

50-305

RESPONSE TO NUREG-0737 ITEM II.D.1

Docket # *50-305*

Control # *8403280048*

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

.0100	-67.	228.	-50.	385.	-461.	-854.	-	.085	.0115	-.0040	-.0026	-.0190	-.0009	419.
.0390	-117.	341.	-80.	502.	-480.	-1105.	-	.0092	.0118	-.0044	-.0037	-.0225	-.0007	524.
.0400	-143.	521.	-71.	576.	-558.	-1275.	-	.0096	.0121	-.0047	-.0046	-.0271	-.0006	604.
.0410	-144.	491.	-75.	650.	-590.	-1341.	-	.0095	.0125	-.0050	-.0056	-.0292	-.0007	643.
.0420	-134.	-76.	-88.	750.	-575.	-1370.	-	.0089	.0130	-.0052	-.0065	-.0297	-.0007	655.
.0430	-132.	-970.	-101.	871.	-586.	-1297.	-	.0079	.0128	-.0054	-.0074	-.0317	-.0004	670.
.0440	-154.	-1217.	-115.	1001.	-610.	-1277.	-	.0065	.0117	-.0054	-.0079	-.0347	.0004	695.
.0450	-172.	-614.	-135.	1150.	-579.	-1205.	-	.0047	.0099	-.0053	-.0082	-.0358	.0015	708.
.0460	-145.	-253.	-168.	1323.	-526.	-971.	-	.0024	.0081	-.0051	-.0085	-.0358	.0023	691.
.0470	-80.	-833.	-200.	1468.	-527.	-592.	-	.0001	.0062	-.0045	-.0087	-.0370	.0028	670.
.0480	-34.	-1505.	-205.	1517.	-531.	-228.	-	.0029	.0040	-.0036	-.0087	-.0375	.0035	652.
.0490	-32.	-1661.	-194.	1447.	-440.	35.	-	.0056	.0015	-.0024	-.0084	-.0340	.0047	607.

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DIS/ADLPIPE ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.44.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
40	1	851					.0500	-31.	-1299.	-170.	1292.	-281.	277.	.0083	-.0012	-.0008	-.0080	-.0273	.0059	542.
							.0510	5.	-1160.	-148.	1093.	-123.	583.	.0109	-.0034	.0011	-.0077	-.0201	.0063	499.
							.0520	57.	-1194.	-127.	858.	25.	908.	.0132	-.0050	.0032	-.0073	-.0128	.0062	501.
							.0530	95.	-1200.	-99.	581.	171.	1167.	.0152	-.0062	.0055	-.0068	-.0052	.0057	528.
							.0540	119.	-1401.	-64.	264.	296.	1338.	.0167	-.0068	.0080	-.0059	.0020	.0049	560.
							.0550	130.	-1708.	-19.	-90.	395.	1411.	.0178	-.0072	.0106	-.0047	.0089	.0040	589.
							.0560	118.	-1535.	40.	-477.	480.	1380.	.0185	-.0075	.0131	-.0031	.0157	.0032	617.
							.0570	98.	-977.	101.	-860.	564.	1317.	.0187	-.0077	.0154	-.0013	.0226	.0022	670.
							.0580	114.	-814.	144.	-1186.	647.	1335.	.0187	-.0076	.0176	.0002	.0290	.0008	762.
							.0590	161.	-939.	167.	-1457.	723.	1423.	.0183	-.0070	.0195	.0014	.0348	-.0008	867.
							.0600	190.	-392.	190.	-1722.	795.	1450.	.0176	-.0060	.0210	.0025	.0400	-.0022	958.
							.0610	182.	710.	224.	-2002.	852.	1372.	.0165	-.0044	.0221	.0036	.0443	-.0029	1032.
							.0620	173.	1060.	258.	-2259.	873.	1279.	.0152	-.0018	.0228	.0046	.0474	-.0035	1099.
							.0630	183.	409.	287.	-2457.	840.	1233.	.0136	.0017	.0229	.0053	.0486	-.0042	1154.
							.0640	198.	19.	315.	-2582.	762.	1191.	.0118	.0055	.0225	.0059	.0482	-.0047	1181.
							.0650	208.	494.	330.	-2595.	673.	1122.	.0097	.0091	.0214	.0065	.0465	-.0050	1166.
							.0660	224.	1000.	313.	-2450.	596.	1041.	.0073	.0125	.0197	.0066	.0437	-.0052	1095.
							.0670	228.	1002.	267.	-2159.	534.	908.	.0047	.0153	.0174	.0063	.0397	-.0050	964.
							.0680	191.	923.	214.	-1786.	492.	662.	.0017	.0174	.0146	.0058	.0352	-.0043	789.
							.0690	128.	933.	165.	-1380.	474.	336.	-.0014	.0187	.0115	.0049	.0314	-.0032	601.
							.0700	83.	699.	117.	-956.	461.	23.	-.0047	.0194	.0080	.0037	.0284	-.0022	426.
							.0710	51.	336.	69.	-521.	443.	-285.	-.0081	.0193	.0044	.0021	.0254	-.0015	297.
							.0720	-7.	199.	23.	-80.	438.	-678.	-.0114	.0184	.0007	.0002	.0224	-.0006	326.
							.0730	-100.	-1.	-30.	384.	435.	-1167.	-.0146	.0164	-.0030	-.0018	.0181	.0005	523.
							.0740	-199.	-649.	-95.	883.	377.	-1672.	-.0176	.0137	-.0066	-.0039	.0110	.0015	774.
							.0750	-286.	-1288.	-164.	1392.	247.	-2138.	-.0201	.0102	-.0101	-.0059	.0011	.0022	1029.
							.0760	-365.	-1364.	-225.	1870.	87.	-2547.	-.0219	.0062	-.0132	-.0074	-.0091	.0027	1269.
							.0770	-431.	-1268.	-275.	2292.	-69.	-2859.	-.0229	.0017	-.0159	-.0085	-.0179	.0032	1471.
							.0780	-473.	-1603.	-316.	2643.	-207.	-3021.	-.0231	-.0028	-.0180	-.0091	-.0249	.0035	1613.
							.0790	-495.	-2080.	-344.	2893.	-300.	-3035.	-.0222	-.0070	-.0195	-.0093	-.0289	.0038	1687.
							.0800	-502.	-2102.	-357.	3016.	-323.	-2910.	-.0204	-.0108	-.0203	-.0089	-.0292	.0042	1687.
							.0810	-478.	-1820.	-353.	3004.	-308.	-2615.	-.0175	-.0137	-.0204	-.0081	-.0265	.0046	1603.
							.0820	-414.	-1756.	-334.	2862.	-293.	-2135.	-.0135	-.0157	-.0197	-.0069	-.0226	.0046	1438.
							.0830	-323.	-1896.	-300.	2600.	-285.	-1523.	-.0094	-.0166	-.0183	-.0052	-.0175	.0043	1214.
							.0840	-225.	-1871.	-249.	2230.	-297.	-853.	-.0045	-.0167	-.0162	-.0031	-.0123	.0038	966.
							.0850	-120.	-1608.	-188.	1790.	-361.	-160.	.0007	-.0160	-.0135	-.0005	-.0087	.0031	736.
							.0860	-3.	-1264.	-129.	1322.	-469.	537.	.0060	-.0146	-.0103	.0024	-.0071	.0021	603.
							.0870	114.	-866.	-76.	852.	-569.	1197.	.0110	-.0127	-.0067	.0055	-.0060	.0008	632.

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DIS/ADLPIPE ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.44.

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	-725.	-1364.	-211.	1670.	87.	-2547.	-.0219	.0062	-.0132	-.0074	-.0051	.0027	1269.
.0770	-431.	-1268.	-275.	2292.	-69.	-2859.	-.0229	.0017	-.0159	-.0085	-.0179	.0032	1471.
.0780	-473.	-1602.	-316.	2643.	-207.	-3021.	-.0231	-.0028	-.0180	-.0091	-.0249	.0035	1613.
.0790	-495.	-2080.	-344.	2893.	-300.	-3035.	-.0222	-.0070	-.0195	-.0093	-.0289	.0038	1687.
.0800	-502.	-2102.	-357.	3016.	-323.	-2910.	-.0204	-.0108	-.0203	-.0089	-.0292	.0042	1687.
.0810	-478.	-1820.	-352.	3004.	-306.	-2615.	-.0175	-.0137	-.0204	-.0081	-.0266	.0046	1603.
.0820	-414.	-1756.	-334.	2862.	-293.	-2135.	-.0138	-.0157	-.0197	-.0069	-.0226	.0046	1438.
.0830	-323.	-1896.	-300.	2600.	-282.	-1523.	-.0094	-.0166	-.0183	-.0052	-.0175	.0043	1214.
.0840	-225.	-1871.	-249.	2230.	-297.	-853.	-.0045	-.0167	-.0162	-.0031	-.0123	.0038	966.
.0850	-120.	-1608.	-188.	1790.	-361.	-160.	.0007	-.0160	-.0135	-.0005	-.0087	.0031	736.
.0860	-7.	-1264.	-129.	1322.	-469.	537.	.0060	-.0146	-.0103	-.0024	-.0071	.0021	603.
.0870	114.	-866.	-76.	852.	-569.	1197.	.0110	-.0127	-.0067	.0055	-.0060	.0008	632.

ADLPIPE PAGE 1605

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.44.

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	40	MEMBER	1	SEQUENCE	851	LOCATION	BEG	TYPE	RU						
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)		
.0880	219.	-409.	-25.	378.	-635.	1762.	.0157	-.0104	-.0026	.0085	-.0043	-.0006	774.		
.0890	318.	-8.	29.	-111.	-674.	2287.	.0198	-.0077	.0017	.0115	-.0020	-.0023	958.		
.0900	413.	291.	88.	-624.	-687.	2706.	.0232	-.0046	.0063	.0141	.0010	-.0041	1148.		
.0910	493.	573.	152.	-1158.	-667.	3003.	.0257	-.0010	.0110	.0163	.0047	-.0059	1319.		
.0920	544.	766.	218.	-1693.	-628.	3148.	.0273	.0029	.0158	.0178	.0081	-.0075	1456.		
.0930	568.	646.	276.	-2190.	-583.	3152.	.0280	.0070	.0206	.0186	.0099	-.0089	1558.		
.0940	577.	247.	318.	-2609.	-529.	3050.	.0279	.0114	.0251	.0185	.0102	-.0101	1625.		
.0950	578.	-151.	342.	-2929.	-460.	2868.	.0268	.0160	.0294	.0176	.0095	-.0110	1655.		
.0960	570.	-444.	354.	-3148.	-378.	2609.	.0251	.0210	.0333	.0160	.0082	-.0117	1648.		
.0970	547.	-937.	357.	-3264.	-286.	2277.	.0226	.0264	.0367	.0139	.0067	-.0120	1601.		
.0980	504.	-1852.	354.	-3276.	-178.	1876.	.0196	.0321	.0397	.0113	.0054	-.0116	1516.		
.0990	439.	-2867.	346.	-3185.	-49.	1410.	.0162	.0379	.0421	.0084	.0046	-.0106	1398.		
.1000	357.	-3432.	330.	-2990.	89.	903.	.0124	.0435	.0440	.0050	.0037	-.0089	1254.		
.1010	270.	-3403.	300.	-2682.	219.	399.	.0085	.0483	.0453	.0010	.0018	-.0065	1092.		
.1020	192.	-3141.	248.	-2255.	320.	-65.	.0046	.0521	.0462	-.0035	-.0023	-.0038	914.		
.1030	114.	-2937.	177.	-1731.	373.	-499.	.0006	.0551	.0466	-.0086	-.0094	-.0005	738.		
.1040	15.	-2649.	100.	-1162.	377.	-956.	-.0032	.0568	.0466	-.0140	-.0190	.0033	623.		
.1050	-103.	-2420.	25.	-590.	349.	-1440.	-.0068	.0574	.0465	-.0197	-.0297	.0075	640.		
.1060	-220.	-2605.	-44.	-75.	314.	-1902.	-.0101	.0569	.0461	-.0253	-.0399	.0119	774.		
.1070	-326.	-3224.	-107.	489.	298.	-2318.	-.0131	.0554	.0457	-.0308	-.0481	.0162	958.		
.1080	-446.	-3478.	-151.	947.	303.	-2738.	-.0157	.0525	.0452	-.0358	-.0541	.0204	1169.		
.1090	-592.	-2812.	-175.	1325.	335.	-3185.	-.0177	.0473	.0447	-.0403	-.0582	.0247	1391.		
.1100	-654.	-3817.	-237.	1735.	454.	-3401.	-.0191	.0418	.0443	-.0448	-.0585	.0278	1543.		
.1110	-682.	-5255.	-306.	2094.	571.	-3507.	-.0198	.0365	.0439	-.0489	-.0580	.0300	1655.		
.1120	-770.	-5103.	-328.	2258.	625.	-3718.	-.0199	.0310	.0436	-.0519	-.0583	.0324	1763.		
.1130	-863.	-4850.	-316.	2242.	658.	-3905.	-.0192	.0259	.0433	-.0539	-.0571	.0343	1826.		
.1140	-874.	-6367.	-300.	2114.	689.	-3860.	-.0177	.0218	.0431	-.0552	-.0531	.0348	1787.		
.1150	-838.	-8019.	-267.	1864.	699.	-3662.	-.0154	.0183	.0427	-.0556	-.0474	.0342	1673.		
.1160	-828.	-7313.	-202.	1492.	709.	-3479.	-.0124	.0150	.0421	-.0547	-.0402	.0333	1545.		
.1170	-801.	-5210.	-143.	1107.	739.	-3208.	-.0085	.0123	.0412	-.0528	-.0317	.0318	1394.		
.1180	-657.	-4857.	-139.	842.	783.	-2626.	-.0040	.0119	.0397	-.0504	-.0223	.0286	1151.		
.1190	-468.	-5535.	-146.	609.	715.	-1908.	.0011	.0137	.0377	-.0471	-.0163	.0245	853.		
.1200	-355.	-4781.	-100.	270.	526.	-1340.	.0066	.0167	.0351	-.0422	-.0131	.0210	588.		
.1210	-268.	-3266.	-20.	-128.	315.	-818.	.0123	.0206	.0320	-.0362	-.0090	.0177	355.		
.1220	-87.	-3053.	39.	-451.	76.	-57.	.0181	.0259	.0283	-.0301	-.0048	.0135	185.		
.1230	159.	-3078.	66.	-661.	-158.	873.	.0238	.0316	.0239	-.0242	-.0011	.0088	444.		
.1240	360.	-1261.	82.	-794.	-355.	1710.	.0290	.0371	.0189	-.0186	.0016	.0047	770.		
.1250	522.	1170.	73.	-824.	-470.	2441.	.0337	.0427	.0133	-.0136	.0046	.0013	1051.		

ADLPIPE PAGE 1606

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.44.

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

.1140	-374.	-6367.	500.	2114.	689.	-3850.	-.0177	.0218	.0431	-.0552	-.0531	.0348	1787.
.1150	-838.	-8019.	-267.	1864.	699.	-3662.	-.0154	.0183	.0427	-.0556	-.0474	.0342	1673.
.1160	-828.	-7313.	-202.	1492.	709.	-3479.	-.0124	.0150	.0421	-.0547	-.0402	.0333	1545.
.1170	-801.	-5210.	-143.	1107.	739.	-3208.	-.0085	.0123	.0412	-.0528	-.0317	.0318	1394.
.1180	-657.	-4857.	-139.	842.	783.	-2826.	-.0040	.0119	.0397	-.0504	-.0223	.0286	1151.
.1190	-468.	-5075.	-146.	609.	715.	-1908.	.0011	.0137	.0377	-.0471	-.0163	.0245	853.
.1200	-755.	-4781.	-100.	270.	526.	-1340.	.0066	.0167	.0351	-.0422	-.0131	.0210	588.
.1210	-268.	-3266.	-20.	-128.	315.	-818.	.0123	.0206	.0320	-.0362	-.0090	.0177	355.
.1220	-87.	-3053.	39.	-451.	76.	-57.	.0181	.0259	.0283	-.0301	-.0048	.0135	185.
.1230	159.	-3078.	66.	-661.	-158.	873.	.0238	.0316	.0239	-.0242	-.0011	.0088	444.
.1240	360.	-1261.	82.	-794.	-355.	1710.	.0290	.0371	.0189	-.0186	.0016	.0047	770.
.1250	522.	1170.	73.	-824.	-470.	1441.	.0337	.0427	.0133	-.0138	.0046	.0013	1051.

ADLPIPE PAGE 1606

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.44.

S/RV PIPING KEWAUNEE GKWOBF 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	40	MEMBER	1	SEQUENCE	851	LOCATION	BEG	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.1260	707.	1701.	26.	-731.	-499.	3172.	.0374	.0487	.0072	-.0101	.0089	-.0021	1322.		
.1270	870.	992.	-12.	-621.	-543.	3776.	.0399	.0545	.0007	-.0071	.0124	-.0050	1551.		
.1280	929.	1399.	3.	-569.	-578.	4051.	.0412	.0590	-.0062	-.0043	.0166	-.0066	1658.		
.1290	932.	2448.	35.	-466.	-591.	4107.	.0409	.0617	-.0133	-.0021	.0211	-.0075	1676.		
.1300	974.	2173.	15.	-127.	-613.	4168.	.0393	.0629	-.0208	-.0012	.0228	-.0087	1691.		
.1310	1016.	1245.	-72.	489.	-642.	4131.	.0362	.0622	-.0285	-.0017	.0197	-.0097	1689.		
.1320	946.	1595.	-185.	1273.	-699.	3740.	.0316	.0588	-.0364	-.0030	.0108	-.0093	1610.		
.1330	773.	2513.	-306.	2144.	-722.	3022.	.0257	.0532	-.0441	-.0049	.0003	-.0077	1515.		
.1340	597.	1913.	-431.	3044.	-705.	2233.	.0187	.0463	-.0515	-.0075	-.0088	-.0058	1541.		
.1350	437.	364.	-529.	3863.	-671.	1448.	.0109	.0383	-.0584	-.0103	-.0150	-.0038	1677.		
.1360	243.	-97.	-575.	4522.	-607.	583.	.0025	.0294	-.0646	-.0129	-.0177	-.0013	1846.		
.1370	38.	93.	-598.	5078.	-545.	-299.	-.0061	.0200	-.0700	-.0155	-.0196	.0014	2053.		
.1380	-130.	-794.	-650.	5642.	-474.	-1077.	-.0148	.0110	-.0745	-.0183	-.0222	.0039	2313.		
.1390	-292.	-2222.	-726.	6191.	-430.	-1812.	-.0232	.0024	-.0781	-.0210	-.0271	.0063	2594.		
.1400	-496.	-2387.	-782.	6611.	-428.	-2604.	-.0312	-.0057	-.0807	-.0229	-.0336	.0092	2857.		
.1410	-688.	-1701.	-804.	6849.	-443.	-3308.	-.0385	-.0126	-.0822	-.0238	-.0381	.0119	3058.		
.1420	-776.	-1929.	-799.	6904.	-520.	-3694.	-.0449	-.0173	-.0825	-.0238	-.0406	.0133	3149.		
.1430	-785.	-2755.	-760.	6747.	-630.	-3820.	-.0504	-.0198	-.0817	-.0228	-.0403	.0138	3122.		
.1440	-805.	-2670.	-678.	6350.	-725.	-3910.	-.0549	-.0205	-.0797	-.0208	-.0374	.0143	3009.		
.1450	-842.	-1960.	-579.	5805.	-755.	-3996.	-.0585	-.0194	-.0768	-.0181	-.0318	.0148	2844.		
.1460	-833.	-1872.	-498.	5178.	-711.	-3948.	-.0612	-.0163	-.0731	-.0153	-.0239	.0145	2628.		
.1470	-768.	-1989.	-423.	4470.	-685.	-3755.	-.0631	-.0116	-.0687	-.0124	-.0161	.0133	2359.		
.1480	-691.	-1095.	-323.	3642.	-676.	-3531.	-.0642	-.0057	-.0639	-.0091	-.0077	.0115	2054.		
.1490	-604.	245.	-202.	2728.	-693.	-3304.	-.0647	.0011	-.0587	-.0055	.0009	.0091	1742.		
.1500	-490.	742.	-86.	1820.	-737.	-3062.	-.0647	.0088	-.0534	-.0020	.0086	.0061	1460.		
.1510	-387.	816.	13.	980.	-761.	-2904.	-.0642	.0171	-.0482	.0013	.0157	.0027	1267.		
.1520	-334.	1589.	100.	236.	-759.	-2919.	-.0634	.0254	-.0433	.0043	.0215	-.0003	1214.		
.1530	-299.	2652.	161.	-361.	-699.	-3010.	-.0621	.0335	-.0389	.0067	.0273	-.0033	1248.		
.1540	-224.	2871.	189.	-779.	-611.	-3020.	-.0603	.0413	-.0350	.0083	.0330	-.0066	1275.		
.1550	-129.	2556.	200.	-1055.	-502.	-2975.	-.0579	.0483	-.0318	.0092	.0390	-.0099	1282.		
.1560	-75.	2724.	214.	-1234.	-345.	-3004.	-.0549	.0535	-.0292	.0095	.0461	-.0122	1311.		
.1570	-64.	3072.	223.	-1294.	-190.	-3097.	-.0513	.0568	-.0273	.0091	.0518	-.0134	1349.		
.1580	-56.	2728.	198.	-1162.	-29.	-3135.	-.0469	.0581	-.0260	.0077	.0554	-.0138	1342.		
.1590	-43.	2050.	131.	-821.	143.	-3072.	-.0418	.0575	-.0253	.0054	.0568	-.0134	1277.		
.1600	-33.	1720.	41.	-318.	281.	-2910.	-.0358	.0549	-.0252	.0024	.0552	-.0120	1180.		
.1610	-20.	1520.	-59.	297.	377.	-2634.	-.0291	.0504	-.0253	-.0010	.0514	-.0099	1074.		
.1620	3.	742.	-163.	979.	468.	-2232.	-.0216	.0442	-.0256	-.0046	.0478	-.0072	996.		
.1630	21.	-373.	-254.	1666.	517.	-1758.	-.0136	.0366	-.0259	-.0081	.0434	-.0039	994.		

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2 SAFETY COLD FKW24F--2 PSV

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.1520	-334.	1529.	100.	236.	-759.	-2919.	-1634.	.0254	-.0433	.0043	.0215	-.0003	1214.
.1530	-299.	2652.	161.	-361.	-699.	-3010.	-1621.	.0335	-.0389	.0067	.0273	-.0033	1248.
.1540	-224.	2871.	189.	-779.	-611.	-3020.	-1603.	.0413	-.0350	.0083	.0330	-.0066	1275.
.1550	-129.	2556.	200.	-1055.	-502.	-2975.	-1579.	.0483	-.0318	.0092	.0390	-.0099	1282.
.1560	-75.	2724.	214.	-1274.	-345.	-2804.	-1549.	.0535	-.0292	.0095	.0461	-.0122	1311.
.1570	-64.	3072.	227.	-1294.	-190.	-2097.	-1513.	.0568	-.0273	.0091	.0518	-.0134	1349.
.1580	-56.	2728.	198.	-1162.	-29.	-3175.	-1469.	.0581	-.0260	.0077	.0554	-.0138	1342.
.1590	-43.	2050.	131.	-821.	143.	-3072.	-1418.	.0575	-.0253	.0054	.0568	-.0134	1277.
.1600	-33.	1720.	41.	-318.	281.	-2910.	-1358.	.0549	-.0252	.0024	.0552	-.0120	1180.
.1610	-20.	1500.	-59.	297.	377.	-2634.	-1291.	.0504	-.0253	-.0010	.0514	-.0099	1074.
.1620	3.	742.	-163.	979.	468.	-2272.	-1216.	.0442	-.0256	-.0046	.0478	-.0072	996.
.1630	21.	-373.	-254.	1666.	517.	-1758.	-.0136	.0366	-.0259	-.0081	.0434	-.0039	994.

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SECTION	40	MEMBER	1	SEQUENCE	851	LOCATION	BEG	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.1640	12.	-1180.	-328.	2319.	534.	-1270.	-.0052	.0280	-.0259	-.0113	.0386	.0002	1082.		
.1650	-0.	-1764.	-398.	2943.	546.	-726.	.0035	.0189	-.0255	-.0143	.0339	.0044	1236.		
.1660	22.	-2645.	-477.	3537.	533.	-57.	.0123	.0100	-.0245	-.0173	.0284	.0082	1436.		
.1670	70.	-3620.	-554.	4046.	522.	89.	.0209	.0019	-.0228	-.0201	.0235	.0115	1660.		
.1680	106.	-4185.	-602.	4372.	499.	1390.	.0292	-.0052	-.0201	-.0224	.0192	.0144	1852.		
.1690	120.	-4423.	-606.	4462.	475.	1991.	.0369	-.0111	-.0165	-.0241	.0167	.0169	1970.		
.1700	136.	-4820.	-572.	4328.	440.	2525.	.0438	-.0152	-.0118	-.0250	.0158	.0186	2018.		
.1710	169.	-5352.	-514.	4011.	379.	3017.	.0498	-.0173	-.0061	-.0253	.0153	.0193	2020.		
.1720	208.	-5515.	-445.	3566.	353.	3434.	.0547	-.0173	.0004	-.0250	.0164	.0191	1992.		
.1730	250.	-5279.	-374.	4328.	339.	3758.	.0586	-.0154	.0077	-.0242	.0176	.0182	1943.		
.1740	293.	-5011.	-305.	2437.	340.	3985.	.0613	-.0116	.0157	-.0229	.0186	.0166	1879.		
.1750	332.	-4815.	-230.	1772.	354.	4095.	.0629	-.0063	.0242	-.0211	.0195	.0146	1796.		
.1760	355.	-4471.	-134.	1018.	337.	4078.	.0632	.0001	.0331	-.0187	.0192	.0124	1692.		
.1770	370.	-3918.	-22.	198.	298.	3960.	.0625	.0072	.0422	-.0160	.0178	.0102	1596.		
.1780	395.	-3422.	88.	-633.	224.	3804.	.0606	.0148	.0515	-.0132	.0141	.0079	1550.		
.1790	428.	-3009.	179.	-1419.	144.	3612.	.0579	.0224	.0607	-.0109	.0083	.0056	1558.		
.1800	445.	-2442.	249.	-2142.	71.	3337.	.0542	.0297	.0697	-.0089	.0002	.0037	1592.		
.1810	432.	-1778.	305.	-2812.	-10.	2955.	.0496	.0361	.0784	-.0075	-.0104	.0023	1637.		
.1820	399.	-1343.	354.	-3434.	-47.	2494.	.0444	.0415	.0866	-.0064	-.0205	.0015	1703.		
.1830	358.	-1239.	405.	-4023.	-60.	1995.	.0386	.0458	.0944	-.0057	-.0296	.0010	1802.		
.1840	307.	-1171.	465.	-4582.	-68.	1465.	.0323	.0486	.1015	-.0051	-.0376	.0009	1931.		
.1850	243.	-1070.	526.	-5080.	-66.	900.	.0257	.0499	.1078	-.0048	-.0449	.0010	2071.		
.1860	166.	-1222.	571.	-5472.	-61.	305.	.0190	.0496	.1133	-.0049	-.0519	.0014	2199.		
.1870	67.	-1606.	591.	-5739.	-18.	-336.	.0122	.0476	.1179	-.0053	-.0582	.0021	2307.		
.1880	-59.	-1908.	599.	-5912.	27.	-1023.	.0056	.0439	.1215	-.0060	-.0643	.0030	2408.		
.1890	-198.	-2047.	604.	-6032.	78.	-1710.	-.0005	.0386	.1240	-.0069	-.0688	.0041	2516.		
.1900	-325.	-2295.	615.	-6122.	139.	-2319.	-.0060	.0322	.1254	-.0076	-.0703	.0049	2627.		
.1910	-430.	-2745.	635.	-6195.	186.	-2813.	-.0107	.0251	.1258	-.0083	-.0694	.0055	2731.		
.1920	-527.	-3133.	662.	-6245.	234.	-3215.	-.0143	.0175	.1250	-.0086	-.0659	.0059	2820.		
.1930	-622.	-3411.	685.	-6240.	281.	-3527.	-.0168	.0098	.1229	-.0086	-.0607	.0063	2879.		
.1940	-699.	-3752.	693.	-6144.	321.	-3705.	-.0180	.0024	.1196	-.0083	-.0545	.0066	2882.		
.1950	-744.	-4102.	684.	-5947.	354.	-3701.	-.0177	-.0045	.1150	-.0076	-.0472	.0066	2815.		
.1960	-751.	-4204.	665.	-5670.	378.	-3493.	-.0160	-.0106	.1092	-.0064	-.0385	.0065	2677.		
.1970	-713.	-4071.	643.	-5376.	392.	-3073.	-.0130	-.0156	.1022	-.0047	-.0283	.0061	2476.		
.1980	-633.	-3936.	618.	-4957.	406.	-2455.	-.0086	-.0192	.0942	-.0027	-.0166	.0055	2226.		
.1990	-523.	-3825.	589.	-4538.	429.	-1690.	-.0032	-.0212	.0852	-.0004	-.0039	.0047	1951.		
.2000	-393.	-3620.	552.	-4080.	459.	-834.	.0030	-.0215	.0752	.0020	.0089	.0040	1681.		
.2010	-248.	-3347.	503.	-3572.	492.	83.	.0097	-.0203	.0646	.0042	.0210	.0032	1447.		

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INTERNAL FORCES IN THE PIPING
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.1910	-430.	-2745.	635.	-6195.	186.	-2813.	-.0107	.0251	.1258	-.0083	-.0594	.0055	2731.
.1920	-527.	-3133.	662.	-6245.	234.	-3215.	-.0143	.0175	.1250	-.0086	-.0559	.0059	2820.
.1930	-622.	-3411.	685.	-6240.	281.	-3527.	-.0168	.0098	.1229	-.0086	-.0507	.0063	2879.
.1940	-659.	-3752.	695.	-6144.	321.	-3705.	-.0180	.0024	.1196	-.0083	-.0545	.0066	2882.
.1950	-744.	-4102.	684.	-5947.	354.	-3701.	-.0177	-.0045	.1150	-.0076	-.0472	.0066	2815.
.1960	-751.	-4204.	665.	-5670.	378.	-3493.	-.0160	-.0106	.1092	-.0064	-.0385	.0065	2677.
.1970	-713.	-4071.	643.	-5376.	392.	-3073.	-.0130	-.0156	.1022	-.0047	-.0283	.0061	2476.
.1980	-632.	-3936.	618.	-4957.	406.	-2459.	-.0086	-.0192	.0942	-.0027	-.0166	.0055	2226.
.1990	-522.	-3825.	589.	-4538.	429.	-1690.	-.0032	-.0212	.0852	-.0004	-.0039	.0047	1951.
.2000	-393.	-3620.	551.	-4080.	459.	-834.	.0070	-.0219	.0752	.0020	.0089	.0040	1681.
.2010	-248.	-3347.	507.	-3572.	492.	83.	.0097	-.0203	.0646	.0042	.0210	.0032	1447.

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SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
40	1	851					.2020	-81.	-3088.	437.	-3005.	533.	1041.	.0166	-.0176	.0533	.0061	.0322	.0023	1294.
							.2030	102.	-2767.	358.	-2382.	575.	1995.	.0233	-.0138	.0415	.0078	.0423	.0010	1268.
							.2040	285.	-2273.	270.	-1709.	603.	2879.	.0296	-.0091	.0295	.0091	.0504	-.0003	1365.
							.2050	456.	-1697.	176.	-986.	606.	3633.	.0350	-.0037	.0173	.0103	.0558	-.0018	1530.
							.2060	604.	-1233.	70.	-205.	591.	4213.	.0394	.0021	.0053	.0110	.0584	-.0032	1709.
							.2070	723.	-919.	-47.	627.	563.	4594.	.0424	.0080	-.0065	.0114	.0582	-.0045	1874.
							.2080	810.	-662.	-170.	1487.	530.	4766.	.0440	.0139	-.0177	.0115	.0556	-.0057	2015.
							.2090	866.	-418.	-294.	2341.	505.	4743.	.0441	.0192	-.0282	.0111	.0516	-.0068	2132.
							.2100	897.	-197.	-412.	3148.	505.	4542.	.0427	.0240	-.0377	.0102	.0476	-.0078	2227.
							.2110	897.	13.	-517.	3869.	528.	4170.	.0397	.0279	-.0459	.0090	.0439	-.0086	2293.
							.2120	861.	204.	-604.	4470.	561.	3630.	.0355	.0310	-.0528	.0074	.0401	-.0090	2322.
							.2130	790.	286.	-670.	4934.	594.	2945.	.0300	.0332	-.0582	.0055	.0361	-.0092	2318.
							.2140	692.	192.	-718.	5257.	618.	2159.	.0235	.0345	-.0619	.0033	.0317	-.0090	2294.
							.2150	574.	1.	-745.	5431.	624.	1314.	.0163	.0350	-.0641	.0010	.0271	-.0086	2256.
							.2160	443.	-168.	-747.	5452.	609.	450.	.0086	.0346	-.0646	-.0013	.0226	-.0080	2209.
							.2170	304.	-323.	-724.	5322.	575.	-398.	.0008	.0334	-.0636	-.0034	.0186	-.0072	2154.
							.2180	162.	-544.	-679.	5051.	527.	-1200.	-.0070	.0314	-.0613	-.0054	.0154	-.0062	2094.
							.2190	19.	-802.	-614.	4657.	471.	-1935.	-.0144	.0287	-.0576	-.0071	.0131	-.0049	2032.
							.2200	-122.	-975.	-534.	4158.	412.	-2587.	-.0212	.0254	-.0530	-.0087	.0115	-.0035	1972.
							.2210	-253.	-1063.	-444.	3579.	349.	-3132.	-.0273	.0218	-.0474	-.0100	.0105	-.0020	1914.
							.2220	-364.	-1190.	-348.	2944.	277.	-3546.	-.0324	.0182	-.0414	-.0112	.0098	-.0005	1853.
							.2230	-455.	-1401.	-248.	2275.	192.	-3830.	-.0364	.0147	-.0349	-.0122	.0090	.0009	1790.
							.2240	-529.	-1601.	-146.	1600.	90.	-4000.	-.0393	.0114	-.0284	-.0130	.0078	.0023	1729.
							.2250	-586.	-1712.	-47.	955.	-25.	-4065.	-.0411	.0085	-.0220	-.0135	.0059	.0036	1676.
							.2260	-622.	-1765.	38.	388.	-143.	-4024.	-.0416	.0061	-.0159	-.0138	.0032	.0048	1623.
							.2270	-632.	-1790.	103.	-64.	-255.	-3874.	-.0410	.0043	-.0104	-.0139	-.0003	.0058	1558.
							.2280	-619.	-1766.	143.	-384.	-355.	-3625.	-.0393	.0031	-.0056	-.0138	-.0045	.0066	1470.
							.2290	-583.	-1712.	162.	-575.	-438.	-3291.	-.0365	.0027	-.0015	-.0137	-.0093	.0073	1352.
							.2300	-529.	-1683.	163.	-654.	-496.	-2892.	-.0329	.0030	.0018	-.0134	-.0143	.0079	1206.
							.2310	-461.	-1667.	152.	-649.	-526.	-2449.	-.0286	.0040	.0044	-.0131	-.0192	.0083	1038.
							.2320	-385.	-1595.	132.	-579.	-531.	-1980.	-.0237	.0055	.0064	-.0129	-.0239	.0087	855.
							.2330	-297.	-1468.	102.	-458.	-516.	-1490.	-.0184	.0075	.0078	-.0128	-.0287	.0089	659.
							.2340	-198.	-1333.	60.	-294.	-485.	-985.	-.0128	.0098	.0087	-.0129	-.0338	.0089	456.
							.2350	-93.	-1171.	8.	-104.	-445.	-492.	-.0073	.0124	.0091	-.0133	-.0392	.0087	270.
							.2360	4.	-944.	-46.	82.	-402.	-45.	-.0016	.0151	.0094	-.0139	-.0448	.0084	166.
							.2370	89.	-701.	-94.	239.	-356.	339.	.0034	.0177	.0094	-.0145	-.0499	.0080	220.
							.2380	165.	-520.	-133.	353.	-305.	669.	.0082	.0203	.0093	-.0151	-.0538	.0075	327.
							.2390	236.	-368.	-160.	415.	-247.	953.	.0125	.0226	.0091	-.0156	-.0562	.0068	429.

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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

.2290	-587.	-1711.	162.	-575.	-438.	-171.	-.0365	.0027	-.0015	-.0137	-.0093	.0073	1352.
.2300	-529.	-1683.	163.	-654.	-496.	-2892.	-.0329	.0030	.0018	-.0134	-.0143	.0079	1206.
.2310	-461.	-1667.	152.	-649.	-576.	-2449.	-.0286	.0040	.0044	-.0131	-.0192	.0083	1038.
.2320	-315.	-1555.	137.	-579.	-531.	-1980.	-.0237	.0055	.0064	-.0129	-.0239	.0087	855.
.2330	-297.	-1468.	102.	-458.	-516.	-1490.	-.0184	.0075	.0078	-.0128	-.0287	.0089	659.
.2340	-197.	-1373.	60.	-294.	-485.	-985.	-.0128	.0090	.0087	-.0129	-.0338	.0089	456.
.2350	-93.	-1171.	8.	-104.	-445.	-492.	-.0073	.0124	.0091	-.0133	-.0392	.0087	270.
.2360	4.	-944.	-46.	52.	-402.	-45.	-.0018	.0151	.0094	-.0139	-.0448	.0084	166.
.2370	89.	-701.	-94.	239.	-356.	339.	.0034	.0177	.0094	-.0145	-.0499	.0080	220.
.2380	165.	-520.	-133.	353.	-305.	669.	.0082	.0203	.0093	-.0151	-.0538	.0075	327.
.2390	236.	-368.	-160.	415.	-247.	953.	.0125	.0226	.0091	-.0156	-.0562	.0068	429.

