

50-305

RESPONSE TO NUREG-0737 ITEM II.D.1

Docket # *50-305*

Control # *8403280048*

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

.1370	-468.	-278.	-74.	-341.	1809.	-2334.	.0042	.0075	.0180	-.0419	.0058	.0102	1193.
.1380	-281.	-351.	-89.	-142.	1710.	-1993.	-.0012	.0072	.0206	-.0463	.0030	.0140	1056.
.1390	-7.	-401.	-90.	55.	1420.	-1565.	-.0013	.0075	.0235	-.0489	.0008	.0172	848.
.1400	-183.	-442.	119.	249.	999.	-1092.	-.0037	.0084	.0267	-.0501	-.0007	.0199	602.
.1410	-582.	-455.	405.	439.	546.	-535.	-.0059	.0096	.0298	-.0505	-.0019	.0219	370.
.1420	-572.	-417.	481.	699.	134.	-62.	-.0074	.0112	.0324	-.0512	-.0028	.0236	287.
.1430	-265.	-346.	391.	930.	-215.	419.	-.0083	.0129	.0344	-.0519	-.0034	.0247	418.
.1440	-264.	-279.	399.	1094.	-524.	790.	-.0090	.0145	.0358	-.0518	-.0033	.0254	581.
.1450	-602.	-216.	539.	1161.	-822.	1040.	-.0095	.0159	.0365	-.0497	-.0022	.0249	707.
.1460	-855.	-131.	642.	1149.	-1103.	1199.	-.0092	.0170	.0364	-.0457	-.0001	.0229	800.
.1470	-956.	-19.	689.	1094.	-1317.	1276.	-.0084	.0176	.0353	-.0411	.0027	.0198	857.

ADLPIPE PAGE 1737

DIS/ADLPIPE ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.52.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKN24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	43	MEMBER	1	SEQUENCE	820	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.1480	-1117.	100.	691.	1004.	-1403.	1243.	-.0074	.0177	.0336	-.0367	.0061	.0159	853.		
.1490	-1219.	210.	654.	877.	-1343.	1062.	-.0062	.0173	.0313	-.0327	.0097	.0117	772.		
.1500	-1106.	303.	506.	700.	-1163.	720.	-.0045	.0162	.0283	-.0291	.0134	.0073	616.		
.1510	-1090.	371.	394.	456.	-905.	228.	-.0025	.0145	.0249	-.0254	.0173	.0028	417.		
.1520	-1445.	405.	443.	150.	-596.	-380.	-.0002	.0123	.0215	-.0217	.0213	-.0017	290.		
.1530	-1798.	421.	496.	-191.	-237.	-1045.	.0022	.0098	.0181	-.0184	.0250	-.0060	437.		
.1540	-1661.	433.	344.	-525.	177.	-1716.	.0048	.0071	.0151	-.0161	.0280	-.0099	724.		
.1550	-1236.	430.	66.	-329.	642.	-2376.	.0077	.0043	.0126	-.0149	.0301	-.0130	1042.		
.1560	-1058.	390.	-112.	-1103.	1122.	-3019.	.0105	.0017	.0110	-.0143	.0312	-.0152	1366.		
.1570	-1147.	311.	-159.	-1337.	1545.	-3611.	.0134	-.0005	.0105	-.0143	.0313	-.0163	1665.		
.1580	-1146.	216.	-203.	-1515.	1840.	-4079.	.0164	-.0021	.0111	-.0143	.0305	-.0166	1896.		
.1590	-939.	123.	-281.	-1623.	1966.	-4351.	.0195	-.0030	.0131	-.0144	.0289	-.0163	2024.		
.1600	-626.	39.	-354.	-1641.	1914.	-4396.	.0224	-.0029	.0166	-.0151	.0265	-.0150	2034.		
.1610	-214.	-37.	-432.	-1562.	1698.	-4216.	.0250	-.0018	.0215	-.0167	.0231	-.0126	1929.		
.1620	279.	-110.	-522.	-1393.	1335.	-3836.	.0276	.0003	.0276	-.0185	.0188	-.0092	1723.		
.1630	655.	-185.	-547.	-1138.	833.	-3286.	.0300	.0035	.0348	-.0206	.0137	-.0048	1435.		
.1640	796.	-259.	-457.	-810.	195.	-2577.	.0320	.0076	.0429	-.0225	.0081	.0003	1087.		
.1650	939.	-313.	-346.	-418.	-578.	-1696.	.0335	.0126	.0515	-.0235	.0023	.0056	738.		
.1660	1351.	-322.	-326.	33.	-1468.	-643.	.0348	.0182	.0604	-.0238	-.0035	.0108	643.		
.1670	1898.	-288.	-353.	514.	-2426.	533.	.0357	.0243	.0691	-.0233	-.0091	.0155	1018.		
.1680	2258.	-237.	-314.	991.	-3386.	1735.	.0361	.0306	.0772	-.0223	-.0143	.0200	1578.		
.1690	2345.	-184.	-192.	1435.	-4277.	2874.	.0361	.0366	.0844	-.0207	-.0191	.0243	2146.		
.1700	2327.	-125.	-67.	1835.	-5043.	3900.	.0358	.0422	.0903	-.0187	-.0234	.0283	2662.		
.1710	2341.	-52.	4.	2183.	-5653.	4790.	.0351	.0469	.0945	-.0163	-.0270	.0315	3100.		
.1720	2370.	36.	34.	2456.	-6085.	5522.	.0340	.0507	.0969	-.0130	-.0296	.0334	3441.		
.1730	2386.	131.	41.	2636.	-6327.	6056.	.0326	.0531	.0973	-.0088	-.0311	.0341	3670.		
.1740	2355.	222.	35.	2704.	-6356.	6347.	.0311	.0540	.0956	-.0041	-.0316	.0336	3764.		
.1750	2197.	292.	42.	2648.	-6141.	6352.	.0293	.0533	.0918	.0008	-.0311	.0321	3701.		
.1760	1879.	327.	70.	2472.	-5661.	6049.	.0274	.0509	.0859	.0051	-.0298	.0301	3469.		
.1770	1499.	329.	81.	2189.	-4921.	5460.	.0252	.0469	.0782	.0087	-.0279	.0276	3078.		
.1780	1218.	311.	25.	1824.	-3965.	4638.	.0230	.0413	.0690	.0117	-.0253	.0244	2556.		
.1790	1039.	279.	-80.	1387.	-2855.	3638.	.0207	.0344	.0585	.0146	-.0221	.0203	1937.		
.1800	823.	225.	-162.	886.	-1650.	2491.	.0183	.0265	.0472	.0179	-.0183	.0153	1251.		
.1810	520.	141.	-196.	333.	-389.	1227.	.0158	.0178	.0354	.0212	-.0142	.0101	534.		
.1820	224.	29.	-232.	-249.	911.	-106.	.0133	.0087	.0235	.0245	-.0101	.0048	382.		
.1830	4.	-101.	-304.	-822.	2230.	-1440.	.0107	-.0004	.0121	.0270	-.0064	-.0001	1115.		
.1840	-180.	-240.	-392.	-1349.	3522.	-2701.	.0081	-.0091	.0013	.0283	-.0034	-.0043	1862.		
.1850	-334.	-375.	-480.	-1807.	4711.	-3817.	.0054	-.0170	-.0082	.0288	-.0010	-.0078	2539.		

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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKN24F--2 PSV

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

.1750	2197.	292.	42.	2648.	-6141.	6352.	.0293	.0533	.0918	.0008	-.0311	.0321	3701.
.1760	1879.	327.	70.	2472.	-5661.	6049.	.0274	.0509	.0859	.0051	-.0298	.0301	3469.
.1770	1499.	329.	81.	2189.	-4921.	5460.	.0252	.0469	.0782	.0087	-.0279	.0276	3078.
.1780	1218.	311.	25.	1824.	-3965.	4638.	.0230	.0413	.0690	.0117	-.0253	.0244	2556.
.1790	1039.	279.	-20.	1327.	-2855.	3638.	.0207	.0344	.0585	.0146	-.0221	.0203	1937.
.1800	823.	225.	-162.	886.	-1650.	2491.	.0183	.0265	.0472	.0179	-.0183	.0153	1251.
.1810	520.	141.	-196.	333.	-389.	1227.	.0158	.0178	.0354	.0212	-.0142	.0101	534.
.1820	224.	29.	-232.	-249.	911.	-106.	.0133	.0087	.0235	.0245	-.0101	.0048	382.
.1830	4.	-101.	-304.	-822.	2230.	-1440.	.0107	-.0004	.0121	.0270	-.0064	-.0001	1115.
.1840	-180.	-240.	-292.	-1349.	3522.	-2701.	.0081	-.0091	.0013	.0283	-.0034	-.0043	1862.
.1850	-334.	-375.	-480.	-1807.	4711.	-3817.	.0054	-.0170	-.0082	.0288	-.0010	-.0078	2539.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.52.

S/RV PIPING KEAUNEE 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	43	MEMBER	1	SEQUENCE	820	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.1860	-388.	-501.	-572.	-2181.	5708.	-4729.	.0029	-.0237	-.0164	.0292	.0009	-.0107	3101.		
.1870	-380.	-611.	-639.	-2464.	6449.	-5395.	.0004	-.0290	-.0228	.0302	.0023	-.0133	3516.		
.1880	-413.	-702.	-638.	-2638.	6905.	-5782.	-.0019	-.0326	-.0273	.0315	.0032	-.0152	3766.		
.1890	-475.	-764.	-587.	-2685.	7088.	-5862.	-.0040	-.0345	-.0298	.0327	.0034	-.0164	3845.		
.1900	-433.	-789.	-556.	-2597.	7021.	-5627.	-.0058	-.0344	-.0305	.0334	.0028	-.0167	3758.		
.1910	-259.	-774.	-562.	-2380.	6715.	-5099.	-.0073	-.0325	-.0293	.0333	.0014	-.0160	3516.		
.1920	-85.	-730.	-548.	-2060.	6171.	-4321.	-.0086	-.0290	-.0266	.0329	-.0006	-.0144	3134.		
.1930	14.	-660.	-477.	-1665.	5389.	-3340.	-.0095	-.0239	-.0224	.0327	-.0028	-.0122	2630.		
.1940	91.	-564.	-368.	-1212.	4393.	-2197.	-.0100	-.0178	-.0171	.0329	-.0051	-.0098	2030.		
.1950	187.	-439.	-250.	-716.	3240.	-940.	-.0102	-.0108	-.0111	.0333	-.0074	-.0073	1384.		
.1960	290.	-290.	-135.	-194.	2008.	371.	-.0100	-.0033	-.0047	.0336	-.0096	-.0048	823.		
.1970	417.	-127.	-44.	326.	775.	1657.	-.0095	.0041	.0017	.0334	-.0117	-.0023	746.		
.1980	573.	36.	9.	808.	-399.	2833.	-.0087	.0111	.0077	.0328	-.0136	.0002	1193.		
.1990	676.	186.	58.	1214.	-1468.	3824.	-.0077	.0173	.0130	.0319	-.0152	.0024	1714.		
.2000	662.	313.	131.	1520.	-2400.	4575.	-.0065	.0224	.0173	.0308	-.0162	.0043	2161.		
.2010	595.	414.	201.	1713.	-3159.	5055.	-.0051	.0261	.0205	.0296	-.0165	.0057	2489.		
.2020	583.	491.	222.	1795.	-3709.	5254.	-.0037	.0281	.0224	.0282	-.0163	.0064	2680.		
.2030	629.	542.	187.	1771.	-4022.	5168.	-.0022	.0285	.0228	.0262	-.0156	.0064	2722.		
.2040	660.	560.	128.	1646.	-4086.	4796.	-.0006	.0273	.0220	.0235	-.0144	.0061	2613.		
.2050	636.	541.	65.	1422.	-3913.	4148.	.0009	.0244	.0198	.0198	-.0128	.0054	2359.		
.2060	576.	485.	-1.	1105.	-3533.	3252.	.0025	.0200	.0165	.0155	-.0109	.0045	1977.		
.2070	509.	394.	-74.	710.	-2980.	2157.	.0040	.0146	.0123	.0106	-.0087	.0035	1503.		
.2080	457.	276.	-159.	263.	-2289.	929.	.0053	.0083	.0074	.0053	-.0064	.0025	997.		
.2090	444.	143.	-266.	-203.	-1495.	-354.	.0066	.0015	.0022	-.0004	-.0042	.0014	622.		
.2100	460.	7.	-388.	-657.	-640.	-1616.	.0077	-.0053	-.0030	-.0061	-.0022	.0004	745.		
.2110	467.	-125.	-503.	-1073.	224.	-2793.	.0087	-.0117	-.0081	-.0117	-.0006	-.0005	1204.		
.2120	445.	-251.	-596.	-1435.	1037.	-3835.	.0096	-.0175	-.0125	-.0169	.0006	-.0011	1695.		
.2130	422.	-365.	-668.	-1729.	1739.	-4693.	.0102	-.0222	-.0161	-.0215	.0014	-.0013	2125.		
.2140	429.	-457.	-724.	-1937.	2283.	-5317.	.0107	-.0255	-.0187	-.0255	.0017	-.0011	2449.		
.2150	452.	-518.	-758.	-2045.	2638.	-5667.	.0109	-.0273	-.0200	-.0288	.0015	-.0004	2639.		
.2160	468.	-542.	-761.	-2041.	2790.	-5723.	.0110	-.0275	-.0201	-.0315	.0007	.0009	2683.		
.2170	490.	-531.	-740.	-1925.	2738.	-5487.	.0109	-.0261	-.0188	-.0336	-.0006	.0025	2579.		
.2180	537.	-488.	-705.	-1704.	2484.	-4980.	.0106	-.0231	-.0164	-.0348	-.0023	.0046	2336.		
.2190	585.	-417.	-647.	-1393.	2043.	-4233.	.0101	-.0187	-.0128	-.0351	-.0045	.0069	1967.		
.2200	587.	-320.	-549.	-1010.	1437.	-3284.	.0096	-.0131	-.0084	-.0345	-.0069	.0093	1494.		
.2210	558.	-200.	-422.	-574.	703.	-2182.	.0089	-.0067	-.0033	-.0330	-.0095	.0117	948.		
.2220	566.	-66.	-300.	-111.	-109.	-994.	.0081	.0002	.0021	-.0309	-.0122	.0140	404.		
.2230	631.	72.	-201.	352.	-945.	206.	.0073	.0072	.0075	-.0286	-.0148	.0162	413.		

ADLPIPE PAGE 1739

DIS/ADLPIPE

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S/RV PIPING KEAUNEE GKW08F 2 RUP DISK
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CONDITION 24

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.2130	422.	-355.	-68.	-1728.	1739.	-4693.	.0102	-.0222	-.0161	-.0215	.0014	-.0013	2125.
.2140	429.	-457.	-724.	-1937.	2283.	-5317.	.0107	-.0255	-.0187	-.0255	.0017	-.0011	2449.
.2150	452.	-518.	-758.	-2045.	2638.	-5667.	.0109	-.0273	-.0200	-.0288	.0015	-.0004	2639.
.2160	468.	-542.	-761.	-2041.	2790.	-5723.	.0110	-.0275	-.0201	-.0315	.0007	.0009	2683.
.2170	490.	-531.	-740.	-1925.	2738.	-5487.	.0109	-.0261	-.0188	-.0336	-.0006	.0025	2579.
.2180	537.	-488.	-705.	-1704.	2484.	-4980.	.0106	-.0231	-.0164	-.0348	-.0023	.0046	2336.
.2190	585.	-417.	-647.	-1393.	2043.	-4233.	.0101	-.0187	-.0128	-.0351	-.0045	.0069	1967.
.2200	587.	-320.	-549.	-1010.	1437.	-3284.	.0096	-.0131	-.0084	-.0345	-.0069	.0093	1494.
.2210	558.	-200.	-422.	-574.	703.	-2182.	.0089	-.0067	-.0033	-.0330	-.0095	.0117	948.
.2220	566.	-66.	-300.	-111.	-109.	-994.	.0081	.0002	.0021	-.0309	-.0122	.0140	404.
.2230	631.	72.	-201.	352.	-945.	206.	.0073	.0072	.0075	-.0286	-.0148	.0162	413.

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

SECTION	43	MEMBER	1	SEQUENCE	820	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2240	684.	202.	-105.	790.	-1749.	1345.	.0064	.0139	.0126	-.0262	-.0172	.0183	940.		
.2250	666.	316.	9.	1182.	-2471.	2362.	.0055	.0200	.0171	-.0237	-.0194	.0201	1451.		
.2260	602.	412.	126.	1508.	-3068.	3210.	.0046	.0250	.0207	-.0213	-.0212	.0214	1882.		
.2270	562.	484.	213.	1750.	-3502.	3846.	.0038	.0289	.0232	-.0189	-.0225	.0221	2202.		
.2280	572.	529.	256.	1896.	-3742.	4237.	.0030	.0313	.0244	-.0167	-.0232	.0222	2393.		
.2290	596.	541.	265.	1935.	-3762.	4359.	.0022	.0321	.0242	-.0148	-.0234	.0217	2438.		
.2300	590.	518.	253.	1864.	-3549.	4203.	.0014	.0314	.0227	-.0134	-.0231	.0207	2331.		
.2310	533.	458.	227.	1686.	-3102.	3776.	.0008	.0292	.0197	-.0123	-.0223	.0192	2074.		
.2320	451.	365.	180.	1415.	-2444.	3108.	.0001	.0257	.0155	-.0115	-.0211	.0173	1685.		
.2330	398.	250.	98.	1070.	-1612.	2253.	-.0004	.0211	.0103	-.0111	-.0194	.0149	1192.		
.2340	392.	125.	-18.	675.	-659.	1274.	-.0008	.0158	.0044	-.0107	-.0174	.0121	636.		
.2350	401.	-2.	-144.	251.	361.	228.	-.0012	.0100	-.0020	-.0103	-.0150	.0089	199.		
.2360	386.	-131.	-260.	-183.	1398.	-836.	-.0014	.0041	-.0086	-.0099	-.0124	.0055	658.		
.2370	364.	-257.	-371.	-606.	2406.	-1667.	-.0014	-.0014	-.0149	-.0094	-.0097	.0023	1246.		
.2380	364.	-370.	-487.	-990.	3343.	-2800.	-.0014	-.0063	-.0207	-.0091	-.0072	-.0006	1795.		
.2390	375.	-457.	-600.	-1309.	4165.	-3572.	-.0011	-.0103	-.0257	-.0089	-.0050	-.0031	2264.		
.2400	378.	-513.	-694.	-1544.	4825.	-4135.	-.0007	-.0131	-.0296	-.0087	-.0032	-.0051	2624.		
.2410	402.	-535.	-774.	-1687.	5279.	-4461.	-.0000	-.0145	-.0322	-.0084	-.0017	-.0067	2855.		
.2420	489.	-525.	-849.	-1734.	5497.	-4539.	.0008	-.0144	-.0333	-.0078	-.0007	-.0076	2944.		
.2430	611.	-484.	-907.	-1683.	5465.	-4365.	.0018	-.0128	-.0328	-.0069	-.0002	-.0080	2887.		
.2440	693.	-411.	-919.	-1530.	5189.	-3942.	.0032	-.0098	-.0309	-.0059	-.0003	-.0077	2686.		
.2450	727.	-309.	-886.	-1283.	4690.	-3291.	.0047	-.0055	-.0275	-.0052	-.0009	-.0067	2356.		
.2460	795.	-185.	-843.	-957.	3993.	-2453.	.0065	-.0003	-.0227	-.0048	-.0021	-.0050	1919.		
.2470	967.	-50.	-822.	-572.	3126.	-1477.	.0084	.0058	-.0168	-.0047	-.0038	-.0028	1407.		
.2480	1195.	90.	-803.	-149.	2124.	-414.	.0105	.0122	-.0100	-.0048	-.0058	-.0000	870.		
.2490	1363.	231.	-742.	291.	1027.	686.	.0128	.0186	-.0027	-.0052	-.0081	.0029	509.		
.2500	1439.	363.	-631.	727.	-113.	1761.	.0152	.0248	.0049	-.0060	-.0106	.0060	766.		
.2510	1519.	473.	-520.	1132.	-1238.	2741.	.0176	.0303	.0124	-.0072	-.0130	.0092	1290.		
.2520	1701.	556.	-457.	1486.	-2294.	3576.	.0199	.0348	.0196	-.0090	-.0154	.0125	1806.		
.2530	1957.	612.	-436.	1778.	-3237.	4236.	.0221	.0381	.0261	-.0114	-.0177	.0155	2255.		
.2540	2178.	643.	-414.	1994.	-4037.	4699.	.0242	.0400	.0316	-.0144	-.0196	.0182	2612.		
.2550	2321.	645.	-374.	2122.	-4673.	4943.	.0262	.0404	.0359	-.0176	-.0210	.0203	2859.		
.2560	2456.	613.	-348.	2150.	-5128.	4945.	.0281	.0392	.0387	-.0210	-.0218	.0219	2986.		
.2570	2696.	546.	-386.	2080.	-5388.	4711.	.0297	.0364	.0401	-.0243	-.0220	.0229	2991.		
.2580	3026.	457.	-485.	1929.	-5447.	4280.	.0314	.0323	.0397	-.0278	-.0216	.0232	2885.		
.2590	3300.	364.	-587.	1718.	-5316.	3701.	.0331	.0270	.0376	-.0313	-.0206	.0227	2689.		
.2600	3431.	266.	-652.	1452.	-5019.	2999.	.0351	.0206	.0338	-.0347	-.0188	.0215	2418.		
.2610	3523.	154.	-720.	1130.	-4592.	2184.	.0369	.0136	.0285	-.0378	-.0165	.0197	2090.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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18.28.52.

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

.2510	1519.	473.	-520.	1132.	-1238.	2741.	.0176	.0303	.0124	-.0072	-.0130	.0092	1290.
.2520	1701.	556.	-457.	1486.	-2294.	3576.	.0199	.0348	.0196	-.0090	-.0154	.0125	1806.
.2530	1957.	612.	-436.	1778.	-3237.	4236.	.0221	.0381	.0261	-.0114	-.0177	.0155	2255.
.2540	2178.	643.	-414.	1994.	-4037.	4699.	.0242	.0400	.0316	-.0144	-.0196	.0182	2612.
.2550	2321.	645.	-374.	2122.	-4673.	4943.	.0262	.0404	.0359	-.0176	-.0210	.0203	2859.
.2560	2456.	613.	-348.	2150.	-5128.	4945.	.0281	.0392	.0387	-.0210	-.0218	.0219	2986.
.2570	2696.	546.	-386.	2080.	-5388.	4711.	.0297	.0364	.0401	-.0243	-.0220	.0229	2991.
.2580	3026.	457.	-485.	1929.	-5447.	4280.	.0314	.0323	.0397	-.0278	-.0216	.0232	2885.
.2590	3300.	364.	-587.	1718.	-5316.	3701.	.0331	.0270	.0376	-.0313	-.0206	.0227	2689.
.2600	3431.	266.	-652.	1452.	-5019.	2999.	.0351	.0206	.0338	-.0347	-.0188	.0215	2418.
.2610	3527.	154.	-720.	1130.	-4592.	2184.	.0369	.0136	.0285	-.0378	-.0165	.0197	2090.

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DIS/ADLPIPE

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

CONDITION 24

LOADS

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ENGLISH UNITS

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

SECTION	43	MEMBER	1	SEQUENCE	820	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2620	3757.	32.	-860.	763.	-4070.	1293.	.0387	.0061	.0219	-.0402	-.0135	.0175	1741.		
.2630	4061.	-81.	-1040.	305.	-3492.	407.	.0403	-.0016	.0141	-.0420	-.0099	.0149	1419.		
.2640	4105.	-159.	-1120.	34.	-2901.	-391.	.0418	-.0091	.0055	-.0433	-.0060	.0115	1175.		
.2650	3886.	-204.	-1094.	-280.	-2339.	-1075.	.0429	-.0161	-.0038	-.0437	-.0017	.0077	1039.		
.2660	3720.	-233.	-1089.	-567.	-1840.	-1659.	.0431	-.0226	-.0132	-.0429	.0028	.0036	1020.		
.2670	3791.	-252.	-1177.	-823.	-1437.	-2136.	.0421	-.0282	-.0225	-.0408	.0073	-.0004	1085.		
.2680	3873.	-240.	-1264.	-1024.	-1152.	-2452.	.0400	-.0330	-.0314	-.0376	.0118	-.0045	1162.		
.2690	3660.	-181.	-1226.	-1148.	-999.	-2569.	.0368	-.0368	-.0399	-.0336	.0159	-.0086	1198.		
.2700	3237.	-90.	-1087.	-1206.	-981.	-2511.	.0325	-.0398	-.0478	-.0288	.0196	-.0125	1185.		
.2710	2956.	6.	-1001.	-1218.	-1092.	-2329.	.0270	-.0418	-.0550	-.0233	.0227	-.0159	1142.		
.2720	2965.	109.	-1023.	-1185.	-1321.	-2031.	.0204	-.0432	-.0616	-.0169	.0251	-.0187	1082.		
.2730	2910.	240.	-1008.	-1092.	-1650.	-1591.	.0134	-.0440	-.0678	-.0102	.0268	-.0214	1019.		
.2740	2467.	399.	-822.	-944.	-2050.	-1030.	.0063	-.0445	-.0739	-.0032	.0276	-.0238	996.		
.2750	1852.	553.	-559.	-780.	-2474.	-443.	-.0008	-.0450	-.0800	.0039	.0275	-.0256	1056.		
.2760	1558.	672.	-431.	-637.	-2868.	78.	-.0080	-.0458	-.0862	.0110	.0265	-.0265	1179.		
.2770	1601.	758.	-450.	-518.	-3176.	511.	-.0149	-.0470	-.0928	.0174	.0245	-.0265	1307.		
.2780	1475.	831.	-411.	-409.	-3356.	878.	-.0211	-.0489	-.1001	.0227	.0216	-.0259	1402.		
.2790	931.	891.	-210.	-315.	-3378.	1163.	-.0266	-.0517	-.1082	.0268	.0179	-.0249	1439.		
.2800	354.	913.	-5.	-272.	-3216.	1288.	-.0317	-.0555	-.1170	.0300	.0135	-.0234	1395.		
.2810	189.	873.	21.	-310.	-2849.	1186.	-.0367	-.0604	-.1266	.0324	.0086	-.0213	1245.		
.2820	288.	778.	-77.	-424.	-2254.	860.	-.0416	-.0664	-.1368	.0340	.0034	-.0186	983.		
.2830	161.	651.	-105.	-588.	-1417.	359.	-.0464	-.0734	-.1476	.0343	-.0022	-.0157	632.		
.2840	-281.	502.	-30.	-792.	-343.	-294.	-.0511	-.0813	-.1589	.0331	-.0081	-.0125	366.		
.2850	-642.	315.	-14.	-1052.	942.	-1119.	-.0561	-.0897	-.1705	.0308	-.0141	-.0090	723.		
.2860	-643.	80.	-164.	-1375.	2387.	-2112.	-.0615	-.0985	-.1819	.0278	-.0201	-.0049	1393.		
.2870	-485.	-180.	-387.	-1732.	3931.	-3192.	-.0672	-.1073	-.1928	.0246	-.0259	-.0006	2148.		
.2880	-511.	-426.	-535.	-2076.	5503.	-4239.	-.0728	-.1156	-.2033	.0211	-.0314	.0034	2909.		
.2890	-729.	-635.	-596.	-2376.	7036.	-5177.	-.0779	-.1230	-.2129	.0176	-.0366	.0071	3633.		
.2900	-857.	-821.	-685.	-2632.	8472.	-5998.	-.0826	-.1293	-.2215	.0143	-.0414	.0106	4297.		
.2910	-710.	-995.	-873.	-2847.	9751.	-6692.	-.0867	-.1341	-.2286	.0115	-.0459	.0142	4881.		
.2920	-429.	-1138.	-1098.	-2995.	10816.	-7191.	-.0899	-.1371	-.2342	.0091	-.0501	.0180	5349.		
.2930	-282.	-1214.	-1243.	-3039.	11612.	-7403.	-.0916	-.1382	-.2383	.0071	-.0541	.0214	5659.		
.2940	-314.	-1215.	-1281.	-2970.	12094.	-7294.	-.0915	-.1373	-.2407	.0057	-.0577	.0244	5791.		
.2950	-290.	-1161.	-1305.	-2807.	12234.	-6898.	-.0899	-.1343	-.2412	.0052	-.0610	.0271	5747.		
.2960	-2.	-1070.	-1399.	-2568.	12024.	-6259.	-.0869	-.1294	-.2399	.0060	-.0640	.0296	5536.		
.2970	436.	-936.	-1518.	-2251.	11479.	-5382.	-.0825	-.1229	-.2367	.0078	-.0667	.0316	5167.		
.2980	727.	-748.	-1545.	-1849.	10626.	-4274.	-.0766	-.1150	-.2319	.0103	-.0692	.0331	4656.		
.2990	804.	-519.	-1457.	-1384.	9507.	-2992.	-.0696	-.1061	-.2256	.0133	-.0715	.0341	4038.		

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DIS/ADLPIPE

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

.2890	-729.	-635.	-596.	-2376.	7036.	-5177.	-10779	-1230	-2129	.0176	-.0366	.0071	3633.
.2900	-857.	-821.	-685.	-2632.	8472.	-5998.	-10826	-1292	-2215	.0143	-.0414	.0106	4297.
.2910	-710.	-995.	-873.	-2847.	9751.	-6692.	-10867	-1341	-2286	.0115	-.0459	.0142	4881.
.2920	-429.	-1178.	-1098.	-2925.	10816.	-7191.	-10899	-1371	-2342	.0091	-.0501	.0180	5349.
.2930	-282.	-1214.	-1243.	-3039.	11612.	-7403.	-10916	-1382	-2383	.0071	-.0541	.0214	5659.
.2940	-314.	-1219.	-1281.	-2970.	12094.	-7294.	-10915	-1373	-2407	.0057	-.0577	.0244	5791.
.2950	-290.	-1161.	-1305.	-2807.	12234.	-6898.	-10899	-1343	-2412	.0052	-.0610	.0271	5747.
.2960	-2.	-1070.	-1399.	-2568.	12024.	-6259.	-10869	-1294	-2399	.0060	-.0640	.0296	5536.
.2970	436.	-936.	-1518.	-2251.	11479.	-5382.	-10825	-1229	-2367	.0078	-.0667	.0316	5167.
.2980	727.	-748.	-1545.	-1849.	10626.	-4274.	-10766	-1150	-2319	.0103	-.0692	.0331	4656.
.2990	804.	-519.	-1457.	-1384.	9507.	-2992.	-10696	-1061	-2256	.0133	-.0715	.0341	4038.

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

CONDITION 24
LOADS
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ENGLISH UNITS

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

SECTION	43	MEMBER	1	SEQUENCE	820	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.3000	928.	-280.	-1365.	-899.	8167.	-1638.		-.0621	-.0967	-.2178	.0168	-.0736	.0347	3362.	
.3010	1316.	-54.	-1361.	-470.	6659.	-301.		-.0543	-.0871	-.2087	.0207	-.0755	.0351	2681.	
.3020	1818.	157.	-1386.	0.	5041.	974.		-.0467	-.0779	-.1986	.0247	-.0770	.0352	2060.	
.3030	2138.	358.	-1327.	413.	3381.	2162.		-.0393	-.0695	-.1880	.0287	-.0782	.0347	1619.	
.3040	2262.	538.	-1186.	768.	1746.	3209.		-.0324	-.0621	-.1771	.0323	-.0791	.0337	1498.	
.3050	2449.	675.	-1077.	1045.	204.	4038.		-.0264	-.0562	-.1662	.0357	-.0796	.0324	1676.	
.3060	2833.	754.	-1062.	1222.	-1190.	4599.		-.0213	-.0519	-.1558	.0388	-.0798	.0310	1968.	
.3070	3245.	781.	-1078.	1300.	-2391.	4895.		-.0171	-.0495	-.1460	.0413	-.0796	.0294	2247.	
.3080	3473.	771.	-1040.	1292.	-3367.	4955.		-.0137	-.0489	-.1374	.0430	-.0791	.0276	2459.	
.3090	3540.	730.	-959.	1201.	-4099.	4793.		-.0109	-.0500	-.1302	.0440	-.0781	.0255	2576.	
.3100	3632.	647.	-916.	1024.	-4572.	4402.		-.0087	-.0528	-.1246	.0443	-.0768	.0236	2580.	
.3110	3831.	521.	-946.	766.	-4785.	3798.		-.0072	-.0571	-.1206	.0441	-.0750	.0218	2471.	
.3120	4017.	370.	-999.	455.	-4745.	3045.		-.0062	-.0626	-.1185	.0434	-.0728	.0202	2270.	
.3130	4031.	220.	-1011.	124.	-4473.	2219.		-.0054	-.0690	-.1181	.0421	-.0704	.0187	2004.	
.3140	3876.	77.	-980.	-214.	-3999.	1360.		-.0049	-.0761	-.1194	.0404	-.0676	.0172	1697.	
.3150	3705.	-66.	-965.	-561.	-3353.	477.		-.0050	-.0834	-.1221	.0384	-.0545	.0160	1378.	
.3160	3618.	-211.	-1008.	-911.	-2572.	-408.		-.0057	-.0907	-.1261	.0365	-.0611	.0153	1107.	
.3170	3524.	-343.	-1068.	-1241.	-1690.	-1243.		-.0071	-.0978	-.1309	.0344	-.0576	.0150	978.	
.3180	3255.	-443.	-1074.	-1525.	-745.	-1976.		-.0092	-.1044	-.1364	.0322	-.0539	.0149	1045.	
.3190	2815.	-513.	-1023.	-1756.	225.	-2588.		-.0120	-.1102	-.1423	.0300	-.0502	.0151	1258.	
.3200	2386.	-562.	-982.	-1939.	1180.	-3071.		-.0158	-.1153	-.1481	.0281	-.0463	.0154	1539.	
.3210	2076.	-595.	-989.	-2079.	2081.	-3487.		-.0206	-.1193	-.1535	.0267	-.0425	.0160	1830.	
.3220	1773.	-604.	-993.	-2169.	2900.	-3760.		-.0261	-.1225	-.1585	.0257	-.0386	.0165	2095.	
.3230	1326.	-584.	-930.	-2204.	3619.	-3902.		-.0323	-.1246	-.1627	.0250	-.0347	.0170	2312.	
.3240	778.	-543.	-817.	-2192.	4230.	-3933.		-.0387	-.1257	-.1661	.0244	-.0310	.0175	2479.	
.3250	309.	-493.	-727.	-2147.	4730.	-3889.		-.0453	-.1261	-.1686	.0239	-.0275	.0179	2604.	
.3260	-25.	-442.	-682.	-2079.	5114.	-3799.		-.0518	-.1256	-.1700	.0235	-.0242	.0183	2689.	
.3270	-342.	-389.	-627.	-1991.	5379.	-3667.		-.0578	-.1245	-.1706	.0232	-.0210	.0186	2732.	
.3280	-735.	-329.	-522.	-1883.	5525.	-3493.		-.0629	-.1229	-.1702	.0228	-.0180	.0185	2730.	
.3290	-1126.	-267.	-394.	-1762.	5558.	-3295.		-.0669	-.1208	-.1690	.0223	-.0151	.0179	2687.	
.3300	-1395.	-213.	-294.	-1644.	5489.	-3102.		-.0697	-.1184	-.1671	.0219	-.0122	.0169	2615.	
.3310	-1540.	-173.	-226.	-1538.	5338.	-2938.		-.0712	-.1157	-.1643	.0212	-.0094	.0155	2522.	
.3320	-1651.	-145.	-157.	-1445.	5128.	-2808.		-.0714	-.1129	-.1609	.0203	-.0066	.0139	2417.	
.3330	-1768.	-126.	-74.	-1363.	4875.	-2711.		-.0703	-.1100	-.1569	.0190	-.0039	.0118	2304.	
.3340	-1844.	-117.	1.	-1295.	4593.	-2649.		-.0681	-.1069	-.1523	.0174	-.0011	.0094	2190.	
.3350	-1822.	-121.	45.	-1245.	4287.	-2629.		-.0649	-.1037	-.1470	.0157	.0019	.0066	2079.	
.3360	-1713.	-137.	62.	-1211.	3960.	-2641.		-.0610	-.1002	-.1411	.0139	.0050	.0036	1971.	
.3370	-1569.	-154.	71.	-1184.	3614.	-2661.		-.0566	-.0965	-.1346	.0122	.0083	.0002	1863.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.3260	-25.	-442.	687.	-2079.	5114.	-3799.	-1512.	-1256.	-1700.	.0235	-.0242	.0183	2689.
.3270	-342.	-389.	-627.	-1991.	5379.	-3667.	-10578.	-1245.	-1706.	.0232	-.0210	.0186	2732.
.3280	-735.	-329.	-522.	-1883.	5525.	-3493.	-.0629	-1229.	-1702.	.0228	-.0180	.0185	2730.
.3290	-1126.	-267.	-394.	-1762.	5558.	-3295.	-.0669	-1208.	-1690.	.0223	-.0151	.0179	2687.
.3300	-1395.	-213.	-294.	-1644.	5489.	-3102.	-.0697	-1184.	-1671.	.0219	-.0122	.0169	2615.
.3310	-1540.	-173.	-226.	-1538.	5338.	-2938.	-.0712	-1157.	-1643.	.0212	-.0094	.0155	2522.
.3320	-1651.	-145.	-157.	-1445.	5128.	-2808.	-.0714	-1129.	-1609.	.0203	-.0066	.0139	2417.
.3330	-1768.	-126.	-74.	-1363.	4875.	-2711.	-.0703	-1100.	-1569.	.0190	-.0039	.0118	2304.
.3340	-1844.	-117.	1.	-1295.	4593.	-2649.	-.0681	-1069.	-1523.	.0174	-.0011	.0094	2190.
.3350	-1822.	-121.	45.	-1245.	4287.	-2629.	-.0649	-1037.	-1470.	.0157	.0019	.0066	2079.
.3360	-1713.	-137.	62.	-1211.	3960.	-2641.	-.0610	-1002.	-1411.	.0139	.0050	.0036	1971.
.3370	-1569.	-154.	71.	-1184.	3614.	-2661.	-.0566	-.0965	-1346.	.0122	.0083	.0002	1863.

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2 SAFETY COLD FKW24F--2 PSV

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
43	1	820					.3380	-1422.	-167.	83.	-1156.	3250.	-2667.	-.0518	-.0925	-.1276	.0105	.0119	-.0034	1750.
							.3390	-1252.	-174.	85.	-1122.	2870.	-2643.	-.0469	-.0880	-.1199	.0090	.0156	-.0071	1629.
							.3400	-1038.	-173.	68.	-1079.	2470.	-2581.	-.0419	-.0829	-.1116	.0076	.0196	-.0108	1498.
							.3410	-772.	-162.	26.	-1022.	2043.	-2463.	-.0370	-.0774	-.1027	.0065	.0236	-.0144	1348.
							.3420	-488.	-132.	-25.	-941.	1577.	-2263.	-.0321	-.0711	-.0933	.0058	.0277	-.0179	1170.
							.3430	-238.	-79.	-62.	-829.	1063.	-1962.	-.0271	-.0643	-.0835	.0056	.0318	-.0211	955.
							.3440	-36.	-1.	-79.	-682.	492.	-1552.	-.0220	-.0569	-.0734	.0059	.0359	-.0242	708.
							.3450	182.	96.	-100.	-505.	-138.	-1041.	-.0168	-.0489	-.0630	.0068	.0398	-.0269	468.
							.3460	440.	210.	-136.	-299.	-821.	-439.	-.0115	-.0406	-.0524	.0080	.0434	-.0292	392.
							.3470	683.	342.	-165.	-65.	-1548.	248.	-.0059	-.0321	-.0418	.0096	.0467	-.0310	630.
							.3480	831.	486.	-154.	190.	-2308.	995.	-.0002	-.0236	-.0312	.0113	.0495	-.0323	1011.
							.3490	905.	633.	-112.	452.	-3083.	1763.	.0057	-.0153	-.0208	.0131	.0518	-.0330	1437.
							.3500	984.	768.	-72.	702.	-3853.	2505.	.0113	-.0075	-.0106	.0151	.0535	-.0332	1866.
							.3510	1088.	884.	-43.	931.	-4593.	3184.	.0167	-.0005	-.0006	.0171	.0546	-.0328	2274.
							.3520	1151.	978.	-0.	1132.	-5272.	3775.	.0216	.0055	.0090	.0189	.0550	-.0320	2642.
							.3530	1096.	1047.	86.	1296.	-5865.	4248.	.0258	.0104	.0181	.0204	.0548	-.0307	2952.
							.3540	970.	1078.	194.	1408.	-6344.	4561.	.0290	.0139	.0268	.0216	.0539	-.0291	3186.
							.3550	884.	1060.	277.	1454.	-6686.	4679.	.0311	.0160	.0349	.0225	.0524	-.0269	3326.
							.3560	859.	994.	323.	1431.	-6869.	4592.	.0319	.0166	.0424	.0228	.0503	-.0244	3365.
							.3570	798.	886.	371.	1347.	-6879.	4313.	.0316	.0158	.0492	.0227	.0478	-.0216	3302.
							.3580	614.	744.	453.	1207.	-6707.	3859.	.0301	.0137	.0551	.0220	.0448	-.0187	3142.
							.3590	341.	566.	556.	1014.	-6351.	3238.	.0276	.0104	.0602	.0210	.0415	-.0157	2890.
							.3600	87.	352.	634.	771.	-5819.	2466.	.0242	.0063	.0643	.0196	.0380	-.0125	2555.
							.3610	-102.	113.	669.	494.	-5122.	1588.	.0200	.0015	.0676	.0181	.0345	-.0092	2161.
							.3620	-297.	-130.	691.	206.	-4281.	673.	.0154	-.0035	.0698	.0164	.0310	-.0061	1741.
							.3630	-588.	-360.	739.	-70.	-3324.	-222.	.0107	-.0084	.0711	.0147	.0276	-.0033	1337.
							.3640	-954.	-574.	809.	-327.	-2283.	-1064.	.0061	-.0129	.0716	.0131	.0246	-.0009	1019.
							.3650	-1293.	-772.	859.	-562.	-1189.	-1834.	.0016	-.0167	.0713	.0119	.0220	.0014	906.
							.3660	-1551.	-948.	868.	-762.	-71.	-2498.	-.0027	-.0195	.0705	.0111	.0200	.0034	1048.
							.3670	-1798.	-1084.	866.	-905.	1041.	-3004.	-.0065	-.0210	.0693	.0108	.0185	.0050	1326.
							.3680	-2137.	-1166.	898.	-976.	2114.	-3310.	-.0097	-.0211	.0678	.0109	.0176	.0060	1624.
							.3690	-2547.	-1197.	960.	-977.	3115.	-3415.	-.0123	-.0196	.0664	.0116	.0174	.0065	1896.
							.3700	-2897.	-1189.	1003.	-921.	4015.	-3342.	-.0146	-.0167	.0653	.0130	.0179	.0065	2129.
							.3710	-3100.	-1148.	992.	-816.	4790.	-3106.	-.0165	-.0122	.0647	.0151	.0192	.0060	2314.
							.3720	-3247.	-1068.	969.	-654.	5421.	-2701.	-.0180	-.0062	.0643	.0179	.0211	.0050	2445.
							.3730	-3492.	-943.	997.	-435.	5898.	-2131.	-.0189	.0010	.0653	.0210	.0236	.0034	2522.
							.3740	-3807.	-786.	1066.	-171.	6210.	-1433.	-.0193	.0092	.0679	.0243	.0267	.0013	2558.
							.3750	-4009.	-618.	1106.	113.	6349.	-667.	-.0193	.0183	.0711	.0279	.0303	-.0012	2562.

