370	0.	-822.	0.	361.	0.	-196.	.0050	.0115	.0591	.0760	-.0399	-.0179	165.
.1380	0.	1327.	0.	-583.	0.	317.	.0098	.0022	.0617	.0749	-.0399	-.0211	266.
.1390	0.	3441.	0.	-1512.	0.	821.	.0149	-.0070	.0640	.0735	-.0432	-.0250	690.
.1400	0.	5230.	0.	-2298.	0.	1248.	.0204	-.0146	.0660	.0721	-.0495	-.0296	1049.
.1410	0.	6645.	0.	-2920.	0.	1585.	.0264	-.0206	.0674	.0709	-.0546	-.0350	1333.
.1420	0.	7791.	0.	-3424.	0.	1859.	.0324	-.0254	.0682	.0696	-.0500	-.0406	1563.
.1430	0.	8579.	-0.	-3770.	0.	2047.	.0385	-.0287	.0683	.0683	-.0538	-.0463	1721.
.1440	0.	8027.	0.	-3878.	0.	2106.	.0442	-.0296	.0677	.0675	-.0545	-.0518	1771.
.1450	0.	8574.	0.	-3767.	0.	2046.	.0496	-.0283	.0663	.0671	-.0500	-.0567	1720.
.1460	0.	7982.	0.	-3507.	0.	1904.	.0541	-.0255	.0642	.0668	-.0504	-.0605	1602.
.1470	0.	7047.	0.	-3096.	0.	1681.	.0570	-.0214	.0619	.0668	-.0416	-.0628	1414.
.1480	0.	5685.	0.	-2498.	-0.	1357.	.0579	-.0154	.0594	.0673	-.0329	-.0634	1141.
.1490	0.	4011.	0.	-1762.	0.	957.	.0567	-.0081	.0568	.0682	-.0249	-.0622	805.
.1500	0.	2222.	0.	-976.	-0.	530.	.0531	-.0004	.0544	.0692	-.0188	-.0589	446.
.1510	0.	337.	0.	-148.	-0.	80.	.0476	.0077	.0519	.0702	-.0127	-.0535	68.
.1520	0.	-1698.	0.	746.	-0.	-405.	.0403	.0163	.0496	.0715	-.0068	-.0465	341.
.1530	0.	-3760.	0.	1652.	0.	-697.	.0318	.0250	.0472	.0728	.0012	-.0382	754.
.1540	0.	-5633.	0.	2475.	0.	-1344.	.0226	.0327	.0449	.0737	.0102	-.0290	1130.
.1550	0.	-7246.	0.	3184.	0.	-1729.	.0131	.0393	.0427	.0742	.0202	-.0194	1454.
.1560	0.	-8607.	0.	3782.	0.	-2054.	.0042	.0448	.0405	.0742	.0333	-.0100	1727.
.1570	0.	-9607.	0.	4221.	0.	-2292.	-.0037	.0486	.0385	.0736	.0447	-.0016	1928.
.1580	0.	-10108.	0.	4441.	0.	-2412.	-.0101	.0503	.0365	.0719	.0543	.0055	2028.
.1590	0.	-10124.	0.	4449.	0.	-2416.	-.0145	.0498	.0346	.0691	.0522	.0109	2031.

ADLPIPE PAGE 1509

DIS/ADLPIPE ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.38.

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

.1490	0.	4011.	0.	-1762.	0.	957.	.0567	-.0001	.0568	.0682	-.0249	-.0622	805.
.1500	0.	2222.	0.	-976.	-0.	530.	.0531	-.0004	.0544	.0692	-.0188	-.0589	448.
.1510	0.	377.	0.	-148.	-0.	80.	.0476	.0077	.0519	.0702	-.0127	-.0535	68.
.1520	0.	-1698.	0.	746.	-0.	-405.	.0403	.0163	.0496	.0715	-.0068	-.0465	341.
.1530	0.	-760.	0.	1610.	0.	-697.	.0310	.0250	.0470	.0728	.0012	-.0382	754.
.1540	0.	-5673.	0.	2475.	0.	-1344.	.0226	.0327	.0449	.0737	.0102	-.0290	1130.
.1550	0.	-7246.	0.	3384.	0.	-1729.	.0131	.0393	.0427	.0742	.0202	-.0194	1454.
.1560	0.	-8607.	0.	3702.	0.	-2054.	.0042	.0448	.0405	.0742	.0333	-.0100	1727.
.1570	0.	-9607.	0.	4221.	0.	-2292.	-.0037	.0486	.0385	.0736	.0447	-.0016	1928.
.1580	0.	-10103.	0.	4441.	0.	-2412.	-.0101	.0503	.0365	.0719	.0542	.0055	2028.
.1590	0.	-10124.	0.	4449.	0.	-2416.	-.0145	.0490	.0346	.0691	.0522	.0109	2031.

