

50-305

RESPONSE TO NUREG-0737 ITEM II.D.1

Docket # *50-305*

Control # *8403280048*

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

.1440	2360.	1313.	359.	1612.	637.	-704.	-1179.	.0822	.0239	-.0575	-.1153	.0398	751.
.1450	-1502.	2318.	-1161.	2453.	447.	-2003.	-.1106	.0741	.0322	-.0349	-.0367	.0381	1284.
.1460	-639.	3204.	-1879.	3026.	622.	-3132.	-.1000	.0669	.0384	-.0164	-.0579	.0348	1765.
.1480	-961.	3087.	-2587.	3379.	710.	-3219.	-.0888	.0587	.0440	.0012	-.0299	.0283	1894.
.1490	-1607.	1809.	-2706.	3440.	1099.	-2150.	-.0771	.0436	.0489	.0189	-.0054	.0191	1693.
.1500	486.	267.	-1427.	3158.	2319.	-726.	-.0641	.0381	.0521	.0337	.0137	.0100	1599.
.1510	942.	-952.	-38.	2662.	3619.	589.	-.0516	.0283	.0543	.0435	.0306	.0040	1817.
.1520	1771.	-1724.	1465.	2152.	4933.	1670.	-.0384	.0191	.0542	.0497	.0466	.0028	2261.
.1530	489.	-2144.	1806.	1641.	5331.	2546.	-.0254	.0097	.0515	.0543	.0639	.0059	2461.
.1540	1217.	-2226.	1763.	1014.	5202.	3135.	-.0113	-.0005	.0447	.0588	.0817	.0124	2471.
.1550	2646.	-2106.	1550.	189.	4770.	3415.	.0041	-.0108	.0347	.0636	.1004	.0218	2355.

ADLPIPE PAGE 1237

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/31/02. 18.27.28.

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	28	MEMBER	1	SEQUENCE	52	LOCATION	BEG	TYPE	EL							
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	-1087.	-1863.	289.	-818.	3621.	3375.	.0182	-.0204	.0242	.0679	.1205	.0340	2013.			
.1570	-1329.	-1236.	114.	-1895.	3096.	2875.	.0323	-.0285	.0124	.0699	.1357	.0489	1958.			
.1580	14.	-258.	459.	-2895.	2919.	2067.	.0445	-.0356	.0007	.0693	.1452	.0648	1847.			
.1590	-1135.	582.	516.	-3607.	2686.	1488.	.0532	-.0428	-.0090	.0675	.1506	.0791	1901.			
.1600	-836.	995.	1165.	-3913.	2951.	1474.	.0596	-.0504	-.0174	.0659	.1508	.0903	2054.			
.1610	1219.	1077.	2270.	-4004.	3501.	1809.	.0646	-.0575	-.0247	.0626	.1459	.0983	2254.			
.1620	-576.	1011.	2260.	-4138.	3247.	2172.	.0675	-.0626	-.0305	.0564	.1394	.1035	2284.			
.1630	-548.	872.	2554.	-4339.	3085.	2461.	.0702	-.0656	-.0359	.0487	.1304	.1067	2354.			
.1640	-370.	561.	2594.	-4515.	2653.	2752.	.0718	-.0670	-.0401	.0405	.1197	.1071	2376.			
.1650	-2373.	63.	1556.	-4566.	1401.	3127.	.0711	-.0675	-.0424	.0326	.1078	.1040	2291.			
.1660	-1417.	-495.	795.	-4377.	245.	3535.	.0693	-.0677	-.0433	.0269	.0925	.0984	2260.			
.1670	-1416.	-985.	-193.	-3912.	-975.	3867.	.0649	-.0678	-.0415	.0241	.0754	.0912	2242.			
.1680	-827.	-1120.	-617.	-3262.	-1703.	3805.	.0590	-.0667	-.0372	.0222	.0559	.0837	2124.			
.1690	-1435.	-850.	-875.	-2551.	-2224.	3264.	.0515	-.0644	-.0307	.0207	.0349	.0763	1887.			
.1700	-1238.	-366.	-647.	-1795.	-2351.	2502.	.0433	-.0623	-.0235	.0228	.0136	.0690	1555.			
.1710	2703.	60.	728.	-990.	-1670.	1730.	.0363	-.0607	-.0167	.0297	-.0070	.0617	1044.			
.1720	1613.	483.	945.	-201.	-1628.	937.	.0288	-.0593	-.0092	.0389	-.0217	.0540	758.			
.1730	1010.	1068.	1149.	551.	-1511.	-9.	.0226	-.0573	-.0021	.0482	-.0315	.0464	645.			
.1740	1234.	1792.	1284.	1277.	-1340.	-1032.	.0172	-.0546	.0046	.0575	-.0363	.0386	850.			
.1750	-556.	2429.	675.	1983.	-1548.	-1919.	.0112	-.0516	.0118	.0667	-.0364	.0298	1270.			
.1760	-543.	2754.	404.	2645.	-1496.	-2477.	.0054	-.0484	.0193	.0755	-.0349	.0189	1573.			
.1770	-1576.	2548.	-73.	3159.	-1535.	-2566.	-.0015	-.0452	.0278	.0835	-.0322	.0052	1746.			
.1780	-444.	1902.	145.	3427.	-1120.	-2287.	-.0085	-.0420	.0367	.0897	-.0305	-.0108	1713.			
.1790	-320.	1015.	141.	3444.	-861.	-1825.	-.0163	-.0385	.0464	.0928	-.0288	-.0284	1602.			
.1800	-1052.	77.	-346.	3337.	-967.	-1290.	-.0250	-.0350	.0560	.0929	-.0269	-.0461	1487.			
.1810	1867.	-771.	-702.	3193.	-822.	-748.	-.0327	-.0320	.0639	.0915	-.0262	-.0621	1357.			
.1820	1423.	-1501.	-1260.	2945.	-1370.	-267.	-.0409	-.0297	.0711	.0888	-.0239	-.0758	1308.			
.1830	49.	-2000.	-2390.	2557.	-2056.	25.	-.0485	-.0284	.0768	.0846	-.0219	-.0864	1317.			
.1840	-646.	-2250.	-3131.	2096.	-2532.	119.	-.0556	-.0282	.0808	.0796	-.0218	-.0941	1320.			
.1850	-840.	-2280.	-3434.	1639.	-2753.	50.	-.0628	-.0294	.0832	.0749	-.0249	-.0984	1286.			
.1860	777.	-2073.	-2841.	1216.	-2412.	-195.	-.0693	-.0315	.0841	.0712	-.0319	-.0986	1087.			
.1870	133.	-1706.	-2350.	861.	-2084.	-564.	-.0761	-.0345	.0845	.0686	-.0397	-.0954	933.			
.1880	1003.	-1215.	-1248.	647.	-1332.	-998.	-.0817	-.0383	.0836	.0670	-.0485	-.0896	717.			
.1890	2083.	-682.	-238.	579.	-862.	-1418.	-.0860	-.0428	.0814	.0660	-.0563	-.0823	670.			
.1900	1926.	-180.	38.	597.	-547.	-1763.	-.0891	-.0478	.0778	.0659	-.0514	-.0734	779.			
.1910	3618.	248.	336.	641.	-530.	-2001.	-.0889	-.0530	.0718	.0668	-.0537	-.0627	870.			
.1920	3857.	530.	68.	629.	-925.	-1117.	-.0859	-.0580	.0641	.0682	-.0515	-.0511	961.			
.1930	2994.	711.	-416.	505.	-1511.	-2151.	-.0799	-.0627	.0552	.0684	-.0558	-.0391	1074.			

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/31/02. 18.27.28.

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

.1830	49.	-2000.	-290.	2557.	-2056.	25.	-.485	-.0284	.0768	.0846	-.0219	-.0864	1317.
.1840	-646.	-2250.	-3131.	2096.	-2532.	119.	-.556	-.0282	.0808	.0796	-.0218	-.0941	1320.
.1850	-840.	-2280.	-3434.	1639.	-2753.	50.	-.628	-.0294	.0832	.0749	-.0249	-.0984	1286.
.1860	777.	-2073.	-2841.	1216.	-2412.	-195.	-.0693	-.0315	.0841	.0712	-.0319	-.0986	1087.
.1870	133.	-1706.	-2350.	261.	-2024.	-564.	-.0761	-.0345	.0845	.0686	-.0397	-.0954	933.
.1880	1003.	-1215.	-1248.	647.	-1332.	-996.	-.0817	-.0387	.0836	.0670	-.0485	-.0896	717.
.1890	2083.	-682.	-238.	579.	-662.	-1418.	-.0860	-.0422	.0814	.0660	-.0563	-.0823	670.
.1900	1926.	-180.	38.	597.	-547.	-1763.	-.0891	-.0478	.0778	.0659	-.0614	-.0734	779.
.1910	3618.	248.	336.	641.	-530.	-2001.	-.0889	-.0530	.0718	.0668	-.0637	-.0627	870.
.1920	3857.	530.	88.	629.	-925.	-1117.	-.0859	-.0580	.0641	.0682	-.0615	-.0511	961.
.1930	2996.	711.	-416.	505.	-1511.	-2151.	-.0799	-.0627	.0552	.0684	-.0558	-.0391	1074.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.27.28.

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	28	MEMBER	1	SEQUENCE	52	LOCATION	BEG	TYPE	EL						
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)		
.1940	2599.	826.	-764.	293.	-2003.	-2063.	-.0709	-.0672	.0454	.0669	-.0483	-.0271	1160.		
.1950	2519.	817.	-936.	78.	-2346.	-1738.	-.0595	-.0719	.0354	.0642	-.0401	-.0155	1172.		
.1960	2081.	654.	-976.	-73.	-2516.	-1149.	-.0465	-.0771	.0261	.0608	-.0314	-.0050	1110.		
.1970	1670.	453.	-722.	-195.	-2391.	-461.	-.0319	-.0824	.0176	.0565	-.0227	.0044	980.		
.1980	1517.	366.	-151.	-385.	-1980.	100.	-.0161	-.0872	.0101	.0510	-.0141	.0133	810.		
.1990	1240.	428.	515.	-685.	-1470.	436.	.0006	-.0911	.0035	.0450	-.0057	.0214	674.		
.2000	1093.	562.	1135.	-1050.	-896.	596.	.0178	-.0947	-.0023	.0398	.0029	.0280	628.		
.2010	1370.	696.	1624.	-1395.	-620.	657.	.0354	-.0982	-.0078	.0370	.0123	.0327	667.		
.2020	1204.	850.	1756.	-1646.	-458.	622.	.0527	-.1017	-.0128	.0374	.0232	.0354	730.		
.2030	143.	1125.	1523.	-1724.	-476.	430.	.0690	-.1047	-.0168	.0406	.0350	.0362	738.		
.2040	-712.	1572.	1328.	-1571.	-395.	65.	.0836	-.1070	-.0199	.0457	.0458	.0351	651.		
.2050	-819.	2042.	1452.	-1193.	-35.	-336.	.0963	-.1086	-.0217	.0526	.0545	.0313	497.		
.2060	-915.	2239.	1837.	-638.	554.	-528.	.1065	-.1101	-.0223	.0623	.0607	.0239	400.		
.2070	-1167.	2007.	2409.	47.	1292.	-388.	.1142	-.1116	-.0217	.0747	.0648	.0127	542.		
.2080	-805.	1488.	3157.	818.	2118.	-57.	.1198	-.1125	-.0203	.0886	.0568	-.0013	911.		
.2090	47.	948.	3828.	1606.	2823.	212.	.1233	-.1123	-.0184	.1018	.0675	-.0165	1306.		
.2100	382.	520.	4054.	2345.	3146.	298.	.1249	-.1107	-.0162	.1135	.0680	-.0316	1579.		
.2110	165.	177.	3797.	3001.	3045.	250.	.1249	-.1081	-.0141	.1235	.0688	-.0459	1719.		
.2120	-117.	-129.	3245.	3545.	2629.	145.	.1236	-.1052	-.0122	.1318	.0592	-.0589	1772.		
.2130	-322.	-363.	2624.	3929.	2054.	-19.	.1206	-.1019	-.0105	.1377	.0578	-.0697	1779.		
.2140	-286.	-439.	2211.	4095.	1536.	-298.	.1159	-.0983	-.0087	.1400	.0637	-.0773	1759.		
.2150	159.	-304.	2184.	4016.	1234.	-718.	.1095	-.0939	-.0069	.1380	.0566	-.0808	1710.		
.2160	734.	-22.	2431.	3719.	1110.	-1194.	.1016	-.0890	-.0048	.1315	.0472	-.0807	1629.		
.2170	1034.	269.	2666.	3264.	999.	-1561.	.0924	-.0840	-.0026	.1215	.0372	-.0773	1506.		
.2180	1259.	470.	2701.	2702.	786.	-1709.	.0819	-.0790	-.0004	.1092	.0275	-.0712	1321.		
.2190	1625.	589.	2458.	2048.	416.	-1672.	.0707	-.0738	.0016	.0949	.0190	-.0627	1074.		
.2200	1766.	665.	1906.	1301.	-108.	-1544.	.0588	-.0681	.0035	.0788	.0121	-.0523	811.		
.2210	1465.	683.	1158.	492.	-680.	-1355.	.0466	-.0617	.0053	.0618	.0070	-.0408	639.		
.2220	1014.	591.	402.	-298.	-1159.	-1055.	.0339	-.0550	.0071	.0456	.0031	-.0288	640.		
.2230	627.	380.	-263.	-964.	-1481.	-613.	.0209	-.0485	.0090	.0313	-.0006	-.0171	750.		
.2240	338.	117.	-775.	-1422.	-1599.	-70.	.0074	-.0424	.0110	.0192	-.0050	-.0066	859.		
.2250	161.	-87.	-1046.	-1645.	-1450.	463.	-.0067	-.0367	.0133	.0091	-.0104	.0026	899.		
.2260	-44.	-154.	-1086.	-1668.	-1067.	881.	-.0211	-.0312	.0159	.0010	-.0170	.0103	869.		
.2270	-351.	-103.	-987.	-1549.	-565.	1157.	-.0355	-.0259	.0185	-.0050	-.0249	.0164	808.		
.2280	-465.	-27.	-808.	-1341.	-67.	1336.	-.0495	-.0209	.0210	-.0088	-.0341	.0202	760.		
.2290	-239.	3.	-614.	-1100.	338.	1451.	-.0627	-.0162	.0230	-.0105	-.0441	.0214	743.		
.2300	-19.	2.	-547.	-872.	542.	1468.	-.0747	-.0116	.0246	-.0109	-.0541	.0199	719.		
.2310	68.	27.	-638.	-660.	522.	1247.	-.0853	-.0066	.0260	-.0110	-.0638	.0161	637.		

ADLPIPE PAGE 1239

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.27.28.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

.1450	72.	2212.	-1044.	-1849.	-2423.	620.	-0070	.0035	-.0498	-.1112	-.0699	.0208	2096.
.1460	221.	2271.	-1449.	-2311.	-2811.	-150.	.0048	.0041	-.0653	-.1439	-.0800	-.0080	2455.
.1470	461.	2326.	-1794.	-2471.	-3458.	-424.	.0138	.0045	-.0763	-.1652	-.0972	-.0269	2879.
.1480	458.	2549.	-1806.	-2705.	-3771.	-781.	.0182	.0048	-.0809	-.1761	-.1055	-.0382	3172.
.1490	255.	3095.	-1590.	-3141.	-3628.	-1329.	.0171	.0048	-.0757	-.1769	-.1015	-.0412	3356.
.1500	-56.	3785.	-1135.	-3417.	-3392.	-1548.	.0108	.0046	-.0703	-.1653	-.0952	-.0313	3409.
.1510	-428.	4215.	-628.	-3372.	-3012.	-1413.	-.0007	.0042	-.0570	-.1411	-.0854	-.0088	3193.
.1520	-936.	4215.	-97.	-3121.	-2473.	-1206.	-.0165	.0035	-.0403	-.1084	-.0716	.0217	2804.
.1530	-1674.	3696.	463.	-2827.	-1581.	-1291.	-.0352	.0026	-.0216	-.0713	-.0483	.0541	2350.
.1540	-2405.	2817.	940.	-2317.	-731.	-1313.	-.0543	.0016	-.0026	-.0307	-.0264	.0875	1861.
.1550	-2988.	1855.	1313.	-1609.	-42.	-1134.	-.0714	.0006	.0159	.0108	-.0087	.1193	1327.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.27.22.

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	26	MEMBER	1	SEQUENCE	812	LOCATION	BEG	TYPE	EL						
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	-3522.	831.	1657.	-966.	815.	-1136.	-.0852	-.0005	.0330	.0492	.0140	.1431	1145.		
.1570	-3858.	-353.	1904.	-311.	1496.	-1154.	-.0934	-.0015	.0478	.0840	.0324	.1568	1291.		
.1580	-3926.	-1609.	2046.	362.	2017.	-1104.	-.0950	-.0025	.0601	.1144	.0470	.1590	1569.		
.1590	-3672.	-2438.	2135.	959.	2441.	-901.	-.0895	-.0033	.0697	.1385	.0598	.1504	1869.		
.1600	-3041.	-2596.	2155.	1489.	2564.	-429.	-.0768	-.0038	.0759	.1552	.0650	.1320	2020.		
.1610	-2185.	-2613.	2057.	1958.	2508.	35.	-.0580	-.0041	.0780	.1638	.0658	.1025	2145.		
.1620	-1301.	-3074.	1796.	2379.	2566.	179.	-.0349	-.0045	.0760	.1650	.0701	.0618	2362.		
.1630	-256.	-3801.	1316.	2925.	2346.	437.	-.0086	-.0047	.0698	.1600	.0668	.0164	2545.		
.1640	872.	-4545.	706.	3503.	1970.	784.	.0189	-.0047	.0604	.1497	.0592	-.0306	2760.		
.1650	1911.	-5175.	101.	3929.	1726.	967.	.0458	-.0047	.0495	.1349	.0550	-.0777	2965.		
.1660	2907.	-5378.	-440.	4204.	1407.	1215.	.0705	-.0045	.0383	.1175	.0486	-.1201	3098.		
.1670	3815.	-5046.	-862.	4296.	1132.	1585.	.0915	-.0041	.0276	.0987	.0430	-.1540	3179.		
.1680	4615.	-4382.	-1192.	4288.	830.	2149.	.1073	-.0035	.0179	.0802	.0361	-.1764	3281.		
.1690	5145.	-3627.	-1421.	4140.	687.	2613.	.1167	-.0030	.0093	.0623	.0329	-.1882	3332.		
.1700	5379.	-2652.	-1547.	3834.	618.	2948.	.1193	-.0023	.0017	.0441	.0310	-.1888	3286.		
.1710	5387.	-1528.	-1631.	3483.	400.	3324.	.1151	-.0015	-.0056	.0261	.0242	-.1766	3256.		
.1720	5011.	-849.	-1706.	3107.	419.	3385.	.1039	-.0009	-.0122	.0094	.0230	-.1551	3110.		
.1730	4354.	-584.	-1799.	2803.	408.	3272.	.0868	-.0003	-.0181	-.0047	.0202	-.1252	2917.		
.1740	3469.	-293.	-1812.	2427.	371.	2995.	.0650	.0003	-.0227	-.0171	.0163	-.0885	2611.		
.1750	2389.	-14.	-1696.	1931.	431.	2523.	.0401	.0008	-.0250	-.0266	.0148	-.0478	2161.		
.1760	1274.	65.	-1499.	1482.	364.	2070.	.0139	.0011	-.0245	-.0302	.0098	-.0049	1733.		
.1770	137.	345.	-1123.	919.	329.	1523.	-.0120	.0013	-.0206	-.0291	.0060	.0366	1219.		
.1780	-913.	1394.	-507.	109.	211.	991.	-.0359	.0015	-.0140	-.0263	.0004	.0754	687.		
.1790	-1897.	2668.	240.	-840.	127.	353.	-.0569	.0017	-.0056	-.0218	-.0037	.1082	620.		
.1800	-2773.	3420.	917.	-1641.	-15.	-355.	-.0741	.0017	.0031	-.0147	-.0090	.1330	1132.		
.1810	-3438.	3875.	1459.	-2255.	-438.	-971.	-.0865	.0016	.0104	-.0078	-.0216	.1497	1681.		
.1820	-4028.	4283.	1933.	-2920.	-736.	-1821.	-.0943	.0015	.0156	-.0053	-.0302	.1559	2372.		
.1830	-4469.	4356.	2231.	-3446.	-1050.	-2750.	-.0971	.0014	.0179	-.0061	-.0389	.1519	3055.		
.1840	-4671.	3909.	2274.	-3657.	-1495.	-3534.	-.0946	.0012	.0173	-.0084	-.0508	.1394	3573.		
.1850	-4627.	3348.	2156.	-3698.	-1975.	-4123.	-.0875	.0011	.0144	-.0133	-.0633	.1202	3963.		
.1860	-4354.	2918.	1957.	-3665.	-2444.	-4513.	-.0761	.0010	.0099	-.0204	-.0751	.0955	4251.		
.1870	-3923.	2423.	1698.	-3518.	-2721.	-4783.	-.0614	.0009	.0051	-.0269	-.0812	.0659	4402.		
.1880	-3229.	2018.	1367.	-3145.	-3052.	-4598.	-.0443	.0008	.0006	-.0308	-.0886	.0365	4281.		
.1890	-2361.	1838.	1040.	-2663.	-3310.	-4049.	-.0261	.0007	-.0031	-.0323	-.0937	.0088	3956.		
.1900	-1494.	1589.	735.	-2116.	-3326.	-3442.	-.0084	.0006	-.0052	-.0305	-.0922	-.0173	3527.		
.1910	-652.	1091.	408.	-1396.	-3283.	-2743.	.0078	.0003	-.0059	-.0241	-.0892	-.0402	3033.		
.1920	103.	442.	99.	-580.	-3101.	-1997.	.0212	-.0001	-.0049	-.0135	-.0327	-.0577	2517.		
.1930	726.	-379.	-169.	287.	-2801.	-1247.	.0311	-.0006	-.0020	.0011	-.0733	-.0690	2076.		

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.1830	-4469.	4356.	2231.	-3446.	-1050.	-2750.	-.0971	.0014	.0179	-.0061	-.0389	.1519	3055.
.1840	-4671.	3909.	2274.	-3657.	-1495.	-3534.	-.0946	.0012	.0173	-.0084	-.0508	.1394	3573.
.1850	-4627.	3348.	2156.	-3698.	-1975.	-4123.	-.0875	.0011	.0144	-.0133	-.0633	.1202	3963.
.1860	-4354.	2912.	1957.	-3665.	-2444.	-4513.	-.0761	.0010	.0099	-.0204	-.0751	.0955	4251.
.1870	-3923.	2423.	1698.	-3518.	-2721.	-4783.	-.0614	.0009	.0051	-.0269	-.0812	.0659	4402.
.1880	-3227.	2018.	1367.	-3145.	-3052.	-4598.	-.0443	.0008	.0006	-.0308	-.0886	.0365	4281.
.1890	-2361.	1838.	1040.	-2663.	-3310.	-4049.	-.0261	.0007	-.0031	-.0323	-.0937	.0088	3956.
.1900	-1494.	1589.	735.	-2116.	-3326.	-3442.	-.0084	.0006	-.0052	-.0305	-.0922	-.0173	3527.
.1910	-652.	1091.	408.	-1396.	-3283.	-2743.	.0078	.0003	-.0059	-.0241	-.0892	-.0402	3033.
.1920	103.	442.	99.	-580.	-3101.	-1997.	.0212	-.0001	-.0049	-.0135	-.0827	-.0577	2517.
.1930	726.	-379.	-169.	287.	-2801.	-1247.	.0311	-.0006	-.0020	.0011	-.0733	-.0690	2076.

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SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	EL	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.1940	1155.	-1459.	-373.	1172.	-2395.	-639.	.0373	-.0012	.0030	.0202	-.0513	-.0752	1848.							
.1950	1377.	-2418.	-428.	1925.	-1864.	-218.	.0398	-.0019	.0106	.0423	-.0462	-.0763	1812.							
.1960	1451.	-2873.	-291.	2452.	-1262.	129.	.0388	-.0025	.0203	.0656	-.0293	-.0716	1861.							
.1970	1409.	-3111.	-36.	2847.	-676.	421.	.0351	-.0031	.0315	.0899	-.0131	-.0623	1992.							
.1980	1223.	-3470.	271.	3145.	-98.	522.	.0295	-.0038	.0433	.1145	.0027	-.0515	2150.							
.1990	912.	-3707.	639.	3245.	511.	394.	.0228	-.0043	.0545	.1360	.0193	-.0407	2230.							
.2000	571.	-3649.	1024.	3173.	1071.	177.	.0160	-.0047	.0640	.1524	.0344	-.0306	2260.							
.2010	266.	-3584.	1315.	3089.	1497.	-47.	.0102	-.0050	.0708	.1638	.0459	-.0222	2314.							
.2020	3.	-3639.	1475.	3004.	1849.	-328.	.0061	-.0052	.0744	.1694	.0552	-.0177	2388.							
.2030	-184.	-3610.	1523.	2857.	2174.	-618.	.0042	-.0052	.0743	.1677	.0539	-.0170	2456.							
.2040	-209.	-3496.	1425.	2746.	2398.	-740.	.0049	-.0049	.0705	.1595	.0700	-.0193	2507.							
.2050	-37.	-3417.	1156.	2763.	2490.	-613.	.0084	-.0046	.0635	.1468	.0725	-.0243	2541.							
.2060	295.	-3179.	792.	2802.	2542.	-304.	.0143	-.0041	.0540	.1296	.0740	-.0317	2558.							
.2070	754.	-2599.	399.	2781.	2590.	143.	.0222	-.0035	.0428	.1081	.0757	-.0410	2563.							
.2080	1322.	-1906.	-48.	2803.	2567.	750.	.0313	-.0027	.0303	.0848	.0754	-.0510	2611.							
.2090	1943.	-1369.	-558.	2923.	2466.	1456.	.0408	-.0020	.0174	.0618	.0730	-.0608	2758.							
.2100	2516.	-963.	-1062.	3033.	2368.	2101.	.0498	-.0013	.0047	.0392	.0707	-.0703	2955.							
.2110	2978.	-626.	-1500.	3070.	2283.	2584.	.0573	-.0007	-.0069	.0180	.0586	-.0789	3112.							
.2120	3310.	-359.	-1852.	3056.	2161.	2909.	.0629	-.0001	-.0167	-.0002	.0553	-.0856	3195.							
.2130	3497.	-68.	-2077.	2962.	2002.	3079.	.0661	.0003	-.0240	-.0148	.0609	-.0894	3180.							
.2140	3504.	281.	-2143.	2732.	1843.	3039.	.0664	.0006	-.0285	-.0257	.0564	-.0901	3022.							
.2150	3313.	514.	-2070.	2407.	1693.	2758.	.0639	.0008	-.0302	-.0323	.0519	-.0881	2719.							
.2160	2955.	556.	-1892.	2058.	1534.	2300.	.0587	.0008	-.0292	-.0338	.0471	-.0830	2323.							
.2170	2481.	578.	-1611.	1687.	1360.	1756.	.0511	.0007	-.0256	-.0309	.0417	-.0746	1880.							
.2180	1920.	617.	-1243.	1299.	1184.	1152.	.0417	.0006	-.0200	-.0244	.0361	-.0637	1416.							
.2190	1294.	486.	-838.	953.	1020.	484.	.0313	.0002	-.0127	-.0143	.0308	-.0515	996.							
.2200	655.	133.	-435.	692.	866.	-172.	.0205	-.0002	-.0043	-.0011	.0258	-.0387	756.							
.2210	76.	-272.	-40.	513.	700.	-707.	.0101	-.0006	.0047	.0141	.0206	-.0254	754.							
.2220	-409.	-616.	344.	392.	520.	-1088.	.0006	-.0011	.0139	.0302	.0150	-.0124	855.							
.2230	-794.	-873.	712.	303.	353.	-1343.	-.0074	-.0015	.0230	.0462	.0100	-.0007	958.							
.2240	-1062.	-970.	1053.	228.	197.	-1450.	-.0137	-.0019	.0313	.0607	.0055	.0097	998.							
.2250	-1198.	-892.	1334.	182.	17.	-1374.	-.0184	-.0021	.0381	.0725	.0004	.0190	934.							
.2260	-1233.	-782.	1514.	188.	-190.	-1178.	-.0216	-.0023	.0426	.0808	-.0054	.0267	814.							
.2270	-1223.	-778.	1574.	231.	-395.	-982.	-.0236	-.0023	.0446	.0848	-.0111	.0321	730.							
.2280	-1196.	-882.	1515.	284.	-605.	-839.	-.0244	-.0023	.0436	.0837	-.0171	.0350	723.							
.2290	-1153.	-1045.	1353.	336.	-851.	-752.	-.0243	-.0021	.0400	.0779	-.0240	.0354	798.							
.2300	-1107.	-1235.	1119.	362.	-1123.	-744.	-.0232	-.0019	.0342	.0680	-.0318	.0334	940.							
.2310	-1071.	-1398.	864.	312.	-1398.	-642.	-.0214	-.0016	.0271	.0548	-.0395	.0290	1120.							

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.2210	76.	-272.	-40.	513.	700.	-707.	.101	-.0006	.0047	.0141	.0206	-.0254	754.
.2220	-409.	-816.	344.	392.	520.	-1088.	.0006	-.0011	.0139	.0302	.0150	-.0124	855.
.2230	-794.	-873.	712.	303.	353.	-1343.	-.0074	-.0015	.0230	.0462	.0100	-.0007	958.
.2240	-1062.	-976.	1057.	220.	197.	-1450.	-.0137	-.0019	.0313	.0607	.0055	.0097	998.
.2250	-1198.	-892.	1334.	182.	17.	-1374.	-.0184	-.0021	.0381	.0725	.0004	.0190	934.
.2260	-1233.	-782.	1514.	188.	-190.	-1178.	-.0216	-.0023	.0426	.0808	-.0054	.0267	814.
.2270	-1223.	-778.	1574.	231.	-395.	-982.	-.0236	-.0023	.0446	.0848	-.0111	.0321	730.
.2280	-1196.	-882.	1515.	284.	-605.	-839.	-.0244	-.0023	.0436	.0837	-.0171	.0350	723.
.2290	-1153.	-1045.	1353.	336.	-851.	-752.	-.0243	-.0021	.0400	.0779	-.0240	.0354	798.
.2300	-1107.	-1235.	1119.	362.	-1123.	-744.	-.0232	-.0019	.0342	.0680	-.0318	.0334	940.
.2310	-1071.	-1398.	864.	312.	-1398.	-842.	-.0214	-.0016	.0271	.0548	-.0395	.0290	1120.

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INTERNAL FORCES IN THE PIPING
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SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	EL								
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)	
.2320	-1040.	-1470.	631.	160.	-1675.	-1023.	-.0188	-.0012	.0195	.0396	-.0473	.0225	1328.	
.2330	-1000.	-1390.	454.	-93.	-1954.	-1240.	-.0157	-.0009	.0121	.0235	-.0549	.0149	1561.	
.2340	-948.	-1080.	355.	-446.	-2211.	-1456.	-.0123	-.0005	.0054	.0077	-.0619	.0069	1810.	
.2350	-891.	-508.	340.	-889.	-2426.	-1651.	-.0090	-.0001	-.0002	-.0076	-.0576	-.0004	2067.	
.2360	-847.	188.	375.	-1365.	-2584.	-1823.	-.0064	.0004	-.0050	-.0219	-.0717	-.0062	2322.	
.2370	-837.	775.	406.	-1790.	-2666.	-1973.	-.0048	.0007	-.0093	-.0345	-.0739	-.0100	2540.	
.2380	-870.	1139.	397.	-2107.	-2657.	-2086.	-.0048	.0010	-.0132	-.0452	-.0738	-.0110	2684.	
.2390	-939.	1326.	347.	-2311.	-2559.	-2137.	-.0060	.0013	-.0167	-.0540	-.0714	-.0088	2734.	
.2400	-1035.	1397.	270.	-2418.	-2366.	-2118.	-.0088	.0015	-.0199	-.0609	-.0566	-.0036	2690.	
.2410	-1140.	1395.	186.	-2447.	-2077.	-2015.	-.0125	.0017	-.0223	-.0658	-.0593	.0042	2554.	
.2420	-1227.	1415.	115.	-2424.	-1714.	-1800.	-.0169	.0019	-.0238	-.0686	-.0500	.0143	2341.	
.2430	-1271.	1556.	77.	-2386.	-1305.	-1468.	-.0213	.0020	-.0245	-.0698	-.0393	.0256	2083.	
.2440	-1270.	1814.	72.	-2350.	-853.	-1056.	-.0254	.0022	-.0244	-.0698	-.0274	.0372	1829.	
.2450	-1222.	2111.	77.	-2303.	-382.	-597.	-.0286	.0023	-.0240	-.0693	-.0149	.0477	1624.	
.2460	-1121.	2389.	59.	-2222.	67.	-109.	-.0306	.0025	-.0239	-.0688	-.0028	.0565	1500.	
.2470	-975.	2583.	-8.	-2095.	477.	367.	-.0313	.0026	-.0245	-.0691	.0083	.0626	1469.	
.2480	-800.	2589.	-145.	-1911.	852.	772.	-.0304	.0027	-.0261	-.0704	.0186	.0650	1503.	
.2490	-595.	2354.	-359.	-1656.	1177.	1101.	-.0279	.0027	-.0287	-.0726	.0276	.0634	1558.	
.2500	-339.	1937.	-632.	-1339.	1421.	1389.	-.0235	.0027	-.0321	-.0752	.0346	.0579	1615.	
.2510	-29.	1462.	-920.	-1009.	1592.	1642.	-.0173	.0027	-.0357	-.0780	.0397	.0488	1685.	
.2520	330.	1048.	-1171.	-721.	1714.	1856.	-.0094	.0027	-.0388	-.0804	.0438	.0363	1771.	
.2530	742.	794.	-1355.	-495.	1780.	2069.	-.0001	.0026	-.0410	-.0819	.0465	.0214	1869.	
.2540	1201.	727.	-1466.	-328.	1780.	2314.	.0101	.0026	-.0421	-.0823	.0477	.0054	1980.	
.2550	1666.	760.	-1518.	-210.	1737.	2561.	.0204	.0025	-.0424	-.0815	.0478	-.0106	2090.	
.2560	2087.	789.	-1532.	-124.	1673.	2756.	.0299	.0024	-.0419	-.0799	.0473	-.0259	2175.	
.2570	2432.	764.	-1535.	-49.	1589.	2895.	.0379	.0022	-.0412	-.0778	.0460	-.0390	2226.	
.2580	2676.	640.	-1549.	42.	1481.	2981.	.0437	.0021	-.0405	-.0755	.0438	-.0487	2244.	
.2590	2789.	369.	-1581.	152.	1363.	2986.	.0468	.0020	-.0399	-.0730	.0409	-.0545	2215.	
.2600	2755.	-25.	-1612.	254.	1246.	2886.	.0469	.0018	-.0393	-.0703	.0377	-.0560	2126.	
.2610	2579.	-450.	-1613.	309.	1128.	2699.	.0441	.0017	-.0382	-.0673	.0342	-.0531	1983.	
.2620	2287.	-811.	-1552.	291.	1003.	2455.	.0385	.0015	-.0364	-.0636	.0301	-.0457	1798.	
.2630	1886.	-1004.	-1400.	166.	868.	2169.	.0304	.0014	-.0335	-.0593	.0256	-.0342	1579.	
.2640	1404.	-936.	-1138.	-101.	725.	1836.	.0205	.0013	-.0294	-.0545	.0208	-.0193	1333.	
.2650	847.	-630.	-782.	-505.	579.	1448.	.0089	.0013	-.0246	-.0500	.0157	-.0021	1105.	
.2660	232.	-232.	-381.	-990.	422.	1002.	-.0037	.0013	-.0195	-.0460	.0103	.0167	992.	
.2670	-424.	133.	10.	-1502.	246.	505.	-.0169	.0014	-.0149	-.0430	.0043	.0359	1081.	
.2680	-1098.	428.	355.	-2015.	58.	-43.	-.0300	.0014	-.0115	-.0421	-.0022	.0546	1359.	
.2690	-1761.	644.	631.	-2508.	-137.	-625.	-.0425	.0015	-.0095	-.0436	-.0089	.0716	1744.	

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INTERNAL FORCES IN THE PIPING
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.2580	2676.	340.	-1547.	42.	1481.	2981.	.0437	.0021	-.0405	-.0755	.0438	-.0487	2244.
.2590	2789.	369.	-1581.	152.	1363.	2986.	.0468	.0020	-.0399	-.0730	.0409	-.0545	2215.
.2600	2755.	-25.	-1612.	254.	1246.	2886.	.0449	.0018	-.0393	-.0703	.0377	-.0560	2126.
.2610	2579.	-450.	-1613.	309.	1128.	2699.	.0441	.0017	-.0382	-.0673	.0342	-.0531	1983.
.2620	2787.	-811.	-1557.	291.	1007.	2455.	.0285	.0015	-.0364	-.0636	.0301	-.0457	1798.
.2630	1886.	-1004.	-1400.	166.	868.	2169.	.0304	.0014	-.0335	-.0593	.0256	-.0342	1579.
.2640	1404.	-976.	-1138.	-101.	725.	1836.	.0205	.0013	-.0274	-.0545	.0208	-.0193	1333.
.2650	847.	-630.	-782.	-505.	579.	1448.	.0089	.0013	-.0246	-.0500	.0157	-.0021	1105.
.2660	232.	-232.	-381.	-990.	422.	1002.	-.0037	.0013	-.0195	-.0460	.0103	.0167	992.
.2670	-424.	133.	10.	-1502.	246.	505.	-.0169	.0014	-.0149	-.0430	.0043	.0359	1081.
.2680	-1098.	428.	355.	-2015.	53.	-43.	-.0300	.0014	-.0115	-.0421	-.0022	.0546	1359.
.2690	-1761.	644.	671.	-2508.	-137.	-625.	-.0425	.0015	-.0095	-.0436	-.0089	.0716	1744.

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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	EL							STRESS
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	(PSI)
.2700	-2369.	783.	821.	-2952.	-344.	-1193.	-.0536	.0017	-.0093	-.0476	-.0158	.0862	2158.
.2710	-2873.	901.	926.	-3341.	-568.	-1690.	-.0626	.0019	-.0107	-.0540	-.0231	.0976	2552.
.2720	-3237.	1070.	964.	-3685.	-797.	-2073.	-.0689	.0021	-.0134	-.0626	-.0303	.1053	2900.
.2730	-3432.	1322.	946.	-3982.	-1025.	-2310.	-.0721	.0024	-.0173	-.0728	-.0371	.1090	3179.
.2740	-3443.	1683.	881.	-4222.	-1259.	-2374.	-.0720	.0028	-.0220	-.0840	-.0437	.1085	3373.
.2750	-3274.	2167.	776.	-4405.	-1488.	-2266.	-.0688	.0031	-.0273	-.0960	-.0499	.1042	3487.
.2760	-2958.	2687.	624.	-4517.	-1695.	-2021.	-.0629	.0035	-.0331	-.1083	-.0551	.0965	3526.
.2770	-2531.	3096.	410.	-4521.	-1876.	-1669.	-.0550	.0039	-.0394	-.1202	-.0595	.0861	3486.
.2780	-2033.	3338.	133.	-4403.	-2029.	-1239.	-.0459	.0042	-.0459	-.1311	-.0630	.0741	3372.
.2790	-1567.	3459.	-181.	-4191.	-2138.	-765.	-.0364	.0045	-.0522	-.1406	-.0652	.0617	3213.
.2800	-994.	3490.	-499.	-3913.	-2192.	-286.	-.0273	.0047	-.0578	-.1481	-.0660	.0500	3029.
.2810	-528.	3423.	-798.	-3584.	-2191.	175.	-.0192	.0048	-.0622	-.1530	-.0653	.0398	2834.
.2820	-135.	3279.	-1047.	-3233.	-2137.	598.	-.0127	.0048	-.0651	-.1545	-.0633	.0319	2643.
.2830	166.	3120.	-1215.	-2897.	-2025.	956.	-.0080	.0047	-.0658	-.1524	-.0597	.0267	2468.
.2840	361.	2982.	-1282.	-2602.	-1861.	1225.	-.0052	.0046	-.0644	-.1468	-.0549	.0243	2309.
.2850	445.	2857.	-1249.	-2354.	-1654.	1387.	-.0044	.0044	-.0608	-.1377	-.0489	.0242	2153.
.2860	422.	2699.	-1131.	-2149.	-1413.	1438.	-.0053	.0040	-.0553	-.1256	-.0422	.0263	1986.
.2870	307.	2474.	-951.	-1968.	-1149.	1385.	-.0077	.0036	-.0484	-.1109	-.0348	.0298	1797.
.2880	125.	2205.	-732.	-1799.	-878.	1250.	-.0110	.0032	-.0405	-.0946	-.0274	.0342	1591.
.2890	-94.	1923.	-493.	-1638.	-610.	1059.	-.0147	.0027	-.0321	-.0775	-.0200	.0389	1377.
.2900	-322.	1592.	-263.	-1466.	-355.	836.	-.0184	.0022	-.0239	-.0603	-.0130	.0431	1162.
.2910	-528.	1183.	-66.	-1262.	-126.	612.	-.0215	.0016	-.0160	-.0435	-.0067	.0460	949.
.2920	-682.	769.	93.	-1031.	63.	416.	-.0234	.0011	-.0089	-.0278	-.0014	.0472	751.
.2930	-765.	441.	222.	-799.	212.	263.	-.0239	.0007	-.0027	-.0138	.0029	.0462	585.
.2940	-773.	167.	316.	-566.	322.	150.	-.0227	.0003	.0025	-.0016	.0063	.0428	451.
.2950	-708.	-127.	363.	-317.	391.	71.	-.0200	-.0001	.0067	.0088	.0088	.0368	343.
.2960	-578.	-404.	374.	-65.	422.	31.	-.0159	-.0004	.0098	.0175	.0102	.0286	289.
.2970	-396.	-578.	366.	165.	430.	26.	-.0107	-.0006	.0122	.0243	.0112	.0191	311.
.2980	-184.	-670.	343.	375.	425.	42.	-.0050	-.0008	.0138	.0295	.0118	.0088	383.
.2990	34.	-763.	298.	583.	417.	71.	.0008	-.0010	.0148	.0336	.0123	-.0014	486.
.3000	238.	-877.	234.	796.	415.	110.	.0061	-.0012	.0154	.0370	.0129	-.0107	610.
.3010	413.	-987.	161.	1006.	430.	153.	.0105	-.0013	.0158	.0399	.0138	-.0183	745.
.3020	545.	-1102.	87.	1215.	465.	191.	.0138	-.0014	.0161	.0428	.0151	-.0241	887.
.3030	630.	-1249.	19.	1427.	522.	219.	.0160	-.0015	.0167	.0460	.0169	-.0279	1035.
.3040	671.	-1423.	-35.	1635.	596.	241.	.0170	-.0017	.0176	.0500	.0191	-.0297	1184.
.3050	676.	-1591.	-61.	1832.	684.	260.	.0170	-.0018	.0191	.0549	.0215	-.0298	1329.
.3060	655.	-1733.	-52.	2009.	778.	279.	.0164	-.0020	.0214	.0609	.0241	-.0285	1464.
.3070	619.	-1843.	-6.	2165.	874.	305.	.0152	-.0022	.0243	.0680	.0267	-.0263	1587.

