50-305

RESPONSE TO NUREG-0737 ITEM II.D.1

Docket # 50-305
Control # 8403280048
Date 3/23/84 of Document:
REGULATORY DOCKET FILE

.2210	126.	-681.	207.	-405.	-54.	-34.	.0019	.0066	.0186	.0967	.0148	-.0129	1711.
.2220	85.	-546.	151.	-376.	-74.	-99.	.0080	.0061	.0170	.0867	.0177	-.0189	1653.
.2230	26.	-395.	87.	-336.	-88.	-161.	.0130	.0055	.0153	.0752	.0191	-.0224	1590.
.2240	-31.	-237.	21.	-277.	-97.	-218.	.0167	.0048	.0138	.0626	.0192	-.0234	1526.
.2250	-85.	-77.	-42.	-206.	-100.	-267.	.0192	.0040	.0128	.0495	.0182	-.0221	1466.
.2260	-132.	78.	-97.	-123.	-96.	-304.	.0204	.0031	.0122	.0364	.0161	-.0189	1426.
.2270	-171.	219.	-143.	-35.	-87.	-330.	.0204	.0022	.0121	.0241	.0127	-.0140	1433.
.2280	-204.	338.	-182.	52.	-71.	-348.	.0194	.0014	.0123	.0134	.0081	-.0079	1497.
.2290	-229.	434.	-220.	133.	-51.	-356.	.0176	.0006	.0127	.0043	.0028	-.0009	1599.
.2300	-245.	506.	-262.	208.	-27.	-353.	.0150	-.0000	.0132	-.0034	-.0026	.0062	1714.
.2310	-252.	552.	-305.	277.	-2.	-338.	.0121	-.0006	.0136	-.0097	-.0078	.0129	1824.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION 62 MEMBER 2 SEQUENCE 90 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)
.2320	-252.	571.	-347.	336.	24.	-315.	.0089	-.0010	.0140	-.0144	-.0127	.0187	1924.
.2330	-245.	564.	-381.	385.	50.	-285.	.0058	-.0013	.0144	-.0174	-.0175	.0234	2010.
.2340	-232.	531.	-401.	423.	76.	-252.	.0031	-.0015	.0149	-.0186	-.0223	.0268	2078.
.2350	-214.	478.	-403.	452.	100.	-216.	.0008	-.0015	.0155	-.0185	-.0271	.0285	2132.
.2360	-193.	411.	-390.	473.	121.	-179.	-.0009	-.0014	.0160	-.0173	-.0316	.0286	2171.
.2370	-174.	335.	-367.	485.	140.	-145.	-.0018	-.0012	.0164	-.0155	-.0358	.0270	2192.
.2380	-160.	257.	-339.	488.	155.	-115.	-.0019	-.0009	.0166	-.0135	-.0397	.0239	2191.
.2390	-157.	182.	-310.	484.	165.	-91.	-.0012	-.0006	.0162	-.0118	-.0431	.0191	2166.
.2400	-162.	119.	-280.	474.	169.	-72.	.0005	-.0004	.0154	-.0110	-.0455	.0129	2120.
.2410	-176.	71.	-272.	459.	167.	-62.	.0031	-.0001	.0140	-.0114	-.0466	.0053	2056.
.2420	-196.	43.	-260.	442.	158.	-62.	.0068	.0000	.0122	-.0132	-.0463	-.0035	1975.
.2430	-220.	33.	-247.	422.	143.	-72.	.0113	.0001	.0100	-.0161	-.0450	-.0133	1884.
.2440	-245.	43.	-232.	402.	122.	-92.	.0167	.0002	.0075	-.0203	-.0424	-.0238	1797.
.2450	-268.	74.	-217.	385.	95.	-121.	.0228	.0002	.0048	-.0259	-.0383	-.0348	1730.
.2460	-290.	125.	-204.	370.	63.	-156.	.0292	.0001	.0020	-.0326	-.0327	-.0459	1696.
.2470	-312.	190.	-195.	356.	29.	-195.	.0357	-.0001	-.0009	-.0399	-.0263	-.0565	1699.
.2480	-335.	266.	-192.	341.	-7.	-236.	.0419	-.0003	-.0038	-.0474	-.0196	-.0662	1733.
.2490	-360.	347.	-198.	324.	-41.	-278.	.0474	-.0005	-.0065	-.0543	-.0129	-.0744	1789.
.2500	-384.	428.	-211.	305.	-73.	-316.	.0520	-.0007	-.0090	-.0603	-.0064	-.0809	1857.
.2510	-402.	504.	-227.	285.	-101.	-346.	.0555	-.0009	-.0110	-.0650	-.0003	-.0855	1920.
.2520	-411.	569.	-242.	266.	-124.	-367.	.0575	-.0010	-.0122	-.0678	.0051	-.0878	1961.
.2530	-409.	617.	-249.	243.	-139.	-378.	.0580	-.0011	-.0126	-.0678	.0094	-.0878	1964.
.2540	-396.	640.	-245.	216.	-145.	-379.	.0570	-.0010	-.0120	-.0646	.0117	-.0853	1917.
.2550	-374.	634.	-228.	183.	-141.	-368.	.0543	-.0008	-.0104	-.0578	.0120	-.0804	1812.
.2560	-342.	600.	-203.	146.	-129.	-342.	.0500	-.0004	-.0080	-.0478	.0105	-.0734	1642.
.2570	-302.	536.	-174.	105.	-107.	-302.	.0441	.0001	-.0048	-.0349	.0074	-.0647	1406.
.2580	-258.	445.	-143.	58.	-78.	-248.	.0370	.0007	-.0010	-.0194	.0028	-.0547	1111.
.2590	-212.	324.	-108.	5.	-41.	-183.	.0290	.0014	.0031	-.0015	-.0036	-.0437	785.
.2600	-165.	178.	-69.	-54.	1.	-112.	.0203	.0023	.0075	.0184	-.0115	-.0324	518.
.2610	-114.	14.	-25.	-116.	46.	-36.	.0115	.0032	.0120	.0393	-.0201	-.0214	542.
.2620	-59.	-161.	23.	-178.	91.	43.	.0029	.0042	.0164	.0601	-.0287	-.0112	854.
.2630	0.	-340.	77.	-238.	135.	119.	-.0049	.0052	.0205	.0801	-.0370	-.0024	1245.
.2640	58.	-516.	134.	-294.	177.	189.	-.0117	.0061	.0241	.0985	-.0451	.0046	1636.
.2650	111.	-681.	190.	-346.	214.	250.	-.0171	.0069	.0270	.1146	-.0525	.0096	1992.
.2660	154.	-824.	240.	-391.	244.	299.	-.0210	.0076	.0290	.1274	-.0590	.0125	2293.
.2670	185.	-938.	277.	-426.	268.	334.	-.0233	.0082	.0300	.1361	-.0643	.0133	2523.
.2680	199.	-1016.	301.	-451.	284.	354.	-.0238	.0085	.0298	.1402	-.0685	.0120	2671.
.2690	195.	-1055.	312.	-464.	293.	356.	-.0225	.0085	.0285	.1397	-.0717	.0086	2729.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.2580	-230.	445.	-142.	18.	-70.	-248.	.0370	.0007	-.0010	-.0194	.0028	-.0547	1111.
.2590	-212.	324.	-108.	5.	-41.	-183.	.0290	.0014	.0031	-.0015	-.0036	-.0437	785.
.2600	-165.	178.	-69.	-54.	1.	-112.	.0203	.0023	.0075	.0184	-.0115	-.0324	518.
.2610	-114.	14.	-25.	-116.	46.	-36.	.0115	.0032	.0120	.0393	-.0201	-.0214	542.
.2620	-59.	-161.	23.	-178.	91.	43.	.0029	.0042	.0164	.0601	-.0287	-.0112	854.
.2630	0.	-340.	77.	-238.	135.	119.	-.0049	.0052	.0205	.0801	-.0370	-.0024	1245.
.2640	50.	-516.	134.	-294.	177.	189.	-.0117	.0061	.0241	.0985	-.0451	.0046	1636.
.2650	111.	-681.	190.	-346.	214.	250.	-.0171	.0069	.0270	.1146	-.0525	.0096	1992.
.2660	154.	-824.	240.	-391.	244.	299.	-.0210	.0076	.0290	.1274	-.0590	.0125	2293.
.2670	185.	-938.	277.	-426.	268.	334.	-.0233	.0082	.0300	.1361	-.0643	.0133	2523.
.2680	199.	-1016.	301.	-451.	284.	354.	-.0238	.0085	.0298	.1402	-.0685	.0120	2671.
.2690	195.	-1055.	312.	-464.	293.	356.	-.0225	.0085	.0285	.1397	-.0717	.0086	2729.

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

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

SECTION 62 MEMBER 2 SEQUENCE 90 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)
.2700	173.	-1051.	312.	-464.	293.	340.	-.0195	.0084	.0261	.1343	-.0738	.0035	2692.
.2710	138.	-1001.	301.	-447.	285.	306.	-.0148	.0079	.0228	.1240	-.0745	-.0034	2554.
.2720	92.	-905.	282.	-414.	269.	257.	-.0085	.0073	.0187	.1090	-.0739	-.0115	2322.
.2730	35.	-767.	257.	-368.	247.	191.	-.0009	.0064	.0139	.0900	-.0721	-.0206	2013.
.2740	-32.	-596.	225.	-311.	219.	111.	.0078	.0053	.0086	.0679	-.0697	-.0304	1653.
.2750	-109.	-395.	185.	-244.	187.	20.	.0172	.0041	.0029	.0432	-.0665	-.0406	1286.
.2760	-191.	-169.	133.	-169.	151.	-74.	.0269	.0027	-.0031	.0164	-.0623	-.0508	995.
.2770	-275.	71.	72.	-89.	114.	-171.	.0365	.0013	-.0091	-.0114	-.0573	-.0606	933.
.2780	-360.	311.	6.	-11.	76.	-267.	.0459	-.0001	-.0150	-.0385	-.0522	-.0696	1159.
.2790	-444.	539.	-57.	61.	41.	-359.	.0545	-.0015	-.0204	-.0637	-.0477	-.0778	1531.
.2800	-510.	747.	-115.	127.	8.	-443.	.0622	-.0026	-.0252	-.0863	-.0434	-.0848	1924.
.2810	-577.	928.	-165.	186.	-21.	-513.	.0686	-.0037	-.0291	-.1056	-.0390	-.0906	2279.
.2820	-610.	1073.	-202.	234.	-44.	-567.	.0735	-.0045	-.0319	-.1207	-.0348	-.0948	2567.
.2830	-643.	1172.	-224.	266.	-62.	-605.	.0768	-.0050	-.0336	-.1304	-.0317	-.0974	2771.
.2840	-654.	1218.	-232.	281.	-72.	-625.	.0782	-.0052	-.0342	-.1344	-.0298	-.0983	2874.
.2850	-645.	1216.	-229.	279.	-75.	-623.	.0776	-.0052	-.0336	-.1330	-.0285	-.0974	2867.
.2860	-617.	1166.	-219.	261.	-72.	-600.	.0751	-.0048	-.0319	-.1262	-.0275	-.0946	2748.
.2870	-575.	1067.	-201.	226.	-61.	-558.	.0707	-.0042	-.0292	-.1140	-.0273	-.0898	2526.
.2880	-521.	920.	-170.	172.	-43.	-500.	.0645	-.0033	-.0254	-.0965	-.0285	-.0834	2215.
.2890	-455.	734.	-128.	106.	-20.	-427.	.0568	-.0022	-.0208	-.0746	-.0306	-.0753	1839.
.2900	-375.	520.	-78.	31.	7.	-342.	.0477	-.0010	-.0153	-.0494	-.0327	-.0658	1432.
.2910	-285.	287.	-21.	-49.	36.	-247.	.0377	.0004	-.0093	-.0219	-.0347	-.0551	1064.
.2920	-190.	41.	42.	-133.	68.	-149.	.0270	.0019	-.0028	.0072	-.0371	-.0434	880.
.2930	-95.	-208.	108.	-218.	99.	-50.	.0160	.0033	.0039	.0369	-.0396	-.0312	1021.
.2940	-1.	-446.	168.	-298.	128.	45.	.0049	.0047	.0105	.0658	-.0414	-.0186	1369.
.2950	91.	-661.	215.	-370.	154.	136.	-.0057	.0060	.0168	.0925	-.0419	-.0060	1765.
.2960	177.	-845.	249.	-428.	174.	220.	-.0158	.0071	.0226	.1160	-.0410	.0062	2138.
.2970	254.	-995.	270.	-474.	189.	293.	-.0249	.0080	.0278	.1360	-.0391	.0177	2456.
.2980	310.	-1105.	278.	-506.	198.	351.	-.0329	.0086	.0322	.1519	-.0362	.0285	2699.
.2990	373.	-1172.	273.	-520.	200.	396.	-.0396	.0090	.0359	.1633	-.0320	.0381	2852.
.3000	416.	-1192.	257.	-514.	196.	427.	-.0448	.0092	.0388	.1696	-.0266	.0463	2906.
.3010	446.	-1169.	233.	-488.	185.	446.	-.0486	.0090	.0408	.1709	-.0202	.0531	2865.
.3020	461.	-1108.	202.	-447.	168.	450.	-.0509	.0087	.0420	.1677	-.0133	.0582	2740.
.3030	459.	-1014.	165.	-394.	147.	441.	-.0517	.0081	.0423	.1606	-.0063	.0617	2544.
.3040	442.	-892.	123.	-330.	122.	421.	-.0511	.0074	.0417	.1496	.0009	.0633	2291.
.3050	414.	-748.	74.	-257.	92.	394.	-.0492	.0065	.0402	.1351	.0085	.0630	2000.
.3060	378.	-590.	20.	-179.	59.	360.	-.0461	.0055	.0378	.1178	.0166	.0607	1695.
.3070	335.	-427.	-33.	-102.	24.	319.	-.0419	.0045	.0347	.0988	.0246	.0566	1402.

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

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

.2960	177.	-845.	249.	-428.	174.	220.	-.0158	.0071	.0226	.1160	-.0410	.0062	2138.
.2970	254.	-995.	270.	-474.	189.	293.	-.0249	.0080	.0278	.1360	-.0391	.0177	2456.
.2980	319.	-1105.	278.	-506.	198.	351.	-.0329	.0086	.0322	.1519	-.0362	.0285	2699.
.2990	373.	-1172.	273.	-520.	200.	396.	-.0396	.0090	.0359	.1633	-.0320	.0381	2852.
.3000	416.	-1192.	257.	-514.	196.	427.	-.0448	.0092	.0388	.1696	-.0266	.0463	2906.
.3010	446.	-1169.	233.	-488.	185.	446.	-.0486	.0090	.0408	.1709	-.0202	.0531	2865.
.3020	461.	-1108.	202.	-447.	168.	450.	-.0509	.0087	.0420	.1677	-.0133	.0582	2740.
.3030	459.	-1014.	165.	-394.	147.	441.	-.0517	.0081	.0423	.1606	-.0063	.0617	2544.
.3040	442.	-892.	123.	-330.	122.	421.	-.0511	.0074	.0417	.1496	.0009	.0633	2291.
.3050	414.	-748.	74.	-257.	92.	394.	-.0492	.0065	.0402	.1351	.0085	.0630	2000.
.3060	375.	-590.	20.	-179.	59.	360.	-.0461	.0055	.0378	.1178	.0166	.0607	1695.
.3070	335.	-427.	-33.	-102.	24.	319.	-.0419	.0045	.0347	.0988	.0246	.0566	1402.

S/RV PIPING KEWAUNEE CKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

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FORCES AND MOMENTS ACT ON THE PIPING

SECTION 62 MEMBER 2 SEQUENCE 90 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)
.3080	289.	-271.	-81.	-29.	-17.	275.	-.0367	.0035	.0309	.0789	.0322	.0506	1155.
.3090	244.	-124.	-122.	40.	-51.	230.	-.0308	.0024	.0266	.0584	.0396	.0428	997.
.3100	205.	9.	-157.	104.	-88.	188.	-.0244	.0014	.0220	.0379	.0473	.0337	968.
.3110	173.	122.	-184.	159.	-123.	149.	-.0178	.0005	.0170	.0182	.0546	.0236	1045.
.3120	145.	208.	-200.	202.	-155.	114.	-.0113	-.0003	.0120	.0002	.0607	.0130	1164.
.3130	120.	265.	-205.	232.	-183.	85.	-.0052	-.0009	.0071	-.0156	.0652	.0024	1281.
.3140	102.	296.	-204.	251.	-204.	65.	.0003	-.0014	.0023	-.0293	.0687	-.0077	1378.
.3150	92.	306.	-199.	261.	-220.	55.	.0047	-.0019	-.0022	-.0408	.0712	-.0168	1443.
.3160	88.	293.	-189.	262.	-228.	54.	.0081	-.0022	-.0062	-.0497	.0721	-.0245	1466.
.3170	87.	259.	-167.	253.	-228.	61.	.0102	-.0024	-.0097	-.0557	.0707	-.0303	1445.
.3180	90.	207.	-139.	237.	-220.	75.	.0111	-.0025	-.0125	-.0590	.0674	-.0340	1385.
.3190	98.	146.	-105.	217.	-204.	97.	.0107	-.0026	-.0146	-.0600	.0628	-.0355	1307.
.3200	111.	80.	-69.	196.	-183.	125.	.0091	-.0026	-.0160	-.0593	.0570	-.0349	1232.
.3210	124.	12.	-29.	173.	-156.	156.	.0065	-.0026	-.0168	-.0570	.0499	-.0323	1171.
.3220	136.	-57.	12.	147.	-125.	189.	.0031	-.0025	-.0171	-.0532	.0417	-.0279	1128.
.3230	146.	-121.	51.	119.	-92.	220.	-.0009	-.0024	-.0170	-.0483	.0329	-.0221	1113.
.3240	154.	-176.	85.	92.	-59.	248.	-.0052	-.0023	-.0167	-.0432	.0242	-.0153	1133.
.3250	161.	-221.	113.	66.	-28.	274.	-.0094	-.0023	-.0163	-.0382	.0162	-.0082	1181.
.3260	167.	-253.	137.	40.	1.	293.	-.0133	-.0023	-.0158	-.0335	.0090	-.0012	1235.
.3270	170.	-276.	158.	13.	25.	304.	-.0166	-.0022	-.0154	-.0290	.0027	.0054	1272.
.3280	170.	-290.	177.	-16.	43.	305.	-.0191	-.0022	-.0151	-.0250	-.0026	.0110	1286.
.3290	170.	-294.	194.	-43.	56.	298.	-.0206	-.0022	-.0149	-.0218	-.0064	.0154	1277.
.3300	169.	-287.	207.	-70.	62.	284.	-.0212	-.0022	-.0150	-.0195	-.0085	.0183	1245.
.3310	166.	-273.	218.	-97.	62.	261.	-.0209	-.0021	-.0152	-.0179	-.0092	.0198	1191.
.3320	157.	-257.	227.	-125.	56.	232.	-.0196	-.0021	-.0156	-.0166	-.0091	.0198	1123.
.3330	142.	-238.	236.	-154.	46.	196.	-.0175	-.0020	-.0162	-.0157	-.0082	.0184	1059.
.3340	125.	-217.	241.	-181.	32.	158.	-.0148	-.0019	-.0168	-.0153	-.0064	.0158	1013.
.3350	107.	-193.	243.	-205.	15.	119.	-.0117	-.0018	-.0175	-.0154	-.0037	.0124	992.
.3360	87.	-170.	245.	-228.	-2.	78.	-.0082	-.0017	-.0181	-.0155	-.0007	.0083	1005.
.3370	65.	-152.	249.	-249.	-23.	36.	-.0046	-.0016	-.0187	-.0153	.0021	.0039	1054.
.3380	43.	-136.	253.	-266.	-41.	-5.	-.0011	-.0014	-.0190	-.0150	.0048	-.0004	1125.
.3390	25.	-120.	255.	-278.	-59.	-43.	.0021	-.0013	-.0191	-.0148	.0078	-.0043	1201.
.3400	12.	-104.	253.	-284.	-75.	-78.	.0049	-.0011	-.0190	-.0147	.0109	-.0073	1268.
.3410	0.	-90.	248.	-284.	-89.	-109.	.0071	-.0010	-.0186	-.0145	.0134	-.0094	1321.
.3420	-10.	-77.	239.	-279.	-98.	-136.	.0085	-.0010	-.0180	-.0140	.0153	-.0100	1359.
.3430	-17.	-63.	225.	-268.	-104.	-159.	.0090	-.0009	-.0171	-.0136	.0166	-.0090	1371.
.3440	-20.	-45.	204.	-249.	-105.	-177.	.0086	-.0010	-.0160	-.0134	.0174	-.0062	1349.
.3450	-20.	-24.	179.	-222.	-102.	-189.	.0073	-.0011	-.0146	-.0134	.0176	-.0017	1290.

S/RV PIPING KEWAUNEE CKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

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

.3350	107.	-193.	243.	-205.	15.	119.	-.0117	-.0018	-.0175	-.0154	-.0037	.0124	992.
.3360	87.	-170.	245.	-228.	-3.	78.	-.0082	-.0017	-.0181	-.0155	-.0007	.0083	1005.
.3370	65.	-152.	249.	-249.	-22.	36.	-.0046	-.0016	-.0187	-.0153	.0021	.0039	1054.
.3380	43.	-136.	253.	-266.	-41.	-5.	-.0011	-.0014	-.0190	-.0150	.0048	-.0004	1125.
.3390	25.	-120.	255.	-278.	-59.	-43.	.0021	-.0013	-.0191	-.0148	.0078	-.0043	1201.
.3400	12.	-104.	253.	-284.	-75.	-78.	.0049	-.0011	-.0190	-.0147	.0109	-.0073	1268.
.3410	0.	-90.	248.	-284.	-89.	-109.	.0071	-.0010	-.0186	-.0145	.0134	-.0094	1321.
.3420	-10.	-77.	239.	-279.	-98.	-136.	.0085	-.0010	-.0180	-.0140	.0153	-.0100	1359.
.3430	-17.	-63.	225.	-268.	-104.	-159.	.0090	-.0009	-.0171	-.0136	.0166	-.0090	1371.
.3440	-20.	-45.	204.	-249.	-105.	-177.	.0086	-.0010	-.0160	-.0134	.0174	-.0062	1349.
.3450	-20.	-24.	179.	-222.	-102.	-189.	.0073	-.0011	-.0146	-.0134	.0176	-.0017	1290.

S/RV PIPING KEWAUNEE CKW08F 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 62 MEMBER 2 SEQUENCE 90 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)
.3460	-19.	-1.	152.	-188.	-94.	-197.	.0050	-.0013	-.0130	-.0136	.0168	.0047	1203.
.3470	-16.	26.	124.	-149.	-81.	-202.	.0019	-.0015	-.0112	-.0138	.0150	.0127	1099.
.3480	-13.	56.	95.	-104.	-64.	-203.	-.0019	-.0018	-.0093	-.0143	.0123	.0222	987.
.3490	-10.	91.	64.	-53.	-44.	-200.	-.0063	-.0022	-.0073	-.0153	.0090	.0328	884.
.3500	-7.	130.	32.	1.	-22.	-195.	-.0110	-.0026	-.0054	-.0169	.0051	.0441	819.
.3510	-6.	173.	-1.	56.	2.	-189.	-.0159	-.0031	-.0035	-.0189	.0008	.0557	824.
.3520	-8.	218.	-34.	110.	27.	-185.	-.0206	-.0036	-.0020	-.0213	-.0039	.0671	903.
.3530	-13.	263.	-66.	161.	50.	-181.	-.0250	-.0041	-.0007	-.0242	-.0088	.0778	1033.
.3540	-19.	311.	-96.	208.	72.	-180.	-.0287	-.0046	.0001	-.0278	-.0134	.0872	1188.
.3550	-28.	358.	-124.	252.	91.	-181.	-.0316	-.0051	.0005	-.0319	-.0175	.0951	1349.
.3560	-38.	404.	-147.	288.	107.	-187.	-.0335	-.0055	.0005	-.0364	-.0212	.1009	1500.
.3570	-51.	445.	-164.	315.	118.	-198.	-.0342	-.0059	-.0000	-.0410	-.0244	.1044	1629.
.3580	-67.	482.	-175.	334.	125.	-213.	-.0337	-.0062	-.0010	-.0458	-.0271	.1054	1732.
.3590	-83.	515.	-182.	345.	126.	-231.	-.0320	-.0065	-.0024	-.0508	-.0288	.1038	1811.
.3600	-101.	544.	-185.	347.	124.	-253.	-.0291	-.0067	-.0041	-.0557	-.0297	.0998	1866.
.3610	-120.	566.	-184.	341.	117.	-277.	-.0251	-.0068	-.0062	-.0604	-.0300	.0935	1896.
.3620	-143.	581.	-177.	324.	107.	-304.	-.0202	-.0068	-.0085	-.0643	-.0301	.0852	1909.
.3630	-168.	588.	-167.	300.	95.	-332.	-.0146	-.0067	-.0109	-.0676	-.0299	.0751	1910.
.3640	-192.	589.	-152.	271.	81.	-359.	-.0085	-.0065	-.0132	-.0702	-.0294	.0637	1906.
.3650	-217.	583.	-133.	237.	66.	-384.	-.0021	-.0062	-.0154	-.0718	-.0287	.0515	1902.
.3660	-241.	568.	-108.	198.	51.	-406.	.0043	-.0058	-.0174	-.0723	-.0283	.0387	1898.
.3670	-266.	544.	-78.	156.	37.	-426.	.0106	-.0054	-.0190	-.0715	-.0283	.0258	1899.
.3680	-288.	513.	-47.	113.	24.	-441.	.0165	-.0049	-.0203	-.0696	-.0283	.0132	1901.
.3690	-307.	475.	-15.	70.	13.	-450.	.0219	-.0043	-.0212	-.0666	-.0284	.0012	1902.
.3700	-321.	431.	16.	28.	3.	-454.	.0266	-.0037	-.0217	-.0628	-.0283	-.0098	1897.
.3710	-330.	382.	44.	-12.	-5.	-451.	.0306	-.0031	-.0218	-.0581	-.0281	-.0197	1884.
.3720	-333.	328.	68.	-49.	-12.	-444.	.0336	-.0025	-.0216	-.0526	-.0279	-.0282	1863.
.3730	-329.	270.	88.	-82.	-16.	-430.	.0357	-.0019	-.0209	-.0465	-.0274	-.0351	1829.
.3740	-318.	211.	103.	-109.	-19.	-410.	.0367	-.0013	-.0199	-.0401	-.0266	-.0403	1774.
.3750	-299.	153.	113.	-128.	-20.	-385.	.0367	-.0008	-.0185	-.0336	-.0253	-.0436	1694.
.3760	-275.	95.	119.	-140.	-19.	-354.	.0357	-.0003	-.0167	-.0269	-.0240	-.0450	1591.
.3770	-247.	38.	120.	-145.	-15.	-319.	.0337	.0001	-.0146	-.0202	-.0226	-.0444	1464.
.3780	-216.	-16.	116.	-141.	-10.	-281.	.0306	.0005	-.0122	-.0137	-.0214	-.0420	1311.
.3790	-183.	-63.	106.	-127.	-3.	-238.	.0268	.0008	-.0095	-.0078	-.0199	-.0379	1127.
.3800	-148.	-101.	88.	-103.	5.	-193.	.0221	.0009	-.0067	-.0025	-.0182	-.0321	914.
.3810	-113.	-132.	65.	-71.	13.	-147.	.0169	.0010	-.0037	.0020	-.0164	-.0251	684.
.3820	-80.	-154.	36.	-32.	23.	-102.	.0113	.0011	-.0006	.0058	-.0147	-.0170	455.
.3830	-48.	-167.	3.	15.	32.	-58.	.0056	.0010	.0024	.0087	-.0128	-.0083	282.

S/RV PIPING KEWAUNEE CKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
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ENGLISH UNITS

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

.3720	-339.	328.	68.	-49.	-12.	-444.	.0336	-.0025	-.0216	-.0526	-.0279	-.0282	1863.
.3730	-329.	270.	88.	-82.	-16.	-430.	.0357	-.0019	-.0209	-.0465	-.0274	-.0351	1829.
.3740	-318.	211.	103.	-109.	-19.	-410.	.0367	-.0013	-.0199	-.0401	-.0266	-.0403	1774.
.3750	-290.	153.	113.	-128.	-20.	-385.	.0367	-.0008	-.0185	-.0336	-.0253	-.0436	1694.
.3760	-275.	95.	119.	-140.	-19.	-354.	.0357	-.0003	-.0167	-.0269	-.0240	-.0450	1591.
.3770	-247.	38.	120.	-145.	-15.	-319.	.0337	.0001	-.0146	-.0202	-.0226	-.0444	1464.
.3780	-216.	-16.	116.	-141.	-10.	-281.	.0306	.0005	-.0122	-.0137	-.0214	-.0420	1311.
.3790	-183.	-63.	106.	-127.	-3.	-238.	.0268	.0008	-.0095	-.0078	-.0199	-.0379	1127.
.3800	-140.	-101.	88.	-103.	5.	-193.	.0221	.0009	-.0067	-.0025	-.0182	-.0321	914.
.3810	-117.	-132.	65.	-71.	13.	-147.	.0169	.0010	-.0037	.0020	-.0164	-.0251	684.
.3820	-80.	-154.	36.	-32.	23.	-102.	.0113	.0011	-.0006	.0058	-.0147	-.0170	455.
.3830	-48.	-167.	3.	15.	32.	-58.	.0056	.0010	.0024	.0087	-.0128	-.0083	282.

S/RV PIPING KEWAUNEE CKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

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

SECTION 62 MEMBER 2 SEQUENCE 90 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)
.3840	-16.	-168.	-35.	68.	40.	-15.	-.0002	.0009	.0054	.0105	-.0104	.0007	335.
.3850	15.	-158.	-76.	127.	46.	24.	-.0057	.0007	.0083	.0111	-.0076	.0096	575.
.3860	42.	-140.	-120.	190.	51.	60.	-.0108	.0004	.0110	.0108	-.0046	.0181	857.
.3870	65.	-114.	-163.	252.	54.	90.	-.0153	.0002	.0135	.0098	-.0016	.0258	1140.
.3880	82.	-83.	-205.	314.	55.	114.	-.0191	-.0001	.0156	.0080	.0015	.0325	1413.
.3890	95.	-45.	-248.	374.	53.	133.	-.0221	-.0004	.0175	.0055	.0049	.0378	1672.
.3900	103.	-4.	-289.	431.	48.	147.	-.0241	-.0006	.0190	.0023	.0086	.0416	1909.
.3910	106.	38.	-325.	480.	41.	154.	-.0252	-.0009	.0201	-.0011	.0123	.0437	2113.
.3920	104.	78.	-355.	521.	32.	154.	-.0253	-.0011	.0209	-.0045	.0158	.0442	2272.
.3930	97.	114.	-380.	552.	20.	148.	-.0243	-.0012	.0212	-.0076	.0192	.0429	2386.
.3940	87.	146.	-397.	574.	6.	137.	-.0225	-.0013	.0212	-.0106	.0226	.0399	2462.
.3950	75.	174.	-409.	586.	-9.	122.	-.0198	-.0013	.0209	-.0134	.0260	.0354	2499.
.3960	61.	194.	-413.	587.	-26.	103.	-.0164	-.0012	.0203	-.0157	.0292	.0295	2491.
.3970	44.	204.	-409.	577.	-43.	81.	-.0125	-.0011	.0195	-.0171	.0318	.0226	2437.
.3980	25.	205.	-399.	556.	-60.	56.	-.0082	-.0009	.0184	-.0177	.0340	.0149	2346.
.3990	7.	199.	-383.	528.	-77.	31.	-.0037	-.0006	.0172	-.0177	.0359	.0067	2229.
.4000	-9.	187.	-364.	493.	-93.	6.	.0007	-.0003	.0159	-.0172	.0378	-.0015	2093.

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)
.1870	457.	-1509.	1010.	-1263.	39.	487.	-.0296	.0058	-.0201	.1131	-.0106	-.0027	5651.

SECTION 63 MEMBER 1 SEQUENCE 90 LOCATION BEG TYPE EL

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	0.	0.	0.	-0.	0.	0.	.0000	.0000	-.0000	.0000	-.0000	-.0000	0.
.0020	0.	0.	0.	-0.	0.	0.	.0000	.0000	.0000	.0000	.0000	-.0000	0.
.0030	0.	0.	0.	-0.	0.	-0.	-.0000	.0000	.0000	.0000	.0000	-.0000	0.
.0040	0.	0.	0.	-0.	0.	0.	-.0000	.0000	.0000	.0000	.0000	.0000	0.
.0050	0.	-0.	0.	-0.	0.	0.	-.0000	-.0000	.0000	-.0000	.0000	.0000	0.
.0060	-0.	-0.	0.	-0.	0.	-0.	-.0000	-.0000	.0000	-.0000	.0000	.0000	0.
.0070	-0.	-0.	0.	-0.	0.	-0.	-.0000	-.0000	.0000	-.0000	.0000	-.0000	1.

S/RV PIPING KEWAUNEE CKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

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

SECTION 63 MEMBER 1 SEQUENCE 90 LOCATION BEG TYPE EL

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	0.	0.	0.	-0.	0.	0.	.0000	.0000	-.0000	.0000	-.0000	-.0000	0.
.0020	0.	0.	0.	-0.	0.	0.	.0000	.0000	.0000	.0000	.0000	-.0000	0.
.0030	0.	0.	0.	-0.	0.	-0.	-.0000	.0000	.0000	.0000	.0000	-.0000	0.
.0040	0.	0.	0.	-0.	0.	0.	-.0000	.0000	.0000	.0000	.0000	.0000	0.
.0050	0.	-0.	0.	-0.	0.	0.	-.0000	-.0000	.0000	-.0000	.0000	.0000	0.
.0060	-0.	-0.	0.	-0.	0.	-0.	-.0000	-.0000	.0000	-.0000	.0000	.0000	0.
.0070	-0.	-0.	0.	-0.	0.	-0.	-.0000	-.0000	.0000	-.0000	.0000	-.0000	1.

