

50-305

RESPONSE TO NUREG-0737 ITEM II.D.1

Docket # *50-305*

Control # *8403280048*

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

Y	1	12	-0.430E+04	-0.497E+04	-0.523E+04	-0.430E+04	-0.109E+04	0.160E+04
Y	7	18	0.115E+04	0.306E+04	-0.308E+04	-0.491E+04	-0.162E+05	-0.119E+05
Y	13	24	-0.126E+05	-0.145E+05	-0.113E+05	-0.474E+04	-0.107E+05	-0.587E+04
Y	19	30	-0.197E+04	-0.214E+02	0.203E+04	0.419E+04	0.482E+04	0.646E+04
Y	25	36	0.156E+05	0.151E+05	0.131E+05	0.107E+05	0.698E+04	0.264E+04
Y	31	42	-0.978E+03	0.161E+05	-0.223E+04	-0.590E+04	-0.376E+04	-0.685E+04
Y	37	48	-0.933E+04	-0.960E+04	-0.662E+04	-0.614E+04	-0.613E+04	-0.557E+04
Y	43	54	-0.431E+04	-0.310E+04	-0.217E+04	-0.154E+04	-0.133E+04	-0.142E+04
Y	49	60	-0.126E+04	0.223E+04	0.106E+04	0.216E+03	0.410E+04	0.628E+04
Y	55	66	0.474E+04	0.222E+04	0.211E+03	-0.177E+04	-0.341E+04	-0.357E+04
Y	61							

ADLPIPE PAGE 15

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.40.29.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

Y	67	72	-0.248E+04	0.742E+02	0.143E+04	0.315E+04	0.195E+04	0.164E+04
Y	73	78	0.163E+04	0.307E+03	0.188E+03	-0.333E+02	-0.317E+03	-0.242E+03
Y	79	84	-0.692E+03	-0.114E+04	-0.519E+03	0.156E+04	0.297E+04	0.269E+04
Y	85	90	0.974E+03	0.180E+04	0.168E+04	-0.768E+01	-0.955E+03	-0.887E+03
Y	91	96	-0.927E+03	-0.134E+04	-0.152E+04	-0.137E+04	-0.650E+04	-0.235E+05
Y	97	102	-0.195E+04	-0.575E+04	-0.602E+04	-0.555E+04	-0.491E+04	-0.299E+04
Y	103	108	-0.333E+04	-0.343E+04	0.511E+04	0.648E+04	-0.181E+04	-0.559E+02
Y	109	114	0.167E+04	0.415E+04	0.585E+04	0.266E+04	-0.166E+04	0.324E+03
Y	115	120	0.322E+04	0.373E+04	0.200E+04	0.530E+03	0.305E+03	0.156E+04
Y	121	126	0.195E+04	0.254E+04	0.156E+04	0.257E+04	0.209E+04	0.141E+04
Y	127	132	0.162E+04	0.861E+03	0.124E+04	0.784E+03	0.103E+04	0.155E+03
Y	133	138	0.945E+03	0.874E+03	0.152E+04	0.891E+03	0.128E+04	0.170E+04
Y	139	144	0.153E+04	0.119E+04	-0.142E+04	-0.942E+03	0.348E+03	0.535E+03
Y	145	150	0.577E+03	0.851E+03	0.974E+03	0.148E+04	0.124E+04	0.129E+04
Y	151	156	0.123E+04	0.129E+04	0.129E+04	0.141E+04	0.179E+04	0.156E+04
Y	157	162	0.148E+04	0.146E+04	0.147E+04	0.151E+04	0.157E+04	0.187E+04
Y	163	168	0.201E+04	0.153E+04	0.123E+04	0.110E+04	0.952E+03	0.778E+03
Y	169	174	0.120E+04	0.858E+03	0.690E+03	0.511E+03	-0.672E+02	-0.178E+03
Y	175	180	-0.607E+03	-0.260E+03	0.214E+03	0.187E+03	0.990E+02	0.115E+03
Y	181	186	0.128E+03	0.406E+02	-0.359E+02	-0.775E+02	-0.261E+02	-0.988E+02
Y	187	192	0.116E+03	0.594E+02	-0.165E+03	-0.479E+03	-0.692E+03	-0.348E+03
Y	193	198	-0.208E+03	-0.964E+02	0.345E+01	0.237E+02	0.398E+02	0.399E+02
Y	199	204	0.141E+02	-0.104E+02	0.169E+02	0.126E+03	0.722E+02	0.141E+02
Y	205	210	-0.726E+02	-0.999E+02	-0.868E+02	-0.589E+02	-0.239E+02	-0.665E+01
Y	211	216	-0.341E+01	-0.200E+01	0.336E+01	0.150E+02	0.229E+02	0.274E+02
Y	217	222	0.259E+02	0.237E+02	0.202E+02	0.173E+02	0.150E+02	0.129E+02
Y	223	228	0.103E+02	0.722E+01	0.442E+01	0.300E+01	0.693E+00	-0.798E+00
Y	229	234	-0.325E+01	-0.425E+01	-0.487E+01	-0.663E+01	-0.556E+01	-0.275E+02
Y	235	240	0.476E+01	-0.317E+02	0.811E+01	-0.320E+02	0.153E+02	-0.267E+02
Y	241	246	0.685E+01	-0.125E+02	-0.309E+02	0.264E+02	-0.256E+02	0.410E+01
Y	247	252	-0.385E+01	-0.235E+02	0.127E+02	0.621E+01	-0.203E+02	-0.169E+02
Y	253	258	0.226E+02	-0.621E+01	-0.148E+02	-0.114E+02	-0.110E+02	-0.544E+01
Y	259	264	0.249E+01	0.634E+01	0.806E+01	0.416E+01	0.743E+00	0.184E+01
Y	265	270	-0.116E+00	0.143E+01	0.596E+00	0.645E+00	0.190E+00	-0.106E+01
Y	271	276	-0.723E+00	-0.691E+00	0.140E+00	0.392E+00	-0.259E+00	-0.100E+01
Y	277	282	-0.797E+00	-0.181E+00	-0.113E+01	-0.286E+00	0.104E+01	-0.208E+00
Y	283	288	-0.499E+00	-0.324E+00	-0.112E+01	0.607E+00	0.123E+00	-0.300E+00
Y	289	294	-0.373E+00	-0.893E-01	-0.105E+01	0.325E+00	-0.644E-01	-0.139E+01
Y	295	300	-0.211E+00	-0.115E+01	-0.816E-01	0.209E+00	-0.646E+00	-0.527E+00
Y	301	306	-0.639E+00	0.633E-01	-0.446E+00	-0.768E+00	-0.868E-01	-0.168E+01
Y	307	312	-0.730E+00	-0.669E+00	0.366E+00	0.201E+00	-0.504E+00	-0.118E+01
Y	313	318	-0.107E+01	-0.950E+00	0.629E+00	-0.687E+00	-0.658E+00	0.244E+00
Y	319	324	-0.588E+00	-0.152E+01	-0.151E+01	-0.391E+00	0.238E+00	-0.104E+01
Y	325	330	-0.120E+01	-0.177E+01	-0.106E+01	-0.329E+01	-0.189E+01	0.104E+01
Y	331	336	0.452E+01	0.522E+01	0.256E+01	-0.269E+01	-0.495E+01	-0.420E+01
Y	337	342	-0.145E+01	-0.108E+00	0.113E+00	-0.338E+00	-0.161E+01	-0.347E+00
Y	343	348	0.110E+00	-0.130E+01	-0.544E+00	-0.317E+00	-0.161E+00	-0.345E+00
Y	349	354	-0.742E+00	0.153E+00	-0.127E+01	-0.150E+00	-0.125E+01	-0.482E+00
Y	355	360	-0.525E+00	-0.139E+00	-0.762E+00	-0.266E+00	-0.293E+00	-0.431E+00
Y	361	366	-0.694E+00	-0.602E+00	-0.651E+00	0.348E-01	-0.875E+00	-0.562E+00
Y	367	372	-0.688E+00	-0.106E+01	-0.981E+00	0.189E+00	-0.221E+00	-0.109E+01
Y	373	378	-0.714E+00	-0.407E+00	-0.755E+00	0.280E+00	-0.129E+01	-0.545E+00

ADLPIPE PAGE 16

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.40.29.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

Y	379	384	-0.193E+00	-0.999E+00	0.231E-01	-0.600E+00	-0.731E+00	-0.654E+00
Y	385	390	-0.369E+00	-0.623E+00	-0.885E+00	-0.473E+00	-0.102E+00	-0.711E+00
Y	391	393	0.257E-01	0.533E+02	0.112E+03	*	*	*
THLE	70	10	-1.	*	*	*	*	*
Y	1	6	0.000E+00	0.176E+02	0.155E+00	-0.127E+01	0.118E+02	0.458E+01
Y	7	12	-0.103E+02	-0.118E+02	-0.131E+02	-0.140E+02	-0.202E+02	-0.343E+02
Y	13	18	-0.669E+02	-0.934E+02	-0.153E+03	-0.262E+03	-0.450E+03	-0.759E+03
Y	19	24	-0.126E+04	-0.192E+04	-0.262E+04	-0.720E+04	-0.965E+04	-0.109E+05
Y	25	30	-0.117E+05	-0.119E+05	-0.121E+05	-0.124E+05	-0.124E+05	-0.121E+05
Y	31	36	-0.115E+05	-0.937E+04	-0.527E+04	-0.207E+04	-0.107E+04	-0.527E+04

Y	319	324	-0.568E+00	-0.152E+01	-0.151E+01	-0.391E+00	0.238E+00	-0.104E+01
Y	325	320	-0.120E+01	-0.177E+01	-0.106E+01	-0.329E+01	-0.189E+01	0.104E+01
Y	371	336	0.452E+01	0.527E+01	0.256E+01	-0.269E+01	-0.495E+01	-0.420E+01
Y	377	342	-0.145E+01	-0.108E+00	0.113E+00	-0.338E+00	-0.161E+01	-0.347E+00
Y	343	348	0.110E+00	-0.130E+01	-0.544E+00	-0.317E+00	-0.161E+00	-0.345E+00
Y	349	354	-0.742E+00	0.153E+00	-0.127E+01	-0.150E+00	-0.125E+01	-0.482E+00
Y	355	360	-0.570E+00	-0.139E+00	-0.762E+00	-0.266E+00	-0.293E+00	-0.431E+00
Y	361	366	-0.694E+00	-0.602E+00	-0.651E+00	0.348E-01	-0.875E+00	-0.562E+00
Y	367	372	-0.688E+00	-0.106E+01	-0.981E+00	0.189E+00	-0.221E+00	-0.109E+01
Y	373	378	-0.714E+00	-0.407E+00	-0.755E+00	0.280E+00	-0.129E+01	-0.545E+00

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

Y	379	384	-0.193E+00	-0.999E+00	0.231E-01	-0.600E+00	-0.731E+00	-0.654E+00
Y	385	390	-0.369E+00	-0.623E+00	-0.885E+00	-0.473E+00	-0.102E+00	-0.711E+00
Y	391	393	0.257E-01	0.533E+02	0.112E+03	*	*	*
TABLE	70	10	-1.	*	*	*	*	*
Y	1	6	0.000E+00	0.176E+02	0.155E+00	-0.127E+01	0.118E+02	0.458E+01
Y	7	12	-0.103E+02	-0.118E+02	-0.131E+02	-0.140E+02	-0.202E+02	-0.343E+02
Y	13	18	-0.669E+02	-0.934E+02	-0.153E+03	-0.262E+03	-0.450E+03	-0.759E+03
Y	19	24	-0.126E+04	-0.192E+04	-0.262E+04	-0.780E+04	-0.965E+04	-0.109E+05
Y	25	30	-0.117E+05	-0.119E+05	-0.121E+05	-0.124E+05	-0.124E+05	-0.121E+05
Y	31	36	-0.114E+05	-0.933E+04	-0.846E+04	-0.632E+04	-0.361E+04	-0.717E+03
Y	37	42	0.171E+04	-0.213E+04	0.956E+04	0.748E+04	0.176E+05	-0.618E+04
Y	43	48	0.492E+04	0.699E+04	0.146E+03	0.729E+04	-0.104E+04	0.320E+03
Y	49	54	0.386E+03	-0.200E+03	-0.994E+02	-0.157E+03	-0.205E+03	-0.253E+03
Y	55	60	0.484E+03	-0.106E+04	0.222E+04	-0.311E+03	-0.178E+04	0.156E+04
Y	61	66	0.108E+04	0.897E+03	0.823E+03	0.666E+03	0.442E+03	0.918E+02
Y	67	72	-0.313E+03	-0.576E+03	-0.549E+03	-0.136E+03	-0.502E+03	-0.132E+04
Y	73	78	-0.207E+04	-0.240E+04	-0.222E+04	-0.185E+04	-0.164E+04	-0.180E+04
Y	79	84	-0.205E+04	-0.196E+04	-0.831E+03	-0.654E+03	-0.393E+03	0.124E+04
Y	85	90	0.371E+04	0.585E+04	0.779E+04	0.876E+04	0.842E+04	0.704E+04
Y	91	96	0.525E+04	0.358E+04	0.186E+04	0.129E+04	0.109E+04	0.713E+03
Y	97	102	0.715E+03	0.386E+03	-0.843E+02	-0.375E+03	-0.637E+03	-0.594E+03
Y	103	108	-0.673E+03	-0.728E+03	-0.656E+03	-0.773E+03	-0.522E+03	0.100E+03
Y	109	114	-0.109E+04	-0.552E+03	-0.767E+03	-0.835E+03	-0.139E+04	-0.191E+04
Y	115	120	-0.213E+04	-0.200E+04	-0.176E+04	-0.164E+04	-0.166E+04	-0.167E+04
Y	121	126	-0.165E+04	-0.164E+04	-0.162E+04	-0.159E+04	-0.151E+04	-0.144E+04
Y	127	132	-0.120E+04	-0.879E+03	-0.648E+03	-0.490E+03	-0.240E+03	-0.360E+02
Y	133	138	0.888E+02	0.153E+03	0.168E+03	0.179E+03	-0.873E+02	0.260E+02
Y	139	144	-0.253E+03	-0.403E+03	-0.629E+03	-0.606E+03	-0.554E+03	-0.436E+03
Y	145	150	-0.333E+03	-0.288E+03	-0.299E+03	-0.349E+03	-0.416E+03	-0.486E+03
Y	151	156	-0.561E+03	-0.808E+03	-0.109E+04	-0.125E+04	-0.137E+04	-0.140E+04
Y	157	162	-0.134E+04	-0.122E+04	-0.107E+04	-0.857E+03	-0.604E+03	-0.316E+03
Y	163	168	-0.358E+02	0.194E+03	0.401E+03	0.611E+03	0.870E+03	0.105E+04
Y	169	174	0.119E+04	0.139E+04	0.147E+04	0.142E+04	0.128E+04	0.109E+04
Y	175	180	0.780E+03	0.529E+03	0.410E+03	0.302E+03	0.243E+03	0.273E+03
Y	181	186	0.323E+03	0.374E+03	0.405E+03	0.400E+03	0.637E+03	0.894E+03
Y	187	192	-0.236E+03	0.740E+03	0.175E+03	0.141E+03	0.985E+02	0.993E+02
Y	193	198	0.379E+03	0.534E+03	0.835E+03	0.113E+04	0.117E+04	0.109E+04
Y	199	204	0.102E+04	0.957E+03	0.874E+03	0.777E+03	0.699E+03	0.522E+03
Y	205	210	0.435E+03	0.363E+03	0.288E+03	0.241E+03	0.218E+03	0.203E+03
Y	211	216	0.188E+03	0.172E+03	0.164E+03	0.166E+03	0.163E+03	0.141E+03
Y	217	222	0.101E+03	0.584E+02	0.316E+02	0.270E+02	0.380E+02	0.531E+02
Y	223	228	0.644E+02	0.701E+02	0.704E+02	0.678E+02	0.637E+02	0.588E+02
Y	229	234	0.539E+02	0.495E+02	0.458E+02	0.428E+02	0.397E+02	0.358E+02
Y	235	240	0.335E+02	0.365E+02	0.286E+02	0.325E+02	0.254E+02	0.300E+02
Y	241	246	0.171E+02	0.340E+02	0.137E+02	0.225E+02	0.252E+02	0.908E+01
Y	247	252	0.289E+02	0.127E+02	0.112E+02	0.301E+02	0.953E+01	0.630E+01
Y	253	258	0.160E+02	0.248E+02	0.206E+01	0.704E+01	0.115E+02	0.100E+02
Y	259	264	0.982E+01	0.951E+01	0.935E+01	0.934E+01	0.845E+01	0.689E+01
Y	265	270	0.984E+01	0.599E+01	0.710E+01	0.634E+01	0.576E+01	0.563E+01
Y	271	276	0.519E+01	0.455E+01	0.464E+01	0.335E+01	-0.103E+01	0.550E+01
Y	277	282	0.452E+01	0.243E+01	0.303E+01	0.309E+01	0.384E+01	0.390E+01
Y	283	288	0.373E+01	0.398E+01	0.430E+01	0.442E+01	0.505E+01	0.484E+01

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

Y	289	294	0.478E+01	0.513E+01	0.485E+01	0.432E+01	0.451E+01	0.343E+01
Y	295	300	0.296E+01	0.238E+01	0.150E+01	0.119E+01	-0.245E-01	-0.775E+00
Y	301	306	-0.125E+01	-0.185E+01	-0.196E+01	-0.259E+01	-0.252E+01	-0.274E+01
Y	307	312	-0.301E+01	-0.247E+01	-0.223E+01	-0.173E+01	-0.175E+01	-0.200E+01
Y	313	318	-0.155E+01	-0.122E+01	-0.114E+01	-0.681E+00	-0.109E+01	-0.414E+00
Y	319	324	-0.118E+00	-0.326E+00	-0.225E+00	0.278E+00	0.102E+01	0.699E+00
Y	325	330	0.418E+01	-0.241E+01	0.787E+00	-0.205E+00	0.200E+01	0.283E+01
Y	331	336	0.174E+01	0.140E+01	0.228E+01	0.306E+01	0.270E+01	0.260E+01
Y	337	342	0.263E+01	0.253E+01	0.220E+01	0.109E+01	-0.260E+00	-0.191E+01
Y	343	348	-0.351E+01	-0.377E+01	-0.794E+01	-0.267E+01	-0.979E+01	-0.984E+01



Y	229	234	0.539E+02	0.495E+02	0.458E+02	0.426E+02	0.397E+02	0.358E+02
Y	235	240	0.335E+02	0.365E+02	0.286E+02	0.325E+02	0.254E+02	0.300E+02
Y	241	246	0.171E+02	0.340E+02	0.137E+02	0.225E+02	0.252E+02	0.901E+01
Y	247	252	0.209E+02	0.127E+02	0.112E+02	0.301E+02	0.953E+01	0.630E+01
Y	253	258	0.160E+02	0.248E+02	0.206E+01	0.704E+01	0.115E+02	0.100E+02
Y	259	264	0.912E+01	0.951E+01	0.935E+01	0.934E+01	0.845E+01	0.685E+01
Y	265	270	0.984E+01	0.599E+01	0.710E+01	0.634E+01	0.576E+01	0.563E+01
Y	271	276	0.519E+01	0.455E+01	0.464E+01	0.335E+01	0.103E+01	0.550E+01
Y	277	282	0.452E+01	0.243E+01	0.303E+01	0.309E+01	0.304E+01	0.390E+01
Y	283	288	0.373E+01	0.398E+01	0.430E+01	0.442E+01	0.505E+01	0.484E+01

ADLPIPE PAGE 17

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.40.29.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

Y	289	294	0.478E+01	0.513E+01	0.485E+01	0.432E+01	0.451E+01	0.343E+01
Y	295	300	0.296E+01	0.238E+01	0.150E+01	0.119E+01	-0.245E-01	-0.775E+00
Y	301	306	-0.125E+01	-0.185E+01	-0.196E+01	-0.259E+01	-0.252E+01	-0.274E+01
Y	307	312	-0.301E+01	-0.247E+01	-0.223E+01	-0.173E+01	-0.175E+01	-0.200E+01
Y	313	318	-0.155E+01	-0.122E+01	-0.114E+01	-0.681E+00	-0.109E+01	-0.414E+00
Y	319	324	-0.118E+00	-0.326E+00	-0.225E+00	0.278E+00	0.102E+01	0.699E+00
Y	325	330	0.418E+01	0.241E+01	0.787E+00	-0.205E+00	0.200E+01	0.283E+01
Y	331	336	0.174E+01	0.140E+01	0.228E+01	0.306E+01	0.270E+01	0.260E+01
Y	337	342	0.263E+01	0.253E+01	0.220E+01	0.109E+01	-0.260E+00	-0.191E+01
Y	343	348	-0.351E+01	-0.577E+01	-0.794E+01	-0.867E+01	-0.979E+01	-0.984E+01
Y	349	354	-0.971E+01	-0.907E+01	-0.789E+01	-0.692E+01	-0.530E+01	-0.430E+01
Y	355	360	-0.283E+01	-0.171E+01	-0.488E+00	0.495E-01	0.973E+00	0.159E+01
Y	361	366	0.188E+01	0.227E+01	0.238E+01	0.259E+01	0.267E+01	0.219E+01
Y	367	372	0.250E+01	0.199E+01	0.179E+01	0.208E+01	0.210E+01	0.176E+01
Y	373	378	0.195E+01	0.248E+01	0.281E+01	0.292E+01	0.323E+01	0.294E+01
Y	379	384	0.310E+01	0.229E+01	0.194E+01	0.111E+01	-0.481E-01	-0.932E+00
Y	385	390	-0.142E+01	-0.165E+01	-0.197E+01	-0.204E+01	-0.166E+01	-0.185E+01
Y	391	393	0.200E+03	0.531E+03	0.326E+03	*	*	*
Y	80	10	-1.	*	*	*	*	*
Y	1	6	0.000E+00	-0.196E+01	-0.315E+01	-0.103E+02	-0.190E+02	-0.112E+02
Y	7	12	-0.290E+01	-0.620E+01	-0.723E+01	-0.744E+01	-0.113E+02	-0.148E+02
Y	13	18	-0.197E+02	-0.180E+02	-0.200E+02	-0.220E+02	-0.236E+02	-0.252E+02
Y	19	24	-0.279E+02	-0.318E+02	-0.289E+02	-0.510E+02	-0.567E+02	-0.641E+02
Y	25	30	-0.728E+02	-0.833E+02	-0.972E+02	-0.112E+03	-0.123E+03	-0.126E+03
Y	31	36	-0.125E+03	-0.109E+03	-0.130E+03	-0.139E+03	-0.145E+03	-0.152E+03
Y	37	42	-0.180E+03	-0.141E+03	-0.181E+03	-0.226E+03	-0.183E+03	-0.226E+03
Y	43	48	-0.260E+03	-0.313E+03	-0.387E+03	-0.478E+03	-0.576E+03	-0.664E+03
Y	49	54	-0.733E+03	-0.788E+03	-0.832E+03	-0.870E+03	-0.906E+03	-0.947E+03
Y	55	60	-0.994E+03	-0.105E+04	-0.111E+04	-0.115E+04	-0.116E+04	-0.113E+04
Y	61	66	-0.107E+04	-0.998E+03	-0.928E+03	-0.864E+03	-0.804E+03	-0.748E+03
Y	67	72	-0.701E+03	-0.665E+03	-0.639E+03	-0.624E+03	-0.619E+03	-0.621E+03
Y	73	78	-0.629E+03	-0.646E+03	-0.675E+03	-0.713E+03	-0.773E+03	-0.883E+03
Y	79	84	-0.108E+04	-0.139E+04	-0.189E+04	-0.266E+04	-0.378E+04	-0.537E+04
Y	85	90	-0.741E+04	-0.968E+04	-0.117E+05	-0.127E+05	-0.124E+05	-0.111E+05
Y	91	96	-0.936E+04	-0.764E+04	-0.604E+04	-0.458E+04	-0.168E+05	0.151E+04
Y	97	102	-0.252E+04	-0.186E+04	-0.169E+04	-0.207E+04	-0.258E+04	-0.795E+04
Y	103	108	-0.326E+04	-0.200E+04	-0.351E+04	-0.348E+04	-0.337E+04	-0.328E+04
Y	109	114	-0.318E+04	-0.310E+04	-0.303E+04	-0.297E+04	-0.293E+04	-0.290E+04
Y	115	120	-0.289E+04	-0.282E+04	-0.281E+04	-0.274E+04	-0.269E+04	-0.262E+04
Y	121	126	-0.256E+04	-0.252E+04	-0.248E+04	-0.246E+04	-0.247E+04	-0.248E+04
Y	127	132	-0.253E+04	-0.260E+04	-0.268E+04	-0.281E+04	-0.298E+04	-0.312E+04
Y	133	138	-0.321E+04	-0.323E+04	-0.322E+04	-0.307E+04	-0.315E+04	-0.287E+04
Y	139	144	-0.293E+04	-0.257E+04	-0.231E+04	-0.221E+04	-0.222E+04	-0.231E+04
Y	145	150	-0.246E+04	-0.261E+04	-0.274E+04	-0.287E+04	-0.301E+04	-0.311E+04
Y	151	156	-0.318E+04	-0.320E+04	-0.317E+04	-0.309E+04	-0.303E+04	-0.300E+04
Y	157	162	-0.302E+04	-0.312E+04	-0.327E+04	-0.346E+04	-0.368E+04	-0.390E+04
Y	163	168	-0.411E+04	-0.433E+04	-0.450E+04	-0.463E+04	-0.467E+04	-0.488E+04
Y	169	174	-0.488E+04	-0.478E+04	-0.464E+04	-0.449E+04	-0.433E+04	-0.412E+04
Y	175	180	-0.387E+04	-0.358E+04	-0.329E+04	-0.301E+04	-0.278E+04	-0.258E+04
Y	181	186	-0.237E+04	-0.214E+04	-0.186E+04	-0.152E+04	-0.109E+04	-0.546E+03
Y	187	192	0.151E+03	0.952E+03	0.160E+04	0.205E+04	0.299E+04	0.477E+04
Y	193	198	0.685E+04	0.791E+04	0.845E+04	0.822E+04	0.772E+04	0.701E+04

ADLPIPE PAGE 18

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.40.29.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

Y	199	204	0.614E+04	0.521E+04	0.430E+04	0.349E+04	0.273E+04	0.214E+04
Y	205	210	0.162E+04	0.118E+04	0.848E+03	0.608E+03	0.469E+03	0.413E+03
Y	211	216	0.457E+03	0.524E+03	0.544E+03	0.574E+03	0.614E+03	0.660E+03
Y	217	222	0.718E+03	0.781E+03	0.848E+03	0.926E+03	0.102E+04	0.114E+04
Y	223	228	0.127E+04	0.142E+04	0.156E+04	0.170E+04	0.183E+04	0.193E+04
Y	229	234	0.202E+04	0.210E+04	0.215E+04	0.219E+04	0.222E+04	0.225E+04
Y	235	240	0.227E+04	0.230E+04	0.234E+04	0.240E+04	0.248E+04	0.258E+04
Y	241	246	0.271E+04	0.286E+04	0.304E+04	0.324E+04	0.345E+04	0.367E+04
Y	247	252	0.390E+04	0.413E+04	0.434E+04	0.454E+04	0.471E+04	0.486E+04
Y	253	258	0.499E+04	0.511E+04	0.520E+04	0.522E+04	0.535E+04	0.542E+04



Y	133	134*	-0.293E+04*	-0.257E+04*	-0.231E+04*	-0.221E+04*	-0.222E+04*	-0.231E+04*
Y	145	150*	-0.246E+04*	-0.261E+04*	-0.274E+04*	-0.277E+04*	-0.301E+04*	-0.311E+04*
Y	151	156*	-0.318E+04*	-0.320E+04*	-0.317E+04*	-0.309E+04*	-0.303E+04*	-0.300E+04*
Y	157	162*	-0.302E+04*	-0.312E+04*	-0.327E+04*	-0.346E+04*	-0.368E+04*	-0.390E+04*
Y	163	168*	-0.411E+04*	-0.433E+04*	-0.450E+04*	-0.463E+04*	-0.467E+04*	-0.488E+04*
Y	169	174*	-0.488E+04*	-0.478E+04*	-0.464E+04*	-0.449E+04*	-0.433E+04*	-0.417E+04*
Y	175	180*	-0.387E+04*	-0.358E+04*	-0.329E+04*	-0.301E+04*	-0.278E+04*	-0.258E+04*
Y	181	186*	-0.277E+04*	-0.214E+04*	-0.186E+04*	-0.152E+04*	-0.109E+04*	-0.546E+03*
Y	187	192*	0.151E+03*	0.252E+03*	0.160E+04*	0.205E+04*	0.299E+04*	0.477E+04*
Y	193	198*	0.685E+04*	0.791E+04*	0.845E+04*	0.822E+04*	0.772E+04*	0.701E+04*

ADLPIPE PAGE 18

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.40.29.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