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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	40	MEMBER	1	SEQUENCE	851	LOCATION	BEG	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.2400	300.	-150.	-176.	424.	-187.	1189.	.0162	.0247	.0090	-.0160	-.0567	.0059	512.										
.2410	352.	106.	-182.	387.	-124.	1369.	.0193	.0264	.0088	-.0163	-.0557	.0050	573.										
.2420	387.	295.	-180.	309.	-60.	1489.	.0217	.0278	.0086	-.0166	-.0532	.0041	611.										
.2430	408.	395.	-170.	193.	-0.	1553.	.0234	.0286	.0083	-.0168	-.0495	.0032	628.										
.2440	414.	496.	-152.	43.	53.	1567.	.0245	.0288	.0078	-.0169	-.0443	.0025	629.										
.2450	410.	647.	-124.	-133.	97.	1543.	.0250	.0285	.0072	-.0169	-.0379	.0019	623.										
.2460	398.	771.	-89.	-312.	128.	1492.	.0248	.0276	.0062	-.0168	-.0304	.0015	614.										
.2470	378.	813.	-53.	-464.	148.	1417.	.0241	.0261	.0049	-.0167	-.0223	.0012	601.										
.2480	349.	782.	-22.	-558.	162.	1316.	.0229	.0240	.0031	-.0164	-.0140	.0012	577.										
.2490	315.	707.	-4.	-570.	172.	1190.	.0212	.0215	.0007	-.0161	-.0059	.0015	534.										
.2500	272.	630.	3.	-492.	174.	1032.	.0190	.0186	-.0022	-.0158	.0017	.0020	464.										
.2510	222.	537.	0.	-329.	165.	845.	.0165	.0154	-.0057	-.0155	.0083	.0028	370.										
.2520	169.	371.	-12.	-87.	144.	640.	.0137	.0120	-.0098	-.0152	.0140	.0038	266.										
.2530	121.	155.	-34.	225.	113.	430.	.0105	.0085	-.0145	-.0150	.0184	.0048	200.										
.2540	77.	3.	-67.	599.	75.	207.	.0072	.0052	-.0196	-.0150	.0213	.0058	256.										
.2550	34.	-55.	-112.	1022.	34.	-44.	.0036	.0020	-.0251	-.0151	.0227	.0069	411.										
.2560	-14.	-80.	-167.	1482.	-4.	-335.	-.0001	-.0011	-.0308	-.0154	.0224	.0080	610.										
.2570	-66.	-44.	-228.	1960.	-39.	-663.	-.0039	-.0039	-.0368	-.0157	.0208	.0090	830.										
.2580	-109.	29.	-294.	2445.	-71.	-994.	-.0077	-.0067	-.0428	-.0159	.0182	.0098	1060.										
.2590	-130.	111.	-366.	2927.	-99.	-1302.	-.0115	-.0092	-.0487	-.0159	.0150	.0103	1286.										
.2600	-140.	278.	-438.	3385.	-126.	-1603.	-.0152	-.0115	-.0543	-.0155	.0113	.0106	1504.										
.2610	-154.	492.	-504.	3796.	-154.	-1919.	-.0187	-.0136	-.0596	-.0145	.0071	.0108	1708.										
.2620	-167.	540.	-562.	4146.	-183.	-2228.	-.0221	-.0156	-.0644	-.0130	.0026	.0109	1890.										
.2630	-166.	460.	-613.	4419.	-215.	-2486.	-.0251	-.0176	-.0685	-.0108	-.0018	.0107	2037.										
.2640	-146.	567.	-652.	4591.	-254.	-2671.	-.0279	-.0196	-.0718	-.0079	-.0056	.0101	2134.										
.2650	-111.	851.	-674.	4638.	-302.	-2786.	-.0304	-.0216	-.0742	-.0043	-.0087	.0092	2175.										
.2660	-78.	1097.	-673.	4542.	-357.	-2847.	-.0326	-.0237	-.0756	-.0001	-.0109	.0079	2156.										
.2670	-49.	1174.	-648.	4295.	-419.	-2851.	-.0345	-.0256	-.0758	.0047	-.0121	.0064	2076.										
.2680	-10.	1145.	-601.	3904.	-489.	-2767.	-.0361	-.0274	-.0750	.0100	-.0120	.0043	1930.										
.2690	43.	1261.	-532.	3372.	-569.	-2591.	-.0374	-.0288	-.0730	.0156	-.0105	.0017	1722.										
.2700	94.	1636.	-437.	2703.	-659.	-2365.	-.0385	-.0300	-.0700	.0217	-.0079	-.0013	1465.										
.2710	129.	2095.	-317.	1913.	-753.	-2126.	-.0395	-.0312	-.0661	.0279	-.0042	-.0044	1187.										
.2720	157.	2380.	-182.	1042.	-844.	-1862.	-.0403	-.0324	-.0613	.0340	.0002	-.0076	921.										
.2730	197.	2615.	-46.	130.	-927.	-1557.	-.0411	-.0334	-.0558	.0399	.0050	-.0111	729.										
.2740	238.	3189.	91.	-802.	-1001.	-1257.	-.0417	-.0341	-.0499	.0452	.0098	-.0146	721.										
.2750	259.	3983.	230.	-1742.	-1061.	-1020.	-.0424	-.0345	-.0437	.0499	.0142	-.0176	915.										
.2760	259.	4386.	367.	-2657.	-1101.	-854.	-.0430	-.0346	-.0375	.0538	.0180	-.0202	1204.										
.2770	254.	4232.	493.	-3506.	-1119.	-732.	-.0436	-.0346	-.0314	.0567	.0208	-.0224	1506.										

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

.2670	-49.	1174.	-648.	4295.	-419.	-2851.	-.0345	-.0256	-.0758	.0047	-.0121	.0064	2076.
.2680	-10.	1145.	-601.	3904.	-489.	-2767.	-.0361	-.0274	-.0750	.0100	-.0120	.0043	1930.
.2690	43.	1261.	-532.	2372.	-569.	-2591.	-.0374	-.0288	-.0730	.0156	-.0105	.0017	1722.
.2700	94.	1636.	-437.	2702.	-659.	-2385.	-.0385	-.0300	-.0700	.0217	-.0079	-.0013	1465.
.2710	129.	2095.	-317.	1913.	-753.	-2126.	-.0395	-.0312	-.0661	.0279	-.0042	-.0044	1187.
.2720	157.	2390.	-182.	1042.	-844.	-1862.	-.0407	-.0324	-.0613	.0340	.0002	-.0076	921.
.2730	197.	2615.	-46.	130.	-927.	-1557.	-.0411	-.0334	-.0558	.0399	.0050	-.0111	729.
.2740	238.	3189.	91.	802.	-1001.	-1257.	-.0417	-.0341	-.0499	.0452	.0098	-.0146	721.
.2750	259.	3983.	230.	-1742.	-1061.	-1020.	-.0424	-.0345	-.0437	.0499	.0142	-.0176	915.
.2760	259.	4386.	367.	-2657.	-1101.	-854.	-.0430	-.0348	-.0375	.0538	.0180	-.0202	1204.
.2770	254.	4231.	497.	-3506.	-1119.	-732.	-.0436	-.0346	-.0314	.0567	.0208	-.0224	1506.

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

SECTION	40	MEMBER	1	SEQUENCE	851	LOCATION	BEG	TYPE	RU	DX	DY	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	HX	MY	MZ	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(DEG)	(DEG)	(DEG)	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)										
.2780	253.	4114.	603.	-4249.	-1117.	-653.	-.0441	-.0344	-.0257	.0586	.0224	-.0241	1782.			
.2790	247.	4472.	690.	-4846.	-1091.	-642.	-.0446	-.0341	-.0205	.0593	.0221	-.0251	2010.			
.2800	227.	4866.	745.	-5244.	-1037.	-708.	-.0449	-.0338	-.0162	.0589	.0194	-.0255	2164.			
.2810	195.	4734.	759.	-5405.	-954.	-834.	-.0451	-.0335	-.0126	.0574	.0139	-.0251	2228.			
.2820	154.	4284.	735.	-5327.	-844.	-1001.	-.0451	-.0330	-.0100	.0547	.0060	-.0241	2201.			
.2830	111.	4079.	681.	-5031.	-712.	-1185.	-.0448	-.0324	-.0083	.0511	-.0040	-.0226	2094.			
.2840	77.	4099.	602.	-4543.	-561.	-1356.	-.0442	-.0314	-.0075	.0469	-.0153	-.0206	1916.			
.2850	47.	3835.	502.	-3890.	-395.	-1500.	-.0433	-.0302	-.0074	.0419	-.0279	-.0182	1680.			
.2860	10.	3145.	387.	-3106.	-215.	-1628.	-.0419	-.0287	-.0078	.0365	-.0415	-.0155	1410.			
.2870	-34.	2451.	260.	-2233.	-27.	-1738.	-.0402	-.0271	-.0086	.0307	-.0558	-.0125	1136.			
.2880	-68.	2059.	123.	-1308.	162.	-1793.	-.0381	-.0253	-.0095	.0247	-.0706	-.0094	893.			
.2890	-77.	1825.	-21.	-374.	342.	-1763.	-.0356	-.0231	-.0103	.0187	-.0852	-.0066	736.			
.2900	-75.	1516.	-158.	502.	503.	-1680.	-.0328	-.0207	-.0108	.0129	-.0992	-.0038	732.			
.2910	-81.	1109.	-272.	1256.	637.	-1586.	-.0297	-.0182	-.0108	.0076	-.1121	-.0011	851.			
.2920	-87.	690.	-359.	1847.	740.	-1474.	-.0264	-.0156	-.0100	.0030	-.1233	.0014	994.			
.2930	-72.	350.	-421.	2259.	811.	-1309.	-.0229	-.0127	-.0084	-.0008	-.1323	.0036	1097.			
.2940	-34.	165.	-460.	2480.	855.	-1096.	-.0195	-.0098	-.0057	-.0039	-.1389	.0053	1141.			
.2950	6.	99.	-470.	2495.	877.	-884.	-.0160	-.0069	-.0021	-.0060	-.1428	.0069	1119.			
.2960	38.	-21.	-452.	2303.	888.	-696.	-.0127	-.0043	.0025	-.0073	-.1438	.0082	1029.			
.2970	72.	-238.	-409.	1913.	888.	-518.	-.0097	-.0021	.0080	-.0077	-.1417	.0093	872.			
.2980	117.	-319.	-340.	1342.	879.	-342.	-.0069	-.0001	.0144	-.0074	-.1365	.0099	658.			
.2990	165.	-135.	-247.	609.	859.	-188.	-.0046	.0015	.0214	-.0064	-.1285	.0102	429.			
.3000	202.	63.	-134.	-245.	833.	-85.	-.0027	.0026	.0289	-.0048	-.1183	.0103	350.			
.3010	225.	-20.	-10.	-1165.	802.	-37.	-.0013	.0031	.0366	-.0028	-.1068	.0101	568.			
.3020	237.	-246.	115.	-2097.	766.	-39.	-.0004	.0031	.0443	-.0005	-.0946	.0097	896.			
.3030	242.	-263.	237.	-3000.	726.	-88.	-.0001	.0025	.0517	.0019	-.0823	.0090	1239.			
.3040	239.	-80.	350.	-3838.	687.	-180.	-.0002	.0013	.0586	.0043	-.0701	.0081	1566.			
.3050	225.	-16.	451.	-4579.	654.	-313.	-.0007	-.0005	.0649	.0067	-.0584	.0070	1861.			
.3060	197.	-179.	538.	-5206.	631.	-488.	-.0015	-.0029	.0703	.0087	-.0478	.0060	2113.			
.3070	158.	-354.	608.	-5704.	617.	-697.	-.0025	-.0056	.0747	.0105	-.0385	.0050	2319.			
.3080	120.	-393.	659.	-6065.	613.	-913.	-.0037	-.0086	.0779	.0119	-.0307	.0041	2474.			
.3090	87.	-427.	686.	-6284.	618.	-1116.	-.0048	-.0116	.0800	.0128	-.0249	.0033	2573.			
.3100	56.	-593.	692.	-6367.	628.	-1312.	-.0059	-.0147	.0809	.0132	-.0212	.0026	2621.			
.3110	20.	-841.	682.	-6321.	642.	-1502.	-.0067	-.0178	.0805	.0133	-.0195	.0022	2623.			
.3120	-10.	-1043.	656.	-6175.	655.	-1659.	-.0073	-.0206	.0790	.0131	-.0197	.0021	2579.			
.3130	-20.	-1132.	611.	-5912.	669.	-1745.	-.0075	-.0232	.0763	.0126	-.0215	.0020	2488.			
.3140	-9.	-1111.	550.	-5554.	683.	-1754.	-.0073	-.0252	.0725	.0121	-.0245	.0020	2353.			
.3150	10.	-1044.	481.	-5123.	695.	-1704.	-.0067	-.0267	.0678	.0115	-.0286	.0021	2185.			

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2 SAFETY COLD FKW24F--2 PSV

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

.3050	225.	-16.	451.	-4579.	654.	-313.	-.0007	-.0005	.0649	.0067	-.0584	.0070	1861.
.3060	197.	-179.	538.	-5206.	631.	-488.	-.0015	-.0029	.0703	.0087	-.0478	.0060	2113.
.3070	158.	-354.	608.	-5704.	617.	-697.	-.0025	-.0056	.0747	.0105	-.0385	.0050	2319.
.3080	120.	-393.	659.	-6065.	613.	-913.	-.0037	-.0086	.0777	.0119	-.0307	.0041	2474.
.3090	87.	-427.	686.	-6284.	618.	-1116.	-.0048	-.0116	.0800	.0128	-.0249	.0033	2573.
.3100	56.	-503.	692.	-6367.	628.	-1312.	-.0059	-.0147	.0809	.0132	-.0212	.0026	2621.
.3110	20.	-841.	682.	-6328.	642.	-1502.	-.0067	-.0178	.0805	.0133	-.0195	.0022	2623.
.3120	-10.	-1043.	656.	-6175.	655.	-1659.	-.0073	-.0206	.0790	.0131	-.0197	.0021	2579.
.3130	-20.	-1132.	611.	-5912.	669.	-1745.	-.0075	-.0232	.0763	.0126	-.0215	.0020	2488.
.3140	-9.	-1111.	550.	-5554.	683.	-1754.	-.0073	-.0252	.0725	.0121	-.0245	.0020	2353.
.3150	10.	-1044.	481.	-5123.	695.	-1704.	-.0067	-.0267	.0678	.0115	-.0286	.0021	2185.

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2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	RU	DZ	RX	RY	RZ	STRESS		
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	HX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.3160	32.	-1076.	407.	-4645.	707.	-1598.	-.0059	-.0277	.0623	.0111	-.0333	.0023	1992.
.3170	66.	-1046.	332.	-4139.	715.	-1416.	-.0047	-.0280	.0561	.0108	-.0381	.0025	1779.
.3180	117.	-941.	260.	-3627.	714.	-1148.	-.0033	-.0276	.0494	.0108	-.0426	.0024	1553.
.3190	179.	-816.	194.	-3129.	702.	-813.	-.0018	-.0267	.0423	.0111	-.0466	.0021	1328.
.3200	241.	-200.	138.	-2657.	680.	-438.	-.0004	-.0254	.0349	.0117	-.0501	.0016	1115.
.3210	298.	154.	88.	-2213.	650.	-42.	.0008	-.0238	.0273	.0125	-.0529	.0009	926.
.3220	353.	529.	45.	-1801.	614.	362.	.0017	-.0220	.0198	.0135	-.0550	-.0002	777.
.3230	402.	1104.	11.	-1431.	573.	753.	.0022	-.0200	.0123	.0147	-.0560	-.0015	689.
.3240	444.	1813.	-12.	-1113.	530.	1108.	.0021	-.0181	.0050	.0161	-.0558	-.0031	665.
.3250	473.	2413.	-23.	-848.	486.	1405.	.0013	-.0163	-.0022	.0177	-.0543	-.0048	687.
.3260	487.	2825.	-24.	-632.	443.	1621.	-.0003	-.0148	-.0090	.0194	-.0516	-.0066	720.
.3270	483.	3220.	-18.	-457.	398.	1736.	-.0026	-.0136	-.0156	.0211	-.0482	-.0083	738.
.3280	464.	3712.	-9.	-311.	355.	1743.	-.0058	-.0130	-.0219	.0228	-.0443	-.0099	725.
.3290	432.	4176.	-3.	-179.	314.	1643.	-.0097	-.0131	-.0278	.0242	-.0401	-.0113	675.
.3300	386.	4479.	-1.	-53.	277.	1432.	-.0143	-.0139	-.0335	.0255	-.0360	-.0125	586.
.3310	324.	4654.	-1.	65.	243.	1106.	-.0195	-.0155	-.0389	.0265	-.0320	-.0133	455.
.3320	246.	4795.	-3.	175.	214.	676.	-.0252	-.0179	-.0439	.0274	-.0279	-.0138	293.
.3330	162.	4893.	-7.	284.	190.	166.	-.0312	-.0208	-.0487	.0281	-.0237	-.0140	153.
.3340	74.	4861.	-14.	403.	173.	-399.	-.0374	-.0243	-.0532	.0287	-.0194	-.0141	238.
.3350	-19.	4715.	-27.	537.	161.	-1005.	-.0436	-.0283	-.0574	.0292	-.0151	-.0139	462.
.3360	-116.	4535.	-44.	691.	153.	-1634.	-.0496	-.0327	-.0613	.0297	-.0109	-.0136	714.
.3370	-212.	4366.	-66.	861.	150.	-2253.	-.0552	-.0373	-.0649	.0303	-.0066	-.0132	970.
.3380	-298.	4212.	-92.	1036.	147.	-2828.	-.0602	-.0419	-.0681	.0309	-.0022	-.0130	1210.
.3390	-373.	4070.	-115.	1195.	143.	-3338.	-.0645	-.0464	-.0708	.0317	.0027	-.0130	1424.
.3400	-436.	3943.	-131.	1315.	137.	-3769.	-.0677	-.0505	-.0731	.0327	.0082	-.0131	1603.
.3410	-486.	3814.	-138.	1379.	129.	-4102.	-.0699	-.0541	-.0748	.0338	.0145	-.0136	1737.
.3420	-517.	3689.	-135.	1380.	118.	-4318.	-.0709	-.0570	-.0760	.0352	.0216	-.0143	1820.
.3430	-525.	3617.	-124.	1312.	103.	-4404.	-.0705	-.0592	-.0766	.0367	.0295	-.0153	1845.
.3440	-513.	3623.	-104.	1175.	83.	-4361.	-.0688	-.0607	-.0766	.0383	.0380	-.0166	1813.
.3450	-480.	3675.	-75.	970.	58.	-4187.	-.0656	-.0614	-.0760	.0401	.0470	-.0180	1725.
.3460	-426.	3736.	-38.	706.	26.	-3879.	-.0611	-.0615	-.0749	.0419	.0563	-.0195	1582.
.3470	-349.	3824.	4.	397.	-12.	-3437.	-.0552	-.0608	-.0733	.0436	.0658	-.0210	1388.
.3480	-251.	3974.	50.	58.	-57.	-2873.	-.0482	-.0595	-.0713	.0453	.0751	-.0225	1153.
.3490	-138.	4145.	97.	-291.	-105.	-2203.	-.0400	-.0578	-.0690	.0467	.0840	-.0238	895.
.3500	-18.	4248.	141.	-628.	-154.	-1462.	-.0310	-.0556	-.0664	.0478	.0922	-.0248	642.
.3510	109.	4263.	180.	-928.	-201.	-652.	-.0213	-.0531	-.0636	.0484	.0993	-.0255	462.
.3520	239.	4263.	209.	-1169.	-244.	207.	-.0111	-.0504	-.0608	.0485	.1050	-.0259	486.
.3530	369.	4299.	227.	-1331.	-282.	1088.	-.0007	-.0477	-.0579	.0479	.1091	-.0260	699.

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ADLPIPE STRESS ANALYSIS

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18.28.44.

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

.3430	-525.	3617.	-124.	1312.	107.	-4404.	-.0705	-.0592	-.0766	.0367	.0295	-.0153	1845.
.3440	-513.	3623.	-104.	1175.	83.	-4361.	-.0688	-.0607	-.0766	.0383	.0380	-.0166	1813.
.3450	-480.	3675.	-75.	970.	58.	-4187.	-.0656	-.0614	-.0760	.0401	.0470	-.0180	1725.
.3460	-426.	3736.	-38.	706.	26.	-3879.	-.0611	-.0615	-.0749	.0419	.0563	-.0195	1582.
.3470	-349.	3824.	4.	397.	-12.	-3437.	-.0552	-.0608	-.0733	.0436	.0556	-.0210	1388.
.3480	-251.	3974.	50.	58.	-57.	-2873.	-.0482	-.0595	-.0713	.0453	.0751	-.0225	1153.
.3490	-138.	4145.	97.	-291.	-105.	-2208.	-.0400	-.0578	-.0690	.0467	.0840	-.0238	895.
.3500	-18.	4248.	141.	-628.	-154.	-1462.	-.0310	-.0556	-.0664	.0478	.0922	-.0248	642.
.3510	109.	4263.	180.	-928.	-201.	-652.	-.0213	-.0531	-.0636	.0484	.0993	-.0255	462.
.3520	239.	4263.	209.	-1169.	-244.	207.	-.0111	-.0504	-.0608	.0485	.1050	-.0259	486.
.3530	369.	4299.	227.	-1351.	-282.	1088.	-.0007	-.0477	-.0579	.0479	.1091	-.0260	699.

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CONDITION 24

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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
40	1	851					.3540	489.	4319.	233.	-1399.	-313.	1959.	.0097	-.0450	-.0550	.0466	.1113	-.0256	974.
							.3550	593.	4229.	225.	-1362.	-336.	2787.	.0197	-.0424	-.0521	.0445	.1114	-.0249	1252.
							.3560	677.	4019.	202.	-1212.	-349.	3551.	.0292	-.0400	-.0493	.0417	.1092	-.0238	1512.
							.3570	743.	3756.	164.	-950.	-352.	4235.	.0379	-.0377	-.0465	.0381	.1049	-.0224	1747.
							.3580	790.	3484.	112.	-588.	-344.	4815.	.0456	-.0355	-.0436	.0339	.0986	-.0208	1952.
							.3590	810.	3167.	51.	-150.	-322.	5263.	.0522	-.0334	-.0406	.0291	.0905	-.0189	2117.
							.3600	798.	2746.	-16.	338.	-289.	5558.	.0576	-.0314	-.0373	.0238	.0806	-.0167	2315.
							.3610	758.	2240.	-84.	845.	-244.	5701.	.0616	-.0296	-.0338	.0182	.0695	-.0144	2337.
							.3620	701.	1739.	-153.	1344.	-190.	5708.	.0644	-.0279	-.0298	.0123	.0572	-.0120	2354.
							.3630	630.	1311.	-219.	1801.	-132.	5589.	.0658	-.0261	-.0252	.0062	.0443	-.0096	2357.
							.3640	544.	937.	-277.	2181.	-72.	5340.	.0661	-.0242	-.0201	.0002	.0309	-.0073	2315.
							.3650	437.	540.	-320.	2452.	-15.	4960.	.0652	-.0222	-.0143	-.0057	.0173	-.0050	2220.
							.3660	315.	96.	-344.	2590.	37.	4477.	.0634	-.0201	-.0078	-.0111	.0041	-.0028	2076.
							.3670	193.	-314.	-350.	2585.	79.	3937.	.0608	-.0178	-.0006	-.0160	-.0082	-.0008	1890.
							.3680	79.	-586.	-336.	2433.	110.	3381.	.0576	-.0152	.0072	-.0203	-.0192	.0007	1672.
							.3690	-27.	-698.	-302.	2135.	131.	2825.	.0541	-.0125	.0155	-.0239	-.0286	.0020	1422.
							.3700	-131.	-747.	-249.	1701.	141.	2279.	.0504	-.0096	.0243	-.0266	-.0364	.0029	1143.
							.3710	-230.	-814.	-178.	1145.	142.	1771.	.0467	-.0068	.0333	-.0284	-.0422	.0036	848.
							.3720	-313.	-846.	-92.	489.	133.	1340.	.0432	-.0040	.0424	-.0294	-.0459	.0039	575.
							.3730	-372.	-728.	5.	-246.	110.	1013.	.0400	-.0012	.0514	-.0296	-.0474	.0038	421.
							.3740	-414.	-456.	113.	-1037.	75.	786.	.0374	.0014	.0600	-.0290	-.0468	.0035	523.
							.3750	-444.	-193.	227.	-1853.	27.	650.	.0352	.0035	.0681	-.0276	-.0442	.0029	788.
							.3760	-463.	-56.	342.	-2658.	-34.	604.	.0337	.0052	.0755	-.0256	-.0402	.0022	1094.
							.3770	-465.	47.	451.	-3413.	-106.	657.	.0328	.0063	.0819	-.0232	-.0348	.0014	1395.
							.3780	-446.	258.	546.	-4089.	-109.	803.	.0325	.0068	.0872	-.0204	-.0284	.0005	1674.
							.3790	-413.	518.	628.	-4664.	-280.	1018.	.0328	.0067	.0912	-.0173	-.0211	-.0003	1919.
							.3800	-378.	629.	696.	-5126.	-376.	1271.	.0336	.0060	.0938	-.0141	-.0131	-.0010	2125.
							.3810	-345.	556.	750.	-5464.	-473.	1544.	.0349	.0046	.0949	-.0109	-.0046	-.0015	2287.
							.3820	-305.	418.	786.	-5665.	-568.	1848.	.0364	.0025	.0945	-.0078	.0045	-.0018	2402.
							.3830	-247.	381.	800.	-5718.	-656.	2186.	.0382	-.0000	.0926	-.0049	.0139	-.0021	2471.
							.3840	-185.	502.	792.	-5626.	-733.	2518.	.0401	-.0031	.0893	-.0025	.0235	-.0022	2491.
							.3850	-136.	601.	764.	-5401.	-796.	2796.	.0420	-.0066	.0845	-.0004	.0328	-.0020	2461.
							.3860	-102.	464.	719.	-5051.	-843.	3013.	.0437	-.0104	.0785	.0012	.0418	-.0016	2384.
							.3870	-70.	146.	658.	-4591.	-877.	3190.	.0451	-.0141	.0712	.0024	.0507	-.0011	2271.
							.3880	-31.	-106.	586.	-4039.	-899.	3341.	.0463	-.0174	.0630	.0031	.0597	-.0007	2134.
							.3890	5.	-226.	507.	-3416.	-911.	3447.	.0470	-.0204	.0538	.0036	.0587	-.0003	1982.
							.3900	27.	-420.	425.	-2736.	-913.	3485.	.0473	-.0229	.0440	.0038	.0775	.0001	1815.
							.3910	33.	-805.	339.	-2002.	-903.	3458.	.0472	-.0249	.0336	.0038	.0859	.0005	1644.

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

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INTERNAL FORCES IN THE PIPING
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.3800	-178.	629.	796.	-5126.	-376.	1271.	376	.0060	.0938	-.0141	-.0131	-.0010	2125.
.3810	-345.	556.	750.	-5464.	-473.	1544.	.349	.0046	.0949	-.0109	-.0046	-.0015	2287.
.3820	-305.	418.	780.	-5665.	-568.	1848.	.0364	.0025	.0945	-.0078	.0045	-.0018	2402.
.3830	-247.	381.	800.	-5718.	-656.	2186.	.0382	-.0000	.0926	-.0049	.0139	-.0021	2471.
.3840	-185.	502.	797.	-5626.	-733.	2518.	.0401	-.0031	.0893	-.0025	.0235	-.0022	2491.
.3850	-136.	601.	764.	-5401.	-796.	2796.	.0420	-.0066	.0845	-.0004	.0328	-.0020	2461.
.3860	-102.	464.	710.	-5051.	-847.	3013.	.0437	-.0104	.0785	.0012	.0418	-.0016	2384.
.3870	-70.	146.	658.	-4591.	-877.	3190.	.0451	-.0141	.0712	.0024	.0507	-.0011	2271.
.3880	-31.	-106.	586.	-4039.	-899.	3341.	.0463	-.0174	.0630	.0031	.0597	-.0007	2134.
.3890	5.	-226.	507.	-3416.	-911.	3447.	.0470	-.0204	.0538	.0036	.0687	-.0003	1982.
.3900	27.	-420.	425.	-2736.	-913.	3485.	.0473	-.0229	.0440	.0038	.0775	.0001	1815.
.3910	33.	-809.	339.	-2002.	-903.	3458.	.0472	-.0249	.0336	.0038	.0859	.0005	1644.

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S/RV PIPING KEWAUNEE GKM08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
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INTERNAL FORCES IN THE PIPING
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SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	RU	TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS
40	1	851					(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.3920	34.	-1162.	245.	-1220.	-883.	3394.	.0465	-.0263	.0228	.0036	.0937	.0007	1490.							
.3930	40.	-1218.	146.	-407.	-858.	3314.	.0453	-.0268	.0119	.0031	.1008	.0007	1383.							
.3940	49.	-1044.	47.	410.	-830.	3216.	.0436	-.0265	.0010	.0026	.1074	.0004	1343.							
.3950	49.	-960.	-45.	1198.	-801.	3083.	.0414	-.0252	-.0097	.0021	.1135	.0001	1366.							
.3960	36.	-1089.	-124.	1933.	-774.	2910.	.0388	-.0231	-.0200	.0016	.1189	-.0004	1436.							
.3970	18.	-1220.	-191.	2601.	-750.	2716.	.0357	-.0200	-.0298	.0011	.1238	-.0009	1539.							
.3980	8.	-1131.	-248.	3204.	-731.	2524.	.0324	-.0162	-.0389	.0007	.1280	-.0015	1663.							
.3990	5.	-859.	-300.	3747.	-715.	2338.	.0287	-.0118	-.0472	.0002	.1312	-.0022	1795.							
.4000	-2.	-602.	-347.	4232.	-700.	2139.	.0247	-.0070	-.0547	-.0003	.1330	-.0028	1923.							

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)
.1420	776.	1929.	799.	-6904.	520.	3694.	-.0449	-.0173	-.0825	-.0238	-.0406	.0133	3149.

SECTION	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	RU	TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS
40	1	61					(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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.	
.0010	-0.	0.	0.	0.	0.	0.	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0020	-0.	0.	0.	0.	0.	0.	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0030	-0.	0.	0.	0.	0.	0.	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0040	0.	0.	-0.	0.	0.	0.	-.0000	.0000	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0050	0.	0.	-0.	0.	0.	0.	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0060	1.	0.	-0.	0.	0.	0.	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0070	2.	0.	-1.	0.	0.	0.	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0080	3.	0.	-1.	0.	0.	0.	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0090	2.	0.	-1.	0.	0.	0.	-.0000	-.0001	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0100	-0.	0.	0.	0.	0.	0.	.0000	-.0001	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0110	-5.	0.	2.	0.	0.	0.	.0000	-.0002	-.0000	.0000	.0001	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0120	-11.	0.	4.	0.	0.	0.	.0001	-.0004	-.0000	.0001	.0006	-.0001	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0130	-15.	0.	6.	0.	0.	0.	.0001	-.0005	-.0001	.0001	.0013	-.0001	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0140	-18.	0.	7.	0.	0.	0.	.0000	-.0007	-.0002	.0002	.0022	-.0002	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0150	-21.	0.	9.	0.	0.	0.	.0000	-.0009	-.0004	.0003	.0034	-.0002	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.

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S/RV PIPING KEWAUNEE GKM08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

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FORCES AND MOMENTS ACT ON THE PIPING

.0050	0.	0.	-0.	0.	0.	0.	0.	-0.0000	-0.0000	.0000	-0.0000	-0.0000	-0.0000	0.
.0060	1.	0.	-0.	0.	0.	0.	0.	-0.0000	-0.0000	.0000	-0.0000	-0.0000	-0.0000	0.
.0070	2.	0.	-1.	0.	0.	0.	0.	-0.0000	-0.0000	.0000	-0.0000	-0.0000	-0.0000	0.
.0080	3.	0.	-1.	0.	0.	0.	0.	-0.0000	-0.0000	.0000	-0.0000	-0.0001	-0.0000	0.
.0090	2.	0.	-1.	0.	0.	0.	0.	-0.0000	-0.0001	.0000	-0.0000	-0.0001	-0.0000	0.
.0100	-0.	0.	0.	0.	0.	0.	0.	.0000	-0.0001	.0000	-0.0000	-0.0001	-0.0000	0.
.0110	-5.	0.	2.	0.	0.	0.	0.	.0000	-0.0002	-0.0000	.0000	.0001	-0.0000	0.
.0120	-11.	0.	4.	0.	0.	0.	0.	.0001	-0.0004	-0.0000	.0001	.0006	-0.0001	0.
.0130	-15.	0.	6.	0.	0.	0.	0.	.0001	-0.0005	-0.0001	.0001	.0013	-0.0001	0.
.0140	-18.	0.	7.	0.	0.	0.	0.	.0000	-0.0007	-0.0002	.0002	.0022	-0.0002	0.
.0150	-21.	0.	9.	0.	0.	0.	0.	.0000	-0.0009	-0.0004	.0003	.0034	-0.0002	0.

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

SECTION	40	MEMBER	1	SEQUENCE	61	LOCATION	DIS	TYPE	RU	DX	DY	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	HX	MY	MZ				(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)										
.0160	-26.	0.	11.	0.	0.	0.				-0.0000	-0.0012	-0.0006	.0004	.0045	-0.0003	0.
.0170	-30.	0.	12.	0.	0.	0.				-0.0001	-0.0015	-0.0008	.0005	.0056	-0.0004	0.
.0180	-30.	0.	12.	0.	0.	0.				-0.0002	-0.0018	-0.0011	.0007	.0064	-0.0005	0.
.0190	-26.	0.	10.	0.	0.	0.				-0.0004	-0.0021	-0.0015	.0009	.0070	-0.0007	0.
.0200	-20.	0.	8.	0.	0.	0.				-0.0006	-0.0022	-0.0019	.0012	.0076	-0.0009	0.
.0210	-12.	0.	5.	0.	0.	0.				-0.0009	-0.0023	-0.0024	.0015	.0085	-0.0011	0.
.0220	1.	0.	-1.	0.	0.	0.				-0.0012	-0.0020	-0.0029	.0020	.0102	-0.0013	0.
.0230	17.	0.	-7.	0.	0.	0.				-0.0016	-0.0015	-0.0036	.0024	.0125	-0.0014	0.
.0240	29.	0.	-12.	0.	0.	0.				-0.0020	-0.0007	-0.0044	.0027	.0147	-0.0016	0.
.0250	35.	0.	-15.	0.	0.	0.				-0.0024	.0002	-0.0052	.0029	.0158	-0.0017	0.
.0260	28.	0.	-12.	0.	0.	0.				-0.0026	.0009	-0.0059	.0030	.0159	-0.0018	0.
.0270	10.	0.	-4.	0.	0.	0.				-0.0026	.0013	-0.0063	.0031	.0157	-0.0020	0.
.0280	-4.	0.	1.	0.	0.	0.				-0.0026	.0013	-0.0064	.0033	.0146	-0.0021	0.
.0290	11.	0.	-4.	0.	0.	0.				-0.0026	.0012	-0.0063	.0032	.0119	-0.0018	0.
.0300	59.	0.	-24.	0.	0.	0.				-0.0028	.0015	-0.0059	.0030	.0092	-0.0011	0.
.0310	121.	0.	-50.	0.	0.	0.				-0.0030	.0026	-0.0053	.0029	.0073	-0.0003	0.
.0320	143.	0.	-59.	0.	0.	0.				-0.0030	.0041	-0.0047	.0024	.0056	.0006	0.
.0330	105.	0.	-43.	0.	0.	0.				-0.0025	.0057	-0.0042	.0014	.0042	.0013	0.
.0340	64.	0.	-26.	0.	0.	0.				-0.0019	.0071	-0.0035	.0002	.0034	.0023	0.
.0350	96.	0.	-39.	0.	0.	0.				-0.0016	.0085	-0.0023	-0.0012	.0020	.0039	0.
.0360	193.	0.	-79.	0.	0.	0.				-0.0016	.0099	-0.0005	-0.0026	-0.0013	.0059	0.
.0370	274.	0.	-112.	0.	0.	0.				-0.0012	.0109	.0019	-0.0041	-0.0055	.0075	0.
.0380	280.	0.	-115.	0.	0.	0.				-0.0003	.0114	.0044	-0.0055	-0.0091	.0085	0.
.0390	231.	0.	-95.	0.	0.	0.				.0011	.0117	.0068	-0.0072	-0.0122	.0094	0.
.0400	190.	0.	-78.	0.	0.	0.				.0024	.0119	.0091	-0.0091	-0.0151	.0104	0.
.0410	201.	0.	-82.	0.	0.	0.				.0033	.0124	.0115	-0.0111	-0.0165	.0113	0.
.0420	241.	0.	-99.	0.	0.	0.				.0040	.0130	.0140	-0.0129	-0.0173	.0119	0.
.0430	233.	0.	-96.	0.	0.	0.				.0051	.0131	.0165	-0.0146	-0.0191	.0117	0.
.0440	119.	0.	-49.	0.	0.	0.				.0068	.0121	.0187	-0.0164	-0.0216	.0107	0.
.0450	-37.	0.	15.	0.	0.	0.				.0088	.0101	.0208	-0.0177	-0.0234	.0093	0.
.0460	-102.	0.	42.	0.	0.	0.				.0101	.0081	.0228	-0.0185	-0.0245	.0081	0.
.0470	-68.	0.	28.	0.	0.	0.				.0106	.0065	.0246	-0.0189	-0.0256	.0069	0.
.0480	-77.	0.	31.	0.	0.	0.				.0111	.0046	.0258	-0.0191	-0.0261	.0049	0.
.0490	-216.	0.	89.	0.	0.	0.				.0123	.0020	.0261	-0.0187	-0.0245	.0019	0.
.0500	-398.	0.	163.	0.	0.	0.				.0134	-0.0007	.0257	-0.0175	-0.0213	-0.0009	0.
.0510	-487.	0.	200.	0.	0.	0.				.0138	-0.0030	.0249	-0.0153	-0.0175	-0.0029	0.
.0520	-459.	0.	188.	0.	0.	0.				.0131	-0.0047	.0238	-0.0126	-0.0133	-0.0048	0.
.0530	-385.	0.	158.	0.	0.	0.				.0119	-0.0058	.0221	-0.0094	-0.0089	-0.0070	0.

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ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.44.

S/RV PIPING KEWAUNEE GKM08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

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.0430	237.	0.	-96.	0.	0.	0.	0.	.051	.0131	.0165	-.0146	-.0191	.0117	0.
.0440	119.	0.	-49.	0.	0.	0.	0.	.068	.0121	.0187	-.0164	-.0216	.0107	0.
.0450	-37.	0.	15.	0.	0.	0.	0.	.0088	.0101	.0208	-.0177	-.0234	.0093	0.
.0460	-102.	0.	42.	0.	0.	0.	0.	.0101	.0081	.0228	-.0185	-.0245	.0081	0.
.0470	-68.	0.	28.	0.	0.	0.	0.	.0106	.0065	.0246	-.0189	-.0256	.0069	0.
.0480	-77.	0.	31.	0.	0.	0.	0.	.0111	.0046	.0258	-.0191	-.0261	.0049	0.
.0490	-216.	0.	89.	0.	0.	0.	0.	.0123	.0020	.0261	-.0187	-.0245	.0019	0.
.0500	-398.	0.	163.	0.	0.	0.	0.	.0134	-.0007	.0257	-.0175	-.0213	-.0009	0.
.0510	-487.	0.	200.	0.	0.	0.	0.	.0138	-.0030	.0249	-.0153	-.0175	-.0029	0.
.0520	-459.	0.	183.	0.	0.	0.	0.	.0131	-.0047	.0238	-.0126	-.0133	-.0048	0.
.0530	-365.	0.	150.	0.	0.	0.	0.	.0119	-.0058	.0221	-.0094	-.0089	-.0070	0.