ADLPIPE PAGE 1509

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.38.

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	37	MEMBER	1	SEQUENCE	559	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)		
.1600	0.	-9740.	0.	4280.	0.	-2324.	-.0168	.0477	.0326	.0655	.0657	.0140	1954.		
.1610	0.	-8949.	0.	3932.	-0.	-2135.	-.0171	.0438	.0306	.0608	.0555	.0150	1796.		
.1620	-0.	-7720.	-0.	3392.	0.	-1842.	-.0150	.0379	.0284	.0551	.0652	.0139	1549.		
.1630	0.	-6138.	0.	2697.	0.	-1465.	-.0112	.0306	.0261	.0485	.0627	.0110	1232.		
.1640	0.	-4372.	0.	1921.	-0.	-1043.	-.0061	.0225	.0236	.0414	.0585	.0067	877.		
.1650	0.	-2527.	0.	1110.	-0.	-603.	.0000	.0141	.0211	.0341	.0542	.0013	507.		
.1660	0.	-665.	0.	292.	-0.	-159.	.0064	.0056	.0185	.0266	.0483	-.0046	133.		
.1670	0.	1082.	0.	-475.	-0.	258.	.0126	-.0024	.0160	.0193	.0429	-.0105	217.		
.1680	0.	2557.	0.	-1124.	-0.	610.	.0182	-.0092	.0133	.0124	.0378	-.0159	513.		
.1690	0.	3685.	0.	-1619.	-0.	879.	.0226	-.0145	.0106	.0060	.0344	-.0204	739.		
.1700	0.	4449.	0.	-1955.	-0.	1061.	.0256	-.0182	.0076	.0002	.0322	-.0236	893.		
.1710	0.	4797.	0.	-2108.	-0.	1145.	.0268	-.0201	.0043	-.0052	.0294	-.0253	962.		
.1720	0.	4648.	0.	-2042.	-0.	1109.	.0264	-.0199	.0005	-.0100	.0296	-.0256	933.		
.1730	0.	4005.	0.	-1760.	-0.	955.	.0243	-.0175	-.0033	-.0144	.0303	-.0245	803.		
.1740	0.	2949.	-0.	-1296.	-0.	704.	.0208	-.0134	-.0086	-.0185	.0312	-.0222	592.		
.1750	-0.	1555.	-0.	-683.	-0.	371.	.0163	-.0079	-.0139	-.0223	.0327	-.0189	312.		
.1760	-0.	-122.	-0.	54.	-0.	-29.	.0109	-.0011	-.0196	-.0260	.0317	-.0149	25.		
.1770	-0.	-2002.	-0.	880.	-0.	-478.	.0051	.0065	-.0253	-.0295	.0289	-.0106	402.		
.1780	-0.	-3959.	-0.	1740.	-0.	-945.	-.0009	.0145	-.0310	-.0329	.0225	-.0063	794.		
.1790	-0.	-5897.	-0.	2591.	-0.	-1407.	-.0065	.0224	-.0366	-.0362	.0137	-.0023	1183.		
.1800	-0.	-7753.	-0.	3407.	-0.	-1650.	-.0116	.0300	-.0418	-.0393	.0029	.0013	1556.		
.1810	-0.	-9441.	-0.	4149.	-0.	-2253.	-.0161	.0369	-.0465	-.0423	-.0107	.0043	1894.		
.1820	-0.	-10862.	-0.	4773.	-0.	-2592.	-.0194	.0427	-.0508	-.0451	-.0222	.0068	2179.		
.1830	-0.	-11954.	-0.	5253.	-0.	-2852.	-.0216	.0471	-.0545	-.0477	-.0318	.0088	2398.		
.1840	-0.	-12706.	-0.	5583.	-0.	-3032.	-.0230	.0501	-.0574	-.0500	-.0402	.0104	2549.		
.1850	-0.	-13093.	-0.	5753.	-0.	-3124.	-.0238	.0516	-.0594	-.0519	-.0474	.0118	2627.		
.1860	-0.	-13070.	-0.	5743.	-0.	-3118.	-.0242	.0512	-.0605	-.0536	-.0542	.0132	2622.		
.1870	-0.	-12643.	-0.	5555.	-0.	-3017.	-.0243	.0492	-.0607	-.0550	-.0589	.0146	2537.		
.1880	-0.	-11869.	-0.	5215.	-0.	-2832.	-.0245	.0456	-.0601	-.0562	-.0632	.0163	2381.		
.1890	-0.	-10796.	-0.	4744.	-0.	-2576.	-.0246	.0408	-.0589	-.0572	-.0659	.0181	2166.		
.1900	-0.	-9456.	-0.	4155.	-0.	-2256.	-.0247	.0348	-.0575	-.0582	-.0652	.0202	1897.		
.1910	-0.	-7917.	-0.	3479.	0.	-1889.	-.0248	.0279	-.0559	-.0591	-.0625	.0224	1588.		
.1920	-0.	-6285.	-0.	2761.	-0.	-1499.	-.0248	.0206	-.0543	-.0601	-.0572	.0244	1261.		
.1930	-0.	-4640.	-0.	2039.	-0.	-1107.	-.0246	.0133	-.0529	-.0610	-.0502	.0261	931.		
.1940	-0.	-3030.	-0.	1331.	-0.	-723.	-.0240	.0061	-.0517	-.0620	-.0425	.0273	608.		
.1950	-0.	-1518.	-0.	667.	-0.	-362.	-.0229	-.0006	-.0506	-.0629	-.0339	.0277	305.		
.1960	-0.	-189.	-0.	83.	-0.	-45.	-.0210	-.0064	-.0496	-.0636	-.0244	.0272	38.		
.1970	-0.	399.	-0.	-395.	-0.	215.	-.0182	-.0111	-.0487	-.0640	-.0137	.0256	180.		