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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

.2970	-396.	-578.	366.	165.	430.	26.	-.0107	-.0006	.0122	.0243	.0112	.0191	311.
.2980	-184.	-670.	343.	375.	423.	42.	-.0050	-.0008	.0138	.0295	.0118	.0088	383.
.2990	34.	-763.	298.	583.	417.	71.	.0008	-.0010	.0148	.0336	.0123	-.0014	486.
.3000	238.	-877.	234.	796.	415.	110.	.0061	-.0012	.0154	.0370	.0129	-.0107	610.
.3010	417.	-987.	161.	1006.	430.	153.	.0105	-.0013	.0158	.0399	.0138	-.0183	745.
.3020	545.	-1102.	87.	1215.	465.	191.	.0138	-.0014	.0161	.0428	.0151	-.0241	887.
.3030	630.	-1249.	19.	1427.	522.	219.	.0160	-.0015	.0167	.0460	.0169	-.0279	1035.
.3040	671.	-1423.	-35.	1635.	596.	241.	.0170	-.0017	.0176	.0500	.0191	-.0297	1184.
.3050	676.	-1591.	-61.	1832.	684.	260.	.0170	-.0018	.0191	.0549	.0215	-.0298	1329.
.3060	655.	-1733.	-52.	2009.	778.	279.	.0164	-.0020	.0214	.0609	.0241	-.0285	1464.
.3070	619.	-1843.	-6.	2165.	874.	305.	.0152	-.0022	.0243	.0680	.0267	-.0263	1587.

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ADLPIPE STRESS ANALYSIS

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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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	EL	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)
.3080	579.	-1912.	73.	2300.	961.	345.	.0138	-.0024	.0279	.0759	.0291	-.0234	1696.
.3090	541.	-1932.	179.	2416.	1033.	399.	.0122	-.0026	.0319	.0844	.0311	-.0201	1792.
.3100	504.	-1910.	299.	2515.	1088.	458.	.0107	-.0027	.0360	.0929	.0327	-.0168	1872.
.3110	473.	-1888.	416.	2604.	1122.	511.	.0093	-.0029	.0400	.1009	.0336	-.0137	1942.
.3120	439.	-1911.	513.	2694.	1129.	545.	.0080	-.0031	.0435	.1082	.0339	-.0110	2003.
.3130	401.	-1980.	584.	2781.	1109.	547.	.0069	-.0033	.0463	.1143	.0333	-.0092	2051.
.3140	361.	-2058.	633.	2848.	1063.	511.	.0062	-.0034	.0483	.1188	.0321	-.0083	2078.
.3150	324.	-2130.	662.	2889.	990.	440.	.0059	-.0035	.0496	.1217	.0301	-.0085	2080.
.3160	296.	-2202.	674.	2903.	887.	337.	.0061	-.0036	.0501	.1228	.0273	-.0101	2059.
.3170	283.	-2247.	675.	2880.	757.	209.	.0070	-.0036	.0499	.1224	.0238	-.0130	2012.
.3180	291.	-2219.	673.	2812.	603.	67.	.0086	-.0036	.0490	.1203	.0198	-.0172	1939.
.3190	324.	-2106.	667.	2703.	424.	-74.	.0108	-.0035	.0476	.1165	.0151	-.0225	1845.
.3200	380.	-1949.	649.	2571.	222.	-212.	.0136	-.0034	.0455	.1113	.0098	-.0287	1745.
.3210	451.	-1785.	611.	2427.	4.	-351.	.0168	-.0032	.0428	.1048	.0041	-.0357	1653.
.3220	526.	-1630.	551.	2281.	-223.	-493.	.0201	-.0031	.0395	.0972	-.0019	-.0430	1580.
.3230	597.	-1499.	469.	2141.	-454.	-638.	.0234	-.0029	.0357	.0889	-.0080	-.0501	1537.
.3240	652.	-1406.	373.	2013.	-680.	-787.	.0262	-.0027	.0316	.0803	-.0141	-.0567	1527.
.3250	681.	-1348.	275.	1891.	-888.	-939.	.0284	-.0025	.0277	.0719	-.0197	-.0621	1544.
.3260	676.	-1303.	195.	1767.	-1056.	-1092.	.0297	-.0023	.0242	.0644	-.0247	-.0659	1574.
.3270	633.	-1231.	150.	1634.	-1205.	-1237.	.0299	-.0022	.0216	.0582	-.0286	-.0677	1603.
.3280	550.	-1104.	155.	1487.	-1294.	-1365.	.0289	-.0021	.0200	.0538	-.0312	-.0669	1616.
.3290	427.	-934.	210.	1331.	-1327.	-1471.	.0265	-.0020	.0196	.0514	-.0324	-.0635	1609.
.3300	263.	-758.	305.	1181.	-1300.	-1557.	.0228	-.0019	.0204	.0511	-.0320	-.0575	1582.
.3310	65.	-598.	429.	1048.	-1214.	-1623.	.0181	-.0019	.0222	.0527	-.0301	-.0494	1538.
.3320	-156.	-466.	567.	943.	-1073.	-1669.	.0125	-.0019	.0246	.0559	-.0267	-.0397	1481.
.3330	-382.	-384.	699.	880.	-889.	-1693.	.0066	-.0020	.0274	.0602	-.0223	-.0292	1419.
.3340	-595.	-387.	810.	868.	-676.	-1696.	.0009	-.0020	.0303	.0652	-.0169	-.0189	1362.
.3350	-773.	-478.	890.	905.	-443.	-1675.	-.0040	-.0021	.0329	.0705	-.0110	-.0099	1318.
.3360	-890.	-617.	937.	984.	-206.	-1622.	-.0076	-.0022	.0352	.0755	-.0048	-.0031	1286.
.3370	-923.	-751.	953.	1093.	19.	-1522.	-.0093	-.0024	.0370	.0799	.0012	.0009	1263.
.3380	-860.	-861.	940.	1224.	223.	-1374.	-.0090	-.0024	.0382	.0834	.0069	.0016	1249.
.3390	-700.	-964.	892.	1375.	403.	-1182.	-.0064	-.0025	.0387	.0857	.0122	-.0013	1252.
.3400	-449.	-1081.	805.	1551.	554.	-955.	-.0017	-.0026	.0383	.0870	.0168	-.0077	1283.
.3410	-124.	-1218.	677.	1750.	674.	-702.	.0048	-.0026	.0372	.0870	.0208	-.0170	1350.
.3420	252.	-1385.	511.	1970.	771.	-441.	.0126	-.0027	.0353	.0858	.0243	-.0287	1456.
.3430	652.	-1610.	313.	2207.	851.	-192.	.0212	-.0027	.0328	.0839	.0273	-.0419	1600.
.3440	1048.	-1902.	93.	2457.	919.	33.	.0300	-.0027	.0300	.0815	.0301	-.0557	1768.
.3450	1419.	-2231.	-126.	2702.	982.	227.	.0384	-.0028	.0271	.0790	.0326	-.0692	1944.

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2 SAFETY COLD FKW24F--2 PSV

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

.3350	-773.	-478.	890.	905.	-443.	-1675.	-.0040	-.0021	.0329	.0705	-.0110	-.0099	1318.
.3360	-890.	-617.	937.	984.	-206.	-1622.	-.0076	-.0022	.0352	.0755	-.0048	-.0031	1286.
.3370	-923.	-751.	953.	1093.	19.	-1522.	-.0093	-.0024	.0370	.0799	.0012	.0009	1263.
.3380	-860.	-861.	940.	1224.	223.	-1374.	-.0090	-.0024	.0382	.0834	.0069	.0016	1249.
.3390	-700.	-984.	892.	1375.	403.	-1182.	-.0064	-.0025	.0387	.0857	.0122	-.0013	1252.
.3400	-449.	-1081.	805.	1531.	554.	-955.	-.0017	-.0026	.0383	.0870	.0168	-.0077	1283.
.3410	-124.	-1218.	677.	1750.	674.	-702.	.0048	-.0026	.0372	.0870	.0208	-.0170	1350.
.3420	252.	-1385.	511.	1970.	771.	-441.	.0126	-.0027	.0353	.0858	.0243	-.0287	1456.
.3430	652.	-1610.	313.	2207.	851.	-192.	.0212	-.0027	.0328	.0839	.0273	-.0419	1600.
.3440	1048.	-1902.	93.	2457.	919.	33.	.0300	-.0027	.0300	.0815	.0301	-.0557	1768.
.3450	1419.	-2231.	-126.	2702.	982.	227.	.0384	-.0028	.0271	.0790	.0326	-.0692	1944.

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ADLPIPE STRESS ANALYSIS

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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
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CONDITION 24

LOADS

SHOCK

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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	EL	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.3460	1745.	-2547.	-321.	2918.	1050.	386.	.0458	-.0028	.0246	.0769	.0352	-.0814	2106.							
.3470	2010.	-2817.	-470.	3088.	1126.	511.	.0520	-.0029	.0228	.0756	.0379	-.0916	2242.							
.3480	2206.	-3011.	-558.	3199.	1212.	605.	.0566	-.0029	.0219	.0752	.0407	-.0990	2342.							
.3490	2326.	-3103.	-579.	3239.	1308.	669.	.0593	-.0030	.0219	.0757	.0437	-.1034	2397.							
.3500	2366.	-3088.	-535.	3207.	1412.	700.	.0602	-.0030	.0227	.0768	.0467	-.1046	2409.							
.3510	2325.	-2998.	-444.	3111.	1519.	697.	.0591	-.0030	.0241	.0782	.0497	-.1026	2380.							
.3520	2208.	-2869.	-328.	2965.	1620.	657.	.0563	-.0030	.0255	.0792	.0522	-.0979	2320.							
.3530	2024.	-2718.	-205.	2777.	1709.	583.	.0521	-.0030	.0267	.0792	.0543	-.0907	2233.							
.3540	1789.	-2546.	-92.	2553.	1778.	477.	.0466	-.0029	.0272	.0777	.0556	-.0818	2122.							
.3550	1520.	-2354.	-2.	2299.	1820.	350.	.0405	-.0027	.0268	.0741	.0560	-.0717	1991.							
.3560	1239.	-2142.	57.	2022.	1829.	217.	.0341	-.0025	.0253	.0683	.0554	-.0612	1843.							
.3570	968.	-1898.	81.	1726.	1800.	94.	.0277	-.0022	.0226	.0602	.0538	-.0508	1682.							
.3580	725.	-1598.	75.	1413.	1733.	-4.	.0219	-.0018	.0189	.0500	.0511	-.0410	1507.							
.3590	524.	-1236.	42.	1088.	1631.	-70.	.0168	-.0014	.0142	.0378	.0474	-.0321	1323.							
.3600	372.	-838.	-20.	765.	1498.	-97.	.0127	-.0009	.0088	.0242	.0430	-.0245	1135.							
.3610	272.	-436.	-109.	460.	1335.	-82.	.0095	-.0004	.0028	.0098	.0379	-.0183	953.							
.3620	221.	-47.	-220.	181.	1151.	-29.	.0073	.0000	-.0035	-.0049	.0322	-.0134	785.							
.3630	212.	319.	-345.	-67.	952.	52.	.0059	.0005	-.0098	-.0192	.0263	-.0098	644.							
.3640	236.	646.	-473.	-281.	744.	156.	.0052	.0009	-.0158	-.0327	.0202	-.0073	546.							
.3650	283.	922.	-596.	-461.	529.	273.	.0050	.0013	-.0213	-.0447	.0140	-.0055	508.							
.3660	341.	1158.	-698.	-615.	313.	394.	.0051	.0017	-.0259	-.0549	.0078	-.0043	535.							
.3670	398.	1376.	-766.	-756.	100.	504.	.0053	.0019	-.0295	-.0630	.0018	-.0034	616.							
.3680	441.	1577.	-793.	-891.	-109.	593.	.0054	.0021	-.0319	-.0690	-.0040	-.0024	725.							
.3690	457.	1745.	-779.	-1022.	-311.	645.	.0051	.0023	-.0331	-.0727	-.0096	-.0012	841.							
.3700	434.	1863.	-727.	-1152.	-505.	647.	.0042	.0023	-.0333	-.0744	-.0150	.0004	954.							
.3710	363.	1926.	-643.	-1281.	-687.	592.	.0027	.0023	-.0325	-.0743	-.0201	.0027	1058.							
.3720	342.	1932.	-533.	-1407.	-857.	480.	.0004	.0023	-.0310	-.0727	-.0249	.0058	1157.							
.3730	69.	1880.	-406.	-1529.	-1011.	313.	-.0027	.0022	-.0288	-.0699	-.0294	.0098	1254.							
.3740	-150.	1772.	-267.	-1645.	-1147.	99.	-.0066	.0021	-.0263	-.0662	-.0334	.0146	1354.							
.3750	-404.	1623.	-121.	-1754.	-1264.	-145.	-.0111	.0020	-.0234	-.0618	-.0370	.0202	1461.							
.3760	-679.	1460.	27.	-1857.	-1360.	-403.	-.0161	.0018	-.0203	-.0570	-.0401	.0265	1575.							
.3770	-961.	1302.	177.	-1955.	-1435.	-657.	-.0212	.0017	-.0172	-.0520	-.0425	.0332	1693.							
.3780	-1236.	1162.	324.	-2045.	-1487.	-895.	-.0263	.0015	-.0141	-.0471	-.0444	.0399	1808.							
.3790	-1489.	1044.	462.	-2125.	-1517.	-1104.	-.0311	.0014	-.0112	-.0423	-.0456	.0464	1911.							
.3800	-1707.	947.	583.	-2189.	-1527.	-1275.	-.0354	.0013	-.0085	-.0380	-.0462	.0523	1994.							
.3810	-1882.	862.	681.	-2232.	-1517.	-1401.	-.0388	.0012	-.0062	-.0342	-.0463	.0573	2050.							
.3820	-2004.	787.	751.	-2251.	-1490.	-1478.	-.0414	.0011	-.0045	-.0311	-.0457	.0610	2074.							
.3830	-2069.	735.	791.	-2247.	-1446.	-1502.	-.0429	.0010	-.0033	-.0289	-.0446	.0635	2066.							

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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

.3730	89.	1880.	-406.	-1529.	-1011.	313.	-.0027	.0022	-.0288	-.0699	-.0294	.0098	1254.
.3740	-150.	1772.	-267.	-1645.	-1147.	99.	-.0066	.0021	-.0263	-.0662	-.0334	.0146	1354.
.3750	-404.	1623.	-121.	-1754.	-1264.	-145.	-.0111	.0020	-.0234	-.0618	-.0370	.0202	1461.
.3760	-679.	1460.	27.	-1857.	-1360.	-403.	-.0161	.0018	-.0203	-.0570	-.0401	.0265	1575.
.3770	-961.	1302.	177.	-1955.	-1435.	-657.	-.0212	.0017	-.0172	-.0520	-.0425	.0332	1693.
.3780	-1236.	1162.	324.	-2045.	-1487.	-895.	-.0263	.0015	-.0141	-.0471	-.0444	.0399	1808.
.3790	-1489.	1044.	462.	-2125.	-1517.	-1104.	-.0311	.0014	-.0112	-.0423	-.0456	.0464	1911.
.3800	-1707.	947.	583.	-2189.	-1527.	-1275.	-.0354	.0013	-.0085	-.0380	-.0462	.0523	1994.
.3810	-1882.	862.	681.	-2232.	-1517.	-1401.	-.0388	.0012	-.0062	-.0342	-.0463	.0573	2050.
.3820	-2004.	787.	751.	-2251.	-1490.	-1478.	-.0414	.0011	-.0045	-.0311	-.0457	.0610	2074.
.3830	-2069.	735.	791.	-2247.	-1446.	-1502.	-.0429	.0010	-.0033	-.0289	-.0446	.0635	2066.

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

SECTION	MEMBER	SEQUENCE	LOCATION	TYPE	EL	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
26	1	812	BEG			.3840	-2073.	716.	802.	-2222.	-1387.	-1471.	-.0432	.0010	-.0027	-.0276	-.0430	.0644	2025.
						.3850	-2017.	719.	781.	-2174.	-1313.	-1387.	-.0425	.0010	-.0028	-.0272	-.0409	.0640	1951.
						.3860	-1906.	726.	727.	-2099.	-1226.	-1254.	-.0408	.0010	-.0034	-.0277	-.0384	.0621	1844.
						.3870	-1745.	733.	642.	-1999.	-1125.	-1077.	-.0381	.0011	-.0046	-.0290	-.0354	.0590	1708.
						.3880	-1544.	744.	531.	-1877.	-1009.	-863.	-.0347	.0011	-.0063	-.0309	-.0319	.0550	1549.
						.3890	-1311.	751.	398.	-1731.	-877.	-618.	-.0307	.0012	-.0082	-.0331	-.0279	.0502	1373.
						.3900	-1056.	735.	248.	-1560.	-731.	-347.	-.0264	.0012	-.0104	-.0354	-.0235	.0450	1185.
						.3910	-790.	688.	87.	-1366.	-570.	-57.	-.0219	.0013	-.0126	-.0374	-.0187	.0398	998.
						.3920	-521.	618.	-75.	-1154.	-394.	248.	-.0175	.0013	-.0145	-.0389	-.0135	.0347	839.
						.3930	-256.	548.	-229.	-931.	-207.	564.	-.0133	.0013	-.0162	-.0397	-.0080	.0302	747.
						.3940	-3.	487.	-365.	-705.	-13.	887.	-.0095	.0014	-.0173	-.0396	-.0024	.0265	764.
						.3950	230.	425.	-482.	-480.	183.	1208.	-.0063	.0013	-.0180	-.0386	.0033	.0237	885.
						.3960	436.	348.	-577.	-261.	374.	1511.	-.0036	.0013	-.0181	-.0367	.0089	.0217	1064.
						.3970	608.	268.	-648.	-57.	553.	1785.	-.0015	.0012	-.0177	-.0340	.0140	.0206	1260.
						.3980	741.	207.	-690.	117.	712.	2017.	-.0001	.0012	-.0170	-.0308	.0185	.0203	1444.
						.3990	832.	166.	-705.	254.	842.	2194.	.0007	.0011	-.0159	-.0275	.0223	.0206	1593.
						.4000	877.	120.	-697.	352.	939.	2303.	.0009	.0010	-.0146	-.0242	.0250	.0213	1693.

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)
.0430	6527.	3618.	-4173.	1930.	3488.	8484.	-.0934	-.0053	.0936	.1583	-.1015	.0819	6318.

SECTION	MEMBER	SEQUENCE	LOCATION	TYPE	EL	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
26	1	44	END			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.	-1.	0.	1.	.0000	-.0000	.0000	.0000	-.0000	-.0000	1.
						.0020	2.	4.	1.	-4.	1.	4.	.0000	-.0000	.0000	.0000	-.0000	-.0000	4.
						.0030	5.	19.	4.	-11.	0.	14.	-.0000	-.0000	.0000	.0001	-.0000	-.0001	12.
						.0040	13.	68.	11.	-30.	-1.	32.	-.0000	-.0000	.0000	.0002	.0000	-.0001	30.
						.0050	24.	162.	23.	-64.	-4.	62.	-.0000	-.0000	.0001	.0005	.0001	-.0003	60.
						.0060	36.	280.	34.	-111.	-9.	97.	-.0000	-.0000	.0002	.0010	.0002	-.0005	100.
						.0070	48.	401.	41.	-165.	-16.	138.	.0000	-.0001	.0005	.0019	.0004	-.0009	145.

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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSVCONDITION 24
LOADS
SHOCK
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ENGLISH UNITSINTERNAL FORCES IN THE PIPING
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)
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	0.	0.	0.	-1.	0.	1.	.0000	-.0000	.0000	.0000	-.0000	-.0000	1.
.0020	2.	4.	1.	-4.	1.	4.	.0000	-.0000	.0000	.0000	-.0000	-.0000	4.
.0030	5.	19.	4.	-11.	0.	14.	-.0000	-.0000	.0000	.0001	-.0000	-.0001	12.
.0040	13.	68.	11.	-30.	-1.	32.	-.0000	-.0000	.0000	.0002	.0000	-.0001	30.
.0050	24.	162.	23.	-64.	-4.	62.	-.0000	-.0000	.0001	.0005	.0001	-.0003	60.
.0060	36.	280.	34.	-111.	-9.	97.	-.0000	-.0000	.0002	.0010	.0002	-.0005	100.
.0070	48.	401.	41.	-165.	-16.	138.	.0000	-.0001	.0005	.0019	.0004	-.0009	145.

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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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	EL	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
26	1	44					.0080	64.	546.	44.	-232.	-23.	199.	.0002	-.0001	.0010	.0033	.0006	-.0015	207.
							.0090	95.	775.	45.	-319.	-41.	299.	.0003	-.0001	.0018	.0051	.0011	-.0023	296.
							.0100	141.	1125.	45.	-436.	-76.	444.	.0004	-.0002	.0027	.0077	.0021	-.0034	422.
							.0110	193.	1550.	35.	-574.	-130.	611.	.0006	-.0002	.0041	.0111	.0036	-.0047	572.
							.0120	238.	1922.	-4.	-700.	-213.	764.	.0008	-.0003	.0060	.0154	.0058	-.0061	713.
							.0130	263.	2159.	-83.	-788.	-336.	871.	.0011	-.0003	.0084	.0205	.0091	-.0073	824.
							.0140	257.	2276.	-189.	-844.	-506.	936.	.0015	-.0003	.0110	.0260	.0135	-.0082	902.
							.0150	205.	2279.	-298.	-878.	-713.	837.	.0020	-.0003	.0136	.0312	.0189	-.0088	949.
							.0160	92.	2089.	-400.	-864.	-948.	636.	.0027	-.0003	.0157	.0351	.0248	-.0091	965.
							.0170	-79.	1642.	-481.	-766.	-1190.	320.	.0038	-.0002	.0167	.0364	.0308	-.0094	978.
							.0180	-285.	988.	-517.	-573.	-1422.	-41.	.0052	-.0000	.0160	.0339	.0363	-.0102	1034.
							.0190	-495.	242.	-474.	-304.	-1635.	-375.	.0070	.0001	.0131	.0267	.0410	-.0118	1149.
							.0200	-679.	-441.	-316.	-12.	-1798.	-612.	.0091	.0003	.0076	.0143	.0441	-.0145	1280.
							.0210	-811.	-870.	-33.	282.	-1943.	-712.	.0112	.0004	-.0003	-.0029	.0463	-.0179	1408.
							.0220	-881.	-810.	359.	534.	-2213.	-700.	.0127	.0004	-.0100	-.0234	.0512	-.0209	1605.
							.0230	-978.	-459.	831.	663.	-2543.	-767.	.0140	.0004	-.0202	-.0443	.0575	-.0232	1845.
							.0240	-1265.	-855.	1246.	856.	-2802.	-1287.	.0157	.0005	-.0299	-.0645	.0621	-.0237	2157.
							.0250	-1707.	-2438.	1498.	1305.	-2955.	-2189.	.0178	.0008	-.0385	-.0838	.0645	-.0227	2630.
							.0260	-2069.	-4172.	1672.	1840.	-3120.	-2938.	.0196	.0011	-.0462	-.1020	.0676	-.0220	3148.
							.0270	-2335.	-5004.	1953.	2108.	-3408.	-3510.	.0206	.0012	-.0539	-.1185	.0731	-.0207	3591.
							.0280	-2737.	-4947.	2447.	1891.	-3349.	-4344.	.0218	.0013	-.0620	-.1332	.0703	-.0187	3911.
							.0290	-3140.	-4706.	2945.	1577.	-2803.	-5068.	.0239	.0013	-.0697	-.1465	.0559	-.0190	4046.
							.0300	-3051.	-4899.	3060.	1878.	-2581.	-4731.	.0250	.0013	-.0746	-.1577	.0499	-.0229	3847.
							.0310	-2802.	-5551.	2917.	2476.	-2323.	-4087.	.0256	.0014	-.0768	-.1652	.0436	-.0273	3581.
							.0320	-2752.	-5698.	2862.	2584.	-1277.	-3853.	.0266	.0014	-.0773	-.1663	.0187	-.0305	3243.
							.0330	-2479.	-4975.	2739.	2499.	-59.	-3257.	.0257	.0013	-.0750	-.1608	-.0100	-.0321	2768.
							.0340	-1645.	-4289.	2208.	2912.	593.	-1774.	.0208	.0011	-.0683	-.1495	-.0242	-.0304	2333.
							.0350	-713.	-4299.	1426.	3464.	1282.	-392.	.0131	.0009	-.0577	-.1314	-.0387	-.0228	2503.
							.0360	-9.	-4603.	686.	3572.	2497.	242.	.0040	.0007	-.0447	-.1059	-.0654	-.0082	2942.
							.0370	924.	-4429.	-82.	3505.	3456.	1054.	-.0086	.0004	-.0295	-.0753	-.0858	.0120	3393.
							.0380	2325.	-3219.	-900.	3424.	3709.	2596.	-.0250	-.0001	-.0127	-.0418	-.0891	.0358	3826.
							.0390	3640.	-947.	-1501.	2779.	4051.	3927.	-.0419	-.0008	.0043	-.0047	-.0947	.0614	4239.
							.0400	4572.	1444.	-1932.	1631.	4775.	4613.	-.0564	-.0014	.0218	.0361	-.1095	.0856	4608.
							.0410	5439.	2619.	-2633.	948.	4948.	5314.	-.0689	-.0018	.0413	.0780	-.1107	.1061	4936.
							.0420	6201.	2830.	-3540.	700.	4652.	6084.	-.0783	-.0021	.0616	.1192	-.1004	.1203	5184.
							.0430	6527.	3618.	-4173.	-11.	4620.	6429.	-.0824	-.0023	.0800	.1593	-.0968	.1265	5336.
							.0440	6470.	5210.	-4489.	-1137.	4589.	6417.	-.0820	-.0025	.0956	.1958	-.0940	.1253	5372.
							.0450	6203.	6415.	-4746.	-2033.	4076.	6292.	-.0779	-.0026	.1084	.2256	-.0800	.1178	5236.

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2 SAFETY COLD FKW24F--2 PSV

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

.0350	-713.	-4299.	1426.	3464.	1282.	-392.	.0131	.0009	-.0577	-.1314	-.0387	-.0228	2503.
.0360	-9.	-4603.	686.	3572.	2497.	242.	.0040	.0007	-.0447	-.1059	-.0654	-.0082	2942.
.0370	924.	-4429.	-82.	3505.	3456.	1054.	-.0086	.0004	-.0295	-.0753	-.0858	.0120	3393.
.0380	2725.	-3219.	-900.	3424.	3709.	2596.	-.0250	-.0001	-.0127	-.0418	-.0301	.0358	3826.
.0390	3640.	-247.	-1501.	2779.	4051.	3927.	-.0419	-.0008	.0043	-.0047	-.0947	.0614	4239.
.0400	4572.	1444.	-1932.	1631.	4775.	4613.	-.0564	-.0014	.0218	.0361	-.1095	.0856	4608.
.0410	5439.	2619.	-2633.	948.	4948.	5314.	-.0689	-.0018	.0413	.0780	-.1107	.1061	4936.
.0420	6201.	2830.	-3540.	700.	4652.	6084.	-.0783	-.0021	.0616	.1192	-.1004	.1203	5184.
.0430	6527.	3618.	-4173.	-11.	4620.	6429.	-.0824	-.0023	.0300	.1593	-.0968	.1265	5336.
.0440	6470.	5210.	-4489.	-1137.	4589.	6417.	-.0820	-.0025	.0956	.1958	-.0940	.1253	5372.
.0450	6203.	6415.	-4746.	-2033.	4076.	6292.	-.0779	-.0026	.1084	.2256	-.0800	.1178	5236.

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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	END	TYPE	EL	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)
.0460	5584.	6555.	-4915.	-2709.	3423.	5767.	-.0696	-.0024	.1178	.2474	-.0532	.1042	4875.
.0470	4495.	5830.	-4839.	-3393.	3037.	4604.	-.0565	-.0020	.1221	.2595	-.0535	.0850	4365.
.0480	3252.	4916.	-4528.	-3918.	2569.	3363.	-.0409	-.0016	.1206	.2590	-.0428	.0612	3888.
.0490	2145.	4758.	-3935.	-4332.	1779.	2587.	-.0244	-.0012	.1127	.2454	-.0255	.0331	3606.
.0500	1011.	5495.	-2960.	-4938.	1121.	1940.	-.0066	-.0010	.0987	.2208	-.0124	.0015	3655.
.0510	-273.	5957.	-1810.	-5449.	770.	1078.	.0126	-.0007	.0802	.1871	-.0073	-.0315	3780.
.0520	-1462.	5230.	-846.	-5281.	347.	376.	.0317	-.0002	.0599	.1461	-.0004	-.0649	3576.
.0530	-2408.	3727.	-106.	-4525.	-251.	60.	.0492	.0004	.0394	.1015	.0107	-.0974	3055.
.0540	-3302.	2164.	621.	-3739.	-734.	-375.	.0647	.0009	.0188	.0566	.0191	-.1251	2581.
.0550	-4219.	754.	1408.	-3147.	-1041.	-1229.	.0771	.0014	-.0015	.0134	.0233	-.1444	2383.
.0560	-4904.	-427.	2146.	-2604.	-1421.	-2031.	.0849	.0017	-.0204	-.0268	.0295	-.1553	2423.
.0570	-5201.	-1417.	2746.	-2029.	-2000.	-3467.	.0878	.0019	-.0367	-.0621	.0408	-.1584	2540.
.0580	-5308.	-2390.	3245.	-1579.	-2584.	-2942.	.0863	.0020	-.0499	-.0907	.0527	-.1529	2846.
.0590	-5368.	-3070.	3709.	-1464.	-2961.	-3679.	.0815	.0021	-.0598	-.1110	.0601	-.1394	3333.
.0600	-5190.	-2913.	4074.	-1623.	-3264.	-4152.	.0738	.0019	-.0656	-.1216	.0563	-.1217	3724.
.0610	-4655.	-2127.	4168.	-1767.	-3677.	-4009.	.0635	.0016	-.0660	-.1218	.0760	-.1026	3855.
.0620	-4014.	-1621.	3905.	-1764.	-4038.	-3726.	.0524	.0013	-.0605	-.1113	.0855	-.0824	3890.
.0630	-3505.	-1899.	3323.	-1682.	-4079.	-3728.	.0419	.0012	-.0496	-.0902	.0383	-.0618	3894.
.0640	-2985.	-2700.	2459.	-1465.	-3959.	-3677.	.0318	.0011	-.0342	-.0611	.0881	-.0422	3774.
.0650	-2269.	-3379.	1424.	-1118.	-3963.	-3201.	.0212	.0010	-.0165	-.0280	.0912	-.0239	3516.
.0660	-1493.	-3245.	513.	-1045.	-3920.	-2552.	.0105	.0008	.0010	.0061	.0931	-.0064	3231.
.0670	-812.	-2066.	-72.	-1530.	-3562.	-1975.	.0008	.0004	.0164	.0391	.0869	.0092	2933.
.0680	-101.	-325.	-464.	-2218.	-3137.	-1158.	-.0077	-.0000	.0296	.0688	.0787	.0212	2705.
.0690	704.	1503.	-831.	-2756.	-2914.	74.	-.0146	-.0005	.0412	.0945	.0751	.0279	2704.
.0700	1344.	3449.	-1107.	-3352.	-2611.	1283.	-.0184	-.0009	.0513	.1178	.0693	.0285	2992.
.0710	1628.	5399.	-1281.	-4108.	-2034.	2128.	-.0178	-.0012	.0606	.1403	.0568	.0225	3406.
.0720	1674.	6736.	-1562.	-4608.	-1521.	2798.	-.0135	-.0013	.0700	.1615	.0459	.0103	3776.
.0730	1543.	7067.	-2036.	-4649.	-1221.	3344.	-.0063	-.0012	.0795	.1807	.0404	-.0068	3947.
.0740	1107.	6539.	-2521.	-4510.	-819.	3430.	.0037	-.0010	.0878	.1963	.0322	-.0268	3859.
.0750	420.	5493.	-2861.	-4342.	-275.	3031.	.0150	-.0006	.0928	.2055	.0201	-.0465	3574.
.0760	-221.	4496.	-2982.	-4113.	104.	2598.	.0251	-.0003	.0931	.2050	.0112	-.0637	3280.
.0770	-674.	4257.	-2749.	-4016.	344.	2351.	.0325	-.0001	.0875	.1935	.0046	-.0768	3145.
.0780	-995.	4905.	-2106.	-4210.	700.	2139.	.0371	-.0001	.0760	.1722	-.0058	-.0849	3218.
.0790	-1168.	5833.	-1255.	-4425.	1092.	1946.	.0387	-.0002	.0606	.1431	-.0177	-.0872	3340.
.0800	-1132.	6428.	-473.	-4326.	1330.	1878.	.0371	-.0003	.0440	.1100	-.0261	-.0839	3303.
.0810	-980.	6350.	100.	-3863.	1560.	1800.	.0333	-.0004	.0286	.0775	-.0339	-.0760	3059.
.0820	-814.	5280.	370.	-3009.	1898.	1516.	.0279	-.0003	.0160	.0482	-.0437	-.0636	2607.
.0830	-582.	3224.	290.	-1706.	2167.	1116.	.0204	-.0001	.0067	.0232	-.0511	-.0465	2005.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.27.22.

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

.0720	1074.	8756.	-1862.	-4608.	-1521.	2798.	-.0155	-.0013	.0700	.1615	.0459	.0103	3776.
.0730	1543.	7067.	-2036.	-4649.	-1221.	3344.	-.0063	-.0012	.0795	.1807	.0404	-.0068	3947.
.0740	1107.	6539.	-2521.	-4510.	-819.	3430.	.0037	-.0010	.0878	.1963	.0322	-.0268	3859.
.0750	420.	5493.	-2861.	-4342.	-275.	3031.	.0150	-.0006	.0928	.2055	.0201	-.0465	3574.
.0760	-221.	4496.	-2982.	-4113.	104.	2598.	.0251	-.0003	.0931	.2050	.0112	-.0637	3280.
.0770	-674.	4257.	-2749.	-4016.	344.	2351.	.0325	-.0001	.0875	.1935	.0046	-.0768	3145.
.0780	-995.	4905.	-2106.	-4210.	700.	2139.	.0371	-.0001	.0760	.1722	-.0058	-.0849	3218.
.0790	-1168.	5833.	-1255.	-4425.	1092.	1946.	.0387	-.0002	.0606	.1431	-.0177	-.0872	3340.
.0800	-1132.	6428.	-473.	-4326.	1330.	1878.	.0371	-.0003	.0440	.1100	-.0261	-.0839	3303.
.0810	-980.	6350.	100.	-3863.	1560.	1800.	.0333	-.0004	.0286	.0775	-.0339	-.0760	3059.
.0820	-814.	5280.	370.	-3009.	1898.	1516.	.0279	-.0003	.0160	.0482	-.0437	-.0636	2607.
.0830	-522.	3224.	290.	-1706.	2167.	1116.	.0204	-.0001	.0067	.0232	-.0511	-.0465	2005.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

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PRESSURE

ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	EL								STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.0840	-223.	729.	-27.	-151.	2298.	738.	.0107	.0001	.0002	.0021	-.0547	-.0249	1630.	
.0850	225.	-1727.	-385.	1359.	2445.	349.	-.0011	.0002	-.0052	-.0164	-.0585	.0006	1900.	
.0860	772.	-3946.	-668.	2730.	2582.	-13.	-.0147	.0003	-.0109	-.0349	-.0622	.0296	2533.	
.0870	1479.	-5452.	-778.	3846.	2563.	-157.	-.0300	.0002	-.0178	-.0545	-.0525	.0607	3117.	
.0880	2288.	-5721.	-612.	4479.	2465.	-52.	-.0459	-.0000	-.0263	-.0745	-.0613	.0912	3447.	
.0890	3058.	-5068.	-241.	4691.	2410.	155.	-.0604	-.0004	-.0353	-.0935	-.0614	.1184	3556.	
.0900	3697.	-4385.	93.	4847.	2306.	384.	-.0720	-.0007	-.0432	-.1098	-.0501	.1397	3627.	
.0910	4121.	-4232.	223.	5140.	2099.	561.	-.0794	-.0009	-.0481	-.1211	-.0559	.1532	3761.	
.0920	4202.	-4809.	135.	5534.	1917.	495.	-.0814	-.0008	-.0494	-.1259	-.0516	.1576	3962.	
.0930	3919.	-6163.	-138.	6029.	1799.	124.	-.0782	-.0006	-.0480	-.1257	-.0484	.1535	4242.	
.0940	3417.	-7786.	-482.	6550.	1630.	-310.	-.0708	-.0002	-.0453	-.1232	-.0437	.1417	4555.	
.0950	2840.	-8768.	-675.	6806.	1385.	-578.	-.0607	.0001	-.0434	-.1209	-.0375	.1236	4698.	
.0960	2209.	-8703.	-547.	6579.	1141.	-717.	-.0488	.0004	-.0439	-.1208	-.0318	.1010	4526.	
.0970	1544.	-7738.	-91.	5897.	902.	-781.	-.0359	.0005	-.0472	-.1238	-.0270	.0758	4055.	
.0980	917.	-5920.	614.	4842.	604.	-652.	-.0224	.0004	-.0524	-.1285	-.0211	.0484	3318.	
.0990	336.	-3359.	1444.	3484.	233.	-312.	-.0084	.0003	-.0575	-.1316	-.0137	.0187	2363.	
.1000	-318.	-663.	2218.	1989.	-162.	-28.	.0066	.0002	-.0604	-.1294	-.0053	-.0127	1346.	
.1010	-1150.	1477.	2749.	561.	-535.	-42.	.0230	.0002	-.0590	-.1192	.0032	-.0451	523.	
.1020	-2127.	2778.	2920.	-652.	-883.	-303.	.0407	.0004	-.0522	-.0995	.0122	-.0785	767.	
.1030	-3146.	3188.	2701.	-1539.	-1233.	-659.	.0587	.0007	-.0403	-.0716	.0221	-.1119	1402.	
.1040	-4130.	2887.	2191.	-2124.	-1565.	-1077.	.0757	.0010	-.0251	-.0388	.0323	-.1430	1921.	
.1050	-4995.	2499.	1614.	-2629.	-1796.	-1502.	.0902	.0014	-.0093	-.0051	.0402	-.1690	2373.	
.1060	-5592.	2632.	1153.	-3202.	-1908.	-1746.	.1005	.0015	.0046	.0254	.0449	-.1880	2775.	
.1070	-5786.	3324.	845.	-3749.	-2002.	-1648.	.1051	.0015	.0153	.0493	.0487	-.1976	3073.	
.1080	-5561.	4320.	680.	-4193.	-2049.	-1246.	.1035	.0013	.0223	.0653	.0508	-.1967	3256.	
.1090	-4934.	5425.	622.	-4506.	-1984.	-580.	.0957	.0010	.0259	.0742	.0498	-.1852	3342.	
.1100	-4014.	6465.	564.	-4553.	-2031.	72.	.0817	.0006	.0275	.0775	.0511	-.1615	3361.	
.1110	-2948.	7557.	510.	-4519.	-1963.	559.	.0633	.0001	.0283	.0789	.0496	-.1282	3343.	
.1120	-1812.	7660.	258.	-4104.	-1807.	831.	.0419	-.0003	.0298	.0797	.0463	-.0879	3074.	
.1130	-666.	5568.	-405.	-2823.	-1807.	790.	.0185	-.0005	.0325	.0782	.0473	-.0415	2321.	
.1140	413.	2543.	-1184.	-1195.	-1861.	447.	-.0058	-.0005	.0347	.0738	.0495	.0084	1520.	
.1150	1432.	662.	-1640.	-19.	-1797.	55.	-.0296	-.0006	.0340	.0664	.0484	.0575	1212.	
.1160	2457.	-300.	-1792.	893.	-1013.	-154.	-.0523	-.0009	.0296	.0528	.0484	.1033	1366.	
.1170	3376.	-1361.	-1770.	1875.	-1927.	-328.	-.0726	-.0011	.0212	.0310	.0501	.1440	1826.	
.1180	4041.	-1927.	-1455.	2564.	-2098.	-603.	-.0885	-.0013	.0094	.0040	.0525	.1768	2270.	
.1190	4233.	-1825.	-794.	2698.	-1876.	-1198.	-.0977	-.0015	-.0050	-.0250	.0449	.1978	2357.	
.1200	4083.	-2501.	-197.	3059.	-1577.	-1835.	-.0997	-.0014	-.0201	-.0564	.0354	.2053	2629.	
.1210	3810.	-4262.	127.	3993.	-1655.	-2103.	-.0957	-.0011	-.0341	-.0890	.0353	.1992	3240.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

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ENGLISH UNITS

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

.1110	-2948.	7557.	510.	-4519.	-1983.	559.	.633	.0001	.0283	.0789	.0496	-.1282	3343.
.1120	-1812.	7660.	258.	-4104.	-1807.	831.	.419	-.0003	.0298	.0797	.0463	-.0879	3074.
.1130	-866.	5568.	-405.	-2823.	-1307.	790.	.0185	-.0005	.0325	.0782	.0473	-.0415	2321.
.1140	413.	2543.	-1184.	-1195.	-1861.	447.	-.0058	-.0005	.0347	.0738	.0495	.0084	1520.
.1150	1432.	662.	-1640.	-19.	-1797.	55.	-.0296	-.0006	.0340	.0664	.0484	.0575	1212.
.1160	2457.	-300.	-1792.	893.	-1813.	-154.	-.0523	-.0009	.0296	.0528	.0484	.1033	1366.
.1170	3376.	-1361.	-1770.	1875.	-1927.	-328.	-.0726	-.0011	.0212	.0310	.0501	.1440	1826.
.1180	4041.	-1927.	-1455.	2564.	-2098.	-603.	-.0885	-.0013	.0094	.0040	.0525	.1768	2270.
.1190	4233.	-1825.	-794.	2698.	-1876.	-1198.	-.0977	-.0015	-.0050	-.0250	.0449	.1978	2357.
.1200	4083.	-2501.	-197.	3059.	-1577.	-1835.	-.0997	-.0014	-.0201	-.0564	.0354	.2053	2629.
.1210	3810.	-4262.	127.	3993.	-1655.	-2103.	-.0957	-.0011	-.0341	-.0890	.0353	.1992	3240.