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S/RV PIPING KEWAUNEE GK008F 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	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.0540	-333.	0.	137.	0.	0.	0.	.0106	-.0064	.0198	-.0058	-.0043	-.0088	0.							
.0550	-350.	0.	144.	0.	0.	0.	.0094	-.0066	.0168	-.0019	.0004	-.0101	0.							
.0560	-431.	0.	177.	0.	0.	0.	.0085	-.0070	.0131	.0020	.0054	-.0114	0.							
.0570	-476.	0.	195.	0.	0.	0.	.0073	-.0074	.0092	.0058	.0104	-.0126	0.							
.0580	-380.	0.	156.	0.	0.	0.	.0051	-.0073	.0055	.0097	.0151	-.0132	0.							
.0590	-193.	0.	79.	0.	0.	0.	.0023	-.0067	.0022	.0138	.0193	-.0131	0.							
.0600	-72.	0.	30.	0.	0.	0.	-.0000	-.0059	-.0013	.0177	.0229	-.0128	0.							
.0610	-65.	0.	27.	0.	0.	0.	-.0015	-.0046	-.0049	.0210	.0260	-.0128	0.							
.0620	-65.	0.	27.	0.	0.	0.	-.0029	-.0021	-.0082	.0238	.0286	-.0125	0.							
.0630	3.	0.	-1.	0.	0.	0.	-.0046	.0016	-.0111	.0257	.0306	-.0117	0.							
.0640	98.	0.	-40.	0.	0.	0.	-.0063	.0055	-.0135	.0265	.0318	-.0105	0.							
.0650	177.	0.	-73.	0.	0.	0.	-.0075	.0090	-.0151	.0262	.0320	-.0090	0.							
.0660	257.	0.	-106.	0.	0.	0.	-.0083	.0121	-.0156	.0251	.0309	-.0067	0.							
.0670	328.	0.	-135.	0.	0.	0.	-.0085	.0150	-.0149	.0232	.0282	-.0040	0.							
.0680	346.	0.	-142.	0.	0.	0.	-.0080	.0171	-.0133	.0202	.0246	-.0018	0.							
.0690	330.	0.	-135.	0.	0.	0.	-.0069	.0184	-.0110	.0161	.0212	.0003	0.							
.0700	338.	0.	-139.	0.	0.	0.	-.0057	.0191	-.0079	.0113	.0185	.0032	0.							
.0710	369.	0.	-151.	0.	0.	0.	-.0044	.0192	-.0042	.0058	.0159	.0069	0.							
.0720	368.	0.	-151.	0.	0.	0.	-.0027	.0183	-.0000	-.0000	.0130	.0102	0.							
.0730	334.	0.	-137.	0.	0.	0.	-.0005	.0164	.0046	-.0060	.0088	.0128	0.							
.0740	306.	0.	-125.	0.	0.	0.	.0017	.0139	.0096	-.0119	.0029	.0151	0.							
.0750	283.	0.	-116.	0.	0.	0.	.0038	.0106	.0143	-.0174	-.0042	.0174	0.							
.0760	243.	0.	-100.	0.	0.	0.	.0058	.0066	.0186	-.0225	-.0110	.0192	0.							
.0770	202.	0.	-83.	0.	0.	0.	.0075	.0021	.0220	-.0271	-.0165	.0201	0.							
.0780	182.	0.	-75.	0.	0.	0.	.0087	-.0023	.0245	-.0306	-.0204	.0202	0.							
.0790	153.	0.	-63.	0.	0.	0.	.0095	-.0064	.0258	-.0329	-.0225	.0192	0.							
.0800	81.	0.	-33.	0.	0.	0.	.0099	-.0101	.0257	-.0337	-.0223	.0171	0.							
.0810	-3.	0.	1.	0.	0.	0.	.0099	-.0131	.0242	-.0330	-.0200	.0142	0.							
.0820	-54.	0.	22.	0.	0.	0.	.0092	-.0151	.0213	-.0307	-.0163	.0108	0.							
.0830	-81.	0.	33.	0.	0.	0.	.0077	-.0160	.0173	-.0271	-.0113	.0067	0.							
.0840	-127.	0.	51.	0.	0.	0.	.0059	-.0161	.0121	-.0224	-.0059	.0021	0.							
.0850	-189.	0.	78.	0.	0.	0.	.0039	-.0154	.0061	-.0168	-.0010	-.0026	0.							
.0860	-259.	0.	106.	0.	0.	0.	.0017	-.0142	-.0004	-.0103	.0029	-.0069	0.							
.0870	-317.	0.	130.	0.	0.	0.	-.0005	-.0124	-.0069	-.0033	.0062	-.0109	0.							
.0880	-356.	0.	146.	0.	0.	0.	-.0028	-.0107	-.0133	.0040	.0093	-.0147	0.							
.0890	-368.	0.	151.	0.	0.	0.	-.0052	-.0077	-.0192	.0113	.0124	-.0177	0.							
.0900	-361.	0.	148.	0.	0.	0.	-.0074	-.0047	-.0245	.0182	.0158	-.0198	0.							
.0910	-356.	0.	146.	0.	0.	0.	-.0092	-.0012	-.0289	.0247	.0191	-.0209	0.							

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.44.

S/RV PIPING KEWAUNEE GK008F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

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

.0810	-3.	0.	1.	0.	0.	0.	.0099	-.0131	.0242	-.0330	-.0200	.0142	0.
.0820	-54.	0.	22.	0.	0.	0.	.0092	-.0151	.0213	-.0307	-.0163	.0108	0.
.0830	-81.	0.	33.	0.	0.	0.	.0077	-.0160	.0173	-.0271	-.0113	.0067	0.
.0840	-123.	0.	51.	0.	0.	0.	.0059	-.0161	.0121	-.0224	-.0059	.0021	0.
.0850	-169.	0.	72.	0.	0.	0.	.0039	-.0154	.0061	-.0168	-.0010	-.0026	0.
.0860	-259.	0.	106.	0.	0.	0.	.0017	-.0142	-.0004	-.0103	.0029	-.0069	0.
.0870	-317.	0.	130.	0.	0.	0.	-.0005	-.0124	-.0069	-.0033	.0062	-.0109	0.
.0880	-356.	0.	146.	0.	0.	0.	-.0026	-.0103	-.0133	.0040	.0093	-.0147	0.
.0890	-368.	0.	151.	0.	0.	0.	-.0052	-.0077	-.0192	.0113	.0124	-.0177	0.
.0900	-361.	0.	148.	0.	0.	0.	-.0074	-.0047	-.0245	.0182	.0158	-.0193	0.
.0910	-356.	0.	146.	0.	0.	0.	-.0092	-.0012	-.0289	.0247	.0191	-.0209	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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18.28.44.

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

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

SECTION	40	MEMBER	1	SEQUENCE	61	LOCATION	DIS	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.0920	-355.	0.	146.	0.	0.	0.	-.0106	.0026	-.0321	.0305	.0216	-.0213	0.		
.0930	-329.	0.	135.	0.	0.	0.	-.0114	.0068	-.0336	.0354	.0224	-.0211	0.		
.0940	-253.	0.	104.	0.	0.	0.	-.0119	.0113	-.0334	.0392	.0216	-.0200	0.		
.0950	-127.	0.	52.	0.	0.	0.	-.0119	.0161	-.0313	.0419	.0194	-.0178	0.		
.0960	26.	0.	-11.	0.	0.	0.	-.0114	.0212	-.0273	.0432	.0163	-.0148	0.		
.0970	191.	0.	-78.	0.	0.	0.	-.0103	.0267	-.0217	.0428	.0128	-.0112	0.		
.0980	350.	0.	-144.	0.	0.	0.	-.0085	.0327	-.0145	.0406	.0093	-.0072	0.		
.0990	481.	0.	-197.	0.	0.	0.	-.0059	.0389	-.0058	.0367	.0057	-.0031	0.		
.1000	573.	0.	-235.	0.	0.	0.	-.0024	.0446	-.0044	.0312	.0018	-.0013	0.		
.1010	650.	0.	-266.	0.	0.	0.	.0018	.0494	.0160	.0243	-.0029	.0059	0.		
.1020	746.	0.	-306.	0.	0.	0.	.0065	.0532	.0291	.0163	-.0092	.0108	0.		
.1030	852.	0.	-352.	0.	0.	0.	.0116	.0560	.0435	.0076	-.0174	.0157	0.		
.1040	920.	0.	-377.	0.	0.	0.	.0173	.0577	.0585	-.0018	-.0271	.0201	0.		
.1050	906.	0.	-371.	0.	0.	0.	.0237	.0582	.0738	-.0117	-.0372	.0241	0.		
.1060	845.	0.	-347.	0.	0.	0.	.0303	.0577	.0889	-.0216	-.0467	.0279	0.		
.1070	775.	0.	-318.	0.	0.	0.	.0367	.0564	.1034	-.0313	-.0545	.0316	0.		
.1080	658.	0.	-270.	0.	0.	0.	.0431	.0537	.1169	-.0409	-.0606	.0343	0.		
.1090	463.	0.	-190.	0.	0.	0.	.0495	.0482	.1290	-.0499	-.0654	.0358	0.		
.1100	433.	0.	-178.	0.	0.	0.	.0543	.0431	.1401	-.0568	-.0582	.0381	0.		
.1110	451.	0.	-185.	0.	0.	0.	.0580	.0382	.1494	-.0620	-.0702	.0401	0.		
.1120	304.	0.	-125.	0.	0.	0.	.0618	.0326	.1560	-.0661	-.0717	.0398	0.		
.1130	87.	0.	-36.	0.	0.	0.	.0648	.0275	.1596	-.0688	-.0712	.0382	0.		
.1140	-27.	0.	11.	0.	0.	0.	.0660	.0239	.1605	-.0691	-.0679	.0372	0.		
.1150	-109.	0.	45.	0.	0.	0.	.0658	.0209	.1585	-.0677	-.0624	.0359	0.		
.1160	-293.	0.	120.	0.	0.	0.	.0650	.0174	.1534	-.0652	-.0554	.0326	0.		
.1170	-480.	0.	197.	0.	0.	0.	.0633	.0140	.1457	-.0610	-.0476	.0286	0.		
.1180	-464.	0.	191.	0.	0.	0.	.0593	.0135	.1362	-.0545	-.0391	.0258	0.		
.1190	-411.	0.	169.	0.	0.	0.	.0541	.0155	.1246	-.0469	-.0316	.0231	0.		
.1200	-591.	0.	242.	0.	0.	0.	.0495	.0182	.1102	-.0396	-.0244	.0182	0.		
.1210	-915.	0.	375.	0.	0.	0.	.0451	.0217	.0938	-.0327	-.0157	.0124	0.		
.1220	-1105.	0.	453.	0.	0.	0.	.0395	.0268	.0767	-.0253	-.0064	.0084	0.		
.1230	-1151.	0.	472.	0.	0.	0.	.0329	.0326	.0598	-.0179	.0023	.0055	0.		
.1240	-1213.	0.	498.	0.	0.	0.	.0267	.0376	.0435	-.0112	.0093	.0017	0.		
.1250	-1271.	0.	521.	0.	0.	0.	.0210	.0423	.0286	-.0053	.0147	-.0023	0.		
.1260	-1232.	0.	505.	0.	0.	0.	.0153	.0481	.0154	.0002	.0196	-.0048	0.		
.1270	-1206.	0.	495.	0.	0.	0.	.0103	.0542	.0037	.0040	.0241	-.0063	0.		
.1280	-1332.	0.	546.	0.	0.	0.	.0070	.0585	-.0067	.0049	.0290	-.0083	0.		
.1290	-1452.	0.	596.	0.	0.	0.	.0045	.0609	-.0149	.0031	.0338	-.0099	0.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.45.

S/RV PIPING KEWAUNEE GKWOBF 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

.1190	-411.	0.	169.	0.	0.	0.	0.	.0541	.0155	.1246	-.0469	-.0316	.0231	0.
.1200	-591.	0.	242.	0.	0.	0.	0.	.0495	.0182	.1102	-.0396	-.0244	.0182	0.
.1210	-915.	0.	375.	0.	0.	0.	0.	.0451	.0217	.0938	-.0327	-.0157	.0124	0.
.1220	-1105.	0.	457.	0.	0.	0.	0.	.0395	.0268	.0767	-.0253	-.0064	.0084	0.
.1230	-1151.	0.	472.	0.	0.	0.	0.	.0329	.0326	.0598	-.0179	.0023	.0055	0.
.1240	-1213.	0.	498.	0.	0.	0.	0.	.0267	.0376	.0435	-.0112	.0093	.0017	0.
.1250	-1271.	0.	521.	0.	0.	0.	0.	.0210	.0423	.0286	-.0053	.0147	-.0023	0.
.1260	-1232.	0.	505.	0.	0.	0.	0.	.0153	.0481	.0154	.0002	.0196	-.0048	0.
.1270	-1206.	0.	495.	0.	0.	0.	0.	.0103	.0542	.0037	.0040	.0241	-.0063	0.
.1280	-1332.	0.	546.	0.	0.	0.	0.	.0070	.0585	-.0067	.0049	.0290	-.0083	0.
.1290	-1452.	0.	596.	0.	0.	0.	0.	.0045	.0609	-.0149	.0031	.0338	-.0099	0.

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SECTION	40	MEMBER	1	SEQUENCE	61	LOCATION	DIS	TYPE	RU						
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)		
.1300	-1326.	0.	544.	0.	0.	0.	.0015	.0622	-.0199	-.0002	.0359	-.0091	0.		
.1310	-1026.	0.	421.	0.	0.	0.	-.0012	.0618	-.0212	-.0047	.0335	-.0066	0.		
.1320	-807.	0.	331.	0.	0.	0.	-.0022	.0583	-.0197	-.0110	.0258	-.0047	0.		
.1330	-694.	0.	265.	0.	0.	0.	-.0015	.0524	-.0160	-.0189	.0158	-.0033	0.		
.1340	-525.	0.	216.	0.	0.	0.	-.0005	.0457	-.0106	-.0275	.0063	-.0007	0.		
.1350	-284.	0.	116.	0.	0.	0.	.0003	.0382	-.0044	-.0370	-.0006	.0029	0.		
.1360	-70.	0.	29.	0.	0.	0.	.0013	.0295	.0020	-.0473	-.0046	.0061	0.		
.1370	151.	0.	-62.	0.	0.	0.	.0023	.0200	.0084	-.0574	-.0079	.0090	0.		
.1380	464.	0.	-190.	0.	0.	0.	.0028	.0112	.0150	-.0658	-.0120	.0125	0.		
.1390	779.	0.	-320.	0.	0.	0.	.0030	.0031	.0212	-.0723	-.0179	.0158	0.		
.1400	965.	0.	-396.	0.	0.	0.	.0036	-.0049	.0260	-.0772	-.0244	.0174	0.		
.1410	1104.	0.	-453.	0.	0.	0.	.0038	-.0120	.0289	-.0806	-.0286	.0182	0.		
.1420	1364.	0.	-560.	0.	0.	0.	.0022	-.0167	.0295	-.0818	-.0294	.0199	0.		
.1430	1687.	0.	-692.	0.	0.	0.	-.0009	-.0189	.0278	-.0810	-.0268	.0219	0.		
.1440	1887.	0.	-774.	0.	0.	0.	-.0041	-.0196	.0237	-.0783	-.0218	.0224	0.		
.1450	1958.	0.	-803.	0.	0.	0.	-.0071	-.0188	.0176	-.0734	-.0156	.0217	0.		
.1460	2037.	0.	-836.	0.	0.	0.	-.0106	-.0157	.0104	-.0659	-.0086	.0213	0.		
.1470	2162.	0.	-887.	0.	0.	0.	-.0149	-.0109	.0021	-.0566	-.0014	.0214	0.		
.1480	2263.	0.	-928.	0.	0.	0.	-.0194	-.0054	-.0071	-.0465	.0068	.0213	0.		
.1490	2338.	0.	-959.	0.	0.	0.	-.0240	.0010	-.0169	-.0364	.0158	.0213	0.		
.1500	2410.	0.	-989.	0.	0.	0.	-.0285	.0086	-.0265	-.0260	.0245	.0222	0.		
.1510	2408.	0.	-988.	0.	0.	0.	-.0321	.0169	-.0355	-.0159	.0321	.0235	0.		
.1520	2271.	0.	-931.	0.	0.	0.	-.0344	.0249	-.0434	-.0067	.0378	.0245	0.		
.1530	2095.	0.	-859.	0.	0.	0.	-.0356	.0327	-.0496	.0013	.0423	.0255	0.		
.1540	2001.	0.	-821.	0.	0.	0.	-.0366	.0404	-.0537	.0079	.0461	.0275	0.		
.1550	1932.	0.	-792.	0.	0.	0.	-.0369	.0474	-.0556	.0126	.0498	.0302	0.		
.1560	1737.	0.	-712.	0.	0.	0.	-.0355	.0526	-.0557	.0148	.0536	.0321	0.		
.1570	1401.	0.	-575.	0.	0.	0.	-.0322	.0558	-.0536	.0148	.0559	.0332	0.		
.1580	1030.	0.	-423.	0.	0.	0.	-.0276	.0573	-.0490	.0131	.0560	.0341	0.		
.1590	677.	0.	-278.	0.	0.	0.	-.0221	.0569	-.0418	.0098	.0538	.0344	0.		
.1600	335.	0.	-138.	0.	0.	0.	-.0158	.0543	-.0324	.0048	.0492	.0338	0.		
.1610	5.	0.	-2.	0.	0.	0.	-.0082	.0499	-.0215	-.0018	.0433	.0322	0.		
.1620	-322.	0.	132.	0.	0.	0.	-.0016	.0440	-.0095	-.0094	.0377	.0299	0.		
.1630	-687.	0.	282.	0.	0.	0.	.0062	.0368	.0028	-.0178	.0323	.0266	0.		
.1640	-1103.	0.	453.	0.	0.	0.	.0143	.0284	.0152	-.0266	.0271	.0220	0.		
.1650	-1482.	0.	608.	0.	0.	0.	.0220	.0194	.0273	-.0350	.0221	.0164	0.		
.1660	-1717.	0.	704.	0.	0.	0.	.0286	.0109	.0392	-.0423	.0169	.0107	0.		
.1670	-1826.	0.	749.	0.	0.	0.	.0340	.0031	.0504	-.0481	.0123	.0050	0.		

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.1560	1737.	0.	712.	0.	0.	0.	0.	-.355	.0526	-.0557	.0148	.0536	.0321	0.
.1570	1401.	0.	-575.	0.	0.	0.	0.	-.0322	.0558	-.0536	.0148	.0559	.0332	0.
.1580	1030.	0.	-423.	0.	0.	0.	0.	-.0276	.0573	-.0490	.0131	.0560	.0341	0.
.1590	677.	0.	-270.	0.	0.	0.	0.	-.0221	.0569	-.0418	.0098	.0538	.0344	0.
.1600	335.	0.	-135.	0.	0.	0.	0.	-.0158	.0543	-.0324	.0048	.0492	.0338	0.
.1610	5.	0.	-2.	0.	0.	0.	0.	-.0082	.0499	-.0215	-.0018	.0433	.0322	0.
.1620	-322.	0.	132.	0.	0.	0.	0.	-.0016	.0440	-.0095	-.0094	.0377	.0299	0.
.1630	-667.	0.	282.	0.	0.	0.	0.	.0062	.0368	.0028	-.0178	.0323	.0266	0.
.1640	-1103.	0.	453.	0.	0.	0.	0.	.0143	.0284	.0152	-.0266	.0271	.0220	0.
.1650	-1482.	0.	608.	0.	0.	0.	0.	.0220	.0194	.0273	-.0350	.0221	.0164	0.
.1660	-1717.	0.	704.	0.	0.	0.	0.	.0266	.0109	.0392	-.0423	.0169	.0107	0.
.1670	-1826.	0.	749.	0.	0.	0.	0.	.0340	.0031	.0504	-.0481	.0123	.0050	0.

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SECTION	40	MEMBER	1	SEQUENCE	61	LOCATION	DIS	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.1680	-1907.	0.	782.	0.	0.	0.	.0385	-.0039	.0600	-.0524	.0085	-.0012	0.		
.1690	-2000.	0.	821.	0.	0.	0.	.0424	-.0097	.0677	-.0552	.0065	-.0076	0.		
.1700	-2058.	0.	844.	0.	0.	0.	.0451	-.0136	.0734	-.0563	.0063	-.0136	0.		
.1710	-2030.	0.	833.	0.	0.	0.	.0465	-.0155	.0773	-.0554	.0071	-.0187	0.		
.1720	-1919.	0.	787.	0.	0.	0.	.0466	-.0155	.0795	-.0526	.0088	-.0230	0.		
.1730	-1743.	0.	715.	0.	0.	0.	.0457	-.0137	.0804	-.0480	.0103	-.0264	0.		
.1740	-1528.	0.	627.	0.	0.	0.	.0440	-.0100	.0801	-.0417	.0113	-.0286	0.		
.1750	-1321.	0.	542.	0.	0.	0.	.0419	-.0048	.0786	-.0342	.0119	-.0298	0.		
.1760	-1155.	0.	474.	0.	0.	0.	.0396	.0015	.0760	-.0261	.0120	-.0300	0.		
.1770	-1010.	0.	414.	0.	0.	0.	.0372	.0085	.0727	-.0177	.0114	-.0293	0.		
.1780	-836.	0.	343.	0.	0.	0.	.0345	.0159	.0693	-.0090	.0093	-.0273	0.		
.1790	-626.	0.	257.	0.	0.	0.	.0318	.0234	.0663	.0000	.0052	-.0241	0.		
.1800	-426.	0.	175.	0.	0.	0.	.0294	.0304	.0640	.0090	-.0013	-.0203	0.		
.1810	-271.	0.	111.	0.	0.	0.	.0276	.0367	.0625	.0176	-.0102	-.0161	0.		
.1820	-144.	0.	59.	0.	0.	0.	.0263	.0419	.0617	.0255	-.0195	-.0117	0.		
.1830	-21.	0.	8.	0.	0.	0.	.0254	.0462	.0615	.0324	-.0283	-.0068	0.		
.1840	104.	0.	-43.	0.	0.	0.	.0246	.0490	.0618	.0379	-.0362	-.0018	0.		
.1850	232.	0.	-95.	0.	0.	0.	.0240	.0503	.0627	.0422	-.0434	.0032	0.		
.1860	375.	0.	-154.	0.	0.	0.	.0236	.0500	.0643	.0455	-.0506	.0081	0.		
.1870	516.	0.	-212.	0.	0.	0.	.0235	.0481	.0666	.0480	-.0578	.0124	0.		
.1880	633.	0.	-260.	0.	0.	0.	.0237	.0445	.0692	.0496	-.0648	.0158	0.		
.1890	738.	0.	-303.	0.	0.	0.	.0240	.0393	.0716	.0504	-.0704	.0184	0.		
.1900	865.	0.	-355.	0.	0.	0.	.0239	.0330	.0736	.0503	-.0733	.0204	0.		
.1910	1014.	0.	-416.	0.	0.	0.	.0233	.0260	.0747	.0495	-.0734	.0218	0.		
.1920	1139.	0.	-467.	0.	0.	0.	.0224	.0185	.0748	.0482	-.0709	.0220	0.		
.1930	1213.	0.	-497.	0.	0.	0.	.0214	.0109	.0738	.0464	-.0667	.0209	0.		
.1940	1250.	0.	-513.	0.	0.	0.	.0203	.0036	.0717	.0446	-.0614	.0187	0.		
.1950	1269.	0.	-521.	0.	0.	0.	.0188	-.0032	.0684	.0427	-.0548	.0155	0.		
.1960	1273.	0.	-522.	0.	0.	0.	.0169	-.0092	.0638	.0406	-.0466	.0115	0.		
.1970	1260.	0.	-517.	0.	0.	0.	.0145	-.0143	.0579	.0383	-.0368	.0068	0.		
.1980	1221.	0.	-501.	0.	0.	0.	.0119	-.0179	.0507	.0358	-.0253	.0016	0.		
.1990	1133.	0.	-465.	0.	0.	0.	.0092	-.0199	.0426	.0333	-.0131	-.0040	0.		
.2000	983.	0.	-403.	0.	0.	0.	.0067	-.0204	.0336	.0306	-.0009	-.0098	0.		
.2010	793.	0.	-325.	0.	0.	0.	.0043	-.0192	.0247	.0279	.0105	-.0155	0.		
.2020	599.	0.	-246.	0.	0.	0.	.0020	-.0166	.0156	.0251	.0208	-.0206	0.		
.2030	409.	0.	-168.	0.	0.	0.	-.0001	-.0129	.0070	.0220	.0299	-.0248	0.		
.2040	209.	0.	-86.	0.	0.	0.	-.0020	-.0083	-.0011	.0184	.0374	-.0279	0.		
.2050	-14.	0.	6.	0.	0.	0.	-.0033	-.0032	-.0084	.0142	.0428	-.0298	0.		

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.1940	1250.	0.	-515.	0.	0.	0.	0.	.0188	-.0032	.0684	.0427	-.0548	.0155	0.
.1950	1269.	0.	-522.	0.	0.	0.	0.	.0169	-.0092	.0638	.0406	-.0466	.0115	0.
.1970	1260.	0.	-517.	0.	0.	0.	0.	.0145	-.0143	.0579	.0383	-.0368	.0068	0.
.1980	1221.	0.	-501.	0.	0.	0.	0.	.0119	-.0179	.0507	.0358	-.0253	.0016	0.
.1990	1133.	0.	-465.	0.	0.	0.	0.	.0092	-.0199	.0426	.0333	-.0131	-.0049	0.
.2000	983.	0.	-403.	0.	0.	0.	0.	.0067	-.0204	.0338	.0306	-.0009	-.0098	0.
.2010	793.	0.	-325.	0.	0.	0.	0.	.0043	-.0192	.0247	.0279	.0105	-.0155	0.
.2020	599.	0.	-246.	0.	0.	0.	0.	.0020	-.0166	.0156	.0251	.0208	-.0206	0.
.2030	409.	0.	-168.	0.	0.	0.	0.	-.0001	-.0129	.0070	.0220	.0299	-.0248	0.
.2040	209.	0.	-86.	0.	0.	0.	0.	-.0020	-.0083	-.0011	.0184	.0374	-.0279	0.
.2050	-14.	0.	6.	0.	0.	0.	0.	-.0033	-.0032	-.0054	.0142	.0428	-.0298	0.

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SECTION	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
40	1	61					.2060	-258.	0.	106.	0.	0.	0.	-.0041	.0025	-.0146	.0095	.0457	-.0304	0.
							.2070	-512.	0.	210.	0.	0.	0.	-.0043	.0083	-.0195	.0044	.0460	-.0296	0.
							.2080	-760.	0.	310.	0.	0.	0.	-.0039	.0141	-.0231	-.0012	.0442	-.0276	0.
							.2090	-983.	0.	403.	0.	0.	0.	-.0032	.0194	-.0252	-.0070	.0408	-.0244	0.
							.2100	-1164.	0.	478.	0.	0.	0.	-.0022	.0241	-.0261	-.0128	.0368	-.0199	0.
							.2110	-1309.	0.	537.	0.	0.	0.	-.0010	.0279	-.0257	-.0186	.0325	-.0145	0.
							.2120	-1423.	0.	584.	0.	0.	0.	.0004	.0309	-.0244	-.0241	.0280	-.0086	0.
							.2130	-1503.	0.	617.	0.	0.	0.	.0019	.0331	-.0222	-.0290	.0233	-.0024	0.
							.2140	-1533.	0.	629.	0.	0.	0.	.0033	.0344	-.0192	-.0331	.0184	.0039	0.
							.2150	-1504.	0.	617.	0.	0.	0.	.0045	.0350	-.0157	-.0365	.0137	.0100	0.
							.2160	-1417.	0.	581.	0.	0.	0.	.0054	.0347	-.0120	-.0389	.0095	.0157	0.
							.2170	-1278.	0.	524.	0.	0.	0.	.0060	.0335	-.0082	-.0405	.0062	.0207	0.
							.2180	-1095.	0.	449.	0.	0.	0.	.0062	.0316	-.0045	-.0412	.0041	.0250	0.
							.2190	-883.	0.	362.	0.	0.	0.	.0061	.0289	-.0010	-.0410	.0029	.0284	0.
							.2200	-654.	0.	268.	0.	0.	0.	.0057	.0257	.0023	-.0399	.0027	.0307	0.
							.2210	-409.	0.	168.	0.	0.	0.	.0052	.0222	.0053	-.0380	.0030	.0320	0.
							.2220	-145.	0.	60.	0.	0.	0.	.0043	.0186	.0080	-.0354	.0039	.0325	0.
							.2230	121.	0.	-50.	0.	0.	0.	.0034	.0152	.0104	-.0324	.0049	.0323	0.
							.2240	361.	0.	-148.	0.	0.	0.	.0025	.0120	.0124	-.0292	.0058	.0313	0.
							.2250	557.	0.	-228.	0.	0.	0.	.0017	.0091	.0142	-.0259	.0064	.0296	0.
							.2260	711.	0.	-292.	0.	0.	0.	.0013	.0067	.0158	-.0229	.0063	.0276	0.
							.2270	831.	0.	-341.	0.	0.	0.	.0011	.0048	.0174	-.0200	.0052	.0254	0.
							.2280	916.	0.	-376.	0.	0.	0.	.0011	.0037	.0191	-.0175	.0031	.0231	0.
							.2290	954.	0.	-391.	0.	0.	0.	.0016	.0033	.0208	-.0156	.0001	.0207	0.
							.2300	935.	0.	-383.	0.	0.	0.	.0024	.0036	.0226	-.0141	-.0037	.0185	0.
							.2310	850.	0.	-349.	0.	0.	0.	.0038	.0046	.0244	-.0131	-.0079	.0164	0.
							.2320	708.	0.	-291.	0.	0.	0.	.0055	.0061	.0261	-.0126	-.0125	.0144	0.
							.2330	535.	0.	-219.	0.	0.	0.	.0075	.0080	.0279	-.0124	-.0176	.0127	0.
							.2340	353.	0.	-145.	0.	0.	0.	.0096	.0103	.0298	-.0123	-.0234	.0113	0.
							.2350	165.	0.	-62.	0.	0.	0.	.0118	.0128	.0317	-.0122	-.0296	.0103	0.
							.2360	-41.	0.	17.	0.	0.	0.	.0140	.0154	.0335	-.0120	-.0361	.0094	0.
							.2370	-262.	0.	107.	0.	0.	0.	.0162	.0180	.0349	-.0118	-.0423	.0087	0.
							.2380	-460.	0.	197.	0.	0.	0.	.0183	.0204	.0360	-.0116	-.0473	.0080	0.
							.2390	-677.	0.	278.	0.	0.	0.	.0200	.0227	.0366	-.0112	-.0508	.0076	0.
							.2400	-846.	0.	347.	0.	0.	0.	.0212	.0247	.0367	-.0107	-.0527	.0074	0.
							.2410	-985.	0.	404.	0.	0.	0.	.0221	.0264	.0363	-.0100	-.0531	.0071	0.
							.2420	-1096.	0.	450.	0.	0.	0.	.0225	.0277	.0354	-.0091	-.0520	.0067	0.
							.2430	-1185.	0.	486.	0.	0.	0.	.0227	.0284	.0342	-.0080	-.0495	.0062	0.

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2 SAFETY COLD FKW24F--2 PSV

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.2330	535.	0.	-219.	0.	0.	0.	0.	.0075	.0080	.0279	-.0124	-.0176	.0127	0.
.2340	353.	0.	-145.	0.	0.	0.	0.	.0096	.0103	.0298	-.0123	-.0234	.0113	0.
.2350	165.	0.	-68.	0.	0.	0.	0.	.0118	.0128	.0317	-.0122	-.0296	.0103	0.
.2360	-41.	0.	17.	0.	0.	0.	0.	.0140	.0154	.0335	-.0120	-.0361	.0094	0.
.2370	-262.	0.	107.	0.	0.	0.	0.	.0162	.0180	.0349	-.0118	-.0423	.0087	0.
.2380	-480.	0.	197.	0.	0.	0.	0.	.0183	.0204	.0360	-.0116	-.0473	.0080	0.
.2390	-677.	0.	278.	0.	0.	0.	0.	.0200	.0227	.0366	-.0112	-.0508	.0076	0.
.2400	-846.	0.	347.	0.	0.	0.	0.	.0212	.0247	.0367	-.0107	-.0527	.0074	0.
.2410	-985.	0.	404.	0.	0.	0.	0.	.0221	.0264	.0363	-.0100	-.0531	.0071	0.
.2420	-1096.	0.	450.	0.	0.	0.	0.	.0225	.0277	.0354	-.0091	-.0520	.0067	0.
.2430	-1185.	0.	486.	0.	0.	0.	0.	.0227	.0284	.0342	-.0080	-.0495	.0062	0.

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

SECTION	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
40	1	61					.2440	-1257.	0.	516.	0.	0.	0.	.0225	.0286	.0325	-.0069	-.0455	.0057	0.
							.2450	-1315.	0.	539.	0.	0.	0.	.0221	.0283	.0304	-.0060	-.0400	.0052	0.
							.2460	-1352.	0.	555.	0.	0.	0.	.0214	.0273	.0281	-.0054	-.0332	.0047	0.
							.2470	-1372.	0.	563.	0.	0.	0.	.0205	.0258	.0256	-.0053	-.0255	.0043	0.
							.2480	-1386.	0.	568.	0.	0.	0.	.0196	.0238	.0232	-.0056	-.0175	.0040	0.
							.2490	-1407.	0.	577.	0.	0.	0.	.0189	.0213	.0209	-.0064	-.0096	.0039	0.
							.2500	-1448.	0.	594.	0.	0.	0.	.0183	.0184	.0188	-.0079	-.0021	.0041	0.
							.2510	-1504.	0.	617.	0.	0.	0.	.0180	.0152	.0170	-.0100	.0048	.0044	0.
							.2520	-1562.	0.	641.	0.	0.	0.	.0177	.0119	.0154	-.0129	.0109	.0051	0.
							.2530	-1614.	0.	662.	0.	0.	0.	.0176	.0085	.0142	-.0163	.0159	.0062	0.
							.2540	-1672.	0.	686.	0.	0.	0.	.0176	.0052	.0132	-.0201	.0197	.0079	0.
							.2550	-1753.	0.	719.	0.	0.	0.	.0179	.0020	.0124	-.0241	.0219	.0100	0.
							.2560	-1865.	0.	765.	0.	0.	0.	.0184	-.0010	.0117	-.0281	.0225	.0125	0.
							.2570	-2014.	0.	826.	0.	0.	0.	.0192	-.0039	.0109	-.0321	.0217	.0153	0.
							.2580	-2190.	0.	898.	0.	0.	0.	.0200	-.0067	.0097	-.0356	.0198	.0186	0.
							.2590	-2397.	0.	983.	0.	0.	0.	.0208	-.0092	.0081	-.0386	.0172	.0227	0.
							.2600	-2660.	0.	1091.	0.	0.	0.	.0217	-.0115	.0055	-.0407	.0140	.0273	0.
							.2610	-2996.	0.	1229.	0.	0.	0.	.0227	-.0138	.0020	-.0419	.0104	.0318	0.
							.2620	-3377.	0.	1385.	0.	0.	0.	.0235	-.0158	-.0028	-.0420	.0065	.0360	0.
							.2630	-3766.	0.	1545.	0.	0.	0.	.0239	-.0178	-.0089	-.0407	.0029	.0401	0.
							.2640	-4149.	0.	1702.	0.	0.	0.	.0236	-.0198	-.0163	-.0380	-.0001	.0441	0.
							.2650	-4498.	0.	1845.	0.	0.	0.	.0225	-.0219	-.0252	-.0336	-.0022	.0474	0.
							.2660	-4775.	0.	1959.	0.	0.	0.	.0203	-.0240	-.0355	-.0279	-.0033	.0495	0.
							.2670	-4940.	0.	2026.	0.	0.	0.	.0168	-.0260	-.0469	-.0208	-.0031	.0500	0.
							.2680	-4954.	0.	2032.	0.	0.	0.	.0118	-.0278	-.0593	-.0124	-.0014	.0493	0.
							.2690	-4815.	0.	1975.	0.	0.	0.	.0054	-.0293	-.0725	-.0027	.0017	.0475	0.
							.2700	-4541.	0.	1862.	0.	0.	0.	-.0022	-.0306	-.0863	.0077	.0063	.0444	0.
							.2710	-4143.	0.	1699.	0.	0.	0.	-.0109	-.0319	-.1002	.0185	.0119	.0398	0.
							.2720	-3620.	0.	1485.	0.	0.	0.	-.0203	-.0332	-.1138	.0296	.0183	.0342	0.
							.2730	-3001.	0.	1231.	0.	0.	0.	-.0301	-.0342	-.1267	.0409	.0249	.0285	0.
							.2740	-2359.	0.	967.	0.	0.	0.	-.0396	-.0351	-.1386	.0521	.0314	.0229	0.
							.2750	-1752.	0.	719.	0.	0.	0.	-.0483	-.0357	-.1490	.0626	.0370	.0174	0.
							.2760	-1191.	0.	488.	0.	0.	0.	-.0560	-.0361	-.1577	.0720	.0416	.0121	0.
							.2770	-679.	0.	279.	0.	0.	0.	-.0624	-.0360	-.1642	.0800	.0449	.0076	0.
							.2780	-258.	0.	106.	0.	0.	0.	-.0672	-.0357	-.1684	.0865	.0464	.0045	0.
							.2790	37.	0.	-15.	0.	0.	0.	-.0699	-.0356	-.1699	.0909	.0455	.0028	0.
							.2800	225.	0.	-92.	0.	0.	0.	-.0707	-.0354	-.1684	.0933	.0416	.0022	0.
							.2810	349.	0.	-143.	0.	0.	0.	-.0698	-.0350	-.1639	.0934	.0344	.0023	0.

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.2710	-4143.	0.	1699.	0.	0.	0.	0.	-.0109	-.0319	-.1002	.0185	.0119	.0393	0.
.2720	-3620.	0.	1485.	0.	0.	0.	0.	-.0203	-.0332	-.1138	.0296	.0183	.0342	0.
.2730	-3001.	0.	1231.	0.	0.	0.	0.	-.0301	-.0342	-.1267	.0409	.0249	.0285	0.
.2740	-2359.	0.	967.	0.	0.	0.	0.	-.0396	-.0351	-.1386	.0521	.0314	.0229	0.
.2750	-1752.	0.	719.	0.	0.	0.	0.	-.0483	-.0357	-.1490	.0626	.0370	.0174	0.
.2760	-1191.	0.	488.	0.	0.	0.	0.	-.0560	-.0361	-.1577	.0720	.0416	.0121	0.
.2770	-679.	0.	279.	0.	0.	0.	0.	-.0624	-.0360	-.1642	.0800	.0449	.0076	0.
.2780	-258.	0.	106.	0.	0.	0.	0.	-.0672	-.0357	-.1684	.0865	.0464	.0045	0.
.2790	37.	0.	-15.	0.	0.	0.	0.	-.0699	-.0356	-.1699	.0909	.0455	.0028	0.
.2800	225.	0.	-92.	0.	0.	0.	0.	-.0707	-.0354	-.1684	.0933	.0416	.0022	0.
.2810	349.	0.	-143.	0.	0.	0.	0.	-.0698	-.0350	-.1639	.0934	.0344	.0023	0.

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INTERNAL FORCES IN THE PIPING
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SECTION	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	RU								STRESS
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	(PSI)	
.2820	420.	0.	-172.	0.	0.	0.	-.0672	-.0344	-.1564	.0911	.0241	.0032	0.	
.2830	434.	0.	-178.	0.	0.	0.	-.0631	-.0337	-.1462	.0865	.0113	.0048	0.	
.2840	414.	0.	-170.	0.	0.	0.	-.0579	-.0328	-.1337	.0797	-.0033	.0072	0.	
.2850	399.	0.	-164.	0.	0.	0.	-.0518	-.0314	-.1192	.0709	-.0194	.0098	0.	
.2860	403.	0.	-165.	0.	0.	0.	-.0452	-.0298	-.1030	.0607	-.0368	.0121	0.	
.2870	423.	0.	-174.	0.	0.	0.	-.0383	-.0279	-.0857	.0494	-.0553	.0138	0.	
.2880	464.	0.	-190.	0.	0.	0.	-.0312	-.0259	-.0679	.0377	-.0741	.0155	0.	
.2890	534.	0.	-219.	0.	0.	0.	-.0244	-.0237	-.0500	.0264	-.0925	.0172	0.	
.2900	610.	0.	-250.	0.	0.	0.	-.0179	-.0212	-.0327	.0157	-.1100	.0187	0.	
.2910	650.	0.	-267.	0.	0.	0.	-.0116	-.0186	-.0167	.0060	-.1257	.0194	0.	
.2920	634.	0.	-260.	0.	0.	0.	-.0057	-.0158	-.0025	-.0023	-.1392	.0196	0.	
.2930	561.	0.	-230.	0.	0.	0.	-.0002	-.0129	.0095	-.0086	-.1497	.0202	0.	
.2940	420.	0.	-172.	0.	0.	0.	.0048	-.0098	.0192	-.0125	-.1572	.0211	0.	
.2950	193.	0.	-79.	0.	0.	0.	.0094	-.0069	.0264	-.0142	-.1616	.0219	0.	
.2960	-116.	0.	47.	0.	0.	0.	.0136	-.0043	.0312	-.0135	-.1628	.0224	0.	
.2970	-485.	0.	199.	0.	0.	0.	.0173	-.0020	.0336	-.0106	-.1608	.0229	0.	
.2980	-902.	0.	370.	0.	0.	0.	.0204	.0000	.0337	-.0057	-.1554	.0238	0.	
.2990	-1356.	0.	556.	0.	0.	0.	.0230	.0016	.0319	.0009	-.1469	.0249	0.	
.3000	-1817.	0.	745.	0.	0.	0.	.0249	.0026	.0285	.0087	-.1362	.0259	0.	
.3010	-2242.	0.	920.	0.	0.	0.	.0262	.0031	.0240	.0172	-.1240	.0265	0.	
.3020	-2607.	0.	1069.	0.	0.	0.	.0268	.0032	.0189	.0261	-.1111	.0270	0.	
.3030	-2908.	0.	1193.	0.	0.	0.	.0268	.0026	.0136	.0349	-.0979	.0274	0.	
.3040	-3137.	0.	1287.	0.	0.	0.	.0264	.0013	.0085	.0432	-.0848	.0278	0.	
.3050	-3282.	0.	1346.	0.	0.	0.	.0255	-.0005	.0037	.0507	-.0725	.0280	0.	
.3060	-3348.	0.	1373.	0.	0.	0.	.0243	-.0028	-.0004	.0570	-.0613	.0279	0.	
.3070	-3360.	0.	1378.	0.	0.	0.	.0230	-.0055	-.0036	.0621	-.0517	.0277	0.	
.3080	-3338.	0.	1369.	0.	0.	0.	.0219	-.0085	-.0061	.0659	-.0439	.0276	0.	
.3090	-3299.	0.	1353.	0.	0.	0.	.0209	-.0115	-.0077	.0684	-.0382	.0279	0.	
.3100	-3266.	0.	1340.	0.	0.	0.	.0203	-.0145	-.0086	.0698	-.0347	.0282	0.	
.3110	-3264.	0.	1339.	0.	0.	0.	.0202	-.0175	-.0089	.0700	-.0333	.0285	0.	
.3120	-3300.	0.	1354.	0.	0.	0.	.0204	-.0203	-.0089	.0691	-.0338	.0288	0.	
.3130	-3366.	0.	1381.	0.	0.	0.	.0210	-.0228	-.0087	.0674	-.0359	.0295	0.	
.3140	-3459.	0.	1419.	0.	0.	0.	.0217	-.0248	-.0086	.0652	-.0392	.0304	0.	
.3150	-3575.	0.	1466.	0.	0.	0.	.0225	-.0264	-.0088	.0624	-.0435	.0310	0.	
.3160	-3694.	0.	1515.	0.	0.	0.	.0231	-.0273	-.0095	.0593	-.0485	.0310	0.	
.3170	-3784.	0.	1552.	0.	0.	0.	.0232	-.0276	-.0108	.0559	-.0534	.0305	0.	
.3180	-3817.	0.	1566.	0.	0.	0.	.0226	-.0273	-.0129	.0526	-.0579	.0296	0.	
.3190	-3776.	0.	1549.	0.	0.	0.	.0211	-.0265	-.0158	.0492	-.0617	.0281	0.	