Y	199	204*	0.614E+04*	0.521E+04*	0.430E+04*	0.349E+04*	0.273E+04*	0.214E+04*
Y	205	210*	0.162E+04*	0.118E+04*	0.848E+03*	0.608E+03*	0.469E+03*	0.413E+03*
Y	211	216*	0.457E+03*	0.524E+03*	0.544E+03*	0.574E+03*	0.614E+03*	0.660E+03*
Y	217	222*	0.718E+03*	0.781E+03*	0.848E+03*	0.926E+03*	0.102E+04*	0.114E+04*
Y	223	228*	0.127E+04*	0.142E+04*	0.156E+04*	0.170E+04*	0.183E+04*	0.193E+04*
Y	229	234*	0.202E+04*	0.210E+04*	0.215E+04*	0.219E+04*	0.222E+04*	0.225E+04*
Y	235	240*	0.227E+04*	0.230E+04*	0.234E+04*	0.240E+04*	0.248E+04*	0.258E+04*
Y	241	246*	0.271E+04*	0.286E+04*	0.304E+04*	0.324E+04*	0.345E+04*	0.367E+04*
Y	247	252*	0.390E+04*	0.413E+04*	0.434E+04*	0.454E+04*	0.471E+04*	0.486E+04*
Y	253	258*	0.499E+04*	0.511E+04*	0.520E+04*	0.528E+04*	0.535E+04*	0.542E+04*
Y	259	264*	0.547E+04*	0.552E+04*	0.556E+04*	0.559E+04*	0.560E+04*	0.560E+04*
Y	265	270*	0.558E+04*	0.555E+04*	0.550E+04*	0.544E+04*	0.537E+04*	0.528E+04*
Y	271	276*	0.518E+04*	0.507E+04*	0.495E+04*	0.481E+04*	0.467E+04*	0.452E+04*
Y	277	282*	0.437E+04*	0.424E+04*	0.411E+04*	0.400E+04*	0.390E+04*	0.380E+04*
Y	283	288*	0.372E+04*	0.364E+04*	0.352E+04*	0.335E+04*	0.303E+04*	0.254E+04*
Y	289	294*	0.207E+04*	0.189E+04*	0.184E+04*	0.179E+04*	0.174E+04*	0.168E+04*
Y	295	300*	0.160E+04*	0.153E+04*	0.144E+04*	0.136E+04*	0.127E+04*	0.117E+04*
Y	301	306*	0.108E+04*	0.996E+03*	0.911E+03*	0.830E+03*	0.754E+03*	0.683E+03*
Y	307	312*	0.617E+03*	0.557E+03*	0.501E+03*	0.451E+03*	0.406E+03*	0.365E+03*
Y	313	318*	0.329E+03*	0.298E+03*	0.270E+03*	0.246E+03*	0.226E+03*	0.209E+03*
Y	319	324*	0.194E+03*	0.182E+03*	0.171E+03*	0.163E+03*	0.157E+03*	0.151E+03*
Y	325	330*	0.198E+03*	0.932E+02*	0.141E+03*	0.137E+03*	0.132E+03*	0.126E+03*
Y	331	336*	0.120E+03*	0.116E+03*	0.113E+03*	0.111E+03*	0.107E+03*	0.104E+03*
Y	337	342*	0.998E+02*	0.948E+02*	0.870E+02*	0.795E+02*	0.708E+02*	0.638E+02*
Y	343	348*	0.562E+02*	0.507E+02*	0.456E+02*	0.427E+02*	0.410E+02*	0.427E+02*
Y	349	354*	0.457E+02*	0.521E+02*	0.600E+02*	0.698E+02*	0.806E+02*	0.933E+02*
Y	355	360*	0.106E+03*	0.119E+03*	0.132E+03*	0.145E+03*	0.158E+03*	0.169E+03*
Y	361	366*	0.180E+03*	0.189E+03*	0.197E+03*	0.202E+03*	0.206E+03*	0.207E+03*
Y	367	372*	0.206E+03*	0.202E+03*	0.196E+03*	0.185E+03*	0.173E+03*	0.155E+03*
Y	373	378*	0.137E+03*	0.113E+03*	0.904E+02*	0.626E+02*	0.359E+02*	0.577E+01*
Y	379	384*	-0.249E+02*	-0.578E+02*	-0.914E+02*	-0.126E+03*	-0.161E+03*	-0.196E+03*
Y	385	390*	-0.233E+03*	-0.271E+03*	-0.309E+03*	-0.349E+03*	-0.388E+03*	-0.426E+03*
Y	391	393*	-0.463E+03*	-0.494E+03*	-0.423E+03*	*	*	*
Y	40	10*	-1.	*	*	*	*	*
Y	1	6*	0.000E+00*	-0.821E-01*	-0.707E-01*	0.258E+00*	0.225E+01*	0.809E+01*
Y	7	12*	0.148E+02*	0.105E+02*	-0.702E+01*	-0.203E+02*	-0.171E+02*	-0.671E+01*
Y	13	18*	-0.269E+01*	-0.179E+01*	-0.198E+01*	-0.199E+01*	-0.162E+01*	-0.107E+01*
Y	19	24*	-0.518E+00*	-0.416E-02*	0.404E+00*	0.207E+01*	0.202E+01*	0.179E+01*
Y	25	30*	0.158E+01*	0.146E+01*	0.139E+01*	0.128E+01*	0.112E+01*	0.922E+00*
Y	31	36*	0.705E+00*	0.338E+00*	-0.316E+00*	-0.183E+01*	-0.410E+01*	-0.624E+01*
Y	37	42*	-0.748E+01*	-0.269E+01*	0.134E+01*	0.765E+01*	0.815E+01*	0.104E+02*
Y	43	48*	0.918E+01*	0.562E+01*	0.217E+01*	0.134E+00*	-0.108E+01*	-0.244E+01*
Y	49	54*	-0.423E+01*	-0.619E+01*	-0.794E+01*	-0.914E+01*	-0.954E+01*	-0.921E+01*
Y	55	60*	-0.866E+01*	-0.843E+01*	-0.888E+01*	-0.102E+02*	-0.125E+02*	-0.160E+02*
Y	61	66*	-0.208E+02*	-0.278E+02*	-0.377E+02*	-0.513E+02*	-0.683E+02*	-0.868E+02*
Y	67	72*	-0.104E+03*	-0.118E+03*	-0.129E+03*	-0.137E+03*	-0.145E+03*	-0.154E+03*
Y	73	78*	-0.166E+03*	-0.182E+03*	-0.206E+03*	-0.235E+03*	-0.265E+03*	-0.289E+03*
Y	79	84*	-0.303E+03*	-0.307E+03*	-0.302E+03*	-0.291E+03*	-0.274E+03*	-0.252E+03*
Y	85	90*	-0.227E+03*	-0.201E+03*	-0.176E+03*	-0.154E+03*	-0.134E+03*	-0.115E+03*
Y	91	96*	-0.962E+02*	-0.745E+02*	-0.486E+02*	-0.188E+02*	0.585E+01*	0.916E+01*
Y	97	102*	0.330E+02*	0.536E+02*	0.673E+02*	0.760E+02*	0.823E+02*	0.115E+03*
Y	103	108*	0.896E+02*	0.855E+02*	0.104E+03*	0.116E+03*	0.130E+03*	0.144E+03*

ADLPIPE PAGE 19

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.40.29.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

Y	109	114*	0.159E+03*	0.174E+03*	0.189E+03*	0.207E+03*	0.226E+03*	0.245E+03*
Y	115	120*	0.258E+03*	0.261E+03*	0.257E+03*	0.257E+03*	0.258E+03*	0.249E+03*
Y	121	126*	0.233E+03*	0.219E+03*	0.206E+03*	0.193E+03*	0.175E+03*	0.153E+03*
Y	127	132*	0.126E+03*	0.961E+02*	0.626E+02*	0.260E+02*	-0.135E+02*	-0.563E+02*
Y	133	138*	-0.102E+03*	-0.151E+03*	-0.201E+03*	-0.278E+03*	-0.251E+03*	-0.379E+03*
Y	139	144*	-0.322E+03*	-0.415E+03*	-0.471E+03*	-0.524E+03*	-0.571E+03*	-0.611E+03*
Y	145	150*	-0.644E+03*	-0.670E+03*	-0.692E+03*	-0.708E+03*	-0.717E+03*	-0.721E+03*
Y	151	156*	-0.721E+03*	-0.716E+03*	-0.703E+03*	-0.680E+03*	-0.644E+03*	-0.597E+03*
Y	157	162*	-0.548E+03*	-0.498E+03*	-0.451E+03*	-0.416E+03*	-0.393E+03*	-0.370E+03*
Y	163	168*	-0.371E+03*	-0.345E+03*	-0.320E+03*	-0.301E+03*	-0.281E+03*	-0.261E+03*

Y	43	47*	0.010E+01*	0.562E+01*	0.217E+01*	0.112E+00*	-0.108E+01*	-0.244E+01*
Y	49	54*	-0.423E+01*	-0.619E+01*	-0.794E+01*	-0.914E+01*	-0.954E+01*	-0.921E+01*
Y	55	60*	-0.866E+01*	-0.843E+01*	-0.888E+01*	-0.112E+02*	-0.125E+02*	-0.160E+02*
Y	61	66*	-0.208E+02*	-0.278E+02*	-0.377E+02*	-0.513E+02*	-0.683E+02*	-0.868E+02*
Y	67	72*	-0.104E+03*	-0.118E+03*	-0.129E+03*	-0.137E+03*	-0.145E+03*	-0.154E+03*
Y	73	78*	-0.166E+03*	-0.182E+03*	-0.206E+03*	-0.235E+03*	-0.265E+03*	-0.289E+03*
Y	79	84*	-0.303E+03*	-0.307E+03*	-0.302E+03*	-0.291E+03*	-0.274E+03*	-0.252E+03*
Y	85	90*	-0.227E+03*	-0.201E+03*	-0.176E+03*	-0.154E+03*	-0.134E+03*	-0.115E+03*
Y	91	96*	-0.962E+02*	-0.745E+02*	-0.486E+02*	-0.188E+02*	0.525E+01*	0.916E+01*
Y	97	102*	0.330E+02*	0.536E+02*	0.673E+02*	0.760E+02*	0.823E+02*	0.115E+03*
Y	103	108*	0.896E+02*	0.855E+02*	0.104E+03*	0.116E+03*	0.130E+03*	0.144E+03*

ADLPIPE PAGE 19

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.40.29.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

Y	109	114*	0.159E+03*	0.174E+03*	0.189E+03*	0.207E+03*	0.226E+03*	0.245E+03*
Y	115	120*	0.258E+03*	0.261E+03*	0.257E+03*	0.257E+03*	0.258E+03*	0.249E+03*
Y	121	126*	0.233E+03*	0.219E+03*	0.206E+03*	0.193E+03*	0.175E+03*	0.153E+03*
Y	127	132*	0.126E+03*	0.961E+02*	0.626E+02*	0.260E+02*	-0.135E+02*	-0.562E+02*
Y	133	138*	-0.102E+03*	-0.151E+03*	-0.201E+03*	-0.278E+03*	-0.251E+03*	-0.379E+03*
Y	139	144*	-0.322E+03*	-0.415E+03*	-0.471E+03*	-0.524E+03*	-0.571E+03*	-0.611E+03*
Y	145	150*	-0.644E+03*	-0.670E+03*	-0.692E+03*	-0.708E+03*	-0.717E+03*	-0.721E+03*
Y	151	156*	-0.721E+03*	-0.716E+03*	-0.703E+03*	-0.680E+03*	-0.644E+03*	-0.597E+03*
Y	157	162*	-0.548E+03*	-0.498E+03*	-0.451E+03*	-0.416E+03*	-0.393E+03*	-0.376E+03*
Y	163	168*	-0.361E+03*	-0.345E+03*	-0.330E+03*	-0.314E+03*	-0.260E+03*	-0.198E+03*
Y	169	174*	-0.858E+02*	0.419E+02*	0.136E+03*	0.240E+03*	0.278E+03*	0.260E+03*
Y	175	180*	0.234E+03*	0.138E+03*	0.888E+01*	-0.152E+03*	-0.334E+03*	-0.542E+03*
Y	181	186*	-0.786E+03*	-0.107E+04*	-0.137E+04*	-0.171E+04*	-0.212E+04*	-0.264E+04*
Y	187	192*	-0.328E+04*	-0.398E+04*	-0.454E+04*	-0.498E+04*	-0.591E+04*	-0.766E+04*
Y	193	198*	-0.973E+04*	-0.114E+05*	-0.114E+05*	-0.112E+05*	-0.107E+05*	-0.993E+04*
Y	199	204*	-0.904E+04*	-0.809E+04*	-0.715E+04*	-0.626E+04*	-0.544E+04*	-0.473E+04*
Y	205	210*	-0.411E+04*	-0.359E+04*	-0.317E+04*	-0.285E+04*	-0.264E+04*	-0.253E+04*
Y	211	216*	-0.250E+04*	-0.249E+04*	-0.246E+04*	-0.241E+04*	-0.235E+04*	-0.229E+04*
Y	217	222*	-0.223E+04*	-0.217E+04*	-0.213E+04*	-0.209E+04*	-0.206E+04*	-0.205E+04*
Y	223	228*	-0.203E+04*	-0.204E+04*	-0.205E+04*	-0.205E+04*	-0.207E+04*	-0.205E+04*
Y	229	234*	-0.204E+04*	-0.201E+04*	-0.197E+04*	-0.194E+04*	-0.186E+04*	-0.183E+04*
Y	235	240*	-0.174E+04*	-0.171E+04*	-0.164E+04*	-0.158E+04*	-0.162E+04*	-0.163E+04*
Y	241	246*	-0.163E+04*	-0.172E+04*	-0.183E+04*	-0.191E+04*	-0.201E+04*	-0.216E+04*
Y	247	252*	-0.229E+04*	-0.239E+04*	-0.249E+04*	-0.259E+04*	-0.265E+04*	-0.267E+04*
Y	253	258*	-0.266E+04*	-0.264E+04*	-0.258E+04*	-0.248E+04*	-0.237E+04*	-0.223E+04*
Y	259	264*	-0.205E+04*	-0.183E+04*	-0.157E+04*	-0.127E+04*	-0.909E+03*	-0.457E+03*
Y	265	270*	0.861E+02*	0.700E+03*	0.133E+04*	0.195E+04*	0.255E+04*	0.310E+04*
Y	271	276*	0.360E+04*	0.406E+04*	0.448E+04*	0.485E+04*	0.516E+04*	0.542E+04*
Y	277	282*	0.562E+04*	0.576E+04*	0.584E+04*	0.585E+04*	0.581E+04*	0.574E+04*
Y	283	288*	0.561E+04*	0.546E+04*	0.530E+04*	0.519E+04*	0.519E+04*	0.536E+04*
Y	289	294*	0.551E+04*	0.538E+04*	0.512E+04*	0.488E+04*	0.466E+04*	0.447E+04*
Y	295	300*	0.430E+04*	0.416E+04*	0.404E+04*	0.395E+04*	0.387E+04*	0.382E+04*
Y	301	306*	0.378E+04*	0.376E+04*	0.374E+04*	0.374E+04*	0.374E+04*	0.374E+04*
Y	307	312*	0.374E+04*	0.374E+04*	0.374E+04*	0.373E+04*	0.372E+04*	0.371E+04*
Y	313	318*	0.368E+04*	0.365E+04*	0.361E+04*	0.357E+04*	0.352E+04*	0.347E+04*
Y	319	324*	0.341E+04*	0.334E+04*	0.327E+04*	0.320E+04*	0.312E+04*	0.305E+04*
Y	325	330*	0.321E+04*	0.271E+04*	0.287E+04*	0.279E+04*	0.271E+04*	0.262E+04*
Y	331	336*	0.254E+04*	0.245E+04*	0.237E+04*	0.228E+04*	0.219E+04*	0.210E+04*
Y	337	342*	0.201E+04*	0.193E+04*	0.185E+04*	0.176E+04*	0.168E+04*	0.160E+04*
Y	343	348*	0.152E+04*	0.144E+04*	0.137E+04*	0.129E+04*	0.122E+04*	0.115E+04*
Y	349	354*	0.107E+04*	0.100E+04*	0.931E+03*	0.852E+03*	0.776E+03*	0.701E+03*
Y	355	360*	0.622E+03*	0.547E+03*	0.470E+03*	0.395E+03*	0.327E+03*	0.262E+03*
Y	361	366*	0.197E+03*	0.132E+03*	0.692E+02*	0.101E+02*	-0.447E+02*	-0.985E+02*
Y	367	372*	-0.155E+03*	-0.208E+03*	-0.246E+03*	-0.268E+03*	-0.280E+03*	-0.292E+03*
Y	373	378*	-0.306E+03*	-0.317E+03*	-0.316E+03*	-0.304E+03*	-0.285E+03*	-0.265E+03*
Y	379	384*	-0.244E+03*	-0.221E+03*	-0.196E+03*	-0.168E+03*	-0.139E+03*	-0.108E+03*
Y	385	390*	-0.750E+02*	-0.474E+02*	-0.177E+02*	0.253E+02*	0.689E+02*	0.110E+03*
Y	391	393*	0.138E+03*	0.166E+03*	0.208E+03*	*	*	*
Y	100	10*	-1.	*	*	*	*	*
Y	1	6*	0.000E+00*	0.188E+02*	0.257E+02*	-0.163E+01*	-0.326E+02*	-0.291E+02*
Y	7	12*	-0.188E+02*	-0.129E+02*	0.478E+01*	0.191E+02*	0.160E+02*	0.758E+01*
Y	13	18*	0.523E+01*	0.398E+01*	0.397E+01*	0.377E+01*	0.329E+01*	0.268E+01*

ADLPIPE PAGE 20

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.40.29.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

Y	19	24*	0.206E+01*	0.146E+01*	0.673E+00*	-0.119E+01*	-0.134E+01*	-0.123E+01*
Y	25	30*	-0.105E+01*	-0.921E+00*	-0.853E+00*	-0.813E+00*	-0.782E+00*	-0.775E+00*
Y	31	36*	-0.809E+00*	-0.764E+00*	-0.103E+01*	-0.112E+01*	-0.110E+01*	-0.962E+00*
Y	37	42*	-0.828E+00*	-0.313E+00*	-0.255E+00*	-0.102E+00*	-0.499E-02*	-0.215E-01*
Y	43	48*	-0.557E-01*	-0.158E+00*	-0.263E+00*	-0.138E+00*	-0.191E-01*	-0.518E-01*
Y	49	54*	-0.131E+00*	-0.250E+00*	-0.354E+00*	-0.341E-01*	0.703E+00*	0.122E+01*
Y	55	60*	0.147E+01*	0.145E+01*	0.964E+00*	0.329E+00*	-0.328E-01*	-0.116E+00*
Y	61	66*	-0.262E-01*	0.183E+00*	0.397E+00*	0.523E+00*	0.559E+00*	0.423E+00*
Y	67	72*	-0.201E-01*	-0.746E+00*	-0.166E+01*	-0.270E+01*	-0.375E+01*	-0.456E+01*
Y	73	78*	-0.453E+01*	-0.473E+01*	-0.401E+01*	-0.301E+01*	-0.201E+01*	-0.101E+01*



Y	361	368	0.197E+03*	0.132E+03*	0.692E+02*	0.191E+02*	-0.447E+02*	-0.985E+02*
Y	367	372	-0.155E+03*	-0.208E+03*	-0.246E+03*	-0.268E+03*	-0.280E+03*	-0.292E+03*
Y	373	378	-0.306E+03*	-0.317E+03*	-0.316E+03*	-0.304E+03*	-0.285E+03*	-0.265E+03*
Y	379	384	-0.244E+03*	-0.221E+03*	-0.196E+03*	-0.168E+03*	-0.139E+03*	-0.108E+03*
Y	385	390	-0.750E+02*	-0.474E+02*	-0.177E+02*	0.253E+02*	0.689E+02*	0.113E+03*
Y	391	393	0.138E+03*	0.166E+03*	0.208E+03*	*	*	*
TABLE	100	10*	-1.	*	*	*	*	*
Y	1	6*	0.000E+00*	0.188E+02*	0.257E+02*	-0.163E+01*	-0.326E+02*	-0.291E+02*
Y	7	12*	-0.188E+02*	-0.129E+02*	0.478E+01*	0.191E+02*	0.160E+02*	0.753E+01*
Y	13	18*	0.523E+01*	0.398E+01*	0.397E+01*	0.377E+01*	0.329E+01*	0.268E+01*

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

Y	19	24*	0.206E+01*	0.146E+01*	0.673E+00*	-0.119E+01*	-0.134E+01*	-0.123E+01*
Y	25	30*	-0.105E+01*	-0.921E+00*	-0.853E+00*	-0.813E+00*	-0.782E+00*	-0.775E+00*
Y	31	36*	-0.809E+00*	-0.764E+00*	-0.103E+01*	-0.112E+01*	-0.110E+01*	-0.962E+00*
Y	37	42*	-0.828E+00*	-0.313E+00*	-0.255E+00*	-0.102E+00*	-0.499E-02*	-0.215E-01*
Y	43	48*	-0.557E-01*	-0.158E+00*	-0.263E+00*	-0.138E+00*	-0.191E-01*	-0.518E-01*
Y	49	54*	-0.131E+00*	-0.250E+00*	-0.354E+00*	-0.341E-01*	0.703E+00*	0.122E+01*
Y	55	60*	0.147E+01*	0.145E+01*	0.964E+00*	0.329E+00*	-0.328E-01*	-0.116E+00*
Y	61	66*	-0.262E-01*	0.183E+00*	0.397E+00*	0.523E+00*	0.559E+00*	0.423E+00*
Y	67	72*	-0.201E-01*	-0.746E+00*	-0.166E+01*	-0.270E+01*	-0.375E+01*	-0.456E+01*
Y	73	78*	-0.493E+01*	-0.473E+01*	-0.406E+01*	-0.327E+01*	-0.287E+01*	-0.335E+01*
Y	79	84*	-0.501E+01*	-0.797E+01*	-0.123E+02*	-0.184E+02*	-0.266E+02*	-0.371E+02*
Y	85	90*	-0.493E+02*	-0.608E+02*	-0.691E+02*	-0.719E+02*	-0.694E+02*	-0.637E+02*
Y	91	96*	-0.586E+02*	-0.577E+02*	-0.625E+02*	-0.711E+02*	-0.128E+03*	-0.577E+02*
Y	97	102*	-0.769E+02*	-0.638E+02*	-0.377E+02*	-0.380E+01*	0.303E+02*	0.712E+02*
Y	103	108*	0.629E+02*	0.693E+02*	0.895E+02*	0.957E+02*	0.100E+03*	0.105E+03*
Y	109	114*	0.111E+03*	0.115E+03*	0.111E+03*	0.880E+02*	0.596E+02*	0.525E+02*
Y	115	120*	0.373E+02*	0.153E+02*	0.383E+01*	-0.723E+01*	-0.160E+02*	-0.146E+02*
Y	121	126*	-0.928E+01*	-0.689E+01*	-0.706E+01*	-0.811E+01*	-0.789E+01*	-0.533E+01*
Y	127	132*	-0.212E+01*	0.604E+00*	0.262E+01*	0.362E+01*	0.326E+01*	0.154E+01*
Y	133	138*	-0.972E+00*	-0.436E+01*	-0.857E+01*	-0.143E+02*	-0.139E+02*	-0.221E+02*
Y	139	144*	-0.189E+02*	-0.240E+02*	-0.257E+02*	-0.267E+02*	-0.268E+02*	-0.264E+02*
Y	145	150*	-0.257E+02*	-0.251E+02*	-0.250E+02*	-0.260E+02*	-0.287E+02*	-0.336E+02*
Y	151	156*	-0.418E+02*	-0.543E+02*	-0.728E+02*	-0.985E+02*	-0.132E+03*	-0.171E+03*
Y	157	162*	-0.210E+03*	-0.238E+03*	-0.248E+03*	-0.235E+03*	-0.204E+03*	-0.162E+03*
Y	163	168*	-0.119E+03*	-0.780E+02*	-0.392E+02*	0.445E+01*	0.627E+02*	0.139E+03*
Y	169	174*	0.160E+03*	0.121E+03*	0.581E+02*	0.165E+02*	0.102E+02*	0.265E+02*
Y	175	180*	0.520E+02*	0.775E+02*	0.927E+02*	0.922E+02*	0.757E+02*	0.494E+02*
Y	181	186*	0.260E+02*	0.991E+01*	-0.795E+01*	-0.273E+02*	-0.395E+02*	-0.492E+02*
Y	187	192*	-0.656E+02*	-0.837E+02*	-0.953E+02*	-0.981E+02*	-0.944E+02*	-0.832E+02*
Y	193	198*	-0.697E+02*	-0.582E+02*	-0.398E+02*	-0.325E+02*	-0.307E+02*	-0.330E+02*
Y	199	204*	-0.357E+02*	-0.364E+02*	-0.363E+02*	-0.361E+02*	-0.334E+02*	-0.117E+02*
Y	205	210*	0.161E+02*	0.526E+00*	-0.461E+02*	-0.800E+02*	-0.734E+02*	-0.212E+02*
Y	211	216*	0.319E+02*	0.615E+02*	0.652E+02*	0.515E+02*	0.342E+02*	0.262E+02*
Y	217	222*	0.249E+02*	0.108E+02*	-0.990E+00*	-0.237E+02*	-0.489E+02*	-0.661E+02*
Y	223	228*	-0.959E+02*	-0.100E+03*	-0.111E+03*	-0.116E+03*	-0.962E+02*	-0.111E+03*
Y	229	234*	-0.930E+02*	-0.954E+02*	-0.902E+02*	-0.709E+02*	-0.895E+02*	-0.597E+02*
Y	235	240*	-0.946E+02*	-0.732E+02*	-0.108E+03*	-0.148E+03*	-0.111E+03*	-0.140E+03*
Y	241	246*	-0.188E+03*	-0.192E+03*	-0.176E+03*	-0.218E+03*	-0.262E+03*	-0.251E+03*
Y	247	252*	-0.281E+03*	-0.321E+03*	-0.352E+03*	-0.394E+03*	-0.408E+03*	-0.495E+03*
Y	253	258*	-0.548E+03*	-0.582E+03*	-0.693E+03*	-0.731E+03*	-0.876E+03*	-0.102E+04*
Y	259	264*	-0.110E+04*	-0.135E+04*	-0.163E+04*	-0.183E+04*	-0.213E+04*	-0.252E+04*
Y	265	270*	-0.294E+04*	-0.331E+04*	-0.374E+04*	-0.425E+04*	-0.477E+04*	-0.521E+04*
Y	271	276*	-0.556E+04*	-0.586E+04*	-0.612E+04*	-0.631E+04*	-0.641E+04*	-0.644E+04*
Y	277	282*	-0.639E+04*	-0.626E+04*	-0.602E+04*	-0.569E+04*	-0.529E+04*	-0.485E+04*
Y	283	288*	-0.439E+04*	-0.391E+04*	-0.340E+04*	-0.284E+04*	-0.224E+04*	-0.161E+04*
Y	289	294*	-0.967E+03*	-0.325E+03*	0.300E+03*	0.892E+03*	0.144E+04*	0.194E+04*
Y	295	300*	0.239E+04*	0.278E+04*	0.310E+04*	0.338E+04*	0.359E+04*	0.375E+04*
Y	301	306*	0.386E+04*	0.393E+04*	0.395E+04*	0.393E+04*	0.387E+04*	0.379E+04*
Y	307	312*	0.368E+04*	0.355E+04*	0.341E+04*	0.326E+04*	0.311E+04*	0.295E+04*
Y	313	318*	0.278E+04*	0.262E+04*	0.245E+04*	0.229E+04*	0.213E+04*	0.198E+04*
Y	319	324*	0.183E+04*	0.169E+04*	0.156E+04*	0.144E+04*	0.133E+04*	0.122E+04*
Y	325	330*	0.121E+04*	0.101E+04*	0.101E+04*	0.928E+03*	0.851E+03*	0.780E+03*

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

Y	331	336*	0.716E+03*	0.657E+03*	0.604E+03*	0.558E+03*	0.513E+03*	0.475E+03*
Y	337	342*	0.442E+03*	0.413E+03*	0.389E+03*	0.369E+03*	0.353E+03*	0.340E+03*
Y	343	348*	0.330E+03*	0.322E+03*	0.314E+03*	0.309E+03*	0.304E+03*	0.303E+03*
Y	349	354*	0.308E+03*	0.309E+03*	0.314E+03*	0.327E+03*	0.336E+03*	0.347E+03*
Y	355	360*	0.362E+03*	0.373E+03*	0.384E+03*	0.395E+03*	0.400E+03*	0.403E+03*
Y	361	366*	0.408E+03*	0.415E+03*	0.425E+03*	0.434E+03*	0.442E+03*	0.451E+03*
Y	367	372*	0.464E+03*	0.478E+03*	0.480E+03*	0.464E+03*	0.437E+03*	0.410E+03*
Y	373	378*	0.391E+03*	0.377E+03*	0.355E+03*	0.320E+03*	0.280E+03*	0.240E+03*
Y	379	384*	0.204E+03*	0.170E+03*	0.138E+03*	0.107E+03*	0.753E+02*	0.443E+02*
Y	385	390*	0.146E+02*	-0.682E+01*	-0.270E+02*	-0.579E+02*	-0.888E+02*	-0.117E+03*
Y	391	393*	-0.173E+03*	-0.147E+03*	-0.127E+03*	-0.107E+03*	-0.888E+02*	-0.117E+03*

Y	271	276*	0.556E+04*	-0.586E+04*	-0.612E+04*	-0.631E+04*	-0.641E+04*	-0.644E+04*
Y	277	282*	-0.639E+04*	-0.626E+04*	-0.602E+04*	-0.569E+04*	-0.529E+04*	-0.481E+04*
Y	283	288*	-0.439E+04*	-0.391E+04*	-0.340E+04*	-0.284E+04*	-0.224E+04*	-0.161E+04*
Y	289	294*	-0.967E+03*	-0.325E+03*	0.300E+03*	0.892E+03*	0.144E+04*	0.194E+04*
Y	295	300*	0.239E+04*	0.278E+04*	0.310E+04*	0.338E+04*	0.359E+04*	0.371E+04*
Y	301	306*	0.386E+04*	0.393E+04*	0.395E+04*	0.393E+04*	0.387E+04*	0.379E+04*
Y	307	312*	0.368E+04*	0.355E+04*	0.341E+04*	0.326E+04*	0.311E+04*	0.291E+04*
Y	313	318*	0.278E+04*	0.262E+04*	0.245E+04*	0.229E+04*	0.213E+04*	0.191E+04*
Y	319	324*	0.183E+04*	0.169E+04*	0.156E+04*	0.144E+04*	0.133E+04*	0.122E+04*
Y	325	330*	0.121E+04*	0.101E+04*	0.101E+04*	0.928E+03*	0.851E+03*	0.780E+03*

ADLPIPE PAGE 21

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.40.29.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