ADLPIPE PAGE 1510

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.38.

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

.1170	-0.	-12643.	-0.	5555.	-0.	-3017.	-0.	.243	.0492	-.0607	-.0550	-.0589	.0146	2537.
.1380	-0.	-11869.	-0.	5215.	-0.	-2832.	-0.	.245	.0456	-.0601	-.0562	-.0532	.0163	2381.
.1890	-0.	-10796.	-0.	4744.	-0.	-2576.	-0.	.246	.0408	-.0589	-.0572	-.0659	.0181	2166.
.1900	-0.	-9456.	-0.	4155.	-0.	-2256.	-0.	.0247	.0348	-.0575	-.0582	-.0652	.0202	1897.
.1910	-0.	-7917.	-0.	3479.	-0.	-1889.	-0.	.0248	.0279	-.0559	-.0591	-.0525	.0224	1588.
.1920	-0.	-6225.	-0.	2761.	-0.	-1499.	-0.	.0248	.0206	-.0543	-.0601	-.0572	.0244	1261.
.1930	-0.	-4640.	-0.	2039.	-0.	-1107.	-0.	.0246	.0133	-.0529	-.0610	-.0502	.0261	931.
.1940	-0.	-3030.	-0.	1331.	-0.	-723.	-0.	.0240	.0061	-.0517	-.0620	-.0425	.0273	608.
.1950	-0.	-1518.	-0.	667.	-0.	-362.	-0.	.0229	-.0006	-.0506	-.0629	-.0339	.0277	305.
.1960	-0.	-189.	-0.	53.	-0.	-45.	-0.	.0210	-.0064	-.0496	-.0636	-.0244	.0272	38.
.1970	-0.	899.	-0.	-395.	-0.	215.	-0.	-.0182	-.0111	-.0487	-.0640	-.0137	.0256	180.

ADLPIPE PAGE 1510

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.38.

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	RU	STRESS
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	(PSI)
.1980	-0.	1720.	-0.	-756.	-0.	410.	345.
.1990	-0.	2241.	-0.	-985.	-0.	535.	450.
.2000	-0.	2436.	-0.	-1070.	-0.	581.	489.
.2010	-0.	2310.	-0.	-1015.	-0.	551.	464.
.2020	-0.	1900.	-0.	-835.	-0.	453.	381.
.2030	-0.	1236.	-0.	-543.	-0.	295.	248.
.2040	-0.	354.	-0.	-156.	-0.	84.	71.
.2050	-0.	-667.	-0.	302.	-0.	-164.	138.
.2060	-0.	-1815.	-0.	797.	-0.	-433.	364.
.2070	-0.	-2968.	0.	1304.	-0.	-708.	595.
.2080	-0.	-4097.	-0.	1800.	-0.	-978.	822.
.2090	-0.	-5150.	-0.	2263.	-0.	-1229.	1033.
.2100	-0.	-6075.	-0.	2669.	-0.	-1449.	1219.
.2110	-0.	-6832.	-0.	3002.	-0.	-1630.	1371.
.2120	-0.	-7396.	-0.	3250.	-0.	-1765.	1484.
.2130	-0.	-7739.	-0.	3401.	-0.	-1847.	1553.
.2140	-0.	-7849.	-0.	3449.	-0.	-1873.	1575.
.2150	-0.	-7732.	-0.	3397.	-0.	-1845.	1551.
.2160	-0.	-7401.	0.	3252.	0.	-1766.	1485.
.2170	-0.	-6863.	0.	3015.	-0.	-1637.	1377.
.2180	0.	-6124.	0.	2691.	0.	-1461.	1229.
.2190	-0.	-5221.	0.	2294.	0.	-1248.	1047.
.2200	-0.	-4210.	-0.	1850.	0.	-1005.	845.
.2210	0.	-3145.	0.	1382.	0.	-750.	631.
.2220	0.	-2064.	0.	907.	0.	-493.	414.
.2230	-0.	-1011.	-0.	444.	0.	-241.	203.
.2240	0.	-40.	0.	18.	0.	-10.	8.
.2250	0.	802.	0.	-352.	0.	191.	161.
.2260	0.	1487.	0.	-653.	0.	355.	298.
.2270	0.	1991.	0.	-875.	0.	475.	399.
.2280	0.	2296.	0.	-1009.	0.	548.	461.
.2290	0.	2400.	0.	-1055.	0.	573.	482.
.2300	0.	2316.	0.	-1018.	0.	553.	465.
.2310	0.	2061.	0.	-906.	0.	492.	414.
.2320	0.	1655.	0.	-727.	0.	395.	332.
.2330	0.	1128.	0.	-496.	0.	269.	226.
.2340	0.	520.	0.	-228.	0.	124.	104.
.2350	0.	-141.	0.	62.	-0.	-34.	28.