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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

.3650	-1297.	-772.	859.	-562.	-1189.	-1834.	.0016	-.0167	.0713	.0119	.0220	.0014	906.
.3660	-1551.	-948.	868.	-762.	-71.	-2498.	-.0027	-.0195	.0705	.0111	.0200	.0034	1048.
.3670	-1798.	-1084.	866.	-905.	1041.	-3004.	-.0065	-.0210	.0693	.0108	.0185	.0050	1326.
.3680	-2137.	-1166.	898.	-976.	2114.	-3310.	-.0097	-.0211	.0678	.0109	.0176	.0060	1624.
.3690	-2547.	-1197.	960.	-777.	3115.	-3415.	-.0123	-.0196	.0664	.0116	.0174	.0065	1896.
.3700	-2897.	-1189.	1003.	-921.	4015.	-3342.	-.0146	-.0167	.0653	.0130	.0179	.0065	2129.
.3710	-3100.	-1148.	992.	-816.	4790.	-3106.	-.0165	-.0122	.0647	.0151	.0192	.0060	2314.
.3720	-3247.	-1068.	969.	-654.	5421.	-2701.	-.0180	-.0062	.0648	.0179	.0211	.0050	2445.
.3730	-3492.	-943.	997.	-435.	5898.	-2131.	-.0189	.0010	.0653	.0210	.0236	.0034	2522.
.3740	-3807.	-786.	1066.	-171.	6210.	-1433.	-.0193	.0092	.0679	.0243	.0267	.0013	2558.
.3750	-4009.	-618.	1106.	113.	6349.	-667.	-.0193	.0183	.0711	.0279	.0303	-.0012	2562.

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INTERNAL FORCES IN THE PIPING
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SECTION	43	MEMBER	1	SEQUENCE	820	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3760	-3994.	-450.	1077.	403.	6311.	130.	-.0189	.0279	.0755	.0317	.0342	-.0039	2538.		
.3770	-3899.	-276.	1038.	698.	6092.	952.	-.0177	.0379	.0812	.0353	.0385	-.0069	2490.		
.3780	-3940.	-94.	1079.	1000.	5699.	1791.	-.0156	.0478	.0880	.0386	.0429	-.0103	2431.		
.3790	-4107.	85.	1197.	1291.	5144.	2603.	-.0126	.0575	.0959	.0414	.0474	-.0140	2371.		
.3800	-4181.	238.	1297.	1549.	4445.	3324.	-.0089	.0667	.1048	.0437	.0518	-.0175	2312.		
.3810	-3990.	352.	1307.	1758.	3626.	3921.	-.0045	.0752	.1148	.0455	.0561	-.0208	2256.		
.3820	-3653.	440.	1274.	1932.	2707.	4414.	.0006	.0829	.1257	.0464	.0501	-.0238	2218.		
.3830	-3433.	521.	1304.	2086.	1705.	4837.	.0067	.0896	.1371	.0462	.0638	-.0268	2222.		
.3840	-3372.	587.	1416.	2211.	634.	5176.	.0135	.0952	.1489	.0452	.0671	-.0297	2273.		
.3850	-3250.	618.	1516.	2286.	-484.	5386.	.0207	.0998	.1611	.0436	.0701	-.0322	2356.		
.3860	-2889.	608.	1528.	2303.	-1623.	5452.	.0282	.1033	.1734	.0414	.0728	-.0341	2463.		
.3870	-2434.	574.	1502.	2282.	-2752.	5411.	.0358	.1057	.1857	.0385	.0751	-.0355	2602.		
.3880	-2171.	538.	1547.	2246.	-3841.	5307.	.0436	.1072	.1976	.0347	.0769	-.0365	2779.		
.3890	-2115.	496.	1666.	2194.	-4868.	5141.	.0512	.1078	.2090	.0300	.0783	-.0370	2974.		
.3900	-2003.	432.	1748.	2110.	-5819.	4889.	.0582	.1076	.2200	.0248	.0793	-.0367	3165.		
.3910	-1679.	345.	1731.	1994.	-6686.	4556.	.0644	.1067	.2303	.0193	.0801	-.0356	3344.		
.3920	-1334.	258.	1692.	1867.	-7464.	4200.	.0696	.1054	.2397	.0136	.0806	-.0342	3518.		
.3930	-1240.	193.	1742.	1754.	-8144.	3872.	.0741	.1036	.2481	.0076	.0809	-.0325	3687.		
.3940	-1348.	147.	1857.	1654.	-8713.	3568.	.0777	.1016	.2554	.0015	.0811	-.0305	3836.		
.3950	-1384.	98.	1919.	1546.	-9159.	3242.	.0801	.0993	.2615	-.0046	.0810	-.0281	3948.		
.3960	-1244.	39.	1883.	1422.	-9475.	2878.	.0813	.0969	.2664	-.0104	.0808	-.0252	4015.		
.3970	-1146.	-14.	1840.	1299.	-9660.	2515.	.0816	.0944	.2699	-.0161	.0804	-.0219	4040.		
.3980	-1307.	-43.	1881.	1196.	-9723.	2195.	.0813	.0920	.2719	-.0218	.0798	-.0186	4029.		
.3990	-1633.	-50.	1974.	1109.	-9676.	1916.	.0803	.0895	.2724	-.0273	.0791	-.0155	3983.		
.4000	-1857.	-55.	2014.	1016.	-9527.	1640.	.0787	.0871	.2715	-.0323	.0783	-.0125	3901.		

MAXIMUM VALUE OF STRESS OCCURS AT

TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2940	-314.	-1215.	-1281.	-2970.	12094.	-7294.	-.0915	-.1373	-.2407	.0057	-.0577	.0244	5791.		

SECTION	44	MEMBER	1	SEQUENCE	820	LOCATION	BEG	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		

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

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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)
.2940	-314.	-1215.	-1281.	-2970.	12094.	-7294.	-.0915	-.1373	-.2407	.0057	-.0577	.0244	5791.

SECTION	44	MEMBER	1	SEQUENCE	820	LOCATION	BEG	TYPE	RU	DX	DY	DZ	RX	RY	RZ	STRESS (PSI)
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)			

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SECTION	44	MEMBER	1	SEQUENCE	820	LOCATION	BEG	TYPE	RU	DX	DY	DZ	RX	RY	RZ	STRESS (PSI)
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)			
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.	
.0010	0.	0.	-0.	-0.	0.	-0.	-.0000	.0000	.0000	-.0000	.0000	.0000	.0000	.0000	0.	
.0020	3.	0.	-1.	-0.	0.	-0.	-.0000	.0000	.0000	-.0000	.0000	.0000	.0000	.0000	0.	
.0030	6.	0.	-2.	-0.	0.	-0.	-.0000	.0000	.0000	-.0000	.0000	.0000	.0000	.0000	0.	
.0040	8.	-0.	-3.	-0.	0.	0.	-.0000	-.0000	.0000	-.0000	.0000	.0000	.0000	.0000	0.	
.0050	8.	-0.	-3.	-0.	0.	0.	-.0000	.0000	.0000	-.0000	.0000	.0000	.0000	.0000	0.	
.0060	7.	-0.	-3.	-0.	-0.	0.	-.0000	.0000	.0000	-.0000	.0000	.0000	.0000	.0000	0.	
.0070	2.	-0.	-1.	-0.	-0.	1.	-.0000	.0000	.0000	-.0000	.0000	.0000	.0000	.0000	0.	
.0080	-13.	-0.	5.	-0.	0.	1.	-.0000	.0000	.0000	-.0000	.0000	.0000	.0000	.0000	0.	
.0090	-31.	-0.	13.	-0.	1.	1.	-.0000	.0000	.0000	-.0000	.0000	.0000	.0000	.0000	1.	
.0100	-32.	0.	13.	0.	1.	-0.	-.0000	.0000	.0000	-.0000	.0000	.0000	.0000	.0000	1.	
.0110	-11.	1.	5.	1.	1.	-4.	-.0000	.0000	.0000	.0001	.0000	.0000	.0001	-.0001	2.	
.0120	9.	1.	-4.	1.	-1.	-8.	.0000	.0000	-.0000	.0003	-.0000	-.0000	-.0001	-.0001	3.	
.0130	4.	2.	-2.	3.	-6.	-12.	.0000	.0000	-.0000	.0006	-.0000	-.0000	-.0003	-.0003	6.	
.0140	-20.	2.	7.	6.	-12.	-16.	.0000	.0000	-.0000	.0009	-.0001	-.0001	-.0004	-.0004	8.	
.0150	-36.	2.	13.	8.	-18.	-21.	-.0000	.0000	.0000	.0012	-.0001	-.0001	-.0006	-.0006	12.	
.0160	-27.	3.	9.	10.	-20.	-29.	-.0000	.0001	.0000	.0015	-.0002	-.0002	-.0008	-.0008	15.	
.0170	-6.	4.	2.	10.	-15.	-40.	-.0000	.0001	.0001	.0018	-.0002	-.0002	-.0009	-.0009	18.	
.0180	-4.	6.	3.	9.	0.	-53.	-.0000	.0001	.0002	.0021	-.0001	-.0001	-.0011	-.0011	21.	
.0190	-26.	7.	16.	8.	25.	-66.	-.0000	.0001	.0003	.0024	-.0000	-.0000	-.0013	-.0013	28.	
.0200	-49.	8.	30.	6.	55.	-79.	-.0000	.0002	.0004	.0027	.0001	.0001	-.0015	-.0015	39.	
.0210	-38.	10.	30.	6.	85.	-93.	.0000	.0002	.0005	.0031	.0002	.0002	-.0018	-.0018	51.	
.0220	1.	10.	16.	11.	106.	-104.	.0000	.0002	.0006	.0037	.0003	.0003	-.0021	-.0021	60.	
.0230	18.	9.	11.	21.	115.	-102.	.0001	.0002	.0007	.0044	.0003	.0003	-.0024	-.0024	62.	
.0240	-2.	6.	19.	31.	117.	-82.	.0002	.0001	.0009	.0047	.0003	.0003	-.0025	-.0025	59.	
.0250	-17.	0.	26.	40.	123.	-46.	.0003	.0001	.0010	.0044	.0003	.0003	-.0022	-.0022	55.	
.0260	-5.	-6.	24.	49.	144.	-4.	.0004	-.0000	.0012	.0039	.0004	.0004	-.0019	-.0019	61.	
.0270	26.	-10.	16.	63.	183.	24.	.0005	-.0001	.0014	.0039	.0005	.0005	-.0018	-.0018	78.	
.0280	72.	-11.	4.	66.	235.	27.	.0007	-.0002	.0016	.0039	.0008	.0008	-.0019	-.0019	98.	
.0290	144.	-8.	-18.	45.	291.	3.	.0009	-.0004	.0018	.0030	.0011	.0011	-.0018	-.0018	118.	
.0300	197.	-4.	-36.	22.	332.	-26.	.0011	-.0005	.0020	.0021	.0014	.0014	-.0018	-.0018	134.	
.0310	163.	-6.	-22.	22.	344.	-12.	.0013	-.0007	.0021	.0017	.0016	.0016	-.0017	-.0017	138.	
.0320	48.	-18.	19.	46.	317.	76.	.0015	-.0010	.0022	.0010	.0016	.0016	-.0009	-.0009	132.	
.0330	3.	-36.	24.	79.	247.	208.	.0016	-.0013	.0023	-.0003	.0014	.0014	.0003	.0003	133.	
.0340	174.	-50.	-62.	101.	145.	318.	.0017	-.0016	.0023	-.0019	.0010	.0010	.0015	.0015	146.	
.0350	425.	-56.	-182.	97.	41.	372.	.0019	-.0019	.0023	-.0039	.0006	.0006	.0025	.0025	155.	
.0360	414.	-57.	-191.	79.	-40.	395.	.0020	-.0021	.0024	-.0061	.0003	.0003	.0035	.0035	163.	
.0370	67.	-59.	-59.	75.	-93.	429.	.0021	-.0023	.0026	-.0076	.0001	.0001	.0044	.0044	179.	

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

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

.0270	26.	-10.	16.	63.	183.	24.	.0005	-.0001	.0014	.0039	.0005	-.0018	78.
.0280	72.	-11.	4.	66.	235.	27.	.0007	-.0002	.0016	.0039	.0008	-.0019	98.
.0290	144.	-8.	-18.	45.	291.	3.	.0009	-.0004	.0018	.0030	.0011	-.0018	118.
.0300	197.	-4.	-36.	22.	332.	-26.	.0011	-.0005	.0020	.0021	.0014	-.0018	134.
.0310	163.	-6.	-22.	22.	344.	-12.	.0013	-.0007	.0021	.0017	.0016	-.0017	138.
.0320	48.	-18.	19.	46.	317.	76.	.0015	-.0010	.0022	.0010	.0016	-.0009	132.
.0330	3.	-36.	24.	79.	247.	208.	.0016	-.0013	.0023	-.0003	.0014	.0003	133.
.0340	174.	-50.	-62.	101.	145.	318.	.0017	-.0016	.0023	-.0019	.0010	.0015	146.
.0350	425.	-56.	-182.	97.	41.	372.	.0019	-.0019	.0023	-.0039	.0006	.0025	155.
.0360	414.	-57.	-191.	79.	-40.	395.	.0020	-.0021	.0024	-.0061	.0003	.0035	163.
.0370	67.	-59.	-59.	75.	-93.	429.	.0021	-.0023	.0026	-.0076	.0001	.0044	179.

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

SECTION	44	MEMBER	1	SEQUENCE	820	LOCATION	BEG	TYPE	RU	DX	DY	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ				(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)										
.0380	-207.	-63.	45.	92.	-140.	431.	.0021	-.0025	.0028	-.0080	-.0001	.0051	204.			
.0390	-16.	-67.	-43.	100.	-204.	529.	.0022	-.0026	.0030	-.0086	-.0005	.0058	231.			
.0400	432.	-66.	-238.	80.	-294.	554.	.0024	-.0027	.0033	-.0104	-.0011	.0069	254.			
.0410	558.	-62.	-303.	55.	-405.	561.	.0025	-.0027	.0036	-.0121	-.0020	.0080	279.			
.0420	143.	-59.	-145.	48.	-504.	581.	.0025	-.0026	.0040	-.0132	-.0028	.0091	309.			
.0430	-396.	-58.	72.	55.	-558.	622.	.0025	-.0024	.0046	-.0140	-.0036	.0103	336.			
.0440	-464.	-53.	105.	54.	-560.	631.	.0026	-.0020	.0053	-.0145	-.0042	.0113	339.			
.0450	54.	-36.	-95.	25.	-522.	550.	.0028	-.0015	.0059	-.0142	-.0048	.0115	304.			
.0460	545.	-9.	-280.	-33.	-462.	393.	.0030	-.0009	.0066	-.0136	-.0052	.0111	244.			
.0470	281.	17.	-155.	-95.	-390.	245.	.0031	-.0001	.0074	-.0132	-.0057	.0109	189.			
.0480	-600.	37.	224.	-132.	-311.	148.	.0030	.0008	.0083	-.0125	-.0060	.0109	148.			
.0490	-1049.	54.	428.	-146.	-223.	59.	.0028	.0017	.0091	-.0107	-.0064	.0106	110.			
.0500	-434.	76.	198.	-171.	-121.	-88.	.0030	.0028	.0096	-.0082	-.0066	.0096	91.			
.0510	462.	105.	-144.	-217.	-5.	-293.	.0032	.0039	.0101	-.0057	-.0067	.0080	146.			
.0520	396.	133.	-95.	-260.	117.	-499.	.0032	.0050	.0104	-.0029	-.0065	.0063	231.			
.0530	-601.	154.	333.	-285.	238.	-665.	.0029	.0061	.0107	.0003	-.0061	.0046	306.			
.0540	-1243.	168.	614.	-296.	357.	-791.	.0026	.0072	.0109	.0036	-.0056	.0028	368.			
.0550	-762.	175.	433.	-303.	467.	-838.	.0027	.0081	.0106	.0067	-.0049	.0010	421.			
.0560	148.	176.	72.	-302.	558.	-962.	.0028	.0089	.0102	.0094	-.0042	-.0008	462.			
.0570	369.	174.	-21.	-291.	626.	-1019.	.0026	.0096	.0096	.0118	-.0033	-.0025	494.			
.0580	-173.	170.	210.	-276.	675.	-1075.	.0023	.0100	.0089	.0141	-.0022	-.0044	521.			
.0590	-756.	164.	446.	-264.	711.	-1136.	.0020	.0102	.0080	.0162	-.0010	-.0066	548.			
.0600	-678.	154.	407.	-246.	732.	-1173.	.0019	.0102	.0069	.0183	.0003	-.0089	563.			
.0610	-33.	131.	130.	-204.	721.	-1133.	.0018	.0099	.0056	.0203	.0016	-.0109	545.			
.0620	500.	93.	-109.	-126.	662.	-976.	.0018	.0092	.0043	.0219	.0027	-.0122	476.			
.0630	394.	41.	-95.	-22.	543.	-717.	.0016	.0083	.0029	.0223	.0036	-.0126	361.			
.0640	-105.	-12.	72.	79.	373.	-428.	.0013	.0071	.0016	.0213	.0043	-.0123	230.			
.0650	-236.	-59.	86.	159.	180.	-178.	.0011	.0057	.0003	.0193	.0048	-.0118	120.			
.0660	271.	-100.	-159.	223.	-6.	35.	.0012	.0042	-.0009	.0169	.0051	-.0114	91.			
.0670	783.	-142.	-402.	298.	-177.	269.	.0013	.0026	-.0019	.0146	.0053	-.0107	176.			
.0680	656.	-186.	-382.	389.	-348.	554.	.0013	.0010	-.0024	.0125	.0053	-.0095	305.			
.0690	182.	-226.	-222.	474.	-541.	847.	.0011	-.0007	-.0027	.0101	.0049	-.0079	446.			
.0700	119.	-255.	-229.	517.	-755.	1084.	.0012	-.0022	-.0026	.0068	.0040	-.0059	569.			
.0710	533.	-269.	-426.	518.	-962.	1243.	.0015	-.0035	-.0022	.0025	.0028	-.0037	664.			
.0720	753.	-272.	-534.	509.	-1120.	1354.	.0017	-.0046	-.0013	-.0018	.0013	-.0012	734.			
.0730	417.	-267.	-399.	505.	-1192.	1441.	.0018	-.0054	.0001	-.0056	-.0000	.0014	777.			
.0740	-42.	-252.	-196.	486.	-1162.	1477.	.0019	-.0058	.0020	-.0092	-.0013	.0040	779.			
.0750	-99.	-220.	-143.	419.	-1043.	1415.	.0023	-.0058	.0042	-.0129	-.0024	.0065	725.			

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

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

.0640	-105.	-12.	72.	79.	373.	-428.	.0013	.0071	.0016	.0213	.0043	-.0123	230.
.0650	-236.	-59.	88.	159.	180.	-178.	.0011	.0057	.0003	.0193	.0048	-.0118	120.
.0660	271.	-100.	-159.	223.	-6.	35.	.0012	.0042	-.0009	.0169	.0051	-.0114	91.
.0670	783.	-142.	-402.	298.	-177.	269.	.0013	.0026	-.0019	.0146	.0053	-.0107	176.
.0680	656.	-186.	-382.	389.	-348.	554.	.0013	.0010	-.0024	.0125	.0053	-.0095	305.
.0690	182.	-226.	-222.	474.	-541.	847.	.0011	-.0007	-.0027	.0101	.0049	-.0079	446.
.0700	119.	-255.	-229.	517.	-755.	1084.	.0012	-.0022	-.0026	.0068	.0040	-.0059	569.
.0710	533.	-269.	-426.	518.	-962.	1243.	.0015	-.0035	-.0022	.0025	.0028	-.0037	664.
.0720	753.	-272.	-534.	509.	-1120.	1354.	.0017	-.0046	-.0013	-.0018	.0013	-.0012	734.
.0730	417.	-267.	-399.	505.	-1192.	1441.	.0018	-.0054	.0001	-.0056	-.0000	.0014	777.
.0740	-42.	-252.	-196.	486.	-1162.	1477.	.0019	-.0058	.0020	-.0092	-.0013	.0040	779.
.0750	-99.	-220.	-143.	419.	-1043.	1415.	.0023	-.0058	.0042	-.0129	-.0024	.0065	725.

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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	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)
44	1	820					.0760	156.	-172.	-206.	303.	-860.	1248.	.0027	-.0054	.0066	-.0165	-.0034	.0087	620.
							.0770	229.	-113.	-188.	163.	-631.	1019.	.0030	-.0046	.0093	-.0197	-.0043	.0105	485.
							.0780	-101.	-51.	2.	24.	-360.	765.	.0032	-.0035	.0120	-.0220	-.0051	.0122	340.
							.0790	-544.	13.	242.	-104.	-53.	488.	.0035	-.0020	.0147	-.0232	-.0056	.0134	201.
							.0800	-669.	80.	355.	-223.	281.	170.	.0037	-.0003	.0172	-.0232	-.0058	.0138	159.
							.0810	-419.	147.	314.	-338.	627.	-183.	.0041	.0017	.0193	-.0221	-.0057	.0136	295.
							.0820	-198.	208.	280.	-444.	966.	-529.	.0044	.0037	.0210	-.0202	-.0053	.0127	477.
							.0830	-381.	259.	404.	-528.	1284.	-829.	.0047	.0057	.0222	-.0175	-.0045	.0115	649.
							.0840	-785.	296.	610.	-587.	1573.	-1076.	.0049	.0076	.0229	-.0142	-.0033	.0099	800.
							.0850	-866.	321.	674.	-631.	1834.	-1282.	.0052	.0093	.0230	-.0107	-.0017	.0079	933.
							.0860	-467.	334.	533.	-657.	2061.	-1454.	.0056	.0107	.0224	-.0072	.0003	.0054	1046.
							.0870	-58.	331.	375.	-649.	2234.	-1571.	.0060	.0117	.0210	-.0034	.0026	.0026	1126.
							.0880	-80.	311.	376.	-598.	2323.	-1604.	.0062	.0122	.0192	.0006	.0051	-.0005	1158.
							.0890	-345.	273.	458.	-513.	2301.	-1550.	.0062	.0123	.0167	.0045	.0075	-.0037	1132.
							.0900	-344.	219.	409.	-409.	2156.	-1418.	.0062	.0119	.0137	.0080	.0097	-.0068	1048.
							.0910	33.	149.	188.	-283.	1892.	-1204.	.0062	.0109	.0102	.0112	.0116	-.0098	907.
							.0920	392.	64.	-41.	-126.	1531.	-890.	.0059	.0095	.0064	.0143	.0131	-.0125	713.
							.0930	407.	-33.	-138.	67.	1102.	-483.	.0054	.0076	.0025	.0170	.0144	-.0147	484.
							.0940	214.	-137.	-155.	278.	623.	-26.	.0048	.0054	-.0013	.0193	.0153	-.0165	274.
							.0950	171.	-237.	-234.	485.	104.	437.	.0040	.0030	-.0049	.0209	.0156	-.0177	265.
							.0960	367.	-332.	-411.	679.	-452.	894.	.0033	.0005	-.0082	.0215	.0152	-.0183	486.
							.0970	539.	-421.	-575.	863.	-1038.	1373.	.0025	-.0020	-.0110	.0212	.0140	-.0178	773.
							.0980	447.	-506.	-625.	1045.	-1638.	1887.	.0017	-.0043	-.0131	.0202	.0120	-.0162	1087.
							.0990	204.	-580.	-602.	1211.	-2226.	2400.	.0009	-.0065	-.0144	.0186	.0090	-.0134	1401.
							.1000	140.	-632.	-635.	1334.	-2765.	2837.	.0003	-.0082	-.0148	.0161	.0053	-.0098	1677.
							.1010	376.	-654.	-768.	1392.	-3215.	3134.	.0000	-.0094	-.0142	.0127	.0008	-.0057	1886.
							.1020	640.	-642.	-883.	1383.	-3539.	3277.	.0001	-.0100	-.0125	.0085	-.0041	-.0012	2013.
							.1030	591.	-602.	-841.	1321.	-3717.	3290.	.0004	-.0100	-.0097	.0040	-.0094	.0038	2061.
							.1040	264.	-538.	-656.	1217.	-3750.	3204.	.0009	-.0092	-.0058	-.0007	-.0149	.0094	2039.
							.1050	88.	-452.	-509.	1071.	-3654.	3026.	.0017	-.0078	-.0010	-.0055	-.0206	.0152	1952.
							.1060	302.	-349.	-502.	881.	-3457.	2752.	.0030	-.0057	.0046	-.0102	-.0264	.0212	1808.
							.1070	560.	-229.	-500.	655.	-3180.	2392.	.0046	-.0029	.0109	-.0149	-.0324	.0272	1618.
							.1080	355.	-98.	-299.	403.	-2833.	1952.	.0061	.0004	.0177	-.0194	-.0382	.0330	1390.
							.1090	-172.	47.	41.	121.	-2405.	1403.	.0076	.0043	.0249	-.0235	-.0435	.0381	1118.
							.1100	-225.	201.	196.	-180.	-1892.	740.	.0095	.0086	.0321	-.0260	-.0482	.0418	818.
							.1110	-129.	352.	291.	-479.	-1306.	36.	.0117	.0132	.0391	-.0274	-.0520	.0443	558.
							.1120	-531.	488.	584.	-749.	-688.	-615.	.0135	.0180	.0459	-.0282	-.0548	.0464	477.
							.1130	-1027.	601.	901.	-981.	-80.	-1185.	.0151	.0227	.0522	-.0282	-.0566	.0479	618.

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INTERNAL FORCES IN THE PIPING
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.1030	591.	-602.	-841.	1321.	-3717.	3290.	.0004	-.0100	-.0097	.0040	-.0094	.0038	2013.
.1040	264.	-538.	-656.	1217.	-3750.	3204.	.0009	-.0092	-.0058	-.0007	-.0149	.0094	2039.
.1050	88.	-452.	-509.	1071.	-3654.	3026.	.0017	-.0078	-.0010	-.0055	-.0206	.0152	1952.
.1060	302.	-349.	-502.	881.	-3457.	2752.	.0030	-.0057	.0046	-.0102	-.0264	.0212	1808.
.1070	560.	-229.	-500.	655.	-3180.	2392.	.0046	-.0029	.0109	-.0149	-.0324	.0272	1618.
.1080	355.	-98.	-299.	403.	-2833.	1952.	.0061	.0004	.0177	-.0194	-.0382	.0330	1390.
.1090	-172.	47.	41.	121.	-2405.	1403.	.0076	.0043	.0249	-.0235	-.0435	.0381	1118.
.1100	-225.	201.	196.	-180.	-1892.	740.	.0095	.0086	.0321	-.0260	-.0482	.0418	818.
.1110	-129.	352.	291.	-479.	-1306.	36.	.0117	.0132	.0391	-.0274	-.0520	.0443	558.
.1120	-531.	488.	584.	-749.	-688.	-615.	.0135	.0180	.0459	-.0282	-.0548	.0464	477.
.1130	-1027.	601.	901.	-981.	-20.	-1185.	.0151	.0227	.0522	-.0282	-.0566	.0479	618.

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

SECTION	44	MEMBER	1	SEQUENCE	820	LOCATION	BEG	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.1140	-1019.	692.	994.	-1185.	488.	-1694.	.0171	.0274	.0576	-.0275	-.0576	.0484	853.		
.1150	-905.	761.	1023.	-1365.	1006.	-2157.	.0191	.0318	.0619	-.0265	-.0575	.0479	1101.		
.1160	-1240.	812.	1214.	-1515.	1478.	-2587.	.0207	.0359	.0654	-.0252	-.0563	.0462	1341.		
.1170	-1590.	847.	1393.	-1637.	1921.	-3009.	.0221	.0396	.0678	-.0230	-.0537	.0430	1576.		
.1180	-1342.	859.	1311.	-1719.	2331.	-3379.	.0240	.0427	.0687	-.0196	-.0500	.0382	1786.		
.1190	-1109.	833.	1213.	-1734.	2673.	-3568.	.0259	.0451	.0684	-.0163	-.0453	.0332	1919.		
.1200	-1518.	762.	1348.	-1660.	2892.	-3494.	.0272	.0467	.0671	-.0137	-.0398	.0288	1938.		
.1210	-1791.	656.	1398.	-1522.	2962.	-3231.	.0282	.0475	.0647	-.0116	-.0341	.0248	1862.		
.1220	-1071.	535.	1019.	-1377.	2903.	-2908.	.0295	.0475	.0610	-.0106	-.0281	.0205	1739.		
.1230	-151.	408.	543.	-1229.	2753.	-2575.	.0307	.0469	.0565	-.0102	-.0219	.0156	1591.		
.1240	-195.	275.	452.	-1047.	2548.	-2205.	.0312	.0454	.0515	-.0096	-.0155	.0105	1416.		
.1250	-740.	136.	560.	-820.	2299.	-1771.	.0311	.0434	.0462	-.0081	-.0090	.0053	1210.		
.1260	-575.	-12.	375.	-559.	1983.	-1251.	.0310	.0406	.0405	-.0058	-.0029	.0002	967.		
.1270	226.	-168.	-78.	-282.	1558.	-611.	.0307	.0374	.0347	-.0047	.0022	-.0036	681.		
.1280	668.	-326.	-394.	-1.	1005.	130.	.0295	.0337	.0294	-.0053	.0062	-.0055	407.		
.1290	620.	-467.	-509.	248.	374.	855.	.0276	.0297	.0246	-.0077	.0090	-.0061	388.		
.1300	664.	-575.	-642.	429.	-228.	1442.	.0256	.0258	.0205	-.0116	.0109	-.0061	611.		
.1310	789.	-645.	-776.	550.	-710.	1860.	.0234	.0219	.0172	-.0157	.0123	-.0059	829.		
.1320	609.	-683.	-750.	637.	-1038.	2164.	.0206	.0183	.0150	-.0197	.0134	-.0051	997.		
.1330	381.	-694.	-673.	698.	-1249.	2395.	.0173	.0151	.0140	-.0230	.0138	-.0037	1120.		
.1340	582.	-679.	-751.	708.	-1412.	2547.	.0142	.0123	.0137	-.0264	.0132	-.0015	1203.		
.1350	877.	-636.	-855.	646.	-1579.	2603.	.0110	.0100	.0143	-.0308	.0115	-.0017	1249.		
.1360	642.	-562.	-731.	518.	-1738.	2538.	.0076	.0084	.0158	-.0362	.0088	.0058	1252.		
.1370	132.	-458.	-474.	341.	-1809.	2334.	.0042	.0075	.0180	-.0419	.0058	.0102	1193.		
.1380	-8.	-332.	-337.	142.	-1710.	1993.	.0012	.0072	.0206	-.0463	.0030	.0140	1056.		
.1390	158.	-192.	-296.	-55.	-1420.	1565.	-.0013	.0075	.0235	-.0489	.0008	.0172	848.		
.1400	148.	-47.	-167.	-249.	-999.	1092.	-.0037	.0084	.0267	-.0501	-.0007	.0199	602.		
.1410	37.	99.	2.	-459.	-546.	585.	-.0059	.0096	.0298	-.0505	-.0019	.0219	370.		
.1420	174.	239.	57.	-699.	-134.	62.	-.0074	.0112	.0324	-.0512	-.0028	.0236	287.		
.1430	335.	362.	82.	-930.	215.	-419.	-.0083	.0129	.0344	-.0519	-.0034	.0247	418.		
.1440	169.	455.	222.	-1094.	524.	-790.	-.0090	.0145	.0358	-.0518	-.0033	.0254	581.		
.1450	28.	512.	335.	-1161.	822.	-1040.	-.0095	.0159	.0365	-.0497	-.0022	.0249	707.		
.1460	420.	536.	211.	-1149.	1103.	-1199.	-.0092	.0170	.0364	-.0457	-.0001	.0229	800.		
.1470	1039.	528.	-30.	-1094.	1317.	-1276.	-.0084	.0176	.0353	-.0411	.0027	.0198	857.		
.1480	1180.	487.	-111.	-1004.	1403.	-1243.	-.0074	.0177	.0336	-.0367	.0061	.0159	853.		
.1490	901.	408.	-58.	-877.	1343.	-1062.	-.0062	.0173	.0313	-.0327	.0097	.0117	772.		
.1500	848.	292.	-126.	-700.	1163.	-720.	-.0045	.0162	.0283	-.0291	.0134	.0073	616.		
.1510	1204.	141.	-383.	-456.	905.	-228.	-.0025	.0145	.0249	-.0254	.0173	.0028	417.		

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ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.53.

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

CONDITION 24
LOADS
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ENGLISH UNITS

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

.1410	37.	99.	2.	-459.	-546.	585.	-.0059	.0096	.0298	-.0505	-.0019	.0219	370.
.1420	174.	239.	57.	-699.	-134.	62.	-.0074	.0112	.0324	-.0512	-.0028	.0236	287.
.1430	325.	362.	82.	-930.	215.	-419.	-.0083	.0129	.0344	-.0519	-.0034	.0247	418.
.1440	169.	455.	222.	-1094.	524.	-790.	-.0090	.0145	.0358	-.0518	-.0033	.0254	581.
.1450	28.	512.	335.	-1161.	822.	-1040.	-.0095	.0159	.0365	-.0497	-.0022	.0249	707.
.1460	420.	536.	211.	-1149.	1102.	-1199.	-.0092	.0170	.0364	-.0457	-.0001	.0229	800.
.1470	1039.	528.	-30.	-1094.	1317.	-1276.	-.0084	.0176	.0353	-.0411	.0027	.0198	857.
.1480	1180.	487.	-111.	-1004.	1403.	-1243.	-.0074	.0177	.0336	-.0367	.0061	.0159	853.
.1490	901.	408.	-58.	-877.	1343.	-1062.	-.0062	.0173	.0313	-.0327	.0097	.0117	772.
.1500	848.	292.	-126.	-700.	1163.	-720.	-.0045	.0162	.0283	-.0291	.0134	.0073	616.
.1510	1204.	141.	-303.	-456.	905.	-228.	-.0025	.0145	.0249	-.0254	.0173	.0028	417.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.53.

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

CONDITION 24

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ENGLISH UNITS

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

SECTION	44	MEMBER	1	SEQUENCE	820	LOCATION	BEG	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.1520	1578.	-36.	-661.	-150.	596.	380.	-.0002	.0123	.0215	-.0217	.0213	-.0017	290.	
.1530	1714.	-226.	-852.	191.	237.	1045.	.0022	.0098	.0181	-.0184	.0250	-.0060	437.	
.1540	1689.	-418.	-983.	525.	-177.	1716.	.0048	.0071	.0151	-.0161	.0280	-.0099	724.	
.1550	1534.	-603.	-1064.	829.	-642.	2376.	.0077	.0043	.0126	-.0149	.0301	-.0130	1042.	
.1560	1265.	-776.	-1091.	1103.	-1122.	3019.	.0105	.0017	.0110	-.0143	.0312	-.0152	1366.	
.1570	1142.	-928.	-1159.	1337.	-1545.	3611.	.0134	-.0005	.0105	-.0143	.0313	-.0163	1665.	
.1580	1323.	-1047.	-1317.	1515.	-1840.	4079.	.0164	-.0021	.0111	-.0143	.0305	-.0166	1896.	
.1590	1412.	-1118.	-1395.	1623.	-1966.	4351.	.0195	-.0030	.0131	-.0144	.0289	-.0163	2024.	
.1600	1071.	-1136.	-1251.	1641.	-1914.	4396.	.0224	-.0029	.0166	-.0151	.0265	-.0150	2034.	
.1610	462.	-1098.	-955.	1562.	-1698.	4216.	.0250	-.0018	.0215	-.0167	.0231	-.0126	1929.	
.1620	45.	-1009.	-696.	1393.	-1335.	3836.	.0276	.0003	.0276	-.0185	.0188	-.0092	1723.	
.1630	-63.	-875.	-525.	1138.	-833.	3286.	.0300	.0035	.0348	-.0206	.0137	-.0048	1435.	
.1640	-159.	-697.	-324.	810.	-195.	2577.	.0320	.0076	.0429	-.0225	.0081	.0003	1087.	
.1650	-435.	-480.	-17.	418.	578.	1696.	.0335	.0126	.0515	-.0235	.0023	.0056	738.	
.1660	-803.	-226.	354.	-33.	1468.	643.	.0348	.0182	.0604	-.0238	-.0035	.0108	543.	
.1670	-1182.	52.	744.	-514.	2426.	-533.	.0357	.0243	.0691	-.0233	-.0091	.0155	1018.	
.1680	-1548.	336.	1131.	-991.	3386.	-1735.	.0361	.0306	.0772	-.0223	-.0143	.0200	1578.	
.1690	-1781.	608.	1451.	-1435.	4277.	-2874.	.0361	.0366	.0844	-.0207	-.0191	.0243	2146.	
.1700	-1771.	857.	1646.	-1835.	5043.	-3900.	.0358	.0422	.0903	-.0187	-.0234	.0283	2662.	
.1710	-1667.	1073.	1768.	-2183.	5653.	-4790.	.0351	.0469	.0945	-.0163	-.0270	.0315	3100.	
.1720	-1735.	1250.	1920.	-2456.	6085.	-5522.	.0340	.0507	.0969	-.0130	-.0296	.0334	3441.	
.1730	-1929.	1378.	2078.	-2656.	6327.	-6056.	.0326	.0531	.0973	-.0088	-.0311	.0341	3670.	
.1740	-1956.	1448.	2118.	-2704.	6356.	-6347.	.0311	.0540	.0956	-.0041	-.0316	.0336	3764.	
.1750	-1706.	1452.	1991.	-2648.	6141.	-6352.	.0293	.0533	.0918	.0008	-.0311	.0321	3701.	
.1760	-1369.	1389.	1770.	-2472.	5661.	-6049.	.0274	.0509	.0859	.0051	-.0298	.0301	3469.	
.1770	-1123.	1262.	1531.	-2189.	4921.	-5460.	.0252	.0469	.0782	.0087	-.0279	.0276	3078.	
.1780	-926.	1082.	1263.	-1824.	3965.	-4638.	.0230	.0413	.0690	.0117	-.0253	.0244	2556.	
.1790	-697.	857.	946.	-1387.	2855.	-3638.	.0207	.0344	.0585	.0146	-.0221	.0203	1937.	
.1800	-454.	598.	599.	-886.	1650.	-2491.	.0183	.0265	.0472	.0179	-.0183	.0153	1251.	
.1810	-211.	312.	237.	-333.	389.	-1227.	.0158	.0178	.0354	.0212	-.0142	.0101	534.	
.1820	55.	13.	-142.	249.	-911.	106.	.0133	.0087	.0235	.0245	-.0101	.0048	382.	
.1830	319.	-284.	-521.	822.	-2230.	1440.	.0107	-.0004	.0121	.0270	-.0064	-.0001	1115.	
.1840	484.	-563.	-848.	1349.	-3522.	2701.	.0081	-.0091	.0013	.0283	-.0034	-.0043	1862.	
.1850	530.	-809.	-1103.	1807.	-4711.	3817.	.0054	-.0170	-.0082	.0288	-.0010	-.0078	2539.	
.1860	549.	-1009.	-1305.	2181.	-5708.	4729.	.0029	-.0237	-.0164	.0292	.0009	-.0107	3101.	
.1870	575.	-1153.	-1456.	2464.	-6449.	5395.	.0004	-.0290	-.0228	.0302	.0023	-.0133	3516.	
.1880	572.	-1236.	-1538.	2638.	-6905.	5782.	-.0019	-.0326	-.0273	.0315	.0032	-.0152	3766.	
.1890	521.	-1250.	-1541.	2685.	-7088.	5862.	-.0040	-.0345	-.0298	.0327	.0034	-.0164	3845.	