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

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

SECTION 63 MEMBER 1 SEQUENCE 90 LOCATION BEG TYPE EL

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.	-0.	1.	-1.	0.	-0.	-.0000	-.0000	.0000	-.0001	.0001	-.0000	3.
.0090	-1.	-1.	1.	-1.	0.	-1.	-.0000	-.0000	.0000	-.0001	.0002	-.0000	7.
.0100	-2.	-2.	1.	-2.	1.	-1.	-.0000	-.0000	.0000	-.0002	.0004	-.0000	12.
.0110	-3.	-3.	2.	-3.	1.	-2.	-.0001	-.0000	.0000	-.0004	.0006	.0000	18.
.0120	-4.	-3.	2.	-5.	2.	-4.	-.0002	-.0000	.0000	-.0006	.0008	.0000	27.
.0130	-5.	-5.	2.	-8.	3.	-6.	-.0002	-.0001	-.0000	-.0010	.0012	-.0000	43.
.0140	-8.	-8.	4.	-12.	4.	-10.	-.0004	-.0001	-.0000	-.0016	.0019	-.0001	67.
.0150	-11.	-13.	6.	-17.	6.	-14.	-.0005	-.0001	-.0001	-.0023	.0027	-.0000	94.
.0160	-15.	-18.	8.	-21.	8.	-17.	-.0008	-.0002	-.0002	-.0031	.0036	.0002	117.
.0170	-18.	-23.	10.	-23.	10.	-19.	-.0010	-.0003	-.0003	-.0037	.0044	.0007	132.
.0180	-20.	-27.	11.	-23.	11.	-20.	-.0014	-.0003	-.0004	-.0041	.0050	.0014	135.
.0190	-21.	-30.	11.	-22.	12.	-18.	-.0018	-.0004	-.0006	-.0044	.0053	.0024	130.
.0200	-21.	-32.	11.	-19.	12.	-16.	-.0022	-.0004	-.0007	-.0044	.0054	.0036	115.
.0210	-20.	-31.	8.	-14.	11.	-12.	-.0027	-.0004	-.0008	-.0041	.0050	.0050	90.
.0220	-18.	-30.	2.	-6.	10.	-7.	-.0032	-.0005	-.0009	-.0036	.0043	.0065	57.
.0230	-16.	-27.	-8.	4.	8.	-3.	-.0036	-.0005	-.0010	-.0028	.0032	.0079	41.
.0240	-12.	-20.	-15.	14.	7.	1.	-.0040	-.0005	-.0012	-.0021	.0024	.0089	67.
.0250	-9.	-15.	-17.	21.	8.	3.	-.0042	-.0005	-.0014	-.0017	.0023	.0094	94.
.0260	-14.	-17.	-16.	26.	8.	4.	-.0043	-.0005	-.0015	-.0015	.0030	.0097	117.
.0270	-24.	-21.	-20.	39.	6.	9.	-.0042	-.0005	-.0016	-.0006	.0032	.0102	168.
.0280	-24.	-4.	-30.	60.	2.	20.	-.0040	-.0003	-.0015	.0021	.0017	.0107	262.
.0290	-13.	30.	-34.	76.	-2.	28.	-.0038	-.0001	-.0013	.0052	-.0005	.0104	339.
.0300	-22.	30.	-37.	79.	-6.	22.	-.0037	-.0000	-.0010	.0062	-.0010	.0098	344.
.0310	-45.	14.	-39.	80.	-14.	12.	-.0036	.0000	-.0005	.0070	-.0013	.0095	344.
.0320	-39.	44.	-46.	93.	-25.	11.	-.0036	.0003	.0001	.0105	-.0054	.0090	403.
.0330	-7.	104.	-68.	110.	-37.	10.	-.0033	.0006	.0007	.0151	-.0125	.0075	485.
.0340	12.	139.	-86.	115.	-46.	1.	-.0028	.0009	.0012	.0176	-.0176	.0051	518.
.0350	7.	141.	-83.	105.	-50.	-16.	-.0020	.0010	.0014	.0173	-.0183	.0019	490.
.0360	1.	140.	-75.	92.	-50.	-29.	-.0006	.0010	.0014	.0160	-.0175	-.0023	452.
.0370	10.	154.	-86.	92.	-48.	-31.	.0014	.0012	.0011	.0155	-.0181	-.0071	451.
.0380	24.	180.	-100.	105.	-45.	-19.	.0039	.0014	.0004	.0159	-.0191	-.0118	483.
.0390	34.	196.	-95.	109.	-39.	-5.	.0065	.0015	-.0005	.0146	-.0175	-.0167	482.
.0400	31.	171.	-77.	87.	-25.	-5.	.0091	.0013	-.0017	.0093	-.0125	-.0223	380.
.0410	15.	108.	-63.	60.	-12.	-10.	.0114	.0010	-.0029	.0020	-.0066	-.0269	260.
.0420	23.	82.	-57.	55.	-6.	5.	.0133	.0008	-.0041	-.0019	-.0052	-.0294	230.
.0430	73.	109.	-62.	59.	-3.	31.	.0147	.0008	-.0052	-.0030	-.0085	-.0310	278.
.0440	120.	105.	-70.	40.	5.	39.	.0157	.0006	-.0062	-.0074	-.0107	-.0330	234.
.0450	121.	28.	-52.	-9.	17.	31.	.0163	.0001	-.0071	-.0164	-.0065	-.0340	152.

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

.0340	12.	179.	-86.	115.	-46.	1.	-.0028	.0009	.0012	.0176	-.0176	.0051	518.
.0350	7.	141.	-83.	105.	-50.	-16.	-.0020	.0010	.0014	.0173	-.0183	.0019	490.
.0360	1.	140.	-75.	92.	-50.	-29.	-.0006	.0010	.0014	.0160	-.0175	-.0023	452.
.0370	10.	154.	-86.	92.	-48.	-31.	.0014	.0012	.0011	.0155	-.0181	-.0071	451.
.0380	24.	180.	-100.	105.	-45.	-19.	.0039	.0014	.0004	.0159	-.0191	-.0118	483.
.0390	34.	196.	-95.	109.	-35.	-5.	.0065	.0015	-.0005	.0146	-.0175	-.0167	482.
.0400	31.	171.	-77.	87.	-25.	-5.	.0091	.0013	-.0017	.0093	-.0125	-.0223	380.
.0410	15.	108.	-63.	60.	-12.	-10.	.0114	.0010	-.0029	.0020	-.0066	-.0269	260.
.0420	23.	82.	-57.	55.	-6.	5.	.0133	.0008	-.0041	-.0019	-.0052	-.0294	230.
.0430	73.	109.	-62.	59.	-2.	31.	.0147	.0008	-.0052	-.0030	-.0085	-.0310	278.
.0440	120.	105.	-70.	40.	1.	39.	.0157	.0006	-.0062	-.0074	-.0107	-.0330	234.
.0450	121.	28.	-52.	-9.	17.	31.	.0163	.0001	-.0071	-.0164	-.0065	-.0340	152.

S/RV PIPING KEWAUNEE CKW08F 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 63 MEMBER 1 SEQUENCE 90 LOCATION BEG TYPE EL

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)
.0460	103.	-62.	-12.	-59.	30.	28.	.0165	-.0005	-.0080	-.0255	.0001	-.0336	299.
.0470	117.	-105.	5.	-89.	41.	40.	.0167	-.0009	-.0087	-.0314	.0028	-.0325	443.
.0480	140.	-122.	4.	-104.	51.	61.	.0167	-.0011	-.0094	-.0350	.0030	-.0308	547.
.0490	144.	-171.	29.	-125.	60.	78.	.0162	-.0015	-.0099	-.0394	.0074	-.0275	666.
.0500	103.	-261.	82.	-167.	72.	79.	.0150	-.0021	-.0102	-.0462	.0164	-.0234	827.
.0510	69.	-350.	120.	-214.	84.	64.	.0130	-.0026	-.0101	-.0530	.0240	-.0193	998.
.0520	63.	-384.	136.	-240.	88.	56.	.0104	-.0029	-.0095	-.0551	.0259	-.0140	1090.
.0530	71.	-368.	149.	-242.	82.	57.	.0070	-.0030	-.0084	-.0521	.0239	-.0068	1092.
.0540	68.	-357.	157.	-249.	74.	45.	.0031	-.0030	-.0068	-.0487	.0220	.0006	1099.
.0550	44.	-373.	156.	-268.	69.	13.	-.0011	-.0031	-.0049	-.0469	.0218	.0071	1156.
.0560	12.	-369.	157.	-276.	62.	-17.	-.0051	-.0031	-.0028	-.0430	.0221	.0136	1182.
.0570	-9.	-313.	154.	-257.	53.	-31.	-.0088	-.0027	-.0007	-.0348	.0208	.0197	1102.
.0580	-24.	-236.	129.	-224.	45.	-45.	-.0120	-.0023	.0013	-.0252	.0187	.0243	970.
.0590	-56.	-175.	105.	-191.	43.	-66.	-.0145	-.0019	.0031	-.0169	.0193	.0273	862.
.0600	-109.	-128.	105.	-157.	42.	-86.	-.0167	-.0015	.0045	-.0090	.0234	.0296	767.
.0610	-155.	-67.	101.	-110.	39.	-101.	-.0184	-.0010	.0058	.0001	.0266	.0313	646.
.0620	-170.	29.	64.	-47.	34.	-110.	-.0197	-.0003	.0069	.0113	.0251	.0319	519.
.0630	-166.	150.	17.	25.	27.	-113.	-.0206	.0004	.0081	.0238	.0207	.0317	494.
.0640	-170.	256.	-15.	84.	21.	-118.	-.0211	.0012	.0092	.0350	.0179	.0309	610.
.0650	-187.	324.	-42.	122.	18.	-133.	-.0213	.0017	.0103	.0427	.0174	.0288	758.
.0660	-198.	379.	-75.	153.	17.	-147.	-.0208	.0022	.0113	.0489	.0165	.0258	888.
.0670	-191.	451.	-106.	193.	13.	-142.	-.0197	.0027	.0120	.0561	.0138	.0229	1000.
.0680	-180.	515.	-127.	233.	9.	-125.	-.0181	.0032	.0124	.0625	.0111	.0200	1103.
.0690	-182.	529.	-137.	253.	9.	-114.	-.0162	.0035	.0124	.0648	.0109	.0168	1158.
.0700	-192.	499.	-125.	249.	11.	-109.	-.0142	.0035	.0122	.0631	.0130	.0135	1136.
.0710	-194.	453.	-98.	233.	11.	-102.	-.0124	.0033	.0117	.0595	.0147	.0109	1061.
.0720	-178.	405.	-78.	215.	6.	-89.	-.0107	.0032	.0111	.0557	.0129	.0094	971.
.0730	-141.	358.	-71.	196.	-3.	-69.	-.0093	.0029	.0106	.0517	.0074	.0089	869.
.0740	-94.	307.	-61.	167.	-15.	-48.	-.0080	.0026	.0101	.0465	.0006	.0089	726.
.0750	-52.	230.	-44.	117.	-24.	-32.	-.0067	.0022	.0094	.0383	-.0049	.0087	518.
.0760	-21.	125.	-27.	57.	-29.	-20.	-.0051	.0015	.0084	.0274	-.0084	.0082	282.
.0770	12.	25.	-11.	6.	-33.	4.	-.0031	.0009	.0068	.0165	-.0116	.0077	142.
.0780	56.	-51.	5.	-29.	-36.	41.	-.0006	.0003	.0047	.0064	-.0150	.0067	259.
.0790	95.	-132.	20.	-61.	-33.	80.	.0024	-.0004	.0020	-.0048	-.0165	.0049	441.
.0800	111.	-239.	46.	-96.	-25.	110.	.0056	-.0012	-.0013	-.0183	-.0140	.0023	619.
.0810	114.	-345.	83.	-131.	-15.	135.	.0087	-.0020	-.0049	-.0322	-.0093	-.0007	788.
.0820	120.	-424.	110.	-158.	-6.	157.	.0114	-.0027	-.0084	-.0444	-.0062	-.0037	930.
.0830	152.	-475.	112.	-173.	-1.	175.	.0137	-.0032	-.0117	-.0543	-.0064	-.0064	1025.

S/RV PIPING KEWAUNEE CKW08F 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

.0720	-173.	435.	-7.	213.	6.	-69.	-.0137	.0032	.0111	.0557	.0129	.0094	971.
.0730	-141.	358.	-71.	196.	-2.	-69.	-.0093	.0029	.0106	.0517	.0074	.0089	869.
.0740	-94.	307.	-61.	167.	-15.	-48.	-.0080	.0026	.0101	.0465	.0006	.0089	726.
.0750	-52.	230.	-44.	117.	-24.	-32.	-.0067	.0022	.0094	.0383	-.0049	.0087	518.
.0760	-21.	125.	-27.	57.	-29.	-20.	-.0051	.0015	.0084	.0274	-.0084	.0082	282.
.0770	12.	25.	-11.	6.	-37.	4.	-.0031	.0009	.0068	.0165	-.0116	.0077	142.
.0780	56.	-51.	5.	-29.	-36.	41.	-.0006	.0003	.0047	.0064	-.0150	.0067	259.
.0790	95.	-132.	20.	-61.	-33.	80.	.0024	-.0004	.0020	-.0048	-.0165	.0049	441.
.0800	111.	-239.	46.	-96.	-25.	110.	.0056	-.0012	-.0013	-.0183	-.0140	.0023	619.
.0810	114.	-345.	83.	-131.	-15.	135.	.0087	-.0020	-.0049	-.0322	-.0093	-.0007	788.
.0820	120.	-424.	110.	-158.	-6.	157.	.0114	-.0027	-.0084	-.0444	-.0062	-.0037	930.
.0830	152.	-475.	112.	-172.	-1.	175.	.0137	-.0032	-.0117	-.0543	-.0064	-.0064	1025.

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 63 MEMBER 1 SEQUENCE 00 LOCATION DEG TYPE EL

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.0840	173.	-506.	103.	-175.	-2.	190.	.0152	-.0036	-.0144	-.0614	-.0086	-.0080	1079.
.0850	190.	-519.	91.	-173.	-7.	200.	.0161	-.0039	-.0165	-.0662	-.0119	-.0086	1103.
.0860	204.	-520.	68.	-169.	-15.	199.	.0163	-.0042	-.0181	-.0695	-.0161	-.0091	1089.
.0870	213.	-510.	32.	-156.	-24.	191.	.0161	-.0043	-.0193	-.0709	-.0210	-.0093	1034.
.0880	217.	-476.	-2.	-127.	-35.	187.	.0157	-.0042	-.0203	-.0694	-.0260	-.0089	953.
.0890	219.	-423.	-33.	-85.	-46.	183.	.0151	-.0040	-.0211	-.0657	-.0305	-.0087	862.
.0900	215.	-370.	-69.	-40.	-53.	171.	.0146	-.0038	-.0219	-.0617	-.0337	-.0094	766.
.0910	200.	-320.	-99.	8.	-57.	156.	.0142	-.0035	-.0225	-.0573	-.0347	-.0106	692.
.0920	181.	-257.	-123.	62.	-59.	143.	.0140	-.0031	-.0230	-.0512	-.0344	-.0122	695.
.0930	169.	-175.	-154.	120.	-59.	130.	.0139	-.0026	-.0231	-.0438	-.0344	-.0146	780.
.0940	161.	-87.	-194.	174.	-54.	115.	.0141	-.0021	-.0229	-.0360	-.0340	-.0180	897.
.0950	141.	-8.	-225.	218.	-46.	96.	.0143	-.0015	-.0222	-.0285	-.0313	-.0215	1011.
.0960	109.	55.	-241.	253.	-35.	77.	.0144	-.0009	-.0211	-.0212	-.0264	-.0247	1113.
.0970	76.	109.	-256.	284.	-25.	58.	.0144	-.0004	-.0196	-.0137	-.0213	-.0273	1215.
.0980	50.	163.	-268.	316.	-16.	44.	.0139	.0002	-.0177	-.0052	-.0171	-.0286	1333.
.0990	25.	212.	-265.	344.	-10.	33.	.0128	.0007	-.0154	.0039	-.0134	-.0281	1444.
.1000	-5.	236.	-247.	358.	-6.	16.	.0109	.0012	-.0126	.0122	-.0092	-.0259	1495.
.1010	-38.	234.	-220.	354.	-5.	-8.	.0081	.0015	-.0094	.0192	-.0052	-.0221	1477.
.1020	-63.	228.	-189.	340.	-7.	-34.	.0046	.0018	-.0055	.0265	-.0029	-.0166	1424.
.1030	-77.	231.	-158.	321.	-14.	-54.	.0004	.0022	-.0011	.0349	-.0032	-.0093	1361.
.1040	-86.	231.	-131.	296.	-24.	-72.	-.0041	.0025	.0037	.0433	-.0048	-.0010	1276.
.1050	-99.	219.	-103.	261.	-34.	-90.	-.0086	.0027	.0087	.0508	-.0061	.0077	1161.
.1060	-117.	200.	-67.	219.	-43.	-105.	-.0129	.0029	.0135	.0571	-.0062	.0162	1028.
.1070	-135.	180.	-28.	175.	-48.	-116.	-.0166	.0031	.0180	.0625	-.0052	.0239	898.
.1080	-149.	167.	11.	132.	-50.	-124.	-.0197	.0032	.0220	.0668	-.0035	.0302	783.
.1090	-157.	159.	56.	90.	-47.	-128.	-.0220	.0034	.0252	.0700	-.0005	.0348	682.
.1100	-176.	142.	105.	48.	-42.	-131.	-.0235	.0034	.0278	.0714	.0044	.0381	610.
.1110	-191.	129.	153.	3.	-33.	-136.	-.0242	.0034	.0298	.0713	.0099	.0393	585.
.1120	-196.	129.	198.	-44.	-22.	-141.	-.0242	.0035	.0313	.0704	.0152	.0385	624.
.1130	-206.	128.	242.	-92.	-12.	-145.	-.0237	.0035	.0327	.0688	.0205	.0369	717.
.1140	-222.	118.	276.	-138.	-6.	-148.	-.0228	.0035	.0338	.0667	.0251	.0349	844.
.1150	-232.	113.	296.	-180.	-4.	-150.	-.0217	.0035	.0348	.0646	.0271	.0325	979.
.1160	-229.	118.	308.	-215.	-8.	-150.	-.0205	.0035	.0356	.0631	.0261	.0302	1094.
.1170	-218.	126.	322.	-245.	-17.	-150.	-.0194	.0036	.0361	.0616	.0228	.0280	1202.
.1180	-206.	110.	328.	-277.	-31.	-158.	-.0183	.0035	.0361	.0583	.0180	.0257	1336.
.1190	-178.	93.	329.	-304.	-47.	-165.	-.0171	.0033	.0356	.0542	.0109	.0228	1458.
.1200	-129.	92.	326.	-316.	-65.	-161.	-.0153	.0032	.0344	.0508	.0014	.0194	1505.
.1210	-69.	90.	309.	-314.	-83.	-145.	-.0125	.0031	.0324	.0470	-.0091	.0150	1485.

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

.1100	-176.	142.	105.	40.	-42.	-171.	-.0235	.0034	.0278	.0714	.0044	.0381	610.
.1110	-191.	129.	153.	3.	-33.	-136.	-.0242	.0034	.0298	.0713	.0099	.0393	585.
.1120	-196.	129.	198.	-44.	-22.	-141.	-.0242	.0035	.0313	.0704	.0152	.0385	624.
.1130	-206.	128.	242.	-92.	-12.	-145.	-.0237	.0035	.0327	.0688	.0205	.0369	717.
.1140	-222.	118.	276.	-138.	-6.	-148.	-.0228	.0035	.0338	.0667	.0251	.0349	844.
.1150	-232.	113.	296.	-180.	-4.	-150.	-.0217	.0035	.0348	.0646	.0271	.0325	979.
.1160	-229.	118.	308.	-215.	-8.	-150.	-.0205	.0035	.0356	.0631	.0261	.0302	1094.
.1170	-218.	126.	322.	-245.	-17.	-150.	-.0194	.0036	.0361	.0616	.0228	.0280	1202.
.1180	-206.	110.	328.	-277.	-31.	-158.	-.0183	.0035	.0361	.0583	.0180	.0257	1336.
.1190	-178.	93.	329.	-304.	-47.	-165.	-.0171	.0033	.0356	.0542	.0109	.0228	1458.
.1200	-129.	92.	326.	-316.	-65.	-161.	-.0153	.0032	.0344	.0508	.0014	.0194	1505.
.1210	-69.	90.	309.	-314.	-87.	-145.	-.0125	.0031	.0324	.0470	-.0091	.0150	1485.

S/RV PIPING KEWAUNEE OKW08F 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 63 MEMBER 1 SEQUENCE 90 LOCATION BEG TYPE EL

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)
.1220	-3.	84.	279.	-307.	-94.	-122.	-.0085	.0030	.0297	.0415	-.0188	.0083	1435.
.1230	56.	63.	244.	-300.	-95.	-93.	-.0029	.0028	.0262	.0335	-.0250	-.0010	1370.
.1240	106.	35.	220.	-290.	-86.	-52.	.0042	.0025	.0218	.0238	-.0268	-.0127	1279.
.1250	150.	-1.	201.	-275.	-67.	-4.	.0126	.0023	.0166	.0125	-.0250	-.0265	1182.
.1260	188.	-58.	176.	-257.	-41.	47.	.0218	.0019	.0108	-.0007	-.0209	-.0417	1105.
.1270	227.	-114.	161.	-231.	-14.	103.	.0311	.0015	.0047	-.0135	-.0157	-.0566	1058.
.1280	265.	-169.	158.	-196.	10.	164.	.0398	.0011	-.0013	-.0249	-.0109	-.0700	1067.
.1290	310.	-218.	153.	-164.	29.	215.	.0474	.0008	-.0067	-.0348	-.0082	-.0818	1137.
.1300	360.	-265.	140.	-147.	43.	248.	.0534	.0005	-.0110	-.0440	-.0083	-.0918	1217.
.1310	399.	-318.	125.	-143.	50.	263.	.0576	.0003	-.0140	-.0518	-.0099	-.0992	1267.
.1320	429.	-356.	119.	-145.	48.	269.	.0600	.0001	-.0155	-.0562	-.0132	-.1034	1292.
.1330	454.	-378.	104.	-147.	38.	268.	.0608	.0001	-.0157	-.0574	-.0190	-.1048	1285.
.1340	475.	-387.	76.	-148.	23.	257.	.0603	.0001	-.0148	-.0561	-.0265	-.1041	1243.
.1350	477.	-389.	55.	-143.	5.	243.	.0586	.0003	-.0132	-.0522	-.0331	-.1012	1177.
.1360	458.	-386.	49.	-131.	-13.	224.	.0560	.0005	-.0113	-.0466	-.0373	-.0968	1084.
.1370	437.	-362.	50.	-117.	-28.	197.	.0528	.0007	-.0093	-.0398	-.0398	-.0923	963.
.1380	412.	-330.	47.	-103.	-36.	160.	.0492	.0010	-.0073	-.0329	-.0407	-.0882	807.
.1390	374.	-288.	49.	-79.	-42.	123.	.0453	.0014	-.0052	-.0246	-.0394	-.0837	635.
.1400	328.	-221.	51.	-36.	-48.	98.	.0414	.0019	-.0030	-.0134	-.0373	-.0783	479.
.1410	280.	-124.	31.	20.	-52.	79.	.0376	.0025	-.0005	.0001	-.0361	-.0730	405.
.1420	252.	-3.	-4.	77.	-53.	60.	.0338	.0033	.0022	.0145	-.0351	-.0683	464.
.1430	195.	104.	-31.	124.	-51.	34.	.0300	.0040	.0052	.0280	-.0310	-.0637	577.
.1440	115.	192.	-42.	165.	-48.	5.	.0258	.0046	.0083	.0409	-.0242	-.0583	716.
.1450	43.	286.	-51.	208.	-49.	-22.	.0213	.0052	.0115	.0545	-.0189	-.0520	898.
.1460	-6.	392.	-74.	257.	-54.	-48.	.0163	.0059	.0147	.0691	-.0176	-.0448	1116.
.1470	-43.	498.	-86.	304.	-65.	-73.	.0108	.0066	.0179	.0837	-.0184	-.0365	1331.
.1480	-90.	571.	-80.	334.	-80.	-105.	.0048	.0070	.0212	.0964	-.0188	-.0270	1500.
.1490	-133.	620.	-70.	344.	-95.	-145.	-.0014	.0074	.0247	.1066	-.0197	-.0176	1607.
.1500	-154.	669.	-72.	338.	-111.	-185.	-.0071	.0077	.0281	.1150	-.0232	-.0092	1673.
.1510	-165.	709.	-85.	326.	-126.	-217.	-.0120	.0079	.0313	.1218	-.0280	-.0015	1717.
.1520	-171.	739.	-91.	312.	-139.	-232.	-.0158	.0080	.0339	.1269	-.0319	.0052	1724.
.1530	-174.	746.	-93.	287.	-143.	-239.	-.0180	.0080	.0355	.1281	-.0336	.0095	1671.
.1540	-166.	726.	-92.	246.	-135.	-243.	-.0185	.0077	.0358	.1238	-.0321	.0104	1548.
.1550	-159.	673.	-75.	196.	-115.	-238.	-.0173	.0072	.0346	.1145	-.0263	.0085	1373.
.1560	-155.	591.	-42.	149.	-86.	-218.	-.0145	.0065	.0319	.1014	-.0167	.0048	1158.
.1570	-132.	511.	-0.	103.	-50.	-183.	-.0104	.0057	.0278	.0858	-.0061	-.0007	902.
.1580	-93.	415.	34.	49.	-7.	-145.	-.0054	.0048	.0228	.0666	.0050	-.0080	640.
.1590	-64.	283.	71.	-18.	40.	-108.	.0000	.0036	.0172	.0440	.0180	-.0157	488.

S/RV PIPING KEWAUNEE OKW08F 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

.1480	-97.	571.	-80.	334.	-80.	-105.	.0048	.0070	.0212	.0964	-.0188	-.0270	1500.
.1490	-137.	620.	-70.	344.	-95.	-145.	-.0014	.0074	.0247	.1066	-.0197	-.0176	1607.
.1500	-154.	669.	-72.	338.	-111.	-185.	-.0071	.0077	.0281	.1150	-.0232	-.0092	1673.
.1510	-165.	709.	-85.	326.	-126.	-217.	-.0120	.0079	.0313	.1218	-.0280	-.0015	1717.
.1520	-171.	739.	-91.	312.	-139.	-232.	-.0158	.0080	.0339	.1269	-.0319	.0052	1724.
.1530	-174.	746.	-93.	287.	-147.	-239.	-.0180	.0080	.0355	.1281	-.0336	.0095	1671.
.1540	-166.	726.	-92.	246.	-135.	-243.	-.0185	.0077	.0358	.1238	-.0321	.0104	1548.
.1550	-159.	673.	-75.	196.	-115.	-238.	-.0173	.0072	.0346	.1145	-.0263	.0085	1373.
.1560	-155.	591.	-42.	149.	-86.	-218.	-.0145	.0065	.0319	.1014	-.0167	.0048	1158.
.1570	-132.	511.	-0.	103.	-50.	-183.	-.0104	.0057	.0278	.0858	-.0061	-.0007	902.
.1580	-97.	415.	34.	49.	-7.	-145.	-.0054	.0048	.0228	.0666	.0050	-.0080	640.
.1590	-64.	283.	71.	-18.	40.	-108.	.0000	.0036	.0172	.0440	.0180	-.0157	488.

S/RV PIPING KEWAUNEE CKW00F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION 63 MEMBER 1 SEQUENCE 90 LOCATION BEG TYPE EL

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.1600	-43.	137.	120.	-93.	85.	-68.	.0053	.0023	.0116	.0201	.0318	-.0223	597.
.1610	-11.	-2.	160.	-172.	127.	-27.	.0101	.0010	.0062	-.0036	.0430	-.0278	898.
.1620	31.	-144.	175.	-256.	167.	7.	.0139	-.0004	.0012	-.0275	.0507	-.0319	1267.
.1630	67.	-290.	197.	-342.	191.	35.	.0164	-.0018	-.0034	-.0505	.0567	-.0333	1642.
.1640	88.	-449.	233.	-425.	210.	57.	.0174	-.0032	-.0077	-.0724	.0621	-.0314	1991.
.1650	108.	-605.	265.	-498.	221.	71.	.0169	-.0047	-.0117	-.0925	.0649	-.0270	2292.
.1660	141.	-731.	286.	-557.	226.	80.	.0152	-.0060	-.0153	-.1095	.0643	-.0209	2529.
.1670	164.	-840.	305.	-601.	225.	82.	.0124	-.0071	-.0186	-.1237	.0627	-.0131	2701.
.1680	161.	-941.	328.	-635.	220.	76.	.0087	-.0082	-.0214	-.1354	.0624	-.0041	2821.
.1690	137.	-1027.	337.	-656.	213.	61.	.0046	-.0092	-.0236	-.1444	.0626	.0052	2888.
.1700	109.	-1069.	324.	-655.	204.	42.	.0001	-.0098	-.0252	-.1491	.0617	.0141	2870.
.1710	75.	-1060.	298.	-627.	191.	24.	-.0045	-.0102	-.0262	-.1486	.0597	.0229	2739.
.1720	20.	-1028.	258.	-573.	174.	1.	-.0093	-.0103	-.0268	-.1440	.0579	.0316	2500.
.1730	-44.	-961.	209.	-496.	155.	-29.	-.0144	-.0101	-.0270	-.1353	.0556	.0398	2172.
.1740	-105.	-850.	149.	-399.	133.	-68.	-.0197	-.0096	-.0269	-.1227	.0518	.0467	1779.
.1750	-166.	-709.	77.	-283.	107.	-118.	-.0252	-.0089	-.0265	-.1066	.0467	.0527	1357.
.1760	-229.	-537.	0.	-148.	78.	-172.	-.0307	-.0080	-.0256	-.0869	.0404	.0579	1002.
.1770	-291.	-336.	-89.	3.	45.	-227.	-.0360	-.0068	-.0243	-.0638	.0324	.0622	968.
.1780	-343.	-103.	-195.	165.	10.	-283.	-.0408	-.0054	-.0226	-.0382	.0224	.0647	1367.
.1790	-392.	139.	-315.	330.	-23.	-338.	-.0447	-.0038	-.0206	-.0115	.0118	.0654	1973.
.1800	-445.	382.	-438.	494.	-54.	-389.	-.0476	-.0022	-.0184	.0152	.0023	.0642	2635.
.1810	-487.	632.	-555.	654.	-79.	-432.	-.0492	-.0005	-.0165	.0412	-.0063	.0607	3289.
.1820	-517.	866.	-673.	803.	-96.	-471.	-.0494	.0011	-.0151	.0643	-.0135	.0544	3904.
.1830	-535.	1073.	-780.	937.	-104.	-501.	-.0481	.0025	-.0144	.0836	-.0185	.0458	4455.
.1840	-545.	1248.	-862.	1056.	-102.	-518.	-.0453	.0038	-.0147	.0988	-.0203	.0355	4926.
.1850	-541.	1387.	-922.	1155.	-91.	-519.	-.0412	.0047	-.0159	.1093	-.0195	.0238	5300.
.1860	-519.	1488.	-967.	1227.	-70.	-508.	-.0359	.0055	-.0177	.1143	-.0165	.0107	5548.
.1870	-492.	1530.	-994.	1263.	-39.	-487.	-.0296	.0058	-.0201	.1131	-.0106	-.0027	5651.
.1880	-467.	1516.	-990.	1262.	-2.	-453.	-.0228	.0058	-.0228	.1064	-.0014	-.0152	5596.
.1890	-439.	1447.	-964.	1225.	38.	-409.	-.0159	.0055	-.0254	.0946	.0094	-.0261	5391.
.1900	-401.	1327.	-924.	1152.	79.	-359.	-.0095	.0048	-.0279	.0782	.0200	-.0346	5045.
.1910	-355.	1164.	-860.	1046.	117.	-303.	-.0042	.0037	-.0302	.0584	.0299	-.0396	4573.
.1920	-309.	950.	-768.	911.	148.	-247.	-.0003	.0024	-.0320	.0355	.0392	-.0404	3990.
.1930	-262.	697.	-655.	751.	173.	-195.	.0017	.0008	-.0334	.0104	.0469	-.0368	3317.
.1940	-206.	427.	-530.	570.	190.	-149.	.0019	-.0010	-.0342	-.0156	.0519	-.0294	2583.
.1950	-147.	149.	-396.	375.	199.	-109.	.0004	-.0029	-.0344	-.0416	.0547	-.0186	1827.
.1960	-100.	-137.	-257.	171.	201.	-76.	-.0025	-.0048	-.0339	-.0671	.0567	-.0050	1146.
.1970	-67.	-416.	-117.	-34.	199.	-50.	-.0066	-.0067	-.0327	-.0910	.0583	.0106	867.

S/RV PIPING KEWAUNEE CKW00F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.1860	-515.	1408.	-967.	1227.	-70.	-508.	-.0359	.0055	-.0177	.1143	-.0165	.0107	5548.
.1870	-492.	1530.	-994.	1263.	-39.	-487.	-.0296	.0058	-.0201	.1131	-.0106	-.0027	5651.
.1880	-467.	1516.	-990.	1262.	-2.	-453.	-.0228	.0058	-.0228	.1064	-.0014	-.0152	5596.
.1890	-435.	1447.	-964.	1225.	38.	-409.	-.0159	.0055	-.0254	.0946	.0094	-.0261	5391.
.1900	-401.	1327.	-924.	1152.	76.	-359.	-.0095	.0048	-.0279	.0782	.0200	-.0346	5045.
.1910	-355.	1164.	-860.	1046.	117.	-303.	-.0042	.0037	-.0302	.0584	.0299	-.0396	4573.
.1920	-305.	950.	-768.	911.	148.	-247.	-.0003	.0024	-.0320	.0355	.0392	-.0404	3990.
.1930	-262.	697.	-655.	751.	173.	-195.	.0017	.0008	-.0334	.0104	.0469	-.0368	3317.
.1940	-206.	427.	-530.	570.	190.	-149.	.0019	-.0010	-.0342	-.0156	.0519	-.0294	2583.
.1950	-147.	149.	-396.	375.	199.	-109.	.0004	-.0029	-.0344	-.0416	.0547	-.0186	1827.
.1960	-100.	-137.	-257.	171.	201.	-76.	-.0025	-.0048	-.0339	-.0671	.0567	-.0050	1146.
.1970	-67.	-416.	-117.	-74.	199.	-50.	-.0066	-.0067	-.0327	-.0910	.0583	.0106	867.

