

50-305

RESPONSE TO NUREG-0737 ITEM II.D.1

Docket # *50-305*

Control # *8403280048*

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

.3399	0.	1322.	-0.	-2607.	-0.	1936.	.0045	-.0789	.0005	-.0227	.0000	.0127	1670.
.3400	0.	9327.	-0.	-2966.	-0.	2154.	.0119	-.0424	-.0006	-.0248	.0133	.0121	1811.
.3410	-0.	9605.	-0.	-4200.	-0.	2292.	-.0012	-.0454	-.0022	-.0271	.0193	.0237	1927.
.3420	-0.	10075.	-0.	-4409.	-0.	2374.	-.0047	-.0477	-.0042	-.0296	.0260	.0296	2013.
.3430	-0.	10301.	-0.	-4571.	0.	2459.	-.0086	-.0495	-.0065	-.0319	.0332	.0355	2068.
.3440	-0.	10414.	-0.	-4577.	0.	2485.	-.0107	-.0505	-.0088	-.0340	.0410	.0414	2089.
.3450	-0.	10371.	-0.	-4557.	-0.	2474.	-.0168	-.0507	-.0111	-.0359	.0491	.0471	2081.
.3460	-0.	10192.	-0.	-4479.	-0.	2431.	-.0210	-.0504	-.0133	-.0373	.0573	.0524	2045.
.3470	-0.	9893.	-0.	-4347.	-0.	2361.	-.0249	-.0494	-.0152	-.0383	.0653	.0572	1985.
.3480	-0.	9491.	-0.	-4170.	0.	2264.	-.0285	-.0479	-.0168	-.0387	.0720	.0612	1904.
.3490	-0.	9010.	-0.	-3959.	-0.	2150.	-.0316	-.0460	-.0180	-.0388	.0801	.0644	1808.

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DIG/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.38.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	37	MEMBER	1	SEQUENCE	509	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3500	-0.	8484.	-0.	-3728.	0.	2024.	-.0340	-.0438	-.0190	-.0384	.0865	.0667	1702.		
.3510	-0.	7938.	-0.	-3488.	-0.	1894.	-.0358	-.0414	-.0195	-.0377	.0918	.0680	1593.		
.3520	-0.	7390.	-0.	-3247.	-0.	1763.	-.0368	-.0389	-.0199	-.0368	.0959	.0683	1483.		
.3530	-0.	6853.	-0.	-3011.	-0.	1635.	-.0371	-.0365	-.0199	-.0356	.0956	.0677	1375.		
.3540	-0.	6347.	-0.	-2789.	-0.	1515.	-.0368	-.0341	-.0197	-.0344	.0996	.0662	1274.		
.3550	-0.	5889.	-0.	-2587.	0.	1405.	-.0358	-.0318	-.0194	-.0331	.0989	.0639	1182.		
.3560	-0.	5481.	-0.	-2409.	0.	1308.	-.0345	-.0298	-.0189	-.0318	.0962	.0610	1100.		
.3570	-0.	5121.	-0.	-2250.	-0.	1222.	-.0328	-.0280	-.0182	-.0305	.0918	.0578	1027.		
.3580	-0.	4800.	-0.	-2109.	0.	1145.	-.0310	-.0263	-.0175	-.0291	.0858	.0543	963.		
.3590	-0.	4518.	-0.	-1985.	0.	1078.	-.0291	-.0247	-.0165	-.0277	.0784	.0507	907.		
.3600	-0.	4273.	-0.	-1878.	0.	1020.	-.0274	-.0234	-.0154	-.0262	.0699	.0474	857.		
.3610	-0.	4057.	-0.	-1783.	0.	968.	-.0260	-.0221	-.0141	-.0245	.0604	.0444	814.		
.3620	-0.	3852.	-0.	-1692.	-0.	919.	-.0250	-.0209	-.0126	-.0226	.0501	.0418	773.		
.3630	-0.	3639.	-0.	-1599.	0.	868.	-.0245	-.0197	-.0108	-.0205	.0394	.0398	730.		
.3640	-0.	3403.	-0.	-1495.	-0.	812.	-.0244	-.0184	-.0089	-.0181	.0282	.0384	683.		
.3650	-0.	3138.	-0.	-1379.	0.	749.	-.0249	-.0169	-.0067	-.0153	.0168	.0376	630.		
.3660	-0.	2836.	-0.	-1246.	0.	677.	-.0259	-.0153	-.0044	-.0124	.0055	.0374	569.		
.3670	-0.	2486.	-0.	-1093.	0.	593.	-.0273	-.0135	-.0021	-.0093	-.0052	.0376	499.		
.3680	-0.	2077.	-0.	-913.	0.	496.	-.0290	-.0115	.0002	-.0061	-.0150	.0383	417.		
.3690	-0.	1606.	-0.	-706.	0.	383.	-.0308	-.0092	.0022	-.0029	-.0238	.0393	322.		
.3700	-0.	1088.	-0.	-478.	0.	260.	-.0328	-.0067	.0039	.0001	-.0311	.0404	218.		
.3710	-0.	543.	-0.	-239.	0.	130.	-.0346	-.0042	.0051	.0026	-.0369	.0415	109.		
.3720	-0.	-18.	0.	8.	0.	-4.	-.0362	-.0016	.0057	.0047	-.0410	.0426	4.		
.3730	-0.	-587.	-0.	258.	0.	-140.	-.0375	-.0009	.0056	.0061	-.0433	.0434	118.		
.3740	-0.	-1144.	-0.	503.	0.	-273.	-.0384	.0034	.0048	.0068	-.0440	.0438	230.		
.3750	-0.	-1650.	-0.	725.	0.	-394.	-.0389	.0056	.0032	.0066	-.0433	.0439	331.		
.3760	-0.	-2068.	-0.	909.	0.	-493.	-.0389	.0073	.0009	.0054	-.0414	.0436	415.		
.3770	-0.	-2381.	-0.	1046.	0.	-568.	-.0384	.0085	-.0021	.0034	-.0388	.0428	478.		
.3780	-0.	-2583.	-0.	1135.	0.	-616.	-.0374	.0092	-.0056	.0006	-.0354	.0416	518.		
.3790	-0.	-2663.	-0.	1170.	0.	-635.	-.0359	.0093	-.0095	-.0029	-.0315	.0400	534.		
.3800	-0.	-2602.	-0.	1143.	0.	-621.	-.0341	.0088	-.0135	-.0069	-.0271	.0381	522.		
.3810	-0.	-2397.	-0.	1053.	0.	-572.	-.0318	.0076	-.0176	-.0113	-.0222	.0358	481.		
.3820	-0.	-2053.	-0.	902.	0.	-490.	-.0293	.0058	-.0214	-.0158	-.0167	.0334	412.		
.3830	-0.	-1589.	-0.	698.	-0.	-379.	-.0265	.0035	-.0249	-.0202	-.0105	.0308	319.		
.3840	-0.	-1021.	-0.	449.	-0.	-244.	-.0236	.0008	-.0278	-.0243	-.0039	.0282	205.		
.3850	-0.	-358.	-0.	157.	-0.	-85.	-.0206	-.0073	-.0300	-.0279	.0031	.0256	72.		
.3860	-0.	387.	-0.	-170.	-0.	92.	-.0177	-.0057	-.0315	-.0309	.0103	.0233	78.		
.3870	-0.	1172.	-0.	-515.	-0.	280.	-.0149	-.0092	-.0321	-.0333	.0180	.0212	235.		