ADLPIPE PAGE 1511

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.38.

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

.2240	0.	802.	0.	-372.	0.	191.	.0005	.0018	.0500	.0610	.0049	.0059	161.
.2260	0.	1427.	0.	-672.	0.	355.	.0044	-.0008	.0512	.0620	-.0022	.0011	298.
.2270	0.	1921.	0.	-875.	0.	475.	.0080	-.0028	.0513	.0620	-.0098	-.0037	399.
.2280	0.	2276.	0.	-1079.	0.	548.	.0113	-.0037	.0503	.0610	-.0177	-.0085	461.
.2290	0.	2430.	0.	-1255.	0.	573.	.0140	-.0047	.0483	.0591	-.0257	-.0130	482.
.2300	0.	2316.	0.	-1017.	0.	552.	.0162	-.0040	.0454	.0566	-.0328	-.0172	465.
.2310	0.	2061.	0.	-908.	0.	492.	.0179	-.0030	.0419	.0536	-.0388	-.0208	414.
.2320	0.	1655.	0.	-727.	0.	395.	.0191	-.0014	.0382	.0505	-.0437	-.0238	332.
.2330	0.	1128.	0.	-496.	0.	269.	.0197	.0008	.0347	.0475	-.0480	-.0262	226.
.2340	0.	520.	0.	-227.	0.	114.	.0195	.0032	.0300	.0448	-.0519	-.0278	104.
.2350	0.	-141.	0.	62.	0.	-24.	.0187	.0060	.0277	.0426	-.0558	-.0285	28.