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 63 MEMBER 1 SEQUENCE 00 LOCATION BEG TYPE EL

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)
.1980	-42.	-667.	11.	-220.	193.	-28.	-.0113	-.0084	-.0310	-.1121	.0592	.0271	1256.
.1990	-31.	-882.	126.	-407.	184.	-11.	-.0164	-.0099	-.0289	-.1298	.0598	.0434	1865.
.2000	-35.	-1059.	229.	-560.	175.	1.	-.0216	-.0112	-.0266	-.1438	.0611	.0591	2450.
.2010	-56.	-1193.	324.	-685.	165.	6.	-.0268	-.0122	-.0243	-.1537	.0634	.0736	2943.
.2020	-85.	-1276.	402.	-778.	154.	3.	-.0318	-.0129	-.0219	-.1591	.0655	.0862	3311.
.2030	-116.	-1300.	458.	-834.	141.	-7.	-.0367	-.0132	-.0194	-.1592	.0663	.0967	3530.
.2040	-148.	-1264.	492.	-852.	126.	-22.	-.0412	-.0131	-.0168	-.1536	.0656	.1052	3594.
.2050	-184.	-1172.	503.	-836.	107.	-43.	-.0453	-.0126	-.0139	-.1426	.0635	.1115	3521.
.2060	-221.	-1033.	488.	-793.	87.	-70.	-.0489	-.0117	-.0105	-.1271	.0600	.1152	3343.
.2070	-261.	-856.	448.	-728.	65.	-104.	-.0518	-.0105	-.0067	-.1077	.0553	.1164	3082.
.2080	-302.	-648.	390.	-641.	43.	-139.	-.0539	-.0090	-.0026	-.0849	.0497	.1154	2745.
.2090	-340.	-417.	320.	-535.	20.	-171.	-.0550	-.0073	.0016	-.0593	.0433	.1122	2345.
.2100	-370.	-178.	240.	-415.	-1.	-200.	-.0552	-.0054	.0057	-.0325	.0363	.1070	1922.
.2110	-392.	56.	159.	-289.	-19.	-226.	-.0544	-.0035	.0095	-.0060	.0296	.0997	1533.
.2120	-405.	272.	86.	-162.	-33.	-247.	-.0526	-.0016	.0127	.0192	.0237	.0906	1242.
.2130	-408.	464.	20.	-39.	-43.	-260.	-.0497	.0001	.0155	.0423	.0187	.0802	1113.
.2140	-395.	630.	-42.	77.	-47.	-263.	-.0457	.0018	.0177	.0627	.0142	.0686	1159.
.2150	-369.	765.	-99.	180.	-46.	-253.	-.0406	.0033	.0194	.0799	.0103	.0560	1310.
.2160	-334.	859.	-148.	268.	-40.	-230.	-.0345	.0045	.0206	.0933	.0079	.0431	1481.
.2170	-296.	908.	-186.	336.	-27.	-194.	-.0276	.0055	.0212	.1023	.0071	.0301	1621.
.2180	-249.	915.	-212.	383.	-11.	-147.	-.0202	.0062	.0214	.1071	.0076	.0175	1713.
.2190	-194.	883.	-224.	410.	10.	-91.	-.0126	.0066	.0210	.1076	.0090	.0057	1754.
.2200	-137.	809.	-217.	417.	32.	-30.	-.0051	.0068	.0200	.1039	.0116	-.0046	1750.
.2210	-79.	696.	-190.	405.	54.	34.	.0019	.0066	.0186	.0967	.0148	-.0129	1711.
.2220	-18.	556.	-148.	376.	74.	99.	.0080	.0061	.0170	.0867	.0177	-.0189	1653.
.2230	46.	404.	-99.	334.	88.	161.	.0130	.0055	.0153	.0752	.0191	-.0224	1590.
.2240	100.	264.	-45.	277.	97.	218.	.0167	.0048	.0138	.0626	.0192	-.0234	1526.
.2250	160.	80.	13.	206.	100.	267.	.0192	.0040	.0128	.0495	.0182	-.0221	1466.
.2260	202.	-78.	70.	123.	96.	304.	.0204	.0031	.0122	.0364	.0161	-.0189	1426.
.2270	234.	-222.	122.	35.	87.	330.	.0204	.0022	.0121	.0241	.0127	-.0140	1433.
.2280	257.	-343.	170.	-52.	71.	348.	.0194	.0014	.0123	.0134	.0081	-.0079	1497.
.2290	270.	-439.	217.	-133.	51.	356.	.0176	.0006	.0127	.0043	.0028	-.0009	1599.
.2300	272.	-511.	263.	-208.	27.	353.	.0150	-.0000	.0132	-.0034	-.0026	.0062	1714.
.2310	265.	-559.	307.	-277.	2.	338.	.0121	-.0006	.0136	-.0097	-.0078	.0129	1824.
.2320	250.	-580.	346.	-336.	-24.	315.	.0089	-.0010	.0140	-.0144	-.0127	.0187	1924.
.2330	229.	-573.	377.	-385.	-50.	285.	.0058	-.0013	.0144	-.0174	-.0175	.0234	2010.
.2340	204.	-540.	397.	-423.	-76.	252.	.0031	-.0015	.0149	-.0186	-.0223	.0268	2078.
.2350	170.	-485.	402.	-452.	-100.	216.	.0008	-.0015	.0155	-.0185	-.0271	.0285	2132.

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

.2250	160.	80.	13.	206.	100.	267.	.0192	.0040	.0128	.0495	.0182	-.0221	1466.
.2260	202.	-78.	70.	123.	96.	304.	.0204	.0031	.0122	.0364	.0161	-.0189	1426.
.2270	234.	-222.	122.	35.	87.	330.	.0204	.0022	.0121	.0241	.0127	-.0140	1433.
.2280	257.	-343.	170.	-52.	71.	348.	.0194	.0014	.0123	.0134	.0081	-.0079	1497.
.2290	270.	-439.	217.	-133.	51.	356.	.0176	.0006	.0127	.0043	.0028	-.0009	1599.
.2300	272.	-511.	263.	-208.	27.	353.	.0150	-.0000	.0132	-.0034	-.0026	.0062	1714.
.2310	265.	-559.	307.	-277.	2.	338.	.0121	-.0006	.0136	-.0097	-.0078	.0129	1824.
.2320	250.	-590.	346.	-336.	-24.	315.	.0089	-.0010	.0140	-.0144	-.0127	.0187	1924.
.2330	229.	-573.	377.	-385.	-50.	285.	.0058	-.0013	.0144	-.0174	-.0175	.0234	2010.
.2340	204.	-540.	397.	-423.	-76.	252.	.0031	-.0015	.0149	-.0186	-.0223	.0268	2078.
.2350	179.	-485.	402.	-452.	-100.	216.	.0008	-.0015	.0155	-.0185	-.0271	.0285	2132.

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 63 MEMBER 1 SEQUENCE 90 LOCATION BEG TYPE EL

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	151.	-416.	397.	-473.	-121.	179.	-.0007	-.0014	.0160	-.0173	-.0316	.0286	2171.
.2370	126.	-339.	384.	-485.	-140.	145.	-.0018	-.0012	.0164	-.0155	-.0358	.0270	2192.
.2380	109.	-259.	364.	-488.	-155.	115.	-.0019	-.0009	.0166	-.0135	-.0397	.0239	2191.
.2390	102.	-182.	342.	-484.	-165.	91.	-.0012	-.0006	.0162	-.0118	-.0431	.0191	2166.
.2400	105.	-116.	320.	-474.	-169.	72.	.0005	-.0004	.0154	-.0110	-.0455	.0129	2120.
.2410	117.	-68.	301.	-459.	-167.	62.	.0031	-.0001	.0140	-.0114	-.0466	.0053	2056.
.2420	137.	-40.	283.	-442.	-158.	62.	.0068	.0000	.0122	-.0132	-.0463	-.0035	1975.
.2430	167.	-30.	264.	-422.	-143.	72.	.0113	.0001	.0100	-.0161	-.0450	-.0133	1884.
.2440	204.	-39.	244.	-402.	-122.	92.	.0167	.0002	.0075	-.0203	-.0424	-.0238	1797.
.2450	247.	-69.	225.	-385.	-95.	121.	.0228	.0002	.0048	-.0259	-.0383	-.0348	1730.
.2460	283.	-121.	209.	-370.	-63.	156.	.0292	.0001	.0020	-.0326	-.0327	-.0459	1696.
.2470	326.	-188.	196.	-356.	-29.	195.	.0357	-.0001	-.0009	-.0399	-.0263	-.0565	1699.
.2480	370.	-265.	187.	-341.	7.	236.	.0419	-.0003	-.0038	-.0474	-.0196	-.0662	1733.
.2490	417.	-347.	182.	-324.	41.	278.	.0474	-.0005	-.0065	-.0543	-.0129	-.0744	1789.
.2500	452.	-429.	183.	-305.	73.	316.	.0520	-.0007	-.0090	-.0603	-.0064	-.0809	1857.
.2510	483.	-506.	186.	-285.	101.	346.	.0555	-.0009	-.0110	-.0650	-.0003	-.0855	1920.
.2520	501.	-574.	190.	-266.	124.	367.	.0575	-.0010	-.0122	-.0678	.0051	-.0878	1961.
.2530	504.	-624.	191.	-243.	139.	378.	.0580	-.0011	-.0126	-.0678	.0094	-.0878	1964.
.2540	495.	-649.	186.	-216.	145.	379.	.0570	-.0010	-.0120	-.0646	.0117	-.0853	1917.
.2550	472.	-642.	174.	-183.	141.	368.	.0543	-.0008	-.0104	-.0578	.0120	-.0804	1812.
.2560	434.	-607.	157.	-146.	129.	342.	.0500	-.0004	-.0080	-.0478	.0105	-.0734	1642.
.2570	383.	-544.	138.	-105.	107.	302.	.0441	.0001	-.0048	-.0349	.0074	-.0647	1406.
.2580	321.	-452.	117.	-58.	78.	248.	.0370	.0007	-.0010	-.0194	.0028	-.0547	1111.
.2590	252.	-331.	91.	-5.	41.	183.	.0290	.0014	.0031	-.0015	-.0036	-.0437	785.
.2600	179.	-183.	61.	54.	-1.	112.	.0203	.0023	.0075	.0184	-.0115	-.0324	518.
.2610	107.	-15.	27.	116.	-46.	36.	.0115	.0032	.0120	.0393	-.0201	-.0214	542.
.2620	22.	162.	-10.	178.	-91.	-43.	.0029	.0042	.0164	.0601	-.0287	-.0112	854.
.2630	-50.	342.	-51.	238.	-135.	-119.	-.0049	.0052	.0205	.0801	-.0370	-.0024	1245.
.2640	-133.	521.	-94.	294.	-177.	-189.	-.0117	.0061	.0241	.0985	-.0451	.0046	1636.
.2650	-198.	689.	-138.	346.	-214.	-250.	-.0171	.0069	.0270	.1146	-.0525	.0096	1992.
.2660	-256.	836.	-178.	391.	-244.	-299.	-.0210	.0076	.0290	.1274	-.0590	.0125	2293.
.2670	-287.	951.	-210.	426.	-268.	-334.	-.0233	.0082	.0300	.1361	-.0643	.0133	2523.
.2680	-304.	1030.	-234.	451.	-284.	-354.	-.0238	.0085	.0298	.1402	-.0685	.0120	2671.
.2690	-300.	1069.	-249.	464.	-293.	-356.	-.0225	.0085	.0285	.1397	-.0717	.0086	2729.
.2700	-275.	1066.	-255.	464.	-293.	-340.	-.0195	.0084	.0261	.1343	-.0738	.0035	2692.
.2710	-232.	1016.	-253.	447.	-285.	-306.	-.0148	.0079	.0228	.1240	-.0745	-.0034	2554.
.2720	-174.	918.	-242.	414.	-269.	-257.	-.0085	.0073	.0187	.1090	-.0739	-.0115	2322.
.2730	-101.	778.	-223.	368.	-247.	-191.	-.0009	.0064	.0139	.0900	-.0721	-.0206	2013.

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

.2630	-99.	342.	-51.	238.	-135.	-119.	-.0049	.0052	.0205	.0801	-.0370	-.0024	1245.
.2640	-133.	521.	-94.	294.	-177.	-189.	-.0117	.0061	.0241	.0985	-.0451	.0046	1636.
.2650	-198.	689.	-138.	346.	-214.	-250.	-.0171	.0069	.0270	.1146	-.0525	.0096	1992.
.2660	-250.	836.	-170.	391.	-244.	-299.	-.0210	.0076	.0290	.1274	-.0590	.0125	2293.
.2670	-287.	951.	-210.	426.	-268.	-334.	-.0233	.0082	.0300	.1361	-.0643	.0133	2523.
.2680	-304.	1030.	-234.	451.	-284.	-354.	-.0238	.0085	.0298	.1402	-.0685	.0120	2671.
.2690	-300.	1069.	-249.	464.	-293.	-356.	-.0225	.0085	.0285	.1397	-.0717	.0086	2729.
.2700	-275.	1066.	-255.	464.	-293.	-340.	-.0195	.0084	.0261	.1343	-.0738	.0035	2692.
.2710	-232.	1016.	-253.	447.	-285.	-306.	-.0148	.0079	.0228	.1240	-.0745	-.0034	2554.
.2720	-174.	918.	-242.	414.	-269.	-257.	-.0085	.0073	.0187	.1090	-.0739	-.0115	2322.
.2730	-101.	778.	-223.	368.	-247.	-191.	-.0009	.0064	.0139	.0900	-.0721	-.0206	2013.

S/RV PIPING KEWAUNEE CKW08F 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 63 MEMBER 1 SEQUENCE 90 LOCATION BEG TYPE EL

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)
.2740	-14.	605.	-199.	311.	-219.	-111.	.0078	.0053	.0086	.0679	-.0697	-.0304	1653.
.2750	85.	403.	-167.	244.	-187.	-20.	.0172	.0041	.0029	.0432	-.0665	-.0406	1286.
.2760	189.	175.	-126.	169.	-151.	74.	.0269	.0027	-.0031	.0164	-.0623	-.0508	995.
.2770	292.	-71.	-79.	89.	-114.	171.	.0365	.0013	-.0091	-.0114	-.0573	-.0606	933.
.2780	396.	-316.	-28.	11.	-76.	267.	.0459	-.0001	-.0150	-.0385	-.0522	-.0696	1159.
.2790	499.	-546.	20.	-61.	-41.	359.	.0545	-.0015	-.0204	-.0637	-.0477	-.0778	1531.
.2800	590.	-755.	65.	-127.	-8.	443.	.0622	-.0026	-.0252	-.0863	-.0434	-.0848	1924.
.2810	663.	-941.	104.	-186.	21.	513.	.0686	-.0037	-.0291	-.1056	-.0390	-.0906	2279.
.2820	716.	-1090.	136.	-234.	44.	567.	.0735	-.0045	-.0319	-.1207	-.0348	-.0948	2567.
.2830	751.	-1190.	156.	-266.	62.	605.	.0768	-.0050	-.0336	-.1304	-.0317	-.0974	2771.
.2840	769.	-1235.	164.	-281.	72.	625.	.0782	-.0052	-.0342	-.1344	-.0298	-.0983	2874.
.2850	764.	-1231.	163.	-279.	75.	623.	.0776	-.0052	-.0336	-.1330	-.0285	-.0974	2867.
.2860	732.	-1182.	156.	-261.	72.	600.	.0751	-.0048	-.0319	-.1262	-.0275	-.0946	2748.
.2870	681.	-1084.	140.	-226.	61.	558.	.0707	-.0042	-.0292	-.1140	-.0273	-.0898	2526.
.2880	616.	-934.	114.	-172.	43.	500.	.0645	-.0033	-.0254	-.0965	-.0285	-.0834	2215.
.2890	536.	-743.	78.	-106.	20.	427.	.0568	-.0022	-.0208	-.0746	-.0306	-.0753	1839.
.2900	439.	-527.	38.	-31.	-7.	342.	.0477	-.0010	-.0153	-.0494	-.0327	-.0658	1432.
.2910	328.	-292.	-7.	49.	-36.	247.	.0377	.0004	-.0093	-.0219	-.0347	-.0551	1064.
.2920	213.	-43.	-56.	133.	-68.	149.	.0270	.0019	-.0028	.0072	-.0371	-.0434	880.
.2930	99.	211.	-106.	218.	-99.	50.	.0160	.0033	.0039	.0369	-.0396	-.0312	1021.
.2940	-14.	454.	-152.	298.	-128.	-45.	.0049	.0047	.0105	.0658	-.0414	-.0186	1369.
.2950	-125.	671.	-188.	370.	-154.	-136.	-.0057	.0060	.0168	.0925	-.0419	-.0060	1765.
.2960	-228.	857.	-213.	428.	-174.	-220.	-.0156	.0071	.0226	.1160	-.0410	.0062	2138.
.2970	-319.	1008.	-229.	474.	-189.	-293.	-.0249	.0080	.0278	.1360	-.0391	.0177	2456.
.2980	-395.	1120.	-233.	506.	-198.	-351.	-.0329	.0086	.0322	.1519	-.0362	.0285	2699.
.2990	-456.	1188.	-226.	520.	-200.	-396.	-.0396	.0090	.0359	.1633	-.0320	.0381	2852.
.3000	-503.	1208.	-209.	514.	-196.	-427.	-.0448	.0092	.0388	.1696	-.0266	.0463	2906.
.3010	-534.	1183.	-183.	488.	-185.	-446.	-.0486	.0090	.0408	.1709	-.0202	.0531	2865.
.3020	-549.	1119.	-150.	447.	-168.	-450.	-.0509	.0087	.0420	.1677	-.0133	.0582	2740.
.3030	-543.	1025.	-111.	394.	-147.	-441.	-.0517	.0081	.0423	.1606	-.0063	.0617	2544.
.3040	-521.	903.	-69.	330.	-122.	-421.	-.0511	.0074	.0417	.1496	.0009	.0633	2291.
.3050	-487.	756.	-22.	257.	-92.	-394.	-.0492	.0065	.0402	.1351	.0085	.0630	2000.
.3060	-445.	593.	26.	179.	-59.	-360.	-.0461	.0055	.0378	.1178	.0166	.0607	1695.
.3070	-394.	427.	73.	102.	-24.	-319.	-.0419	.0045	.0347	.0988	.0246	.0566	1402.
.3080	-335.	270.	113.	29.	13.	-275.	-.0367	.0035	.0309	.0789	.0322	.0506	1155.
.3090	-275.	123.	146.	-40.	51.	-230.	-.0308	.0024	.0266	.0584	.0396	.0428	997.
.3100	-220.	-13.	173.	-104.	88.	-188.	-.0244	.0014	.0220	.0379	.0473	.0337	968.
.3110	-171.	-129.	192.	-159.	123.	-149.	-.0178	.0005	.0170	.0182	.0546	.0236	1045.

S/RV PIPING KEWAUNEE CKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.3010	-534.	1103.	-183.	408.	-185.	-446.	-.0486	.0090	.0408	.1709	-.0202	.0531	2865.
.3020	-540.	1119.	-150.	447.	-168.	-450.	-.0509	.0087	.0420	.1677	-.0133	.0582	2740.
.3030	-543.	1025.	-111.	394.	-147.	-441.	-.0517	.0081	.0423	.1606	-.0063	.0617	2544.
.3040	-521.	903.	-69.	330.	-122.	-421.	-.0511	.0074	.0417	.1496	.0009	.0633	2291.
.3050	-487.	756.	-22.	257.	-97.	-394.	-.0492	.0065	.0402	.1351	.0085	.0630	2000.
.3060	-445.	593.	26.	179.	-59.	-360.	-.0461	.0055	.0378	.1178	.0166	.0607	1695.
.3070	-394.	427.	73.	102.	-24.	-319.	-.0419	.0045	.0347	.0988	.0246	.0566	1402.
.3080	-335.	270.	113.	29.	13.	-275.	-.0367	.0035	.0309	.0789	.0322	.0506	1155.
.3090	-275.	123.	146.	-40.	51.	-230.	-.0308	.0024	.0266	.0584	.0396	.0428	997.
.3100	-220.	-17.	173.	-104.	80.	-188.	-.0244	.0014	.0220	.0379	.0473	.0337	968.
.3110	-171.	-129.	192.	-159.	123.	-149.	-.0178	.0005	.0170	.0182	.0546	.0236	1045.

S/RV PIPING KEWAUNEE CKW08F 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 63 MEMBER 1 SEQUENCE 90 LOCATION BEG TYPE EL

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)
.3120	-124.	-215.	200.	-202.	155.	-114.	-.0113	-.0003	.0120	.0002	.0607	.0130	1164.
.3130	-81.	-271.	197.	-232.	187.	-85.	-.0052	-.0009	.0071	-.0156	.0652	.0024	1281.
.3140	-48.	-302.	187.	-251.	204.	-65.	.0003	-.0014	.0023	-.0293	.0687	-.0077	1378.
.3150	-28.	-313.	174.	-261.	220.	-55.	.0047	-.0019	-.0022	-.0408	.0712	-.0168	1443.
.3160	-16.	-301.	155.	-262.	228.	-54.	.0081	-.0022	-.0062	-.0497	.0721	-.0245	1466.
.3170	-11.	-265.	129.	-253.	228.	-61.	.0102	-.0024	-.0097	-.0557	.0707	-.0303	1445.
.3180	-14.	-211.	97.	-237.	220.	-75.	.0111	-.0025	-.0125	-.0590	.0674	-.0340	1385.
.3190	-27.	-148.	65.	-217.	204.	-97.	.0107	-.0026	-.0146	-.0600	.0628	-.0355	1307.
.3200	-48.	-82.	32.	-196.	183.	-125.	.0091	-.0026	-.0160	-.0593	.0570	-.0349	1232.
.3210	-74.	-14.	-2.	-173.	156.	-156.	.0065	-.0026	-.0168	-.0570	.0499	-.0323	1171.
.3220	-100.	55.	-35.	-147.	125.	-189.	.0031	-.0025	-.0171	-.0532	.0417	-.0279	1128.
.3230	-127.	122.	-66.	-119.	92.	-220.	-.0009	-.0024	-.0170	-.0483	.0329	-.0221	1113.
.3240	-153.	178.	-93.	-92.	59.	-248.	-.0052	-.0023	-.0167	-.0432	.0242	-.0153	1133.
.3250	-177.	222.	-116.	-66.	28.	-274.	-.0094	-.0023	-.0163	-.0382	.0162	-.0082	1181.
.3260	-199.	253.	-135.	-40.	-1.	-293.	-.0133	-.0023	-.0158	-.0335	.0090	-.0012	1235.
.3270	-215.	276.	-152.	-13.	-25.	-304.	-.0166	-.0022	-.0154	-.0290	.0027	.0054	1272.
.3280	-224.	291.	-168.	16.	-43.	-305.	-.0191	-.0022	-.0151	-.0250	-.0026	.0110	1286.
.3290	-227.	295.	-183.	43.	-56.	-298.	-.0206	-.0022	-.0149	-.0218	-.0064	.0154	1277.
.3300	-226.	287.	-196.	70.	-62.	-284.	-.0212	-.0022	-.0150	-.0195	-.0085	.0183	1245.
.3310	-220.	272.	-207.	97.	-62.	-261.	-.0209	-.0021	-.0152	-.0179	-.0092	.0198	1191.
.3320	-204.	255.	-218.	125.	-56.	-232.	-.0196	-.0021	-.0156	-.0166	-.0091	.0198	1123.
.3330	-181.	238.	-230.	154.	-46.	-196.	-.0175	-.0020	-.0162	-.0157	-.0082	.0184	1059.
.3340	-154.	217.	-239.	181.	-32.	-158.	-.0148	-.0019	-.0168	-.0153	-.0064	.0158	1013.
.3350	-126.	192.	-246.	205.	-15.	-119.	-.0117	-.0018	-.0175	-.0154	-.0037	.0124	992.
.3360	-95.	168.	-252.	228.	3.	-78.	-.0082	-.0017	-.0181	-.0155	-.0007	.0083	1005.
.3370	-61.	151.	-259.	249.	23.	-36.	-.0046	-.0016	-.0187	-.0153	.0021	.0039	1054.
.3380	-20.	137.	-266.	266.	41.	5.	-.0011	-.0014	-.0190	-.0150	.0048	-.0004	1125.
.3390	1.	122.	-269.	278.	59.	43.	.0021	-.0013	-.0191	-.0148	.0078	-.0043	1201.
.3400	24.	106.	-267.	284.	75.	78.	.0049	-.0011	-.0190	-.0147	.0109	-.0073	1268.
.3410	44.	92.	-263.	284.	89.	109.	.0071	-.0010	-.0186	-.0145	.0134	-.0094	1321.
.3420	61.	80.	-254.	279.	98.	136.	.0085	-.0010	-.0180	-.0140	.0153	-.0100	1359.
.3430	73.	67.	-240.	268.	104.	159.	.0090	-.0009	-.0171	-.0136	.0166	-.0090	1371.
.3440	77.	50.	-220.	249.	105.	177.	.0086	-.0010	-.0160	-.0134	.0174	-.0062	1349.
.3450	76.	28.	-194.	222.	102.	189.	.0073	-.0011	-.0146	-.0134	.0176	-.0017	1290.
.3460	71.	4.	-166.	188.	94.	197.	.0050	-.0013	-.0130	-.0136	.0168	.0047	1203.
.3470	62.	-22.	-134.	149.	81.	202.	.0019	-.0015	-.0112	-.0138	.0150	.0127	1099.
.3480	40.	-51.	-99.	104.	64.	203.	-.0019	-.0018	-.0093	-.0143	.0123	.0222	987.
.3490	35.	-86.	-63.	53.	44.	200.	-.0063	-.0022	-.0073	-.0153	.0090	.0328	884.

S/RV PIPING KEWAUNEE CKW08F 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

.3380	-27.	137.	-266.	226.	41.	5.	-.0011	-.0014	-.0190	-.0150	.0048	-.0004	1125.
.3390	1.	122.	-269.	228.	59.	43.	.0021	-.0013	-.0191	-.0148	.0078	-.0043	1201.
.3400	24.	106.	-267.	224.	75.	76.	.0049	-.0011	-.0190	-.0147	.0109	-.0073	1268.
.3410	44.	92.	-263.	224.	85.	109.	.0071	-.0010	-.0186	-.0145	.0134	-.0094	1321.
.3420	61.	80.	-254.	229.	90.	136.	.0085	-.0010	-.0180	-.0140	.0153	-.0100	1359.
.3430	72.	67.	-240.	238.	104.	159.	.0090	-.0009	-.0171	-.0136	.0166	-.0090	1371.
.3440	77.	50.	-220.	249.	105.	177.	.0086	-.0010	-.0160	-.0134	.0174	-.0062	1349.
.3450	76.	28.	-194.	252.	102.	189.	.0073	-.0011	-.0146	-.0134	.0176	-.0017	1290.
.3460	71.	4.	-166.	188.	94.	197.	.0050	-.0013	-.0130	-.0136	.0168	.0047	1203.
.3470	62.	-22.	-134.	149.	81.	202.	.0019	-.0015	-.0112	-.0138	.0150	.0127	1099.
.3480	42.	-51.	-99.	104.	64.	203.	-.0019	-.0018	-.0093	-.0143	.0123	.0222	987.
.3490	35.	-86.	-63.	53.	44.	200.	-.0063	-.0022	-.0073	-.0153	.0090	.0328	884.

S/RV PIPING KEWAUNEE CKW08F 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 63 MEMBER 1 SEQUENCE 90 LOCATION BEG TYPE EL

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.3500	10.	-127.	-25.	-1.	22.	195.	-.0110	-.0026	-.0054	-.0169	.0051	.0441	819.
.3510	2.	-171.	14.	-56.	-2.	189.	-.0159	-.0031	-.0035	-.0189	.0008	.0557	824.
.3520	-12.	-216.	52.	-110.	-27.	185.	-.0206	-.0036	-.0020	-.0213	-.0039	.0671	903.
.3530	-21.	-263.	88.	-161.	-50.	181.	-.0250	-.0041	-.0007	-.0242	-.0088	.0778	1033.
.3540	-28.	-311.	121.	-208.	-72.	180.	-.0287	-.0046	.0001	-.0278	-.0134	.0872	1188.
.3550	-31.	-360.	151.	-252.	-91.	181.	-.0316	-.0051	.0005	-.0319	-.0175	.0951	1349.
.3560	-29.	-407.	175.	-288.	-107.	187.	-.0335	-.0055	.0005	-.0364	-.0212	.1009	1500.
.3570	-21.	-449.	191.	-315.	-118.	198.	-.0342	-.0059	-.0000	-.0410	-.0244	.1044	1629.
.3580	-5.	-485.	201.	-334.	-125.	213.	-.0337	-.0062	-.0010	-.0458	-.0271	.1054	1732.
.3590	14.	-519.	205.	-345.	-126.	231.	-.0320	-.0065	-.0024	-.0508	-.0288	.1038	1811.
.3600	37.	-549.	204.	-347.	-124.	253.	-.0291	-.0067	-.0041	-.0557	-.0297	.0998	1866.
.3610	65.	-572.	197.	-341.	-117.	277.	-.0251	-.0068	-.0062	-.0604	-.0300	.0935	1896.
.3620	99.	-586.	184.	-324.	-107.	304.	-.0202	-.0068	-.0085	-.0643	-.0301	.0852	1909.
.3630	136.	-593.	166.	-300.	-95.	332.	-.0146	-.0067	-.0109	-.0676	-.0299	.0751	1910.
.3640	174.	-594.	144.	-271.	-81.	359.	-.0085	-.0065	-.0132	-.0702	-.0294	.0637	1906.
.3650	211.	-588.	119.	-237.	-66.	384.	-.0021	-.0062	-.0154	-.0718	-.0287	.0515	1902.
.3660	249.	-573.	90.	-198.	-51.	406.	.0043	-.0058	-.0174	-.0723	-.0283	.0387	1898.
.3670	285.	-548.	57.	-156.	-37.	426.	.0106	-.0054	-.0190	-.0715	-.0283	.0258	1899.
.3680	318.	-515.	24.	-113.	-24.	441.	.0165	-.0049	-.0203	-.0696	-.0283	.0132	1901.
.3690	346.	-477.	-8.	-70.	-13.	450.	.0219	-.0043	-.0212	-.0666	-.0284	.0012	1902.
.3700	367.	-433.	-39.	-28.	-3.	454.	.0266	-.0037	-.0217	-.0628	-.0283	-.0098	1897.
.3710	382.	-383.	-67.	12.	5.	451.	.0306	-.0031	-.0218	-.0581	-.0281	-.0197	1884.
.3720	390.	-328.	-91.	49.	12.	444.	.0336	-.0025	-.0216	-.0526	-.0279	-.0282	1863.
.3730	389.	-269.	-111.	82.	16.	430.	.0357	-.0019	-.0209	-.0465	-.0274	-.0351	1829.
.3740	380.	-209.	-126.	109.	19.	410.	.0367	-.0013	-.0199	-.0401	-.0266	-.0403	1774.
.3750	362.	-150.	-136.	128.	20.	385.	.0367	-.0008	-.0185	-.0336	-.0255	-.0436	1694.
.3760	336.	-92.	-140.	140.	19.	354.	.0357	-.0003	-.0167	-.0269	-.0240	-.0450	1591.
.3770	305.	-34.	-138.	145.	15.	319.	.0337	.0001	-.0146	-.0202	-.0226	-.0444	1464.
.3780	270.	21.	-132.	141.	10.	281.	.0306	.0005	-.0122	-.0137	-.0214	-.0420	1311.
.3790	229.	68.	-118.	127.	3.	238.	.0268	.0008	-.0095	-.0078	-.0199	-.0379	1127.
.3800	185.	107.	-97.	103.	-5.	193.	.0221	.0009	-.0067	-.0025	-.0182	-.0321	914.
.3810	138.	136.	-70.	71.	-13.	147.	.0169	.0010	-.0037	.0020	-.0164	-.0251	684.
.3820	93.	159.	-38.	32.	-23.	102.	.0113	.0011	-.0006	.0058	-.0147	-.0170	455.
.3830	49.	172.	-1.	-15.	-32.	58.	.0056	.0010	.0024	.0087	-.0128	-.0083	282.
.3840	5.	172.	41.	-68.	-40.	15.	-.0002	.0009	.0054	.0105	-.0104	.0007	335.
.3850	-37.	161.	86.	-127.	-46.	-24.	-.0057	.0007	.0083	.0111	-.0076	.0096	575.
.3860	-75.	141.	133.	-190.	-51.	-60.	-.0108	.0004	.0110	.0108	-.0046	.0181	857.
.3870	-106.	115.	179.	-252.	-54.	-90.	-.0153	.0002	.0135	.0098	-.0016	.0258	1140.

S/RV PIPING KEWAUNEE CKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
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PRESSURE
ENGLISH UNITS

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

.3760	337.	-42.	-143.	146.	16.	354.	.0357	-.0003	-.0167	-.0269	-.0240	-.0450	1591.
.3770	305.	-34.	-138.	145.	15.	319.	.0337	.0001	-.0146	-.0202	-.0226	-.0444	1464.
.3780	270.	21.	-132.	141.	10.	281.	.0306	.0005	-.0122	-.0137	-.0214	-.0420	1311.
.3790	229.	68.	-118.	127.	3.	238.	.0261	.0008	-.0095	-.0078	-.0199	-.0379	1127.
.3800	185.	107.	-97.	103.	-5.	193.	.0221	.0009	-.0067	-.0025	-.0182	-.0321	914.
.3810	135.	136.	-70.	71.	-13.	147.	.0169	.0010	-.0037	.0020	-.0164	-.0251	684.
.3820	97.	159.	-38.	32.	-27.	102.	.0113	.0011	-.0006	.0058	-.0147	-.0170	455.
.3830	40.	172.	-1.	-15.	-32.	58.	.0056	.0010	.0024	.0087	-.0128	-.0083	282.
.3840	5.	172.	41.	-68.	-40.	15.	-.0002	.0009	.0054	.0105	-.0104	.0007	335.
.3850	-37.	161.	86.	-127.	-46.	-24.	-.0057	.0007	.0083	.0111	-.0076	.0096	575.
.3860	-75.	141.	133.	-190.	-51.	-60.	-.0108	.0004	.0110	.0108	-.0046	.0181	857.
.3870	-106.	115.	179.	-252.	-54.	-90.	-.0153	.0002	.0135	.0098	-.0016	.0258	1140.

S/RV PIPING KEWAUNEE CKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

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

SECTION 63 MEMBER 1 SEQUENCE 90 LOCATION BEG TYPE EL

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)
.3880	-130.	83.	224.	-314.	-55.	-114.	-.0191	-.0001	.0156	.0080	.0015	.0325	1413.
.3890	-149.	45.	269.	-374.	-53.	-133.	-.0221	-.0004	.0175	.0055	.0049	.0378	1672.
.3900	-161.	2.	311.	-431.	-48.	-147.	-.0241	-.0006	.0190	.0023	.0086	.0416	1909.
.3910	-166.	-41.	348.	-480.	-41.	-154.	-.0252	-.0009	.0201	-.0011	.0123	.0437	2113.
.3920	-167.	-82.	378.	-521.	-32.	-154.	-.0253	-.0011	.0209	-.0045	.0158	.0442	2272.
.3930	-152.	-117.	401.	-552.	-20.	-148.	-.0243	-.0012	.0212	-.0076	.0192	.0429	2386.
.3940	-137.	-149.	417.	-574.	-6.	-137.	-.0225	-.0013	.0212	-.0106	.0226	.0399	2462.
.3950	-118.	-178.	427.	-586.	9.	-122.	-.0198	-.0013	.0209	-.0134	.0260	.0354	2499.
.3960	-96.	-199.	428.	-587.	26.	-103.	-.0164	-.0012	.0203	-.0157	.0292	.0295	2491.
.3970	-69.	-208.	422.	-577.	43.	-81.	-.0125	-.0011	.0195	-.0171	.0318	.0226	2437.
.3980	-38.	-207.	408.	-556.	60.	-56.	-.0082	-.0009	.0184	-.0177	.0340	.0149	2346.
.3990	-6.	-200.	389.	-528.	77.	-31.	-.0037	-.0006	.0172	-.0177	.0359	.0067	2229.
.4000	18.	-189.	366.	-493.	93.	-6.	.0007	-.0003	.0159	-.0172	.0378	-.0015	2093.

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)
.1870	492.	-1530.	994.	-1263.	39.	487.	-.0296	.0058	-.0201	.1131	-.0106	-.0027	5651.