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.3070	-3330.	0.	1367.	0.	0.	0.	0.	.0219	-.0085	-.0061	.0659	-.0439	.0276	0.
.3090	-3299.	0.	1353.	0.	0.	0.	0.	.0209	-.0115	-.0077	.0684	-.0382	.0279	0.
.3100	-3266.	0.	1340.	0.	0.	0.	0.	.0203	-.0145	-.0086	.0698	-.0347	.0282	0.
.3110	-3264.	0.	1339.	0.	0.	0.	0.	.0202	-.0175	-.0089	.0700	-.0333	.0285	0.
.3120	-3300.	0.	1354.	0.	0.	0.	0.	.0204	-.0102	-.0089	.0691	-.0338	.0288	0.
.3130	-3366.	0.	1381.	0.	0.	0.	0.	.0210	-.0228	-.0037	.0674	-.0359	.0295	0.
.3140	-3459.	0.	1419.	0.	0.	0.	0.	.0217	-.0248	-.0026	.0652	-.0392	.0304	0.
.3150	-3575.	0.	1466.	0.	0.	0.	0.	.0228	-.0264	-.0088	.0624	-.0435	.0310	0.
.3160	-3694.	0.	1515.	0.	0.	0.	0.	.0235	-.0273	-.0095	.0593	-.0485	.0310	0.
.3170	-3784.	0.	1552.	0.	0.	0.	0.	.0237	-.0276	-.0108	.0559	-.0534	.0305	0.
.3180	-3817.	0.	1566.	0.	0.	0.	0.	.0226	-.0273	-.0129	.0526	-.0579	.0296	0.
.3190	-3776.	0.	1549.	0.	0.	0.	0.	.0211	-.0265	-.0158	.0492	-.0617	.0281	0.

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

SECTION	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	RU								STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	(PSI)	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
.3200	-3639.	0.	1493.	0.	0.	0.	.0186	-.0253	-.0195	.0459	-.0647	.0258	0.	
.3210	-3388.	0.	1390.	0.	0.	0.	.0149	-.0239	-.0239	.0429	-.0569	.0225	0.	
.3220	-3021.	0.	1239.	0.	0.	0.	.0102	-.0222	-.0289	.0401	-.0682	.0186	0.	
.3230	-2556.	0.	1048.	0.	0.	0.	.0045	-.0204	-.0345	.0376	-.0683	.0143	0.	
.3240	-2014.	0.	826.	0.	0.	0.	-.0020	-.0187	-.0406	.0354	-.0672	.0098	0.	
.3250	-1414.	0.	580.	0.	0.	0.	-.0090	-.0171	-.0471	.0334	-.0647	.0052	0.	
.3260	-787.	0.	323.	0.	0.	0.	-.0163	-.0157	-.0538	.0316	-.0612	.0009	0.	
.3270	-175.	0.	72.	0.	0.	0.	-.0236	-.0147	-.0606	.0299	-.0568	-.0030	0.	
.3280	388.	0.	-159.	0.	0.	0.	-.0304	-.0142	-.0673	.0285	-.0519	-.0061	0.	
.3290	881.	0.	-362.	0.	0.	0.	-.0367	-.0145	-.0737	.0274	-.0469	-.0081	0.	
.3300	1287.	0.	-528.	0.	0.	0.	-.0421	-.0154	-.0797	.0264	-.0419	-.0090	0.	
.3310	1584.	0.	-650.	0.	0.	0.	-.0465	-.0170	-.0852	.0256	-.0372	-.0089	0.	
.3320	1760.	0.	-722.	0.	0.	0.	-.0499	-.0194	-.0902	.0247	-.0325	-.0077	0.	
.3330	1822.	0.	-748.	0.	0.	0.	-.0522	-.0224	-.0948	.0239	-.0278	-.0054	0.	
.3340	1790.	0.	-734.	0.	0.	0.	-.0536	-.0259	-.0989	.0230	-.0231	-.0023	0.	
.3350	1679.	0.	-689.	0.	0.	0.	-.0543	-.0299	-.1026	.0222	-.0186	.0014	0.	
.3360	1509.	0.	-619.	0.	0.	0.	-.0544	-.0342	-.1058	.0214	-.0142	.0053	0.	
.3370	1306.	0.	-536.	0.	0.	0.	-.0542	-.0387	-.1088	.0207	-.0099	.0091	0.	
.3380	1095.	0.	-449.	0.	0.	0.	-.0537	-.0433	-.1115	.0202	-.0054	.0128	0.	
.3390	891.	0.	-365.	0.	0.	0.	-.0534	-.0477	-.1143	.0200	-.0004	.0160	0.	
.3400	699.	0.	-287.	0.	0.	0.	-.0532	-.0517	-.1171	.0201	.0052	.0185	0.	
.3410	525.	0.	-215.	0.	0.	0.	-.0532	-.0553	-.1203	.0207	.0117	.0201	0.	
.3420	370.	0.	-152.	0.	0.	0.	-.0535	-.0582	-.1237	.0219	.0191	.0208	0.	
.3430	227.	0.	-93.	0.	0.	0.	-.0540	-.0604	-.1275	.0237	.0273	.0206	0.	
.3440	80.	0.	-33.	0.	0.	0.	-.0546	-.0619	-.1317	.0262	.0362	.0195	0.	
.3450	-81.	0.	33.	0.	0.	0.	-.0552	-.0626	-.1360	.0293	.0457	.0175	0.	
.3460	-260.	0.	107.	0.	0.	0.	-.0557	-.0627	-.1405	.0328	.0557	.0147	0.	
.3470	-465.	0.	191.	0.	0.	0.	-.0561	-.0621	-.1449	.0368	.0660	.0113	0.	
.3480	-704.	0.	289.	0.	0.	0.	-.0560	-.0608	-.1491	.0408	.0764	.0074	0.	
.3490	-976.	0.	400.	0.	0.	0.	-.0555	-.0591	-.1526	.0447	.0863	.0030	0.	
.3500	-1267.	0.	520.	0.	0.	0.	-.0544	-.0569	-.1551	.0483	.0955	-.0019	0.	
.3510	-1554.	0.	637.	0.	0.	0.	-.0528	-.0545	-.1563	.0511	.1036	-.0071	0.	
.3520	-1816.	0.	745.	0.	0.	0.	-.0507	-.0518	-.1559	.0531	.1102	-.0125	0.	
.3530	-2033.	0.	834.	0.	0.	0.	-.0482	-.0491	-.1536	.0539	.1151	-.0180	0.	
.3540	-2187.	0.	897.	0.	0.	0.	-.0452	-.0464	-.1492	.0533	.1180	-.0236	0.	
.3550	-2257.	0.	926.	0.	0.	0.	-.0419	-.0438	-.1424	.0512	.1186	-.0293	0.	
.3560	-2227.	0.	913.	0.	0.	0.	-.0384	-.0413	-.1333	.0475	.1167	-.0349	0.	
.3570	-2094.	0.	859.	0.	0.	0.	-.0347	-.0389	-.1218	.0423	.1125	-.0402	0.	

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.3470	-465.	0.	191.	0.	0.	0.	0.	-.0561	-.0621	-.1449	.0368	.0660	.0113	0.
.3480	-704.	0.	289.	0.	0.	0.	0.	-.0560	-.0608	-.1491	.0408	.0764	.0074	0.
.3490	-976.	0.	400.	0.	0.	0.	0.	-.0555	-.0591	-.1526	.0447	.0863	.0030	0.
.3500	-1267.	0.	520.	0.	0.	0.	0.	-.0544	-.0569	-.1551	.0483	.0955	-.0019	0.
.3510	-1554.	0.	637.	0.	0.	0.	0.	-.0528	-.0545	-.1563	.0511	.1036	-.0071	0.
.3520	-1816.	0.	745.	0.	0.	0.	0.	-.0507	-.0518	-.1559	.0531	.1102	-.0125	0.
.3530	-2033.	0.	834.	0.	0.	0.	0.	-.0482	-.0491	-.1536	.0539	.1151	-.0180	0.
.3540	-2187.	0.	897.	0.	0.	0.	0.	-.0452	-.0464	-.1492	.0533	.1180	-.0236	0.
.3550	-2257.	0.	926.	0.	0.	0.	0.	-.0419	-.0438	-.1424	.0512	.1186	-.0293	0.
.3560	-2227.	0.	913.	0.	0.	0.	0.	-.0384	-.0413	-.1333	.0475	.1167	-.0349	0.
.3570	-2094.	0.	859.	0.	0.	0.	0.	-.0347	-.0389	-.1218	.0423	.1125	-.0402	0.

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SECTION	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	RU	TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS
40	1	61					(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.3580	-1269.	0.	767.	0.	0.	0.	-.0307	-.0366	-.1081	.0357	.1060	-.0449	0.							
.3590	-1571.	0.	644.	0.	0.	0.	-.0265	-.0344	-.0926	.0280	.0974	-.0490	0.							
.3600	-1214.	0.	498.	0.	0.	0.	-.0221	-.0323	-.0754	.0194	.0868	-.0525	0.							
.3610	-808.	0.	331.	0.	0.	0.	-.0175	-.0304	-.0571	.0101	.0747	-.0553	0.							
.3620	-365.	0.	150.	0.	0.	0.	-.0129	-.0284	-.0380	.0008	.0613	-.0571	0.							
.3630	94.	0.	-39.	0.	0.	0.	-.0083	-.0265	-.0186	-.0082	.0471	-.0577	0.							
.3640	541.	0.	-222.	0.	0.	0.	-.0037	-.0245	.0006	-.0164	.0324	-.0573	0.							
.3650	954.	0.	-391.	0.	0.	0.	.0009	-.0224	.0191	-.0237	.0176	-.0563	0.							
.3660	1329.	0.	-545.	0.	0.	0.	.0052	-.0201	.0363	-.0297	.0034	-.0546	0.							
.3670	1675.	0.	-687.	0.	0.	0.	.0091	-.0177	.0520	-.0342	-.0099	-.0524	0.							
.3680	1995.	0.	-818.	0.	0.	0.	.0124	-.0150	.0657	-.0369	-.0215	-.0496	0.							
.3690	2288.	0.	-938.	0.	0.	0.	.0150	-.0123	.0773	-.0379	-.0314	-.0466	0.							
.3700	2555.	0.	-1048.	0.	0.	0.	.0169	-.0094	.0867	-.0372	-.0394	-.0439	0.							
.3710	2809.	0.	-1152.	0.	0.	0.	.0179	-.0065	.0936	-.0349	-.0452	-.0418	0.							
.3720	3062.	0.	-1256.	0.	0.	0.	.0180	-.0037	.0983	-.0310	-.0488	-.0402	0.							
.3730	3313.	0.	-1359.	0.	0.	0.	.0171	-.0010	.1006	-.0259	-.0498	-.0391	0.							
.3740	3553.	0.	-1457.	0.	0.	0.	.0154	.0015	.1008	-.0198	-.0484	-.0386	0.							
.3750	3775.	0.	-1548.	0.	0.	0.	.0131	.0036	.0991	-.0129	-.0448	-.0390	0.							
.3760	3977.	0.	-1631.	0.	0.	0.	.0102	.0052	.0957	-.0058	-.0394	-.0403	0.							
.3770	4147.	0.	-1701.	0.	0.	0.	.0070	.0063	.0910	.0016	-.0325	-.0421	0.							
.3780	4263.	0.	-1749.	0.	0.	0.	.0038	.0067	.0852	.0088	-.0243	-.0441	0.							
.3790	4309.	0.	-1767.	0.	0.	0.	.0007	.0065	.0785	.0157	-.0151	-.0462	0.							
.3800	4278.	0.	-1755.	0.	0.	0.	-.0020	.0058	.0713	.0217	-.0050	-.0485	0.							
.3810	4178.	0.	-1714.	0.	0.	0.	-.0043	.0044	.0639	.0267	.0056	-.0512	0.							
.3820	4020.	0.	-1649.	0.	0.	0.	-.0062	.0024	.0565	.0306	.0167	-.0538	0.							
.3830	3805.	0.	-1561.	0.	0.	0.	-.0076	-.0002	.0493	.0333	.0280	-.0556	0.							
.3840	3522.	0.	-1445.	0.	0.	0.	-.0083	-.0033	.0426	.0349	.0392	-.0568	0.							
.3850	3167.	0.	-1299.	0.	0.	0.	-.0082	-.0068	.0364	.0352	.0499	-.0578	0.							
.3860	2766.	0.	-1135.	0.	0.	0.	-.0076	-.0105	.0308	.0342	.0599	-.0585	0.							
.3870	2350.	0.	-964.	0.	0.	0.	-.0066	-.0141	.0258	.0320	.0695	-.0587	0.							
.3880	1935.	0.	-794.	0.	0.	0.	-.0054	-.0174	.0214	.0288	.0790	-.0581	0.							
.3890	1528.	0.	-627.	0.	0.	0.	-.0040	-.0203	.0174	.0245	.0883	-.0569	0.							
.3900	1147.	0.	-471.	0.	0.	0.	-.0027	-.0227	.0139	.0192	.0971	-.0556	0.							
.3910	825.	0.	-339.	0.	0.	0.	-.0016	-.0246	.0109	.0131	.1053	-.0544	0.							
.3920	585.	0.	-240.	0.	0.	0.	-.0008	-.0259	.0084	.0065	.1126	-.0530	0.							
.3930	434.	0.	-178.	0.	0.	0.	-.0006	-.0264	.0062	-.0004	.1193	-.0512	0.							
.3940	372.	0.	-153.	0.	0.	0.	-.0010	-.0261	.0042	-.0074	.1253	-.0493	0.							
.3950	291.	0.	-161.	0.	0.	0.	-.0019	-.0249	.0024	-.0145	.1307	-.0475	0.							

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.3850	3167.	0.	1299.	0.	0.	0.	0.	-.0082	-.0068	.0364	.0352	.0499	-.0578	0.
.3860	2766.	0.	-1135.	0.	0.	0.	0.	-.0076	-.0105	.0308	.0342	.0599	-.0585	0.
.3870	2750.	0.	-964.	0.	0.	0.	0.	-.0066	-.0141	.0258	.0320	.0595	-.0587	0.
.3880	1935.	0.	-794.	0.	0.	0.	0.	-.0054	-.0174	.0214	.0288	.0790	-.0581	0.
.3890	1528.	0.	-627.	0.	0.	0.	0.	-.0040	-.0203	.0174	.0245	.0883	-.0569	0.
.3900	1147.	0.	-471.	0.	0.	0.	0.	-.0027	-.0227	.0139	.0192	.0971	-.0556	0.
.3910	825.	0.	-339.	0.	0.	0.	0.	-.0016	-.0246	.0109	.0131	.1053	-.0544	0.
.3920	585.	0.	-240.	0.	0.	0.	0.	-.0008	-.0259	.0084	.0065	.1126	-.0530	0.
.3930	434.	0.	-178.	0.	0.	0.	0.	-.0006	-.0264	.0062	-.0004	.1193	-.0512	0.
.3940	372.	0.	-153.	0.	0.	0.	0.	-.0010	-.0261	.0042	-.0074	.1253	-.0493	0.
.3950	291.	0.	-161.	0.	0.	0.	0.	-.0019	-.0249	.0024	-.0145	.1307	-.0475	0.

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SECTION	40	MEMBER	1	SEQUENCE	61	LOCATION	DIS	TYPE	RU					
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)	
.3960	480.	0.	-197.	0.	0.	0.	-.0033	-.0227	.0006	-.0216	.1356	-.0460	0.	
.3970	623.	0.	-255.	0.	0.	0.	-.0050	-.0196	-.0012	-.0285	.1400	-.0445	0.	
.3980	811.	0.	-333.	0.	0.	0.	-.0071	-.0158	-.0029	-.0349	.1437	-.0426	0.	
.3990	1039.	0.	-426.	0.	0.	0.	-.0094	-.0115	-.0045	-.0407	.1465	-.0405	0.	
.4000	1292.	0.	-530.	0.	0.	0.	-.0118	-.0068	-.0058	-.0459	.1481	-.0383	0.	

MAXIMUM VALUE OF DISCONTINUITY FORCE 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)	FORCE (LB)
.2680	-4954.	0.	2032.	0.	0.	0.	.0118	-.0278	-.0593	-.0124	-.0014	.0493	5355.

SECTION	40	MEMBER	1	SEQUENCE	61	LOCATION	END	TYPE	RU					
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)	
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.	
.0010	0.	-0.	-0.	-0.	0.	-0.	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.	
.0020	0.	-2.	-0.	-0.	0.	-0.	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.	
.0030	0.	-3.	-0.	-0.	1.	-0.	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.	
.0040	0.	-3.	-0.	-1.	1.	-1.	-.0000	.0000	.0000	-.0000	-.0000	-.0000	1.	
.0050	-0.	-2.	0.	-1.	1.	-2.	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	1.	
.0060	-1.	-2.	0.	-1.	1.	-2.	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	1.	
.0070	-2.	2.	1.	-2.	2.	-3.	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	2.	
.0080	-2.	14.	1.	-3.	5.	-4.	-.0000	-.0000	.0000	-.0000	-.0001	-.0000	3.	
.0090	-2.	30.	1.	-3.	6.	-5.	-.0000	-.0001	.0000	-.0000	-.0001	-.0000	3.	
.0100	1.	41.	-0.	-1.	2.	-8.	.0000	-.0001	.0000	-.0000	-.0001	-.0000	3.	
.0110	7.	40.	-2.	3.	-12.	-14.	.0000	-.0002	-.0000	.0000	.0001	-.0000	7.	
.0120	14.	39.	-4.	7.	-36.	-21.	.0001	-.0004	-.0000	.0001	.0006	-.0001	17.	
.0130	19.	59.	-5.	11.	-72.	-27.	.0001	-.0005	-.0001	.0001	.0013	-.0001	31.	
.0140	22.	99.	-7.	11.	-117.	-33.	.0000	-.0007	-.0002	.0002	.0022	-.0002	49.	
.0150	27.	134.	-9.	7.	-167.	-39.	.0000	-.0009	-.0004	.0003	.0034	-.0002	69.	
.0160	33.	143.	-13.	1.	-216.	-48.	-.0000	-.0012	-.0006	.0004	.0045	-.0003	89.	
.0170	37.	136.	-16.	-5.	-257.	-55.	-.0001	-.0015	-.0008	.0005	.0056	-.0004	105.	
.0180	37.	126.	-18.	-6.	-285.	-58.	-.0002	-.0018	-.0011	.0007	.0064	-.0005	117.	
.0190	33.	100.	-16.	-1.	-304.	-61.	-.0004	-.0021	-.0015	.0009	.0070	-.0007	124.	

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.0090	-2.	30.	1.	-3.	6.	-5.	-.0000	-.0001	.0000	-.0000	-.0001	-.0000	3.
.0100	1.	41.	-0.	-1.	2.	-8.	-.0000	-.0001	.0000	-.0000	-.0001	-.0000	3.
.0110	7.	40.	-2.	3.	-12.	-14.	-.0000	-.0002	-.0000	.0000	.0001	-.0000	7.
.0120	14.	39.	-4.	7.	-36.	-21.	.0001	-.0004	-.0000	.0001	.0006	-.0001	17.
.0130	19.	59.	-5.	11.	-72.	-27.	.0001	-.0005	-.0001	.0001	.0013	-.0001	31.
.0140	22.	79.	-7.	11.	-117.	-33.	.0000	-.0007	-.0002	.0002	.0022	-.0002	49.
.0150	27.	134.	-9.	7.	-167.	-39.	.0000	-.0007	-.0004	.0003	.0034	-.0002	69.
.0160	33.	143.	-13.	1.	-216.	-48.	-.0000	-.0012	-.0006	.0004	.0045	-.0003	89.
.0170	37.	136.	-16.	-5.	-257.	-55.	-.0001	-.0015	-.0008	.0005	.0056	-.0004	105.
.0180	37.	126.	-18.	-6.	-285.	-58.	-.0002	-.0018	-.0011	.0007	.0064	-.0005	117.
.0190	33.	100.	-16.	-1.	-304.	-61.	-.0004	-.0021	-.0015	.0009	.0070	-.0007	124.

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SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
40	1	61					.0200	28.	17.	-15.	5.	-319.	-65.	-.0006	-.0022	-.0019	.0012	.0076	-.0009	131.
							.0210	17.	-98.	-12.	13.	-342.	-56.	-.0009	-.0023	-.0024	.0015	.0085	-.0011	139.
							.0220	-3.	-185.	-6.	30.	-403.	-31.	-.0012	-.0020	-.0029	.0020	.0102	-.0013	162.
							.0230	-27.	-235.	-1.	34.	-480.	7.	-.0016	-.0015	-.0036	.0024	.0125	-.0014	193.
							.0240	-52.	-206.	-4.	2.	-525.	55.	-.0020	-.0007	-.0044	.0027	.0147	-.0016	212.
							.0250	-72.	-60.	-14.	-63.	-503.	110.	-.0024	.0002	-.0052	.0029	.0158	-.0017	208.
							.0260	-75.	126.	-27.	-119.	-443.	138.	-.0026	.0009	-.0059	.0030	.0159	-.0018	192.
							.0270	-59.	185.	-35.	-118.	-416.	119.	-.0026	.0013	-.0063	.0031	.0157	-.0020	180.
							.0280	-45.	-38.	-35.	-85.	-374.	97.	-.0026	.0013	-.0064	.0033	.0146	-.0021	159.
							.0290	-68.	-528.	-24.	-59.	-243.	138.	-.0026	.0012	-.0063	.0032	.0119	-.0018	115.
							.0300	-132.	-978.	9.	6.	-128.	235.	-.0028	.0015	-.0059	.0030	.0092	-.0011	107.
							.0310	-206.	-933.	51.	97.	-69.	337.	-.0030	.0026	-.0053	.0029	.0073	-.0003	143.
							.0320	-219.	-529.	63.	105.	6.	348.	-.0030	.0041	-.0047	.0024	.0056	.0006	146.
							.0330	-147.	-285.	33.	-2.	92.	240.	-.0025	.0057	-.0042	.0014	.0042	.0013	103.
							.0340	-70.	-363.	1.	-133.	147.	145.	-.0019	.0071	-.0035	.0002	.0034	.0023	98.
							.0350	-89.	-458.	13.	-195.	217.	210.	-.0016	.0085	-.0023	-.0012	.0020	.0039	144.
							.0360	-188.	-367.	69.	-168.	340.	372.	-.0016	.0099	-.0005	-.0026	-.0013	.0059	213.
							.0370	-253.	-236.	131.	-73.	440.	419.	-.0012	.0109	.0019	-.0041	-.0055	.0075	245.
							.0380	-212.	-228.	164.	35.	461.	283.	-.0003	.0114	.0044	-.0055	-.0091	.0083	218.
							.0390	-114.	-341.	163.	78.	480.	114.	.0011	.0117	.0068	-.0072	-.0122	.0094	200.
							.0400	-47.	-521.	149.	79.	558.	61.	.0024	.0119	.0091	-.0091	-.0151	.0104	226.
							.0410	-57.	-491.	157.	-16.	590.	117.	.0033	.0124	.0115	-.0111	-.0165	.0113	241.
							.0420	-107.	76.	185.	-17.	575.	193.	.0040	.0130	.0140	-.0129	-.0173	.0119	243.
							.0430	-101.	970.	197.	-9.	586.	171.	.0051	.0131	.0165	-.0146	-.0191	.0117	245.
							.0440	35.	1217.	184.	-24.	610.	-29.	.0068	.0121	.0187	-.0164	-.0216	.0107	245.
							.0450	209.	614.	120.	-1.	579.	-259.	.0088	.0101	.0208	-.0177	-.0234	.0093	255.
							.0460	247.	253.	127.	109.	526.	-265.	.0101	.0081	.0228	-.0185	-.0245	.0081	240.
							.0470	148.	833.	172.	232.	527.	-88.	.0106	.0065	.0246	-.0189	-.0256	.0069	234.
							.0480	111.	1595.	178.	260.	531.	-64.	.0111	.0046	.0258	-.0191	-.0261	.0049	239.
							.0490	248.	1661.	105.	200.	440.	-308.	.0123	.0020	.0261	-.0187	-.0245	.0019	230.
							.0500	429.	1299.	6.	149.	281.	-541.	.0134	-.0007	.0257	-.0175	-.0213	-.0009	252.
							.0510	482.	1160.	-51.	168.	123.	-538.	.0138	-.0030	.0249	-.0153	-.0175	-.0029	232.
							.0520	402.	1194.	-61.	225.	-25.	-424.	.0131	-.0047	.0238	-.0126	-.0133	-.0048	193.
							.0530	290.	1200.	-58.	265.	-171.	-364.	.0119	-.0058	.0221	-.0094	-.0089	-.0070	193.
							.0540	215.	1401.	-73.	279.	-296.	-328.	.0106	-.0064	.0198	-.0058	-.0043	-.0088	210.
							.0550	220.	1708.	-125.	248.	-395.	-304.	.0094	-.0066	.0168	-.0019	.0004	-.0101	223.
							.0560	313.	1535.	-217.	136.	-480.	-381.	.0085	-.0070	.0131	.0020	.0054	-.0114	252.
							.0570	378.	977.	-296.	0.	-564.	-481.	.0073	-.0074	.0092	.0058	.0104	-.0126	297.

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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
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.0470	148.	833.	172.	232.	527.	-38.	.0106	.0065	.0246	-.0189	-.0256	.0069	234.
.0480	111.	1595.	178.	260.	531.	-64.	.0111	.0046	.0258	-.0191	-.0261	.0049	239.
.0490	248.	1661.	165.	200.	440.	-308.	.0123	.0020	.0261	-.0187	-.0245	.0019	230.
.0500	429.	1299.	6.	149.	251.	-541.	.0134	-.0007	.0257	-.0175	-.0213	-.0009	252.
.0510	482.	1160.	-51.	168.	127.	-536.	.0138	-.0030	.0249	-.0153	-.0175	-.0029	232.
.0520	402.	1194.	-61.	225.	-25.	-424.	.0131	-.0047	.0238	-.0126	-.0133	-.0048	193.
.0530	290.	1200.	-58.	265.	-171.	-364.	.0119	-.0058	.0221	-.0094	-.0089	-.0070	193.
.0540	215.	1401.	-73.	279.	-296.	-328.	.0106	-.0064	.0198	-.0058	-.0043	-.0088	210.
.0550	220.	1708.	-125.	248.	-395.	-304.	.0094	-.0066	.0168	-.0019	.0004	-.0101	223.
.0560	313.	1535.	-217.	176.	-480.	-381.	.0085	-.0070	.0131	.0020	.0054	-.0114	252.
.0570	275.	977.	-296.	0.	-564.	-481.	.0073	-.0074	.0092	.0058	.0104	-.0126	297.

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

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.0580	267.	814.	-300.	-36.	-647.	-369.	.0051	-.0073	.0055	.0097	.0151	-.0132	299.							
.0590	32.	939.	-246.	39.	-723.	-57.	.0023	-.0067	.0022	.0138	.0193	-.0131	291.							
.0600	-118.	392.	-220.	107.	-795.	161.	-.0000	-.0059	-.0013	.0177	.0229	-.0128	328.							
.0610	-117.	-710.	-250.	101.	-852.	175.	-.0015	-.0046	-.0049	.0210	.0260	-.0128	351.							
.0620	-108.	-1060.	-285.	67.	-873.	188.	-.0029	-.0021	-.0082	.0238	.0286	-.0125	359.							
.0630	-187.	-409.	-286.	16.	-840.	326.	-.0046	.0016	-.0111	.0257	.0306	-.0117	362.							
.0640	-295.	-19.	-275.	-93.	-762.	489.	-.0063	.0055	-.0135	.0265	.0318	-.0105	365.							
.0650	-385.	-494.	-257.	-207.	-673.	646.	-.0075	.0090	-.0151	.0262	.0320	-.0090	383.							
.0660	-481.	-1000.	-208.	-212.	-596.	860.	-.0083	.0121	-.0156	.0251	.0309	-.0067	428.							
.0670	-556.	-1002.	-133.	-115.	-534.	1026.	-.0085	.0150	-.0149	.0232	.0282	-.0040	466.							
.0680	-537.	-923.	-72.	-33.	-492.	958.	-.0080	.0171	-.0133	.0202	.0246	-.0018	432.							
.0690	-458.	-933.	-29.	-19.	-474.	756.	-.0069	.0184	-.0110	.0161	.0212	.0003	358.							
.0700	-421.	-699.	22.	-35.	-461.	683.	-.0057	.0191	-.0079	.0113	.0185	.0032	331.							
.0710	-420.	-336.	82.	-67.	-443.	722.	-.0044	.0192	-.0042	.0058	.0159	.0069	341.							
.0720	-361.	-199.	128.	-113.	-438.	620.	-.0027	.0183	-.0000	-.0000	.0130	.0102	308.							
.0730	-233.	1.	167.	-130.	-435.	315.	-.0005	.0164	.0046	-.0060	.0088	.0128	222.							
.0740	-107.	649.	220.	-79.	-377.	-19.	.0017	.0139	.0096	-.0119	.0029	.0151	155.							
.0750	3.	1288.	280.	0.	-247.	-293.	.0038	.0106	.0143	-.0174	-.0042	.0174	154.							
.0760	122.	1364.	325.	43.	-87.	-557.	.0058	.0066	.0186	-.0225	-.0110	.0192	227.							
.0770	229.	1268.	358.	46.	69.	-808.	.0075	.0021	.0220	-.0271	-.0165	.0201	326.							
.0780	291.	1603.	390.	41.	207.	-1003.	.0087	-.0023	.0245	-.0306	-.0204	.0202	411.							
.0790	343.	2080.	407.	34.	300.	-1176.	.0095	-.0064	.0258	-.0329	-.0225	.0192	487.							
.0800	420.	2102.	390.	16.	323.	-1356.	.0099	-.0101	.0257	-.0337	-.0223	.0171	560.							
.0810	481.	1820.	352.	-5.	308.	-1450.	.0099	-.0131	.0242	-.0330	-.0200	.0142	595.							
.0820	468.	1756.	312.	-21.	293.	-1382.	.0092	-.0151	.0213	-.0307	-.0163	.0108	567.							
.0830	404.	1896.	267.	-50.	285.	-1225.	.0077	-.0160	.0173	-.0271	-.0113	.0067	505.							
.0840	349.	1871.	198.	-114.	297.	-1063.	.0059	-.0161	.0121	-.0224	-.0059	.0021	445.							
.0850	309.	1608.	111.	-189.	361.	-857.	.0039	-.0154	.0061	-.0168	-.0010	-.0026	381.							
.0860	262.	1264.	23.	-226.	469.	-561.	.0017	-.0142	-.0004	-.0103	.0029	-.0069	307.							
.0870	203.	866.	-54.	-209.	569.	-229.	-.0005	-.0124	-.0069	-.0033	.0062	-.0109	260.							
.0880	136.	409.	-121.	-169.	635.	83.	-.0028	-.0103	-.0133	.0040	.0093	-.0147	266.							
.0890	50.	8.	-100.	-137.	674.	415.	-.0052	-.0077	-.0192	.0113	.0124	-.0177	322.							
.0900	-53.	-291.	-236.	-124.	687.	807.	-.0074	-.0047	-.0245	.0182	.0158	-.0198	428.							
.0910	-138.	-573.	-298.	-134.	667.	1190.	-.0092	-.0012	-.0289	.0247	.0191	-.0209	550.							
.0920	-189.	-766.	-363.	-158.	628.	1478.	-.0106	.0026	-.0321	.0305	.0216	-.0213	648.							
.0930	-239.	-646.	-411.	-156.	583.	1677.	-.0114	.0068	-.0336	.0354	.0224	-.0211	715.							
.0940	-324.	-247.	-422.	-94.	529.	1852.	-.0119	.0113	-.0334	.0392	.0216	-.0200	774.							
.0950	-451.	151.	-394.	20.	460.	2044.	-.0119	.0161	-.0313	.0419	.0194	-.0178	841.							

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

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

.0850	309.	1608.	111.	-189.	361.	-857.	.0079	-.0154	.0061	-.0168	-.0010	-.0026	445.
.0860	262.	1264.	23.	-226.	469.	-561.	.0017	-.0142	-.0004	-.0103	.0029	-.0069	307.
.0870	203.	866.	-54.	-209.	569.	-229.	-.0005	-.0124	-.0069	-.0033	.0062	-.0109	260.
.0880	136.	409.	-121.	-169.	625.	87.	-.0028	-.0102	-.0133	.0040	.0093	-.0147	266.
.0890	50.	8.	-100.	-137.	674.	415.	-.0052	-.0077	-.0192	.0117	.0124	-.0177	322.
.0900	-57.	-291.	-236.	-114.	687.	807.	-.0074	-.0047	-.0245	.0182	.0158	-.0198	428.
.0910	-138.	-573.	-298.	-134.	667.	1190.	-.0092	-.0012	-.0289	.0247	.0191	-.0209	550.
.0920	-189.	-766.	-363.	-158.	628.	1478.	-.0106	.0026	-.0321	.0305	.0216	-.0213	648.
.0930	-239.	-646.	-411.	-156.	583.	1677.	-.0114	.0068	-.0336	.0354	.0224	-.0211	715.
.0940	-324.	-247.	-422.	-94.	529.	1852.	-.0119	.0113	-.0334	.0392	.0216	-.0200	774.
.0950	-451.	151.	-394.	20.	460.	2044.	-.0119	.0161	-.0313	.0419	.0194	-.0178	841.

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S/RV PIPING KEWAUNEE GKWOBF 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	40	MEMBER	1	SEQUENCE	61	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)		
.0960	-596.	444.	-343.	140.	378.	2232.	-.0114	.0212	-.0273	.0432	.0163	-.0148	910.		
.0970	-738.	937.	-279.	228.	286.	2370.	-.0103	.0267	-.0217	.0428	.0128	-.0112	962.		
.0980	-854.	1852.	-211.	265.	178.	2410.	-.0085	.0327	-.0145	.0406	.0093	-.0072	975.		
.0990	-920.	2867.	-149.	245.	49.	2322.	-.0059	.0389	-.0058	.0367	.0057	-.0031	937.		
.1000	-930.	3432.	-95.	183.	-89.	2128.	-.0024	.0446	.0044	.0312	.0018	.0013	858.		
.1010	-920.	3403.	-34.	130.	-219.	1900.	.0018	.0494	.0160	.0243	-.0029	.0059	769.		
.1020	-938.	3141.	58.	143.	-320.	1695.	.0065	.0532	.0291	.0163	-.0092	.0108	695.		
.1030	-972.	2937.	175.	227.	-373.	1467.	.0116	.0560	.0435	.0076	-.0174	.0157	614.		
.1040	-934.	2649.	278.	315.	-377.	1082.	.0173	.0577	.0585	-.0018	-.0271	.0201	477.		
.1050	-802.	2420.	346.	374.	-349.	563.	.0237	.0582	.0738	-.0117	-.0372	.0241	305.		
.1060	-626.	2605.	391.	410.	-314.	36.	.0303	.0577	.0889	-.0216	-.0467	.0279	208.		
.1070	-449.	3224.	425.	420.	-298.	-452.	.0367	.0564	.1034	-.0313	-.0545	.0316	275.		
.1080	-212.	3478.	421.	338.	-303.	-1057.	.0431	.0537	.1169	-.0409	-.0606	.0343	462.		
.1090	129.	2812.	366.	167.	-335.	-1850.	.0495	.0482	.1290	-.0499	-.0654	.0358	758.		
.1100	221.	3817.	415.	282.	-454.	-2154.	.0543	.0431	.1401	-.0568	-.0682	.0381	891.		
.1110	231.	5255.	491.	510.	-571.	-2288.	.0580	.0382	.1494	-.0620	-.0702	.0401	968.		
.1120	466.	5103.	453.	532.	-625.	-2825.	.0618	.0326	.1560	-.0661	-.0717	.0398	1181.		
.1130	776.	4850.	352.	442.	-658.	-3432.	.0648	.0275	.1596	-.0688	-.0712	.0382	1413.		
.1140	900.	6367.	289.	433.	-689.	-3566.	.0660	.0239	.1605	-.0691	-.0679	.0372	1468.		
.1150	946.	8019.	222.	401.	-699.	-3460.	.0658	.0209	.1585	-.0677	-.0624	.0359	1426.		
.1160	1121.	7313.	82.	225.	-709.	-3563.	.0650	.0174	.1534	-.0652	-.0554	.0326	1461.		
.1170	1281.	5210.	-54.	108.	-739.	-3597.	.0633	.0140	.1457	-.0610	-.0476	.0286	1474.		
.1180	1121.	4857.	-51.	341.	-783.	-2957.	.0593	.0135	.1362	-.0545	-.0391	.0258	1235.		
.1190	880.	5535.	-23.	631.	-715.	-2074.	.0541	.0155	.1246	-.0469	-.0316	.0231	916.		
.1200	946.	4781.	-143.	577.	-526.	-1676.	.0495	.0182	.1102	-.0396	-.0244	.0182	742.		
.1210	1183.	3266.	-355.	298.	-315.	-1462.	.0451	.0217	.0938	-.0327	-.0157	.0124	612.		
.1220	1191.	3053.	-492.	124.	-76.	-680.	.0395	.0268	.0767	-.0253	-.0064	.0084	279.		
.1230	993.	3078.	-538.	100.	158.	476.	.0329	.0326	.0598	-.0179	.0023	.0055	205.		
.1240	854.	1261.	-580.	95.	355.	1349.	.0267	.0376	.0435	-.0112	.0093	.0017	561.		
.1250	749.	-1170.	-595.	202.	470.	1998.	.0210	.0423	.0286	-.0053	.0147	-.0023	828.		
.1260	526.	-1701.	-531.	512.	499.	2834.	.0153	.0481	.0154	.0002	.0196	-.0048	1173.		
.1270	336.	-992.	-483.	720.	543.	3619.	.0103	.0542	.0037	.0040	.0241	-.0063	1497.		
.1280	403.	-1399.	-550.	542.	578.	3846.	.0070	.0585	-.0067	.0049	.0290	-.0083	1576.		
.1290	521.	-2448.	-631.	165.	591.	3812.	.0045	.0609	-.0149	.0031	.0338	-.0099	1549.		
.1300	351.	-2173.	-559.	-0.	613.	4115.	.0015	.0622	-.0199	-.0002	.0359	-.0091	1670.		
.1310	11.	-1245.	-349.	122.	642.	4502.	-.0012	.0618	-.0212	-.0047	.0335	-.0066	1825.		
.1320	-138.	-1595.	-147.	295.	695.	4300.	-.0022	.0583	-.0197	-.0110	.0258	-.0047	1752.		
.1330	-79.	-2513.	21.	455.	722.	3552.	-.0015	.0524	-.0160	-.0189	.0158	-.0033	1466.		