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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

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ENGLISH UNITS

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

SECTION	26	MEMBER	1	SEQUENCE	44	LOCATION	END	TYPE	EL						
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)		
.1220	3138.	-5555.	559.	4609.	-1377.	-2500.	-.0846	-.0007	-.0480	-.1195	.0267	.1798	3654.		
.1230	2155.	-5514.	1193.	4633.	-744.	-2916.	-.0677	-.0003	-.0613	-.1454	.0094	.1489	3724.		
.1240	1165.	-5511.	1652.	4826.	-114.	-2951.	-.0473	.0000	-.0724	-.1682	-.0073	.1094	3814.		
.1250	320.	-6578.	1739.	5563.	339.	-2539.	-.0258	.0006	-.0805	-.1878	-.0192	.0653	4128.		
.1260	-457.	-7726.	1741.	6211.	793.	-2040.	-.0049	.0011	-.0862	-.2022	-.0307	.0220	4439.		
.1270	-1244.	-7725.	1951.	6189.	1696.	-1748.	.0139	.0014	-.0908	-.2108	-.0529	-.0165	4483.		
.1280	-1549.	-6396.	2170.	5912.	2311.	-873.	.0272	.0014	-.0933	-.2141	-.0681	-.0474	4319.		
.1290	-1319.	-4426.	2240.	5619.	2480.	561.	.0339	.0012	-.0924	-.2107	-.0721	-.0685	4157.		
.1300	-1001.	-2514.	2211.	5044.	2688.	1596.	.0354	.0009	-.0873	-.1975	-.0764	-.0773	4000.		
.1310	-743.	-1146.	2000.	4283.	2866.	1916.	.0323	.0007	-.0769	-.1730	-.0792	-.0731	3706.		
.1320	-409.	-584.	1460.	3695.	2888.	1893.	.0249	.0005	-.0614	-.1393	-.0774	-.0587	3409.		
.1330	174.	-578.	597.	3402.	2435.	1985.	.0135	.0002	-.0415	-.0987	-.0635	-.0369	3121.		
.1340	671.	-798.	-282.	2991.	1968.	1639.	.0003	.0001	-.0203	-.0550	-.0490	-.0092	2654.		
.1350	937.	-759.	-948.	2240.	1732.	717.	-.0131	-.0002	-.0007	-.0126	-.0405	.0220	1969.		
.1360	1312.	-172.	-1457.	1480.	1260.	74.	-.0266	-.0005	.0160	.0241	-.0268	.0517	1311.		
.1370	1745.	333.	-1847.	967.	724.	-235.	-.0385	-.0007	.0284	.0509	-.0122	.0764	830.		
.1380	1977.	225.	-2054.	663.	316.	-682.	-.0471	-.0009	.0352	.0659	-.0015	.0957	675.		
.1390	1852.	-82.	-1935.	327.	309.	-1477.	-.0511	-.0009	.0356	.0685	-.0014	.1079	1041.		
.1400	1648.	96.	-1546.	59.	446.	-1964.	-.0511	-.0009	.0300	.0589	-.0057	.1104	1358.		
.1410	1569.	427.	-1085.	185.	370.	-1754.	-.0478	-.0009	.0198	.0382	-.0055	.1027	1215.		
.1420	1244.	-18.	-569.	608.	649.	-1658.	-.0400	-.0007	.0059	.0086	-.0143	.0871	1268.		
.1430	673.	-1045.	2.	1145.	1267.	-1766.	-.0287	-.0003	-.0103	-.0259	-.0314	.0657	1656.		
.1440	178.	-1864.	566.	1773.	1901.	-1523.	-.0160	.0000	-.0271	-.0620	-.0490	.0397	2030.		
.1450	-72.	-2212.	1044.	2502.	2341.	-749.	-.0041	.0003	-.0429	-.0968	-.0618	.0123	2364.		
.1460	-221.	-2271.	1449.	3116.	2681.	69.	.0061	.0004	-.0563	-.1262	-.0719	-.0118	2771.		
.1470	-461.	-2326.	1794.	3405.	3273.	425.	.0141	.0006	-.0659	-.1465	-.0874	-.0294	3196.		
.1480	-498.	-2549.	1866.	3693.	3577.	779.	.0180	.0007	-.0699	-.1558	-.0952	-.0388	3505.		
.1490	-255.	-3095.	1590.	4101.	3484.	1203.	.0168	.0007	-.0677	-.1536	-.0925	-.0386	3717.		
.1500	56.	-3785.	1135.	4306.	3320.	1264.	.0111	.0007	-.0602	-.1400	-.0873	-.0276	3762.		
.1510	428.	-4215.	628.	4136.	3023.	967.	.0010	.0006	-.0485	-.1163	-.0784	-.0062	3514.		
.1520	936.	-4215.	97.	3697.	2587.	581.	-.0129	.0003	-.0340	-.0856	-.0658	.0230	3067.		
.1530	1674.	-3696.	-463.	3139.	1829.	441.	-.0297	-.0000	-.0178	-.0510	-.0453	.0565	2467.		
.1540	2405.	-2817.	-940.	2347.	1106.	266.	-.0467	-.0005	-.0013	-.0146	-.0256	.0906	1758.		
.1550	2988.	-1855.	-1313.	1383.	519.	-52.	-.0619	-.0009	.0145	.0213	-.0094	.1218	996.		
.1560	3522.	-831.	-1657.	487.	-246.	-167.	-.0744	-.0012	.0292	.0547	.0108	.1467	384.		
.1570	3858.	353.	-1904.	-408.	-866.	-185.	-.0821	-.0015	.0419	.0842	.0273	.1615	657.		
.1580	3926.	1609.	-2046.	-1292.	-1369.	-171.	-.0838	-.0018	.0523	.1092	.0407	.1646	1274.		
.1590	3672.	2438.	-2135.	-2027.	-1819.	-227.	-.0793	-.0018	.0604	.1289	.0525	.1559	1842.		

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ADLPIPE STRESS ANALYSIS

83/12/02.

18.27.23.

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

.1470	-215.	-3095.	1135.	4306.	3320.	1264.	.0111	.0007	-.0602	-.1400	-.0873	-.0276	3717.
.1500	56.	-3785.	628.	4176.	3023.	967.	.0010	.0006	-.0485	-.1163	-.0784	-.0062	3514.
.1520	936.	-4215.	97.	3697.	2587.	581.	-.0129	.0003	-.0340	-.0856	-.0658	.0230	3067.
.1530	1674.	-3696.	-462.	3139.	1829.	441.	-.0297	-.0000	-.0178	-.0510	-.0453	.0565	2467.
.1540	2405.	-2817.	-940.	2347.	1106.	266.	-.0467	-.0005	-.0013	-.0146	-.0256	.0906	1758.
.1550	2988.	-1855.	-1313.	1383.	519.	-52.	-.0619	-.0009	.0145	.0213	-.0094	.1218	996.
.1560	3522.	-831.	-1657.	487.	-246.	-167.	-.0744	-.0012	.0292	.0547	.0108	.1467	384.
.1570	3858.	353.	-1904.	-408.	-866.	-185.	-.0821	-.0015	.0419	.0842	.0273	.1615	657.
.1580	3926.	1609.	-2046.	-1292.	-1369.	-171.	-.0833	-.0018	.0523	.1092	.0407	.1646	1274.
.1590	3672.	2438.	-2135.	-2027.	-1819.	-227.	-.0793	-.0018	.0604	.1289	.0525	.1559	1842.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.27.23.

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	EL	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
26	1	44					.1600	3041.	2596.	-2155.	-2586.	-2022.	-465.	-.0683	-.0016	.0655	.1419	.0579	.1356	2235.
							.1610	2185.	2613.	-2057.	-3022.	-2083.	-624.	-.0518	-.0013	.0672	.1474	.0595	.1042	2509.
							.1620	1301.	3074.	-1796.	-3410.	-2273.	-424.	-.0319	-.0010	.0653	.1457	.0635	.0640	2777.
							.1630	256.	3801.	-1316.	-3880.	-2221.	-262.	-.0090	-.0007	.0596	.1369	.0512	.0183	3018.
							.1640	-872.	4545.	-706.	-4337.	-2033.	-158.	.0151	-.0004	.0510	.1227	.0551	-.0295	3231.
							.1650	-1911.	5175.	-101.	-4631.	-1965.	71.	.0384	-.0000	.0413	.1052	.0518	-.0765	3391.
							.1660	-2907.	5378.	440.	-4741.	-1812.	189.	.0601	.0003	.0314	.0862	.0465	-.1196	3423.
							.1670	-3815.	5046.	862.	-4641.	-1683.	116.	.0785	.0007	.0221	.0674	.0419	-.1552	3328.
							.1680	-4615.	4382.	1192.	-4431.	-1507.	-211.	.0926	.0011	.0136	.0498	.0364	-.1810	3158.
							.1690	-5145.	3627.	1421.	-4104.	-1448.	-541.	.1011	.0014	.0064	.0338	.0339	-.1957	2956.
							.1700	-5379.	2652.	1547.	-3629.	-1418.	-861.	.1036	.0016	-.0001	.0186	.0323	-.1987	2689.
							.1710	-5387.	1528.	1631.	-3103.	-1208.	-1312.	.1004	.0017	-.0062	.0038	.0265	-.1898	2412.
							.1720	-5011.	849.	1706.	-2613.	-1183.	-1554.	.0908	.0016	-.0117	-.0096	.0252	-.1695	2199.
							.1730	-4354.	584.	1799.	-2242.	-1094.	-1692.	.0760	.0014	-.0167	-.0213	.0224	-.1398	2032.
							.1740	-3469.	293.	1812.	-1824.	-944.	-1748.	.0572	.0011	-.0205	-.0309	.0184	-.1027	1818.
							.1750	-2389.	14.	1696.	-1333.	-857.	-1678.	.0354	.0007	-.0223	-.0370	.0162	-.0604	1556.
							.1760	-1274.	-65.	1499.	-944.	-632.	-1624.	.0127	.0003	-.0217	-.0379	.0111	-.0162	1336.
							.1770	-137.	-345.	1123.	-478.	-426.	-1499.	-.0098	-.0001	-.0181	-.0333	.0070	.0272	1099.
							.1780	913.	-1394.	507.	249.	-129.	-1411.	-.0305	-.0003	-.0121	-.0251	.0012	.0675	970.
							.1790	1897.	-2668.	-240.	1099.	134.	-1210.	-.0488	-.0005	-.0043	-.0143	-.0035	.1025	1105.
							.1800	2773.	-3420.	-917.	1757.	436.	-864.	-.0638	-.0007	.0036	-.0022	-.0091	.1301	1352.
							.1810	3438.	-3875.	-1459.	2238.	983.	-515.	-.0745	-.0008	.0100	.0082	-.0209	.1493	1684.
							.1820	4028.	-4283.	-1933.	2788.	1390.	97.	-.0814	-.0009	.0147	.0146	-.0296	.1596	2101.
							.1830	4469.	-4356.	-2231.	3218.	1781.	865.	-.0840	-.0010	.0168	.0166	-.0384	.1606	2547.
							.1840	4671.	-3909.	-2274.	3356.	2255.	1610.	-.0820	-.0010	.0162	.0149	-.0497	.1527	2934.
							.1850	4627.	-3348.	-2156.	3366.	2722.	2253.	-.0758	-.0010	.0134	.0096	-.0513	.1371	3289.
							.1860	4354.	-2918.	-1957.	3348.	3141.	2770.	-.0659	-.0009	.0094	.0018	-.0720	.1148	3614.
							.1870	3923.	-2423.	-1698.	3230.	3344.	3226.	-.0532	-.0008	.0050	-.0060	-.0776	.0875	3814.
							.1880	3229.	-2018.	-1367.	2922.	3563.	3315.	-.0382	-.0006	.0008	-.0125	-.0836	.0575	3826.
							.1890	2361.	-1838.	-1040.	2532.	3686.	3086.	-.0221	-.0003	-.0026	-.0171	-.0872	.0272	3663.
							.1900	1494.	-1589.	-735.	2060.	3570.	2802.	-.0066	-.0000	-.0047	-.0189	-.0850	-.0017	3360.
							.1910	652.	-1091.	-408.	1393.	3395.	2437.	.0076	.0002	-.0056	-.0172	-.0812	-.0276	2969.
							.1920	-103.	-442.	-99.	602.	3095.	2002.	.0194	.0003	-.0051	-.0120	-.0743	-.0485	2518.
							.1930	-726.	379.	169.	-276.	2696.	1531.	.0280	.0004	-.0029	-.0033	-.0548	-.0631	2098.
							.1940	-1155.	1459.	373.	-1228.	2220.	1149.	.0333	.0004	.0011	.0096	-.0531	-.0715	1877.
							.1950	-1377.	2418.	428.	-2084.	1657.	873.	.0352	.0003	.0074	.0264	-.0390	-.0740	1889.
							.1960	-1451.	2873.	291.	-2718.	1055.	585.	.0341	.0002	.0158	.0459	-.0236	-.0704	2005.
							.1970	-1409.	3111.	36.	-3234.	493.	295.	.0307	.0001	.0255	.0675	-.0088	-.0622	2214.

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ADLPIPE STRESS ANALYSIS

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18.27.23.

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

.1870	3923.	-2423.	-1698.	3230.	3344.	3226.	-.0532	-.0008	.0050	-.0060	-.0776	.0875	3814.
.1880	3229.	-2018.	-1367.	2922.	3563.	3315.	-.0382	-.0006	.0008	-.0125	-.0836	.0575	3826.
.1890	2361.	-1838.	-1040.	2532.	3686.	3086.	-.0221	-.0003	-.0026	-.0171	-.0872	.0272	3663.
.1900	1494.	-1589.	-735.	2060.	3570.	2802.	-.0066	-.0000	-.0047	-.0189	-.0850	-.0017	3360.
.1910	652.	-1091.	-408.	1393.	3395.	2437.	.0076	.0002	-.0056	-.0172	-.0812	-.0276	2969.
.1920	-103.	-442.	-99.	602.	3095.	2002.	.0194	.0003	-.0051	-.0120	-.0743	-.0485	2518.
.1930	-726.	379.	169.	-276.	2696.	1531.	.0280	.0004	-.0029	-.0033	-.0548	-.0631	2098.
.1940	-1155.	1459.	373.	-1228.	2220.	1149.	.0333	.0004	.0011	.0096	-.0531	-.0715	1877.
.1950	-1377.	2418.	428.	-2084.	1657.	873.	.0352	.0003	.0074	.0264	-.0390	-.0740	1889.
.1960	-1451.	2873.	291.	-2718.	1055.	585.	.0341	.0002	.0158	.0459	-.0236	-.0704	2005.
.1970	-1409.	3111.	36.	-3234.	493.	295.	.0307	.0001	.0255	.0675	-.0088	-.0622	2214.

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ADLPIPE STRESS ANALYSIS

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

CONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	EL	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
26	1	44					.1980	-1223.	3470.	-271.	-3688.	-41.	153.	.0255	-.0000	.0357	.0898	.0054	-.0513	2488.
							.1990	-912.	3707.	-639.	-3948.	-584.	188.	.0192	-.0002	.0455	.1103	.0199	-.0393	2693.
							.2000	-571.	3649.	-1024.	-4004.	-1072.	280.	.0129	-.0003	.0540	.1271	.0329	-.0274	2801.
							.2010	-266.	3584.	-1315.	-4015.	-1440.	392.	.0075	-.0004	.0601	.1390	.0426	-.0175	2887.
							.2020	-3.	3639.	-1475.	-3994.	-1746.	583.	.0037	-.0005	.0633	.1451	.0505	-.0109	2964.
							.2030	184.	3610.	-1523.	-3860.	-2044.	805.	.0017	-.0005	.0634	.1445	.0576	-.0082	2994.
							.2040	209.	3496.	-1425.	-3700.	-2271.	910.	.0021	-.0005	.0603	.1374	.0526	-.0096	2990.
							.2050	37.	3417.	-1156.	-3612.	-2405.	838.	.0051	-.0004	.0543	.1251	.0548	-.0150	2979.
							.2060	-295.	3179.	-792.	-3491.	-2524.	631.	.0103	-.0003	.0461	.1084	.0563	-.0241	2935.
							.2070	-754.	2599.	-399.	-3257.	-2659.	305.	.0173	-.0001	.0365	.0881	.0680	-.0360	2841.
							.2080	-1322.	1906.	48.	-3032.	-2740.	-149.	.0255	.0002	.0258	.0658	.0583	-.0495	2756.
							.2090	-1943.	1369.	558.	-2902.	-2755.	-674.	.0342	.0005	.0146	.0430	.0569	-.0636	2735.
							.2100	-2516.	963.	1062.	-2782.	-2766.	-1144.	.0423	.0007	.0036	.0207	.0654	-.0768	2754.
							.2110	-2978.	626.	1500.	-2620.	-2771.	-1487.	.0491	.0009	-.0065	.0001	.0539	-.0883	2759.
							.2120	-3310.	359.	1852.	-2448.	-2717.	-1714.	.0542	.0010	-.0149	-.0174	.0513	-.0969	2722.
							.2130	-3497.	68.	2077.	-2236.	-2597.	-1638.	.0571	.0011	-.0212	-.0309	.0575	-.1020	2621.
							.2140	-3504.	-281.	2143.	-1938.	-2443.	-1820.	.0575	.0012	-.0251	-.0400	.0533	-.1028	2434.
							.2150	-3313.	-514.	2070.	-1609.	-2264.	-1623.	.0553	.0012	-.0265	-.0444	.0489	-.0995	2169.
							.2160	-2955.	-556.	1892.	-1317.	-2046.	-1294.	.0507	.0011	-.0255	-.0439	.0440	-.0922	1858.
							.2170	-2481.	-578.	1611.	-1043.	-1792.	-920.	.0440	.0009	-.0223	-.0390	.0386	-.0811	1529.
							.2180	-1920.	-617.	1243.	-780.	-1518.	-516.	.0358	.0008	-.0173	-.0305	.0330	-.0672	1202.
							.2190	-1294.	-486.	838.	-594.	-1245.	-61.	.0266	.0006	-.0110	-.0189	.0276	-.0516	931.
							.2200	-655.	-133.	435.	-521.	-981.	395.	.0171	.0003	-.0037	-.0049	.0225	-.0355	795.
							.2210	-76.	272.	40.	-533.	-713.	752.	.0079	.0001	.0041	.0106	.0174	-.0195	786.
							.2220	409.	616.	-344.	-593.	-443.	986.	-.0003	-.0001	.0120	.0266	.0123	-.0047	831.
							.2230	794.	873.	-712.	-667.	-201.	1123.	-.0073	-.0003	.0198	.0424	.0378	.0081	891.
							.2240	1062.	970.	-1053.	-725.	13.	1143.	-.0127	-.0004	.0269	.0568	.0038	.0186	912.
							.2250	1198.	892.	-1334.	-769.	230.	1013.	-.0166	-.0005	.0327	.0685	-.0004	.0270	871.
							.2260	1233.	782.	-1514.	-824.	455.	797.	-.0192	-.0005	.0366	.0766	-.0051	.0331	831.
							.2270	1223.	778.	-1574.	-888.	663.	604.	-.0206	-.0005	.0382	.0801	-.0098	.0370	850.
							.2280	1196.	882.	-1515.	-932.	865.	478.	-.0212	-.0005	.0372	.0786	-.0148	.0387	916.
							.2290	1153.	1045.	-1353.	-949.	1094.	418.	-.0208	-.0005	.0340	.0723	-.0208	.0384	1016.
							.2300	1107.	1235.	-1119.	-916.	1344.	439.	-.0198	-.0006	.0289	.0622	-.0276	.0361	1136.
							.2310	1071.	1398.	-864.	-797.	1596.	561.	-.0181	-.0006	.0226	.0494	-.0346	.0321	1261.
							.2320	1040.	1470.	-631.	-573.	1853.	758.	-.0158	-.0005	.0160	.0352	-.0417	.0265	1404.
							.2330	1000.	1390.	-454.	-247.	2115.	983.	-.0130	-.0005	.0096	.0210	-.0489	.0199	1581.
							.2340	948.	1080.	-355.	182.	2358.	1196.	-.0099	-.0004	.0040	.0077	-.0554	.0129	1786.
							.2350	891.	508.	-340.	704.	2564.	1372.	-.0070	-.0003	-.0008	-.0042	-.0509	.0064	2017.

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ADLPIPE STRESS ANALYSIS

83/12/02.

18.27.23.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.2250	1198.	892.	-1334.	-769.	230.	1013.	-.0166	-.0005	.0327	.0685	-.0004	.0270	871.
.2260	1233.	782.	-1514.	-824.	455.	797.	-.0192	-.0005	.0366	.0766	-.0051	.0331	831.
.2270	1223.	778.	-1574.	-888.	663.	604.	-.0206	-.0005	.0382	.0801	-.0098	.0370	850.
.2280	1196.	882.	-1515.	-973.	865.	478.	-.0212	-.0005	.0372	.0786	-.0148	.0387	916.
.2290	1153.	1045.	-1353.	-949.	1094.	418.	-.0208	-.0005	.0340	.0723	-.0208	.0384	1016.
.2300	1107.	1235.	-1119.	-916.	1344.	439.	-.0198	-.0006	.0289	.0622	-.0276	.0361	1136.
.2310	1071.	1398.	-864.	-797.	1596.	561.	-.0181	-.0006	.0226	.0494	-.0346	.0321	1261.
.2320	1040.	1470.	-631.	-573.	1853.	758.	-.0158	-.0005	.0160	.0352	-.0417	.0265	1404.
.2330	1000.	1390.	-454.	-247.	2115.	983.	-.0130	-.0005	.0096	.0210	-.0489	.0199	1581.
.2340	948.	1080.	-355.	182.	2358.	1196.	-.0099	-.0004	.0040	.0077	-.0554	.0129	1786.
.2350	891.	508.	-340.	704.	2564.	1372.	-.0070	-.0003	-.0008	-.0042	-.0609	.0064	2017.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.27.23.

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	EL								
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.2360	847.	-188.	-375.	1257.	2719.	1511.	-.0047	-.0001	-.0047	-.0149	-.0650	.0011	2261.	
.2370	837.	-775.	-406.	1746.	2802.	1623.	-.0033	-.0000	-.0082	-.0243	-.0674	-.0020	2479.	
.2380	870.	-1139.	-397.	2113.	2797.	1699.	-.0032	.0000	-.0113	-.0325	-.0676	-.0026	2626.	
.2390	939.	-1326.	-347.	2359.	2704.	1713.	-.0044	.0000	-.0143	-.0396	-.0658	-.0002	2680.	
.2400	1035.	-1397.	-270.	2502.	2518.	1654.	-.0069	.0000	-.0169	-.0455	-.0618	.0050	2640.	
.2410	1140.	-1395.	-186.	2561.	2236.	1515.	-.0103	-.0001	-.0188	-.0498	-.0554	.0124	2509.	
.2420	1227.	-1415.	-115.	2566.	1880.	1268.	-.0142	-.0001	-.0201	-.0524	-.0471	.0213	2308.	
.2430	1271.	-1556.	-77.	2559.	1473.	910.	-.0181	-.0001	-.0205	-.0533	-.0375	.0309	2083.	
.2440	1270.	-1814.	-72.	2558.	1022.	480.	-.0216	-.0002	-.0202	-.0530	-.0267	.0402	1885.	
.2450	1222.	-2111.	-77.	2548.	545.	18.	-.0245	-.0002	-.0197	-.0522	-.0152	.0482	1756.	
.2460	1121.	-2389.	-59.	2509.	81.	-454.	-.0263	-.0001	-.0195	-.0516	-.0042	.0544	1719.	
.2470	975.	-2583.	8.	2430.	-352.	-892.	-.0269	-.0001	-.0199	-.0521	.0060	.0579	1761.	
.2480	800.	-2589.	145.	2296.	-759.	-1236.	-.0262	-.0001	-.0212	-.0542	.0155	.0584	1830.	
.2490	595.	-2354.	359.	2086.	-1125.	-1476.	-.0241	-.0001	-.0235	-.0577	.0237	.0554	1882.	
.2500	339.	-1937.	632.	1812.	-1422.	-1644.	-.0203	-.0000	-.0265	-.0623	.0302	.0489	1907.	
.2510	29.	-1462.	920.	1523.	-1653.	-1754.	-.0150	.0000	-.0297	-.0671	.0351	.0390	1922.	
.2520	-330.	-1048.	1171.	1270.	-1838.	-1813.	-.0082	.0001	-.0325	-.0713	.0389	.0259	1939.	
.2530	-742.	-794.	1355.	1076.	-1970.	-1862.	-.0001	.0002	-.0345	-.0743	.0416	.0103	1966.	
.2540	-1201.	-727.	1466.	940.	-2037.	-1940.	.0087	.0003	-.0355	-.0757	.0430	-.0066	1999.	
.2550	-1666.	-760.	1518.	844.	-2057.	-2025.	.0177	.0005	-.0357	-.0756	.0434	-.0238	2027.	
.2560	-2087.	-789.	1532.	768.	-2049.	-2074.	.0261	.0007	-.0354	-.0745	.0433	-.0399	2032.	
.2570	-2432.	-764.	1535.	690.	-2009.	-2089.	.0331	.0008	-.0349	-.0730	.0424	-.0535	2008.	
.2580	-2676.	-640.	1549.	588.	-1933.	-2080.	.0382	.0009	-.0344	-.0714	.0406	-.0636	1955.	
.2590	-2789.	-369.	1581.	454.	-1832.	-2026.	.0409	.0009	-.0339	-.0699	.0382	-.0693	1866.	
.2600	-2755.	25.	1612.	313.	-1714.	-1911.	.0410	.0008	-.0335	-.0682	.0354	-.0702	1743.	
.2610	-2579.	450.	1613.	203.	-1573.	-1756.	.0385	.0007	-.0327	-.0660	.0321	-.0662	1595.	
.2620	-2283.	811.	1552.	154.	-1405.	-1591.	.0336	.0006	-.0312	-.0627	.0284	-.0575	1435.	
.2630	-1886.	1004.	1400.	200.	-1208.	-1432.	.0267	.0004	-.0287	-.0580	.0241	-.0448	1270.	
.2640	-1404.	936.	1138.	383.	-985.	-1275.	.0180	.0003	-.0251	-.0519	.0195	-.0286	1116.	
.2650	-847.	630.	782.	700.	-742.	-1104.	.0080	.0001	-.0208	-.0449	.0145	-.0099	1013.	
.2660	-232.	232.	381.	1095.	-478.	-904.	-.0030	-.0001	-.0162	-.0380	.0091	.0106	1010.	
.2670	424.	-133.	-10.	1516.	-191.	-664.	-.0144	-.0002	-.0121	-.0320	.0031	.0318	1123.	
.2680	1098.	-428.	-355.	1945.	109.	-375.	-.0259	-.0004	-.0090	-.0279	-.0033	.0527	1337.	
.2690	1761.	-644.	-631.	2367.	408.	-43.	-.0368	-.0006	-.0071	-.0265	-.0100	.0723	1619.	
.2700	2369.	-783.	-821.	2762.	706.	301.	-.0465	-.0008	-.0068	-.0278	-.0169	.0895	1933.	
.2710	2877.	-901.	-926.	3130.	1002.	611.	-.0543	-.0009	-.0079	-.0318	-.0240	.1031	2253.	
.2720	3237.	-1070.	-964.	3482.	1281.	854.	-.0597	-.0010	-.0103	-.0382	-.0308	.1125	2566.	
.2730	3432.	-1322.	-946.	3818.	1533.	1004.	-.0624	-.0010	-.0135	-.0463	-.0373	.1170	2854.	

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ADLPIPE STRESS ANALYSIS

83/12/02. 18.27.23.

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

.2630	-1886.	1004.	1400.	200.	-1208.	-1432.	.0267	.0004	-.0287	-.0580	.0241	-.0448	1270.
.2640	-1404.	936.	1132.	383.	-985.	-1275.	.0180	.0003	-.0251	-.0519	.0195	-.0286	1116.
.2650	-847.	630.	782.	700.	-742.	-1104.	.0080	.0001	-.0208	-.0449	.0145	-.0099	1013.
.2660	-232.	232.	381.	1095.	-478.	-904.	-.0030	-.0001	-.0162	-.0380	.0091	.0106	1010.
.2670	424.	-133.	-10.	1516.	-191.	-664.	-.0144	-.0002	-.0121	-.0320	.0031	.0318	1123.
.2680	1098.	-428.	-355.	1945.	109.	-375.	-.0259	-.0004	-.0090	-.0279	-.0033	.0527	1337.
.2690	1761.	-644.	-631.	2367.	408.	-43.	-.0368	-.0006	-.0071	-.0265	-.0100	.0723	1619.
.2700	2369.	-783.	-821.	2762.	706.	301.	-.0465	-.0008	-.0068	-.0278	-.0169	.0895	1933.
.2710	2873.	-901.	-926.	3130.	1002.	611.	-.0543	-.0009	-.0079	-.0318	-.0240	.1031	2253.
.2720	3237.	-1070.	-964.	3482.	1281.	854.	-.0597	-.0010	-.0103	-.0382	-.0308	.1125	2566.
.2730	3432.	-1322.	-946.	3818.	1533.	1004.	-.0624	-.0010	-.0135	-.0463	-.0373	.1170	2854.

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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	MEMBER	SEQUENCE	LOCATION	END	TYPE	EL								
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)	
.2740	3443.	-1683.	-881.	4127.	1764.	1039.	-.0622	-.0009	-.0175	-.0557	-.0433	.1165	3105.	
.2750	3274.	-2167.	-776.	4410.	1964.	957.	-.0592	-.0008	-.0221	-.0661	-.0487	.1111	3317.	
.2760	2958.	-2687.	-624.	4642.	2119.	787.	-.0538	-.0006	-.0271	-.0772	-.0531	.1017	3480.	
.2770	2531.	-3096.	-410.	4774.	2230.	558.	-.0468	-.0004	-.0325	-.0885	-.0566	.0891	3572.	
.2780	2033.	-3338.	-133.	4785.	2300.	287.	-.0386	-.0002	-.0382	-.0997	-.0592	.0747	3584.	
.2790	1507.	-3459.	181.	4700.	2320.	-9.	-.0301	-.0001	-.0437	-.1101	-.0606	.0597	3533.	
.2800	994.	-3490.	499.	4538.	2285.	-310.	-.0220	.0001	-.0487	-.1191	-.0607	.0454	3431.	
.2810	528.	-3423.	798.	4306.	2203.	-601.	-.0148	.0002	-.0527	-.1258	-.0595	.0329	3286.	
.2820	135.	-3279.	1047.	4025.	2081.	-875.	-.0090	.0003	-.0553	-.1294	-.0571	.0229	3111.	
.2830	-166.	-3120.	1215.	3728.	1919.	-1116.	-.0049	.0004	-.0561	-.1294	-.0535	.0160	2925.	
.2840	-361.	-2982.	1282.	3439.	1725.	-1305.	-.0025	.0004	-.0549	-.1257	-.0488	.0124	2738.	
.2850	-445.	-2857.	1249.	3164.	1510.	-1429.	-.0018	.0004	-.0519	-.1183	-.0433	.0117	2552.	
.2860	-422.	-2699.	1131.	2896.	1280.	-1477.	-.0028	.0004	-.0472	-.1077	-.0371	.0138	2355.	
.2870	-307.	-2474.	951.	2623.	1043.	-1449.	-.0050	.0003	-.0412	-.0945	-.0306	.0180	2139.	
.2880	-125.	-2205.	732.	2342.	810.	-1359.	-.0082	.0002	-.0343	-.0797	-.0240	.0236	1905.	
.2890	94.	-1923.	493.	2060.	588.	-1226.	-.0117	.0001	-.0271	-.0641	-.0177	.0298	1664.	
.2900	322.	-1592.	263.	1764.	378.	-1061.	-.0152	-.0000	-.0200	-.0485	-.0116	.0356	1411.	
.2910	528.	-1183.	66.	1437.	189.	-881.	-.0181	-.0001	-.0132	-.0336	-.0061	.0403	1144.	
.2920	682.	-769.	-93.	1097.	31.	-711.	-.0200	-.0002	-.0072	-.0199	-.0015	.0430	882.	
.2930	765.	-441.	-222.	778.	-98.	-565.	-.0206	-.0003	-.0019	-.0079	.0023	.0433	651.	
.2940	773.	-167.	-316.	476.	-201.	-434.	-.0197	-.0003	.0025	.0024	.0054	.0409	455.	
.2950	708.	127.	-363.	172.	-274.	-313.	-.0175	-.0003	.0060	.0108	.0076	.0358	304.	
.2960	578.	404.	-374.	-119.	-322.	-207.	-.0140	-.0003	.0086	.0175	.0090	.0283	270.	
.2970	396.	578.	-366.	-369.	-353.	-125.	-.0095	-.0003	.0106	.0226	.0100	.0192	354.	
.2980	184.	670.	-343.	-582.	-377.	-60.	-.0046	-.0002	.0119	.0263	.0107	.0092	469.	
.2990	-34.	763.	-298.	-787.	-401.	-6.	.0004	-.0001	.0127	.0289	.0113	-.0008	595.	
.3000	-238.	877.	-234.	-991.	-430.	36.	.0049	-.0000	.0131	.0308	.0120	-.0100	729.	
.3010	-413.	987.	-161.	-1190.	-472.	62.	.0087	.0000	.0133	.0323	.0130	-.0176	864.	
.3020	-545.	1102.	-87.	-1388.	-529.	79.	.0116	.0001	.0135	.0337	.0143	-.0233	1003.	
.3030	-630.	1249.	-19.	-1594.	-601.	91.	.0134	.0001	.0139	.0355	.0160	-.0270	1150.	
.3040	-671.	1423.	35.	-1806.	-685.	96.	.0142	.0001	.0146	.0380	.0180	-.0287	1304.	
.3050	-676.	1591.	61.	-2015.	-775.	90.	.0142	.0000	.0158	.0416	.0203	-.0287	1456.	
.3060	-655.	1733.	52.	-2214.	-866.	73.	.0136	.0000	.0177	.0463	.0227	-.0273	1603.	
.3070	-619.	1843.	6.	-2400.	-954.	42.	.0125	-.0000	.0202	.0522	.0251	-.0251	1741.	
.3080	-579.	1912.	-73.	-2572.	-1030.	-7.	.0113	-.0001	.0233	.0591	.0274	-.0224	1868.	
.3090	-541.	1932.	-179.	-2728.	-1090.	-72.	.0099	-.0001	.0267	.0666	.0293	-.0194	1981.	
.3100	-506.	1910.	-299.	-2866.	-1132.	-145.	.0086	-.0001	.0303	.0743	.0308	-.0164	2080.	
.3110	-473.	1888.	-416.	-2994.	-1154.	-212.	.0073	-.0001	.0337	.0817	.0318	-.0136	2168.	

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18.27.23.

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

.3010	-413.	987.	-161.	-1190.	-472.	62.	.0087	.0000	.0133	.0323	.0130	-.0176	864.
.3020	-545.	1102.	-87.	-1388.	-529.	79.	.0116	.0001	.0135	.0337	.0143	-.0233	1003.
.3030	-630.	1249.	-19.	-1594.	-601.	91.	.0134	.0001	.0139	.0355	.0160	-.0270	1150.
.3040	-671.	1423.	35.	-1806.	-685.	96.	.0142	.0001	.0146	.0380	.0180	-.0287	1304.
.3050	-676.	1591.	61.	-2015.	-775.	90.	.0142	.0000	.0158	.0416	.0203	-.0287	1456.
.3060	-655.	1733.	52.	-2214.	-866.	73.	.0136	.0000	.0177	.0463	.0227	-.0273	1603.
.3070	-619.	1843.	6.	-2400.	-954.	42.	.0125	-.0000	.0202	.0522	.0251	-.0251	1741.
.3080	-579.	1912.	-73.	-2572.	-1030.	-7.	.0113	-.0001	.0233	.0591	.0274	-.0224	1868.
.3090	-541.	1932.	-179.	-2728.	-1090.	-72.	.0099	-.0001	.0267	.0666	.0293	-.0194	1981.
.3100	-506.	1910.	-299.	-2866.	-1132.	-145.	.0086	-.0001	.0303	.0743	.0308	-.0164	2080.
.3110	-473.	1888.	-416.	-2994.	-1154.	-212.	.0073	-.0001	.0337	.0817	.0318	-.0136	2168.

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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	END	TYPE	EL								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)		
.3120	-439.	1911.	-513.	-3122.	-1150.	-257.	.0062	-.0001	.0366	.0882	.0322	-.0112	2249.	
.3130	-401.	1980.	-584.	-3242.	-1120.	-267.	.0053	-.0002	.0390	.0935	.0318	-.0093	2319.	
.3140	-361.	2058.	-633.	-3337.	-1066.	-240.	.0047	-.0002	.0407	.0974	.0308	-.0083	2367.	
.3150	-324.	2130.	-662.	-3398.	-985.	-176.	.0044	-.0002	.0417	.0998	.0290	-.0081	2388.	
.3160	-296.	2202.	-674.	-3425.	-878.	-78.	.0047	-.0002	.0421	.1007	.0265	-.0091	2383.	
.3170	-283.	2247.	-675.	-3408.	-746.	48.	.0054	-.0002	.0419	.1003	.0233	-.0113	2352.	
.3180	-291.	2219.	-673.	-3335.	-593.	190.	.0068	-.0002	.0412	.0985	.0196	-.0148	2287.	
.3190	-324.	2106.	-667.	-3210.	-419.	336.	.0088	-.0001	.0399	.0954	.0153	-.0194	2194.	
.3200	-380.	1949.	-649.	-3051.	-226.	483.	.0113	-.0001	.0381	.0911	.0105	-.0250	2088.	
.3210	-451.	1785.	-611.	-2873.	-19.	635.	.0141	-.0000	.0358	.0856	.0052	-.0314	1983.	
.3220	-526.	1630.	-551.	-2685.	194.	793.	.0171	.0001	.0329	.0790	-.0002	-.0380	1892.	
.3230	-597.	1499.	-469.	-2500.	410.	954.	.0200	.0001	.0296	.0716	-.0059	-.0445	1825.	
.3240	-652.	1406.	-373.	-2325.	622.	1115.	.0226	.0002	.0261	.0639	-.0114	-.0503	1788.	
.3250	-681.	1348.	-275.	-2161.	819.	1274.	.0245	.0002	.0226	.0564	-.0166	-.0550	1779.	
.3260	-676.	1303.	-195.	-2004.	992.	1422.	.0257	.0002	.0196	.0497	-.0212	-.0581	1786.	
.3270	-633.	1231.	-150.	-1846.	1134.	1547.	.0259	.0002	.0174	.0444	-.0249	-.0591	1794.	
.3280	-550.	1104.	-155.	-1684.	1234.	1637.	.0250	.0002	.0161	.0410	-.0274	-.0578	1788.	
.3290	-427.	934.	-210.	-1525.	1286.	1687.	.0229	.0002	.0158	.0397	-.0286	-.0540	1761.	
.3300	-263.	758.	-305.	-1386.	1287.	1703.	.0197	.0002	.0166	.0405	-.0285	-.0478	1716.	
.3310	-65.	598.	-429.	-1277.	1235.	1688.	.0155	.0001	.0182	.0430	-.0269	-.0395	1652.	
.3320	156.	466.	-567.	-1204.	1132.	1647.	.0106	.0001	.0204	.0469	-.0241	-.0296	1573.	
.3330	362.	384.	-699.	-1177.	987.	1585.	.0054	-.0000	.0229	.0517	-.0202	-.0191	1488.	
.3340	595.	387.	-810.	-1204.	809.	1512.	.0004	-.0001	.0255	.0568	-.0155	-.0088	1412.	
.3350	773.	478.	-890.	-1281.	605.	1436.	-.0040	-.0002	.0278	.0618	-.0103	.0002	1359.	
.3360	890.	617.	-937.	-1395.	386.	1350.	-.0072	-.0003	.0298	.0662	-.0048	.0069	1334.	
.3370	923.	751.	-953.	-1527.	167.	1248.	-.0089	-.0003	.0314	.0699	.0006	.0105	1334.	
.3380	860.	861.	-940.	-1667.	-47.	1130.	-.0086	-.0003	.0324	.0726	.0058	.0106	1358.	
.3390	700.	964.	-892.	-1814.	-251.	1003.	-.0064	-.0003	.0328	.0741	.0107	.0070	1407.	
.3400	449.	1081.	-805.	-1974.	-439.	872.	-.0023	-.0002	.0325	.0743	.0150	-.0003	1485.	
.3410	124.	1218.	-677.	-2146.	-611.	743.	.0033	-.0001	.0315	.0731	.0189	-.0106	1585.	
.3420	-252.	1385.	-511.	-2329.	-768.	627.	.0101	-.0000	.0298	.0707	.0223	-.0233	1706.	
.3430	-652.	1610.	-313.	-2525.	-913.	535.	.0175	.0001	.0276	.0673	.0253	-.0374	1845.	
.3440	-1048.	1902.	-93.	-2735.	-1047.	471.	.0251	.0002	.0250	.0633	.0280	-.0520	1999.	
.3450	-1419.	2231.	126.	-2944.	-1174.	431.	.0324	.0003	.0224	.0593	.0305	-.0661	2156.	
.3460	-1745.	2547.	321.	-3132.	-1297.	408.	.0388	.0003	.0202	.0559	.0330	-.0786	2302.	
.3470	-2010.	2817.	470.	-3284.	-1418.	396.	.0442	.0004	.0186	.0534	.0355	-.0891	2426.	
.3480	-2206.	3011.	558.	-3389.	-1535.	385.	.0481	.0004	.0177	.0523	.0382	-.0967	2521.	
.3490	-2326.	3103.	579.	-3434.	-1648.	371.	.0504	.0005	.0178	.0526	.0408	-.1012	2579.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.27.23.