Y	331	336*	0.716E+03*	0.657E+03*	0.604E+03*	0.556E+03*	0.513E+03*	0.475E+03*
Y	337	342*	0.442E+03*	0.413E+03*	0.389E+03*	0.369E+03*	0.353E+03*	0.340E+03*
Y	343	348*	0.330E+03*	0.322E+03*	0.314E+03*	0.309E+03*	0.304E+03*	0.303E+03*
Y	349	354*	0.308E+03*	0.309E+03*	0.314E+03*	0.327E+03*	0.336E+03*	0.347E+03*
Y	355	360*	0.362E+03*	0.373E+03*	0.384E+03*	0.395E+03*	0.400E+03*	0.403E+03*
Y	361	366*	0.408E+03*	0.415E+03*	0.425E+03*	0.434E+03*	0.442E+03*	0.451E+03*
Y	367	372*	0.464E+03*	0.478E+03*	0.480E+03*	0.464E+03*	0.437E+03*	0.410E+03*
Y	373	378*	0.391E+03*	0.377E+03*	0.355E+03*	0.320E+03*	0.280E+03*	0.240E+03*
Y	379	384*	0.204E+03*	0.170E+03*	0.138E+03*	0.107E+03*	0.753E+02*	0.443E+02*
Y	385	390*	0.146E+02*	-0.682E+01*	-0.270E+02*	-0.579E+02*	-0.888E+02*	-0.117E+03*
Y	391	393*	-0.133E+03*	-0.147E+03*	-0.174E+03*	*	*	*
Y	110	10*	-1.	*	*	*	*	*
Y	1	6*	0.000E+00*	-0.423E+02*	-0.270E+02*	0.500E+01*	0.306E+02*	0.130E+02*
Y	7	12*	-0.139E+01*	0.336E+01*	0.492E+01*	0.384E+01*	0.357E+01*	0.146E+01*
Y	13	18*	-0.517E-01*	-0.271E+00*	-0.282E+00*	-0.312E+00*	-0.381E+00*	-0.381E+00*
Y	19	24*	-0.241E+00*	-0.413E-01*	0.163E+00*	0.127E-01*	-0.747E-01*	-0.173E+00*
Y	25	30*	-0.316E+00*	-0.494E+00*	-0.655E+00*	-0.715E+00*	-0.653E+00*	-0.541E+00*
Y	31	36*	-0.455E+00*	-0.225E+00*	0.162E+00*	0.484E+00*	0.320E+00*	0.378E+00*
Y	37	42*	0.379E+00*	0.184E+00*	0.402E-01*	-0.497E-01*	0.865E-01*	0.126E+00*
Y	43	48*	0.202E+00*	0.379E+00*	0.597E+00*	0.487E+00*	0.614E+00*	0.970E+00*
Y	49	54*	0.147E+01*	0.105E+01*	0.537E+00*	0.550E+00*	0.239E+00*	0.741E-01*
Y	55	60*	0.218E+00*	0.359E+00*	0.780E+00*	0.141E+01*	0.179E+01*	0.182E+01*
Y	61	66*	0.175E+01*	0.143E+01*	0.806E+00*	0.453E+00*	0.441E+00*	0.101E+01*
Y	67	72*	0.492E+00*	-0.583E+00*	-0.326E+00*	0.632E-01*	0.156E-01*	-0.137E+00*
Y	73	78*	-0.746E+00*	-0.177E+01*	-0.264E+01*	-0.309E+01*	-0.306E+01*	-0.254E+01*
Y	79	84*	-0.152E+01*	-0.955E-01*	0.690E+00*	0.491E+00*	-0.711E+00*	-0.292E+01*
Y	85	90*	-0.611E+01*	-0.127E+02*	-0.211E+02*	-0.293E+02*	-0.362E+02*	-0.426E+02*
Y	91	96*	-0.443E+02*	-0.396E+02*	-0.289E+02*	-0.149E+02*	-0.709E+01*	-0.257E+01*
Y	97	102*	0.193E+01*	-0.108E+01*	0.126E+02*	-0.265E+02*	-0.338E+02*	-0.400E+02*
Y	103	108*	-0.253E+02*	-0.845E+01*	0.197E+02*	0.487E+02*	0.681E+02*	0.742E+02*
Y	109	114*	0.681E+02*	0.551E+02*	0.336E+02*	0.149E+02*	-0.341E+01*	-0.218E+02*
Y	115	120*	-0.815E+01*	0.684E+01*	0.479E+01*	0.236E+01*	-0.303E+01*	-0.942E+01*
Y	121	126*	-0.119E+02*	-0.115E+02*	-0.137E+02*	-0.891E+01*	-0.666E+01*	-0.454E+01*
Y	127	132*	-0.225E+01*	-0.843E-01*	0.145E+01*	0.224E+01*	0.249E+01*	0.218E+01*
Y	133	138*	0.662E+00*	-0.150E+01*	-0.354E+01*	-0.641E+01*	-0.647E+01*	-0.105E+02*
Y	139	144*	-0.895E+01*	-0.119E+02*	-0.136E+02*	-0.144E+02*	-0.148E+02*	-0.146E+02*
Y	145	150*	-0.137E+02*	-0.123E+02*	-0.106E+02*	-0.910E+01*	-0.825E+01*	-0.835E+01*
Y	151	156*	-0.964E+01*	-0.122E+02*	-0.163E+02*	-0.220E+02*	-0.301E+02*	-0.412E+02*
Y	157	162*	-0.567E+02*	-0.777E+02*	-0.104E+03*	-0.132E+03*	-0.153E+03*	-0.156E+03*
Y	163	168*	-0.135E+03*	-0.901E+02*	-0.352E+02*	0.203E+02*	0.628E+02*	0.766E+02*
Y	169	174*	0.450E+02*	0.198E+02*	0.875E+01*	0.315E+01*	0.550E+00*	0.326E+01*
Y	175	180*	0.108E+02*	0.177E+02*	0.213E+02*	0.210E+02*	0.161E+02*	0.809E+01*
Y	181	186*	-0.644E+00*	-0.683E+01*	-0.637E+01*	-0.392E+01*	-0.968E+01*	-0.201E+02*
Y	187	192*	-0.252E+02*	-0.281E+02*	-0.357E+02*	-0.439E+02*	-0.466E+02*	-0.435E+02*
Y	193	198*	-0.372E+02*	-0.374E+02*	-0.336E+02*	-0.348E+02*	-0.346E+02*	-0.323E+02*
Y	199	204*	-0.296E+02*	-0.291E+02*	-0.311E+02*	-0.689E+02*	-0.153E+03*	-0.161E+03*
Y	205	210*	-0.131E+03*	-0.598E+02*	0.144E+02*	0.605E+02*	0.685E+02*	0.393E+02*
Y	211	216*	0.197E+02*	0.190E+02*	0.227E+02*	0.295E+02*	0.384E+02*	0.445E+02*
Y	217	222*	0.447E+02*	0.395E+02*	0.310E+02*	0.204E+02*	0.585E+01*	-0.119E+02*
Y	223	228*	-0.300E+02*	-0.473E+02*	-0.605E+02*	-0.711E+02*	-0.766E+02*	-0.765E+02*
Y	229	234*	-0.750E+02*	-0.667E+02*	-0.588E+02*	-0.540E+02*	-0.467E+02*	-0.404E+02*
Y	235	240*	-0.326E+02*	-0.331E+02*	-0.336E+02*	-0.370E+02*	-0.383E+02*	-0.366E+02*

ADLPIPE PAGE 22

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.40.29.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

Y	241	246*	-0.384E+02*	-0.254E+02*	-0.276E+02*	-0.285E+02*	-0.203E+02*	-0.291E+02*
Y	247	252*	-0.121E+02*	-0.180E+02*	-0.255E+02*	-0.963E+01*	-0.266E+02*	0.991E+01*
Y	253	258*	0.852E+01*	-0.246E+02*	-0.183E+02*	-0.865E+02*	-0.722E+02*	-0.739E+02*
Y	259	264*	-0.165E+03*	-0.143E+03*	-0.968E+02*	-0.283E+02*	0.105E+03*	0.696E+02*
Y	265	270*	-0.487E+02*	-0.291E+03*	-0.376E+03*	-0.394E+03*	-0.473E+03*	-0.448E+03*
Y	271	276*	-0.442E+03*	-0.536E+03*	-0.471E+03*	-0.526E+03*	-0.408E+03*	-0.429E+03*
Y	277	282*	-0.496E+03*	-0.591E+03*	-0.732E+03*	-0.910E+03*	-0.111E+04*	-0.132E+04*
Y	283	288*	-0.151E+04*	-0.168E+04*	-0.185E+04*	-0.206E+04*	-0.230E+04*	-0.256E+04*
Y	289	294*	-0.284E+04*	-0.311E+04*	-0.338E+04*	-0.361E+04*	-0.381E+04*	-0.396E+04*
Y	295	300*	-0.407E+04*	-0.414E+04*	-0.416E+04*	-0.414E+04*	-0.407E+04*	-0.396E+04*
Y	301	306*	0.388E+04*	0.341E+04*	0.311E+04*	0.271E+04*	0.231E+04*	0.191E+04*



Y	175	180	-0.108E+02*	0.177E+02*	0.213E+02*	0.210E+02*	0.161E+02*	0.809E+01*
Y	181	186	-0.644E+00*	-0.683E+01*	-0.637E+01*	-0.392E+01*	-0.968E+01*	-0.201E+02*
Y	187	192	-0.252E+02*	-0.281E+02*	-0.357E+02*	-0.439E+02*	-0.466E+02*	-0.435E+02*
Y	193	198	-0.372E+02*	-0.374E+02*	-0.336E+02*	-0.348E+02*	-0.346E+02*	-0.323E+02*
Y	199	204	-0.296E+02*	-0.291E+02*	-0.311E+02*	-0.689E+02*	-0.153E+03*	-0.161E+03*
Y	205	210	-0.131E+03*	0.598E+02*	0.144E+02*	0.605E+02*	0.685E+02*	0.393E+02*
Y	211	216	0.197E+02*	0.190E+02*	0.227E+02*	0.295E+02*	0.384E+02*	0.441E+02*
Y	217	222	0.447E+02*	0.395E+02*	0.310E+02*	0.204E+02*	0.585E+01*	-0.119E+02*
Y	223	228	-0.300E+02*	-0.473E+02*	-0.605E+02*	-0.711E+02*	-0.766E+02*	-0.765E+02*
Y	229	234	-0.750E+02*	-0.667E+02*	-0.588E+02*	-0.540E+02*	-0.467E+02*	-0.404E+02*
Y	235	240	-0.326E+02*	-0.331E+02*	-0.336E+02*	-0.370E+02*	-0.383E+02*	-0.366E+02*

ADLPIPE PAGE 22

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.40.29.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

Y	241	246	-0.384E+02*	-0.254E+02*	-0.276E+02*	-0.285E+02*	-0.203E+02*	-0.291E+02*
Y	247	252	-0.121E+02*	-0.180E+02*	-0.255E+02*	-0.963E+01*	-0.266E+02*	0.991E+01*
Y	253	258	0.852E+01*	-0.246E+02*	-0.183E+02*	-0.865E+02*	-0.722E+02*	-0.739E+02*
Y	259	264	-0.165E+03*	-0.143E+03*	-0.968E+02*	-0.283E+02*	0.105E+03*	0.696E+02*
Y	265	270	-0.487E+02*	-0.291E+03*	-0.376E+03*	-0.394E+03*	-0.473E+03*	-0.448E+03*
Y	271	276	-0.442E+03*	-0.536E+03*	-0.471E+03*	-0.526E+03*	-0.408E+03*	-0.429E+03*
Y	277	282	-0.496E+03*	-0.591E+03*	-0.732E+03*	-0.910E+03*	-0.111E+04*	-0.137E+04*
Y	283	288	-0.151E+04*	-0.168E+04*	-0.185E+04*	-0.206E+04*	-0.230E+04*	-0.256E+04*
Y	289	294	-0.284E+04*	-0.311E+04*	-0.338E+04*	-0.361E+04*	-0.381E+04*	-0.396E+04*
Y	295	300	-0.407E+04*	-0.414E+04*	-0.416E+04*	-0.414E+04*	-0.407E+04*	-0.396E+04*
Y	301	306	-0.380E+04*	-0.361E+04*	-0.338E+04*	-0.309E+04*	-0.275E+04*	-0.238E+04*
Y	307	312	-0.200E+04*	-0.162E+04*	-0.125E+04*	-0.889E+03*	-0.534E+03*	-0.189E+03*
Y	313	318	0.143E+03*	0.459E+03*	0.758E+03*	0.104E+04*	0.129E+04*	0.153E+04*
Y	319	324	0.173E+04*	0.192E+04*	0.207E+04*	0.220E+04*	0.230E+04*	0.238E+04*
Y	325	330	0.242E+04*	0.246E+04*	0.247E+04*	0.248E+04*	0.248E+04*	0.245E+04*
Y	331	336	0.241E+04*	0.236E+04*	0.229E+04*	0.221E+04*	0.212E+04*	0.203E+04*
Y	337	342	0.193E+04*	0.183E+04*	0.172E+04*	0.161E+04*	0.151E+04*	0.140E+04*
Y	343	348	0.130E+04*	0.121E+04*	0.112E+04*	0.103E+04*	0.946E+03*	0.869E+03*
Y	349	354	0.797E+03*	0.730E+03*	0.669E+03*	0.613E+03*	0.563E+03*	0.517E+03*
Y	355	360	0.477E+03*	0.442E+03*	0.411E+03*	0.384E+03*	0.359E+03*	0.337E+03*
Y	361	366	0.315E+03*	0.293E+03*	0.270E+03*	0.246E+03*	0.224E+03*	0.205E+03*
Y	367	372	0.187E+03*	0.172E+03*	0.160E+03*	0.152E+03*	0.149E+03*	0.148E+03*
Y	373	378	0.144E+03*	0.136E+03*	0.125E+03*	0.117E+03*	0.111E+03*	0.105E+03*
Y	379	384	0.980E+02*	0.884E+02*	0.778E+02*	0.676E+02*	0.585E+02*	0.508E+02*
Y	385	390	0.446E+02*	0.403E+02*	0.378E+02*	0.376E+02*	0.407E+02*	0.467E+02*
Y	391	393	0.537E+02*	0.609E+02*	0.690E+02*	*	*	*
IN		801	*184.1	*184.1	*184.1	*	*	*
IN		802	*85.4	*85.4	*85.4	*	*	*
IN		803	*91.1	*91.1	*91.1	*	*	*
IN		804	*70.2	*70.2	*70.2	*	*	*
IN		24	*164.	*164.	*164.	*	*	*
IN		805	*684.0	*684.0	*684.0	*	*	*
IN		228	*77.	*77.	*77.	*	*	*
IN		806	*16.2	*16.2	*16.2	*	*	*
IN		841	*25.7	*25.7	*25.7	*	*	*
IN		842	*250.	*250.	*250.	*	*	*
IN		843	*111.8	*111.8	*111.8	*	*	*
IN		807	*256.2	*256.2	*256.2	*	*	*
IN		852	*11.4	*11.4	*11.4	*	*	*
IN		853	*250.	*250.	*250.	*	*	*
IN		35	*77.	*77.	*77.	*	*	*
IN		808	*684.0	*684.0	*684.0	*	*	*
IN		138	*164.	*164.	*164.	*	*	*
IN		809	*70.2	*70.2	*70.2	*	*	*
IN		810	*91.1	*91.1	*91.1	*	*	*
IN		811	*85.4	*85.4	*85.4	*	*	*
IN		812	*184.1	*184.1	*184.1	*	*	*
IN		52	*40.5	*40.5	*40.5	*	*	*
IN		53	*111.4	*111.4	*111.4	*	*	*
IN		844	*454.	*454.	*454.	*	*	*
IN		55	*111.4	*111.4	*111.4	*	*	*
IN		56	*68.9	*68.9	*68.9	*	*	*

ADLPIPE PAGE 23

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.40.30.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

IN	815	*249.8	*249.8	*249.8	*	*	*	*
IN	816	*352.4	*352.4	*352.4	*	*	*	*
IN	817	*364.5	*364.5	*364.5	*	*	*	*
IN	850	*354.4	*354.4	*354.4	*	*	*	*
IN	818	*354.4	*354.4	*354.4	*	*	*	*
IN	851	*384.8	*384.8	*384.8	*	*	*	*
IN	161	*202.5	*202.5	*202.5	*	*	*	*
IN	62	*202.5	*202.5	*202.5	*	*	*	*
IN	820	*404.	*404.	*404.	*	*	*	*
IN	821	*439.	*439.	*439.	*	*	*	*

IN	807*164.0	*164.0	*164.0	*	*	*	*
IN	138*164.2	*164.2	*164.2	*	*	*	*
IN	809*70.2	*70.2	*70.2	*	*	*	*
IN	810*91.1	*91.1	*91.1	*	*	*	*
IN	811*85.4	*85.4	*85.4	*	*	*	*
IN	812*184.1	*184.1	*184.1	*	*	*	*
IN	52*40.5	*40.5	*40.5	*	*	*	*
IN	53*111.4	*111.4	*111.4	*	*	*	*
IN	844*454.0	*454.0	*454.0	*	*	*	*
IN	55*111.4	*111.4	*111.4	*	*	*	*
IN	56*68.9	*68.9	*68.9	*	*	*	*

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

IN	815*249.8	*249.8	*249.8	*	*	*	*
IN	816*352.4	*352.4	*352.4	*	*	*	*
IN	817*364.5	*364.5	*364.5	*	*	*	*
IN	850*354.4	*354.4	*354.4	*	*	*	*
IN	818*354.4	*354.4	*354.4	*	*	*	*
IN	851*384.8	*384.8	*384.8	*	*	*	*
IN	161*202.5	*202.5	*202.5	*	*	*	*
IN	62*202.5	*202.5	*202.5	*	*	*	*
IN	820*404.0	*404.0	*404.0	*	*	*	*
IN	821*439.4	*439.4	*439.4	*	*	*	*
IN	265*236.9	*236.9	*236.9	*	*	*	*
IN	266*145.8	*145.8	*145.8	*	*	*	*
IN	66*145.8	*145.8	*145.8	*	*	*	*
IN	67*91.1	*91.1	*91.1	*	*	*	*
IN	71*10.8	*10.8	*10.8	*	*	*	*
IN	72*5.9	*5.9	*5.9	*	*	*	*
IN	173*5.9	*5.9	*5.9	*	*	*	*
IN	174*4.3	*4.3	*4.3	*	*	*	*
IN	826*22.9	*22.9	*22.9	*	*	*	*
IN	827*480.0	*480.0	*480.0	*	*	*	*
IN	828*527.0	*527.0	*527.0	*	*	*	*
IN	85*5.7	*5.7	*5.7	*	*	*	*
IN	86*20.0	*20.0	*20.0	*	*	*	*
IN	830*47.2	*47.2	*47.2	*	*	*	*
IN	90*22.9	*22.9	*22.9	*	*	*	*
IN	91*40.0	*40.0	*40.0	*	*	*	*
IN	832*527.0	*527.0	*527.0	*	*	*	*
IN	833*480.0	*480.0	*480.0	*	*	*	*
IN	104*3.0	*3.0	*3.0	*	*	*	*
IN	105*7.2	*7.2	*7.2	*	*	*	*
IN	106*7.2	*7.2	*7.2	*	*	*	*
IN	107*4.5	*4.5	*4.5	*	*	*	*
FF	10 806*.4772	*	*.8778	*	*	*	*
FF	20 841*-.2840	*	*.9588	*	*	*	*
FF	30 843*-.9588	*	*-.2840	*	*	*	*
FF	40 807*.4772	*	*.8788	*	*	*	*
FF	50 852*.9588	*	*.2840	*	*	*	*
FF	60 52*-.8788	*	*.4772	*	*	*	*
FF	70 55*-.4772	*	*-.8783	*	*	*	*
FF	80 161*	*-1.0	*	*	*	*	*
FF	90 265*-.9252	*	*.3795	*	*	*	*
FF	100 66*-.9951	*	*.0993	*	*	*	*
FF	110 67*.0702	*-.7071	*.7036	*	*	*	*
SK	236 237*-.8526	*-.2425	*.4629	*-.2131	*.9701	*.1157	*
SP RC-H40	236 237*130000.	*	*	*	*	*	*
SK	56 57*.4772	*	*.8788	*	*1.0	*	*
SP RC-H37	56 57*160000.	*	*	*	*	*	*
SP	559 560*	*230000.	*	*	*	*	*
SK	851 61*.9252	*	*-.3795	*	*1.0	*	*
SP RC-H39	851 61*160000.	*	*	*	*	*	*
SK	62 63*.174	*-.8886	*.4243	*-.3372	*-.4586	*-.8222	*
SP RC-H38	62 63*171000.	*	*	*	*	*	*

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

EN	*	*	*	*	*	*	*
----	---	---	---	---	---	---	---



FF	110	67	.0702	*-.7071	*.7036	*-.2132	*.9701	*.1157	*
SK	236	237	*-.8526	*-.2425	*.4629	*	*	*	*
SP RC-H40	236	237	*130000.	*	*	*	*	*	*
SK	56	57	*.4772	*	*.8786	*	*1.	*	*
SP RC-H37	56	57	*160000.	*	*	*	*	*	*
SP	559	560	*	*230000.	*	*	*	*	*
SK	851	61	*.9252	*	*-.3795	*	*1.	*	*
SP RC-H39	851	61	*160000.	*	*	*	*	*	*
SK	62	63	*.174	*-.8886	*.4243	*-.3372	*-.4586	*-.8222	*
SP RC-H38	62	63	*171000.	*	*	*	*	*	*

ADLPIPE PAGE 24 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.40.30.  
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK  
 EN \* \* \* \* \*

ADLPIPE PAGE 25 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.51.  
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK  
 2 SAFETY COLD FKW24F--2 PSV  
 CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE  
 PIPE ELEMENT GEOMETRY

SECTION 1 CONNECTS SEQUENCE POINTS 10 AND 301 AND HAS 4 MEMBERS.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

## PIPE ELEMENT GEOMETRY

SECTION 1 CONNECTS SEQUENCE POINTS 10 AND 801 AND HAS 4 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE		FITTING		CORR. ALLOW.
						DX	DY	DZ			OD	T	OD	T	
						-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)	
1	RU	10	12 BUTT	BUTT	NONE	.00	.00	-.00	.01		6.625	.718			0.000
2	EL	12	14 BUTT	BUTT	NONE	.14	.53	-.17	.75	45.00	6.625	.718	6.625	.718	0.000
3	RU	14	16 BUTT	BUTT	NONE	0.00	2.63	0.00	2.63	0.	6.625	.718			0.000
4	EL	16	801 BUTT	BUTT	NONE	.12	.35	.08	.50	45.00	6.625	.718	6.625	.718	0.000

SECTION 2 CONNECTS SEQUENCE POINTS 801 AND 802 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE		FITTING		CORR. ALLOW.
						DX	DY	DZ			OD	T	OD	T	
						-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)	
1	EL	801	17 NONE	BUTT	NONE	.29	.15	.20	.50	45.00	6.625	.718	6.625	.718	0.000
2	EL	17	802 BUTT	BUTT	NONE	.44	-.22	.30	.75	45.00	6.625	.718	6.625	.718	0.000

SECTION 3 CONNECTS SEQUENCE POINTS 802 AND 803 AND HAS 3 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE		FITTING		CORR. ALLOW.
						DX	DY	DZ			OD	T	OD	T	
						-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)	
1	EL	802	18 NONE	BUTT	NONE	.18	-.53	.12	.75	45.00	6.625	.718	6.625	.718	0.000
2	RU	18	20 BUTT	BUTT	NONE	.00	-1.02	.00	1.02	0.	6.625	.718			0.000
3	EL	20	803 BUTT	BUTT	NONE	.18	-.53	.12	.75	45.00	6.625	.718	6.625	.718	0.000

SECTION 4 CONNECTS SEQUENCE POINTS 803 AND 804 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE		FITTING		CORR. ALLOW.
						DX	DY	DZ			OD	T	OD	T	
						-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)	
1	EL	803	21 NONE	BUTT	NONE	.44	-.22	.30	.75	45.00	6.625	.718	6.625	.718	0.000
2	EL	21	804 BUTT	BUTT	NONE	.44	.22	.30	.75	45.00	6.625	.718	6.625	.718	0.000

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

## PIPE ELEMENT GEOMETRY

SECTION 5 CONNECTS SEQUENCE POINTS 804 AND 24 AND HAS 3 MEMBERS.



MEM TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	DIRECTION	PIPE		FITTING		CORR. ALLOW.	
						DX	DY	DZ	RADIUS OF CURVATURE		CHANGE	OD	T	OD		T
						-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)		
1	EL	803	21	NONE	BUTT	NONE	.44	-.22	.30	.75	45.00	6.625	.718	6.625	.718	0.000
2	EL	21	804	BUTT	BUTT	NONE	.44	.22	.30	.75	45.00	6.625	.718	6.625	.718	0.000

ADLPIPE PAGE 26

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.51.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 5 CONNECTS SEQUENCE POINTS 804 AND 24 AND HAS 3 MEMBERS.

MEM TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	DIRECTION	PIPE		FITTING		CORR. ALLOW.	
						DX	DY	DZ	RADIUS OF CURVATURE		CHANGE	OD	T	OD		T
						-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)		
1	EL	804	22	NONE	BUTT	NONE	.18	.53	.12	.75	45.00	6.625	.718	6.625	.718	0.000
2	RU	22	23	BUTT	BUTT	NONE	.00	.01	.00	.01	0.	6.625	.718			0.000
3	RU	23	24	BUTT	BUTT	NONE	0.00	.57	0.00	.57	0.	6.625	1.436			0.000

SECTION 6 CONNECTS SEQUENCE POINTS 24 AND 25 AND HAS 1 MEMBERS.

MEM TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	DIRECTION	PIPE		FITTING		CORR. ALLOW.	
						DX	DY	DZ	RADIUS OF CURVATURE		CHANGE	OD	T	OD		T
						-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)		
1	VA	24	25	BUTT	BUTT	NONE	0.00	.94	0.00	.94		6.625	1.436			0.000

SECTION 7 CONNECTS SEQUENCE POINTS 25 AND 805 AND HAS 2 MEMBERS.

MEM TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	DIRECTION	PIPE		FITTING		CORR. ALLOW.	
						DX	DY	DZ	RADIUS OF CURVATURE		CHANGE	OD	T	OD		T
						-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)		
1	VA	25	26	NONE	BUTT	NONE	0.00	.40	0.00	.40		6.625	1.436			0.000
2	VA	26	805	BUTT	BUTT	NONE	.04	0.00	.07	.08	90.	6.625	1.436			0.000

SECTION 8 CONNECTS SEQUENCE POINTS 25 AND 228 AND HAS 2 MEMBERS.

MEM TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	DIRECTION	PIPE		FITTING		CORR. ALLOW.	
						DX	DY	DZ	RADIUS OF CURVATURE		CHANGE	OD	T	OD		T
						-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)		
1	VA	25	27	NONE	BUTT	NONE	.45	0.00	.82	.94		6.625	1.436			0.000
2	RU	27	228	BUTT	BUTT	NONE	.18	0.00	.34	.39	0.	6.625	1.436			0.000

ADLPIPE PAGE 27

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.51.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 9 CONNECTS SEQUENCE POINTS 228 AND 806 AND HAS 2 MEMBERS.

MEM TYPE	FROM	TO	WELD	WELD	WELD	DX	DY	DZ	RADIUS OF CURVATURE (FEET)	DIRECTION OF CHANGE (DEGREES)	OD (IN)	T (IN)	OD (IN)	T (IN)	CORR. ALLOW.
1	VA	25	27	NONE	BUTT	NONE	.45	0.00	.82	.94	6.625	1.436			0.000
2	RU	27	228	BUTT	BUTT	NONE	.18	0.00	.34	.39	0.	6.625	1.436		0.000

ADLPIPE PAGE 27 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.51.  
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK  
 2 SAFETY COLD FKW24F--2 PSV

CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 9 CONNECTS SEQUENCE POINTS 228 AND 806 AND HAS 2 MEMBERS.

MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE DX	DY	DZ	LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION OF CHANGE (DEGREES)	OD (IN)	PIPE T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.	
1	RU	228	28	NONE	BUTT	NONE	.00	0.00	.00	.00	22.50	6.625	.280	0.000	
2	EL	28	806	BUTT	BUTT	NONE	.09	0.00	.28	.75	6.625	.280	6.625	.280	0.000

SECTION 10 CONNECTS SEQUENCE POINTS 806 AND 841 AND HAS 4 MEMBERS.

MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE DX	DY	DZ	LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION OF CHANGE (DEGREES)	OD (IN)	PIPE T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.		
1	EL	806	29	NONE	BUTT	NONE	-.03	0.00	.29	.75	22.52	6.625	.280	6.625	.280	0.000
2	RU	29	229	BUTT	BUTT	NONE	-.04	0.00	.14	.15	0.	6.625	.280		0.000	
3	RU	229	230	BUTT	BUTT	NONE	-.04	0.00	.14	.15	0.	6.625	.280		0.000	
4	TE	230	841	BUTT	NONE	NONE	-.13	0.00	.45	.47	0.	6.625	.280		0.000	

SECTION 11 CONNECTS SEQUENCE POINTS 841 AND 842 AND HAS 2 MEMBERS.

MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE DX	DY	DZ	LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION OF CHANGE (DEGREES)	OD (IN)	PIPE T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.	
1	TE	841	231	NONE	BUTT	NONE	-.13	0.00	.45	.47	6.625	.280		0.000	
2	RU	231	842	BUTT	BUTT	NONE	-.12	0.00	.40	.42	0.	6.625	.280		0.000

SECTION 12 CONNECTS SEQUENCE POINTS 841 AND 843 AND HAS 3 MEMBERS.

MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE DX	DY	DZ	LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION OF CHANGE (DEGREES)	OD (IN)	PIPE T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.		
1	TE	841	232	NONE	BUTT	NONE	-.45	0.00	-.13	.47	6.625	.280		0.000		
2	RU	232	233	BUTT	BUTT	NONE	-.00	0.00	-.00	.00	0.	6.625	.280		0.000	
3	EL	233	843	BUTT	BUTT	NONE	-.29	0.00	-.03	.75	22.50	6.625	.280	6.625	.280	0.000

ADLPIPE PAGE 28 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.51.  
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK  
 2 SAFETY COLD FKW24F--2 PSV

CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 13 CONNECTS SEQUENCE POINTS 843 AND 235 AND HAS 4 MEMBERS.



MEM	TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH (PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE		FITTING		CORR. ALLOW.
							DX	DY	DZ			OD	T	OD	T	
							-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)	
1	TE	841	232	NONE	BUTT	NONE	-.45	0.00	-.13	.47		6.625	.280			0.000
2	RU	232	233	BUTT	BUTT	NONE	-.00	0.00	-.00	.00	0.	6.625	.280			0.000
3	EL	233	843	BUTT	BUTT	NONE	-.29	0.00	-.03	.75	22.50	6.625	.280	6.625	.280	0.000

ADLPIPE PAGE 28 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.51.  
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK  
 2 SAFETY COLD FKW24F--2 PSV  
 CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 13 CONNECTS SEQUENCE POINTS 843 AND 235 AND HAS 4 MEMBERS.

MEM	TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH (PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE		FITTING		CORR. ALLOW.
							DX	DY	DZ			OD	T	OD	T	
							-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)	
1	EL	843	234	NONE	BUTT	NONE	-.28	0.00	.09	.75	22.51	6.625	.280	6.625	.280	0.000
2	RU	234	400	BUTT	BUTT	NONE	-.00	0.00	.00	.00	0.	6.625	.280			0.000
3	RE	400	401	BUTT	BUTT	NONE	-.51	0.00	.26	.58	0.	6.625	.280	10.750	.365	0.000
4	RU	401	235	BUTT	BUTT	NONE	-.73	0.00	.40	.83	0.	10.750	.365			0.000

SECTION 14 CONNECTS SEQUENCE POINTS 235 AND 237 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH (PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE		FITTING		CORR. ALLOW.
							DX	DY	DZ			OD	T	OD	T	
							-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)	
1	RU	235	236	NONE	BUTT	NONE	0.00	-.01	0.00	.01		10.750	.365			0.000
2	RIGID	236	237	NONE	NONE	NONE	0.00	-.91	0.00	.91						0.000

SECTION 15 CONNECTS SEQUENCE POINTS 235 AND 807 AND HAS 3 MEMBERS.

MEM	TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH (PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE		FITTING		CORR. ALLOW.
							DX	DY	DZ			OD	T	OD	T	
							-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)	
1	RU	235	403	NONE	BUTT	NONE	-.73	0.00	.40	.83		10.750	.365			0.000
2	RU	403	33	BUTT	BUTT	NONE	-2.38	0.00	1.29	2.71	0.	10.750	.365			0.000
3	RU	33	807	BUTT	BUTT	NONE	-.62	0.00	.34	.71	0.	10.750	.365			0.000

SECTION 16 CONNECTS SEQUENCE POINTS 807 AND 852 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH (PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE		FITTING		CORR. ALLOW.
							DX	DY	DZ			OD	T	OD	T	
							-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)	
1	RU	807	900	NONE	BUTT	NONE	.30	0.00	.56	.64		6.625	.280			0.000
2	EL	900	852	BUTT	BUTT	NONE	.19	0.00	.22	.75	22.50	6.625	.280	6.625	.280	0.000

ADLPIPE PAGE 29 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.51.  
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK  
 2 SAFETY COLD FKW24F--2 PSV  
 CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 17 CONNECTS SEQUENCE POINTS 852 AND 853 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	DIRECTION	PIPE		FITTING		CORR. ALLOW.	
						DX	DY	DZ	RADIUS OF CURVATURE		CHANGE	OD	T	OD		T
						-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)		
1	RU	807	900	NONE	BUTT	NONE	.30	0.00	.56	.64	22.50	6.625	.280		0.000	
2	EL	900	852	BUTT	BUTT	NONE	.19	0.00	.22	.75	22.50	6.625	.280	6.625	.280	0.000

ADLPIPE PAGE 29

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.51.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 17 CONNECTS SEQUENCE POINTS 852 AND 853 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	DIRECTION	PIPE		FITTING		CORR. ALLOW.	
						DX	DY	DZ	RADIUS OF CURVATURE		CHANGE	OD	T	OD		T
						-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)		
1	EL	852	901	NONE	BUTT	NONE	.26	0.00	.14	.75	22.50	6.625	.280	6.625	.280	0.000
2	RU	901	853	BUTT	BUTT	NONE	.40	0.00	.12	.42	0.	6.625	.280		0.000	

SECTION 18 CONNECTS SEQUENCE POINTS 807 AND 35 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	DIRECTION	PIPE		FITTING		CORR. ALLOW.
						DX	DY	DZ	RADIUS OF CURVATURE		CHANGE	OD	T	OD	
						-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)	
1	RU	807	34	NONE	BUTT	NONE	-.30	0.00	-.56	.64	0.	6.625	.280		0.000
2	RU	34	35	BUTT	BUTT	NONE	-.18	0.00	-.34	.39	0.	6.625	1.436		0.000

SECTION 19 CONNECTS SEQUENCE POINTS 35 AND 36 AND HAS 1 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	DIRECTION	PIPE		FITTING		CORR. ALLOW.
						DX	DY	DZ	RADIUS OF CURVATURE		CHANGE	OD	T	OD	
						-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)	
1	VA	35	36	BUTT	BUTT	NONE	-.45	0.00	-.82	.94		6.625	1.436		0.000

SECTION 20 CONNECTS SEQUENCE POINTS 36 AND 808 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	DIRECTION	PIPE		FITTING		CORR. ALLOW.
						DX	DY	DZ	RADIUS OF CURVATURE		CHANGE	OD	T	OD	
						-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)	
1	VA	36	37	NONE	BUTT	NONE	0.00	.40	0.00	.40		6.625	1.436		0.000
2	VA	37	808	BUTT	BUTT	NONE	.04	0.00	.07	.08	90.	6.625	1.436		0.000

ADLPIPE PAGE 30

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.52.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 21 CONNECTS SEQUENCE POINTS 36 AND 138 AND HAS 2 MEMBERS.