SECTION 63 MEMBER 1 SEQUENCE 831 LOCATION END TYPE EL

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	-0.	-0.	-0.	-0.	-0.	0.	-.0000	.0000	-.0000	.0000	-.0000	-.0000	0.
.0020	-0.	-0.	-0.	-0.	-0.	0.	-.0000	.0000	-.0000	.0000	-.0000	-.0000	0.
.0030	-0.	-0.	-0.	0.	-0.	0.	-.0000	.0000	.0000	.0000	.0000	-.0000	0.
.0040	-0.	-0.	-0.	0.	-0.	-0.	-.0000	.0000	.0000	.0000	.0000	-.0000	0.
.0050	-0.	0.	-0.	0.	-0.	-0.	-.0000	.0000	.0000	.0000	.0000	.0000	0.
.0060	0.	0.	-0.	0.	-0.	0.	-.0000	-.0000	.0000	-.0000	.0000	.0000	0.
.0070	0.	0.	-0.	0.	-0.	0.	-.0000	-.0000	.0000	-.0000	.0000	-.0000	1.
.0080	0.	0.	-1.	1.	-0.	0.	-.0000	-.0000	.0000	-.0000	.0001	-.0000	4.
.0090	1.	1.	-1.	1.	-1.	1.	-.0000	-.0000	.0000	-.0001	.0002	-.0000	8.
.0100	2.	2.	-1.	3.	-1.	1.	-.0000	-.0000	.0000	-.0002	.0004	.0000	13.
.0110	3.	3.	-2.	4.	-2.	2.	-.0001	-.0000	.0000	-.0003	.0005	.0000	19.

S/RV PIPING KEWAUNEE CKW08F 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

0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	-0.	-0.	-0.	-0.	-0.	0.	-.0000	.0000	-.0000	.0000	-.0000	-.0000	0.
.0020	-0.	-0.	-0.	-0.	-0.	0.	-.0000	.0000	-.0000	.0000	-.0000	-.0000	0.
.0030	-0.	-0.	-0.	0.	-0.	0.	-.0000	.0000	.0000	.0000	.0000	-.0000	0.
.0040	-0.	-0.	-0.	0.	-0.	-0.	-.0000	.0000	.0000	.0000	.0000	-.0000	0.
.0050	-0.	0.	-0.	0.	-0.	-0.	-.0000	.0000	.0000	.0000	.0000	.0000	0.
.0060	0.	0.	-0.	0.	-0.	0.	-.0000	-.0000	.0000	-.0000	.0000	.0000	0.
.0070	0.	0.	-0.	0.	-0.	0.	-.0000	-.0000	.0000	-.0000	.0000	-.0000	1.
.0080	0.	0.	-1.	1.	-0.	0.	-.0000	-.0000	.0000	-.0000	.0001	-.0000	4.
.0090	1.	1.	-1.	1.	-1.	1.	-.0000	-.0000	.0000	-.0001	.0002	-.0000	8.
.0100	2.	2.	-1.	2.	-1.	1.	-.0000	-.0000	.0000	-.0002	.0004	.0000	13.
.0110	2.	3.	-2.	4.	-2.	2.	-.0001	-.0000	.0000	-.0003	.0005	.0000	19.

S/RV PIPING KEWAUNEE CKW08F 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 63 MEMBER 1 SEQUENCE 831 LOCATION END TYPE EL

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.0120	4.	3.	-2.	6.	-3.	3.	-.0001	-.0000	.0000	-.0004	.0007	.0001	29.
.0130	5.	5.	-2.	9.	-4.	5.	-.0002	-.0000	-.0000	-.0007	.0011	.0001	46.
.0140	8.	8.	-4.	13.	-6.	8.	-.0003	-.0000	-.0001	-.0012	.0017	.0001	70.
.0150	11.	13.	-6.	19.	-9.	11.	-.0004	-.0000	-.0001	-.0018	.0025	.0003	99.
.0160	15.	18.	-8.	24.	-12.	13.	-.0006	-.0001	-.0002	-.0024	.0034	.0005	126.
.0170	18.	23.	-10.	27.	-15.	14.	-.0008	-.0001	-.0004	-.0029	.0041	.0010	143.
.0180	20.	27.	-11.	29.	-17.	14.	-.0011	-.0001	-.0005	-.0033	.0046	.0017	150.
.0190	21.	30.	-11.	28.	-18.	12.	-.0015	-.0001	-.0006	-.0036	.0049	.0027	148.
.0200	21.	32.	-11.	25.	-18.	9.	-.0019	-.0001	-.0007	-.0037	.0049	.0038	136.
.0210	20.	31.	-8.	20.	-17.	6.	-.0023	-.0001	-.0008	-.0035	.0046	.0051	112.
.0220	18.	30.	-2.	13.	-14.	2.	-.0028	-.0001	-.0009	-.0033	.0039	.0066	80.
.0230	16.	27.	8.	3.	-11.	-2.	-.0033	-.0001	-.0011	-.0029	.0029	.0079	47.
.0240	12.	20.	15.	-8.	-8.	-5.	-.0037	-.0001	-.0012	-.0025	.0021	.0088	51.
.0250	9.	15.	17.	-16.	-8.	-6.	-.0039	-.0001	-.0014	-.0023	.0020	.0093	77.
.0260	14.	17.	16.	-21.	-9.	-8.	-.0039	-.0001	-.0016	-.0023	.0026	.0096	101.
.0270	24.	21.	20.	-31.	-9.	-14.	-.0038	-.0001	-.0016	-.0018	.0028	.0100	150.
.0280	24.	4.	30.	-55.	-4.	-23.	-.0037	-.0001	-.0016	.0001	.0014	.0103	251.
.0290	13.	-30.	34.	-80.	4.	-25.	-.0036	-.0000	-.0014	.0025	-.0006	.0100	349.
.0300	22.	-30.	37.	-82.	6.	-21.	-.0035	-.0000	-.0011	.0034	-.0010	.0096	354.
.0310	45.	-14.	39.	-79.	8.	-15.	-.0035	-.0000	-.0006	.0042	-.0012	.0095	339.
.0320	39.	-44.	46.	-98.	22.	-10.	-.0036	.0001	.0001	.0071	-.0048	.0092	420.
.0330	7.	-104.	68.	-127.	44.	2.	-.0037	.0002	.0007	.0110	-.0115	.0081	559.
.0340	-12.	-139.	86.	-138.	60.	18.	-.0035	.0002	.0013	.0131	-.0159	.0062	633.
.0350	-7.	-141.	83.	-129.	62.	34.	-.0028	.0003	.0016	.0131	-.0164	.0034	614.
.0360	-1.	-140.	75.	-116.	59.	47.	-.0014	.0003	.0015	.0122	-.0156	-.0005	579.
.0370	-10.	-154.	86.	-118.	61.	52.	.0004	.0003	.0012	.0116	-.0163	-.0052	596.
.0380	-24.	-180.	100.	-136.	64.	44.	.0027	.0004	.0006	.0115	-.0173	-.0101	653.
.0390	-34.	-196.	95.	-144.	59.	34.	.0053	.0004	-.0003	.0101	-.0160	-.0154	664.
.0400	-31.	-171.	77.	-119.	42.	30.	.0080	.0003	-.0015	.0055	-.0114	-.0212	540.
.0410	-15.	-108.	63.	-79.	23.	25.	.0105	.0002	-.0028	-.0005	-.0061	-.0260	358.
.0420	-23.	-82.	57.	-68.	19.	8.	.0123	.0002	-.0039	-.0041	-.0048	-.0290	295.
.0430	-77.	-109.	62.	-78.	28.	-9.	.0136	.0002	-.0049	-.0054	-.0082	-.0313	347.
.0440	-120.	-105.	70.	-57.	32.	-13.	.0144	.0001	-.0057	-.0090	-.0103	-.0335	277.
.0450	-121.	-28.	52.	8.	17.	-14.	.0151	-.0000	-.0066	-.0160	-.0066	-.0347	98.
.0460	-107.	62.	12.	75.	-4.	-24.	.0157	-.0002	-.0074	-.0230	-.0004	-.0347	328.
.0470	-117.	105.	-5.	113.	-14.	-40.	.0160	-.0003	-.0081	-.0276	.0019	-.0343	505.
.0480	-148.	122.	-4.	173.	-17.	-60.	.0160	-.0003	-.0087	-.0305	.0018	-.0333	611.
.0490	-144.	171.	-29.	162.	-31.	-84.	.0158	-.0005	-.0093	-.0340	.0057	-.0308	772.

S/RV PIPING KEWAUNEE CKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.0380	-24.	-180.	100.	-136.	64.	44.	.0027	.0004	.0006	.0115	-.0173	-.0101	653.
.0390	-34.	-176.	95.	-144.	59.	34.	.0053	.0004	-.0003	.0101	-.0160	-.0154	664.
.0400	-31.	-171.	77.	-119.	42.	30.	.0080	.0003	-.0015	.0055	-.0114	-.0212	540.
.0410	-12.	-108.	63.	-79.	27.	25.	.0105	.0002	-.0028	-.0005	-.0061	-.0260	358.
.0420	-27.	-02.	57.	-68.	19.	8.	.0123	.0002	-.0039	-.0041	-.0048	-.0290	295.
.0430	-77.	-109.	62.	-78.	28.	-9.	.0136	.0002	-.0049	-.0054	-.0082	-.0313	347.
.0440	-120.	-105.	76.	-87.	32.	-13.	.0144	.0001	-.0057	-.0090	-.0103	-.0335	277.
.0450	-121.	-28.	52.	8.	17.	-14.	.0151	-.0000	-.0066	-.0160	-.0066	-.0347	98.
.0460	-107.	62.	12.	75.	-4.	-24.	.0157	-.0002	-.0074	-.0230	-.0004	-.0347	328.
.0470	-117.	105.	-5.	113.	-14.	-40.	.0160	-.0003	-.0081	-.0276	.0019	-.0343	505.
.0480	-147.	122.	-4.	173.	-17.	-60.	.0160	-.0003	-.0087	-.0305	.0018	-.0333	611.
.0490	-144.	171.	-29.	162.	-31.	-84.	.0158	-.0005	-.0093	-.0340	.0057	-.0308	772.

S/RV PIPING KEWAUNEE CKW08F 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 63 MEMBER 1 SEQUENCE 831 LOCATION END TYPE EL

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.0500	-103.	261.	-82.	219.	-59.	-101.	.0151	-.0006	-.0096	-.0390	.0141	-.0273	1034.
.0510	-69.	350.	-120.	203.	-83.	-101.	.0136	-.0008	-.0096	-.0438	.0212	-.0233	1300.
.0520	-63.	384.	-136.	314.	-90.	-97.	.0112	-.0008	-.0090	-.0449	.0230	-.0179	1424.
.0530	-71.	368.	-149.	311.	-84.	-96.	.0079	-.0008	-.0080	-.0419	.0213	-.0107	1404.
.0540	-68.	357.	-157.	315.	-79.	-83.	.0041	-.0008	-.0064	-.0384	.0196	-.0029	1397.
.0550	-44.	373.	-156.	338.	-78.	-55.	.0001	-.0008	-.0045	-.0360	.0196	.0044	1465.
.0560	-12.	369.	-157.	345.	-70.	-29.	-.0038	-.0008	-.0025	-.0319	.0202	.0117	1481.
.0570	9.	313.	-154.	313.	-74.	-9.	-.0074	-.0007	-.0005	-.0247	.0192	.0185	1343.
.0580	24.	236.	-129.	264.	-67.	12.	-.0105	-.0006	.0013	-.0167	.0173	.0238	1140.
.0590	56.	175.	-105.	220.	-69.	37.	-.0130	-.0005	.0028	-.0099	.0179	.0277	977.
.0600	109.	128.	-105.	175.	-80.	58.	-.0149	-.0003	.0040	-.0035	.0219	.0308	840.
.0610	155.	67.	-101.	115.	-88.	76.	-.0164	-.0002	.0050	.0036	.0249	.0332	682.
.0620	170.	-29.	-64.	33.	-82.	95.	-.0177	-.0000	.0060	.0121	.0234	.0346	542.
.0630	166.	-150.	-17.	-61.	-68.	113.	-.0188	.0002	.0070	.0217	.0193	.0352	608.
.0640	170.	-256.	15.	-142.	-50.	131.	-.0195	.0004	.0080	.0303	.0167	.0351	844.
.0650	187.	-324.	42.	-193.	-56.	154.	-.0197	.0005	.0090	.0363	.0162	.0338	1056.
.0660	198.	-379.	75.	-233.	-53.	173.	-.0193	.0007	.0098	.0411	.0154	.0314	1232.
.0670	191.	-451.	106.	-286.	-44.	178.	-.0184	.0008	.0105	.0466	.0129	.0287	1418.
.0680	180.	-515.	127.	-339.	-35.	171.	-.0170	.0010	.0108	.0515	.0103	.0257	1589.
.0690	182.	-529.	137.	-361.	-34.	161.	-.0152	.0010	.0108	.0531	.0100	.0223	1656.
.0700	192.	-499.	125.	-351.	-39.	151.	-.0132	.0010	.0105	.0516	.0120	.0188	1605.
.0710	194.	-453.	98.	-327.	-44.	138.	-.0113	.0010	.0101	.0489	.0136	.0157	1494.
.0720	178.	-405.	78.	-301.	-38.	120.	-.0098	.0009	.0097	.0459	.0120	.0136	1361.
.0730	141.	-358.	71.	-272.	-20.	99.	-.0087	.0008	.0093	.0429	.0070	.0125	1211.
.0740	94.	-307.	61.	-231.	1.	76.	-.0077	.0008	.0091	.0391	.0007	.0117	1017.
.0750	52.	-230.	44.	-166.	17.	56.	-.0067	.0006	.0087	.0330	-.0042	.0108	735.
.0760	21.	-125.	27.	-84.	28.	33.	-.0053	.0004	.0080	.0248	-.0075	.0095	393.
.0770	-12.	-25.	11.	-11.	38.	1.	-.0035	.0003	.0068	.0162	-.0104	.0078	163.
.0780	-56.	51.	-5.	41.	48.	-42.	-.0011	.0001	.0049	.0079	-.0136	.0054	315.
.0790	-95.	132.	-20.	89.	52.	-86.	.0017	-.0001	.0024	-.0016	-.0151	.0022	562.
.0800	-111.	239.	-46.	146.	45.	-128.	.0049	-.0007	-.0006	-.0133	-.0129	-.0018	834.
.0810	-114.	345.	-83.	203.	31.	-166.	.0081	-.0006	-.0040	-.0254	-.0087	-.0059	1101.
.0820	-122.	424.	-110.	245.	22.	-196.	.0109	-.0008	-.0074	-.0363	-.0060	-.0099	1313.
.0830	-152.	475.	-112.	271.	22.	-218.	.0131	-.0009	-.0104	-.0454	-.0062	-.0133	1455.
.0840	-177.	506.	-103.	282.	29.	-235.	.0145	-.0011	-.0128	-.0521	-.0083	-.0154	1537.
.0850	-190.	519.	-91.	284.	40.	-245.	.0152	-.0012	-.0148	-.0568	-.0114	-.0163	1572.
.0860	-204.	520.	-68.	282.	54.	-242.	.0152	-.0012	-.0162	-.0603	-.0153	-.0166	1568.
.0870	-217.	510.	-32.	271.	69.	-232.	.0148	-.0013	-.0172	-.0622	-.0197	-.0165	1518.

S/RV PIPING KEWAUNEE CKW08F 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

.0770	-12.	-25.	11.	-11.	38.	1.	-.0035	.0003	.0068	.0162	-.0104	.0078	163.
.0780	-56.	51.	-5.	41.	49.	-42.	-.0011	.0001	.0049	.0079	-.0136	.0054	315.
.0790	-95.	132.	-20.	89.	52.	-86.	.0017	-.0001	.0024	-.0016	-.0151	.0022	562.
.0800	-111.	239.	-46.	146.	45.	-128.	.0049	-.0003	-.0006	-.0133	-.0129	-.0018	834.
.0810	-114.	345.	-83.	203.	31.	-166.	.0081	-.0006	-.0040	-.0254	-.0087	-.0059	1101.
.0820	-120.	424.	-110.	245.	22.	-196.	.0109	-.0008	-.0074	-.0363	-.0060	-.0099	1313.
.0830	-152.	475.	-112.	271.	22.	-218.	.0131	-.0009	-.0104	-.0454	-.0062	-.0133	1455.
.0840	-177.	506.	-103.	282.	29.	-235.	.0145	-.0011	-.0128	-.0521	-.0083	-.0154	1537.
.0850	-190.	519.	-91.	284.	40.	-245.	.0152	-.0012	-.0148	-.0568	-.0114	-.0163	1572.
.0860	-204.	520.	-69.	282.	54.	-242.	.0152	-.0012	-.0162	-.0603	-.0153	-.0166	1568.
.0870	-217.	510.	-32.	271.	69.	-232.	.0148	-.0013	-.0172	-.0622	-.0197	-.0165	1518.

S/RV PIPING KEWAUNEE CKW00F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION 63 MEMBER 1 SEQUENCE 831 LOCATION END TYPE EL

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)
.0880	-217.	476.	2.	238.	86.	-223.	.0141	-.0012	-.0181	-.0618	-.0242	-.0157	1407.
.0890	-219.	423.	33.	187.	101.	-212.	.0134	-.0012	-.0189	-.0598	-.0283	-.0150	1254.
.0900	-215.	370.	69.	134.	112.	-194.	.0127	-.0011	-.0196	-.0576	-.0312	-.0150	1090.
.0910	-200.	320.	99.	78.	116.	-174.	.0122	-.0011	-.0203	-.0551	-.0321	-.0154	932.
.0920	-181.	257.	123.	11.	117.	-155.	.0120	-.0010	-.0209	-.0513	-.0319	-.0163	813.
.0930	-169.	175.	154.	-63.	117.	-134.	.0119	-.0008	-.0212	-.0463	-.0319	-.0179	788.
.0940	-161.	87.	194.	-132.	116.	-108.	.0120	-.0007	-.0211	-.0408	-.0316	-.0203	860.
.0950	-141.	8.	225.	-191.	107.	-82.	.0123	-.0005	-.0206	-.0352	-.0293	-.0230	975.
.0960	-109.	-55.	241.	-229.	91.	-58.	.0126	-.0004	-.0197	-.0296	-.0249	-.0254	1096.
.0970	-76.	-109.	256.	-281.	75.	-36.	.0127	-.0002	-.0185	-.0236	-.0202	-.0272	1225.
.0980	-50.	-163.	268.	-325.	61.	-18.	.0124	-.0001	-.0169	-.0165	-.0165	-.0279	1381.
.0990	-25.	-212.	265.	-365.	50.	-3.	.0115	.0001	-.0149	-.0087	-.0131	-.0269	1535.
.1000	5.	-236.	247.	-386.	36.	13.	.0099	.0002	-.0125	-.0011	-.0091	-.0242	1618.
.1010	38.	-234.	220.	-384.	24.	34.	.0074	.0003	-.0095	.0059	-.0053	-.0198	1612.
.1020	63.	-228.	189.	-372.	16.	56.	.0041	.0004	-.0058	.0136	-.0031	-.0136	1571.
.1030	77.	-231.	158.	-358.	16.	75.	.0001	.0005	-.0017	.0225	-.0030	-.0058	1526.
.1040	86.	-231.	131.	-336.	21.	92.	-.0042	.0006	.0030	.0317	-.0043	.0029	1454.
.1050	99.	-219.	103.	-301.	24.	106.	-.0086	.0007	.0078	.0403	-.0053	.0120	1335.
.1060	117.	-200.	67.	-258.	24.	117.	-.0127	.0008	.0125	.0482	-.0051	.0207	1187.
.1070	135.	-180.	28.	-214.	20.	124.	-.0162	.0009	.0168	.0551	-.0040	.0285	1035.
.1080	140.	-167.	-11.	-172.	14.	129.	-.0190	.0009	.0206	.0609	-.0023	.0348	899.
.1090	157.	-159.	-56.	-133.	4.	131.	-.0211	.0010	.0236	.0654	.0006	.0393	779.
.1100	176.	-142.	-105.	-92.	-12.	130.	-.0223	.0010	.0260	.0683	.0052	.0424	667.
.1110	191.	-129.	-153.	-50.	-31.	131.	-.0227	.0010	.0279	.0698	.0104	.0434	599.
.1120	196.	-129.	-198.	-7.	-49.	136.	-.0225	.0011	.0293	.0705	.0153	.0426	603.
.1130	206.	-128.	-242.	36.	-66.	138.	-.0217	.0011	.0305	.0705	.0202	.0408	657.
.1140	222.	-118.	-276.	80.	-81.	138.	-.0207	.0011	.0315	.0699	.0244	.0386	748.
.1150	232.	-113.	-296.	121.	-88.	139.	-.0195	.0011	.0325	.0693	.0264	.0361	853.
.1160	229.	-118.	-308.	153.	-85.	140.	-.0185	.0011	.0334	.0690	.0255	.0336	936.
.1170	218.	-126.	-322.	180.	-74.	142.	-.0176	.0011	.0339	.0685	.0227	.0314	1007.
.1180	206.	-110.	-328.	215.	-59.	149.	-.0168	.0011	.0341	.0664	.0185	.0291	1120.
.1190	178.	-93.	-329.	247.	-36.	157.	-.0159	.0011	.0338	.0633	.0122	.0264	1230.
.1200	128.	-92.	-326.	259.	-6.	158.	-.0146	.0011	.0329	.0604	.0036	.0229	1267.
.1210	69.	-90.	-309.	259.	28.	149.	-.0125	.0010	.0314	.0567	-.0061	.0183	1253.
.1220	3.	-84.	-279.	257.	58.	132.	-.0091	.0010	.0291	.0512	-.0151	.0111	1231.
.1230	-56.	-63.	-244.	259.	77.	107.	-.0040	.0009	.0259	.0433	-.0211	.0009	1212.
.1240	-106.	-35.	-220.	257.	82.	68.	.0027	.0008	.0218	.0336	-.0231	-.0119	1164.
.1250	-150.	1.	-201.	253.	76.	20.	.0108	.0007	.0168	.0221	-.0219	-.0271	1108.

S/RV PIPING KEWAUNEE CKW00F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.1150	232.	-113.	-296.	121.	-88.	139.	-.0195	.0011	.0325	.0693	.0264	.0361	853.
.1160	229.	-118.	-300.	113.	-85.	140.	-.0185	.0011	.0334	.0690	.0255	.0336	936.
.1170	218.	-126.	-322.	106.	-74.	142.	-.0176	.0011	.0339	.0685	.0227	.0314	1007.
.1180	206.	-110.	-320.	215.	-50.	149.	-.0168	.0011	.0341	.0664	.0185	.0291	1120.
.1190	179.	-93.	-329.	247.	-36.	157.	-.0159	.0011	.0338	.0633	.0122	.0264	1230.
.1200	120.	-92.	-326.	279.	-6.	158.	-.0146	.0011	.0329	.0604	.0036	.0229	1267.
.1210	60.	-90.	-309.	259.	28.	149.	-.0125	.0010	.0314	.0567	-.0061	.0183	1253.
.1220	7.	-94.	-279.	207.	55.	132.	-.0091	.0010	.0291	.0512	-.0151	.0111	1231.
.1230	-56.	-63.	-244.	259.	77.	107.	-.0040	.0009	.0259	.0433	-.0211	.0009	1212.
.1240	-106.	-35.	-220.	257.	82.	68.	.0027	.0008	.0218	.0336	-.0231	-.0119	1164.
.1250	-150.	1.	-201.	253.	76.	20.	.0108	.0007	.0168	.0221	-.0219	-.0271	1108.

S/RV PIPING KEWAUNEE CKW08F 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 63 MEMBER 1 SEQUENCE 031 LOCATION END TYPE EL

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.1260	-180.	58.	-176.	251.	63.	-33.	.0198	.0005	.0112	.0087	-.0187	-.0439	1090.
.1270	-227.	114.	-161.	240.	46.	-93.	.0290	.0004	.0053	-.0045	-.0145	-.0606	1091.
.1280	-265.	169.	-158.	218.	31.	-156.	.0376	.0002	-.0006	-.0166	-.0106	-.0758	1127.
.1290	-310.	218.	-153.	198.	24.	-209.	.0450	.0001	-.0057	-.0273	-.0087	-.0890	1206.
.1300	-360.	265.	-140.	193.	23.	-242.	.0507	.0000	-.0098	-.0367	-.0092	-.1001	1296.
.1310	-399.	318.	-125.	204.	27.	-259.	.0547	-.0001	-.0126	-.0443	-.0109	-.1080	1381.
.1320	-429.	356.	-119.	215.	37.	-267.	.0568	-.0001	-.0139	-.0484	-.0140	-.1124	1439.
.1330	-454.	378.	-104.	224.	55.	-265.	.0573	-.0002	-.0139	-.0494	-.0192	-.1137	1468.
.1340	-475.	387.	-76.	230.	78.	-254.	.0564	-.0001	-.0129	-.0480	-.0260	-.1126	1468.
.1350	-477.	389.	-55.	228.	99.	-240.	.0545	-.0001	-.0113	-.0443	-.0319	-.1093	1441.
.1360	-458.	386.	-49.	216.	114.	-222.	.0518	-.0000	-.0094	-.0392	-.0354	-.1042	1378.
.1370	-437.	362.	-50.	196.	123.	-195.	.0486	.0000	-.0074	-.0331	-.0375	-.0987	1262.
.1380	-412.	330.	-47.	174.	126.	-156.	.0451	.0001	-.0056	-.0269	-.0380	-.0934	1110.
.1390	-374.	288.	-49.	140.	123.	-119.	.0414	.0002	-.0037	-.0199	-.0367	-.0876	923.
.1400	-328.	221.	-51.	82.	118.	-90.	.0377	.0004	-.0018	-.0106	-.0346	-.0812	707.
.1410	-288.	124.	-31.	5.	115.	-63.	.0341	.0006	.0004	.0004	-.0334	-.0749	550.
.1420	-252.	3.	4.	-76.	112.	-33.	.0305	.0008	.0028	.0122	-.0324	-.0691	582.
.1430	-195.	-104.	31.	-145.	100.	0.	.0270	.0010	.0054	.0235	-.0286	-.0634	734.
.1440	-115.	-192.	42.	-205.	80.	32.	.0233	.0012	.0081	.0344	-.0222	-.0569	928.
.1450	-47.	-286.	51.	-269.	65.	63.	.0192	.0014	.0108	.0459	-.0172	-.0495	1186.
.1460	6.	-392.	74.	-340.	62.	97.	.0145	.0016	.0137	.0581	-.0158	-.0411	1500.
.1470	43.	-498.	86.	-410.	66.	132.	.0092	.0018	.0166	.0706	-.0164	-.0315	1818.
.1480	90.	-571.	80.	-458.	69.	168.	.0034	.0019	.0197	.0817	-.0164	-.0208	2057.
.1490	133.	-620.	70.	-481.	73.	209.	-.0025	.0020	.0229	.0912	-.0169	-.0101	2209.
.1500	154.	-669.	72.	-486.	84.	253.	-.0082	.0022	.0262	.0994	-.0197	-.0004	2313.
.1510	165.	-709.	85.	-482.	98.	288.	-.0132	.0022	.0293	.1064	-.0239	.0083	2380.
.1520	171.	-739.	91.	-474.	110.	307.	-.0170	.0023	.0319	.1118	-.0273	.0156	2402.
.1530	174.	-746.	93.	-451.	115.	315.	-.0192	.0023	.0336	.1138	-.0288	.0200	2343.
.1540	166.	-726.	92.	-405.	108.	316.	-.0196	.0022	.0339	.1111	-.0274	.0208	2191.
.1550	159.	-673.	75.	-345.	87.	305.	-.0181	.0021	.0328	.1037	-.0223	.0183	1956.
.1560	155.	-591.	42.	-282.	55.	276.	-.0150	.0019	.0300	.0926	-.0138	.0135	1662.
.1570	132.	-511.	0.	-222.	19.	233.	-.0106	.0017	.0260	.0790	-.0045	.0064	1347.
.1580	93.	-415.	-34.	-150.	-19.	187.	-.0052	.0014	.0211	.0623	.0052	-.0026	1004.
.1590	64.	-283.	-71.	-56.	-64.	137.	.0006	.0010	.0158	.0426	.0166	-.0121	673.
.1600	43.	-137.	-120.	48.	-111.	80.	.0063	.0007	.0103	.0221	.0287	-.0208	604.
.1610	11.	2.	-160.	155.	-149.	25.	.0114	.0003	.0051	.0019	.0385	-.0283	904.
.1620	-31.	144.	-175.	271.	-175.	-21.	.0155	-.0001	.0004	-.0183	.0451	-.0341	1354.
.1630	-67.	290.	-197.	388.	-200.	-64.	.0182	-.0005	-.0039	-.0376	.0503	-.0371	1843.

S/RV PIPING KEWAUNEE CKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.1530	174.	-746.	93.	-451.	115.	315.	-.0192	.0023	.0336	.1138	-.0288	.0200	2343.
.1540	166.	-726.	92.	-405.	106.	316.	-.0196	.0022	.0339	.1111	-.0274	.0208	2191.
.1550	150.	-673.	75.	-345.	87.	305.	-.0181	.0021	.0328	.1037	-.0235	.0183	1956.
.1560	135.	-591.	42.	-282.	55.	276.	-.0150	.0019	.0300	.0926	-.0138	.0135	1662.
.1570	125.	-511.	0.	-202.	16.	233.	-.0106	.0017	.0260	.0790	-.0045	.0064	1347.
.1580	93.	-415.	-34.	-150.	-19.	187.	-.0052	.0014	.0211	.0623	.0052	-.0026	1004.
.1590	64.	-283.	-71.	-96.	-64.	137.	.0006	.0010	.0158	.0426	.0166	-.0121	673.
.1600	47.	-137.	-120.	48.	-111.	80.	.0063	.0007	.0103	.0221	.0287	-.0208	604.
.1610	11.	2.	-160.	155.	-149.	25.	.0114	.0003	.0051	.0019	.0385	-.0283	904.
.1620	-31.	144.	-175.	271.	-175.	-21.	.0155	-.0001	.0004	-.0187	.0451	-.0341	1354.
.1630	-67.	290.	-197.	328.	-200.	-64.	.0182	-.0005	-.0039	-.0376	.0503	-.0371	1843.

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

CONDITION 24
LOADS
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ENGLISH UNITS

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

SECTION 63 MEMBER 1 SEQUENCE 871 LOCATION END TYPE EL

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)
.1640	-88.	449.	-233.	503.	-219.	-104.	.0195	-.0009	-.0078	-.0557	.0551	-.0367	2333.
.1650	-109.	605.	-265.	610.	-230.	-136.	.0192	-.0013	-.0114	-.0725	.0576	-.0335	2778.
.1660	-141.	721.	-286.	696.	-229.	-157.	.0176	-.0017	-.0147	-.0869	.0570	-.0282	3126.
.1670	-164.	840.	-305.	764.	-225.	-170.	.0149	-.0020	-.0176	-.0990	.0556	-.0209	3398.
.1680	-161.	941.	-328.	818.	-224.	-178.	.0114	-.0023	-.0202	-.1091	.0555	-.0121	3617.
.1690	-137.	1027.	-337.	858.	-223.	-176.	.0075	-.0025	-.0222	-.1171	.0559	-.0027	3772.
.1700	-109.	1069.	-324.	869.	-219.	-165.	.0032	-.0027	-.0237	-.1217	.0553	.0067	3803.
.1710	-75.	1060.	-298.	842.	-211.	-150.	-.0013	-.0028	-.0247	-.1222	.0537	.0161	3675.
.1720	-20.	1028.	-258.	784.	-202.	-129.	-.0060	-.0028	-.0253	-.1196	.0523	.0259	3424.
.1730	44.	961.	-209.	697.	-191.	-98.	-.0109	-.0028	-.0256	-.1140	.0505	.0353	3044.
.1740	105.	850.	-149.	581.	-176.	-51.	-.0162	-.0027	-.0257	-.1054	.0473	.0442	2542.
.1750	166.	709.	-77.	440.	-156.	10.	-.0218	-.0025	-.0254	-.0942	.0430	.0525	1949.
.1760	220.	537.	-0.	273.	-131.	79.	-.0274	-.0022	-.0247	-.0801	.0375	.0604	1308.
.1770	291.	336.	89.	85.	-101.	153.	-.0329	-.0019	-.0237	-.0634	.0305	.0674	844.
.1780	343.	103.	195.	-119.	-66.	232.	-.0381	-.0015	-.0222	-.0445	.0217	.0730	1123.
.1790	392.	-139.	315.	-327.	-29.	313.	-.0424	-.0011	-.0204	-.0249	.0122	.0767	1894.
.1800	445.	-382.	438.	-535.	5.	389.	-.0457	-.0006	-.0185	-.0051	.0037	.0784	2761.
.1810	487.	-632.	555.	-740.	36.	459.	-.0478	-.0001	-.0169	.0141	-.0040	.0775	3638.
.1820	517.	-866.	673.	-930.	61.	524.	-.0484	.0003	-.0157	.0309	-.0107	.0737	4463.
.1830	535.	-1073.	780.	-1101.	78.	578.	-.0475	.0007	-.0153	.0445	-.0153	.0671	5201.
.1840	545.	-1248.	862.	-1252.	84.	616.	-.0451	.0010	-.0158	.0547	-.0173	.0582	5834.
.1850	541.	-1387.	922.	-1377.	82.	635.	-.0412	.0012	-.0172	.0611	-.0168	.0473	6339.
.1860	519.	-1488.	967.	-1467.	71.	639.	-.0360	.0014	-.0192	.0632	-.0146	.0345	6685.
.1870	492.	-1530.	994.	-1510.	50.	626.	-.0298	.0015	-.0217	.0607	-.0097	.0207	6827.
.1880	467.	-1516.	990.	-1507.	19.	593.	-.0229	.0015	-.0244	.0541	-.0019	.0070	6759.
.1890	430.	-1447.	964.	-1456.	-18.	544.	-.0158	.0014	-.0271	.0440	.0075	-.0056	6487.
.1900	401.	-1327.	924.	-1359.	-55.	483.	-.0091	.0011	-.0295	.0309	.0167	-.0163	6025.
.1910	355.	-1164.	860.	-1223.	-90.	412.	-.0035	.0009	-.0316	.0156	.0253	-.0239	5399.
.1920	309.	-950.	768.	-1048.	-123.	334.	.0007	.0005	-.0332	-.0014	.0335	-.0275	4620.
.1930	262.	-697.	655.	-841.	-151.	255.	.0032	.0000	-.0343	-.0196	.0404	-.0269	3722.
.1940	206.	-427.	530.	-611.	-171.	180.	.0037	-.0004	-.0348	-.0380	.0450	-.0224	2753.
.1950	147.	-149.	396.	-366.	-183.	111.	.0026	-.0009	-.0346	-.0558	.0477	-.0143	1769.
.1960	100.	137.	257.	-110.	-192.	48.	-.0000	-.0014	-.0337	-.0728	.0497	-.0031	946.
.1970	67.	416.	117.	144.	-199.	-10.	-.0037	-.0019	-.0321	-.0883	.0515	.0101	1028.
.1980	43.	667.	-11.	384.	-204.	-61.	-.0080	-.0024	-.0301	-.1014	.0527	.0245	1832.
.1990	31.	802.	-126.	599.	-207.	-104.	-.0127	-.0028	-.0277	-.1119	.0536	.0390	2679.
.2000	35.	1059.	-229.	782.	-212.	-139.	-.0174	-.0031	-.0252	-.1197	.0553	.0532	3431.
.2010	56.	1193.	-324.	928.	-219.	-164.	-.0222	-.0037	-.0227	-.1247	.0578	.0666	4037.