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

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

.1230	993.	3078.	-538.	100.	158.	476.	.0329	.0326	.0598	-.0179	.0023	.0055	205.
.1240	854.	1261.	-580.	95.	355.	1349.	.0267	.0376	.0435	-.0112	.0093	.0017	561.
.1250	749.	-1170.	-595.	202.	470.	1998.	.0210	.0423	.0286	-.0053	.0147	-.0023	828.
.1260	516.	-1701.	-531.	512.	490.	2834.	.0153	.0481	.0154	.0002	.0196	-.0048	1173.
.1270	336.	-992.	-483.	720.	543.	3619.	.0103	.0542	.0037	.0040	.0241	-.0063	1497.
.1280	403.	-1399.	-550.	542.	578.	3846.	.0070	.0585	-.0067	.0049	.0290	-.0083	1576.
.1290	521.	-2448.	-631.	165.	591.	3812.	.0045	.0609	-.0149	.0031	.0338	-.0099	1549.
.1300	351.	-2173.	-559.	-0.	613.	4115.	.0015	.0622	-.0199	-.0002	.0359	-.0091	1670.
.1310	11.	-1245.	-349.	122.	642.	4502.	-.0012	.0618	-.0212	-.0047	.0335	-.0066	1825.
.1320	-138.	-1595.	-147.	255.	699.	4360.	-.0022	.0583	-.0197	-.0110	.0258	-.0047	1752.
.1330	-79.	-2513.	21.	455.	722.	3552.	-.0015	.0524	-.0160	-.0189	.0158	-.0033	1466.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.45.

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)	HX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
40	1	61					.1340	-72.	-1913.	216.	622.	705.	2845.	-.0005	.0457	-.0106	-.0275	.0063	-.0007	1202.
							.1350	-153.	-364.	413.	637.	671.	2263.	.0003	.0382	-.0044	-.0370	-.0006	.0029	981.
							.1360	-173.	97.	546.	365.	607.	1485.	.0013	.0295	.0020	-.0473	-.0046	.0061	660.
							.1370	-190.	-93.	660.	3.	545.	623.	.0023	.0200	.0084	-.0574	-.0079	.0090	332.
							.1380	-334.	794.	841.	-115.	474.	-30.	.0028	.0112	.0150	-.0658	-.0120	.0125	196.
							.1390	-488.	2222.	1046.	-17.	430.	-668.	.0030	.0031	.0212	-.0723	-.0179	.0158	319.
							.1400	-469.	2387.	1178.	38.	428.	-1610.	.0036	-.0049	.0260	-.0772	-.0244	.0174	669.
							.1410	-416.	1701.	1257.	-14.	443.	-2541.	.0038	-.0120	.0289	-.0806	-.0286	.0182	1035.
							.1420	-588.	1929.	1359.	-111.	520.	-2902.	.0022	-.0167	.0295	-.0818	-.0294	.0199	1184.
							.1430	-902.	2755.	1452.	-288.	630.	-2850.	-.0009	-.0189	.0278	-.0810	-.0268	.0219	1177.
							.1440	-1083.	2670.	1452.	-599.	725.	-2931.	-.0041	-.0196	.0237	-.0783	-.0218	.0224	1235.
							.1450	-1116.	1960.	1382.	-883.	755.	-3158.	-.0071	-.0188	.0176	-.0734	-.0156	.0217	1350.
							.1460	-1204.	1872.	1334.	-941.	711.	-3130.	-.0106	-.0157	.0104	-.0659	-.0086	.0213	1342.
							.1470	-1394.	1989.	1309.	-877.	685.	-2774.	-.0149	-.0109	.0021	-.0566	-.0014	.0214	1199.
							.1480	-1572.	1095.	1252.	-894.	676.	-2343.	-.0194	-.0054	-.0071	-.0465	.0068	.0213	1047.
							.1490	-1734.	-245.	1161.	-1008.	693.	-1029.	-.0240	.0010	-.0169	-.0364	.0158	.0213	883.
							.1500	-1920.	-742.	1075.	-1088.	737.	-1105.	-.0285	.0086	-.0265	-.0260	.0245	.0222	689.
							.1510	-2021.	-816.	974.	-1095.	761.	-384.	-.0321	.0169	-.0355	-.0159	.0321	.0235	557.
							.1520	-1937.	-1589.	831.	-1086.	759.	82.	-.0344	.0249	-.0434	-.0067	.0378	.0245	533.
							.1530	-1796.	-2652.	698.	-1009.	699.	471.	-.0356	.0327	-.0496	.0013	.0423	.0255	528.
							.1540	-1777.	-2871.	632.	-824.	611.	1114.	-.0366	.0404	-.0537	.0079	.0461	.0275	608.
							.1550	-1803.	-2556.	593.	-642.	502.	1876.	-.0369	.0474	-.0556	.0126	.0498	.0302	821.
							.1560	-1661.	-2724.	498.	-584.	345.	2364.	-.0355	.0526	-.0557	.0148	.0536	.0321	987.
							.1570	-1336.	-3072.	351.	-604.	190.	2549.	-.0322	.0558	-.0536	.0148	.0559	.0332	1054.
							.1580	-974.	-2728.	225.	-519.	29.	2656.	-.0276	.0573	-.0490	.0131	.0560	.0341	1086.
							.1590	-634.	-2050.	146.	-293.	-143.	2708.	-.0221	.0569	-.0418	.0098	.0538	.0344	1094.
							.1600	-303.	-1720.	97.	-29.	-281.	2632.	-.0158	.0543	-.0324	.0048	.0492	.0338	1062.
							.1610	15.	-1500.	61.	207.	-377.	2463.	-.0088	.0499	-.0215	-.0018	.0433	.0322	1003.
							.1620	319.	-742.	31.	405.	-468.	2260.	-.0016	.0440	-.0095	-.0094	.0377	.0299	940.
							.1630	666.	373.	-27.	497.	-517.	1935.	.0062	.0368	.0028	-.0178	.0323	.0266	828.
							.1640	1091.	1180.	-124.	471.	-534.	1373.	.0143	.0284	.0152	-.0266	.0271	.0220	621.
							.1650	1482.	1764.	-210.	441.	-546.	724.	.0220	.0194	.0273	-.0350	.0221	.0164	405.
							.1660	1695.	2645.	-228.	514.	-533.	243.	.0286	.0109	.0392	-.0423	.0169	.0107	313.
							.1670	1756.	3620.	-195.	665.	-522.	-96.	.0340	.0031	.0504	-.0481	.0123	.0050	341.
							.1680	1800.	4185.	-180.	745.	-499.	-488.	.0385	-.0039	.0600	-.0524	.0085	-.0012	409.
							.1690	1880.	4423.	-215.	688.	-475.	-967.	.0424	-.0097	.0677	-.0552	.0065	-.0076	513.
							.1700	1922.	4820.	-272.	538.	-440.	-1368.	.0451	-.0136	.0734	-.0563	.0063	-.0136	616.
							.1710	1861.	5352.	-319.	359.	-379.	-1580.	.0465	-.0155	.0773	-.0554	.0071	-.0187	668.

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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

.1610	15.	-1500.	61.	207.	-377.	2463.	-.0028	.0499	-.0215	-.0018	.0433	.0322	1003.
.1620	319.	-742.	31.	405.	-468.	2260.	-.0016	.0440	-.0095	-.0094	.0377	.0299	940.
.1630	666.	373.	-27.	497.	-517.	1935.	.0062	.0368	.0028	-.0178	.0323	.0266	826.
.1640	1091.	1120.	-124.	471.	-534.	1373.	.0143	.0284	.0152	-.0266	.0271	.0220	621.
.1650	1462.	1764.	-710.	441.	-546.	724.	.0220	.0194	.0273	-.0350	.0221	.0164	405.
.1660	1695.	2645.	-228.	514.	-537.	243.	.0226	.0109	.0392	-.0423	.0169	.0107	313.
.1670	1756.	3620.	-195.	665.	-522.	-96.	.0340	.0031	.0504	-.0481	.0123	.0050	341.
.1680	1800.	4185.	-180.	745.	-499.	-488.	.0385	-.0039	.0600	-.0524	.0085	-.0012	409.
.1690	1880.	4423.	-215.	628.	-475.	-967.	.0424	-.0097	.0677	-.0552	.0065	-.0076	513.
.1700	1922.	4820.	-272.	538.	-440.	-1366.	.0451	-.0136	.0734	-.0563	.0063	-.0136	616.
.1710	1861.	5352.	-319.	359.	-379.	-1580.	.0465	-.0155	.0773	-.0554	.0071	-.0187	668.

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

SECTION	MEMBER	SEQUENCE	LOCATION	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)
40	1	61					.1720	1710.	5515.	-342.	219.	-353.	-1663.	.0466	-.0155	.0795	-.0526	.0088	-.0230	688.
							.1730	1493.	5279.	-341.	148.	-339.	-1637.	.0457	-.0137	.0804	-.0480	.0103	-.0264	674.
							.1740	1235.	5011.	-322.	154.	-340.	-1491.	.0440	-.0100	.0801	-.0417	.0113	-.0286	617.
							.1750	989.	4815.	-312.	179.	-354.	-1275.	.0419	-.0048	.0786	-.0342	.0119	-.0298	536.
							.1760	799.	4471.	-339.	122.	-337.	-1058.	.0396	.0015	.0760	-.0261	.0120	-.0300	448.
							.1770	641.	3918.	-392.	-7.	-298.	-818.	.0372	.0085	.0727	-.0177	.0114	-.0293	349.
							.1780	442.	3422.	-431.	-114.	-224.	-449.	.0345	.0159	.0693	-.0090	.0093	-.0273	207.
							.1790	198.	3009.	-436.	-103.	-144.	23.	.0318	.0234	.0663	.0000	.0052	-.0241	72.
							.1800	-18.	2442.	-424.	27.	-71.	441.	.0294	.0304	.0640	.0090	-.0013	-.0203	180.
							.1810	-162.	1778.	-416.	216.	10.	719.	.0276	.0367	.0625	.0176	-.0102	-.0161	301.
							.1820	-255.	1343.	-413.	426.	47.	896.	.0263	.0419	.0617	.0255	-.0195	-.0117	399.
							.1830	-337.	1239.	-413.	582.	60.	1044.	.0254	.0462	.0615	.0324	-.0283	-.0068	480.
							.1840	-411.	1171.	-422.	630.	68.	1145.	.0246	.0490	.0618	.0379	-.0362	-.0018	525.
							.1850	-476.	1070.	-431.	610.	68.	1168.	.0240	.0503	.0627	.0422	-.0434	.0032	530.
							.1860	-542.	1222.	-417.	620.	61.	1109.	.0236	.0500	.0643	.0455	-.0506	.0081	511.
							.1870	-584.	1606.	-380.	712.	18.	908.	.0235	.0481	.0666	.0480	-.0578	.0124	463.
							.1880	-575.	1908.	-339.	825.	-27.	523.	.0237	.0445	.0692	.0496	-.0648	.0158	392.
							.1890	-539.	2047.	-302.	895.	-78.	23.	.0240	.0393	.0716	.0504	-.0704	.0184	361.
							.1900	-539.	2295.	-260.	893.	-130.	-446.	.0239	.0330	.0736	.0503	-.0733	.0204	405.
							.1910	-584.	2745.	-219.	798.	-186.	-841.	.0233	.0260	.0747	.0495	-.0734	.0218	471.
							.1920	-612.	3133.	-194.	621.	-234.	-1264.	.0224	.0185	.0748	.0482	-.0709	.0220	573.
							.1930	-591.	3411.	-188.	417.	-281.	-1757.	.0214	.0109	.0738	.0464	-.0667	.0209	733.
							.1940	-550.	3752.	-181.	251.	-321.	-2240.	.0203	.0036	.0717	.0446	-.0614	.0187	913.
							.1950	-525.	4102.	-163.	135.	-354.	-2626.	.0188	-.0032	.0684	.0427	-.0548	.0155	1065.
							.1960	-523.	4204.	-142.	20.	-378.	-2886.	.0169	-.0092	.0638	.0406	-.0466	.0115	1168.
							.1970	-546.	4071.	-126.	-127.	-392.	-2990.	.0145	-.0143	.0579	.0383	-.0368	.0068	1211.
							.1980	-588.	3936.	-117.	-298.	-406.	-2926.	.0119	-.0179	.0507	.0358	-.0253	.0016	1191.
							.1990	-612.	3825.	-124.	-467.	-429.	-2747.	.0092	-.0199	.0426	.0333	-.0131	-.0040	1131.
							.2000	-590.	3620.	-149.	-613.	-459.	-2509.	.0067	-.0204	.0338	.0306	-.0009	-.0098	1053.
							.2010	-546.	3347.	-177.	-700.	-492.	-2188.	.0043	-.0192	.0247	.0279	.0105	-.0155	943.
							.2020	-518.	3088.	-191.	-708.	-533.	-1727.	.0020	-.0166	.0156	.0251	.0208	-.0206	779.
							.2030	-511.	2767.	-190.	-658.	-575.	-1130.	-.0001	-.0129	.0070	.0220	.0299	-.0248	573.
							.2040	-494.	2273.	-184.	-588.	-603.	-456.	-.0020	-.0083	-.0011	.0184	.0374	-.0279	384.
							.2050	-441.	1697.	-181.	-507.	-606.	240.	-.0033	-.0032	-.0084	.0142	.0428	-.0298	331.
							.2060	-346.	1233.	-176.	-390.	-591.	921.	-.0041	.0025	-.0146	.0095	.0457	-.0304	466.
							.2070	-212.	919.	-163.	-231.	-563.	1554.	-.0043	.0083	-.0195	.0044	.0460	-.0296	670.
							.2080	-49.	662.	-142.	-43.	-530.	2116.	-.0039	.0141	-.0231	-.0012	.0442	-.0276	876.
							.2090	116.	418.	-109.	156.	-505.	2622.	-.0032	.0194	-.0252	-.0070	.0408	-.0244	1073.

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83/12/02. 18.28.45.

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

.1990	-612.	3825.	-124.	-467.	-429.	-2747.	.0092	-.0199	.0426	.0333	-.0131	-.0040	1131.
.2000	-590.	3620.	-149.	-613.	-459.	-2509.	.0067	-.0204	.0338	.0306	-.0009	-.0098	1053.
.2010	-546.	3347.	-177.	-700.	-492.	-2188.	.0043	-.0192	.0247	.0279	.0105	-.0155	943.
.2020	-518.	3088.	-191.	-708.	-527.	-1727.	.0020	-.0166	.0156	.0251	.0208	-.0206	779.
.2030	-511.	2767.	-190.	-658.	-575.	-1130.	-.0001	-.0129	.0070	.0220	.0299	-.0248	573.
.2040	-494.	2273.	-184.	-508.	-603.	-456.	-.0020	-.0083	-.0011	.0184	.0374	-.0279	384.
.2050	-441.	1697.	-181.	-507.	-606.	240.	-.0033	-.0032	-.0084	.0142	.0428	-.0298	331.
.2060	-346.	1233.	-176.	-390.	-591.	921.	-.0041	.0025	-.0146	.0095	.0457	-.0304	466.
.2070	-212.	919.	-163.	-231.	-563.	1554.	-.0043	.0083	-.0195	.0044	.0460	-.0296	670.
.2080	-49.	662.	-142.	-43.	-530.	2116.	-.0039	.0141	-.0231	-.0012	.0442	-.0276	876.
.2090	116.	418.	-109.	156.	-505.	2622.	-.0032	.0194	-.0252	-.0070	.0408	-.0244	1073.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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

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

SECTION	MEMBER	SEQUENCE	LOCATION	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)
40	1	61					.2100	268.	197.	-66.	353.	-505.	3079.	-.0022	.0241	-.0261	-.0128	.0368	-.0199	1260.
							.2110	412.	-13.	-20.	527.	-528.	3454.	-.0010	.0279	-.0257	-.0186	.0325	-.0145	1418.
							.2120	562.	-204.	20.	662.	-561.	3690.	.0004	.0309	-.0244	-.0241	.0280	-.0086	1521.
							.2130	713.	-286.	54.	765.	-594.	3770.	.0019	.0331	-.0222	-.0290	.0233	-.0024	1562.
							.2140	842.	-192.	89.	847.	-618.	3721.	.0033	.0344	-.0192	-.0331	.0184	.0039	1551.
							.2150	930.	-1.	128.	900.	-624.	3566.	.0045	.0350	-.0157	-.0365	.0137	.0100	1497.
							.2160	973.	168.	166.	899.	-609.	3317.	.0054	.0347	-.0120	-.0389	.0095	.0157	1401.
							.2170	974.	323.	200.	836.	-575.	2982.	.0060	.0335	-.0082	-.0405	.0062	.0207	1264.
							.2180	934.	544.	229.	717.	-527.	2574.	.0062	.0316	-.0045	-.0412	.0041	.0250	1093.
							.2190	865.	802.	251.	560.	-471.	2094.	.0061	.0289	-.0010	-.0410	.0029	.0284	890.
							.2200	776.	975.	265.	380.	-412.	1551.	.0057	.0257	.0023	-.0399	.0027	.0307	662.
							.2210	662.	1063.	276.	194.	-349.	985.	.0052	.0222	.0053	-.0380	.0030	.0320	426.
							.2220	510.	1190.	288.	14.	-277.	450.	.0043	.0186	.0080	-.0354	.0039	.0325	212.
							.2230	334.	1401.	298.	-167.	-192.	-39.	.0034	.0152	.0104	-.0324	.0049	.0323	103.
							.2240	168.	1601.	294.	-361.	-90.	-497.	.0025	.0120	.0124	-.0292	.0058	.0313	249.
							.2250	29.	1712.	275.	-556.	25.	-916.	.0017	.0091	.0142	-.0259	.0064	.0296	430.
							.2260	-89.	1765.	253.	-715.	143.	-1261.	.0013	.0067	.0158	-.0229	.0063	.0276	584.
							.2270	-199.	1790.	238.	-809.	255.	-1501.	.0011	.0048	.0174	-.0200	.0052	.0254	692.
							.2280	-297.	1766.	232.	-833.	355.	-1635.	.0011	.0037	.0191	-.0175	.0031	.0231	750.
							.2290	-371.	1712.	229.	-802.	438.	-1665.	.0016	.0033	.0208	-.0156	.0001	.0207	762.
							.2300	-406.	1683.	220.	-733.	496.	-1503.	.0024	.0036	.0226	-.0141	-.0037	.0185	735.
							.2310	-389.	1667.	196.	-645.	526.	-1472.	.0038	.0046	.0244	-.0131	-.0079	.0164	679.
							.2320	-324.	1595.	158.	-545.	531.	-1289.	.0055	.0061	.0261	-.0126	-.0125	.0144	601.
							.2330	-238.	1468.	117.	-412.	516.	-1036.	.0075	.0080	.0279	-.0124	-.0176	.0127	493.
							.2340	-156.	1333.	85.	-217.	485.	-695.	.0096	.0103	.0298	-.0123	-.0234	.0113	351.
							.2350	-71.	1171.	59.	35.	445.	-302.	.0118	.0128	.0317	-.0122	-.0296	.0103	216.
							.2360	37.	944.	29.	306.	402.	77.	.0140	.0154	.0335	-.0120	-.0361	.0094	205.
							.2370	173.	701.	-13.	560.	356.	414.	.0162	.0180	.0349	-.0118	-.0423	.0087	314.
							.2380	315.	520.	-64.	777.	305.	733.	.0183	.0204	.0360	-.0116	-.0473	.0080	446.
							.2390	441.	368.	-118.	947.	247.	1057.	.0200	.0227	.0366	-.0112	-.0508	.0076	578.
							.2400	546.	150.	-171.	1069.	187.	1364.	.0210	.0247	.0367	-.0107	-.0527	.0074	699.
							.2410	634.	-106.	-223.	1156.	124.	1620.	.0221	.0264	.0363	-.0100	-.0531	.0071	800.
							.2420	709.	-295.	-270.	1219.	60.	1804.	.0225	.0277	.0354	-.0091	-.0520	.0067	874.
							.2430	777.	-395.	-315.	1256.	0.	1912.	.0227	.0284	.0342	-.0080	-.0495	.0062	918.
							.2440	843.	-496.	-364.	1249.	-53.	1955.	.0225	.0286	.0325	-.0069	-.0455	.0057	931.
							.2450	905.	-647.	-416.	1185.	-97.	1943.	.0221	.0283	.0304	-.0060	-.0400	.0052	914.
							.2460	954.	-771.	-466.	1066.	-128.	1891.	.0214	.0273	.0281	-.0054	-.0332	.0047	873.
							.2470	994.	-813.	-510.	911.	-148.	1793.	.0205	.0258	.0256	-.0053	-.0255	.0043	809.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.45.

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

.2370	173.	701.	-13.	560.	356.	414.	.0162	.0180	.0349	-.0118	-.0423	.0087	205.
.2380	315.	520.	-64.	777.	305.	733.	.0183	.0204	.0360	-.0116	-.0473	.0080	446.
.2390	441.	388.	-118.	947.	247.	1057.	.0200	.0227	.0366	-.0112	-.0508	.0076	578.
.2400	346.	150.	-171.	1009.	187.	1364.	.0212	.0247	.0367	-.0107	-.0527	.0074	699.
.2410	634.	-106.	-223.	1156.	124.	1620.	.0221	.0264	.0363	-.0100	-.0531	.0071	800.
.2420	709.	-295.	-270.	1219.	60.	1804.	.0225	.0277	.0354	-.0091	-.0520	.0067	874.
.2430	777.	-395.	-315.	1256.	0.	1912.	.0227	.0284	.0342	-.0080	-.0495	.0062	918.
.2440	843.	-496.	-364.	1249.	-53.	1955.	.0225	.0286	.0325	-.0069	-.0455	.0057	931.
.2450	905.	-647.	-416.	1185.	-97.	1943.	.0221	.0283	.0304	-.0060	-.0400	.0052	914.
.2460	954.	-771.	-466.	1066.	-128.	1891.	.0214	.0273	.0281	-.0054	-.0332	.0047	873.
.2470	994.	-813.	-510.	911.	-148.	1793.	.0205	.0258	.0256	-.0053	-.0255	.0043	809.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.45.

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	40	MEMBER	1	SEQUENCE	61	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)		
.2480	1036.	-782.	-546.	748.	-162.	1653.	.0196	.0238	.0232	-.0056	-.0175	.0040	731.		
.2490	1093.	-707.	-574.	601.	-172.	1484.	.0189	.0213	.0209	-.0064	-.0096	.0039	646.		
.2500	1176.	-630.	-597.	466.	-174.	1280.	.0183	.0184	.0188	-.0079	-.0021	.0041	551.		
.2510	1283.	-537.	-617.	328.	-165.	1039.	.0180	.0152	.0170	-.0100	.0048	.0044	442.		
.2520	1393.	-371.	-629.	189.	-144.	795.	.0177	.0119	.0154	-.0129	.0109	.0051	333.		
.2530	1494.	-155.	-628.	65.	-113.	596.	.0176	.0085	.0142	-.0163	.0159	.0062	245.		
.2540	1595.	-3.	-618.	-25.	-75.	450.	.0176	.0052	.0132	-.0201	.0197	.0079	183.		
.2550	1719.	55.	-607.	-68.	-34.	331.	.0179	.0020	.0124	-.0241	.0219	.0100	136.		
.2560	1880.	80.	-598.	-62.	4.	214.	.0184	-.0010	.0117	-.0281	.0225	.0125	89.		
.2570	2080.	44.	-598.	-22.	39.	100.	.0192	-.0039	.0109	-.0321	.0217	.0153	44.		
.2580	2299.	-29.	-604.	57.	71.	71.	.0200	-.0067	.0097	-.0356	.0198	.0186	46.		
.2590	2527.	-111.	-617.	185.	99.	197.	.0208	-.0092	.0081	-.0386	.0172	.0227	116.		
.2600	2800.	-278.	-653.	338.	126.	414.	.0217	-.0115	.0055	-.0407	.0140	.0273	220.		
.2610	3150.	-492.	-725.	485.	154.	614.	.0227	-.0138	.0020	-.0419	.0104	.0318	320.		
.2620	3544.	-540.	-823.	633.	183.	806.	.0235	-.0158	-.0028	-.0420	.0065	.0360	418.		
.2630	3932.	-460.	-931.	794.	215.	1071.	.0239	-.0178	-.0089	-.0407	.0029	.0401	542.		
.2640	4295.	-567.	-1050.	953.	254.	1432.	.0236	-.0198	-.0163	-.0380	-.0001	.0441	698.		
.2650	4609.	-851.	-1171.	1091.	302.	1839.	.0225	-.0219	-.0252	-.0336	-.0022	.0474	867.		
.2660	4854.	-1097.	-1286.	1181.	357.	2183.	.0203	-.0240	-.0355	-.0279	-.0033	.0495	1006.		
.2670	4989.	-1174.	-1378.	1212.	419.	2433.	.0168	-.0260	-.0469	-.0208	-.0031	.0500	1104.		
.2680	4965.	-1145.	-1431.	1202.	489.	2679.	.0118	-.0278	-.0593	-.0124	-.0014	.0493	1195.		
.2690	4772.	-1261.	-1443.	1147.	569.	2955.	.0054	-.0293	-.0725	-.0027	.0017	.0475	1292.		
.2700	4446.	-1636.	-1426.	1010.	659.	3166.	-.0022	-.0306	-.0863	.0077	.0063	.0444	1359.		
.2710	4014.	-2095.	-1383.	778.	753.	3220.	-.0109	-.0319	-.1002	.0185	.0119	.0398	1363.		
.2720	3463.	-2380.	-1303.	506.	844.	3200.	-.0203	-.0332	-.1138	.0296	.0183	.0342	1343.		
.2730	2804.	-2615.	-1185.	258.	927.	3234.	-.0301	-.0342	-.1267	.0409	.0249	.0285	1354.		
.2740	2120.	-3189.	-1059.	28.	1001.	3281.	-.0396	-.0351	-.1386	.0521	.0314	.0229	1377.		
.2750	1493.	-3983.	-949.	-213.	1061.	3221.	-.0483	-.0357	-.1490	.0626	.0370	.0174	1364.		
.2760	932.	-4386.	-855.	-462.	1101.	3054.	-.0560	-.0361	-.1577	.0720	.0416	.0121	1316.		
.2770	425.	-4232.	-772.	-687.	1119.	2895.	-.0624	-.0360	-.1642	.0800	.0449	.0076	1276.		
.2780	5.	-4114.	-709.	-876.	1117.	2807.	-.0672	-.0357	-.1684	.0865	.0464	.0045	1262.		
.2790	-284.	-4472.	-675.	-1022.	1091.	2741.	-.0699	-.0356	-.1699	.0909	.0455	.0028	1253.		
.2800	-452.	-4866.	-653.	-1027.	1037.	2641.	-.0707	-.0354	-.1684	.0933	.0416	.0022	1219.		
.2810	-544.	-4734.	-616.	-1046.	954.	2491.	-.0698	-.0350	-.1639	.0934	.0344	.0023	1150.		
.2820	-573.	-4284.	-563.	-921.	844.	2306.	-.0672	-.0344	-.1564	.0911	.0241	.0032	1053.		
.2830	-545.	-4079.	-503.	-757.	712.	2132.	-.0631	-.0337	-.1462	.0865	.0113	.0048	952.		
.2840	-491.	-4099.	-432.	-575.	561.	2007.	-.0579	-.0328	-.1337	.0797	-.0033	.0072	868.		
.2850	-446.	-3835.	-339.	-300.	395.	1898.	-.0518	-.0314	-.1192	.0709	-.0194	.0098	793.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.45.

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

.2750	1493.	-3983.	-949.	-213.	1061.	3221.	-.0483	-.0357	-.1490	.0626	.0370	.0174	1364.
.2760	932.	-4386.	-855.	-462.	1101.	3054.	-.0560	-.0361	-.1577	.0720	.0416	.0121	1316.
.2770	425.	-4272.	-772.	-687.	1119.	2895.	-.0624	-.0360	-.1642	.0800	.0449	.0076	1276.
.2780	5.	-4114.	-709.	-876.	1117.	2807.	-.0672	-.0357	-.1684	.0865	.0464	.0045	1262.
.2790	-284.	-4472.	-675.	-1022.	1091.	2741.	-.0699	-.0356	-.1699	.0909	.0455	.0028	1253.
.2800	-452.	-4866.	-653.	-1007.	1037.	2641.	-.0707	-.0354	-.1684	.0933	.0416	.0022	1219.
.2810	-544.	-4734.	-616.	-1046.	954.	2491.	-.0698	-.0350	-.1639	.0934	.0344	.0023	1150.
.2820	-573.	-4284.	-563.	-921.	844.	2306.	-.0672	-.0344	-.1564	.0911	.0241	.0032	1053.
.2830	-545.	-4079.	-503.	-757.	712.	2132.	-.0631	-.0337	-.1462	.0865	.0113	.0048	952.
.2840	-491.	-4099.	-432.	-575.	561.	2007.	-.0579	-.0328	-.1337	.0797	-.0033	.0072	868.
.2850	-446.	-3835.	-339.	-380.	395.	1898.	-.0518	-.0314	-.1192	.0709	-.0194	.0098	793.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.45.

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)	PX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.2860	40	1						-414.	-3145.	-221.	-181.	215.	1714.	-.0452	-.0298	-.1030	.0607	-.0368	.0121	697.
.2870								-389.	-2451.	-86.	23.	27.	1447.	-.0383	-.0279	-.0857	.0494	-.0553	.0138	581.
.2880								-397.	-2059.	68.	263.	-162.	1219.	-.0312	-.0259	-.0679	.0377	-.0741	.0155	505.
.2890								-458.	-1825.	240.	552.	-342.	1112.	-.0244	-.0237	-.0500	.0264	-.0925	.0172	517.
.2900								-535.	-1516.	408.	838.	-503.	1041.	-.0179	-.0212	-.0327	.0157	-.1100	.0187	573.
.2910								-569.	-1109.	539.	1058.	-637.	895.	-.0116	-.0186	-.0167	.0060	-.1257	.0194	612.
.2920								-547.	-690.	619.	1205.	-740.	733.	-.0057	-.0158	-.0025	-.0023	-.1392	.0196	639.
.2930								-489.	-350.	652.	1322.	-811.	698.	-.0002	-.0129	.0095	-.0086	-.1497	.0202	683.
.2940								-386.	-165.	632.	1428.	-855.	806.	.0048	-.0098	.0192	-.0125	-.1572	.0211	742.
.2950								-199.	-99.	550.	1503.	-877.	932.	.0094	-.0069	.0264	-.0142	-.1616	.0219	792.
.2960								78.	21.	405.	1543.	-888.	1016.	.0136	-.0043	.0312	-.0135	-.1628	.0224	823.
.2970								413.	238.	210.	1559.	-888.	1131.	.0173	-.0020	.0336	-.0106	-.1608	.0229	851.
.2980								785.	319.	-30.	1549.	-879.	1237.	.0204	.0000	.0337	-.0057	-.1554	.0238	894.
.2990								1192.	135.	-309.	1491.	-859.	1587.	.0230	.0016	.0319	.0009	-.1469	.0249	940.
.3000								1616.	-63.	-611.	1384.	-833.	1799.	.0249	.0026	.0285	.0087	-.1362	.0259	970.
.3010								2018.	20.	-909.	1254.	-802.	1948.	.0262	.0031	.0240	.0172	-.1240	.0265	984.
.3020								2370.	246.	-1184.	1121.	-766.	2055.	.0268	.0032	.0189	.0261	-.1111	.0270	989.
.3030								2667.	263.	-1430.	990.	-726.	2142.	.0268	.0026	.0136	.0349	-.0979	.0274	991.
.3040								2899.	80.	-1637.	864.	-687.	2207.	.0264	.0013	.0085	.0432	-.0848	.0278	990.
.3050								3057.	16.	-1797.	746.	-654.	2225.	.0255	-.0005	.0037	.0507	-.0725	.0280	978.
.3060								3151.	179.	-1911.	634.	-631.	2164.	.0243	-.0028	-.0004	.0570	-.0613	.0279	940.
.3070								3201.	354.	-1986.	533.	-617.	2043.	.0230	-.0055	-.0036	.0621	-.0517	.0277	883.
.3080								3219.	393.	-2028.	467.	-613.	1929.	.0219	-.0085	-.0061	.0659	-.0439	.0276	834.
.3090								3212.	427.	-2039.	455.	-618.	1859.	.0209	-.0115	-.0077	.0684	-.0382	.0279	807.
.3100								3210.	593.	-2032.	483.	-628.	1788.	.0203	-.0145	-.0086	.0698	-.0347	.0282	785.
.3110								3244.	841.	-2021.	530.	-642.	1674.	.0202	-.0175	-.0089	.0700	-.0333	.0285	750.
.3120								3310.	1043.	-2009.	603.	-655.	1575.	.0204	-.0203	-.0089	.0691	-.0338	.0288	726.
.3130								3386.	1132.	-1992.	720.	-669.	1579.	.0210	-.0228	-.0087	.0674	-.0359	.0295	746.
.3140								3468.	1111.	-1969.	875.	-683.	1679.	.0217	-.0248	-.0086	.0652	-.0392	.0304	808.
.3150								3566.	1044.	-1947.	1038.	-695.	1786.	.0225	-.0264	-.0088	.0624	-.0435	.0310	875.
.3160								3663.	1026.	-1922.	1187.	-707.	1867.	.0231	-.0273	-.0095	.0593	-.0485	.0310	932.
.3170								3718.	1046.	-1884.	1318.	-715.	1973.	.0232	-.0276	-.0108	.0559	-.0534	.0305	995.
.3180								3700.	941.	-1825.	1421.	-714.	2143.	.0226	-.0273	-.0129	.0526	-.0579	.0296	1071.
.3190								3597.	616.	-1743.	1478.	-702.	2334.	.0211	-.0265	-.0158	.0492	-.0617	.0281	1144.
.3200								3398.	200.	-1630.	1487.	-680.	2484.	.0186	-.0253	-.0195	.0459	-.0647	.0258	1193.
.3210								3089.	-154.	-1478.	1464.	-650.	2579.	.0149	-.0239	-.0239	.0429	-.0669	.0225	1218.
.3220								2668.	-529.	-1284.	1418.	-614.	2637.	.0102	-.0222	-.0289	.0401	-.0582	.0186	1227.
.3230								2154.	-1104.	-1059.	1339.	-573.	2668.	.0045	-.0204	-.0345	.0376	-.0683	.0143	1220.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.45.

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

.3130	3756.	1132.	-1969.	720.	-669.	1579.	.210	-.0220	-.0087	.0674	-.0359	.0295	746.
.3140	3468.	1111.	-1969.	875.	-663.	1679.	.217	-.0248	-.0086	.0652	-.0392	.0304	808.
.3150	3566.	1044.	-1947.	1038.	-695.	1786.	.225	-.0264	-.0088	.0624	-.0435	.0310	875.
.3160	3667.	1026.	-1927.	1177.	-707.	1867.	.231	-.0273	-.0095	.0597	-.0485	.0310	932.
.3170	3718.	1046.	-1884.	1317.	-715.	1973.	.232	-.0276	-.0108	.0559	-.0534	.0305	995.
.3180	3700.	941.	-1825.	1471.	-714.	2143.	.226	-.0273	-.0129	.0526	-.0579	.0296	1071.
.3190	3597.	616.	-1743.	1478.	-702.	2334.	.211	-.0265	-.0158	.0492	-.0617	.0281	1144.
.3200	3398.	200.	-1630.	1487.	-680.	2484.	.2186	-.0253	-.0195	.0459	-.0647	.0258	1193.
.3210	3089.	-154.	-1478.	1464.	-650.	2579.	.2149	-.0239	-.0239	.0429	-.0669	.0225	1218.
.3220	2668.	-529.	-1284.	1418.	-614.	2637.	.2102	-.0222	-.0289	.0401	-.0682	.0186	1227.
.3230	2154.	-1104.	-1059.	1379.	-573.	2668.	.2045	-.0204	-.0345	.0376	-.0683	.0143	1220.

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S/RV PIPING KAWAUNEE 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	40	MEMBER	1	SEQUENCE	61	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)		
.3240	1570.	-1813.	-814.	1216.	-530.	2666.	-.0020	-.0187	-.0406	.0354	-.0572	.0098	1195.		
.3250	940.	-2413.	-556.	1047.	-486.	2619.	-.0090	-.0171	-.0471	.0334	-.0647	.0052	1149.		
.3260	300.	-2825.	-298.	839.	-443.	2520.	-.0163	-.0157	-.0538	.0316	-.0612	.0009	1081.		
.3270	-309.	-3220.	-54.	610.	-398.	2373.	-.0236	-.0147	-.0606	.0299	-.0568	-.0030	996.		
.3280	-852.	-3712.	168.	387.	-355.	2201.	-.0304	-.0142	-.0673	.0285	-.0519	-.0061	908.		
.3290	-1313.	-4176.	364.	202.	-314.	2029.	-.0367	-.0145	-.0737	.0274	-.0469	-.0081	828.		
.3300	-1673.	-4479.	529.	60.	-277.	1850.	-.0421	-.0154	-.0797	.0264	-.0419	-.0070	751.		
.3310	-1908.	-4654.	651.	-53.	-243.	1644.	-.0465	-.0170	-.0852	.0256	-.0372	-.0089	667.		
.3320	-2006.	-4795.	725.	-150.	-214.	1418.	-.0499	-.0194	-.0902	.0247	-.0325	-.0077	579.		
.3330	-1984.	-4893.	754.	-228.	-190.	1208.	-.0522	-.0224	-.0948	.0239	-.0278	-.0054	499.		
.3340	-1864.	-4861.	748.	-281.	-173.	1026.	-.0536	-.0259	-.0989	.0230	-.0231	-.0023	433.		
.3350	-1660.	-4715.	715.	-310.	-161.	845.	-.0543	-.0299	-.1026	.0222	-.0186	.0014	367.		
.3360	-1393.	-4535.	663.	-316.	-153.	645.	-.0544	-.0342	-.1058	.0214	-.0142	.0053	295.		
.3370	-1094.	-4366.	602.	-296.	-150.	452.	-.0542	-.0387	-.1088	.0207	-.0099	.0091	225.		
.3380	-797.	-4212.	541.	-256.	-147.	295.	-.0537	-.0433	-.1115	.0202	-.0054	.0128	167.		
.3390	-518.	-4070.	480.	-217.	-143.	170.	-.0534	-.0477	-.1143	.0200	-.0004	.0160	125.		
.3400	-262.	-3943.	418.	-200.	-137.	59.	-.0532	-.0517	-.1171	.0201	.0052	.0185	100.		
.3410	-39.	-3814.	353.	-209.	-129.	-32.	-.0532	-.0553	-.1203	.0207	.0117	.0201	99.		
.3420	147.	-3689.	287.	-232.	-118.	-77.	-.0535	-.0582	-.1237	.0219	.0191	.0208	109.		
.3430	299.	-3617.	217.	-261.	-103.	-62.	-.0540	-.0604	-.1275	.0237	.0273	.0206	115.		
.3440	433.	-3623.	136.	-295.	-83.	2.	-.0546	-.0619	-.1317	.0262	.0362	.0195	123.		
.3450	561.	-3675.	41.	-336.	-58.	104.	-.0552	-.0626	-.1360	.0293	.0457	.0175	143.		
.3460	687.	-3736.	-69.	-383.	-26.	255.	-.0557	-.0627	-.1405	.0328	.0557	.0147	185.		
.3470	814.	-3824.	-195.	-432.	12.	471.	-.0561	-.0621	-.1449	.0368	.0660	.0113	257.		
.3480	954.	-3974.	-338.	-481.	57.	743.	-.0560	-.0608	-.1491	.0408	.0764	.0074	356.		
.3490	1114.	-4145.	-497.	-529.	105.	1033.	-.0555	-.0591	-.1526	.0447	.0863	.0030	468.		
.3500	1284.	-4248.	-661.	-572.	154.	1313.	-.0544	-.0569	-.1551	.0483	.0955	-.0019	578.		
.3510	1445.	-4263.	-817.	-600.	201.	1576.	-.0528	-.0545	-.1563	.0511	.1036	-.0071	682.		
.3520	1576.	-4263.	-954.	-610.	244.	1826.	-.0507	-.0518	-.1559	.0531	.1102	-.0125	779.		
.3530	1664.	-4299.	-1061.	-602.	282.	2048.	-.0482	-.0491	-.1536	.0539	.1151	-.0180	864.		
.3540	1698.	-4319.	-1130.	-580.	313.	2201.	-.0452	-.0464	-.1492	.0533	.1180	-.0236	922.		
.3550	1664.	-4229.	-1151.	-549.	336.	2253.	-.0419	-.0438	-.1424	.0512	.1186	-.0293	940.		
.3560	1590.	-4019.	-1115.	-506.	349.	2204.	-.0384	-.0413	-.1333	.0475	.1167	-.0349	918.		
.3570	1350.	-3756.	-1023.	-444.	362.	2084.	-.0347	-.0389	-.1218	.0423	.1125	-.0402	867.		
.3580	1079.	-3484.	-879.	-366.	344.	1898.	-.0307	-.0366	-.1081	.0357	.1060	-.0449	788.		
.3590	761.	-3167.	-695.	-283.	322.	1619.	-.0265	-.0344	-.0926	.0280	.0974	-.0490	672.		
.3600	416.	-2746.	-482.	-205.	289.	1225.	-.0221	-.0323	-.0754	.0194	.0868	-.0525	512.		
.3610	50.	-2240.	-247.	-129.	244.	745.	-.0175	-.0304	-.0571	.0101	.0747	-.0553	319.		