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

.3380	800.	361.	-640.	-1667.	-47.	1130.	-.0086	-.0003	.0324	.0726	.0058	.0106	1358.
.3390	700.	964.	-892.	-1814.	-251.	1003.	-.0064	-.0003	.0328	.0741	.0107	.0070	1407.
.3400	449.	1081.	-805.	-1974.	-459.	872.	-.0023	-.0002	.0325	.0743	.0150	-.0003	1485.
.3410	124.	1218.	-677.	-2146.	-611.	743.	.0033	-.0001	.0315	.0731	.0189	-.0106	1585.
.3420	-252.	1385.	-511.	-2329.	-768.	627.	.0101	-.0000	.0298	.0707	.0223	-.0233	1706.
.3430	-652.	1610.	-313.	-2525.	-913.	535.	.0175	.0001	.0276	.0673	.0253	-.0374	1845.
.3440	-1043.	1902.	-93.	-2735.	-1047.	471.	.0251	.0002	.0250	.0633	.0280	-.0520	1999.
.3450	-1419.	2231.	126.	-2944.	-1174.	431.	.0324	.0003	.0224	.0593	.0305	-.0661	2156.
.3460	-1745.	2547.	321.	-3132.	-1297.	408.	.0388	.0003	.0202	.0559	.0330	-.0786	2302.
.3470	-2010.	2817.	470.	-3284.	-1418.	396.	.0442	.0004	.0186	.0534	.0355	-.0891	2426.
.3480	-2206.	3011.	558.	-3389.	-1535.	385.	.0481	.0004	.0177	.0523	.0382	-.0967	2521.
.3490	-2326.	3103.	579.	-3434.	-1648.	371.	.0504	.0005	.0178	.0526	.0408	-.1012	2579.

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

CONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	EL	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	HX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.3500	26	1	44					-2366.	3088.	535.	-3415.	-1754.	352.	.0511	.0005	.0186	.0540	.0435	-.1024	2599.
.3510								-2325.	2998.	444.	-3340.	-1849.	335.	.0501	.0005	.0198	.0560	.0460	-.1004	2583.
.3520								-2208.	2869.	328.	-3218.	-1927.	324.	.0476	.0005	.0212	.0581	.0481	-.0955	2538.
.3530								-2024.	2718.	205.	-3054.	-1984.	323.	.0439	.0004	.0223	.0594	.0497	-.0881	2465.
.3540								-1789.	2546.	92.	-2848.	-2015.	333.	.0391	.0003	.0229	.0594	.0506	-.0788	2362.
.3550								-1520.	2354.	2.	-2601.	-2016.	351.	.0337	.0003	.0227	.0577	.0507	-.0683	2231.
.3560								-1239.	2142.	-57.	-2318.	-1984.	371.	.0281	.0002	.0215	.0538	.0499	-.0574	2071.
.3570								-968.	1898.	-81.	-1999.	-1919.	380.	.0227	.0001	.0193	.0479	.0481	-.0467	1885.
.3580								-725.	1598.	-75.	-1646.	-1821.	372.	.0177	.0001	.0163	.0400	.0454	-.0369	1673.
.3590								-524.	1236.	-42.	-1262.	-1696.	342.	.0134	.0001	.0123	.0303	.0419	-.0282	1443.
.3600								-372.	838.	20.	-866.	-1547.	287.	.0099	.0001	.0078	.0193	.0378	-.0210	1210.
.3610								-272.	436.	109.	-477.	-1378.	208.	.0073	.0001	.0027	.0073	.0331	-.0154	993.
.3620								-221.	47.	220.	-109.	-1195.	111.	.0055	.0001	-.0027	-.0051	.0280	-.0114	812.
.3630								-212.	-319.	345.	230.	-1003.	1.	.0045	.0001	-.0081	-.0175	.0227	-.0088	694.
.3640								-236.	-646.	473.	532.	-807.	-118.	.0042	.0002	-.0132	-.0292	.0172	-.0074	656.
.3650								-283.	-922.	596.	790.	-607.	-238.	.0042	.0002	-.0179	-.0397	.0118	-.0068	691.
.3660								-341.	-1158.	698.	1011.	-406.	-354.	.0045	.0003	-.0219	-.0486	.0065	-.0067	772.
.3670								-398.	-1376.	766.	1204.	-205.	-460.	.0049	.0003	-.0250	-.0556	.0012	-.0068	879.
.3680								-441.	-1577.	793.	1374.	-4.	-547.	.0051	.0003	-.0271	-.0605	-.0038	-.0068	997.
.3690								-457.	-1745.	779.	1522.	198.	-605.	.0050	.0004	-.0281	-.0634	-.0088	-.0063	1112.
.3700								-434.	-1863.	727.	1649.	398.	-624.	.0044	.0004	-.0283	-.0642	-.0135	-.0050	1218.
.3710								-363.	-1926.	643.	1756.	595.	-599.	.0032	.0004	-.0276	-.0634	-.0180	-.0027	1313.
.3720								-242.	-1932.	533.	1844.	788.	-530.	.0012	.0003	-.0263	-.0612	-.0224	.0007	1398.
.3730								-69.	-1880.	406.	1915.	974.	-420.	-.0014	.0003	-.0245	-.0579	-.0265	.0054	1475.
.3740								150.	-1772.	267.	1968.	1148.	-276.	-.0048	.0002	-.0222	-.0538	-.0302	.0112	1547.
.3750								404.	-1623.	121.	2006.	1307.	-111.	-.0087	.0001	-.0198	-.0491	-.0336	.0180	1616.
.3760								679.	-1460.	-27.	2035.	1450.	60.	-.0131	-.0000	-.0171	-.0440	-.0365	.0255	1685.
.3770								961.	-1302.	-177.	2060.	1571.	226.	-.0176	-.0001	-.0144	-.0388	-.0390	.0335	1753.
.3780								1236.	-1162.	-324.	2080.	1668.	377.	-.0221	-.0003	-.0118	-.0335	-.0408	.0414	1815.
.3790								1489.	-1044.	-462.	2096.	1741.	505.	-.0263	-.0004	-.0092	-.0286	-.0422	.0490	1868.
.3800								1707.	-947.	-583.	2105.	1787.	605.	-.0300	-.0004	-.0069	-.0241	-.0429	.0557	1905.
.3810								1882.	-862.	-681.	2102.	1807.	676.	-.0331	-.0005	-.0049	-.0202	-.0430	.0613	1923.
.3820								2004.	-787.	-751.	2087.	1800.	714.	-.0353	-.0006	-.0034	-.0171	-.0426	.0655	1919.
.3830								2069.	-735.	-791.	2062.	1768.	719.	-.0367	-.0006	-.0024	-.0149	-.0417	.0681	1894.
.3840								2073.	-716.	-802.	2031.	1710.	688.	-.0370	-.0006	-.0019	-.0138	-.0402	.0689	1848.
.3850								2017.	-719.	-781.	1990.	1627.	624.	-.0364	-.0006	-.0019	-.0137	-.0383	.0681	1783.
.3860								1906.	-726.	-727.	1936.	1522.	530.	-.0349	-.0006	-.0025	-.0145	-.0359	.0656	1698.
.3870								1745.	-733.	-642.	1867.	1394.	409.	-.0326	-.0005	-.0035	-.0163	-.0330	.0617	1595.

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2 SAFETY COLD FKW24F--2 PSV

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.3770	961.	-1302.	-177.	2060.	1571.	226.	-.176	-.0001	-.0144	-.0388	-.0390	.0335	1753.
.3780	1236.	-1162.	-324.	2080.	1668.	377.	-.0221	-.0003	-.0118	-.0335	-.0408	.0414	1815.
.3790	1489.	-1044.	-462.	2096.	1741.	575.	-.0263	-.0004	-.0092	-.0286	-.0422	.0490	1868.
.3800	1707.	-947.	-583.	2105.	1787.	605.	-.0300	-.0004	-.0069	-.0241	-.0429	.0557	1905.
.3810	1882.	-862.	-681.	2102.	1807.	676.	-.0331	-.0005	-.0049	-.0202	-.0430	.0613	1923.
.3820	2004.	-787.	-751.	2087.	1800.	714.	-.0353	-.0006	-.0034	-.0171	-.0426	.0655	1919.
.3830	2069.	-735.	-791.	2062.	1768.	719.	-.0367	-.0006	-.0024	-.0149	-.0417	.0681	1894.
.3840	2073.	-716.	-802.	2031.	1710.	688.	-.0370	-.0006	-.0019	-.0138	-.0402	.0689	1848.
.3850	2017.	-719.	-781.	1990.	1627.	624.	-.0364	-.0006	-.0019	-.0137	-.0383	.0681	1783.
.3860	1906.	-726.	-727.	1936.	1522.	530.	-.0349	-.0006	-.0025	-.0145	-.0359	.0656	1698.
.3870	1745.	-733.	-642.	1867.	1374.	409.	-.0326	-.0005	-.0035	-.0163	-.0330	.0617	1595.

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

SECTION	26	MEMBER	1	SEQUENCE	44	LOCATION	END	TYPE	EL						
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	1544.	-744.	-531.	1785.	1244.	265.		-.0296	-.0004	-.0049	-.0187	-.0297	.0566	1477.	
.3890	1311.	-751.	-398.	1687.	1074.	102.		-.0261	-.0004	-.0067	-.0216	-.0260	.0507	1349.	
.3900	1056.	-735.	-248.	1567.	884.	-77.		-.0224	-.0003	-.0085	-.0248	-.0219	.0443	1214.	
.3910	790.	-688.	-87.	1423.	677.	-270.		-.0185	-.0002	-.0104	-.0278	-.0173	.0377	1078.	
.3920	521.	-618.	75.	1260.	456.	-475.		-.0147	-.0002	-.0121	-.0304	-.0124	.0313	958.	
.3930	256.	-548.	229.	1083.	224.	-693.		-.0110	-.0001	-.0136	-.0324	-.0072	.0254	880.	
.3940	3.	-487.	365.	897.	-12.	-923.		-.0078	-.0000	-.0146	-.0336	-.0018	.0202	868.	
.3950	-230.	-425.	482.	706.	-246.	-1156.		-.0049	.0000	-.0152	-.0338	.0036	.0158	928.	
.3960	-436.	-348.	577.	510.	-471.	-1382.		-.0026	.0001	-.0154	-.0331	.0089	.0125	1042.	
.3970	-608.	-268.	648.	321.	-676.	-1589.		-.0008	.0001	-.0151	-.0316	.0138	.0101	1184.	
.3980	-741.	-207.	690.	154.	-855.	-1770.		.0004	.0001	-.0144	-.0295	.0180	.0086	1329.	
.3990	-832.	-100.	705.	16.	-999.	-1911.		.0011	.0001	-.0135	-.0270	.0216	.0081	1454.	
.4000	-877.	-120.	697.	-90.	-1101.	-2001.		.0012	.0001	-.0124	-.0243	.0241	.0082	1541.	

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)	
.0440	6470.	5210.	-4489.	-1137.	4589.	6417.		-.0820	-.0025	.0956	.1958	-.0940	.1253	5372.	

SECTION	26	MEMBER	2	SEQUENCE	45	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.	4.	1.	-0.	1.	0.		-.0000	-.0000	-.0000	-.0000	-.0000	.0000	0.	
.0030	5.	19.	4.	0.	0.	-1.		-.0000	-.0000	-.0000	-.0000	-.0000	.0000	1.	
.0040	13.	68.	11.	0.	-1.	-2.		-.0000	-.0000	-.0000	-.0000	-.0000	.0001	1.	
.0050	24.	162.	23.	-4.	-4.	-1.		-.0000	-.0000	-.0000	-.0000	.0000	.0001	4.	
.0060	36.	280.	34.	-20.	-9.	3.		-.0000	-.0000	-.0000	.0001	.0000	.0002	15.	
.0070	48.	401.	41.	-56.	-16.	13.		-.0000	-.0000	.0000	.0003	.0001	.0002	40.	
.0080	64.	546.	44.	-116.	-23.	29.		-.0000	-.0000	.0000	.0007	.0002	.0002	82.	
.0090	95.	775.	45.	-201.	-41.	50.		-.0001	-.0000	.0001	.0013	.0004	.0003	142.	
.0100	141.	1125.	45.	-317.	-76.	73.		-.0001	-.0001	.0001	.0021	.0006	.0004	225.	
.0110	193.	1550.	35.	-482.	-130.	102.		-.0001	-.0001	.0002	.0033	.0011	.0005	343.	

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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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FORCES AND MOMENTS ACT ON THE PIPING

.0010	0.	0.	0.	-0.	0.	0.	-0.000	-0.0000	-0.0000	-0.0000	-0.0000	.0000	0.
.0020	2.	4.	1.	-0.	1.	0.	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	.0000	0.
.0030	5.	19.	4.	0.	0.	-1.	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	.0000	1.
.0040	13.	68.	11.	0.	-1.	-2.	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	.0001	1.
.0050	24.	162.	23.	-4.	-4.	-1.	-0.0000	-0.0000	-0.0000	-0.0000	.0000	.0001	4.
.0060	36.	280.	34.	-20.	-9.	3.	-0.0000	-0.0000	-0.0000	.0001	.0000	.0002	15.
.0070	48.	401.	41.	-56.	-16.	13.	-0.0000	-0.0000	.0000	.0003	.0001	.0002	40.
.0080	64.	546.	44.	-116.	-23.	29.	-0.0000	-0.0000	.0000	.0007	.0002	.0002	82.
.0090	95.	775.	45.	-201.	-41.	50.	-0.0001	-0.0000	.0001	.0013	.0004	.0003	142.
.0100	141.	1125.	45.	-317.	-76.	73.	-0.0001	-0.0001	.0001	.0021	.0006	.0004	225.
.0110	193.	1550.	35.	-482.	-130.	102.	-0.0001	-0.0001	.0002	.0033	.0011	.0005	343.

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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	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)
.0120	238.	1922.	-4.	-712.	-213.	137.	-0.0001	-0.0001	.0003	.0050	.0017	.0005	509.							
.0130	263.	2159.	-83.	-1007.	-336.	178.	-0.0002	-0.0001	.0005	.0073	.0027	.0004	726.							
.0140	257.	2276.	-189.	-1341.	-506.	228.	-0.0001	-0.0001	.0007	.0100	.0039	.0001	978.							
.0150	205.	2279.	-298.	-1665.	-713.	296.	-0.0001	-0.0001	.0009	.0126	.0053	-0.0005	1237.							
.0160	92.	2089.	-400.	-1919.	-948.	394.	-0.0000	-0.0001	.0010	.0147	.0067	-0.0015	1467.							
.0170	-79.	1642.	-481.	-2035.	-1190.	530.	.0001	-0.0000	.0011	.0159	.0081	-0.0031	1629.							
.0180	-285.	988.	-517.	-1937.	-1422.	710.	.0003	.0001	.0011	.0155	.0091	-0.0052	1689.							
.0190	-495.	242.	-474.	-1556.	-1635.	929.	.0005	.0001	.0010	.0130	.0098	-0.0077	1645.							
.0200	-679.	-441.	-316.	-844.	-1798.	1180.	.0007	.0002	.0007	.0081	.0098	-0.0103	1557.							
.0210	-811.	-870.	-33.	194.	-1943.	1428.	.0009	.0003	.0002	.0006	.0093	-0.0126	1630.							
.0220	-881.	-810.	359.	1480.	-2213.	1624.	.0010	.0003	-0.0004	-0.0086	.0090	-0.0142	2102.							
.0230	-978.	-459.	831.	2855.	-2543.	1813.	.0011	.0003	-0.0010	-0.0185	.0090	-0.0156	2852.							
.0240	-1265.	-855.	1246.	4142.	-2802.	2049.	.0013	.0004	-0.0016	-0.0278	.0087	-0.0181	3642.							
.0250	-1707.	-2438.	1498.	5254.	-2955.	2312.	.0016	.0005	-0.0021	-0.0357	.0082	-0.0218	4352.							
.0260	-2069.	-4172.	1672.	6250.	-3129.	2519.	.0019	.0007	-0.0025	-0.0426	.0079	-0.0250	5008.							
.0270	-2335.	-5004.	1953.	7259.	-3408.	2648.	.0021	.0008	-0.0030	-0.0498	.0081	-0.0270	5692.							
.0280	-2737.	-4947.	2447.	8346.	-3349.	2874.	.0023	.0008	-0.0035	-0.0581	.0064	-0.0294	6363.							
.0290	-3140.	-4706.	2945.	9343.	-2803.	3212.	.0025	.0009	-0.0042	-0.0664	.0024	-0.0326	6922.							
.0300	-3051.	-4899.	3060.	9948.	-2581.	3316.	.0026	.0009	-0.0045	-0.0709	.0007	-0.0333	7279.							
.0310	-2802.	-5551.	2917.	10169.	-2323.	3303.	.0026	.0009	-0.0046	-0.0724	-0.0007	-0.0331	7375.							
.0320	-2752.	-5698.	2862.	10133.	-1277.	3404.	.0026	.0009	-0.0047	-0.0731	-0.0057	-0.0338	7256.							
.0330	-2479.	-4975.	2739.	9721.	-59.	3280.	.0024	.0008	-0.0047	-0.0712	-0.0111	-0.0319	6915.							
.0340	-1645.	-4289.	2208.	8734.	593.	2565.	.0018	.0007	-0.0042	-0.0641	-0.0129	-0.0246	6149.							
.0350	-713.	-4299.	1426.	7226.	1282.	1487.	.0012	.0005	-0.0035	-0.0530	-0.0142	-0.0148	5047.							
.0360	-9.	-4603.	686.	5381.	2497.	265.	.0005	.0003	-0.0028	-0.0402	-0.0178	-0.0045	4002.							
.0370	924.	-4429.	-82.	3259.	3456.	-1382.	-0.0005	.0000	-0.0010	-0.0255	-0.0199	.0096	3348.							
.0380	2325.	-3219.	-900.	1051.	3709.	-3535.	-0.0019	-0.0004	-0.0007	-0.0090	-0.0183	.0289	3526.							
.0390	3640.	-947.	-1501.	-1179.	4051.	-5672.	-0.0033	-0.0009	.0003	.0070	-0.0174	.0486	4765.							
.0400	4572.	1444.	-1932.	-3463.	4775.	-7445.	-0.0045	-0.0013	.0012	.0226	-0.0184	.0648	6402.							
.0410	5439.	2619.	-2633.	-5995.	4948.	-9029.	-0.0055	-0.0016	.0024	.0410	-0.0163	.0789	8030.							
.0420	6201.	2830.	-3540.	-8636.	4652.	-10268.	-0.0062	-0.0018	.0038	.0610	-0.0116	.0896	9572.							
.0430	6527.	3618.	-4173.	-11016.	4620.	-10786.	-0.0066	-0.0019	.0049	.0784	-0.0087	.0945	10848.							
.0440	6470.	5210.	-4489.	-12975.	4589.	-10647.	-0.0066	-0.0020	.0058	.0923	-0.0065	.0943	11729.							
.0450	6203.	6415.	-4746.	-14550.	4076.	-10067.	-0.0064	-0.0020	.0066	.1040	-0.0023	.0901	12238.							
.0460	5584.	6555.	-4915.	-15672.	3423.	-8958.	-0.0058	-0.0018	.0072	.1126	.0021	.0808	12384.							
.0470	4495.	5830.	-4839.	-16156.	3037.	-7249.	-0.0047	-0.0015	.0074	.1161	.0044	.0656	12110.							
.0480	3252.	4916.	-4528.	-15860.	2569.	-5214.	-0.0034	-0.0011	.0073	.1139	.0061	.0476	11386.							
.0490	2145.	4758.	-3935.	-14711.	1779.	-3070.	-0.0022	-0.0008	.0068	.1057	.0084	.0296	10200.							

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.27.23.

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

.0390	3640.	-947.	-1501.	-1179.	4051.	-5672.	-.0033	-.0009	.0003	.0070	-.0174	.0486	4765.
.0400	4572.	1444.	-1932.	-3463.	4775.	-7445.	-.0045	-.0013	.0012	.0226	-.0184	.0648	6402.
.0410	5439.	2619.	-2633.	-5995.	4948.	-9029.	-.0055	-.0016	.0024	.0410	-.0163	.0789	8030.
.0420	6201.	2370.	-3540.	-8636.	4652.	-10268.	-.0062	-.0018	.0038	.0610	-.0116	.0896	9572.
.0430	6527.	3618.	-4173.	-11016.	4620.	-10786.	-.0066	-.0019	.0049	.0784	-.0087	.0945	10848.
.0440	6470.	5210.	-4489.	-12975.	4589.	-10647.	-.0066	-.0020	.0058	.0923	-.0065	.0943	11729.
.0450	6203.	6415.	-4746.	-14550.	4076.	-10067.	-.0064	-.0020	.0066	.1040	-.0023	.0901	12238.
.0460	5584.	6555.	-4915.	-15672.	3423.	-8958.	-.0058	-.0018	.0072	.1126	.0021	.0808	12384.
.0470	4495.	5830.	-4839.	-16156.	3037.	-7249.	-.0047	-.0015	.0074	.1161	.0044	.0656	12110.
.0480	3252.	4916.	-4528.	-15860.	2569.	-5214.	-.0034	-.0011	.0073	.1139	.0061	.0476	11386.
.0490	2145.	4758.	-3935.	-14711.	1779.	-3070.	-.0022	-.0008	.0068	.1057	.0084	.0296	10200.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.27.23.

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)
26	2	45					.0500	1011.	5495.	-2960.	-12744.	1121.	-726.	-.0010	-.0005	.0058	.0911	.0090	.0104	8637.
							.0510	-273.	5957.	-1810.	-10223.	770.	1797.	.0004	-.0001	.0045	.0721	.0074	-.0104	7015.
							.0520	-1462.	5230.	-846.	-7513.	347.	4231.	.0018	.0003	.0032	.0523	.0062	-.0311	5817.
							.0530	-2408.	3727.	-106.	-4805.	-251.	6411.	.0031	.0007	.0020	.0331	.0059	-.0499	5403.
							.0540	-3302.	2164.	621.	-2102.	-734.	8332.	.0043	.0011	.0008	.0138	.0051	-.0667	5813.
							.0550	-4219.	754.	1408.	566.	-1041.	9897.	.0053	.0014	-.0005	-.0056	.0035	-.0808	6719.
							.0560	-4904.	-427.	2146.	3054.	-1421.	10901.	.0060	.0017	-.0016	-.0235	.0024	-.0903	7690.
							.0570	-5201.	-1417.	2746.	5213.	-2000.	11250.	.0063	.0018	-.0026	-.0388	.0027	-.0940	8465.
							.0580	-5308.	-2390.	3245.	6978.	-2584.	11058.	.0063	.0018	-.0033	-.0511	.0034	-.0933	8984.
							.0590	-5368.	-3070.	3709.	8316.	-2961.	10477.	.0061	.0018	-.0039	-.0608	.0036	-.0896	9234.
							.0600	-5190.	-2913.	4074.	9120.	-3264.	9537.	.0056	.0017	-.0043	-.0666	.0041	-.0822	9162.
							.0610	-4655.	-2127.	4168.	9225.	-3677.	8266.	.0049	.0014	-.0043	-.0671	.0059	-.0714	8709.
							.0620	-4014.	-1621.	3905.	8535.	-4038.	6860.	.0041	.0012	-.0039	-.0616	.0085	-.0595	7867.
							.0630	-3505.	-1899.	3323.	7082.	-4079.	5516.	.0034	.0010	-.0032	-.0506	.0105	-.0487	6646.
							.0640	-2985.	-2700.	2459.	5020.	-3959.	4194.	.0028	.0009	-.0021	-.0350	.0126	-.0384	5154.
							.0650	-2269.	-3379.	1424.	2637.	-3963.	2783.	.0020	.0007	-.0009	-.0168	.0156	-.0269	3717.
							.0660	-1493.	-3245.	513.	308.	-3920.	1384.	.0012	.0004	.0003	.0007	.0183	-.0150	2810.
							.0670	-812.	-2066.	-72.	-1719.	-3562.	166.	.0004	.0002	.0013	.0152	.0190	-.0040	2668.
							.0680	-101.	-325.	-464.	-3442.	-3137.	-892.	-.0003	-.0001	.0020	.0273	.0189	.0062	3196.
							.0690	704.	1503.	-831.	-4947.	-2914.	-1783.	-.0011	-.0003	.0027	.0380	.0195	.0154	4052.
							.0700	1344.	3449.	-1107.	-6271.	-2611.	-2263.	-.0016	-.0005	.0033	.0472	.0195	.0213	4826.
							.0710	1628.	5399.	-1281.	-7485.	-2034.	-2166.	-.0018	-.0007	.0037	.0552	.0180	.0222	5428.
							.0720	1674.	6736.	-1562.	-8728.	-1521.	-1615.	-.0016	-.0007	.0042	.0637	.0169	.0190	6070.
							.0730	1543.	7067.	-2036.	-10018.	-1221.	-724.	-.0012	-.0006	.0048	.0731	.0171	.0124	6820.
							.0740	1107.	6539.	-2521.	-11159.	-819.	511.	-.0006	-.0004	.0054	.0814	.0166	.0021	7550.
							.0750	420.	5493.	-2861.	-11887.	-275.	1923.	.0003	-.0001	.0057	.0865	.0149	-.0102	8119.
							.0760	-221.	4496.	-2982.	-11977.	104.	3182.	.0011	.0001	.0057	.0869	.0132	-.0213	8354.
							.0770	-674.	4257.	-2749.	-11266.	344.	4129.	.0016	.0003	.0053	.0814	.0112	-.0293	8091.
							.0780	-995.	4905.	-2106.	-9764.	700.	4765.	.0019	.0004	.0044	.0697	.0076	-.0343	7338.
							.0790	-1168.	5833.	-1255.	-7735.	1092.	5026.	.0020	.0004	.0033	.0539	.0031	-.0360	6261.
							.0800	-1132.	6428.	-473.	-5572.	1330.	4864.	.0019	.0003	.0022	.0374	-.0007	-.0344	5066.
							.0810	-980.	6350.	100.	-3601.	1560.	4383.	.0017	.0002	.0012	.0227	-.0042	-.0306	3965.
							.0820	-814.	5280.	370.	-2032.	1698.	3663.	.0014	.0002	.0004	.0112	-.0075	-.0256	3100.
							.0830	-582.	3224.	290.	-942.	2167.	2651.	.0010	.0002	-.0000	.0037	-.0098	-.0189	2394.
							.0840	-223.	729.	-27.	-223.	2298.	1327.	.0006	.0001	-.0003	-.0006	-.0109	-.0098	1795.
							.0850	225.	-1727.	-385.	344.	2445.	-245.	-.0000	.0000	-.0004	-.0039	-.0119	.0013	1673.
							.0860	772.	-3946.	-668.	969.	2582.	-2050.	-.0008	-.0001	-.0006	-.0078	-.0130	.0144	2316.
							.0870	1479.	-5452.	-778.	1794.	2563.	-4057.	-.0017	-.0003	-.0009	-.0131	-.0136	.0298	3453.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.27.23.

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

.0760	-221.	4490.	-2749.	-11266.	344.	4129.	.0016	.0007	.0053	.0814	.0112	-.0293	8091.
.0770	-674.	4257.	-2106.	-9764.	700.	4765.	.0019	.0004	.0044	.0697	.0076	-.0343	7338.
.0780	-995.	4905.	-1255.	-7735.	1092.	5026.	.0020	.0004	.0033	.0539	.0031	-.0360	6261.
.0790	-1168.	5833.	-473.	-5572.	1330.	4864.	.0019	.0003	.0022	.0374	-.0007	-.0344	5066.
.0800	-1132.	6428.	100.	-3601.	1560.	4383.	.0017	.0002	.0012	.0227	-.0042	-.0306	3961.
.0810	-980.	6350.	370.	-2032.	1698.	3663.	.0014	.0002	.0004	.0112	-.0075	-.0156	3100.
.0820	-814.	5280.	290.	-942.	2167.	2651.	.0010	.0002	-.0000	.0037	-.0098	-.0189	2394.
.0830	-582.	3224.	-27.	-223.	2298.	1327.	.0006	.0001	-.0003	-.0006	-.0109	-.0098	1795.
.0840	-223.	729.	-385.	344.	2445.	-245.	-.0000	.0000	-.0004	-.0039	-.0119	.0013	1673.
.0850	225.	-1727.	-668.	969.	2582.	-2050.	-.0008	-.0001	-.0006	-.0078	-.0130	.0144	2316.
.0860	772.	-3946.	-778.	1794.	2563.	-4057.	-.0017	-.0003	-.0009	-.0131	-.0136	.0298	3453.
.0870	1479.	-5452.											

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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	MEMBER	SEQUENCE	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)	
.0880	2288.	-5721.	-612.	2866.	2465.	-6087.	-.0028	-.0006	-.0014	-.0206	-.0143	.0462	4830.	
.0890	3058.	-5068.	-241.	4056.	2410.	-7909.	-.0038	-.0009	-.0020	-.0294	-.0154	.0615	6207.	
.0900	3697.	-4385.	93.	5091.	2306.	-9365.	-.0046	-.0011	-.0024	-.0369	-.0162	.0739	7351.	
.0910	4121.	-4232.	223.	5729.	2099.	-10306.	-.0052	-.0013	-.0027	-.0413	-.0159	.0817	8073.	
.0920	4202.	-4809.	135.	5891.	1917.	-10587.	-.0053	-.0013	-.0027	-.0421	-.0151	.0836	8268.	
.0930	3919.	-6163.	-138.	5665.	1799.	-10211.	-.0049	-.0012	-.0025	-.0399	-.0141	.0795	7964.	
.0940	3417.	-7786.	-482.	5278.	1630.	-9323.	-.0043	-.0009	-.0023	-.0365	-.0126	.0711	7304.	
.0950	2840.	-8768.	-675.	5027.	1385.	-8067.	-.0035	-.0007	-.0021	-.0341	-.0111	.0601	6474.	
.0960	2209.	-8703.	-547.	5136.	1141.	-6543.	-.0027	-.0005	-.0021	-.0349	-.0101	.0477	5659.	
.0970	1544.	-7738.	-91.	5657.	902.	-4852.	-.0019	-.0003	-.0024	-.0391	-.0098	.0345	5060.	
.0980	917.	-5920.	614.	6460.	604.	-3070.	-.0011	-.0001	-.0029	-.0456	-.0096	.0211	4838.	
.0990	336.	-3359.	1444.	7293.	233.	-1199.	-.0003	.0000	-.0034	-.0525	-.0092	.0076	4984.	
.1000	-318.	-663.	2218.	7839.	-162.	810.	.0005	.0002	-.0038	-.0573	-.0084	-.0070	5313.	
.1010	-1150.	1477.	2749.	7811.	-535.	2991.	.0015	.0004	-.0039	-.0578	-.0070	-.0235	5649.	
.1020	-2127.	2778.	2920.	7048.	-883.	5307.	.0026	.0006	-.0035	-.0526	-.0047	-.0418	5977.	
.1030	-3146.	3188.	2701.	5584.	-1233.	7637.	.0038	.0010	-.0028	-.0419	-.0014	-.0607	6431.	
.1040	-4130.	2887.	2191.	3655.	-1565.	9815.	.0051	.0013	-.0019	-.0275	.0025	-.0789	7138.	
.1050	-4995.	2499.	1614.	1627.	-1796.	11669.	.0061	.0016	-.0008	-.0124	.0060	-.0945	8034.	
.1060	-5592.	2632.	1153.	-163.	-1908.	13002.	.0068	.0018	.0000	.0007	.0086	-.1054	8859.	
.1070	-5786.	3324.	845.	-1522.	-2002.	13611.	.0071	.0018	.0007	.0106	.0106	-.1099	9330.	
.1080	-5561.	4320.	680.	-2399.	-2049.	13418.	.0069	.0017	.0011	.0169	.0117	-.1074	9291.	
.1090	-4934.	5425.	622.	-2866.	-1984.	12431.	.0062	.0015	.0013	.0202	.0119	-.0983	8702.	
.1100	-4014.	6465.	564.	-3065.	-2031.	10657.	.0051	.0012	.0014	.0217	.0124	-.0828	7599.	
.1110	-2948.	7557.	510.	-3175.	-1963.	8333.	.0038	.0008	.0014	.0224	.0122	-.0630	6155.	
.1120	-1812.	7660.	258.	-3424.	-1807.	5611.	.0023	.0004	.0016	.0245	.0119	-.0406	4595.	
.1130	-666.	5568.	-405.	-3890.	-1807.	2548.	.0008	.0000	.0020	.0289	.0128	-.0170	3363.	
.1140	413.	2543.	-1184.	-4316.	-1861.	-642.	-.0006	-.0002	.0024	.0334	.0141	.0070	3198.	
.1150	1432.	662.	-1640.	-4343.	-1797.	-3721.	-.0020	-.0006	.0025	.0344	.0141	.0306	4040.	
.1160	2457.	-300.	-1792.	-3833.	-1813.	-6632.	-.0035	-.0009	.0023	.0312	.0138	.0535	5306.	
.1170	3376.	-1361.	-1770.	-2793.	-1927.	-9232.	-.0047	-.0013	.0019	.0242	.0133	.0739	6630.	
.1180	4041.	-1927.	-1455.	-1274.	-2098.	-11259.	-.0057	-.0015	.0012	.0135	.0125	.0898	7767.	
.1190	4233.	-1825.	-794.	605.	-1876.	-12361.	-.0063	-.0017	.0003	-.0008	.0091	.0983	8437.	
.1200	4083.	-2501.	-197.	2539.	-1577.	-12602.	-.0063	-.0016	-.0007	-.0153	.0054	.0994	8730.	
.1210	3810.	-4262.	127.	4327.	-1655.	-12152.	-.0059	-.0015	-.0015	-.0280	.0038	.0946	8766.	
.1220	3138.	-5555.	559.	6083.	-1377.	-10776.	-.0050	-.0012	-.0024	-.0410	.0004	.0824	8392.	
.1230	2155.	-5514.	1193.	7779.	-744.	-8601.	-.0038	-.0009	-.0034	-.0544	-.0048	.0645	7833.	
.1240	1165.	-5511.	1652.	9183.	-114.	-6024.	-.0025	-.0005	-.0042	-.0654	-.0095	.0435	7403.	
.1250	320.	-6578.	1739.	10150.	339.	-3383.	-.0010	-.0001	-.0047	-.0726	-.0127	.0218	7215.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.27.23.

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

.1150	1452.	662.	-1640.	-4343.	-1797.	-3721.	-.0020	-.0006	.0021	.0344	.0141	.0306	4040.
.1160	2457.	-300.	-1792.	-3833.	-1813.	-6632.	-.0035	-.0009	.0023	.0312	.0138	.0535	5306.
.1170	3376.	-1361.	-1770.	-2793.	-1927.	-9232.	-.0047	-.0013	.0019	.0242	.0133	.0739	6630.
.1180	4041.	-1927.	-1455.	-1274.	-2098.	-11259.	-.0057	-.0015	.0012	.0135	.0125	.0898	7767.
.1190	4233.	-1825.	-794.	605.	-1876.	-12361.	-.0063	-.0017	.0003	-.0008	.0091	.0983	8437.
.1200	4087.	-2501.	-197.	2539.	-1577.	-12602.	-.0063	-.0016	-.0007	-.0153	.0054	.0994	8730.
.1210	3810.	-4262.	127.	4327.	-1655.	-12152.	-.0059	-.0015	-.0015	-.0280	.0038	.0946	8766.
.1220	3138.	-5535.	559.	6083.	-1377.	-10776.	-.0050	-.0012	-.0024	-.0410	.0004	.0824	8392.
.1230	2155.	-5514.	1193.	7779.	-744.	-8601.	-.0038	-.0009	-.0034	-.0544	-.0048	.0645	7833.
.1240	1165.	-5511.	1652.	9183.	-114.	-6024.	-.0025	-.0005	-.0047	-.0654	-.0095	.0435	7403.
.1250	320.	-6578.	1739.	10150.	339.	-3383.	-.0010	-.0001	-.0047	-.0726	-.0127	.0218	7215.

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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	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)
.1260	26	2	45				.1260	-457.	-7726.	1741.	10801.	793.	-835.	.0003	.0004	-.0050	-.0774	-.0155	.0009	7322.
.1270							.1270	-1244.	-7725.	1951.	11333.	1696.	1532.	.0016	.0007	-.0054	-.0823	-.0206	-.0181	7792.
.1280							.1280	-1549.	-6396.	2170.	11636.	2311.	3212.	.0023	.0008	-.0057	-.0854	-.0240	-.0303	8284.
.1290							.1290	-1319.	-4426.	2240.	11525.	2480.	4039.	.0024	.0008	-.0057	-.0849	-.0248	-.0348	8400.
.1300							.1300	-1001.	-2514.	2211.	10876.	2688.	4237.	.0023	.0007	-.0054	-.0807	-.0251	-.0345	8074.
.1310							.1310	-743.	-1146.	2000.	9559.	2866.	3875.	.0019	.0006	-.0049	-.0715	-.0246	-.0306	7216.
.1320							.1320	-409.	-584.	1460.	7547.	2888.	2973.	.0014	.0004	-.0039	-.0568	-.0223	-.0230	5804.
.1330							.1330	174.	-578.	597.	4978.	2435.	1527.	.0007	.0002	-.0026	-.0373	-.0170	-.0112	3874.
.1340							.1340	671.	-798.	-282.	2247.	1968.	-131.	-.0002	-.0000	-.0011	-.0166	-.0115	.0019	2015.
.1350							.1350	937.	-759.	-948.	-260.	1732.	-1754.	-.0009	-.0002	.0001	.0019	-.0075	.0144	1671.
.1360							.1360	1312.	-172.	-1457.	-2361.	1260.	-3385.	-.0018	-.0005	.0012	.0176	-.0028	.0274	2908.
.1370							.1370	1745.	333.	-1847.	-3904.	724.	-4837.	-.0026	-.0007	.0020	.0294	.0016	.0392	4218.
.1380							.1380	1977.	225.	-2054.	-4753.	316.	-5896.	-.0031	-.0008	.0025	.0359	.0046	.0474	5109.
.1390							.1390	1852.	-82.	-1935.	-4777.	309.	-6362.	-.0032	-.0009	.0024	.0359	.0045	.0504	5367.
.1400							.1400	1648.	96.	-1546.	-4018.	446.	-6311.	-.0031	-.0009	.0020	.0298	.0028	.0497	5052.
.1410							.1410	1569.	427.	-1085.	-2676.	370.	-5892.	-.0030	-.0008	.0013	.0199	.0016	.0467	4369.
.1420							.1420	1244.	-18.	-569.	-893.	649.	-4937.	-.0024	-.0007	.0004	.0065	-.0019	.0388	3410.
.1430							.1430	673.	-1045.	2.	1152.	1267.	-3541.	-.0016	-.0004	-.0007	-.0090	-.0073	.0268	2651.
.1440							.1440	178.	-1864.	566.	3265.	1901.	-1993.	-.0008	-.0001	-.0018	-.0251	-.0128	.0140	2879.
.1450							.1450	-72.	-2212.	1044.	5255.	2341.	-560.	-.0001	.0001	-.0028	-.0399	-.0172	.0027	3896.
.1460							.1460	-221.	-2271.	1449.	6936.	2681.	652.	.0005	.0002	-.0036	-.0524	-.0207	-.0065	5032.
.1470							.1470	-461.	-2326.	1794.	8137.	3273.	1641.	.0010	.0003	-.0043	-.0618	-.0250	-.0143	6014.
.1480							.1480	-498.	-2549.	1866.	8614.	3577.	2091.	.0012	.0004	-.0046	-.0655	-.0270	-.0178	6443.
.1490							.1490	-255.	-3095.	1590.	8293.	3484.	1877.	.0011	.0004	-.0043	-.0627	-.0261	-.0160	6194.
.1500							.1500	56.	-3785.	1135.	7298.	3320.	1117.	.0008	.0003	-.0038	-.0549	-.0240	-.0102	5457.
.1510							.1510	428.	-4215.	628.	5793.	3023.	-161.	.0001	.0002	-.0030	-.0434	-.0207	-.0003	4406.
.1520							.1520	936.	-4215.	97.	3953.	2587.	-1888.	-.0007	-.0001	-.0020	-.0295	-.0164	.0134	3429.
.1530							.1530	1674.	-3696.	-463.	1918.	1829.	-7975.	-.0019	-.0004	-.0009	-.0139	-.0104	.0305	3220.
.1540							.1540	2405.	-2817.	-940.	-131.	1106.	-6076.	-.0030	-.0007	.0001	.0016	-.0045	.0479	4164.
.1550							.1550	2988.	-1855.	-1313.	-2081.	519.	-7932.	-.0040	-.0010	.0011	.0162	.0005	.0633	5538.
.1560							.1560	3522.	-831.	-1657.	-3882.	-246.	-9454.	-.0049	-.0013	.0021	.0298	.0062	.0761	6891.
.1570							.1570	3858.	353.	-1904.	-5429.	-866.	-10361.	-.0055	-.0015	.0029	.0414	.0108	.0841	7906.
.1580							.1580	3926.	1609.	-2046.	-6689.	-1369.	-10525.	-.0057	-.0016	.0035	.0507	.0146	.0861	8456.
.1590							.1590	3672.	2438.	-2135.	-7657.	-1819.	-9911.	-.0054	-.0016	.0040	.0578	.0178	.0816	8530.
.1600							.1600	3041.	2596.	-2155.	-8270.	-2022.	-8485.	-.0046	-.0014	.0043	.0622	.0194	.0699	8102.
.1610							.1610	2185.	2613.	-2057.	-8445.	-2083.	-6386.	-.0035	-.0010	.0043	.0633	.0197	.0528	7274.
.1620							.1620	1301.	3074.	-1796.	-8145.	-2273.	-3855.	-.0022	-.0007	.0042	.0609	.0202	.0326	6264.
.1630							.1630	256.	3801.	-1316.	-7351.	-2221.	-938.	-.0008	-.0003	.0037	.0546	.0188	.0095	5214.