						FEET	(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)		
1	VA	36	37	NONE	BUTT	NONE	0.00	.40	0.00	.40	6.625	1.436	0.000	
2	VA	37	808	BUTT	BUTT	NONE	.04	0.00	.07	.08	90.	6.625	1.436	0.000

ADLPIPE PAGE 30 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.52.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 21 CONNECTS SEQUENCE POINTS 36 AND 138 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE	DIRECTION OF CHANGE	PIPE OD	T	FITTING OD	T	CORR. ALLOW.
						DX	DY	DZ	(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)	
						-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)	
1	VA	36	38	NONE	BUTT	NONE	0.00	-.94	0.00	.94	6.625	1.436			0.000
2	RU	38	138	BUTT	BUTT	NONE	0.00	-.57	0.00	.57	0.	6.625	1.436		0.000

SECTION 22 CONNECTS SEQUENCE POINTS 138 AND 809 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE	DIRECTION OF CHANGE	PIPE OD	T	FITTING OD	T	CORR. ALLOW.	
						DX	DY	DZ	(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)		
						-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)		
1	RU	138	39	NONE	BUTT	NONE	0.00	-.01	0.00	.01	6.625	.718			0.000	
2	EL	39	809	BUTT	BUTT	NONE	-.10	-.53	-.19	.75	45.00	6.625	.718	6.625	.718	0.000

SECTION 23 CONNECTS SEQUENCE POINTS 809 AND 810 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE	DIRECTION OF CHANGE	PIPE OD	T	FITTING OD	T	CORR. ALLOW.	
						DX	DY	DZ	(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)		
						-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)		
1	EL	809	40	NONE	BUTT	NONE	-.25	-.22	-.47	.75	45.00	6.625	.718	6.625	.718	0.000
2	EL	40	810	BUTT	BUTT	NONE	-.25	.22	-.47	.75	45.00	6.625	.718	6.625	.718	0.000

SECTION 24 CONNECTS SEQUENCE POINTS 810 AND 811 AND HAS 3 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE	DIRECTION OF CHANGE	PIPE OD	T	FITTING OD	T	CORR. ALLOW.	
						DX	DY	DZ	(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)		
						-----FEET-----			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)		
1	EL	810	41	NONE	BUTT	NONE	-.10	.53	-.19	.75	45.00	6.625	.718	6.625	.718	0.000
2	RU	41	42	BUTT	BUTT	NONE	-.00	1.02	-.00	1.02	0.	6.625	.718			0.000
3	EL	42	811	BUTT	BUTT	NONE	-.10	.53	-.19	.75	45.00	6.625	.718	6.625	.718	0.000

ADLPIPE PAGE 31 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.52.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 25 CONNECTS SEQUENCE POINTS 811 AND 812 AND HAS 2 MEMBERS.

						DX	DY	DZ	RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	OD (IN)	T (IN)	OD (IN)	T (IN)	ALLOW.	
1	EL	810	41	NONE	BUTT	NONE	-.10	.53	-.19	.75	45.00	6.625	.718	6.625	.718	0.000
2	RU	41	42	BUTT	BUTT	NONE	-.00	1.02	-.00	1.02	0.	6.625	.718	6.625	.718	0.000
3	EL	42	811	BUTT	BUTT	NONE	-.10	.53	-.19	.75	45.00	6.625	.718	6.625	.718	0.000

ADLPIPE PAGE 31 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.52.  
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK  
 2 SAFETY COLD FKW24F--2 PSV  
 CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 25 CONNECTS SEQUENCE POINTS 811 AND 812 AND HAS 2 MEMBERS.

MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE OD (IN)	T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.		
1	EL	811	43	NONE	BUTT	NONE	-.25	.22	-.47	.75	45.00	6.625	.718	6.625	.718	0.000
2	EL	43	812	BUTT	BUTT	NONE	-.17	-.15	-.31	.50	45.00	6.625	.718	6.625	.718	0.000

SECTION 26 CONNECTS SEQUENCE POINTS 812 AND 47 AND HAS 4 MEMBERS.

MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE OD (IN)	T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.		
1	EL	812	44	NONE	BUTT	NONE	-.07	-.35	-.13	.50	45.00	6.625	.718	6.625	.718	0.000
2	RU	44	45	BUTT	BUTT	NONE	-.00	-2.64	-.00	2.64	0.	6.625	.718	6.625	.718	0.000
3	EL	45	46	BUTT	BUTT	NONE	.22	-.53	-.00	.75	45.00	6.625	.718	6.625	.718	0.000
4	RU	46	47	BUTT	BUTT	NONE	.00	-.00	0.00	.01	0.	6.625	.718	6.625	.718	0.000

SECTION 27 CONNECTS SEQUENCE POINTS 807 AND 52 AND HAS 2 MEMBERS.

MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE OD (IN)	T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.		
1	RU	807	50	NONE	BUTT	NONE	-.62	0.00	.34	.71	10.750	.365	10.750	.365	0.000	
2	RU	50	52	BUTT	BUTT	NONE	-.00	0.00	.00	.00	0.	10.750	.365	10.750	.365	0.000

SECTION 28 CONNECTS SEQUENCE POINTS 52 AND 53 AND HAS 2 MEMBERS.

MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE OD (IN)	T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.		
1	EL	52	813	NONE	BUTT	NONE	-.95	0.00	.10	1.25	45.00	10.750	.365	10.750	.365	0.000
2	EL	813	53	BUTT	BUTT	NONE	-.74	0.00	-.60	1.25	45.00	10.750	.365	10.750	.365	0.000

ADLPIPE PAGE 32 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.52.  
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK  
 2 SAFETY COLD FKW24F--2 PSV  
 CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 29 CONNECTS SEQUENCE POINTS 53 AND 844 AND HAS 2 MEMBERS.



MEM	TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE		FITTING		CORR. ALLOW.
							DX	DY	DZ			OD	T	OD	T	
1	EL	52	813	NONE	BUTT	NONE	-0.95	0.00	-0.10	1.25	45.00	10.750	.365	10.750	.365	0.000
2	EL	813	53	BUTT	BUTT	NONE	-0.74	0.00	-0.60	1.25	45.00	10.750	.365	10.750	.365	0.000

ADLPIPE PAGE 32 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.52.

S/RV PIPING KEWAUNEE GKWC8F 2 RUP DISK  
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 29 CONNECTS SEQUENCE POINTS 53 AND 844 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE		FITTING		CORR. ALLOW.
							DX	DY	DZ			OD	T	OD	T	
1	RU	53	253	NONE	BUTT	NONE	-0.00	0.00	-0.00	.00	0.	10.750	.365			0.000
2	RU	253	844	BUTT	BUTT	NONE	-0.24	0.00	-0.44	.50	0.	10.750	.730			0.000

SECTION 30 CONNECTS SEQUENCE POINTS 844 AND 55 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE		FITTING		CORR. ALLOW.
							DX	DY	DZ			OD	T	OD	T	
1	RU	844	254	NONE	BUTT	NONE	-0.24	0.00	-0.44	.50	0.	10.750	.730			0.000
2	RU	254	55	BUTT	BUTT	NONE	-1.43	0.00	-2.64	3.00	0.	10.750	.365			0.000

SECTION 31 CONNECTS SEQUENCE POINTS 55 AND 56 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE		FITTING		CORR. ALLOW.
							DX	DY	DZ			OD	T	OD	T	
1	EL	55	814	NONE	BUTT	NONE	-0.42	-0.37	-0.78	1.25	45.00	10.750	.365	10.750	.365	0.000
2	EL	814	56	BUTT	BUTT	NONE	-0.17	-0.88	-0.32	1.25	45.00	10.750	.365	10.750	.365	0.000

SECTION 32 CONNECTS SEQUENCE POINTS 56 AND 815 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE		FITTING		CORR. ALLOW.
							DX	DY	DZ			OD	T	OD	T	
1	RU	56	57	NONE	BUTT	NONE	-0.00	-0.50	-0.00	.50	0.	10.750	.365			0.000
2	RU	57	815	BUTT	BUTT	NONE	0.00	-1.13	0.00	1.13	0.	10.750	.365			0.000

ADLPIPE PAGE 37 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.52.

S/RV PIPING KEWAUNEE GKWC8F 2 RUP DISK  
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 33 CONNECTS SEQUENCE POINTS 815 AND 816 AND HAS 1 MEMBERS.

MEM TYPE	FROM	TO	WELD	WELD	WELD	DX	DY	DZ	RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	OD (IN)	T (IN)	OD (IN)	T (IN)	ALLOW.
1	RU	56	57	NONE	BUTT	NONE	-0.00	-0.58	-0.00	.58	10.750	.365			0.000
2	RU	57	815	BUTT	BUTT	NONE	0.00	-1.13	0.00	1.13	0.	10.750	.365		0.000

ADLPIPE PAGE 33 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.52.  
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK  
 2 SAFETY COLD FKW24F--2 PSV  
 CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 33 CONNECTS SEQUENCE POINTS 815 AND 816 AND HAS 1 MEMBERS.  
 MEM TYPE FROM TO WELD WELD LONG WELD COORDINATE CHANGE DX DY DZ LENGTH(PIPE) RADIUS OF CURVATURE (FEET) DIRECTION CHANGE (DEGREES) OD (IN) T (IN) FITTING OD (IN) T (IN) CORR. ALLOW.

1	RU	815	816	BUTT	BUTT	NONE	0.00	-8.44	0.00	8.44	10.750	.365			0.000
---	----	-----	-----	------	------	------	------	-------	------	------	--------	------	--	--	-------

SECTION 34 CONNECTS SEQUENCE POINTS 816 AND 817 AND HAS 1 MEMBERS.  
 MEM TYPE FROM TO WELD WELD LONG WELD COORDINATE CHANGE DX DY DZ LENGTH(PIPE) RADIUS OF CURVATURE (FEET) DIRECTION CHANGE (DEGREES) OD (IN) T (IN) FITTING OD (IN) T (IN) CORR. ALLOW.

1	RU	816	817	BUTT	BUTT	NONE	0.00	-9.00	0.00	9.00	10.750	.365			0.000
---	----	-----	-----	------	------	------	------	-------	------	------	--------	------	--	--	-------

SECTION 35 CONNECTS SEQUENCE POINTS 817 AND 850 AND HAS 1 MEMBERS.  
 MEM TYPE FROM TO WELD WELD LONG WELD COORDINATE CHANGE DX DY DZ LENGTH(PIPE) RADIUS OF CURVATURE (FEET) DIRECTION CHANGE (DEGREES) OD (IN) T (IN) FITTING OD (IN) T (IN) CORR. ALLOW.

1	RU	817	850	BUTT	BUTT	NONE	0.00	-9.00	0.00	9.00	10.750	.365			0.000
---	----	-----	-----	------	------	------	------	-------	------	------	--------	------	--	--	-------

SECTION 36 CONNECTS SEQUENCE POINTS 850 AND 59 AND HAS 1 MEMBERS.  
 MEM TYPE FROM TO WELD WELD LONG WELD COORDINATE CHANGE DX DY DZ LENGTH(PIPE) RADIUS OF CURVATURE (FEET) DIRECTION CHANGE (DEGREES) OD (IN) T (IN) FITTING OD (IN) T (IN) CORR. ALLOW.

1	RU	850	59	BUTT	BUTT	NONE	0.00	-2.78	0.00	2.78	10.750	.365			0.000
---	----	-----	----	------	------	------	------	-------	------	------	--------	------	--	--	-------

SECTION 37 CONNECTS SEQUENCE POINTS 59 AND 560 AND HAS 2 MEMBERS.  
 MEM TYPE FROM TO WELD WELD LONG WELD COORDINATE CHANGE DX DY DZ LENGTH(PIPE) RADIUS OF CURVATURE (FEET) DIRECTION CHANGE (DEGREES) OD (IN) T (IN) FITTING OD (IN) T (IN) CORR. ALLOW.

1	RU	59	559	NONE	BUTT	NONE	.24	0.00	.44	.50	10.750	.365			0.000
2	RIGID	559	560	NONE	NONE	NONE	.24	0.00	.44	.50					

ADLPIPE PAGE 34 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.52.  
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK  
 2 SAFETY COLD FKW24F--2 PSV  
 CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 38 CONNECTS SEQUENCE POINTS 59 AND 818 AND HAS 2 MEMBERS.



1	RU	850	59	BUTT	BUTT	NONE	0.00	-2.78	0.00	2.78	10.750	.365			0.000
SECTION 37 CONNECTS SEQUENCE POINTS 59 AND 560 AND HAS 2 MEMBERS.															
MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	PIPE	FITTING	CORR. ALLOW.				
					DX	DY	DZ	RADIUS OF CURVATURE (FEET)	DIRECTION OF CHANGE (DEGREES)	OD (IN)	T (IN)	OD (IN)	T (IN)		
1	RU	59	559	NONE	BUTT	NONE	.24	0.00	.44	.50	10.750	.365			0.000
2	RIGID	559	560	NONE	NONL	NONE	.24	0.00	.44	.50					

ADLPIPE PAGE 34 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.52.  
 S/RV PIPING KEWAUNEE GKWC8F 2 RUP DISK  
 2 SAFETY COLD FKW24F--2 PSV  
 CONDITION LOADS 24  
 SHOCK  
 PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 38 CONNECTS SEQUENCE POINTS 59 AND 818 AND HAS 2 MEMBERS.															
MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	PIPE	FITTING	CORR. ALLOW.				
					DX	DY	DZ	RADIUS OF CURVATURE (FEET)	DIRECTION OF CHANGE (DEGREES)	OD (IN)	T (IN)	OD (IN)	T (IN)		
1	RU	59	60	NONE	BUTT	NONE	0.00	-3.75	0.00	3.75	10.750	.365			0.000
2	RU	60	818	BUTT	BUTT	NONE	0.00	-2.00	0.00	2.00	0.	10.750	.365		0.000

SECTION 39 CONNECTS SEQUENCE POINTS 818 AND 851 AND HAS 1 MEMBERS.															
MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	PIPE	FITTING	CORR. ALLOW.				
					DX	DY	DZ	RADIUS OF CURVATURE (FEET)	DIRECTION OF CHANGE (DEGREES)	OD (IN)	T (IN)	OD (IN)	T (IN)		
1	RU	818	851	BUTT	BUTT	NONE	0.00	-9.00	0.00	9.00	10.750	.365			0.000

SECTION 40 CONNECTS SEQUENCE POINTS 851 AND 161 AND HAS 2 MEMBERS.															
MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	PIPE	FITTING	CORR. ALLOW.				
					DX	DY	DZ	RADIUS OF CURVATURE (FEET)	DIRECTION OF CHANGE (DEGREES)	OD (IN)	T (IN)	OD (IN)	T (IN)		
1	RU	851	61	NONE	BUTT	NONE	0.00	-8.50	0.00	8.50	10.750	.365			0.000
2	RU	61	161	BUTT	BUTT	NONE	0.00	-.25	0.00	.25	0.	10.750	.365		0.000

SECTION 41 CONNECTS SEQUENCE POINTS 161 AND 62 AND HAS 2 MEMBERS.																
MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	PIPE	FITTING	CORR. ALLOW.					
					DX	DY	DZ	RADIUS OF CURVATURE (FEET)	DIRECTION OF CHANGE (DEGREES)	OD (IN)	T (IN)	OD (IN)	T (IN)			
1	EL	161	819	NONE	BUTT	NONE	-.34	-.88	.14	1.25	45.00	10.750	.365	10.750	.365	0.000
2	EL	819	62	BUTT	BUTT	NONE	-.82	-.37	.34	1.25	45.00	10.750	.365	10.750	.365	0.000

ADLPIPE PAGE 35 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.52.  
 S/RV PIPING KEWAUNEE GKWC8F 2 RUP DISK  
 2 SAFETY COLD FKW24F--2 PSV  
 CONDITION LOADS 24  
 SHOCK  
 PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 42 CONNECTS SEQUENCE POINTS 62 AND 64 AND HAS 2 MEMBERS.															
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

						FEET	(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)				
1	EL	161	819	NONE	BUTT	NONE	-.34	-.88	.14	1.25	45.00	10.750	.365	10.750	.365	0.000
2	LL	619	62	BUTT	BUTT	NONE	-.82	-.37	.34	1.25	45.00	10.750	.365	10.750	.365	0.000

ADLPIPE PAGE 35

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.52.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 42 CONNECTS SEQUENCE POINTS 62 AND 64 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	PIPE	FITTING		CORR.		
						DX	DY	DZ	RADIUS OF CURVATURE	DIRECTION	OD	T	OD	T	ALLOW.
						FEET			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)	
1	RU	62	63	NONE	BUTT	NONE	-.58	-.00	.24	.62	10.750	.365			0.000
2	RU	63	64	BUTT	BUTT	NONE	-3.52	0.00	1.44	3.80	0.	10.750	.365		0.000

SECTION 43 CONNECTS SEQUENCE POINTS 64 AND 820 AND HAS 1 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	PIPE	FITTING		CORR.		
						DX	DY	DZ	RADIUS OF CURVATURE	DIRECTION	OD	T	OD	T	ALLOW.
						FEET			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)	
1	RU	64	820	BUTT	BUTT	NONE	-4.00	0.00	1.64	4.33	10.750	.365			0.000

SECTION 44 CONNECTS SEQUENCE POINTS 820 AND 821 AND HAS 1 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	PIPE	FITTING		CORR.		
						DX	DY	DZ	RADIUS OF CURVATURE	DIRECTION	OD	T	OD	T	ALLOW.
						FEET			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)	
1	RU	820	821	BUTT	BUTT	NONE	-9.25	0.00	3.79	10.00	10.750	.365			0.000

SECTION 45 CONNECTS SEQUENCE POINTS 821 AND 265 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	PIPE	FITTING		CORR.		
						DX	DY	DZ	RADIUS OF CURVATURE	DIRECTION	OD	T	OD	T	ALLOW.
						FEET			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)	
1	RU	821	65	NONE	BUTT	NONE	-4.94	0.00	2.03	5.34	10.750	.365			0.000
2	RU	65	265	BUTT	BUTT	NONE	-5.69	0.00	2.33	6.15	0.	10.750	.365		0.000

SECTION 46 CONNECTS SEQUENCE POINTS 265 AND 266 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	PIPE	FITTING		CORR.			
						DX	DY	DZ	RADIUS OF CURVATURE	DIRECTION	OD	T	OD	T	ALLOW.	
						FEET			(FEET)	(DEGREES)	(IN)	(IN)	(IN)	(IN)		
1	EL	265	822	NONE	BUTT	NONE	-.17	0.00	.06	1.25	8.30	10.750	.365	10.750	.365	0.000
2	EL	822	266	BUTT	BUTT	NONE	-.18	0.00	.03	1.25	8.30	10.750	.365	10.750	.365	0.000

ADLPIPE PAGE 36

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.52.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 47 CONNECTS SEQUENCE POINTS 266 AND 66 AND HAS 1 MEMBERS.



MEM	TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE DX	DY	DZ	LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	OD (IN)	PIPE T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.
1	RU	821	65	NONE	BUTT	NONE	-4.94	0.00	2.03	5.34		10.750	.365			0.000
2	RU	65	265	BUTT	BUTT	NONE	-5.69	0.00	2.33	6.15	0.	10.750	.365			0.000

SECTION 46 CONNECTS SEQUENCE POINTS 265 AND 266 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE DX	DY	DZ	LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	OD (IN)	PIPE T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.
1	EL	265	822	NONE	BUTT	NONE	-.17	0.00	.06	1.25	8.30	10.750	.365	10.750	.365	0.000
2	EL	822	266	BUTT	BUTT	NONE	-.18	0.00	.03	1.25	8.30	10.750	.365	10.750	.365	0.000

ADLPIPE PAGE 36

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.52.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 47 CONNECTS SEQUENCE POINTS 266 AND 66 AND HAS 1 MEMBERS.

MEM	TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE DX	DY	DZ	LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	OD (IN)	PIPE T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.
1	RU	266	66	BUTT	BUTT	NONE	-5.79	0.00	.58	5.82		10.750	.365			0.000

SECTION 48 CONNECTS SEQUENCE POINTS 66 AND 67 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE DX	DY	DZ	LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	OD (IN)	PIPE T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.
1	EL	66	823	NONE	BUTT	NONE	-.85	-.26	.35	1.25	45.00	10.750	.365	10.750	.365	0.000
2	EL	823	67	BUTT	BUTT	NONE	-.30	-.62	.66	1.25	45.00	10.750	.365	10.750	.365	0.000

SECTION 49 CONNECTS SEQUENCE POINTS 67 AND 68 AND HAS 1 MEMBERS.

MEM	TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE DX	DY	DZ	LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	OD (IN)	PIPE T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.
1	RU	67	68	BUTT	BUTT	NONE	.07	-.71	.70	1.00		10.750	.365			0.000

SECTION 50 CONNECTS SEQUENCE POINTS 815 AND 71 AND HAS 3 MEMBERS.

MEM	TYPE	FROM	TO	BEG WELD	END WELD	LONG WELD	COORDINATE CHANGE DX	DY	DZ	LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	OD (IN)	PIPE T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.
1	RU	815	70	NONE	BUTT	NONE	.39	.45	-.21	.63		10.750	.365			0.000
2	RU	70	700	BUTT	BUTT	NONE	.00	.00	-.00	.00	16.	10.750	.365			0.000
3	RU	700	71	BUTT	BUTT	NONE	.28	.32	-.15	.46	16.	4.500	.237			0.000

ADLPIPE PAGE 37

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.52.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 51 CONNECTS SEQUENCE POINTS 71 AND 72 AND HAS 2 MEMBERS.

1	RU	815	70	NONE	BUTT	NONE	.39	.45	-.21	.63		10.750	.365	0.000
2	RU	70	700	BUTT	BUTT	NONE	.00	.00	-.00	.00	16.	10.750	.365	0.000
3	RU	700	71	BUTT	BUTT	NONE	.28	.32	-.15	.46	16.	4.500	.237	0.000

ADLPIPE PAGE 37 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.52.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 51 CONNECTS SEQUENCE POINTS 71 AND 72 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	PIPE	FITTING		CORR.			
						DX	DY	DZ	RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	OD (IN)	T (IN)	OD (IN)	T (IN)	ALLOW.	
-----FEET-----																
1	EL	71	824	NONE	BUTT	NONE	.10	.16	-.05	.50	22.50	4.500	.237	4.500	.237	0.000
2	EL	824	72	BUTT	BUTT	NONE	.03	.19	-.02	.50	22.50	4.500	.237	4.500	.237	0.000

SECTION 52 CONNECTS SEQUENCE POINTS 72 AND 173 AND HAS 1 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	PIPE	FITTING		CORR.		
						DX	DY	DZ	RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	OD (IN)	T (IN)	OD (IN)	T (IN)	ALLOW.
-----FEET-----															
1	RU	72	173	BUTT	BUTT	NONE	0.00	.40	0.00	.40	4.500	.237			0.000

SECTION 53 CONNECTS SEQUENCE POINTS 173 AND 174 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	PIPE	FITTING		CORR.			
						DX	DY	DZ	RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	OD (IN)	T (IN)	OD (IN)	T (IN)	ALLOW.	
-----FEET-----																
1	EL	173	825	NONE	BUTT	NONE	.13	.35	-.07	.50	45.00	4.500	.237	4.500	.237	0.000
2	EL	825	174	BUTT	BUTT	NONE	.31	.15	-.17	.50	45.00	4.500	.237	4.500	.237	0.000

SECTION 54 CONNECTS SEQUENCE POINTS 174 AND 826 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	PIPE	FITTING		CORR.			
						DX	DY	DZ	RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	OD (IN)	T (IN)	OD (IN)	T (IN)	ALLOW.	
-----FEET-----																
1	RU	174	73	NONE	BUTT	NONE	.00	0.00	-.00	.00	4.500	.237			0.000	
2	RU	73	826	BUTT	BUTT	NONE	.22	0.00	-.12	.25	0.	4.500	.237			0.000

ADLPIPE PAGE 38 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.52.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

PIPE ELEMENT GEOMETRY



						FEET	FEET	FEET	FEET	FEET	FEET	FEET	FEET	FEET	FEET
1	RU	174	73	NONE	BUTT	NONE	.00	0.00	-.00	.00	0.00	4.500	.237	0.000	0.000
2	RU	73	826	BUTT	BUTT	NONE	.22	0.00	-.12	.25	0.00	4.500	.237	0.000	0.000

ADLPIPE PAGE 38 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.52.  
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK  
 2 SAFETY COLD FKW24F--2 PSV

CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 55 CONNECTS SEQUENCE POINTS 826 AND 76 AND HAS 4 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE	LENGTH(PIPE)	PIPE	FITTING	CORR.
						DX DY DZ	RADIUS OF CURVATURE	DIRECTION CHANGE	OD T OD T	ALLOW.
						FEET	FEET	(DEGREES)	(IN)	(IN)
1	RU	826	74	NONE	BUTT	NONE	.88 0.00 -.48	1.00	4.500 .237	0.000
2	RE	74	75	BUTT	BUTT	NONE	.29 0.00 -.16	.33	0. 4.500 .237	3.500 .437
3	RU	75	750	BUTT	BUTT	NONE	.40 .04 -.22	.46	5. 3.500 .437	0.000
4	VA	750	76	BUTT	BUTT	NONE	.45 .05 -.24	.51	0. 3.500 .437	3.500 .874

SECTION 56 CONNECTS SEQUENCE POINTS 76 AND 827 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE	LENGTH(PIPE)	PIPE	FITTING	CORR.
						DX DY DZ	RADIUS OF CURVATURE	DIRECTION CHANGE	OD T OD T	ALLOW.
						FEET	FEET	(DEGREES)	(IN)	(IN)
1	VA	76	77	NONE	BUTT	NONE	0.00 1.00 0.00	1.00	3.500 .437	3.500 .874
2	VA	77	827	BUTT	BUTT	NONE	0.00 1.61 0.00	1.61	0. 3.500 .437	3.500 .874

SECTION 57 CONNECTS SEQUENCE POINTS 76 AND 82 AND HAS 4 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE	LENGTH(PIPE)	PIPE	FITTING	CORR.
						DX DY DZ	RADIUS OF CURVATURE	DIRECTION CHANGE	OD T OD T	ALLOW.
						FEET	FEET	(DEGREES)	(IN)	(IN)
1	VA	76	78	NONE	BUTT	NONE	.45 .05 -.24	.51	3.500 .437	3.500 .874
2	RU	78	80	BUTT	BUTT	NONE	.74 .08 -.40	.84	0. 3.500 .437	0.000
3	RU	80	81	BUTT	BUTT	NONE	.74 .08 -.40	.84	0. 3.500 .437	0.000
4	VA	81	82	BUTT	BUTT	NONE	.44 .05 -.24	.50	0. 3.500 .437	3.500 .874

SECTION 58 CONNECTS SEQUENCE POINTS 82 AND 828 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE	LENGTH(PIPE)	PIPE	FITTING	CORR.
						DX DY DZ	RADIUS OF CURVATURE	DIRECTION CHANGE	OD T OD T	ALLOW.
						FEET	FEET	(DEGREES)	(IN)	(IN)
1	VA	82	83	NONE	BUTT	NONE	0.00 .50 0.00	.50	3.500 .437	3.500 .874
2	VA	83	828	BUTT	BUTT	NONE	0.00 .33 0.00	.33	0. 3.500 .437	3.500 .874

ADLPIPE PAGE 39 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.52.  
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK  
 2 SAFETY COLD FKW24F--2 PSV

CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 58 CONNECTS SEQUENCE POINTS 82 AND 828 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	DIRECTION CHANGE	PIPE		FITTING		CORR. ALLOW.	
						DX	DY	DZ	RADIUS OF CURVATURE (FEET)		(DEGREES)	OD (IN)	T (IN)	OD (IN)		T (IN)
1	VA	82	83	NONE	BUTT	NONE	0.00	.50	0.00	.50	3.500	.437	3.500	.874	0.000	
2	VA	83	828	BUTT	BUTT	NONE	0.00	.33	0.00	.33	0.	3.500	.437	3.500	.874	0.000

ADLPIPE PAGE 39

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.52.

S/RV PIPING KEWAUNLE GKW08F 2 RUP DISK

2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS  
SHOCK  
PRESSURE

## PIPE ELEMENT GEOMETRY

SECTION 59 CONNECTS SEQUENCE POINTS 82 AND 85 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	DIRECTION CHANGE	PIPE		FITTING		CORR. ALLOW.
						DX	DY	DZ	RADIUS OF CURVATURE (FEET)		(DEGREES)	OD (IN)	T (IN)	OD (IN)	
1	VA	82	84	NONE	BUTT	NONE	.44	.05	-.24	.50	3.500	.437	3.500	.874	0.000
2	RU	84	85	BUTT	BUTT	NONE	.00	.00	-.00	.00	0.	3.500	.437		0.000

SECTION 60 CONNECTS SEQUENCE POINTS 85 AND 86 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	DIRECTION CHANGE	PIPE		FITTING		CORR. ALLOW.	
						DX	DY	DZ	RADIUS OF CURVATURE (FEET)		(DEGREES)	OD (IN)	T (IN)	OD (IN)		T (IN)
1	EL	85	829	NONE	BUTT	NONE	.28	.03	-.03	.38	45.00	3.500	.437	3.500	.437	0.000
2	EL	829	86	BUTT	BUTT	NONE	.22	.01	.18	.38	44.99	3.500	.437	3.500	.437	0.000

SECTION 61 CONNECTS SEQUENCE POINTS 86 AND 830 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	DIRECTION CHANGE	PIPE		FITTING		CORR. ALLOW.
						DX	DY	DZ	RADIUS OF CURVATURE (FEET)		(DEGREES)	OD (IN)	T (IN)	OD (IN)	
1	RU	86	87	NONE	BUTT	NONE	1.00	0.00	1.84	2.09	3.500	.437			0.000
2	TE	87	830	BUTT	NONE	NONE	.13	0.00	.25	.28	0.	3.500	.437		0.000

SECTION 62 CONNECTS SEQUENCE POINTS 830 AND 90 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE)	DIRECTION CHANGE	PIPE		FITTING		CORR. ALLOW.
						DX	DY	DZ	RADIUS OF CURVATURE (FEET)		(DEGREES)	OD (IN)	T (IN)	OD (IN)	
1	TE	830	89	NONE	BUTT	NONE	.13	0.00	.25	.28	3.500	.437			0.000
2	RU	89	90	BUTT	BUTT	NONE	1.12	0.00	2.06	2.34	0.	3.500	.437		0.000

ADLPIPE PAGE 40

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.52.

S/RV PIPING KEWAUNLE GKW08F 2 RUP DISK

2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS  
SHOCK  
PRESSURE

## PIPE ELEMENT GEOMETRY



						-----FEET-----		CURVATURE (FEET)	CHANGE (DEGREES)	(IN)	(IN)	(IN)	ALLOW.	
1	TE	830	89	NONE	BUTT	NONE	.13	0.00	.25	.28	3.500	.437	0.000	
2	RU	89	90	BUTT	BUTT	NONE	1.12	0.00	2.06	2.34	0.	3.500	.437	0.000

ADLPIPE PAGE 40

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.52.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 63 CONNECTS SEQUENCE POINTS 90 AND 91 AND HAS 2 MEMBERS.

MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE OD (IN)	T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.		
					-----FEET-----											
1	EL	90	831	NONE	BUTT	NONE	.13	-.11	.23	.38	45.00	3.500	.437	3.500	.437	0.000
2	EL	831	91	BUTT	BUTT	NONE	.05	-.27	.10	.38	45.00	3.500	.437	3.500	.437	0.000

SECTION 64 CONNECTS SEQUENCE POINTS 91 AND 94 AND HAS 3 MEMBERS.

MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE OD (IN)	T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.		
					-----FEET-----											
1	RU	91	92	NONE	BUTT	NONE	.00	-2.26	.00	2.26		3.500	.437			0.000
2	EL	92	93	BUTT	BUTT	NONE	-.10	-.27	-.04	.38	45.00	3.500	.437	3.500	.437	0.000
3	RU	93	94	BUTT	BUTT	NONE	-.01	-.01	-.00	.01	0.	3.500	.437			0.000

SECTION 65 CONNECTS SEQUENCE POINTS 830 AND 96 AND HAS 2 MEMBERS.

MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE OD (IN)	T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.		
					-----FEET-----											
1	TE	830	95	NONE	BUTT	NONE	-.25	-.03	.13	.28	3.500	.437			0.000	
2	VA	95	96	BUTT	BUTT	NONE	-.44	-.05	.24	.50	0.	3.500	.437	3.500	.874	0.000

SECTION 66 CONNECTS SEQUENCE POINTS 96 AND 832 AND HAS 2 MEMBERS.

MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE OD (IN)	T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.		
					-----FEET-----											
1	VA	96	97	NONE	BUTT	NONE	0.00	.50	0.00	.50		3.500	.437	3.500	.874	0.000
2	VA	97	832	BUTT	BUTT	NONE	0.00	.33	0.00	.33	0.	3.500	.437	3.500	.874	0.000

ADLPIPE PAGE 41

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.53.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

PIPE ELEMENT GEOMETRY

MEM TYPE	FROM	TO	WELD	WELD	WELD	DX	DY	DZ	RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	OD (IN)	T (IN)	OD (IN)	T (IN)	ALLOW.	
1	VA	96	97	NONE	BUTT	NONE	0.00	.50	0.00	.50	3.500	.437	3.500	.874	0.000	
2	VA	97	832	BUTT	BUTT	NONE	0.00	.33	0.00	.33	0.	3.500	.437	3.500	.874	0.000

ADLPIPE PAGE 41 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.53.  
 5/RV PIPING KEWAUNEE GK08F 2 RUP DISK  
 2 SAFETY COLD FKM24F--2 PSV  
 CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 67 CONNECTS SEQUENCE POINTS 96 AND 101 AND HAS 4 MEMBERS.

MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE DX	DY	DZ	LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	OD (IN)	T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.		
1	VA	96	98	NONE	BUTT	NONE	-.44	-.05	.24	.50	3.500	.437	3.500	.874	0.000	
2	RU	98	99	BUTT	BUTT	NONE	-.24	-.09	.46	.96	0.	3.500	.437		0.000	
3	RU	99	100	BUTT	BUTT	NONE	-.84	-.09	.46	.96	0.	3.500	.437		0.000	
4	VA	100	101	BUTT	BUTT	NONE	-.45	-.05	.24	.51	0.	3.500	.437	3.500	.874	0.000

SECTION 68 CONNECTS SEQUENCE POINTS 101 AND 833 AND HAS 2 MEMBERS.

MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE DX	DY	DZ	LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	OD (IN)	T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.		
1	VA	101	102	NONE	BUTT	NONE	0.00	1.00	0.00	1.00	3.500	.437	3.500	.874	0.000	
2	VA	102	833	BUTT	BUTT	NONE	0.00	1.61	0.00	1.61	0.	3.500	.437	3.500	.874	0.000

SECTION 69 CONNECTS SEQUENCE POINTS 101 AND 104 AND HAS 3 MEMBERS.

MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE DX	DY	DZ	LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	OD (IN)	T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.	
1	VA	101	103	NONE	BUTT	NONE	-.45	-.05	.24	.51	3.500	.437	3.500	.874	0.000
2	RU	103	704	BUTT	BUTT	NONE	-.40	-.04	.22	.46	0.	3.500	.216		0.000
3	RU	704	104	BUTT	BUTT	NONE	-.00	0.00	.00	.00	5.	3.500	.216		0.000

SECTION 70 CONNECTS SEQUENCE POINTS 104 AND 105 AND HAS 2 MEMBERS.

MEM TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE DX	DY	DZ	LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	OD (IN)	T (IN)	FITTING OD (IN)	T (IN)	CORR. ALLOW.		
1	EL	104	834	NONE	BUTT	NONE	-.29	0.00	.03	.38	45.00	3.500	.216	3.500	.216	0.000
2	EL	834	105	BUTT	BUTT	NONE	-.22	0.00	-.18	.38	45.00	3.500	.216	3.500	.216	0.000

ADLPIPE PAGE 42 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.53.  
 5/RV PIPING KEWAUNEE GK08F 2 RUP DISK  
 2 SAFETY COLD FKM24F--2 PSV  
 CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 71 CONNECTS SEQUENCE POINTS 105 AND 106 AND HAS 1 MEMBERS.



MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE OD (IN)	T (IN)	FITTING		CORR. ALLOW.	
						DX	DY	DZ					OD	T		
1	EL	104	834	NONE	BUTT	NONE	-.29	0.00	.03	.38	45.00	3.500	.216	3.500	.216	0.000
2	EL	834	105	BUTT	BUTT	NONE	-.22	0.00	-.18	.38	45.00	3.500	.216	3.500	.216	0.000

ADLPIPE PAGE 42 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.53.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

PIPE ELEMENT GEOMETRY

SECTION 71 CONNECTS SEQUENCE POINTS 105 AND 106 AND HAS 1 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE OD (IN)	T (IN)	FITTING		CORR. ALLOW.
						DX	DY	DZ					OD	T	
1	RU	105	106	BUTT	BUTT	NONE	-.67	0.00	-1.23	1.40		3.500	.216		0.000

SECTION 72 CONNECTS SEQUENCE POINTS 106 AND 107 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE OD (IN)	T (IN)	FITTING		CORR. ALLOW.	
						DX	DY	DZ					OD	T		
1	EL	106	835	NONE	BUTT	NONE	-.09	0.00	-.11	.38	22.50	3.500	.216	3.500	.216	0.000
2	EL	835	107	BUTT	BUTT	NONE	-.13	0.00	-.07	.38	22.50	3.500	.216	3.500	.216	0.000

SECTION 73 CONNECTS SEQUENCE POINTS 107 AND 826 AND HAS 2 MEMBERS.

MEM	TYPE	FROM	BEG TO WELD	END WELD	LONG WELD	COORDINATE CHANGE			LENGTH(PIPE) RADIUS OF CURVATURE (FEET)	DIRECTION CHANGE (DEGREES)	PIPE OD (IN)	T (IN)	FITTING		CORR. ALLOW.
						DX	DY	DZ					OD	T	
1	RU	107	707	NONE	BUTT	NONE	-.71	0.00	-.21	.74		3.500	.216		0.000
2	RU	707	826	BUTT	BUTT	NONE	-.25	0.00	-.08	.27	0.	4.500	.237		0.000

ADLPIPE PAGE 43 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.53.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

PIPE SYSTEM GEOMETRY

NUMBER OF NETWORK POINTS = 73  
NUMBER OF SECTIONS = 73  
MAX ORDER OF REDUCED STIFFNESS MATRIX = 666  
NUMBER OF MEMBERS = 155  
ORDER OF REDUCED STIFFNESS MATRIX = 114  
MAX NUMBER OF FREQUENCIES = 650

ADLPIPE PAGE 43

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.53.

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

## PIPE SYSTEM GEOMETRY

NUMBER OF NETWORK POINTS = 73

NUMBER OF MEMBERS = 155

NUMBER OF SECTIONS = 73

ORDER OF REDUCED STIFFNESS MATRIX = 414

MAX ORDER OF REDUCED STIFFNESS MATRIX = 900

MAX NUMBER OF FREQUENCIES = 480

NUMBER OF DYNAMIC MODES (FREQ) = 174

## NETWORK POINT RESTRAINTS AND COORDINATES

## TRANSLATION

## ROTATION

## OVERALL COORDINATES

NETWORK PT.	SEQ	TRANSLATION			ROTATION			OVERALL COORDINATES (FT)		
		X	Y	Z	X	Y	Z	X	Y	Z
1	10	RST	RST	RST	RST	RST	RST	36.262	656.016	14.062
2	801	FREE	FREE	FREE	FREE	FREE	FREE	36.522	659.531	13.970
3	802	FREE	FREE	FREE	FREE	FREE	FREE	37.249	659.457	14.472
4	803	FREE	FREE	FREE	FREE	FREE	FREE	37.610	657.376	14.722
5	804	FREE	FREE	FREE	FREE	FREE	FREE	38.483	657.376	15.325
6	24	FREE	FREE	FREE	FREE	FREE	FREE	38.664	658.490	15.450
7	25	FREE	FREE	FREE	FREE	FREE	FREE	38.664	659.427	15.450
8	805	FREE	FREE	FREE	FREE	FREE	FREE	38.704	659.823	15.523
9	228	FREE	FREE	FREE	FREE	FREE	FREE	39.295	659.427	16.612
10	806	FREE	FREE	FREE	FREE	FREE	FREE	39.383	659.427	16.893
11	841	FREE	FREE	FREE	FREE	FREE	FREE	39.139	659.427	17.918
12	842	FREE	FREE	FREE	FREE	FREE	FREE	38.887	659.427	18.767
13	843	FREE	FREE	FREE	FREE	FREE	FREE	38.396	659.427	17.758
14	235	FREE	FREE	FREE	FREE	FREE	FREE	36.870	659.427	18.521
15	237	FREE	FREE	FREE	FREE	FREE	FREE	36.870	658.510	18.521
16	807	FREE	FREE	FREE	FREE	FREE	FREE	33.131	659.427	20.551
17	852	FREE	FREE	FREE	FREE	FREE	FREE	33.623	659.427	21.337
18	853	FREE	FREE	FREE	FREE	FREE	FREE	34.283	659.427	21.592
19	35	FREE	FREE	FREE	FREE	FREE	FREE	32.644	659.427	19.654
20	36	FREE	FREE	FREE	FREE	FREE	FREE	32.197	659.427	18.830
21	808	FREE	FREE	FREE	FREE	FREE	FREE	32.237	659.823	18.904
22	138	FREE	FREE	FREE	FREE	FREE	FREE	32.197	657.916	18.830
23	809	FREE	FREE	FREE	FREE	FREE	FREE	32.092	657.376	18.637
24	810	FREE	FREE	FREE	FREE	FREE	FREE	31.586	657.376	17.705
25	811	FREE	FREE	FREE	FREE	FREE	FREE	31.376	659.457	17.319

ADLPIPE PAGE 44

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.53.

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

## TRANSLATION

## ROTATION

## OVERALL COORDINATES (FT)

NETWORK PT.	SEQ	X	Y	Z	X	Y	Z	X	Y	Z
-------------	-----	---	---	---	---	---	---	---	---	---



21	808	FREE	FREE	FREE	FREE	FREE	FREE	FREE	32.237	659.823	18.904
22	138	FREE	FREE	FREE	FREE	FREE	FREE	FREE	32.197	657.916	18.830
23	809	FREE	FREE	FREE	FREE	FREE	FREE	FREE	32.092	657.376	18.637
24	810	FREE	FREE	FREE	FREE	FREE	FREE	FREE	31.586	657.376	17.705
25	811	FREE	FREE	FREE	FREE	FREE	FREE	FREE	31.376	659.457	17.319

ADLPIPE PAGE 44

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.53.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

TRANSLATION

ROTATION

OVERALL COORDINATES  
(FT)

NETWORK PT.	SEQ	X	Y	Z	X	Y	Z	X	Y	Z
26	812	FREE	FREE	FREE	FREE	FREE	FREE	30.955	659.531	16.542
27	47	RST	RST	RST	RST	RST	RST	31.117	656.006	16.386
28	52	FREE	FREE	FREE	FREE	FREE	FREE	32.508	659.427	20.890
29	53	FREE	FREE	FREE	FREE	FREE	FREE	30.813	659.427	20.388
30	844	FREE	FREE	FREE	FREE	FREE	FREE	30.575	659.427	19.948
31	55	FREE	FREE	FREE	FREE	FREE	FREE	28.904	659.427	16.872
32	56	FREE	FREE	FREE	FREE	FREE	FREE	28.308	658.177	15.774
33	815	FREE	FREE	FREE	FREE	FREE	FREE	28.308	656.469	15.774
34	816	FREE	FREE	FREE	FREE	FREE	FREE	28.308	648.030	15.774
35	817	FREE	FREE	FREE	FREE	FREE	FREE	28.308	639.030	15.774
36	850	FREE	FREE	FREE	FREE	FREE	FREE	28.308	630.030	15.774
37	59	FREE	FREE	FREE	FREE	FREE	FREE	28.308	627.250	15.774
38	560	FREE	FREE	FREE	FREE	FREE	FREE	28.785	627.250	16.653
39	818	FREE	FREE	FREE	FREE	FREE	FREE	28.308	621.500	15.774
40	851	FREE	FREE	FREE	FREE	FREE	FREE	28.308	612.500	15.774
41	161	FREE	FREE	FREE	FREE	FREE	FREE	28.308	603.750	15.774
42	62	FREE	FREE	FREE	FREE	FREE	FREE	27.152	602.500	16.248
43	64	FREE	FREE	FREE	FREE	FREE	FREE	23.058	602.500	17.927
44	820	FREE	FREE	FREE	FREE	FREE	FREE	19.056	602.500	19.568
45	821	FREE	FREE	FREE	FREE	FREE	FREE	9.804	602.500	23.363
46	265	FREE	FREE	FREE	FREE	FREE	FREE	-0.829	602.500	27.724
47	266	FREE	FREE	FREE	FREE	FREE	FREE	-1.179	602.500	27.811
48	66	FREE	FREE	FREE	FREE	FREE	FREE	-6.968	602.500	28.389
49	67	FREE	FREE	FREE	FREE	FREE	FREE	-8.124	601.616	29.393
50	68	RST	RST	RST	RST	RST	RST	-8.043	600.909	30.069
51	71	FREE	FREE	FREE	FREE	FREE	FREE	28.985	657.239	15.406
52	72	FREE	FREE	FREE	FREE	FREE	FREE	29.114	657.593	15.336
53	173	FREE	FREE	FREE	FREE	FREE	FREE	29.114	657.990	15.336
54	174	FREE	FREE	FREE	FREE	FREE	FREE	29.553	658.490	15.098
55	826	FREE	FREE	FREE	FREE	FREE	FREE	29.773	658.490	14.979
56	76	FREE	FREE	FREE	FREE	FREE	FREE	31.792	658.582	13.882
57	827	FREE	FREE	FREE	FREE	FREE	FREE	31.792	661.191	13.882
58	82	FREE	FREE	FREE	FREE	FREE	FREE	34.152	658.841	12.601
59	828	FREE	FREE	FREE	FREE	FREE	FREE	34.152	659.671	12.601
60	85	FREE	FREE	FREE	FREE	FREE	FREE	34.589	658.889	12.363
61	86	FREE	FREE	FREE	FREE	FREE	FREE	35.096	658.925	12.515
62	830	FREE	FREE	FREE	FREE	FREE	FREE	36.230	658.925	14.602
63	90	FREE	FREE	FREE	FREE	FREE	FREE	37.482	658.925	16.909
64	91	FREE	FREE	FREE	FREE	FREE	FREE	37.661	658.550	17.238
65	94	RST	RST	RST	RST	RST	RST	37.557	656.013	17.163
66	96	FREE	FREE	FREE	FREE	FREE	FREE	35.546	658.852	14.973
67	832	FREE	FREE	FREE	FREE	FREE	FREE	35.546	659.682	14.973
68	101	FREE	FREE	FREE	FREE	FREE	FREE	32.985	658.579	16.364
69	833	FREE	FREE	FREE	FREE	FREE	FREE	32.985	661.188	16.364
70	104	FREE	FREE	FREE	FREE	FREE	FREE	32.137	658.489	16.824

ADLPIPE PAGE 45

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.53.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

TRANSLATION

ROTATION

OVERALL COORDINATES  
(FT)

NETWORK PT.	SEQ	X	Y	Z	X	Y	Z	X	Y	Z
-------------	-----	---	---	---	---	---	---	---	---	---

57	827	FREE	FREE	FREE	FREE	FREE	FREE	FREE	31.792	658.582	13.882
58	82	FREE	FREE	FREE	FREE	FREE	FREE	FREE	34.152	658.841	12.601
59	828	FREE	FREE	FREE	FREE	FREE	FREE	FREE	34.152	659.671	12.601
60	85	FREE	FREE	FREE	FREE	FREE	FREE	FREE	34.589	658.889	12.363
61	86	FREE	FREE	FREE	FREE	FREE	FREE	FREE	35.096	658.925	12.515
62	830	FREE	FREE	FREE	FREE	FREE	FREE	FREE	36.230	658.925	14.602
63	90	FREE	FREE	FREE	FREE	FREE	FREE	FREE	37.482	658.925	16.909
64	91	FREE	FREE	FREE	FREE	FREE	FREE	FREE	37.661	658.550	17.238
65	94	RST	RST	RST	RST	RST	RST	RST	37.557	656.013	17.163
66	96	FREE	FREE	FREE	FREE	FREE	FREE	FREE	35.546	658.852	14.973
67	832	FREE	FREE	FREE	FREE	FREE	FREE	FREE	35.546	659.682	14.973
68	101	FREE	FREE	FREE	FREE	FREE	FREE	FREE	32.985	658.579	16.364
69	833	FREE	FREE	FREE	FREE	FREE	FREE	FREE	32.985	661.188	16.364
70	104	FREE	FREE	FREE	FREE	FREE	FREE	FREE	32.137	658.489	16.824

ADLPIPE PAGE 45 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.53.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

NETWORK PT.	SEQ	TRANSLATION			ROTATION			OVERALL COORDINATES (FT)		
		X	Y	Z	X	Y	Z	X	Y	Z
71	105	FREE	FREE	FREE	FREE	FREE	FREE	31.629	658.489	16.674
72	106	FREE	FREE	FREE	FREE	FREE	FREE	30.962	658.489	15.446
73	107	FREE	FREE	FREE	FREE	FREE	FREE	30.739	658.489	15.265

NETWORK POINT MOVEMENTS

NETWORK PT.	SEQ	TRANSLATION (INCHES)			ROTATION (RADIAN)		
		X	Y	Z	X	Y	Z

NO MOVEMENTS

ADLPIPE PAGE 46 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.53.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

MEMBER MATERIAL PROPERTY DATA  
(NEW DATA ENTRIES ARE MADE WHEN ONE OR MORE PROPERTIES CHANGE)



ADLPIPE PAGE 46

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.53.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK  
2 SAFETY COLD FKW24F--2 PSVCONDITION 24  
LOADS  
SHOCK  
PRESSUREMEMBER MATERIAL PROPERTY DATA  
(NEW DATA ENTRIES ARE MADE WHEN ONE OR MORE PROPERTIES CHANGE)

CODE: B31.1, 1977

SEC	MEM	TYPE	FROM	TO	E HOT	E COLD	EXPANSION		POISSON'S RATIO	SH PSI	SC PSI	F	DELTA/T IN/IN
					PSI	PSI	HOT	COLD					
					10**5	10**6	---IN/(IN DEG F)---						
					10**-6								
1	1	RU	10	12	25.15	27.40	0.000	0.000	.30	16000.	18750.	1.0000	0.000
9	1	RU	228	28	26.60	28.30	0.000	0.000	.30	16600.	18800.	1.0000	0.000
13	4	RU	401	235	26.90	28.30	0.000	0.000	.30	18100.	18800.	1.0000	0.000
16	1	RU	807	900	26.60	28.30	0.000	0.000	.30	16600.	18800.	1.0000	0.000
18	2	RU	34	35	25.15	27.40	0.000	0.000	.30	16000.	18750.	1.0000	0.000
27	1	RU	807	50	26.90	28.30	0.000	0.000	.30	18100.	18800.	1.0000	0.000
30	2	RU	254	55	26.40	27.40	0.000	0.000	.30	16300.	18750.	1.0000	0.000
50	1	RU	815	70	26.40	27.40	0.000	0.000	.30	14950.	18750.	1.0000	0.000
55	4	VA	750	76	26.40	27.40	0.000	0.000	.30	14300.	18750.	1.0000	0.000
57	2	RU	78	80	25.15	27.40	0.000	0.000	.30	14300.	18750.	1.0000	0.000
69	2	RU	103	704	26.40	27.40	0.000	0.000	.30	14950.	18750.	1.0000	0.000

ADLPIPE PAGE 47

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.54.

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

## PIPING CONNECTIVITY BY SEQUENCE NUMBER

SECTION

1 10- 12- 14- 16- 801-

ADLPIPE PAGE 47

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.54.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

PIPING CONNECTIVITY BY SEQUENCE NUMBER

SECTION

1	10-	12-	14-	16-	801-
2	801-	17-	802-		
3	802-	18-	20-	803-	
4	803-	21-	804-		
5	804-	22-	23-	24-	
6	24-	25-			
7	25-	26-	805-		
8	25-	27-	228-		
9	228-	28-	806-		
10	806-	29-	229-	230-	841-
11	841-	231-	842-		
12	841-	232-	233-	843-	
13	843-	234-	400-	401-	235-
14	235-	236-	237-		
15	235-	403-	33-	807-	
16	807-	900-	852-		
17	852-	901-	853-		
18	807-	34-	35-		
19	35-	36-			
20	36-	37-	808-		
21	36-	38-	138-		
22	138-	39-	809-		
23	809-	40-	810-		
24	810-	41-	42-	811-	
25	811-	43-	812-		
26	812-	44-	45-	46-	47-
27	807-	50-	52-		
28	52-	813-	53-		
29	53-	253-	844-		
30	844-	254-	55-		
31	55-	814-	56-		
32	56-	57-	815-		
33	815-	816-			
34	816-	817-			
35	817-	850-			
36	850-	59-			
37	59-	559-	560-		
38	59-	60-	818-		
39	818-	851-			
40	851-	61-	161-		
41	161-	819-	62-		
42	62-	63-	64-		
43	64-	820-			
44	820-	821-			
45	821-	65-	265-		
46	265-	822-	266-		

ADLPIPE PAGE 48

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.54.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

PIPING CONNECTIVITY BY SEQUENCE NUMBER

SECTION

47	266-	66-
----	------	-----



34	816-	817-	
35	817-	850-	
36	850-	59-	
37	59-	559-	560-
38	59-	60-	818-
39	818-	851-	
40	851-	61-	161-
41	161-	819-	62-
42	62-	63-	64-
43	64-	820-	
44	820-	821-	
45	821-	65-	265-
46	265-	822-	266-

ADLPIPE PAGE 48

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.54.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

PIPING CONNECTIVITY BY SEQUENCE NUMBER

SECTION

47	266-	66-		
48	66-	823-	67-	
49	67-	68-		
50	815-	70-	700-	71-
51	71-	824-	72-	
52	72-	173-		
53	173-	825-	174-	
54	174-	73-	826-	
55	826-	74-	75-	750- 76-
56	76-	77-	827-	
57	76-	78-	80-	81- 82-
58	82-	83-	828-	
59	82-	84-	85-	
60	85-	829-	86-	
61	86-	87-	830-	
62	830-	89-	90-	
63	90-	831-	91-	
64	91-	92-	93-	94-
65	830-	95-	96-	
66	96-	97-	832-	
67	96-	98-	99-	100- 101-
68	101-	102-	833-	
69	101-	103-	704-	104-
70	104-	834-	105-	
71	105-	106-		
72	106-	835-	107-	
73	107-	707-	826-	

ADLPIPE PAGE 49

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.54.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

MEMBER LOADS

(NEW ENTRIES ARE MADE WHEN LOADS CHANGE)

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

MEMBER LOADS

(NEW ENTRIES ARE MADE WHEN LOADS CHANGE)

CODE: B31.1, 1977

SEC	MEM	FROM	TO	PRESS	UNIT WEIGHT	CONC WEIGHT	TEMP CHANGE	FX	FY	FZ	MX	MY	MZ
				PSI	LB/FT	LB	DEG F	LB	LB	LB	FT-LB	FT-LB	FT-LB
1	1	10	12	2485.00	45.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	3	23	24	2485.00	291.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	1	24	25	2485.00	0.00	.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	2	26	805	2485.00	0.00	684.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	1	25	27	2485.00	0.00	.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	2	27	228	2485.00	199.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	1	228	28	700.00	18.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	2	231	842	700.00	.12	250.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	1	841	232	700.00	18.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	3	400	401	875.00	29.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	4	401	235	875.00	40.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	3	33	807	875.00	104.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	1	807	900	700.00	18.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	2	901	853	700.00	18.96	250.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	1	807	34	700.00	18.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	2	34	35	2485.00	199.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	1	35	36	2485.00	0.00	.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	2	37	808	2485.00	0.00	684.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	1	36	38	2485.00	0.00	.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	2	38	138	2485.00	291.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	1	138	39	2485.00	45.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	1	807	50	875.00	104.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	2	50	52	875.00	40.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	2	253	844	875.00	453.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	2	254	55	875.00	40.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	1	815	70	700.00	40.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	3	700	71	700.00	10.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	2	74	75	700.00	12.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	3	75	750	700.00	14.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	4	750	76	2510.00	0.00	.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56	2	77	827	2510.00	0.00	480.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57	1	76	78	2510.00	0.00	.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57	2	78	80	2510.00	14.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57	4	81	82	2510.00	0.00	.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
58	2	83	828	2510.00	0.00	527.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
59	1	82	84	2510.00	0.00	.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
59	2	84	85	2510.00	14.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65	2	95	96	2510.00	0.00	.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
66	2	97	832	2510.00	0.00	527.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67	1	96	98	2510.00	0.00	.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67	2	98	99	2510.00	14.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

MEMBER LOADS

(NEW ENTRIES ARE MADE WHEN LOADS CHANGE)

CODE: B31.1, 1977



55	4	750	76	2510.00	0.00	.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56	2	77	827	2510.00	0.00	480.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57	1	76	78	2510.00	0.00	.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57	2	78	80	2510.00	14.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57	4	81	82	2510.00	0.00	.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
58	2	83	828	2510.00	0.00	527.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
59	1	82	84	2510.00	0.00	.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
59	2	84	85	2510.00	14.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65	2	95	96	2510.00	0.00	.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
66	2	97	832	2510.00	0.00	527.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67	1	96	98	2510.00	0.00	.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67	2	98	99	2510.00	14.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ADLPIPE PAGE 50 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.55.  
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK  
 2 SAFETY COLD FKW24F--2 PSV

CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE

MEMBER LOADS  
 (NEW ENTRIES ARE MADE WHEN LOADS CHANGE)

CODE: B31.1, 1977

SEC	MEM	FROM	TO	PRESS	UNIT	CONC	TEMP	FX	FY	FZ	MX	MY	MZ
				PSI	LB/FT	LB	DEG F	LB	LB	LB	FT-LB	FT-LB	FT-LB
67	3	99	100	2510.00	14.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67	4	100	101	2510.00	0.00	.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
68	2	102	833	2510.00	0.00	480.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
69	1	101	103	2510.00	0.00	.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
69	2	103	704	700.00	7.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73	2	707	826	700.00	10.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ADLPIPE PAGE 51 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.55.  
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK  
 2 SAFETY COLD FKW24F--2 PSV

CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE

MEMBER STIFFNESS MODIFICATIONS

SEC	MEM	TYPE	FROM	TO	KX	KY	KZ	KPX	KPY	KPZ	FX	FY	FZ
					LB/IN	LB/IN	LB/IN	LB-IN/RAD	LB-IN/RAD	LB-IN/RAD	LB	LB	LB

ADLPIPE PAGE 51

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.55.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

MEMBER STIFFNESS MODIFICATIONS

SEC	MEM	TYPE	FROM	TO	KX LB/IN	KY LB/IN	KZ LB/IN	KPX LB-IN/RAD	KPY LB-IN/RAD	KPZ LB-IN/RAD	FX LB	FY LB	FZ LB
5	1	SP	804	22	.114E+07	0.	.786E+06	0.	0.	0.	0.	0.	0.
					0.	0.	0.	0.	0.	0.	0.	0.	0.
					.786E+06	0.	.543E+06	0.	0.	0.	0.	0.	0.
					0.	0.	0.	0.	0.	0.	0.	0.	0.
					0.	0.	0.	0.	0.	0.	0.	0.	0.
14	2	SP	236	237	.945E+05	.269E+05	-.513E+05	0.	0.	0.	0.	0.	0.
					.269E+05	.764E+04	-.146E+05	0.	0.	0.	0.	0.	0.
					-.513E+05	-.146E+05	.279E+05	0.	0.	0.	0.	0.	0.
					0.	0.	0.	0.	0.	0.	0.	0.	0.
					0.	0.	0.	0.	0.	0.	0.	0.	0.
21	2	SP	38	138	.383E+06	0.	.705E+06	0.	0.	0.	0.	0.	0.
					0.	0.	0.	0.	0.	0.	0.	0.	0.
					.705E+06	0.	.130E+07	0.	0.	0.	0.	0.	0.
					0.	0.	0.	0.	0.	0.	0.	0.	0.
					0.	0.	0.	0.	0.	0.	0.	0.	0.
32	1	SP	56	57	.364E+05	0.	.671E+05	0.	0.	0.	0.	0.	0.
					0.	0.	0.	0.	0.	0.	0.	0.	0.
					.671E+05	0.	.124E+06	0.	0.	0.	0.	0.	0.
					0.	0.	0.	0.	0.	0.	0.	0.	0.
					0.	0.	0.	0.	0.	0.	0.	0.	0.
37	2	SP	559	560	0.	.230E+06	0.	0.	0.	0.	0.	0.	0.
38	1	SP	59	60	.700E+06	0.	.700E+06	0.	0.	0.	0.	0.	0.
40	1	SP	851	61	.137E+06	0.	-.562E+05	0.	0.	0.	0.	0.	0.
					0.	0.	0.	0.	0.	0.	0.	0.	0.
					-.562E+05	0.	.230E+05	0.	0.	0.	0.	0.	0.
					0.	0.	0.	0.	0.	0.	0.	0.	0.
					0.	0.	0.	0.	0.	0.	0.	0.	0.
42	1	SP	62	63	.518E+04	-.264E+05	.126E+05	0.	0.	0.	0.	0.	0.
					-.264E+05	.135E+06	-.645E+05	0.	0.	0.	0.	0.	0.
					.126E+05	-.645E+05	.308E+05	0.	0.	0.	0.	0.	0.
					0.	0.	0.	0.	0.	0.	0.	0.	0.
					0.	0.	0.	0.	0.	0.	0.	0.	0.
					0.	0.	0.	0.	0.	0.	0.	0.	0.

ADLPIPE PAGE 52

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.41.58.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE



42 1 SP 62 63 .518E+04 -.264E+05 .126E+05 0. 0. 0.  
 -.264E+05 .135E+06 -.645E+05 0. 0. 0.  
 .126E+05 -.645E+05 .308E+05 0. 0. 0.  
 0. 0. 0. 0. 0. 0.  
 0. 0. 0. 0. 0. 0.  
 0. 0. 0. 0. 0. 0.