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DIS/ADLPIPE

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

CONDITION 24

LOADS

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ENGLISH UNITS

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

.1780	-922.	1082.	1261.	-1324.	3965.	-4638.	.0230	.0413	.0690	.0117	-.0253	.0244	2556.
.1790	-697.	857.	946.	-1387.	2855.	-3638.	.0207	.0344	.0585	.0146	-.0221	.0203	1937.
.1800	-454.	598.	599.	-886.	1650.	-2491.	.0183	.0265	.0472	.0179	-.0183	.0153	1251.
.1810	-211.	312.	237.	-333.	389.	-1227.	.0158	.0178	.0354	.0212	-.0142	.0101	534.
.1820	55.	13.	-142.	249.	-911.	106.	.0133	.0087	.0235	.0245	-.0101	.0048	382.
.1830	319.	-284.	-521.	822.	-2230.	1440.	.0107	-.0004	.0121	.0270	-.0064	-.0001	1115.
.1840	484.	-563.	-843.	1349.	-3522.	2701.	.0081	-.0091	.0013	.0283	-.0034	-.0043	1862.
.1850	530.	-809.	-1103.	1807.	-4711.	3817.	.0054	-.0170	-.0082	.0288	-.0010	-.0078	2539.
.1860	549.	-1009.	-1305.	2181.	-5708.	4729.	.0029	-.0237	-.0164	.0292	.0009	-.0107	3101.
.1870	575.	-1153.	-1456.	2464.	-6449.	5395.	.0004	-.0290	-.0228	.0302	.0023	-.0133	3516.
.1880	572.	-1236.	-1538.	2638.	-6905.	5782.	-.0019	-.0326	-.0273	.0315	.0032	-.0152	3766.
.1890	521.	-1250.	-1541.	2685.	-7088.	5862.	-.0040	-.0345	-.0298	.0327	.0034	-.0164	3845.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.53.

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

CONDITION 24

LOADS

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ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	TYPE	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)
44	1	820				.1900	448.	-1195.	-1480.	2597.	-7021.	5627.	-.0058	-.0344	-.0305	.0334	.0028	-.0167	3758.
						.1910	339.	-1075.	-1353.	2380.	-6715.	5099.	-.0073	-.0325	-.0293	.0333	.0014	-.0160	3516.
						.1920	147.	-899.	-1141.	2060.	-6171.	4321.	-.0086	-.0290	-.0266	.0329	-.0006	-.0144	3134.
						.1930	-57.	-677.	-877.	1665.	-5389.	3340.	-.0095	-.0239	-.0224	.0327	-.0028	-.0122	2630.
						.1940	-151.	-420.	-618.	1212.	-4393.	2197.	-.0100	-.0178	-.0171	.0329	-.0051	-.0098	2030.
						.1950	-149.	-140.	-371.	716.	-3240.	940.	-.0102	-.0108	-.0111	.0333	-.0074	-.0073	1384.
						.1960	-190.	150.	-93.	194.	-2008.	-371.	-.0100	-.0033	-.0047	.0336	-.0096	-.0048	823.
						.1970	-322.	432.	217.	-326.	-775.	-1657.	-.0095	.0041	.0017	.0334	-.0117	-.0023	746.
						.1980	-447.	688.	509.	-808.	399.	-2833.	-.0087	.0111	.0077	.0328	-.0136	.0002	1193.
						.1990	-477.	904.	736.	-1214.	1468.	-3824.	-.0077	.0173	.0130	.0319	-.0152	.0024	1714.
						.2000	-419.	1067.	892.	-1520.	2400.	-4575.	-.0065	.0224	.0173	.0308	-.0162	.0043	2161.
						.2010	-331.	1169.	993.	-1713.	3159.	-5055.	-.0051	.0261	.0205	.0296	-.0165	.0057	2489.
						.2020	-272.	1207.	1058.	-1795.	3709.	-5254.	-.0037	.0281	.0224	.0282	-.0163	.0064	2680.
						.2030	-267.	1180.	1091.	-1771.	4022.	-5168.	-.0022	.0285	.0228	.0262	-.0156	.0064	2722.
						.2040	-294.	1090.	1083.	-1646.	4086.	-4796.	-.0006	.0273	.0220	.0235	-.0144	.0061	2613.
						.2050	-275.	939.	1004.	-1422.	3913.	-4148.	.0009	.0244	.0198	.0198	-.0128	.0054	2359.
						.2060	-170.	734.	846.	-1105.	3533.	-3252.	.0025	.0200	.0165	.0155	-.0109	.0045	1977.
						.2070	-38.	487.	640.	-710.	2980.	-2157.	.0040	.0146	.0123	.0106	-.0087	.0035	1503.
						.2080	27.	212.	434.	-263.	2289.	-929.	.0053	.0083	.0074	.0053	-.0064	.0025	997.
						.2090	21.	-74.	239.	203.	1495.	354.	.0066	.0015	.0022	-.0004	-.0042	.0014	622.
						.2100	17.	-355.	35.	657.	640.	1616.	.0077	-.0053	-.0030	-.0061	-.0022	.0004	745.
						.2110	54.	-617.	-181.	1073.	-224.	2793.	.0087	-.0117	-.0081	-.0117	-.0006	-.0005	1204.
						.2120	90.	-346.	-382.	1435.	-1037.	3835.	.0096	-.0175	-.0125	-.0169	.0006	-.0011	1695.
						.2130	92.	-1032.	-539.	1728.	-1739.	4693.	.0102	-.0222	-.0161	-.0215	.0014	-.0013	2125.
						.2140	76.	-1165.	-651.	1937.	-2283.	5317.	.0107	-.0255	-.0187	-.0255	.0017	-.0011	2449.
						.2150	62.	-1235.	-718.	2045.	-2638.	5667.	.0109	-.0273	-.0200	-.0288	.0015	-.0004	2639.
						.2160	39.	-1240.	-733.	2041.	-2790.	5723.	.0110	-.0275	-.0201	-.0315	.0007	.0009	2683.
						.2170	-14.	-1179.	-687.	1925.	-2738.	5487.	.0109	-.0261	-.0188	-.0336	-.0006	.0025	2579.
						.2180	-91.	-1057.	-585.	1704.	-2484.	4980.	.0106	-.0231	-.0164	-.0348	-.0023	.0046	2336.
						.2190	-162.	-882.	-441.	1393.	-2043.	4233.	.0101	-.0187	-.0128	-.0351	-.0045	.0069	1967.
						.2200	-204.	-662.	-272.	1010.	-1437.	3284.	.0096	-.0131	-.0084	-.0345	-.0069	.0093	1494.
						.2210	-216.	-410.	-86.	574.	-703.	2182.	.0089	-.0067	-.0033	-.0330	-.0095	.0117	948.
						.2220	-246.	-139.	125.	111.	109.	994.	.0081	.0002	.0021	-.0309	-.0122	.0140	404.
						.2230	-330.	133.	364.	-352.	945.	-206.	.0073	.0072	.0075	-.0286	-.0148	.0162	413.
						.2240	-431.	392.	603.	-790.	1749.	-1345.	.0064	.0139	.0126	-.0262	-.0172	.0183	940.
						.2250	-462.	624.	796.	-1182.	2471.	-2362.	.0055	.0200	.0171	-.0237	-.0194	.0201	1451.
						.2260	-404.	816.	924.	-1508.	3068.	-3210.	.0046	.0250	.0207	-.0213	-.0212	.0214	1882.
						.2270	-353.	960.	1018.	-1750.	3502.	-3846.	.0038	.0289	.0232	-.0189	-.0225	.0221	2202.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.53.

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

.2170	-14.	-1179.	-687.	1925.	-2738.	5487.	.0109	-.0261	-.0188	-.0336	-.0006	.0025	2579.
.2180	-91.	-1057.	-585.	1704.	-2484.	4980.	.0106	-.0231	-.0164	-.0348	-.0023	.0046	2336.
.2190	-162.	-882.	-441.	1393.	-2043.	4233.	.0101	-.0187	-.0128	-.0351	-.0045	.0069	1967.
.2200	-204.	-662.	-272.	1010.	-1437.	3284.	.0096	-.0131	-.0084	-.0345	-.0069	.0093	1494.
.2210	-216.	-410.	-86.	574.	-703.	2182.	.0089	-.0067	-.0033	-.0330	-.0095	.0117	948.
.2220	-246.	-139.	125.	111.	109.	994.	.0081	.0002	.0021	-.0309	-.0122	.0140	404.
.2230	-330.	133.	364.	-352.	945.	-206.	.0073	.0072	.0075	-.0286	-.0148	.0162	413.
.2240	-431.	392.	603.	-790.	1749.	-1345.	.0064	.0139	.0126	-.0262	-.0172	.0183	940.
.2250	-462.	624.	796.	-1182.	2471.	-2362.	.0055	.0200	.0171	-.0237	-.0194	.0201	1451.
.2260	-404.	816.	924.	-1508.	3068.	-3210.	.0046	.0250	.0207	-.0213	-.0212	.0214	1882.
.2270	-357.	960.	1018.	-1750.	3502.	-3846.	.0038	.0289	.0232	-.0189	-.0225	.0221	2202.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.53.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
44	1	820					.2280	-390.	1047.	1103.	-1896.	3742.	-4237.	.0030	.0313	.0244	-.0167	-.0232	.0222	2393.
							.2290	-461.	1073.	1153.	-1935.	3762.	-4359.	.0022	.0321	.0242	-.0148	-.0234	.0217	2438.
							.2300	-464.	1036.	1122.	-1864.	3549.	-4203.	.0014	.0314	.0227	-.0134	-.0231	.0207	2331.
							.2310	-389.	937.	1008.	-1686.	3102.	-3776.	.0003	.0292	.0197	-.0123	-.0223	.0192	2074.
							.2320	-334.	785.	853.	-1415.	2444.	-3108.	.0001	.0257	.0155	-.0115	-.0211	.0173	1685.
							.2330	-344.	588.	686.	-1070.	1612.	-2253.	-.0004	.0211	.0103	-.0111	-.0194	.0149	1192.
							.2340	-365.	361.	492.	-675.	659.	-1274.	-.0008	.0158	.0044	-.0107	-.0174	.0121	636.
							.2350	-356.	116.	268.	-251.	-361.	-228.	-.0012	.0100	-.0020	-.0103	-.0150	.0089	199.
							.2360	-348.	-135.	36.	183.	-1398.	836.	-.0014	.0041	-.0086	-.0099	-.0124	.0055	658.
							.2370	-388.	-379.	-173.	606.	-2406.	1867.	-.0014	-.0014	-.0149	-.0094	-.0097	.0023	1246.
							.2380	-447.	-602.	-361.	990.	-3343.	2800.	-.0014	-.0063	-.0207	-.0091	-.0072	-.0006	1795.
							.2390	-466.	-790.	-542.	1309.	-4165.	3572.	-.0011	-.0103	-.0257	-.0089	-.0050	-.0031	2264.
							.2400	-464.	-932.	-697.	1544.	-4825.	4135.	-.0007	-.0131	-.0296	-.0087	-.0032	-.0051	2624.
							.2410	-515.	-1022.	-788.	1687.	-5279.	4461.	-.0000	-.0145	-.0322	-.0084	-.0017	-.0067	2855.
							.2420	-671.	-1056.	-786.	1734.	-5497.	4539.	.0008	-.0144	-.0333	-.0078	-.0007	-.0076	2944.
							.2430	-855.	-1032.	-720.	1683.	-5465.	4365.	.0018	-.0128	-.0328	-.0069	-.0002	-.0080	2887.
							.2440	-943.	-951.	-642.	1530.	-5189.	3942.	.0032	-.0098	-.0309	-.0059	-.0003	-.0077	2686.
							.2450	-938.	-818.	-553.	1283.	-4690.	3291.	.0047	-.0055	-.0275	-.0052	-.0009	-.0067	2356.
							.2460	-982.	-641.	-400.	957.	-3993.	2453.	.0065	-.0003	-.0227	-.0048	-.0021	-.0050	1919.
							.2470	-1202.	-431.	-138.	572.	-3126.	1477.	.0084	.0058	-.0168	-.0047	-.0038	-.0028	1407.
							.2480	-1494.	-198.	183.	149.	-2124.	414.	.0105	.0122	-.0100	-.0048	-.0058	-.0000	870.
							.2490	-1608.	44.	451.	-291.	-1027.	-686.	.0128	.0186	-.0027	-.0052	-.0081	.0029	509.
							.2500	-1539.	283.	653.	-727.	113.	-1761.	.0152	.0248	.0049	-.0060	-.0106	.0060	766.
							.2510	-1527.	505.	875.	-1132.	1238.	-2741.	.0176	.0303	.0124	-.0072	-.0130	.0092	1290.
							.2520	-1731.	697.	1171.	-1486.	2294.	-3576.	.0199	.0348	.0196	-.0090	-.0154	.0125	1806.
							.2530	-2038.	853.	1484.	-1778.	3237.	-4236.	.0221	.0381	.0261	-.0114	-.0177	.0155	2255.
							.2540	-2265.	964.	1733.	-1994.	4037.	-4699.	.0242	.0400	.0316	-.0144	-.0196	.0182	2612.
							.2550	-2370.	1027.	1895.	-2122.	4673.	-4943.	.0262	.0404	.0359	-.0176	-.0210	.0203	2859.
							.2560	-2525.	1036.	2035.	-2150.	5128.	-4945.	.0281	.0392	.0387	-.0210	-.0218	.0219	2986.
							.2570	-2997.	994.	2261.	-2080.	5388.	-4711.	.0297	.0364	.0401	-.0243	-.0220	.0229	2991.
							.2580	-3606.	906.	2497.	-1929.	5447.	-4280.	.0314	.0323	.0397	-.0278	-.0216	.0232	2885.
							.2590	-3909.	780.	2565.	-1718.	5316.	-3701.	.0331	.0270	.0376	-.0313	-.0206	.0227	2689.
							.2600	-3875.	624.	2457.	-1452.	5019.	-2999.	.0351	.0206	.0338	-.0347	-.0188	.0215	2418.
							.2610	-3893.	441.	2338.	-1130.	4592.	-2184.	.0369	.0136	.0285	-.0378	-.0165	.0197	2090.
							.2620	-4222.	240.	2322.	-763.	4070.	-1293.	.0387	.0061	.0219	-.0402	-.0135	.0175	1741.
							.2630	-4567.	37.	2298.	-385.	3492.	-407.	.0403	-.0016	.0141	-.0420	-.0099	.0149	1419.
							.2640	-4313.	-154.	2023.	-34.	2901.	391.	.0418	-.0091	.0055	-.0433	-.0060	.0115	1175.
							.2650	-3535.	-326.	1538.	280.	2339.	1075.	.0429	-.0161	-.0038	-.0437	-.0017	.0077	1039.

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DIS/ADLPIPE

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18.28.53.

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

.2550	-2375.	1027.	1895.	-2122.	4675.	-4943.	.0262	.0404	.0359	-.0176	-.0210	.0203	2859.
.2560	-2525.	1036.	2035.	-2150.	5128.	-4945.	.0281	.0392	.0387	-.0210	-.0218	.0219	2986.
.2570	-2997.	994.	2261.	-2080.	5388.	-4711.	.0297	.0364	.0401	-.0243	-.0220	.0229	2991.
.2580	-3606.	906.	2497.	-1929.	5447.	-4280.	.0314	.0323	.0397	-.0278	-.0216	.0232	2885.
.2590	-3909.	780.	2565.	-1718.	5316.	-3701.	.0331	.0270	.0376	-.0313	-.0206	.0227	2689.
.2600	-3875.	624.	2457.	-1452.	5019.	-2999.	.0351	.0206	.0338	-.0347	-.0188	.0215	2418.
.2610	-3893.	441.	2338.	-1130.	4592.	-2184.	.0369	.0136	.0285	-.0378	-.0165	.0197	2090.
.2620	-4222.	240.	2302.	-763.	4070.	-1293.	.0387	.0061	.0219	-.0402	-.0135	.0175	1741.
.2630	-4567.	37.	2298.	-385.	3492.	-407.	.0403	-.0016	.0141	-.0420	-.0099	.0149	1419.
.2640	-4313.	-154.	2023.	-74.	2901.	391.	.0418	-.0091	.0055	-.0433	-.0060	.0115	1175.
.2650	-3535.	-326.	1538.	280.	2339.	1075.	.0429	-.0161	-.0038	-.0437	-.0017	.0077	1039.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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

CONDITION 24
LOADS
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ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	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)
44	1	820					.2660	-3005.	-477.	1167.	567.	1840.	1659.	.0431	-.0226	-.0132	-.0429	.0028	.0036	1020.
							.2670	-3107.	-602.	1075.	823.	1437.	2136.	.0421	-.0282	-.0225	-.0408	.0073	-.0004	1085.
							.2680	-3233.	-692.	1021.	1024.	1152.	2452.	.0400	-.0330	-.0314	-.0376	.0118	-.0045	1162.
							.2690	-2800.	-741.	773.	1148.	999.	2569.	.0368	-.0368	-.0399	-.0336	.0159	-.0086	1198.
							.2700	-2150.	-751.	473.	1206.	981.	2511.	.0325	-.0398	-.0478	-.0288	.0196	-.0125	1185.
							.2710	-2129.	-726.	467.	1218.	1092.	2329.	.0270	-.0418	-.0550	-.0233	.0227	-.0159	1142.
							.2720	-2721.	-668.	749.	1185.	1321.	2031.	.0204	-.0432	-.0616	-.0169	.0251	-.0187	1082.
							.2730	-2980.	-576.	930.	1092.	1650.	1591.	.0134	-.0440	-.0678	-.0102	.0268	-.0214	1019.
							.2740	-2486.	-454.	833.	944.	2050.	1030.	.0063	-.0445	-.0739	-.0032	.0276	-.0238	996.
							.2750	-1873.	-317.	710.	780.	2474.	443.	-.0008	-.0450	-.0800	.0039	.0275	-.0256	1056.
							.2760	-1912.	-179.	865.	637.	2868.	-78.	-.0080	-.0458	-.0862	.0110	.0265	-.0265	1179.
							.2770	-2349.	-48.	1184.	518.	3176.	-511.	-.0149	-.0470	-.0928	.0174	.0245	-.0265	1307.
							.2780	-2269.	75.	1282.	409.	3356.	-878.	-.0211	-.0489	-.1001	.0227	.0216	-.0259	1402.
							.2790	-1418.	185.	1047.	315.	3378.	-1163.	-.0266	-.0517	-.1082	.0268	.0179	-.0249	1439.
							.2800	-499.	267.	759.	272.	3216.	-1288.	-.0317	-.0555	-.1170	.0300	.0135	-.0234	1395.
							.2810	-233.	310.	705.	310.	2849.	-1186.	-.0367	-.0604	-.1266	.0324	.0086	-.0213	1245.
							.2820	-418.	310.	794.	424.	2254.	-860.	-.0416	-.0664	-.1368	.0340	.0034	-.0186	983.
							.2830	-256.	274.	696.	588.	1417.	-359.	-.0464	-.0734	-.1476	.0343	-.0022	-.0157	632.
							.2840	486.	202.	313.	792.	343.	294.	-.0511	-.0813	-.1589	.0331	-.0081	-.0125	366.
							.2850	1139.	93.	-79.	1052.	-942.	1119.	-.0561	-.0897	-.1705	.0308	-.0141	-.0090	723.
							.2860	1024.	-51.	-195.	1375.	-2387.	2112.	-.0615	-.0985	-.1819	.0278	-.0201	-.0049	1393.
							.2870	377.	-217.	-124.	1732.	-3931.	3192.	-.0672	-.1073	-.1928	.0246	-.0259	-.0006	2148.
							.2880	26.	-386.	-192.	2076.	-5503.	4239.	-.0728	-.1156	-.2033	.0211	-.0314	.0034	2909.
							.2890	226.	-544.	-491.	2376.	-7036.	5177.	-.0779	-.1230	-.2129	.0176	-.0366	.0071	3633.
							.2900	322.	-686.	-742.	2632.	-8472.	5998.	-.0826	-.1293	-.2215	.0143	-.0414	.0106	4297.
							.2910	-269.	-806.	-694.	2847.	-9751.	6692.	-.0867	-.1341	-.2286	.0115	-.0459	.0142	4881.
							.2920	-1178.	-892.	-488.	2995.	-10816.	7191.	-.0899	-.1371	-.2342	.0091	-.0501	.0180	5349.
							.2930	-1588.	-929.	-446.	3039.	-11612.	7403.	-.0916	-.1382	-.2383	.0071	-.0541	.0214	5659.
							.2940	-1382.	-910.	-605.	2970.	-12094.	7294.	-.0915	-.1373	-.2407	.0057	-.0577	.0244	5791.
							.2950	-1235.	-840.	-686.	2807.	-12234.	6898.	-.0899	-.1343	-.2412	.0052	-.0610	.0271	5747.
							.2960	-1596.	-723.	-501.	2568.	-12024.	6259.	-.0869	-.1294	-.2399	.0060	-.0540	.0296	5536.
							.2970	-2081.	-563.	-209.	2251.	-11479.	5382.	-.0825	-.1229	-.2367	.0078	-.0667	.0316	5167.
							.2980	-2072.	-364.	-67.	1849.	-10626.	4274.	-.0766	-.1150	-.2319	.0103	-.0592	.0331	4656.
							.2990	-1591.	-135.	-74.	1384.	-9507.	2992.	-.0696	-.1061	-.2256	.0133	-.0715	.0341	4038.
							.3000	-1235.	105.	7.	899.	-8167.	1638.	-.0621	-.0967	-.2178	.0168	-.0736	.0347	3362.
							.3010	-1376.	341.	318.	430.	-6659.	301.	-.0543	-.0871	-.2087	.0207	-.0755	.0351	2681.
							.3020	-1732.	562.	731.	-8.	-5041.	-974.	-.0467	-.0779	-.1986	.0247	-.0770	.0352	2060.
							.3030	-1814.	762.	1036.	-413.	-3381.	-2162.	-.0393	-.0695	-.1880	.0287	-.0782	.0347	1619.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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18.28.53.

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

.2930	-1588.	-929.	-446.	3039.	-11612.	7403.	-.0916	-.1362	-.2383	.0071	-.0541	.0214	5659.
.2940	-1382.	-910.	-605.	2970.	-12094.	7294.	-.0915	-.1373	-.2407	.0057	-.0577	.0244	5791.
.2950	-1235.	-840.	-686.	2807.	-12234.	6898.	-.0899	-.1343	-.2412	.0052	-.0610	.0271	5747.
.2960	-1596.	-723.	-501.	2568.	-12024.	6259.	-.0869	-.1294	-.2399	.0060	-.0540	.0296	5536.
.2970	-2081.	-563.	-209.	2251.	-11479.	5382.	-.0825	-.1229	-.2367	.0078	-.0567	.0316	5167.
.2980	-2072.	-364.	-67.	1849.	-10626.	4274.	-.0766	-.1150	-.2319	.0103	-.0592	.0331	4656.
.2990	-1591.	-135.	-74.	1384.	-9507.	2992.	-.0696	-.1061	-.2256	.0133	-.0715	.0341	4038.
.3000	-1235.	105.	7.	899.	-8167.	1638.	-.0621	-.0967	-.2178	.0168	-.0736	.0347	3362.
.3010	-1376.	341.	318.	430.	-6659.	301.	-.0543	-.0871	-.2087	.0207	-.0755	.0351	2681.
.3020	-1732.	562.	731.	-8.	-5041.	-974.	-.0467	-.0779	-.1986	.0247	-.0770	.0352	2060.
.3030	-1814.	762.	1036.	-413.	-3381.	-2162.	-.0393	-.0695	-.1880	.0287	-.0782	.0347	1619.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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

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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
44	1	820					.3040	-1604.	930.	1213.	-768.	-1746.	-3209.	-.0324	-.0621	-.1771	.0323	-.0791	.0337	1498.
							.3050	-1561.	1054.	1437.	-1045.	-204.	-4038.	-.0264	-.0562	-.1662	.0357	-.0796	.0324	1676.
							.3060	-2000.	1127.	1826.	-1222.	1190.	-4599.	-.0213	-.0519	-.1558	.0388	-.0798	.0310	1968.
							.3070	-2654.	1150.	2267.	-1300.	2391.	-4895.	-.0171	-.0495	-.1460	.0413	-.0796	.0294	2247.
							.3080	-3024.	1128.	2548.	-1292.	3367.	-4955.	-.0137	-.0489	-.1374	.0430	-.0791	.0276	2459.
							.3090	-3032.	1063.	2635.	-1201.	4099.	-4793.	-.0109	-.0500	-.1302	.0440	-.0781	.0255	2576.
							.3100	-3094.	959.	2699.	-1024.	4572.	-4402.	-.0087	-.0528	-.1246	.0443	-.0768	.0236	2580.
							.3110	-3490.	822.	2852.	-766.	4785.	-3798.	-.0072	-.0571	-.1206	.0441	-.0750	.0218	2471.
							.3120	-3924.	663.	2978.	-455.	4745.	-3045.	-.0062	-.0626	-.1185	.0434	-.0728	.0202	2270.
							.3130	-3926.	495.	2889.	-124.	4473.	-2219.	-.0054	-.0690	-.1181	.0421	-.0704	.0187	2004.
							.3140	-3519.	328.	2600.	214.	3999.	-1360.	-.0049	-.0761	-.1194	.0404	-.0676	.0172	1697.
							.3150	-3159.	166.	2305.	561.	3353.	-477.	-.0050	-.0834	-.1221	.0384	-.0645	.0160	1378.
							.3160	-3088.	14.	2109.	911.	2572.	408.	-.0057	-.0907	-.1261	.0365	-.0611	.0153	1107.
							.3170	-3025.	-120.	1905.	1241.	1690.	1243.	-.0071	-.0978	-.1309	.0344	-.0576	.0150	978.
							.3180	-2623.	-228.	1558.	1525.	745.	1976.	-.0092	-.1044	-.1364	.0322	-.0539	.0149	1045.
							.3190	-1989.	-308.	1118.	1756.	-225.	2588.	-.0120	-.1102	-.1423	.0300	-.0502	.0151	1258.
							.3200	-1535.	-361.	760.	1939.	-1180.	3091.	-.0158	-.1153	-.1481	.0281	-.0463	.0154	1539.
							.3210	-1415.	-388.	554.	2079.	-2081.	3487.	-.0206	-.1193	-.1535	.0267	-.0425	.0160	1830.
							.3220	-1376.	-391.	400.	2169.	-2900.	3760.	-.0261	-.1225	-.1585	.0257	-.0386	.0165	2095.
							.3230	-1159.	-369.	197.	2204.	-3619.	3902.	-.0323	-.1246	-.1627	.0250	-.0347	.0170	2312.
							.3240	-824.	-329.	-32.	2192.	-4230.	3933.	-.0387	-.1257	-.1661	.0244	-.0310	.0175	2479.
							.3250	-645.	-276.	-173.	2147.	-4730.	3889.	-.0453	-.1261	-.1686	.0239	-.0275	.0179	2604.
							.3260	-706.	-218.	-193.	2079.	-5114.	3799.	-.0518	-.1256	-.1700	.0235	-.0242	.0183	2689.
							.3270	-798.	-157.	-179.	1991.	-5379.	3667.	-.0578	-.1245	-.1706	.0232	-.0210	.0186	2732.
							.3280	-704.	-98.	-220.	1883.	-5525.	3493.	-.0629	-.1229	-.1702	.0228	-.0180	.0185	2730.
							.3290	-455.	-43.	-306.	1762.	-5558.	3295.	-.0669	-.1208	-.1690	.0223	-.0151	.0179	2687.
							.3300	-256.	1.	-359.	1644.	-5489.	3102.	-.0697	-.1184	-.1671	.0219	-.0122	.0169	2615.
							.3310	-179.	30.	-352.	1538.	-5338.	2938.	-.0712	-.1157	-.1643	.0212	-.0094	.0155	2522.
							.3320	-91.	41.	-346.	1445.	-5128.	2808.	-.0714	-.1129	-.1609	.0203	-.0066	.0139	2417.
							.3330	138.	34.	-399.	1363.	-4875.	2711.	-.0703	-.1100	-.1569	.0190	-.0039	.0118	2304.
							.3340	462.	9.	-494.	1295.	-4593.	2649.	-.0681	-.1069	-.1523	.0174	-.0011	.0094	2190.
							.3350	685.	-34.	-556.	1245.	-4287.	2629.	-.0649	-.1037	-.1470	.0157	.0019	.0066	2079.
							.3360	741.	-93.	-557.	1211.	-3960.	2641.	-.0610	-.1002	-.1411	.0139	.0050	.0036	1971.
							.3370	744.	-163.	-546.	1184.	-3614.	2661.	-.0566	-.0965	-.1346	.0122	.0083	.0002	1863.
							.3380	783.	-238.	-558.	1156.	-3250.	2667.	-.0518	-.0925	-.1276	.0105	.0119	-.0034	1750.
							.3390	780.	-314.	-561.	1122.	-2870.	2643.	-.0469	-.0880	-.1199	.0090	.0156	-.0071	1629.
							.3400	629.	-385.	-510.	1079.	-2470.	2581.	-.0419	-.0829	-.1116	.0076	.0196	-.0108	1498.
							.3410	314.	-446.	-394.	1022.	-2043.	2463.	-.0370	-.0774	-.1027	.0065	.0236	-.0144	1348.

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ADLPIPE STRESS ANALYSIS

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

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

.3310	-179.	30.	-352.	1538.	-5338.	2938.	-0.0712	-0.1157	-0.1643	.0212	-0.0094	.0155	2522.
.3320	-91.	41.	-346.	1445.	-5128.	2808.	-0.0714	-0.1129	-0.1609	.0203	-0.0066	.0139	2417.
.3330	138.	34.	-399.	1363.	-4875.	2711.	-0.0703	-0.1100	-0.1569	.0190	-0.0039	.0118	2304.
.3340	462.	9.	-494.	1295.	-4593.	2649.	-0.0681	-0.1069	-0.1523	.0174	-0.0011	.0094	2190.
.3350	685.	-34.	-556.	1245.	-4287.	2629.	-0.0649	-0.1037	-0.1470	.0157	.0019	.0066	2079.
.3360	741.	-53.	-557.	1211.	-3960.	2641.	-0.0610	-0.1002	-0.1411	.0139	.0050	.0036	1971.
.3370	744.	-163.	-546.	1184.	-3614.	2661.	-0.0566	-0.0965	-0.1346	.0122	.0083	.0002	1863.
.3380	783.	-238.	-558.	1156.	-3250.	2667.	-0.0518	-0.0925	-0.1276	.0105	.0119	-0.0034	1750.
.3390	780.	-314.	-561.	1122.	-2870.	2643.	-0.0469	-0.0880	-0.1199	.0090	.0156	-0.0071	1629.
.3400	629.	-385.	-510.	1079.	-2470.	2581.	-0.0419	-0.0829	-0.1116	.0076	.0196	-0.0108	1498.
.3410	314.	-446.	-394.	1022.	-2043.	2463.	-0.0370	-0.0774	-0.1027	.0065	.0236	-0.0144	1348.

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CONDITION 24

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

SECTION	44	MEMBER	1	SEQUENCE	820	LOCATION	BEG	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3420	-52.	-490.	-256.	941.	-1577.	2263.	-0.0321	-0.0711	-0.0933	.0058	.0277	-0.0179	1170.		
.3430	-350.	-512.	-140.	829.	-1063.	1962.	-0.0271	-0.0643	-0.0835	.0056	.0318	-0.0211	955.		
.3440	-571.	-508.	-46.	682.	-492.	1552.	-0.0220	-0.0569	-0.0734	.0059	.0359	-0.0242	708.		
.3450	-842.	-477.	81.	505.	138.	1041.	-0.0168	-0.0489	-0.0630	.0068	.0398	-0.0269	468.		
.3460	-1177.	-419.	250.	299.	821.	439.	-0.0115	-0.0406	-0.0524	.0080	.0434	-0.0292	392.		
.3470	-1429.	-334.	400.	65.	1548.	-248.	-0.0059	-0.0321	-0.0418	.0096	.0467	-0.0310	630.		
.3480	-1457.	-227.	474.	-190.	2308.	-995.	-0.0002	-0.0236	-0.0312	.0113	.0495	-0.0323	1011.		
.3490	-1334.	-103.	501.	-452.	3083.	-1763.	.0057	-0.0153	-0.0208	.0131	.0518	-0.0330	1437.		
.3500	-1227.	28.	547.	-702.	3853.	-2505.	.0113	-0.0075	-0.0106	.0151	.0535	-0.0332	1866.		
.3510	-1172.	160.	623.	-931.	4593.	-3184.	.0167	-0.0005	-0.0006	.0171	.0546	-0.0328	2274.		
.3520	-1046.	285.	674.	-1132.	5272.	-3775.	.0216	.0055	-0.0090	.0189	.0550	-0.0320	2642.		
.3530	-726.	397.	644.	-1296.	5865.	-4248.	.0258	.0104	.0181	.0204	.0548	-0.0307	2952.		
.3540	-349.	487.	584.	-1408.	6344.	-4561.	.0290	.0139	.0268	.0216	.0539	-0.0291	3186.		
.3550	-168.	548.	594.	-1454.	6886.	-4679.	.0311	.0160	.0349	.0225	.0524	-0.0269	3326.		
.3560	-220.	577.	683.	-1431.	6869.	-4592.	.0319	.0166	.0424	.0228	.0503	-0.0244	3365.		
.3570	-279.	573.	754.	-1347.	6879.	-4313.	.0316	.0158	.0492	.0227	.0478	-0.0216	3302.		
.3580	-156.	538.	729.	-1207.	6707.	-3859.	.0301	.0137	.0551	.0220	.0448	-0.0187	3142.		
.3590	46.	474.	647.	-1014.	6351.	-3238.	.0276	.0104	.0602	.0210	.0415	-0.0157	2890.		
.3600	91.	382.	603.	-771.	5819.	-2466.	.0242	.0063	.0643	.0196	.0380	-0.0125	2555.		
.3610	-71.	270.	619.	-494.	5122.	-1588.	.0200	.0015	.0676	.0181	.0345	-0.0092	2161.		
.3620	-205.	149.	600.	-206.	4281.	-673.	.0154	-0.0035	.0698	.0164	.0310	-0.0061	1741.		
.3630	-81.	28.	456.	70.	3324.	222.	.0107	-0.0084	.0711	.0147	.0276	-0.0033	1337.		
.3640	216.	-88.	225.	327.	2283.	1064.	.0061	-0.0129	.0716	.0131	.0246	-0.0009	1019.		
.3650	431.	-193.	13.	562.	1189.	1834.	.0016	-0.0167	.0713	.0119	.0220	.0014	906.		
.3660	480.	-282.	-140.	762.	71.	2498.	-0.0027	-0.0195	.0705	.0111	.0200	.0034	1048.		
.3670	587.	-348.	-322.	905.	-1041.	3004.	-0.0065	-0.0210	.0693	.0108	.0185	.0050	1326.		
.3680	992.	-384.	-629.	976.	-2114.	3310.	-0.0097	-0.0211	.0678	.0109	.0176	.0060	1624.		
.3690	1579.	-391.	-1007.	977.	-3115.	3415.	-0.0123	-0.0196	.0664	.0116	.0174	.0065	1896.		
.3700	2006.	-372.	-1314.	921.	-4015.	3342.	-0.0146	-0.0167	.0653	.0130	.0179	.0065	2129.		
.3710	2115.	-330.	-1482.	816.	-4790.	3106.	-0.0165	-0.0122	.0647	.0151	.0192	.0060	2314.		
.3720	2163.	-266.	-1613.	654.	-5421.	2701.	-0.0180	-0.0062	.0648	.0179	.0211	.0050	2445.		
.3730	2475.	-180.	-1836.	435.	-5898.	2131.	-0.0189	.0010	.0658	.0210	.0236	.0034	2522.		
.3740	2919.	-81.	-2099.	171.	-6210.	1433.	-0.0193	.0092	.0679	.0243	.0267	.0013	2558.		
.3750	3093.	24.	-2232.	-113.	-6349.	667.	-0.0193	.0183	.0711	.0279	.0303	-0.0012	2562.		
.3760	2843.	128.	-2173.	-403.	-6311.	-130.	-0.0189	.0279	.0755	.0317	.0342	-0.0039	2538.		
.3770	2526.	230.	-2065.	-698.	-6092.	-952.	-0.0177	.0379	.0812	.0353	.0385	-0.0069	2490.		
.3780	2604.	327.	-2096.	-1000.	-5699.	-1791.	-0.0156	.0478	.0880	.0386	.0429	-0.0103	2431.		
.3790	3022.	414.	-2246.	-1291.	-5144.	-2603.	-0.0126	.0575	.0959	.0414	.0474	-0.0140	2371.		

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DIS/ADLPIPE

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

CONDITION 24

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INTERNAL FORCES IN THE PIPING
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.3690	1579.	-391.	-1007.	977.	-2114.	3415.	-.0123	-.0196	.0664	.0116	.0174	.0065	1896.
.3700	2006.	-372.	-1314.	921.	-4015.	3342.	-.0146	-.0167	.0653	.0130	.0179	.0065	2129.
.3710	2115.	-330.	-1482.	316.	-4790.	3106.	-.0165	-.0122	.0647	.0151	.0192	.0060	2314.
.3720	2167.	-266.	-1613.	654.	-5421.	2701.	-.0180	-.0062	.0648	.0179	.0211	.0050	2445.
.3730	2475.	-180.	-1836.	435.	-5898.	2131.	-.0189	.0010	.0658	.0210	.0236	.0034	2522.
.3740	2919.	-81.	-2099.	171.	-6210.	1433.	-.0193	.0092	.0679	.0243	.0267	.0013	2558.
.3750	3093.	24.	-2232.	-113.	-6349.	667.	-.0193	.0183	.0711	.0279	.0303	-.0012	2562.
.3760	2843.	128.	-2173.	-403.	-6311.	-130.	-.0189	.0279	.0755	.0317	.0342	-.0039	2538.
.3770	2526.	270.	-2065.	-698.	-6092.	-952.	-.0177	.0379	.0812	.0353	.0385	-.0069	2490.
.3780	2604.	327.	-2096.	-1000.	-5699.	-1791.	-.0156	.0478	.0880	.0386	.0429	-.0103	2431.
.3790	3022.	414.	-2246.	-1291.	-5144.	-2603.	-.0126	.0575	.0959	.0414	.0474	-.0140	2371.

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

SECTION	44	MEMBER	1	SEQUENCE	820	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)		
.3800	3280.	482.	-2310.	-1549.	-4445.	-3324.	-.0089	.0667	.1048	.0437	.0518	-.0175	2312.		
.3810	2978.	529.	-2128.	-1758.	-3626.	-3921.	-.0045	.0752	.1148	.0455	.0561	-.0208	2256.		
.3820	2472.	557.	-1846.	-1932.	-2707.	-4414.	.0006	.0829	.1257	.0464	.0601	-.0238	2218.		
.3830	2397.	572.	-1726.	-2086.	-1705.	-4837.	.0067	.0896	.1371	.0462	.0638	-.0268	2222.		
.3840	2730.	573.	-1759.	-2211.	-634.	-5176.	.0135	.0952	.1489	.0452	.0671	-.0297	2273.		
.3850	2892.	556.	-1713.	-2286.	484.	-5386.	.0207	.0998	.1611	.0436	.0701	-.0322	2356.		
.3860	2565.	521.	-1461.	-2303.	1623.	-5452.	.0282	.1033	.1734	.0414	.0728	-.0341	2463.		
.3870	2153.	475.	-1172.	-2282.	2752.	-5411.	.0358	.1057	.1857	.0385	.0751	-.0355	2602.		
.3880	2221.	424.	-1080.	-2246.	3841.	-5307.	.0436	.1072	.1976	.0347	.0769	-.0365	2779.		
.3890	2665.	371.	-1148.	-2194.	4868.	-5141.	.0512	.1078	.2090	.0300	.0783	-.0370	2974.		
.3900	2872.	313.	-1128.	-2110.	5819.	-4889.	.0582	.1076	.2200	.0248	.0793	-.0367	3165.		
.3910	2551.	253.	-900.	-1994.	6686.	-4556.	.0644	.1067	.2303	.0193	.0801	-.0356	3344.		
.3920	2138.	199.	-644.	-1867.	7464.	-4200.	.0696	.1054	.2397	.0136	.0806	-.0342	3518.		
.3930	2187.	156.	-588.	-1754.	8144.	-3872.	.0741	.1036	.2481	.0076	.0809	-.0325	3687.		
.3940	2565.	126.	-680.	-1654.	8713.	-3568.	.0777	.1016	.2554	.0015	.0811	-.0305	3836.		
.3950	2676.	102.	-677.	-1546.	9159.	-3242.	.0801	.0993	.2615	-.0046	.0810	-.0281	3948.		
.3960	2292.	81.	-487.	-1422.	9475.	-2878.	.0813	.0969	.2664	-.0104	.0808	-.0252	4015.		
.3970	1887.	67.	-303.	-1299.	9660.	-2515.	.0816	.0944	.2699	-.0161	.0804	-.0219	4040.		
.3980	1980.	64.	-336.	-1196.	9723.	-2195.	.0813	.0920	.2719	-.0218	.0798	-.0186	4029.		
.3990	2412.	70.	-519.	-1109.	9676.	-1916.	.0803	.0895	.2724	-.0273	.0791	-.0155	3983.		
.4000	2606.	78.	-614.	-1016.	9527.	-1640.	.0787	.0871	.2715	-.0323	.0783	-.0125	3901.		

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)
.2940	1382.	910.	605.	-2970.	12094.	-7294.	-.0915	-.1373	-.2407	.0057	-.0577	.0244	5791.

SECTION	44	MEMBER	1	SEQUENCE	821	LOCATION	END	TYPE	RU						
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)		
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.		
.0010	-0.	-.	0.	0.	-0.	-0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	0.		
.0020	-3.	-0.	1.	0.	-0.	-0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	0.		
.0030	-6.	-0.	2.	0.	-0.	0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	0.		