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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

.1520	936.	-4215.	97.	3953.	2587.	-1888.	-.0007	-.0001	-.0020	-.0295	-.0164	.0134	3429.
.1530	1674.	-3696.	-463.	1918.	1829.	-3975.	-.0019	-.0004	-.0009	-.0139	-.0104	.0305	3220.
.1540	2405.	-2817.	-940.	-131.	1106.	-6076.	-.0030	-.0007	.0001	.0016	-.0045	.0479	4164.
.1550	2988.	-1855.	-1315.	-2081.	519.	-7932.	-.0040	-.0010	.0011	.0162	.0005	.0633	5538.
.1560	3522.	-831.	-1657.	-3882.	-246.	-9454.	-.0049	-.0013	.0021	.0298	.0062	.0761	6891.
.1570	3858.	353.	-1904.	-5429.	-866.	-10361.	-.0055	-.0015	.0029	.0414	.0108	.0841	7906.
.1580	3928.	1609.	-2046.	-6689.	-1369.	-10525.	-.0057	-.0016	.0035	.0507	.0146	.0861	8456.
.1590	3672.	2438.	-2135.	-7657.	-1819.	-9911.	-.0054	-.0016	.0040	.0578	.0178	.0816	8530.
.1600	3041.	2596.	-2155.	-8270.	-2022.	-8485.	-.0046	-.0014	.0043	.0622	.0194	.0699	8102.
.1610	2185.	2613.	-2057.	-8445.	-2083.	-6386.	-.0035	-.0010	.0043	.0633	.0197	.0528	7274.
.1620	1301.	3074.	-1796.	-8145.	-2273.	-3655.	-.0022	-.0007	.0042	.0609	.0202	.0326	6264.
.1630	256.	3801.	-1316.	-7351.	-2221.	-938.	-.0008	-.0003	.0037	.0546	.0188	.0095	5214.

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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 PSVCONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITSINTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	TIME (SEC)	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	-872.	4545.	-706.	-6200.	-2033.	2142.	.0008	.0001	.0030	.0454	.0163	-.0150	4629.							
.1650	-1911.	5175.	-101.	-4896.	-1965.	5110.	.0023	.0005	.0023	.0353	.0143	-.0385	4950.							
.1660	-2907.	5378.	440.	-3580.	-1812.	7855.	.0037	.0008	.0016	.0252	.0119	-.0606	5945.							
.1670	-3815.	5046.	862.	-2369.	-1683.	10177.	.0050	.0012	.0010	.0160	.0398	-.0797	7134.							
.1680	-4615.	4382.	1192.	-1286.	-1507.	11960.	.0060	.0015	.0004	.0079	.0077	-.0948	8172.							
.1690	-5145.	3627.	1421.	-356.	-1448.	13028.	.0066	.0017	-.0000	.0011	.0063	-.1041	8839.							
.1700	-5379.	2652.	1547.	450.	-1418.	13324.	.0069	.0018	-.0004	-.0047	.0053	-.1073	9037.							
.1710	-5387.	1528.	1631.	1199.	-1208.	12896.	.0068	.0018	-.0005	-.0101	.0035	-.1048	8768.							
.1720	-5011.	849.	1706.	1886.	-1183.	11662.	.0062	.0017	-.0011	-.0150	.0027	-.0954	8003.							
.1730	-4354.	584.	1799.	2503.	-1094.	9791.	.0053	.0014	-.0013	-.0194	.0016	-.0804	6852.							
.1740	-3469.	293.	1812.	2955.	-944.	7400.	.0040	.0011	-.0016	-.0227	.0004	-.0612	5408.							
.1750	-2389.	14.	1696.	3140.	-857.	4622.	.0026	.0007	-.0016	-.0238	-.0001	-.0388	3811.							
.1760	-1274.	-65.	1499.	3010.	-632.	1735.	.0011	.0003	-.0015	-.0227	-.0009	-.0154	2380.							
.1770	-137.	-345.	1123.	2483.	-426.	-1139.	-.0004	-.0001	-.0013	-.0186	-.0012	.0079	1863.							
.1780	913.	-1394.	507.	1587.	-129.	-3820.	-.0018	-.0004	-.0008	-.0116	-.0013	.0291	2790.							
.1790	1897.	-2668.	-240.	465.	134.	-6214.	-.0030	-.0007	-.0001	-.0028	-.0009	.0480	4201.							
.1800	2773.	-3420.	-917.	-662.	436.	-8178.	-.0040	-.0010	.0005	.0058	-.0008	.0638	5538.							
.1810	3438.	-3875.	-1459.	-1609.	983.	-9583.	-.0047	-.0012	.0009	.0128	-.0021	.0752	6583.							
.1820	4028.	-4203.	-1933.	-2310.	1390.	-10526.	-.0052	-.0013	.0013	.0181	-.0031	.0831	7324.							
.1830	4469.	-4356.	-2231.	-2666.	1781.	-10921.	-.0055	-.0014	.0014	.0207	-.0044	.0869	7672.							
.1840	4671.	-3909.	-2274.	-2642.	2255.	-10709.	-.0055	-.0014	.0014	.0202	-.0067	.0860	7588.							
.1850	4627.	-3348.	-2156.	-2319.	2722.	-9949.	-.0052	-.0013	.0011	.0173	-.0094	.0806	7126.							
.1860	4354.	-2918.	-1957.	-1814.	3141.	-8711.	-.0046	-.0012	.0008	.0131	-.0120	.0712	6360.							
.1870	3923.	-2423.	-1698.	-1247.	3344.	-7121.	-.0039	-.0010	.0005	.0085	-.0138	.0589	5369.							
.1880	3229.	-2018.	-1367.	-685.	3563.	-5201.	-.0029	-.0007	.0001	.0039	-.0156	.0437	4275.							
.1890	2361.	-1838.	-1040.	-210.	3686.	-3139.	-.0018	-.0004	-.0002	-.0001	-.0169	.0269	3266.							
.1900	1494.	-1589.	-735.	123.	3570.	-1138.	-.0007	-.0002	-.0004	-.0028	-.0169	.0105	2527.							
.1910	652.	-1091.	-408.	317.	3395.	717.	.0002	.0001	-.0005	-.0046	-.0165	-.0045	2349.							
.1920	-103.	-442.	-99.	342.	3095.	2273.	.0010	.0003	-.0006	-.0051	-.0153	-.0171	2599.							
.1930	-726.	379.	169.	169.	2696.	3446.	.0016	.0004	-.0005	-.0041	-.0134	-.0266	2951.							
.1940	-1155.	1459.	373.	-246.	2220.	4196.	.0020	.0005	-.0003	-.0012	-.0108	-.0323	3204.							
.1950	-1377.	2418.	428.	-955.	1657.	4503.	.0021	.0005	.0000	.0041	-.0074	-.0345	3298.							
.1960	-1451.	2873.	291.	-1951.	1055.	4411.	.0020	.0005	.0005	.0117	-.0035	-.0337	3328.							
.1970	-1409.	3111.	36.	-3139.	493.	4010.	.0018	.0004	.0012	.0208	.0006	-.0306	3449.							
.1980	-1223.	3470.	-271.	-4403.	-41.	3379.	.0015	.0003	.0019	.0304	.0046	-.0254	3741.							
.1990	-912.	3707.	-639.	-5634.	-584.	2594.	.0011	.0002	.0026	.0400	.0087	-.0188	4199.							
.2000	-571.	3649.	-1024.	-6705.	-1072.	1785.	.0006	.0001	.0032	.0485	.0124	-.0122	4732.							
.2010	-266.	3584.	-1315.	-7482.	-1440.	1095.	.0003	-.0000	.0036	.0547	.0152	-.0066	5188.							

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2 SAFETY COLD FKW24F--2 PSVCONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITSINTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

.1910	652.	-1021.	-408.	317.	3395.	717.	.0002	.0001	-.0005	-.0046	-.0165	-.0045	2349.
.1920	-103.	-442.	-99.	342.	3095.	2273.	.0010	.0003	-.0006	-.0051	-.0153	-.0171	2599.
.1930	-726.	379.	169.	169.	2696.	3446.	.0016	.0004	-.0005	-.0041	-.0134	-.0266	2951.
.1940	-1155.	1459.	373.	-246.	2220.	4196.	.0020	.0005	-.0007	-.0012	-.0108	-.0323	3204.
.1950	-1377.	2418.	428.	-955.	1657.	4503.	.0021	.0005	.0000	.0041	-.0074	-.0345	3298.
.1960	-1451.	2873.	291.	-1951.	1055.	4411.	.0020	.0005	.0005	.0117	-.0035	-.0337	3328.
.1970	-1409.	3111.	36.	-3139.	493.	4010.	.0018	.0004	.0012	.0208	.0006	-.0306	3449.
.1980	-1223.	3470.	-271.	-4403.	-41.	3379.	.0015	.0003	.0019	.0304	.0046	-.0254	3741.
.1990	-912.	3707.	-639.	-5634.	-584.	2594.	.0011	.0002	.0026	.0400	.0087	-.0188	4199.
.2000	-571.	3649.	-1024.	-6705.	-1072.	1785.	.0006	.0001	.0032	.0485	.0124	-.0122	4732.
.2010	-266.	3584.	-1315.	-7482.	-1440.	1095.	.0003	-.0000	.0036	.0547	.0152	-.0066	5188.

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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	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS
TIME (SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(DEG)	(DEG)	(DEG)	(PSI)
.2020	-3.	3639.	-1475.	-7883.	-1746.	592.	-.0000	-.0001	.0039	.0580	.0171	-.0023							5457.
.2030	184.	3610.	-1523.	-7878.	-2044.	321.	-.0002	-.0002	.0039	.0584	.0186	.0000							5490.
.2040	209.	3496.	-1425.	-7458.	-2271.	360.	-.0002	-.0002	.0038	.0556	.0192	-.0003							5261.
.2050	37.	3417.	-1156.	-6661.	-2405.	741.	.0000	-.0001	.0034	.0497	.0189	-.0035							4779.
.2060	-295.	3179.	-792.	-5580.	-2524.	1409.	.0004	.0000	.0029	.0418	.0182	-.0072							4236.
.2070	-754.	2599.	-399.	-4308.	-2659.	2293.	.0010	.0002	.0023	.0326	.0173	-.0169							3746.
.2080	-1322.	1906.	48.	-2904.	-2740.	3337.	.0016	.0004	.0016	.0222	.0161	-.0261							3508.
.2090	-1943.	1369.	558.	-1429.	-2755.	4450.	.0023	.0006	.0009	.0113	.0143	-.0359							3657.
.2100	-2516.	963.	1062.	19.	-2766.	5493.	.0029	.0008	.0001	.0005	.0126	-.0449							4145.
.2110	-2978.	626.	1500.	1337.	-2771.	6366.	.0034	.0009	-.0005	-.0093	.0110	-.0525							4766.
.2120	-3310.	359.	1852.	2436.	-2717.	7016.	.0038	.0010	-.0011	-.0175	.0095	-.0581							5330.
.2130	-3497.	68.	2077.	3242.	-2597.	7384.	.0041	.0011	-.0015	-.0235	.0079	-.0613							5711.
.2140	-3504.	-281.	2143.	3714.	-2443.	7419.	.0041	.0011	-.0017	-.0270	.0067	-.0618							5830.
.2150	-3313.	-514.	2070.	3850.	-2264.	7113.	.0039	.0011	-.0018	-.0280	.0057	-.0593							5661.
.2160	-2955.	-556.	1892.	3671.	-2046.	6498.	.0036	.0010	-.0017	-.0266	.0050	-.0540							5216.
.2170	-2481.	-578.	1611.	3205.	-1792.	5622.	.0031	.0009	-.0015	-.0231	.0044	-.0467							4526.
.2180	-1920.	-617.	1243.	2498.	-1518.	4547.	.0025	.0007	-.0011	-.0179	.0040	-.0376							3644.
.2190	-1294.	-486.	838.	1616.	-1245.	3351.	.0018	.0005	-.0007	-.0114	.0039	-.0275							2645.
.2200	-655.	-133.	435.	624.	-981.	2123.	.0011	.0003	-.0002	-.0041	.0038	-.0170							1632.
.2210	-76.	272.	40.	-427.	-713.	952.	.0004	.0001	.0003	.0035	.0038	-.0070							852.
.2220	409.	616.	-344.	-1499.	-443.	-92.	-.0002	-.0001	.0008	.0113	.0038	.0019							1055.
.2230	794.	873.	-712.	-2545.	-201.	-969.	-.0007	-.0002	.0013	.0188	.0039	.0092							1840.
.2240	1062.	970.	-1053.	-3501.	13.	-1657.	-.0011	-.0003	.0017	.0258	.0041	.0149							2611.
.2250	1198.	892.	-1334.	-4287.	230.	-2145.	-.0013	-.0004	.0021	.0314	.0040	.0187							3235.
.2260	1233.	782.	-1514.	-4818.	455.	-2453.	-.0014	-.0004	.0023	.0352	.0035	.0210							3657.
.2270	1223.	778.	-1574.	-5038.	663.	-2621.	-.0015	-.0004	.0024	.0366	.0028	.0222							3854.
.2280	1196.	882.	-1515.	-4930.	865.	-2675.	-.0015	-.0004	.0023	.0355	.0017	.0226							3825.
.2290	1153.	1045.	-1353.	-4517.	1094.	-2623.	-.0015	-.0004	.0020	.0322	.0000	.0222							3597.
.2300	1107.	1235.	-1119.	-3867.	1344.	-2481.	-.0014	-.0004	.0017	.0271	-.0020	.0212							3227.
.2310	1071.	1398.	-864.	-3075.	1596.	-2265.	-.0014	-.0004	.0012	.0210	-.0041	.0196							2790.
.2320	1040.	1470.	-631.	-2238.	1853.	-1985.	-.0012	-.0004	.0008	.0146	-.0064	.0175							2372.
.2330	1000.	1390.	-454.	-1443.	2115.	-1655.	-.0011	-.0003	.0004	.0086	-.0085	.0150							2055.
.2340	948.	1080.	-355.	-754.	2358.	-1304.	-.0009	-.0003	.0000	.0035	-.0104	.0121							1886.
.2350	891.	508.	-340.	-193.	2564.	-977.	-.0007	-.0002	-.0002	-.0005	-.0120	.0093							1854.
.2360	847.	-188.	-375.	268.	2719.	-722.	-.0005	-.0001	-.0004	-.0037	-.0132	.0069							1905.
.2370	837.	-775.	-406.	675.	2802.	-584.	-.0004	-.0001	-.0006	-.0065	-.0139	.0056							1982.
.2380	870.	-1139.	-397.	1065.	2797.	-595.	-.0004	-.0001	-.0008	-.0092	-.0143	.0055							2057.
.2390	939.	-1326.	-347.	1443.	2704.	-763.	-.0005	-.0001	-.0009	-.0117	-.0142	.0068							2129.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.27.23.

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

.2290	1153.	1045.	-1353.	-4517.	1094.	-2623.	-.0015	-.0004	.0020	.0322	.0000	.0222	3597.
.2300	1107.	1235.	-1119.	-3867.	1344.	-2481.	-.0014	-.0004	.0017	.0271	-.0020	.0212	3227.
.2310	1071.	1398.	-864.	-3075.	1596.	-2265.	-.0014	-.0004	.0012	.0210	-.0041	.0196	2790.
.2320	1040.	1470.	-631.	-2238.	1853.	-1985.	-.0012	-.0004	.0008	.0146	-.0064	.0175	2372.
.2330	1009.	1390.	-454.	-1443.	2115.	-1655.	-.0011	-.0003	.0004	.0086	-.0085	.0150	2055.
.2340	948.	1080.	-355.	-754.	2358.	-1304.	-.0009	-.0003	.0000	.0035	-.0104	.0121	1886.
.2350	891.	508.	-340.	-193.	2564.	-977.	-.0007	-.0002	-.0002	-.0005	-.0120	.0093	1854.
.2360	847.	-188.	-375.	268.	2719.	-722.	-.0005	-.0001	-.0004	-.0037	-.0132	.0069	1905.
.2370	837.	-775.	-406.	675.	2802.	-584.	-.0004	-.0001	-.0006	-.0065	-.0139	.0056	1982.
.2380	870.	-1139.	-397.	1065.	2797.	-595.	-.0004	-.0001	-.0008	-.0092	-.0143	.0055	2057.
.2390	939.	-1326.	-347.	1443.	2704.	-763.	-.0005	-.0001	-.0009	-.0117	-.0142	.0068	2129.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.27.23.

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)
26	2	45					.2400	1035.	-1397.	-270.	1789.	2518.	-1074.	-.0006	-.0001	-.0010	-.0140	-.0137	.0092	2204.
							.2410	1140.	-1395.	-186.	2071.	2236.	-1493.	-.0008	-.0002	-.0011	-.0158	-.0127	.0125	2288.
							.2420	1227.	-1415.	-115.	2264.	1880.	-1967.	-.0011	-.0002	-.0012	-.0169	-.0112	.0162	2386.
							.2430	1271.	-1556.	-77.	2356.	1473.	-2441.	-.0013	-.0003	-.0012	-.0173	-.0094	.0197	2493.
							.2440	1270.	-1814.	-72.	2367.	1022.	-2868.	-.0014	-.0003	-.0011	-.0169	-.0072	.0226	2600.
							.2450	1222.	-2111.	-77.	2345.	545.	-3205.	-.0015	-.0004	-.0010	-.0163	-.0048	.0248	2702.
							.2460	1121.	-2389.	-59.	2354.	81.	-3411.	-.0016	-.0004	-.0010	-.0159	-.0026	.0260	2794.
							.2470	975.	-2583.	8.	2452.	-352.	-3462.	-.0015	-.0003	-.0009	-.0163	-.0007	.0260	2870.
							.2480	800.	-2589.	145.	2677.	-759.	-3346.	-.0014	-.0003	-.0010	-.0177	.0010	.0247	2933.
							.2490	595.	-2354.	359.	3032.	-1125.	-3044.	-.0013	-.0003	-.0012	-.0202	.0023	.0222	2994.
							.2500	339.	-1937.	632.	3479.	-1422.	-2538.	-.0010	-.0002	-.0014	-.0235	.0031	.0182	3057.
							.2510	29.	-1462.	920.	3948.	-1653.	-1830.	-.0007	-.0001	-.0016	-.0270	.0035	.0127	3138.
							.2520	-330.	-1048.	1171.	4357.	-1838.	-942.	-.0002	-.0000	-.0018	-.0301	.0039	.0056	3250.
							.2530	-742.	-794.	1355.	4650.	-1970.	94.	.0003	.0001	-.0020	-.0323	.0041	-.0027	3404.
							.2540	-1201.	-727.	1466.	4807.	-2037.	1226.	.0009	.0003	-.0020	-.0335	.0042	-.0119	3615.
							.2550	-1666.	-760.	1518.	4847.	-2057.	2370.	.0015	.0004	-.0021	-.0339	.0042	-.0212	3892.
							.2560	-2087.	-789.	1532.	4809.	-2049.	3431.	.0021	.0006	-.0021	-.0336	.0042	-.0299	4215.
							.2570	-2432.	-764.	1535.	4739.	-2009.	4324.	.0025	.0007	-.0020	-.0332	.0041	-.0371	4531.
							.2580	-2676.	-640.	1549.	4674.	-1933.	4976.	.0029	.0008	-.0020	-.0329	.0037	-.0424	4783.
							.2590	-2789.	-369.	1581.	4622.	-1832.	5330.	.0030	.0009	-.0020	-.0327	.0033	-.0450	4913.
							.2600	-2755.	25.	1612.	4565.	-1714.	5354.	.0030	.0008	-.0020	-.0324	.0027	-.0449	4881.
							.2610	-2579.	450.	1613.	4456.	-1573.	5045.	.0028	.0008	-.0020	-.0318	.0022	-.0421	4659.
							.2620	-2283.	811.	1552.	4246.	-1405.	4428.	.0024	.0006	-.0019	-.0305	.0016	-.0367	4242.
							.2630	-1856.	1004.	1400.	3892.	-1208.	3542.	.0019	.0005	-.0018	-.0280	.0011	-.0293	3639.
							.2640	-1404.	936.	1138.	3385.	-985.	2427.	.0013	.0003	-.0015	-.0242	.0007	-.0202	2885.
							.2650	-847.	630.	782.	2762.	-742.	1130.	.0007	.0002	-.0012	-.0195	.0004	-.0097	2073.
							.2660	-232.	232.	381.	2100.	-478.	-293.	-.0001	-.0000	-.0009	-.0145	.0000	.0018	1465.
							.2670	424.	-133.	-10.	1490.	-191.	-1781.	-.0009	-.0002	-.0006	-.0099	-.0005	.0139	1570.
							.2680	1098.	-428.	-355.	1007.	109.	-3270.	-.0017	-.0004	-.0003	-.0063	-.0012	.0260	2308.
							.2690	1761.	-644.	-631.	703.	408.	-4687.	-.0024	-.0006	-.0002	-.0039	-.0022	.0376	3207.
							.2700	2369.	-783.	-821.	598.	706.	-5947.	-.0031	-.0008	-.0001	-.0032	-.0034	.0480	4057.
							.2710	2873.	-901.	-926.	687.	1002.	-6967.	-.0037	-.0010	-.0002	-.0038	-.0048	.0565	4767.
							.2720	3237.	-1070.	-964.	940.	1281.	-7683.	-.0040	-.0011	-.0003	-.0057	-.0064	.0624	5288.
							.2730	3432.	-1322.	-946.	1322.	1533.	-8048.	-.0042	-.0011	-.0005	-.0086	-.0080	.0653	5594.
							.2740	3443.	-1683.	-881.	1804.	1764.	-8040.	-.0042	-.0011	-.0008	-.0122	-.0096	.0651	5680.
							.2750	3274.	-2167.	-776.	2364.	1964.	-7678.	-.0040	-.0010	-.0010	-.0164	-.0112	.0618	5574.
							.2760	2958.	-2687.	-624.	2996.	2119.	-7013.	-.0036	-.0009	-.0014	-.0212	-.0127	.0560	5335.
							.2770	2531.	-3096.	-410.	3693.	2230.	-6116.	-.0030	-.0007	-.0017	-.0264	-.0141	.0483	5045.

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ADLPIPE STRESS ANALYSIS

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18.27.23.

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

.2660	-232.	232.	-81.	2100.	-478.	-293.	-.0001	-.0000	-.0009	-.0145	.0000	.0018	1465.
.2670	424.	-133.	-10.	1490.	-191.	-1781.	-.0009	-.0002	-.0006	-.0099	-.0005	.0139	1570.
.2680	1098.	-428.	-355.	1007.	109.	-3270.	-.0017	-.0004	-.0003	-.0063	-.0012	.0260	2308.
.2690	1761.	-644.	-631.	703.	408.	-4637.	-.0024	-.0006	-.0002	-.0039	-.0022	.0376	3207.
.2700	2369.	-783.	-821.	598.	706.	-5947.	-.0031	-.0008	-.0001	-.0032	-.0034	.0480	4057.
.2710	2873.	-901.	-926.	687.	1002.	-6967.	-.0037	-.0010	-.0002	-.0038	-.0048	.0565	4767.
.2720	3237.	-1070.	-964.	940.	1281.	-7683.	-.0040	-.0011	-.0003	-.0057	-.0064	.0624	5288.
.2730	3432.	-1322.	-946.	1322.	1533.	-8048.	-.0042	-.0011	-.0005	-.0086	-.0080	.0653	5554.
.2740	3443.	-1683.	-881.	1804.	1764.	-8040.	-.0042	-.0011	-.0008	-.0122	-.0096	.0651	5680.
.2750	3274.	-2167.	-776.	2364.	1964.	-7678.	-.0040	-.0010	-.0010	-.0164	-.0112	.0618	5574.
.2760	2958.	-2687.	-624.	2996.	2119.	-7013.	-.0036	-.0009	-.0014	-.0212	-.0127	.0560	5335.
.2770	2531.	-3096.	-410.	3693.	2230.	-6116.	-.0030	-.0007	-.0017	-.0264	-.0141	.0483	5045.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.27.23.

S/RV PIPING KEWAUNEE GKWO0F 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	26	MEMBER	2	SEQUENCE	45	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	2033.	-3338.	-133.	4435.	2300.	-5074.	-.0024	-.0006	-.0021	-.0321	-.0153	.0395	4800.		
.2790	1507.	-3459.	181.	5176.	2320.	-3982.	-.0018	-.0004	-.0025	-.0377	-.0164	.0304	4671.		
.2800	994.	-3490.	499.	5855.	2285.	-2932.	-.0012	-.0002	-.0029	-.0429	-.0171	.0216	4674.		
.2810	528.	-3423.	798.	6411.	2203.	-1995.	-.0007	-.0001	-.0032	-.0472	-.0174	.0138	4763.		
.2820	135.	-3279.	1047.	6787.	2081.	-1230.	-.0003	.0000	-.0034	-.0501	-.0174	.0075	4856.		
.2830	-166.	-3120.	1215.	6932.	1919.	-677.	-.0000	.0001	-.0034	-.0512	-.0169	.0029	4869.		
.2840	-361.	-2982.	1282.	6820.	1725.	-353.	.0002	.0001	-.0034	-.0504	-.0159	.0002	4748.		
.2850	-445.	-2857.	1249.	6458.	1510.	-256.	.0002	.0002	-.0032	-.0477	-.0145	-.0006	4474.		
.2860	-422.	-2699.	1131.	5879.	1280.	-365.	.0002	.0001	-.0029	-.0433	-.0127	.0003	4063.		
.2870	-307.	-2474.	951.	5131.	1043.	-640.	-.0000	.0001	-.0025	-.0377	-.0107	.0027	3555.		
.2880	-125.	-2205.	732.	4271.	810.	-1030.	-.0002	.0000	-.0021	-.0312	-.0086	.0061	3011.		
.2890	94.	-1923.	493.	3361.	588.	-1475.	-.0005	-.0001	-.0016	-.0243	-.0065	.0099	2505.		
.2900	322.	-1592.	263.	2459.	378.	-1911.	-.0008	-.0002	-.0011	-.0176	-.0044	.0138	2114.		
.2910	528.	-1183.	66.	1613.	189.	-2275.	-.0010	-.0002	-.0007	-.0113	-.0025	.0171	1884.		
.2920	682.	-769.	-93.	852.	31.	-2510.	-.0012	-.0003	-.0003	-.0056	-.0009	.0194	1787.		
.2930	765.	-441.	-222.	191.	-98.	-2582.	-.0013	-.0003	-.0000	-.0008	.0005	.0203	1746.		
.2940	773.	-167.	-316.	-357.	-201.	-2472.	-.0012	-.0003	.0003	.0032	.0016	.0196	1689.		
.2950	708.	127.	-363.	-786.	-274.	-2181.	-.0011	-.0003	.0005	.0063	.0024	.0175	1573.		
.2960	578.	404.	-374.	-1105.	-322.	-1731.	-.0009	-.0003	.0006	.0085	.0029	.0141	1401.		
.2970	396.	578.	-366.	-1332.	-353.	-1168.	-.0006	-.0002	.0007	.0101	.0033	.0097	1218.		
.2980	184.	670.	-343.	-1486.	-377.	-544.	-.0003	-.0001	.0008	.0111	.0035	.0047	1096.		
.2990	-34.	763.	-298.	-1572.	-401.	85.	-.0000	-.0000	.0008	.0116	.0037	-.0003	1095.		
.3000	-238.	877.	-234.	-1607.	-430.	665.	.0003	.0000	.0006	.0118	.0038	-.0049	1208.		
.3010	-413.	987.	-161.	-1615.	-472.	1151.	.0005	.0001	.0008	.0117	.0040	-.0087	1374.		
.3020	-545.	1102.	-87.	-1619.	-529.	1517.	.0007	.0002	.0008	.0117	.0042	-.0116	1537.		
.3030	-630.	1249.	-19.	-1644.	-601.	1753.	.0008	.0002	.0008	.0118	.0045	-.0135	1670.		
.3040	-671.	1423.	35.	-1714.	-685.	1866.	.0009	.0002	.0008	.0122	.0049	-.0143	1769.		
.3050	-676.	1591.	61.	-1853.	-775.	1873.	.0009	.0002	.0009	.0132	.0055	-.0142	1851.		
.3060	-655.	1733.	52.	-2075.	-866.	1800.	.0008	.0002	.0010	.0148	.0062	-.0136	1942.		
.3070	-619.	1843.	6.	-2383.	-954.	1674.	.0007	.0001	.0011	.0171	.0069	-.0125	2066.		
.3080	-579.	1912.	-73.	-2766.	-1030.	1519.	.0007	.0001	.0013	.0199	.0077	-.0113	2237.		
.3090	-541.	1932.	-179.	-3201.	-1090.	1353.	.0006	.0001	.0015	.0231	.0085	-.0100	2455.		
.3100	-506.	1910.	-299.	-3656.	-1132.	1190.	.0005	.0001	.0017	.0265	.0092	-.0087	2702.		
.3110	-473.	1888.	-416.	-4092.	-1154.	1036.	.0004	.0001	.0020	.0297	.0098	-.0075	2950.		
.3120	-439.	1911.	-513.	-4475.	-1150.	900.	.0004	.0000	.0021	.0325	.0103	-.0064	3173.		
.3130	-401.	1930.	-584.	-4782.	-1120.	789.	.0003	.0000	.0023	.0347	.0105	-.0055	3353.		
.3140	-361.	2058.	-633.	-5006.	-1066.	711.	.0002	-.0000	.0024	.0362	.0105	-.0048	3483.		
.3150	-324.	2130.	-662.	-5144.	-985.	678.	.0002	-.0000	.0024	.0371	.0102	-.0045	3560.		

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83/12/02. 18.27.23.

S/RV PIPING KEWAUNEE GKWO8F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

.3050	-676.	1591.	61.	-1853.	-775.	1873.	.0009	.0002	.0009	.0132	.0055	-.0142	1851.
.3060	-655.	1733.	52.	-2075.	-866.	1800.	.0008	.0002	.0010	.0148	.0062	-.0136	1942.
.3070	-619.	1843.	6.	-2383.	-954.	1674.	.0007	.0001	.0011	.0171	.0069	-.0125	2066.
.3080	-579.	1912.	-73.	-2766.	-1030.	1519.	.0007	.0001	.0013	.0199	.0077	-.0113	2237.
.3090	-541.	1932.	-179.	-3201.	-1090.	1352.	.0006	.0001	.0015	.0231	.0085	-.0100	2455.
.3100	-506.	1910.	-299.	-3656.	-1132.	1190.	.0005	.0001	.0017	.0265	.0092	-.0087	2702.
.3110	-473.	1888.	-416.	-4092.	-1154.	1036.	.0004	.0001	.0020	.0297	.0098	-.0075	2950.
.3120	-439.	1911.	-513.	-4475.	-1150.	900.	.0004	.0000	.0021	.0325	.0103	-.0064	3173.
.3130	-401.	1930.	-584.	-4782.	-1120.	789.	.0003	.0000	.0023	.0347	.0105	-.0055	3353.
.3140	-361.	2058.	-633.	-5066.	-1066.	711.	.0002	.0000	.0024	.0362	.0105	-.0048	3483.
.3150	-324.	2130.	-662.	-5144.	-985.	678.	.0002	-.0000	.0024	.0371	.0102	-.0045	3560.

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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)
.3160	26	2	45					-296.	2202.	-674.	-5201.	-878.	702.	.0002	-.0000	.0024	.0374	.0098	-.0045	3587.
.3170								-283.	2247.	-675.	-5187.	-746.	794.	.0002	-.0000	.0024	.0372	.0091	-.0052	3573.
.3180								-291.	2219.	-673.	-5109.	-593.	957.	.0003	.0000	.0024	.0365	.0083	-.0064	3526.
.3190								-324.	2106.	-667.	-4970.	-419.	1190.	.0004	.0001	.0023	.0354	.0073	-.0082	3456.
.3200								-380.	1949.	-649.	-4763.	-226.	1486.	.0006	.0001	.0021	.0338	.0062	-.0106	3366.
.3210								-451.	1785.	-611.	-4485.	-19.	1825.	.0008	.0002	.0020	.0316	.0049	-.0133	3263.
.3220								-526.	1630.	-551.	-4139.	194.	2181.	.0009	.0002	.0018	.0290	.0034	-.0162	3156.
.3230								-597.	1499.	-469.	-3738.	410.	2528.	.0011	.0003	.0016	.0259	.0020	-.0189	3054.
.3240								-652.	1406.	-373.	-3308.	622.	2835.	.0013	.0003	.0013	.0226	.0004	-.0214	2966.
.3250								-681.	1348.	-275.	-2886.	819.	3070.	.0014	.0003	.0011	.0193	-.0010	-.0232	2893.
.3260								-676.	1303.	-195.	-2517.	992.	3204.	.0015	.0004	.0009	.0165	-.0022	-.0242	2827.
.3270								-633.	1231.	-150.	-2242.	1134.	3216.	.0015	.0004	.0008	.0144	-.0032	-.0242	2751.
.3280								-550.	1104.	-155.	-2092.	1234.	3088.	.0014	.0003	.0007	.0133	-.0039	-.0232	2648.
.3290								-427.	934.	-210.	-2078.	1286.	2813.	.0012	.0003	.0007	.0133	-.0041	-.0210	2512.
.3300								-263.	758.	-305.	-2191.	1287.	2397.	.0010	.0003	.0008	.0142	-.0039	-.0177	2355.
.3310								-65.	598.	-429.	-2409.	1235.	1860.	.0008	.0002	.0009	.0160	-.0034	-.0134	2214.
.3320								156.	466.	-567.	-2698.	1132.	1236.	.0005	.0001	.0011	.0183	-.0015	-.0085	2141.
.3330								382.	384.	-699.	-3021.	987.	577.	.0001	.0000	.0013	.0209	-.0014	-.0032	2177.
.3340								595.	387.	-810.	-3340.	809.	-58.	-.0002	-.0001	.0015	.0235	-.0001	.0019	2317.
.3350								773.	478.	-890.	-3628.	605.	-603.	-.0005	-.0002	.0016	.0258	.0012	.0063	2512.
.3360								890.	617.	-937.	-3865.	386.	-997.	-.0007	-.0002	.0018	.0277	.0025	.0095	2703.
.3370								923.	751.	-953.	-4041.	167.	-1186.	-.0008	-.0002	.0019	.0291	.0038	.0110	2841.
.3380								860.	861.	-940.	-4145.	47.	-1137.	-.0008	-.0002	.0020	.0300	.0049	.0106	2898.
.3390								700.	964.	-892.	-4167.	-251.	-842.	-.0006	-.0002	.0020	.0302	.0059	.0082	2871.
.3400								449.	1081.	-805.	-4096.	-439.	-313.	-.0003	-.0001	.0020	.0298	.0067	.0038	2785.
.3410								124.	1218.	-677.	-3931.	-611.	416.	.0001	-.0000	.0019	.0286	.0072	-.0021	2696.
.3420								-252.	1385.	-511.	-3676.	-768.	1293.	.0005	.0001	.0018	.0267	.0076	-.0092	2677.
.3430								-652.	1610.	-313.	-3350.	-913.	2254.	.0010	.0002	.0016	.0242	.0079	-.0170	2790.
.3440								-1048.	1902.	-93.	-2981.	-1047.	3236.	.0015	.0004	.0014	.0214	.0080	-.0248	3048.
.3450								-1419.	2231.	126.	-2611.	-1174.	4173.	.0020	.0005	.0012	.0186	.0081	-.0323	3411.
.3460								-1745.	2547.	321.	-2286.	-1297.	5009.	.0024	.0006	.0010	.0161	.0083	-.0389	3813.
.3470								-2010.	2817.	470.	-2046.	-1418.	5697.	.0027	.0007	.0009	.0143	.0085	-.0444	4191.
.3480								-2206.	3011.	558.	-1917.	-1535.	6204.	.0030	.0007	.0009	.0134	.0089	-.0484	4497.
.3490								-2326.	3103.	579.	-1908.	-1648.	6505.	.0032	.0008	.0009	.0134	.0094	-.0508	4703.
.3500								-2366.	3088.	535.	-2004.	-1754.	6591.	.0032	.0008	.0009	.0142	.0100	-.0515	4791.
.3510								-2325.	2998.	444.	-2168.	-1849.	6466.	.0031	.0008	.0010	.0156	.0107	-.0505	4762.
.3520								-2208.	2869.	328.	-2354.	-1927.	6146.	.0030	.0007	.0012	.0172	.0114	-.0480	4622.
.3530								-2024.	2718.	205.	-2513.	-1984.	5661.	.0027	.0007	.0013	.0186	.0119	-.0442	4384.

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.3420	-252.	1285.	511.	-2676.	-768.	1293.	.0005	.0001	.0018	.0267	.0076	-.0092	2677.
.3430	-652.	1610.	-313.	-3350.	-913.	2254.	.0010	.0002	.0016	.0242	.0079	-.0170	2790.
.3440	-1048.	1902.	-93.	-2981.	-1047.	3236.	.0015	.0004	.0014	.0214	.0080	-.0248	3048.
.3450	-1419.	2231.	126.	-2611.	-1174.	4173.	.0020	.0005	.0012	.0186	.0081	-.0323	3411.
.3460	-1745.	2547.	321.	-2286.	-1297.	5009.	.0024	.0006	.0010	.0161	.0083	-.0389	3813.
.3470	-2010.	2817.	470.	-2046.	-1418.	5697.	.0027	.0007	.0009	.0143	.0085	-.0444	4191.
.3480	-2206.	3011.	550.	-1917.	-1535.	6204.	.0030	.0007	.0009	.0134	.0089	-.0484	4497.
.3490	-2326.	3103.	579.	-1908.	-1648.	6505.	.0032	.0008	.0009	.0134	.0094	-.0508	4703.
.3500	-2366.	3088.	535.	-2004.	-1754.	6591.	.0032	.0008	.0009	.0142	.0100	-.0515	4791.
.3510	-2325.	2998.	444.	-2168.	-1849.	6466.	.0031	.0008	.0010	.0156	.0107	-.0505	4762.
.3520	-2208.	2869.	326.	-2354.	-1927.	6146.	.0030	.0007	.0012	.0172	.0114	-.0480	4622.
.3530	-2024.	2718.	205.	-2513.	-1984.	5661.	.0027	.0007	.0013	.0186	.0119	-.0442	4384.

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SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS
26	2	45					(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.3540	-1789.	2546.	92.	-2604.	-2015.	5050.	.0024	.0006	.0013	.0194	.0122	-.0393	4063.							
.3550	-1520.	2354.	2.	-2595.	-2016.	4359.	.0021	.0005	.0014	.0195	.0123	-.0338	3679.							
.3560	-1239.	2142.	-57.	-2467.	-1984.	3637.	.0017	.0004	.0013	.0188	.0120	-.0280	3250.							
.3570	-968.	1898.	-81.	-2214.	-1919.	2933.	.0014	.0003	.0012	.0170	.0115	-.0224	2794.							
.3580	-725.	1598.	-75.	-1844.	-1821.	2285.	.0010	.0002	.0011	.0144	.0107	-.0174	2329.							
.3590	-524.	1236.	-42.	-1372.	-1696.	1723.	.0008	.0002	.0008	.0110	.0096	-.0130	1874.							
.3600	-372.	838.	20.	-813.	-1547.	1268.	.0006	.0001	.0006	.0070	.0083	-.0096	1455.							
.3610	-272.	436.	109.	-190.	-1378.	926.	.0004	.0001	.0003	.0024	.0068	-.0071	1126.							
.3620	-221.	47.	220.	471.	-1195.	694.	.0004	.0001	-.0001	-.0025	.0052	-.0055	984.							
.3630	-212.	-319.	345.	1139.	-1003.	560.	.0003	.0001	-.0004	-.0074	.0035	-.0047	1091.							
.3640	-236.	-646.	473.	1780.	-807.	505.	.0003	.0001	-.0007	-.0122	.0019	-.0045	1361.							
.3650	-283.	-922.	596.	2361.	-607.	508.	.0004	.0001	-.0010	-.0166	.0002	-.0048	1679.							
.3660	-341.	-1158.	698.	2851.	-406.	545.	.0004	.0002	-.0013	-.0203	-.0013	-.0053	1975.							
.3670	-398.	-1376.	766.	3223.	-205.	539.	.0005	.0002	-.0015	-.0232	-.0027	-.0059	2213.							
.3680	-441.	-1577.	793.	3465.	-4.	616.	.0005	.0002	-.0016	-.0250	-.0039	-.0063	2372.							
.3690	-457.	-1745.	779.	3576.	198.	600.	.0005	.0002	-.0017	-.0260	-.0050	-.0063	2448.							
.3700	-434.	-1863.	727.	3566.	398.	520.	.0005	.0002	-.0017	-.0260	-.0059	-.0057	2444.							
.3710	-363.	-1926.	643.	3451.	595.	359.	.0004	.0002	-.0017	-.0252	-.0067	-.0044	2373.							
.3720	-242.	-1932.	533.	3250.	788.	107.	.0003	.0001	-.0016	-.0238	-.0073	-.0024	2255.							
.3730	-69.	-1880.	406.	2984.	974.	-238.	.0001	.0001	-.0015	-.0220	-.0079	.0006	2122.							
.3740	150.	-1772.	267.	2671.	1148.	-671.	-.0002	.0000	-.0013	-.0197	-.0083	.0042	2011.							
.3750	404.	-1623.	121.	2327.	1307.	-1176.	-.0005	-.0001	-.0012	-.0173	-.0087	.0086	1966.							
.3760	679.	-1460.	-27.	1963.	1450.	-1731.	-.0008	-.0002	-.0010	-.0147	-.0089	.0133	2017.							
.3770	961.	-1302.	-177.	1592.	1571.	-2310.	-.0011	-.0003	-.0008	-.0120	-.0090	.0182	2167.							
.3780	1236.	-1162.	-324.	1226.	1668.	-2883.	-.0015	-.0004	-.0007	-.0093	-.0090	.0230	2392.							
.3790	1489.	-1044.	-462.	879.	1741.	-3421.	-.0018	-.0005	-.0005	-.0067	-.0089	.0276	2654.							
.3800	1707.	-947.	-583.	568.	1787.	-3897.	-.0020	-.0005	-.0003	-.0044	-.0088	.0316	2915.							
.3810	1882.	-862.	-681.	307.	1807.	-4287.	-.0023	-.0006	-.0002	-.0025	-.0086	.0348	3142.							
.3820	2004.	-787.	-751.	107.	1800.	-4571.	-.0024	-.0006	-.0001	-.0010	-.0083	.0372	3312.							
.3830	2069.	-735.	-791.	-25.	1768.	-4737.	-.0025	-.0007	-.0000	.0000	-.0080	.0386	3408.							
.3840	2073.	-716.	-802.	-85.	1710.	-4778.	-.0025	-.0007	-.0000	.0005	-.0073	.0389	3421.							
.3850	2017.	-719.	-781.	-69.	1627.	-4696.	-.0025	-.0007	-.0000	.0004	-.0073	.0382	3350.							
.3860	1906.	-726.	-727.	19.	1522.	-4496.	-.0024	-.0006	-.0000	-.0002	-.0069	.0365	3200.							
.3870	1745.	-733.	-642.	175.	1394.	-4194.	-.0022	-.0006	-.0001	-.0013	-.0065	.0339	2981.							
.3880	1544.	-744.	-531.	386.	1244.	-3806.	-.0020	-.0005	-.0002	-.0028	-.0060	.0307	2712.							
.3890	1311.	-751.	-398.	637.	1074.	-3355.	-.0017	-.0004	-.0003	-.0046	-.0055	.0269	2413.							
.3900	1056.	-735.	-248.	913.	884.	-2863.	-.0014	-.0004	-.0004	-.0066	-.0050	.0228	2111.							
.3910	790.	-688.	-87.	1194.	677.	-2353.	-.0012	-.0003	-.0006	-.0086	-.0044	.0185	1837.							