ADLPIPE PAGE 52 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.41.58.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK  
 2 SAFETY COLD FRW24F--2 PSV

CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE

FLEXIBILITY REPORT  
 (NEW ENTRIES ARE MADE WHEN VALUES CHANGE)

SEQ BEG	SEQ END	CLASS	FLEXIBILITY FACTOR	SECTION MODULUS
10	12	B31.1,1977	.1000E+01	.1780E+02
12	14	B31.1,1977	.2227E+01	.1780E+02
14	16	B31.1,1977	.1000E+01	.1780E+02
16	801	B31.1,1977	.3341E+01	.1780E+02
17	802	B31.1,1977	.2227E+01	.1780E+02
18	20	B31.1,1977	.1000E+01	.1780E+02
20	803	B31.1,1977	.2227E+01	.1780E+02
22	23	B31.1,1977	.1000E+01	.1780E+02
23	24	B31.1,1977	.1000E+01	.2561E+02
228	28	B31.1,1977	.1000E+01	.8496E+01
28	806	B31.1,1977	.6590E+01	.8496E+01
29	229	B31.1,1977	.1000E+01	.8496E+01
233	843	B31.1,1977	.6590E+01	.8496E+01
234	400	B31.1,1977	.1000E+01	.8496E+01
400	401	B31.1,1977	.1000E+01	.2990E+02
807	900	B31.1,1977	.1000E+01	.8496E+01
900	852	B31.1,1977	.6590E+01	.8496E+01
901	853	B31.1,1977	.1000E+01	.8496E+01
34	35	B31.1,1977	.1000E+01	.2561E+02
138	39	B31.1,1977	.1000E+01	.1780E+02
39	809	B31.1,1977	.2227E+01	.1780E+02
41	42	B31.1,1977	.1000E+01	.1780E+02
42	811	B31.1,1977	.2227E+01	.1780E+02
43	812	B31.1,1977	.3341E+01	.1780E+02
44	45	B31.1,1977	.1000E+01	.1780E+02
45	46	B31.1,1977	.2227E+01	.1780E+02
46	47	B31.1,1977	.1000E+01	.1780E+02
807	50	B31.1,1977	.1000E+01	.2990E+02
52	813	B31.1,1977	.8126E+01	.2990E+02
53	253	B31.1,1977	.1000E+01	.2990E+02
253	844	B31.1,1977	.1000E+01	.5394E+02
254	55	B31.1,1977	.1000E+01	.2990E+02
55	814	B31.1,1977	.8126E+01	.2990E+02
56	57	B31.1,1977	.1000E+01	.2990E+02
161	819	B31.1,1977	.8126E+01	.2990E+02

ADLPIPE PAGE 53 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.42.00.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK  
 2 SAFETY COLD FRW24F--2 PSV

CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE

FLEXIBILITY REPORT  
 (NEW ENTRIES ARE MADE WHEN VALUES CHANGE)

52	813	B31.1,1977	.1000E+01	.2990E+02
53	253	B31.1,1977	.8126E+01	.2990E+02
253	844	B31.1,1977	.1000E+01	.5394E+02
254	55	B31.1,1977	.1000E+01	.2990E+02
55	814	B31.1,1977	.8126E+01	.2990E+02
56	57	B31.1,1977	.1000E+01	.2990E+02
161	819	B31.1,1977	.8126E+01	.2990E+02

ADLPIPE PAGE 53 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.42.00.  
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK  
 2 SAFETY COLD FKW24F--2 PSV  
 CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE

FLEXIBILITY REPORT  
 (NEW ENTRIES ARE MADE WHEN VALUES CHANGE)

SEQ BEG	SEQ END	CLASS	FLEXIBILITY FACTOR	SECTION MODULUS
62	63	B31.1,1977	.1000E+01	.2990E+02
265	822	B31.1,1977	.8126E+01	.2990E+02
266	66	B31.1,1977	.1000E+01	.2990E+02
66	823	B31.1,1977	.8126E+01	.2990E+02
67	68	B31.1,1977	.1000E+01	.2990E+02
700	71	B31.1,1977	.1000E+01	.3214E+01
71	824	B31.1,1977	.5272E+01	.3214E+01
72	173	B31.1,1977	.1000E+01	.3214E+01
173	825	B31.1,1977	.5272E+01	.3214E+01
174	73	B31.1,1977	.1000E+01	.3214E+01
75	750	B31.1,1977	.1000E+01	.2875E+01
750	76	B31.1,1977	.1000E+01	.3945E+01
78	80	B31.1,1977	.1000E+01	.2875E+01
81	82	B31.1,1977	.1000E+01	.3945E+01
84	85	B31.1,1977	.1000E+01	.2875E+01
85	829	B31.1,1977	.1968E+01	.2875E+01
86	87	B31.1,1977	.1000E+01	.2875E+01
90	831	B31.1,1977	.1968E+01	.2875E+01
91	92	B31.1,1977	.1000E+01	.2875E+01
92	93	B31.1,1977	.1968E+01	.2875E+01
93	94	B31.1,1977	.1000E+01	.2875E+01
95	96	B31.1,1977	.1000E+01	.3945E+01
98	99	B31.1,1977	.1000E+01	.2875E+01
100	101	B31.1,1977	.1000E+01	.3945E+01
103	704	B31.1,1977	.1000E+01	.1724E+01
104	834	B31.1,1977	.4577E+01	.1724E+01
105	106	B31.1,1977	.1000E+01	.1724E+01
106	835	B31.1,1977	.4577E+01	.1724E+01
107	707	B31.1,1977	.1000E+01	.1724E+01
707	826	B31.1,1977	.1000E+01	.3214E+01

STIFFNESS MATRIX STORAGE REQUIRED 13399 LOCATIONS OUT OF A TOTAL OF 35000

ADLPIPE PAGE 54 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.46.01.  
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK  
 2 SAFETY COLD FKW24F--2 PSV

CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE

MODE	FREQUENCY	MODAL PARTICIPATION FACTOR			SEQUENCE OF MAXIMUM PARTICIPATION			MODAL EFFECTIVE MASS FRACTION		
		X-Dir	Y-Dir	Z-Dir	X-Dir	Y-Dir	Z-Dir	X-Dir	Y-Dir	Z-Dir
1	2.998	.521	-1.196	-1.704	827	828	833	.010	.052	.106
2	5.308	-2.952	-.013	.705	828	828	816	.328	.052	.124
3	6.496	-.734	-1.241	-1.266	821	821	821	.748	.105	.185



100 835 831.1,1977 .4577E+01 .1724E+01  
 107 707 831.1,1977 .1000E+01 .1724E+01  
 707 826 831.1,1977 .1000E+01 .3214E+01

STIFFNESS MATRIX STORAGE REQUIRED 13399 LOCATIONS OUT OF A TOTAL OF 35000

ADLPIPE PAGE 54 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.46.01.

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

CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE

MODE	FREQUENCY	MODAL PARTICIPATION FACTOR			SEQUENCE OF MAXIMUM PARTICIPATION			MODAL EFFECTIVE MASS FRACTION		
		X-DIR	Y-DIR	Z-DIR	X-DIR	Y-DIR	Z-DIR	X-DIR	Y-DIR	Z-DIR
1	2.998	.521	-1.196	-1.704	827	828	833	.010	.052	.106
2	5.308	-2.952	-.013	.705	828	828	816	.328	.052	.124
3	6.496	-.734	-1.241	-1.286	821	821	821	.348	.109	.185
4	6.816	.476	-2.357	.872	827	833	833	.356	.311	.212
5	7.334	-.373	-1.763	-.347	827	808	833	.361	.425	.217
6	7.612	-.602	1.347	-1.233	821	821	821	.374	.491	.272
7	7.973	.027	-.385	-.126	827	833	827	.374	.497	.273
8	8.933	-.817	.286	-.751	817	805	817	.399	.500	.293
9	10.100	-.696	.762	-.550	833	805	817	.417	.521	.305
10	10.940	.010	-.459	.508	833	832	827	.417	.528	.314
11	12.006	.554	.156	-1.525	805	805	817	.428	.529	.399
12	13.664	-.408	.340	-1.110	833	828	832	.434	.534	.444
13	14.816	-.063	-.960	-.557	827	833	833	.434	.567	.455
14	15.528	-.504	.119	-1.063	851	833	851	.443	.568	.497
15	17.489	-.386	.622	-.531	827	828	827	.449	.582	.507
16	20.700	-.343	-.898	1.192	820	827	820	.453	.611	.559
17	21.105	1.512	-.309	-1.755	808	805	805	.537	.615	.671
18	22.088	.117	-.268	.249	832	820	851	.537	.617	.673
19	22.682	.196	-.102	.256	832	820	828	.538	.618	.676
20	23.436	.722	-.836	-.639	851	827	851	.557	.643	.691
21	24.680	.096	.142	.146	851	832	828	.558	.644	.692
22	25.847	-.341	-1.131	-.184	808	827	816	.562	.691	.693
23	26.405	-1.121	-.565	.080	808	805	828	.608	.702	.693
24	30.950	-.646	-.227	.531	851	827	828	.623	.704	.703
25	32.050	-.427	-.991	-.519	832	808	832	.630	.740	.713
26	32.511	.498	-.427	-.343	816	808	816	.639	.747	.717
27	33.759	-.285	-.938	-.511	832	808	808	.642	.779	.727
28	35.557	-1.129	-.261	-.657	805	805	801	.688	.780	.743
29	36.295	-.224	.740	-.973	805	805	808	.690	.800	.777
30	36.902	-.778	-.847	.065	808	842	832	.712	.827	.777
31	37.512	.113	.122	-.283	821	820	821	.713	.827	.780
32	38.016	-.419	.072	-.009	828	832	832	.719	.827	.780
33	39.975	.231	-1.420	.196	161	820	161	.721	.901	.782
34	44.691	.081	-.187	-.471	812	828	812	.721	.902	.790
35	46.020	.104	.066	-.486	828	828	828	.722	.902	.798
36	50.935	-.086	-.074	-.230	842	828	801	.722	.903	.800
37	53.445	-.903	-.001	-1.060	850	853	844	.752	.903	.841
38	54.313	.240	.180	-.513	850	853	850	.754	.904	.851
39	54.704	.071	-.225	-.236	850	853	850	.754	.906	.853
40	56.146	-.018	-.050	-.222	138	853	808	.754	.906	.855
41	56.874	-1.906	.010	.263	820	265	821	.887	.906	.857
42	59.578	-.013	-.020	-.387	808	808	853	.887	.906	.863
43	62.529	-.197	-.022	.079	832	827	91	.888	.906	.863
44	65.296	-.142	-.003	-.528	808	844	808	.889	.906	.873
45	68.387	-.422	-.013	-.636	808	844	808	.896	.906	.888
46	71.037	-.438	-.045	-.122	808	842	805	.903	.906	.889

ADLPIPE PAGE 55 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.46.02.

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

CONDITION 24  
 LOADS  
 SHOCK  
 PRESSURE

47	79.837	-.155	-.020	-.128	844	844	808	.903	.906	.889
48	92.293	-.021	.100	-.672	818	808	818	.903	.906	.906
49	92.665	-.821	-.226	-.668	818	808	844	.928	.908	.922
50	92.724	.480	-.198	-.574	818	808	818	.936	.910	.934
51	95.126	-1.026	-.531	-.668	801	805	801	.975	.920	.951

36	50.935	-.088	-.074	-.230	842	828	801	.722	.903	.800
37	53.445	-.903	-.001	-1.060	850	853	844	.752	.903	.841
38	54.313	.240	.180	-.513	850	853	850	.754	.904	.851
39	54.704	.071	-.225	-.236	850	853	850	.754	.906	.853
40	56.146	-.018	-.050	-.222	138	853	808	.754	.906	.855
41	56.874	-1.906	.010	.263	820	265	821	.887	.906	.857
42	59.578	-.013	-.020	-.387	808	808	853	.887	.906	.863
43	62.529	-.197	-.022	.079	832	827	91	.888	.906	.863
44	65.296	-.142	-.003	-.528	808	844	808	.889	.906	.873
45	68.387	-.422	-.013	-.636	803	844	808	.896	.906	.888
46	71.037	-.438	-.045	-.122	808	842	805	.903	.906	.889

ADLPIPE PAGE 55 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.46.02.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

47	79.837	-.155	-.020	-.128	844	844	808	.903	.906	.889
48	92.293	-.021	.100	-.672	818	808	818	.903	.906	.906
49	92.665	-.821	-.226	-.668	818	808	844	.928	.908	.922
50	92.724	.480	-.198	-.574	818	808	818	.936	.910	.934
51	95.528	-1.026	-.531	-.688	801	805	801	.975	.920	.951
52	96.692	-.337	-.388	-.546	808	808	812	.979	.925	.962
53	105.697	-.023	-.141	-.237	808	808	808	.979	.926	.964
54	107.945	-.040	-.006	-.041	828	828	832	.979	.926	.964
55	115.183	-.051	-.059	-.169	815	808	815	.979	.926	.965
56	122.898	.001	.070	-.135	815	851	161	.979	.926	.966
57	130.440	-.041	-.437	-.373	161	66	66	.979	.933	.971
58	137.401	-.037	-.058	-.040	815	844	808	.979	.934	.971
59	144.422	-.031	-.025	-.055	62	851	161	.979	.934	.971
60	157.174	-.000	-.027	.019	830	832	830	.979	.934	.971
61	162.958	.045	.117	-.177	161	62	62	.980	.934	.972
62	176.859	-.134	.169	-.212	844	807	842	.980	.935	.974
63	193.246	-.114	.068	.020	844	843	842	.981	.935	.974
64	200.510	-.017	.011	-.047	820	62	265	.981	.935	.974
65	202.446	-.071	.078	-.084	820	62	265	.981	.936	.974
66	213.720	-.048	.024	-.034	844	843	805	.981	.936	.974
67	229.458	.138	-.552	.244	138	811	810	.982	.947	.977
68	232.745	.249	-.555	.198	803	802	803	.984	.958	.978
69	240.665	.058	-.077	.005	810	843	138	.984	.958	.978
70	243.059	-.008	.013	-.019	820	850	820	.984	.958	.978
71	249.419	-.017	.025	-.028	820	850	161	.984	.958	.978
72	260.795	.125	-.096	.024	844	843	24	.985	.959	.978
73	266.933	-.316	-.187	-.249	24	805	803	.988	.960	.980
74	276.983	-.175	-.165	-.364	138	810	138	.989	.961	.985
75	279.971	-.027	-.026	-.012	815	832	826	.989	.961	.985
76	286.376	-.120	-.046	-.125	853	805	842	.990	.961	.986

ADLPIPE PAGE 56 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 17.46.51.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

FORCING FUNCTIONS AT NETWORK POINTS

(TIME IN SECS, FORCE (X,Y,Z DOFS) IN LBS, MOMENT (RX,RY,RZ DOFS) IN IN-LBS)

806 806 841 841 843 843 807 807 852 852



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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

FORCING FUNCTIONS AT NETWORK POINTS

(TIME IN SECS, FORCE (X,Y,Z DOFS) IN LBS , MOMENT (RX,RY,RZ DOFS) IN IN-LBS)

TIME	806 X	806 Z	841 X	841 Z	843 X	843 Z	807 X	807 Z	852 X	852 Z
0.0000	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.0010	-.1400E+03	-.2575E+03	.1003E+02	-.3388E+02	.1709E+02	.5062E+01	-.2450E+03	-.4511E+03	-.3665E+01	-.1086E+01
.0020	-.2800E+03	-.5150E+03	.2007E+02	-.6776E+02	.3418E+02	.1012E+02	-.4899E+03	-.9022E+03	-.7329E+01	-.2171E+01
.0030	-.4199E+03	-.7725E+03	.3010E+02	-.1016E+03	.5126E+02	.1518E+02	-.7349E+03	-.1353E+04	-.1099E+02	-.3257E+01
.0040	-.5599E+03	-.1030E+04	.4014E+02	-.1355E+03	.6835E+02	.2025E+02	-.9799E+03	-.1804E+04	-.1466E+02	-.4342E+01
.0050	-.7922E+03	-.1457E+04	.6742E+02	-.2276E+03	.1221E+03	.3616E+02	-.1318E+04	-.2427E+04	-.4238E+02	-.1255E+02
.0060	-.1149E+04	-.2114E+04	.1403E+03	-.4736E+03	.2644E+03	.7833E+02	-.1886E+04	-.3473E+04	-.1173E+03	-.3475E+02
.0070	-.1603E+04	-.2949E+04	.2982E+03	-.1007E+04	.5628E+03	.1667E+03	-.2863E+04	-.5273E+04	-.2618E+03	-.7753E+02
.0080	-.1832E+04	-.3371E+04	.6117E+03	-.2065E+04	.1179E+04	.3491E+03	-.3455E+04	-.6363E+04	-.4543E+03	-.1346E+03
.0090	-.1798E+04	-.3308E+04	.9866E+03	-.3331E+04	.1920E+04	.5686E+03	-.3683E+04	-.6783E+04	-.6549E+03	-.1940E+03
.0100	-.1447E+04	-.2661E+04	.1357E+04	-.4581E+04	.2666E+04	.7898E+03	-.3742E+04	-.6892E+04	-.8927E+03	-.2644E+03
.0110	-.9214E+03	-.1695E+04	.1656E+04	-.5591E+04	.3284E+04	.9726E+03	-.3696E+04	-.6806E+04	-.1205E+04	-.3570E+03
.0120	-.5249E+03	-.9656E+03	.1846E+04	-.6232E+04	.3682E+04	.1091E+04	-.3512E+04	-.6468E+04	-.1611E+04	-.4771E+03
.0130	-.3989E+03	-.7337E+03	.1990E+04	-.6720E+04	.4065E+04	.1204E+04	-.2351E+04	-.4330E+04	-.2242E+04	-.6641E+03
.0140	-.4462E+03	-.8207E+03	.2121E+04	-.7159E+04	.4478E+04	.1326E+04	-.5879E+03	-.1083E+04	-.2864E+04	-.8483E+03
.0150	-.4376E+03	-.8050E+03	.2682E+04	-.9055E+04	.4641E+04	.1375E+04	.1649E+04	.3036E+04	-.3313E+04	-.9815E+03
.0160	-.2587E+03	-.4758E+03	.3478E+04	-.1174E+05	.4565E+04	.1352E+04	.3946E+04	.7267E+04	-.3401E+04	-.1007E+04
.0170	.8637E+02	.1589E+03	.3806E+04	-.1285E+05	.4535E+04	.1343E+04	.5631E+04	.1037E+05	-.3039E+04	-.9003E+03
.0180	.2531E+03	.4655E+03	.3664E+04	-.1237E+05	.5539E+04	.1641E+04	.6394E+04	.1178E+05	-.2077E+04	-.6153E+03
.0190	.4194E+03	.7714E+03	.2243E+04	-.7573E+04	.5078E+04	.1504E+04	.3276E+04	.6033E+04	-.9391E+03	-.2782E+03
.0200	.5140E+03	.9455E+03	.1183E+04	-.3993E+04	.4407E+04	.1305E+04	.1682E+03	.3098E+03	.2225E+04	.6590E+03
.0210	.6640E+03	.1221E+04	-.8548E+03	.2886E+04	.3182E+04	.9425E+03	.6163E+03	.1135E+04	.5150E+04	.1525E+04
.0220	.9624E+03	.1770E+04	-.3758E+04	.1269E+05	.1458E+04	.4318E+03	.2349E+03	.4327E+03	.3830E+04	.1135E+04
.0230	.1527E+04	.2809E+04	-.2670E+04	.9013E+04	-.1448E+04	-.4289E+03	.3296E+03	.6070E+03	.1887E+04	.5591E+03
.0240	.1957E+04	.3599E+04	-.9656E+03	.3260E+04	-.3525E+04	-.1044E+04	.2645E+03	.4871E+03	.6382E+03	.1890E+03
.0250	.1649E+04	.3033E+04	-.3110E+04	.1050E+05	-.5785E+04	-.1713E+04	-.7492E+02	-.1380E+03	-.8933E+03	-.2646E+03
.0260	.7619E+03	.1402E+04	-.6352E+04	.2145E+05	-.7463E+04	-.2210E+04	.1350E+03	.2487E+03	-.1628E+04	-.4821E+03
.0270	.3891E+03	.7158E+03	-.4893E+04	.1652E+05	-.8184E+04	-.2424E+04	.6156E+02	.1134E+03	-.1283E+04	-.3802E+03
.0280	.3102E+03	.5706E+03	-.2823E+04	.9530E+04	-.8409E+04	-.2491E+04	.3350E+02	.6169E+02	.6740E+04	.1997E+04
.0290	.2346E+03	.4316E+03	-.4033E+04	.1361E+05	-.7894E+04	-.2338E+04	.2275E+02	.4189E+02	-.3158E+04	-.9353E+03
.0300	.8324E+02	.1531E+03	-.4455E+03	.1504E+04	-.6274E+04	-.1858E+04	.1684E+02	.3101E+02	.5448E+03	.1614E+03
.0310	.2740E+02	.5041E+02	-.9479E+03	.3200E+04	-.4231E+04	-.1253E+04	.2746E+02	.5057E+02	-.1093E+04	-.3238E+03
.0320	-.1885E+02	-.3467E+02	-.3777E+03	.1275E+04	-.2704E+04	-.8009E+03	.1179E+02	.2171E+02	-.1189E+04	-.3522E+03
.0330	.4179E+02	.7688E+02	-.2428E+03	.8198E+03	-.1977E+04	-.5855E+03	.2511E+02	.4624E+02	-.6959E+03	-.2061E+03
.0340	.7683E+02	.1413E+03	-.1673E+03	.5647E+03	-.1137E+04	-.3367E+03	.9346E+01	.1721E+02	-.1097E+04	-.3250E+03
.0350	.8339E+02	.1534E+03	-.1163E+03	.3926E+03	-.4967E+03	-.1471E+03	.1637E+02	.3015E+02	-.6839E+03	-.2026E+03
.0360	.6393E+02	.1176E+03	-.7337E+02	.2477E+03	-.1873E+03	-.5547E+02	.2173E+02	.4001E+02	-.3317E+03	-.9826E+02
.0370	.4654E+02	.8561E+02	-.3514E+02	.1186E+03	-.1208E+03	-.3579E+02	-.1057E+02	-.1946E+02	-.4835E+03	-.1432E+03
.0380	.4610E+02	.8480E+02	-.1011E+02	.3413E+02	-.5858E+02	-.1735E+02	.1169E+02	.2153E+02	.2455E+04	.7270E+03
.0390	.3970E+02	.7302E+02	-.5590E+01	.1887E+02	-.9366E+02	-.2774E+02	-.2489E+02	-.4584E+02	.2654E+04	.7862E+03
.0400	.1992E+02	.3664E+02	-.3171E+01	.1071E+02	-.1143E+02	-.3386E+02	-.9605E+02	-.1769E+03	.6667E+03	.1975E+03
.0410	.2252E+02	.4143E+02	.4629E+01	-.1563E+02	-.6395E+02	-.1894E+02	-.4624E+02	-.8516E+02	.2186E+04	.6475E+03
.0420	.1418E+02	.2609E+02	.5654E+01	-.1909E+02	-.7465E+02	-.2211E+02	-.3183E+02	-.5861E+02	.3432E+04	.1017E+04

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

FORCING FUNCTIONS AT NETWORK POINTS

(TIME IN SECS, FORCE (X,Y,Z DOFS) IN LBS , MOMENT (RX,RY,RZ DOFS) IN IN-LBS)

806	806	841	841	843	843	807	807	852	852
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----



.0290	.2346E+03	.4316E+03	-.4033E+04	.1361E+05	-.7294E+04	-.3338E+04	.2275E+02	.4189E+02	-.3158E+04	-.9353E+03
.0300	.8324E+02	.1531E+03	-.4455E+03	.1504E+04	-.6274E+04	-.858E+04	.1684E+02	.3101E+02	.5448E+03	.1614E+03
.0310	.2740E+02	.5041E+02	-.9479E+03	.3200E+04	-.4231E+04	-.1253E+04	.2746E+02	.5057E+02	-.1093E+04	-.3238E+03
.0320	-.1885E+02	-.3467E+02	-.3777E+03	.1275E+04	-.2704E+04	-.8009E+03	.1179E+02	.2171E+02	-.1189E+04	-.3522E+03
.0330	.4179E+02	.7688E+02	-.2428E+03	.8198E+03	-.1977E+04	-.5855E+02	.2511E+02	.4624E+02	-.6959E+03	-.2061E+03
.0340	.7683E+02	.1413E+03	-.1673E+03	.5647E+03	-.1137E+04	-.3367E+03	.9346E+01	.1721E+02	-.1097E+04	-.3250E+03
.0350	.8339E+02	.1534E+03	-.1163E+03	.3926E+03	-.4967E+03	-.1471E+03	.1637E+02	.3015E+02	-.6839E+03	-.2026E+03
.0360	.6393E+02	.1176E+03	-.7337E+02	.2477E+03	-.1873E+03	-.5547E+02	.2173E+02	.4001E+02	-.3317E+03	-.9826E+02
.0370	.4654E+02	.8561E+02	-.3514E+02	.1186E+03	-.1208E+03	-.3579E+02	-.1057E+02	-.1946E+02	-.4835E+03	-.1432E+03
.0380	.4610E+02	.8480E+02	-.1011E+02	.3413E+02	-.5858E+02	-.1735E+02	.1169E+02	.2153E+02	.2455E+04	.7270E+03
.0390	.3970E+02	.7302E+02	-.5590E+01	.1887E+02	-.9366E+02	-.2774E+02	-.2489E+02	-.4584E+02	.2654E+04	.7862E+03
.0400	.1992E+02	.3664E+02	-.3171E+01	.1071E+02	-.1143E+03	-.3386E+02	-.9605E+02	-.1769E+03	.6667E+03	.1975E+03
.0410	.2252E+02	.4143E+02	.4629E+01	-.1563E+02	-.6395E+02	-.1894E+02	-.4624E+02	-.8516E+02	.2186E+04	.6475E+03
.0420	.1418E+02	.2609E+02	.5654E+01	-.1909E+02	-.7465E+02	-.2211E+02	-.3183E+02	-.5861E+02	.3432E+04	.1017E+04

ADLPIPE PAGE 57

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.46.52.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

FORCING FUNCTIONS AT NETWORK POINTS

(TIME IN SECS, FORCE (X,Y,Z DOFS) IN LBS, MOMENT (RX,RY,RZ DOFS) IN IN-LBS)

TIME	806 X	806 Z	841 X	841 Z	843 X	843 Z	807 X	807 Z	852 X	852 Z
.0430	.1136E+02	.2089E+02	.5282E+01	-.1783E+02	-.6395E+02	-.1894E+02	-.5536E+02	-.1019E+03	-.2435E+03	-.7214E+02
.0440	.7381E+01	.1358E+02	.4738E+01	-.1600E+02	-.4909E+02	-.1454E+02	-.4251E+02	-.7829E+02	.6617E+03	.1960E+03
.0450	.1910E+01	.3514E+01	.2514E+01	-.8489E+01	-.2523E+02	-.7474E+01	-.3234E+02	-.5955E+02	.3344E+03	.9905E+02
.0460	-.2121E+01	-.3902E+01	-.2215E+01	.7479E+01	.8078E+01	.2393E+01	-.5969E+01	-.1099E+02	.6883E+01	.2039E+01
.0470	-.5018E+01	-.9230E+01	-.8618E+01	.2910E+02	.4274E+02	.1266E+02	.2444E+02	.4501E+02	-.1446E+02	-.4284E+01
.0480	-.9496E+01	-.1747E+02	-.1406E+02	.4746E+02	.6376E+02	.1889E+02	.2496E+02	.4596E+02	-.3989E+02	-.1181E+02
.0490	-.9218E+01	-.1696E+02	-.1446E+02	.4882E+02	.6048E+02	.1792E+02	.9449E+01	.1740E+02	-.7312E+02	-.2166E+02
.0500	-.1072E+02	-.1972E+02	-.1281E+02	.4325E+02	.5269E+02	.1561E+02	-.1174E+02	-.2163E+02	-.7086E+02	-.2099E+02
.0510	-.1056E+02	-.1942E+02	-.1105E+02	.3732E+02	.4555E+02	.1349E+02	-.3472E+02	-.6394E+02	-.6254E+02	-.1852E+02
.0520	-.9159E+01	-.1685E+02	-.1013E+02	.3420E+02	.4101E+02	.1215E+02	-.5040E+02	-.9281E+02	-.6142E+02	-.1819E+02
.0530	-.9783E+01	-.1799E+02	-.1020E+02	.3442E+02	.3835E+02	.1136E+02	-.4820E+02	-.8876E+02	-.7057E+02	-.2090E+02
.0540	-.6840E+01	-.1258E+02	-.9793E+01	.3306E+02	.3252E+02	.9632E+01	-.4160E+02	-.7660E+02	-.6633E+02	-.1965E+02
.0550	-.6633E+01	-.1220E+02	-.7318E+01	.2471E+02	.2351E+02	.6962E+01	-.3194E+02	-.5881E+02	-.6649E+02	-.1969E+02
.0560	-.5146E+01	-.9466E+01	-.3092E+01	.1044E+02	.1249E+02	.3700E+01	-.2485E+02	-.4577E+02	-.6232E+02	-.1846E+02
.0570	-.2657E+01	-.4887E+01	.2030E+01	-.6852E+01	.8828E+00	.2615E+00	-.1612E+02	-.2969E+02	-.5172E+02	-.1532E+02
.0580	-.2415E+01	-.4442E+01	.6362E+01	-.2148E+02	-.9310E+01	-.2758E+01	.4271E+01	.7865E+01	-.3874E+02	-.1147E+02
.0590	.1602E+01	.2946E+01	.7995E+01	-.2699E+02	-.1458E+02	-.4317E+01	.7070E+02	.1302E+03	.9741E+02	.2885E+02
.0600	.2617E+01	.4813E+01	.7045E+01	-.2379E+02	-.1463E+02	-.4332E+01	.7488E+02	.1379E+03	.1211E+03	.3587E+02
.0610	.4427E+01	.8143E+01	.4314E+01	-.1457E+02	-.1072E+02	-.3176E+01	.4724E+02	.8700E+02	.8138E+02	.2410E+02
.0620	.6523E+01	.1200E+02	.4500E+00	-.1519E+01	-.4253E+01	-.1260E+01	.1750E+02	.3223E+02	.3452E+02	.1023E+02
.0630	.5679E+01	.1045E+02	-.3408E+01	.1151E+02	.2023E+01	.5992E+00	.2081E+02	.3832E+02	.5341E+02	.1582E+02
.0640	.7945E+01	.1462E+02	-.6485E+01	.2189E+02	.5874E+01	.1740E+01	.2124E+02	.3912E+02	.7881E+02	.2334E+02
.0650	.7048E+01	.1296E+02	-.8795E+01	.2969E+02	.8574E+01	.2540E+01	.1120E+02	.2062E+02	.6230E+02	.1845E+02
.0660	.6800E+01	.1251E+02	-.1093E+02	.3691E+02	.1102E+02	.3264E+01	-.5611E+01	-.1033E+02	.2862E+02	.8478E+01
.0670	.6878E+01	.1265E+02	-.1209E+02	.4080E+02	.1170E+02	.3467E+01	-.2260E+02	-.4163E+02	-.9454E+01	-.2800E+01
.0680	.4352E+01	.8006E+01	-.1091E+02	.3682E+02	.8207E+01	.2431E+01	-.3035E+02	-.5589E+02	-.4219E+02	-.1250E+02
.0690	.4980E+01	.9161E+01	-.4729E+01	.1596E+02	-.4458E+00	-.1321E+00	-.3409E+02	-.6278E+02	-.7271E+02	-.2154E+02
.0700	.2751E+01	.5060E+01	.2956E+01	-.9979E+01	-.1517E+02	-.4495E+01	-.3578E+02	-.6588E+02	-.9109E+02	-.2698E+02
.0710	.1464E+01	.2693E+01	.9507E+01	-.3210E+02	-.2817E+02	-.8345E+01	-.4104E+02	-.7557E+02	-.1012E+03	-.2996E+02
.0720	.8120E+00	.1494E+01	.1349E+02	-.4554E+02	-.3599E+02	-.1066E+02	-.3234E+02	-.5955E+02	-.8891E+02	-.2634E+02
.0730	-.2224E+01	-.4091E+01	.1500E+02	-.5062E+02	-.3931E+02	-.1164E+02	.1847E+02	.3401E+02	-.3691E+02	-.1093E+02
.0740	-.1794E+01	-.3301E+01	.1483E+02	-.5007E+02	-.3803E+02	-.1127E+02	.7187E+02	.1324E+03	.8334E+02	.2468E+02
.0750	-.3858E+01	-.7097E+01	.1287E+02	-.4346E+02	-.2922E+02	-.8655E+01	.6993E+02	.1288E+03	.5747E+02	.1702E+02
.0760	-.4653E+01	-.8559E+01	.8832E+01	-.2982E+02	-.1267E+02	-.3754E+01	.4897E+02	.9019E+02	.1236E+02	.3660E+01
.0770	-.4475E+01	-.8231E+01	.3559E+01	-.1202E+02	.6276E+01	.1859E+01	.2208E+02	.4067E+02	-.3905E+01	-.1157E+01
.0780	-.6442E+01	-.1185E+02	-.7640E+00	.2579E+01	.1716E+02	.5084E+01	-.6585E+01	-.1213E+02	.6827E+01	.2022E+01
.0790	-.4605E+01	-.8471E+01	-.3441E+01	.1162E+02	.2395E+02	.7095E+01	-.3136E+02	-.5775E+02	-.3314E+02	-.9816E+01
.0800	-.5212E+01	-.9588E+01	-.6038E+01	.2039E+02	.2903E+02	.8599E+01	-.4744E+02	-.8737E+02	-.8544E+02	-.2531E+02
.0810	-.4517E+01	-.8310E+01	-.7836E+01	.2645E+02	.3027E+02	.8967E+01	-.5977E+02	-.1101E+03	-.1091E+03	-.3233E+02
.0820	-.2956E+01	-.5437E+01	-.8437E+01	.2848E+02	.2746E+02	.8133E+01	-.6089E+02	-.1121E+03	-.8948E+02	-.2650E+02
.0830	-.3837E+01	-.7058E+01	-.8066E+01	.2723E+02	.2311E+02	.6844E+01	-.3956E+02	-.7285E+02	-.4257E+02	-.1261E+02
.0840	-.1125E+01	-.2069E+01	-.5249E+01	.1772E+02	.1424E+02	.4217E+01	-.2612E+02	-.4810E+02	-.2132E+02	-.6314E+01
.0850	-.1208E+01	-.2222E+01	.1901E+00	-.6417E+00	-.3570E+00	-.1057E+00	-.3224E+02	-.5937E+02	-.4521E+02	-.1339E+02
.0860	-.2247E+00	-.4133E+00	.6882E+01	-.2323E+02	-.1938E+02	-.5742E+01	-.3594E+02	-.6618E+02	-.7858E+02	-.2328E+02