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

.2940 1382. 910. 605. -2970. 12094. -7294. -.0915 -.1373 -.2407 .0057 -.0577 .0244 5791.

SECTION	44	MEMBER	1	SEQUENCE	821	LOCATION	END	TYPE	RU	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	(PSI)	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	-0.	-0.	0.	0.	-0.	-0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	.0000	0.
.0020	-3.	-0.	1.	0.	-0.	-0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	.0000	0.
.0030	-6.	-0.	2.	0.	-0.	0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	.0000	0.

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

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

SECTION	44	MEMBER	1	SEQUENCE	821	LOCATION	END	TYPE	RU	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	(PSI)	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
.0040	-8.	0.	3.	0.	-0.	0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	.0000	0.
.0050	-8.	0.	3.	0.	-1.	0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	.0000	0.
.0060	-7.	0.	3.	0.	-1.	0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	.0000	0.
.0070	-2.	0.	1.	0.	-2.	-0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	.0000	1.
.0080	13.	0.	-5.	0.	-2.	-0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	.0000	1.
.0090	31.	0.	-13.	0.	-2.	-1.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	.0000	1.
.0100	32.	-0.	-13.	-1.	-1.	-1.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	.0000	1.
.0110	11.	-1.	-5.	-3.	-0.	-2.	-.0000	-.0000	-.0000	.0001	-.0000	-.0000	-.0000	1.
.0120	-9.	-1.	4.	-6.	1.	-2.	-.0000	-.0000	-.0000	.0002	.0000	.0000	-.0001	2.
.0130	-4.	-2.	2.	-9.	1.	-2.	.0000	.0000	-.0000	.0004	.0000	.0000	-.0002	4.
.0140	20.	-2.	-7.	-13.	-0.	-1.	.0000	.0000	-.0000	.0006	.0000	.0000	-.0002	5.
.0150	36.	-2.	-13.	-17.	-0.	-0.	.0000	.0000	-.0000	.0009	.0000	.0000	-.0003	7.
.0160	27.	-3.	-9.	-22.	2.	0.	-.0000	.0000	-.0000	.0011	.0000	.0000	-.0004	9.
.0170	6.	-4.	-2.	-26.	6.	0.	-.0000	.0000	-.0000	.0014	.0000	.0000	-.0005	11.
.0180	4.	-6.	-3.	-30.	13.	0.	-.0001	.0001	.0000	.0016	-.0000	.0000	-.0005	13.
.0190	26.	-7.	-16.	-34.	22.	0.	-.0001	.0001	.0000	.0018	-.0001	.0000	-.0006	16.
.0200	49.	-8.	-30.	-39.	33.	1.	-.0001	.0001	.0000	.0021	-.0001	.0000	-.0007	20.
.0210	38.	-10.	-30.	-43.	43.	3.	-.0002	.0002	.0001	.0024	-.0002	.0000	-.0008	24.
.0220	-1.	-10.	-16.	-50.	51.	8.	-.0002	.0002	.0001	.0029	-.0003	.0000	-.0010	29.
.0230	-18.	-9.	-11.	-55.	54.	17.	-.0001	.0003	.0002	.0033	-.0003	.0000	-.0012	32.
.0240	2.	-6.	-19.	-53.	54.	29.	-.0001	.0004	.0002	.0035	-.0003	.0000	-.0013	33.
.0250	17.	-0.	-26.	-41.	55.	42.	-.0000	.0004	.0003	.0033	-.0004	.0000	-.0013	32.
.0260	5.	6.	-24.	-28.	60.	56.	.0001	.0005	.0004	.0029	-.0005	.0000	-.0012	35.
.0270	-26.	10.	-16.	-24.	68.	70.	.0002	.0006	.0005	.0028	-.0006	.0000	-.0013	41.
.0280	-72.	11.	-4.	-23.	79.	78.	.0003	.0006	.0005	.0027	-.0007	.0000	-.0013	45.
.0290	-144.	8.	18.	-14.	86.	72.	.0004	.0006	.0005	.0022	-.0009	.0000	-.0010	45.
.0300	-197.	4.	36.	-6.	84.	65.	.0006	.0007	.0013	.0017	-.0010	.0000	-.0008	43.
.0310	-163.	6.	22.	2.	69.	71.	.0009	.0007	.0012	.0014	-.0011	.0000	-.0008	40.
.0320	-48.	18.	-19.	23.	38.	93.	.0011	.0007	.0014	.0007	-.0012	.0000	-.0007	41.
.0330	-3.	36.	-24.	56.	-8.	121.	.0013	.0006	.0017	-.0005	-.0011	.0000	-.0006	54.
.0340	-174.	50.	62.	87.	-61.	142.	.0015	.0005	.0020	-.0019	-.0010	.0000	-.0003	71.
.0350	-425.	56.	182.	115.	-111.	145.	.0017	.0004	.0023	-.0035	-.0009	.0000	.0002	87.
.0360	-414.	57.	191.	138.	-156.	132.	.0019	.0002	.0026	-.0051	-.0008	.0000	.0008	99.
.0370	-67.	59.	59.	149.	-196.	116.	.0021	-.0000	.0028	-.0063	-.0009	.0000	.0012	109.
.0380	207.	63.	-45.	148.	-228.	105.	.0022	-.0004	.0030	-.0069	-.0009	.0000	.0012	117.
.0390	16.	67.	43.	153.	-251.	89.	.0022	-.0008	.0032	-.0075	-.0009	.0000	.0013	123.
.0400	-432.	66.	238.	171.	-269.	56.	.0022	-.0012	.0033	-.0087	-.0009	.0000	.0018	130.
.0410	-558.	62.	303.	180.	-286.	11.	.0022	-.0018	.0033	-.0100	-.0008	.0000	.0023	136.

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.0310	-163.	6.	22.	2.	69.	71.	.0009	.0007	.0012	.0014	.0007	-.0011	-.0008	40.
.0320	-48.	18.	-19.	23.	38.	93.	.0011	.0007	.0014	.0007	-.0012	-.0007	-.0007	41.
.0330	-3.	36.	-24.	56.	-8.	121.	.0013	.0006	.0017	-.0005	-.0011	-.0006	-.0006	54.
.0340	-174.	50.	62.	87.	-61.	142.	.0015	.0005	.0020	-.0019	-.0010	-.0010	-.0003	71.
.0350	-425.	56.	182.	115.	-111.	145.	.0017	.0004	.0023	-.0035	-.0009	-.0009	.0002	87.
.0360	-414.	57.	191.	138.	-156.	132.	.0019	.0002	.0026	-.0051	-.0008	-.0008	.0008	99.
.0370	-67.	59.	59.	149.	-196.	116.	.0021	-.0000	.0028	-.0063	-.0009	.0012	.0012	109.
.0380	207.	63.	-45.	148.	-228.	105.	.0022	-.0004	.0030	-.0069	-.0009	.0012	.0012	117.
.0390	16.	67.	43.	153.	-251.	39.	.0022	-.0008	.0032	-.0075	-.0009	.0013	.0013	123.
.0400	-432.	66.	238.	171.	-269.	56.	.0022	-.0012	.0033	-.0087	-.0009	.0018	.0018	130.
.0410	-553.	62.	303.	180.	-286.	11.	.0022	-.0018	.0033	-.0100	-.0008	.0023	.0023	136.

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SECTION	44	MEMBER	1	SEQUENCE	821	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ									STRESS
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		(PSI)
.0420	-143.	59.	145.	175.	-294.	-38.	.0021	-.0023	.0032	-.0110	-.0008	.0027	.0027	138.	
.0430	396.	58.	-72.	165.	-278.	-85.	.0020	-.0030	.0030	-.0119	-.0009	.0031	.0031	134.	
.0440	464.	53.	-105.	147.	-229.	-140.	.0017	-.0036	.0028	-.0125	-.0010	.0034	.0034	123.	
.0450	-54.	36.	95.	113.	-154.	-213.	.0013	-.0043	.0025	-.0124	-.0012	.0036	.0036	115.	
.0460	-545.	9.	280.	68.	-64.	-307.	.0009	-.0050	.0021	-.0117	-.0014	.0039	.0039	129.	
.0470	-281.	-17.	155.	29.	25.	-405.	.0006	-.0057	.0016	-.0110	-.0016	.0042	.0042	163.	
.0480	600.	-37.	-224.	-9.	109.	-491.	.0003	-.0063	.0011	-.0103	-.0020	.0043	.0043	202.	
.0490	1049.	-54.	-428.	-59.	200.	-560.	-.0002	-.0068	.0006	-.0090	-.0023	.0042	.0042	240.	
.0500	434.	-76.	-198.	-119.	308.	-620.	-.0007	-.0072	.0002	-.0071	-.0024	.0041	.0041	282.	
.0510	-462.	-105.	144.	-181.	420.	-677.	-.0012	-.0075	-.0002	-.0049	-.0025	.0041	.0041	328.	
.0520	-396.	-133.	95.	-243.	507.	-729.	-.0014	-.0076	-.0006	-.0025	-.0027	.0040	.0040	369.	
.0530	601.	-154.	-333.	-301.	562.	-763.	-.0016	-.0075	-.0009	.0002	-.0030	.0036	.0036	399.	
.0540	1243.	-168.	-614.	-342.	604.	-766.	-.0017	-.0072	-.0010	.0030	-.0032	.0031	.0031	415.	
.0550	762.	-175.	-433.	-361.	646.	-731.	-.0018	-.0066	-.0011	.0058	-.0032	.0026	.0026	417.	
.0560	-148.	-176.	-72.	-366.	671.	-667.	-.0018	-.0059	-.0009	.0083	-.0031	.0023	.0023	407.	
.0570	-389.	-174.	21.	-368.	657.	-587.	-.0018	-.0049	-.0006	.0105	-.0030	.0019	.0019	383.	
.0580	173.	-170.	-210.	-367.	610.	-494.	-.0014	-.0038	-.0003	.0124	-.0028	.0016	.0016	348.	
.0590	756.	-164.	-446.	-359.	543.	-383.	-.0008	-.0025	.0002	.0143	-.0026	.0011	.0011	303.	
.0600	678.	-154.	-407.	-337.	461.	-248.	-.0003	-.0010	.0008	.0163	-.0024	.0006	.0006	250.	
.0610	33.	-131.	-130.	-295.	358.	-82.	.0002	.0006	.0016	.0181	-.0020	-.0002	-.0002	189.	
.0620	-500.	-93.	109.	-226.	229.	118.	.0009	.0023	.0026	.0195	-.0015	-.0010	-.0010	138.	
.0630	-394.	-41.	95.	-134.	71.	335.	.0017	.0040	.0035	.0199	-.0009	-.0016	-.0016	148.	
.0640	105.	12.	-72.	-32.	-108.	543.	.0025	.0057	.0045	.0190	-.0004	-.0023	-.0023	223.	
.0650	236.	59.	-86.	67.	-286.	728.	.0033	.0073	.0055	.0172	.0002	-.0025	-.0025	315.	
.0660	-271.	100.	159.	157.	-439.	893.	.0040	.0086	.0065	.0152	.0009	-.0026	-.0026	404.	
.0670	-783.	142.	402.	240.	-572.	1041.	.0047	.0098	.0074	.0131	.0015	-.0028	-.0028	486.	
.0680	-656.	186.	382.	315.	-700.	1163.	.0053	.0107	.0082	.0110	.0019	-.0033	-.0033	559.	
.0690	-182.	226.	222.	384.	-821.	1244.	.0057	.0113	.0088	.0086	.0022	-.0038	-.0038	618.	
.0700	-119.	255.	229.	449.	-911.	1272.	.0060	.0115	.0094	.0057	.0025	-.0039	-.0039	653.	
.0710	-533.	269.	426.	501.	-958.	1242.	.0061	.0113	.0097	.0023	.0028	-.0037	-.0037	661.	
.0720	-753.	272.	534.	522.	-962.	1159.	.0059	.0108	.0098	-.0015	.0029	-.0032	-.0032	640.	
.0730	-417.	267.	399.	508.	-917.	1029.	.0055	.0099	.0097	-.0052	.0026	-.0028	-.0028	590.	
.0740	42.	252.	196.	470.	-812.	853.	.0050	.0087	.0094	-.0088	.0021	-.0023	-.0023	509.	
.0750	99.	220.	143.	417.	-651.	624.	.0042	.0072	.0089	-.0121	.0014	-.0015	-.0015	399.	
.0760	-156.	172.	206.	349.	-453.	343.	.0032	.0054	.0083	-.0150	.0006	-.0006	-.0006	268.	
.0770	-229.	113.	188.	267.	-235.	29.	.0022	.0036	.0076	-.0174	-.0005	.0004	.0004	143.	
.0780	101.	51.	-2.	170.	-5.	-293.	.0011	.0016	.0067	-.0191	-.0016	.0013	.0013	136.	
.0790	544.	-13.	-242.	54.	231.	-609.	.0001	-.0002	.0059	-.0201	-.0028	.0021	.0021	262.	

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.0690	-182.	226.	222.	384.	-821.	1244.	.0057	.0113	.0088	.0086	.0022	-.0038	618.
.0700	-119.	255.	229.	449.	-911.	1272.	.0060	.0115	.0094	.0057	.0025	-.0039	653.
.0710	-537.	269.	426.	501.	-958.	1242.	.0061	.0113	.0097	.0023	.0028	-.0037	661.
.0720	-753.	272.	534.	522.	-962.	1159.	.0059	.0108	.0098	-.0015	.0029	-.0032	640.
.0730	-417.	267.	399.	508.	-917.	1029.	.0055	.0099	.0097	-.0052	.0026	-.0028	590.
.0740	42.	252.	196.	470.	-812.	853.	.0050	.0087	.0094	-.0088	.0021	-.0023	509.
.0750	99.	220.	143.	417.	-651.	624.	.0042	.0072	.0089	-.0121	.0014	-.0015	399.
.0760	-156.	172.	206.	349.	-453.	343.	.0032	.0054	.0083	-.0150	.0006	-.0006	268.
.0770	-229.	113.	188.	267.	-235.	29.	.0022	.0036	.0076	-.0174	-.0005	.0004	143.
.0780	101.	51.	-2.	170.	-5.	-293.	.0011	.0016	.0067	-.0191	-.0016	.0013	136.
.0790	544.	-13.	-242.	54.	231.	-609.	.0001	-.0002	.0059	-.0201	-.0028	.0021	262.

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INTERNAL FORCES IN THE PIPING
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SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
44	1	821					.0800	669.	-80.	-355.	-80.	465.	-906.	-.0010	-.0020	.0051	-.0203	-.0040	.0028	410.
							.0810	419.	-147.	-314.	-219.	687.	-1175.	-.0019	-.0034	.0044	-.0196	-.0051	.0034	553.
							.0820	198.	-208.	-280.	-346.	875.	-1399.	-.0025	-.0046	.0037	-.0181	-.0062	.0038	677.
							.0830	381.	-259.	-404.	-455.	1012.	-1566.	-.0028	-.0053	.0033	-.0159	-.0071	.0040	770.
							.0840	785.	-296.	-610.	-537.	1090.	-1665.	-.0029	-.0056	.0030	-.0130	-.0080	.0039	827.
							.0850	866.	-321.	-674.	-588.	1117.	-1689.	-.0026	-.0054	.0030	-.0097	-.0086	.0037	846.
							.0860	467.	-334.	-533.	-609.	1096.	-1634.	-.0020	-.0046	.0033	-.0064	-.0091	.0035	826.
							.0870	58.	-331.	-375.	-608.	1014.	-1494.	-.0010	-.0033	.0038	-.0030	-.0092	.0033	765.
							.0880	80.	-311.	-376.	-582.	856.	-1272.	.0003	-.0016	.0046	.0004	-.0092	.0028	658.
							.0890	345.	-273.	-458.	-521.	622.	-972.	.0018	.0006	.0056	.0038	-.0088	.0022	508.
							.0900	344.	-219.	-409.	-420.	323.	-604.	.0036	.0032	.0068	.0070	-.0082	.0015	323.
							.0910	-33.	-149.	-188.	-283.	-31.	-178.	.0054	.0060	.0083	.0102	-.0071	.0006	135.
							.0920	-392.	-64.	41.	-119.	-424.	294.	.0072	.0089	.0098	.0131	-.0059	-.0005	212.
							.0930	-407.	33.	138.	60.	-838.	792.	.0089	.0119	.0114	.0156	-.0044	-.0018	463.
							.0940	-214.	137.	155.	241.	-1246.	1290.	.0104	.0146	.0128	.0175	-.0029	-.0031	726.
							.0950	-171.	237.	234.	415.	-1626.	1759.	.0117	.0171	.0142	.0186	-.0012	-.0042	975.
							.0960	-367.	332.	411.	581.	-1961.	2176.	.0127	.0191	.0152	.0190	.0006	-.0052	1198.
							.0970	-539.	421.	575.	736.	-2240.	2526.	.0132	.0205	.0159	.0184	.0024	-.0060	1387.
							.0980	-447.	506.	625.	877.	-2449.	2798.	.0134	.0212	.0162	.0172	.0041	-.0068	1533.
							.0990	-204.	580.	602.	991.	-2570.	2968.	.0131	.0211	.0159	.0153	.0057	-.0074	1625.
							.1000	-140.	632.	635.	1065.	-2580.	3013.	.0124	.0202	.0150	.0126	.0071	-.0078	1648.
							.1010	-376.	654.	768.	1089.	-2460.	2912.	.0111	.0183	.0135	.0092	.0082	-.0077	1591.
							.1020	-640.	642.	883.	1054.	-2204.	2664.	.0095	.0156	.0113	.0052	.0089	-.0071	1450.
							.1030	-591.	602.	841.	962.	-1819.	2277.	.0075	.0119	.0085	.0007	.0091	-.0061	1232.
							.1040	-264.	538.	656.	872.	-1319.	1769.	.0052	.0075	.0052	-.0041	.0088	-.0048	945.
							.1050	-88.	452.	509.	646.	-720.	1161.	.0026	.0025	.0014	-.0088	.0080	-.0033	606.
							.1060	-302.	349.	502.	442.	-41.	474.	-.0002	-.0030	-.0028	-.0133	.0068	-.0014	261.
							.1070	-560.	229.	500.	216.	682.	-269.	-.0031	-.0088	-.0071	-.0175	.0052	.0006	307.
							.1080	-355.	98.	299.	-31.	1414.	-1046.	-.0061	-.0147	-.0115	-.0216	.0031	.0030	706.
							.1090	172.	-47.	-41.	-300.	2135.	-1839.	-.0090	-.0204	-.0158	-.0253	.0006	.0057	1137.
							.1100	225.	-201.	-196.	-583.	2849.	-2599.	-.0117	-.0259	-.0199	-.0275	-.0021	.0083	1565.
							.1110	129.	-352.	-291.	-858.	3514.	-3296.	-.0139	-.0308	-.0236	-.0286	-.0051	.0109	1964.
							.1120	531.	-488.	-584.	-1102.	4075.	-3899.	-.0160	-.0349	-.0267	-.0291	-.0085	.0135	2306.
							.1130	1027.	-601.	-901.	-1300.	4517.	-4376.	-.0177	-.0380	-.0291	-.0288	-.0119	.0159	2577.
							.1140	1019.	-692.	-994.	-1439.	4842.	-4704.	-.0187	-.0401	-.0309	-.0275	-.0152	.0181	2770.
							.1150	905.	-761.	-1023.	-1523.	5027.	-4886.	-.0189	-.0409	-.0318	-.0257	-.0184	.0204	2879.
							.1160	1240.	-812.	-1214.	-1567.	5052.	-4929.	-.0186	-.0406	-.0319	-.0234	-.0215	.0225	2901.
							.1170	1590.	-847.	-1393.	-1577.	4934.	-4829.	-.0176	-.0389	-.0310	-.0204	-.0244	.0245	2842.

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FORCES AND MOMENTS ACT ON THE PIPING

.1070	-560.	229.	500.	216.	682.	-269.	-.0031	-.0088	-.0071	-.0175	.0052	.0006	307.
.1080	-355.	98.	299.	-31.	1414.	-1046.	-.0061	-.0147	-.0115	-.0216	.0031	.0030	706.
.1090	172.	-47.	-41.	-300.	2135.	-1839.	-.0090	-.0204	-.0158	-.0253	.0006	.0057	1137.
.1100	225.	-201.	-196.	-573.	2849.	-2599.	-.0117	-.0259	-.0199	-.0275	-.0021	.0083	1565.
.1110	129.	-352.	-291.	-858.	3514.	-3296.	-.0139	-.0308	-.0236	-.0286	-.0051	.0109	1964.
.1120	531.	-488.	-584.	-1102.	4075.	-3899.	-.0160	-.0349	-.0267	-.0291	-.0085	.0135	2306.
.1130	1027.	-601.	-901.	-1300.	4517.	-4376.	-.0177	-.0380	-.0291	-.0288	-.0119	.0159	2577.
.1140	1019.	-692.	-994.	-1439.	4842.	-4704.	-.0187	-.0401	-.0309	-.0275	-.0152	.0181	2770.
.1150	905.	-761.	-1023.	-1523.	5027.	-4886.	-.0189	-.0409	-.0318	-.0257	-.0184	.0204	2879.
.1160	1240.	-812.	-1214.	-1567.	5052.	-4929.	-.0186	-.0406	-.0319	-.0234	-.0215	.0225	2901.
.1170	1590.	-847.	-1393.	-1577.	4934.	-4829.	-.0176	-.0389	-.0310	-.0204	-.0244	.0245	2842.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.53.

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	44	MEMBER	1	SEQUENCE	821	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.1180	1342.	-859.	-1311.	-1540.	4702.	-4567.	-.0155	-.0361	-.0294	-.0162	-.0270	.0260	2702.		
.1190	1109.	-833.	-1213.	-1426.	4339.	-4137.	-.0127	-.0320	-.0271	-.0119	-.0291	.0271	2473.		
.1200	1518.	-762.	-1348.	-1230.	3820.	-3553.	-.0094	-.0268	-.0239	-.0084	-.0308	.0278	2151.		
.1210	1791.	-656.	-1398.	-968.	3175.	-2841.	-.0057	-.0207	-.0200	-.0053	-.0320	.0282	1753.		
.1220	1071.	-535.	-1019.	-652.	2462.	-2041.	-.0014	-.0138	-.0156	-.0027	-.0324	.0285	1310.		
.1230	151.	-408.	-543.	-319.	1700.	-1197.	.0033	-.0065	-.0108	-.0005	-.0322	.0287	844.		
.1240	195.	-275.	-452.	3.	893.	-341.	.0080	.0011	-.0056	.0013	-.0316	.0284	384.		
.1250	740.	-136.	-560.	305.	77.	514.	.0125	.0088	-.0002	.0034	-.0306	.0273	242.		
.1260	575.	12.	-375.	604.	-698.	1361.	.0168	.0162	.0052	.0057	-.0290	.0255	660.		
.1270	-226.	168.	78.	921.	-1426.	2168.	.0207	.0232	.0105	.0072	-.0268	.0234	1105.		
.1280	-668.	326.	394.	1238.	-2116.	2886.	.0236	.0295	.0158	.0070	-.0241	.0212	1519.		
.1290	-620.	467.	509.	1524.	-2728.	3467.	.0258	.0350	.0208	.0052	-.0212	.0191	1873.		
.1300	-664.	575.	642.	1753.	-3194.	3880.	.0272	.0394	.0252	.0021	-.0179	.0173	2136.		
.1310	-789.	645.	776.	1898.	-3479.	4111.	.0278	.0426	.0291	-.0015	-.0146	.0156	2291.		
.1320	-609.	683.	750.	1956.	-3590.	4156.	.0273	.0446	.0324	-.0056	-.0114	.0137	2339.		
.1330	-381.	694.	673.	1936.	-3537.	4028.	.0258	.0453	.0351	-.0096	-.0085	.0116	2287.		
.1340	-582.	679.	751.	1869.	-3329.	3737.	.0234	.0449	.0372	-.0134	-.0054	.0094	2144.		
.1350	-877.	636.	855.	1766.	-3001.	3278.	.0205	.0433	.0385	-.0178	-.0024	.0074	1919.		
.1360	-642.	562.	731.	1613.	-2585.	2658.	.0169	.0408	.0394	-.0230	.0006	.0059	1622.		
.1370	-132.	458.	474.	1398.	-2070.	1906.	.0129	.0375	.0397	-.0286	.0032	.0048	1261.		
.1380	8.	332.	337.	1117.	-1439.	1076.	.0089	.0336	.0395	-.0335	.0056	.0037	849.		
.1390	-158.	192.	296.	784.	-720.	211.	.0049	.0294	.0389	-.0373	.0076	.0026	435.		
.1400	-148.	47.	167.	427.	16.	-659.	.0009	.0252	.0382	-.0400	.0092	.0014	315.		
.1410	-37.	-99.	-2.	83.	707.	-1502.	-.0027	.0212	.0374	-.0417	.0103	.0002	667.		
.1420	-174.	-239.	-57.	-209.	1320.	-2275.	-.0056	.0178	.0367	-.0428	.0113	-.0006	1059.		
.1430	-335.	-362.	-82.	-443.	1816.	-2929.	-.0077	.0150	.0362	-.0434	.0122	-.0012	1394.		
.1440	-169.	-455.	-222.	-631.	2168.	-3416.	-.0090	.0131	.0360	-.0434	.0127	-.0018	1643.		
.1450	-28.	-512.	-335.	-782.	2379.	-3698.	-.0095	.0123	.0363	-.0424	.0130	-.0025	1792.		
.1460	-420.	-536.	-211.	-884.	2449.	-3758.	-.0090	.0127	.0371	-.0398	.0130	-.0033	1835.		
.1470	-1039.	-528.	30.	-910.	2350.	-3608.	-.0075	.0143	.0384	-.0365	.0128	-.0041	1766.		
.1480	-1180.	-487.	111.	-842.	2045.	-3260.	-.0052	.0170	.0401	-.0327	.0123	-.0047	1581.		
.1490	-901.	-408.	58.	-673.	1542.	-2717.	-.0020	.0208	.0424	-.0286	.0116	-.0053	1282.		
.1500	-848.	-292.	126.	-408.	887.	-1981.	.0020	.0254	.0450	-.0243	.0107	-.0058	886.		
.1510	-1204.	-141.	383.	-78.	123.	-1075.	.0065	.0307	.0479	-.0199	.0097	-.0062	435.		
.1520	-1578.	36.	661.	288.	-722.	-45.	.0112	.0364	.0510	-.0159	.0085	-.0064	313.		
.1530	-1714.	226.	852.	669.	-1613.	1050.	.0161	.0422	.0540	-.0126	.0070	-.0064	818.		
.1540	-1689.	418.	983.	1062.	-2509.	2153.	.0211	.0478	.0566	-.0099	.0054	-.0060	1394.		
.1550	-1534.	603.	1064.	1461.	-3377.	3207.	.0259	.0527	.0589	-.0080	.0036	-.0052	1959.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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18.28.53.

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

.1450	-28.	-512.	-335.	-782.	2379.	-3698.	-.0095	.0123	.0363	-.0424	.0130	-.0025	1792.
.1460	-420.	-536.	-211.	-884.	2449.	-3758.	-.0090	.0127	.0371	-.0398	.0130	-.0033	1835.
.1470	-1039.	-528.	30.	-910.	2350.	-3608.	-.0075	.0143	.0384	-.0365	.0128	-.0041	1766.
.1480	-1180.	-487.	111.	-842.	2045.	-3260.	-.0052	.0170	.0401	-.0327	.0123	-.0047	1581.
.1490	-901.	-408.	58.	-677.	1542.	-2717.	-.0020	.0208	.0424	-.0286	.0116	-.0053	1282.
.1500	-848.	-292.	126.	-408.	887.	-1981.	.0020	.0254	.0450	-.0243	.0107	-.0058	886.
.1510	-1204.	-141.	383.	-78.	123.	-1075.	.0065	.0307	.0479	-.0199	.0097	-.0062	435.
.1520	-1578.	36.	661.	288.	-722.	-45.	.0112	.0364	.0510	-.0159	.0085	-.0064	313.
.1530	-1714.	226.	852.	669.	-1613.	1050.	.0161	.0422	.0540	-.0126	.0070	-.0064	818.
.1540	-1689.	418.	983.	1062.	-2509.	2153.	.0211	.0478	.0566	-.0099	.0054	-.0060	1394.
.1550	-1534.	603.	1064.	1461.	-3377.	3207.	.0259	.0527	.0589	-.0080	.0036	-.0052	1959.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	44	MEMBER	1	SEQUENCE	821	LOCATION	END	TYPE	RU							
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS			
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)			
.1560	-1265.	776.	1091.	1843.	-4176.	4164.	.0302	.0568	.0606	-.0065	.0015	-.0043	2479.			
.1570	-1142.	928.	1159.	2186.	-4845.	4978.	.0337	.0596	.0615	-.0053	-.0008	-.0033	2922.			
.1580	-1323.	1047.	1317.	2456.	-5322.	5604.	.0364	.0611	.0615	-.0044	-.0033	-.0021	3254.			
.1590	-1412.	1118.	1395.	2620.	-5577.	5994.	.0382	.0608	.0605	-.0039	-.0062	-.0006	3450.			
.1600	-1071.	1136.	1251.	2668.	-5600.	6110.	.0389	.0588	.0584	-.0043	-.0093	.0013	3494.			
.1610	-462.	1098.	955.	2604.	-5387.	5942.	.0385	.0550	.0553	-.0057	-.0127	.0038	3384.			
.1620	-45.	1009.	696.	2437.	-4936.	5502.	.0371	.0494	.0511	-.0075	-.0162	.0066	3123.			
.1630	63.	875.	525.	2181.	-4266.	4806.	.0345	.0423	.0460	-.0094	-.0197	.0096	2723.			
.1640	159.	697.	324.	1837.	-3408.	3875.	.0309	.0336	.0403	-.0112	-.0231	.0125	2198.			
.1650	435.	480.	17.	1402.	-2389.	2741.	.0265	.0239	.0339	-.0125	-.0266	.0152	1564.			
.1660	803.	226.	-354.	889.	-1244.	1446.	.0215	.0133	.0272	-.0134	-.0299	.0180	845.			
.1670	1182.	-52.	-744.	316.	-24.	51.	.0162	.0023	.0203	-.0138	-.0329	.0205	129.			
.1680	1548.	-336.	-1131.	-284.	1208.	-1373.	.0108	-.0087	.0135	-.0140	-.0355	.0229	743.			
.1690	1781.	-608.	-1451.	-872.	2389.	-2753.	.0053	-.0192	.0072	-.0140	-.0375	.0250	1504.			
.1700	1771.	-857.	-1646.	-1415.	3463.	-4024.	.0003	-.0290	.0015	-.0134	-.0388	.0266	2205.			
.1710	1667.	-1073.	-1768.	-1888.	4380.	-5137.	-.0042	-.0375	-.0034	-.0124	-.0394	.0276	2813.			
.1720	1735.	-1250.	-1920.	-2286.	5094.	-6041.	-.0077	-.0444	-.0073	-.0104	-.0392	.0280	3301.			
.1730	1929.	-1378.	-2078.	-2592.	5580.	-6692.	-.0103	-.0496	-.0100	-.0076	-.0384	.0276	3648.			
.1740	1956.	-1448.	-2118.	-2789.	5823.	-7048.	-.0118	-.0528	-.0115	-.0044	-.0368	.0265	3836.			
.1750	1706.	-1452.	-1991.	-2863.	5807.	-7085.	-.0121	-.0539	-.0117	-.0011	-.0343	.0249	3851.			
.1760	1369.	-1389.	-1770.	-2799.	5523.	-6802.	-.0114	-.0530	-.0106	.0019	-.0312	.0228	3691.			
.1770	1123.	-1262.	-1531.	-2601.	4979.	-6219.	-.0096	-.0501	-.0084	.0045	-.0273	.0203	3363.			
.1780	926.	-1082.	-1263.	-2280.	4208.	-5369.	-.0069	-.0454	-.0051	.0068	-.0229	.0174	2886.			
.1790	697.	-857.	-946.	-1865.	3256.	-4292.	-.0033	-.0392	-.0010	.0094	-.0182	.0141	2288.			
.1800	454.	-598.	-599.	-1382.	2171.	-3037.	.0008	-.0319	.0038	.0124	-.0132	.0103	1597.			
.1810	211.	-312.	-237.	-851.	1005.	-1660.	.0051	-.0237	.0090	.0153	-.0082	.0062	850.			
.1820	-55.	-13.	142.	-298.	-195.	-225.	.0095	-.0153	.0144	.0181	-.0031	.0020	169.			
.1830	-319.	284.	521.	257.	-1378.	1191.	.0136	-.0070	.0197	.0203	.0019	-.0020	738.			
.1840	-484.	563.	848.	788.	-2493.	2510.	.0173	.0009	.0246	.0217	.0066	-.0056	1454.			
.1850	-530.	809.	1103.	1262.	-3480.	3665.	.0202	.0077	.0288	.0223	.0110	-.0087	2090.			
.1860	-549.	1009.	1305.	1646.	-4279.	4602.	.0224	.0133	.0322	.0228	.0148	-.0115	2607.			
.1870	-575.	1153.	1456.	1913.	-4844.	5276.	.0235	.0173	.0345	.0236	.0179	-.0139	2975.			
.1880	-572.	1236.	1538.	2051.	-5151.	5651.	.0235	.0196	.0357	.0245	.0203	-.0159	3177.			
.1890	-521.	1250.	1541.	2058.	-5194.	5704.	.0224	.0201	.0356	.0252	.0218	-.0173	3204.			
.1900	-448.	1195.	1480.	1937.	-4978.	5430.	.0203	.0187	.0342	.0255	.0227	-.0180	3057.			
.1910	-339.	1075.	1353.	1700.	-4515.	4848.	.0173	.0155	.0316	.0252	.0228	-.0178	2745.			
.1920	-147.	899.	1141.	1350.	-3827.	3994.	.0135	.0109	.0277	.0246	.0222	-.0170	2285.			
.1930	57.	677.	877.	903.	-2942.	2921.	.0090	.0050	.0230	.0238	.0210	-.0157	1703.			

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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18.28.53.

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

.1830	-319.	284.	521.	257.	-1378.	1191.	.0136	-.0070	.0197	.0203	.0019	-.0020	169.
.1840	-484.	563.	848.	788.	-2493.	2510.	.0173	.0009	.0246	.0217	.0066	-.0056	1454.
.1850	-530.	809.	1103.	1262.	-3480.	3665.	.0202	.0077	.0288	.0223	.0110	-.0087	2090.
.1860	-549.	1009.	1305.	1646.	-4277.	4602.	.0224	.0133	.0322	.0228	.0148	-.0115	2607.
.1870	-575.	1153.	1456.	1913.	-4844.	5276.	.0235	.0173	.0345	.0236	.0179	-.0139	2975.
.1880	-572.	1236.	1538.	2051.	-5151.	5651.	.0235	.0196	.0357	.0245	.0203	-.0159	3177.
.1890	-521.	1250.	1541.	2058.	-5194.	5704.	.0224	.0201	.0356	.0252	.0218	-.0173	3204.
.1900	-448.	1195.	1480.	1937.	-4978.	5430.	.0203	.0187	.0342	.0255	.0227	-.0180	3057.
.1910	-339.	1075.	1353.	1700.	-4515.	4848.	.0173	.0155	.0316	.0252	.0228	-.0178	2745.
.1920	-147.	899.	1141.	1350.	-3327.	3994.	.0135	.0109	.0277	.0246	.0222	-.0170	2285.
.1930	57.	677.	877.	903.	-2942.	2921.	.0090	.0050	.0230	.0238	.0210	-.0157	1703.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
44	1	821					.1940	151.	420.	618.	381.	-1899.	1686.	.0041	-.0010	.0174	.0232	.0191	-.0141	1030.
							.1950	149.	140.	371.	-186.	-755.	352.	-.0010	-.0091	.0112	.0229	.0167	-.0123	342.
							.1960	190.	-150.	93.	-762.	422.	-1014.	-.0060	-.0164	.0048	.0225	.0140	-.0103	536.
							.1970	322.	-432.	-217.	-1312.	1564.	-2337.	-.0107	-.0233	-.0017	.0220	.0110	-.0081	1245.
							.1980	447.	-688.	-509.	-1805.	2616.	-3537.	-.0149	-.0295	-.0080	.0213	.0079	-.0059	1908.
							.1990	477.	-904.	-736.	-2217.	3529.	-4542.	-.0183	-.0345	-.0137	.0203	.0049	-.0038	2474.
							.2000	419.	-1067.	-892.	-2528.	4261.	-5295.	-.0210	-.0381	-.0187	.0192	.0019	-.0020	2910.
							.2010	331.	-1169.	-993.	-2722.	4776.	-5759.	-.0226	-.0399	-.0228	.0180	-.0008	-.0004	3195.
							.2020	272.	-1207.	-1058.	-2785.	5047.	-5913.	-.0232	-.0399	-.0259	.0168	-.0033	.0007	3314.
							.2030	267.	-1180.	-1091.	-2707.	5060.	-5752.	-.0227	-.0381	-.0279	.0154	-.0055	.0015	3261.
							.2040	294.	-1090.	-1083.	-2489.	4816.	-5236.	-.0211	-.0344	-.0288	.0137	-.0073	.0020	3038.
							.2050	275.	-939.	-1004.	-2140.	4334.	-4536.	-.0187	-.0291	-.0286	.0115	-.0087	.0022	2660.
							.2060	170.	-734.	-846.	-1680.	3648.	-3539.	-.0154	-.0224	-.0275	.0088	-.0098	.0022	2148.
							.2070	38.	-487.	-640.	-1138.	2799.	-2349.	-.0114	-.0147	-.0255	.0056	-.0104	.0020	1536.
							.2080	-27.	-212.	-434.	-542.	1833.	-1033.	-.0071	-.0063	-.0230	.0020	-.0108	.0017	872.
							.2090	-21.	74.	-239.	78.	799.	333.	-.0025	.0024	-.0200	-.0019	-.0109	.0013	349.
							.2100	-17.	355.	-35.	692.	-249.	1673.	.0020	.0109	-.0169	-.0058	-.0108	.0009	733.
							.2110	-54.	617.	181.	1268.	-1252.	2915.	.0063	.0188	-.0139	-.0094	-.0105	.0005	1371.
							.2120	-90.	846.	382.	1776.	-2154.	3995.	.0100	.0257	-.0111	-.0129	-.0102	.0002	1956.
							.2130	-92.	1032.	539.	2189.	-2901.	4858.	.0131	.0313	-.0089	-.0161	-.0099	-.0001	2435.
							.2140	-76.	1165.	651.	2482.	-3450.	5458.	.0152	.0352	-.0073	-.0190	-.0097	-.0002	2776.
							.2150	-62.	1235.	718.	2642.	-3770.	5760.	.0164	.0374	-.0065	-.0216	-.0095	-.0000	2959.
							.2160	-39.	1240.	733.	2663.	-3846.	5747.	.0164	.0378	-.0065	-.0240	-.0095	.0005	2974.
							.2170	14.	1179.	687.	2549.	-3676.	5421.	.0155	.0363	-.0074	-.0259	-.0097	.0012	2820.
							.2180	91.	1057.	585.	2307.	-3272.	4802.	.0135	.0331	-.0092	-.0273	-.0100	.0022	2509.
							.2190	162.	882.	441.	1953.	-2653.	3926.	.0106	.0283	-.0117	-.0280	-.0104	.0032	2056.
							.2200	204.	662.	272.	1502.	-1852.	2841.	.0070	.0224	-.0148	-.0280	-.0110	.0043	1489.
							.2210	216.	410.	86.	980.	-912.	1608.	.0028	.0155	-.0184	-.0274	-.0116	.0054	840.
							.2220	246.	139.	-125.	417.	116.	293.	-.0017	.0082	-.0222	-.0265	-.0121	.0065	210.
							.2230	330.	-133.	-364.	-154.	1172.	-1029.	-.0063	.0008	-.0260	-.0253	-.0125	.0076	629.
							.2240	431.	-392.	-603.	-699.	2200.	-2286.	-.0107	-.0063	-.0297	-.0241	-.0128	.0086	1303.
							.2250	462.	-624.	-796.	-1185.	3141.	-3410.	-.0147	-.0126	-.0329	-.0227	-.0129	.0094	1920.
							.2260	404.	-816.	-924.	-1589.	3948.	-4342.	-.0181	-.0178	-.0354	-.0211	-.0126	.0100	2440.
							.2270	353.	-960.	-1018.	-1891.	4573.	-5034.	-.0207	-.0217	-.0372	-.0194	-.0121	.0102	2833.
							.2280	390.	-1047.	-1103.	-2077.	4982.	-5450.	-.0223	-.0240	-.0380	-.0177	-.0112	.0101	3078.
							.2290	461.	-1073.	-1153.	-2136.	5152.	-5567.	-.0229	-.0246	-.0378	-.0161	-.0099	.0097	3162.
							.2300	464.	-1036.	-1122.	-2066.	5072.	-5378.	-.0225	-.0235	-.0365	-.0146	-.0083	.0090	3080.
							.2310	369.	-937.	-1008.	-1870.	4745.	-4896.	-.0211	-.0207	-.0343	-.0134	-.0064	.0081	2837.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