ADLPIPE PAGE 1511

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.38.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	37	MEMBER	1	SEQUENCE	559	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)
.2360	0.	-826.	0.	363.	0.	-197.		.0171	.0088	.0253	.0412	-.0598	-.0284	166.
.2370	0.	-1498.	0.	698.	0.	-358.		.0149	.0116	.0237	.0406	-.0632	-.0275	301.
.2380	0.	-2121.	0.	932.	0.	-506.		.0122	.0143	.0230	.0409	-.0652	-.0258	426.
.2390	0.	-2675.	0.	1175.	0.	-638.		.0091	.0167	.0232	.0421	-.0654	-.0234	537.
.2400	0.	-3152.	0.	1385.	0.	-752.		.0059	.0188	.0242	.0441	-.0637	-.0206	632.
.2410	0.	-3534.	0.	1553.	0.	-843.		.0026	.0206	.0259	.0470	-.0603	-.0174	709.
.2420	0.	-3793.	0.	1667.	0.	-905.		-.0006	.0218	.0283	.0504	-.0555	-.0140	761.
.2430	0.	-3914.	0.	1720.	0.	-934.		-.0034	.0225	.0312	.0542	-.0495	-.0107	785.
.2440	0.	-3898.	-0.	1713.	0.	-930.		-.0057	.0227	.0344	.0582	-.0424	-.0077	782.
.2450	0.	-3752.	0.	1648.	0.	-895.		-.0073	.0223	.0377	.0622	-.0343	-.0051	753.
.2460	0.	-3471.	0.	1525.	0.	-828.		-.0081	.0213	.0409	.0661	-.0256	-.0032	696.
.2470	0.	-3052.	-0.	1341.	0.	-728.		-.0081	.0198	.0439	.0695	-.0168	-.0020	612.
.2480	0.	-2505.	0.	1100.	0.	-598.		-.0071	.0176	.0467	.0725	-.0080	-.0015	503.
.2490	0.	-1846.	0.	811.	0.	-440.		-.0054	.0150	.0491	.0749	.0005	-.0018	370.
.2500	0.	-1105.	0.	485.	0.	-264.		-.0029	.0120	.0514	.0768	.0082	-.0028	222.
.2510	0.	-306.	0.	135.	0.	-73.		.0001	.0087	.0534	.0781	.0145	-.0045	61.
.2520	0.	526.	0.	-231.	0.	126.		.0035	.0053	.0552	.0790	.0194	-.0066	106.
.2530	0.	1363.	0.	-599.	0.	325.		.0070	.0018	.0569	.0794	.0226	-.0091	273.
.2540	0.	2166.	0.	-952.	0.	517.		.0105	-.0015	.0585	.0793	.0241	-.0117	435.
.2550	0.	2905.	0.	-1277.	0.	693.		.0137	-.0047	.0599	.0789	.0239	-.0143	583.
.2560	0.	3566.	0.	-1577.	0.	851.		.0166	-.0075	.0610	.0781	.0223	-.0168	716.
.2570	0.	4143.	0.	-1821.	0.	989.		.0190	-.0100	.0618	.0767	.0194	-.0190	831.
.2580	0.	4642.	0.	-2040.	0.	1108.		.0209	-.0123	.0621	.0747	.0156	-.0208	931.
.2590	0.	5063.	0.	-2225.	0.	1208.		.0222	-.0143	.0619	.0719	.0113	-.0221	1016.
.2600	0.	5395.	0.	-2371.	0.	1287.		.0229	-.0160	.0609	.0684	.0066	-.0229	1082.
.2610	0.	5642.	0.	-2479.	0.	1346.		.0231	-.0175	.0590	.0639	.0013	-.0233	1132.
.2620	0.	5835.	0.	-2564.	0.	1372.		.0228	-.0188	.0562	.0585	-.0042	-.0231	1171.
.2630	0.	5988.	0.	-2631.	0.	1429.		.0221	-.0201	.0523	.0519	-.0098	-.0225	1201.
.2640	0.	6090.	0.	-2678.	0.	1454.		.0210	-.0213	.0474	.0444	-.0151	-.0215	1223.
.2650	0.	6152.	0.	-2703.	0.	1468.		.0196	-.0224	.0415	.0359	-.0200	-.0201	1234.
.2660	0.	6175.	0.	-2713.	0.	1473.		.0181	-.0235	.0346	.0267	-.0242	-.0184	1239.
.2670	0.	6174.	0.	-2713.	0.	1473.		.0163	-.0245	.0269	.0169	-.0277	-.0164	1239.
.2680	0.	6139.	0.	-2698.	0.	1465.		.0144	-.0254	.0187	.0067	-.0302	-.0142	1232.
.2690	0.	6044.	0.	-2656.	0.	1442.		.0124	-.0260	.0102	-.0035	-.0317	-.0118	1213.
.2700	0.	5880.	0.	-2584.	-0.	1403.		.0103	-.0263	.0016	-.0133	-.0324	-.0092	1180.
.2710	0.	5688.	-0.	-2499.	-0.	1357.		.0081	-.0265	-.0066	-.0226	-.0323	-.0065	1141.
.2720	-0.	5516.	-0.	-2424.	-0.	1316.		.0058	-.0267	-.0142	-.0311	-.0313	-.0036	1107.
.2730	-0.	5354.	-0.	-2352.	-0.	1277.		.0035	-.0268	-.0210	-.0387	-.0296	-.0005	1074.

ADLPIPE PAGE 1512

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.38.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.2630	0.	5908.	0.	-2671.	0.	1429.	0.221	-0.0701	0.523	0.519	-0.0098	-0.0225	1201.
.2640	0.	6089.	0.	-2678.	0.	1454.	0.210	-0.0213	0.474	0.444	-0.0151	-0.0215	1223.
.2650	0.	6152.	0.	-2703.	0.	1468.	0.196	-0.0224	0.415	0.359	-0.0200	-0.0201	1234.
.2660	0.	6175.	0.	-2713.	0.	1473.	0.181	-0.0235	0.346	0.267	-0.0242	-0.0184	1239.
.2670	0.	6174.	0.	-2713.	0.	1473.	0.163	-0.0247	0.269	0.169	-0.0277	-0.0164	1239.
.2680	0.	6179.	0.	-2690.	0.	1465.	0.144	-0.0254	0.187	0.067	-0.0302	-0.0142	1232.
.2690	0.	6344.	0.	-2656.	0.	1442.	0.124	-0.0260	0.102	-0.0035	-0.0317	-0.0118	1213.
.2700	0.	5580.	0.	-2884.	0.	1403.	0.103	-0.0263	0.016	-0.0132	-0.0324	-0.0092	1180.
.2710	0.	5688.	0.	-2469.	0.	1357.	0.081	-0.0265	-0.066	-0.0226	-0.0323	-0.0065	1141.
.2720	0.	5516.	0.	-2424.	0.	1316.	0.058	-0.0267	-0.142	-0.0311	-0.0313	-0.0036	1107.
.2730	0.	5354.	0.	-2352.	0.	1277.	0.035	-0.0268	-0.210	-0.0287	-0.0296	-0.0005	1074.