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.3810	1882.	-362.	-681.	307.	1807.	-4287.	-.0023	-.0006	-.0007	-.0025	-.0086	.0348	3142.
.3820	2004.	-787.	-751.	197.	1800.	-4571.	-.0024	-.0006	-.0001	-.0010	-.0083	.0372	3312.
.3830	2069.	-735.	-791.	-25.	1768.	-4737.	-.0025	-.0007	-.0000	.0000	-.0080	.0386	3408.
.3840	2077.	-716.	-802.	-85.	1710.	-4778.	-.0025	-.0007	-.0000	.0005	-.0076	.0389	3421.
.3850	2017.	-719.	-731.	-69.	1627.	-4696.	-.0025	-.0007	-.0000	.0004	-.0073	.0382	3350.
.3860	1906.	-726.	-727.	19.	1522.	-4496.	-.0024	-.0006	-.0000	-.0002	-.0069	.0365	3200.
.3870	1745.	-733.	-642.	175.	1394.	-4194.	-.0022	-.0006	-.0001	-.0013	-.0065	.0339	2981.
.3880	1544.	-744.	-531.	386.	1244.	-3806.	-.0020	-.0005	-.0002	-.0028	-.0060	.0307	2712.
.3890	1311.	-751.	-398.	637.	1074.	-3355.	-.0017	-.0004	-.0003	-.0046	-.0055	.0269	2413.
.3900	1056.	-735.	-248.	913.	884.	-2863.	-.0014	-.0004	-.0004	-.0066	-.0050	.0228	2111.
.3910	797.	-688.	-87.	1194.	677.	-2353.	-.0012	-.0003	-.0006	-.0086	-.0044	.0185	1837.

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SECTION	26	MEMBER	2	SEQUENCE	45	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)	
.3920	521.	-618.	75.	1458.	456.	-1049.		-.0009	-.0002	-.0007	-.0105	-.0037	.0143	1617.	
.3930	256.	-548.	229.	1686.	224.	-1370.		-.0006	-.0001	-.0008	-.0121	-.0029	.0103	1472.	
.3940	3.	-487.	365.	1861.	-12.	-932.		-.0004	-.0001	-.0009	-.0133	-.0020	.0066	1403.	
.3950	-230.	-425.	482.	1977.	-246.	-550.		-.0001	-.0000	-.0009	-.0141	-.0011	.0033	1393.	
.3960	-436.	-348.	577.	2033.	-471.	-233.		.0000	.0000	-.0009	-.0145	-.0001	.0006	1415.	
.3970	-608.	-268.	648.	2029.	-676.	13.		.0002	.0001	-.0009	-.0144	.0009	-.0015	1442.	
.3980	-741.	-207.	690.	1973.	-855.	185.		.0003	.0001	-.0009	-.0139	.0017	-.0030	1455.	
.3990	-832.	-166.	705.	1874.	-999.	283.		.0003	.0001	-.0008	-.0131	.0025	-.0039	1444.	
.4000	-877.	-120.	697.	1749.	-1101.	311.		.0004	.0001	-.0007	-.0122	.0031	-.0042	1409.	

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)	
.0460	5584.	6555.	-4915.	-15672.	3423.	-8958.		-.0058	-.0018	.0072	.1126	.0021	.0808	12384.	

SECTION	26	MEMBER	3	SEQUENCE	46	LOCATION	END	TYPE	EL						
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.	4.	1.	1.	1.	-2.		-.0000	-.0000	-.0000	-.0000	-.0000	.0000	1.	
.0030	5.	19.	4.	3.	1.	-8.		-.0000	-.0000	-.0000	-.0000	-.0000	.0000	6.	
.0040	13.	68.	11.	7.	2.	-23.		-.0000	-.0000	-.0000	-.0000	-.0000	.0000	16.	
.0050	24.	162.	23.	9.	1.	-49.		-.0000	-.0000	-.0000	-.0000	-.0000	.0000	34.	
.0060	36.	280.	34.	-2.	-2.	-78.		-.0000	-.0000	-.0000	.0000	.0000	.0000	52.	
.0070	48.	401.	41.	-34.	-7.	-100.		-.0000	-.0000	-.0000	.0000	.0000	.0000	72.	
.0080	64.	546.	44.	-92.	-14.	-125.		-.0000	-.0000	-.0000	.0000	.0000	.0000	105.	
.0090	95.	775.	45.	-177.	-31.	-171.		-.0000	-.0000	-.0000	.0000	.0000	.0000	167.	
.0100	141.	1125.	45.	-294.	-66.	-249.		-.0000	-.0000	-.0000	.0000	.0000	.0000	263.	
.0110	193.	1550.	35.	-463.	-123.	-341.		-.0000	-.0000	-.0000	.0000	.0000	.0000	397.	
.0120	238.	1922.	-4.	-714.	-214.	-411.		-.0000	-.0000	.0000	.0000	.0000	.0000	574.	
.0130	263.	2159.	-83.	-1051.	-355.	-436.		-.0000	-.0000	.0000	.0000	.0000	.0000	803.	
.0140	257.	2276.	-189.	-1441.	-547.	-409.		-.0000	-.0000	.0000	.0001	.0000	.0000	1075.	
.0150	205.	2279.	-298.	-1823.	-779.	-313.		-.0000	-.0000	.0000	.0001	.0000	.0000	1353.	

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.0050	24.	162.	23.	9.	1.	-49.	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	34.
.0060	36.	280.	34.	-2.	-2.	-78.	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	52.
.0070	48.	401.	41.	-34.	-7.	-100.	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	72.
.0080	64.	546.	44.	-92.	-14.	-125.	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	105.
.0090	95.	775.	45.	-177.	-31.	-171.	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	167.
.0100	141.	1125.	45.	-294.	-66.	-249.	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	263.
.0110	193.	1550.	35.	-463.	-123.	-341.	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	397.
.0120	238.	1922.	-4.	-714.	-214.	-411.	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	574.
.0130	263.	2159.	-83.	-1051.	-355.	-436.	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	803.
.0140	257.	2276.	-189.	-1441.	-547.	-409.	-.0000	-.0000	-.0000	-.0001	-.0000	-.0000	-.0000	1075.
.0150	205.	2279.	-298.	-1823.	-779.	-313.	-.0000	-.0000	-.0000	-.0001	-.0000	-.0000	-.0000	1353.

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SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	EL	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
26	3	46					.0160	92.	2089.	-400.	-2131.	-1035.	-114.	-.0000	-.0000	.0000	.0001	.0000	.0000	1599.
							.0170	-79.	1642.	-481.	-2290.	-1296.	211.	-.0000	-.0000	.0000	.0001	.0000	-.0000	1779.
							.0180	-285.	988.	-517.	-2212.	-1536.	644.	-.0000	-.0000	.0000	.0001	.0000	-.0000	1866.
							.0190	-495.	242.	-474.	-1807.	-1739.	1138.	.0000	.0000	.0000	.0001	.0001	-.0000	1856.
							.0200	-679.	-441.	-316.	-1012.	-1867.	1637.	.0000	.0000	.0000	.0000	.0001	-.0001	1807.
							.0210	-811.	-870.	-33.	177.	-1950.	2049.	.0000	.0000	.0000	-.0000	.0001	-.0001	1910.
							.0220	-881.	-810.	359.	1670.	-2134.	2269.	.0000	.0000	-.0000	-.0001	.0001	-.0001	2382.
							.0230	-978.	-459.	831.	3295.	-2360.	2432.	.0000	.0000	-.0000	-.0001	.0001	-.0001	3186.
							.0240	-1265.	-855.	1246.	4802.	-2528.	2907.	.0000	.0000	-.0000	-.0002	.0001	-.0001	4150.
							.0250	-1707.	-2438.	1498.	6049.	-2626.	3753.	.0000	.0000	-.0000	-.0002	.0001	-.0001	5114.
							.0260	-2069.	-4172.	1672.	7176.	-2762.	4533.	.0000	.0000	-.0000	-.0003	.0001	-.0002	5995.
							.0270	-2335.	-5004.	1953.	8294.	-2979.	4985.	.0000	.0000	-.0000	-.0003	.0002	-.0002	6825.
							.0280	-2737.	-4947.	2447.	9643.	-2812.	5412.	.0000	.0000	-.0000	-.0004	.0002	-.0002	7691.
							.0290	-3140.	-4706.	2945.	10904.	-2156.	5911.	.0000	.0000	-.0000	-.0004	.0001	-.0002	8486.
							.0300	-3051.	-4899.	3060.	11571.	-1909.	6010.	.0000	.0000	-.0000	-.0005	.0001	-.0002	8882.
							.0310	-2802.	-5551.	2917.	11715.	-1682.	6009.	.0000	.0000	-.0000	-.0005	.0001	-.0002	8947.
							.0320	-2752.	-5698.	2862.	11651.	-648.	6115.	.0000	.0000	-.0000	-.0005	.0001	-.0002	8880.
							.0330	-2479.	-4975.	2739.	11174.	543.	5687.	.0000	.0000	-.0000	-.0004	.0000	-.0002	8459.
							.0340	-1645.	-4289.	2208.	9905.	1078.	4380.	.0000	.0000	-.0000	-.0004	.0000	-.0001	7336.
							.0350	-713.	-4299.	1426.	7982.	1595.	2810.	.0000	.0000	-.0000	-.0003	-.0000	-.0001	5804.
							.0360	-9.	-4603.	686.	5745.	2648.	1280.	.0000	.0000	-.0000	-.0002	-.0001	-.0000	4350.
							.0370	924.	-4429.	-82.	3245.	3438.	-899.	.0000	.0000	-.0000	-.0001	-.0001	.0000	3244.
							.0380	2325.	-3219.	-900.	574.	3511.	-4061.	-.0000	.0000	.0000	-.0000	-.0001	.0001	3639.
							.0390	3640.	-947.	-1501.	-1975.	3721.	-7394.	-.0000	-.0000	.0000	.0001	-.0002	.0002	5736.
							.0400	4572.	1444.	-1932.	-4487.	4351.	-10187.	-.0000	-.0000	.0000	.0002	-.0002	.0003	8056.
							.0410	5439.	2619.	-2633.	-7391.	4370.	-12488.	-.0000	-.0000	.0000	.0003	-.0002	.0004	10215.
							.0420	6201.	2830.	-3540.	-10514.	3875.	-14178.	-.0000	-.0000	.0000	.0004	-.0002	.0005	12181.
							.0430	6527.	3618.	-4173.	-13228.	3703.	-15042.	-.0000	-.0000	.0000	.0005	-.0002	.0005	13731.
							.0440	6470.	5210.	-4489.	-15356.	3603.	-15223.	-.0000	-.0000	.0000	.0006	-.0002	.0005	14776.
							.0450	6203.	6415.	-4746.	-17067.	3034.	-14765.	-.0000	-.0000	.0000	.0007	-.0002	.0005	15348.
							.0460	5584.	6555.	-4915.	-18279.	2343.	-13359.	-.0000	-.0000	.0000	.0007	-.0002	.0005	15342.
							.0470	4495.	5830.	-4839.	-18723.	1974.	-10914.	-.0000	-.0000	.0000	.0007	-.0002	.0004	14668.
							.0480	3252.	4916.	-4528.	-18262.	1574.	-8019.	-.0000	-.0000	.0000	.0007	-.0002	.0003	13485.
							.0490	2145.	4758.	-3935.	-16798.	914.	-5252.	-.0000	-.0000	.0000	.0007	-.0001	.0002	11879.
							.0500	1011.	5495.	-2960.	-14314.	471.	-2469.	-.0000	-.0000	.0000	.0006	-.0001	.0001	9796.
							.0510	-273.	5957.	-1810.	-11183.	373.	633.	-.0000	-.0000	.0000	.0004	-.0001	-.0000	7554.
							.0520	-1462.	5230.	-846.	-7962.	161.	3858.	-.0000	-.0000	.0000	.0003	-.0000	-.0001	5964.
							.0530	-2408.	3727.	-106.	-4862.	-274.	6869.	.0000	-.0000	.0000	.0002	-.0000	-.0002	5676.

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.0430	6527.	3618.	-4173.	-13228.	3703.	-15042.	-.0000	-.0000	.0000	.0005	-.0002	.0005	12181.
.0440	6470.	5210.	-4489.	-15356.	3603.	-15223.	-.0000	-.0000	.0000	.0006	-.0002	.0005	14776.
.0450	6203.	6415.	-4746.	-17067.	3634.	-14765.	-.0000	-.0000	.0000	.0007	-.0002	.0005	15348.
.0460	5584.	6555.	-4915.	-18279.	2343.	-13359.	-.0000	-.0000	.0000	.0007	-.0002	.0005	15342.
.0470	4495.	5830.	-4839.	-18723.	1774.	-10914.	-.0000	-.0000	.0000	.0007	-.0002	.0004	14668.
.0480	3252.	4916.	-4528.	-18262.	1574.	-8019.	-.0000	-.0000	.0000	.0007	-.0002	.0003	13485.
.0490	2145.	4758.	-3935.	-16798.	914.	-5252.	-.0000	-.0000	.0000	.0007	-.0001	.0002	11879.
.0500	1011.	5495.	-2960.	-14314.	471.	-2469.	-.0000	-.0000	.0000	.0006	-.0001	.0001	9796.
.0510	-273.	5957.	-1810.	-11183.	373.	633.	-.0000	-.0000	.0000	.0004	-.0001	-.0000	7554.
.0520	-1462.	5230.	-846.	-7962.	161.	3858.	-.0000	-.0000	.0000	.0003	-.0000	-.0001	5964.
.0530	-2408.	3727.	-106.	-4862.	-274.	6869.	.0000	-.0000	.0000	.0002	-.0000	-.0002	5676.

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SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	EL	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)
.0540	-3302.	2164.	621.	-1773.	-597.	9607.	.0000	.0000	-.0000	.0001	.0000	-.0003	6597.
.0550	-4219.	754.	1408.	1312.	-731.	11969.	.0000	.0000	-.0000	-.0001	.0000	-.0004	8131.
.0560	-4904.	-427.	2146.	4192.	-949.	13595.	.0000	.0000	-.0000	-.0002	.0001	-.0005	9611.
.0570	-5201.	-1417.	2746.	6669.	-1397.	14319.	.0000	.0000	-.0000	-.0003	.0001	-.0005	10689.
.0580	-5308.	-2390.	3245.	8698.	-1871.	14398.	.0000	.0000	-.0000	-.0003	.0001	-.0005	11408.
.0590	-5368.	-3070.	3709.	10283.	-2147.	13998.	.0000	.0000	-.0000	-.0004	.0001	-.0005	11796.
.0600	-5190.	-2913.	4074.	11280.	-2369.	12928.	.0000	.0000	-.0000	-.0005	.0001	-.0004	11675.
.0610	-4655.	-2127.	4168.	11436.	-2761.	11202.	.0000	.0000	-.0000	-.0005	.0002	-.0004	10949.
.0620	-4014.	-1621.	3905.	10606.	-3180.	9345.	.0000	.0000	-.0000	-.0004	.0002	-.0003	9766.
.0630	-3505.	-1899.	3323.	8845.	-3349.	7792.	.0000	.0000	-.0000	-.0004	.0002	-.0003	8260.
.0640	-2985.	-2700.	2459.	6324.	-3419.	6370.	.0000	.0000	-.0000	-.0003	.0002	-.0002	6474.
.0650	-2269.	-3379.	1424.	3392.	-3650.	4728.	.0000	.0000	-.0000	-.0002	.0002	-.0002	4630.
.0660	-1493.	-3245.	513.	580.	-3807.	2888.	.0000	.0000	-.0000	-.0000	.0002	-.0001	3245.
.0670	-812.	-2066.	-72.	-1757.	-3578.	1050.	.0000	.0000	.0000	.0001	.0001	-.0000	2778.
.0680	-101.	-325.	-464.	-3688.	-3239.	-768.	.0000	.0000	.0000	.0001	.0001	.0000	3348.
.0690	704.	1503.	-831.	-5388.	-3097.	-2486.	-.0000	-.0000	.0000	.0002	.0001	.0001	4512.
.0700	1344.	3449.	-1107.	-6858.	-2855.	-3733.	-.0000	-.0000	.0000	.0003	.0001	.0001	5604.
.0710	1628.	5399.	-1281.	-8164.	-2315.	-4215.	-.0000	-.0000	.0000	.0003	.0000	.0001	6386.
.0720	1674.	6736.	-1562.	-9557.	-1864.	-3983.	-.0000	-.0000	.0000	.0004	.0000	.0001	7091.
.0730	1543.	7067.	-2036.	-11098.	-1668.	-3095.	-.0000	-.0000	.0000	.0004	.0000	.0001	7847.
.0740	1107.	6539.	-2521.	-12496.	-1372.	-1512.	-.0000	-.0000	.0000	.0005	-.0000	.0001	8534.
.0750	420.	5493.	-2861.	-13404.	-903.	493.	-.0000	-.0000	.0000	.0005	-.0000	-.0000	9062.
.0760	-221.	4496.	-2982.	-13559.	-551.	2312.	-.0000	-.0000	.0000	.0005	-.0000	-.0001	9279.
.0770	-674.	4257.	-2749.	-12724.	-259.	3551.	-.0000	-.0000	.0000	.0005	-.0001	-.0001	8906.
.0780	-995.	4905.	-2106.	-10880.	238.	4215.	-.0000	-.0000	.0000	.0004	-.0001	-.0001	7866.
.0790	-1168.	5833.	-1255.	-8401.	816.	4364.	-.0000	-.0000	.0000	.0003	-.0001	-.0001	6405.
.0800	-1132.	6428.	-473.	-5823.	1227.	4052.	-.0000	-.0000	.0000	.0002	-.0001	-.0001	4853.
.0810	-980.	6350.	100.	-3548.	1581.	3507.	-.0000	-.0000	-.0000	.0001	-.0001	-.0001	3528.
.0820	-814.	5280.	370.	-1836.	1979.	2935.	-.0000	-.0000	-.0000	.0001	-.0001	-.0001	2688.
.0830	-582.	3224.	290.	-788.	2230.	2252.	-.0000	-.0000	-.0000	.0000	-.0001	-.0001	2201.
.0840	-223.	729.	-27.	-237.	2292.	1285.	-.0000	-.0000	-.0000	.0000	-.0001	-.0000	1778.
.0850	225.	-1727.	-385.	140.	2361.	15.	.0000	.0000	.0000	.0000	-.0001	-.0000	1594.
.0860	772.	-3946.	-668.	615.	2436.	-1593.	.0000	.0000	.0000	-.0000	-.0001	.0001	2005.
.0870	1479.	-5452.	-778.	1382.	2392.	-3644.	.0000	.0000	.0000	-.0000	-.0001	.0001	3082.
.0880	2288.	-5721.	-612.	2541.	2331.	-6044.	.0000	.0000	.0000	-.0001	-.0001	.0002	4690.
.0890	3058.	-5068.	-241.	3928.	2357.	-8417.	.0000	.0000	.0000	-.0001	-.0001	.0003	6459.
.0900	3697.	-4385.	93.	5140.	2326.	-10363.	-.0000	.0000	-.0000	-.0002	-.0001	.0003	7953.
.0910	4121.	-4232.	223.	5848.	2148.	-11562.	-.0000	.0000	-.0000	-.0002	-.0001	.0004	8852.

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.0800	-1132.	6428.	-473.	-5823.	1227.	4052.	-.0000	-.0000	.0000	.0002	-.0001	-.0001	4853.
.0810	-980.	6350.	100.	-3548.	1581.	3507.	-.0000	-.0000	-.0000	.0001	-.0001	-.0001	3528.
.0820	-814.	5280.	370.	-1836.	1979.	2935.	-.0000	-.0000	-.0000	.0001	-.0001	-.0001	2688.
.0830	-582.	3224.	290.	-788.	2230.	2252.	-.0000	-.0000	-.0000	.0000	-.0001	-.0001	2201.
.0840	-223.	729.	-27.	-277.	2292.	1285.	-.0000	-.0000	-.0000	.0000	-.0001	-.0000	1778.
.0850	225.	-1727.	-383.	140.	2361.	15.	.0000	.0000	.0000	.0000	-.0001	-.0000	1594.
.0860	772.	-7946.	-668.	615.	2436.	-1593.	.0000	.0000	.0000	-.0000	-.0001	.0001	2005.
.0870	1479.	-5452.	-778.	1382.	2392.	-3644.	.0000	.0000	.0000	-.0000	-.0001	.0001	3082.
.0880	2288.	-5721.	-612.	2541.	2331.	-6044.	.0000	.0000	.0000	-.0001	-.0001	.0002	4690.
.0890	3058.	-5068.	-241.	3928.	2357.	-8417.	.0000	.0000	.0000	-.0001	-.0001	.0003	6459.
.0900	3697.	-4385.	93.	5140.	2326.	-10363.	-.0000	.0000	-.0000	-.0002	-.0001	.0003	7953.
.0910	4121.	-4232.	223.	5848.	2148.	-11562.	-.0000	.0000	-.0000	-.0002	-.0001	.0004	8852.

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SECTION	26	MEMBER	3	SEQUENCE	46	LOCATION	END	TYPE	EL						
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.0920	4202.	-4809.	135.	5963.	1947.	-11759.		-.0000	.0000	-.0000	-.0002	-.0000	.0004	8983.	
.0930	3919.	-6163.	-138.	5592.	1769.	-10935.		.0000	.0000	.0000	-.0002	-.0000	.0004	8364.	
.0940	3417.	-7786.	-482.	5023.	1524.	-9425.		.0000	.0000	.0000	-.0002	-.0000	.0003	7271.	
.0950	2840.	-8768.	-675.	4669.	1236.	-7647.		.0000	.0000	.0000	-.0002	-.0000	.0003	6096.	
.0960	2209.	-8703.	-547.	4846.	1021.	-5802.		.0000	.0000	.0000	-.0002	-.0000	.0002	5142.	
.0970	1544.	-7738.	-91.	5609.	882.	-3971.		.0000	.0000	.0000	-.0002	-.0000	.0001	4670.	
.0980	917.	-5920.	614.	6786.	739.	-2256.		.0000	.0000	-.0000	-.0003	.0000	.0001	4846.	
.0990	336.	-3359.	1444.	8059.	550.	-640.		.0000	.0000	-.0000	-.0003	.0000	.0000	5462.	
.1000	-318.	-663.	2218.	9015.	325.	1124.		.0000	.0000	-.0000	-.0003	.0000	-.0000	6128.	
.1010	-1150.	1477.	2749.	9269.	69.	3276.		.0000	-.0000	-.0000	-.0004	.0000	-.0001	6627.	
.1020	-2127.	2778.	2920.	8597.	-241.	5825.		.0000	-.0000	-.0000	-.0003	.0001	-.0002	7002.	
.1030	-3146.	3188.	2701.	7016.	-639.	8605.		.0000	-.0000	-.0000	-.0003	.0001	-.0003	7496.	
.1040	-4130.	2887.	2191.	4817.	-1084.	11371.		.0000	.0000	-.0000	-.0002	.0001	-.0004	8356.	
.1050	-4995.	2499.	1614.	2483.	-1441.	13769.		.0000	.0000	-.0000	-.0001	.0001	-.0005	9481.	
.1060	-5592.	2632.	1153.	449.	-1655.	15390.		.0000	.0000	-.0000	-.0000	.0001	-.0005	10438.	
.1070	-5786.	3324.	845.	-1074.	-1816.	15950.		.0000	.0000	-.0000	.0000	.0001	-.0005	10844.	
.1080	-5561.	4320.	680.	-2039.	-1899.	15418.		.0000	-.0000	-.0000	.0001	.0001	-.0005	10561.	
.1090	-4934.	5425.	622.	-2536.	-1848.	13856.		.0000	-.0000	-.0000	.0001	.0001	-.0005	9576.	
.1100	-4014.	6465.	564.	-2766.	-1908.	11366.		-.0000	-.0000	-.0000	.0001	.0001	-.0004	7989.	
.1110	-2948.	7557.	510.	-2904.	-1859.	8236.		-.0000	-.0000	-.0000	.0001	.0001	-.0003	6017.	
.1120	-1812.	7660.	258.	-3287.	-1750.	4889.		-.0000	-.0000	-.0000	.0001	.0001	-.0002	4143.	
.1130	-666.	5568.	-405.	-4105.	-1896.	1678.		-.0000	-.0000	.0000	.0001	.0001	-.0001	3251.	
.1140	413.	2543.	-1184.	-4944.	-2121.	-1420.		-.0000	-.0000	.0000	.0002	.0001	.0000	3750.	
.1150	1432.	662.	-1640.	-5212.	-2157.	-4625.		-.0000	-.0000	.0000	.0002	.0001	.0002	4917.	
.1160	2457.	-300.	-1792.	-4784.	-2207.	-7869.		-.0000	-.0000	.0000	.0002	.0001	.0003	6383.	
.1170	3376.	-1361.	-1770.	-3732.	-2316.	-10723.		-.0000	-.0000	.0000	.0001	.0001	.0004	7811.	
.1180	4041.	-1927.	-1455.	-2046.	-2418.	-12979.		-.0000	-.0000	.0000	.0001	.0001	.0004	9005.	
.1190	4233.	-1825.	-794.	184.	-2050.	-14205.		-.0000	-.0000	.0000	-.0000	.0001	.0005	9675.	
.1200	4083.	-2501.	-197.	2435.	-1620.	-14217.		-.0000	-.0000	.0000	-.0001	.0001	.0005	9784.	
.1210	3810.	-4262.	127.	4394.	-1627.	-13237.		-.0000	.0000	-.0000	-.0002	.0001	.0004	9465.	
.1220	3138.	-5555.	559.	6380.	-1254.	-11220.		.0000	.0000	-.0000	-.0003	.0001	.0004	8741.	
.1230	2155.	-5514.	1193.	8412.	-482.	-8533.		.0000	.0000	-.0000	-.0003	.0001	.0003	8083.	
.1240	1165.	-5511.	1652.	10059.	248.	-5431.		.0000	.0000	-.0000	-.0004	.0000	.0002	7707.	
.1250	320.	-6578.	1739.	11072.	721.	-2108.		.0000	.0000	-.0000	-.0004	.0000	.0001	7613.	
.1260	-457.	-7726.	1741.	11724.	1176.	1104.		.0000	.0000	-.0000	-.0004	.0000	-.0000	7977.	
.1270	-1244.	-7725.	1951.	12367.	2125.	3888.		.0000	.0000	-.0000	-.0005	-.0000	-.0001	8855.	
.1280	-1549.	-6396.	2170.	12787.	2787.	5439.		.0000	.0000	-.0000	-.0005	-.0000	-.0002	9553.	
.1290	-1319.	-4426.	2240.	12713.	2972.	5711.		.0000	.0000	-.0000	-.0005	-.0001	-.0002	9605.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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18.27.24.

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

CONDITION 24
LOADS
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INTERNAL FORCES IN THE PIPING
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.1180	4041.	-1927.	1455.	-2046.	-2418.	-12979.	-.0000	-.0000	.0000	-.0001	.0001	.0004	9005.
.1190	4233.	-1825.	-794.	184.	-2050.	-14205.	-.0000	-.0000	.0000	-.0000	.0001	.0005	9675.
.1200	4083.	-2501.	-197.	2435.	-1620.	-14217.	-.0000	-.0000	.0000	-.0001	.0001	.0005	9784.
.1210	3810.	-4262.	127.	4394.	-1627.	-13237.	-.0000	.0000	-.0000	-.0002	.0001	.0004	9465.
.1220	3138.	-5555.	559.	6380.	-1254.	-11220.	.0000	.0000	-.0000	-.0003	.0001	.0004	8741.
.1230	2155.	-5514.	1197.	8412.	-482.	-8533.	.0000	.0000	-.0000	-.0003	.0001	.0003	8083.
.1240	1165.	-5511.	1652.	10059.	248.	-5431.	.0000	.0000	-.0000	-.0004	.0000	.0002	7707.
.1250	320.	-6578.	1739.	11072.	721.	-2108.	.0000	.0000	-.0000	-.0004	.0000	.0001	7613.
.1260	-457.	-7726.	1741.	11724.	1176.	1104.	.0000	.0000	-.0000	-.0004	.0000	-.0000	7977.
.1270	-1244.	-7725.	1951.	12367.	2125.	3888.	.0000	.0000	-.0000	-.0005	-.0000	-.0001	8855.
.1280	-1549.	-6396.	2170.	12787.	2787.	5439.	.0000	.0000	-.0000	-.0005	-.0000	-.0002	9553.
.1290	-1319.	-4426.	2240.	12713.	2972.	5711.	.0000	.0000	-.0000	-.0005	-.0001	-.0002	9605.

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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKM24F--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	EL							STRESS
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	(PSI)
.1300	-1001.	-2514.	2211.	12049.	3174.	5320.	.0000	.0000	-.0000	-.0005	-.0001	-.0002	9132.
.1310	-743.	-1146.	2000.	10620.	3305.	4521.	.0000	.0000	-.0000	-.0004	-.0001	-.0002	8092.
.1320	-409.	-584.	1460.	8321.	3209.	3318.	.0000	.0000	-.0000	-.0003	-.0001	-.0001	6414.
.1330	174.	-578.	597.	5295.	2566.	1561.	.0000	.0000	-.0000	-.0002	-.0001	-.0001	4103.
.1340	671.	-798.	-282.	2098.	1906.	-312.	-.0000	.0000	.0000	-.0001	-.0001	.0000	1922.
.1350	937.	-759.	-948.	-762.	1524.	-2085.	-.0000	.0000	.0000	.0000	-.0001	.0001	1815.
.1360	1312.	-172.	-1457.	-3133.	940.	-4042.	-.0000	-.0000	.0000	.0001	-.0001	.0001	3505.
.1370	1745.	333.	-1847.	-4884.	318.	-5836.	-.0000	-.0000	.0000	.0002	-.0000	.0002	5134.
.1380	1977.	225.	-2054.	-5842.	-135.	-6994.	-.0000	-.0000	.0000	.0002	-.0000	.0002	6143.
.1390	1852.	-82.	-1935.	-5803.	-117.	-7327.	-.0000	-.0000	.0000	.0002	-.0000	.0002	6300.
.1400	1648.	96.	-1546.	-4838.	106.	-7207.	-.0000	-.0000	.0000	.0002	-.0000	.0002	5851.
.1410	1569.	427.	-1085.	-3252.	132.	-6817.	-.0000	-.0000	.0000	.0001	-.0000	.0002	5092.
.1420	1244.	-18.	-569.	-1195.	524.	-5593.	-.0000	-.0000	.0000	.0000	-.0000	.0002	3871.
.1430	673.	-1045.	2.	1153.	1267.	-3669.	-.0000	.0000	-.0000	-.0000	-.0000	.0001	2729.
.1440	178.	-1864.	566.	3565.	2025.	-1678.	.0000	.0000	-.0000	-.0001	-.0001	.0001	2986.
.1450	-72.	-2212.	1044.	5808.	2570.	-36.	.0000	.0000	-.0000	-.0002	-.0001	.0000	4281.
.1460	-221.	-2271.	1449.	7704.	2999.	1268.	.0000	.0000	-.0000	-.0003	-.0001	-.0000	5638.
.1470	-461.	-2326.	1794.	9089.	3667.	2397.	.0000	.0000	-.0000	-.0003	-.0001	-.0001	6801.
.1480	-498.	-2549.	1866.	9504.	3987.	2914.	.0000	.0000	-.0000	-.0004	-.0001	-.0001	7279.
.1490	-255.	-3095.	1590.	9136.	3833.	2692.	.0000	.0000	-.0000	-.0003	-.0001	-.0001	6920.
.1500	56.	-3785.	1135.	7900.	3569.	1919.	.0000	.0000	-.0000	-.0003	-.0001	-.0001	5985.
.1510	428.	-4215.	628.	6126.	3161.	538.	.0000	.0000	-.0000	-.0002	-.0001	-.0000	4661.
.1520	936.	-4215.	97.	4004.	2608.	-1458.	.0000	.0000	-.0000	-.0001	-.0001	.0000	3368.
.1530	1674.	-3696.	-463.	1673.	1728.	-4050.	.0000	.0000	.0000	-.0001	-.0001	.0001	3175.
.1540	2405.	-2817.	-940.	-530.	900.	-6733.	-.0000	.0000	.0000	.0000	-.0000	.0002	4598.
.1550	2988.	-1855.	-1313.	-2777.	230.	-9109.	-.0000	-.0000	.0000	.0001	-.0000	.0003	6421.
.1560	3522.	-831.	-1657.	-4761.	-610.	-11140.	-.0000	-.0000	.0000	.0002	-.0000	.0004	8176.
.1570	3858.	353.	-1904.	-6439.	-1284.	-12485.	-.0000	-.0000	.0000	.0002	.0000	.0004	9508.
.1580	3926.	1609.	-2046.	-7774.	-1818.	-12960.	-.0000	-.0000	.0000	.0003	.0000	.0004	10260.
.1590	3672.	2438.	-2135.	-8789.	-2288.	-12393.	-.0000	-.0000	.0000	.0003	.0000	.0004	10356.
.1600	3041.	2596.	-2155.	-9413.	-2496.	-10668.	-.0000	-.0000	.0000	.0004	.0000	.0004	9736.
.1610	2185.	2613.	-2057.	-9536.	-2535.	-8119.	-.0000	-.0000	.0000	.0004	.0001	.0003	8613.
.1620	1301.	3074.	-1796.	-9097.	-2667.	-5220.	-.0000	-.0000	.0000	.0003	.0001	.0002	7295.
.1630	256.	3801.	-1316.	-8049.	-2510.	-1909.	-.0000	-.0000	.0000	.0003	.0001	.0001	5827.
.1640	-872.	4545.	-706.	-6574.	-2188.	1606.	-.0000	-.0000	.0000	.0002	.0001	-.0001	4794.
.1650	-1911.	5175.	-101.	-4949.	-1987.	4986.	-.0000	-.0000	.0000	.0002	.0001	-.0002	4221.
.1660	-2907.	5378.	440.	-3347.	-1716.	8215.	-.0000	-.0000	-.0000	.0001	.0000	-.0003	6090.
.1670	-3815.	5046.	862.	-1912.	-1494.	11092.	.0000	-.0000	-.0000	.0001	.0000	-.0004	7653.

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ADLPIPE STRESS ANALYSIS

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

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

.1570	3858.	353.	1904.	-6439.	-1284.	-12485.	-.0000	-.0000	.0000	.0002	.0000	.0004	8176.
.1580	3926.	1609.	-2046.	-7774.	-1818.	-12960.	-.0000	-.0000	.0000	.0003	.0000	.0004	10260.
.1590	3672.	2438.	-2135.	-8789.	-2288.	-12393.	-.0000	-.0000	.0000	.0003	.0000	.0004	10356.
.1600	3041.	2598.	-2155.	-9413.	-2496.	-10668.	-.0000	-.0000	.0000	.0004	.0000	.0004	9736.
.1610	2185.	2613.	-2057.	-9576.	-2535.	-8119.	-.0000	-.0000	.0000	.0004	.0001	.0003	8613.
.1620	1301.	3074.	-1796.	-9097.	-2667.	-5220.	-.0000	-.0000	.0000	.0003	.0001	.0002	7295.
.1630	256.	3801.	-1316.	-8049.	-2510.	-1909.	-.0000	-.0000	.0000	.0003	.0001	.0001	5827.
.1640	-872.	4545.	-706.	-6574.	-2188.	1606.	-.0000	-.0000	.0000	.0002	.0001	-.0001	4794.
.1650	-1911.	5175.	-101.	-4949.	-1987.	4986.	-.0000	-.0000	.0000	.0002	.0001	-.0002	4921.
.1660	-2907.	5378.	440.	-3347.	-1716.	8215.	-.0000	-.0000	-.0000	.0001	.0000	-.0003	6090.
.1670	-2915.	5046.	862.	-1912.	-1494.	11092.	.0000	-.0000	-.0000	.0001	.0000	-.0004	7653.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.27.24.

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	EL	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)							
.1680	-4615.	4382.	1192.	-654.	-1245.	13446.	.0000	-.0000	-.0000	.0000	.0000	-.0005	9112.
.1690	-5145.	3627.	1421.	398.	-1136.	14960.	.0000	.0000	-.0000	-.0000	.0000	-.0005	10116.
.1700	-5379.	2652.	1547.	1270.	-1078.	15594.	.0000	.0000	-.0000	-.0001	.0000	-.0005	10571.
.1710	-5387.	1528.	1631.	2064.	-849.	15417.	.0000	.0000	-.0000	-.0001	.0000	-.0005	10500.
.1720	-5011.	849.	1706.	2790.	-809.	14133.	.0000	.0000	-.0000	-.0001	.0000	-.0005	9725.
.1730	-4354.	584.	1799.	3457.	-699.	11972.	.0000	.0000	-.0000	-.0001	.0000	-.0004	8412.
.1740	-3469.	293.	1812.	3916.	-546.	9175.	.0000	.0000	-.0000	-.0002	.0000	-.0003	6734.
.1750	-2389.	14.	1696.	4040.	-484.	5886.	.0000	.0000	-.0000	-.0002	.0000	-.0002	4823.
.1760	-1274.	-65.	1499.	3806.	-303.	2425.	.0000	.0000	-.0000	-.0001	.0000	-.0001	3048.
.1770	-137.	-345.	1123.	3078.	-179.	-990.	.0000	.0000	-.0000	-.0001	.0000	.0000	2183.
.1780	913.	-1394.	507.	1856.	-17.	-3998.	-.0000	.0000	-.0000	-.0001	.0000	.0001	2971.
.1790	1897.	-2668.	-240.	337.	81.	-6634.	-.0000	.0000	.0000	-.0000	-.0000	.0002	4478.
.1800	2773.	-3420.	-917.	-1149.	234.	-8897.	-.0000	.0000	.0000	.0000	-.0000	.0003	6049.
.1810	3438.	-3875.	-1459.	-2382.	662.	-10555.	-.0000	.0000	.0000	.0001	-.0000	.0004	7307.
.1820	4028.	-4283.	-1933.	-3335.	965.	-11722.	-.0000	.0000	.0000	.0001	-.0001	.0004	8240.
.1830	4469.	-4356.	-2231.	-3849.	1291.	-12334.	-.0000	.0000	.0000	.0002	-.0001	.0004	8753.
.1840	4671.	-3909.	-2274.	-3848.	1756.	-12327.	-.0000	.0000	.0000	.0002	-.0001	.0004	8784.
.1850	4627.	-3348.	-2156.	-3462.	2248.	-11667.	-.0000	-.0000	.0000	.0001	-.0001	.0004	8342.
.1860	4754.	-2918.	-1957.	-2852.	2711.	-10379.	-.0000	-.0000	.0000	.0001	-.0001	.0004	7482.
.1870	3923.	-2423.	-1698.	-2148.	2971.	-8669.	-.0000	-.0000	.0000	.0001	-.0001	.0003	6344.
.1880	3229.	-2018.	-1367.	-1410.	3263.	-6471.	-.0000	-.0000	.0000	.0001	-.0001	.0002	4976.
.1890	2361.	-1838.	-1040.	-762.	3458.	-3987.	-.0000	.0000	.0000	.0000	-.0001	.0001	3594.
.1900	1494.	-1589.	-735.	-267.	3408.	-1581.	-.0000	.0000	.0000	.0000	-.0001	.0001	2539.
.1910	652.	-1091.	-408.	100.	3305.	611.	.0000	.0000	.0000	.0000	-.0001	-.0000	2267.
.1920	-103.	-442.	-99.	289.	3073.	2425.	.0000	.0000	.0000	.0000	-.0001	-.0001	2646.
.1930	-726.	379.	169.	259.	2733.	3748.	.0000	.0000	-.0000	.0000	-.0001	-.0001	3132.
.1940	-1155.	1459.	373.	-48.	2302.	4488.	.0000	-.0000	-.0000	.0000	-.0001	-.0002	3400.
.1950	-1377.	2418.	428.	-728.	1751.	4702.	-.0000	-.0000	-.0000	.0000	-.0001	-.0002	3418.
.1960	-1451.	2873.	291.	-1796.	1119.	4549.	-.0000	-.0000	-.0000	.0001	-.0001	-.0002	3382.
.1970	-1409.	3111.	36.	-3120.	501.	4073.	-.0000	-.0000	-.0000	.0001	-.0000	-.0001	3475.
.1980	-1223.	3470.	-271.	-4547.	-101.	3266.	-.0000	-.0000	.0000	.0002	-.0000	-.0001	3774.
.1990	-912.	3707.	-639.	-5973.	-724.	2263.	-.0000	-.0000	.0000	.0002	-.0000	-.0001	4333.
.2000	-571.	3649.	-1024.	-7248.	-1297.	1286.	-.0000	-.0000	.0000	.0003	.0000	-.0000	5038.
.2010	-266.	3584.	-1315.	-8179.	-1729.	49.	-.0000	-.0000	.0000	.0003	.0000	-.0000	5643.
.2020	-3.	3639.	-1475.	-8665.	-2070.	-206.	-.0000	-.0000	.0000	.0003	.0000	.0000	6007.
.2030	184.	3610.	-1523.	-8686.	-2379.	-369.	-.0000	-.0000	.0000	.0003	.0000	.0000	6083.
.2040	209.	3496.	-1425.	-8214.	-2504.	-519.	-.0000	-.0000	.0000	.0003	.0001	.0000	5815.
.2050	37.	3417.	-1156.	-7274.	-2659.	-29.	-.0000	-.0000	.0000	.0003	.0001	.0000	5220.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.27.24.