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

CONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

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

.1910	355.	-1164.	360.	-1223.	-90.	412.	-.0035	.0009	-.0316	.0156	.0253	-.0239	5399.
.1920	309.	-950.	768.	-1048.	-127.	334.	.0007	.0005	-.0332	-.0014	.0335	-.0275	4620.
.1930	262.	-697.	655.	-841.	-151.	255.	.0032	.0000	-.0343	-.0196	.0404	-.0269	3722.
.1940	206.	-427.	530.	-611.	-171.	180.	.0037	-.0004	-.0348	-.0380	.0450	-.0224	2753.
.1950	147.	-149.	396.	-366.	-183.	111.	.0026	-.0009	-.0346	-.0558	.0477	-.0143	1769.
.1960	100.	137.	257.	-110.	-192.	48.	-.0000	-.0014	-.0337	-.0728	.0497	-.0031	946.
.1970	67.	416.	117.	144.	-199.	-10.	-.0037	-.0019	-.0321	-.0883	.0515	.0101	1028.
.1980	43.	667.	-11.	384.	-204.	-61.	-.0080	-.0024	-.0301	-.1014	.0527	.0245	1832.
.1990	31.	882.	-126.	599.	-207.	-104.	-.0127	-.0028	-.0277	-.1119	.0536	.0390	2679.
.2000	35.	1059.	-229.	702.	-212.	-139.	-.0174	-.0031	-.0252	-.1197	.0553	.0532	3431.
.2010	56.	1193.	-324.	928.	-219.	-164.	-.0222	-.0033	-.0227	-.1247	.0578	.0666	4037.

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

CONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

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

SECTION 63 MEMBER 1 SEQUENCE 821 LOCATION END TYPE EL

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.2020	85.	1276.	-402.	1031.	-225.	-174.	-.0268	-.0035	-.0203	-.1265	.0602	.0786	4465.
.2030	116.	1300.	-458.	1087.	-226.	-171.	-.0314	-.0035	-.0180	-.1246	.0613	.0891	4687.
.2040	145.	1264.	-492.	1092.	-222.	-154.	-.0357	-.0035	-.0155	-.1186	.0611	.0981	4696.
.2050	184.	1172.	-503.	1054.	-213.	-126.	-.0398	-.0033	-.0127	-.1087	.0595	.1053	4517.
.2060	221.	1033.	-488.	980.	-200.	-85.	-.0434	-.0030	-.0096	-.0954	.0566	.1105	4190.
.2070	261.	856.	-448.	878.	-183.	-33.	-.0465	-.0027	-.0061	-.0793	.0526	.1134	3747.
.2080	302.	648.	-390.	750.	-163.	24.	-.0488	-.0023	-.0024	-.0605	.0476	.1143	3203.
.2090	340.	417.	-320.	597.	-140.	80.	-.0503	-.0018	.0015	-.0397	.0420	.1132	2582.
.2100	370.	178.	-240.	430.	-116.	136.	-.0509	-.0013	.0052	-.0183	.0357	.1099	1944.
.2110	392.	-56.	-159.	259.	-92.	190.	-.0505	-.0007	.0086	.0028	.0295	.1046	1393.
.2120	405.	-272.	-86.	90.	-72.	237.	-.0491	-.0002	.0116	.0225	.0241	.0974	1099.
.2130	408.	-464.	-20.	-71.	-55.	274.	-.0467	.0003	.0140	.0404	.0194	.0884	1204.
.2140	395.	-630.	42.	-219.	-39.	299.	-.0432	.0007	.0159	.0560	.0151	.0778	1555.
.2150	369.	-765.	99.	-348.	-27.	309.	-.0386	.0011	.0174	.0691	.0111	.0658	1945.
.2160	334.	-859.	148.	-452.	-20.	301.	-.0329	.0014	.0184	.0790	.0084	.0528	2268.
.2170	296.	-908.	186.	-527.	-18.	276.	-.0264	.0017	.0189	.0857	.0072	.0393	2483.
.2180	249.	-915.	212.	-573.	-21.	235.	-.0193	.0018	.0190	.0889	.0071	.0255	2587.
.2190	194.	-883.	224.	-591.	-27.	182.	-.0119	.0019	.0185	.0888	.0079	.0121	2584.
.2200	137.	-809.	217.	-582.	-37.	117.	-.0046	.0019	.0176	.0855	.0096	-.0002	2481.
.2210	79.	-696.	190.	-546.	-49.	45.	.0022	.0018	.0163	.0794	.0121	-.0107	2296.
.2220	18.	-556.	148.	-490.	-59.	-30.	.0083	.0017	.0147	.0713	.0143	-.0190	2063.
.2230	-46.	-404.	99.	-417.	-65.	-105.	.0132	.0015	.0133	.0622	.0152	-.0249	1815.
.2240	-108.	-244.	45.	-329.	-66.	-176.	.0169	.0013	.0121	.0525	.0150	-.0283	1580.
.2250	-160.	-80.	-13.	-226.	-64.	-239.	.0194	.0010	.0113	.0428	.0139	-.0290	1398.
.2260	-202.	78.	-70.	-113.	-58.	-292.	.0205	.0008	.0110	.0335	.0121	-.0276	1327.
.2270	-234.	222.	-122.	3.	-47.	-333.	.0205	.0005	.0112	.0251	.0091	-.0242	1403.
.2280	-257.	343.	-170.	113.	-33.	-363.	.0194	.0003	.0118	.0180	.0051	-.0191	1592.
.2290	-270.	439.	-217.	212.	-15.	-382.	.0174	.0001	.0125	.0122	.0006	-.0129	1822.
.2300	-272.	511.	-263.	299.	3.	-388.	.0148	-.0000	.0132	.0075	-.0038	-.0062	2042.
.2310	-265.	559.	-307.	373.	21.	-380.	.0119	-.0002	.0138	.0038	-.0081	.0006	2225.
.2320	-250.	580.	-346.	433.	39.	-361.	.0086	-.0003	.0144	.0011	-.0120	.0069	2358.
.2330	-229.	573.	-377.	477.	56.	-333.	.0054	-.0003	.0150	-.0002	-.0159	.0123	2437.
.2340	-204.	540.	-397.	505.	73.	-297.	.0025	-.0003	.0156	-.0004	-.0197	.0166	2466.
.2350	-175.	485.	-402.	521.	90.	-257.	.0001	-.0003	.0163	.0004	-.0236	.0195	2455.
.2360	-151.	416.	-397.	526.	106.	-216.	-.0018	-.0003	.0169	.0018	-.0273	.0207	2415.
.2370	-126.	339.	-384.	522.	121.	-174.	-.0029	-.0002	.0174	.0036	-.0308	.0204	2351.
.2380	-105.	259.	-364.	509.	134.	-136.	-.0033	-.0001	.0175	.0053	-.0340	.0183	2267.
.2390	-102.	182.	-342.	489.	145.	-102.	-.0028	-.0000	.0173	.0064	-.0370	.0146	2170.

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

CONDITION 24
LOADS
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INTERNAL FORCES IN THE PIPING
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.2290	-279.	439.	-217.	212.	-15.	-382.	.0174	.0001	.0125	.0122	.0006	-.0129	1822.
.2300	-272.	511.	-263.	209.	3.	-388.	.0148	-.0000	.0132	.0075	-.0038	-.0062	2042.
.2310	-265.	559.	-307.	373.	21.	-380.	.0118	-.0002	.0128	.0038	-.0081	.0006	2225.
.2320	-257.	590.	-346.	473.	39.	-361.	.0086	-.0003	.0144	.0011	-.0120	.0069	2358.
.2330	-220.	573.	-377.	477.	56.	-333.	.0054	-.0003	.0150	-.0002	-.0159	.0123	2437.
.2340	-204.	540.	-397.	505.	73.	-297.	.0025	-.0003	.0156	-.0004	-.0197	.0166	2466.
.2350	-178.	485.	-402.	521.	90.	-257.	.0001	-.0003	.0163	.0004	-.0236	.0195	2455.
.2360	-151.	416.	-397.	526.	106.	-216.	-.0018	-.0003	.0169	.0018	-.0273	.0207	2415.
.2370	-126.	339.	-384.	522.	121.	-174.	-.0029	-.0002	.0174	.0036	-.0308	.0204	2351.
.2380	-109.	259.	-364.	509.	134.	-136.	-.0033	-.0001	.0175	.0053	-.0340	.0183	2267.
.2390	-102.	182.	-342.	489.	145.	-102.	-.0028	-.0000	.0173	.0064	-.0370	.0146	2170.

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

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

SECTION 63 MEMBER 1 SEQUENCE 831 LOCATION END TYPE EL

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)
.2400	-105.	116.	-320.	465.	153.	-75.	-.0013	.0001	.0165	.0065	-.0391	.0091	2069.
.2410	-117.	68.	-301.	442.	156.	-58.	.0011	.0001	.0152	.0053	-.0402	.0020	1971.
.2420	-137.	40.	-283.	420.	154.	-52.	.0045	.0002	.0134	.0028	-.0401	-.0066	1880.
.2430	-167.	30.	-264.	400.	149.	-57.	.0089	.0002	.0112	-.0008	-.0392	-.0166	1797.
.2440	-204.	39.	-244.	385.	139.	-75.	.0142	.0002	.0088	-.0056	-.0373	-.0277	1734.
.2450	-243.	69.	-225.	376.	123.	-103.	.0201	.0001	.0061	-.0115	-.0340	-.0396	1708.
.2460	-283.	121.	-209.	375.	103.	-140.	.0265	.0001	.0033	-.0184	-.0296	-.0518	1726.
.2470	-326.	188.	-196.	379.	80.	-183.	.0330	-.0000	.0005	-.0258	-.0244	-.0637	1786.
.2480	-370.	265.	-187.	382.	56.	-229.	.0392	-.0001	-.0024	-.0333	-.0189	-.0748	1875.
.2490	-413.	347.	-182.	384.	32.	-277.	.0449	-.0002	-.0051	-.0403	-.0133	-.0844	1981.
.2500	-452.	429.	-183.	384.	9.	-321.	.0496	-.0003	-.0076	-.0465	-.0080	-.0922	2089.
.2510	-483.	506.	-186.	383.	-13.	-357.	.0532	-.0004	-.0096	-.0514	-.0029	-.0978	2186.
.2520	-501.	574.	-190.	379.	-31.	-385.	.0554	-.0004	-.0109	-.0545	.0017	-.1010	2257.
.2530	-504.	624.	-191.	368.	-46.	-402.	.0561	-.0005	-.0114	-.0551	.0053	-.1013	2281.
.2540	-495.	649.	-186.	346.	-53.	-407.	.0552	-.0005	-.0109	-.0527	.0074	-.0988	2240.
.2550	-472.	642.	-174.	314.	-53.	-397.	.0527	-.0004	-.0095	-.0472	.0077	-.0934	2123.
.2560	-434.	607.	-157.	270.	-47.	-371.	.0485	-.0003	-.0072	-.0387	.0065	-.0855	1925.
.2570	-383.	544.	-138.	216.	-35.	-328.	.0427	-.0001	-.0042	-.0277	.0041	-.0753	1647.
.2580	-321.	452.	-117.	151.	-18.	-270.	.0357	.0000	-.0007	-.0144	.0004	-.0632	1292.
.2590	-252.	331.	-91.	72.	6.	-198.	.0276	.0003	.0032	.0009	-.0048	-.0497	878.
.2600	-179.	183.	-61.	-18.	35.	-115.	.0189	.0005	.0074	.0178	-.0113	-.0356	508.
.2610	-103.	15.	-27.	-116.	66.	-26.	.0100	.0008	.0116	.0355	-.0184	-.0216	567.
.2620	-22.	-162.	10.	-215.	98.	66.	.0014	.0011	.0158	.0531	-.0256	-.0084	1022.
.2630	59.	-342.	51.	-312.	128.	156.	-.0066	.0014	.0197	.0699	-.0324	.0034	1550.
.2640	133.	-521.	94.	-405.	158.	241.	-.0135	.0017	.0231	.0853	-.0390	.0132	2073.
.2650	196.	-689.	138.	-492.	185.	315.	-.0191	.0020	.0259	.0987	-.0453	.0207	2557.
.2660	250.	-836.	178.	-566.	209.	377.	-.0232	.0022	.0278	.1091	-.0507	.0257	2970.
.2670	287.	-951.	210.	-625.	228.	423.	-.0257	.0024	.0287	.1159	-.0552	.0280	3290.
.2680	304.	-1030.	234.	-665.	243.	451.	-.0264	.0024	.0285	.1188	-.0588	.0276	3504.
.2690	300.	-1069.	249.	-686.	254.	458.	-.0253	.0025	.0273	.1176	-.0617	.0245	3603.
.2700	275.	-1066.	255.	-684.	261.	444.	-.0225	.0024	.0251	.1124	-.0637	.0189	3575.
.2710	232.	-1016.	253.	-656.	263.	410.	-.0180	.0023	.0221	.1030	-.0646	.0109	3408.
.2720	174.	-918.	242.	-601.	259.	354.	-.0119	.0021	.0183	.0898	-.0644	.0009	3107.
.2730	101.	-778.	223.	-525.	252.	278.	-.0045	.0018	.0138	.0734	-.0633	-.0106	2691.
.2740	14.	-605.	199.	-430.	241.	186.	.0039	.0015	.0090	.0543	-.0617	-.0235	2199.
.2750	-85.	-403.	167.	-320.	228.	81.	.0132	.0011	.0037	.0332	-.0595	-.0370	1673.
.2760	-189.	-175.	126.	-195.	211.	-32.	.0227	.0007	-.0018	.0104	-.0564	-.0509	1208.
.2770	-292.	71.	79.	-64.	192.	-148.	.0324	.0002	-.0073	-.0131	-.0525	-.0645	1044.

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

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

.2670	287.	-951.	210.	-625.	228.	423.	-.0257	.0024	.0287	.1159	-.0552	.0280	3290.
.2680	304.	-1030.	234.	-665.	242.	451.	-.0264	.0024	.0285	.1188	-.0588	.0276	3504.
.2690	300.	-1069.	249.	-686.	254.	458.	-.0253	.0025	.0273	.1176	-.0617	.0245	3603.
.2700	275.	-1066.	255.	-684.	261.	444.	-.0225	.0024	.0251	.1124	-.0637	.0189	3575.
.2710	232.	-1016.	253.	-656.	267.	410.	-.0180	.0023	.0221	.1030	-.0646	.0109	3408.
.2720	174.	-918.	242.	-601.	255.	354.	-.0119	.0021	.0183	.0898	-.0644	.0009	3107.
.2730	101.	-778.	223.	-525.	252.	278.	-.0045	.0018	.0138	.0734	-.0633	-.0106	2691.
.2740	14.	-605.	199.	-430.	241.	186.	.0039	.0015	.0090	.0543	-.0617	-.0235	2199.
.2750	-85.	-403.	167.	-320.	228.	81.	.0132	.0011	.0037	.0332	-.0595	-.0370	1673.
.2760	-180.	-175.	126.	-195.	211.	-32.	.0227	.0007	-.0016	.0104	-.0564	-.0509	1208.
.2770	-290.	71.	79.	-64.	192.	-148.	.0324	.0002	-.0073	-.0131	-.0525	-.0645	1044.

S/RV PIPING KEWAUNEE OKW08F 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 63 MEMBER 1 SEQUENCE 831 LOCATION END TYPE EL

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)
.2780	-396.	316.	28.	66.	172.	-263.	.0416	-.0002	-.0127	-.0360	-.0487	-.0774	1341.
.2790	-490.	546.	-20.	186.	154.	-374.	.0502	-.0006	-.0177	-.0573	-.0453	-.0891	1858.
.2800	-590.	755.	-65.	296.	137.	-474.	.0578	-.0010	-.0221	-.0763	-.0420	-.0994	2401.
.2810	-663.	941.	-104.	394.	121.	-559.	.0643	-.0013	-.0257	-.0925	-.0385	-.1079	2898.
.2820	-716.	1090.	-136.	473.	105.	-626.	.0693	-.0015	-.0283	-.1050	-.0351	-.1144	3306.
.2830	-751.	1190.	-156.	526.	94.	-673.	.0726	-.0017	-.0299	-.1130	-.0326	-.1185	3588.
.2840	-760.	1235.	-164.	551.	86.	-696.	.0740	-.0018	-.0305	-.1162	-.0310	-.1202	3723.
.2850	-764.	1231.	-163.	548.	82.	-695.	.0736	-.0017	-.0299	-.1149	-.0299	-.1192	3710.
.2860	-732.	1182.	-156.	520.	79.	-669.	.0712	-.0016	-.0284	-.1091	-.0288	-.1155	3552.
.2870	-681.	1084.	-140.	463.	80.	-620.	.0669	-.0015	-.0259	-.0988	-.0284	-.1092	3248.
.2880	-616.	934.	-114.	377.	86.	-551.	.0609	-.0012	-.0226	-.0840	-.0291	-.1005	2809.
.2890	-536.	743.	-78.	270.	95.	-462.	.0533	-.0008	-.0183	-.0656	-.0304	-.0895	2270.
.2900	-439.	527.	-38.	149.	104.	-360.	.0444	-.0005	-.0134	-.0444	-.0318	-.0766	1685.
.2910	-328.	292.	7.	19.	114.	-248.	.0346	-.0000	-.0078	-.0211	-.0329	-.0622	1143.
.2920	-213.	43.	56.	-117.	124.	-131.	.0241	.0004	-.0019	.0036	-.0344	-.0467	898.
.2930	-99.	-211.	106.	-255.	135.	-13.	.0134	.0009	.0042	.0288	-.0360	-.0306	1208.
.2940	14.	-454.	152.	-387.	144.	101.	.0026	.0013	.0102	.0534	-.0370	-.0143	1776.
.2950	125.	-671.	188.	-505.	148.	208.	-.0077	.0017	.0160	.0763	-.0367	.0018	2363.
.2960	228.	-857.	213.	-605.	148.	304.	-.0173	.0020	.0212	.0965	-.0354	.0171	2891.
.2970	319.	-1008.	229.	-684.	143.	385.	-.0261	.0023	.0259	.1139	-.0331	.0312	3331.
.2980	395.	-1120.	233.	-741.	135.	450.	-.0336	.0025	.0299	.1279	-.0301	.0440	3662.
.2990	456.	-1188.	226.	-772.	122.	496.	-.0398	.0026	.0332	.1383	-.0260	.0551	3863.
.3000	503.	-1208.	209.	-773.	105.	525.	-.0446	.0027	.0358	.1445	-.0208	.0642	3922.
.3010	534.	-1183.	183.	-744.	83.	537.	-.0479	.0027	.0377	.1467	-.0149	.0712	3844.
.3020	548.	-1119.	150.	-692.	60.	531.	-.0498	.0026	.0387	.1452	-.0086	.0760	3649.
.3030	547.	-1025.	111.	-621.	35.	511.	-.0502	.0024	.0390	.1403	-.0024	.0787	3358.
.3040	521.	-903.	69.	-533.	9.	478.	-.0493	.0022	.0384	.1321	.0039	.0791	2988.
.3050	487.	-756.	22.	-431.	-19.	436.	-.0470	.0020	.0370	.1209	.0106	.0772	2559.
.3060	445.	-593.	-26.	-320.	-48.	386.	-.0436	.0017	.0348	.1071	.0176	.0731	2102.
.3070	394.	-427.	-73.	-210.	-77.	330.	-.0392	.0014	.0318	.0917	.0244	.0670	1664.
.3080	335.	-270.	-113.	-104.	-105.	272.	-.0338	.0011	.0283	.0751	.0309	.0589	1293.
.3090	275.	-123.	-146.	-4.	-133.	215.	-.0278	.0008	.0242	.0579	.0372	.0491	1057.
.3100	220.	13.	-173.	88.	-161.	162.	-.0213	.0005	.0198	.0403	.0436	.0381	1022.
.3110	171.	129.	-192.	168.	-187.	114.	-.0146	.0002	.0151	.0232	.0498	.0263	1153.
.3120	124.	215.	-200.	230.	-210.	73.	-.0081	-.0000	.0104	.0072	.0549	.0142	1334.
.3130	81.	271.	-197.	273.	-227.	42.	-.0021	-.0002	.0057	-.0072	.0587	.0024	1491.
.3140	40.	302.	-187.	301.	-239.	21.	.0033	-.0004	.0011	-.0200	.0615	-.0085	1606.
.3150	2.	313.	-174.	315.	-245.	12.	.0076	-.0005	-.0032	-.0310	.0636	-.0180	1674.

S/RV PIPING KEWAUNEE OKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.3050	487.	-756.	22.	-431.	-19.	436.	-.0470	.0020	.0370	.1209	.0106	.0772	2559.
.3060	445.	-593.	-26.	-320.	-48.	386.	-.0436	.0017	.0348	.1071	.0176	.0731	2102.
.3070	394.	-427.	-73.	-210.	-77.	330.	-.0392	.0014	.0318	.0917	.0244	.0670	1664.
.3080	335.	-270.	-117.	-104.	-105.	272.	-.0338	.0011	.0283	.0751	.0309	.0589	1293.
.3090	275.	-123.	-146.	-4.	-133.	215.	-.0278	.0008	.0242	.0579	.0372	.0491	1057.
.3100	220.	13.	-173.	28.	-161.	162.	-.0213	.0005	.0198	.0403	.0436	.0381	1022.
.3110	171.	129.	-192.	168.	-167.	114.	-.0146	.0002	.0151	.0232	.0498	.0263	1153.
.3120	124.	215.	-200.	270.	-210.	73.	-.0081	-.0000	.0104	.0072	.0549	.0142	1334.
.3130	81.	271.	-197.	273.	-227.	42.	-.0021	-.0002	.0057	-.0072	.0587	.0024	1491.
.3140	48.	302.	-187.	301.	-230.	21.	.0033	-.0004	.0011	-.0200	.0615	-.0085	1606.
.3150	27.	313.	-174.	315.	-247.	12.	.0076	-.0005	-.0032	-.0310	.0636	-.0180	1674.

S/RV PIPING KEWAUNEE CKWOBF 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 63 MEMBER 1 SEQUENCE 831 LOCATION END TYPE EL

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.3160	16.	301.	-155.	315.	-251.	14.	.0109	-.0006	-.0070	-.0400	.0642	-.0256	1683.
.3170	11.	265.	-129.	301.	-247.	26.	.0128	-.0007	-.0103	-.0464	.0630	-.0311	1628.
.3180	14.	211.	-97.	276.	-235.	47.	.0134	-.0007	-.0129	-.0505	.0601	-.0342	1525.
.3190	27.	148.	-65.	244.	-219.	75.	.0128	-.0007	-.0149	-.0526	.0560	-.0348	1404.
.3200	48.	82.	-32.	211.	-198.	109.	.0110	-.0007	-.0162	-.0530	.0510	-.0330	1291.
.3210	74.	14.	-2.	176.	-173.	147.	.0081	-.0007	-.0168	-.0518	.0450	-.0292	1199.
.3220	100.	-55.	35.	138.	-144.	185.	.0044	-.0007	-.0170	-.0493	.0379	-.0234	1136.
.3230	127.	-122.	66.	98.	-113.	221.	.0002	-.0006	-.0168	-.0457	.0303	-.0163	1116.
.3240	153.	-178.	93.	61.	-83.	254.	-.0043	-.0006	-.0164	-.0418	.0228	-.0084	1144.
.3250	177.	-222.	116.	27.	-54.	282.	-.0087	-.0006	-.0158	-.0380	.0158	-.0002	1206.
.3260	199.	-253.	135.	-4.	-29.	303.	-.0127	-.0006	-.0153	-.0344	.0096	.0076	1272.
.3270	215.	-276.	152.	-35.	-6.	315.	-.0161	-.0006	-.0148	-.0310	.0041	.0148	1322.
.3280	224.	-291.	168.	-65.	12.	317.	-.0187	-.0005	-.0144	-.0280	-.0006	.0207	1351.
.3290	227.	-295.	183.	-92.	26.	310.	-.0204	-.0005	-.0142	-.0257	-.0040	.0250	1355.
.3300	226.	-287.	196.	-115.	34.	295.	-.0210	-.0005	-.0143	-.0242	-.0060	.0276	1329.
.3310	220.	-272.	207.	-137.	37.	272.	-.0207	-.0005	-.0145	-.0233	-.0067	.0285	1279.
.3320	204.	-255.	218.	-161.	36.	241.	-.0194	-.0005	-.0149	-.0228	-.0069	.0278	1220.
.3330	181.	-238.	230.	-184.	33.	207.	-.0174	-.0005	-.0155	-.0227	-.0064	.0254	1164.
.3340	154.	-217.	239.	-205.	27.	169.	-.0147	-.0005	-.0162	-.0230	-.0052	.0218	1115.
.3350	126.	-192.	246.	-223.	17.	129.	-.0115	-.0005	-.0169	-.0237	-.0031	.0171	1078.
.3360	95.	-168.	252.	-239.	6.	89.	-.0080	-.0005	-.0176	-.0243	-.0008	.0119	1066.
.3370	61.	-151.	259.	-256.	-4.	48.	-.0044	-.0005	-.0182	-.0246	.0013	.0063	1086.
.3380	28.	-137.	266.	-269.	-14.	9.	-.0009	-.0005	-.0186	-.0247	.0033	.0008	1126.
.3390	-1.	-122.	269.	-277.	-25.	-28.	.0023	-.0004	-.0187	-.0247	.0057	-.0042	1167.
.3400	-24.	-106.	267.	-279.	-36.	-62.	.0052	-.0004	-.0187	-.0246	.0081	-.0083	1202.
.3410	-44.	-92.	263.	-276.	-45.	-92.	.0074	-.0004	-.0184	-.0242	.0102	-.0113	1230.
.3420	-61.	-80.	254.	-270.	-52.	-120.	.0088	-.0004	-.0178	-.0235	.0116	-.0128	1249.
.3430	-73.	-67.	240.	-257.	-57.	-143.	.0094	-.0004	-.0170	-.0225	.0127	-.0126	1250.
.3440	-77.	-50.	220.	-236.	-59.	-163.	.0091	-.0004	-.0160	-.0215	.0135	-.0105	1222.
.3450	-76.	-28.	194.	-207.	-60.	-178.	.0079	-.0004	-.0146	-.0204	.0137	-.0064	1166.
.3460	-71.	-4.	166.	-171.	-57.	-189.	.0058	-.0004	-.0130	-.0193	.0131	-.0005	1089.
.3470	-62.	22.	134.	-129.	-50.	-198.	.0028	-.0005	-.0112	-.0180	.0117	.0072	1006.
.3480	-49.	51.	99.	-81.	-40.	-204.	-.0010	-.0005	-.0092	-.0168	.0096	.0164	930.
.3490	-35.	86.	63.	-26.	-28.	-207.	-.0052	-.0006	-.0072	-.0159	.0069	.0268	880.
.3500	-19.	127.	25.	33.	-15.	-209.	-.0099	-.0007	-.0051	-.0154	.0037	.0379	886.
.3510	-2.	171.	-14.	94.	1.	-211.	-.0147	-.0008	-.0032	-.0153	.0002	.0494	964.
.3520	12.	216.	-52.	154.	17.	-213.	-.0194	-.0009	-.0015	-.0156	-.0036	.0606	1101.
.3530	21.	263.	-88.	212.	34.	-217.	-.0237	-.0010	-.0001	-.0166	-.0077	.0712	1274.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.3420	-67.	-56.	154.	-203.	-52.	-120.	.0088	-.0004	-.0178	-.0235	.0116	-.0128	1249.
.3430	-77.	-67.	240.	-207.	-57.	-143.	.0094	-.0004	-.0170	-.0225	.0127	-.0126	1250.
.3440	-77.	-50.	220.	-236.	-50.	-163.	.0091	-.0004	-.0160	-.0215	.0135	-.0105	1222.
.3450	-76.	-23.	194.	-207.	-60.	-178.	.0079	-.0004	-.0146	-.0204	.0137	-.0064	1166.
.3460	-71.	-4.	166.	-171.	-57.	-189.	.0058	-.0004	-.0130	-.0193	.0131	-.0005	1089.
.3470	-60.	22.	134.	-129.	-50.	-198.	.0028	-.0005	-.0112	-.0180	.0117	.0072	1006.
.3480	-40.	51.	90.	-91.	-40.	-204.	-.0010	-.0005	-.0092	-.0168	.0096	.0164	930.
.3490	-35.	86.	63.	-26.	-28.	-207.	-.0052	-.0006	-.0072	-.0159	.0069	.0268	880.
.3500	-19.	127.	25.	33.	-15.	-209.	-.0099	-.0007	-.0051	-.0154	.0037	.0379	886.
.3510	-2.	171.	-14.	84.	1.	-211.	-.0147	-.0008	-.0032	-.0153	.0002	.0494	964.
.3520	12.	216.	-52.	154.	17.	-213.	-.0194	-.0009	-.0015	-.0156	-.0036	.0606	1101.
.3530	21.	263.	-88.	212.	34.	-217.	-.0237	-.0010	-.0001	-.0166	-.0077	.0712	1274.

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 63 MEMBER 1 SEQUENCE 831 LOCATION END TYPE EL

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.3540	20.	311.	-121.	268.	51.	-222.	-.0274	-.0011	.0009	-.0182	-.0115	.0804	1467.
.3550	31.	360.	-151.	319.	65.	-230.	-.0303	-.0013	.0015	-.0206	-.0150	.0879	1664.
.3560	20.	407.	-175.	363.	78.	-242.	-.0322	-.0014	.0017	-.0236	-.0180	.0933	1850.
.3570	21.	449.	-191.	399.	89.	-257.	-.0330	-.0015	.0013	-.0270	-.0209	.0964	2013.
.3580	5.	485.	-201.	425.	98.	-275.	-.0326	-.0016	.0005	-.0309	-.0233	.0968	2151.
.3590	-14.	519.	-205.	443.	104.	-295.	-.0310	-.0017	-.0007	-.0352	-.0249	.0946	2265.
.3600	-37.	549.	-204.	453.	106.	-318.	-.0282	-.0017	-.0023	-.0398	-.0258	.0899	2352.
.3610	-65.	572.	-197.	452.	107.	-342.	-.0245	-.0018	-.0043	-.0445	-.0264	.0828	2409.
.3620	-99.	586.	-184.	441.	107.	-367.	-.0198	-.0018	-.0065	-.0488	-.0268	.0737	2436.
.3630	-136.	593.	-166.	420.	106.	-392.	-.0144	-.0018	-.0088	-.0528	-.0269	.0630	2439.
.3640	-174.	594.	-144.	393.	103.	-415.	-.0086	-.0017	-.0110	-.0563	-.0268	.0510	2425.
.3650	-211.	588.	-119.	361.	100.	-435.	-.0025	-.0017	-.0132	-.0590	-.0267	.0381	2395.
.3660	-249.	573.	-90.	322.	98.	-451.	.0036	-.0016	-.0151	-.0608	-.0267	.0249	2350.
.3670	-285.	548.	-57.	278.	96.	-464.	.0096	-.0015	-.0167	-.0615	-.0270	.0117	2291.
.3680	-318.	515.	-24.	230.	95.	-471.	.0152	-.0014	-.0180	-.0612	-.0275	-.0010	2224.
.3690	-346.	477.	8.	182.	95.	-473.	.0203	-.0013	-.0190	-.0599	-.0278	-.0130	2149.
.3700	-367.	433.	39.	133.	93.	-468.	.0248	-.0011	-.0195	-.0577	-.0281	-.0239	2068.
.3710	-382.	383.	67.	85.	92.	-458.	.0285	-.0010	-.0197	-.0546	-.0281	-.0334	1981.
.3720	-390.	328.	91.	37.	91.	-442.	.0313	-.0008	-.0196	-.0507	-.0280	-.0414	1891.
.3730	-389.	269.	111.	-7.	89.	-421.	.0333	-.0007	-.0191	-.0461	-.0277	-.0476	1797.
.3740	-380.	209.	126.	-46.	86.	-395.	.0343	-.0005	-.0182	-.0410	-.0269	-.0519	1698.
.3750	-362.	150.	136.	-78.	82.	-364.	.0343	-.0004	-.0169	-.0355	-.0258	-.0543	1590.
.3760	-336.	92.	140.	-103.	77.	-329.	.0333	-.0002	-.0153	-.0297	-.0244	-.0546	1473.
.3770	-305.	34.	138.	-121.	73.	-290.	.0313	-.0001	-.0134	-.0235	-.0229	-.0529	1347.
.3780	-270.	-21.	132.	-131.	69.	-248.	.0285	.0000	-.0112	-.0173	-.0215	-.0492	1207.
.3790	-229.	-68.	118.	-130.	65.	-205.	.0248	.0001	-.0087	-.0113	-.0199	-.0438	1046.
.3800	-185.	-107.	92.	-117.	60.	-160.	.0204	.0002	-.0061	-.0056	-.0179	-.0368	863.
.3810	-138.	-136.	70.	-95.	54.	-115.	.0155	.0003	-.0033	-.0004	-.0158	-.0285	662.
.3820	-93.	-159.	38.	-64.	49.	-72.	.0102	.0003	-.0004	.0045	-.0138	-.0192	451.
.3830	-49.	-172.	1.	-25.	43.	-31.	.0047	.0003	.0025	.0087	-.0116	-.0094	245.
.3840	-5.	-172.	-41.	24.	36.	7.	-.0007	.0003	.0054	.0121	-.0090	.0005	181.
.3850	37.	-161.	-86.	80.	27.	41.	-.0058	.0003	.0081	.0147	-.0060	.0103	392.
.3860	75.	-141.	-133.	142.	17.	69.	-.0106	.0002	.0107	.0165	-.0029	.0194	664.
.3870	106.	-115.	-179.	206.	7.	92.	-.0147	.0002	.0131	.0176	.0002	.0276	942.
.3880	130.	-83.	-224.	270.	-4.	110.	-.0182	.0001	.0152	.0180	.0033	.0346	1217.
.3890	149.	-45.	-269.	334.	-16.	122.	-.0209	.0001	.0170	.0176	.0067	.0401	1486.
.3900	161.	-2.	-311.	396.	-29.	129.	-.0227	.0000	.0184	.0165	.0103	.0439	1742.
.3910	166.	41.	-348.	452.	-42.	130.	-.0235	-.0000	.0195	.0149	.0137	.0459	1971.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.3800	-161.	-107.	97.	-117.	60.	-160.	.0204	.0002	-.0061	-.0056	-.0179	-.0368	863.
.3810	-130.	-136.	70.	-96.	54.	-115.	.0155	.0003	-.0033	-.0004	-.0158	-.0285	662.
.3820	-97.	-159.	39.	-64.	49.	-72.	.0102	.0003	-.0004	.0045	-.0138	-.0192	451.
.3830	-49.	-172.	1.	-25.	43.	-31.	.0047	.0003	.0025	.0087	-.0116	-.0094	245.
.3840	-6.	-172.	-41.	24.	36.	7.	-.0007	.0003	.0054	.0121	-.0090	.0005	181.
.3850	37.	-161.	-86.	80.	27.	41.	-.0058	.0003	.0081	.0147	-.0060	.0103	392.
.3860	77.	-141.	-123.	142.	17.	69.	-.0106	.0002	.0107	.0165	-.0029	.0194	664.
.3870	106.	-115.	-179.	206.	7.	92.	-.0147	.0002	.0131	.0176	.0002	.0276	942.
.3880	130.	-83.	-224.	270.	-4.	110.	-.0182	.0001	.0152	.0180	.0033	.0346	1217.
.3890	149.	-45.	-269.	334.	-16.	122.	-.0209	.0001	.0170	.0176	.0067	.0401	1486.
.3900	161.	-2.	-311.	396.	-29.	129.	-.0227	.0000	.0184	.0165	.0103	.0439	1742.
.3910	166.	41.	-348.	452.	-42.	130.	-.0235	-.0000	.0195	.0149	.0137	.0459	1971.