ADLPIPE PAGE 1512

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.38.

S/RV PIPING KEWAUNEE GKMOBF 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	PX	RY	RZ	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	
.2740	-0.	5150.	-0.	-2263.	-0.	1229.	0.010	-0.0267	-0.0268	-0.0450	-0.0275	0.0025	1033.
.2750	-0.	4909.	-0.	-2157.	-0.	1171.	-0.0014	-0.0262	-0.0314	-0.0499	-0.0253	0.0055	985.
.2760	-0.	4704.	-0.	-2067.	-0.	1122.	-0.0039	-0.0258	-0.0348	-0.0536	-0.0231	0.0084	944.
.2770	-0.	4570.	-0.	-2008.	-0.	1090.	-0.0062	-0.0256	-0.0370	-0.0562	-0.0209	0.0112	917.
.2780	-0.	4456.	-0.	-1958.	-0.	1063.	-0.0083	-0.0254	-0.0381	-0.0576	-0.0193	0.0137	894.
.2790	-0.	4318.	-0.	-1898.	-0.	1030.	-0.0101	-0.0249	-0.0383	-0.0580	-0.0186	0.0156	866.
.2800	-0.	4198.	-0.	-1845.	-0.	1002.	-0.0116	-0.0244	-0.0377	-0.0577	-0.0193	0.0171	842.
.2810	-0.	4143.	-0.	-1821.	-0.	989.	-0.0127	-0.0241	-0.0365	-0.0570	-0.0216	0.0179	831.
.2820	-0.	4119.	-0.	-1810.	-0.	983.	-0.0132	-0.0239	-0.0349	-0.0559	-0.0255	0.0180	826.
.2830	-0.	4054.	-0.	-1781.	-0.	967.	-0.0132	-0.0235	-0.0331	-0.0546	-0.0305	0.0172	813.
.2840	-0.	3939.	-0.	-1731.	-0.	940.	-0.0125	-0.0228	-0.0312	-0.0532	-0.0362	0.0155	790.
.2850	-0.	3818.	-0.	-1678.	-0.	911.	-0.0111	-0.0220	-0.0295	-0.0518	-0.0426	0.0130	766.
.2860	-0.	3697.	-0.	-1624.	-0.	882.	-0.0092	-0.0212	-0.0278	-0.0507	-0.0495	0.0098	742.
.2870	-0.	3529.	-0.	-1551.	-0.	842.	-0.0068	-0.0202	-0.0264	-0.0497	-0.0568	0.0059	708.
.2880	-0.	3286.	-0.	-1444.	-0.	784.	-0.0041	-0.0188	-0.0252	-0.0487	-0.0645	0.0015	659.
.2890	-0.	2987.	-0.	-1312.	-0.	713.	-0.0011	-0.0172	-0.0242	-0.0478	-0.0725	-0.0034	599.
.2900	-0.	2652.	-0.	-1165.	-0.	633.	0.0020	-0.0154	-0.0234	-0.0470	-0.0804	-0.0085	532.
.2910	-0.	2281.	-0.	-1002.	-0.	544.	0.0052	-0.0135	-0.0227	-0.0462	-0.0883	-0.0136	458.
.2920	-0.	1871.	-0.	-822.	-0.	446.	0.0082	-0.0114	-0.0221	-0.0453	-0.0957	-0.0186	375.
.2930	-0.	1426.	-0.	-627.	-0.	340.	0.0110	-0.0091	-0.0216	-0.0443	-0.1020	-0.0234	286.
.2940	0.	956.	0.	-420.	0.	228.	0.0136	-0.0068	-0.0211	-0.0433	-0.1070	-0.0277	192.
.2950	-0.	477.	-0.	-210.	0.	114.	0.0158	-0.0044	-0.0208	-0.0421	-0.1100	-0.0314	96.
.2960	-0.	21.	-0.	-9.	-0.	5.	0.0176	-0.0022	-0.0206	-0.0410	-0.1107	-0.0343	4.
.2970	0.	-391.	0.	172.	-0.	-73.	0.0191	-0.0002	-0.0208	-0.0401	-0.1086	-0.0364	78.
.2980	-0.	-764.	-0.	336.	-0.	-182.	0.0200	0.0016	-0.0212	-0.0393	-0.1037	-0.0376	153.
.2990	0.	-1102.	0.	484.	-0.	-263.	0.0205	0.0031	-0.0221	-0.0387	-0.0964	-0.0379	221.
.3000	-0.	-1371.	-0.	602.	-0.	-327.	0.0204	0.0043	-0.0233	-0.0385	-0.0873	-0.0371	275.
.3010	-0.	-1536.	-0.	675.	-0.	-366.	0.0197	0.0049	-0.0250	-0.0367	-0.0769	-0.0354	308.
.3020	-0.	-1601.	-0.	704.	-0.	-382.	0.0184	0.0050	-0.0269	-0.0394	-0.0661	-0.0327	321.
.3030	-0.	-1593.	-0.	700.	-0.	-380.	0.0165	0.0047	-0.0291	-0.0405	-0.0552	-0.0293	320.
.3040	-0.	-1502.	-0.	660.	-0.	-358.	0.0141	0.0039	-0.0316	-0.0420	-0.0445	-0.0251	301.
.3050	-0.	-1300.	-0.	571.	-0.	-310.	0.0112	0.0026	-0.0341	-0.0439	-0.0341	-0.0203	261.
.3060	-0.	-986.	-0.	473.	-0.	-235.	0.0080	0.0008	-0.0367	-0.0461	-0.0243	-0.0151	198.
.3070	-0.	-597.	-0.	262.	-0.	-142.	0.0046	-0.0014	-0.0391	-0.0484	-0.0154	-0.0097	120.
.3080	-0.	-161.	-0.	71.	-0.	-38.	0.0012	-0.0037	-0.0413	-0.0507	-0.0079	-0.0044	32.
.3090	-0.	319.	-0.	-140.	-0.	76.	-0.0021	-0.0063	-0.0431	-0.0529	-0.0019	0.0006	64.
.3100	-0.	838.	-0.	-362.	-0.	200.	-0.0051	-0.0090	-0.0445	-0.0550	0.0023	0.0052	168.
.3110	-0.	1370.	-0.	-602.	-0.	327.	-0.0077	-0.0116	-0.0453	-0.0567	0.0044	0.0091	275.