ADLPIPE PAGE 1634 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.28.45.

S/RV PIPING KAWAUNEE 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

.3510	1445.	-4263.	-817.	-600.	201.	1576.	-.0528	-.0545	-.1563	.0511	.1036	-.0071	682.
.3520	1576.	-4263.	-954.	-610.	244.	1826.	-.0507	-.0518	-.1559	.0531	.1102	-.0125	779.
.3530	1664.	-4299.	-1061.	-602.	282.	2048.	-.0482	-.0491	-.1536	.0539	.1151	-.0180	864.
.3540	1698.	-4319.	-1130.	-570.	313.	2281.	-.0452	-.0464	-.1492	.0533	.1180	-.0236	922.
.3550	1664.	-4229.	-1151.	-549.	336.	2513.	-.0419	-.0438	-.1424	.0512	.1186	-.0293	940.
.3560	1550.	-4019.	-1111.	-506.	349.	2704.	-.0384	-.0413	-.1333	.0475	.1167	-.0349	918.
.3570	1350.	-3756.	-1023.	-444.	352.	2884.	-.0347	-.0389	-.1218	.0423	.1125	-.0402	867.
.3580	1079.	-3484.	-879.	-366.	344.	1898.	-.0307	-.0366	-.1081	.0357	.1060	-.0449	788.
.3590	761.	-3167.	-695.	-283.	322.	1619.	-.0265	-.0344	-.0926	.0280	.0974	-.0490	672.
.3600	416.	-2746.	-482.	-205.	289.	1229.	-.0221	-.0327	-.0754	.0194	.0848	-.0525	512.
.3610	50.	-2240.	-247.	-129.	244.	745.	-.0175	-.0304	-.0571	.0101	.0747	-.0553	319.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.45.

S/RV PIPING KEWAUNEE CKW06F 2 RUP DISK
2 SAFETY COLD FRW24F--2 PSVCONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITSINTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	40	MEMBER	1	SEQUENCE	61	LOCATION	END	TYPE	RU					STRESS
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	
.3620	-336.	-1739.	3.	-43.	190.	247.		-.0129	-.0284	-.0380	.0008	.0513	-.0571	126.
.3630	-724.	-1311.	258.	61.	132.	-233.		-.0083	-.0265	-.0186	-.0082	.0471	-.0577	110.
.3640	-1084.	-937.	498.	170.	72.	-719.		-.0037	-.0245	.0006	-.0164	.0324	-.0573	298.
.3650	-1391.	-540.	711.	265.	15.	-1247.		.0009	-.0224	.0191	-.0237	.0176	-.0563	512.
.3660	-1645.	-96.	890.	337.	-37.	-1798.		.0052	-.0201	.0363	-.0297	.0034	-.0546	734.
.3670	-1868.	314.	1037.	388.	-79.	-2300.		.0091	-.0177	.0520	-.0342	-.0099	-.0524	936.
.3680	-2075.	586.	1154.	422.	-110.	-2706.		.0124	-.0150	.0657	-.0369	-.0215	-.0496	1100.
.3690	-2261.	698.	1241.	434.	-131.	-3051.		.0150	-.0123	.0773	-.0379	-.0314	-.0466	1238.
.3700	-2425.	747.	1297.	415.	-141.	-3389.		.0169	-.0094	.0867	-.0372	-.0394	-.0439	1371.
.3710	-2580.	814.	1330.	365.	-142.	-3724.		.0179	-.0065	.0936	-.0349	-.0452	-.0418	1503.
.3720	-2749.	846.	1348.	294.	-133.	-3999.		.0180	-.0037	.0983	-.0310	-.0488	-.0402	1610.
.3730	-2941.	728.	1354.	201.	-110.	-4179.		.0171	-.0010	.1006	-.0259	-.0498	-.0391	1679.
.3740	-3139.	456.	1345.	77.	-75.	-4302.		.0154	.0015	.1008	-.0198	-.0484	-.0386	1727.
.3750	-3331.	193.	1321.	-80.	-27.	-4423.		.0131	.0036	.0991	-.0129	-.0448	-.0390	1775.
.3760	-3513.	56.	1289.	-253.	34.	-4542.		.0102	.0052	.0957	-.0058	-.0394	-.0403	1825.
.3770	-3682.	-47.	1250.	-416.	106.	-4608.		.0070	.0063	.0910	.0016	-.0325	-.0421	1857.
.3780	-3818.	-258.	1202.	-554.	189.	-4591.		.0038	.0067	.0852	.0088	-.0243	-.0441	1857.
.3790	-3896.	-518.	1140.	-673.	280.	-4526.		.0007	.0065	.0785	.0157	-.0151	-.0462	1840.
.3800	-3901.	-629.	1059.	-787.	376.	-4480.		-.0020	.0058	.0713	.0217	-.0050	-.0485	1831.
.3810	-3833.	-556.	964.	-910.	473.	-4476.		-.0043	.0044	.0639	.0267	.0056	-.0512	1843.
.3820	-3715.	-418.	862.	-1020.	568.	-4437.		-.0062	.0024	.0565	.0306	.0167	-.0538	1841.
.3830	-3558.	-381.	761.	-1085.	656.	-4289.		-.0076	-.0002	.0493	.0333	.0280	-.0556	1795.
.3840	-3337.	-502.	652.	-1106.	733.	-4092.		-.0083	-.0033	.0426	.0349	.0392	-.0568	1726.
.3850	-3031.	-601.	535.	-1097.	796.	-3951.		-.0082	-.0068	.0364	.0352	.0499	-.0578	1676.
.3860	-2664.	-464.	415.	-1064.	847.	-3879.		-.0076	-.0105	.0308	.0342	.0599	-.0585	1649.
.3870	-2280.	-146.	306.	-1006.	877.	-3785.		-.0066	-.0141	.0258	.0320	.0695	-.0587	1610.
.3880	-1904.	106.	208.	-939.	899.	-3608.		-.0054	-.0174	.0214	.0288	.0790	-.0581	1539.
.3890	-1533.	226.	120.	-892.	911.	-3402.		-.0040	-.0203	.0174	.0245	.0883	-.0569	1458.
.3900	-1175.	420.	46.	-876.	913.	-3254.		-.0027	-.0227	.0139	.0192	.0971	-.0556	1401.
.3910	-858.	805.	0.	-875.	903.	-3179.		-.0016	-.0246	.0109	.0131	.1053	-.0544	1372.
.3920	-619.	1132.	-6.	-865.	883.	-3106.		-.0008	-.0259	.0084	.0065	.1126	-.0530	1342.
.3930	-474.	1218.	32.	-877.	850.	-2972.		-.0006	-.0264	.0062	-.0004	.1193	-.0512	1286.
.3940	-421.	1044.	105.	-870.	830.	-2801.		-.0010	-.0261	.0042	-.0074	.1253	-.0493	1217.
.3950	-440.	960.	206.	-816.	801.	-2668.		-.0019	-.0249	.0024	-.0145	.1307	-.0475	1165.
.3960	-516.	1089.	321.	-876.	774.	-2607.		-.0033	-.0227	.0006	-.0216	.1356	-.0460	1146.
.3970	-641.	1220.	446.	-980.	750.	-2559.		-.0050	-.0196	-.0012	-.0285	.1400	-.0445	1140.
.3980	-820.	1131.	581.	-1097.	731.	-2452.		-.0071	-.0158	-.0029	-.0349	.1437	-.0426	1117.
.3990	-1044.	859.	726.	-1200.	715.	-2294.		-.0094	-.0115	-.0045	-.0407	.1465	-.0405	1078.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.45.

S/RV PIPING KEWAUNEE CKW06F 2 RUP DISK
2 SAFETY COLD FRW24F--2 PSVCONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING

.3890	-1533.	226.	120.	-892.	911.	-3402.	-.0040	-.0203	.0174	.0245	.0883	-.0569	1458.
.3900	-1175.	420.	46.	-876.	913.	-3254.	-.0027	-.0227	.0139	.0192	.0971	-.0556	1401.
.3910	-858.	805.	0.	-875.	903.	-3179.	-.0016	-.0246	.0109	.0131	.1053	-.0544	1372.
.3920	-619.	1162.	-6.	-865.	883.	-3106.	-.0008	-.0259	.0084	.0065	.1126	-.0530	1342.
.3930	-474.	1218.	32.	-857.	858.	-2972.	-.0006	-.0264	.0062	-.0004	.1193	-.0512	1286.
.3940	-421.	1044.	101.	-810.	830.	-2801.	-.0010	-.0271	.0042	-.0074	.1253	-.0493	1217.
.3950	-440.	960.	206.	-816.	801.	-2668.	-.0019	-.0249	.0024	-.0145	.1307	-.0475	1165.
.3960	-516.	1089.	321.	-876.	774.	-2607.	-.0033	-.0227	.0006	-.0216	.1356	-.0460	1146.
.3970	-641.	1220.	446.	-980.	750.	-2559.	-.0050	-.0196	-.0012	-.0285	.1400	-.0445	1140.
.3980	-820.	1171.	581.	-1097.	731.	-2452.	-.0071	-.0158	-.0029	-.0349	.1437	-.0426	1117.
.3990	-1044.	859.	726.	-1200.	715.	-2294.	-.0094	-.0115	-.0045	-.0407	.1465	-.0405	1078.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.45.

S/RV PIPING KEWAUNEE GKW06F 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	40	MEMBER	1	SEQUENCE	61	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)	
.4000	-1290.	602.	876.	-1200.	700.	-2156.	-.0118	-.0068	-.0058	-.0459	.1481	-.0383	1046.	

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)	
.3780	-3818.	-258.	1202.	-554.	189.	-4591.	.0038	.0067	.0852	.0088	-.0243	-.0441	1857.	

SECTION	40	MEMBER	2	SEQUENCE	161	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	0.	-2.	-0.	-0.	0.	-0.	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.	
.0030	0.	-3.	-0.	-0.	1.	-1.	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.	
.0040	0.	-3.	-0.	-1.	1.	-1.	-.0000	.0000	.0000	-.0000	-.0000	-.0000	1.	
.0050	-0.	-2.	0.	-1.	1.	-2.	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	1.	
.0060	-1.	-2.	0.	-1.	1.	-2.	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	1.	
.0070	-2.	2.	1.	-2.	2.	-3.	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	2.	
.0080	-2.	14.	1.	-3.	5.	-3.	-.0000	-.0000	.0000	-.0000	-.0001	-.0000	3.	
.0090	-2.	30.	1.	-3.	6.	-5.	-.0000	-.0001	.0000	-.0000	-.0001	-.0000	3.	
.0100	1.	41.	-0.	-1.	2.	-8.	.0000	-.0001	.0000	-.0000	-.0001	-.0000	3.	
.0110	7.	40.	-2.	2.	-12.	-15.	.0000	-.0002	-.0000	.0000	.0001	-.0001	8.	
.0120	14.	39.	-4.	6.	-36.	-24.	.0001	-.0004	-.0000	.0001	.0005	-.0001	18.	
.0130	19.	59.	-5.	9.	-72.	-32.	.0001	-.0005	-.0001	.0001	.0012	-.0001	32.	
.0140	22.	99.	-7.	9.	-117.	-38.	.0000	-.0007	-.0002	.0002	.0021	-.0002	50.	
.0150	27.	134.	-9.	5.	-167.	-46.	.0000	-.0009	-.0004	.0003	.0033	-.0002	70.	
.0160	33.	143.	-13.	-3.	-216.	-56.	-.0001	-.0012	-.0006	.0004	.0044	-.0003	90.	
.0170	37.	136.	-16.	-9.	-257.	-64.	-.0001	-.0015	-.0008	.0005	.0054	-.0004	106.	
.0180	37.	126.	-18.	-10.	-285.	-68.	-.0003	-.0018	-.0012	.0007	.0062	-.0006	117.	
.0190	33.	100.	-16.	-5.	-304.	-70.	-.0005	-.0021	-.0015	.0009	.0068	-.0007	125.	
.0200	28.	17.	-15.	1.	-319.	-72.	-.0007	-.0022	-.0019	.0012	.0074	-.0009	131.	
.0210	17.	-98.	-12.	10.	-342.	-61.	-.0009	-.0023	-.0025	.0015	.0082	-.0011	139.	
.0220	-3.	-185.	-6.	29.	-407.	-30.	-.0013	-.0020	-.0030	.0020	.0099	-.0013	162.	
.0230	-27.	-235.	-1.	34.	-480.	14.	-.0017	-.0015	-.0038	.0024	.0122	-.0014	193.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.46.

S/RV PIPING KEWAUNEE GKW06F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING

.0115	7.	40.	-1.	1.	-11.	-1.	.0000	-.0001	-.0000	.0000	.0001	-.0001	8.
.0120	14.	79.	-4.	6.	-26.	-24.	.0001	-.0004	-.0000	.0001	.0005	-.0001	18.
.0130	19.	59.	-5.	9.	-72.	-32.	.0001	-.0005	-.0001	.0001	.0012	-.0001	32.
.0140	22.	99.	-7.	9.	-117.	-38.	.0000	-.0007	-.0002	.0002	.0021	-.0002	50.
.0150	27.	134.	-9.	5.	-167.	-46.	.0000	-.0009	-.0004	.0003	.0033	-.0002	70.
.0160	37.	143.	-13.	-3.	-216.	-56.	-.0001	-.0012	-.0006	.0004	.0044	-.0003	90.
.0170	37.	176.	-16.	-9.	-257.	-64.	-.0001	-.0015	-.0008	.0005	.0054	-.0004	106.
.0180	37.	126.	-18.	-10.	-285.	-68.	-.0003	-.0018	-.0012	.0007	.0062	-.0006	117.
.0190	33.	100.	-16.	-5.	-304.	-70.	-.0005	-.0021	-.0015	.0009	.0068	-.0007	125.
.0200	28.	17.	-15.	1.	-319.	-72.	-.0007	-.0022	-.0019	.0012	.0074	-.0009	131.
.0210	17.	-98.	-12.	10.	-342.	-61.	-.0009	-.0023	-.0025	.0015	.0082	-.0011	139.
.0220	-7.	-185.	-6.	29.	-407.	-30.	-.0012	-.0020	-.0030	.0020	.0099	-.0013	162.
.0230	-27.	-275.	-1.	36.	-480.	14.	-.0017	-.0015	-.0038	.0024	.0122	-.0014	193.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.46.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	40	MEMBER	2	SEQUENCE	161	LOCATION	END	TYPE	RU					
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)		DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.0240	-52.	-206.	-4.	1.	-525.	68.		-.0021	-.0007	-.0045	.0027	.0143	-.0016	212.
.0250	-72.	-60.	-14.	-66.	-503.	128.		-.0025	.0002	-.0053	.0028	.0155	-.0017	210.
.0260	-75.	126.	-27.	-125.	-443.	157.		-.0027	.0009	-.0060	.0029	.0156	-.0018	195.
.0270	-59.	185.	-35.	-126.	-416.	134.		-.0027	.0013	-.0064	.0031	.0154	-.0019	182.
.0280	-45.	-38.	-35.	-94.	-374.	109.		-.0027	.0013	-.0066	.0032	.0144	-.0020	161.
.0290	-68.	-528.	-24.	-65.	-243.	155.		-.0027	.0012	-.0064	.0031	.0117	-.0017	119.
.0300	-132.	-978.	9.	6.	-128.	269.		-.0029	.0015	-.0060	.0030	.0091	-.0010	119.
.0310	-206.	-933.	51.	110.	-69.	389.		-.0031	.0026	-.0054	.0030	.0073	-.0001	164.
.0320	-219.	-529.	67.	121.	6.	403.		-.0029	.0041	-.0048	.0025	.0056	.0007	169.
.0330	-147.	-285.	33.	6.	92.	277.		-.0024	.0057	-.0043	.0014	.0042	.0014	117.
.0340	-70.	-363.	1.	-132.	147.	162.		-.0018	.0071	-.0035	.0001	.0035	.0024	103.
.0350	-89.	-458.	13.	-192.	217.	232.		-.0014	.0085	-.0022	-.0013	.0022	.0040	149.
.0360	-188.	-367.	69.	-151.	340.	419.		-.0013	.0099	-.0003	-.0027	-.0011	.0061	225.
.0370	-253.	-236.	131.	-41.	440.	482.		-.0008	.0109	.0021	-.0041	-.0052	.0077	262.
.0380	-212.	-228.	164.	76.	461.	336.		.0002	.0114	.0047	-.0055	-.0088	.0086	231.
.0390	-114.	-341.	163.	119.	480.	143.		.0016	.0117	.0072	-.0071	-.0119	.0094	207.
.0400	-47.	-521.	149.	66.	558.	72.		.0029	.0119	.0096	-.0091	-.0147	-.0104	228.
.0410	-57.	-491.	157.	23.	590.	131.		.0038	.0124	.0121	-.0111	-.0161	.0114	243.
.0420	-107.	76.	185.	29.	575.	220.		.0046	.0130	.0147	-.0129	-.0169	.0120	247.
.0430	-101.	970.	197.	40.	586.	197.		.0057	.0131	.0173	-.0146	-.0187	.0118	249.
.0440	35.	1217.	164.	17.	610.	-38.		.0074	.0121	.0196	-.0164	-.0212	.0107	245.
.0450	209.	614.	120.	29.	579.	-311.		.0093	.0101	.0217	-.0177	-.0230	.0092	264.
.0460	247.	253.	127.	141.	526.	-326.		.0105	.0081	.0238	-.0185	-.0241	.0080	255.
.0470	148.	833.	172.	276.	527.	-125.		.0110	.0065	.0256	-.0188	-.0253	.0069	244.
.0480	111.	1595.	178.	305.	531.	-92.		.0114	.0046	.0268	-.0189	-.0258	.0048	249.
.0490	248.	1661.	105.	226.	440.	-370.		.0124	.0020	.0271	-.0186	-.0242	.0017	248.
.0500	429.	1259.	6.	150.	281.	-640.		.0134	-.0007	.0266	-.0174	-.0211	-.0012	290.
.0510	482.	1160.	-51.	155.	123.	-659.		.0136	-.0030	.0257	-.0152	-.0174	-.0032	276.
.0520	482.	1194.	-61.	209.	-25.	-525.		.0129	-.0047	.0244	-.0124	-.0134	-.0051	227.
.0530	290.	1200.	-58.	250.	-171.	-436.		.0115	-.0058	.0226	-.0092	-.0090	-.0072	213.
.0540	215.	1401.	-73.	261.	-296.	-331.		.0101	-.0064	.0201	-.0056	-.0045	-.0090	220.
.0550	220.	1708.	-125.	217.	-395.	-359.		.0089	-.0066	.0169	-.0018	.0002	-.0103	231.
.0560	317.	1535.	-217.	62.	-480.	-459.		.0079	-.0070	.0130	.0021	.0051	-.0116	269.
.0570	378.	977.	-396.	-74.	-564.	-575.		.0066	-.0074	.0089	.0058	.0101	-.0129	325.
.0580	267.	814.	-300.	-111.	-647.	-435.		.0044	-.0073	.0050	.0097	.0147	-.0134	316.
.0590	32.	939.	-246.	-23.	-723.	-65.		.0016	-.0067	.0014	.0138	.0188	-.0131	291.
.0600	-115.	392.	-220.	52.	-795.	190.		-.0007	-.0059	-.0022	.0177	.0224	-.0127	329.
.0610	-117.	-710.	-250.	36.	-652.	204.		-.0022	-.0046	-.0060	.0210	.0255	-.0127	352.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.46.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.0500	429.	1209.	-51.	155.	221.	-648.	.0174	-.0007	.0266	-.0174	-.0211	-.0012	290.
.0510	482.	1166.	-51.	155.	123.	-659.	.0136	-.0030	.0257	-.0152	-.0174	-.0032	276.
.0520	402.	1194.	-61.	209.	-25.	-525.	.0129	-.0047	.0244	-.0124	-.0134	-.0051	227.
.0530	290.	1200.	-58.	250.	-171.	-436.	.0119	-.0058	.0226	-.0092	-.0090	-.0072	213.
.0540	215.	1401.	-73.	261.	-296.	-331.	.0101	-.0064	.0201	-.0056	-.0045	-.0090	220.
.0550	220.	1708.	-125.	217.	-395.	-359.	.0089	-.0066	.0169	-.0018	.0002	-.0103	231.
.0560	317.	1575.	-217.	72.	-480.	-459.	.0079	-.0070	.0170	.0021	.0051	-.0116	269.
.0570	378.	977.	-296.	-74.	-564.	-575.	.0066	-.0074	.0089	.0058	.0101	-.0129	325.
.0580	267.	814.	-300.	-111.	-647.	-435.	.0044	-.0073	.0050	.0097	.0147	-.0134	316.
.0590	32.	939.	-246.	-23.	-722.	-69.	.0016	-.0067	.0014	.0138	.0188	-.0131	291.
.0600	-118.	392.	-220.	52.	-795.	190.	-.0007	-.0059	-.0022	.0177	.0224	-.0127	329.
.0610	-117.	-710.	-250.	38.	-852.	204.	-.0022	-.0046	-.0060	.0210	.0255	-.0127	352.

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DJS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.46.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

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)	FX (DEG)	RY (DEG)	PZ (DEG)	STRESS (PSI)
40	2	161					.0620	-108.	-1060.	-285.	-4.	-873.	215.	-.0036	-.0021	-.0095	.0238	.0281	-.0124	361.
							.0630	-187.	-409.	-286.	-56.	-840.	372.	-.0052	.0016	-.0125	.0257	.0300	-.0115	370.
							.0640	-295.	-19.	-275.	-161.	-762.	563.	-.0068	.0055	-.0149	.0265	.0313	-.0103	386.
							.0650	-385.	-494.	-257.	-271.	-673.	742.	-.0080	.0090	-.0165	.0261	.0316	-.0086	416.
							.0660	-481.	-1000.	-208.	-264.	-596.	980.	-.0086	.0121	-.0169	.0250	.0305	-.0062	472.
							.0670	-556.	-1002.	-133.	-148.	-534.	1165.	-.0088	.0150	-.0162	.0232	.0278	-.0035	518.
							.0680	-537.	-923.	-72.	-51.	-492.	1092.	-.0081	.0171	-.0144	.0202	.0243	-.0013	481.
							.0690	-458.	-933.	-29.	-26.	-474.	871.	-.0069	.0184	-.0118	.0161	.0209	.0007	398.
							.0700	-421.	-699.	22.	-30.	-461.	788.	-.0055	.0191	-.0085	.0112	.0182	.0036	367.
							.0710	-420.	-336.	82.	-46.	-443.	828.	-.0041	.0192	-.0045	.0058	.0156	.0072	377.
							.0720	-361.	-199.	128.	-61.	-438.	710.	-.0022	.0183	.0000	-.0001	.0127	.0105	337.
							.0730	-233.	1.	167.	-68.	-435.	373.	.0001	.0164	.0050	-.0061	.0085	.0129	233.
							.0740	-107.	649.	220.	-24.	-377.	7.	.0025	.0139	.0102	-.0119	.0026	.0151	152.
							.0750	3.	1288.	280.	70.	-247.	-294.	.0047	.0106	.0153	-.0174	-.0044	.0173	157.
							.0760	122.	1364.	325.	124.	-87.	-587.	.0069	.0066	.0198	-.0225	-.0110	.0189	243.
							.0770	229.	1268.	358.	135.	69.	-866.	.0086	.0021	.0234	-.0270	-.0164	.0197	353.
							.0780	291.	1603.	390.	139.	207.	-1076.	.0098	-.0023	.0261	-.0306	-.0203	.0197	443.
							.0790	343.	2080.	407.	136.	300.	-1262.	.0105	-.0063	.0275	-.0328	-.0223	.0186	523.
							.0800	420.	2102.	390.	114.	323.	-1461.	.0108	-.0101	.0274	-.0337	-.0221	.0164	602.
							.0810	481.	1820.	352.	83.	308.	-1570.	.0107	-.0131	.0259	-.0330	-.0198	.0135	643.
							.0820	468.	1756.	312.	57.	293.	-1499.	.0097	-.0151	.0230	-.0307	-.0161	.0101	613.
							.0830	404.	1896.	267.	17.	285.	-1326.	.0080	-.0160	.0187	-.0271	-.0112	.0061	544.
							.0840	349.	1871.	198.	-64.	297.	-1150.	.0060	-.0160	.0133	-.0225	-.0057	.0016	477.
							.0850	309.	1608.	111.	-162.	361.	-935.	.0038	-.0154	.0070	-.0169	-.0007	-.0031	407.
							.0860	262.	1264.	23.	-220.	469.	-626.	.0014	-.0142	.0002	-.0105	.0032	-.0072	326.
							.0870	203.	866.	-54.	-203.	569.	-280.	-.0011	-.0124	-.0068	-.0034	.0066	-.0111	270.
							.0880	136.	409.	-121.	-109.	635.	49.	-.0036	-.0103	-.0135	.0039	.0097	-.0146	268.
							.0890	50.	8.	-180.	-182.	674.	403.	-.0061	-.0077	-.0198	.0112	.0129	-.0175	323.
							.0900	-53.	-291.	-236.	-183.	687.	820.	-.0084	-.0047	-.0254	.0182	.0162	-.0194	435.
							.0910	-138.	-573.	-298.	-209.	667.	1224.	-.0103	-.0012	-.0302	.0246	.0195	-.0203	566.
							.0920	-189.	-766.	-363.	-249.	628.	1525.	-.0117	.0026	-.0337	.0304	.0220	-.0206	669.
							.0930	-239.	-646.	-411.	-259.	583.	1737.	-.0125	.0068	-.0355	.0353	.0228	-.0202	743.
							.0940	-324.	-247.	-422.	-200.	529.	1933.	-.0129	.0113	-.0355	.0392	.0219	-.0190	808.
							.0950	-451.	151.	-394.	-79.	460.	2157.	-.0128	.0161	-.0335	.0419	.0197	-.0168	886.
							.0960	-596.	444.	-343.	54.	378.	2381.	-.0122	.0212	-.0296	.0432	.0166	-.0137	968.
							.0970	-738.	937.	-279.	150.	286.	2554.	-.0109	.0267	-.0240	.0428	.0130	-.0100	1033.
							.0980	-854.	1852.	-211.	213.	178.	2623.	-.0089	.0327	-.0167	.0407	.0094	-.0060	1059.
							.0990	-920.	2867.	-140.	208.	49.	2552.	-.0061	.0389	-.0077	.0368	.0057	-.0019	1028.

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DJS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.46.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.0890	50.	8.	-100.	-182.	674.	403.	-00061	-00077	-01198	.0112	.0129	-01175	323.
.0900	-53.	-291.	-236.	-183.	687.	820.	-00084	-00047	-0254	.0182	.0162	-0194	435.
.0910	-138.	-573.	-298.	-209.	667.	1224.	-0103	-0012	-0302	.0246	.0195	-0203	566.
.0920	-189.	-766.	-367.	-249.	625.	1525.	-0117	.0026	-0337	.0304	.0220	-0206	669.
.0930	-239.	-646.	-411.	-259.	587.	1737.	-0125	.0068	-0355	.0353	.0228	-0202	743.
.0940	-324.	-247.	-422.	-260.	529.	1933.	-0129	.0113	-0355	.0392	.0219	-0190	808.
.0950	-451.	151.	-394.	-79.	460.	2117.	-0128	.0161	-0335	.0419	.0197	-0168	886.
.0960	-596.	444.	-343.	54.	378.	2381.	-0122	.0212	-0296	.0432	.0166	-0137	968.
.0970	-738.	937.	-279.	150.	286.	2554.	-0109	.0267	-0240	.0428	.0130	-0100	1033.
.0980	-854.	1852.	-211.	213.	178.	2623.	-0089	.0327	-0167	.0407	.0094	-0060	1059.
.0990	-920.	2867.	-140.	207.	49.	2552.	-0061	.0389	-0077	.0368	.0057	-0019	1028.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.46.

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	40	MEMBER	2	SEQUENCE	161	LOCATION	END	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.1000	-930.	3432.	-95.	160.	-89.	2360.	-0023	.0446	.0028	.0313	.0017	.0023	950.	
.1010	-920.	3403.	-34.	122.	-219.	2130.	.0021	.0494	.0148	.0243	-0031	.0069	861.	
.1020	-938.	3141.	58.	158.	-320.	1930.	.0070	.0532	.0283	.0164	-0094	.0117	788.	
.1030	-972.	2937.	175.	271.	-373.	1710.	.0124	.0560	.0431	.0077	-0176	.0165	711.	
.1040	-934.	2649.	278.	384.	-377.	1316.	.0183	.0577	.0586	-0017	-0273	.0207	571.	
.1050	-802.	2420.	346.	461.	-349.	763.	.0249	.0582	.0744	-0115	-0374	.0244	384.	
.1060	-626.	2605.	391.	508.	-314.	192.	.0317	.0577	.0900	-0214	-0469	.0280	252.	
.1070	-449.	3224.	425.	526.	-298.	-340.	.0384	.0565	.1050	-0311	-0547	.0314	278.	
.1080	-212.	3478.	421.	443.	-303.	-1004.	.0449	.0537	.1190	-0407	-0608	.0338	457.	
.1090	129.	2812.	366.	258.	-335.	-1883.	.0514	.0483	.1316	-0498	-0656	.0349	774.	
.1100	221.	3817.	415.	385.	-454.	-2209.	.0563	.0431	.1431	-0567	-0685	.0370	918.	
.1110	231.	5255.	491.	633.	-571.	-2346.	.0601	.0383	.1527	-0617	-0706	.0390	1002.	
.1120	466.	5103.	453.	645.	-625.	-2942.	.0638	.0327	.1595	-0658	-0721	.0384	1234.	
.1130	776.	4850.	352.	530.	-658.	-3626.	.0668	.0275	.1632	-0685	-0716	.0365	1494.	
.1140	900.	6367.	289.	506.	-689.	-3791.	.0680	.0240	.1641	-0689	-0683	.0354	1560.	
.1150	946.	8019.	222.	456.	-699.	-3697.	.0677	.0210	.1620	-0675	-0629	.0341	1521.	
.1160	1121.	7313.	82.	246.	-709.	-3843.	.0668	.0174	.1568	-0650	-0559	.0308	1571.	
.1170	1281.	5210.	-54.	95.	-739.	-3917.	.0648	.0141	.1489	-0610	-0480	.0268	1600.	
.1180	1121.	4857.	-51.	329.	-783.	-3237.	.0606	.0135	.1391	-0544	-0396	.0243	1343.	
.1190	880.	5535.	-23.	626.	-715.	-2294.	.0553	.0155	.1270	-0466	-0321	.0221	996.	
.1200	946.	4781.	-143.	542.	-526.	-1913.	.0505	.0182	.1123	-0394	-0248	.0174	825.	
.1210	1183.	3266.	-355.	209.	-315.	-1757.	.0458	.0217	.0955	-0326	-0159	.0116	721.	
.1220	1191.	3053.	-492.	1.	-76.	-978.	.0400	.0269	.0780	-0253	-0065	.0080	393.	
.1230	993.	3078.	-538.	-35.	158.	228.	.0333	.0327	.0607	-0178	.0024	.0057	112.	
.1240	854.	1261.	-580.	-50.	355.	1135.	.0269	.0376	.0441	-0112	.0095	.0024	478.	
.1250	749.	-1170.	-595.	53.	470.	1810.	.0209	.0423	.0288	-0052	.0150	-0014	751.	
.1260	526.	-1701.	-531.	379.	499.	2703.	.0151	.0481	.0154	.0004	.0199	-0035	1113.	
.1270	336.	-992.	-483.	600.	543.	3535.	.0101	.0542	.0035	.0043	.0244	-0045	1455.	
.1280	403.	-1399.	-550.	404.	578.	3745.	.0066	.0585	-0070	.0051	.0294	-0064	1529.	
.1290	521.	-2448.	-631.	7.	591.	3682.	.0040	.0609	-0151	.0031	.0342	-0081	1496.	
.1300	351.	-2173.	-559.	-140.	613.	4027.	.0011	.0622	-0199	-0002	.0363	-0071	1636.	
.1310	11.	-1245.	-349.	35.	642.	4499.	-0015	.0618	-0210	-0047	.0339	-0044	1824.	
.1320	-138.	-1591.	-147.	259.	695.	4334.	-0024	.0583	-0192	-0109	.0263	-0026	1765.	
.1330	-79.	-2513.	21.	460.	722.	3571.	-0016	.0524	-0151	-0187	.0162	-0016	1474.	
.1340	-72.	-1913.	216.	676.	705.	2863.	-0005	.0456	-0092	-0272	.0068	.0007	1214.	
.1350	-153.	-364.	413.	740.	671.	2301.	.0004	.0382	-0024	-0366	-0002	.0040	1007.	
.1360	-173.	97.	546.	501.	607.	1528.	.0017	.0295	.0045	-0471	-0042	.0069	690.	
.1370	-190.	-93.	600.	168.	545.	670.	.0028	.0200	.0114	-0574	-0075	.0094	353.	

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ADLPIPE ST

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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

.1260	522.	-1701.	-104.	379.	479.	2703.	1151.	.0481	.0154	.0004	.0199	-.0035	1113.
.1270	336.	-992.	-483.	600.	543.	3535.	1101.	.0542	.0035	.0042	.0244	-.0045	1455.
.1280	403.	-1399.	-550.	404.	578.	3745.	.0066	.0585	-.0070	.0051	.0294	-.0064	1529.
.1290	521.	-2448.	-631.	7.	591.	3682.	.0040	.0609	-.0151	.0031	.0342	-.0081	1496.
.1300	351.	-2173.	-559.	-140.	613.	4027.	.0011	.0622	-.0199	-.0002	.0363	-.0071	1636.
.1310	11.	-1245.	-740.	35.	642.	4499.	-.0015	.0618	-.0210	-.0047	.0339	-.0044	1824.
.1320	-138.	-1595.	-147.	159.	695.	4334.	-.0024	.0583	-.0192	-.0109	.0263	-.0026	1765.
.1330	-79.	-2513.	21.	460.	722.	3571.	-.0016	.0524	-.0151	-.0187	.0162	-.0016	1474.
.1340	-72.	-1913.	216.	676.	705.	2883.	-.0005	.0456	-.0092	-.0272	.0068	.0007	1214.
.1350	-153.	-364.	413.	740.	671.	2301.	.0004	.0382	-.0024	-.0366	-.0002	.0040	1007.
.1360	-173.	97.	546.	501.	607.	1528.	.0017	.0295	.0045	-.0471	-.0042	.0069	690.
.1370	-190.	-93.	660.	168.	545.	670.	.0028	.0200	.0114	-.0574	-.0075	.0094	353.

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

SECTION	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)	PX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
40	2	161					.1380	-334.	794.	841.	95.	474.	53.	.0034	.0113	.0185	-.0658	-.0117	.0125	195.
							.1390	-488.	2222.	1046.	244.	430.	-546.	.0038	.0032	.0251	-.0722	-.0176	.0155	296.
							.1400	-469.	2387.	1178.	333.	428.	-1493.	.0045	-.0049	.0301	-.0771	-.0241	.0166	637.
							.1410	-416.	1701.	1257.	300.	443.	-2437.	.0047	-.0120	.0331	-.0805	-.0283	.0170	1001.
							.1420	-588.	1929.	1359.	228.	520.	-2755.	.0031	-.0167	.0339	-.0818	-.0291	.0185	1129.
							.1430	-902.	2755.	1452.	75.	630.	-2624.	.0002	-.0189	.0321	-.0810	-.0264	.0205	1084.
							.1440	-1083.	2670.	1452.	-236.	725.	-2660.	-.0030	-.0196	.0279	-.0785	-.0214	.0210	1110.
							.1450	-1116.	1960.	1382.	-537.	755.	-2679.	-.0060	-.0187	.0216	-.0737	-.0151	.0202	1214.
							.1460	-1204.	1872.	1334.	-607.	711.	-2829.	-.0096	-.0157	.0139	-.0663	-.0081	.0198	1196.
							.1470	-1394.	1989.	1309.	-549.	685.	-2425.	-.0139	-.0109	.0052	-.0569	-.0009	.0201	1035.
							.1480	-1572.	1095.	1252.	-581.	676.	-1950.	-.0184	-.0054	-.0046	-.0469	.0072	.0203	861.
							.1490	-1734.	-245.	1161.	-718.	693.	-1396.	-.0230	.0010	-.0149	-.0368	.0162	.0205	688.
							.1500	-1920.	-742.	1075.	-819.	737.	-625.	-.0274	.0086	-.0251	-.0265	.0249	.0218	508.
							.1510	-2021.	-816.	974.	-851.	761.	122.	-.0310	.0169	-.0346	-.0163	.0325	.0235	461.
							.1520	-1937.	-1589.	831.	-878.	759.	566.	-.0332	.0249	-.0430	-.0072	.0383	.0246	518.
							.1530	-1796.	-2652.	698.	-825.	699.	920.	-.0344	.0326	-.0496	.0009	.0427	.0258	572.
							.1540	-1777.	-2871.	632.	-666.	611.	1558.	-.0353	.0404	-.0540	.0075	.0465	.0282	723.
							.1550	-1803.	-2556.	593.	-494.	502.	2327.	-.0354	.0474	-.0563	.0123	.0501	.0312	976.
							.1560	-1661.	-2724.	498.	-460.	345.	2780.	-.0339	.0526	-.0564	.0146	.0538	.0334	1139.
							.1570	-1336.	-3072.	351.	-516.	190.	2883.	-.0305	.0558	-.0543	.0145	.0560	.0346	1178.
							.1580	-974.	-2728.	225.	-462.	29.	2900.	-.0258	.0572	-.0496	.0128	.0560	.0354	1178.
							.1590	-634.	-2050.	146.	-256.	-143.	2866.	-.0203	.0568	-.0423	.0096	.0537	.0358	1156.
							.1600	-303.	-1720.	97.	-5.	-281.	2708.	-.0140	.0543	-.0327	.0048	.0490	.0351	1092.
							.1610	15.	-1500.	61.	223.	-377.	2459.	-.0071	.0499	-.0214	-.0017	.0431	.0334	1002.
							.1620	319.	-742.	31.	413.	-468.	2180.	.0001	.0439	-.0090	-.0092	.0374	.0310	910.
							.1630	666.	373.	-27.	490.	-517.	1760.	.0076	.0368	.0038	-.0175	.0320	.0275	765.
							.1640	1091.	1180.	-124.	440.	-534.	1101.	.0155	.0284	.0165	-.0263	.0268	.0226	522.
							.1650	1482.	1764.	-210.	388.	-546.	354.	.0230	.0194	.0292	-.0348	.0218	.0167	304.
							.1660	1695.	2645.	-228.	457.	-533.	-181.	.0293	.0109	.0414	-.0420	.0166	.0107	291.
							.1670	1756.	3620.	-195.	616.	-522.	-536.	.0343	.0031	.0529	-.0478	.0119	.0048	389.
							.1680	1800.	4185.	-180.	700.	-499.	-938.	.0386	-.0038	.0628	-.0521	.0082	-.0015	510.
							.1690	1880.	4423.	-215.	675.	-475.	-1477.	.0421	-.0096	.0706	-.0549	.0062	-.0082	659.
							.1700	1922.	4820.	-272.	470.	-440.	-1649.	.0445	-.0136	.0764	-.0560	.0060	-.0144	786.
							.1710	1861.	5352.	-319.	279.	-379.	-2045.	.0456	-.0155	.0802	-.0553	.0069	-.0196	842.
							.1720	1710.	5515.	-342.	134.	-353.	-2090.	.0455	-.0155	.0823	-.0526	.0086	-.0239	852.
							.1730	1493.	5279.	-341.	62.	-339.	-2011.	.0444	-.0136	.0829	-.0480	.0101	-.0273	819.
							.1740	1035.	5011.	-302.	74.	-340.	-1800.	.0425	-.0100	.0822	-.0417	.0111	-.0294	736.
							.1750	989.	4815.	-310.	101.	-354.	-1523.	.0403	-.0047	.0803	-.0342	.0117	-.0305	629.