.2210	216.	410.	88.	980.	-912.	1608.	0028	.0155	-.0174	-.0274	-.0116	.0054	340.
.2220	246.	139.	-125.	417.	116.	293.	-.0017	-.0032	-.0222	-.0265	-.0121	.0065	210.
.2230	130.	-133.	-164.	-114.	1172.	-1029.	-.0063	.0008	-.0260	-.0253	-.0125	.0076	629.
.2240	431.	-372.	-637.	-699.	3200.	-2256.	-.0107	-.0067	-.0297	-.0241	-.0123	.0086	1303.
.2250	463.	-634.	-796.	-1130.	3141.	-3410.	-.0147	-.0126	-.0329	-.0227	-.0129	.0094	1920.
.2260	404.	-316.	-324.	-1589.	3943.	-4342.	-.0131	-.0177	-.0254	-.0211	-.0126	.0100	2440.
.2270	353.	-960.	-1010.	-1891.	4573.	-5034.	-.1207	-.0217	-.0372	-.0194	-.0121	.0102	2833.
.2280	390.	-1047.	-1103.	-2077.	4982.	-5450.	-.0223	-.0240	-.0380	-.0177	-.0112	.0101	3078.
.2290	461.	-1073.	-1153.	-2176.	5152.	-5667.	-.0229	-.0246	-.0378	-.0161	-.0099	.0097	3162.
.2300	464.	-1036.	-1122.	-2066.	5072.	-5378.	-.0225	-.0235	-.0365	-.0146	-.0083	.0090	3080.
.2310	369.	-917.	-1003.	-1870.	4745.	-4896.	-.0211	-.0207	-.0343	-.0134	-.0064	.0081	2837.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSVCONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITSINTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	44	MEMBER	1	SEQUENCE	821	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)		
.2310	334.	-785.	-852.	-1562.	4187.	-4151.	-.0187	-.0165	-.0311	-.0123	-.0041	.0059	2448.		
.2330	344.	-588.	-686.	-1162.	3428.	-3188.	-.0155	-.0110	-.0271	-.0113	-.0018	.0056	1936.		
.2340	365.	-361.	-492.	-695.	2511.	-2064.	-.0116	-.0046	-.0225	-.0101	.0006	.0041	1334.		
.2350	356.	-116.	-268.	-188.	1488.	-841.	-.0073	.0024	-.0174	-.0089	.0030	.0026	690.		
.2360	348.	135.	-36.	331.	411.	417.	-.0027	.0095	-.0123	-.0076	.0052	.0011	270.		
.2370	388.	379.	173.	834.	-668.	1643.	.0018	.0164	-.0072	-.0064	.0072	-.0002	787.		
.2380	447.	602.	361.	1295.	-1693.	2771.	.0062	.0227	-.0024	-.0053	.0088	-.0012	1403.		
.2390	466.	790.	542.	1689.	-2614.	3737.	.0102	.0281	.0017	-.0044	.0101	-.0018	1952.		
.2400	464.	932.	697.	1993.	-3383.	4491.	.0137	.0322	.0052	-.0036	.0109	-.0020	2394.		
.2410	515.	1022.	788.	2171.	-3952.	4994.	.0164	.0349	.0076	-.0028	.0111	-.0018	2705.		
.2420	671.	1056.	786.	2171.	-4321.	5226.	.0183	.0360	.0090	-.0019	.0107	-.0012	2870.		
.2430	855.	1032.	720.	2232.	-4444.	5179.	.0193	.0354	.0092	-.0010	.0097	-.0003	2881.		
.2440	943.	951.	642.	2078.	-4328.	4856.	.0195	.0333	.0083	-.0002	.0081	.0010	2740.		
.2450	938.	818.	553.	1821.	-3983.	4270.	.0188	.0296	.0062	.0004	.0060	.0027	2457.		
.2460	982.	641.	400.	1476.	-3433.	3479.	.0174	.0247	.0031	.0005	.0033	.0048	2049.		
.2470	1202.	431.	138.	1063.	-2711.	2508.	.0153	.0187	-.0010	.0003	.0003	.0072	1542.		
.2480	1494.	198.	-183.	603.	-1853.	1420.	.0129	.0119	-.0058	-.0003	-.0032	.0097	967.		
.2490	1608.	-44.	-451.	123.	-903.	275.	.0100	.0049	-.0111	-.0012	-.0069	.0123	382.		
.2500	1539.	-283.	-653.	-349.	89.	-862.	.0071	-.0023	-.0167	-.0023	-.0108	.0148	375.		
.2510	1527.	-505.	-875.	-784.	1065.	-1931.	.0041	-.0090	-.0224	-.0038	-.0147	.0171	939.		
.2520	1731.	-697.	-1171.	-1160.	1969.	-2876.	.0013	-.0151	-.0278	-.0057	-.0186	.0192	1474.		
.2530	2038.	-853.	-1484.	-1457.	2759.	-3652.	-.0011	-.0203	-.0329	-.0081	-.0223	.0211	1928.		
.2540	2265.	-964.	-1733.	-1664.	3400.	-4221.	-.0029	-.0243	-.0374	-.0108	-.0257	.0227	2275.		
.2550	2370.	-1027.	-1895.	-1774.	3863.	-4556.	-.0042	-.0269	-.0412	-.0138	-.0289	.0239	2500.		
.2560	2525.	-1036.	-2035.	-1782.	4123.	-4642.	-.0047	-.0282	-.0443	-.0168	-.0316	.0246	2592.		
.2570	2997.	-994.	-2261.	-1691.	4161.	-4483.	-.0043	-.0280	-.0465	-.0198	-.0340	.0248	2547.		
.2580	3404.	-906.	-2497.	-1508.	3976.	-4100.	-.0028	-.0264	-.0480	-.0228	-.0359	.0246	2370.		
.2590	3909.	-780.	-2565.	-1243.	3584.	-3519.	-.0004	-.0237	-.0488	-.0257	-.0374	.0241	2076.		
.2600	3875.	-624.	-2457.	-914.	3006.	-2771.	.0030	-.0199	-.0490	-.0284	-.0384	.0232	1681.		
.2610	3893.	-441.	-2338.	-542.	2265.	-1892.	.0071	-.0154	-.0488	-.0309	-.0391	.0221	1204.		
.2620	4222.	-240.	-2322.	-148.	1393.	-929.	.0119	-.0104	-.0483	-.0331	-.0395	.0206	674.		
.2630	4567.	-37.	-2298.	245.	435.	65.	.0170	-.0052	-.0477	-.0348	-.0396	.0190	202.		
.2640	4317.	154.	-2023.	619.	-553.	1036.	.0222	-.0001	-.0471	-.0360	-.0396	.0174	533.		
.2650	3535.	326.	-1538.	958.	-1526.	1944.	.0268	.0047	-.0468	-.0363	-.0393	.0158	1064.		
.2660	3005.	477.	-1167.	1243.	-2448.	2754.	.0307	.0087	-.0467	-.0357	-.0389	.0140	1560.		
.2670	3107.	602.	-1075.	1461.	-3279.	3434.	.0333	.0119	-.0470	-.0343	-.0385	.0121	1994.		
.2680	3233.	692.	-1021.	1603.	-3968.	3953.	.0346	.0140	-.0475	-.0321	-.0380	.0102	2338.		
.2690	2800.	741.	-773.	1665.	-4470.	4289.	.0341	.0149	-.0495	-.0291	-.0373	.0083	2574.		

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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSVCONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITSINTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

.2590	3909.	-780.	-2565.	-1243.	3564.	-3519.	-6034	-.0237	-.0488	-.0257	-.0374	.0241	2076.
.2600	3875.	-624.	-2457.	-914.	3006.	-2771.	.0030	-.0199	-.0490	-.0284	-.0384	.0232	1681.
.2610	3893.	-441.	-2338.	-542.	2265.	-1892.	.0071	-.0154	-.0488	-.0309	-.0391	.0221	1204.
.2620	4222.	-240.	-2322.	-148.	1793.	-929.	.0119	-.0104	-.0483	-.0331	-.0395	.0206	674.
.2630	4567.	-37.	-2298.	245.	435.	65.	.0170	-.0052	-.0477	-.0348	-.0396	.0190	202.
.2640	4313.	154.	-2023.	619.	-553.	1036.	.0222	-.0001	-.0471	-.0360	-.0396	.0174	533.
.2650	3535.	326.	-1538.	958.	-1526.	1944.	.0268	.0047	-.0468	-.0363	-.0393	.0158	1064.
.2660	3005.	477.	-1167.	1243.	-2448.	2754.	.0307	.0087	-.0467	-.0357	-.0389	.0140	1560.
.2670	3107.	602.	-1075.	1461.	-3279.	3434.	.0333	.0119	-.0470	-.0343	-.0385	.0121	1994.
.2680	3233.	692.	-1021.	1603.	-3968.	3953.	.0346	.0140	-.0475	-.0321	-.0380	.0102	2338.
.2690	2800.	741.	-773.	1665.	-4470.	4289.	.0341	.0149	-.0495	-.0291	-.0373	.0083	2574.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	44	MEMBER	1	SEQUENCE	821	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2700	2150.	751.	-473.	1642.	-4766.	4433.	.0318	.0146	-.0518	-.0255	-.0363	.0066	2694.		
.2710	2129.	726.	-467.	1536.	-4851.	4385.	.0279	.0129	-.0549	-.0215	-.0351	.0047	2696.		
.2720	2721.	668.	-749.	1350.	-4719.	4149.	.0226	.0100	-.0589	-.0171	-.0336	.0026	2579.		
.2730	2980.	576.	-930.	1093.	-4357.	3736.	.0162	.0059	-.0640	-.0123	-.0316	.0004	2344.		
.2740	2486.	454.	-833.	778.	-3775.	3169.	.0090	.0008	-.0700	-.0074	-.0291	-.0019	2002.		
.2750	1873.	317.	-710.	422.	-3013.	2487.	.0012	-.0050	-.0769	-.0025	-.0259	-.0045	1577.		
.2760	1912.	179.	-865.	44.	-2121.	1737.	-.0065	-.0115	-.0847	.0019	-.0220	-.0075	1100.		
.2770	2349.	48.	-1184.	-335.	-1140.	957.	-.0139	-.0183	-.0931	.0055	-.0174	-.0107	612.		
.2780	2269.	-75.	-1282.	-695.	-107.	181.	-.0208	-.0253	-.1020	.0082	-.0121	-.0140	291.		
.2790	1418.	-185.	-1047.	-1017.	931.	-548.	-.0272	-.0321	-.1112	.0099	-.0059	-.0173	595.		
.2800	499.	-267.	-759.	-1285.	1916.	-1182.	-.0328	-.0385	-.1203	.0108	.0008	-.0207	1040.		
.2810	233.	-310.	-705.	-1485.	2790.	-1678.	-.0376	-.0445	-.1292	.0110	.0081	-.0244	1436.		
.2820	418.	-310.	-794.	-1602.	3510.	-2012.	-.0417	-.0498	-.1376	.0105	.0156	-.0282	1746.		
.2830	256.	-274.	-696.	-1628.	4053.	-2176.	-.0452	-.0544	-.1453	.0091	.0234	-.0319	1958.		
.2840	-486.	-202.	-313.	-1560.	4400.	-2165.	-.0485	-.0583	-.1521	.0069	.0313	-.0351	2065.		
.2850	-1139.	-93.	79.	-1405.	4537.	-1981.	-.0514	-.0615	-.1580	.0039	.0391	-.0379	2065.		
.2860	-1024.	51.	195.	-1182.	4466.	-1642.	-.0542	-.0642	-.1630	.0005	.0465	-.0403	1967.		
.2870	-377.	217.	124.	-910.	4212.	-1187.	-.0568	-.0665	-.1672	-.0032	.0533	-.0423	1794.		
.2880	-26.	386.	192.	-612.	3825.	-670.	-.0594	-.0686	-.1707	-.0067	.0593	-.0436	1578.		
.2890	-226.	544.	491.	-311.	3353.	-142.	-.0620	-.0707	-.1737	-.0098	.0644	-.0441	1353.		
.2900	-322.	686.	742.	-28.	2833.	352.	-.0644	-.0731	-.1765	-.0124	.0685	-.0440	1146.		
.2910	269.	806.	694.	213.	2306.	770.	-.0665	-.0759	-.1794	-.0146	.0713	-.0431	979.		
.2920	1178.	892.	488.	390.	1827.	1063.	-.0683	-.0794	-.1826	-.0164	.0728	-.0415	863.		
.2930	1588.	929.	446.	485.	1461.	1191.	-.0697	-.0837	-.1864	-.0177	.0730	-.0390	781.		
.2940	1382.	910.	605.	484.	1247.	1129.	-.0707	-.0888	-.1909	-.0184	.0720	-.0355	702.		
.2950	1235.	840.	686.	380.	1203.	873.	-.0711	-.0947	-.1963	-.0183	.0696	-.0315	616.		
.2960	1596.	723.	501.	177.	1335.	434.	-.0711	-.1014	-.2027	-.0173	.0659	-.0270	568.		
.2970	2081.	563.	209.	-113.	1649.	-170.	-.0707	-.1087	-.2099	-.0154	.0610	-.0223	667.		
.2980	2072.	364.	67.	-469.	2141.	-910.	-.0700	-.1165	-.2178	-.0127	.0549	-.0171	952.		
.2990	1591.	135.	74.	-871.	2786.	-1743.	-.0693	-.1245	-.2262	-.0094	.0480	-.0116	1364.		
.3000	1235.	-105.	-7.	-1297.	3545.	-2611.	-.0686	-.1325	-.2349	-.0057	.0402	-.0061	1842.		
.3010	1376.	-341.	-318.	-1724.	4374.	-3455.	-.0681	-.1401	-.2436	-.0018	.0318	-.0008	2341.		
.3020	1732.	-562.	-731.	-2125.	5234.	-4227.	-.0678	-.1471	-.2519	.0022	.0229	.0044	2831.		
.3030	1814.	-762.	-1036.	-2478.	6084.	-4885.	-.0678	-.1533	-.2597	.0062	.0138	.0092	3285.		
.3040	1604.	-930.	-1213.	-2759.	6879.	-5391.	-.0683	-.1583	-.2665	.0103	.0048	.0136	3678.		
.3050	1561.	-1054.	-1437.	-2954.	7571.	-5712.	-.0690	-.1622	-.2721	.0141	-.0041	.0174	3986.		
.3060	2000.	-1127.	-1826.	-3056.	8121.	-5831.	-.0697	-.1646	-.2765	.0176	-.0125	.0204	4195.		
.3070	2654.	-1150.	-2267.	-3065.	8509.	-5748.	-.0705	-.1657	-.2794	.0206	-.0202	.0226	4300.		

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ADLPIPE STRESS ANALYSIS

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18.28.53.

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

.2960	1596.	723.	501.	177.	1335.	434.	-.0711	-.1014	-.2027	-.0173	.0659	-.0270	568.
.2970	2081.	563.	209.	-113.	1649.	-170.	-.0707	-.1087	-.2099	-.0154	.0510	-.0223	667.
.2980	2072.	364.	67.	-469.	2141.	-910.	-.0700	-.1165	-.2178	-.0127	.0549	-.0171	952.
.2990	1591.	175.	74.	-871.	2786.	-1743.	-.0693	-.1245	-.2262	-.0094	.0480	-.0116	1364.
.3000	1235.	-105.	-7.	-1297.	3545.	-2611.	-.0686	-.1325	-.2347	-.0057	.0402	-.0061	1842.
.3010	1376.	-341.	-318.	-1724.	4774.	-3455.	-.0681	-.1401	-.2436	-.0018	.0318	-.0008	2341.
.3020	1732.	-562.	-731.	-2125.	5234.	-4227.	-.0678	-.1471	-.2519	.0022	.0229	.0044	2831.
.3030	1814.	-762.	-1036.	-2478.	6084.	-4885.	-.0678	-.1533	-.2597	.0062	.0138	.0092	3285.
.3040	1604.	-930.	-1213.	-2759.	6879.	-5391.	-.0683	-.1583	-.2665	.0103	.0048	.0136	3678.
.3050	1561.	-1054.	-1437.	-2954.	7571.	-5712.	-.0690	-.1622	-.2721	.0141	-.0041	.0174	3986.
.3060	2000.	-1127.	-1826.	-3056.	8121.	-5831.	-.0697	-.1646	-.2765	.0176	-.0125	.0204	4195.
.3070	2654.	-1150.	-2267.	-3065.	8509.	-5748.	-.0705	-.1657	-.2794	.0206	-.0202	.0226	4300.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.53.

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	44	MEMBER	1	SEQUENCE	821	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3080	3024.	-1128.	-2548.	-2987.	8730.	-5479.	-.0710	-.1655	-.2809	.0228	-.0269	.0240	4306.		
.3090	3032.	-1063.	-2635.	-2833.	8780.	-5045.	-.0711	-.1640	-.2809	.0243	-.0326	.0247	4220.		
.3100	3094.	-959.	-2699.	-2617.	8655.	-4474.	-.0706	-.1614	-.2794	.0249	-.0371	.0245	4048.		
.3110	3490.	-822.	-2852.	-2353.	8360.	-3806.	-.0694	-.1578	-.2766	.0247	-.0402	.0234	3805.		
.3120	3924.	-663.	-2978.	-2060.	7916.	-3087.	-.0674	-.1536	-.2725	.0238	-.0420	.0215	3508.		
.3130	3926.	-495.	-2889.	-1756.	7354.	-2365.	-.0647	-.1488	-.2673	.0223	-.0423	.0189	3179.		
.3140	3519.	-328.	-2600.	-1461.	6703.	-1679.	-.0613	-.1438	-.2610	.0202	-.0413	.0157	2834.		
.3150	3159.	-166.	-2305.	-1192.	5984.	-1061.	-.0574	-.1387	-.2539	.0176	-.0389	.0119	2485.		
.3160	3088.	-14.	-2109.	-965.	5224.	-538.	-.0534	-.1338	-.2459	.0145	-.0353	.0077	2143.		
.3170	3025.	120.	-1905.	-786.	4456.	-133.	-.0493	-.1292	-.2373	.0111	-.0307	.0031	1817.		
.3180	2623.	228.	-1558.	-660.	3714.	135.	-.0455	-.1250	-.2282	.0074	-.0250	-.0015	1515.		
.3190	1989.	308.	-1118.	-588.	3018.	259.	-.0423	-.1212	-.2185	.0038	-.0186	-.0062	1238.		
.3200	1535.	361.	-760.	-571.	2386.	245.	-.0399	-.1180	-.2086	.0004	-.0117	-.0109	989.		
.3210	1415.	388.	-554.	-605.	1835.	106.	-.0383	-.1153	-.1984	-.0026	-.0044	-.0156	777.		
.3220	1376.	391.	-400.	-685.	1383.	-144.	-.0377	-.1131	-.1880	-.0051	.0031	-.0201	622.		
.3230	1159.	369.	-197.	-803.	1041.	-485.	-.0379	-.1112	-.1777	-.0072	.0106	-.0244	562.		
.3240	824.	329.	32.	-945.	810.	-893.	-.0390	-.1096	-.1675	-.0090	.0180	-.0283	615.		
.3250	645.	276.	173.	-1099.	681.	-1336.	-.0406	-.1081	-.1575	-.0104	.0251	-.0318	746.		
.3260	706.	218.	193.	-1253.	646.	-1783.	-.0424	-.1066	-.1473	-.0115	.0318	-.0349	912.		
.3270	798.	157.	179.	-1394.	696.	-2210.	-.0444	-.1048	-.1386	-.0122	.0381	-.0376	1085.		
.3280	704.	98.	220.	-1513.	819.	-2591.	-.0460	-.1028	-.1297	-.0125	.0437	-.0398	1248.		
.3290	455.	43.	306.	-1601.	995.	-2901.	-.0472	-.1003	-.1214	-.0124	.0486	-.0415	1388.		
.3300	256.	-1.	359.	-1650.	1199.	-3116.	-.0477	-.0972	-.1135	-.0120	.0528	-.0428	1494.		
.3310	179.	-30.	352.	-1652.	1402.	-3216.	-.0473	-.0935	-.1060	-.0114	.0561	-.0436	1556.		
.3320	91.	-41.	346.	-1601.	1581.	-3189.	-.0459	-.0892	-.0988	-.0108	.0586	-.0438	1566.		
.3330	-138.	-34.	399.	-1494.	1711.	-3029.	-.0437	-.0841	-.0918	-.0100	.0602	-.0435	1519.		
.3340	-462.	-9.	494.	-1330.	1772.	-2736.	-.0407	-.0784	-.0849	-.0092	.0608	-.0425	1413.		
.3350	-685.	34.	556.	-1116.	1743.	-2314.	-.0369	-.0721	-.0780	-.0081	.0605	-.0411	1246.		
.3360	-741.	93.	557.	-857.	1615.	-1780.	-.0326	-.0652	-.0710	-.0069	.0592	-.0391	1024.		
.3370	-744.	163.	546.	-566.	1385.	-1154.	-.0279	-.0581	-.0639	-.0053	.0569	-.0367	758.		
.3380	-783.	278.	558.	-253.	1056.	-464.	-.0231	-.0508	-.0565	-.0035	.0537	-.0337	474.		
.3390	-780.	314.	561.	67.	637.	257.	-.0182	-.0435	-.0490	-.0015	.0497	-.0302	277.		
.3400	-629.	385.	510.	380.	141.	978.	-.0134	-.0364	-.0412	.0007	.0449	-.0264	425.		
.3410	-314.	446.	394.	670.	-410.	1662.	-.0088	-.0297	-.0334	.0030	.0395	-.0222	738.		
.3420	52.	490.	256.	919.	-988.	2272.	-.0043	-.0236	-.0256	.0056	.0334	-.0177	1061.		
.3430	350.	512.	140.	1115.	-1561.	2777.	-.0001	-.0182	-.0179	.0083	.0270	-.0132	1354.		
.3440	571.	508.	46.	1246.	-2100.	3150.	.0040	-.0137	-.0105	.0112	.0202	-.0086	1600.		
.3450	842.	477.	-81.	1305.	-2580.	3373.	.0079	-.0101	-.0035	.0142	.0134	-.0041	1783.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.53.

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

.3350	-685.	34.	556.	-1116.	1743.	-2314.	-.0369	-.0721	-.0780	-.0081	.0505	-.0411	1246.
.3360	-741.	93.	557.	-857.	1615.	-1780.	-.0326	-.0652	-.0710	-.0069	.0592	-.0391	1024.
.3370	-744.	163.	546.	-566.	1385.	-1154.	-.0279	-.0581	-.0639	-.0053	.0569	-.0367	758.
.3380	-783.	276.	558.	-253.	1016.	-464.	-.0231	-.0508	-.0565	-.0025	.0537	-.0337	474.
.3390	-780.	314.	561.	67.	637.	257.	-.0182	-.0435	-.0490	-.0015	.0497	-.0302	277.
.3400	-629.	385.	510.	320.	141.	978.	-.0134	-.0364	-.0412	.0007	.0449	-.0264	425.
.3410	-314.	446.	394.	670.	-410.	1662.	-.0088	-.0297	-.0334	.0030	.0395	-.0222	738.
.3420	52.	490.	256.	919.	-988.	2272.	-.0043	-.0236	-.0256	.0056	.0334	-.0177	1061.
.3430	350.	512.	140.	1115.	-1561.	2777.	-.0001	-.0182	-.0179	.0083	.0270	-.0132	1354.
.3440	571.	508.	46.	1246.	-2100.	3150.	.0040	-.0137	-.0105	.0112	.0202	-.0086	1600.
.3450	842.	477.	-81.	1305.	-2550.	3373.	.0079	-.0101	-.0035	.0142	.0134	-.0041	1783.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.53.

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	44	MEMBER	1	SEQUENCE	B21	LOCATION	END	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.3460	1177.	419.	-250.	1290.	-2977.	3436.	.0117	-.0075	.0029	.0171	.0065	.0002	1896.	
.3470	1429.	334.	-400.	1203.	-3272.	3339.	.0155	-.0059	.0088	.0198	-.0002	.0042	1937.	
.3480	1457.	227.	-474.	1050.	-3450.	3092.	.0191	-.0052	.0141	.0223	-.0064	.0079	1906.	
.3490	1334.	103.	-501.	843.	-3507.	2718.	.0225	-.0052	.0187	.0244	-.0122	.0111	1812.	
.3500	1227.	-28.	-547.	596.	-3445.	2246.	.0256	-.0060	.0229	.0261	-.0174	.0136	1667.	
.3510	1172.	-160.	-623.	326.	-3274.	1708.	.0284	-.0071	.0266	.0274	-.0219	.0155	1488.	
.3520	1046.	-285.	-674.	51.	-3009.	1138.	.0307	-.0086	.0300	.0283	-.0255	.0166	1291.	
.3530	726.	-397.	-644.	-210.	-2664.	575.	.0323	-.0102	.0332	.0288	-.0281	.0171	1097.	
.3540	349.	-487.	-584.	-440.	-2262.	53.	.0332	-.0117	.0365	.0287	-.0298	.0168	925.	
.3550	168.	-548.	-594.	-626.	-1829.	-394.	.0334	-.0129	.0401	.0282	-.0304	.0157	792.	
.3560	220.	-577.	-683.	-758.	-1387.	-746.	.0327	-.0138	.0439	.0271	-.0299	.0139	701.	
.3570	279.	-573.	-754.	-828.	-957.	-991.	.0314	-.0142	.0482	.0256	-.0284	.0115	645.	
.3580	156.	-530.	-729.	-836.	-554.	-1123.	.0294	-.0141	.0530	.0237	-.0258	.0087	604.	
.3590	-46.	-474.	-647.	-784.	-194.	-1145.	.0270	-.0135	.0585	.0216	-.0221	.0053	562.	
.3600	-91.	-382.	-603.	-678.	106.	-1068.	.0243	-.0124	.0645	.0193	-.0175	.0016	509.	
.3610	71.	-270.	-619.	-532.	337.	-913.	.0216	-.0109	.0711	.0170	-.0121	-.0023	445.	
.3620	205.	-149.	-600.	-360.	497.	-708.	.0190	-.0091	.0783	.0146	-.0058	-.0063	376.	
.3630	81.	-28.	-456.	-176.	589.	-480.	.0169	-.0070	.0859	.0124	.0011	-.0102	313.	
.3640	-216.	88.	-225.	5.	614.	-254.	.0152	-.0049	.0940	.0105	.0084	-.0139	267.	
.3650	-431.	193.	-13.	171.	570.	-49.	.0141	-.0027	.1024	.0090	.0160	-.0173	240.	
.3660	-480.	282.	140.	310.	458.	115.	.0138	-.0006	.1112	.0081	.0237	-.0203	227.	
.3670	-587.	348.	322.	416.	284.	217.	.0141	.0014	.1202	.0077	.0314	-.0228	220.	
.3680	-992.	384.	629.	483.	59.	248.	.0151	.0031	.1293	.0080	.0387	-.0245	219.	
.3690	-1579.	391.	1007.	508.	-214.	207.	.0166	.0047	.1387	.0091	.0456	-.0256	236.	
.3700	-2006.	372.	1314.	492.	-534.	104.	.0185	.0060	.1482	.0111	.0517	-.0259	294.	
.3710	-2115.	330.	1482.	438.	-896.	-50.	.0206	.0072	.1578	.0138	.0570	-.0256	401.	
.3720	-2163.	266.	1613.	353.	-1289.	-244.	.0230	.0083	.1673	.0172	.0613	-.0245	545.	
.3730	-2475.	180.	1836.	249.	-1701.	-463.	.0254	.0093	.1769	.0213	.0644	-.0227	715.	
.3740	-2919.	81.	2099.	136.	-2128.	-686.	.0278	.0104	.1863	.0260	.0664	-.0202	899.	
.3750	-3093.	-24.	2232.	22.	-2567.	-890.	.0302	.0117	.1955	.0311	.0670	-.0171	1090.	
.3760	-2847.	-128.	2173.	-84.	-3006.	-1057.	.0326	.0132	.2044	.0365	.0664	-.0136	1279.	
.3770	-2526.	-230.	2065.	-174.	-3429.	-1176.	.0351	.0150	.2129	.0419	.0644	-.0097	1456.	
.3780	-2604.	-327.	2096.	-242.	-3818.	-1236.	.0376	.0173	.2209	.0473	.0612	-.0055	1613.	
.3790	-3022.	-414.	2246.	-279.	-4168.	-1227.	.0402	.0199	.2284	.0524	.0569	-.0011	1747.	
.3800	-3280.	-482.	2310.	-282.	-4481.	-1138.	.0430	.0231	.2352	.0570	.0515	.0033	1859.	
.3810	-2978.	-529.	2128.	-248.	-4759.	-971.	.0459	.0267	.2413	.0609	.0451	.0076	1952.	
.3820	-2472.	-557.	1846.	-181.	-4990.	-737.	.0490	.0307	.2467	.0640	.0379	.0117	2026.	
.3830	-2397.	-572.	1726.	-83.	-5164.	-451.	.0523	.0352	.2514	.0662	.0302	.0156	2080.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.54.

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

.3730	-2475.	180.	1836.	249.	-1701.	-463.	.0254	.0093	.1769	.0213	.0644	-.0227	715.
.3740	-2919.	81.	2099.	136.	-2128.	-686.	.0278	.0104	.1863	.0260	.0664	-.0202	899.
.3750	-3093.	-24.	2232.	22.	-2567.	-890.	.0302	.0117	.1955	.0311	.0670	-.0171	1090.
.3760	-2843.	-128.	2173.	-84.	-3006.	-1057.	.0326	.0132	.2044	.0365	.0664	-.0136	1279.
.3770	-2526.	-230.	2065.	-174.	-3429.	-1176.	.0351	.0150	.2129	.0419	.0644	-.0097	1456.
.3780	-2604.	-327.	2096.	-242.	-3810.	-1236.	.0376	.0173	.2209	.0473	.0612	-.0055	1613.
.3790	-3022.	-414.	2246.	-279.	-4168.	-1227.	.0402	.0199	.2284	.0524	.0569	-.0011	1747.
.3800	-3280.	-482.	2310.	-282.	-4481.	-1138.	.0430	.0231	.2352	.0570	.0515	.0033	1859.
.3810	-2978.	-529.	2128.	-248.	-4759.	-971.	.0459	.0267	.2413	.0609	.0451	.0076	1952.
.3820	-2472.	-557.	1846.	-181.	-4990.	-737.	.0490	.0307	.2467	.0640	.0379	.0117	2026.
.3830	-2397.	-572.	1726.	-83.	-5164.	-451.	.0523	.0352	.2514	.0662	.0302	.0156	2080.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.54.

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	44	MEMBER	1	SEQUENCE	821	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3840	-2730.	-573.	1759.	38.	-5283.	-122.	.0558	.0400	.2553	.0675	.0219	.0192	2121.		
.3850	-2892.	-556.	1713.	177.	-5360.	243.	.0594	.0451	.2586	.0679	.0133	.0223	2154.		
.3860	-2565.	-521.	1461.	325.	-5405.	629.	.0630	.0503	.2613	.0673	.0045	.0248	2188.		
.3870	-2153.	-475.	1172.	480.	-5421.	1016.	.0667	.0557	.2634	.0657	-.0044	.0268	2221.		
.3880	-2221.	-424.	1080.	635.	-5409.	1380.	.0703	.0610	.2651	.0631	-.0130	.0283	2254.		
.3890	-2665.	-371.	1148.	785.	-5381.	1707.	.0735	.0662	.2663	.0594	-.0214	.0294	2287.		
.3900	-2872.	-313.	1128.	921.	-5353.	1989.	.0764	.0712	.2673	.0548	-.0293	.0300	2321.		
.3910	-2551.	-253.	900.	1032.	-5331.	2213.	.0788	.0759	.2681	.0493	-.0368	.0299	2353.		
.3920	-2138.	-199.	644.	1113.	-5311.	2362.	.0806	.0803	.2687	.0433	-.0436	.0293	2375.		
.3930	-2187.	-156.	588.	1161.	-5289.	2425.	.0818	.0843	.2692	.0368	-.0497	.0284	2381.		
.3940	-2565.	-126.	680.	1175.	-5271.	2400.	.0824	.0879	.2697	.0299	-.0549	.0271	2372.		
.3950	-2676.	-102.	677.	1158.	-5267.	2298.	.0825	.0912	.2701	.0228	-.0592	.0253	2353.		
.3960	-2292.	-81.	487.	1114.	-5281.	2127.	.0820	.0940	.2704	.0155	-.0626	.0230	2328.		
.3970	-1887.	-67.	303.	1044.	-5302.	1892.	.0811	.0966	.2706	.0080	-.0651	.0204	2298.		
.3980	-1980.	-64.	336.	952.	-5317.	1600.	.0799	.0990	.2706	.0005	-.0664	.0177	2260.		
.3990	-2412.	-70.	519.	842.	-5321.	1266.	.0785	.1012	.2703	-.0068	-.0667	.0148	2221.		
.4000	-2606.	-78.	614.	719.	-5321.	914.	.0769	.1034	.2699	-.0137	-.0660	.0116	2186.		

MAXIMUM VALUE OF STRESS OCCURS AT

TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.3080	3024.	-1128.	-2548.	-2987.	8730.	-5479.	-.0710	-.1655	-.2809	.0228	-.0269	.0240	4306.

SECTION	45	MEMBER	1	SEQUENCE	821	LOCATION	BEG	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.		
.0010	0.	0.	-0.	-0.	0.	0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	0.		
.0020	2.	0.	-1.	-0.	0.	0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	0.		
.0030	4.	0.	-2.	-0.	0.	-0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	0.		
.0040	5.	0.	-2.	-0.	0.	-0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	0.		
.0050	4.	0.	-1.	-0.	1.	-0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	0.		
.0060	1.	0.	-0.	-0.	1.	-0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	0.		
.0070	-5.	0.	2.	-0.	2.	0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	1.		

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

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

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)
0.0090	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	0.	0.	-0.	-0.	0.	0.	-0.0000	-0.0000	.0000	-0.0000	-0.0000	.0000	0.
.0020	2.	0.	-1.	-0.	0.	0.	-0.0000	-0.0000	.0000	-0.0000	-0.0000	.0000	0.
.0030	4.	0.	-2.	-0.	0.	-0.	-0.0000	-0.0000	.0000	-0.0000	-0.0000	.0000	0.
.0040	5.	0.	-2.	-0.	0.	-0.	-0.0000	-0.0000	.0000	-0.0000	-0.0000	.0000	0.
.0050	4.	0.	-1.	-0.	1.	-0.	-0.0000	-0.0000	.0000	-0.0000	-0.0000	.0000	0.
.0060	1.	0.	-0.	-0.	1.	-0.	-0.0000	-0.0000	.0000	-0.0000	-0.0000	.0000	0.
.0070	-5.	0.	2.	-0.	2.	0.	-0.0000	-0.0000	.0000	-0.0000	-0.0000	.0000	1.

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

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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
45	1	821					.0080	-18.	0.	8.	-0.	2.	0.	-0.0000	-0.0000	.0000	-0.0000	-0.0000	.0000	1.
							.0090	-32.	-0.	14.	-0.	2.	1.	-0.0000	-0.0000	.0000	-0.0000	-0.0000	.0000	1.
							.0100	-30.	-0.	13.	1.	1.	1.	-0.0000	-0.0000	.0000	-0.0000	-0.0000	.0000	1.
							.0110	-9.	-0.	4.	3.	0.	2.	-0.0000	-0.0000	-0.0000	.0001	-0.0000	-0.0000	1.
							.0120	11.	-1.	-5.	6.	-1.	2.	-0.0000	-0.0000	-0.0000	.0002	.0000	-0.0001	2.
							.0130	10.	-1.	-5.	9.	-1.	2.	.0000	.0000	-0.0000	.0004	.0000	-0.0002	4.
							.0140	-5.	-1.	2.	13.	0.	1.	.0000	.0000	-0.0000	.0006	.0000	-0.0002	5.
							.0150	-14.	-1.	6.	17.	0.	0.	.0000	.0000	-0.0000	.0009	.0000	-0.0003	7.
							.0160	-5.	-1.	2.	22.	-2.	-0.	-0.0000	.0000	-0.0000	.0011	.0000	-0.0004	9.
							.0170	11.	-1.	-6.	26.	-6.	-0.	-0.0000	.0000	-0.0000	.0014	.0000	-0.0005	11.
							.0180	10.	-1.	-6.	30.	-13.	-0.	-0.0001	.0001	.0000	.0016	-0.0000	-0.0005	13.
							.0190	-15.	-2.	3.	34.	-22.	-0.	-0.0001	.0001	.0000	.0018	-0.0001	-0.0006	16.
							.0200	-50.	-2.	16.	39.	-33.	-1.	-0.0001	.0001	.0000	.0021	-0.0001	-0.0007	20.
							.0210	-56.	-1.	17.	43.	-43.	-3.	-0.0002	.0002	.0001	.0024	-0.0002	-0.0008	24.
							.0220	-28.	-1.	5.	50.	-51.	-8.	-0.0002	.0002	.0001	.0029	-0.0003	-0.0010	29.
							.0230	-14.	-0.	-1.	55.	-54.	-17.	-0.0001	.0003	.0002	.0033	-0.0003	-0.0012	32.
							.0240	-25.	1.	4.	53.	-54.	-29.	-0.0001	.0004	.0002	.0035	-0.0003	-0.0013	33.
							.0250	-32.	3.	7.	41.	-55.	-42.	-0.0000	.0004	.0003	.0033	-0.0004	-0.0013	32.
							.0260	-27.	5.	3.	28.	-60.	-56.	.0001	.0005	.0004	.0029	-0.0005	-0.0012	35.
							.0270	2.	6.	-8.	24.	-68.	-70.	.0002	.0006	.0005	.0028	-0.0006	-0.0013	41.
							.0280	46.	7.	-28.	23.	-79.	-78.	.0003	.0006	.0006	.0027	-0.0007	-0.0013	45.
							.0290	100.	7.	-50.	14.	-86.	-72.	.0004	.0006	.0008	.0022	-0.0009	-0.0010	45.
							.0300	142.	6.	-65.	6.	-84.	-65.	.0006	.0007	.0010	.0017	-0.0010	-0.0008	43.
							.0310	176.	7.	-76.	-2.	-69.	-71.	.0009	.0007	.0012	.0014	-0.0011	-0.0008	40.
							.0320	136.	9.	-54.	-23.	-38.	-93.	.0011	.0007	.0014	.0007	-0.0012	-0.0007	41.
							.0330	61.	13.	-16.	-56.	8.	-121.	.0013	.0006	.0017	-0.0005	-0.0011	-0.0006	54.
							.0340	136.	17.	-40.	-87.	61.	-142.	.0015	.0005	.0020	-0.0019	-0.0010	-0.0003	71.
							.0350	372.	19.	-131.	-115.	111.	-145.	.0017	.0004	.0023	-0.0035	-0.0009	.0002	87.
							.0360	459.	18.	-160.	-138.	156.	-132.	.0019	.0002	.0026	-0.0051	-0.0008	.0008	99.
							.0370	204.	16.	-48.	-149.	196.	-116.	.0021	-0.0000	.0028	-0.0063	-0.0009	.0012	109.
							.0380	-71.	13.	71.	-148.	228.	-105.	.0022	-0.0004	.0030	-0.0069	-0.0009	.0012	117.
							.0390	52.	11.	24.	-153.	251.	-89.	.0022	-0.0008	.0032	-0.0075	-0.0009	.0013	123.
							.0400	427.	10.	-129.	-171.	269.	-56.	.0022	-0.0012	.0033	-0.0087	-0.0009	.0018	130.
							.0410	544.	5.	-175.	-180.	286.	-11.	.0022	-0.0018	.0033	-0.0100	-0.0008	.0023	136.
							.0420	227.	-1.	-43.	-175.	294.	38.	.0021	-0.0023	.0032	-0.0110	-0.0008	.0027	138.
							.0430	-159.	-8.	114.	-165.	278.	85.	.0020	-0.0030	.0030	-0.0119	-0.0009	.0031	134.
							.0440	-250.	-15.	145.	-147.	229.	140.	.0017	-0.0036	.0028	-0.0125	-0.0010	.0034	123.
							.0450	29.	-23.	17.	-113.	154.	213.	.0013	-0.0043	.0025	-0.0124	-0.0012	.0036	115.

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.0350	372.	19.	-131.	-119.	111.	-145.	.0017	.0004	.0023	-.0035	-.0009	.0002	87.
.0360	459.	18.	-160.	-138.	156.	-132.	.0019	.0002	.0026	-.0051	-.0008	.0008	99.
.0370	204.	16.	-48.	-149.	196.	-116.	.0021	-.0000	.0028	-.0063	-.0009	.0012	109.
.0380	-71.	13.	71.	-140.	228.	-105.	.0022	-.0004	.0030	-.0069	-.0009	.0012	117.
.0390	52.	11.	24.	-153.	251.	-89.	.0022	-.0008	.0032	-.0075	-.0009	.0013	123.
.0400	427.	10.	-129.	-171.	269.	-56.	.0022	-.0012	.0033	-.0087	-.0009	.0018	130.
.0410	544.	5.	-175.	-180.	286.	-11.	.0022	-.0018	.0033	-.0100	-.0008	.0023	136.
.0420	227.	-1.	-43.	-175.	294.	38.	.0021	-.0023	.0032	-.0110	-.0008	.0027	138.
.0430	-159.	-8.	114.	-165.	278.	85.	.0020	-.0030	.0030	-.0119	-.0009	.0031	134.
.0440	-252.	-15.	145.	-147.	229.	140.	.0017	-.0036	.0028	-.0125	-.0010	.0034	123.
.0450	29.	-23.	17.	-113.	154.	213.	.0013	-.0043	.0025	-.0124	-.0012	.0036	115.