ADLPIPE PAGE 58

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.46.52.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

FORCING FUNCTIONS AT NETWORK POINTS

(TIME IN SECS, FORCE (X,Y,Z DOFS) IN LBS, MOMENT (RX,RY,RZ DOFS) IN IN-LBS)

806 806 841 841 843 843 807 807 852 852



.0720	.8120E+00	.1494E+01	.1349E+02	-.4554E+02	-.3519E+02	-.1066E+02	-.3234E+02	-.5955E+02	-.8891E+02	-.2634E+02
.0730	-.2224E+01	-.4091E+01	.1500E+02	-.5062E+02	-.3931E+02	-.1164E+02	.1847E+02	.3401E+02	-.3691E+02	-.1093E+02
.0740	-.1794E+01	-.3301E+01	.1483E+02	-.5007E+02	-.3803E+02	-.1127E+02	.7187E+02	.1324E+03	.8334E+02	.2468E+02
.0750	-.3858E+01	-.7097E+01	.1287E+02	-.4346E+02	-.2922E+02	-.8655E+01	.6993E+02	.1288E+03	.5747E+02	.1702E+02
.0760	-.4653E+01	-.8559E+01	.8832E+01	-.2982E+02	-.1267E+02	-.3754E+01	.4897E+02	.9019E+02	.1236E+02	.3660E+01
.0770	-.4475E+01	-.8231E+01	.3559E+01	-.1202E+02	.6276E+01	.1859E+01	.2208E+02	.4067E+02	-.3905E+01	-.1157E+01
.0780	-.6442E+01	-.1185E+02	-.7640E+00	.2579E+01	.1716E+02	.5084E+01	-.6585E+01	-.1213E+02	.6827E+01	.2022E+01
.0790	-.4605E+01	-.8471E+01	-.3441E+01	.1162E+02	.2395E+02	.7095E+01	-.3136E+02	-.5775E+02	-.3314E+02	-.9816E+01
.0800	-.5212E+01	-.9588E+01	-.6038E+01	.2039E+02	.2903E+02	.8599E+01	-.4744E+02	-.8737E+02	-.8544E+02	-.2531E+02
.0810	-.4517E+01	-.8310E+01	-.7836E+01	.2645E+02	.3027E+02	.8967E+01	-.5977E+02	-.1101E+03	-.1091E+03	-.3233E+02
.0820	-.2956E+01	-.5417E+01	-.8437E+01	.2848E+02	.2746E+02	.8133E+01	-.6089E+02	-.1121E+03	-.8948E+02	-.2650E+02
.0830	-.3837E+01	-.7058E+01	-.8066E+01	.2723E+02	.2311E+02	.6844E+01	-.3956E+02	-.7285E+02	-.4257E+02	-.1261E+02
.0840	-.1125E+01	-.2069E+01	-.5249E+01	.1772E+02	.1424E+02	.4217E+01	-.2612E+02	-.4810E+02	-.2132E+02	-.6314E+01
.0850	-.1208E+01	-.2222E+01	.1901E+00	-.6417E+00	-.3570E+00	-.1057E+00	-.3224E+02	-.5937E+02	-.4521E+02	-.1339E+02
.0860	-.2247E+00	-.4133E+00	.6882E+01	-.2323E+02	-.1938E+02	-.5742E+01	-.3594E+02	-.6618E+02	-.7858E+02	-.2328E+02

ADLPIPE PAGE 58

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.46.52.

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

## FORCING FUNCTIONS AT NETWORK POINTS

(TIME IN SECS, FORCE (X,Y,Z DOFS) IN LBS, MOMENT (RX,RY,RZ DOFS) IN IN-LBS)

TIME	806		841		843		807		852	
	X	Z	X	Z	X	Z	X	Z	X	Z
.0870	.1439E+01	.2647E+01	.1288E+02	-.4349E+02	-.3735E+02	-.1106E+02	-.2602E+02	-.4792E+02	-.8523E+02	-.2525E+02
.0880	.5726E+00	.1053E+01	.1588E+02	-.5360E+02	-.4583E+02	-.1358E+02	-.1403E+01	-.2584E+01	-.3375E+02	-.9997E+01
.0890	.3054E+01	.5618E+01	.1597E+02	-.5392E+02	-.4951E+02	-.1466E+02	.3651E+02	.6724E+02	.9476E+01	.2807E+01
.0900	.2611E+01	.4802E+01	.1377E+02	-.4649E+02	-.4357E+02	-.1291E+02	.8362E+02	.1540E+03	.1126E+03	.3335E+02
.0910	.3099E+01	.5701E+01	.9815E+01	-.3313E+02	-.3010E+02	-.8915E+01	.8884E+02	.1636E+03	.1297E+03	.3841E+02
.0920	.4114E+01	.7567E+01	.4759E+01	-.1607E+02	-.1284E+02	-.3802E+01	.5458E+02	.1005E+03	.6584E+02	.1950E+02
.0930	.2472E+01	.4556E+01	-.1085E+00	.3663E+00	.1266E+01	.3749E+00	.3130E+02	.5765E+02	.4880E+02	.1446E+02
.0940	.3988E+01	.7335E+01	-.3237E+01	.1093E+02	.8361E+01	.2476E+01	.1670E+00	.3076E+00	.3618E+02	.1072E+02
.0950	.2563E+01	.4715E+01	-.4649E+01	.1569E+02	.1043E+02	.3089E+01	-.2764E+02	-.5091E+02	.2233E+02	.6613E+01
.0960	.2085E+01	.3835E+01	-.5282E+01	.1783E+02	.1163E+02	.3446E+01	-.5064E+02	-.9326E+02	.1542E+01	.4568E+00
.0970	.2236E+01	.4114E+01	-.5809E+01	.1961E+02	.1395E+02	.4131E+01	-.6240E+02	-.1149E+03	-.2508E+02	-.7428E+01
.0980	-.5965E-01	-.1097E+00	-.6901E+01	.2330E+02	.1793E+02	.5311E+01	-.5726E+02	-.1055E+03	-.4986E+02	-.1477E+02
.0990	.1032E+01	.1898E+01	-.7659E+01	.2586E+02	.2129E+02	.6305E+01	-.4199E+02	-.7733E+02	-.4818E+02	-.1427E+02
.1000	-.1742E+01	-.3204E+01	-.7384E+01	.2493E+02	.1946E+02	.5765E+01	-.1775E+02	-.3269E+02	-.2857E+02	-.8463E+01
.1010	-.1027E+01	-.1890E+01	-.5836E+01	.1970E+02	.1477E+02	.4374E+01	-.1618E+02	-.2979E+02	-.2761E+02	-.8179E+01
.1020	-.3130E+00	-.5758E+00	-.4288E+01	.1448E+02	.1007E+02	.2982E+01	-.1460E+02	-.2689E+02	-.2665E+02	-.7895E+01
.1030	-.3107E+01	-.5714E+01	.2272E+01	-.7670E+01	-.1045E+02	-.3096E+01	.2954E+01	.5440E+01	.8025E+02	.2377E+02
.1040	-.1360E+01	-.2502E+01	.1110E+02	-.3749E+02	-.3883E+02	-.1150E+02	-.3092E+02	-.5695E+02	-.2378E+03	-.7043E+02
.1050	-.3751E+01	-.6900E+01	.1624E+02	-.5484E+02	-.5245E+02	-.1553E+02	.2753E+02	.5071E+02	.1879E+03	.5566E+02
.1060	-.2663E+01	-.4898E+01	.1626E+02	-.5489E+02	-.4957E+02	-.1468E+02	.4526E+02	.8335E+02	.1390E+03	.4117E+02
.1070	-.1575E+01	-.2897E+01	.1627E+02	-.5494E+02	-.4669E+02	-.1383E+02	.6299E+02	.1160E+03	.9003E+02	.2667E+02
.1080	-.3073E+01	-.5653E+01	.1451E+02	-.4899E+02	-.1477E+02	-.4374E+01	-.5631E+04	-.1037E+05	-.3107E+04	-.9202E+03
.1090	-.3732E+01	-.6864E+01	.1017E+02	-.3433E+02	-.2023E+02	-.5992E+01	-.2897E+03	-.5334E+03	-.2196E+04	-.6504E+03
.1100	-.4691E+00	-.8629E+00	.4345E+01	-.1467E+02	-.1966E+01	-.5822E+00	-.2362E+03	-.4350E+03	-.1582E+04	-.4686E+03
.1110	-.2057E+01	-.3783E+01	.4771E+00	-.1611E+01	.7910E+01	.2343E+01	-.2467E+03	-.4543E+03	-.2752E+04	-.8151E+03
.1120	-.6824E+00	-.1255E+01	-.6972E+00	.2354E+01	.1024E+02	.3032E+01	-.3152E+03	-.5804E+03	-.1133E+04	-.3355E+03
.1130	.6919E+00	.1273E+01	-.1872E+01	.6318E+01	.1256E+02	.3720E+01	-.3837E+03	-.7066E+03	.4861E+03	.1440E+03
.1140	-.9305E+00	-.1712E+01	-.3635E+01	.1227E+02	.1592E+02	.4714E+01	-.4562E+03	-.8401E+03	.2081E+04	.6163E+03
.1150	-.6108E+01	-.1124E+02	-.4942E+01	.1668E+02	.2033E+02	.6021E+01	-.4624E+03	-.8516E+03	-.1687E+04	-.4998E+03
.1160	.3460E+01	.6364E+01	-.6646E+01	.2244E+02	.1879E+02	.5566E+01	-.7874E+03	-.1450E+04	.2531E+04	.7498E+03
.1170	.2515E+01	.4626E+01	-.7100E+01	.2397E+02	.1822E+02	.5396E+01	.1226E+04	.2259E+04	-.4478E+04	-.1326E+04
.1180	.1434E+01	.2637E+01	-.7767E+01	.2622E+02	.2229E+02	.6603E+01	.1131E+04	.2083E+04	.2828E+03	.8378E+02
.1190	.3527E+00	.6487E+00	-.8435E+01	.2848E+02	.2637E+02	.7810E+01	.1036E+04	.1907E+04	.5043E+04	.1494E+04
.1200	.2663E+01	.4898E+01	-.1039E+02	.3509E+02	.2982E+02	.8832E+01	-.1317E+04	-.2425E+04	-.4161E+04	-.1233E+04
.1210	.4524E+00	.8322E+00	-.9514E+01	.3212E+02	.2339E+02	.6930E+01	-.5249E+03	-.9667E+03	.4027E+04	.1193E+04
.1220	.2405E+01	.4424E+01	-.5794E+01	.1956E+02	.9454E+01	.2800E+01	.1303E+03	.2399E+03	-.4180E+04	-.1238E+04
.1230	.1145E+01	.2106E+01	-.2835E+01	.9571E+01	-.1630E+00	-.4828E-01	.3992E+03	.7351E+03	.4794E+01	.1420E+01
.1240	-.1155E+00	-.2124E+00	.1235E+00	-.4171E+00	-.9780E+01	-.2897E+01	.6681E+03	.1230E+04	.4190E+04	.1241E+04
.1250	.1651E+01	.3037E+01	.6702E+01	-.2263E+02	-.3020E+02	-.8946E+01	.9830E+03	.1810E+04	-.3816E+04	-.1130E+04
.1260	-.9449E+00	-.1738E+01	.9684E+01	-.3270E+02	-.3509E+02	-.1039E+02	.1174E+03	.2162E+03	.4526E+04	.1340E+04
.1270	.8256E+00	.1519E+01	.8662E+01	-.2924E+02	-.2598E+02	-.7696E+01	-.1059E+04	-.1951E+04	-.3845E+04	-.1139E+04
.1280	-.4510E+00	-.8295E+00	.6958E+01	-.2349E+02	-.1884E+02	-.5581E+01	-.6681E+03	-.1230E+04	-.2205E+03	-.6532E+02
.1290	-.1727E+01	-.3178E+01	.5254E+01	-.1774E+02	-.1170E+02	-.3465E+01	-.2768E+03	-.5097E+03	.3404E+04	.1008E+04
.1300	.1288E+00	.2370E+00	.2087E+01	-.7047E+01	-.7469E+00	-.2212E+00	.5583E+03	.1028E+04	-.3845E+04	-.1139E+04

ADLPIPE PAGE 59

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.46.53.

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

## FORCING FUNCTIONS AT NETWORK POINTS

(TIME IN SECS, FORCE (X,Y,Z DOFS) IN LBS, MOMENT (RX,RY,RZ DOFS) IN IN-LBS)

806 806 841 841 843 843 807 807 852 852



.1160	.3460E+01	.8384E+01	.2664E+01	.2244E+02	.1879E+02	.5866E+01	-.7874E+03	-.1450E+04	.2531E+04	.7498E+03
.1170	.2515E+01	.4626E+01	-.7100E+01	.2397E+02	.1812E+02	.7196E+01	.1226E+04	.2259E+04	-.4478E+04	-.1326E+04
.1180	.1474E+01	.2627E+01	-.7767E+01	.2622E+02	.2229E+02	.6603E+01	.1131E+04	.2183E+04	.2828E+03	.8378E+02
.1190	.7527E+00	.8487E+00	-.8405E+01	.2548E+02	.2637E+02	.7810E+01	.1036E+04	.1907E+04	.5043E+04	.1494E+04
.1200	.2663E+01	.4950E+01	-.1039E+02	.3009E+02	.2982E+02	.8532E+01	-.1217E+04	-.2425E+04	-.4161E+04	-.1233E+04
.1210	.4524E+00	.8322E+00	-.9514E+01	.3212E+02	.2379E+02	.6930E+01	-.3249E+03	-.9667E+03	.4027E+04	.1193E+04
.1220	.2405E+01	.4424E+01	-.5794E+01	.1956E+02	.9454E+01	.2800E+01	.1303E+03	.2199E+03	-.4180E+04	-.1238E+04
.1230	.1145E+01	.2106E+01	-.2835E+01	.9571E+01	-.1630E+00	-.4828E-01	.3992E+03	.7351E+03	.4794E+01	.1420E+01
.1240	-.1155E+00	-.2124E+00	.1235E+00	-.4171E+00	-.9780E+01	-.2897E+01	.6681E+03	.1230E+04	.4190E+04	.1241E+04
.1250	.1651E+01	.3037E+01	.6702E+01	-.2263E+02	-.7020E+02	-.8946E+01	.9830E+03	.1810E+04	-.3816E+04	-.1130E+04
.1260	-.9449E+00	-.1738E+01	.9684E+01	-.2270E+02	-.3509E+02	-.1039E+02	.1174E+03	.2162E+03	.4526E+04	.1340E+04
.1270	.7256E+00	.1519E+01	.8662E+01	-.2924E+02	-.2590E+02	-.7696E+01	-.1059E+04	-.1951E+04	-.3845E+04	-.1139E+04
.1280	-.4510E+00	-.8295E+00	.6958E+01	-.2349E+02	-.1874E+02	-.5581E+01	-.6681E+03	-.1230E+04	-.2205E+04	-.6532E+02
.1290	-.1727E+01	-.3178E+01	.5254E+01	-.1774E+02	-.1170E+02	-.3465E+01	-.2768E+03	-.5097E+03	.3404E+04	.1008E+04
.1300	.1288E+00	.2770E+00	.2087E+01	-.7047E+01	-.7469E+00	-.2212E+00	.5583E+03	.1028E+04	-.3845E+04	-.1139E+04

ADLPIPE PAGE 59

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.46.53.

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

CONDITION 24

LOADS  
SHOCK  
PRESSURE

FORCING FUNCTIONS AT NETWORK POINTS

(TIME IN SECS, FORCE (X,Y,Z DOFS) IN LBS, MOMENT (RX,RY,RZ DOFS) IN IN-LBS)

TIME	806		841		843		807		852	
	X	Z	X	Z	X	Z	X	Z	X	Z
.1310	-.2286E+01	-.4205E+01	.5538E+00	-.1870E+01	.2263E+01	.6702E+00	.6204E+03	.1142E+04	.3825E+04	.1133E+04
.1320	-.2598E+00	-.4775E+00	.9940E+00	-.3356E+01	-.1266E+01	-.3749E+00	.1274E+03	.2346E+03	-.3548E+04	-.1051E+04
.1330	-.1366E+01	-.2512E+01	.1173E+01	-.3960E+01	-.1385E+01	-.4104E+00	-.4128E+02	-.7602E+02	.2397E+03	.7100E+02
.1340	-.2472E+01	-.4547E+01	.1352E+01	-.4564E+01	-.1505E+01	-.4459E+00	-.2100E+03	-.3867E+03	.4027E+04	.1193E+04
.1350	-.2310E+00	-.4249E+00	.5822E+00	-.1966E+01	.2301E+01	.6816E+00	-.2248E+03	-.4139E+03	-.3528E+04	-.1045E+04
.1360	-.2229E+01	-.4099E+01	.5652E-01	-.1908E+00	.3471E+01	.1028E+01	.1346E+03	.2478E+03	.3471E+04	.1028E+04
.1370	.1842E+00	.3388E+00	.9628E+00	-.3250E+01	-.2272E+01	-.6731E+00	.1813E+03	.3339E+03	-.3548E+04	-.1051E+04
.1380	-.7621E+00	-.1402E+01	.2469E+01	-.8337E+01	-.9094E+01	-.2694E+01	.3429E+03	.4473E+03	.9588E+02	.2840E+02
.1390	-.1708E+01	-.3143E+01	.3976E+01	-.1342E+02	-.1592E+02	-.4714E+01	.3045E+03	.5607E+03	.3739E+04	.1108E+04
.1400	.7683E+00	.1413E+01	.7384E+01	-.2493E+02	-.2876E+02	-.8520E+01	-.4820E+01	-.8876E+01	-.3375E+04	-.9997E+03
.1410	-.1112E+01	-.2045E+01	.8946E+01	-.3020E+02	-.3212E+02	-.9514E+01	.2582E+03	.4754E+03	.3615E+04	.1071E+04
.1420	.1327E+01	.2440E+01	.8094E+01	-.2733E+02	-.2752E+02	-.8151E+01	.1818E+03	.3348E+03	-.3116E+04	-.9230E+03
.1430	.3507E+00	.6452E+00	.7654E+01	-.2584E+02	-.2608E+02	-.7725E+01	.8267E+02	.1523E+03	.8629E+02	.2556E+02
.1440	-.6251E+00	-.1150E+01	.7214E+01	-.2435E+02	-.2464E+02	-.7299E+01	-.1646E+02	-.3032E+02	.3289E+04	.9741E+03
.1450	.1718E+01	.3160E+01	.7128E+01	-.2407E+02	-.2589E+02	-.7668E+01	.9830E+02	-.1810E+03	-.3030E+04	-.8974E+03
.1460	-.3641E+00	-.6698E+00	.6248E+01	-.2109E+02	-.2426E+02	-.7185E+01	-.7349E+02	-.1353E+03	.3068E+04	.9088E+03
.1470	.1828E+01	.3362E+01	.5765E+01	-.1946E+02	-.2090E+02	-.6191E+01	.8733E+02	.1608E+03	-.3078E+04	-.9116E+03
.1480	.7137E+00	.1313E+01	.5410E+01	-.1827E+02	-.1999E+02	-.5921E+01	.2749E+02	.5062E+02	-.1438E+02	-.4260E+01
.1490	-.4004E+00	-.7365E+00	.5055E+01	-.1707E+02	-.1908E+02	-.5652E+01	-.3235E+02	-.5958E+02	.3049E+04	.9031E+03
.1500	.1656E+01	.3046E+01	.4317E+01	-.1457E+02	-.1592E+02	-.4714E+01	.6585E+02	.1213E+03	-.3059E+04	-.9060E+03
.1510	-.6967E+00	-.1282E+01	.3380E+01	-.1141E+02	-.1189E+02	-.3522E+01	-.1436E+03	-.2645E+03	.3078E+04	.9116E+03
.1520	.1298E+01	.2390E+01	.2417E+01	-.8159E+01	-.7872E+01	-.2332E+01	.2596E+01	.4781E+01	-.3126E+04	-.9258E+03
.1530	.9783E-01	.1799E+00	.1971E+01	-.6654E+01	-.6141E+01	-.1819E+01	.3589E+02	.6610E+02	-.4315E+02	-.1278E+02
.1540	-.1102E+01	-.2028E+01	.1525E+01	-.5149E+01	-.4410E+01	-.1306E+01	.6919E+02	.1274E+03	.3039E+04	.9003E+03
.1550	.8733E+00	.1606E+01	.8475E+00	-.2848E+01	-.1534E+01	-.4544E+00	.1312E+03	.2417E+03	-.3087E+04	-.9145E+03
.1560	-.2691E+01	-.4951E+01	.2246E+00	-.7584E+00	.1448E+01	.4288E+00	.4400E+02	.8103E+02	.3346E+04	.9912E+03
.1570	.1599E+01	.2941E+01	.5055E+00	-.1707E+01	.2723E+01	.8066E+00	.5249E+02	.9667E+02	-.7699E+03	-.2281E+03
.1580	-.5774E+00	-.1762E+01	-.8264E+00	.2790E+01	.5599E+01	.1659E+01	.1894E+03	.3489E+03	-.2081E+04	-.6163E+03
.1590	-.9019E+00	-.1659E+01	-.6759E+00	.2282E+01	.3864E+01	.1145E+01	.1727E+03	.3181E+03	-.5427E+03	-.1607E+03
.1600	-.5536E+00	-.1018E+01	-.1136E+01	.3835E+01	.4516E+01	.1338E+01	.8542E+02	.1573E+03	.2867E+04	.8492E+03
.1610	.1059E+00	.1949E+00	-.4820E+00	.1630E+01	.1515E+01	.4487E+00	-.7349E+03	-.1353E+04	-.3116E+04	-.9230E+03
.1620	-.1976E+01	-.3634E+01	.1926E+00	-.6501E+00	.4717E+00	.1397E+00	-.3799E+03	-.6995E+03	.2330E+04	.6901E+03
.1630	-.7902E+00	-.1454E+01	.3277E+00	-.1106E+01	.1966E-01	.5822E-02	-.1374E+03	-.2531E+03	-.4986E+03	-.1477E+03
.1640	.3951E+00	.7268E+00	.4629E+00	-.1563E+01	-.4324E+00	-.1281E+00	.1050E+03	.1933E+03	-.3327E+04	-.9855E+03
.1650	-.1618E+01	-.2976E+01	.6163E+00	-.2081E+01	-.6740E+00	-.1997E+00	.1288E+03	.2373E+03	.2809E+04	.8321E+03
.1660	.7110E+00	.1308E+01	-.1607E+00	.5427E+00	.3950E+01	.1170E+01	.9926E+02	.1828E+03	-.3500E+04	-.1037E+04
.1670	-.1322E+01	-.2432E+01	-.1619E+01	.5465E+01	.9684E+01	.2168E+01	.1231E+03	.2267E+03	.3404E+04	.1008E+04
.1680	-.1599E+00	-.2941E+00	-.1776E+01	.5997E+01	.8500E+01	.2518E+01	.1212E+03	.2232E+03	-.7670E+02	-.2272E+02
.1690	.1002E+01	.1843E+01	-.1934E+01	.8529E+01	.7316E+01	.2167E+01	.1193E+03	.2197E+03	-.3557E+04	-.1054E+04
.1700	-.1045E+01	-.1922E+01	-.1761E+00	.5945E+00	-.2982E+01	-.8832E+00	.2233E+03	.4113E+03	.3758E+04	.1113E+04
.1710	.1241E+01	.2282E+01	.2081E+01	-.7699E+01	-.1323E+02	-.3919E+01	.1193E+03	.2197E+03	-.3404E+04	-.1008E+04
.1720	-.8637E+00	-.1589E+01	.4061E+01	-.1371E+02	-.1850E+02	-.5481E+01	.1317E+03	.2425E+03	.3749E+04	.1110E+04
.1730	.2505E+00	.4608E+00	.4374E+01	-.1477E+02	-.1884E+02	-.5581E+01	.1155E+03	.2127E+03	.2541E+03	.7526E+02
.1740	.1365E+01	.2511E+01	.4686E+01	-.1582E+02	-.1918E+02	-.5680E+01	.9926E+02	.1828E+03	-.3241E+04	-.9599E+03

ADLPIPE PAGE 60

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.46.53.