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2 SAFETY COLD FKW24F--2 PSVCONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.1640	1391.	1111.	-124.	440.	-534.	1101.	1155.	.0284	.0165	-.0263	.0268	.0226	522.
.1650	1482.	1764.	-210.	388.	-546.	354.	.0230	.0194	.0292	-.0348	.0218	.0167	304.
.1660	1695.	2645.	-228.	477.	-533.	-181.	.0293	.0109	.0414	-.0420	.0166	.0107	291.
.1670	1756.	3620.	-195.	616.	-522.	-536.	.0343	.0031	.0529	-.0478	.0119	.0048	389.
.1680	1800.	4155.	-180.	700.	-499.	-938.	.0386	-.0038	.0628	-.0521	.0082	-.0015	510.
.1690	1880.	4428.	-210.	670.	-475.	-1437.	.0421	-.0094	.0706	-.0549	.0062	-.0082	659.
.1700	1922.	4820.	-272.	470.	-440.	-1049.	.0449	-.0136	.0764	-.0580	.0060	-.0144	786.
.1710	1861.	5352.	-219.	279.	-379.	-2045.	.0456	-.0155	.0802	-.0553	.0069	-.0196	842.
.1720	1710.	5515.	-342.	134.	-353.	-2090.	.0455	-.0155	.0823	-.0526	.0086	-.0239	852.
.1730	1493.	5279.	-341.	62.	-339.	-2011.	.0444	-.0136	.0829	-.0480	.0101	-.0273	819.
.1740	1235.	5011.	-322.	74.	-340.	-1800.	.0425	-.0100	.0822	-.0417	.0111	-.0294	736.
.1750	989.	4815.	-312.	101.	-354.	-1523.	.0403	-.0047	.0803	-.0342	.0117	-.0305	629.

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S/RV PIPING KEWAUNEE GKWD8F 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)	FX (DEG)	FY (DEG)	FZ (DEG)	STRESS (PSI)
40	2	161					.1760	799.	4471.	-339.	37.	-337.	-1257.	.0380	.0016	.0773	-.0261	.0117	-.0306	523.
							.1770	641.	3718.	-392.	-105.	-298.	-978.	.0357	.0085	.0736	-.0177	.0112	-.0297	412.
							.1780	442.	3422.	-431.	-222.	-224.	-560.	.0331	.0159	.0697	-.0090	.0092	-.0275	258.
							.1790	198.	3009.	-436.	-212.	-144.	-27.	.0305	.0234	.0663	-.0001	.0051	-.0241	103.
							.1800	-18.	2442.	-424.	-79.	-71.	446.	.0283	.0305	.0635	.0090	-.0014	-.0201	184.
							.1810	-162.	1778.	-416.	112.	10.	760.	.0268	.0367	.0615	.0176	-.0102	-.0158	308.
							.1820	-255.	1343.	-413.	323.	47.	960.	.0257	.0419	.0603	.0257	-.0194	-.0112	407.
							.1830	-337.	1239.	-413.	479.	60.	1128.	.0250	.0462	.0597	.0326	-.0282	-.0063	492.
							.1840	-411.	1171.	-422.	524.	68.	1248.	.0245	.0490	.0598	.0382	-.0361	-.0012	544.
							.1850	-476.	1070.	-431.	503.	68.	1287.	.0242	.0503	.0605	.0425	-.0434	.0038	555.
							.1860	-542.	1222.	-417.	516.	61.	1245.	.0241	.0500	.0619	.0458	-.0506	.0086	541.
							.1870	-584.	1606.	-380.	617.	18.	1054.	.0242	.0481	.0641	.0483	-.0578	.0128	490.
							.1880	-575.	1908.	-339.	741.	-27.	667.	.0246	.0445	.0666	.0500	-.0649	.0161	400.
							.1890	-539.	2047.	-300.	819.	-78.	158.	.0249	.0393	.0690	.0508	-.0705	.0185	336.
							.1900	-539.	2295.	-260.	828.	-139.	-311.	.0249	.0330	.0709	.0507	-.0734	.0202	359.
							.1910	-584.	2745.	-219.	744.	-186.	-695.	.0244	.0260	.0721	.0499	-.0735	.0214	415.
							.1920	-612.	3133.	-194.	573.	-234.	-1111.	.0235	.0185	.0723	.0484	-.0711	.0214	510.
							.1930	-591.	3411.	-188.	370.	-281.	-1609.	.0225	.0110	.0714	.0466	-.0669	.0201	672.
							.1940	-550.	2752.	-181.	206.	-321.	-2102.	.0212	.0036	.0693	.0447	-.0616	.0176	857.
							.1950	-525.	4102.	-163.	94.	-354.	-2495.	.0195	-.0031	.0661	.0427	-.0550	.0143	1012.
							.1960	-523.	4204.	-142.	-15.	-378.	-2756.	.0174	-.0092	.0616	.0406	-.0469	.0101	1116.
							.1970	-546.	4071.	-126.	-159.	-392.	-2854.	.0148	-.0142	.0558	.0383	-.0370	.0053	1158.
							.1980	-588.	3936.	-117.	-327.	-406.	-2779.	.0119	-.0179	.0488	.0357	-.0256	.0002	1135.
							.1990	-612.	3825.	-124.	-498.	-429.	-2094.	.0089	-.0199	.0408	.0330	-.0134	-.0053	1074.
							.2000	-590.	3620.	-149.	-650.	-459.	-3361.	.0061	-.0203	.0322	.0303	-.0012	-.0110	1000.
							.2010	-546.	3347.	-177.	-744.	-492.	-2051.	.0035	-.0192	.0232	.0276	.0102	-.0165	898.
							.2020	-518.	3038.	-191.	-756.	-533.	-1598.	.0009	-.0166	.0143	.0248	.0205	-.0214	741.
							.2030	-511.	2767.	-190.	-705.	-575.	-1002.	-.0015	-.0129	.0058	.0217	.0296	-.0253	543.
							.2040	-494.	2273.	-184.	-635.	-603.	-332.	-.0025	-.0083	-.0021	.0181	.0370	-.0281	376.
							.2050	-441.	1697.	-181.	-552.	-606.	350.	-.0049	-.0031	-.0091	.0140	.0424	-.0297	358.
							.2060	-746.	1233.	-176.	-434.	-591.	1008.	-.0057	.0025	-.0151	.0093	.0453	-.0299	500.
							.2070	-212.	919.	-163.	-271.	-563.	1637.	-.0058	.0003	-.0197	.0042	.0457	-.0289	692.
							.2080	-47.	662.	-142.	-79.	-530.	2129.	-.0053	.0141	-.0230	-.0012	.0438	-.0266	881.
							.2090	116.	418.	-109.	129.	-505.	2593.	-.0044	.0194	-.0249	-.0069	.0405	-.0231	1061.
							.2100	268.	197.	-66.	337.	-505.	3012.	-.0032	.0241	-.0254	-.0127	.0365	-.0184	1233.
							.2110	412.	-13.	-20.	522.	-528.	3351.	-.0017	.0279	-.0248	-.0183	.0322	-.0129	1377.
							.2120	562.	-204.	20.	667.	-561.	3549.	.0000	.0309	-.0231	-.0237	.0277	-.0068	1466.
							.2130	717.	-286.	54.	778.	-594.	3592.	.0018	.0331	-.0207	-.0286	.0229	-.0006	1494.

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S/RV PIPING KEWAUNEE GKWD8F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE

.2030	-511.	2767.	-190.	-705.	-575.	-1002.	-10015	-.0129	.0058	.0217	.0296	-.0253	543.
.2040	-494.	2273.	-184.	-635.	-603.	-332.	-.0035	-.0083	-.0021	.0181	.0370	-.0281	376.
.2050	-441.	1697.	-181.	-552.	-606.	350.	-.0049	-.0031	-.0091	.0140	.0424	-.0297	358.
.2060	-346.	1233.	-176.	-434.	-591.	1008.	-.0057	.0025	-.0151	.0093	.0453	-.0299	500.
.2070	-212.	919.	-167.	-271.	-563.	1607.	-.0058	.0083	-.0197	.0042	.0457	-.0289	692.
.2080	-47.	662.	-142.	-79.	-530.	2129.	-.0033	.0141	-.0230	-.0012	.0438	-.0266	881.
.2090	116.	418.	-109.	129.	-505.	2593.	-.0044	.0194	-.0249	-.0069	.0405	-.0231	1061.
.2100	268.	197.	-66.	337.	-505.	3012.	-.0032	.0241	-.0254	-.0127	.0365	-.0184	1233.
.2110	412.	-13.	-20.	522.	-528.	3351.	-.0017	.0279	-.0248	-.0183	.0322	-.0129	1377.
.2120	562.	-204.	20.	667.	-561.	3549.	.0000	.0309	-.0231	-.0237	.0277	-.0068	1466.
.2130	713.	-286.	54.	778.	-594.	3592.	.0018	.0331	-.0207	-.0286	.0229	-.0006	1494.

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ADLPIPE STRESS ANALYSIS

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	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)
40	2	161					.2140	842.	-192.	89.	869.	-618.	3510.	.0036	.0344	-.0175	-.0327	.0180	.0056	1472.
							.2150	930.	-1.	128.	932.	-624.	3334.	.0051	.0350	-.0138	-.0360	.0133	.0116	1411.
							.2160	973.	168.	166.	941.	-609.	3073.	.0063	.0347	-.0099	-.0385	.0091	.0172	1313.
							.2170	974.	323.	200.	886.	-575.	2738.	.0071	.0335	-.0061	-.0401	.0059	.0221	1178.
							.2180	934.	544.	229.	775.	-527.	2340.	.0075	.0316	-.0023	-.0409	.0037	.0262	1012.
							.2190	865.	302.	251.	623.	-471.	1878.	.0076	.0289	.0012	-.0407	.0026	.0293	816.
							.2200	776.	975.	265.	446.	-412.	1356.	.0074	.0257	.0044	-.0397	.0024	.0314	596.
							.2210	662.	1063.	276.	263.	-349.	819.	.0069	.0222	.0073	-.0379	.0028	.0325	373.
							.2220	510.	1190.	288.	86.	-277.	322.	.0061	.0186	.0098	-.0354	.0037	.0327	174.
							.2230	334.	1401.	298.	-93.	-192.	-123.	.0051	.0152	.0121	-.0324	.0047	.0322	99.
							.2240	168.	1601.	294.	-288.	-90.	-538.	.0041	.0120	.0139	-.0293	.0058	.0310	248.
							.2250	29.	1712.	275.	-487.	25.	-924.	.0033	.0091	.0155	-.0262	.0064	.0292	419.
							.2260	-89.	1765.	253.	-652.	143.	-1239.	.0027	.0067	.0170	-.0232	.0064	.0270	565.
							.2270	-199.	1790.	238.	-749.	255.	-1452.	.0024	.0049	.0185	-.0204	.0054	.0247	663.
							.2280	-297.	1766.	232.	-775.	355.	-1561.	.0023	.0037	.0200	-.0179	.0034	.0223	714.
							.2290	-371.	1712.	229.	-745.	438.	-1572.	.0026	.0033	.0217	-.0159	.0004	.0200	720.
							.2300	-406.	1683.	220.	-678.	496.	-1501.	.0034	.0036	.0234	-.0144	-.0033	.0178	690.
							.2310	-389.	1667.	196.	-596.	526.	-1375.	.0046	.0046	.0251	-.0134	-.0075	.0157	637.
							.2320	-324.	1595.	158.	-505.	531.	-1208.	.0063	.0061	.0268	-.0129	-.0122	.0138	567.
							.2330	-238.	1468.	117.	-382.	516.	-976.	.0082	.0080	.0285	-.0126	-.0173	.0122	469.
							.2340	-156.	1333.	85.	-196.	485.	-656.	.0102	.0103	.0304	-.0124	-.0231	.0110	337.
							.2350	-71.	1171.	59.	50.	445.	-285.	.0123	.0128	.0323	-.0122	-.0294	.0102	213.
							.2360	37.	944.	29.	314.	402.	68.	.0145	.0154	.0341	-.0119	-.0339	.0095	207.
							.2370	173.	701.	-13.	557.	356.	370.	.0167	.0180	.0356	-.0116	-.0420	.0088	304.
							.2380	315.	520.	-64.	761.	305.	654.	.0187	.0204	.0366	-.0112	-.0471	.0084	421.
							.2390	441.	368.	-118.	917.	247.	947.	.0204	.0227	.0372	-.0107	-.0507	.0081	538.
							.2400	546.	150.	-171.	1026.	187.	1228.	.0216	.0247	.0372	-.0102	-.0526	.0080	646.
							.2410	634.	-106.	-223.	1100.	124.	1462.	.0225	.0264	.0368	-.0094	-.0530	.0078	736.
							.2420	709.	-295.	-270.	1152.	60.	1627.	.0229	.0277	.0359	-.0085	-.0519	.0075	800.
							.2430	777.	-395.	-315.	1177.	0.	1718.	.0230	.0284	.0346	-.0074	-.0495	.0071	836.
							.2440	843.	-496.	-364.	1158.	-53.	1744.	.0229	.0286	.0328	-.0064	-.0455	.0066	840.
							.2450	905.	-647.	-416.	1081.	-97.	1717.	.0224	.0283	.0307	-.0055	-.0400	.0061	815.
							.2460	954.	-771.	-466.	950.	-123.	1652.	.0217	.0273	.0283	-.0050	-.0332	.0056	766.
							.2470	994.	-813.	-510.	784.	-148.	1544.	.0208	.0258	.0259	-.0049	-.0256	.0051	698.
							.2480	1036.	-782.	-546.	612.	-162.	1394.	.0199	.0238	.0235	-.0053	-.0176	.0047	614.
							.2490	1093.	-737.	-574.	458.	-172.	1211.	.0191	.0213	.0212	-.0062	-.0097	.0046	524.
							.2500	1176.	-630.	-597.	317.	-174.	987.	.0186	.0184	.0192	-.0077	-.0022	.0046	422.
							.2510	1287.	-537.	-617.	174.	-165.	716.	.0183	.0157	.0175	-.0099	.0047	.0048	304.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.46.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.2410	634.	-106.	-223.	1100.	124.	1462.	.0225	.0264	.0368	-.0094	-.0530	.0078	646.
.2420	709.	-295.	-270.	1152.	60.	1627.	.0229	.0277	.0359	-.0085	-.0519	.0075	800.
.2430	777.	-395.	-315.	1177.	0.	1718.	.0230	.0284	.0346	-.0074	-.0495	.0071	836.
.2440	843.	-476.	-364.	1198.	-53.	1744.	.0229	.0286	.0328	-.0064	-.0455	.0066	840.
.2450	905.	-547.	-416.	1211.	-97.	1717.	.0224	.0282	.0307	-.0055	-.0400	.0061	815.
.2460	954.	-771.	-466.	950.	-128.	1652.	.0217	.0272	.0282	-.0050	-.0332	.0056	766.
.2470	994.	-813.	-510.	784.	-148.	1544.	.0208	.0258	.0259	-.0049	-.0256	.0051	698.
.2480	1036.	-782.	-546.	612.	-162.	1394.	.0199	.0238	.0235	-.0052	-.0176	.0047	614.
.2490	1093.	-707.	-574.	458.	-172.	1211.	.0191	.0213	.0212	-.0062	-.0097	.0046	524.
.2500	1176.	-630.	-597.	317.	-174.	987.	.0176	.0184	.0172	-.0077	-.0022	.0046	422.
.2510	1287.	-537.	-617.	174.	-165.	716.	.0183	.0157	.0175	-.0099	.0047	.0048	304.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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18.28.46.

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	40	MEMBER	2	SEQUENCE	161	LOCATION	END	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ								STRESS
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.2520	1397.	-371.	-629.	31.	-144.	447.		.0181	.0119	.0161	-.0128	.0108	.0054	189.
.2530	1494.	-155.	-628.	-92.	-113.	223.		.0180	.0085	.0150	-.0163	.0159	.0064	107.
.2540	1595.	-3.	-618.	-180.	-75.	51.		.0181	.0052	.0142	-.0202	.0197	.0080	81.
.2550	1719.	55.	-607.	-220.	-34.	-99.		.0185	.0020	.0136	-.0242	.0219	.0100	98.
.2560	1850.	80.	-598.	-212.	4.	-256.		.0192	-.0010	.0131	-.0282	.0225	.0125	133.
.2570	2000.	44.	-598.	-171.	39.	-420.		.0201	-.0039	.0125	-.0321	.0217	.0152	183.
.2580	2295.	-29.	-604.	-94.	71.	-504.		.0211	-.0067	.0116	-.0356	.0198	.0185	208.
.2590	2527.	-111.	-617.	31.	99.	-434.		.0221	-.0092	.0100	-.0385	.0172	.0226	179.
.2600	2800.	-278.	-653.	174.	126.	-286.		.0233	-.0115	.0076	-.0406	.0141	.0273	144.
.2610	3150.	-492.	-725.	304.	154.	-173.		.0245	-.0138	.0041	-.0417	.0105	.0319	153.
.2620	3544.	-540.	-823.	428.	183.	-80.		.0256	-.0158	-.0007	-.0417	.0066	.0362	169.
.2630	3937.	-460.	-931.	561.	215.	88.		.0262	-.0178	-.0068	-.0404	.0030	.0404	244.
.2640	4295.	-567.	-1050.	690.	254.	359.		.0261	-.0198	-.0144	-.0376	.0000	.0445	328.
.2650	4609.	-851.	-1171.	798.	302.	687.		.0252	-.0219	-.0236	-.0332	-.0020	.0480	440.
.2660	4854.	-1097.	-1286.	859.	357.	970.		.0232	-.0240	-.0341	-.0274	-.0030	.0503	539.
.2670	4989.	-1174.	-1378.	868.	419.	1186.		.0197	-.0260	-.0459	-.0203	-.0028	.0509	613.
.2680	4665.	-1145.	-1431.	845.	489.	1438.		.0147	-.0278	-.0588	-.0119	-.0011	.0503	697.
.2690	4772.	-1261.	-1443.	786.	569.	1762.		.0082	-.0293	-.0725	-.0023	.0021	.0487	807.
.2700	4448.	-1636.	-1426.	654.	659.	2054.		.0003	-.0306	-.0868	.0081	.0067	.0457	905.
.2710	4014.	-2095.	-1383.	473.	753.	2216.		-.0085	-.0319	-.1013	.0188	.0124	.0411	955.
.2720	3463.	-2380.	-1303.	181.	844.	2334.		-.0183	-.0332	-.1154	.0298	.0188	.0355	999.
.2730	2804.	-2615.	-1185.	-38.	927.	2533.		-.0284	-.0343	-.1289	.0410	.0255	.0299	1082.
.2740	2120.	-3189.	-1059.	-236.	1001.	2751.		-.0383	-.0351	-.1413	.0520	.0320	.0244	1178.
.2750	1493.	-3983.	-949.	-451.	1061.	2848.		-.0473	-.0358	-.1524	.0624	.0377	.0189	1233.
.2760	932.	-4306.	-855.	-675.	1101.	2821.		-.0553	-.0361	-.1615	.0717	.0423	.0135	1245.
.2770	425.	-4232.	-772.	-880.	1119.	2789.		-.0620	-.0360	-.1685	.0795	.0456	.0090	1256.
.2780	5.	-4114.	-709.	-1054.	1117.	2806.		-.0669	-.0358	-.1729	.0860	.0471	.0059	1283.
.2790	-284.	-4472.	-675.	-1191.	1091.	2812.		-.0698	-.0356	-.1747	.0904	.0462	.0042	1301.
.2800	-452.	-4866.	-653.	-1251.	1037.	2754.		-.0706	-.0354	-.1733	.0927	.0423	.0035	1283.
.2810	-544.	-4734.	-616.	-1200.	954.	2627.		-.0696	-.0351	-.1688	.0928	.0350	.0036	1220.
.2820	-573.	-4284.	-563.	-1062.	844.	2450.		-.0670	-.0345	-.1611	.0906	.0246	.0043	1124.
.2830	-545.	-4079.	-503.	-883.	712.	2268.		-.0629	-.0338	-.1507	.0861	.0118	.0059	1018.
.2840	-491.	-4099.	-432.	-683.	561.	2130.		-.0575	-.0328	-.1379	.0793	-.0029	.0082	925.
.2850	-446.	-3835.	-339.	-464.	395.	2009.		-.0513	-.0315	-.1229	.0707	-.0191	.0108	843.
.2860	-414.	-3145.	-221.	-237.	215.	1817.		-.0446	-.0298	-.1062	.0606	-.0367	.0130	741.
.2870	-389.	-2451.	-86.	1.	27.	1544.		-.0375	-.0279	-.0883	.0494	-.0552	.0146	620.
.2880	-397.	-2059.	68.	280.	-162.	1318.		-.0304	-.0260	-.0698	.0379	-.0742	.0161	545.
.2890	-458.	-1825.	240.	612.	-342.	1227.		-.0235	-.0237	-.0514	.0267	-.0921	.0178	567.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.46.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

.2790	-284.	-4472.	-675.	-1191.	1091.	2812.	-0698	-0356	-1747	.0904	.0462	.0042	1283.
.2800	-452.	-4866.	-653.	-1151.	1037.	2754.	-0706	-0354	-1732	.0927	.0423	.0035	1283.
.2810	-544.	-4734.	-616.	-1200.	954.	2627.	-0696	-0351	-1688	.0928	.0350	.0036	1220.
.2820	-577.	-4284.	-563.	-1062.	744.	2450.	-0670	-0345	-1611	.0906	.0246	.0043	1124.
.2830	-545.	-4079.	-507.	-883.	712.	2268.	-0629	-0338	-1507	.0861	.0118	.0059	1018.
.2840	-491.	-4099.	-432.	-683.	561.	2130.	-0575	-0328	-1379	.0793	-.0029	.0082	925.
.2850	-446.	-3875.	-339.	-464.	395.	2009.	-0513	-0315	-1229	.0707	-.0191	.0108	843.
.2860	-414.	-3145.	-231.	-237.	215.	1817.	-0446	-0298	-1062	.0606	-.0367	.0130	741.
.2870	-369.	-2451.	-86.	1.	27.	1544.	-0375	-0279	-.0803	.0494	-.0552	.0146	620.
.2880	-397.	-2059.	68.	280.	-162.	1318.	-0304	-0260	-.0698	.0379	-.0742	.0161	545.
.2890	-458.	-1825.	240.	612.	-342.	1227.	-0255	-0237	-.0514	.0267	-.0927	.0178	567.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.46.

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	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)
40	.2900	-535.	-1516.	408.	940.	-503.	1175.	-.0169	-.0212	-.0335	.0161	-.1103	.0192	637.
	.2910	-569.	-1109.	539.	1193.	-637.	1037.	-.0106	-.0186	-.0170	.0065	-.1261	.0198	684.
	.2920	-547.	-690.	619.	1360.	-740.	869.	-.0047	-.0158	-.0024	-.0017	-.1396	.0200	713.
	.2930	-489.	-350.	652.	1485.	-811.	821.	.0008	-.0129	.0100	-.0079	-.1502	.0205	755.
	.2940	-386.	-165.	632.	1586.	-855.	902.	.0059	-.0098	.0199	-.0118	-.1578	.0215	808.
	.2950	-199.	-99.	550.	1641.	-877.	981.	.0106	-.0069	.0272	-.0134	-.1622	.0223	844.
	.2960	78.	21.	495.	1644.	-888.	997.	.0148	-.0043	.0319	-.0128	-.1634	.0229	850.
	.2970	413.	238.	410.	1612.	-888.	1028.	.0185	-.0020	.0341	-.0099	-.1613	.0234	846.
	.2980	785.	319.	30.	1542.	-879.	1141.	.0217	.0000	.0340	-.0049	-.1559	.0244	847.
	.2990	1192.	135.	-309.	1414.	-859.	1289.	.0244	.0016	.0318	.0016	-.1475	.0256	842.
	.3000	1616.	-63.	-611.	1232.	-833.	1395.	.0264	.0026	.0280	.0093	-.1368	.0266	818.
	.3010	2018.	20.	-909.	1026.	-802.	1443.	.0277	.0031	.0230	.0177	-.1246	.0273	780.
	.3020	2370.	246.	-1184.	825.	-766.	1463.	.0284	.0032	.0175	.0265	-.1116	.0278	741.
	.3030	2667.	263.	-1430.	633.	-726.	1475.	.0284	.0026	.0117	.0253	-.0983	.0283	707.
	.3040	2899.	80.	-1637.	454.	-687.	1483.	.0280	.0013	.0061	.0435	-.0853	.0287	681.
	.3050	3057.	16.	-1797.	296.	-654.	1461.	.0271	-.0005	.0010	.0509	-.0729	.0289	653.
	.3060	3151.	179.	-1911.	156.	-631.	1377.	.0259	-.0028	-.0034	.0572	-.0617	.0288	611.
	.3070	3201.	354.	-1986.	37.	-617.	1243.	.0247	-.0055	-.0070	.0622	-.0521	.0285	557.
	.3080	3219.	393.	-2028.	-39.	-613.	1125.	.0235	-.0085	-.0096	.0660	-.0443	.0284	514.
	.3090	3212.	427.	-2039.	-55.	-618.	1057.	.0226	-.0115	-.0114	.0685	-.0386	.0286	492.
	.3100	3210.	593.	-2032.	-25.	-628.	986.	.0220	-.0145	-.0123	.0699	-.0351	.0289	469.
	.3110	3244.	841.	-2021.	25.	-642.	863.	.0218	-.0175	-.0127	.0701	-.0337	.0291	432.
	.3120	3310.	1043.	-2009.	100.	-655.	748.	.0221	-.0203	-.0126	.0692	-.0342	.0294	401.
	.3130	3386.	1132.	-1992.	222.	-669.	733.	.0227	-.0228	-.0124	.0676	-.0363	.0301	408.
	.3140	3468.	1111.	-1969.	383.	-683.	812.	.0235	-.0248	-.0121	.0655	-.0396	.0310	453.
	.3150	3566.	1044.	-1947.	552.	-695.	895.	.0243	-.0264	-.0122	.0628	-.0440	.0316	506.
	.3160	3663.	1026.	-1922.	707.	-707.	951.	.0249	-.0273	-.0127	.0597	-.0489	.0317	554.
	.3170	3718.	1046.	-1884.	847.	-715.	1044.	.0250	-.0276	-.0138	.0565	-.0539	.0312	611.
	.3180	3700.	941.	-1825.	965.	-714.	1218.	.0243	-.0273	-.0157	.0531	-.0584	.0304	686.
	.3190	3597.	616.	-1743.	1042.	-702.	1434.	.0228	-.0265	-.0185	.0498	-.0621	.0291	765.
	.3200	3398.	200.	-1630.	1079.	-680.	1634.	.0201	-.0253	-.0220	.0466	-.0651	.0268	832.
	.3210	3089.	-154.	-1478.	1094.	-650.	1806.	.0163	-.0239	-.0262	.0435	-.0673	.0236	887.
	.3220	2668.	-529.	-1284.	1097.	-614.	1970.	.0113	-.0222	-.0311	.0407	-.0686	.0197	938.
	.3230	2154.	-1104.	-1059.	1075.	-573.	2130.	.0054	-.0204	-.0366	.0382	-.0687	.0155	984.
	.3240	1570.	-1813.	-814.	1013.	-530.	2273.	-.0013	-.0187	-.0425	.0359	-.0675	.0110	1021.
	.3250	940.	-2413.	-556.	908.	-486.	2384.	-.0087	-.0171	-.0489	.0339	-.0650	.0065	1042.
	.3260	300.	-2825.	-298.	765.	-443.	2445.	-.0162	-.0157	-.0555	.0320	-.0614	.0021	1043.
	.3270	-309.	-3220.	-54.	596.	-398.	2450.	-.0237	-.0147	-.0622	.0302	-.0570	-.0019	1025.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.46.

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

.3160	3667.	1026.	-1772.	707.	-707.	951.	.0249	-.0273	-.0127	.0597	-.0489	.0317	554.
.3170	3716.	1046.	-1864.	847.	-715.	1044.	.0250	-.0276	-.0138	.0565	-.0539	.0312	611.
.3180	3700.	941.	-1825.	965.	-714.	1218.	.0243	-.0273	-.0157	.0531	-.0584	.0304	686.
.3190	3597.	616.	-1743.	1042.	-702.	1434.	.0228	-.0265	-.0185	.0498	-.0621	.0291	765.
.3200	3398.	270.	-1630.	1079.	-680.	1634.	.0201	-.0252	-.0220	.0466	-.0651	.0268	832.
.3210	3089.	-154.	-1478.	1094.	-650.	1806.	.0165	-.0239	-.0262	.0435	-.0673	.0236	887.
.3220	2668.	-529.	-1284.	1097.	-614.	1970.	.0113	-.0222	-.0311	.0407	-.0686	.0197	938.
.3230	2154.	-1104.	-1059.	1075.	-573.	2130.	.0054	-.0204	-.0366	.0382	-.0687	.0155	984.
.3240	1570.	-1813.	-814.	1013.	-530.	2273.	-.0013	-.0187	-.0425	.0359	-.0675	.0110	1021.
.3250	940.	-2413.	-556.	908.	-486.	2384.	-.0087	-.0171	-.0489	.0339	-.0650	.0065	1042.
.3260	300.	-2820.	-290.	769.	-447.	2445.	-.0162	-.0157	-.0555	.0320	-.0614	.0021	1043.
.3270	-309.	-3220.	-04.	596.	-390.	2450.	-.0237	-.0147	-.0622	.0302	-.0570	-.0019	1025.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.46.

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	40	MEMBER	2	SEQUENCE	161	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3280	-852.	-3712.	168.	429.	-355.	2414.	-.0308	-.0143	-.0688	.0287	-.0521	-.0050	994.		
.3290	-1313.	-4176.	364.	293.	-314.	2358.	-.0371	-.0145	-.0751	.0275	-.0471	-.0070	962.		
.3300	-1673.	-4479.	529.	192.	-277.	2269.	-.0426	-.0154	-.0810	.0265	-.0421	-.0080	920.		
.3310	-1908.	-4654.	651.	110.	-243.	2121.	-.0470	-.0171	-.0865	.0256	-.0373	-.0080	858.		
.3320	-2006.	-4795.	725.	32.	-214.	1920.	-.0503	-.0195	-.0915	.0247	-.0326	-.0069	775.		
.3330	-1984.	-4893.	754.	-40.	-190.	1704.	-.0526	-.0224	-.0960	.0238	-.0279	-.0047	688.		
.3340	-1864.	-4861.	748.	-94.	-173.	1492.	-.0538	-.0259	-.1001	.0229	-.0232	-.0017	604.		
.3350	-1660.	-4715.	715.	-132.	-161.	1260.	-.0543	-.0299	-.1037	.0221	-.0187	.0019	512.		
.3360	-1393.	-4535.	663.	-151.	-153.	993.	-.0542	-.0342	-.1069	.0213	-.0143	.0057	408.		
.3370	-1094.	-4366.	602.	-145.	-150.	726.	-.0537	-.0388	-.1098	.0206	-.0100	.0094	303.		
.3380	-797.	-4212.	541.	-121.	-147.	494.	-.0531	-.0433	-.1126	.0201	-.0054	.0130	212.		
.3390	-518.	-4070.	480.	-97.	-143.	299.	-.0526	-.0477	-.1153	.0199	-.0005	.0161	139.		
.3400	-262.	-3943.	418.	-66.	-137.	124.	-.0522	-.0518	-.1182	.0201	.0051	.0185	84.		
.3410	-39.	-3814.	353.	-121.	-129.	-23.	-.0521	-.0553	-.1213	.0206	.0116	.0201	72.		
.3420	147.	-3689.	287.	-161.	-118.	-114.	-.0524	-.0583	-.1249	.0218	.0190	.0207	92.		
.3430	299.	-3617.	217.	-207.	-103.	-137.	-.0529	-.0604	-.1288	.0236	.0272	.0205	108.		
.3440	433.	-3623.	136.	-261.	-83.	-106.	-.0536	-.0619	-.1330	.0261	.0361	.0195	118.		
.3450	561.	-3675.	41.	-326.	-58.	-37.	-.0543	-.0627	-.1376	.0291	.0457	.0175	134.		
.3460	687.	-3736.	-69.	-400.	-26.	83.	-.0549	-.0627	-.1423	.0327	.0557	.0148	164.		
.3470	814.	-3824.	-195.	-481.	12.	268.	-.0554	-.0621	-.1469	.0365	.0660	.0115	221.		
.3480	954.	-3974.	-338.	-566.	57.	504.	-.0556	-.0609	-.1512	.0406	.0764	.0077	305.		
.3490	1114.	-4145.	-497.	-654.	105.	755.	-.0552	-.0591	-.1549	.0444	.0864	.0034	403.		
.3500	1284.	-4248.	-661.	-737.	154.	992.	-.0544	-.0570	-.1577	.0480	.0956	-.0013	500.		
.3510	1445.	-4263.	-817.	-804.	201.	1215.	-.0531	-.0545	-.1591	.0508	.1037	-.0064	590.		
.3520	1576.	-4263.	-954.	-848.	244.	1432.	-.0513	-.0519	-.1588	.0528	.1104	-.0117	675.		
.3530	1664.	-4299.	-1061.	-867.	282.	1632.	-.0490	-.0491	-.1565	.0536	.1153	-.0171	750.		
.3540	1698.	-4319.	-1130.	-863.	313.	1777.	-.0463	-.0465	-.1520	.0530	.1182	-.0227	802.		
.3550	1664.	-4229.	-1151.	-837.	336.	1837.	-.0434	-.0439	-.1451	.0509	.1188	-.0283	821.		
.3560	1550.	-4019.	-1115.	-784.	349.	1817.	-.0401	-.0414	-.1358	.0472	.1170	-.0340	807.		
.3570	1350.	-3756.	-1023.	-700.	352.	1747.	-.0367	-.0389	-.1240	.0420	.1127	-.0393	768.		
.3580	1079.	-3484.	-879.	-586.	344.	1629.	-.0330	-.0366	-.1100	.0355	.1062	-.0441	708.		
.3590	761.	-3167.	-695.	-457.	322.	1429.	-.0290	-.0344	-.0941	.0278	.0976	-.0483	616.		
.3600	416.	-2746.	-482.	-326.	289.	1121.	-.0248	-.0324	-.0765	.0192	.0870	-.0520	483.		
.3610	50.	-2240.	-247.	-191.	244.	733.	-.0204	-.0304	-.0576	.0101	.0748	-.0550	319.		
.3620	-336.	-1739.	3.	-42.	190.	331.	-.0159	-.0285	-.0380	.0008	.0614	-.0570	154.		
.3630	-724.	-1311.	258.	125.	132.	-52.	-.0114	-.0265	-.0181	-.0081	.0472	-.0578	76.		
.3640	-1084.	-937.	490.	295.	72.	-448.	-.0068	-.0245	.0015	-.0163	.0324	-.0576	217.		
.3650	-1391.	-540.	711.	443.	15.	-900.	-.0022	-.0224	.0203	-.0236	.0176	-.0568	402.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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

CONDITION 24

LOADS

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

.3540	1698.	-4319.	1170.	-863.	312.	1777.	-.0463	-.0465	-.1520	.0530	.1182	-.0227	802.
.3550	1664.	-4229.	-1151.	-837.	336.	1837.	-.0434	-.0439	-.1451	.0509	.1188	-.0283	821.
.3560	1550.	-4019.	-1115.	-784.	349.	1817.	-.0401	-.0414	-.1358	.0472	.1170	-.0340	807.
.3570	1350.	-3756.	-1023.	-700.	352.	1747.	-.0367	-.0389	-.1240	.0420	.1127	-.0393	768.
.3580	1079.	-3484.	-879.	-586.	344.	1629.	-.0330	-.0366	-.1100	.0355	.1062	-.0441	708.
.3590	761.	-3167.	-695.	-457.	322.	1429.	-.0290	-.0344	-.0941	.0278	.0976	-.0483	616.
.3600	416.	-2746.	-482.	-326.	289.	1121.	-.0242	-.0304	-.0765	.0192	.0870	-.0520	483.
.3610	50.	-2240.	-247.	-191.	244.	732.	-.0204	-.0264	-.0576	.0101	.0748	-.0550	319.
.3620	-336.	-1739.	3.	-42.	190.	331.	-.0159	-.0225	-.0380	.0008	.0514	-.0570	154.
.3630	-724.	-1311.	258.	125.	132.	-52.	-.0114	-.0265	-.0181	-.0081	.0472	-.0578	76.
.3640	-1084.	-937.	490.	295.	72.	-446.	-.0068	-.0245	.0015	-.0163	.0324	-.0576	217.
.3650	-1391.	-540.	711.	443.	15.	-900.	-.0022	-.0224	.0203	-.0236	.0176	-.0568	402.

ADLPIPE PAGE 1645 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.28.46.