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

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INTERNAL FORCES IN THE PIPING
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SECTION	45	MEMBER	1	SEQUENCE	821	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)
.0460	405.	-34.	-151.	-68.	64.	307.	.0009	-.0050	.0021	-.0117	-.0014	.0039	129.										
.0470	333.	-45.	-133.	-29.	-25.	405.	.0006	-.0057	.0016	-.0110	-.0016	.0042	163.										
.0480	-340.	-56.	135.	9.	-109.	491.	.0003	-.0063	.0011	-.0103	-.0020	.0043	202.										
.0490	-881.	-66.	346.	59.	-200.	560.	-.0002	-.0068	.0006	-.0090	-.0023	.0042	240.										
.0500	-513.	-72.	177.	119.	-308.	620.	-.0007	-.0072	.0002	-.0071	-.0024	.0041	282.										
.0510	301.	-75.	-178.	181.	-420.	677.	-.0012	-.0075	-.0002	-.0049	-.0025	.0041	328.										
.0520	320.	-80.	-198.	243.	-507.	729.	-.0014	-.0076	-.0006	-.0025	-.0027	.0040	369.										
.0530	-602.	-86.	176.	301.	-562.	763.	-.0016	-.0075	-.0009	.0002	-.0030	.0036	399.										
.0540	-1196.	-86.	417.	342.	-604.	766.	-.0017	-.0072	-.0010	.0030	-.0032	.0031	415.										
.0550	-702.	-77.	206.	361.	-646.	731.	-.0018	-.0066	-.0011	.0058	-.0032	.0026	417.										
.0560	69.	-63.	-118.	366.	-671.	667.	-.0018	-.0059	-.0009	.0083	-.0031	.0023	407.										
.0570	115.	-49.	-136.	368.	-657.	587.	-.0018	-.0049	-.0006	.0105	-.0030	.0019	383.										
.0580	-379.	-37.	75.	367.	-610.	494.	-.0014	-.0038	-.0003	.0124	-.0028	.0016	348.										
.0590	-668.	-21.	203.	359.	-543.	383.	-.0008	-.0025	.0002	.0143	-.0026	.0011	303.										
.0600	-509.	-1.	149.	337.	-461.	248.	-.0003	-.0010	.0008	.0163	-.0024	.0006	250.										
.0610	-93.	23.	-10.	295.	-358.	82.	.0002	.0006	.0016	.0181	-.0020	-.0002	189.										
.0620	331.	51.	-167.	226.	-229.	-118.	.0009	.0023	.0026	.0195	-.0015	-.0010	138.										
.0630	419.	80.	-182.	134.	-71.	-335.	.0017	.0040	.0035	.0199	-.0009	-.0018	148.										
.0640	78.	105.	-17.	32.	108.	-543.	.0025	.0057	.0045	.0190	-.0004	-.0023	223.										
.0650	-108.	128.	84.	-67.	286.	-721.	.0033	.0073	.0055	.0172	.0002	-.0025	315.										
.0660	377.	148.	-98.	-157.	439.	-893.	.0040	.0086	.0065	.0152	.0009	-.0026	404.										
.0670	1001.	165.	-340.	-240.	572.	-1041.	.0047	.0098	.0074	.0131	.0015	-.0028	486.										
.0680	916.	175.	-289.	-315.	700.	-1163.	.0053	.0107	.0082	.0110	.0019	-.0033	559.										
.0690	397.	178.	-57.	-384.	821.	-1244.	.0057	.0113	.0088	.0086	.0022	-.0038	618.										
.0700	384.	175.	-39.	-449.	911.	-1272.	.0060	.0115	.0094	.0057	.0025	-.0039	653.										
.0710	901.	167.	-247.	-501.	958.	-1242.	.0061	.0113	.0097	.0023	.0028	-.0037	661.										
.0720	1094.	149.	-326.	-522.	962.	-1159.	.0059	.0108	.0098	-.0015	.0029	-.0032	640.										
.0730	683.	122.	-165.	-508.	917.	-1029.	.0055	.0099	.0097	-.0052	.0026	-.0028	590.										
.0740	264.	89.	-7.	-470.	812.	-853.	.0050	.0087	.0094	-.0088	.0021	-.0023	509.										
.0750	246.	51.	-22.	-417.	651.	-624.	.0042	.0072	.0089	-.0121	.0014	-.0015	399.										
.0760	375.	8.	-102.	-349.	453.	-343.	.0032	.0054	.0083	-.0150	.0006	-.0006	268.										
.0770	297.	-38.	-98.	-267.	235.	-29.	.0022	.0036	.0076	-.0174	-.0005	.0004	143.										
.0780	-31.	-86.	9.	-170.	5.	293.	.0011	.0016	.0067	-.0191	-.0016	.0013	136.										
.0790	-444.	-133.	150.	-54.	-231.	609.	.0001	-.0002	.0059	-.0201	-.0028	.0021	262.										
.0800	-691.	-176.	222.	80.	-465.	906.	-.0010	-.0020	.0051	-.0203	-.0040	.0028	410.										
.0810	-624.	-214.	166.	219.	-687.	1175.	-.0019	-.0034	.0044	-.0196	-.0051	.0034	553.										
.0820	-467.	-244.	78.	346.	-875.	1399.	-.0025	-.0046	.0037	-.0181	-.0062	.0038	677.										
.0830	-617.	-266.	126.	455.	-1012.	1566.	-.0028	-.0053	.0037	-.0159	-.0071	.0040	770.										

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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
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INTERNAL FORCES IN THE PIPING
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.0730	683.	122.	-163.	-568.	217.	-1029.	-163.	.0055	.0099	.0097	-.0052	.0026	-.0028	590.
.0740	284.	89.	-7.	-470.	812.	-853.	.0050	.0087	.0094	-.0088	.0021	-.0023	509.	
.0750	246.	51.	-22.	-417.	651.	-624.	.0042	.0072	.0087	-.0121	.0014	-.0015	399.	
.0760	375.	8.	-102.	-349.	453.	-343.	.0032	.0054	.0083	-.0150	.0006	-.0006	268.	
.0770	297.	-38.	-96.	-267.	235.	-29.	.0022	.0036	.0076	-.0174	-.0005	.0004	143.	
.0780	-31.	-86.	9.	-170.	5.	293.	.0011	.0016	.0067	-.0191	-.0016	.0013	136.	
.0790	-444.	-133.	150.	-54.	-231.	609.	.0001	-.0002	.0059	-.0201	-.0028	.0021	262.	
.0800	-691.	-176.	222.	80.	-465.	906.	-.0010	-.0020	.0051	-.0203	-.0040	.0028	410.	
.0810	-624.	-214.	166.	219.	-687.	1175.	-.0019	-.0034	.0044	-.0196	-.0051	.0034	553.	
.0820	-467.	-244.	79.	346.	-875.	1399.	-.0025	-.0046	.0037	-.0181	-.0062	.0038	677.	
.0830	-617.	-266.	126.	455.	-1012.	1566.	-.0028	-.0057	.0037	-.0159	-.0071	.0040	770.	

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

SECTION	45	MEMBER	1	SEQUENCE	021	LOCATION	BEG	TYPE	RU						
TIME	FX	FY	FZ	RX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.0840	-1015.	-278.	285.	537.	-1090.	1665.	-.0029	-.0056	.0030	-.0130	-.0080	.0039	827.		
.0850	-1124.	-276.	333.	588.	-1117.	1689.	-.0026	-.0054	.0030	-.0097	-.0086	.0037	846.		
.0860	-732.	-262.	179.	609.	-1096.	1634.	-.0020	-.0046	.0033	-.0064	-.0091	.0035	826.		
.0870	-296.	-235.	15.	608.	-1014.	1494.	-.0010	-.0033	.0038	-.0030	-.0092	.0033	765.		
.0880	-255.	-198.	25.	582.	-856.	1272.	.0003	-.0016	.0046	.0004	-.0092	.0028	658.		
.0890	-393.	-151.	119.	521.	-622.	972.	.0018	.0006	.0056	.0038	-.0088	.0022	508.		
.0900	-223.	-92.	94.	420.	-323.	604.	.0036	.0032	.0063	.0070	-.0082	.0015	323.		
.0910	287.	-23.	-66.	283.	31.	178.	.0054	.0060	.0083	.0102	-.0071	.0006	135.		
.0920	744.	51.	-198.	119.	424.	-294.	.0072	.0089	.0098	.0131	-.0059	-.0005	212.		
.0930	903.	127.	-206.	-60.	838.	-792.	.0089	.0119	.0114	.0156	-.0044	-.0018	463.		
.0940	924.	202.	-159.	-241.	1246.	-1290.	.0104	.0146	.0128	.0175	-.0029	-.0031	726.		
.0950	1092.	272.	-180.	-415.	1626.	-1759.	.0117	.0171	.0142	.0186	-.0012	-.0042	975.		
.0960	1437.	334.	-287.	-581.	1961.	-2176.	.0127	.0191	.0152	.0190	.0006	-.0052	1198.		
.0970	1744.	385.	-378.	-736.	2240.	-2526.	.0132	.0205	.0159	.0184	.0024	-.0060	1387.		
.0980	1817.	423.	-338.	-877.	2449.	-2798.	.0134	.0212	.0162	.0172	.0041	-.0068	1533.		
.0990	1690.	444.	-328.	-991.	2570.	-2968.	.0131	.0211	.0159	.0153	.0057	-.0074	1625.		
.1000	1593.	446.	-297.	-1065.	2580.	-3013.	.0124	.0202	.0150	.0126	.0071	-.0078	1648.		
.1010	1681.	478.	-361.	-1089.	2460.	-2912.	.0111	.0183	.0135	.0092	.0082	-.0077	1591.		
.1020	1815.	387.	-463.	-1054.	2204.	-2664.	.0095	.0156	.0113	.0052	.0089	-.0071	1450.		
.1030	1690.	325.	-476.	-962.	1819.	-2277.	.0075	.0119	.0085	.0007	.0091	-.0061	1232.		
.1040	1208.	249.	-355.	-822.	1319.	-1769.	.0052	.0075	.0052	-.0041	.0088	-.0048	945.		
.1050	798.	151.	-275.	-646.	720.	-1161.	.0026	.0025	.0014	-.0088	.0080	-.0033	606.		
.1060	808.	48.	-378.	-442.	41.	-474.	-.0002	-.0030	-.0028	-.0133	.0068	-.0014	261.		
.1070	934.	-59.	-533.	-216.	-682.	269.	-.0031	-.0088	-.0071	-.0175	.0052	.0006	307.		
.1080	478.	-172.	-445.	31.	-1414.	1046.	-.0061	-.0147	-.0115	-.0216	.0031	.0030	706.		
.1090	-514.	-285.	-131.	300.	-2135.	1839.	-.0090	-.0204	-.0158	-.0253	.0004	.0057	1137.		
.1100	-465.	-338.	-244.	583.	-2849.	2599.	-.0117	-.0259	-.0199	-.0275	-.0021	.0083	1565.		
.1110	-132.	-478.	-464.	858.	-3514.	3296.	-.0139	-.0308	-.0236	-.0286	-.0051	.0109	1964.		
.1120	-857.	-555.	-227.	1102.	-4075.	3899.	-.0160	-.0349	-.0267	-.0291	-.0085	.0135	2306.		
.1130	-1795.	-611.	118.	1300.	-4517.	4376.	-.0177	-.0380	-.0291	-.0288	-.0119	.0159	2577.		
.1140	-1690.	-639.	51.	1439.	-4842.	4704.	-.0187	-.0401	-.0309	-.0275	-.0152	.0181	2770.		
.1150	-1305.	-642.	-111.	1523.	-5027.	4886.	-.0189	-.0409	-.0318	-.0257	-.0184	.0204	2879.		
.1160	-1867.	-626.	144.	1567.	-5052.	4929.	-.0186	-.0406	-.0319	-.0234	-.0215	.0225	2901.		
.1170	-2644.	-590.	510.	1577.	-4934.	4829.	-.0176	-.0389	-.0310	-.0204	-.0244	.0245	2842.		
.1180	-2155.	-528.	367.	1540.	-4702.	4567.	-.0155	-.0361	-.0294	-.0162	-.0270	.0260	2702.		
.1190	-1382.	-441.	126.	1426.	-4339.	4137.	-.0127	-.0320	-.0271	-.0119	-.0291	.0271	2473.		
.1200	-1807.	-376.	403.	1230.	-3820.	3553.	-.0094	-.0268	-.0239	-.0084	-.0308	.0278	2151.		
.1210	-2380.	-216.	756.	968.	-3175.	2841.	-.0057	-.0207	-.0200	-.0053	-.0320	.0282	1753.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.54.

S/RV PIPING KEWAUNEE GKW0RF 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

.1100	-465.	-338.	-244.	583.	-2849.	2599.	-0117	-0259	-0197	-0275	-0021	.0083	1565.
.1110	-132.	-478.	-464.	858.	-3514.	3296.	-0139	-0308	-0236	-0286	-0051	.0109	1964.
.1120	-857.	-555.	-227.	1102.	-4075.	3899.	-0160	-0349	-0267	-0291	-0085	.0135	2306.
.1130	-1795.	-611.	118.	1300.	-4517.	4376.	-0177	-0380	-0291	-0288	-0119	.0159	2577.
.1140	-1690.	-639.	51.	1439.	-4842.	4704.	-0187	-0401	-0309	-0275	-0152	.0181	2770.
.1150	-1305.	-642.	-111.	1523.	-5027.	4886.	-0189	-0409	-0318	-0257	-0184	.0204	2879.
.1160	-1867.	-626.	144.	1567.	-5052.	4929.	-0186	-0406	-0317	-0234	-0215	.0225	2901.
.1170	-2644.	-590.	510.	1577.	-4934.	4829.	-0176	-0389	-0310	-0204	-0244	.0245	2842.
.1180	-2155.	-528.	367.	1540.	-4702.	4567.	-0155	-0361	-0294	-0162	-0270	.0260	2702.
.1190	-1382.	-441.	126.	1426.	-4339.	4137.	-0127	-0320	-0271	-0119	-0291	.0271	2473.
.1200	-1807.	-336.	403.	1230.	-3820.	3553.	-0094	-0268	-0239	-0084	-0308	.0278	2151.
.1210	-2320.	-216.	756.	968.	-3175.	2841.	-0057	-0207	-0200	-0053	-0320	.0282	1753.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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S/RV PIPING KEWAUNEE GKW0RF 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	45	MEMBER	1	SEQUENCE	821	LOCATION	BEG	TYPE	LU						
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	PX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)		
.1220	-1443.	-80.	490.	652.	-2462.	2041.	-0014	-0138	-0156	-0027	-0324	.0285	1310.		
.1230	7.	61.	15.	319.	-1700.	1197.	.0033	-0065	-0108	-0005	-0322	.0287	844.		
.1240	110.	193.	99.	-3.	-893.	341.	.0080	.0011	-0056	.0013	-0316	.0284	384.		
.1250	-482.	317.	467.	-305.	-77.	-514.	.0125	.0068	-0002	.0034	-0306	.0273	242.		
.1260	51.	437.	358.	-604.	698.	-1361.	.0108	.0162	.0052	.0057	-0290	.0255	660.		
.1270	1361.	550.	-85.	-921.	1426.	-2168.	.0207	.0232	.0105	.0072	-0268	.0234	1105.		
.1280	1776.	643.	-170.	-1236.	2116.	-2886.	.0236	.0295	.0158	.0070	-0241	.0212	1519.		
.1290	1442.	711.	30.	-1524.	2728.	-3467.	.0258	.0350	.0208	.0052	-0212	.0191	1873.		
.1300	1678.	752.	-17.	-1753.	3194.	-3680.	.0272	.0394	.0252	.0021	-0179	.0173	2136.		
.1310	2249.	763.	-244.	-1898.	3479.	-4111.	.0278	.0426	.0291	-0015	-0146	.0156	2291.		
.1320	2011.	739.	-165.	-1956.	3590.	-4156.	.0273	.0446	.0324	-0056	-0114	.0137	2339.		
.1330	1339.	686.	66.	-1936.	3537.	-4026.	.0258	.0453	.0351	-0096	-0085	.0116	2287.		
.1340	1402.	609.	-32.	-1869.	3329.	-3737.	.0234	.0449	.0372	-0134	-0054	.0094	2144.		
.1350	1787.	509.	-282.	-1766.	3001.	-3278.	.0205	.0433	.0385	-0178	-0024	.0074	1919.		
.1360	1298.	382.	-184.	-1613.	2585.	-2658.	.0169	.0408	.0394	-0230	.0006	.0059	1622.		
.1370	335.	235.	95.	-1398.	2070.	-1906.	.0129	.0375	.0397	-0286	.0032	.0048	1261.		
.1380	87.	77.	61.	-1117.	1439.	-1076.	.0089	.0336	.0395	-0335	.0056	.0037	849.		
.1390	300.	-85.	-174.	-784.	720.	-211.	.0049	.0294	.0389	-0373	.0076	.0026	435.		
.1400	-60.	-248.	-171.	-427.	-16.	659.	.0009	.0252	.0382	-0400	.0092	.0014	315.		
.1410	-705.	-404.	-37.	-83.	-707.	1502.	-0027	.0212	.0374	-0417	.0103	.0002	667.		
.1420	-665.	-541.	-169.	209.	-1320.	2275.	-0056	.0178	.0367	-0428	.0113	-0006	1059.		
.1430	-308.	-655.	-409.	443.	-1816.	2929.	-0077	.0150	.0362	-0434	.0122	-0012	1394.		
.1440	-560.	-741.	-371.	631.	-2168.	3416.	-0090	.0131	.0360	-0434	.0127	-0018	1643.		
.1450	-994.	-796.	-231.	782.	-2379.	3698.	-0095	.0123	.0363	-0424	.0130	-0025	1792.		
.1460	-616.	-813.	-402.	884.	-2449.	3758.	-0090	.0127	.0371	-0398	.0130	-0033	1835.		
.1470	209.	-791.	-726.	910.	-2350.	3608.	-0075	.0143	.0384	-0365	.0128	-0041	1766.		
.1480	405.	-735.	-752.	842.	-2045.	3260.	-0052	.0170	.0401	-0327	.0123	-0047	1581.		
.1490	153.	-645.	-554.	673.	-1542.	2717.	-0020	.0208	.0424	-0286	.0116	-0053	1282.		
.1500	412.	-519.	-541.	408.	-887.	1981.	.0020	.0254	.0450	-0243	.0107	-0058	886.		
.1510	1150.	-363.	-705.	78.	-123.	1075.	.0065	.0307	.0479	-0199	.0097	-0062	435.		
.1520	1616.	-187.	-742.	-288.	722.	45.	.0112	.0364	.0510	-0159	.0085	-0064	313.		
.1530	1765.	-1.	-638.	-669.	1613.	-1050.	.0161	.0427	.0540	-0126	.0070	-0064	818.		
.1540	2077.	189.	-600.	-1062.	2509.	-2153.	.0211	.0478	.0566	-0099	.0054	-0060	1394.		
.1550	2422.	374.	-577.	-1461.	3377.	-3207.	.0259	.0527	.0589	-0080	.0036	-0052	1959.		
.1560	2394.	546.	-409.	-1843.	4176.	-4164.	.0302	.0568	.0606	-0065	.0015	-0043	2479.		
.1570	2309.	696.	-235.	-2186.	4845.	-4978.	.0337	.0596	.0615	-0053	-0008	-0035	2922.		
.1580	2634.	819.	-260.	-2456.	5322.	-5604.	.0364	.0611	.0615	-0044	-0033	-0021	3254.		
.1590	2921.	905.	-304.	-2620.	5577.	-5994.	.0382	.0608	.0605	-0039	-0062	-0006	3450.		

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18.28.54.

S/RV PIPING KEWAUNEE GKW0RF 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.1490	153.	-945.	-554.	673.	-1542.	2717.	-0020	.0208	.0424	-.0286	.0116	-.0053	1282.
.1500	412.	-519.	-541.	403.	-887.	1981.	.0020	.0254	.0450	-.0243	.0107	-.0058	886.
.1510	1150.	-363.	-705.	78.	-123.	1075.	.0065	.0707	.0479	-.0199	.0097	-.0062	435.
.1520	1616.	-187.	-742.	-288.	722.	45.	.0112	.0364	.0510	-.0159	.0085	-.0064	313.
.1530	1765.	-1.	-638.	-669.	1613.	-1050.	.0161	.0422	.0540	-.0126	.0070	-.0064	818.
.1540	2077.	129.	-600.	-1062.	2509.	-2153.	.0211	.0478	.0566	-.0099	.0054	-.0060	1394.
.1550	2422.	374.	-577.	-1461.	3377.	-3207.	.0259	.0527	.0589	-.0080	.0036	-.0052	1959.
.1560	2394.	546.	-409.	-1843.	4176.	-4164.	.0302	.0568	.0606	-.0065	.0015	-.0043	2479.
.1570	2309.	696.	-235.	-2186.	4945.	-4978.	.0337	.0596	.0619	-.0053	-.0008	-.0033	2922.
.1580	2634.	319.	-260.	-2456.	5722.	-5604.	.0364	.0611	.0615	-.0044	-.0033	-.0021	3254.
.1590	2921.	905.	-304.	-2620.	5577.	-5994.	.0382	.0608	.0605	-.0039	-.0062	-.0006	3450.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	45	MEMBER	1	SEQUENCE	821	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)		
.1600	2633.	946.	-148.	-2008.	5600.	-6110.	.0389	.0588	.0584	-.0043	-.0093	.0013	3494.		
.1610	1997.	942.	114.	-2604.	5387.	-5942.	.0385	.0550	.0553	-.0057	-.0127	.0038	3384.		
.1620	1617.	896.	231.	-2437.	4936.	-5502.	.0371	.0494	.0511	-.0075	-.0162	.0066	3123.		
.1630	1490.	812.	208.	-2181.	4266.	-4806.	.0345	.0423	.0460	-.0094	-.0197	.0096	2723.		
.1640	1144.	691.	244.	-1837.	3408.	-3875.	.0309	.0336	.0403	-.0112	-.0231	.0125	2198.		
.1650	527.	535.	365.	-1402.	2389.	-2741.	.0265	.0239	.0339	-.0125	-.0266	.0152	1564.		
.1660	-34.	354.	439.	-889.	1244.	-1446.	.0215	.0133	.0272	-.0134	-.0299	.0180	845.		
.1670	-533.	154.	472.	-316.	24.	-51.	.0162	.0023	.0203	-.0138	-.0239	.0205	129.		
.1680	-1151.	-53.	547.	284.	-1208.	1373.	.0108	-.0087	.0135	-.0140	-.0355	.0229	743.		
.1690	-1762.	-256.	622.	872.	-2389.	2753.	.0053	-.0192	.0072	-.0140	-.0375	.0250	1504.		
.1700	-2073.	-443.	585.	1415.	-3463.	4024.	.0003	-.0290	.0015	-.0134	-.0388	.0266	2205.		
.1710	-2177.	-608.	482.	1888.	-4380.	5137.	-.0042	-.0375	-.0034	-.0124	-.0394	.0276	2813.		
.1720	-2418.	-744.	464.	2286.	-5094.	6041.	-.0077	-.0444	-.0073	-.0104	-.0392	.0280	3301.		
.1730	-2749.	-845.	514.	2592.	-5580.	6692.	-.0103	-.0496	-.0100	-.0076	-.0384	.0276	3648.		
.1740	-2813.	-903.	487.	2789.	-5823.	7048.	-.0118	-.0528	-.0115	-.0044	-.0368	.0265	3836.		
.1750	-2522.	-915.	349.	2863.	-5807.	7085.	-.0121	-.0539	-.0117	-.0011	-.0343	.0249	3851.		
.1760	-2144.	-880.	213.	2799.	-5523.	6802.	-.0114	-.0530	-.0106	.0019	-.0312	.0227	3691.		
.1770	-1843.	-801.	146.	2601.	-4979.	6219.	-.0096	-.0501	-.0084	.0045	-.0273	.0203	3363.		
.1780	-1461.	-682.	79.	2280.	-4208.	5369.	-.0069	-.0454	-.0051	.0068	-.0229	.0174	2886.		
.1790	-919.	-529.	-28.	1865.	-3256.	4292.	-.0033	-.0392	-.0010	.0094	-.0182	.0141	2288.		
.1800	-366.	-351.	-119.	1382.	-2171.	3037.	.0008	-.0319	.0036	.0124	-.0132	.0103	1597.		
.1810	129.	-155.	-173.	851.	-1005.	1660.	.0051	-.0237	.0090	.0153	-.0082	.0062	850.		
.1820	657.	49.	-236.	298.	195.	225.	.0095	-.0153	.0144	.0181	-.0031	.0020	169.		
.1830	1225.	250.	-318.	-257.	1378.	-1191.	.0136	.0070	.0197	.0203	.0019	-.0020	738.		
.1840	1650.	438.	-351.	-788.	2493.	-2510.	.0173	.0009	.0246	.0217	.0066	-.0056	1454.		
.1850	1881.	601.	-321.	-1262.	3480.	-3665.	.0202	.0077	.0288	.0223	.0113	-.0087	2090.		
.1860	2077.	732.	-304.	-1646.	4279.	-4602.	.0224	.0133	.0322	.0228	.0148	-.0115	2607.		
.1870	2251.	824.	-311.	-1913.	4844.	-5276.	.0235	.0173	.0345	.0236	.0177	-.0139	2975.		
.1880	2263.	871.	-286.	-2051.	5151.	-5651.	.0235	.0196	.0357	.0245	.0203	-.0159	3177.		
.1890	2100.	869.	-227.	-2058.	5194.	-5704.	.0224	.0201	.0356	.0252	.0218	-.0173	3204.		
.1900	1914.	820.	-193.	-1937.	4978.	-5436.	.0203	.0187	.0342	.0255	.0227	-.0180	3057.		
.1910	1717.	726.	-190.	-1790.	4515.	-4848.	.0173	.0155	.0316	.0252	.0228	-.0178	2745.		
.1920	1352.	592.	-148.	-1350.	3827.	-3994.	.0135	.0109	.0277	.0246	.0222	-.0170	2285.		
.1930	865.	425.	-82.	-903.	2942.	-2921.	.0090	.0050	.0230	.0238	.0210	-.0157	1703.		
.1940	471.	234.	-75.	-381.	1899.	-1686.	.0041	-.0018	.0174	.0232	.0191	-.0141	1030.		
.1950	200.	29.	-130.	186.	755.	-352.	-.0010	-.0091	.0112	.0229	.0167	-.0123	342.		
.1960	-126.	-180.	-164.	762.	-422.	1014.	-.0060	-.0164	.0048	.0225	.0140	-.0103	536.		
.1970	-530.	-381.	-156.	1312.	-1564.	2337.	-.0107	-.0233	-.0017	.0220	.0110	-.0081	1245.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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18.28.54.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.1870	2251.	824.	311.	-1913.	4844.	-5276.	.0235	.0173	.0345	.0236	.0179	-.0139	2975.
.1880	2263.	871.	-286.	-2051.	5151.	-5651.	.0235	.0196	.0357	.0245	.0203	-.0159	3177.
.1890	2100.	869.	-227.	-2058.	5194.	-5704.	.0224	.0201	.0356	.0252	.0218	-.0173	3204.
.1900	1914.	820.	-193.	-1937.	4978.	-5430.	.0203	.0187	.0342	.0255	.0227	-.0180	3057.
.1910	1717.	728.	-190.	-1700.	4510.	-4848.	.0173	.0155	.0316	.0252	.0228	-.0178	2745.
.1920	1392.	592.	-148.	-1350.	3827.	-3994.	.0135	.0109	.0277	.0246	.0222	-.0170	2285.
.1930	865.	435.	-82.	-903.	2942.	-2921.	.0090	.0050	.0230	.0238	.0210	-.0157	1703.
.1940	471.	234.	-75.	-381.	1899.	-1686.	.0041	-.0010	.0174	.0232	.0191	-.0141	1030.
.1950	200.	29.	-130.	186.	755.	-352.	-.0010	-.0091	.0112	.0229	.0167	-.0123	342.
.1960	-126.	-180.	-164.	762.	-422.	1614.	-.0060	-.0164	.0048	.0225	.0140	-.0103	536.
.1970	-530.	-381.	-156.	1312.	-1084.	2337.	-.0107	-.0233	-.0017	.0220	.0110	-.0081	1245.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.54.

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	45	MEMBER	1	SEQUENCE	821	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)	
.1980	-861.	-562.	-162.	1805.	-2616.	3537.	-.0149	-.0295	-.0080	.0213	.0079	-.0059	1908.	
.1990	-1060.	-713.	-200.	2217.	-3529.	4542.	-.0183	-.0345	-.0137	.0203	.0049	-.0038	2474.	
.2000	-1181.	-325.	-240.	2528.	-4261.	5295.	-.0210	-.0381	-.0187	.0192	.0019	-.0020	2910.	
.2010	-1244.	-894.	-270.	2722.	-4776.	5759.	-.0226	-.0399	-.0228	.0180	-.0008	-.0004	3195.	
.2020	-1232.	-915.	-292.	2785.	-5047.	5913.	-.0232	-.0399	-.0259	.0168	-.0033	.0007	3314.	
.2030	-1178.	-387.	-292.	2707.	-5060.	5752.	-.0227	-.0381	-.0279	.0154	-.0055	.0015	3261.	
.2040	-1111.	-813.	-256.	2489.	-4816.	5286.	-.0211	-.0344	-.0288	.0137	-.0073	.0020	3038.	
.2050	-965.	-695.	-218.	2140.	-4334.	4536.	-.0187	-.0291	-.0286	.0115	-.0087	.0022	2660.	
.2060	-681.	-539.	-206.	1680.	-3646.	3539.	-.0154	-.0224	-.0275	.0088	-.0098	.0022	2148.	
.2070	-331.	-354.	-198.	1136.	-2799.	2349.	-.0114	-.0147	-.0255	.0056	-.0104	.0020	1536.	
.2080	-28.	-150.	-155.	542.	-1833.	1033.	-.0071	-.0063	-.0230	.0020	-.0108	.0017	872.	
.2090	228.	60.	-84.	-78.	-799.	-333.	-.0025	.0024	-.0200	-.0019	-.0109	.0013	349.	
.2100	511.	266.	-23.	-692.	249.	-1673.	.0020	.0109	-.0169	-.0058	-.0108	.0009	733.	
.2110	822.	457.	16.	-1268.	1252.	-2915.	.0063	.0188	-.0139	-.0094	-.0105	.0005	1371.	
.2120	1084.	622.	59.	-1776.	2154.	-3995.	.0100	.0257	-.0111	-.0129	-.0102	.0002	1956.	
.2130	1262.	753.	109.	-2189.	2901.	-4858.	.0131	.0313	-.0089	-.0161	-.0099	-.0001	2435.	
.2140	1386.	844.	149.	-2482.	3450.	-5458.	.0152	.0352	-.0073	-.0190	-.0097	-.0002	2776.	
.2150	1460.	888.	171.	-2642.	3770.	-5760.	.0164	.0374	-.0065	-.0216	-.0095	-.0000	2959.	
.2160	1450.	883.	188.	-2663.	3846.	-5747.	.0164	.0378	-.0065	-.0240	-.0095	.0005	2974.	
.2170	1339.	830.	207.	-2549.	3676.	-5421.	.0155	.0363	-.0074	-.0259	-.0097	.0012	2820.	
.2180	1160.	733.	216.	-2307.	3272.	-4802.	.0135	.0331	-.0092	-.0273	-.0100	.0022	2519.	
.2190	938.	596.	208.	-1953.	2653.	-3926.	.0106	.0283	-.0117	-.0280	-.0104	.0032	2056.	
.2200	677.	427.	186.	-1502.	1852.	-2841.	.0070	.0224	-.0148	-.0280	-.0110	.0043	1489.	
.2210	391.	235.	151.	-980.	912.	-1600.	.0028	.0155	-.0184	-.0274	-.0116	.0054	840.	
.2220	92.	30.	106.	-417.	-116.	-293.	-.0017	.0082	-.0222	-.0265	-.0121	.0065	210.	
.2230	-734.	-176.	67.	154.	-1172.	1629.	-.0063	.0008	-.0260	-.0253	-.0125	.0076	629.	
.2240	-573.	-372.	36.	699.	-2200.	2286.	-.0107	-.0063	-.0297	-.0241	-.0128	.0086	1303.	
.2250	-851.	-548.	-8.	1185.	-3141.	3410.	-.0147	-.0126	-.0329	-.0227	-.0129	.0094	1920.	
.2260	-1007.	-693.	-82.	1589.	-3942.	4342.	-.0181	-.0178	-.0354	-.0211	-.0126	.0100	2440.	
.2270	-1102.	-801.	-154.	1891.	-4573.	5034.	-.0207	-.0217	-.0372	-.0194	-.0121	.0102	2833.	
.2280	-1213.	-867.	-186.	2077.	-4982.	5450.	-.0223	-.0240	-.0380	-.0177	-.0112	.0101	3078.	
.2290	-1295.	-886.	-194.	2176.	-5152.	5567.	-.0229	-.0246	-.0378	-.0161	-.0099	.0097	3162.	
.2300	-1245.	-858.	-217.	2066.	-5072.	5378.	-.0225	-.0235	-.0365	-.0146	-.0083	.0090	3080.	
.2310	-1067.	-785.	-255.	1870.	-4745.	4896.	-.0211	-.0207	-.0343	-.0134	-.0064	.0081	2837.	
.2320	-873.	-670.	-264.	1562.	-4187.	4151.	-.0187	-.0165	-.0311	-.0123	-.0041	.0069	2448.	
.2330	-693.	-521.	-235.	1162.	-3428.	3188.	-.0155	-.0110	-.0271	-.0113	-.0018	.0056	1936.	
.2340	-456.	-347.	-203.	695.	-2511.	2064.	-.0116	-.0046	-.0225	-.0101	.0006	.0041	1334.	
.2350	-150.	-156.	-181.	188.	-1438.	841.	-.0073	.0024	-.0174	-.0089	.0030	.0026	690.	

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ADLPIPE STRESS ANALYSIS

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

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

.2250	-851.	-548.	-8.	1185.	-3141.	3410.	-0.0147	-0.0126	-0.0329	-0.0227	-0.0129	.0094	1920.
.2260	-1007.	-693.	-82.	1529.	-3942.	4342.	-0.0181	-0.0172	-0.0354	-0.0211	-0.0126	.0100	2440.
.2270	-1102.	-801.	-104.	1891.	-4572.	5034.	-0.0207	-0.0217	-0.0372	-0.0194	-0.0121	.0102	2833.
.2280	-1213.	-867.	-126.	2377.	-4982.	5450.	-0.0223	-0.0240	-0.0380	-0.0177	-0.0112	.0101	3078.
.2290	-1295.	-886.	-194.	2176.	-5152.	5567.	-0.0229	-0.0246	-0.0378	-0.0161	-0.0099	.0097	3162.
.2300	-1245.	-858.	-217.	2066.	-5077.	5378.	-0.0225	-0.0235	-0.0365	-0.0146	-0.0082	.0090	3080.
.2310	-1067.	-785.	-255.	1870.	-4745.	4896.	-0.0211	-0.0207	-0.0343	-0.0134	-0.0064	.0081	2837.
.2320	-873.	-670.	-264.	1562.	-4187.	4151.	-0.0187	-0.0165	-0.0311	-0.0123	-0.0041	.0069	2448.
.2330	-693.	-521.	-235.	1162.	-3428.	3186.	-0.0155	-0.0110	-0.0271	-0.0113	-0.0018	.0056	1936.
.2340	-456.	-347.	-203.	695.	-2511.	2064.	-0.0116	-0.0046	-0.0225	-0.0101	.0006	.0041	1334.
.2350	-190.	-156.	-181.	188.	-1488.	241.	-0.0073	.0024	-0.0174	-0.0089	.0030	.0026	690.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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

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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	RU	DX	DY	DZ	RX	RY	RZ	STRESS
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.2360	142.	41.	-143.	-331.	-411.	-417.	-0.0027	.0095	-0.0123	-0.0076	.0052	.0011	270.
.2370	364.	234.	-73.	-834.	668.	-1643.	.0018	.0164	-0.0372	-0.0064	.0072	-0.0002	787.
.2380	566.	413.	-1.	-1295.	1693.	-2771.	.0062	.0227	-0.0024	-0.0053	.0088	-0.0012	1403.
.2390	797.	568.	46.	-1689.	2614.	-3737.	.0102	.0281	.0017	-0.0044	.0101	-0.0018	1952.
.2400	1005.	692.	81.	-1993.	3383.	-4491.	.0137	.0322	.0052	-0.0036	.0109	-0.0020	2394.
.2410	1107.	778.	134.	-2191.	3962.	-4994.	.0164	.0349	.0076	-0.0028	.0111	-0.0018	2705.
.2420	1069.	822.	214.	-2271.	4321.	-5226.	.0183	.0360	.0090	-0.0019	.0107	-0.0012	2870.
.2430	966.	824.	287.	-2232.	4444.	-5179.	.0193	.0354	.0092	-0.0010	.0097	-0.0003	2881.
.2440	896.	784.	313.	-2078.	4328.	-4856.	.0195	.0333	.0083	-0.0002	.0081	.0010	2740.
.2450	847.	705.	298.	-1821.	3983.	-4278.	.0188	.0296	.0062	.0004	.0060	.0027	2457.
.2460	713.	592.	282.	-1476.	3433.	-3479.	.0174	.0247	.0031	.0005	.0033	.0048	2049.
.2470	394.	452.	330.	-1063.	2711.	-2508.	.0153	.0187	-0.0010	.0003	.0003	.0072	1542.
.2480	-5.	292.	387.	-603.	1853.	-1420.	.0129	.0119	-0.0058	-0.0003	-0.0032	.0097	967.
.2490	-251.	124.	368.	-123.	903.	-275.	.0100	.0049	-0.0111	-0.0012	-0.0069	.0123	382.
.2500	-351.	-44.	284.	349.	-89.	862.	.0071	-0.0023	-0.0167	-0.0023	-0.0108	.0148	375.
.2510	-520.	-202.	231.	784.	-1065.	1931.	.0041	-0.0090	-0.0224	-0.0038	-0.0147	.0171	939.
.2520	-821.	-342.	265.	1160.	-1969.	2876.	.0013	-0.0151	-0.0278	-0.0057	-0.0186	.0192	1474.
.2530	-1276.	-458.	340.	1457.	-2759.	3652.	-0.0011	-0.0203	-0.0329	-0.0081	-0.0223	.0211	1928.
.2540	-1579.	-542.	394.	1664.	-3400.	4271.	-0.0029	-0.0243	-0.0374	-0.0108	-0.0257	.0227	2275.
.2550	-1751.	-592.	421.	1774.	-3863.	4556.	-0.0042	-0.0269	-0.0412	-0.0138	-0.0289	.0239	2500.
.2560	-1936.	-606.	484.	1782.	-4123.	4642.	-0.0047	-0.0282	-0.0443	-0.0168	-0.0316	.0246	2592.
.2570	-2374.	-585.	686.	1691.	-4161.	4483.	-0.0043	-0.0280	-0.0465	-0.0193	-0.0340	.0248	2547.
.2580	-2842.	-531.	934.	1502.	-3976.	4100.	-0.0028	-0.0264	-0.0480	-0.0228	-0.0359	.0246	2370.
.2590	-2892.	-448.	1041.	1243.	-3584.	3519.	-0.0004	-0.0237	-0.0488	-0.0257	-0.0374	.0241	2076.
.2600	-2557.	-339.	1018.	914.	-3006.	2771.	.0030	-0.0190	-0.0490	-0.0284	-0.0394	.0232	1681.
.2610	-2250.	-212.	1031.	542.	-2265.	1892.	.0071	-0.0154	-0.0488	-0.0309	-0.0371	.0221	1204.
.2620	-2164.	-75.	1156.	148.	-1393.	929.	.0119	-0.0104	-0.0483	-0.0331	-0.0395	.0206	674.
.2630	-2006.	66.	1263.	-245.	-435.	-65.	.0170	-0.0052	-0.0477	-0.0348	-0.0396	.0190	202.
.2640	-1291.	206.	1145.	-619.	553.	-1036.	.0222	-0.0001	-0.0471	-0.0360	-0.0396	.0174	533.
.2650	-150.	338.	846.	-958.	1526.	-1944.	.0238	.0047	-0.0468	-0.0363	-0.0397	.0158	1064.
.2660	670.	457.	659.	-1243.	2448.	-2754.	.0307	.0087	-0.0467	-0.0357	-0.0389	.0140	1560.
.2670	807.	515.	760.	-1461.	3279.	-3434.	.0323	.0119	-0.0470	-0.0343	-0.0385	.0121	1994.
.2680	815.	630.	874.	-1607.	3968.	-3953.	.0346	.0140	-0.0479	-0.0321	-0.0380	.0102	2339.
.2690	1188.	691.	804.	-1665.	4470.	-4289.	.0341	.0149	-0.0495	-0.0291	-0.0373	.0083	2574.
.2700	1545.	705.	702.	-1642.	4766.	-4433.	.0318	.0146	-0.0518	-0.0255	-0.0363	.0066	2694.
.2710	1133.	698.	75.	-1536.	4851.	-4385.	.0279	.0129	-0.0549	-0.0215	-0.0351	.0047	2696.
.2720	113.	659.	1266.	-1350.	4719.	-4149.	.0226	.0100	-0.0589	-0.0171	-0.0336	.0026	2579.
.2730	-582.	592.	1478.	-1093.	4357.	-3736.	.0162	.0059	-0.0640	-0.0123	-0.0316	.0004	2344.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/31/02.

18.28.54.