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

.1950	-1377.	2418.	428.	-728.	1751.	4702.	-0.000	-0.000	-0.000	.0000	-0.0001	-0.0002	3418.
.1960	-1451.	2873.	291.	-1796.	1119.	4549.	-0.000	-0.000	-0.000	.0001	-0.0001	-0.0002	3382.
.1970	-1409.	3111.	36.	-3120.	501.	4073.	-0.000	-0.000	-0.000	.0001	-0.0000	-0.0001	3475.
.1980	-1223.	3470.	-271.	-4547.	-101.	3266.	-0.000	-0.000	.0000	.0002	-0.0000	-0.0001	3774.
.1990	-912.	3707.	-639.	-5973.	-724.	2263.	-0.000	-0.000	.0000	.0002	-0.0000	-0.0001	4333.
.2000	-571.	3649.	-1024.	-7248.	-1297.	1286.	-0.000	-0.000	.0000	.0003	.0000	-0.0000	5038.
.2010	-266.	3584.	-1315.	-8179.	-1729.	449.	-0.000	-0.000	.0000	.0003	.0000	-0.0000	5643.
.2020	-3.	3639.	-1475.	-8665.	-2070.	-206.	-0.000	-0.000	.0000	.0003	.0000	.0000	6007.
.2030	184.	3610.	-1523.	-8686.	-2379.	-569.	-0.000	-0.000	.0000	.0003	.0000	.0000	6083.
.2040	209.	3496.	-1425.	-8214.	-2514.	-519.	-0.000	-0.000	.0000	.0003	.0001	.0000	5815.
.2050	37.	3417.	-1156.	-7274.	-2659.	-29.	-0.000	-0.000	.0000	.0003	.0001	.0000	5220.

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DIS/ADLPIPE ADLPIPE STRESS ANALYSIS

8/31/02. 18.27.24.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	EL	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.2060	-295.	3179.	-792.	-6000.	-2698.	868.	-0.000	-0.000	.0000	.0002	.0001	-0.0000	4473.							
.2070	-754.	2599.	-399.	-4520.	-2746.	2122.	-0.000	-0.000	.0000	.0002	.0001	-0.0001	3841.							
.2080	-1322.	1906.	48.	-2879.	-2730.	3620.	.0000	-0.000	.0000	.0001	.0001	-0.0001	3620.							
.2090	-1943.	1369.	558.	-1133.	-2632.	5179.	.0000	.0000	-0.000	.0000	.0001	-0.0002	3990.							
.2100	-2516.	963.	1062.	582.	-2533.	6616.	.0000	.0000	-0.000	-0.000	.0001	-0.0002	4791.							
.2110	-2978.	626.	1500.	2133.	-2441.	7808.	.0000	.0000	-0.000	-0.001	.0001	-0.0003	5698.							
.2120	-3310.	359.	1852.	3418.	-2310.	8692.	.0000	.0000	-0.000	-0.001	.0001	-0.0003	6485.							
.2130	-3497.	68.	2077.	4344.	-2141.	9223.	.0000	.0100	-0.000	-0.002	.0001	-0.0003	7022.							
.2140	-3504.	-281.	2143.	4850.	-1972.	9339.	.0000	.0000	-0.000	-0.002	.0001	-0.0003	7217.							
.2150	-3313.	-514.	2070.	4947.	-1809.	8983.	.0000	.0000	-0.000	-0.002	.0001	-0.0003	7019.							
.2160	-2955.	-556.	1892.	4674.	-1631.	8137.	.0000	.0000	-0.000	-0.002	.0001	-0.0003	6449.							
.2170	-2481.	-578.	1611.	4060.	-1438.	7065.	.0000	.0000	-0.000	-0.002	.0001	-0.0002	5577.							
.2180	-1920.	-617.	1243.	3157.	-1245.	5701.	.0000	.0000	-0.000	-0.001	.0001	-0.0002	4472.							
.2190	-1294.	-486.	838.	2060.	-1061.	4144.	.0000	.0000	-0.000	-0.001	.0001	-0.0001	3200.							
.2200	-655.	-133.	435.	855.	-885.	2500.	.0000	.0000	-0.000	-0.000	.0000	-0.0001	1878.							
.2210	-76.	272.	40.	-406.	-704.	932.	-0.000	-0.000	-0.000	.0000	.0000	-0.0000	834.							
.2220	409.	616.	-344.	-1681.	-519.	-444.	-0.000	-0.000	.0000	.0001	.0000	.0000	1223.							
.2230	794.	873.	-712.	-2922.	-357.	-1582.	-0.000	-0.000	.0000	.0001	-0.0000	.0001	2253.							
.2240	1062.	970.	-1053.	-4060.	-218.	-2433.	-0.000	-0.000	.0000	.0002	-0.0000	.0001	3194.							
.2250	1198.	892.	-1334.	-4994.	-63.	-2976.	-0.000	-0.000	.0000	.0002	-0.0000	.0001	3919.							
.2260	1233.	782.	-1514.	-5621.	122.	-3279.	-0.000	-0.000	.0000	.0002	-0.0000	.0001	4387.							
.2270	1223.	778.	-1574.	-5873.	317.	-3441.	-0.000	-0.000	.0000	.0002	-0.0000	.0001	4593.							
.2280	1196.	782.	-1515.	-5733.	532.	-3503.	-0.000	-0.000	.0000	.0002	-0.0000	.0001	4543.							
.2290	1153.	1045.	-1353.	-5234.	796.	-3464.	-0.000	-0.000	.0000	.0002	-0.0001	.0001	4265.							
.2300	1107.	1235.	-1119.	-4461.	1098.	-3339.	-0.000	-0.000	.0000	.0002	-0.0001	.0001	3828.							
.2310	1071.	1398.	-864.	-3533.	1407.	-3140.	-0.000	-0.000	.0000	.0001	-0.0001	.0001	3324.							
.2320	1040.	1470.	-631.	-2572.	1715.	-2860.	-0.000	-0.000	.0000	.0001	-0.0001	.0001	2839.							
.2330	1000.	1390.	-454.	-1683.	2015.	-2491.	-0.000	-0.000	.0000	.0001	-0.0001	.0001	2440.							
.2340	948.	1080.	-355.	-943.	2280.	-2044.	-0.000	-0.000	.0000	.0000	-0.0001	.0001	2160.							
.2350	891.	508.	-340.	-373.	2439.	-1561.	-0.000	-0.000	.0000	.0000	-0.0001	.0001	1996.							
.2360	847.	-188.	-375.	69.	2637.	-1130.	-0.000	-0.000	.0000	.0000	-0.0001	.0000	1934.							
.2370	837.	-775.	-406.	460.	2712.	-658.	-0.000	.0000	.0000	-0.000	-0.0001	.0000	1942.							
.2380	870.	-1139.	-397.	855.	2709.	-806.	-0.000	.0000	.0000	-0.000	-0.0001	.0000	1991.							
.2390	939.	-1326.	-347.	1259.	2628.	-969.	-0.000	.0000	.0000	-0.000	-0.0001	.0000	2070.							
.2400	1035.	-1397.	-270.	1645.	2459.	-1316.	-0.000	.0000	.0000	-0.0001	-0.0001	.0000	2182.							
.2410	1140.	-1395.	-186.	1973.	2196.	-1792.	-0.000	.0000	.0000	-0.0001	-0.0001	.0001	2327.							
.2420	1227.	-1415.	-115.	2203.	1855.	-2307.	-0.000	.0000	.0000	-0.0001	-0.0001	.0001	2487.							
.2430	1271.	-1556.	-77.	2316.	1457.	-2773.	-0.000	.0000	.0000	-0.0001	-0.0000	.0001	2626.							

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.2320	1040.	1470.	-631.	-2572.	1715.	-2850.	-.0000	-.0000	.0000	.0001	-.0001	.0001	2839.
.2330	1000.	1390.	-454.	-1683.	2015.	-2491.	-.0000	-.0000	.0000	.0001	-.0001	.0001	2440.
.2340	948.	1080.	-355.	-943.	2280.	-2044.	-.0000	-.0000	.0000	.0000	-.0001	.0001	2160.
.2350	891.	508.	-340.	-373.	2489.	-1561.	-.0000	-.0000	.0000	.0000	-.0001	.0001	1996.
.2360	847.	-188.	-375.	69.	2637.	-1130.	-.0000	-.0000	.0000	.0000	-.0001	.0000	1934.
.2370	837.	-775.	-406.	460.	2712.	-658.	-.0000	.0000	.0000	-.0000	-.0001	.0000	1942.
.2380	870.	-1139.	-397.	855.	2709.	-806.	-.0000	.0000	.0000	-.0000	-.0001	.0000	1991.
.2390	939.	-1326.	-347.	1259.	2628.	-969.	-.0000	.0000	.0000	-.0000	-.0001	.0000	2070.
.2400	1035.	-1397.	-270.	1645.	2459.	-1316.	-.0000	.0000	.0000	-.0001	-.0001	.0000	2182.
.2410	1140.	-1395.	-186.	1973.	2196.	-1792.	-.0000	.0000	.0000	-.0001	-.0001	.0001	2327.
.2420	1227.	-1415.	-115.	2203.	1855.	-2307.	-.0000	.0000	.0000	-.0001	-.0001	.0001	2487.
.2430	1271.	-1556.	-77.	2316.	1457.	-2773.	-.0000	.0000	.0000	-.0001	-.0000	.0001	2626.

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SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	EL	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)
.2440	1270.	-1814.	-72.	2329.	1006.	-3143.	-.0000	.0000	.0000	-.0001	-.0000	.0001	2723.
.2450	1222.	-2111.	-77.	2304.	528.	-3389.	.0000	.0000	.0000	-.0001	-.0000	.0001	2785.
.2460	1121.	-2389.	-59.	2323.	68.	-3481.	.0000	.0000	.0000	-.0001	.0000	.0001	2821.
.2470	975.	-2583.	8.	2457.	-350.	-3412.	.0000	.0000	-.0000	-.0001	.0000	.0001	2844.
.2480	800.	-2589.	145.	2754.	-727.	-3201.	.0000	.0000	-.0000	-.0001	.0000	.0001	2888.
.2490	595.	-2354.	359.	3222.	-1047.	-2843.	.0000	.0000	-.0000	-.0001	.0001	.0001	2981.
.2500	339.	-1937.	632.	3815.	-1283.	-2293.	.0000	.0000	-.0000	-.0002	.0001	.0001	3122.
.2510	29.	-1462.	920.	4436.	-1451.	-1524.	.0000	.0000	-.0000	-.0002	.0001	.0001	3309.
.2520	-330.	-1048.	1171.	4970.	-1581.	-537.	.0000	.0000	-.0000	-.0002	.0001	.0000	3539.
.2530	-742.	-794.	1355.	5368.	-1672.	662.	.0000	.0000	-.0000	-.0002	.0001	-.0000	3816.
.2540	-1201.	-727.	1466.	5585.	-1715.	2022.	.0000	.0000	-.0000	-.0002	.0001	-.0001	4167.
.2550	-1666.	-760.	1518.	5652.	-1724.	3421.	.0000	.0000	-.0000	-.0002	.0001	-.0001	4602.
.2560	-2087.	-789.	1532.	5621.	-1712.	4712.	.0000	.0000	-.0000	-.0002	.0001	-.0002	5077.
.2570	-2432.	-764.	1535.	5553.	-1672.	5782.	.0000	.0000	-.0000	-.0002	.0001	-.0002	5520.
.2580	-2676.	-640.	1549.	5495.	-1593.	6536.	.0000	.0000	-.0000	-.0002	.0001	-.0002	5855.
.2590	-2789.	-369.	1581.	5461.	-1485.	6891.	.0000	.0000	-.0000	-.0002	.0001	-.0002	6010.
.2600	-2755.	25.	1612.	5420.	-1359.	6809.	.0000	.0000	-.0000	-.0002	.0001	-.0002	5937.
.2610	-2579.	450.	1613.	5312.	-1219.	6314.	.0000	.0000	-.0000	-.0002	.0001	-.0002	5622.
.2620	-2283.	811.	1552.	5069.	-1064.	5461.	.0000	.0000	-.0000	-.0002	.0001	-.0002	5073.
.2630	-1886.	1004.	1400.	4635.	-901.	4321.	.0000	.0000	-.0000	-.0002	.0001	-.0001	4314.
.2640	-1404.	936.	1138.	3989.	-735.	2966.	.0000	.0000	-.0000	-.0002	.0000	-.0001	3387.
.2650	-847.	630.	782.	3176.	-571.	1442.	.0000	-.0000	-.0000	-.0001	.0000	-.0000	2382.
.2660	-232.	232.	381.	2302.	-395.	-221.	.0000	-.0000	-.0000	-.0001	.0000	.0000	1581.
.2670	424.	-133.	-10.	1485.	-193.	-1976.	-.0000	-.0000	-.0000	-.0001	.0000	.0001	1671.
.2680	1098.	-428.	-355.	819.	30.	-3759.	-.0000	-.0000	.0000	-.0000	.0000	.0001	2593.
.2690	1761.	-644.	-631.	368.	269.	-5430.	-.0000	-.0000	.0000	-.0000	-.0000	.0002	3707.
.2700	2369.	-783.	-821.	163.	526.	-7031.	-.0000	-.0000	.0000	-.0000	-.0000	.0002	4754.
.2710	2873.	-901.	-926.	196.	799.	-8292.	-.0000	-.0000	.0000	-.0000	-.0000	.0003	5617.
.2720	3237.	-1070.	-964.	429.	1069.	-9164.	-.0000	-.0000	.0000	-.0000	-.0000	.0003	6226.
.2730	3432.	-1322.	-946.	821.	1325.	-9578.	-.0000	-.0000	.0000	-.0000	-.0000	.0003	6541.
.2740	3443.	-1683.	-881.	1337.	1570.	-9496.	-.0000	-.0000	.0000	-.0000	-.0001	.0003	6550.
.2750	3274.	-2167.	-776.	1953.	1794.	-8938.	-.0000	-.0000	.0000	-.0001	-.0001	.0003	6284.
.2760	2958.	-2687.	-624.	2665.	1982.	-7991.	-.0000	.0000	.0000	-.0001	-.0001	.0003	5833.
.2770	2531.	-3096.	-410.	3476.	2140.	-6779.	-.0000	.0000	.0000	-.0001	-.0001	.0002	5334.
.2780	2033.	-3338.	-133.	4365.	2271.	-5419.	.0000	.0000	.0000	-.0002	-.0001	.0002	4933.
.2790	1507.	-3459.	181.	5272.	2359.	-4021.	.0000	.0000	-.0000	-.0002	-.0001	.0001	4744.
.2800	994.	-3496.	499.	6120.	2394.	-2692.	.0000	.0000	-.0000	-.0002	-.0001	.0001	4787.
.2810	528.	-3423.	798.	6835.	2379.	-1523.	.0000	.0000	-.0000	-.0003	-.0001	.0001	4985.

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.2710	2873.	-901.	-926.	196.	799.	-8292.	-0.000	-0.0000	.0000	-0.0000	-0.0000	.0003	5617.
.2720	3237.	-1070.	-964.	429.	1069.	-9164.	-0.000	-0.0000	.0000	-0.0000	-0.0000	.0003	6226.
.2730	3432.	-1322.	-946.	821.	1325.	-9578.	-0.000	-0.0000	.0000	-0.0000	-0.0000	.0003	6541.
.2740	3443.	-1663.	-821.	1327.	1570.	-9476.	-0.000	-0.0000	.0000	-0.0000	-0.0001	.0003	6550.
.2750	3274.	-2167.	-776.	1953.	1794.	-8938.	-0.000	-0.0000	.0000	-0.0001	-0.0001	.0003	6284.
.2760	2958.	-2687.	-624.	2665.	1982.	-7991.	-0.000	.0000	.0000	-0.0001	-0.0001	.0003	5833.
.2770	2531.	-3096.	-410.	3476.	2140.	-6779.	-0.000	.0000	.0000	-0.0001	-0.0001	.0002	5334.
.2780	2033.	-3338.	-133.	4365.	2271.	-5419.	.0000	.0000	.0000	-0.0002	-0.0001	.0002	4933.
.2790	1507.	-3459.	181.	5272.	2359.	-4021.	.0000	.0000	-0.0000	-0.0002	-0.0001	.0001	4744.
.2800	994.	-3496.	499.	6120.	2394.	-2692.	.0000	.0000	-0.0000	-0.0002	-0.0001	.0001	4787.
.2810	528.	-3423.	798.	6835.	2379.	-1523.	.0000	.0000	-0.0000	-0.0003	-0.0001	.0001	4985.

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SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	EL	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)
.2820	135.	-3279.	1047.	7342.	2311.	-581.	.0000	.0000	-0.0000	-0.0003	-0.0001	.0000	5203.
.2830	-166.	-3120.	1215.	7576.	2186.	97.	.0000	.0000	-0.0000	-0.0003	-0.0000	-0.0000	5315.
.2840	-361.	-2992.	1282.	7500.	2006.	493.	.0000	.0000	-0.0000	-0.0003	-0.0000	-0.0000	5244.
.2850	-445.	-2857.	1249.	7121.	1784.	607.	.0000	.0000	-0.0000	-0.0003	-0.0000	-0.0000	4965.
.2860	-422.	-2699.	1131.	6478.	1528.	452.	.0000	.0000	-0.0000	-0.0002	-0.0000	-0.0000	4497.
.2870	-307.	-2474.	951.	5635.	1252.	56.	.0000	.0000	-0.0000	-0.0002	-0.0000	-0.0000	3891.
.2880	-125.	-2205.	731.	4659.	971.	-479.	.0000	.0000	-0.0000	-0.0002	-0.0000	.0000	3224.
.2890	94.	-1923.	493.	3623.	696.	-1102.	.0000	.0000	-0.0000	-0.0001	-0.0000	.0000	2595.
.2900	322.	-1592.	263.	2598.	436.	-1733.	.0000	.0000	-0.0000	-0.0001	-0.0000	.0001	2125.
.2910	528.	-1183.	66.	1648.	204.	-2295.	.0000	.0000	-0.0000	-0.0001	.0000	.0001	1909.
.2920	602.	-769.	-93.	802.	11.	-2703.	-0.000	.0000	.0000	-0.0000	.0000	.0001	1900.
.2930	765.	-441.	-222.	73.	-147.	-2891.	-0.000	-0.0000	.0000	-0.0000	.0000	.0001	1951.
.2940	773.	-167.	-316.	-525.	-270.	-2845.	-0.000	-0.0000	.0000	.0000	.0000	.0001	1959.
.2950	708.	127.	-363.	-978.	-354.	-2584.	-0.000	-0.0000	.0000	.0000	.0000	.0001	1878.
.2960	578.	404.	-374.	-1303.	-404.	-2127.	-0.000	-0.0000	.0000	.0000	.0000	.0001	1703.
.2970	396.	578.	-366.	-1527.	-433.	-1505.	-0.000	-0.0000	.0000	.0001	.0000	.0001	1474.
.2980	184.	670.	-743.	-1667.	-453.	-789.	-0.000	-0.0000	.0000	.0001	.0000	.0000	1280.
.2990	-34.	763.	-298.	-1730.	-466.	-65.	-0.000	-0.0000	.0000	.0001	.0000	.0000	1208.
.3000	-238.	877.	-234.	-1731.	-481.	598.	-0.000	-0.0000	.0000	.0001	.0000	-0.0000	1276.
.3010	-413.	987.	-161.	-1700.	-507.	1153.	-0.000	-0.0000	.0000	.0001	.0000	-0.0000	1426.
.3020	-545.	1102.	-87.	-1665.	-548.	1564.	-0.000	-0.0000	.0000	.0001	.0000	-0.0001	1583.
.3030	-630.	1249.	-19.	-1654.	-606.	1813.	-0.000	-0.0000	.0000	.0001	.0000	-0.0001	1703.
.3040	-671.	1423.	35.	-1696.	-677.	1909.	-0.000	-0.0000	-0.0000	.0001	.0000	-0.0001	1781.
.3050	-676.	1591.	61.	-1821.	-761.	1883.	-0.000	-0.0000	-0.0000	.0001	.0000	-0.0001	1838.
.3060	-655.	1733.	52.	-2047.	-855.	1767.	-0.000	-0.0000	-0.0000	.0001	.0000	-0.0001	1912.
.3070	-619.	1843.	6.	-2380.	-952.	1597.	-0.000	-0.0000	.0000	.0001	.0000	-0.0001	2036.
.3080	-579.	1912.	-73.	-2805.	-1046.	1405.	-0.000	-0.0000	.0000	.0001	.0000	-0.0000	2229.
.3090	-541.	1932.	-179.	-3296.	-1130.	1216.	-0.000	-0.0000	.0000	.0001	.0000	-0.0000	2487.
.3100	-506.	1910.	-299.	-3815.	-1198.	1039.	-0.000	-0.0000	.0000	.0001	.0000	-0.0000	2785.
.3110	-473.	1888.	-416.	-4313.	-1245.	872.	-0.000	-0.0000	.0000	.0002	.0000	-0.0000	3082.
.3120	-439.	1911.	-513.	-4747.	-1262.	713.	-0.000	-0.0000	.0000	.0002	.0000	-0.0000	3346.
.3130	-401.	1980.	-584.	-5097.	-1248.	567.	-0.000	-0.0000	.0000	.0002	.0000	-0.0000	3554.
.3140	-361.	2058.	-633.	-5341.	-1205.	450.	-0.000	-0.0000	.0000	.0002	.0000	-0.0000	3703.
.3150	-324.	2130.	-662.	-5495.	-1131.	331.	-0.000	-0.0000	.0000	.0002	.0000	-0.0000	3790.
.3160	-296.	2202.	-674.	-5559.	-1026.	376.	-0.000	-0.0000	.0000	.0002	.0000	-0.0000	3819.
.3170	-263.	2247.	-675.	-5545.	-894.	450.	-0.000	-0.0000	.0000	.0002	.0000	-0.0000	3798.
.3180	-291.	2219.	-673.	-5466.	-741.	623.	-0.000	-0.0000	.0000	.0002	.0000	-0.0000	3742.
.3190	-324.	2106.	-667.	-5323.	-566.	699.	-0.000	-0.0000	.0000	.0002	-0.0000	-0.0000	3659.

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.3090	-541.	1932.	-179.	-3296.	-1130.	1216.	-.0000	-.0000	.0000	.0001	.0000	-.0000	2487.
.3100	-506.	1910.	-299.	-3815.	-1198.	1039.	-.0000	-.0000	.0000	.0001	.0000	-.0000	2785.
.3110	-473.	1888.	-416.	-4313.	-1245.	872.	-.0000	-.0000	.0000	.0002	.0000	-.0000	3082.
.3120	-439.	1911.	-513.	-4747.	-1262.	713.	-.0000	-.0000	.0000	.0002	.0000	-.0000	3346.
.3130	-401.	1980.	-534.	-5092.	-1248.	567.	-.0000	-.0000	.0000	.0002	.0000	-.0000	3554.
.3140	-361.	2058.	-633.	-5341.	-1205.	450.	-.0000	-.0000	.0000	.0002	.0000	-.0000	3703.
.3150	-324.	2130.	-662.	-5495.	-1131.	391.	-.0000	-.0000	.0000	.0002	.0000	-.0000	3790.
.3160	-296.	2202.	-674.	-5559.	-1026.	376.	-.0000	-.0000	.0000	.0002	.0000	-.0000	3819.
.3170	-283.	2247.	-675.	-5545.	-894.	450.	-.0000	-.0000	.0000	.0002	.0000	-.0000	3798.
.3180	-291.	2219.	-673.	-5466.	-741.	623.	-.0000	-.0000	.0000	.0002	.0000	-.0000	3742.
.3190	-324.	2106.	-667.	-5323.	-566.	899.	-.0000	-.0000	.0000	.0002	-.0000	-.0000	3659.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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S/RV PIPING KEWAUNEE GKWOBF 2 SUP DISK
2 SAFETY COLD FW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	EL								
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)	
.3200	-380.	1949.	-649.	-5107.	-768.	1259.	-.0000	-.0000	.0000	.0002	-.0000	-.0000	3554.	
.3210	-451.	1785.	-611.	-4809.	-153.	1672.	-.0000	-.0000	.0000	.0002	-.0000	-.0001	3433.	
.3220	-526.	1630.	-551.	-4431.	73.	2102.	-.0000	-.0000	.0000	.0002	-.0000	-.0001	3306.	
.3230	-597.	1499.	-469.	-3987.	307.	2515.	-.0000	-.0000	.0000	.0002	-.0000	-.0001	3184.	
.3240	-652.	1406.	-373.	-3506.	540.	2872.	-.0000	-.0000	.0000	.0001	-.0000	-.0001	3076.	
.3250	-681.	1348.	-275.	-3032.	759.	3135.	-.0000	-.0000	.0000	.0001	-.0000	-.0001	2984.	
.3260	-676.	1303.	-195.	-2620.	950.	3277.	-.0000	-.0000	.0000	.0001	-.0001	-.0001	2899.	
.3270	-633.	1231.	-150.	-2322.	1101.	3282.	-.0000	-.0000	.0000	.0001	-.0001	-.0001	2809.	
.3280	-550.	1104.	-155.	-2174.	1200.	3138.	-.0000	-.0000	.0000	.0001	-.0001	-.0001	2697.	
.3290	-427.	934.	-210.	-2189.	1240.	2835.	-.0000	-.0000	.0000	.0001	-.0001	-.0001	2555.	
.3300	-263.	758.	-305.	-2353.	1220.	2371.	-.0000	-.0000	.0000	.0001	-.0001	-.0001	2397.	
.3310	-65.	598.	-429.	-2636.	1141.	1763.	-.0000	-.0000	.0000	.0001	-.0001	-.0001	2272.	
.3320	156.	466.	-567.	-2999.	1008.	1051.	-.0000	-.0000	.0000	.0001	-.0001	-.0000	2247.	
.3330	382.	384.	-699.	-3392.	834.	290.	-.0000	-.0000	.0000	.0001	-.0000	-.0000	2363.	
.3340	595.	387.	-810.	-3770.	631.	-458.	-.0000	-.0000	.0000	.0001	-.0000	-.0000	2595.	
.3350	773.	478.	-890.	-4099.	409.	-1118.	-.0000	-.0000	.0000	.0002	-.0000	.0000	2877.	
.3360	895.	617.	-937.	-4361.	180.	-1604.	-.0000	-.0000	.0000	.0002	-.0000	.0001	3135.	
.3370	923.	751.	-953.	-4546.	-43.	-1840.	-.0000	-.0000	.0000	.0002	-.0000	.0001	3306.	
.3380	860.	861.	-940.	-4644.	-253.	-1783.	-.0000	-.0000	.0000	.0002	-.0000	.0001	3357.	
.3390	700.	964.	-892.	-4640.	-447.	-1425.	-.0000	-.0000	.0000	.0002	-.0000	.0000	3286.	
.3400	449.	1081.	-805.	-4523.	-616.	-729.	-.0000	-.0000	.0000	.0002	.0000	.0000	3122.	
.3410	124.	1218.	-677.	-4289.	-760.	83.	-.0000	-.0000	.0000	.0002	.0000	-.0000	2937.	
.3420	-252.	1385.	-511.	-3947.	-880.	1122.	-.0000	-.0000	.0000	.0001	.0000	-.0000	2829.	
.3430	-652.	1610.	-313.	-3516.	-981.	2246.	-.0000	-.0000	.0000	.0001	.0000	-.0001	2889.	
.3440	-1048.	1902.	-93.	-3031.	-1068.	3374.	-.0000	-.0000	.0000	.0001	.0000	-.0001	3140.	
.3450	-1419.	2231.	126.	-2544.	-1146.	4436.	.0000	-.0000	-.0000	.0001	.0000	-.0001	3532.	
.3460	-1745.	2547.	321.	-2115.	-1227.	5375.	.0000	-.0000	-.0000	.0001	.0000	-.0002	3980.	
.3470	-2010.	2817.	470.	-1796.	-1315.	6145.	.0000	-.0000	-.0000	.0001	.0000	-.0002	4405.	
.3480	-2206.	3011.	558.	-1621.	-1412.	6712.	.0000	-.0000	-.0000	.0001	.0000	-.0002	4751.	
.3490	-2326.	3103.	579.	-1602.	-1520.	7057.	.0000	-.0000	-.0000	.0001	.0001	-.0002	4984.	
.3500	-2366.	3088.	535.	-1720.	-1636.	7167.	.0000	-.0000	-.0000	.0001	.0001	-.0002	5089.	
.3510	-2325.	2998.	444.	-1722.	-1751.	7040.	.0000	-.0000	-.0000	.0001	.0001	-.0002	5060.	
.3520	-2203.	2369.	328.	-2180.	-1255.	6686.	.0000	-.0000	-.0000	.0001	.0001	-.0002	4902.	
.3530	-2024.	2718.	205.	-2404.	-1939.	6137.	.0000	-.0000	-.0000	.0001	.0001	-.0002	4631.	
.3540	-1789.	2546.	92.	-2555.	-1994.	5439.	.0000	-.0000	-.0000	.0001	.0001	-.0002	4268.	
.3550	-1520.	2354.	2.	-2594.	-2015.	4648.	.0000	-.0000	.0000	.0001	.0001	-.0002	3836.	
.3560	-1239.	2142.	-57.	-2497.	-1996.	3924.	-.0000	-.0000	.0000	.0001	.0001	-.0001	3359.	
.3570	-968.	1898.	-81.	-2257.	-1936.	3029.	-.0000	-.0000	.0000	.0001	.0001	-.0001	2861.	

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ADLPIPE STRESS ANALYSIS

83/12/02. 18.27.24.

S/RV PIPING KEWAUNEE GKWOBF 2 SUP DISK
2 SAFETY COLD FW24F--2 PSV

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LOADS
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.3470	-2010.	2317.	470.	-1796.	-1315.	6145.	.0000	-.0000	-.0000	.0001	.0000	-.0002	3980.
.3480	-2206.	3011.	558.	-1621.	-1412.	6712.	.0000	-.0000	-.0000	.0001	.0000	-.0002	4405.
.3490	-2326.	3103.	579.	-1602.	-1520.	7057.	.0000	-.0000	-.0000	.0001	.0001	-.0002	4751.
.3500	-2366.	3098.	535.	-1720.	-1636.	7167.	.0000	-.0000	-.0000	.0001	.0001	-.0002	4984.
.3510	-2325.	2998.	444.	-1932.	-1751.	7040.	.0000	-.0000	-.0000	.0001	.0001	-.0002	5089.
.3520	-2203.	2369.	328.	-2180.	-1955.	6698.	.0000	-.0000	-.0000	.0001	.0001	-.0002	5060.
.3530	-2024.	2718.	205.	-2404.	-1939.	6137.	.0000	-.0000	-.0000	.0001	.0001	-.0002	4902.
.3540	-1789.	2546.	92.	-2555.	-1994.	5439.	.0000	-.0000	-.0000	.0001	.0001	-.0002	4631.
.3550	-1520.	2354.	2.	-2594.	-2015.	4648.	.0000	-.0000	-.0000	.0001	.0001	-.0002	4268.
.3560	-1239.	2142.	-57.	-2497.	-1996.	3824.	-.0000	-.0000	.0000	.0001	.0001	-.0001	3836.
.3570	-968.	1898.	-81.	-2257.	-1936.	3029.	-.0000	-.0000	.0000	.0001	.0001	-.0001	3359.
													2861.

ADLPIPE PAGE 1188 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 93/12/02. 18.27.24.
 S/RV PIPING KEWAUNEE GKW0RF 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	END	TYPE	EL								
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	PX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)	
.3580	-725.	1598.	-75.	-1884.	-1837.	2318.	-.0000	-.0000	.0000	.0001	.0001	-.0001	2364.	
.3590	-524.	1236.	-42.	-1394.	-1705.	1730.	-.0000	-.0000	.0000	.0000	.0001	-.0001	1887.	
.3600	-372.	838.	20.	-803.	-1542.	1281.	-.0000	-.0000	.0000	.0000	.0001	-.0000	1456.	
.3610	-272.	436.	109.	-132.	-1354.	975.	-.0000	-.0000	-.0000	-.0000	.0001	-.0000	1128.	
.3620	-221.	47.	220.	588.	-1146.	801.	.0000	.0000	-.0000	-.0000	.0000	-.0000	1023.	
.3630	-212.	-319.	345.	1322.	-928.	742.	.0000	.0000	-.0000	-.0001	.0000	-.0000	1198.	
.3640	-236.	-646.	473.	2031.	-703.	772.	.0000	.0000	-.0000	-.0001	.0000	-.0000	1539.	
.3650	-283.	-922.	596.	2677.	-476.	860.	.0000	.0000	-.0000	-.0001	.0000	-.0000	1922.	
.3660	-341.	-1158.	698.	3221.	-253.	980.	.0000	.0000	-.0000	-.0001	.0000	-.0000	2276.	
.3670	-398.	-1376.	766.	3629.	-37.	1102.	.0000	.0000	-.0000	-.0001	.0000	-.0000	2557.	
.3680	-441.	-1577.	793.	3886.	171.	1196.	.0000	.0000	-.0000	-.0002	.0000	-.0000	2743.	
.3690	-457.	-1745.	779.	3989.	369.	1226.	.0000	.0000	-.0000	-.0002	.0000	-.0000	2824.	
.3700	-434.	-1863.	727.	3952.	558.	1160.	.0000	.0000	-.0000	-.0002	-.0000	-.0000	2801.	
.3710	-363.	-1926.	643.	3792.	736.	975.	.0000	.0000	-.0000	-.0001	-.0000	-.0000	2685.	
.3720	-242.	-1932.	533.	3533.	905.	660.	.0000	.0000	-.0000	-.0001	-.0000	-.0000	2498.	
.3730	-69.	-1880.	406.	3199.	1063.	211.	.0000	.0000	-.0000	-.0001	-.0000	-.0000	2277.	
.3740	150.	-1772.	267.	2813.	1207.	-361.	.0000	.0000	-.0000	-.0001	-.0000	.0000	2077.	
.3750	404.	-1623.	121.	2391.	1334.	-1033.	.0000	.0000	-.0000	-.0001	-.0000	.0000	1973.	
.3760	679.	-1460.	-27.	1948.	1444.	-1771.	.0000	.0000	-.0000	-.0001	-.0000	.0001	2024.	
.3770	961.	-1302.	-177.	1498.	1532.	-2534.	-.0000	.0000	.0000	-.0001	-.0001	.0001	2236.	
.3780	1236.	-1162.	-324.	1054.	1597.	-3283.	-.0000	.0000	.0000	-.0000	-.0001	.0001	2561.	
.3790	1489.	-1044.	-462.	634.	1639.	-3981.	-.0000	-.0000	.0000	-.0000	-.0001	.0001	2933.	
.3800	1707.	-947.	-583.	259.	1659.	-4594.	-.0000	-.0000	.0000	-.0000	-.0001	.0002	3297.	
.3810	1882.	-862.	-681.	-54.	1658.	-5095.	-.0000	-.0000	.0000	.0000	-.0001	.0002	3612.	
.3820	2004.	-787.	-751.	-292.	1635.	-5461.	-.0000	-.0000	.0000	.0000	-.0001	.0002	3847.	
.3830	2069.	-735.	-791.	-445.	1594.	-5672.	-.0000	-.0000	.0000	.0000	-.0001	.0002	3983.	
.3840	2073.	-716.	-802.	-510.	1534.	-5720.	-.0000	-.0000	.0000	.0000	-.0001	.0002	4006.	
.3850	2017.	-719.	-781.	-484.	1456.	-5607.	-.0000	-.0000	.0000	.0000	-.0001	.0002	3919.	
.3860	1906.	-726.	-727.	-366.	1362.	-5348.	-.0000	-.0000	.0000	.0000	-.0001	.0002	3728.	
.3870	1745.	-733.	-642.	-165.	1253.	-4958.	-.0000	-.0000	.0000	.0000	-.0000	.0002	3449.	
.3880	1544.	-744.	-531.	104.	1128.	-4461.	-.0000	-.0000	.0000	.0000	-.0000	.0002	3102.	
.3890	1311.	-751.	-398.	426.	996.	-3885.	-.0000	-.0000	.0000	-.0000	-.0000	.0001	2717.	
.3900	1056.	-735.	-248.	782.	830.	-3261.	-.0000	-.0000	.0000	-.0000	-.0000	.0001	2329.	
.3910	790.	-688.	-67.	1148.	658.	-2621.	-.0000	.0000	.0000	-.0000	-.0000	.0001	1979.	
.3920	521.	-618.	75.	1498.	472.	-1990.	-.0000	.0000	-.0000	-.0001	-.0000	.0001	1509.	
.3930	256.	-548.	229.	1807.	274.	-1385.	.0000	.0000	-.0000	-.0001	-.0000	.0000	1146.	
.3940	3.	-487.	365.	2055.	67.	-827.	.0000	.0000	-.0000	-.0001	.0000	.0000	1494.	
.3950	-230.	-425.	482.	2233.	-140.	-334.	.0000	.0000	-.0000	-.0001	.0000	.0000	1525.	

ADLPIPE PAGE 1189 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 93/12/02. 18.27.24.
 S/RV PIPING KEWAUNEE GKW0RF 2 RUP DISK
 2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
 LOADS
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.3850	2017.	-719.	-781.	-484.	1456.	-5607.	-0.000	-0.0000	.0000	.0000	-0.0001	.0002	3919.
.3860	1906.	-726.	-727.	-366.	1362.	-5348.	-0.000	-0.0000	.0000	.0000	-0.0001	.0002	3728.
.3870	1745.	-733.	-642.	-165.	1253.	-4958.	-0.000	-0.0000	.0000	.0000	-0.0000	.0002	3449.
.3880	1544.	-744.	-521.	104.	1128.	-4461.	-0.000	-0.0000	.0000	.0000	-0.0000	.0002	3102.
.3890	1311.	-751.	-398.	426.	936.	-3839.	-0.000	-0.0000	.0000	-0.0000	-0.0000	.0001	2717.
.3900	1056.	-755.	-248.	782.	820.	-3261.	-0.000	-0.0000	.0000	-0.0000	-0.0000	.0001	2329.
.3910	790.	-688.	-87.	1148.	658.	-2621.	-0.000	.0000	.0000	-0.0000	-0.0000	.0001	1979.
.3920	521.	-618.	75.	1498.	472.	-1990.	-0.000	.0000	-0.0000	-0.0001	-0.0000	.0001	1709.
.3930	256.	-548.	229.	1807.	274.	-1385.	.0000	.0000	-0.0000	-0.0001	-0.0000	.0000	1546.
.3940	3.	-487.	365.	2055.	68.	-827.	.0000	.0000	-0.0000	-0.0001	.0000	.0000	1494.
.3950	-230.	-425.	482.	2233.	-140.	-334.	.0000	.0000	-0.0000	-0.0001	.0000	.0000	1525.

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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	MEMBER	SEQUENCE	LOCATION	END	TYPE	EL	TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS
	26	3					(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.3960								-436.	-348.	577.	2339.	-344.	75.	.0000	.0000	-0.0000	-0.0001	.0000	-0.0000	1594.
.3970								-608.	-268.	648.	2373.	-534.	394.	.0000	.0000	-0.0000	-0.0001	.0000	-0.0000	1661.
.3980								-741.	-207.	690.	2339.	-704.	623.	.0000	.0000	-0.0000	-0.0001	.0000	-0.0000	1699.
.3990								-832.	-166.	705.	2248.	-844.	761.	.0000	.0000	-0.0000	-0.0001	.0000	-0.0000	1698.
.4000								-877.	-120.	697.	2119.	-948.	802.	.0000	.0000	-0.0000	-0.0001	.0000	-0.0000	1655.

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)
.0450	6203.	6415.	-4746.	-17067.	3034.	-14765.	-0.0000	-0.0000	.0000	.0007	-0.0002	.0005	15348.

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS
	26	4					(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
0.0000								0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010								0.	0.	0.	0.	0.	-0.	0.0000	-0.0000	-0.0000	.0000	.0000	-0.0000	0.
.0020								2.	4.	1.	1.	1.	-2.	.0000	.0000	-0.0000	.0000	.0000	.0000	1.
.0030								5.	19.	4.	3.	1.	-8.	.0000	.0000	-0.0000	.0000	.0000	.0000	6.
.0040								13.	68.	11.	7.	2.	-24.	.0000	-0.0000	-0.0000	.0000	.0000	-0.0000	17.
.0050								24.	162.	23.	9.	1.	-50.	.0000	.0000	-0.0000	.0000	.0000	.0000	34.
.0060								36.	280.	34.	-1.	-2.	-79.	0.0000	-0.0000	-0.0000	.0000	.0000	-0.0000	53.
.0070								48.	401.	41.	-34.	-7.	-102.	.0000	.0000	.0000	.0000	.0000	.0000	73.
.0080								64.	546.	44.	-92.	-14.	-127.	.0000	0.0000	-0.0000	.0000	.0000	.0000	106.
.0090								95.	775.	45.	-176.	-31.	-174.	.0000	.0000	.0000	.0000	-0.0000	.0000	168.
.0100								141.	1125.	45.	-293.	-66.	-255.	.0000	0.0000	-0.0000	.0000	.0000	.0000	266.
.0110								193.	1550.	35.	-463.	-123.	-349.	.0000	0.0000	-0.0000	.0000	.0000	-0.0000	399.
.0120								238.	1922.	-4.	-714.	-214.	-421.	.0000	.0000	-0.0000	.0000	.0000	.0000	577.
.0130								263.	2159.	-63.	-1052.	-355.	-446.	0.0000	0.0000	-0.0000	.0000	.0000	0.0000	806.
.0140								257.	2276.	-189.	-1442.	-548.	-420.	.0000	0.0000	-0.0000	.0000	.0000	.0000	1078.
.0150								205.	2279.	-298.	-1824.	-780.	-324.	.0000	0.0000	-0.0000	.0000	.0000	0.0000	1355.
.0160								92.	2089.	-400.	-2133.	-1037.	-123.	.0000	-0.0000	-0.0000	.0000	.0000	-0.0000	1601.
.0170								-79.	1642.	-431.	-2293.	-1248.	205.	.0000	-0.0000	-0.0000	.0000	.0000	-0.0000	1781.
.0180								-285.	988.	-517.	-2214.	-1538.	641.	-0.0000	-0.0000	-0.0000	-0.0000	.0000	-0.0000	1868.
.0190								-495.	242.	-474.	-1309.	-1741.	1140.	-0.0000	-0.0000	-0.0000	.0000	.0000	-0.0000	1859.