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

CONDITION 24

LOADS  
SHOCK  
PRESSURE

FORCING FUNCTIONS AT NETWORK POINTS

(TIME IN SECS, FORCE (X,Y,Z DOFS) IN LBS, MOMENT (RX,RY,RZ DOFS) IN IN-LBS)

806 806 841 841 843 843 807 807 852 852



.1600	-.5536E+00	-.1019E+00	-.1136E+01	.3835E+01	.4516E+01	.1738E+01	.8542E+02	-.1573E+03	.2867E+04	.8492E+03
.1610	-.1059E+00	.1949E+00	-.4828E+00	-.1630E+01	.1515E+01	.4487E+00	-.7349E+03	-.1353E+04	-.3116E+04	-.9230E+03
.1620	-.1976E+01	-.3634E+01	.1926E+00	-.6501E+00	.4717E+00	.1397E+00	-.3799E+03	-.6995E+03	.2330E+04	.6901E+03
.1630	-.7902E+00	-.1454E+01	.3277E+00	-.1106E+01	.1966E-01	.5822E-02	-.1374E+03	-.2531E+03	-.4986E+03	-.1477E+03
.1640	.3951E+00	.7269E+00	.4629E+00	-.1563E+01	-.4324E+00	-.1281E+00	.1050E+03	.1933E+03	-.3327E+04	-.9855E+03
.1650	-.1618E+01	-.2976E+01	.6163E+00	-.2081E+01	-.6740E+00	-.1997E+00	.1288E+03	.2373E+03	.2809E+04	.8321E+03
.1660	.7110E+00	.1308E+01	-.1607E+00	.5427E+00	.3950E+01	.1170E+01	.9926E+02	.1828E+03	-.3500E+04	-.1037E+04
.1670	-.1322E+01	-.2432E+01	-.1619E+01	.5467E+01	.9684E+01	.2868E+01	.1231E+03	.2267E+03	.3404E+04	.1008E+04
.1680	-.1599E+00	-.2941E+00	-.1776E+01	.5997E+01	.8500E+01	.2518E+01	.1212E+03	.2232E+03	-.7670E+02	-.2272E+02
.1690	.1002E+01	.1847E+01	-.1934E+01	.6529E+01	.7316E+01	.2167E+01	.1193E+03	.2197E+03	-.3557E+04	-.1054E+04
.1700	-.1045E+01	-.1922E+01	-.1761E+00	.5945E+00	-.2982E+01	-.8832E+00	.2233E+03	.4113E+03	.3758E+04	.1113E+04
.1710	.1241E+01	.2282E+01	.2281E+01	-.7699E+01	-.1323E+02	-.3919E+01	.1193E+03	.2197E+03	-.3404E+04	-.1008E+04
.1720	-.8637E+00	-.1589E+01	.4061E+01	-.1371E+02	-.1850E+02	-.5481E+01	.1317E+03	.2425E+03	.3749E+04	.1110E+04
.1730	.2505E+00	.4608E+00	.4374E+01	-.1477E+02	-.1084E+02	-.5581E+01	.1155E+03	.2127E+03	.2541E+03	.7526E+02
.1740	.1265E+01	.2511E+01	.4686E+01	-.1582E+02	-.1918E+02	-.5680E+01	.9926E+02	.1828E+03	-.3241E+04	-.9599E+03

ADLPIPE PAGE 60

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.46.53.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

FORCING FUNCTIONS AT NETWORK POINTS

(TIME IN SECS, FORCE (X,Y,Z DOFS) IN LBS, MOMENT (RX,RY,RZ DOFS) IN IN-LBS)

TIME	806		806		841		841		843		843		807		807		852		852	
	X	Z	X	Z	X	Z	X	Z	X	Z	X	Z	X	Z	X	Z	X	Z		
.175	-.8112E+00	-.1492E+01	.4572E+01	-.1544E+02	-.1755E+02	-.5197E+01	.1188E+03	.2188E+03	.3548E+04	.1051E+04										
.1760	.1350E+01	.2484E+01	.4033E+01	-.1361E+02	-.1457E+02	-.4317E+01	.1002E+03	.1845E+03	-.3068E+04	-.9088E+03										
.1770	-.3924E+00	-.1641E+01	.3294E+01	-.1112E+02	-.1170E+02	-.3465E+01	.1331E+03	.2452E+03	.3327E+04	.9855E+03										
.1780	.1575E+00	.2897E+00	.3033E+01	-.1024E+02	-.1079E+02	-.3195E+01	.1152E+03	.2122E+03	.2253E+03	.6674E+02										
.1790	.1207E+01	.2221E+01	.2772E+01	-.9358E+01	-.9876E+01	-.2925E+01	.9735E+02	.1793E+03	-.2876E+04	-.8520E+03										
.1800	-.1069E+01	-.1966E+01	.2565E+01	-.8658E+01	-.9684E+01	-.2868E+01	.1389E+03	.2557E+03	.3193E+04	.9457E+03										
.1810	.1012E+01	.1861E+01	.2667E+01	-.9003E+01	-.1045E+02	-.3096E+01	.1074E+03	.1977E+03	-.2646E+04	-.7838E+03										
.1820	-.1274E+01	-.2344E+01	.2954E+01	-.9972E+01	-.1160E+02	-.3436E+01	.1150E+03	.2118E+03	.2915E+04	.8634E+03										
.1830	-.2267E+00	-.4170E+00	.3053E+01	-.1031E+02	-.1165E+02	-.3451E+01	.1124E+03	.2070E+03	.2301E+03	.6816E+02										
.1840	.8208E+00	.1510E+01	.3152E+01	-.1064E+02	-.1170E+02	-.3465E+01	.1098E+03	.2021E+03	-.2455E+04	-.7270E+03										
.1850	-.1441E+01	-.2651E+01	.3209E+01	-.1083E+02	-.1170E+02	-.3465E+01	.1174E+03	.2162E+03	.2752E+04	.8151E+03										
.1860	.7015E+00	.1290E+01	-.2036E+02	.6875E+02	-.5254E+02	-.1556E+02	.9639E+02	.1775E+03	-.2263E+04	-.6702E+03										
.1870	.3340E+01	.6145E+01	-.7100E+00	.2397E+01	-.4650E+02	-.1377E+02	.1665E+03	.3067E+03	.2598E+04	.7696E+03										
.1880	.1923E+01	.3538E+01	.1007E+01	-.3399E+01	-.3193E+02	-.9457E+01	.1995E+03	.3673E+03	.6424E+03	.1903E+03										
.1890	.5058E+00	.9305E+00	.2724E+01	-.9195E+01	-.1735E+02	-.5140E+01	.2324E+03	.4280E+03	-.1314E+04	-.3891E+03										
.1900	-.4510E+01	-.8295E+01	.5936E+01	-.2004E+02	-.2378E+02	-.7043E+01	.1350E+03	.2487E+03	.2109E+04	.6248E+03										
.1910	-.2381E+01	-.4380E+01	.5850E+01	-.1975E+02	-.1764E+02	-.5226E+01	.7253E+02	.1336E+03	-.1237E+04	-.3664E+03										
.1920	-.4280E+01	-.7874E+01	.4686E+01	-.1582E+02	-.1112E+02	-.3294E+01	.6824E+02	.1257E+03	.1112E+04	.3294E+03										
.1930	-.3243E+01	-.5966E+01	.5046E+01	-.1703E+02	-.1131E+02	-.3351E+01	.8478E+02	.1561E+03	.8485E+03	.2513E+03										
.1940	-.2206E+01	-.4058E+01	.5405E+01	-.1825E+02	-.1151E+02	-.3408E+01	.1013E+03	.1866E+03	.5849E+03	.1732E+03										
.1950	-.1169E+01	-.2151E+01	.5765E+01	-.1946E+02	-.1170E+02	-.3465E+01	.1179E+03	.2171E+03	.3212E+03	.9514E+02										
.1960	-.3567E+01	-.6562E+01	.4899E+01	-.1654E+02	-.1290E+02	-.3820E+01	.7716E+02	.1421E+03	.1995E+03	.5909E+02										
.1970	-.5965E+01	-.1097E+02	.4033E+01	-.1361E+02	-.1409E+02	-.4175E+01	.3646E+02	.6714E+02	.7776E+02	.2303E+02										
.1980	-.3690E+01	-.6788E+01	.4393E+01	-.1483E+02	-.1793E+02	-.5311E+01	.4880E+02	.8987E+02	.1097E+03	.3249E+02										
.1990	-.1416E+01	-.2604E+01	.4752E+01	-.1604E+02	-.2176E+02	-.6447E+01	.6115E+02	.1126E+03	.1416E+03	.4195E+02										
.2000	.8590E+00	.1580E+01	.5112E+01	-.1726E+02	-.2560E+02	-.7583E+01	.7349E+02	.1353E+03	.1735E+03	.5140E+02										
.2010	-.1749E+01	-.3217E+01	.4714E+01	-.1592E+02	-.3674E+02	-.1076E+02	.5433E+02	.1001E+03	-.3835E+01	-.1136E+01										
.2020	-.4357E+01	-.8014E+01	.4317E+01	-.1457E+02	-.4708E+02	-.1394E+02	.3517E+02	.6477E+02	-.1812E+03	-.5368E+02										
.2030	-.2403E+01	-.4421E+01	.3716E+01	-.1254E+02	-.4510E+02	-.1336E+02	.3027E+02	.5575E+02	-.5881E+02	-.1742E+02										
.2040	-.4502E+00	-.8281E+00	.3115E+01	-.1051E+02	-.4311E+02	-.1277E+02	.2537E+02	.4672E+02	.6360E+02	.1884E+02										
.2050	.1503E+01	.2765E+01	.2513E+01	-.8485E+01	-.4113E+02	-.1218E+02	.2047E+02	.3770E+02	.1860E+03	.5510E+02										
.2060	-.1630E+01	-.2998E+01	.2947E+01	-.9948E+01	-.3567E+02	-.1056E+02	.2121E+02	.3906E+02	-.6232E+01	-.1846E+01										
.2070	-.4762E+01	-.8767E+01	.3380E+01	-.1141E+02	-.3020E+02	-.8946E+01	.2195E+02	.4042E+02	-.1985E+03	-.5879E+02										
.2080	-.3113E+01	-.5727E+01	.4326E+01	-.1461E+02	-.2065E+02	-.6116E+01	.6585E+01	.1213E+02	-.5337E+02	-.1581E+02										
.2090	-.1464E+01	-.2694E+01	.5273E+01	-.1780E+02	-.1110E+02	-.3287E+01	-.8780E+01	-.1617E+02	.9173E+02	.2717E+02										
.2100	.1847E+00	.3397E+00	.6220E+01	-.2100E+02	-.1544E+01	-.4572E+00	-.2415E+02	-.4447E+02	.2368E+03	.7015E+02										
.2110	-.2604E+01	-.4790E+01	.5013E+01	-.1692E+02	.2977E+01	.8818E+00	-.1517E+02	-.2795E+02	.6424E+02	.1903E+02										
.2120	-.5392E+01	-.9919E+01	.3806E+01	-.1285E+02	.7498E+01	.2221E+01	-.6204E+01	-.1142E+02	-.1083E+03	-.3209E+02										
.2130	-.3404E+01	-.6262E+01	.3645E+01	-.1230E+02	.7725E+01	.2288E+01	-.2497E+02	-.7599E+02	-.6533E+02	-.1935E+02										
.2140	-.1416E+01	-.2604E+01	.3484E+01	-.1176E+02	.7952E+01	.2355E+01	-.4374E+02	-.8056E+02	-.2231E+02	-.6608E+01										
.2150	.5726E+00	.1053E+01	.3323E+01	-.1122E+02	.8179E+01	.2423E+01	-.6251E+02	-.1151E+03	.2071E+02	.6134E+01										
.2160	-.1849E+01	-.3401E+01	.2114E+01	-.7138E+01	-.4540E+01	-.1345E+01	-.3061E+02	-.5636E+02	-.5082E+01	-.1505E+01										
.2170	-.4271E+01	-.7856E+01	.9060E+00	-.3059E+01	-.1726E+02	-.5112E+01	.1303E+01	.2399E+01	-.3087E+02	-.9145E+01										
.2180	-.2305E+01	-.4240E+01	.1231E+01	-.4155E+01	-.5473E+01	-.1609E+01	.1191E+02	.2193E+02	-.5945E+01	-.1761E+01										

ADLPIPE PAGE 61

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.46.53.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

FORCING FUNCTIONS AT NETWORK POINTS

(TIME IN SECS, FORCE (X,Y,Z DOFS) IN LBS, MOMENT (RX,RY,RZ DOFS) IN IN-LBS)

806	806	841	841	843	843	807	807	852	852
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

.2040	-.4502E+00	-.8281E+00	.3115E+01	-.1051E+02	-.4311E+02	-.1777E+02	.2537E+02	.4672E+02	.6360E+02	.1884E+02
.2050	.1503E+01	-.2765E+01	.2513E+01	-.8485E+01	-.4113E+02	-.1218E+02	.2047E+02	.3770E+02	.1860E+03	.5510E+02
.2060	-.1630E+01	-.2998E+01	.2947E+01	-.9948E+01	-.3567E+02	-.1056E+02	.2121E+02	.3906E+02	-.6232E+01	-.1846E+01
.2070	-.4762E+01	-.9760E+01	.7380E+01	-.1141E+02	-.3020E+02	-.8946E+01	.2195E+02	.4042E+02	-.1985E+03	-.5879E+02
.2080	-.3113E+01	-.9727E+01	.4326E+01	-.1461E+02	-.2065E+02	-.6116E+01	.6585E+01	.1212E+02	-.5337E+02	-.1581E+02
.2090	-.1464E+01	-.2694E+01	.5273E+01	-.1780E+02	-.1110E+02	-.3287E+01	-.8780E+01	-.1617E+02	.9173E+02	.2717E+02
.2100	.1847E+00	.3397E+00	.6220E+01	-.2100E+02	-.1544E+01	-.4572E+00	-.2415E+02	-.4447E+02	.2368E+03	.7015E+02
.2110	-.2604E+01	-.4790E+01	.5013E+01	-.1692E+02	.2977E+01	.8818E+00	-.1517E+02	-.2795E+02	.6424E+02	.1903E+02
.2120	-.5392E+01	-.9919E+01	.7806E+01	-.1285E+02	.7498E+01	.2221E+01	-.6204E+01	-.1142E+02	-.1083E+03	-.3205E+02
.2130	-.3404E+01	-.6262E+01	.3645E+01	-.1230E+02	.7725E+01	.2288E+01	-.2497E+02	-.4599E+02	-.6533E+02	-.1935E+02
.2140	-.1416E+01	-.2604E+01	.3484E+01	-.1176E+02	.7952E+01	.2355E+01	-.4374E+02	-.8056E+02	-.2231E+02	-.6608E+01
.2150	.5726E+00	.1053E+01	.3322E+01	-.1122E+02	.8179E+01	.2423E+01	-.6251E+02	-.1151E+03	.2071E+02	.6134E+01
.2160	-.1849E+01	-.3401E+01	.2114E+01	-.7132E+01	-.4540E+02	-.1345E+01	-.3061E+02	-.5636E+02	-.5082E+01	-.1505E+01
.2170	-.4271E+01	-.7856E+01	.9060E+00	-.3059E+01	-.1726E+02	-.5112E+01	.1303E+01	.2399E+01	-.3087E+02	-.9145E+01
.2180	-.2305E+01	-.4240E+01	.1231E+01	-.4155E+01	-.5473E+01	-.1609E+01	.1191E+02	.2193E+02	-.5945E+01	-.1761E+01

ADLPIPE PAGE 61

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.46.53.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

FORCING FUNCTIONS AT NETWORK POINTS

(TIME IN SECS, FORCE (X,Y,Z DOFS) IN LBS, MOMENT (RX,RY,RZ DOFS) IN IN-LBS)

TIME	806 X	806 Z	841 X	841 Z	843 X	843 Z	807 X	807 Z	852 X	852 Z
.2190	-.3388E+00	-.6232E+00	.1555E+01	-.5251E+01	.6392E+01	.1893E+01	.2251E+02	.4146E+02	.1898E+02	.5623E+01
.2200	.1627E+01	.2993E+01	.1880E+01	-.6347E+01	.1822E+02	.5396E+01	.3312E+02	.6099E+02	.4391E+02	.1301E+02
.2210	-.1267E+01	-.2331E+01	.2218E+01	-.7488E+01	.1238E+02	.3668E+01	.3107E+02	.5721E+02	.4943E+02	.1464E+02
.2220	-.4161E+01	-.7654E+01	.2556E+01	-.8629E+01	.6549E+01	.1940E+01	.2901E+02	.5343E+02	.5494E+02	.1627E+02
.2230	-.1828E+01	-.3362E+01	.1650E+01	-.5569E+01	.1301E+01	.3853E+00	.2516E+02	.4634E+02	.4743E+02	.1405E+02
.2240	.5058E+00	.9305E+00	.7431E+00	-.2509E+01	-.3947E+01	-.1169E+01	.2131E+02	.3925E+02	.3992E+02	.1182E+02
.2250	.2839E+01	.5223E+01	-.1633E+00	.5513E+00	-.9195E+01	-.2724E+01	.1747E+02	.3216E+02	.3241E+02	.9599E+01
.2260	.3030E+00	.5574E+00	-.7036E+00	.2375E+01	-.4688E+01	-.1389E+01	.1520E+02	.2799E+02	.2891E+02	.8563E+01
.2270	-.2233E+01	-.4108E+01	-.1244E+01	.4200E+01	-.1812E+00	-.5368E-01	.1293E+02	.2382E+02	.2541E+02	.7526E+01
.2280	-.6347E+00	-.1167E+01	-.6437E+00	.2173E+01	-.4388E+00	-.1300E+00	.1012E+02	.1864E+02	.2282E+02	.6759E+01
.2290	.9639E+00	.1773E+01	-.4355E-01	.1470E+00	-.6964E+00	-.2063E+00	.7308E+01	.1346E+02	.2023E+02	.5992E+01
.2300	.2566E+01	.4714E+01	.5566E+00	-.1879E+01	-.9540E+00	-.2826E+00	.4495E+01	.8278E+01	.1764E+02	.5226E+01
.2310	-.1646E+00	-.3028E+00	.3017E+00	-.1019E+01	-.2361E+01	-.6994E+00	.5970E+01	.1099E+02	.2033E+02	.6021E+01
.2320	-.2892E+01	-.5319E+01	.4686E-01	-.1582E+00	-.3768E+01	-.1116E+01	.7444E+01	.1371E+02	.2301E+02	.6816E+01
.2330	-.1028E+01	-.1890E+01	.5566E-01	-.1879E+00	-.3007E+01	-.8908E+00	.3102E+01	.5712E+01	.2081E+02	.6163E+01
.2340	.8367E+00	.1539E+01	.6447E-01	-.2176E+00	-.2247E+01	-.6655E+00	-.1241E+01	-.2285E+01	.1860E+02	.5510E+01
.2350	.2701E+01	.4968E+01	.7327E-01	-.2474E+00	-.1486E+01	-.4402E+00	-.5583E+01	-.1028E+02	.1640E+02	.4856E+01
.2360	-.1813E+00	-.3336E+00	.1343E+00	-.4535E+00	.1246E+00	.3692E-01	-.3214E+01	-.5919E+01	.1553E+02	.4601E+01
.2370	-.3064E+01	-.5635E+01	.1954E+00	-.6597E+00	.1735E+01	.5140E+00	-.8446E+00	-.1555E+01	.1467E+02	.4345E+01
.2380	-.1245E+01	-.2291E+01	.3044E+00	-.1028E+01	.2346E+01	.6949E+00	-.9130E+00	-.1681E+01	.1972E+02	.5841E+01
.2390	.5726E+00	.1053E+01	.4135E+00	-.1396E+01	.2956E+01	.8757E+00	-.9814E+00	-.1807E+01	.2477E+02	.7337E+01
.2400	.2391E+01	.4398E+01	.5226E+00	-.1764E+01	.2567E+01	.1056E+01	-.1050E+01	-.1933E+01	.2982E+02	.8832E+01
.2410	-.3579E+00	-.6584E+00	.4246E+00	-.1433E+01	.2948E+01	.8733E+00	.6705E+01	.1235E+02	.2785E+02	.8250E+01
.2420	-.3107E+01	-.5714E+01	.3266E+00	-.1103E+01	.2330E+01	.6901E+00	.1446E+02	.2663E+02	.2589E+02	.7668E+01
.2430	-.1183E+01	-.2177E+01	.2310E+00	-.7798E+00	.1548E+01	.4584E+00	.1810E+02	.3334E+02	.3739E+02	.1108E+02
.2440	.7397E+00	.1361E+01	.1354E+00	-.4570E+00	.7655E+00	.2676E+00	.2174E+02	.4004E+02	.4890E+02	.1448E+02
.2450	.2663E+01	.4898E+01	.3976E-01	-.1342E+00	-.1668E-01	-.4942E-02	.2539E+02	.4675E+02	.6040E+02	.1789E+02
.2460	-.9305E-01	-.1712E+00	-.3337E-01	.1127E+00	.5734E-01	.1698E-01	.2782E+02	.5123E+02	.8198E+02	.2428E+02
.2470	-.2849E+01	-.5240E+01	-.1065E+00	.3596E+00	.1314E+00	.3891E-01	.3025E+02	.5572E+02	.1036E+03	.3067E+02
.2480	-.9783E+00	-.1799E+01	-.1144E+00	.3861E+00	-.3055E+00	-.9050E-01	.1753E+02	.3228E+02	.8124E+02	.2406E+02
.2490	.8924E+00	.1641E+01	-.1222E+00	.4126E+00	-.7424E+00	-.2199E+00	.4804E+01	.8847E+01	.5893E+02	.1746E+02
.2500	.2763E+01	.5082E+01	-.1301E+00	.4391E+00	-.1179E+01	-.3493E+00	-.7922E+01	-.1459E+02	.3663E+02	.1085E+02
.2510	.7158E-02	.1317E-01	-.4612E+00	.1557E+01	.4348E+01	.1288E+01	-.1656E+02	-.3049E+02	.8198E+01	.2428E+01
.2520	-.2749E+01	-.5056E+01	-.7924E+00	.2675E+01	.9876E+01	.2925E+01	-.2520E+02	-.4640E+02	-.2023E+02	-.5992E+01
.2530	-.9973E+00	-.1835E+01	-.5330E+00	.1800E+01	.1403E+02	.4156E+01	-.4368E+02	-.8044E+02	-.6782E+02	-.2009E+02
.2540	.7540E+00	.1387E+01	-.2737E+00	.9242E+00	.1819E+02	.5387E+01	-.6216E+02	-.1145E+03	-.1154E+03	-.3418E+02
.2550	.2505E+01	.4608E+01	-.1443E-01	.4871E-01	.2234E+02	.6617E+01	-.8065E+02	-.1485E+03	-.1630E+03	-.4828E+02
.2560	-.1813E+00	-.3336E+00	-.2685E+00	.9064E+00	.2282E+02	.6759E+01	-.3515E+02	-.6472E+02	-.2924E+02	-.8662E+01
.2570	-.2868E+01	-.5276E+01	-.5226E+00	.1764E+01	.2330E+02	.6901E+01	.1036E+02	.1907E+02	.1945E+03	.3096E+02
.2580	-.7667E+00	-.1410E+01	-.8804E+00	.2972E+01	.2199E+02	.6513E+01	.4565E+01	.8407E+01	.8971E+02	.2657E+02
.2590	.1335E+01	.2455E+01	-.1238E+01	.4180E+01	.2068E+02	.6125E+01	-.1225E+01	-.2256E+01	.7491E+02	.2219E+02
.2600	.3436E+01	.6320E+01	-.1596E+01	.5388E+01	.1937E+02	.5737E+01	-.7015E+01	-.1292E+02	.6012E+02	.1781E+02
.2610	.1203E+01	.2212E+01	-.1552E+01	.5240E+01	.1812E+02	.5368E+01	.3555E+01	.6547E+01	.4636E+02	.1733E+02
.2620	-.1031E+01	-.1896E+01	-.1508E+01	.5091E+01	.1687E+02	.4998E+01	.1413E+02	.2601E+02	.3260E+02	.9656E+01

ADLPIPE PAGE 62

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.46.54.

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

CONDITION 24  
LOADS  
SHOCK  
PRESSURE

FORCING FUNCTIONS AT NETWORK POINTS

(TIME IN SECS, FORCE (X,Y,Z DOFS) IN LBS, MOMENT (RX,RY,RZ DOFS) IN IN-LBS)

806 806 841 841 843 843 807 807 852 852



.2470	-.2249E+01	-.5240E+01	-.1003E+00	-.3597E+00	.1314E+00	-.1591E-01	.3025E+02	.5572E+02	.1036E+03	.3067E+02
.2480	-.9783E+00	-.1799E+01	-.1144E+00	.3861E+00	-.3055E+00	-.9050E-01	.1753E+02	.3228E+02	.8124E+02	.2406E+02
.2490	.2924E+00	.1641E+01	-.1222E+00	.4126E+00	-.7424E+00	-.2199E+00	.4804E+01	.8847E+01	.5893E+02	.1746E+02
.2500	.2763E+01	.5022E+01	-.1301E+00	.4391E+00	-.1179E+01	-.3493E+00	-.7922E+01	-.1459E+02	.3663E+02	.1085E+02
.2510	.7158E-02	.1317E-01	-.4612E+00	.1557E+01	.4348E+01	.1288E+01	-.1656E+02	-.3049E+02	.8198E+01	.2428E+01
.2520	-.2749E+01	-.5056E+01	-.7924E+00	.2675E+01	.9876E+01	.2925E+01	-.2520E+02	-.4640E+02	-.2023E+02	-.5992E+01
.2530	-.9973E+00	-.1835E+01	-.5330E+00	.1900E+01	.1403E+02	.4156E+01	-.4368E+02	-.8044E+02	-.6782E+02	-.2009E+02
.2540	.7540E+00	.1387E+01	-.2737E+00	.9242E+00	.1819E+02	.5387E+01	-.6216E+02	-.1145E+03	-.1154E+03	-.3418E+02
.2550	.2505E+01	.4608E+01	-.1443E-01	.4871E-01	.2234E+02	.6617E+01	-.8065E+02	-.1485E+03	-.1630E+03	-.4828E+02
.2560	-.1813E+00	-.3736E+00	-.2685E+00	.9064E+00	.2282E+02	.6759E+01	-.3515E+02	-.6472E+02	-.2924E+02	-.8662E+01
.2570	-.2868E+01	-.5276E+01	-.5226E+00	.1764E+01	.2330E+02	.6901E+01	.1036E+02	.1907E+02	.1045E+03	.3096E+02
.2580	-.7667E+00	-.1410E+01	-.8804E+00	.2972E+01	.2199E+02	.6513E+01	.4565E+01	.8407E+01	.2971E+02	.2657E+02
.2590	.1335E+01	.2455E+01	-.1238E+01	.4180E+01	.2068E+02	.6125E+01	-.1225E+01	-.2256E+01	.7491E+02	.2219E+02
.2600	.3436E+01	.6320E+01	-.1596E+01	.5388E+01	.1977E+02	.5737E+01	-.7015E+01	-.1292E+02	.6012E+02	.1781E+02
.2610	.1203E+01	.2212E+01	-.1552E+01	.5240E+01	.1812E+02	.5368E+01	.3555E+01	.6547E+01	.4636E+02	.1373E+02
.2620	-.1031E+01	-.1896E+01	-.1508E+01	.5091E+01	.1687E+02	.4998E+01	.1413E+02	.2601E+02	.3260E+02	.9656E+01

ADLPIPE PAGE 62

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.46.54.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

## FORCING FUNCTIONS AT NETWORK POINTS

(TIME IN SECS, FORCE (X,Y,Z DOFS) IN LBS, MOMENT (RX,RY,RZ DOFS) IN IN-LBS)

TIME	806		841		843		807		852	
	X	Z	X	Z	X	Z	X	Z	X	Z
.2630	-.6156E+01	-.1132E+02	-.1531E+01	.5168E+01	.1477E+02	.4374E+01	.5345E+01	.9843E+01	.2646E+02	.7838E+01
.2640	.6776E+00	.1246E+01	-.1133E+01	.3826E+01	.2061E+02	.6106E+01	.1756E+02	.3234E+02	.2148E+02	.6362E+01
.2650	.1947E+01	.3581E+01	-.1924E+01	.6496E+01	.1827E+02	.5410E+01	.1560E+02	.2874E+02	.2594E+02	.7682E+01
.2660	.3216E+01	.5916E+01	-.2715E+01	.9166E+01	.1592E+02	.4714E+01	.1365E+02	.2513E+02	.3039E+02	.9003E+01
.2670	.5822E+00	.1071E+01	-.2982E+01	.1007E+02	.9972E+01	.2954E+01	.1455E+02	.2680E+02	.2924E+02	.8662E+01
.2680	.2992E+01	.5504E+01	-.3238E+01	.1093E+02	.6644E+01	.1968E+01	.1155E+02	.2127E+02	.2656E+02	.7867E+01
.2690	.6681E+00	.1229E+01	-.3294E+01	.1112E+02	.6060E+01	.1795E+01	.1222E+02	.2250E+02	.2598E+02	.7696E+01
.2700	.1792E+01	.3296E+01	-.3181E+01	.1074E+02	.6366E+01	.1886E+01	.7409E+01	.1364E+02	.3054E+02	.9045E+01
.2710	.2916E+01	.5363E+01	-.3067E+01	.1036E+02	.6673E+01	.1977E+01	.2601E+01	.4789E+01	.3509E+02	.1039E+02
.2720	.2744E+00	.5047E+00	-.2698E+01	.9109E+01	.7546E+01	.2235E+01	.9973E+01	.1837E+02	.8447E+01	.2502E+01
.2730	.2372E+01	.4363E+01	-.2303E+01	.7776E+01	.7325E+01	.2170E+01	.4867E+01	.8964E+01	.2416E+02	.7157E+01
.2740	-.1842E+00	-.3388E+00	-.1701E+01	.5743E+01	.1141E+01	.3380E+00	.6919E+01	.1274E+02	.2991E+02	.8861E+01
.2750	.1032E+01	.1898E+01	-.1623E+01	.5480E+01	-.1606E+01	-.4757E+00	.5128E+01	.9443E+01	.3073E+02	.9102E+01
.2760	.2248E+01	.4134E+01	-.1545E+01	.5216E+01	-.4353E+01	-.1289E+01	.3336E+01	.6143E+01	.3154E+02	.9344E+01
.2770	.1059E+00	.1949E+00	-.2008E+01	.6779E+01	-.4084E+00	-.1210E+00	.7540E+00	.1389E+01	.1822E+02	.5396E+01
.2780	.2243E+01	.4126E+01	-.1908E+01	.6443E+01	.5551E+01	.1644E+01	-.5631E+00	-.1037E+01	.1975E+02	.5850E+01
.2790	-.6824E+00	-.1255E+01	-.1414E+01	.4775E+01	.1045E+02	.3096E+01	.3173E+01	.5844E+01	.1927E+02	.5708E+01
.2800	.2696E+00	.4960E+00	-.1234E+01	.4166E+01	.1218E+02	.3607E+01	.2441E+01	.4495E+01	.1759E+02	.5211E+01
.2810	.1222E+01	.2247E+01	-.1054E+01	.3557E+01	.1390E+02	.4118E+01	.1708E+01	.3146E+01	.1592E+02	.4714E+01
.2820	-.1360E+01	-.2502E+01	-.6958E+00	.2349E+01	.1218E+02	.3607E+01	.5440E+01	.1002E+02	.1687E+02	.4998E+01
.2830	.1150E+01	.2115E+01	-.7441E+00	.2512E+01	.9061E+01	.2684E+01	.3150E+01	.5800E+01	.1793E+02	.5311E+01
.2840	-.8637E+00	-.1589E+01	-.1113E+01	.3758E+01	.6817E+01	.2019E+01	.6013E+01	.1107E+02	.1592E+02	.4714E+01
.2850	.4581E+00	.8427E+00	-.1210E+01	.4084E+01	.6256E+01	.1853E+01	.4443E+01	.8182E+01	.1568E+02	.4643E+01
.2860	.1780E+01	.3274E+01	-.1306E+01	.4410E+01	.5695E+01	.1687E+01	.2873E+01	.5290E+01	.1544E+02	.4572E+01
.2870	-.4400E+00	-.8093E+00	-.1551E+01	.5235E+01	.5101E+01	.1511E+01	.5679E+01	.1046E+02	.1352E+02	.4004E+01
.2880	.1899E+01	.3494E+01	-.1358E+01	.4583E+01	.4526E+01	.1340E+01	.2753E+01	.5071E+01	.1409E+02	.4175E+01
.2890	-.4758E+00	-.8752E+00	-.1474E+01	.4976E+01	.3826E+01	.1133E+01	.5631E+01	.1037E+02	.1246E+02	.3692E+01
.2900	.6712E+00	.1235E+01	-.1291E+01	.4358E+01	.3509E+01	.1039E+01	.4144E+01	.7632E+01	.1261E+02	.3735E+01
.2910	.1818E+01	.3344E+01	-.1108E+01	.3739E+01	.3193E+01	.9457E+00	.2658E+01	.4895E+01	.1275E+02	.3777E+01
.2920	-.5583E+00	-.1027E+01	-.1332E+01	.4497E+01	.2924E+01	.8662E+00	.5249E+01	.9667E+01	.1074E+02	.3181E+01
.2930	.1718E+01	.3160E+01	-.9344E+00	.3154E+01	.2991E+01	.8861E+00	.2157E+01	.3972E+01	.1045E+02	.3096E+01
.2940	-.6872E+00	-.1264E+01	-.1167E+01	.3941E+01	.3183E+01	.9429E+00	.4514E+01	.8313E+01	.9588E+01	.2840E+01
.2950	.4343E+00	.7988E+00	-.9273E+00	.3130E+01	.3212E+01	.9514E+00	.2973E+01	.5475E+01	.9238E+01	.2736E+01
.2960	.1556E+01	.2862E+01	-.6873E+00	.2320E+01	.3241E+01	.9599E+00	.1432E+01	.2636E+01	.8888E+01	.2633E+01
.2970	-.8494E+00	-.1562E+01	-.9997E+00	.3375E+01	.3231E+01	.9571E+00	.3942E+01	.7259E+01	.8159E+01	.2417E+01
.2980	.1436E+01	.2642E+01	-.5368E+00	.1812E+01	.3126E+01	.9258E+00	.8828E+00	.1626E+01	.7364E+01	.2181E+01
.2990	-.9210E+00	-.1694E+01	-.8889E+00	.3001E+01	.3030E+01	.8974E+00	.3326E+01	.6125E+01	.6788E+01	.2011E+01
.3000	.2291E+00	.4213E+00	-.6546E+00	.2210E+01	.2996E+01	.8875E+00	.1821E+01	.3354E+01	.6472E+01	.1917E+01
.3010	.1379E+01	.2537E+01	-.4203E+00	.1419E+01	.2963E+01	.8776E+00	.3169E+00	.5835E+00	.6155E+01	.1823E+01
.3020	-.9639E+00	-.1773E+01	-.8690E+00	.2934E+01	.2915E+01	.8634E+00	.2901E+01	.5343E+01	.5427E+01	.1607E+01
.3030	.1341E+01	.2467E+01	-.3522E+00	.1189E+01	.2838E+01	.8406E+00	-.1160E+00	-.2135E+00	.4986E+01	.1477E+01
.3040	-.9973E+00	-.1835E+01	-.8236E+00	.2781E+01	.2809E+01	.8321E+00	.2505E+01	.4614E+01	.4497E+01	.1332E+01
.3050	.1527E+00	.2809E+01	-.5385E+00	.1818E+01	.2761E+01	.8179E+00	.9544E+00	.1758E+01	.4276E+01	.1267E+01
.3060	.1303E+01	.2396E+01	-.2533E+00	.8552E+00	.2713E+01	.8037E+00	-.5965E+00	-.1099E+01	.4056E+01	.1201E+01

ADLPIPE PAGE 63

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 17.46.54.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK

2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

## FORCING FUNCTIONS AT NETWORK POINTS

(TIME IN SECS, FORCE (X,Y,Z DOFS) IN LBS, MOMENT (RX,RY,RZ DOFS) IN IN-LBS)