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

.2630	-2006.	66.	1263.	-245.	-435.	-65.	.1170	-.0052	-.0477	-.0348	-.0396	.0190	202.
.2640	-1291.	206.	1145.	-619.	553.	-1036.	.0222	-.0001	-.0471	-.0360	-.0396	.0174	533.
.2650	-150.	338.	846.	-958.	1026.	-1944.	.0268	.0047	-.0468	-.0363	-.0393	.0158	1064.
.2660	670.	457.	669.	-1243.	2448.	-2754.	.0307	.0087	-.0467	-.0357	-.0389	.0140	1560.
.2670	803.	559.	760.	-1461.	3279.	-3434.	.0333	.0119	-.0470	-.0343	-.0385	.0121	1994.
.2680	815.	630.	874.	-1607.	3968.	-4203.	.0346	.0140	-.0479	-.0321	-.0380	.0102	2338.
.2690	1188.	651.	804.	-1665.	4470.	-4289.	.0341	.0149	-.0495	-.0291	-.0373	.0083	2574.
.2700	1545.	705.	702.	-1642.	4766.	-4433.	.0318	.0146	-.0518	-.0255	-.0363	.0066	2694.
.2710	1133.	698.	878.	-1536.	4851.	-4385.	.0279	.0129	-.0549	-.0215	-.0351	.0047	2696.
.2720	113.	659.	1266.	-1350.	4719.	-4149.	.0226	.0100	-.0585	-.0171	-.0336	.0026	2579.
.2730	-582.	592.	1478.	-1093.	4057.	-3736.	.0162	.0059	-.0640	-.0127	-.0316	.0004	2344.

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DIC/ADLPIPE

ADLPIPE STRESS ANALYSIS

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

SECTION	45	MEMBER	1	SEQUENCE	821	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)		
.2740	-653.	501.	1390.	-773.	3775.	-7169.	.0090	.0008	-.0700	-.0074	-.0291	-.0019	2002.		
.2750	-693.	388.	1255.	-422.	3013.	-2487.	.0012	-.0050	-.0769	-.0025	-.0259	-.0045	1577.		
.2760	-1246.	258.	1307.	-44.	2121.	-1737.	-.0065	-.0115	-.0847	.0019	-.0220	-.0075	1100.		
.2770	-1955.	116.	1404.	335.	1140.	-957.	-.0139	-.0183	-.0931	.0055	-.0174	-.0107	612.		
.2780	-2050.	-28.	1238.	695.	107.	-181.	-.0208	-.0253	-.1020	.0082	-.0121	-.0140	291.		
.2790	-1438.	-166.	768.	1017.	-931.	548.	-.0272	-.0321	-.1112	.0099	-.0059	-.0173	595.		
.2800	-674.	-293.	243.	1285.	-1916.	1182.	-.0328	-.0385	-.1203	.0108	.0008	-.0207	1040.		
.2810	-533.	-403.	-91.	1485.	-2790.	1678.	-.0376	-.0445	-.1292	.0110	.0081	-.0244	1436.		
.2820	-103.	-488.	-274.	1602.	-3510.	2012.	-.0417	-.0498	-.1376	.0105	.0156	-.0282	1746.		
.2830	8.	-544.	-545.	1628.	-4053.	2176.	-.0452	-.0544	-.1453	.0091	.0234	-.0319	1958.		
.2840	803.	-566.	-986.	1560.	-4400.	2165.	-.0485	-.0583	-.1521	.0069	.0313	-.0351	2065.		
.2850	1536.	-556.	-1267.	1405.	-4537.	1981.	-.0514	-.0615	-.1580	.0039	.0391	-.0379	2065.		
.2860	1551.	-518.	-1415.	1182.	-4466.	1642.	-.0542	-.0642	-.1630	.0005	.0465	-.0403	1967.		
.2870	974.	-450.	-1185.	910.	-4212.	1187.	-.0568	-.0665	-.1672	-.0032	.0533	-.0423	1794.		
.2880	565.	-375.	-997.	612.	-3825.	670.	-.0594	-.0686	-.1707	-.0067	.0593	-.0436	1578.		
.2890	642.	-262.	-908.	311.	-3353.	142.	-.0620	-.0707	-.1737	-.0098	.0544	-.0441	1353.		
.2900	619.	-186.	-922.	28.	-2833.	-352.	.0644	-.0731	-.1765	-.0124	.0585	-.0440	1146.		
.2910	-80.	-97.	-563.	-213.	-2306.	-770.	-.0665	-.0759	-.1794	-.0146	.0713	-.0431	979.		
.2920	-1084.	-23.	-75.	-390.	-1027.	-1063.	-.0683	-.0794	-.1826	-.0164	.0728	-.0415	863.		
.2930	-1570.	33.	194.	-485.	-1461.	-1191.	-.0697	-.0837	-.1864	-.0177	.0730	-.0390	781.		
.2940	-1417.	66.	187.	-484.	-1247.	-1129.	-.0707	-.0888	-.1909	-.0184	.0720	-.0355	702.		
.2950	-1282.	71.	173.	-380.	-1203.	-873.	-.0711	-.0947	-.1963	-.0183	.0596	-.0315	616.		
.2960	-1564.	47.	317.	-177.	-1335.	-434.	-.0711	-.1014	-.2027	-.0173	.0659	-.0270	568.		
.2970	-1871.	-0.	454.	113.	-1649.	170.	-.0707	-.1087	-.2099	-.0154	.0610	-.0223	667.		
.2980	-1675.	-66.	365.	469.	-2141.	910.	-.0700	-.1165	-.2178	-.0127	.0549	-.0171	952.		
.2990	-1067.	-144.	89.	871.	-2786.	1743.	-.0693	-.1245	-.2262	-.0094	.0480	-.0116	1364.		
.3000	-605.	-228.	-138.	1297.	-3545.	2611.	-.0686	-.1325	-.2349	-.0057	.0402	-.0061	1842.		
.3010	-601.	-309.	-183.	1724.	-4374.	3455.	-.0691	-.1401	-.2436	-.0018	.0318	-.0008	2341.		
.3020	-829.	-381.	-135.	2125.	-5234.	4227.	-.0678	-.1471	-.2519	.0022	.0229	.0044	2831.		
.3030	-918.	-434.	-144.	2478.	-6084.	4885.	-.0678	-.1533	-.2597	.0062	.0138	.0092	3285.		
.3040	-846.	-465.	-214.	2759.	-6870.	5391.	-.0683	-.1583	-.2665	.0103	.0046	.0136	3678.		
.3050	-975.	-470.	-188.	2954.	-7571.	5712.	-.0690	-.1622	-.2721	.0141	-.0041	.0174	3986.		
.3060	-1577.	-445.	49.	3056.	-8121.	5831.	-.0697	-.1646	-.2765	.0176	-.0125	.0204	4195.		
.3070	-2432.	-403.	409.	3065.	-8509.	5748.	-.0705	-.1657	-.2794	.0206	-.0202	.0226	4300.		
.3080	-3057.	-334.	690.	2987.	-8730.	5479.	-.0710	-.1655	-.2809	.0228	-.0269	.0240	4306.		
.3090	-3307.	-246.	832.	2833.	-8780.	5045.	-.0711	-.1640	-.2809	.0243	-.0326	.0247	4220.		
.3100	-3533.	-147.	930.	2617.	-8655.	4474.	-.0706	-.1614	-.2794	.0249	-.0371	.0245	4048.		
.3110	-4002.	-45.	1245.	2353.	-8360.	3806.	-.0694	-.1578	-.2766	.0247	-.0402	.0234	3805.		

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DIC/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.54.

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

.3010	-601.	-309.	-183.	1724.	-4374.	3455.	-1681.	-1401.	-2436.	-0018.	.0318.	-0008.	2341.
.3020	-829.	-381.	-135.	2125.	-5234.	4227.	-0678.	-1471.	-2519.	.0022.	.0229.	.0044.	2831.
.3030	-918.	-434.	-144.	2478.	-6084.	4885.	-0678.	-1523.	-2597.	.0062.	.0138.	.0092.	3285.
.3040	-946.	-465.	-214.	2759.	-6879.	5391.	-0683.	-1583.	-2665.	.0103.	.0048.	.0136.	3678.
.3050	-975.	-470.	-188.	2954.	-7571.	5712.	-0690.	-1622.	-2721.	.0141.	-0041.	.0174.	3986.
.3060	-1577.	-449.	49.	3056.	-8121.	5831.	-0697.	-1646.	-2765.	.0176.	-0125.	.0204.	4195.
.3070	-2432.	-403.	409.	3065.	-8509.	5748.	-0705.	-1657.	-2794.	.0206.	-0202.	.0226.	4300.
.3080	-3057.	-334.	690.	2987.	-8730.	5479.	-0710.	-1655.	-2809.	.0228.	-0269.	.0240.	4306.
.3090	-3307.	-246.	837.	2833.	-8780.	5045.	-0711.	-1640.	-2809.	.0243.	-0326.	.0247.	4220.
.3100	-3533.	-147.	980.	2617.	-8655.	4474.	-0706.	-1614.	-2794.	.0249.	-0371.	.0245.	4048.
.3110	-4007.	-45.	1240.	2353.	-8360.	3806.	-0694.	-1578.	-2766.	.0247.	-0402.	.0234.	3805.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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18.28.54.

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	45	MEMBER	1	SEQUENCE	321	LOCATION	BEG	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DY	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.3120	-4423.	55.	1502.	2060.	-7916.	3057.	-0674	-1536	-2725	.0236	-0420	.0215	3508.	
.3130	-4331.	147.	1553.	1756.	-7354.	2365.	-0647	-1488	-2673	.0223	-0423	.0189	3179.	
.3140	-3754.	224.	1405.	1461.	-6703.	1679.	-0613	-1438	-2610	.0202	-0413	.0157	2834.	
.3150	-3162.	282.	1250.	1192.	-5984.	1061.	-0574	-1387	-2539	.0176	-0389	.0119	2485.	
.3160	-2795.	315.	1183.	965.	-5224.	538.	-0534	-1338	-2459	.0145	-0353	.0077	2143.	
.3170	-2398.	324.	1094.	786.	-4456.	133.	-0493	-1292	-2373	.0111	-0307	.0031	1817.	
.3180	-1697.	308.	864.	660.	-3714.	-135.	-0455	-1250	-2282	.0074	-0250	-0015	1515.	
.3190	-851.	269.	557.	588.	-3018.	-259.	-0423	-1212	-2185	.0038	-0186	-0062	1238.	
.3200	-258.	207.	337.	571.	-2386.	-245.	-0399	-1180	-2086	.0004	-0117	-0109	989.	
.3210	-42.	125.	254.	605.	-1835.	-106.	-0363	-1153	-1984	-0026	-0044	-0156	777.	
.3220	8.	28.	219.	685.	-1383.	144.	-0377	-1131	-1880	-0051	.0031	-0201	622.	
.3230	96.	-79.	147.	803.	-1041.	485.	-0379	-1112	-1777	-0072	.0106	-0244	562.	
.3240	186.	-192.	55.	945.	-810.	893.	-0390	-1096	-1675	-0090	.0180	-0283	615.	
.3250	91.	-306.	23.	1099.	-681.	1336.	-0406	-1081	-1575	-0104	.0251	-0318	746.	
.3260	-236.	-417.	75.	1253.	-646.	1783.	-0424	-1066	-1478	-0115	.0318	-0349	912.	
.3270	-612.	-520.	138.	1394.	-696.	2210.	-0444	-1048	-1386	-0122	.0381	-0376	1085.	
.3280	-819.	-610.	125.	1513.	-819.	2591.	-0460	-1028	-1297	-0125	.0437	-0398	1248.	
.3290	-820.	-684.	27.	1601.	-995.	2901.	-0472	-1003	-1214	-0124	.0486	-0415	1388.	
.3300	-762.	-739.	-91.	1650.	-1199.	3116.	-0477	-0972	-1135	-0120	.0528	-0428	1494.	
.3310	-732.	-771.	-188.	1652.	-1402.	3216.	-0473	-0935	-1060	-0114	.0561	-0436	1556.	
.3320	-630.	-778.	-300.	1601.	-1581.	3189.	-0459	-0892	-0988	-0108	.0586	-0438	1566.	
.3330	-330.	-758.	-476.	1494.	-1711.	3029.	-0437	-0841	-0918	-0100	.0602	-0435	1519.	
.3340	139.	-710.	-700.	1330.	-1772.	2736.	-0407	-0784	-0849	-0092	.0608	-0425	1413.	
.3350	559.	-637.	-880.	1116.	-1743.	2314.	-0369	-0721	-0780	-0081	.0605	-0411	1246.	
.3360	826.	-539.	-970.	857.	-1615.	1780.	-0326	-0652	-0710	-0069	.0592	-0391	1024.	
.3370	1025.	-420.	-1006.	566.	-1385.	1154.	-0279	-0581	-0639	-0053	.0569	-0367	758.	
.3380	1233.	-284.	-1022.	253.	-1056.	464.	-0231	-0508	-0565	-0035	.0537	-0337	474.	
.3390	1359.	-137.	-981.	-67.	-637.	-257.	-0182	-0435	-0490	-0015	.0497	-0302	277.	
.3400	1287.	15.	-841.	-380.	-141.	-978.	-0134	-0364	-0412	.0007	.0449	-0264	425.	
.3410	1006.	165.	-599.	-670.	410.	-1662.	-0088	-0297	-0334	.0030	.0395	-0222	738.	
.3420	639.	306.	-312.	-919.	988.	-2272.	-0043	-0236	-0256	.0056	.0334	-0177	1061.	
.3430	306.	433.	-37.	-1115.	1501.	-2777.	-0001	-0182	-0179	.0083	.0270	-0132	1354.	
.3440	23.	538.	215.	-1246.	2100.	-3150.	.0040	-0137	-0105	.0112	.0202	-0086	1600.	
.3450	-304.	618.	477.	-1305.	2580.	-3373.	.0079	-0101	-0035	.0142	.0134	-0041	1783.	
.3460	-661.	668.	738.	-1290.	2977.	-3436.	.0117	-0075	.0029	.0171	.0065	.0002	1896.	
.3470	-896.	688.	932.	-1203.	3272.	-3339.	.0155	-0059	.0088	.0198	-0002	.0042	1937.	
.3480	-889.	679.	1005.	-1050.	3450.	-3092.	.0191	-0052	.0141	.0223	-0064	.0079	1906.	
.3490	-714.	643.	984.	-843.	3507.	-2718.	.0225	-0052	.0187	.0244	-0122	.0111	1812.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.54.

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

.3390	1559.	-137.	881.	-67.	-637.	-257.	-182.	-0435	-0490	-0015	.0497	-0302	277.
.3400	1287.	15.	-841.	-380.	-141.	-978.	-0134	-0364	-0412	.0007	.0449	-0264	425.
.3410	1066.	165.	-599.	-670.	410.	-1662.	-0088	-0297	-0334	.0030	.0395	-0222	738.
.3420	639.	306.	-312.	-919.	988.	-2272.	-0043	-0236	-0256	.0056	.0334	-0177	1061.
.3430	306.	433.	-37.	-1115.	1561.	-2777.	-0001	-0182	-0179	.0083	.0270	-0132	1354.
.3440	23.	538.	215.	-1246.	2100.	-3150.	.0040	-0137	-0105	.0112	.0202	-0086	1600.
.3450	-304.	618.	477.	-1305.	2580.	-3373.	.0079	-0101	-0035	.0142	.0134	-0041	1783.
.3460	-661.	663.	738.	-1290.	2977.	-3436.	.0117	-0075	.0029	.0171	.0065	.0002	1896.
.3470	-896.	638.	932.	-1203.	3272.	-3339.	.0155	-0059	.0088	.0198	-0002	.0042	1937.
.3480	-889.	679.	1005.	-1050.	3450.	-3092.	.0191	-0052	.0141	.0223	-0064	.0079	1906.
.3490	-714.	643.	904.	-043.	3507.	-2718.	.0225	-0052	.0187	.0244	-0122	.0111	1812.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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18.28.54.

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	45	MEMBER	1	SEQUENCE	821	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)		
.3500	-523.	583.	933.	-596.	3445.	-2246.	.0256	-0060	.0229	.0261	-0174	.0136	1667.		
.3510	-354.	506.	867.	-326.	3274.	-1708.	.0284	-0071	.0266	.0274	-0219	.0155	1488.		
.3520	-119.	416.	750.	-51.	3009.	-1138.	.0307	-0086	.0300	.0283	-0255	.0166	1291.		
.3530	263.	321.	550.	210.	2664.	-575.	.0323	-0102	.0332	.0288	-0281	.0171	1097.		
.3540	646.	227.	329.	440.	2262.	-53.	.0332	-0117	.0365	.0287	-0298	.0168	925.		
.3550	788.	138.	191.	626.	1829.	394.	.0334	-0129	.0401	.0282	-0304	.0157	792.		
.3560	655.	59.	155.	758.	1387.	746.	.0327	-0138	.0439	.0271	-0299	.0139	701.		
.3570	458.	-7.	134.	828.	957.	991.	.0314	-0142	.0482	.0256	-0284	.0115	645.		
.3580	369.	-57.	62.	836.	554.	1123.	.0294	-0141	.0530	.0237	-0258	.0087	604.		
.3590	299.	-93.	-23.	784.	194.	1145.	.0270	-0135	.0585	.0216	-0221	.0053	562.		
.3600	50.	-114.	-34.	678.	-106.	1058.	.0243	-0124	.0645	.0193	-0175	.0016	509.		
.3610	-391.	-125.	37.	532.	-337.	913.	.0216	-0109	.0711	.0170	-0121	-0023	445.		
.3620	-773.	-129.	88.	360.	-497.	708.	.0190	-0091	.0783	.0146	-0058	-0063	376.		
.3630	-868.	-127.	26.	176.	-589.	480.	.0169	-0070	.0859	.0124	-0011	-0102	313.		
.3640	-755.	-124.	-115.	-5.	-614.	254.	.0152	-0049	.0940	.0105	.0084	-0139	267.		
.3650	-667.	-123.	-236.	-171.	-570.	49.	.0141	-0027	.1024	.0090	.0160	-0173	240.		
.3660	-669.	-125.	-308.	-310.	-458.	-112.	.0138	-0006	.1112	.0081	.0237	-0203	227.		
.3670	-543.	-133.	-422.	-416.	-284.	-217.	.0141	.0014	.1202	.0077	.0314	-0228	220.		
.3680	-82.	-146.	-662.	-483.	-59.	-248.	.0151	.0031	.1293	.0080	.0387	-0245	219.		
.3690	568.	-163.	-967.	-508.	214.	-207.	.0166	.0047	.1387	.0091	.0456	-0256	236.		
.3700	1064.	-134.	-1193.	-492.	534.	-104.	.0185	.0060	.1482	.0111	.0517	-0259	294.		
.3710	1259.	-206.	-1281.	-438.	896.	50.	.0206	.0072	.1578	.0138	.0570	-0256	401.		
.3720	1386.	-227.	-1326.	-353.	1289.	244.	.0230	.0083	.1673	.0172	.0613	-0245	545.		
.3730	1719.	-243.	-1444.	-249.	1701.	463.	.0254	.0093	.1769	.0213	.0644	-0227	715.		
.3740	2109.	-251.	-1572.	-136.	2128.	686.	.0278	.0104	.1863	.0260	.0564	-0202	899.		
.3750	2189.	-250.	-1558.	-22.	2567.	890.	.0302	.0117	.1959	.0311	.0570	-0171	1090.		
.3760	1853.	-239.	-1360.	84.	3006.	1057.	.0326	.0132	.2044	.0365	.0564	-0136	1279.		
.3770	1445.	-216.	-1123.	174.	3429.	1176.	.0351	.0150	.2129	.0419	.0544	-0097	1456.		
.3780	1386.	-179.	-1024.	242.	3818.	1236.	.0376	.0173	.2209	.0473	.0612	-0055	1613.		
.3790	1624.	-129.	-1043.	279.	4168.	1227.	.0402	.0199	.2284	.0524	.0569	-0011	1747.		
.3800	1712.	-68.	-994.	282.	4481.	1138.	.0430	.0231	.2352	.0570	.0515	.0033	1859.		
.3810	1293.	2.	-733.	248.	4759.	971.	.0459	.0267	.2413	.0609	.0451	.0076	1952.		
.3820	727.	78.	-408.	181.	4990.	737.	.0490	.0307	.2467	.0640	.0379	.0117	2026.		
.3830	614.	160.	-274.	83.	5164.	451.	.0523	.0352	.2514	.0662	.0302	.0156	2080.		
.3840	898.	245.	-306.	-38.	5283.	122.	.0558	.0400	.2553	.0675	.0219	.0192	2121.		
.3850	1037.	327.	-280.	-177.	5360.	-243.	.0594	.0451	.2586	.0679	.0133	.0223	2154.		
.3860	770.	403.	-88.	-325.	5405.	-629.	.0630	.0503	.2613	.0673	.0045	.0248	2188.		
.3870	489.	471.	107.	-480.	5421.	-1016.	.0667	.0557	.2634	.0657	-0044	.0268	2221.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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18.28.54.

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

.3770	1445.	-216.	-1123.	174.	3429.	1176.	1123.	8351	.0150	.2129	.0419	.0544	-.0097	1456.
.3780	1386.	-179.	-1024.	242.	3818.	1236.	1236.	.0376	.0173	.2209	.0473	.0512	-.0055	1613.
.3790	1624.	-129.	-1043.	279.	4168.	1227.	1227.	.0402	.0199	.2284	.0524	.0569	-.0011	1747.
.3800	1712.	-61.	-994.	282.	4481.	1138.	1138.	.0430	.0231	.2352	.0570	.0515	.0033	1859.
.3810	1293.	2.	-733.	248.	4759.	971.	971.	.0459	.0267	.2413	.0609	.0451	.0076	1952.
.3820	727.	78.	-408.	181.	4990.	737.	737.	.0490	.0307	.2467	.0640	.0379	.0117	2026.
.3830	614.	150.	-274.	83.	5164.	451.	451.	.0523	.0352	.2514	.0662	.0302	.0156	2080.
.3840	898.	245.	-306.	-38.	5207.	122.	122.	.0558	.0400	.2553	.0675	.0219	.0192	2121.
.3850	1037.	327.	-280.	-177.	5360.	-243.	-243.	.0594	.0451	.2586	.0679	.0133	.0223	2154.
.3860	770.	403.	-88.	-325.	5405.	-629.	-629.	.0630	.0503	.2613	.0673	.0045	.0248	2188.
.3870	489.	471.	107.	-480.	5421.	-1016.	-1016.	.0667	.0557	.2634	.0657	-.0044	.0268	2221.

ADLPIPE PAGE 1776 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.28.54.

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	45	MEMBER	1	SEQUENCE	821	LOCATION	BEG	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3880	675.	530.	104.	-635.	5409.	-1380.	.0703	.0610	.2651	.0631	-.0130	.0283	2254.		
.3890	1180.	577.	-36.	-785.	5381.	-1707.	.0735	.0662	.2663	.0594	-.0214	.0294	2287.		
.3900	1440.	609.	-78.	-921.	5353.	-1989.	.0764	.0712	.2673	.0548	-.0293	.0300	2321.		
.3910	1207.	623.	81.	-1032.	5331.	-2213.	.0788	.0759	.2681	.0493	-.0368	.0299	2353.		
.3920	871.	619.	276.	-1113.	5311.	-2362.	.0806	.0803	.2687	.0433	-.0436	.0293	2375.		
.3930	908.	597.	310.	-1161.	5289.	-2425.	.0818	.0843	.2692	.0368	-.0497	.0284	2381.		
.3940	1194.	557.	233.	-1175.	5271.	-2400.	.0824	.0879	.2697	.0299	-.0549	.0271	2372.		
.3950	1209.	499.	263.	-1158.	5267.	-2298.	.0825	.0912	.2701	.0228	-.0592	.0253	2353.		
.3960	755.	425.	481.	-1114.	5281.	-2127.	.0820	.0940	.2704	.0155	-.0626	.0230	2328.		
.3970	265.	336.	706.	-1044.	5302.	-1892.	.0811	.0966	.2706	.0080	-.0651	.0204	2298.		
.3980	222.	238.	735.	-952.	5317.	-1600.	.0799	.0990	.2706	.0005	-.0664	.0177	2260.		
.3990	507.	131.	620.	-842.	5321.	-1266.	.0785	.1012	.2703	-.0068	-.0667	.0148	2221.		
.4000	611.	18.	570.	-719.	5321.	-914.	.0769	.1034	.2699	-.0137	-.0660	.0116	2186.		

MAXIMUM VALUE OF STRESS OCCURS AT

TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3080	3057.	334.	-690.	-2987.	8730.	-5479.	-.0710	-.1655	-.2809	.0228	-.0269	.0240	4306.		

SECTION	45	MEMBER	1	SEQUENCE	65	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.		
.0010	-0.	-0.	0.	0.	-0.	-0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	0.		
.0020	-2.	-0.	1.	0.	-0.	-0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	0.		
.0030	-4.	-0.	2.	0.	-0.	-0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	0.		
.0040	-5.	-0.	2.	0.	-0.	-0.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	0.		
.0050	-4.	-0.	1.	0.	-0.	-0.	-.0000	-.0000	-.0000	-.0000	-.0000	.0000	0.		
.0060	-1.	-0.	0.	0.	-0.	-0.	-.0000	-.0000	-.0000	-.0000	-.0000	.0000	0.		
.0070	5.	-0.	-2.	0.	-0.	-0.	-.0000	-.0000	-.0000	-.0000	-.0000	.0000	0.		
.0080	18.	-0.	-8.	0.	0.	-0.	-.0000	.0000	-.0000	-.0000	-.0000	.0000	0.		
.0090	32.	0.	-14.	0.	0.	-0.	-.0000	.0000	-.0000	-.0000	-.0000	.0000	0.		
.0100	30.	0.	-13.	-0.	0.	0.	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	0.		
.0110	9.	0.	-4.	-2.	0.	0.	-.0000	.0000	-.0000	.0000	-.0000	-.0000	1.		

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.0010	-0.	-0.	0.	0.	-0.	-0.	-0.	-0.0000	-0.0000	.0000	-0.0000	-0.0000	.0000	0.
.0020	-2.	-0.	1.	0.	-0.	-0.	-0.	-0.0000	-0.0000	.0000	-0.0000	-0.0000	.0000	0.
.0030	-4.	-0.	2.	0.	-0.	-0.	-0.	-0.0000	-0.0000	.0000	-0.0000	-0.0000	.0000	0.
.0040	-5.	-0.	2.	0.	-0.	-0.	-0.	-0.0000	-0.0000	.0000	-0.0000	-0.0000	.0000	0.
.0050	-4.	-0.	1.	0.	-0.	-0.	-0.	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	.0000	0.
.0060	-1.	-0.	0.	0.	-0.	-0.	-0.	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	.0000	0.
.0070	5.	-0.	-2.	0.	-0.	-0.	-0.	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	.0000	0.
.0080	18.	-0.	-8.	0.	0.	-0.	-0.	-0.0000	.0000	-0.0000	-0.0000	-0.0000	.0000	0.
.0090	32.	0.	-14.	0.	0.	-0.	-0.	-0.0000	.0000	-0.0000	-0.0000	-0.0000	.0000	0.
.0100	30.	0.	-13.	-0.	0.	0.	0.	-0.0000	.0000	-0.0000	-0.0000	-0.0000	-0.0000	0.
.0110	9.	0.	-4.	-2.	0.	0.	0.	-0.0000	.0000	-0.0000	.0000	-0.0000	-0.0000	1.

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CONDITION 24

LOADS

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

SECTION	45	MEMBER	1	SEQUENCE	65	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.0120	-11.	1.	5.	-4.	-0.	1.		.0000	.0000	.0000	.0001	.0000	-0.0001	2.	
.0130	-10.	1.	5.	-7.	-1.	3.		.0000	.0000	.0000	.0003	.0000	-0.0001	3.	
.0140	5.	1.	-2.	-11.	-1.	4.		.0000	.0000	.0000	.0005	.0000	-0.0002	5.	
.0150	14.	1.	-6.	-15.	-1.	6.		.0000	.0000	.0000	.0007	.0000	-0.0003	6.	
.0160	5.	1.	-2.	-19.	-1.	7.		.0000	.0000	.0000	.0009	.0001	-0.0004	8.	
.0170	-11.	1.	6.	-23.	-0.	7.		-0.0000	.0000	.0001	.0010	.0001	-0.0004	10.	
.0180	-10.	1.	6.	-27.	2.	7.		-0.0001	.0000	.0001	.0012	.0001	-0.0005	11.	
.0190	15.	2.	-3.	-31.	6.	8.		-0.0001	.0000	.0000	.0014	.0001	-0.0005	13.	
.0200	50.	2.	-16.	-35.	11.	9.		-0.0001	.0000	.0000	.0016	.0001	-0.0006	15.	
.0210	56.	1.	-17.	-40.	15.	10.		-0.0002	.0000	.0000	.0018	.0001	-0.0007	18.	
.0220	28.	1.	-5.	-48.	18.	14.		-0.0002	.0000	.0001	.0022	.0001	-0.0008	21.	
.0230	14.	0.	1.	-55.	20.	19.		-0.0002	.0001	.0001	.0026	.0001	-0.0009	25.	
.0240	25.	-1.	-4.	-55.	21.	25.		-0.0001	.0002	.0001	.0028	.0001	-0.0009	26.	
.0250	32.	-3.	-7.	-47.	23.	29.		-0.0001	.0002	.0001	.0027	.0000	-0.0008	24.	
.0260	23.	-5.	-3.	-38.	27.	33.		-0.0000	.0003	.0002	.0024	-0.0000	-0.0007	23.	
.0270	-2.	-6.	8.	-37.	31.	40.		.0000	.0004	.0002	.0023	-0.0001	-0.0006	25.	
.0280	-46.	-7.	28.	-37.	36.	44.		.0001	.0005	.0002	.0023	-0.0001	-0.0006	27.	
.0290	-100.	-7.	50.	-28.	43.	39.		.0002	.0005	.0003	.0018	-0.0002	-0.0004	26.	
.0300	-142.	-6.	65.	-18.	48.	35.		.0003	.0005	.0003	.0015	-0.0003	-0.0003	25.	
.0310	-176.	-7.	76.	-12.	48.	38.		.0005	.0006	.0004	.0013	-0.0005	-0.0002	25.	
.0320	-136.	-9.	54.	4.	44.	47.		.0007	.0007	.0004	.0008	-0.0007	-0.0000	26.	
.0330	-61.	-13.	16.	29.	34.	56.		.0009	.0008	.0006	-0.0001	-0.0010	.0003	29.	
.0340	-136.	-17.	40.	53.	16.	60.		.0009	.0008	.0008	-0.0011	-0.0012	.0007	33.	
.0350	-372.	-19.	131.	77.	-4.	53.		.0011	.0008	.0010	-0.0023	-0.0015	.0012	37.	
.0360	-459.	-18.	160.	100.	-18.	41.		.0012	.0007	.0012	-0.0037	-0.0017	.0016	44.	
.0370	-204.	-16.	48.	116.	-21.	38.		.0014	.0006	.0011	-0.0047	-0.0020	.0018	50.	
.0380	71.	-13.	-71.	122.	-22.	41.		.0015	.0005	.0011	-0.0052	-0.0022	.0018	52.	
.0390	-52.	-11.	-24.	130.	-30.	33.		.0014	.0003	.0012	-0.0057	-0.0024	.0018	55.	
.0400	-427.	-10.	129.	151.	-41.	8.		.0013	.0000	.0013	-0.0067	-0.0025	.0020	63.	
.0410	-544.	-5.	175.	169.	-48.	-16.		.0012	-0.0003	.0013	-0.0077	-0.0025	.0021	71.	
.0420	-227.	1.	43.	178.	-45.	-31.		.0013	-0.0007	.0012	-0.0087	-0.0026	.0022	75.	
.0430	159.	8.	-114.	182.	-35.	-44.		.0012	-0.0010	.0010	-0.0096	-0.0025	.0022	77.	
.0440	252.	15.	-145.	178.	-23.	-64.		.0010	-0.0015	.0008	-0.0103	-0.0023	.0021	77.	
.0450	-29.	23.	-17.	160.	-9.	-97.		.0006	-0.0022	.0007	-0.0104	-0.0020	.0018	75.	
.0460	-405.	34.	151.	136.	12.	-141.		.0001	-0.0029	.0005	-0.0101	-0.0016	.0013	79.	
.0470	-333.	45.	133.	120.	44.	-183.		-0.0001	-0.0036	.0001	-0.0097	-0.0013	.0009	90.	
.0480	340.	56.	-135.	106.	85.	-212.		-0.0002	-0.0042	-0.0004	-0.0093	-0.0010	.0004	101.	
.0490	881.	66.	-346.	75.	122.	-234.		-0.0005	-0.0048	-0.0008	-0.0085	-0.0006	-0.0001	110.	

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2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

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.0390	-52.	-11.	-24.	130.	-30.	33.	.0014	.0003	.0012	-.0057	-.0024	.0018	55.
.0400	-427.	-10.	129.	151.	-41.	8.	.0013	.0000	.0013	-.0067	-.0025	.0020	63.
.0410	-544.	-5.	175.	169.	-48.	-16.	.0012	-.0003	.0013	-.0077	-.0025	.0021	71.
.0420	-227.	1.	43.	178.	-45.	-31.	.0013	-.0007	.0012	-.0087	-.0026	.0022	75.
.0430	159.	8.	-114.	182.	-35.	-44.	.0012	-.0010	.0010	-.0096	-.0025	.0022	77.
.0440	252.	15.	-145.	178.	-23.	-64.	.0010	-.0015	.0008	-.0103	-.0023	.0021	77.
.0450	-29.	23.	-17.	160.	-9.	-97.	.0006	-.0022	.0007	-.0104	-.0020	.0018	75.
.0460	-405.	34.	151.	136.	12.	-141.	.0001	-.0029	.0005	-.0101	-.0016	.0013	79.
.0470	-333.	45.	133.	120.	44.	-183.	-.0001	-.0036	.0001	-.0097	-.0013	.0009	90.
.0480	340.	56.	-135.	106.	85.	-212.	-.0002	-.0042	-.0004	-.0093	-.0010	.0004	101.
.0490	281.	66.	-346.	75.	122.	-234.	-.0005	-.0048	-.0008	-.0085	-.0006	-.0001	110.

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S/RV PIPING KEWAUNEE GKW03F 2 RUP DISK
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CONDITION 24
LOADS
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PRESSURE
ENGLISH UNITS

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

SECTION	45	MEMBER	1	SEQUENCE	65	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)		
.0500	513.	72.	-177.	26.	141.	-265.	-.0011	-.0055	-.0010	-.0072	-.0001	-.0006	121.		
.0510	-301.	75.	178.	-29.	152.	-306.	-.0016	-.0063	-.0010	-.0057	.0004	-.0011	138.		
.0520	-320.	80.	198.	-81.	175.	-333.	-.0018	-.0069	-.0012	-.0040	.0008	-.0016	154.		
.0530	602.	86.	-176.	-127.	213.	-339.	-.0017	-.0073	-.0015	-.0020	.0010	-.0022	169.		
.0540	1196.	86.	-417.	-168.	240.	-342.	-.0017	-.0076	-.0018	.0003	.0012	-.0026	181.		
.0550	702.	77.	-206.	-206.	242.	-352.	-.0018	-.0078	-.0016	.0027	.0014	-.0029	190.		
.0560	-69.	63.	118.	-239.	230.	-357.	-.0020	-.0080	-.0012	.0050	.0016	-.0029	196.		
.0570	-115.	49.	136.	-268.	220.	-343.	-.0019	-.0079	-.0009	.0068	.0016	-.0028	196.		
.0580	379.	37.	-75.	-293.	212.	-314.	-.0015	-.0075	-.0006	.0085	.0014	-.0025	192.		
.0590	668.	21.	-203.	-316.	194.	-280.	-.0009	-.0070	-.0002	.0102	.0012	-.0021	186.		
.0600	509.	1.	-149.	-334.	163.	-242.	-.0004	-.0064	.0003	.0122	.0009	-.0017	178.		
.0610	93.	-23.	10.	-341.	121.	-195.	.0001	-.0056	.0012	.0142	.0005	-.0013	165.		
.0620	-331.	-51.	167.	-329.	72.	-133.	.0006	-.0046	.0020	.0159	.0001	-.0008	145.		
.0630	-419.	-80.	182.	-296.	19.	-58.	.0013	-.0033	.0029	.0169	-.0005	-.0001	121.		
.0640	-78.	-105.	17.	-246.	-34.	23.	.0022	-.0018	.0036	.0169	-.0011	.0009	100.		
.0650	108.	-128.	-84.	-192.	-93.	98.	.0029	-.0003	.0045	.0160	-.0017	.0020	94.		
.0660	-377.	-148.	98.	-142.	-161.	162.	.0036	.0011	.0055	.0147	-.0022	.0031	108.		
.0670	-1001.	-165.	340.	-95.	-225.	225.	.0041	.0026	.0065	.0134	-.0027	.0039	133.		
.0680	-916.	-175.	289.	-40.	-269.	298.	.0047	.0041	.0071	.0120	-.0031	.0045	162.		
.0690	-397.	-178.	57.	24.	-298.	366.	.0051	.0056	.0076	.0104	-.0036	.0047	190.		
.0700	-384.	-175.	39.	94.	-327.	407.	.0054	.0069	.0080	.0084	-.0039	.0049	213.		
.0710	-901.	-167.	247.	163.	-356.	419.	.0054	.0079	.0085	.0057	-.0040	.0050	230.		
.0720	-1094.	-149.	328.	220.	-367.	423.	.0052	.0088	.0086	.0025	-.0040	.0049	241.		
.0730	-683.	-122.	165.	261.	-350.	427.	.0049	.0095	.0085	-.0010	-.0039	.0047	245.		
.0740	-264.	-89.	7.	290.	-314.	415.	.0044	.0099	.0081	-.0045	-.0037	.0042	239.		
.0750	-246.	-51.	22.	314.	-263.	372.	.0036	.0101	.0076	-.0079	-.0033	.0035	222.		
.0760	-375.	-8.	102.	333.	-197.	303.	.0026	.0098	.0069	-.0109	-.0028	.0026	197.		
.0770	-297.	38.	98.	345.	-116.	219.	.0015	.0094	.0060	-.0135	-.0023	.0014	170.		
.0780	31.	86.	-9.	344.	-23.	132.	.0004	.0088	.0050	-.0157	-.0018	.0001	148.		
.0790	444.	133.	-150.	323.	72.	47.	-.0006	.0081	.0039	-.0174	-.0013	-.0012	134.		
.0800	691.	176.	-222.	278.	162.	-35.	-.0017	.0072	.0029	-.0185	-.0008	-.0024	130.		
.0810	624.	214.	-166.	215.	241.	-117.	-.0027	.0062	.0020	-.0189	-.0003	-.0036	138.		
.0820	467.	244.	-78.	148.	313.	-193.	-.0035	.0052	.0011	-.0186	.0000	-.0047	159.		
.0830	617.	266.	-126.	84.	381.	-253.	-.0039	.0043	.0003	-.0173	.0001	-.0057	187.		
.0840	1015.	278.	-285.	25.	442.	-294.	-.0041	.0035	-.0005	-.0152	-.0000	-.0065	213.		
.0850	1124.	276.	-333.	-28.	483.	-323.	-.0040	.0028	-.0010	-.0127	-.0003	-.0069	234.		
.0860	732.	262.	-179.	-79.	498.	-340.	-.0037	.0022	-.0012	-.0098	-.0008	-.0068	244.		
.0870	296.	235.	-15.	-131.	489.	-332.	-.0030	.0017	-.0012	-.0068	-.0014	-.0062	243.		

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2 SAFETY COLD FKW24F--2 PSV

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

.0770	-97.	38.	98.	345.	-116.	219.	.0015	.0094	.0060	-.0135	-.0023	.0014	170.
.0780	31.	86.	-9.	344.	-23.	132.	.0004	.0088	.0050	-.0157	-.0018	.0001	148.
.0790	444.	133.	-150.	323.	72.	47.	-.0006	.0081	.0039	-.0174	-.0013	-.0012	134.
.0800	691.	176.	-222.	278.	162.	-35.	-.0017	.0072	.0029	-.0185	-.0008	-.0024	130.
.0810	624.	214.	-166.	215.	241.	-117.	-.0027	.0062	.0020	-.0189	-.0003	-.0036	138.
.0820	467.	244.	-70.	148.	313.	-193.	-.0035	.0052	.0011	-.0186	.0000	-.0047	159.
.0830	617.	266.	-126.	84.	381.	-253.	-.0039	.0043	.0003	-.0173	.0001	-.0057	187.
.0840	1015.	278.	-285.	25.	442.	-294.	-.0041	.0035	-.0005	-.0152	-.0000	-.0065	213.
.0850	1124.	276.	-333.	-28.	483.	-323.	-.0040	.0028	-.0010	-.0127	-.0003	-.0069	234.
.0860	732.	262.	-179.	-79.	498.	-340.	-.0037	.0022	-.0012	-.0098	-.0008	-.0068	244.
.0870	296.	235.	-15.	-131.	489.	-332.	-.0030	.0017	-.0012	-.0068	-.0014	-.0062	243.