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 63 MEMBER 1 SEQUENCE 231 LOCATION END TYPE EL

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)
.3920	163.	82.	-378.	499.	-54.	126.	-.0234	-.0001	.0202	.0132	.0169	.0460	2158.
.3930	152.	117.	-401.	535.	-66.	116.	-.0223	-.0001	.0206	.0112	.0199	.0443	2303.
.3940	137.	149.	-417.	563.	-79.	103.	-.0204	-.0001	.0206	.0091	.0228	.0408	2410.
.3950	118.	178.	-427.	581.	-91.	86.	-.0177	-.0001	.0202	.0069	.0257	.0357	2479.
.3960	96.	199.	-428.	587.	-103.	68.	-.0143	-.0001	.0196	.0049	.0283	.0292	2501.
.3970	69.	206.	-422.	579.	-113.	47.	-.0104	-.0001	.0187	.0032	.0304	.0216	2469.
.3980	38.	207.	-408.	560.	-121.	25.	-.0062	-.0001	.0176	.0020	.0320	.0132	2391.
.3990	9.	200.	-389.	532.	-128.	4.	-.0019	-.0000	.0164	.0010	.0334	.0045	2282.
.4000	-18.	189.	-366.	496.	-135.	-16.	.0025	.0000	.0150	.0003	.0347	-.0044	2149.

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)
.1870	492.	-1530.	994.	-1510.	50.	626.	-.0298	.0015	-.0217	.0607	-.0097	.0207	6827.

SECTION 63 MEMBER 2 SEQUENCE 91 LOCATION END TYPE EL

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	-0.	-0.	-0.	-0.	0.	0.	-.0000	.0000	-.0000	.0000	-.0000	-.0000	0.
.0020	-0.	-0.	-0.	-0.	0.	0.	-.0000	.0000	-.0000	.0000	.0000	-.0000	0.
.0030	-0.	-0.	-0.	-0.	-0.	0.	-.0000	.0000	.0000	.0000	.0000	-.0000	0.
.0040	-0.	-0.	-0.	-0.	-0.	0.	-.0000	.0000	.0000	.0000	.0000	-.0000	0.
.0050	-0.	0.	-0.	0.	-0.	-0.	-.0000	-.0000	.0000	.0000	.0000	.0000	0.
.0060	0.	0.	-0.	0.	-0.	-0.	-.0000	-.0000	.0000	-.0000	.0000	.0000	0.
.0070	0.	0.	-0.	0.	-0.	0.	-.0000	-.0000	.0000	-.0000	.0000	.0000	1.
.0080	0.	0.	-1.	1.	-0.	0.	-.0000	-.0000	.0000	-.0000	.0001	.0000	3.
.0090	1.	1.	-1.	1.	-1.	0.	-.0000	-.0000	.0000	-.0000	.0002	.0000	7.
.0100	2.	2.	-1.	2.	-2.	1.	-.0000	-.0000	.0000	-.0001	.0003	.0000	12.
.0110	3.	3.	-2.	4.	-2.	1.	-.0000	-.0000	.0000	-.0001	.0005	.0001	18.
.0120	4.	3.	-2.	5.	-3.	2.	-.0001	-.0000	.0000	-.0002	.0007	.0001	27.
.0130	5.	5.	-2.	6.	-5.	4.	-.0002	-.0000	-.0000	-.0004	.0010	.0002	43.
.0140	7.	8.	-4.	13.	-7.	6.	-.0002	-.0000	-.0000	-.0007	.0016	.0004	67.
.0150	11.	12.	-6.	17.	-11.	7.	-.0003	-.0000	-.0001	-.0011	.0023	.0005	95.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.0040	-0.	0.	-0.	0.	-0.	0.	-.0000	.0000	.0000	.0000	.0000	-.0000	0.
.0050	-0.	0.	-0.	0.	-0.	-0.	-.0000	-.0000	.0000	.0000	.0000	.0000	0.
.0060	0.	0.	-0.	0.	-0.	-0.	-.0000	-.0000	.0000	-.0000	.0000	.0000	0.
.0070	0.	0.	-0.	0.	-0.	0.	-.0000	-.0000	.0000	-.0000	.0000	.0000	1.
.0080	0.	0.	-1.	1.	-0.	0.	-.0000	-.0000	.0000	-.0000	.0001	.0000	3.
.0090	1.	1.	-1.	1.	-1.	0.	-.0000	-.0000	.0000	-.0000	.0002	.0000	7.
.0100	2.	2.	-1.	2.	-2.	1.	-.0000	-.0000	.0000	-.0001	.0003	.0000	12.
.0110	3.	3.	-2.	4.	-2.	1.	-.0000	-.0000	.0000	-.0001	.0005	.0001	18.
.0120	4.	3.	-2.	5.	-3.	2.	-.0001	-.0000	.0000	-.0002	.0007	.0001	27.
.0130	5.	5.	-2.	8.	-5.	4.	-.0002	-.0000	-.0000	-.0004	.0010	.0002	43.
.0140	8.	8.	-4.	13.	-7.	6.	-.0002	-.0000	-.0000	-.0007	.0016	.0004	67.
.0150	11.	13.	-6.	19.	-11.	7.	-.0003	-.0000	-.0001	-.0011	.0023	.0005	95.

S/RV PIPING KEWAUNEE CKW08E 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 63 MEMBER 2 SEQUENCE 01 LOCATION END TYPE EL

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)
.0160	15.	18.	-8.	24.	-14.	9.	-.0005	-.0000	-.0002	-.0015	.0031	.0008	120.
.0170	18.	23.	-10.	27.	-17.	8.	-.0007	-.0000	-.0003	-.0019	.0037	.0013	138.
.0180	20.	27.	-11.	28.	-19.	7.	-.0009	-.0000	-.0004	-.0023	.0042	.0020	146.
.0190	21.	30.	-11.	28.	-21.	5.	-.0012	-.0000	-.0005	-.0026	.0045	.0029	146.
.0200	21.	32.	-11.	26.	-21.	2.	-.0016	.0000	-.0006	-.0027	.0045	.0039	138.
.0210	20.	31.	-8.	21.	-19.	-1.	-.0020	.0000	-.0007	-.0028	.0042	.0051	119.
.0220	18.	30.	-2.	15.	-16.	-5.	-.0024	.0000	-.0008	-.0028	.0035	.0064	94.
.0230	16.	27.	8.	7.	-12.	-8.	-.0028	.0000	-.0009	-.0027	.0026	.0076	67.
.0240	12.	20.	15.	-2.	-8.	-9.	-.0032	.0000	-.0011	-.0027	.0018	.0085	51.
.0250	9.	15.	17.	-10.	-8.	-9.	-.0033	.0000	-.0013	-.0028	.0017	.0090	65.
.0260	14.	17.	16.	-15.	-10.	-13.	-.0033	.0000	-.0014	-.0030	.0022	.0092	92.
.0270	24.	21.	20.	-24.	-11.	-22.	-.0032	.0000	-.0015	-.0028	.0024	.0093	143.
.0280	24.	4.	30.	-47.	-4.	-29.	-.0031	.0000	-.0015	-.0018	.0011	.0094	233.
.0290	13.	-30.	34.	-74.	4.	-27.	-.0031	.0000	-.0014	-.0003	-.0008	.0092	328.
.0300	22.	-30.	37.	-75.	6.	-25.	-.0030	.0000	-.0012	.0005	-.0011	.0089	331.
.0310	45.	-14.	39.	-70.	6.	-27.	-.0030	.0000	-.0007	.0014	-.0012	.0089	315.
.0320	39.	-44.	46.	-90.	20.	-18.	-.0032	.0000	-.0002	.0037	-.0044	.0089	391.
.0330	7.	-104.	68.	-119.	47.	6.	-.0035	.0001	.0004	.0064	-.0103	.0086	533.
.0340	-12.	-139.	86.	-129.	65.	29.	-.0035	.0001	.0009	.0081	-.0144	.0074	615.
.0350	-7.	-141.	83.	-121.	67.	43.	-.0029	.0001	.0011	.0085	-.0148	.0052	603.
.0360	-1.	-140.	75.	-110.	63.	55.	-.0017	.0001	.0011	.0080	-.0140	.0018	577.
.0370	-10.	-154.	86.	-110.	66.	63.	-.0001	.0001	.0009	.0073	-.0145	-.0027	598.
.0380	-24.	-180.	100.	-126.	72.	60.	.0019	.0001	.0003	.0066	-.0155	-.0078	656.
.0390	-34.	-196.	95.	-138.	67.	53.	.0042	.0001	-.0006	.0048	-.0143	-.0134	676.
.0400	-31.	-171.	77.	-115.	49.	48.	.0066	.0000	-.0016	.0011	-.0102	-.0194	558.
.0410	-15.	-108.	63.	-72.	28.	35.	.0089	-.0000	-.0026	-.0034	-.0054	-.0247	355.
.0420	-23.	-82.	57.	-60.	24.	19.	.0106	-.0000	-.0036	-.0065	-.0043	-.0283	282.
.0430	-73.	-109.	62.	-72.	38.	16.	.0117	-.0000	-.0044	-.0082	-.0074	-.0309	347.
.0440	-120.	-105.	70.	-48.	47.	24.	.0124	-.0000	-.0051	-.0110	-.0093	-.0331	300.
.0450	-121.	-28.	52.	19.	32.	19.	.0131	-.0001	-.0056	-.0155	-.0058	-.0346	173.
.0460	-107.	62.	12.	84.	6.	-1.	.0137	-.0001	-.0062	-.0200	-.0003	-.0353	351.
.0470	-117.	105.	-5.	122.	-3.	-15.	.0141	-.0001	-.0067	-.0231	.0018	-.0355	513.
.0480	-140.	122.	-4.	143.	-3.	-27.	.0141	-.0001	-.0072	-.0253	.0017	-.0351	609.
.0490	-144.	171.	-29.	171.	-18.	-55.	.0141	-.0002	-.0076	-.0276	.0052	-.0336	752.
.0500	-103.	261.	-82.	222.	-53.	-87.	.0137	-.0002	-.0079	-.0306	.0127	-.0312	1019.
.0510	-69.	350.	-120.	284.	-83.	-101.	.0126	-.0002	-.0077	-.0331	.0191	-.0276	1306.
.0520	-67.	384.	-136.	315.	-91.	-100.	.0105	-.0002	-.0071	-.0330	.0208	-.0222	1433.
.0530	-71.	368.	-149.	307.	-85.	-96.	.0076	-.0002	-.0062	-.0302	.0192	-.0149	1391.

S/RV PIPING KEWAUNEE CKW08E 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.0420	-23.	-102.	55.	-46.	24.	19.	.0106	-.0000	-.0036	-.0065	-.0043	-.0283	282.
.0430	-73.	-109.	62.	-72.	38.	16.	.0117	-.0000	-.0044	-.0082	-.0074	-.0309	347.
.0440	-120.	-105.	70.	-48.	47.	24.	.0124	-.0000	-.0051	-.0110	-.0093	-.0331	300.
.0450	-121.	-28.	52.	19.	32.	19.	.0131	-.0001	-.0056	-.0155	-.0058	-.0346	173.
.0460	-107.	62.	12.	64.	6.	-1.	.0137	-.0001	-.0062	-.0200	-.0003	-.0353	351.
.0470	-117.	105.	-5.	102.	-3.	-15.	.0141	-.0001	-.0067	-.0231	.0018	-.0355	513.
.0480	-140.	122.	-4.	143.	-7.	-27.	.0141	-.0001	-.0072	-.0253	.0017	-.0351	609.
.0490	-144.	171.	-29.	171.	-18.	-55.	.0141	-.0002	-.0076	-.0276	.0052	-.0336	752.
.0500	-103.	261.	-82.	222.	-53.	-87.	.0137	-.0002	-.0079	-.0306	.0127	-.0312	1019.
.0510	-69.	350.	-120.	284.	-83.	-101.	.0126	-.0002	-.0077	-.0331	.0191	-.0276	1306.
.0520	-63.	384.	-136.	315.	-91.	-100.	.0105	-.0002	-.0071	-.0330	.0208	-.0222	1433.
.0530	-71.	368.	-149.	307.	-85.	-96.	.0076	-.0002	-.0062	-.0302	.0192	-.0149	1391.

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 63 MEMBER 2 SEQUENCE 91 LOCATION END TYPE EL

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.0540	-68.	357.	-157.	308.	-80.	-84.	.0042	-.0002	-.0048	-.0267	.0177	-.0066	1371.
.0550	-44.	373.	-156.	332.	-82.	-63.	.0006	-.0001	-.0031	-.0234	.0179	.0016	1453.
.0560	-12.	369.	-157.	339.	-86.	-45.	-.0028	-.0001	-.0014	-.0191	.0185	.0096	1470.
.0570	0.	313.	-154.	302.	-83.	-28.	-.0060	-.0001	.0003	-.0132	.0175	.0171	1314.
.0580	24.	236.	-129.	253.	-77.	-7.	-.0089	-.0000	.0017	-.0070	.0158	.0233	1103.
.0590	56.	175.	-105.	209.	-80.	13.	-.0111	.0000	.0030	-.0019	.0164	.0280	937.
.0600	109.	128.	-105.	160.	-96.	23.	-.0127	.0000	.0038	.0026	.0199	.0318	785.
.0610	155.	67.	-101.	94.	-108.	31.	-.0140	.0001	.0044	.0073	.0225	.0347	614.
.0620	170.	-29.	-64.	13.	-102.	52.	-.0152	.0001	.0050	.0127	.0212	.0369	480.
.0630	166.	-150.	-17.	-81.	-85.	77.	-.0163	.0002	.0057	.0187	.0174	.0385	585.
.0640	170.	-256.	15.	-163.	-74.	100.	-.0171	.0002	.0063	.0242	.0150	.0393	855.
.0650	187.	-324.	42.	-213.	-72.	121.	-.0173	.0002	.0070	.0283	.0146	.0388	1067.
.0660	198.	-379.	75.	-250.	-68.	140.	-.0170	.0003	.0077	.0316	.0138	.0372	1230.
.0670	191.	-451.	106.	-302.	-57.	151.	-.0163	.0003	.0081	.0351	.0115	.0349	1428.
.0680	180.	-515.	127.	-355.	-46.	150.	-.0152	.0003	.0083	.0380	.0091	.0319	1617.
.0690	182.	-529.	137.	-376.	-44.	141.	-.0136	.0003	.0082	.0388	.0088	.0282	1685.
.0700	192.	-499.	125.	-366.	-51.	127.	-.0117	.0003	.0079	.0377	.0105	.0241	1632.
.0710	194.	-453.	98.	-345.	-58.	110.	-.0100	.0002	.0076	.0358	.0120	.0205	1531.
.0720	178.	-405.	78.	-319.	-51.	94.	-.0087	.0002	.0073	.0339	.0105	.0178	1406.
.0730	141.	-358.	71.	-288.	-30.	80.	-.0077	.0002	.0072	.0321	.0060	.0160	1253.
.0740	94.	-307.	61.	-245.	-5.	67.	-.0070	.0002	.0072	.0299	.0004	.0147	1060.
.0750	52.	-230.	44.	-177.	15.	54.	-.0061	.0001	.0071	.0265	-.0039	.0131	773.
.0760	21.	-125.	27.	-88.	27.	34.	-.0049	.0001	.0068	.0215	-.0068	.0109	412.
.0770	-12.	-25.	11.	-11.	39.	6.	-.0032	.0000	.0060	.0159	-.0094	.0081	171.
.0780	-56.	51.	-5.	44.	53.	-29.	-.0011	-.0000	.0046	.0097	-.0123	.0043	314.
.0790	-95.	132.	-20.	96.	61.	-68.	.0015	-.0001	.0026	.0021	-.0136	-.0006	553.
.0800	-111.	239.	-46.	157.	53.	-111.	.0044	-.0001	.0001	-.0072	-.0117	-.0061	855.
.0810	-114.	345.	-83.	214.	38.	-154.	.0074	-.0002	-.0028	-.0172	-.0079	-.0119	1111.
.0820	-128.	424.	-110.	257.	28.	-185.	.0100	-.0002	-.0056	-.0265	-.0055	-.0171	1325.
.0830	-152.	475.	-112.	287.	30.	-203.	.0120	-.0003	-.0081	-.0344	-.0057	-.0213	1473.
.0840	-177.	506.	-103.	303.	40.	-216.	.0132	-.0003	-.0102	-.0406	-.0076	-.0238	1563.
.0850	-190.	519.	-91.	309.	54.	-221.	.0138	-.0003.	-.0118	-.0451	-.0103	-.0250	1604.
.0860	-204.	520.	-68.	315.	70.	-215.	.0137	-.0003	-.0130	-.0485	-.0138	-.0251	1618.
.0870	-213.	510.	-32.	312.	88.	-203.	.0132	-.0003	-.0139	-.0506	-.0177	-.0245	1595.
.0880	-217.	476.	2.	284.	107.	-191.	.0125	-.0002	-.0147	-.0514	-.0218	-.0233	1496.
.0890	-219.	423.	33.	237.	124.	-176.	.0117	-.0002	-.0155	-.0512	-.0255	-.0220	1337.
.0900	-215.	370.	69.	187.	136.	-157.	.0111	-.0002	-.0162	-.0510	-.0281	-.0212	1168.
.0910	-200.	320.	99.	135.	141.	-138.	.0106	-.0002	-.0170	-.0506	-.0289	-.0208	996.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.0800	-111.	249.	-48.	197.	38.	-111.	.0044	-.0001	.0001	-.0072	-.0117	-.0061	835.
.0810	-116.	345.	-83.	234.	38.	-154.	.0074	-.0002	-.0028	-.0172	-.0079	-.0119	1111.
.0820	-128.	424.	-110.	257.	28.	-185.	.0100	-.0002	-.0056	-.0265	-.0055	-.0171	1325.
.0830	-152.	475.	-112.	287.	30.	-203.	.0120	-.0003	-.0081	-.0344	-.0057	-.0213	1473.
.0840	-177.	506.	-103.	303.	40.	-216.	.0132	-.0003	-.0102	-.0406	-.0076	-.0238	1563.
.0850	-190.	519.	-91.	309.	54.	-221.	.0138	-.0003	-.0118	-.0451	-.0103	-.0250	1604.
.0860	-204.	520.	-68.	315.	70.	-215.	.0137	-.0003	-.0130	-.0485	-.0138	-.0251	1618.
.0870	-213.	510.	-32.	312.	88.	-203.	.0132	-.0003	-.0139	-.0506	-.0177	-.0245	1595.
.0880	-217.	476.	2.	284.	107.	-191.	.0125	-.0002	-.0147	-.0514	-.0218	-.0233	1496.
.0890	-219.	423.	33.	237.	124.	-176.	.0117	-.0002	-.0155	-.0512	-.0255	-.0220	1337.
.0900	-215.	370.	69.	187.	136.	-157.	.0111	-.0002	-.0162	-.0510	-.0281	-.0212	1168.
.0910	-200.	320.	99.	135.	141.	-138.	.0106	-.0002	-.0170	-.0506	-.0289	-.0208	996.

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 63 MEMBER 2 SEQUENCE 91 LOCATION END TYPE EL

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)
.0920	-181.	257.	123.	68.	141.	-121.	.0103	-.0001	-.0177	-.0493	-.0287	-.0209	825.
.0930	-169.	175.	154.	-5.	142.	-98.	.0101	-.0001	-.0182	-.0471	-.0288	-.0216	721.
.0940	-161.	87.	194.	-72.	141.	-70.	.0101	-.0001	-.0183	-.0443	-.0286	-.0230	724.
.0950	-141.	8.	225.	-131.	132.	-45.	.0103	-.0000	-.0181	-.0410	-.0265	-.0247	799.
.0960	-109.	-55.	241.	-181.	115.	-26.	.0106	.0000	-.0176	-.0373	-.0226	-.0263	899.
.0970	-76.	-109.	256.	-224.	95.	-10.	.0108	.0000	-.0167	-.0329	-.0184	-.0274	1017.
.0980	-50.	-163.	268.	-269.	80.	4.	.0105	.0000	-.0154	-.0276	-.0151	-.0275	1173.
.0990	-25.	-212.	265.	-315.	66.	15.	.0098	.0001	-.0139	-.0214	-.0121	-.0261	1343.
.1000	5.	-236.	247.	-343.	49.	24.	.0084	.0001	-.0119	-.0148	-.0086	-.0229	1450.
.1010	38.	-234.	220.	-348.	31.	36.	.0062	.0001	-.0093	-.0079	-.0051	-.0179	1467.
.1020	63.	-228.	189.	-344.	20.	51.	.0033	.0001	-.0061	.0000	-.0031	-.0112	1453.
.1030	77.	-231.	158.	-338.	17.	66.	-.0002	.0001	-.0025	.0093	-.0030	-.0028	1440.
.1040	86.	-231.	131.	-323.	19.	81.	-.0040	.0001	.0016	.0192	-.0041	.0065	1392.
.1050	99.	-219.	103.	-294.	20.	92.	-.0079	.0001	.0060	.0290	-.0049	.0160	1290.
.1060	117.	-200.	67.	-259.	16.	97.	-.0115	.0001	.0102	.0383	-.0047	.0250	1157.
.1070	135.	-180.	28.	-224.	9.	98.	-.0145	.0001	.0140	.0467	-.0036	.0329	1019.
.1080	148.	-167.	-11.	-191.	-1.	98.	-.0170	.0001	.0174	.0539	-.0021	.0392	897.
.1090	157.	-159.	-56.	-163.	-14.	98.	-.0187	.0001	.0201	.0597	.0005	.0436	796.
.1100	176.	-142.	-105.	-134.	-35.	91.	-.0197	.0001	.0223	.0639	.0047	.0464	689.
.1110	191.	-129.	-153.	-103.	-57.	87.	-.0199	.0001	.0239	.0667	.0094	.0473	611.
.1120	196.	-129.	-198.	-72.	-78.	90.	-.0197	.0001	.0252	.0687	.0138	.0465	582.
.1130	206.	-128.	-242.	-41.	-99.	90.	-.0189	.0001	.0263	.0701	.0182	.0446	584.
.1140	222.	-118.	-276.	-5.	-117.	85.	-.0179	.0001	.0273	.0710	.0221	.0423	605.
.1150	232.	-113.	-296.	32.	-126.	83.	-.0168	.0001	.0283	.0718	.0239	.0396	644.
.1160	229.	-118.	-308.	60.	-123.	86.	-.0159	.0001	.0291	.0727	.0232	.0372	674.
.1170	218.	-126.	-322.	83.	-112.	91.	-.0152	.0001	.0297	.0731	.0207	.0351	694.
.1180	206.	-110.	-328.	118.	-96.	100.	-.0146	.0001	.0300	.0723	.0171	.0332	759.
.1190	178.	-93.	-329.	151.	-71.	115.	-.0140	.0000	.0299	.0705	.0116	.0309	844.
.1200	128.	-92.	-326.	163.	-36.	129.	-.0131	.0000	.0292	.0681	.0039	.0279	882.
.1210	69.	-90.	-309.	169.	5.	136.	-.0114	.0000	.0280	.0646	-.0048	.0232	903.
.1220	3.	-84.	-279.	175.	43.	136.	-.0086	.0000	.0261	.0592	-.0128	.0159	942.
.1230	-56.	-63.	-244.	188.	69.	125.	-.0042	-.0000	.0234	.0517	-.0182	.0052	985.
.1240	-106.	-35.	-220.	196.	81.	98.	.0017	-.0001	.0199	.0421	-.0201	-.0089	975.
.1250	-150.	1.	-201.	200.	80.	60.	.0089	-.0001	.0155	.0307	-.0192	-.0257	934.
.1260	-188.	58.	-176.	210.	71.	13.	.0170	-.0002	.0107	.0176	-.0164	-.0443	929.
.1270	-227.	114.	-161.	208.	60.	-39.	.0252	-.0003	.0054	.0041	-.0129	-.0631	918.
.1280	-265.	169.	-158.	193.	49.	-95.	.0330	-.0003	.0002	-.0086	-.0096	-.0804	918.
.1290	-310.	218.	-153.	179.	45.	-138.	.0396	-.0004	-.0044	-.0199	-.0080	-.0955	961.

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

.1180	204.	-110.	-329.	117.	-92.	100.	-.0146	.0001	.0300	.0723	.0171	.0332	759.
.1190	178.	-93.	-329.	151.	-71.	115.	-.0140	.0000	.0299	.0705	.0116	.0309	844.
.1200	120.	-92.	-326.	163.	-36.	129.	-.0131	.0000	.0292	.0681	.0039	.0279	882.
.1210	60.	-90.	-309.	169.	5.	136.	-.0114	.0000	.0280	.0646	-.0048	.0232	903.
.1220	2.	-84.	-279.	175.	43.	136.	-.0086	.0000	.0261	.0592	-.0128	.0159	942.
.1230	-56.	-63.	-244.	188.	69.	125.	-.0042	-.0000	.0234	.0517	-.0182	.0052	985.
.1240	-106.	-35.	-220.	196.	81.	98.	.0017	-.0001	.0199	.0421	-.0201	-.0089	975.
.1250	-150.	1.	-201.	200.	80.	60.	.0089	-.0001	.0155	.0307	-.0192	-.0257	934.
.1260	-180.	58.	-176.	210.	71.	13.	.0170	-.0002	.0107	.0176	-.0164	-.0443	929.
.1270	-227.	114.	-161.	208.	60.	-39.	.0252	-.0003	.0054	.0041	-.0129	-.0631	918.
.1280	-265.	169.	-158.	193.	49.	-95.	.0330	-.0003	.0002	-.0086	-.0096	-.0804	918.
.1290	-310.	218.	-153.	179.	45.	-138.	.0396	-.0004	-.0044	-.0199	-.0080	-.0955	961.

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 63 MEMBER 2 SEQUENCE 91 LOCATION END TYPE EL

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)
.1300	-360.	265.	-140.	182.	50.	-161.	.0447	-.0004	-.0079	-.0292	-.0085	-.1075	1033.
.1310	-399.	318.	-125.	201.	59.	-170.	.0481	-.0005	-.0102	-.0362	-.0100	-.1159	1127.
.1320	-429.	356.	-119.	217.	72.	-172.	.0500	-.0005	-.0113	-.0398	-.0128	-.1205	1196.
.1330	-454.	378.	-104.	233.	93.	-165.	.0503	-.0005	-.0112	-.0403	-.0175	-.1216	1253.
.1340	-475.	387.	-76.	248.	120.	-149.	.0493	-.0005	-.0102	-.0384	-.0235	-.1200	1305.
.1350	-477.	389.	-55.	251.	143.	-134.	.0475	-.0005	-.0087	-.0347	-.0287	-.1160	1327.
.1360	-458.	386.	-49.	240.	156.	-121.	.0451	-.0005	-.0071	-.0300	-.0318	-.1103	1297.
.1370	-437.	362.	-50.	218.	163.	-98.	.0422	-.0004	-.0054	-.0247	-.0336	-.1039	1205.
.1380	-412.	330.	-47.	194.	163.	-64.	.0390	-.0004	-.0039	-.0195	-.0341	-.0972	1091.
.1390	-374.	288.	-49.	155.	156.	-35.	.0357	-.0004	-.0024	-.0138	-.0328	-.0902	951.
.1400	-328.	221.	-51.	90.	147.	-14.	.0324	-.0003	-.0009	-.0070	-.0309	-.0828	721.
.1410	-288.	124.	-31.	9.	142.	7.	.0292	-.0003	.0007	.0010	-.0299	-.0755	593.
.1420	-252.	3.	4.	-75.	137.	34.	.0260	-.0002	.0026	.0097	-.0291	-.0686	666.
.1430	-195.	-104.	31.	-146.	121.	57.	.0229	-.0001	.0045	.0182	-.0257	-.0618	827.
.1440	-115.	-192.	42.	-212.	93.	72.	.0198	-.0001	.0066	.0266	-.0200	-.0544	1014.
.1450	-43.	-286.	51.	-283.	72.	90.	.0162	-.0000	.0087	.0355	-.0155	-.0461	1276.
.1460	6.	-392.	74.	-359.	65.	116.	.0120	.0000	.0110	.0449	-.0144	-.0366	1597.
.1470	43.	-498.	86.	-435.	66.	146.	.0072	.0001	.0133	.0545	-.0149	-.0257	1936.
.1480	90.	-571.	80.	-492.	64.	174.	.0021	.0002	.0158	.0636	-.0149	-.0138	2195.
.1490	133.	-620.	70.	-522.	64.	206.	-.0032	.0002	.0185	.0720	-.0153	-.0017	2358.
.1500	154.	-669.	72.	-531.	73.	247.	-.0083	.0003	.0214	.0799	-.0177	.0096	2464.
.1510	165.	-709.	85.	-528.	87.	282.	-.0129	.0003	.0242	.0870	-.0214	.0197	2524.
.1520	171.	-739.	91.	-521.	99.	300.	-.0163	.0003	.0265	.0927	-.0244	.0276	2545.
.1530	174.	-746.	93.	-498.	103.	308.	-.0183	.0004	.0281	.0956	-.0256	.0323	2480.
.1540	166.	-726.	92.	-451.	97.	310.	-.0186	.0004	.0285	.0946	-.0244	.0331	2319.
.1550	150.	-673.	75.	-390.	76.	299.	-.0172	.0003	.0276	.0894	-.0197	.0301	2073.
.1560	155.	-591.	42.	-328.	42.	266.	-.0142	.0003	.0253	.0807	-.0121	.0239	1770.
.1570	132.	-511.	0.	-271.	7.	225.	-.0100	.0002	.0219	.0693	-.0038	.0152	1472.
.1580	93.	-415.	-34.	-199.	-30.	185.	-.0050	.0002	.0178	.0553	.0048	.0043	1139.
.1590	64.	-283.	-71.	-102.	-74.	135.	.0004	.0001	.0133	.0392	.0150	-.0073	771.
.1600	43.	-137.	-120.	3.	-121.	76.	.0058	-.0000	.0087	.0227	.0259	-.0184	596.
.1610	11.	2.	-160.	113.	-159.	22.	.0106	-.0001	.0045	.0066	.0347	-.0281	818.
.1620	-31.	144.	-175.	238.	-184.	-21.	.0144	-.0002	.0007	-.0090	.0406	-.0358	1258.
.1630	-67.	290.	-197.	364.	-204.	-61.	.0170	-.0002	-.0027	-.0237	.0452	-.0406	1761.
.1640	-88.	449.	-233.	485.	-223.	-104.	.0183	-.0003	-.0059	-.0373	.0496	-.0419	2270.
.1650	-100.	605.	-265.	598.	-233.	-139.	.0183	-.0004	-.0087	-.0499	.0520	-.0401	2741.
.1660	-141.	731.	-286.	690.	-231.	-158.	.0169	-.0004	-.0113	-.0609	.0515	-.0356	3109.
.1670	-164.	840.	-305.	764.	-225.	-171.	.0145	-.0004	-.0136	-.0702	.0503	-.0289	3399.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.1570	132.	-511.	0.	-271.	7.	225.	-.0100	.0002	.0219	.0693	-.0038	.0152	1472.
.1580	94.	-415.	-34.	-109.	-30.	185.	-.0050	.0002	.0178	.0553	.0048	.0043	1139.
.1590	64.	-283.	-71.	-102.	-74.	135.	.0004	.0001	.0133	.0392	.0150	-.0073	771.
.1600	47.	-137.	-120.	3.	-121.	76.	.0058	-.0000	.0087	.0227	.0259	-.0184	596.
.1610	11.	2.	-160.	113.	-159.	22.	.0106	-.0001	.0045	.0066	.0347	-.0281	818.
.1620	-31.	144.	-175.	278.	-184.	-21.	.0144	-.0002	.0007	-.0090	.0406	-.0358	1258.
.1630	-67.	290.	-197.	364.	-204.	-61.	.0170	-.0002	-.0027	-.0237	.0452	-.0406	1761.
.1640	-88.	449.	-233.	485.	-223.	-104.	.0183	-.0003	-.0059	-.0373	.0496	-.0419	2270.
.1650	-108.	605.	-265.	598.	-233.	-139.	.0183	-.0004	-.0087	-.0499	.0520	-.0401	2741.
.1660	-141.	731.	-286.	690.	-231.	-158.	.0169	-.0004	-.0113	-.0609	.0515	-.0356	3109.
.1670	-164.	840.	-305.	764.	-225.	-171.	.0145	-.0004	-.0136	-.0702	.0503	-.0289	3399.