ADLPIPE PAGE 1513

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.38.

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

CONDITION 24
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ENGLISH UNITS

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

.3010	-0.	-1536.	-0.	675.	-0.	-366.	.0197	.0049	-.0250	-.0387	-.0769	-.0354	308.
.3020	-0.	-1601.	-0.	704.	-0.	-382.	.0184	.0050	-.0269	-.0394	-.0561	-.0327	321.
.3030	-0.	-1593.	-0.	700.	-0.	-380.	.0165	.0047	-.0291	-.0405	-.0552	-.0293	320.
.3040	-0.	-1502.	-0.	660.	-0.	-358.	.0141	.0039	-.0316	-.0420	-.0445	-.0251	301.
.3050	-0.	-1330.	-0.	571.	-0.	-310.	.0112	.0026	-.0341	-.0439	-.0341	-.0203	261.
.3060	-0.	-988.	-0.	473.	-0.	-235.	.0080	.0008	-.0367	-.0461	-.0243	-.0151	198.
.3070	-0.	-597.	-0.	262.	-0.	-142.	.0046	-.0014	-.0391	-.0484	-.0154	-.0097	120.
.3080	-0.	-161.	-0.	71.	-0.	-38.	.0012	-.0037	-.0413	-.0507	-.0079	-.0044	32.
.3090	-0.	319.	-0.	-140.	-0.	76.	-.0021	-.0063	-.0431	-.0529	-.0019	.0006	64.
.3100	-0.	876.	-0.	-560.	-0.	230.	-.0051	-.0090	-.0445	-.0550	.0023	.0052	168.
.3110	-0.	1370.	-0.	-602.	-0.	327.	-.0077	-.0116	-.0453	-.0567	.0044	.0091	275.