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

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

SECTION	45	MEMBER	1	SEQUENCE	65	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)	
.0880	255.	198.	-25.	-180.	461.	-292.	-.0020	.0016	-.0010	-.0037	-.0024	-.0052	231.	
.0890	393.	151.	-119.	-216.	411.	-228.	-.0006	.0017	-.0006	-.0004	-.0035	-.0039	208.	
.0900	223.	92.	-94.	-234.	332.	-151.	.0009	.0020	.0001	.0031	-.0048	-.0023	174.	
.0910	-287.	23.	66.	-236.	227.	-63.	.0024	.0024	.0011	.0069	-.0061	-.0005	134.	
.0920	-744.	-51.	198.	-223.	105.	41.	.0040	.0031	.0024	.0107	-.0075	.0015	100.	
.0930	-903.	-127.	206.	-199.	-25.	162.	.0055	.0039	.0036	.0142	-.0089	.0034	103.	
.0940	-924.	-202.	159.	-169.	-161.	291.	.0070	.0048	.0050	.0171	-.0102	.0054	150.	
.0950	-1092.	-272.	180.	-136.	-302.	415.	.0083	.0057	.0064	.0193	-.0112	.0074	213.	
.0960	-1437.	-334.	282.	-96.	-443.	527.	.0093	.0065	.0078	.0206	-.0119	.0092	279.	
.0970	-1744.	-385.	378.	-44.	-573.	624.	.0101	.0072	.0091	.0212	-.0122	.0107	340.	
.0980	-1817.	-423.	388.	20.	-682.	709.	.0106	.0079	.0102	.0211	-.0122	.0117	395.	
.0990	-1690.	-444.	328.	91.	-764.	773.	.0107	.0083	.0110	.0203	-.0116	.0122	438.	
.1000	-1593.	-446.	297.	161.	-816.	807.	.0105	.0085	.0114	.0185	-.0106	.0122	465.	
.1010	-1681.	-428.	361.	222.	-836.	799.	.0099	.0083	.0115	.0157	-.0090	.0117	472.	
.1020	-1815.	-387.	463.	269.	-814.	752.	.0089	.0076	.0110	.0119	-.0068	.0107	458.	
.1030	-1690.	-325.	476.	303.	-744.	671.	.0077	.0066	.0100	.0073	-.0042	.0092	420.	
.1040	-1208.	-245.	355.	327.	-623.	561.	.0063	.0052	.0084	.0022	-.0013	.0072	361.	
.1050	-798.	-151.	275.	340.	-462.	416.	.0044	.0033	.0062	-.0032	.0018	.0047	284.	
.1060	-808.	-48.	378.	344.	-273.	235.	.0023	.0011	.0037	-.0085	.0051	.0020	200.	
.1070	-934.	59.	533.	337.	-60.	25.	-.0001	-.0016	.0008	-.0138	.0084	-.0010	138.	
.1080	-478.	172.	445.	317.	183.	-197.	-.0026	-.0045	-.0027	-.0190	.0114	-.0039	167.	
.1090	514.	285.	131.	278.	447.	-430.	-.0051	-.0077	-.0064	-.0242	.0140	-.0066	273.	
.1100	465.	388.	244.	204.	701.	-680.	-.0076	-.0112	-.0103	-.0282	.0163	-.0092	400.	
.1110	132.	478.	464.	112.	952.	-931.	-.0101	-.0148	-.0142	-.0311	.0181	-.0115	536.	
.1120	857.	555.	227.	23.	1214.	-1156.	-.0124	-.0182	-.0183	-.0334	.0190	-.0133	673.	
.1130	1795.	611.	-118.	-61.	1462.	-1356.	-.0145	-.0215	-.0223	-.0345	.0191	-.0144	801.	
.1140	1690.	639.	-51.	-144.	1667.	-1547.	-.0163	-.0247	-.0259	-.0344	.0186	-.0149	914.	
.1150	1305.	642.	111.	-222.	1834.	-1714.	-.0175	-.0275	-.0291	-.0334	.0172	-.0144	1011.	
.1160	1867.	626.	-144.	-298.	1980.	-1834.	-.0183	-.0298	-.0321	-.0319	.0150	-.0131	1090.	
.1170	2644.	590.	-510.	-381.	2094.	-1912.	-.0184	-.0316	-.0346	-.0295	.0121	-.0110	1148.	
.1180	2155.	528.	-367.	-470.	2150.	-1959.	-.0179	-.0330	-.0363	-.0258	.0086	-.0083	1182.	
.1190	1382.	441.	-126.	-533.	2161.	-1959.	-.0166	-.0336	-.0375	-.0214	.0047	-.0049	1190.	
.1200	1807.	336.	-403.	-549.	2148.	-1892.	-.0148	-.0333	-.0381	-.0170	.0002	-.0007	1170.	
.1210	2380.	216.	-756.	-531.	2089.	-1776.	-.0125	-.0322	-.0380	-.0125	-.0046	.0040	1121.	
.1220	1443.	80.	-490.	-491.	1962.	-1648.	-.0097	-.0305	-.0368	-.0081	-.0094	.0091	1047.	
.1230	-7.	-61.	-15.	-442.	1787.	-1498.	-.0065	-.0282	-.0348	-.0040	-.0140	.0145	952.	
.1240	-110.	-193.	-99.	-389.	1604.	-1297.	-.0030	-.0252	-.0323	-.0003	-.0186	.0197	842.	
.1250	482.	-317.	-467.	-337.	1409.	-1052.	.0007	-.0214	-.0294	.0034	-.0229	.0244	719.	

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

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

.1140	1890.	870.	111.	-222.	1834.	-1714.	-.0175	-.0275	-.0291	-.0334	.0172	-.0144	1011.
.1150	1305.	642.	111.	-222.	1834.	-1714.	-.0175	-.0275	-.0291	-.0334	.0172	-.0144	1011.
.1160	1867.	626.	-144.	-298.	1980.	-1834.	-.0183	-.0298	-.0321	-.0319	.0150	-.0131	1090.
.1170	2644.	390.	-510.	-381.	2094.	-1912.	-.0184	-.0316	-.0346	-.0295	.0121	-.0110	1148.
.1180	2155.	528.	-367.	-470.	2150.	-1959.	-.0179	-.0330	-.0363	-.0258	.0086	-.0083	1182.
.1190	1382.	441.	-126.	-533.	2161.	-1959.	-.0166	-.0336	-.0375	-.0214	.0047	-.0049	1190.
.1200	1807.	336.	-403.	-549.	2148.	-1892.	-.0148	-.0333	-.0381	-.0170	.0002	-.0007	1170.
.1210	2380.	216.	-756.	-531.	2089.	-1776.	-.0125	-.0322	-.0380	-.0125	-.0046	.0040	1121.
.1220	1443.	80.	-490.	-491.	1962.	-1648.	-.0097	-.0305	-.0368	-.0021	-.0094	.0091	1047.
.1230	-7.	-61.	-15.	-442.	1787.	-1498.	-.0065	-.0282	-.0348	-.0040	-.0140	.0145	952.
.1240	-110.	-193.	-99.	-389.	1604.	-1297.	-.0030	-.0252	-.0323	-.0003	-.0186	.0197	842.
.1250	482.	-317.	-467.	-337.	1409.	-1052.	.0007	-.0214	-.0294	.0074	-.0229	.0244	719.

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

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

SECTION	45	MEMBER	1	SEQUENCE	65	LOCATION	END	TYPE	RU	DX	DY	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ				(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)										
.1260	-51.	-437.	-358.	-281.	1176.	-798.	.0042	-.0172	-.0256	.0075	-.0265	.0284	.0075	-.0265	.0284	581.
.1270	-1361.	-550.	85.	-193.	911.	-548.	.0075	-.0126	-.0210	.0111	-.0295	.0318	.0111	-.0295	.0318	433.
.1280	-1776.	-643.	170.	-65.	644.	-292.	.0102	-.0076	-.0160	.0133	-.0318	.0346	.0133	-.0318	.0346	285.
.1290	-1442.	-711.	-38.	84.	384.	-44.	.0126	-.0023	-.0107	.0138	-.0333	.0367	.0138	-.0333	.0367	159.
.1300	-1678.	-752.	17.	230.	121.	166.	.0145	.0029	-.0050	.0128	-.0339	.0381	.0128	-.0339	.0381	124.
.1310	-2249.	-763.	244.	353.	-126.	342.	.0158	.0079	.0009	.0107	-.0333	.0385	.0107	-.0333	.0385	204.
.1320	-2011.	-739.	165.	457.	-331.	502.	.0164	.0130	.0066	.0076	-.0318	.0377	.0076	-.0318	.0377	303.
.1330	-1339.	-686.	-66.	547.	-496.	640.	.0161	.0178	.0123	.0041	-.0294	.0355	.0041	-.0294	.0355	392.
.1340	-1402.	-609.	32.	636.	-644.	729.	.0153	.0223	.0181	.0005	-.0261	.0322	.0005	-.0261	.0322	466.
.1350	-1787.	-509.	282.	735.	-773.	765.	.0140	.0264	.0237	-.0037	-.0220	.0280	-.0037	-.0220	.0280	527.
.1360	-1298.	-382.	184.	838.	-865.	768.	.0124	.0302	.0289	-.0089	-.0173	.0231	-.0089	-.0173	.0231	573.
.1370	-235.	-235.	-95.	922.	-921.	744.	.0105	.0336	.0338	-.0149	-.0123	.0178	-.0149	-.0123	.0178	602.
.1380	-87.	-77.	-61.	960.	-960.	694.	.0084	.0365	.0383	-.0209	-.0068	.0122	-.0209	-.0068	.0122	612.
.1390	-300.	85.	174.	955.	-974.	629.	.0063	.0389	.0425	-.0264	-.0012	.0062	-.0264	-.0012	.0062	603.
.1400	60.	248.	171.	929.	-951.	565.	.0042	.0411	.0462	-.0311	.0043	.0001	-.0311	.0043	.0001	580.
.1410	705.	404.	37.	902.	-905.	494.	.0023	.0429	.0493	-.0347	.0093	-.0058	-.0347	.0093	-.0058	550.
.1420	665.	541.	169.	888.	-864.	400.	.0008	.0442	.0520	-.0373	.0137	-.0112	-.0373	.0137	-.0112	523.
.1430	308.	655.	409.	884.	-832.	306.	-.0002	.0453	.0543	-.0391	.0173	-.0157	-.0391	.0173	-.0157	502.
.1440	560.	741.	371.	872.	-800.	248.	-.0007	.0462	.0560	-.0401	.0198	-.0190	-.0401	.0198	-.0190	485.
.1450	994.	796.	231.	832.	-779.	237.	-.0007	.0471	.0574	-.0401	.0213	-.0212	-.0401	.0213	-.0212	467.
.1460	616.	813.	402.	763.	-786.	258.	-.0002	.0477	.0585	-.0387	.0216	-.0222	-.0387	.0216	-.0222	451.
.1470	-209.	791.	726.	693.	-815.	301.	.0009	.0480	.0592	-.0361	.0208	-.0219	-.0361	.0208	-.0219	446.
.1480	-405.	735.	752.	648.	-848.	373.	.0025	.0483	.0593	-.0324	.0185	-.0202	-.0324	.0185	-.0202	454.
.1490	-153.	645.	554.	634.	-888.	471.	.0047	.0485	.0588	-.0276	.0150	-.0174	-.0276	.0150	-.0174	477.
.1500	-412.	519.	541.	644.	-950.	584.	.0072	.0484	.0580	-.0220	.0104	-.0135	-.0220	.0104	-.0135	517.
.1510	-1150.	363.	705.	657.	-1030.	719.	.0099	.0481	.0569	-.0159	.0050	-.0084	-.0159	.0050	-.0084	569.
.1520	-1616.	187.	742.	667.	-1113.	880.	.0126	.0477	.0554	-.0101	-.0011	-.0024	-.0101	-.0011	-.0024	629.
.1530	-1765.	1.	638.	671.	-1191.	1056.	.0154	.0470	.0533	-.0050	-.0076	.0043	-.0050	-.0076	.0043	693.
.1540	-2077.	-189.	600.	679.	-1265.	1220.	.0182	.0460	.0509	-.0004	-.0142	.0113	-.0004	-.0142	.0113	756.
.1550	-2422.	-374.	577.	703.	-1321.	1357.	.0208	.0445	.0479	.0036	-.0208	.0183	.0036	-.0208	.0183	811.
.1560	-2394.	-546.	409.	737.	-1343.	1467.	.0230	.0426	.0444	.0073	-.0271	.0248	.0073	-.0271	.0248	851.
.1570	-2309.	-696.	235.	775.	-1325.	1538.	.0246	.0402	.0405	.0104	-.0328	.0304	.0104	-.0328	.0304	872.
.1580	-2634.	-819.	260.	796.	-1268.	1557.	.0254	.0372	.0362	.0129	-.0375	.0349	.0129	-.0375	.0349	867.
.1590	-2921.	-905.	304.	787.	-1161.	1524.	.0257	.0335	.0314	.0143	-.0412	.0382	.0143	-.0412	.0382	831.
.1600	-2633.	-946.	148.	752.	-994.	1437.	.0252	.0293	.0262	.0139	-.0436	.0404	.0139	-.0436	.0404	763.
.1610	-1997.	-942.	-114.	696.	-774.	1289.	.0240	.0245	.0207	.0119	-.0447	.0412	.0119	-.0447	.0412	665.
.1620	-1617.	-896.	-231.	620.	-515.	1073.	.0220	.0192	.0150	.0089	-.0445	.0406	.0089	-.0445	.0406	539.
.1630	-1490.	-812.	-208.	535.	-218.	792.	.0192	.0133	.0094	.0052	-.0429	.0384	.0052	-.0429	.0384	394.

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

CONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

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

.1530	-1765.	1.	638.	671.	-1191.	1056.	.0154	.0470	.0533	-.0050	-.0076	.0043	693.
.1540	-2077.	-189.	600.	679.	-1265.	1220.	.0182	.0460	.0509	-.0004	-.0142	.0113	756.
.1550	-2422.	-374.	577.	703.	-1321.	1357.	.0208	.0445	.0479	.0036	-.0208	.0183	811.
.1560	-2394.	-546.	409.	737.	-1343.	1467.	.0230	.0426	.0444	.0073	-.0271	.0248	851.
.1570	-2309.	-696.	235.	775.	-1325.	1538.	.0246	.0402	.0405	.0104	-.0328	.0304	872.
.1580	-2634.	-819.	260.	796.	-1268.	1577.	.0254	.0372	.0362	.0129	-.0375	.0349	867.
.1590	-2921.	-905.	304.	787.	-1161.	1524.	.0257	.0335	.0314	.0143	-.0412	.0382	831.
.1600	-2633.	-946.	148.	752.	-994.	1437.	.0252	.0293	.0262	.0139	-.0436	.0404	763.
.1610	-1997.	-942.	-114.	696.	-774.	1289.	.0240	.0245	.0207	.0119	-.0447	.0412	665.
.1620	-1617.	-896.	-231.	620.	-515.	1073.	.0220	.0192	.0150	.0089	-.0445	.0406	539.
.1630	-1490.	-812.	-208.	535.	-218.	792.	.0192	.0133	.0094	.0052	-.0429	.0384	394.

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

CONDITION 24
LOADS
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ENGLISH UNITS

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

SECTION	45	MEMBER	1	SEQUENCE	65	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)		
.1640	-1144.	-691.	-244.	437.	117.	463.	.0157	.0070	.0037	.0012	-.0402	.0347	260.		
.1650	-527.	-535.	-365.	317.	481.	96.	.0118	.0006	-.0018	-.0029	-.0365	.0297	235.		
.1660	34.	-354.	-439.	173.	857.	-302.	.0075	-.0060	-.0071	-.0071	-.0319	.0236	371.		
.1670	533.	-154.	-472.	3.	1228.	-712.	.0032	-.0126	-.0120	-.0114	-.0266	.0168	569.		
.1680	1151.	53.	-547.	-177.	1578.	-1113.	-.0011	-.0189	-.0162	-.0157	-.0210	.0097	778.		
.1690	1762.	256.	-622.	-354.	1891.	-1490.	-.0053	-.0248	-.0177	-.0196	-.0152	.0027	977.		
.1700	2073.	443.	-585.	-517.	2150.	-1834.	-.0090	-.0301	-.0223	-.0228	-.0096	-.0041	1153.		
.1710	2177.	608.	-482.	-657.	2349.	-2133.	-.0121	-.0347	-.0240	-.0250	-.0044	-.0103	1300.		
.1720	2418.	744.	-464.	-778.	2484.	-2365.	-.0144	-.0384	-.0249	-.0258	.0001	-.0159	1411.		
.1730	2749.	845.	-514.	-880.	2548.	-2518.	-.0158	-.0411	-.0248	-.0252	.0038	-.0204	1480.		
.1740	2813.	903.	-487.	-959.	2529.	-2585.	-.0162	-.0428	-.0237	-.0236	.0066	-.0236	1501.		
.1750	2522.	915.	-349.	-1009.	2421.	-2563.	-.0157	-.0433	-.0217	-.0211	.0084	-.0253	1472.		
.1760	2144.	880.	-213.	-1016.	2230.	-2454.	-.0142	-.0428	-.0186	-.0179	.0091	-.0253	1392.		
.1770	1843.	801.	-146.	-977.	1964.	-2261.	-.0119	-.0413	-.0149	-.0142	.0087	-.0237	1264.		
.1780	1461.	682.	-79.	-898.	1635.	-1999.	-.0088	-.0388	-.0105	-.0099	.0074	-.0207	1097.		
.1790	919.	529.	28.	-793.	1256.	-1678.	-.0050	-.0355	-.0056	-.0046	.0052	-.0168	899.		
.1800	366.	351.	119.	-671.	843.	-1304.	-.0009	-.0317	-.0003	.0013	.0024	-.0121	679.		
.1810	-129.	155.	173.	-537.	411.	-894.	.0034	-.0273	.0050	.0076	-.0008	-.0068	450.		
.1820	-657.	-49.	236.	-397.	-30.	-466.	.0077	-.0228	.0105	.0140	-.0043	-.0014	246.		
.1830	-1225.	-250.	318.	-250.	-467.	-46.	.0117	-.0181	.0158	.0198	-.0077	.0042	214.		
.1840	-1650.	-438.	351.	-100.	-883.	346.	.0153	-.0137	.0207	.0246	-.0109	.0095	383.		
.1850	-1881.	-601.	321.	43.	-1256.	693.	.0184	-.0096	.0252	.0285	-.0136	.0142	576.		
.1860	-2077.	-732.	304.	162.	-1573.	982.	.0206	-.0061	.0291	.0316	-.0156	.0178	747.		
.1870	-2251.	-824.	311.	242.	-1817.	1204.	.0220	-.0032	.0321	.0341	-.0167	.0200	880.		
.1880	-2263.	-871.	286.	286.	-1980.	1349.	.0224	-.0011	.0343	.0359	-.0168	.0207	968.		
.1890	-2100.	-869.	227.	296.	-2057.	1408.	.0219	.0002	.0355	.0367	-.0158	.0199	1008.		
.1900	-1914.	-820.	193.	275.	-2054.	1377.	.0205	.0006	.0357	.0362	-.0139	.0177	999.		
.1910	-1717.	-726.	190.	227.	-1974.	1258.	.0184	.0002	.0351	.0345	-.0109	.0142	944.		
.1920	-1352.	-592.	148.	150.	-1819.	1068.	.0155	-.0009	.0335	.0316	-.0071	.0096	849.		
.1930	-865.	-425.	82.	42.	-1595.	822.	.0121	-.0026	.0311	.0279	-.0026	.0040	720.		
.1940	-471.	-234.	75.	-93.	-1315.	532.	.0083	-.0047	.0279	.0239	.0024	-.0023	571.		
.1950	-200.	-29.	130.	-244.	-993.	211.	.0042	-.0072	.0241	.0198	.0077	-.0090	419.		
.1960	126.	180.	164.	-397.	-642.	-124.	.0002	-.0098	.0198	.0156	.0128	-.0158	307.		
.1970	530.	381.	156.	-540.	-281.	-454.	-.0037	-.0124	.0150	.0115	.0176	-.0222	305.		
.1980	861.	562.	162.	-666.	70.	-759.	-.0073	-.0147	.0101	.0075	.0219	-.0278	406.		
.1990	1060.	713.	200.	-772.	395.	-1019.	-.0104	-.0165	.0052	.0039	.0252	-.0323	537.		
.2000	1181.	825.	240.	-856.	681.	-1216.	-.0129	-.0178	.0004	.0007	.0276	-.0354	656.		
.2010	1244.	894.	270.	-910.	921.	-1342.	-.0148	-.0184	-.0043	-.0018	.0288	-.0369	748.		

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CONDITION 24
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.1910	-1717.	-726.	190.	227.	-1974.	1258.	.0184	.0002	.0351	.0345	-.0109	.0142	944.
.1920	-1352.	-592.	148.	150.	-1819.	1068.	.0155	-.0009	.0335	.0316	-.0071	.0096	849.
.1930	-865.	-425.	82.	42.	-1595.	822.	.0121	-.0026	.0311	.0279	-.0026	.0040	720.
.1940	-471.	-234.	75.	-93.	-1315.	532.	.0093	-.0047	.0279	.0239	.0024	-.0023	571.
.1950	-200.	-25.	130.	-244.	-993.	211.	.0042	-.0072	.0241	.0198	.0077	-.0090	419.
.1960	126.	180.	164.	-397.	-642.	-124.	.0002	-.0098	.0198	.0156	.0128	-.0158	307.
.1970	530.	381.	156.	-540.	-281.	-454.	-.0037	-.0124	.0150	.0115	.0176	-.0222	305.
.1980	861.	562.	162.	-666.	70.	-759.	-.0073	-.0147	.0101	.0075	.0219	-.0278	406.
.1990	1060.	713.	200.	-772.	395.	-1019.	-.0104	-.0165	.0052	.0039	.0252	-.0323	537.
.2000	1181.	825.	240.	-856.	681.	-1216.	-.0129	-.0178	.0004	.0007	.0276	-.0354	656.
.2010	1244.	894.	270.	-910.	921.	-1342.	-.0148	-.0184	-.0043	-.0018	.0288	-.0369	748.

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

SECTION	45	MEMBER	1	SEQUENCE	65	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2020	1232.	915.	292.	-930.	1106.	-1392.	-.0159	-.0183	-.0086	-.0035	.0286	-.0368	805.		
.2030	1178.	887.	292.	-909.	1232.	-1367.	-.0162	-.0175	-.0126	-.0043	.0272	-.0351	823.		
.2040	1111.	813.	256.	-842.	1297.	-1269.	-.0158	-.0159	-.0162	-.0045	.0244	-.0317	803.		
.2050	965.	695.	218.	-732.	1302.	-1104.	-.0147	-.0136	-.0193	-.0042	.0205	-.0268	745.		
.2060	681.	539.	206.	-589.	1250.	-878.	-.0129	-.0107	-.0219	-.0036	.0157	-.0205	657.		
.2070	331.	354.	198.	-422.	1150.	-602.	-.0107	-.0073	-.0240	-.0030	.0101	-.0131	548.		
.2080	28.	150.	155.	-237.	1012.	-290.	-.0082	-.0035	-.0256	-.0024	.0039	-.0050	433.		
.2090	-228.	-60.	84.	-43.	849.	38.	-.0054	.0004	-.0270	-.0019	-.0024	.0033	341.		
.2100	-511.	-266.	23.	153.	672.	360.	-.0026	.0043	-.0279	-.0013	-.0086	.0115	312.		
.2110	-822.	-457.	-16.	342.	495.	659.	.0001	.0080	-.0287	-.0009	-.0145	.0190	358.		
.2120	-1084.	-622.	-59.	515.	332.	921.	.0024	.0114	-.0292	-.0006	-.0197	.0255	444.		
.2130	-1262.	-753.	-109.	662.	196.	1135.	.0043	.0142	-.0296	-.0007	-.0239	.0308	533.		
.2140	-1386.	-844.	-149.	772.	96.	1289.	.0056	.0165	-.0300	-.0014	-.0271	.0346	604.		
.2150	-1460.	-888.	-171.	843.	37.	1374.	.0063	.0181	-.0304	-.0028	-.0289	.0367	647.		
.2160	-1450.	-883.	-188.	873.	25.	1383.	.0062	.0189	-.0307	-.0048	-.0294	.0372	657.		
.2170	-1339.	-830.	-207.	866.	62.	1318.	.0055	.0190	-.0311	-.0073	-.0285	.0359	633.		
.2180	-1160.	-733.	-216.	822.	147.	1181.	.0041	.0183	-.0316	-.0101	-.0262	.0329	580.		
.2190	-938.	-596.	-208.	745.	275.	982.	.0021	.0170	-.0320	-.0131	-.0228	.0283	507.		
.2200	-677.	-427.	-186.	638.	438.	733.	-.0004	.0152	-.0324	-.0160	-.0183	.0225	428.		
.2210	-391.	-235.	-151.	505.	627.	449.	-.0032	.0129	-.0328	-.0189	-.0130	.0157	370.		
.2220	-92.	-30.	-106.	356.	828.	146.	-.0062	.0104	-.0330	-.0217	-.0072	.0085	366.		
.2230	234.	176.	-67.	203.	1029.	-158.	-.0091	.0078	-.0330	-.0244	-.0011	.0012	425.		
.2240	573.	372.	-36.	56.	1216.	-446.	-.0118	.0054	-.0327	-.0268	.0049	-.0058	520.		
.2250	851.	548.	8.	-76.	1377.	-704.	-.0142	.0031	-.0322	-.0287	.0106	-.0121	621.		
.2260	1007.	693.	82.	-185.	1500.	-918.	-.0162	.0012	-.0313	-.0298	.0157	-.0175	710.		
.2270	1102.	801.	154.	-268.	1578.	-1076.	-.0175	-.0002	-.0300	-.0302	.0199	-.0217	774.		
.2280	1213.	867.	186.	-321.	1603.	-1167.	-.0181	-.0011	-.0283	-.0297	.0230	-.0244	806.		
.2290	1295.	886.	194.	-340.	1570.	-1187.	-.0179	-.0014	-.0262	-.0285	.0250	-.0255	802.		
.2300	1245.	858.	217.	-326.	1475.	-1137.	-.0170	-.0011	-.0237	-.0267	.0257	-.0250	759.		
.2310	1067.	785.	255.	-280.	1320.	-1019.	-.0154	-.0002	-.0209	-.0242	.0251	-.0228	678.		
.2320	873.	670.	264.	-204.	1112.	-840.	-.0131	.0012	-.0179	-.0211	.0234	-.0192	565.		
.2330	693.	521.	235.	-105.	863.	-612.	-.0103	.0029	-.0146	-.0174	.0205	-.0143	427.		
.2340	454.	347.	203.	8.	585.	-350.	-.0070	.0049	-.0114	-.0133	.0167	-.0086	274.		
.2350	150.	156.	181.	129.	290.	-70.	-.0035	.0070	-.0083	-.0008	.0122	-.0023	130.		
.2360	-142.	-41.	143.	248.	-6.	214.	.0001	.0090	-.0053	-.0042	.0073	.0042	131.		
.2370	-364.	-234.	73.	360.	-290.	487.	.0036	.0108	-.0027	.0002	.0022	.0107	270.		
.2380	-566.	-413.	1.	458.	-550.	731.	.0069	.0123	-.0005	.0042	-.0028	.0168	411.		
.2390	-797.	-568.	-46.	537.	-773.	930.	.0098	.0133	.0011	.0076	-.0075	.0223	531.		

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

.2290	1295.	388.	194.	-340.	1570.	-1187.	-1179.	-.0014	-.0262	-.0285	.0250	-.0255	802.
.2300	1245.	858.	217.	-326.	1475.	-1137.	-.0170	-.0011	-.0237	-.0267	.0257	-.0250	759.
.2310	1067.	785.	255.	-280.	1320.	-1019.	-.0154	-.0002	-.0209	-.0242	.0251	-.0228	678.
.2320	877.	670.	264.	-204.	1112.	-840.	-.0131	.0012	-.0179	-.0211	.0234	-.0192	565.
.2330	693.	521.	235.	-105.	863.	-612.	-.0103	.0029	-.0146	-.0174	.0205	-.0143	427.
.2340	456.	347.	203.	8.	585.	-350.	-.0070	.0049	-.0114	-.0133	.0167	-.0086	274.
.2350	150.	156.	181.	129.	290.	-70.	-.0035	.0070	-.0083	-.0088	.0122	-.0023	130.
.2360	-142.	-41.	143.	248.	-6.	214.	.0001	.0090	-.0053	-.0042	.0073	.0042	131.
.2370	-364.	-234.	73.	360.	-290.	487.	.0036	.0108	-.0027	.0002	.0022	.0107	270.
.2380	-566.	-413.	1.	458.	-550.	731.	.0069	.0123	-.0005	.0042	-.0028	.0168	411.
.2390	-797.	-568.	-46.	537.	-773.	530.	.0098	.0133	.0011	.0076	-.0075	.0223	531.

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

SECTION	45	MEMBER	1	SEQUENCE	55	LOCATION	END	TYPE	RU	DX	DY	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ				(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)										
.2400	-1005.	-692.	-81.	591.	-946.	1071.	.0122	.0137	.0022	.0102	-.0116	.0267	.0102	-.0116	.0267	621.
.2410	-1107.	-778.	-134.	614.	-1058.	1150.	.0141	.0135	.0025	.0121	-.0150	.0300	.0121	-.0150	.0300	674.
.2420	-1069.	-822.	-214.	604.	-1099.	1163.	.0152	.0126	.0021	.0133	-.0174	.0318	.0133	-.0174	.0318	686.
.2430	-966.	-824.	-287.	562.	-1067.	1107.	.0157	.0111	.0009	.0138	-.0189	.0322	.0138	-.0189	.0322	657.
.2440	-896.	-784.	-312.	489.	-965.	982.	.0155	.0089	-.0011	.0134	-.0194	.0312	.0134	-.0194	.0312	586.
.2450	-847.	-705.	-298.	392.	-796.	794.	.0145	.0062	-.0039	.0120	-.0188	.0290	.0120	-.0188	.0290	478.
.2460	-713.	-592.	-288.	276.	-565.	554.	.0130	.0030	-.0073	.0098	-.0174	.0257	.0098	-.0174	.0257	337.
.2470	-394.	-452.	-330.	148.	-279.	277.	.0110	-.0005	-.0114	.0067	-.0153	.0216	.0067	-.0153	.0216	169.
.2480	5.	-292.	-387.	11.	51.	-24.	.0087	-.0042	-.0160	.0029	-.0126	.0169	.0029	-.0126	.0169	23.
.2490	251.	-124.	-368.	-129.	409.	-337.	.0061	-.0079	-.0210	-.0012	-.0095	.0119	-.0012	-.0095	.0119	219.
.2500	351.	44.	-284.	-261.	780.	-647.	.0032	-.0116	-.0263	-.0054	-.0063	.0066	-.0054	-.0063	.0066	420.
.2510	520.	202.	-231.	-376.	1153.	-935.	.0004	-.0149	-.0318	-.0098	-.0032	.0022	-.0098	-.0032	.0022	614.
.2520	871.	342.	-265.	-467.	1516.	-1186.	-.0023	-.0178	-.0373	-.0141	-.0005	-.0019	-.0141	-.0005	-.0019	795.
.2530	1276.	458.	-340.	-530.	1851.	-1390.	-.0048	-.0201	-.0427	-.0183	.0016	-.0051	-.0183	.0016	-.0051	953.
.2540	1579.	542.	-394.	-565.	2147.	-1541.	-.0069	-.0218	-.0479	-.0222	.0031	-.0073	-.0222	.0031	-.0073	1085.
.2550	1751.	592.	-421.	-574.	2395.	-1629.	-.0086	-.0229	-.0528	-.0257	.0036	-.0083	-.0257	.0036	-.0083	1185.
.2560	1936.	606.	-484.	-554.	2591.	-1648.	-.0097	-.0233	-.0574	-.0286	.0033	-.0082	-.0286	.0033	-.0082	1252.
.2570	2374.	585.	-686.	-506.	2737.	-1594.	-.0100	-.0229	-.0618	-.0308	.0018	-.0069	-.0308	.0018	-.0069	1287.
.2580	2842.	531.	-934.	-431.	2831.	-1475.	-.0095	-.0218	-.0658	-.0324	-.0006	-.0045	-.0324	-.0006	-.0045	1293.
.2590	2892.	448.	-1041.	-336.	2868.	-1307.	-.0083	-.0202	-.0696	-.0334	-.0039	-.0012	-.0334	-.0039	-.0012	1272.
.2600	2557.	339.	-1018.	-228.	2853.	-1096.	-.0063	-.0182	-.0731	-.0337	-.0080	.0029	-.0337	-.0080	.0029	1230.
.2610	2250.	212.	-1031.	-112.	2799.	-843.	-.0037	-.0157	-.0764	-.0337	-.0128	.0076	-.0337	-.0128	.0076	1174.
.2620	2164.	75.	-1156.	4.	2719.	-557.	-.0005	-.0131	-.0797	-.0332	-.0181	.0126	-.0332	-.0181	.0126	1113.
.2630	2006.	-66.	-1263.	111.	2614.	-260.	.0030	-.0103	-.0831	-.0324	-.0238	.0178	-.0324	-.0238	.0178	1055.
.2640	1291.	-206.	-1145.	202.	2488.	20.	.0065	-.0078	-.0863	-.0312	-.0295	.0227	-.0312	-.0295	.0227	1002.
.2650	150.	-338.	-846.	272.	2350.	272.	.0094	-.0057	-.0894	-.0295	-.0350	.0271	-.0295	-.0350	.0271	956.
.2660	-670.	-457.	-669.	318.	2218.	498.	.0117	-.0039	-.0926	-.0273	-.0401	.0308	-.0273	-.0401	.0308	921.
.2670	-803.	-555.	-760.	337.	2105.	693.	.0132	-.0026	-.0958	-.0249	-.0446	.0335	-.0249	-.0446	.0335	900.
.2680	-815.	-630.	-874.	327.	2004.	840.	.0136	-.0018	-.0990	-.0221	-.0482	.0351	-.0221	-.0482	.0351	882.
.2690	-1188.	-681.	-804.	284.	1910.	923.	.0125	-.0018	-.1018	-.0192	-.0506	.0355	-.0192	-.0506	.0355	859.
.2700	-1545.	-705.	-702.	213.	1832.	950.	.0100	-.0023	-.1042	-.0163	-.0515	.0347	-.0163	-.0515	.0347	833.
.2710	-1133.	-698.	-878.	122.	1785.	929.	.0065	-.0033	-.1066	-.0136	-.0510	.0326	-.0136	-.0510	.0326	811.
.2720	-113.	-659.	-1266.	15.	1767.	895.	.0023	-.0046	-.1087	-.0110	-.0490	.0292	-.0110	-.0490	.0292	795.
.2730	582.	-592.	-1478.	-108.	1765.	810.	-.0025	-.0063	-.1104	-.0084	-.0451	.0245	-.0084	-.0451	.0245	780.
.2740	653.	-501.	-1390.	-238.	1769.	692.	-.0078	-.0081	-.1116	-.0060	-.0395	.0187	-.0060	-.0395	.0187	768.
.2750	693.	-388.	-1255.	-365.	1784.	568.	-.0130	-.0100	-.1122	-.0038	-.0322	.0120	-.0038	-.0322	.0120	766.
.2760	1244.	-258.	-1307.	-479.	1812.	484.	-.0176	-.0116	-.1126	-.0022	-.0236	.0047	-.0022	-.0236	.0047	775.
.2770	1955.	-116.	-1404.	-571.	1837.	383.	-.0214	-.0129	-.1127	-.0012	-.0138	-.0029	-.0012	-.0138	-.0029	787.

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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
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CONDITION 24
LOADS
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INTERNAL FORCES IN THE PIPING
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.2670	-803.	-555.	-760.	337.	2105.	693.	.132	-.0026	-.0958	-.0249	-.0446	.0335	900.
.2680	-815.	-630.	-874.	327.	2004.	840.	.136	-.0018	-.0990	-.0221	-.0482	.0351	882.
.2690	-1188.	-681.	-804.	284.	1910.	923.	.0125	-.0018	-.1018	-.0192	-.0506	.0355	859.
.2700	-1545.	-705.	-702.	213.	1832.	950.	.0100	-.0023	-.1042	-.0183	-.0515	.0347	833.
.2710	-1133.	-698.	-878.	122.	1785.	939.	.0065	-.0033	-.1066	-.0136	-.0510	.0326	811.
.2720	-113.	-659.	-1266.	15.	1767.	895.	.0023	-.0046	-.1087	-.0110	-.0490	.0292	795.
.2730	582.	-592.	-1478.	-102.	1765.	810.	-.0025	-.0063	-.1104	-.0084	-.0451	.0245	780.
.2740	653.	-501.	-1390.	-238.	1769.	692.	-.0078	-.0081	-.1116	-.0060	-.0395	.0187	768.
.2750	693.	-388.	-1255.	-365.	1784.	568.	-.0130	-.0100	-.1122	-.0038	-.0322	.0120	766.
.2760	1246.	-258.	-1307.	-479.	1812.	484.	-.0176	-.0116	-.1126	-.0022	-.0236	.0047	775.
.2770	1955.	-116.	-1404.	-571.	1837.	383.	-.0214	-.0129	-.1127	-.0012	-.0138	-.0029	787.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.55.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	45	MEMBER	1	SEQUENCE	65	LOCATION	END	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.2780	2050.	28.	-1230.	-638.	1840.	318.	-.0245	-.0140	-.1121	-.0008	-.0031	-.0105	792.	
.2790	1438.	166.	-768.	-679.	1810.	274.	-.0267	-.0148	-.1110	-.0010	.0083	-.0178	784.	
.2800	674.	293.	-243.	-671.	1750.	267.	-.0282	-.0152	-.1095	-.0016	.0199	-.0246	763.	
.2810	333.	403.	91.	-668.	1664.	312.	-.0287	-.0153	-.1077	-.0023	.0312	-.0307	730.	
.2820	303.	488.	274.	-612.	1543.	400.	-.0286	-.0152	-.1058	-.0031	.0418	-.0358	685.	
.2830	-8.	544.	545.	-525.	1375.	512.	-.0282	-.0150	-.1036	-.0041	.0516	-.0397	625.	
.2840	-803.	566.	986.	-412.	1154.	634.	-.0278	-.0151	-.1012	-.0052	.0602	-.0423	554.	
.2850	-1536.	556.	1367.	-278.	895.	768.	-.0276	-.0154	-.0989	-.0064	.0673	-.0435	486.	
.2860	-1551.	518.	1415.	-132.	616.	918.	-.0275	-.0160	-.0969	-.0077	.0729	-.0435	447.	
.2870	-974.	456.	1185.	14.	332.	1066.	-.0277	-.0172	-.0956	-.0090	.0769	-.0425	448.	
.2880	-565.	375.	997.	147.	45.	1182.	-.0285	-.0191	-.0948	-.0100	.0794	-.0406	478.	
.2890	-642.	282.	988.	260.	-231.	1250.	-.0298	-.0220	-.0947	-.0107	.0806	-.0381	521.	
.2900	-619.	186.	922.	349.	-468.	1271.	-.0314	-.0259	-.0956	-.0112	.0807	-.0353	561.	
.2910	80.	97.	563.	410.	-640.	1249.	-.0332	-.0306	-.0979	-.0117	.0799	-.0325	587.	
.2920	1084.	23.	75.	436.	-738.	1174.	-.0349	-.0363	-.1016	-.0122	.0784	-.0298	583.	
.2930	1570.	-33.	-194.	418.	-761.	1026.	-.0367	-.0430	-.1066	-.0130	.0767	-.0275	539.	
.2940	1417.	-66.	-187.	351.	-701.	804.	-.0384	-.0507	-.1129	-.0140	.0748	-.0255	451.	
.2950	1282.	-71.	-173.	237.	-540.	524.	-.0398	-.0592	-.1207	-.0150	.0731	-.0243	316.	
.2960	1564.	-47.	-317.	81.	-270.	200.	-.0410	-.0683	-.1300	-.0160	.0715	-.0237	139.	
.2970	1871.	0.	-454.	-112.	99.	-168.	-.0419	-.0780	-.1405	-.0167	.0700	-.0240	90.	
.2980	1675.	66.	-365.	-334.	548.	-582.	-.0427	-.0881	-.1521	-.0171	.0689	-.0247	348.	
.2990	1067.	144.	-89.	-579.	1063.	-1030.	-.0437	-.0986	-.1644	-.0173	.0680	-.0259	638.	
.3000	605.	228.	138.	-836.	1636.	-1486.	-.0449	-.1089	-.1773	-.0174	.0671	-.0272	948.	
.3010	601.	309.	183.	-1097.	2251.	-1927.	-.0462	-.1190	-.1906	-.0173	.0662	-.0284	1268.	
.3020	829.	381.	135.	-1354.	2885.	-2346.	-.0479	-.1287	-.2039	-.0169	.0651	-.0293	1588.	
.3030	918.	434.	144.	-1597.	3511.	-2738.	-.0501	-.1378	-.2168	-.0162	.0636	-.0298	1898.	
.3040	846.	465.	214.	-1816.	4108.	-3092.	-.0528	-.1461	-.2291	-.0150	.0618	-.0298	2188.	
.3050	975.	470.	188.	-2001.	4664.	-3389.	-.0558	-.1533	-.2404	-.0132	.0595	-.0292	2449.	
.3060	1577.	449.	-49.	-2145.	5167.	-3611.	-.0588	-.1593	-.2506	-.0111	.0565	-.0279	2672.	
.3070	2432.	403.	-409.	-2248.	5599.	-3756.	-.0617	-.1639	-.2594	-.0089	.0531	-.0260	2852.	
.3080	3057.	334.	-690.	-2310.	5942.	-3828.	-.0645	-.1671	-.2666	-.0066	.0492	-.0235	2984.	
.3090	3307.	246.	-832.	-2334.	6188.	-3827.	-.0667	-.1688	-.2719	-.0046	.0451	-.0206	3066.	
.3100	3533.	147.	-980.	-2318.	6339.	-3746.	-.0681	-.1688	-.2752	-.0028	.0408	-.0173	3098.	
.3110	4002.	45.	-1245.	-2262.	6401.	-3585.	-.0685	-.1673	-.2767	-.0013	.0364	-.0141	3081.	
.3120	4423.	-55.	-1502.	-2172.	6372.	-3361.	-.0679	-.1642	-.2763	-.0003	.0322	-.0111	3019.	
.3130	4331.	-147.	-1553.	-2054.	6249.	-3091.	-.0663	-.1598	-.2737	.0004	.0283	-.0086	2917.	
.3140	3754.	-224.	-1405.	-1915.	6038.	-2788.	-.0637	-.1543	-.2691	.0006	.0249	-.0067	2777.	
.3150	3162.	-282.	-1250.	-1763.	5753.	-2453.	-.0603	-.1476	-.2626	.0003	.0220	-.0055	2608.	

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