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 63 MEMBER 2 SEQUENCE 91 LOCATION END TYPE EL

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)
.1680	-161.	941.	-328.	822.	-225.	-185.	.0116	-.0004	-.0156	-.0782	.0503	-.0205	3640.
.1690	-137.	1027.	-337.	868.	-229.	-193.	.0082	-.0004	-.0172	-.0845	.0508	-.0114	3829.
.1700	-109.	1069.	-324.	886.	-226.	-192.	.0044	-.0004	-.0185	-.0885	.0503	-.0018	3899.
.1710	-75.	1060.	-298.	865.	-220.	-186.	.0005	-.0004	-.0194	-.0900	.0489	.0081	3803.
.1720	-20.	1028.	-258.	815.	-214.	-178.	-.0037	-.0003	-.0201	-.0894	.0476	.0185	3595.
.1730	44.	961.	-209.	734.	-207.	-160.	-.0081	-.0003	-.0206	-.0870	.0460	.0290	3253.
.1740	105.	850.	-149.	623.	-194.	-123.	-.0129	-.0002	-.0209	-.0827	.0431	.0395	2773.
.1750	166.	709.	-77.	488.	-176.	-71.	-.0180	-.0001	-.0211	-.0768	.0392	.0501	2186.
.1760	229.	537.	-0.	325.	-154.	-10.	-.0233	.0000	-.0210	-.0689	.0343	.0607	1501.
.1770	291.	336.	89.	141.	-125.	58.	-.0284	.0002	-.0206	-.0593	.0280	.0707	822.
.1780	343.	103.	195.	-58.	-89.	136.	-.0333	.0003	-.0198	-.0482	.0200	.0795	719.
.1790	392.	-139.	315.	-257.	-50.	216.	-.0375	.0004	-.0188	-.0363	.0115	.0865	1417.
.1800	445.	-382.	438.	-456.	-14.	291.	-.0408	.0005	-.0177	-.0243	.0038	.0913	2257.
.1810	487.	-632.	555.	-654.	18.	363.	-.0430	.0007	-.0168	-.0127	-.0032	.0934	3123.
.1820	517.	-866.	673.	-836.	46.	432.	-.0439	.0008	-.0163	-.0030	-.0093	.0923	3931.
.1830	535.	-1073.	780.	-998.	67.	493.	-.0434	.0008	-.0164	.0042	-.0135	.0881	4653.
.1840	545.	-1248.	862.	-1144.	77.	537.	-.0415	.0009	-.0172	.0087	-.0153	.0809	5284.
.1850	541.	-1387.	922.	-1267.	78.	565.	-.0382	.0009	-.0188	.0104	-.0151	.0711	5797.
.1860	510.	-1488.	967.	-1354.	72.	580.	-.0336	.0010	-.0209	.0091	-.0132	.0587	6155.
.1870	492.	-1530.	994.	-1395.	55.	576.	-.0281	.0009	-.0232	.0049	-.0089	.0445	6301.
.1880	467.	-1516.	990.	-1391.	26.	549.	-.0218	.0009	-.0256	-.0015	-.0020	.0296	6241.
.1890	439.	-1447.	964.	-1340.	-10.	503.	-.0153	.0008	-.0279	-.0097	.0063	.0151	5974.
.1900	401.	-1327.	924.	-1242.	-46.	446.	-.0092	.0007	-.0298	-.0192	.0145	.0020	5512.
.1910	355.	-1164.	860.	-1108.	-80.	379.	-.0038	.0006	-.0313	-.0292	.0222	-.0084	4896.
.1920	309.	-950.	768.	-937.	-113.	301.	.0002	.0005	-.0323	-.0397	.0295	-.0152	4133.
.1930	262.	-697.	655.	-735.	-142.	222.	.0027	.0004	-.0327	-.0501	.0358	-.0178	3258.
.1940	206.	-427.	530.	-512.	-163.	148.	.0036	.0003	-.0325	-.0598	.0400	-.0163	2326.
.1950	147.	-149.	396.	-275.	-176.	80.	.0028	.0002	-.0315	-.0684	.0425	-.0111	1404.
.1960	100.	137.	257.	-29.	-188.	14.	.0008	.0000	-.0300	-.0758	.0445	-.0027	797.
.1970	67.	416.	117.	215.	-200.	-49.	-.0021	-.0001	-.0279	-.0817	.0463	.0080	1243.
.1980	43.	667.	-11.	445.	-209.	-107.	-.0057	-.0001	-.0254	-.0859	.0475	.0201	2101.
.1990	31.	882.	-126.	650.	-217.	-159.	-.0096	-.0002	-.0227	-.0884	.0485	.0326	2937.
.2000	35.	1059.	-229.	823.	-220.	-204.	-.0136	-.0003	-.0200	-.0894	.0502	.0451	3665.
.2010	56.	1193.	-324.	957.	-242.	-241.	-.0176	-.0003	-.0175	-.0891	.0526	.0572	4241.
.2020	85.	1276.	-402.	1048.	-254.	-264.	-.0215	-.0003	-.0151	-.0872	.0548	.0685	4632.
.2030	116.	1300.	-458.	1091.	-261.	-269.	-.0255	-.0003	-.0129	-.0835	.0559	.0789	4814.
.2040	148.	1264.	-492.	1084.	-262.	-260.	-.0293	-.0003	-.0108	-.0775	.0558	.0883	4779.
.2050	184.	1172.	-503.	1033.	-257.	-236.	-.0330	-.0002	-.0085	-.0693	.0543	.0966	4552.

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

.1940	267.	-427.	330.	-272.	-182.	148.	.0036	.0003	-.0325	-.0598	.0400	-.0163	2326.
.1950	142.	-149.	396.	-275.	-176.	80.	.0028	.0002	-.0315	-.0684	.0425	-.0111	1404.
.1960	100.	137.	257.	-29.	-188.	14.	.0008	.0000	-.0300	-.0758	.0445	-.0027	797.
.1970	67.	416.	117.	215.	-200.	-49.	-.0021	-.0001	-.0279	-.0817	.0463	.0080	1243.
.1980	42.	667.	-11.	445.	-209.	-107.	-.0057	-.0001	-.0254	-.0859	.0475	.0201	2101.
.1990	31.	802.	-126.	600.	-217.	-159.	-.0096	-.0002	-.0227	-.0884	.0485	.0326	2937.
.2000	35.	1059.	-229.	823.	-220.	-204.	-.0136	-.0003	-.0200	-.0894	.0502	.0451	3665.
.2010	56.	1193.	-324.	877.	-242.	-241.	-.0176	-.0003	-.0175	-.0891	.0526	.0572	4241.
.2020	85.	1276.	-402.	1048.	-254.	-264.	-.0215	-.0003	-.0151	-.0872	.0548	.0685	4632.
.2030	116.	1300.	-458.	1091.	-261.	-269.	-.0255	-.0003	-.0129	-.0835	.0559	.0789	4814.
.2040	140.	1264.	-492.	1084.	-262.	-260.	-.0293	-.0003	-.0108	-.0775	.0558	.0883	4779.
.2050	184.	1172.	-503.	1033.	-257.	-236.	-.0330	-.0002	-.0085	-.0693	.0543	.0966	4552.

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 63 MEMBER 2 SEQUENCE 91 LOCATION END TYPE EL

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)
.2060	221.	1033.	-488.	950.	-247.	-197.	-.0363	-.0001	-.0060	-.0591	.0518	.1033	4180.
.2070	261.	856.	-448.	842.	-232.	-147.	-.0392	-.0000	-.0033	-.0469	.0481	.1083	3697.
.2080	302.	648.	-390.	709.	-212.	-90.	-.0415	.0000	-.0003	-.0332	.0437	.1115	3110.
.2090	340.	417.	-320.	553.	-190.	-32.	-.0431	.0001	.0026	-.0184	.0386	.1128	2442.
.2100	370.	178.	-240.	384.	-164.	29.	-.0439	.0002	.0054	-.0033	.0329	.1120	1745.
.2110	392.	-56.	-159.	211.	-138.	89.	-.0439	.0003	.0079	.0111	.0272	.1090	1116.
.2120	405.	-272.	-86.	41.	-115.	144.	-.0430	.0004	.0100	.0244	.0223	.1040	788.
.2130	408.	-464.	-20.	-121.	-95.	190.	-.0411	.0005	.0116	.0361	.0180	.0968	1021.
.2140	395.	-630.	42.	-269.	-75.	227.	-.0382	.0005	.0129	.0462	.0139	.0876	1501.
.2150	369.	-765.	99.	-395.	-57.	251.	-.0343	.0005	.0138	.0544	.0102	.0764	1970.
.2160	334.	-859.	148.	-495.	-44.	258.	-.0295	.0005	.0144	.0605	.0076	.0635	2337.
.2170	296.	-908.	186.	-565.	-37.	245.	-.0238	.0005	.0147	.0644	.0063	.0494	2575.
.2180	249.	-915.	212.	-605.	-34.	217.	-.0175	.0004	.0146	.0661	.0060	.0345	2687.
.2190	194.	-883.	224.	-617.	-34.	176.	-.0109	.0004	.0142	.0655	.0065	.0194	2683.
.2200	137.	-809.	217.	-602.	-39.	123.	-.0043	.0003	.0134	.0627	.0079	.0049	2571.
.2210	79.	-696.	190.	-563.	-46.	61.	.0020	.0002	.0124	.0582	.0099	-.0082	2371.
.2220	13.	-556.	148.	-504.	-53.	-6.	.0075	.0001	.0112	.0524	.0117	-.0192	2116.
.2230	-46.	-404.	99.	-430.	-55.	-72.	.0120	.0000	.0101	.0461	.0125	-.0278	1832.
.2240	-108.	-244.	45.	-340.	-53.	-134.	.0155	-.0001	.0094	.0399	.0122	-.0336	1544.
.2250	-160.	-80.	-13.	-237.	-49.	-192.	.0178	-.0001	.0090	.0343	.0112	-.0368	1291.
.2260	-202.	78.	-70.	-124.	-42.	-242.	.0189	-.0002	.0092	.0293	.0096	-.0373	1149.
.2270	-234.	222.	-122.	-8.	-31.	-282.	.0189	-.0003	.0097	.0254	.0070	-.0355	1186.
.2280	-257.	343.	-170.	101.	-17.	-313.	.0180	-.0003	.0106	.0225	.0035	-.0317	1373.
.2290	-270.	439.	-217.	196.	-1.	-333.	.0163	-.0004	.0115	.0205	-.0004	-.0262	1613.
.2300	-272.	511.	-263.	278.	16.	-342.	.0140	-.0004	.0124	.0190	-.0043	-.0198	1841.
.2310	-265.	559.	-307.	346.	31.	-339.	.0112	-.0004	.0133	.0180	-.0079	-.0128	2025.
.2320	-250.	580.	-346.	397.	45.	-325.	.0083	-.0004	.0140	.0175	-.0113	-.0060	2151.
.2330	-229.	573.	-377.	432.	58.	-302.	.0054	-.0003	.0146	.0175	-.0145	.0004	2213.
.2340	-204.	540.	-397.	452.	72.	-272.	.0027	-.0003	.0153	.0183	-.0178	.0059	2222.
.2350	-178.	485.	-402.	461.	86.	-236.	.0004	-.0003	.0159	.0195	-.0211	.0102	2192.
.2360	-151.	416.	-397.	461.	100.	-197.	-.0014	-.0002	.0165	.0210	-.0243	.0130	2135.
.2370	-126.	339.	-384.	453.	113.	-159.	-.0026	-.0002	.0169	.0224	-.0273	.0142	2057.
.2380	-100.	259.	-364.	437.	125.	-121.	-.0031	-.0002	.0170	.0235	-.0301	.0136	1963.
.2390	-102.	182.	-342.	416.	137.	-85.	-.0028	-.0001	.0168	.0238	-.0326	.0112	1860.
.2400	-105.	116.	-320.	392.	146.	-54.	-.0017	-.0001	.0160	.0230	-.0345	.0068	1760.
.2410	-117.	68.	-301.	369.	151.	-31.	.0004	-.0001	.0148	.0209	-.0354	.0005	1669.
.2420	-137.	40.	-283.	349.	153.	-17.	.0033	-.0001	.0132	.0176	-.0353	-.0077	1590.
.2430	-167.	30.	-264.	333.	151.	-14.	.0071	-.0001	.0112	.0133	-.0346	-.0177	1526.

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

.2320	-250.	580.	-342.	367.	45.	-325.	.0083	-.0004	.0140	.0175	-.0113	-.0060	2151.
.2330	-220.	573.	-377.	432.	58.	-302.	.0054	-.0003	.0146	.0175	-.0145	.0004	2213.
.2340	-204.	540.	-397.	452.	72.	-272.	.0027	-.0003	.0153	.0183	-.0178	.0059	2222.
.2350	-178.	485.	-402.	461.	86.	-236.	.0004	-.0003	.0159	.0195	-.0211	.0102	2192.
.2360	-151.	416.	-397.	461.	100.	-197.	-.0014	-.0002	.0165	.0210	-.0243	.0130	2135.
.2370	-126.	339.	-384.	453.	113.	-159.	-.0026	-.0002	.0169	.0224	-.0273	.0142	2057.
.2380	-109.	259.	-364.	437.	125.	-121.	-.0031	-.0002	.0170	.0235	-.0301	.0136	1963.
.2390	-102.	182.	-342.	416.	137.	-85.	-.0028	-.0001	.0168	.0238	-.0326	.0112	1860.
.2400	-105.	116.	-320.	392.	146.	-54.	-.0017	-.0001	.0160	.0230	-.0345	.0068	1760.
.2410	-117.	68.	-301.	369.	151.	-31.	.0004	-.0001	.0148	.0209	-.0354	.0005	1669.
.2420	-137.	40.	-283.	349.	153.	-17.	.0033	-.0001	.0132	.0176	-.0353	-.0077	1590.
.2430	-167.	30.	-264.	333.	151.	-14.	.0071	-.0001	.0112	.0133	-.0346	-.0177	1526.

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 63 MEMBER 2 SEQUENCE 91 LOCATION END TYPE EL

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)
.2440	-204.	39.	-244.	324.	145.	-23.	.0118	-.0001	.0090	.0080	-.0329	-.0294	1483.
.2450	-243.	69.	-225.	323.	135.	-42.	.0171	-.0002	.0067	.0020	-.0301	-.0422	1472.
.2460	-283.	121.	-209.	331.	119.	-71.	.0229	-.0003	.0042	-.0047	-.0262	-.0556	1500.
.2470	-326.	188.	-196.	345.	101.	-106.	.0288	-.0003	.0017	-.0118	-.0217	-.0691	1563.
.2480	-370.	265.	-187.	358.	82.	-145.	.0344	-.0004	-.0008	-.0189	-.0169	-.0818	1649.
.2490	-413.	347.	-182.	370.	62.	-185.	.0396	-.0004	-.0032	-.0257	-.0121	-.0931	1744.
.2500	-452.	429.	-183.	377.	43.	-223.	.0439	-.0005	-.0054	-.0317	-.0074	-.1025	1838.
.2510	-483.	506.	-186.	382.	24.	-256.	.0472	-.0005	-.0071	-.0365	-.0030	-.1095	1923.
.2520	-501.	574.	-190.	384.	7.	-282.	.0494	-.0006	-.0083	-.0396	.0010	-.1137	1987.
.2530	-504.	624.	-191.	377.	-7.	-301.	.0501	-.0006	-.0088	-.0405	.0042	-.1147	2014.
.2540	-495.	649.	-186.	360.	-15.	-309.	.0494	-.0006	-.0085	-.0388	.0060	-.1124	1981.
.2550	-472.	642.	-174.	329.	-17.	-306.	.0471	-.0006	-.0073	-.0345	.0062	-.1068	1876.
.2560	-434.	607.	-157.	287.	-14.	-288.	.0434	-.0006	-.0054	-.0277	.0051	-.0980	1696.
.2570	-383.	544.	-138.	232.	-6.	-255.	.0382	-.0005	-.0030	-.0187	.0030	-.0863	1439.
.2580	-321.	452.	-117.	164.	7.	-208.	.0319	-.0004	-.0001	-.0080	-.0003	-.0721	1106.
.2590	-252.	331.	-91.	80.	25.	-148.	.0245	-.0003	.0032	.0042	-.0048	-.0561	711.
.2600	-179.	183.	-61.	-17.	49.	-77.	.0166	-.0002	.0065	.0175	-.0105	-.0390	387.
.2610	-103.	15.	-27.	-122.	74.	0.	.0084	-.0001	.0100	.0312	-.0168	-.0217	595.
.2620	-22.	-162.	10.	-228.	100.	80.	.0005	.0000	.0134	.0449	-.0230	-.0051	1091.
.2630	59.	-342.	51.	-331.	125.	158.	-.0068	.0001	.0165	.0578	-.0290	.0100	1619.
.2640	133.	-521.	94.	-430.	150.	233.	-.0132	.0003	.0192	.0695	-.0348	.0229	2135.
.2650	198.	-689.	138.	-521.	173.	299.	-.0184	.0004	.0214	.0794	-.0403	.0332	2610.
.2660	250.	-836.	178.	-600.	194.	354.	-.0223	.0004	.0229	.0869	-.0451	.0405	3019.
.2670	287.	-951.	210.	-661.	211.	397.	-.0247	.0005	.0236	.0913	-.0490	.0445	3337.
.2680	304.	-1030.	234.	-703.	226.	424.	-.0255	.0005	.0233	.0926	-.0522	.0452	3553.
.2690	300.	-1069.	249.	-723.	238.	435.	-.0246	.0006	.0222	.0907	-.0548	.0425	3659.
.2700	275.	-1066.	255.	-719.	248.	427.	-.0222	.0005	.0203	.0856	-.0566	.0366	3642.
.2710	232.	-1016.	253.	-687.	254.	402.	-.0182	.0005	.0177	.0775	-.0575	.0275	3486.
.2720	174.	-918.	242.	-626.	255.	356.	-.0127	.0004	.0146	.0665	-.0573	.0156	3188.
.2730	101.	-778.	223.	-540.	254.	292.	-.0060	.0003	.0110	.0532	-.0564	.0013	2774.
.2740	14.	-605.	199.	-436.	251.	214.	.0017	.0002	.0071	.0381	-.0551	-.0148	2279.
.2750	-85.	-403.	167.	-314.	245.	125.	.0101	.0001	.0028	.0215	-.0533	-.0321	1743.
.2760	-189.	-175.	126.	-179.	236.	28.	.0188	-.0001	-.0016	.0038	-.0506	-.0500	1241.
.2770	-292.	71.	79.	-36.	224.	-74.	.0276	-.0002	-.0060	-.0144	-.0473	-.0677	996.
.2780	-396.	316.	28.	104.	212.	-175.	.0361	-.0004	-.0103	-.0320	-.0440	-.0848	1226.
.2790	-498.	546.	-20.	234.	201.	-270.	.0440	-.0005	-.0143	-.0484	-.0411	-.1005	1711.
.2800	-590.	755.	-65.	352.	191.	-357.	.0510	-.0006	-.0178	-.0630	-.0383	-.1144	2238.
.2810	-663.	941.	-104.	457.	179.	-433.	.0569	-.0007	-.0206	-.0752	-.0353	-.1261	2751.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.2710	232.	-1016.	253.	-687.	254.	402.	-.0182	.0005	.0177	.0775	-.0575	.0275	3486.
.2720	174.	-918.	242.	-626.	255.	356.	-.0127	.0004	.0146	.0665	-.0573	.0156	3188.
.2730	101.	-778.	223.	-540.	254.	292.	-.0060	.0003	.0110	.0552	-.0564	.0013	2774.
.2740	14.	-605.	199.	-436.	251.	214.	.0017	.0002	.0071	.0381	-.0551	-.0148	2279.
.2750	-85.	-403.	167.	-314.	245.	125.	.0101	.0001	.0028	.0215	-.0533	-.0321	1743.
.2760	-180.	-175.	126.	-179.	236.	28.	.0188	-.0001	-.0016	.0038	-.0506	-.0500	1241.
.2770	-292.	71.	79.	-36.	224.	-74.	.0276	-.0002	-.0060	-.0144	-.0473	-.0677	996.
.2780	-396.	316.	28.	104.	212.	-175.	.0361	-.0004	-.0103	-.0320	-.0440	-.0848	1226.
.2790	-498.	546.	-20.	234.	201.	-270.	.0440	-.0005	-.0143	-.0484	-.0411	-.1005	1711.
.2800	-590.	755.	-65.	352.	191.	-357.	.0510	-.0006	-.0178	-.0630	-.0383	-.1144	2238.
.2810	-663.	941.	-104.	457.	179.	-433.	.0569	-.0007	-.0206	-.0752	-.0353	-.1261	2751.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION 63 MEMBER 2 SEQUENCE 91 LOCATION END TYPE FL

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.2820	-716.	1090.	-136.	543.	167.	-494.	.0615	-.0008	-.0227	-.0846	-.0323	-.1350	3140.
.2830	-751.	1190.	-156.	600.	158.	-536.	.0646	-.0009	-.0239	-.0904	-.0301	-.1408	3423.
.2840	-769.	1235.	-164.	626.	152.	-557.	.0659	-.0009	-.0243	-.0926	-.0287	-.1434	3556.
.2850	-764.	1231.	-163.	624.	147.	-557.	.0656	-.0009	-.0239	-.0914	-.0277	-.1424	3544.
.2860	-732.	1182.	-156.	593.	142.	-537.	.0634	-.0009	-.0227	-.0868	-.0267	-.1379	3390.
.2870	-681.	1084.	-140.	530.	139.	-497.	.0596	-.0008	-.0207	-.0788	-.0263	-.1299	3086.
.2880	-616.	934.	-114.	437.	139.	-436.	.0541	-.0007	-.0180	-.0675	-.0269	-.1186	2642.
.2890	-536.	743.	-78.	321.	142.	-359.	.0472	-.0006	-.0147	-.0534	-.0280	-.1045	2097.
.2900	-439.	527.	-38.	190.	145.	-271.	.0391	-.0005	-.0108	-.0371	-.0291	-.0880	1509.
.2910	-328.	292.	7.	49.	146.	-177.	.0302	-.0003	-.0063	-.0192	-.0300	-.0696	978.
.2920	-213.	43.	56.	-98.	148.	-77.	.0207	-.0002	-.0016	-.0000	-.0312	-.0499	807.
.2930	-99.	-211.	106.	-247.	151.	24.	.0110	-.0000	.0033	.0196	-.0325	-.0296	1213.
.2940	14.	-454.	152.	-391.	151.	121.	.0013	.0002	.0081	.0388	-.0333	-.0092	1820.
.2950	125.	-671.	188.	-520.	146.	210.	-.0080	.0003	.0127	.0568	-.0330	.0105	2420.
.2960	228.	-857.	213.	-631.	137.	288.	-.0167	.0004	.0169	.0729	-.0317	.0291	2951.
.2970	319.	-1008.	229.	-721.	125.	354.	-.0245	.0005	.0207	.0869	-.0296	.0461	3390.
.2980	395.	-1120.	233.	-788.	109.	404.	-.0312	.0006	.0240	.0986	-.0267	.0610	3721.
.2990	456.	-1188.	226.	-827.	90.	437.	-.0367	.0007	.0267	.1075	-.0230	.0735	3921.
.3000	503.	-1208.	209.	-834.	67.	455.	-.0408	.0007	.0289	.1135	-.0184	.0834	3973.
.3010	534.	-1183.	183.	-810.	41.	457.	-.0436	.0007	.0305	.1166	-.0130	.0905	3884.
.3020	548.	-1119.	150.	-760.	15.	445.	-.0451	.0007	.0315	.1170	-.0074	.0949	3675.
.3030	543.	-1025.	111.	-690.	-12.	421.	-.0453	.0007	.0319	.1148	-.0018	.0966	3373.
.3040	521.	-903.	69.	-602.	-38.	387.	-.0442	.0006	.0316	.1099	.0039	.0955	2991.
.3050	487.	-756.	22.	-498.	-65.	346.	-.0420	.0005	.0306	.1026	.0098	.0919	2545.
.3060	445.	-593.	-26.	-384.	-92.	299.	-.0388	.0004	.0290	.0931	.0161	.0858	2068.
.3070	394.	-427.	-73.	-270.	-119.	248.	-.0346	.0004	.0267	.0820	.0222	.0775	1610.
.3080	335.	-270.	-113.	-160.	-144.	197.	-.0296	.0003	.0239	.0696	.0280	.0672	1219.
.3090	275.	-123.	-146.	-55.	-167.	149.	-.0241	.0002	.0206	.0563	.0336	.0552	962.
.3100	220.	13.	-173.	44.	-191.	103.	-.0181	.0001	.0170	.0424	.0394	.0422	925.
.3110	171.	129.	-192.	130.	-214.	62.	-.0121	.0000	.0132	.0284	.0449	.0285	1076.
.3120	124.	215.	-200.	198.	-232.	29.	-.0062	-.0001	.0092	.0149	.0494	.0150	1278.
.3130	81.	271.	-197.	247.	-245.	6.	-.0008	-.0001	.0051	.0022	.0528	.0021	1451.
.3140	48.	302.	-187.	280.	-254.	-7.	.0040	-.0002	.0012	-.0094	.0553	-.0095	1578.
.3150	28.	313.	-174.	299.	-260.	-11.	.0078	-.0002	-.0025	-.0199	.0572	-.0193	1654.
.3160	16.	301.	-155.	303.	-261.	-6.	.0107	-.0002	-.0058	-.0287	.0579	-.0268	1669.
.3170	11.	265.	-129.	292.	-254.	10.	.0123	-.0002	-.0087	-.0357	.0568	-.0317	1618.
.3180	14.	211.	-97.	270.	-242.	32.	.0127	-.0001	-.0111	-.0407	.0543	-.0340	1519.
.3190	27.	148.	-65.	242.	-225.	60.	.0120	-.0001	-.0128	-.0439	.0507	-.0334	1399.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.3090	275.	-123.	-146.	-55.	-167.	149.	-.0241	.0002	.0206	.0563	.0536	.0552	962.
.3100	220.	13.	-173.	44.	-191.	103.	-.0181	.0001	.0170	.0424	.0394	.0422	925.
.3110	171.	129.	-192.	130.	-214.	62.	-.0121	.0000	.0132	.0284	.0449	.0285	1076.
.3120	124.	215.	-200.	198.	-232.	29.	-.0062	-.0001	.0092	.0149	.0494	.0150	1278.
.3130	81.	271.	-197.	247.	-245.	6.	-.0008	-.0001	.0051	.0022	.0528	.0021	1451.
.3140	40.	302.	-187.	280.	-254.	-7.	.0040	-.0002	.0012	-.0094	.0553	-.0095	1578.
.3150	22.	313.	-174.	299.	-260.	-11.	.0078	-.0002	-.0025	-.0199	.0572	-.0193	1654.
.3160	16.	301.	-155.	303.	-261.	-6.	.0107	-.0002	-.0058	-.0287	.0579	-.0268	1669.
.3170	11.	265.	-129.	292.	-254.	10.	.0123	-.0002	-.0087	-.0357	.0568	-.0317	1618.
.3180	14.	211.	-97.	270.	-242.	32.	.0127	-.0001	-.0111	-.0407	.0543	-.0340	1519.
.3190	27.	148.	-65.	242.	-225.	60.	.0120	-.0001	-.0128	-.0439	.0507	-.0334	1399.

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 63 MEMBER 2 SEQUENCE 01 LOCATION END TYPE EL

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.3200	48.	82.	-32.	211.	-204.	92.	.0102	-.0001	-.0140	-.0455	.0463	-.0304	1283.
.3210	74.	14.	2.	178.	-180.	126.	.0075	-.0000	-.0146	-.0457	.0410	-.0250	1181.
.3220	100.	-55.	35.	142.	-152.	161.	.0040	.0000	-.0148	-.0445	.0347	-.0178	1099.
.3230	127.	-122.	66.	104.	-122.	194.	.0001	.0001	-.0147	-.0425	.0280	-.0093	1051.
.3240	153.	-178.	93.	68.	-93.	223.	-.0040	.0002	-.0143	-.0400	.0213	-.0001	1047.
.3250	177.	-222.	116.	36.	-65.	247.	-.0081	.0002	-.0139	-.0374	.0152	.0092	1077.
.3260	199.	-253.	135.	7.	-41.	264.	-.0117	.0002	-.0134	-.0349	.0096	.0178	1115.
.3270	215.	-276.	152.	-21.	-19.	272.	-.0149	.0003	-.0131	-.0325	.0047	.0254	1143.
.3280	224.	-291.	168.	-49.	-0.	273.	-.0172	.0003	-.0128	-.0306	.0005	.0315	1157.
.3290	227.	-295.	183.	-72.	14.	266.	-.0187	.0003	-.0126	-.0292	-.0026	.0356	1149.
.3300	226.	-287.	196.	-91.	22.	250.	-.0193	.0003	-.0127	-.0285	-.0044	.0378	1114.
.3310	220.	-272.	207.	-109.	26.	228.	-.0189	.0003	-.0130	-.0283	-.0052	.0379	1058.
.3320	204.	-255.	218.	-127.	28.	201.	-.0177	.0003	-.0134	-.0286	-.0055	.0361	998.
.3330	181.	-238.	230.	-146.	28.	171.	-.0158	.0003	-.0140	-.0292	-.0053	.0326	947.
.3340	154.	-217.	239.	-163.	24.	140.	-.0134	.0002	-.0146	-.0302	-.0043	.0277	900.
.3350	126.	-192.	246.	-176.	18.	106.	-.0104	.0002	-.0153	-.0314	-.0026	.0217	861.
.3360	95.	-168.	252.	-189.	10.	72.	-.0072	.0002	-.0160	-.0325	-.0007	.0151	845.
.3370	61.	-151.	259.	-201.	4.	40.	-.0040	.0001	-.0165	-.0333	.0010	.0082	857.
.3380	28.	-137.	266.	-212.	-3.	9.	-.0008	.0001	-.0169	-.0339	.0027	.0014	885.
.3390	-1.	-122.	269.	-218.	-11.	-21.	.0022	.0001	-.0171	-.0341	.0046	-.0048	914.
.3400	-24.	-106.	267.	-218.	-20.	-50.	.0048	.0001	-.0171	-.0340	.0067	-.0102	938.
.3410	-44.	-92.	263.	-215.	-27.	-76.	.0068	.0000	-.0168	-.0335	.0084	-.0142	960.
.3420	-61.	-80.	254.	-210.	-33.	-99.	.0082	.0000	-.0163	-.0325	.0097	-.0167	978.
.3430	-73.	-67.	240.	-200.	-37.	-120.	.0088	.0000	-.0156	-.0311	.0106	-.0172	985.
.3440	-77.	-50.	220.	-183.	-40.	-139.	.0086	-.0000	-.0146	-.0293	.0112	-.0158	974.
.3450	-76.	-28.	194.	-158.	-42.	-156.	.0076	-.0000	-.0134	-.0272	.0114	-.0124	944.
.3460	-71.	-4.	166.	-127.	-41.	-170.	.0058	-.0000	-.0119	-.0248	.0109	-.0070	903.
.3470	-62.	22.	134.	-91.	-37.	-182.	.0032	-.0000	-.0102	-.0220	.0096	.0003	865.
.3480	-49.	51.	99.	-50.	-30.	-193.	-.0001	-.0000	-.0083	-.0191	.0078	.0092	842.
.3490	-35.	86.	63.	-1.	-22.	-203.	-.0038	-.0000	-.0063	-.0162	.0054	.0193	850.
.3500	-18.	127.	25.	52.	-12.	-211.	-.0079	.0000	-.0043	-.0135	.0027	.0302	908.
.3510	-2.	171.	-14.	107.	0.	-219.	-.0121	.0000	-.0024	-.0112	-.0003	.0415	1018.
.3520	12.	216.	-52.	161.	13.	-228.	-.0163	.0000	-.0007	-.0094	-.0037	.0525	1166.
.3530	21.	263.	-88.	214.	28.	-236.	-.0201	.0000	.0007	-.0082	-.0072	.0628	1336.
.3540	28.	311.	-121.	265.	42.	-246.	-.0234	.0000	.0018	-.0078	-.0106	.0718	1520.
.3550	31.	360.	-151.	314.	54.	-257.	-.0260	.0000	.0025	-.0082	-.0136	.0789	1709.
.3560	29.	407.	-175.	356.	66.	-271.	-.0277	.0000	.0027	-.0095	-.0163	.0839	1888.
.3570	21.	449.	-191.	391.	77.	-286.	-.0283	-.0000	.0026	-.0115	-.0189	.0864	2047.

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

.3470	-62.	22.	134.	-91.	-37.	-182.	.0032	-.0000	-.0102	-.0220	.0096	.0003	865.
.3480	-49.	51.	99.	-50.	-30.	-193.	-.0001	-.0000	-.0083	-.0191	.0078	.0092	842.
.3490	-35.	86.	63.	-1.	-22.	-203.	-.0038	-.0000	-.0063	-.0162	.0054	.0193	850.
.3500	-18.	127.	25.	52.	-12.	-211.	-.0079	.0000	-.0043	-.0135	.0027	.0302	908.
.3510	-2.	171.	-14.	107.	0.	-219.	-.0121	.0000	-.0024	-.0112	-.0003	.0415	1018.
.3520	12.	216.	-52.	161.	12.	-228.	-.0163	.0000	-.0007	-.0094	-.0037	.0525	1166.
.3530	21.	263.	-88.	214.	28.	-236.	-.0201	.0000	.0007	-.0082	-.0072	.0628	1336.
.3540	28.	311.	-121.	265.	42.	-246.	-.0234	.0000	.0018	-.0078	-.0106	.0718	1520.
.3550	31.	360.	-151.	314.	54.	-257.	-.0260	.0000	.0025	-.0082	-.0136	.0789	1709.
.3560	29.	407.	-175.	356.	66.	-271.	-.0277	.0000	.0027	-.0095	-.0163	.0839	1888.
.3570	21.	449.	-191.	391.	77.	-286.	-.0283	-.0000	.0026	-.0115	-.0189	.0864	2047.