ADLPIPE PAGE 1513

DIS/ADLPIPE

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CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	37	MEMBER	1	SEQUENCE	559	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)	
.3120	-0.	1884.	-0.	-828.	-0.	450.	-.0098	-.0142	-.0456	-.0581	.0047	.0123	378.	
.3130	-0.	2353.	-0.	-1074.	-0.	561.	-.0113	-.0164	-.0454	-.0591	.0035	.0144	472.	
.3140	-0.	2754.	-0.	-1210.	-0.	657.	-.0121	-.0182	-.0448	-.0597	.0009	.0156	552.	
.3150	-0.	3069.	-0.	-1348.	-0.	732.	-.0122	-.0196	-.0438	-.0599	-.0027	.0159	616.	
.3160	-0.	3291.	-0.	-1446.	-0.	785.	-.0117	-.0206	-.0426	-.0596	-.0069	.0151	660.	
.3170	-0.	3412.	-0.	-1499.	-0.	814.	-.0106	-.0209	-.0412	-.0591	-.0114	.0136	685.	
.3180	-0.	3420.	-0.	-1503.	-0.	816.	-.0090	-.0208	-.0397	-.0581	-.0159	.0112	686.	
.3190	-0.	3313.	-0.	-1456.	-0.	791.	-.0070	-.0201	-.0382	-.0569	-.0204	.0083	665.	
.3200	-0.	3119.	-0.	-1371.	-0.	744.	-.0047	-.0189	-.0366	-.0553	-.0247	.0051	626.	
.3210	-0.	2870.	-0.	-1261.	-0.	685.	-.0023	-.0175	-.0349	-.0536	-.0287	.0016	576.	
.3220	-0.	2575.	-0.	-1132.	-0.	614.	.0000	-.0158	-.0332	-.0515	-.0321	-.0019	517.	
.3230	-0.	2241.	-0.	-985.	-0.	535.	.0023	-.0140	-.0315	-.0492	-.0347	-.0052	450.	
.3240	-0.	1900.	-0.	-835.	-0.	453.	.0044	-.0121	-.0296	-.0467	-.0361	-.0082	381.	
.3250	-0.	1602.	-0.	-704.	-0.	382.	.0063	-.0105	-.0276	-.0439	-.0362	-.0108	322.	
.3260	-0.	1382.	-0.	-607.	-0.	330.	.0079	-.0091	-.0254	-.0410	-.0352	-.0129	277.	
.3270	-0.	1246.	-0.	-548.	-0.	297.	.0093	-.0082	-.0230	-.0379	-.0334	-.0143	250.	
.3280	-0.	1211.	-0.	-532.	-0.	289.	.0103	-.0077	-.0203	-.0347	-.0310	-.0152	243.	
.3290	-0.	1311.	-0.	-576.	-0.	313.	.0110	-.0078	-.0174	-.0315	-.0284	-.0154	263.	
.3300	0.	1571.	-0.	-690.	-0.	375.	.0115	-.0087	-.0143	-.0285	-.0257	-.0150	315.	
.3310	0.	1985.	-0.	-872.	-0.	474.	.0117	-.0103	-.0112	-.0257	-.0229	-.0140	398.	
.3320	0.	2533.	-0.	-1113.	-0.	604.	.0118	-.0125	-.0081	-.0233	-.0199	-.0124	508.	
.3330	0.	3201.	0.	-1406.	0.	764.	.0116	-.0154	-.0054	-.0213	-.0166	-.0103	642.	
.3340	0.	3979.	0.	-1748.	0.	949.	.0112	-.0188	-.0030	-.0199	-.0130	-.0077	798.	
.3350	0.	4839.	-0.	-2126.	0.	1155.	.0106	-.0226	-.0011	-.0192	-.0091	-.0045	971.	
.3360	0.	5741.	0.	-2523.	0.	1370.	.0097	-.0267	.0002	-.0192	-.0052	-.0009	1152.	
.3370	0.	6645.	-0.	-2920.	0.	1585.	.0084	-.0309	.0009	-.0198	-.0011	.0032	1333.	
.3380	0.	7516.	-0.	-3303.	0.	1793.	.0067	-.0350	.0010	-.0210	.0033	.0077	1508.	
.3390	0.	8322.	0.	-3657.	-0.	1986.	.0045	-.0389	.0005	-.0227	.0080	.0127	1670.	
.3400	0.	9027.	-0.	-3966.	-0.	2154.	.0019	-.0424	-.0006	-.0248	.0133	.0181	1811.	
.3410	-0.	9605.	-0.	-4220.	-0.	2292.	-.0012	-.0454	-.0022	-.0271	.0193	.0237	1927.	
.3420	-0.	10035.	-0.	-4409.	-0.	2394.	-.0047	-.0478	-.0042	-.0296	.0260	.0296	2013.	
.3430	-0.	10305.	-0.	-4528.	0.	2459.	-.0086	-.0495	-.0065	-.0319	.0333	.0355	2068.	
.3440	-0.	10414.	-0.	-4576.	0.	2485.	-.0127	-.0505	-.0088	-.0340	.0410	.0414	2089.	
.3450	-0.	10371.	-0.	-4557.	-0.	2474.	-.0168	-.0507	-.0111	-.0359	.0491	.0471	2081.	
.3460	-0.	10192.	-0.	-4478.	-0.	2432.	-.0210	-.0504	-.0133	-.0373	.0573	.0524	2045.	
.3470	-0.	9893.	-0.	-4347.	-0.	2361.	-.0249	-.0494	-.0152	-.0383	.0653	.0572	1985.	
.3480	-0.	9491.	-0.	-4170.	0.	2264.	-.0285	-.0479	-.0168	-.0387	.0730	.0612	1904.	
.3490	-0.	9010.	-0.	-3959.	-0.	2150.	-.0316	-.0460	-.0180	-.0388	.0801	.0644	1808.	

ADLPIPE PAGE 1514

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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