S/RV PIPING KEWAUNEE GKM08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	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)
.3660	40	2	161					-1445.	-96.	-890.	559.	-37.	-1387.	.0022	-.0201	.0379	-.0295	.0033	-.0554	600.
.3670								-1868.	314.	1037.	647.	-79.	-1833.	.0062	-.0177	.0538	-.0339	-.0099	-.0534	781.
.3680								-2075.	586.	1154.	711.	-110.	-2188.	.0097	-.0150	.0677	-.0367	-.0216	-.0508	924.
.3690								-2261.	698.	1241.	744.	-131.	-2486.	.0124	-.0123	.0794	-.0376	-.0315	-.0479	1043.
.3700								-2425.	747.	1297.	739.	-141.	-2783.	.0144	-.0094	.0887	-.0369	-.0395	-.0454	1157.
.3710								-2580.	814.	1330.	698.	-142.	-3079.	.0155	-.0065	.0955	-.0346	-.0453	-.0434	1268.
.3720								-2749.	846.	1348.	631.	-133.	-3311.	.0157	-.0037	.1000	-.0308	-.0488	-.0420	1354.
.3730								-2941.	728.	1354.	540.	-110.	-3444.	.0148	-.0010	.1021	-.0257	-.0498	-.0409	1399.
.3740								-3139.	456.	1345.	413.	-75.	-3517.	.0132	.0015	.1019	-.0196	-.0484	-.0405	1422.
.3750								-3331.	193.	1321.	250.	-27.	-3591.	.0108	.0036	.0998	-.0129	-.0448	-.0410	1444.
.3760								-3513.	56.	1289.	69.	34.	-3663.	.0079	.0052	.0961	-.0058	-.0394	-.0423	1470.
.3770								-3682.	-47.	1250.	-104.	106.	-3688.	.0046	.0063	.0910	.0014	-.0325	-.0441	1481.
.3780								-3818.	-258.	1202.	-254.	189.	-3637.	.0012	.0067	.0848	.0086	-.0242	-.0461	1465.
.3790								-3896.	-518.	1140.	-388.	280.	-3552.	-.0019	.0065	.0777	.0154	-.0149	-.0481	1438.
.3800								-3901.	-629.	1059.	-523.	376.	-3504.	-.0048	.0058	.0702	.0214	-.0048	-.0505	1430.
.3810								-3833.	-556.	964.	-670.	473.	-3518.	-.0072	.0044	.0626	.0264	.0059	-.0532	1450.
.3820								-3715.	-418.	862.	-804.	568.	-3508.	-.0092	.0024	.0549	.0302	.0170	-.0557	1462.
.3830								-3558.	-381.	761.	-895.	656.	-3399.	-.0107	-.0002	.0476	.0329	.0284	-.0575	1435.
.3840								-3337.	-502.	652.	-943.	733.	-3257.	-.0114	-.0003	.0408	.0344	.0397	-.0586	1392.
.3850								-3031.	-601.	535.	-964.	796.	-3194.	-.0114	-.0068	.0346	.0347	.0504	-.0595	1376.
.3860								-2664.	-464.	415.	-960.	843.	-3213.	-.0108	-.0105	.0290	.0337	.0604	-.0603	1388.
.3870								-2280.	-146.	306.	-930.	877.	-3215.	-.0098	-.0141	.0242	.0315	.0701	-.0604	1388.
.3880								-1904.	106.	208.	-887.	899.	-3132.	-.0085	-.0174	.0199	.0283	.0796	-.0598	1355.
.3890								-1533.	226.	120.	-862.	911.	-3018.	-.0071	-.0203	.0162	.0240	.0889	-.0585	1312.
.3900								-1175.	470.	46.	-864.	913.	-2960.	-.0057	-.0227	.0129	.0188	.0977	-.0571	1291.
.3910								-858.	805.	0.	-875.	903.	-2965.	-.0045	-.0246	.0102	.0127	.1058	-.0559	1292.
.3920								-619.	1162.	-6.	-867.	883.	-2952.	-.0037	-.0259	.0080	.0061	.1132	-.0545	1284.
.3930								-474.	1218.	32.	-829.	858.	-2854.	-.0034	-.0264	.0062	-.0008	.1198	-.0527	1241.
.3940								-421.	1044.	105.	-784.	830.	-2696.	-.0036	-.0261	.0046	-.0078	.1258	-.0506	1175.
.3950								-440.	960.	206.	-764.	801.	-2558.	-.0044	-.0249	.0032	-.0149	.1312	-.0487	1119.
.3960								-516.	1089.	321.	-796.	774.	-2478.	-.0057	-.0227	.0018	-.0220	.1361	-.0472	1090.
.3970								-641.	1220.	446.	-869.	750.	-2399.	-.0074	-.0196	.0004	-.0289	.1404	-.0457	1067.
.3980								-820.	1131.	581.	-952.	731.	-2247.	-.0094	-.0158	-.0010	-.0354	.1442	-.0438	1022.
.3990								-1044.	859.	726.	-1019.	715.	-2033.	-.0116	-.0115	-.0023	-.0412	.1470	-.0415	956.
.4000								-1290.	602.	876.	-1066.	700.	-1834.	-.0139	-.0068	-.0033	-.0465	.1485	-.0392	896.

ADLPIPE PAGE 1646 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.28.46.

S/RV PIPING KEWAUNEE GKM08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

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

.3920	-219.	1182.	0.	-867.	858.	-2854.	-.0034	-.0264	.0062	-.0008	.1198	-.0527	1241.
.3930	-474.	1218.	32.	-829.	858.	-2854.	-.0034	-.0264	.0062	-.0008	.1198	-.0527	1241.
.3940	-421.	1044.	105.	-724.	830.	-2696.	-.0036	-.0261	.0046	-.0078	.1258	-.0506	1175.
.3950	-440.	960.	206.	-764.	801.	-2558.	-.0044	-.0249	.0032	-.0149	.1312	-.0487	1119.
.3960	-516.	1289.	321.	-796.	774.	-2478.	-.0057	-.0227	.0018	-.0220	.1361	-.0472	1090.
.3970	-641.	1220.	446.	-869.	750.	-2399.	-.0074	-.0196	.0004	-.0289	.1404	-.0457	1067.
.3980	-820.	1131.	581.	-952.	731.	-2247.	-.0094	-.0158	-.0010	-.0354	.1442	-.0438	1022.
.3990	-1044.	859.	726.	-1019.	715.	-2033.	-.0116	-.0115	-.0023	-.0412	.1470	-.0415	956.
.4000	-1290.	602.	876.	-1066.	700.	-1834.	-.0139	-.0068	-.0033	-.0465	.1485	-.0392	896.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/31/02. 18.28.46.

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

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

MAXIMUM VALUE OF STRESS OCCURS AT

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.1310	11.	-1245.	-349.	35.	642.	4499.	-.0015	.0618	-.0210	-.0047	.0339	-.0044	1824.

SECTION	41	MEMBER	1	SEQUENCE	161	LOCATION	BEG	TYPE	EL	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)	
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.	
.0010	0.	0.	0.	0.	0.	0.	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0020	1.	1.	-0.	0.	-0.	0.	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0030	2.	2.	-1.	0.	-1.	1.	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0040	3.	2.	-1.	1.	-1.	1.	-.0000	.0000	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	1.
.0050	3.	2.	-2.	1.	-1.	2.	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	1.
.0060	4.	2.	-2.	1.	-1.	2.	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	1.
.0070	4.	-0.	-2.	2.	-2.	3.	-.0000	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	2.
.0080	1.	-7.	-2.	3.	-5.	3.	-.0000	-.0000	.0000	-.0000	-.0000	-.0001	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0001	-.0000	-.0000	3.
.0090	-4.	-17.	1.	3.	-6.	5.	-.0000	-.0001	.0000	-.0000	-.0000	-.0001	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0001	-.0000	-.0000	3.
.0100	-7.	-25.	5.	1.	-2.	8.	.0000	-.0001	.0000	-.0000	-.0000	-.0001	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0001	-.0000	-.0000	3.
.0110	-3.	-28.	10.	-2.	12.	15.	.0000	-.0002	-.0000	.0000	.0000	.0001	-.0001	-.0001	-.0001	-.0000	-.0000	-.0000	-.0000	.0000	.0001	-.0001	-.0001	8.
.0120	1.	-32.	16.	-6.	36.	24.	.0001	-.0004	-.0000	.0001	.0001	.0005	-.0001	-.0001	-.0001	-.0000	-.0000	-.0000	-.0000	.0001	.0005	-.0001	-.0001	18.
.0130	-3.	-48.	26.	-9.	72.	32.	.0001	-.0005	-.0001	.0001	.0001	.0012	-.0001	-.0001	-.0001	-.0000	-.0000	-.0000	-.0000	.0001	.0012	-.0001	-.0001	32.
.0140	-14.	-75.	36.	-9.	117.	38.	.0000	-.0007	-.0002	.0002	.0002	.0021	-.0002	-.0002	-.0002	-.0000	-.0000	-.0000	-.0000	.0002	.0021	-.0002	-.0002	50.
.0150	-24.	-101.	43.	-5.	167.	46.	.0000	-.0009	-.0004	.0003	.0003	.0033	-.0002	-.0002	-.0002	-.0000	-.0000	-.0000	-.0000	.0003	.0033	-.0002	-.0002	70.
.0160	-26.	-118.	44.	3.	216.	56.	-.0001	-.0012	-.0006	.0004	.0004	.0044	-.0003	-.0003	-.0003	-.0000	-.0000	-.0000	-.0000	.0004	.0044	-.0003	-.0003	90.
.0170	-25.	-124.	45.	9.	257.	64.	-.0001	-.0015	-.0008	.0005	.0005	.0054	-.0004	-.0004	-.0004	-.0000	-.0000	-.0000	-.0000	.0005	.0054	-.0004	-.0004	106.
.0180	-26.	-126.	49.	10.	285.	68.	-.0003	-.0018	-.0012	.0007	.0007	.0062	-.0006	-.0006	-.0006	-.0000	-.0000	-.0000	-.0000	.0007	.0062	-.0006	-.0006	117.
.0190	-24.	-121.	56.	5.	304.	70.	-.0005	-.0021	-.0015	.0009	.0009	.0068	-.0007	-.0007	-.0007	-.0000	-.0000	-.0000	-.0000	.0009	.0068	-.0007	-.0007	125.
.0200	-5.	-91.	58.	-1.	319.	72.	-.0007	-.0022	-.0019	.0012	.0012	.0074	-.0009	-.0009	-.0009	-.0000	-.0000	-.0000	-.0000	.0012	.0074	-.0009	-.0009	131.
.0210	20.	-32.	55.	-10.	342.	61.	-.0009	-.0023	-.0025	.0015	.0015	.0082	-.0011	-.0011	-.0011	-.0000	-.0000	-.0000	-.0000	.0015	.0082	-.0011	-.0011	139.
.0220	35.	39.	62.	-29.	403.	30.	-.0013	-.0020	-.0030	.0020	.0020	.0099	-.0013	-.0013	-.0013	-.0000	-.0000	-.0000	-.0000	.0020	.0099	-.0013	-.0013	162.
.0230	40.	104.	56.	-34.	480.	-14.	-.0017	-.0015	-.0038	.0024	.0024	.0122	-.0014	-.0014	-.0014	-.0000	-.0000	-.0000	-.0000	.0024	.0122	-.0014	-.0014	193.
.0240	28.	139.	19.	-1.	525.	-68.	-.0021	-.0007	-.0045	.0027	.0027	.0143	-.0016	-.0016	-.0016	-.0000	-.0000	-.0000	-.0000	.0027	.0143	-.0016	-.0016	212.
.0250	-8.	133.	-44.	66.	503.	-128.	-.0025	.0002	-.0053	.0028	.0028	.0155	-.0017	-.0017	-.0017	-.0000	-.0000	-.0000	-.0000	.0028	.0155	-.0017	-.0017	210.
.0260	-30.	97.	-99.	125.	443.	-157.	-.0027	.0009	-.0060	.0029	.0029	.0156	-.0018	-.0018	-.0018	-.0000	-.0000	-.0000	-.0000	.0029	.0156	-.0018	-.0018	195.
.0270	2.	74.	-104.	126.	416.	-134.	-.0027	.0013	-.0064	.0031	.0031	.0154	-.0019	-.0019	-.0019	-.0000	-.0000	-.0000	-.0000	.0031	.0154	-.0019	-.0019	182.
.0280	70.	141.	-95.	94.	374.	-109.	-.0027	.0013	-.0066	.0032	.0032	.0144	-.0020	-.0020	-.0020	-.0000	-.0000	-.0000	-.0000	.0032	.0144	-.0020	-.0020	161.
.0290	124.	352.	-119.	65.	243.	-155.	-.0027	.0012	-.0064	.0031	.0031	.0117	-.0017	-.0017	-.0017	-.0000	-.0000	-.0000	-.0000	.0031	.0117	-.0017	-.0017	119.
.0300	128.	618.	-107.	-8.	128.	-268.	-.0029	.0015	-.0060	.0030	.0030	.0091	-.0010	-.0010	-.0010	-.0000	-.0000	-.0000	-.0000	.0030	.0091	-.0010	-.0010	119.
.0310	32.	711.	-31.	-110.	69.	-389.	-.0031	.0026	-.0054	.0030	.0030	.0073	-.0001	-.0001	-.0001	-.0000	-.0000	-.0000	-.0000	.0030	.0073	-.0001	-.0001	164.
.0320	-41.	581.	-7.	-121.	-6.	-403.	-.0029	.0041	-.0048	.0025	.0025	.0056	-.0007	-.0007	-.0007	-.0000	-.0000	-.0000	-.0000	.0025	.0056	-.0007	-.0007	169.

.0330	54.	415.	-112.	-6.	-92.	-277.	-.0024	.0057	-.0043	.0014	.0042	.0014	117.
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.0180	-26.	-126.	45.	10.	285.	68.	-.0003	-.0018	-.0012	.0007	.0062	-.0006	117.
.0190	-24.	-121.	56.	5.	304.	70.	-.0005	-.0021	-.0015	.0009	.0068	-.0007	125.
.0200	-5.	-91.	50.	-1.	319.	72.	-.0007	-.0022	-.0019	.0012	.0074	-.0009	131.
.0210	20.	-32.	55.	-10.	342.	61.	-.0009	-.0023	-.0025	.0015	.0082	-.0011	139.
.0220	35.	39.	62.	-20.	403.	30.	-.0013	-.0020	-.0030	.0020	.0099	-.0013	162.
.0230	40.	104.	56.	-34.	480.	-14.	-.0017	-.0015	-.0038	.0024	.0122	-.0014	193.
.0240	28.	139.	19.	-1.	525.	-68.	-.0021	-.0007	-.0045	.0027	.0143	-.0016	212.
.0250	-8.	133.	-44.	66.	503.	-128.	-.0025	.0002	-.0053	.0028	.0155	-.0017	210.
.0260	-30.	97.	-99.	125.	443.	-157.	-.0027	.0000	-.0060	.0029	.0156	-.0018	195.
.0270	2.	74.	-104.	126.	416.	-134.	-.0027	.0013	-.0064	.0031	.0154	-.0019	182.
.0280	70.	141.	-95.	94.	374.	-109.	-.0027	.0012	-.0066	.0032	.0144	-.0020	161.
.0290	124.	352.	-119.	65.	243.	-155.	-.0027	.0012	-.0064	.0031	.0117	-.0017	119.
.0300	128.	616.	-107.	-8.	128.	-268.	-.0029	.0015	-.0060	.0030	.0091	-.0010	119.
.0310	32.	711.	-31.	-110.	69.	-389.	-.0031	.0026	-.0054	.0030	.0073	-.0001	164.
.0320	-41.	581.	-7.	-121.	-6.	-403.	-.0029	.0041	-.0048	.0025	.0056	.0007	169.

.0330	54.	415.	-113.	-6.	-92.	-277.	-.0024	.0057	-.0043	.0014	.0042	.0014	117.
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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY COLD FKM24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	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)	
.0340	215.	399.	-271.	132.	-147.	-162.	-.0018	.0071	-.0035	.0001	.0035	.0024	103.	
.0350	204.	513.	-357.	192.	-217.	-232.	-.0014	.0085	-.0022	-.0013	.0022	.0040	149.	
.0360	12.	601.	-330.	151.	-340.	-419.	-.0013	.0099	-.0003	-.0027	-.0011	.0061	225.	
.0370	-111.	568.	-226.	41.	-440.	-482.	-.0008	.0109	.0021	-.0041	-.0052	.0077	262.	
.0380	-27.	460.	-122.	-76.	-461.	-336.	.0002	.0114	.0047	-.0055	-.0088	.0086	231.	
.0390	141.	395.	-103.	-11.	-480.	-143.	.0016	.0117	.0072	-.0071	-.0119	.0094	207.	
.0400	231.	434.	-183.	-66.	-558.	-72.	.0029	.0119	.0096	-.0091	-.0147	.0104	228.	
.0410	160.	446.	-231.	-23.	-590.	-131.	.0038	.0124	.0121	-.0111	-.0161	.0114	243.	
.0420	-76.	219.	-170.	-29.	-575.	-220.	.0046	.0130	.0147	-.0129	-.0169	.0120	247.	
.0430	-315.	-251.	-64.	-40.	-586.	-197.	.0057	.0131	.0173	-.0146	-.0187	.0118	249.	
.0440	-222.	-571.	-47.	-17.	-610.	38.	.0074	.0121	.0196	-.0164	-.0212	.0107	245.	
.0450	125.	-500.	-86.	-29.	-579.	311.	.0093	.0101	.0217	-.0177	-.0230	.0092	264.	
.0460	187.	-347.	-12.	-141.	-526.	326.	.0105	.0081	.0238	-.0185	-.0241	.0080	255.	
.0470	-209.	-540.	191.	-276.	-527.	129.	.0110	.0065	.0256	-.0188	-.0253	.0069	244.	
.0480	-535.	-1008.	339.	-305.	-531.	92.	.0114	.0046	.0268	-.0189	-.0258	.0048	249.	
.0490	-386.	-1333.	324.	-226.	-440.	370.	.0124	.0020	.0271	-.0186	-.0242	.0017	248.	
.0500	-70.	-1342.	253.	-150.	-281.	648.	.0134	-.0007	.0266	-.0174	-.0211	-.0012	290.	
.0510	-28.	-1233.	275.	-155.	-123.	659.	.0136	-.0030	.0257	-.0152	-.0174	-.0032	276.	
.0520	-198.	-1198.	376.	-209.	25.	525.	.0129	-.0047	.0244	-.0124	-.0134	-.0051	227.	
.0530	-339.	-1244.	473.	-250.	171.	436.	.0115	-.0058	.0226	-.0092	-.0090	-.0072	213.	
.0540	-447.	-1317.	540.	-261.	296.	381.	.0101	-.0064	.0201	-.0056	-.0045	-.0090	220.	
.0550	-478.	-1324.	537.	-217.	395.	359.	.0089	-.0066	.0169	-.0018	.0002	-.0103	231.	
.0560	-261.	-1172.	398.	-82.	480.	459.	.0079	-.0070	.0130	.0021	.0051	-.0116	269.	
.0570	27.	-946.	220.	74.	564.	575.	.0066	-.0074	.0089	.0058	.0101	-.0129	325.	
.0580	-59.	-817.	210.	111.	647.	435.	.0044	-.0073	.0050	.0097	.0147	-.0134	316.	
.0590	-430.	-672.	341.	23.	723.	65.	.0016	-.0067	.0014	.0138	.0188	-.0131	291.	
.0600	-478.	-227.	363.	-52.	795.	-190.	-.0007	-.0059	-.0022	.0177	.0224	-.0127	329.	
.0610	-94.	403.	211.	-38.	852.	-204.	-.0022	-.0046	-.0060	.0210	.0255	-.0127	352.	
.0620	155.	731.	82.	4.	873.	-215.	-.0036	-.0021	-.0095	.0238	.0281	-.0124	361.	
.0630	21.	651.	42.	56.	840.	-372.	-.0052	.0016	-.0125	.0257	.0300	-.0115	370.	
.0640	-98.	636.	-70.	161.	762.	-563.	-.0068	.0055	-.0149	.0265	.0313	-.0103	386.	
.0650	6.	1001.	-277.	271.	673.	-742.	-.0080	.0090	-.0165	.0261	.0316	-.0086	416.	
.0660	63.	1478.	-391.	264.	596.	-980.	-.0086	.0121	-.0169	.0250	.0305	-.0062	472.	
.0670	8.	1703.	-354.	148.	534.	-1165.	-.0088	.0150	-.0162	.0232	.0278	-.0035	518.	
.0680	98.	1653.	-310.	51.	492.	-1092.	-.0081	.0171	-.0144	.0202	.0243	-.0013	481.	
.0690	287.	1431.	-323.	26.	474.	-871.	-.0069	.0184	-.0118	.0161	.0209	.0007	398.	
.0700	267.	1293.	-332.	30.	461.	-788.	-.0055	.0191	-.0085	.0112	.0182	.0036	367.	
.0710	74.	1144.	-332.	46.	443.	-628.	-.0041	.0192	-.0045	.0058	.0156	.0072	377.	

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.0610	-94.	402.	211.	-28.	852.	-204.	-0022	-0046	-0060	.0210	.0255	-0127	329.
.0620	155.	731.	82.	4.	873.	-215.	-0036	-0021	-0095	.0238	.0281	-0124	361.
.0630	21.	651.	42.	56.	840.	-372.	-0052	.0016	-0125	.0257	.0300	-0115	370.
.0640	-98.	676.	-70.	161.	762.	-563.	-0068	.0055	-0149	.0265	.0313	-0103	386.
.0650	6.	1001.	-277.	271.	673.	-742.	-0080	.0090	-0165	.0261	.0316	-0086	416.
.0660	63.	1478.	-391.	264.	596.	-980.	-0086	.0121	-0169	.0250	.0305	-0062	472.
.0670	8.	1703.	-354.	148.	534.	-1160.	-0088	.0150	-0162	.0232	.0278	-0035	518.
.0680	98.	1653.	-310.	51.	492.	-1092.	-0081	.0171	-0144	.0202	.0243	-0013	481.
.0690	287.	1481.	-323.	26.	474.	-871.	-0069	.0184	-0118	.0161	.0209	.0007	398.
.0700	267.	1293.	-332.	30.	461.	-788.	-0055	.0191	-0085	.0112	.0182	.0036	367.
.0710	74.	1144.	-332.	46.	443.	-628.	-0041	.0192	-0045	.0058	.0156	.0072	377.

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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	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)	FX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
41	1	161					.0720	34.	964.	-349.	81.	438.	-710.	-0022	.0183	.0000	-0001	.0127	.0105	337.
							.0730	112.	560.	-307.	88.	435.	-373.	.0001	.0164	.0050	-0061	.0085	.0129	233.
							.0740	62.	-67.	-142.	24.	377.	-7.	.0025	.0139	.0102	-0119	.0026	.0151	152.
							.0750	-49.	-611.	44.	-70.	247.	294.	.0047	.0106	.0153	-0174	-0044	.0173	157.
							.0760	-27.	-887.	136.	-124.	87.	587.	.0069	.0066	.0198	-0225	-0110	.0189	243.
							.0770	10.	-1119.	184.	-135.	-69.	866.	.0086	.0021	.0234	-0270	-0164	.0197	353.
							.0780	-127.	-1547.	284.	-139.	-207.	1076.	.0098	-0023	.0261	-0306	-0203	.0197	443.
							.0790	-285.	-2017.	397.	-136.	-300.	1262.	.0105	-0063	.0275	-0328	-0223	.0186	523.
							.0800	-244.	-2235.	437.	-114.	-323.	1461.	.0108	-0101	.0274	-0337	-0221	.0164	602.
							.0810	-125.	-2199.	422.	-83.	-308.	1570.	.0107	-0131	.0259	-0330	-0198	.0135	643.
							.0820	-160.	-2123.	421.	-57.	-293.	1499.	.0097	-0151	.0230	-0307	-0161	.0101	613.
							.0830	-295.	-2091.	419.	-17.	-285.	1326.	.0080	-0160	.0187	-0271	-0112	.0061	544.
							.0840	-351.	-1992.	353.	64.	-297.	1150.	.0060	-0160	.0133	-0225	-0057	.0016	477.
							.0850	-328.	-1717.	228.	162.	-361.	935.	.0038	-0154	.0070	-0169	-0007	-0031	407.
							.0860	-313.	-1276.	109.	220.	-469.	626.	.0014	-0142	.0002	-0105	.0032	-0072	326.
							.0870	-301.	-767.	33.	223.	-569.	280.	-0011	-0124	-0068	-0034	.0066	-0111	270.
							.0880	-275.	-288.	-14.	199.	-635.	-49.	-0036	-0103	-0135	.0039	.0097	-0146	268.
							.0890	-301.	148.	-56.	182.	-674.	-403.	-0061	-0077	-0198	.0112	.0129	-0175	323.
							.0900	-394.	606.	-115.	183.	-687.	-820.	-0084	-0047	-0254	.0182	.0162	-0194	435.
							.0910	-458.	1100.	-212.	209.	-667.	-1224.	-0103	-0012	-0302	.0246	.0195	-0203	566.
							.0920	-452.	1504.	-323.	249.	-628.	-1525.	-0117	.0026	-0337	.0304	.0220	-0206	669.
							.0930	-469.	1692.	-373.	259.	-583.	-1737.	-0125	.0068	-0355	.0353	.0228	-0202	743.
							.0940	-569.	1738.	-330.	200.	-529.	-1933.	-0129	.0113	-0355	.0392	.0219	-0190	808.
							.0950	-702.	1826.	-237.	79.	-460.	-2157.	-0128	.0161	-0335	.0419	.0197	-0168	886.
							.0960	-808.	1989.	-157.	-54.	-378.	-2381.	-0122	.0212	-0296	.0432	.0166	-0137	968.
							.0970	-925.	2031.	-92.	-158.	-286.	-2554.	-0109	.0267	-0240	.0428	.0130	-0100	1033.
							.0980	-1075.	1791.	-33.	-213.	-178.	-2623.	-0089	.0327	-0167	.0407	.0094	-0060	1059.
							.0990	-1152.	1382.	-17.	-208.	-49.	-2552.	-0061	.0389	-0077	.0368	.0057	-0019	1028.
							.1000	-1051.	1065.	-80.	-160.	89.	-2360.	-0023	.0446	.0028	.0313	.0017	.0023	950.
							.1010	-831.	950.	-176.	-122.	219.	-2130.	.0021	.0494	.0148	.0243	-0031	.0069	861.
							.1020	-668.	902.	-202.	-158.	320.	-1930.	.0070	.0532	.0283	.0164	-0094	.0117	788.
							.1030	-589.	751.	-125.	-271.	373.	-1710.	.0124	.0560	.0431	.0077	-0176	.0165	711.
							.1040	-410.	477.	-33.	-384.	377.	-1316.	.0183	.0577	.0586	-0017	-0273	.0207	571.
							.1050	-143.	82.	41.	-461.	349.	-783.	.0249	.0582	.0744	-0115	-0374	.0244	384.
							.1060	18.	-467.	137.	-508.	314.	-192.	.0317	.0577	.0900	-0214	-0469	.0280	252.
							.1070	11.	-1180.	267.	-526.	298.	340.	.0384	.0565	.1050	-0311	-0547	.0314	278.
							.1080	139.	-1914.	309.	-443.	303.	1004.	.0449	.0537	.1190	-0407	-0608	.0338	457.
							.1090	573.	-2510.	225.	-258.	335.	1883.	.0514	.0483	.1316	-0498	-0656	.0349	774.

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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

.0990	-1152.	1382.	-17.	-208.	-49.	-2552.	-0061	.0389	-.0077	.0368	.0057	-.0019	1028.
.1000	-1051.	1065.	-80.	-160.	89.	-2360.	-.0023	.0446	.0028	.0313	.0017	.0023	950.
.1010	-831.	950.	-176.	-122.	219.	-2130.	.0021	.0494	.0148	.0243	-.0031	.0069	861.
.1020	-668.	902.	-202.	-152.	120.	-1930.	.0070	.0532	.0283	.0164	-.0094	.0117	788.
.1030	-586.	751.	-125.	-271.	372.	-1710.	.0124	.0560	.0431	.0077	-.0176	.0165	711.
.1040	-410.	477.	-33.	-384.	377.	-1316.	.0182	.0577	.0586	-.0017	-.0273	.0207	571.
.1050	-143.	82.	41.	-461.	349.	-763.	.0249	.0582	.0744	-.0115	-.0374	.0244	384.
.1060	18.	-467.	137.	-508.	314.	-192.	.0317	.0577	.0900	-.0214	-.0469	.0280	252.
.1070	11.	-1180.	267.	-526.	298.	340.	.0384	.0565	.1050	-.0311	-.0547	.0314	278.
.1080	139.	-1914.	309.	-443.	303.	1004.	.0449	.0537	.1190	-.0407	-.0608	.0338	457.
.1090	573.	-2510.	225.	-258.	335.	1883.	.0514	.0483	.1316	-.0498	-.0656	.0349	774.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.46.

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	41	MEMBER	1	SEQUENCE	161	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)		
.1100	134.	-3356.	592.	-385.	454.	2209.	.0563	.0431	.1431	-.0567	-.0585	.0370	918.		
.1110	-526.	-4183.	1097.	-633.	571.	2346.	.0601	.0383	.1527	-.0617	-.0706	.0390	1002.		
.1120	-354.	-4658.	1223.	-645.	625.	2942.	.0638	.0327	.1595	-.0658	-.0721	.0384	1234.		
.1130	3.	-5113.	1216.	-530.	658.	3626.	.0668	.0275	.1632	-.0685	-.0716	.0365	1494.		
.1140	-430.	-5891.	1432.	-506.	689.	3791.	.0680	.0240	.1641	-.0689	-.0683	.0354	1560.		
.1150	-1073.	-6569.	1633.	-456.	699.	3697.	.0677	.0210	.1620	-.0675	-.0629	.0341	1521.		
.1160	-916.	-6497.	1470.	-246.	709.	3843.	.0668	.0174	.1568	-.0650	-.0559	.0308	1571.		
.1170	-424.	-5777.	1212.	-95.	739.	3917.	.0648	.0141	.1489	-.0610	-.0480	.0268	1600.		
.1180	-873.	-5135.	1416.	-329.	783.	3237.	.0606	.0135	.1391	-.0544	-.0396	.0243	1343.		
.1190	-1664.	-4678.	1719.	-626.	715.	2294.	.0553	.0155	.1270	-.0466	-.0321	.0221	996.		
.1200	-1514.	-4035.	1500.	-542.	526.	1913.	.0505	.0182	.1123	-.0394	-.0248	.0174	825.		
.1210	-881.	-3208.	948.	-209.	315.	1757.	.0458	.0217	.0955	-.0326	-.0159	.0116	721.		
.1220	-1025.	-2433.	594.	-1.	76.	978.	.0400	.0269	.0780	-.0253	-.0065	.0080	393.		
.1230	-1597.	-1494.	414.	35.	-158.	-228.	.0333	.0327	.0607	-.0178	.0024	.0057	112.		
.1240	-1517.	-91.	96.	50.	-355.	-1135.	.0269	.0376	.0441	-.0112	.0095	.0024	478.		
.1250	-1090.	1421.	-180.	-53.	-470.	-1810.	.0209	.0423	.0288	-.0052	.0150	-.0014	751.		
.1260	-1251.	2429.	-107.	-379.	-499.	-2703.	.0151	.0481	.0154	.0004	.0199	-.0035	1113.		
.1270	-1631.	2944.	-37.	-600.	-543.	-3535.	.0101	.0542	.0035	.0043	.0244	-.0045	1455.		
.1280	-1261.	3412.	-431.	-404.	-578.	-3745.	.0066	.0585	-.0070	.0051	.0294	-.0064	1529.		
.1290	-617.	3843.	-1031.	-7.	-591.	-3682.	.0040	.0609	-.0151	.0031	.0342	-.0081	1496.		
.1300	-780.	3951.	-1243.	140.	-613.	-4027.	.0011	.0622	-.0199	-.0002	.0363	-.0071	1636.		
.1310	-1346.	3875.	-1066.	-35.	-642.	-4499.	-.0015	.0613	-.0210	-.0047	.0339	-.0044	1824.		
.1320	-1172.	3908.	-935.	-259.	-699.	-4334.	-.0024	.0583	-.0192	-.0109	.0263	-.0026	1765.		
.1330	-429.	3804.	-855.	-460.	-722.	-3571.	-.0016	.0524	-.0151	-.0187	.0162	-.0016	1474.		
.1340	-170.	3120.	-598.	-676.	-705.	-2863.	-.0005	.0456	-.0092	-.0272	.0068	.0007	1214.		
.1350	-351.	2067.	-356.	-740.	-671.	-2301.	.0004	.0382	-.0024	-.0366	-.0002	.0040	1007.		
.1360	-167.	1210.	-450.	-501.	-607.	-1528.	.0017	.0295	.0045	-.0471	-.0042	.0069	690.		
.1370	207.	536.	-664.	-168.	-545.	-670.	.0028	.0200	.0114	-.0574	-.0075	.0094	353.		
.1380	123.	-333.	-532.	-95.	-474.	-53.	.0034	.0113	.0185	-.0658	-.0117	.0125	195.		
.1390	-72.	-1307.	-154.	-244.	-430.	546.	.0038	.0032	.0251	-.0722	-.0176	.0155	296.		
.1400	380.	-1946.	42.	-333.	-428.	1493.	.0045	-.0049	.0301	-.0771	-.0241	.0166	637.		
.1410	1084.	-2227.	36.	-300.	-443.	2437.	.0047	-.0120	.0331	-.0805	-.0283	.0170	1001.		
.1420	1091.	-2479.	60.	-228.	-520.	2755.	.0031	-.0167	.0339	-.0818	-.0291	.0185	1129.		
.1430	646.	-2693.	49.	-75.	-630.	2624.	.0002	-.0189	.0321	-.0810	-.0264	.0205	1084.		
.1440	668.	-2626.	-206.	236.	-725.	2660.	-.0030	-.0196	.0279	-.0785	-.0214	.0210	1110.		
.1450	1118.	-2338.	-532.	537.	-755.	2879.	-.0060	-.0187	.0216	-.0737	-.0151	.0202	1214.		
.1460	1295.	-2013.	-614.	607.	-711.	2829.	-.0096	-.0157	.0139	-.0663	-.0081	.0198	1196.		
.1470	1178.	-1505.	-583.	549.	-685.	2425.	-.0139	-.0109	.0052	-.0569	-.0009	.0201	1035.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.46.

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

.1370	207.	536.	-664.	-168.	-545.	-670.	.028	.0200	.0114	-.0574	-.0075	.0094	353.
.1380	123.	-333.	-532.	-95.	-474.	-53.	.034	.0113	.0185	-.0658	-.0117	.0125	195.
.1390	-72.	-1307.	-154.	-244.	-430.	546.	.0038	.0032	.0251	-.0722	-.0176	.0155	296.
.1400	380.	-1946.	42.	-373.	-422.	1493.	.0045	-.0049	.0301	-.0771	-.0241	.0166	637.
.1410	1084.	-2227.	36.	-300.	-443.	2437.	.0047	-.0120	.0331	-.0805	-.0282	.0170	1001.
.1420	1091.	-2479.	60.	-228.	-520.	2755.	.0031	-.0167	.0339	-.0818	-.0291	.0185	1129.
.1430	646.	-2693.	49.	-75.	-630.	2624.	.0002	-.0189	.0321	-.0810	-.0264	.0205	1084.
.1440	668.	-2626.	-206.	236.	-725.	2660.	-.0030	-.0196	.0279	-.0785	-.0214	.0210	1110.
.1450	1118.	-2338.	-532.	537.	-755.	2879.	-.0060	-.0187	.0216	-.0737	-.0151	.0202	1214.
.1460	1295.	-2013.	-614.	607.	-711.	2829.	-.0096	-.0157	.0139	-.0667	-.0081	.0198	1196.
.1470	1178.	-1505.	-587.	549.	-685.	2425.	-.0139	-.0109	.0052	-.0569	-.0009	.0201	1035.

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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	41	MEMBER	1	SEQUENCE	161	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)		
.1480	1256.	-606.	-736.	581.	-676.	1950.	-.0184	-.0054	-.0046	-.0469	.0072	.0203	861.		
.1490	1373.	442.	-1032.	718.	-693.	1396.	-.0230	.0010	-.0149	-.0368	.0162	.0205	688.		
.1500	1123.	1276.	-1234.	819.	-737.	625.	-.0274	.0086	-.0251	-.0265	.0249	.0218	508.		
.1510	833.	1971.	-1353.	851.	-761.	-122.	-.0310	.0169	-.0346	-.0163	.0325	.0235	461.		
.1520	994.	2780.	-1541.	878.	-759.	-566.	-.0332	.0249	-.0430	-.0072	.0383	.0246	518.		
.1530	1273.	3614.	-1682.	835.	-699.	-920.	-.0344	.0326	-.0496	.0009	.0427	.0258	572.		
.1540	1035.	4205.	-1612.	666.	-611.	-1558.	-.0353	.0404	-.0540	.0075	.0465	.0282	723.		
.1550	476.	4567.	-1471.	494.	-502.	-2327.	-.0354	.0474	-.0563	.0123	.0501	.0312	976.		
.1560	232.	4840.	-1483.	460.	-345.	-2780.	-.0339	.0526	-.0564	.0146	.0538	.0334	1139.		
.1570	258.	4910.	-1580.	516.	-190.	-2883.	-.0305	.0558	-.0543	.0145	.0560	.0346	1178.		
.1580	116.	4624.	-1495.	462.	-29.	-2900.	-.0258	.0572	-.0496	.0128	.0560	.0354	1178.		
.1590	-159.	4128.	-1209.	256.	143.	-2866.	-.0203	.0568	-.0423	.0096	.0537	.0358	1156.		
.1600	-344.	3619.	-880.	5.	281.	-2708.	-.0140	.0543	-.0327	.0048	.0490	.0351	1092.		
.1610	-518.	3016.	-550.	-223.	377.	-2459.	-.0071	.0499	-.0214	-.0017	.0431	.0334	1002.		
.1620	-853.	2144.	-180.	-413.	468.	-2180.	.0001	.0439	-.0090	-.0092	.0374	.0310	910.		
.1630	-1183.	1041.	129.	-490.	517.	-1768.	.0076	.0368	.0038	-.0175	.0320	.0275	765.		
.1640	-1232.	-101.	298.	-440.	534.	-1101.	.0155	.0284	.0165	-.0263	.0268	.0226	522.		
.1650	-1173.	-1200.	453.	-388.	546.	-354.	.0230	.0194	.0292	-.0348	.0218	.0167	304.		
.1660	-1365.	-2250.	747.	-457.	533.	181.	.0293	.0109	.0414	-.0420	.0166	.0107	291.		
.1670	-1696.	-3164.	1128.	-616.	522.	536.	.0343	.0031	.0529	-.0472	.0119	.0048	389.		
.1680	-1921.	-3881.	1390.	-700.	499.	938.	.0386	-.0038	.0628	-.0521	.0082	-.0015	510.		
.1690	-1698.	-4472.	1470.	-635.	475.	1437.	.0421	-.0096	.0706	-.0549	.0062	-.0082	659.		
.1700	-1593.	-5001.	1448.	-470.	440.	1849.	.0445	-.0136	.0764	-.0560	.0060	-.0144	786.		
.1710	-1614.	-5382.	1382.	-279.	379.	2045.	.0456	-.0155	.0802	-.0553	.0069	-.0196	842.		
.1720	-1599.	-5462.	1295.	-134.	353.	2090.	.0455	-.0155	.0823	-.0526	.0086	-.0239	852.		
.1730	-1518.	-5243.	1210.	-62.	339.	2011.	.0444	-.0136	.0829	-.0480	.0101	-.0273	819.		
.1740	-1453.	-4847.	1165.	-74.	340.	1800.	.0425	-.0100	.0822	-.0417	.0111	-.0294	736.		
.1750	-1374.	-4366.	1110.	-101.	354.	1523.	.0403	-.0047	.0803	-.0342	.0117	-.0305	629.		
.1760	-1186.	-3817.	936.	-37.	337.	1257.	.0380	.0016	.0773	-.0261	.0117	-.0306	523.		
.1770	-933.	-3196.	659.	105.	298.	978.	.0357	.0085	.0736	-.0177	.0112	-.0297	412.		
.1780	-808.	-2527.	400.	222.	224.	560.	.0331	.0159	.0697	-.0090	.0092	-.0275	258.		
.1790	-811.	-1810.	256.	212.	144.	27.	.0305	.0234	.0663	-.0001	.0051	-.0241	103.		
.1800	-739.	-1051.	202.	79.	71.	-446.	.0283	.0305	.0635	.0090	-.0014	-.0201	184.		
.1810	-530.	-346.	193.	-112.	-10.	-760.	.0268	.0367	.0615	.0176	-.0102	-.0158	308.		
.1820	-315.	180.	237.	-323.	-47.	-960.	.0257	.0419	.0603	.0257	-.0194	-.0112	407.		
.1830	-208.	506.	284.	-479.	-60.	-1128.	.0250	.0462	.0597	.0326	-.0282	-.0063	492.		
.1840	-141.	722.	261.	-524.	-68.	-1248.	.0245	.0490	.0598	.0382	-.0361	-.0012	544.		
.1850	-76.	849.	204.	-503.	-68.	-1287.	.0242	.0503	.0605	.0425	-.0434	.0038	555.		

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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