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

CONDITION 24
LOADS
SHOCK
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.0090	95.	775.	45.	-176.	-31.	-174.	.0000	.0000	.0000	.0000	.0000	.0000	.0000	168.
.0100	141.	1125.	45.	-293.	-66.	-255.	.0000	0.0000	-0.0000	.0000	.0000	.0000	.0000	266.
.0110	193.	1550.	35.	-463.	-123.	-349.	.0000	0.0000	-0.0000	.0000	.0000	-0.0000	-0.0000	399.
.0120	238.	1922.	-4.	-714.	-214.	-421.	.0000	.0000	-0.0000	.0000	.0000	.0000	.0000	577.
.0130	263.	2159.	-63.	-1052.	-355.	-446.	0.0000	0.0000	-0.0000	.0000	.0000	0.0000	0.0000	806.
.0140	257.	2276.	-189.	-1442.	-248.	-420.	.0000	0.0000	-0.0000	.0000	.0000	.0000	.0000	1073.
.0150	205.	2279.	-298.	-1824.	-780.	-324.	.0000	0.0000	-0.0000	.0000	.0000	0.0000	0.0000	1355.
.0160	92.	2089.	-400.	-2133.	-1037.	-123.	.0000	-0.0000	-0.0000	.0000	.0000	-0.0000	-0.0000	1601.
.0170	-79.	1642.	-431.	-2293.	-1298.	205.	.0000	-0.0000	-0.0000	.0000	.0000	-0.0000	-0.0000	1781.
.0180	-285.	988.	-517.	-2214.	-1539.	641.	-0.0000	-0.0000	-0.0000	-0.0000	.0000	-0.0000	-0.0000	1868.
.0190	-495.	242.	-474.	-1809.	-1741.	1140.	-0.0000	-0.0000	-0.0000	.0000	.0000	-0.0000	-0.0000	1859.

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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	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)	
.0200								-679.	-441.	-316.	-1013.	-1869.	1642.	0.0000	-0.0000	-0.0000	-0.0000	.0000	-0.0000	-0.0000	1810.
.0210								-811.	-870.	-33.	177.	-1950.	2056.	-0.0000	-0.0000	.0000	-0.0000	.0000	-0.0000	-0.0000	1914.
.0220								-881.	-810.	359.	1672.	-2132.	2276.	-0.0000	-0.0000	.0000	.0000	-0.0000	-0.0000	-0.0000	2385.
.0230								-978.	-459.	831.	3299.	-2356.	2439.	0.0000	0.0000	-0.0000	-0.0000	.0000	0.0000	0.0000	3189.
.0240								-1265.	-855.	1246.	4808.	-2523.	2916.	-0.0000	-0.0000	.0000	-0.0000	.0000	-0.0000	-0.0000	4154.
.0250								-1707.	-2438.	1498.	6055.	-2620.	3771.	-0.0000	-0.0000	-0.0000	.0000	.0000	-0.0000	-0.0000	5122.
.0260								-2069.	-4172.	1672.	7143.	-2755.	4560.	0.0000	0.0000	.0000	.0000	.0000	.0000	.0000	6006.
.0270								-2335.	-5004.	1953.	8303.	-2971.	5017.	-0.0000	-0.0000	.0000	-0.0000	.0000	0.0000	0.0000	6838.
.0280								-2737.	-4947.	2447.	9654.	-2801.	5445.	-0.0000	0.0000	-0.0000	.0000	.0000	0.0000	-0.0000	7706.
.0290								-3140.	-4706.	2945.	10917.	-2144.	5944.	-0.0000	-0.0000	.0000	-0.0000	.0000	-0.0000	-0.0000	8502.
.0300								-3051.	-4899.	3060.	11584.	-1896.	6044.	-0.0000	-0.0000	-0.0000	.0000	.0000	-0.0000	-0.0000	8899.
.0310								-2802.	-5551.	2917.	11728.	-1670.	6045.	-0.0000	-0.0000	-0.0000	0.0000	.0000	.0000	.0000	8964.
.0320								-2752.	-5698.	2862.	11663.	-636.	6151.	-0.0000	-0.0000	-0.0000	.0000	.0000	-0.0000	-0.0000	8898.
.0330								-2479.	-4975.	2739.	11185.	555.	5719.	-0.0000	-0.0000	.0000	-0.0000	-0.0000	-0.0000	-0.0000	8476.
.0340								-1645.	-4289.	2208.	9915.	1088.	4405.	-0.0000	-0.0000	.0000	-0.0000	-0.0000	0.0000	-0.0000	7350.
.0350								-713.	-4299.	1426.	7988.	1601.	2831.	-0.0000	-0.0000	.0000	-0.0000	-0.0000	-0.0000	-0.0000	5814.
.0360								-9.	-4603.	686.	5748.	2651.	1300.	-0.0000	.0000	.0000	-0.0000	-0.0000	.0000	.0000	4355.
.0370								924.	-4429.	-82.	3245.	3437.	-884.	0.0000	.0000	.0000	-0.0000	-0.0000	.0000	.0000	3241.
.0380								2325.	-3219.	-900.	570.	3507.	-4057.	.0000	.0000	.0000	-0.0000	-0.0000	.0000	.0000	3635.
.0390								3640.	-947.	-1501.	-1981.	3714.	-7406.	.0000	.0000	.0000	-0.0000	-0.0000	.0000	.0000	5742.
.0400								4572.	1444.	-1932.	-4495.	4343.	-10212.	0.0000	.0000	.0000	-0.0000	-0.0000	.0000	.0000	8071.
.0410								5439.	2619.	-2633.	-7402.	4359.	-12523.	.0000	.0000	.0000	-0.0000	-0.0000	0.0000	0.0000	10236.
.0420								6201.	2830.	-3540.	-10529.	3860.	-14217.	.0000	.0000	.0000	-0.0000	-0.0000	0.0000	0.0000	12205.
.0430								6527.	3618.	-4173.	-13246.	3685.	-15086.	0.0000	.0000	-0.0000	.0000	.0000	-0.0000	-0.0000	13758.
.0440								6470.	5210.	-4489.	-15375.	3584.	-15273.	.0000	.0000	.0000	-0.0000	-0.0000	.0000	.0000	14806.
.0450								6203.	6415.	-4746.	-17087.	3013.	-14819.	.0000	.0000	-0.0000	.0000	-0.0000	0.0000	0.0000	15380.
.0460								5584.	6555.	-4915.	-18300.	2322.	-13411.	.0000	.0000	-0.0000	.0000	.0000	.0000	.0000	15372.
.0470								4495.	5830.	-4839.	-18743.	1953.	-10958.	.0000	.0000	-0.0000	.0000	.0000	-0.0000	-0.0000	14694.
.0480								3252.	4916.	-4528.	-18281.	1555.	-8054.	.0000	.0000	-0.0000	.0000	-0.0000	-0.0000	0.0000	13506.
.0490								2145.	4758.	-3935.	-16815.	897.	-5282.	0.0000	.0000	-0.0000	-0.0000	-0.0000	-0.0000	0.0000	11896.
.0500								1011.	5475.	-2960.	-14327.	499.	-2497.	-0.0000	-0.0000	-0.0000	.0000	.0000	-0.0000	-0.0000	9807.
.0510								-273.	5957.	-1810.	-11190.	365.	609.	.0000	.0000	.0000	.0000	.0000	.0000	.0000	7558.
.0520								-1462.	5230.	-846.	-7965.	157.	3842.	-0.0000	-0.0000	-0.0000	.0000	.0000	-0.0000	-0.0000	5962.
.0530								-2408.	3727.	-106.	-4862.	-274.	6944.	.0000	-0.0000	-0.0000	.0000	.0000	-0.0000	-0.0000	5673.
.0540								-3302.	2164.	621.	-1771.	-595.	9612.	0.0000	-0.0000	-0.0000	.0000	.0000	.0000	.0000	6600.
.0550								-4219.	754.	1408.	1318.	-725.	11983.	.0000	-0.0000	-0.0000	.0000	.0000	.0000	.0000	8141.
.0560								-4904.	-427.	2146.	4201.	-940.	13618.	-0.0000	-0.0000	-0.0000	.0000	.0000	-0.0000	-0.0000	9627.
.0570								-5201.	-1417.	2746.	6621.	-1385.	14348.	-0.0000	-0.0000	-0.0000	.0000	.0000	-0.0000	-0.0000	10709.

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.0470	4495.	5830.	4839.	-18743.	1953.	-10958.	.0000	.0000	-.0000	.0000	.0000	.0000	.0000	14694.
.0480	3252.	4916.	-4528.	-18281.	1555.	-8054.	.0000	.0000	-.0000	.0000	.0000	-.0000	0.0000	13506.
.0490	2145.	4758.	-3935.	-16815.	897.	-5282.	0.0000	.0000	-.0000	-.0000	-.0000	-.0000	0.0000	11896.
.0500	1011.	5475.	-2960.	-14327.	459.	-2497.	-.0000	-.0000	-.0000	.0000	.0000	.0000	-.0000	9807.
.0510	-273.	5957.	-1810.	-11190.	365.	609.	.0000	.0000	.0000	.0000	.0000	.0000	.0000	7558.
.0520	-1462.	5230.	-846.	-7965.	157.	3842.	-.0000	-.0000	-.0000	.0000	.0000	.0000	-.0000	5962.
.0530	-2408.	3727.	-106.	-4862.	-274.	6864.	.0000	-.0000	-.0000	.0000	.0000	-.0000	-.0000	5673.
.0540	-3302.	2164.	621.	-1771.	-595.	9612.	0.0000	-.0000	-.0000	.0000	.0000	.0000	.0000	6600.
.0550	-4219.	754.	1408.	1318.	-725.	11983.	.0000	-.0000	-.0000	.0000	.0000	.0000	.0000	8141.
.0560	-4904.	-427.	2146.	4201.	-940.	13618.	-.0000	-.0000	-.0000	.0000	.0000	.0000	-.0000	9627.
.0570	-5201.	-1417.	2746.	6681.	-1325.	14348.	-.0000	-.0000	-.0000	.0000	.0000	.0000	-.0000	10709.

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INTERNAL FORCES IN THE PIPING
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SECTION	MEMBER	SEQUENCE	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)							
.0580	-5308.	-2390.	3245.	8712.	-1857.	14431.	-.0000	-.0000	-.0000	.0000	.0000	-.0000	11431.
.0590	-5368.	-3070.	3709.	10299.	-2131.	14034.	-.0000	-.0000	.0000	-.0000	.0000	-.0000	11821.
.0600	-5190.	-2913.	4074.	11298.	-2352.	12963.	0.0000	-.0000	-.0000	.0000	.0000	0.0000	11698.
.0610	-4655.	-2127.	4168.	11453.	-2743.	11231.	-.0000	-.0000	.0000	.0000	.0000	-.0000	10979.
.0620	-4014.	-1621.	3905.	10623.	-3163.	9369.	-.0000	-.0000	-.0000	.0000	.0000	-.0000	9782.
.0630	-3505.	-1899.	3323.	8859.	-3335.	7815.	-.0000	-.0000	-.0000	.0000	.0000	-.0000	8274.
.0640	-2985.	-2700.	2459.	6335.	-3408.	6394.	-.0000	-.0000	-.0000	.0000	.0000	-.0000	6487.
.0650	-2269.	-3379.	1424.	3398.	-3644.	4752.	-.0000	.0000	-.0000	.0000	-.0000	.0000	4641.
.0660	-1493.	-3245.	513.	582.	-3805.	2909.	-.0000	-.0000	-.0000	.0000	.0000	.0000	3252.
.0670	-812.	-2066.	-72.	-1758.	-3578.	1062.	-.0000	-.0000	.0000	-.0000	.0000	-.0000	2781.
.0680	-101.	-325.	-464.	-3690.	-3241.	-766.	-.0000	.0000	-.0000	.0000	.0000	-.0000	3350.
.0690	704.	1503.	-831.	-5391.	-3100.	-2496.	-.0000	.0000	-.0000	.0000	.0000	-.0000	4517.
.0700	1344.	3449.	-1107.	-6863.	-2859.	-3754.	.0000	.0000	-.0000	.0000	.0000	.0000	5614.
.0710	1628.	5399.	-1281.	-8169.	-2320.	-4246.	.0000	.0000	-.0000	.0000	.0000	.0000	6400.
.0720	1674.	6736.	-1562.	-9564.	-1871.	-4019.	.0000	.0000	.0000	.0000	.0000	.0000	7105.
.0730	1543.	7067.	-2036.	-11107.	-1677.	-3132.	.0000	.0000	-.0000	.0000	.0000	.0000	7860.
.0740	1107.	6539.	-2521.	-12507.	-1383.	-1545.	.0000	0.0000	-.0000	.0000	.0000	.0000	8545.
.0750	420.	5493.	-2861.	-13416.	-916.	468.	.0000	.0000	-.0000	-.0000	.0000	.0000	9070.
.0760	-221.	4496.	-2982.	-13572.	-563.	2293.	.0000	.0000	.0000	-.0000	.0000	.0000	9285.
.0770	-674.	4257.	-2749.	-12736.	-271.	3536.	.0000	.0000	-.0000	.0000	.0000	.0000	8911.
.0780	-995.	4905.	-2106.	-10889.	229.	4198.	.0000	-.0000	-.0000	.0000	.0000	-.0000	7868.
.0790	-1168.	5833.	-1255.	-8406.	811.	4344.	.0000	0.0000	-.0000	.0000	.0000	.0000	6401.
.0800	-1132.	6428.	-473.	-5825.	1225.	4030.	.0000	.0000	-.0000	.0000	-.0000	.0000	4845.
.0810	-980.	6350.	100.	-3548.	1582.	3484.	.0000	-.0000	-.0000	.0000	.0000	-.0000	3517.
.0820	-814.	5280.	370.	-1834.	1981.	2916.	.0000	0.0000	-.0000	.0000	-.0000	.0000	2679.
.0830	-582.	3224.	290.	-787.	2232.	2240.	.0000	.0000	-.0000	.0000	.0000	-.0000	2196.
.0840	-223.	729.	-27.	-238.	2292.	1283.	.0000	-.0000	.0000	-.0000	-.0000	0.0000	1778.
.0850	225.	-1727.	-385.	138.	2359.	21.	.0000	.0000	-.0000	-.0000	-.0000	.0000	1593.
.0860	772.	-3946.	-668.	612.	2433.	-1579.	0.0000	.0000	-.0000	-.0000	-.0000	.0000	1998.
.0870	1479.	-5452.	-778.	1378.	2389.	-3627.	.0000	.0000	-.0000	-.0000	-.0000	.0000	3071.
.0880	2288.	-5721.	-612.	2539.	2328.	-6029.	.0000	.0000	.0000	-.0000	-.0000	.0000	4680.
.0890	3058.	-5068.	-241.	3927.	2356.	-8409.	.0000	.0000	-.0000	-.0000	-.0000	.0000	6454.
.0900	3697.	-4385.	93.	5140.	2326.	-10360.	.0000	.0000	.0000	-.0000	-.0000	.0000	7951.
.0910	4121.	-4232.	223.	5849.	2149.	-11561.	.0000	.0000	.0000	-.0000	-.0000	.0000	8853.
.0920	4202.	-4809.	135.	5964.	1947.	-11757.	.0000	.0000	.0000	-.0000	-.0000	.0000	8982.
.0930	3919.	-6163.	-138.	5592.	1768.	-10925.	-.0000	.0000	.0000	-.0000	-.0000	0.0000	8358.
.0940	3417.	-7786.	-482.	5021.	1522.	-9406.	.0000	.0000	.0000	-.0000	-.0000	.0000	7260.
.0950	2840.	-8768.	-675.	4666.	1233.	-7621.	.0000	.0000	.0000	-.0000	-.0000	.0000	6080.

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.0840	-223.	729.	-27.	-238.	2292.	1253.	.0000	-.0000	.0000	-.0000	-.0000	0.0000	1778.
.0850	225.	-1727.	-385.	138.	2359.	21.	.0000	.0000	-.0000	-.0000	-.0000	.0000	1593.
.0860	772.	-3946.	-668.	612.	2433.	-1579.	0.0000	.0000	.0000	-.0000	-.0000	.0000	1998.
.0870	1479.	-5452.	-778.	1378.	2389.	-3627.	.0000	.0000	-.0000	-.0000	-.0000	.0000	3071.
.0880	2288.	-5721.	-612.	2539.	2328.	-6029.	.0000	.0000	.0000	-.0000	-.0000	.0000	4680.
.0890	3058.	-5068.	-241.	3927.	2356.	-8409.	.0000	.0000	-.0000	-.0000	-.0000	.0000	6454.
.0900	3697.	-4385.	90.	5140.	2326.	-10360.	.0000	.0000	.0000	-.0000	-.0000	.0000	7951.
.0910	4121.	-4232.	223.	5849.	2149.	-11561.	.0000	.0000	.0000	-.0000	-.0000	.0000	8853.
.0920	4202.	-4809.	135.	5964.	1947.	-11757.	.0000	.0000	.0000	-.0000	-.0000	.0000	8982.
.0930	3919.	-6163.	-138.	5592.	1768.	-10925.	-.0000	.0000	.0000	-.0000	-.0000	0.0000	8358.
.0940	3417.	-7786.	-482.	5021.	1522.	-9406.	.0000	.0000	.0000	-.0000	-.0000	.0000	7260.
.0950	2840.	-8768.	-675.	4666.	1233.	-7621.	.0000	.0000	.0000	-.0000	-.0000	.0000	6080.

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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	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU								
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	HX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)	
.0960	2209.	-8703.	-547.	4844.	1018.	-5775.	.0000	.0000	.0000	-.0000	-.0000	.0000	5127.	
.0970	1544.	-7738.	-91.	5609.	882.	-3944.	0.0000	.0000	.0000	-.0000	-.0000	.0000	4660.	
.0980	917.	-5920.	614.	6788.	741.	-2235.	.0000	.0000	.0000	-.0000	-.0000	.0000	4843.	
.0990	336.	-3359.	1444.	8065.	556.	-627.	.0000	.0000	.0000	-.0000	-.0000	.0000	5465.	
.1000	-318.	-663.	2218.	9025.	335.	1128.	.0000	-.0000	.0000	-.0000	-.0000	-.0000	6135.	
.1010	-1150.	1477.	2749.	9281.	81.	3275.	.0000	-.0000	-.0000	.0000	.0000	.0000	6634.	
.1020	-2127.	2778.	2920.	8610.	-229.	5822.	.0000	-.0000	-.0000	.0000	.0000	-.0000	7007.	
.1030	-3146.	3188.	2701.	7027.	-628.	8605.	.0000	-.0000	.0000	.0000	.0000	-.0000	7501.	
.1040	-4130.	2887.	2191.	4826.	-1074.	11376.	-.0000	-.0000	-.0000	.0000	.0000	-.0000	8361.	
.1050	-4995.	2499.	1614.	2490.	-1434.	12780.	-.0000	-.0000	-.0000	.0000	.0000	-.0000	9488.	
.1060	-5592.	2632.	1153.	454.	-1650.	15403.	-.0000	-.0000	.0000	.0000	.0000	-.0000	10446.	
.1070	-5786.	3324.	845.	-1070.	-1813.	15960.	-.0000	-.0000	-.0000	.0000	.0000	-.0000	10851.	
.1080	-5561.	4320.	680.	-2036.	-1897.	15424.	0.0000	-.0000	.0000	.0000	.0000	-.0000	10564.	
.1090	-4934.	5425.	622.	-2534.	-1845.	13854.	.0000	-.0000	.0000	.0000	.0000	-.0000	9574.	
.1100	-4014.	6465.	564.	-2764.	-1905.	11355.	.0000	-.0000	.0000	.0000	.0000	-.0000	7981.	
.1110	-2948.	7557.	510.	-2902.	-1849.	8217.	.0000	-.0000	-.0000	.0000	.0000	.0000	6004.	
.1120	-1812.	7660.	258.	-3286.	-1749.	4864.	.0000	.0000	-.0000	.0000	.0000	.0000	4129.	
.1130	-666.	5568.	-405.	-4107.	-1898.	1657.	.0000	-.0000	-.0000	.0000	.0000	-.0000	3248.	
.1140	413.	2543.	-1184.	-4949.	-2126.	-1433.	.0000	.0000	-.0000	-.0000	-.0000	0.0000	3757.	
.1150	1432.	662.	-1640.	-5219.	-2164.	-4634.	.0000	.0000	-.0000	-.0000	.0000	.0000	4926.	
.1160	2457.	-300.	-1792.	-4791.	-2214.	-7878.	-.0000	.0000	.0000	-.0000	.0000	.0000	6392.	
.1170	3376.	-1361.	-1770.	-3740.	-2323.	-10732.	-.0000	.0000	-.0000	.0000	.0000	-.0000	7819.	
.1180	4041.	-1927.	-1455.	-2052.	-2424.	-12988.	-.0000	.0000	.0000	-.0000	-.0000	-.0000	9012.	
.1190	4233.	-1825.	-794.	180.	-2054.	-14215.	.0000	.0000	.0000	-.0000	.0000	.0000	9682.	
.1200	4083.	-2501.	-197.	2434.	-1621.	-14224.	.0000	.0000	.0000	-.0000	-.0000	.0000	9788.	
.1210	3810.	-4262.	127.	4395.	-1627.	-13235.	.0000	.0000	.0000	-.0000	.0000	.0000	9463.	
.1220	3138.	-5555.	559.	6382.	-1252.	-11209.	-.0000	0.0000	-.0000	.0000	.0000	.0000	8735.	
.1230	2155.	-5514.	1193.	8417.	-476.	-8518.	-.0000	.0000	.0000	-.0000	-.0000	.0000	8078.	
.1240	1165.	-5511.	1652.	10066.	256.	-5413.	-.0000	.0000	-.0000	-.0000	-.0000	.0000	7706.	
.1250	320.	-6578.	1739.	11080.	728.	-2081.	-.0000	.0000	.0000	-.0000	-.0000	.0000	7615.	
.1260	-457.	-7726.	1741.	11731.	1183.	1139.	.0000	.0000	.0000	-.0000	-.0000	.0000	7985.	
.1270	-1244.	-7725.	1951.	12375.	2133.	3937.	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	8869.	
.1280	-1549.	-6396.	2170.	12796.	2797.	5473.	-.0000	-.0000	-.0000	.0000	-.0000	-.0000	9568.	
.1290	-1319.	-4426.	2240.	12722.	2982.	5736.	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	9619.	
.1300	-1001.	-2514.	2211.	12059.	3183.	5335.	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	9144.	
.1310	-743.	-1146.	2000.	10628.	3314.	4529.	0.0000	-.0000	.0000	-.0000	-.0000	-.0000	8101.	
.1320	-409.	-584.	1460.	9328.	3215.	3322.	-.0000	-.0000	-.0000	.0000	-.0000	-.0000	6420.	
.1330	174.	-578.	597.	5297.	2568.	1563.	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	4106.	

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ADLPIPE STRESS ANALYSIS

83/12/02. 18.27.25.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.1230	2155.	-5514.	1193.	8417.	-476.	-8518.	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	.0000	8078.
.1240	1165.	-5511.	1652.	10066.	256.	-5413.	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	.0000	7706.
.1250	320.	-6578.	1739.	11080.	728.	-2081.	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	.0000	7615.
.1260	-457.	-7726.	1741.	11731.	1183.	1139.	.0000	.0000	-.0000	-.0000	-.0000	-.0000	.0000	7985.
.1270	-1244.	-7725.	1951.	12375.	2133.	3927.	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	8869.
.1280	-1549.	-6396.	2170.	12798.	2797.	5473.	-.0000	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	9568.
.1290	-1319.	-4426.	2240.	12722.	2982.	5736.	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	9619.
.1300	-1061.	-2514.	2211.	12059.	3183.	5335.	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	9144.
.1310	-743.	-1146.	2000.	10628.	3314.	4529.	0.0000	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	8101.
.1320	-409.	-584.	1460.	8328.	3215.	3322.	-.0000	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	6420.
.1330	174.	-578.	597.	5297.	2568.	1563.	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	4106.

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ADLPIPE STRESS ANALYSIS

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	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)
.1340	671.	-798.	-282.	2097.	1904.	-312.	.0000	.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	1021.	
.1350	937.	-759.	-948.	-766.	1520.	-2085.	.0000	.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	1814.	
.1360	1312.	-172.	-1457.	-3139.	934.	-4047.	-.0000	.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	3509.	
.1370	1745.	333.	-1847.	-4892.	311.	-5844.	-.0000	.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	5141.	
.1380	1977.	225.	-2054.	-5851.	-144.	-7003.	-.0000	.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	6152.	
.1390	1852.	-82.	-1935.	-5811.	-125.	-7334.	.0000	.0000	-.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	6308.	
.1400	1648.	96.	-1546.	-4845.	100.	-7214.	.0000	.0000	-.0000	.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	5858.	
.1410	1569.	427.	-1085.	-3256.	127.	-6826.	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	5099.	
.1420	1244.	-18.	-569.	-1197.	522.	-5598.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	3875.	
.1430	673.	-1045.	2.	1153.	1267.	-3667.	-.0000	0.0000	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	2728.	
.1440	178.	-1864.	566.	3568.	2027.	-1671.	-.0000	.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	0.0000	2986.	
.1450	-72.	-2212.	1044.	5813.	2574.	-27.	-.0000	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	4285.	
.1460	-221.	-2271.	1449.	7711.	3005.	1278.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	5644.	
.1470	-461.	-2326.	1794.	9096.	3675.	2409.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	6809.	
.1480	-498.	-2549.	1866.	9612.	3995.	2927.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	7288.	
.1490	-255.	-3095.	1590.	9143.	3840.	2707.	.0000	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	.0000	-.0000	-.0000	0.0000	6929.	
.1500	56.	-3785.	1135.	7905.	3574.	1935.	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	5991.	
.1510	428.	-4215.	628.	6128.	3164.	554.	.0000	.0000	-.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	0.0000	4664.	
.1520	936.	-4215.	97.	4004.	2609.	-1444.	.0000	.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	3365.	
.1530	1674.	-3696.	-463.	1671.	1726.	-4042.	.0000	.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	3169.	
.1540	2405.	-2817.	-940.	-634.	896.	-6731.	0.0000	.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	4597.	
.1550	2988.	-1855.	-1313.	-2783.	225.	-9114.	.0000	.0000	-.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	6425.	
.1560	3522.	-831.	-1657.	-4768.	-617.	-11151.	.0000	.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	0.0000	8185.	
.1570	3858.	353.	-1904.	-6447.	-1292.	-12503.	.0000	.0000	-.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	9522.	
.1580	3926.	1609.	-2046.	-7783.	-1027.	-12934.	-.0000	0.0000	-.0000	.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	10277.	
.1590	3672.	2438.	-2135.	-8798.	-2297.	-12420.	.0000	.0000	-.0000	.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	10375.	
.1600	3041.	2596.	-2155.	-9402.	-2505.	-10692.	.0000	.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	9753.	
.1610	2185.	2613.	-2057.	-9545.	-2543.	-8139.	-.0000	.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	8627.	
.1620	1301.	3074.	-1796.	-9105.	-2675.	-5239.	0.0000	.0000	-.0000	.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	7307.	
.1630	256.	3801.	-1316.	-8054.	-2516.	-1927.	.0000	.0000	-.0000	.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	5834.	
.1640	-872.	4545.	-706.	-6577.	-2191.	1590.	.0000	-.0000	-.0000	.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	4794.	
.1650	-1011.	5175.	-101.	-4950.	-1987.	4972.	.0000	-.0000	-.0000	.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	4915.	
.1660	-2907.	5378.	440.	-3345.	-1714.	8204.	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	.0000	-.0000	-.0000	-.0000	6083.	
.1670	-3815.	5046.	862.	-1908.	-1490.	11087.	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	.0000	-.0000	-.0000	.0000	7649.	
.1680	-4615.	4382.	1192.	-649.	-1240.	13447.	-.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	.0000	-.0000	-.0000	-.0000	9113.	
.1690	-5145.	3627.	1421.	404.	-1130.	14966.	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	.0000	-.0000	-.0000	-.0000	10120.	
.1700	-5379.	2652.	1547.	1277.	-1072.	15606.	.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	10579.	
.1710	-5387.	1528.	1631.	2071.	-842.	15434.	.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	10512.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.27.25.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.1590	2041.	2096.	-155.	-422.	-2205.	-10692.	.0000	.0000	.0000	-.0000	.0000	.0000	.0000	9753.
.1610	2185.	2613.	-2057.	-9545.	-2543.	-8139.	-.0000	.0000	.0000	-.0000	.0000	.0000	-.0000	8627.
.1620	1301.	3074.	-1796.	-9105.	-2675.	-5239.	0.0000	.0000	-.0000	.0000	.0000	.0000	.0000	7307.
.1630	256.	3801.	-1316.	-8054.	-2516.	-1927.	.0000	.0000	-.0000	.0000	.0000	.0000	.0000	5834.
.1640	-272.	4545.	-706.	-6577.	-2191.	1590.	.0000	-.0000	-.0000	.0000	.0000	.0000	.0000	4794.
.1650	-1911.	5175.	-101.	-4950.	-1987.	4972.	.0000	-.0000	-.0000	.0000	.0000	.0000	-.0000	4915.
.1660	-2907.	5378.	440.	-3345.	-1714.	8204.	.0000	-.0000	-.0000	.0000	.0000	.0000	-.0000	6083.
.1670	-3815.	5046.	862.	-1908.	-1490.	11087.	.0000	-.0000	-.0000	.0000	.0000	-.0000	.0000	7649.
.1680	-4615.	4382.	1192.	-649.	-1240.	13447.	-.0000	-.0000	-.0000	.0000	.0000	.0000	-.0000	9113.
.1690	-5145.	3627.	1421.	404.	-1130.	14966.	.0000	-.0000	-.0000	.0000	.0000	.0000	-.0000	10120.
.1700	-5379.	2652.	1547.	1277.	-1072.	15606.	.0000	-.0000	.0000	.0000	.0000	.0000	.0000	10579.
.1710	-5387.	1528.	1631.	2071.	-642.	15434.	.0000	-.0000	.0000	.0000	.0000	.0000	-.0000	10512.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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

CONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

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

SECTION	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)	
.1720	-5011.	849.	1706.	2798.	-801.	14151.	-.0000	-.0000	-.0000	.0000	.0000	-.0000	9738.	
.1730	-4354.	584.	1799.	3465.	-691.	11988.	.0000	-.0000	-.0000	.0000	.0000	0.0000	8424.	
.1740	-3469.	293.	1812.	3924.	-538.	9189.	-.0000	-.0000	.0000	.0000	.0000	-.0000	6744.	
.1750	-2389.	14.	1696.	4047.	-477.	5896.	-.0000	-.0000	-.0000	.0000	.0000	-.0000	4831.	
.1760	-1274.	-65.	1499.	3812.	-296.	2430.	-.0000	-.0000	-.0000	.0000	.0000	-.0000	3054.	
.1770	-137.	-345.	1123.	3083.	-174.	-988.	-.0000	.0000	.0000	.0000	.0000	.0000	2185.	
.1780	913.	-1394.	507.	1858.	-15.	-3996.	-.0000	.0000	.0000	-.0000	-.0000	.0000	2971.	
.1790	1897.	-2668.	-240.	336.	80.	-6631.	-.0000	.0000	.0000	-.0000	-.0000	.0000	4475.	
.1800	2773.	-3420.	-917.	-1152.	230.	-8894.	.0000	.0000	.0000	-.0000	-.0000	.0000	6047.	
.1810	3438.	-3875.	-1459.	-2388.	656.	-10553.	.0000	.0000	.0000	-.0000	-.0000	.0000	7306.	
.1820	4028.	-4283.	-1933.	-3344.	957.	-11721.	0.0000	.0000	-.0000	-.0000	-.0000	0.0000	8241.	
.1830	4469.	-4356.	-2231.	-3858.	1282.	-12335.	.0000	.0000	.0000	-.0000	-.0000	.0000	8754.	
.1840	4671.	-3909.	-2271.	-3857.	1746.	-12330.	0.0000	.0000	.0000	-.0000	.0000	0.0000	8788.	
.1850	4627.	-3348.	-2156.	-3472.	2239.	-11673.	.0000	.0000	.0000	-.0000	-.0000	.0000	8346.	
.1860	4354.	-2918.	-1957.	-2860.	2703.	-10385.	.0000	.0000	-.0000	-.0000	-.0000	0.0000	7486.	
.1870	3923.	-2423.	-1698.	-2155.	2964.	-8675.	.0000	.0000	.0000	-.0000	-.0000	0.0000	6348.	
.1880	3229.	-2018.	-1367.	-1416.	3257.	-6476.	.0000	0.0000	.0000	-.0000	-.0000	.0000	4978.	
.1890	2361.	-1838.	-1040.	-766.	3453.	-3989.	.0000	.0000	-.0000	-.0000	-.0000	.0000	3594.	
.1900	1494.	-1589.	-735.	-270.	3405.	-1581.	.0000	.0000	.0000	-.0000	-.0000	.0000	2537.	
.1910	652.	-1091.	-408.	99.	3304.	613.	.0000	.0000	.0000	-.0000	-.0000	.0000	2266.	
.1920	-103.	-442.	-99.	289.	3073.	2427.	.0000	-.0000	-.0000	-.0000	.0000	-.0000	2646.	
.1930	-726.	379.	169.	260.	2734.	3750.	-.0000	-.0000	-.0000	.0000	-.0000	-.0000	3133.	
.1940	-1155.	1459.	373.	-47.	2303.	4486.	-.0000	-.0000	-.0000	.0000	-.0000	-.0000	3399.	
.1950	-1377.	2418.	428.	-726.	1753.	4698.	.0000	-.0000	-.0000	.0000	-.0000	-.0000	3415.	
.1960	-1451.	2873.	291.	-1795.	1120.	4543.	-.0000	-.0000	-.0000	.0000	-.0000	-.0000	3378.	
.1970	-1409.	3111.	36.	-3120.	501.	4066.	-.0000	-.0000	.0000	.0000	.0000	-.0000	3471.	
.1980	-1223.	3470.	-271.	-4548.	-102.	3256.	-.0000	-.0000	-.0000	.0000	.0000	-.0000	3771.	
.1990	-912.	3707.	-639.	-5976.	-727.	2251.	.0000	-.0000	-.0000	.0000	.0000	-.0000	4332.	
.2000	-571.	3649.	-1024.	-7252.	-1302.	1273.	.0000	-.0000	-.0000	.0000	.0000	.0000	5040.	
.2010	-266.	3584.	-1315.	-8185.	-1734.	435.	.0000	-.0000	-.0000	.0000	.0000	-.0000	5647.	
.2020	-3.	3639.	-1475.	-8672.	-2077.	-222.	.0000	-.0000	-.0000	-.0000	.0000	-.0000	6012.	
.2030	184.	3610.	-1523.	-8693.	-2386.	-585.	.0000	.0000	-.0000	.0000	.0000	.0000	6089.	
.2040	209.	3496.	-1425.	-8220.	-2591.	-535.	.0000	-.0000	.0000	-.0000	.0000	-.0000	5821.	
.2050	37.	3417.	-1156.	-7279.	-2664.	-44.	.0000	.0000	-.0000	.0000	.0000	-.0000	5225.	
.2060	-295.	3179.	-792.	-6003.	-2702.	855.	-.0000	-.0000	-.0000	.0000	.0000	-.0000	4474.	
.2070	-754.	2599.	-399.	-4521.	-2748.	2114.	.0000	-.0000	-.0000	.0000	.0000	-.0000	3840.	
.2080	-1322.	1906.	48.	-2878.	-2729.	3617.	0.0000	-.0000	-.0000	.0000	.0000	.0000	3619.	
.2090	-1943.	1369.	558.	-1131.	-2630.	5132.	0.0000	-.0000	.0000	.0000	.0000	-.0000	3990.	

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ADLPIPE STRESS ANALYSIS

83/12/02. 18.27.25.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.2210	1465.	683.	1158.	492.	-680.	-1355.	466.	-.0617	.0053	.0618	.0070	-.0408	639.
.2220	1014.	591.	402.	-298.	-1109.	-1055.	339.	-.0550	.0071	.0456	.0031	-.0288	640.
.2230	627.	380.	-263.	-964.	-1481.	-613.	.0209	-.0485	.0090	.0313	-.0006	-.0171	750.
.2240	338.	117.	-775.	-1422.	-1509.	-70.	.0074	-.0424	.0110	.0190	-.0050	-.0066	859.
.2250	161.	-67.	-1046.	-1645.	-1450.	463.	-.0067	-.0367	.0133	.0091	-.0104	.0026	899.
.2260	-44.	-154.	-1026.	-1669.	-1063.	881.	-.0211	-.0312	.0159	.0010	-.0170	.0103	869.
.2270	-351.	-103.	-987.	-1549.	-565.	1157.	-.0355	-.0259	.0185	-.0050	-.0249	.0164	808.
.2280	-465.	-27.	-808.	-1341.	-67.	1336.	-.0495	-.0209	.0210	-.0088	-.0341	.0202	760.
.2290	-239.	3.	-614.	-1100.	338.	1451.	-.0627	-.0162	.0230	-.0105	-.0441	.0214	743.
.2300	-15.	2.	-543.	-872.	542.	1468.	-.0747	-.0116	.0246	-.0109	-.0541	.0199	719.
.2310	68.	27.	-638.	-640.	522.	1347.	-.0853	-.0066	.0260	-.0110	-.0638	.0161	637.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.27.28.

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	TYPE	EL	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
28	1	52	BEG			.2320	298.	96.	-776.	-431.	377.	1114.	-.0941	-.0011	.0271	-.0112	-.0730	.0105	503.
						.2330	661.	161.	-850.	-172.	213.	852.	-.1009	.0048	.0282	-.0117	-.0815	.0035	359.
						.2340	885.	145.	-821.	83.	85.	657.	-.1056	.0109	.0291	-.0127	-.0890	-.0049	268.
						.2350	1152.	-11.	-604.	289.	62.	592.	-.1080	.0171	.0298	-.0146	-.0751	-.0145	265.
						.2360	1728.	-307.	-176.	416.	164.	667.	-.1079	.0233	.0301	-.0175	-.0992	-.0246	322.
						.2370	2293.	-692.	284.	449.	286.	841.	-.1050	.0298	.0296	-.0214	-.1002	-.0342	399.
						.2380	2460.	-1100.	547.	392.	290.	1052.	-.0995	.0364	.0284	-.0262	-.0970	-.0426	465.
						.2390	2331.	-1481.	513.	272.	115.	1257.	-.0914	.0430	.0261	-.0316	-.0892	-.0493	518.
						.2400	2047.	-1800.	176.	128.	-240.	1424.	-.0811	.0495	.0228	-.0372	-.0772	-.0542	582.
						.2410	1584.	-2015.	-382.	-13.	-710.	1507.	-.0691	.0557	.0186	-.0426	-.0621	-.0572	669.
						.2420	1143.	-2079.	-930.	-139.	-1133.	1457.	-.0560	.0616	.0136	-.0473	-.0454	-.0577	743.
						.2430	875.	-1968.	-1245.	-243.	-1347.	1246.	-.0421	.0670	.0079	-.0509	-.0289	-.0559	743.
						.2440	496.	-1699.	-1323.	-315.	-1344.	896.	-.0281	.0721	.0018	-.0536	-.0131	-.0519	660.
						.2450	-26.	-1317.	-1233.	-338.	-1186.	468.	-.0143	.0766	-.0047	-.0556	.0011	-.0462	529.
						.2460	-290.	-884.	-1000.	-310.	-920.	46.	-.0010	.0805	-.0115	-.0573	.0131	-.0392	390.
						.2470	-130.	-469.	-614.	-259.	-567.	-296.	.0113	.0838	-.0188	-.0589	.0221	-.0313	277.
						.2480	-137.	-143.	-180.	-234.	-198.	-508.	.0224	.0866	-.0263	-.0608	.0283	-.0229	238.
						.2490	-712.	53.	177.	-261.	109.	-572.	.0321	.0892	-.0338	-.0632	.0322	-.0145	256.
						.2500	-1354.	126.	461.	-335.	338.	-497.	.0403	.0915	-.0411	-.0666	.0340	-.0061	276.
						.2510	-1605.	108.	668.	-442.	467.	-307.	.0467	.0939	-.0482	-.0711	.0335	.0021	286.
						.2520	-1558.	19.	779.	-578.	495.	-29.	.0514	.0963	-.0545	-.0767	.0310	.0100	306.
						.2530	-1462.	-121.	831.	-750.	483.	301.	.0542	.0987	-.0601	-.0830	.0275	.0176	378.
						.2540	-1429.	-268.	874.	-960.	493.	628.	.0555	.1012	-.0647	-.0898	.0237	.0251	501.
						.2550	-1413.	-352.	904.	-1205.	531.	888.	.0552	.1038	-.0683	-.0972	.0200	.0326	637.
						.2560	-1263.	-333.	896.	-1477.	583.	1057.	.0537	.1067	-.0712	-.1051	.0171	.0404	766.
						.2570	-966.	-236.	833.	-1767.	646.	1163.	.0512	.1097	-.0734	-.1133	.0155	.0483	887.
						.2580	-854.	-121.	650.	-2070.	692.	1249.	.0479	.1126	-.0749	-.1218	.0160	.0557	1009.
						.2590	-1150.	-40.	325.	-2374.	708.	1353.	.0440	.1156	-.0757	-.1300	.0188	.0622	1133.
						.2600	-1564.	-8.	-39.	-2640.	750.	1477.	.0395	.1187	-.0760	-.1378	.0232	.0677	1251.
						.2610	-1768.	7.	-32.	-2842.	880.	1579.	.0343	.1221	-.0755	-.1452	.0281	.0721	1351.
						.2620	-1827.	40.	-497.	-2979.	1108.	1608.	.0284	.1259	-.0743	-.1521	.0328	.0748	1429.
						.2630	-1883.	63.	-569.	-3041.	1419.	1578.	.0217	.1299	-.0722	-.1580	.0368	.0757	1488.
						.2640	-1861.	22.	-526.	-3003.	1799.	1540.	.0142	.1340	-.0693	-.1624	.0395	.0744	1535.
						.2650	-1690.	-71.	-406.	-2863.	2195.	1488.	.0059	.1381	-.0658	-.1652	.0403	.0712	1566.
						.2660	-1459.	-160.	-295.	-2651.	2525.	1370.	-.0029	.1424	-.0618	-.1670	.0393	.0665	1569.
						.2670	-1256.	-216.	-257.	-2409.	2740.	1164.	-.0120	.1469	-.0574	-.1685	.0366	.0604	1537.
						.2680	-1190.	-276.	-238.	-2165.	2800.	917.	-.0213	.1513	-.0528	-.1697	.0326	.0532	1467.
						.2690	-1252.	-403.	-540.	-1922.	2699.	706.	-.0305	.1555	-.0479	-.1705	.0273	.0451	1359.

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DIS/ADLPIPE

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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
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CONDITION 24

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