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 63 MEMBER 2 SEQUENCE 91 LOCATION END TYPE EL

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)
.3580	5.	485.	-201.	419.	87.	-301.	-.0280	-.0000	.0020	-.0143	-.0210	.0862	2183.
.3590	-14.	519.	-205.	439.	94.	-319.	-.0265	-.0000	.0010	-.0179	-.0225	.0833	2298.
.3600	-37.	549.	-204.	452.	99.	-337.	-.0241	-.0001	-.0004	-.0221	-.0233	.0778	2389.
.3610	-65.	572.	-197.	455.	103.	-355.	-.0207	-.0001	-.0021	-.0266	-.0239	.0700	2448.
.3620	-99.	586.	-184.	449.	107.	-372.	-.0166	-.0001	-.0040	-.0313	-.0243	.0602	2473.
.3630	-136.	593.	-166.	434.	110.	-387.	-.0119	-.0002	-.0060	-.0359	-.0246	.0487	2469.
.3640	-174.	594.	-144.	412.	112.	-400.	-.0067	-.0002	-.0081	-.0403	-.0246	.0361	2443.
.3650	-211.	588.	-119.	386.	114.	-410.	-.0014	-.0002	-.0101	-.0441	-.0245	.0227	2397.
.3660	-249.	573.	-90.	353.	117.	-415.	.0040	-.0003	-.0118	-.0473	-.0246	.0091	2328.
.3670	-285.	548.	-57.	315.	121.	-417.	.0092	-.0003	-.0134	-.0495	-.0250	-.0043	2239.
.3680	-318.	515.	-24.	274.	125.	-414.	.0141	-.0003	-.0146	-.0508	-.0255	-.0170	2134.
.3690	-346.	477.	8.	230.	128.	-406.	.0185	-.0003	-.0156	-.0513	-.0259	-.0288	2019.
.3700	-367.	433.	39.	185.	131.	-393.	.0224	-.0003	-.0162	-.0509	-.0262	-.0393	1895.
.3710	-382.	383.	67.	140.	132.	-377.	.0256	-.0003	-.0165	-.0496	-.0263	-.0483	1765.
.3720	-390.	328.	91.	93.	133.	-356.	.0280	-.0003	-.0165	-.0475	-.0262	-.0555	1633.
.3730	-389.	269.	111.	48.	132.	-332.	.0296	-.0003	-.0162	-.0446	-.0259	-.0609	1505.
.3740	-380.	209.	126.	7.	129.	-305.	.0304	-.0003	-.0156	-.0410	-.0252	-.0642	1383.
.3750	-362.	150.	136.	-28.	124.	-276.	.0304	-.0003	-.0146	-.0369	-.0241	-.0654	1266.
.3760	-336.	92.	140.	-58.	117.	-244.	.0294	-.0002	-.0133	-.0322	-.0228	-.0645	1155.
.3770	-305.	34.	138.	-82.	110.	-211.	.0276	-.0002	-.0117	-.0269	-.0215	-.0615	1049.
.3780	-270.	-21.	132.	-98.	102.	-176.	.0251	-.0002	-.0099	-.0212	-.0201	-.0565	942.
.3790	-229.	-68.	118.	-105.	93.	-140.	.0217	-.0001	-.0077	-.0154	-.0185	-.0496	828.
.3800	-185.	-107.	97.	-102.	83.	-105.	.0178	-.0001	-.0054	-.0095	-.0166	-.0412	701.
.3810	-138.	-136.	70.	-90.	71.	-71.	.0135	-.0000	-.0030	-.0037	-.0146	-.0315	563.
.3820	-93.	-159.	38.	-70.	60.	-39.	.0088	-.0000	-.0004	.0020	-.0126	-.0209	416.
.3830	-40.	-172.	1.	-42.	48.	-9.	.0040	.0000	.0022	.0075	-.0105	-.0099	267.
.3840	-5.	-172.	-41.	-4.	34.	17.	-.0008	.0001	.0048	.0125	-.0080	.0011	160.
.3850	37.	-161.	-86.	42.	19.	39.	-.0053	.0001	.0073	.0169	-.0052	.0118	252.
.3860	75.	-141.	-133.	93.	3.	57.	-.0094	.0001	.0097	.0208	-.0022	.0217	456.
.3870	106.	-115.	-179.	147.	-13.	70.	-.0131	.0001	.0119	.0240	.0007	.0304	683.
.3880	130.	-83.	-224.	202.	-28.	80.	-.0161	.0001	.0139	.0266	.0037	.0378	916.
.3890	149.	-45.	-269.	258.	-44.	85.	-.0184	.0001	.0156	.0285	.0068	.0435	1150.
.3900	161.	-2.	-311.	313.	-60.	87.	-.0199	.0001	.0170	.0296	.0101	.0473	1380.
.3910	166.	41.	-348.	364.	-76.	84.	-.0205	.0001	.0180	.0300	.0132	.0491	1590.
.3920	163.	82.	-378.	406.	-90.	78.	-.0204	.0001	.0188	.0299	.0161	.0490	1767.
.3930	152.	117.	-401.	440.	-102.	70.	-.0193	.0000	.0191	.0293	.0188	.0468	1909.
.3940	137.	149.	-417.	466.	-114.	59.	-.0176	.0000	.0192	.0282	.0214	.0428	2019.
.3950	118.	178.	-427.	485.	-125.	46.	-.0151	-.0000	.0189	.0267	.0240	.0371	2097.

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

.3850	37.	-161.	-86.	42.	19.	39.	-.0053	.0001	.0073	.0169	-.0052	.0118	252.
.3860	75.	-141.	-133.	93.	3.	57.	-.0094	.0001	.0097	.0208	-.0022	.0217	456.
.3870	106.	-115.	-172.	147.	-13.	70.	-.0131	.0001	.0119	.0240	.0007	.0304	683.
.3880	130.	-83.	-224.	202.	-28.	80.	-.0161	.0001	.0139	.0266	.0037	.0378	916.
.3890	149.	-45.	-269.	258.	-44.	85.	-.0184	.0001	.0156	.0285	.0068	.0435	1150.
.3900	161.	-2.	-311.	313.	-60.	87.	-.0199	.0001	.0170	.0296	.0101	.0473	1380.
.3910	166.	41.	-348.	364.	-76.	84.	-.0205	.0001	.0180	.0300	.0132	.0491	1590.
.3920	163.	82.	-378.	406.	-90.	78.	-.0204	.0001	.0188	.0299	.0161	.0490	1767.
.3930	152.	117.	-401.	440.	-102.	70.	-.0193	.0000	.0191	.0293	.0188	.0468	1909.
.3940	137.	149.	-417.	466.	-114.	59.	-.0176	.0000	.0192	.0282	.0214	.0428	2019.
.3950	118.	178.	-427.	485.	-125.	46.	-.0151	-.0000	.0189	.0267	.0240	.0371	2097.

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 63 MEMBER 2 SEQUENCE 91 LOCATION END TYPE EL

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)
.3960	96.	199.	-428.	492.	-134.	32.	-.0121	-.0001	.0183	.0249	.0262	.0299	2133.
.3970	69.	208.	-422.	487.	-141.	18.	-.0086	-.0001	.0175	.0230	.0280	.0217	2118.
.3980	38.	207.	-408.	471.	-146.	4.	-.0049	-.0001	.0165	.0211	.0293	.0127	2059.
.3990	9.	200.	-389.	448.	-150.	-8.	-.0010	-.0001	.0154	.0192	.0305	.0033	1971.
.4000	-18.	189.	-366.	418.	-153.	-21.	.0028	-.0002	.0141	.0173	.0315	-.0061	1858.

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)
.1870	492.	-1530.	994.	-1395.	55.	576.	-.0281	.0009	-.0232	.0049	-.0089	.0445	6301.

SECTION 64 MEMBER 1 SEQUENCE 91 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)
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	-0.	0.	-0.	0.	-0.	-0.	-.0000	.0000	-.0000	.0000	-.0000	-.0000	0.
.0020	-0.	0.	-0.	0.	-0.	-0.	-.0000	.0000	-.0000	.0000	.0000	-.0000	0.
.0030	-0.	0.	-0.	0.	0.	-0.	-.0000	.0000	.0000	.0000	.0000	-.0000	0.
.0040	-0.	0.	-0.	0.	0.	-0.	-.0000	.0000	.0000	.0000	.0000	-.0000	0.
.0050	0.	-0.	0.	-0.	0.	0.	-.0000	-.0000	.0000	.0000	.0000	.0000	0.
.0060	-0.	-0.	0.	-0.	0.	0.	-.0000	-.0000	.0000	-.0000	.0000	.0000	0.
.0070	-0.	-0.	0.	-0.	0.	-0.	-.0000	-.0000	.0000	-.0000	.0000	.0000	1.
.0080	-0.	-0.	0.	-1.	0.	-0.	-.0000	-.0000	.0000	-.0000	.0001	.0000	3.
.0090	-0.	-1.	1.	-1.	1.	-0.	-.0000	-.0000	.0000	-.0000	.0002	.0000	7.
.0100	-1.	-2.	1.	-2.	2.	-1.	-.0000	-.0000	.0000	-.0001	.0003	.0000	12.
.0110	-1.	-3.	2.	-4.	2.	-1.	-.0000	-.0000	.0000	-.0001	.0005	.0001	18.
.0120	-2.	-3.	3.	-5.	3.	-2.	-.0001	-.0000	.0000	-.0002	.0007	.0001	27.
.0130	-3.	-5.	5.	-8.	5.	-4.	-.0002	-.0000	-.0000	-.0004	.0010	.0002	43.
.0140	-5.	-8.	7.	-13.	7.	-6.	-.0002	-.0000	-.0000	-.0007	.0016	.0004	67.
.0150	-8.	-13.	9.	-19.	11.	-7.	-.0003	-.0000	-.0001	-.0011	.0023	.0005	95.
.0160	-10.	-18.	11.	-24.	14.	-9.	-.0005	-.0000	-.0002	-.0015	.0031	.0008	120.
.0170	-11.	-23.	12.	-27.	17.	-8.	-.0007	-.0000	-.0003	-.0019	.0037	.0013	138.
.0180	-13.	-27.	12.	-28.	19.	-7.	-.0009	-.0000	-.0004	-.0023	.0042	.0020	146.
.0190	-15.	-30.	10.	-28.	21.	-5.	-.0012	-.0000	-.0005	-.0026	.0045	.0029	146.

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

.0080	-0.	-0.	0.	-1.	0.	-0.	-.0000	-.0000	.0000	-.0000	.0000	.0000	1.
.0090	-0.	-1.	1.	-1.	1.	-0.	-.0000	-.0000	.0000	-.0000	.0001	.0000	3.
.0100	-1.	-2.	1.	-2.	2.	-1.	-.0000	-.0000	.0000	-.0001	.0002	.0000	7.
.0110	-1.	-3.	2.	-4.	2.	-1.	-.0000	-.0000	.0000	-.0001	.0003	.0000	12.
.0120	-2.	-3.	3.	-5.	3.	-2.	-.0001	-.0000	.0000	-.0002	.0005	.0001	18.
.0130	-3.	-5.	5.	-8.	5.	-4.	-.0002	-.0000	-.0000	-.0004	.0007	.0001	27.
.0140	-5.	-8.	7.	-13.	7.	-6.	-.0002	-.0000	-.0000	-.0007	.0010	.0002	43.
.0150	-8.	-13.	9.	-19.	11.	-7.	-.0003	-.0000	-.0001	-.0011	.0016	.0004	67.
.0160	-10.	-18.	11.	-24.	14.	-9.	-.0005	-.0000	-.0002	-.0015	.0023	.0005	95.
.0170	-11.	-23.	12.	-27.	17.	-8.	-.0007	-.0000	-.0003	-.0019	.0031	.0008	120.
.0180	-13.	-27.	12.	-28.	19.	-7.	-.0009	-.0000	-.0004	-.0023	.0037	.0013	138.
.0190	-15.	-30.	10.	-28.	21.	-5.	-.0012	-.0000	-.0005	-.0026	.0042	.0020	146.

S/RV PIPING KEWAUNEE CKW08F 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 64 MEMBER 1 SEQUENCE 91 LOCATION BEG TYPE RU

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.0200	-17.	-31.	8.	-26.	21.	-2.	-.0016	.0000	-.0006	-.0027	.0045	.0039	138.
.0210	-19.	-30.	5.	-21.	19.	1.	-.0020	.0000	-.0007	-.0028	.0042	.0051	119.
.0220	-22.	-30.	0.	-15.	16.	5.	-.0024	.0000	-.0008	-.0028	.0035	.0064	94.
.0230	-24.	-27.	-5.	-7.	12.	8.	-.0028	.0000	-.0009	-.0027	.0026	.0076	67.
.0240	-27.	-20.	-11.	2.	8.	9.	-.0032	.0000	-.0011	-.0027	.0018	.0085	51.
.0250	-28.	-15.	-18.	10.	8.	9.	-.0033	.0000	-.0013	-.0028	.0017	.0090	65.
.0260	-27.	-17.	-22.	15.	10.	13.	-.0033	.0000	-.0014	-.0030	.0022	.0092	92.
.0270	-20.	-23.	-28.	24.	11.	22.	-.0032	.0000	-.0015	-.0028	.0024	.0093	143.
.0280	-15.	-5.	-41.	47.	4.	29.	-.0031	.0000	-.0015	-.0018	.0011	.0094	233.
.0290	-15.	32.	-54.	74.	-4.	27.	-.0031	.0000	-.0014	-.0003	-.0008	.0092	328.
.0300	-16.	30.	-52.	75.	-6.	25.	-.0030	.0000	-.0012	.0005	-.0011	.0089	331.
.0310	-15.	11.	-45.	70.	-6.	27.	-.0030	.0000	-.0007	.0014	-.0012	.0089	315.
.0320	-21.	41.	-50.	90.	-20.	18.	-.0032	.0000	-.0002	.0037	-.0044	.0089	391.
.0330	-36.	105.	-61.	119.	-47.	-6.	-.0035	.0001	.0004	.0064	-.0103	.0086	533.
.0340	-40.	141.	-61.	129.	-65.	-29.	-.0035	.0001	.0009	.0081	-.0144	.0074	615.
.0350	-50.	141.	-54.	121.	-67.	-43.	-.0029	.0001	.0011	.0085	-.0148	.0052	603.
.0360	-45.	140.	-48.	110.	-63.	-55.	-.0017	.0001	.0011	.0080	-.0140	.0018	577.
.0370	-33.	154.	-52.	110.	-66.	-63.	-.0001	.0001	.0009	.0073	-.0145	-.0027	598.
.0380	-12.	180.	-66.	126.	-72.	-60.	.0019	.0001	.0003	.0066	-.0155	-.0078	656.
.0390	15.	198.	-81.	138.	-67.	-53.	.0042	.0001	-.0006	.0048	-.0143	-.0134	676.
.0400	42.	173.	-79.	115.	-49.	-48.	.0066	.0000	-.0016	.0011	-.0102	-.0194	558.
.0410	71.	106.	-66.	72.	-28.	-35.	.0089	-.0000	-.0026	-.0034	-.0054	-.0247	355.
.0420	97.	79.	-70.	60.	-24.	-19.	.0106	-.0000	-.0036	-.0065	-.0043	-.0283	282.
.0430	109.	110.	-85.	72.	-38.	-16.	.0117	-.0000	-.0044	-.0082	-.0074	-.0309	347.
.0440	112.	109.	-79.	48.	-47.	-24.	.0124	-.0000	-.0051	-.0110	-.0093	-.0331	300.
.0450	120.	29.	-49.	-19.	-32.	-19.	.0131	-.0001	-.0056	-.0155	-.0058	-.0346	173.
.0460	137.	-64.	-19.	-54.	-6.	1.	.0137	-.0001	-.0062	-.0200	-.0003	-.0353	351.
.0470	148.	-106.	-4.	-122.	3.	15.	.0141	-.0001	-.0067	-.0231	.0018	-.0355	513.
.0480	155.	-121.	3.	-143.	3.	27.	.0141	-.0001	-.0072	-.0253	.0017	-.0351	609.
.0490	169.	-169.	14.	-171.	18.	55.	.0141	-.0002	-.0076	-.0276	.0052	-.0336	752.
.0500	181.	-262.	39.	-222.	53.	87.	.0137	-.0002	-.0079	-.0306	.0127	-.0312	1019.
.0510	177.	-353.	75.	-284.	83.	101.	.0126	-.0002	-.0077	-.0331	.0191	-.0276	1306.
.0520	156.	-387.	98.	-315.	91.	100.	.0105	-.0002	-.0071	-.0330	.0208	-.0222	1433.
.0530	124.	-368.	103.	-307.	85.	96.	.0076	-.0002	-.0062	-.0302	.0192	-.0149	1391.
.0540	83.	-356.	118.	-308.	80.	84.	.0042	-.0002	-.0048	-.0267	.0177	-.0066	1371.
.0550	37.	-374.	149.	-332.	82.	63.	.0006	-.0001	-.0031	-.0234	.0179	.0016	1453.
.0560	-8.	-371.	170.	-339.	86.	45.	-.0028	-.0001	-.0014	-.0191	.0185	.0096	1470.
.0570	-48.	-314.	168.	-302.	83.	28.	-.0060	-.0001	.0003	-.0132	.0175	.0171	1314.

S/RV PIPING KEWAUNEE CKW08F 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

.0470	140.	-106.	-4.	-122.	2.	15.	.0141	-.0001	-.0067	-.0231	.0018	-.0355	513.
.0480	155.	-121.	3.	-143.	3.	27.	.0141	-.0001	-.0072	-.0253	.0017	-.0351	609.
.0490	169.	-169.	14.	-171.	18.	55.	.0141	-.0002	-.0076	-.0276	.0052	-.0336	752.
.0500	181.	-262.	39.	-222.	53.	87.	.0137	-.0002	-.0079	-.0306	.0127	-.0312	1019.
.0510	177.	-353.	75.	-284.	87.	101.	.0126	.0002	-.0077	-.0331	.0191	-.0276	1306.
.0520	156.	-387.	98.	-315.	91.	100.	.0105	-.0002	-.0071	-.0330	.0208	-.0222	1433.
.0530	124.	-368.	103.	-307.	85.	96.	.0076	-.0002	-.0062	-.0302	.0192	-.0149	1391.
.0540	83.	-356.	118.	-308.	80.	84.	.0042	-.0002	-.0048	-.0267	.0177	-.0066	1371.
.0550	37.	-374.	149.	-332.	82.	63.	.0006	-.0001	-.0031	-.0234	.0179	.0016	1453.
.0560	-8.	-371.	170.	-339.	86.	45.	-.0028	-.0001	-.0014	-.0191	.0185	.0096	1470.
.0570	-40.	-314.	168.	-302.	83.	28.	-.0060	-.0001	.0003	-.0132	.0175	.0171	1314.

S/RV PIPING KEWAUNEE CKW08F 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 64 MEMBER 1 SEQUENCE 91 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)
.0580	-87.	-234.	156.	-253.	77.	7.	-.0089	-.0000	.0017	-.0070	.0158	.0233	1103.
.0590	-120.	-174.	145.	-209.	80.	-13.	-.0111	.0000	.0030	-.0019	.0164	.0280	937.
.0600	-141.	-129.	128.	-160.	96.	-23.	-.0127	.0000	.0038	.0026	.0199	.0318	785.
.0610	-158.	-68.	99.	-94.	108.	-31.	-.0140	.0001	.0044	.0073	.0225	.0347	614.
.0620	-180.	28.	62.	-13.	102.	-52.	-.0152	.0001	.0050	.0127	.0212	.0369	480.
.0630	-204.	151.	18.	81.	85.	-77.	-.0163	.0002	.0057	.0187	.0174	.0385	585.
.0640	-223.	258.	-20.	163.	74.	-100.	-.0171	.0002	.0063	.0242	.0150	.0393	855.
.0650	-236.	325.	-40.	213.	72.	-121.	-.0173	.0002	.0070	.0283	.0146	.0388	1067.
.0660	-243.	378.	-53.	250.	68.	-140.	-.0170	.0003	.0077	.0316	.0138	.0372	1230.
.0670	-241.	451.	-77.	302.	57.	-151.	-.0163	.0003	.0081	.0351	.0115	.0349	1428.
.0680	-228.	517.	-104.	355.	46.	-150.	-.0152	.0003	.0083	.0380	.0091	.0319	1617.
.0690	-207.	531.	-116.	376.	44.	-141.	-.0136	.0003	.0082	.0388	.0088	.0282	1685.
.0700	-182.	499.	-114.	366.	51.	-127.	-.0117	.0003	.0079	.0377	.0105	.0241	1632.
.0710	-157.	453.	-106.	345.	58.	-110.	-.0100	.0002	.0076	.0358	.0120	.0205	1531.
.0720	-135.	404.	-95.	319.	51.	-94.	-.0087	.0002	.0073	.0339	.0105	.0178	1406.
.0730	-118.	358.	-80.	288.	30.	-80.	-.0077	.0002	.0072	.0321	.0060	.0160	1253.
.0740	-104.	308.	-58.	245.	5.	-67.	-.0070	.0002	.0072	.0299	.0004	.0147	1060.
.0750	-88.	232.	-23.	177.	-15.	-54.	-.0061	.0001	.0071	.0265	-.0039	.0131	773.
.0760	-67.	125.	21.	88.	-27.	-34.	-.0049	.0001	.0068	.0215	-.0068	.0109	412.
.0770	-35.	24.	54.	11.	-39.	-6.	-.0032	.0000	.0060	.0159	-.0094	.0081	171.
.0780	4.	-50.	69.	-44.	-53.	29.	-.0011	-.0000	.0046	.0097	-.0123	.0043	314.
.0790	50.	-131.	76.	-96.	-61.	68.	.0015	-.0001	.0026	.0021	-.0136	-.0006	553.
.0800	103.	-239.	83.	-157.	-53.	111.	.0044	-.0001	.0001	-.0072	-.0117	-.0061	835.
.0810	155.	-347.	85.	-214.	-38.	154.	.0074	-.0002	-.0028	-.0172	-.0079	-.0119	1111.
.0820	197.	-426.	79.	-257.	-28.	185.	.0100	-.0002	-.0056	-.0265	-.0055	-.0171	1325.
.0830	226.	-477.	70.	-287.	-30.	203.	.0120	-.0003	-.0081	-.0344	-.0057	-.0213	1473.
.0840	245.	-507.	57.	-303.	-40.	216.	.0132	-.0003	-.0102	-.0406	-.0076	-.0238	1563.
.0850	254.	-520.	43.	-309.	-54.	221.	.0138	-.0003	-.0118	-.0451	-.0103	-.0250	1604.
.0860	250.	-521.	34.	-315.	-70.	215.	.0137	-.0003	-.0130	-.0485	-.0138	-.0251	1618.
.0870	239.	-511.	23.	-312.	-88.	203.	.0132	-.0003	-.0139	-.0506	-.0177	-.0245	1595.
.0880	226.	-477.	0.	-284.	-107.	191.	.0125	-.0002	-.0147	-.0514	-.0218	-.0233	1496.
.0890	211.	-423.	-34.	-237.	-124.	176.	.0117	-.0002	-.0155	-.0512	-.0255	-.0220	1337.
.0900	194.	-370.	-68.	-187.	-136.	157.	.0111	-.0002	-.0162	-.0510	-.0281	-.0212	1168.
.0910	180.	-321.	-105.	-135.	-141.	138.	.0106	-.0002	-.0170	-.0506	-.0289	-.0208	996.
.0920	168.	-258.	-147.	-68.	-141.	121.	.0103	-.0001	-.0177	-.0493	-.0287	-.0209	825.
.0930	156.	-175.	-191.	5.	-142.	98.	.0101	-.0001	-.0182	-.0471	-.0288	-.0216	721.
.0940	141.	-86.	-229.	72.	-141.	70.	.0101	-.0001	-.0183	-.0443	-.0286	-.0230	724.
.0950	130.	-8.	-258.	131.	-132.	45.	.0103	-.0000	-.0181	-.0410	-.0265	-.0247	799.

S/RV PIPING KEWAUNEE CKW08F 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

.0840	247.	-537.	17.	-[illegible].	-49.	216.	.0132	-.0003	-.0102	-.0406	-.0076	-.0238	1563.
.0850	254.	-520.	43.	-309.	-54.	221.	.0138	-.0003	-.0118	-.0451	-.0103	-.0250	1604.
.0860	256.	-521.	34.	-315.	-70.	215.	.0137	-.0003	-.0130	-.0485	-.0138	-.0251	1618.
.0870	239.	-511.	23.	-312.	-88.	203.	.0132	-.0003	-.0139	-.0506	-.0177	-.0245	1595.
.0880	226.	-477.	0.	-294.	-107.	191.	.0125	-.0002	-.0147	-.0514	-.0218	-.0233	1496.
.0890	211.	-423.	-34.	-277.	-124.	176.	.0117	-.0002	-.0155	-.0512	-.0255	-.0220	1337.
.0900	194.	-370.	-68.	-107.	-136.	157.	.0111	-.0002	-.0162	-.0510	-.0281	-.0212	1168.
.0910	180.	-321.	-105.	-175.	-141.	138.	.0106	-.0002	-.0170	-.0506	-.0289	-.0208	996.
.0920	168.	-258.	-147.	-68.	-141.	121.	.0103	-.0001	-.0177	-.0493	-.0287	-.0209	825.
.0930	156.	-175.	-191.	5.	-142.	98.	.0101	-.0001	-.0182	-.0471	-.0288	-.0216	721.
.0940	141.	-86.	-229.	72.	-141.	70.	.0101	-.0001	-.0183	-.0443	-.0286	-.0230	724.
.0950	130.	-8.	-258.	111.	-137.	45.	.0103	-.0000	-.0181	-.0410	-.0265	-.0247	799.

S/RV PIPING KEWAUNEE CKW08F 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 64 MEMBER 1 SEQUENCE 91 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)
.0960	123.	55.	-279.	181.	-115.	26.	.0106	.0000	-.0176	-.0373	-.0226	-.0263	899.
.0970	116.	108.	-293.	224.	-95.	10.	.0108	.0000	-.0167	-.0329	-.0184	-.0274	1017.
.0980	106.	163.	-304.	269.	-80.	-4.	.0105	.0000	-.0154	-.0276	-.0151	-.0275	1173.
.0990	93.	213.	-312.	315.	-66.	-15.	.0098	.0001	-.0139	-.0214	-.0121	-.0261	1343.
.1000	74.	237.	-307.	343.	-49.	-24.	.0084	.0001	-.0119	-.0148	-.0086	-.0229	1450.
.1010	46.	233.	-283.	348.	-31.	-36.	.0062	.0001	-.0093	-.0079	-.0051	-.0179	1467.
.1020	0.	228.	-248.	344.	-20.	-51.	.0033	.0001	-.0061	.0000	-.0031	-.0112	1453.
.1030	-35.	231.	-207.	338.	-17.	-66.	-.0002	.0001	-.0025	.0093	-.0030	-.0028	1440.
.1040	-82.	231.	-157.	323.	-19.	-81.	-.0040	.0001	.0016	.0192	-.0041	.0065	1392.
.1050	-126.	219.	-98.	294.	-20.	-92.	-.0079	.0001	.0060	.0290	-.0049	.0160	1290.
.1060	-165.	200.	-36.	259.	-16.	-97.	-.0115	.0001	.0102	.0383	-.0047	.0250	1157.
.1070	-197.	181.	23.	224.	-9.	-98.	-.0145	.0001	.0140	.0467	-.0036	.0329	1019.
.1080	-222.	167.	75.	191.	1.	-98.	-.0170	.0001	.0174	.0539	-.0021	.0392	897.
.1090	-239.	160.	118.	163.	14.	-98.	-.0187	.0001	.0201	.0597	.0005	.0436	796.
.1100	-245.	142.	156.	134.	35.	-91.	-.0197	.0001	.0223	.0639	.0047	.0464	689.
.1110	-247.	128.	190.	103.	57.	-87.	-.0199	.0001	.0239	.0667	.0094	.0473	611.
.1120	-246.	129.	220.	72.	78.	-90.	-.0197	.0001	.0252	.0687	.0138	.0465	582.
.1130	-239.	129.	248.	41.	99.	-90.	-.0189	.0001	.0263	.0701	.0182	.0446	584.
.1140	-227.	119.	278.	5.	117.	-85.	-.0179	.0001	.0273	.0710	.0221	.0423	605.
.1150	-215.	112.	308.	-32.	126.	-83.	-.0168	.0001	.0283	.0718	.0239	.0396	644.
.1160	-208.	118.	331.	-60.	123.	-86.	-.0159	.0001	.0291	.0727	.0232	.0372	674.
.1170	-203.	126.	349.	-83.	112.	-91.	-.0152	.0001	.0297	.0731	.0207	.0351	694.
.1180	-202.	109.	371.	-118.	96.	-100.	-.0146	.0001	.0300	.0723	.0171	.0332	759.
.1190	-204.	92.	387.	-151.	71.	-115.	-.0140	.0000	.0299	.0705	.0116	.0309	844.
.1200	-203.	93.	387.	-163.	36.	-129.	-.0131	.0000	.0292	.0681	.0039	.0279	882.
.1210	-189.	91.	376.	-169.	-5.	-136.	-.0114	.0000	.0280	.0646	-.0048	.0232	903.
.1220	-160.	86.	359.	-175.	-43.	-136.	-.0086	.0000	.0261	.0592	-.0128	.0159	942.
.1230	-111.	64.	338.	-188.	-69.	-125.	-.0042	-.0000	.0234	.0517	-.0182	.0052	985.
.1240	-37.	36.	305.	-196.	-81.	-98.	.0017	-.0001	.0199	.0421	-.0201	-.0089	975.
.1250	55.	0.	263.	-200.	-80.	-60.	.0089	-.0001	.0155	.0307	-.0192	-.0257	934.
.1260	161.	-58.	218.	-210.	-71.	-13.	.0170	-.0002	.0107	.0176	-.0164	-.0443	929.
.1270	271.	-114.	163.	-208.	-60.	39.	.0252	-.0003	.0054	.0041	-.0129	-.0631	918.
.1280	378.	-170.	102.	-193.	-49.	95.	.0330	-.0003	.0002	-.0086	-.0096	-.0804	918.
.1290	467.	-219.	47.	-179.	-45.	138.	.0396	-.0004	-.0044	-.0199	-.0080	-.0955	961.
.1300	530.	-265.	12.	-182.	-50.	161.	.0447	-.0004	-.0079	-.0292	-.0085	-.1075	1033.
.1310	569.	-320.	-2.	-201.	-59.	170.	.0431	-.0005	-.0102	-.0362	-.0100	-.1159	1127.
.1320	588.	-357.	-5.	-217.	-72.	172.	.0500	-.0005	-.0113	-.0398	-.0128	-.1205	1196.
.1330	587.	-379.	4.	-233.	-93.	165.	.0503	-.0005	-.0112	-.0403	-.0175	-.1216	1253.

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.1230	-111.	64.	338.	-108.	-69.	-125.	-.0042	-.0000	.0234	.0517	-.0182	.0052	985.
.1240	-37.	36.	305.	-196.	-81.	-98.	.0017	-.0001	.0199	.0421	-.0201	-.0089	975.
.1250	55.	0.	263.	-200.	-80.	-60.	.0089	-.0001	.0155	.0307	-.0192	-.0257	934.
.1260	161.	-58.	218.	-210.	-71.	-13.	.0170	-.0002	.0107	.0176	-.0164	-.0443	929.
.1270	271.	-114.	163.	-208.	-60.	39.	.0252	-.0003	.0054	.0041	-.0129	-.0631	918.
.1280	378.	-170.	102.	-193.	-49.	95.	.0330	-.0003	.0002	-.0086	-.0096	-.0804	918.
.1290	467.	-219.	47.	-179.	-45.	138.	.0396	-.0004	-.0044	-.0199	-.0080	-.0955	961.
.1300	530.	-265.	12.	-182.	-50.	161.	.0447	-.0004	-.0079	-.0292	-.0085	-.1075	1033.
.1310	569.	-320.	-2.	-201.	-59.	170.	.0481	-.0005	-.0102	-.0362	-.0100	-.1159	1127.
.1320	580.	-357.	-5.	-217.	-72.	172.	.0500	-.0005	-.0113	-.0398	-.0128	-.1205	1196.
.1330	587.	-379.	4.	-233.	-93.	165.	.0503	-.0005	-.0112	-.0403	-.0175	-.1216	1253.

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INTERNAL FORCES IN THE PIPING
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SECTION 64 MEMBER 1 SEQUENCE 91 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)
.1340	569.	-388.	22.	-248.	-120.	149.	.0493	-.0005	-.0102	-.0384	-.0235	-.1200	1305.
.1350	543.	-390.	38.	-251.	-143.	134.	.0475	-.0005	-.0087	-.0347	-.0287	-.1160	1327.
.1360	512.	-388.	49.	-240.	-156.	121.	.0451	-.0005	-.0071	-.0300	-.0318	-.1103	1297.
.1370	471.	-363.	54.	-218.	-163.	98.	.0422	-.0004	-.0054	-.0247	-.0336	-.1039	1205.
.1380	421.	-331.	57.	-194.	-163.	64.	.0390	-.0004	-.0039	-.0195	-.0341	-.0972	1091.
.1390	373.	-289.	52.	-155.	-156.	35.	.0357	-.0004	-.0024	-.0138	-.0328	-.0902	931.
.1400	330.	-222.	33.	-90.	-147.	14.	.0324	-.0003	-.0009	-.0070	-.0309	-.0828	721.
.1410	287.	-125.	6.	-9.	-142.	-7.	.0292	-.0003	.0007	.0010	-.0299	-.0755	593.
.1420	241.	-2.	-20.	75.	-137.	-34.	.0260	-.0002	.0026	.0097	-.0291	-.0686	666.
.1430	199.	105.	-37.	146.	-121.	-57.	.0229	-.0001	.0045	.0182	-.0257	-.0618	827.
.1440	160.	191.	-51.	212.	-93.	-72.	.0198	-.0001	.0066	.0266	-.0200	-.0544	1014.
.1450	115.	285.	-67.	283.	-72.	-90.	.0162	-.0000	.0087	.0355	-.0155	-.0461	1276.
.1460	60.	391.	-84.	359.	-65.	-116.	.0120	.0000	.0110	.0449	-.0144	-.0366	1597.
.1470	-3.	499.	-101.	435.	-66.	-146.	.0072	.0001	.0133	.0545	-.0149	-.0257	1936.
.1480	-69.	572.	-106.	492.	-64.	-174.	.0021	.0002	.0158	.0636	-.0149	-.0138	2195.
.1490	-139.	620.	-94.	522.	-64.	-206.	-.0032	.0002	.0185	.0720	-.0153	-.0017	2358.
.1500	-212.	669.	-69.	531.	-73.	-247.	-.0083	.0003	.0214	.0799	-.0177	.0096	2464.
.1510	-275.	710.	-39.	528.	-87.	-282.	-.0129	.0003	.0242	.0870	-.0214	.0197	2524.
.1520	-319.	741.	-11.	521.	-99.	-300.	-.0163	.0003	.0265	.0927	-.0244	.0276	2545.
.1530	-343.	748.	17.	498.	-103.	-308.	-.0183	.0004	.0281	.0956	-.0256	.0323	2480.
.1540	-348.	728.	47.	451.	-97.	-310.	-.0186	.0004	.0285	.0946	-.0244	.0331	2319.
.1550	-328.	675.	71.	390.	-76.	-299.	-.0172	.0003	.0276	.0894	-.0197	.0301	2073.
.1560	-281.	592.	82.	328.	-42.	-266.	-.0142	.0003	.0253	.0807	-.0121	.0239	1770.
.1570	-219.	512.	78.	271.	-7.	-225.	-.0100	.0002	.0219	.0693	-.0038	.0152	1472.
.1580	-148.	417.	75.	199.	30.	-185.	-.0050	.0002	.0178	.0553	.0048	.0043	1139.
.1590	-69.	284.	82.	102.	74.	-135.	.0004	.0001	.0133	.0392	.0150	-.0073	771.
.1600	16.	136.	92.	-3.	121.	-76.	.0058	-.0000	.0087	.0227	.0259	-.0184	596.
.1610	91.	-2.	109.	-113.	159.	-22.	.0106	-.0001	.0045	.0066	.0347	-.0281	818.
.1620	151.	-144.	138.	-238.	184.	21.	.0144	-.0002	.0007	-.0090	.0406	-.0358	1258.
.1630	198.	-291.	171.	-364.	204.	61.	.0170	-.0002	-.0027	-.0237	.0452	-.0406	1761.
.1640	237.	-450.	204.	-485.	223.	104.	.0183	-.0003	-.0059	-.0373	.0496	-.0419	2270.
.1650	250.	-608.	236.	-598.	233.	139.	.0183	-.0004	-.0087	-.0499	.0520	-.0401	2741.
.1660	246.	-733.	260.	-690.	231.	158.	.0169	-.0004	-.0113	-.0609	.0515	-.0356	3109.
.1670	229.	-840.	276.	-764.	225.	171.	.0145	-.0004	-.0136	-.0702	.0503	-.0289	3399.
.1680	206.	-942.	287.	-822.	225.	185.	.0116	-.0004	-.0156	-.0782	.0503	-.0205	3640.
.1690	176.	-1029.	295.	-868.	228.	193.	.0082	-.0004	-.0172	-.0845	.0508	-.0114	3829.
.1700	138.	-1071.	293.	-886.	226.	192.	.0044	-.0004	-.0185	-.0885	.0503	-.0018	3899.
.1710	95.	-1061.	272.	-865.	220.	186.	.0005	-.0004	-.0194	-.0900	.0489	.0081	3803.

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