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DIG/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.38.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.3770	-0.	-2381.	-0.	1048.	0.	-568.	-0.374	.0085	-.0021	.0034	-.0398	.0428	478.
.3780	-0.	-2503.	-0.	1175.	0.	-616.	-0.374	.0092	-.0056	.0006	-.0354	.0416	518.
.3790	-0.	-2663.	-0.	1170.	0.	-635.	-0.359	.0093	-.0095	-.0029	-.0315	.0400	534.
.3800	-0.	-2802.	-0.	1147.	0.	-671.	-0.341	.0082	-.0175	-.0069	-.0271	.0381	522.
.3810	-0.	-2997.	-0.	1073.	0.	-723.	-0.318	.0076	-.0176	-.0113	-.0232	.0358	481.
.3820	-0.	-3253.	-0.	951.	0.	-790.	-0.293	.0058	-.0214	-.0158	-.0167	.0334	412.
.3830	-0.	-3589.	-0.	808.	-0.	-879.	-0.265	.0035	-.0249	-.0202	-.0105	.0308	319.
.3840	-0.	-4021.	-0.	649.	-0.	-984.	-0.236	.0008	-.0278	-.0243	-.0039	.0282	205.
.3850	-0.	-4558.	-0.	487.	-0.	-1105.	-0.206	-.0023	-.0300	-.0279	.0031	.0256	72.
.3860	-0.	-5207.	-0.	327.	-0.	-1242.	-0.177	-.0057	-.0315	-.0309	.0103	.0233	78.
.3870	-0.	-5972.	-0.	172.	-0.	-1395.	-0.149	-.0092	-.0321	-.0333	.0180	.0212	235.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.38.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	37	MEMBER	1	SEQUENCE	559	LOCATION	END	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.3880	-0.	1935.	-0.	-850.	-0.	462.	-.0123	-.0126	-.0320	-.0347	.0262	.0193	388.	
.3890	-0.	2637.	-0.	-1159.	-0.	629.	-.0099	-.0156	-.0311	-.0353	.0347	.0177	529.	
.3900	-0.	3269.	-0.	-1476.	-0.	730.	-.0079	-.0183	-.0295	-.0350	.0435	.0164	656.	
.3910	-0.	3819.	-0.	-1678.	-0.	911.	-.0061	-.0205	-.0274	-.0339	.0522	.0154	766.	
.3920	-0.	4244.	0.	-1865.	-0.	1013.	-.0047	-.0221	-.0247	-.0319	.0607	.0146	852.	
.3930	-0.	4497.	-0.	-1976.	-0.	1073.	-.0036	-.0229	-.0216	-.0292	.0588	.0140	902.	
.3940	-0.	4563.	-0.	-2005.	-0.	1089.	-.0028	-.0229	-.0182	-.0258	.0765	.0134	916.	
.3950	-0.	4459.	-0.	-1959.	-0.	1064.	-.0020	-.0220	-.0146	-.0217	.0836	.0127	895.	
.3960	-0.	4198.	-0.	-1845.	-0.	1002.	-.0013	-.0204	-.0109	-.0172	.0901	.0119	842.	
.3970	-0.	3776.	-0.	-1659.	-0.	901.	-.0006	-.0181	-.0071	-.0121	.0959	.0109	758.	
.3980	-0.	3195.	0.	-1404.	-0.	762.	.0003	-.0150	-.0033	-.0067	.1007	.0095	641.	
.3990	0.	2490.	0.	-1094.	-0.	594.	.0014	-.0113	.0006	-.0009	.1045	.0076	500.	
.4000	0.	1713.	0.	-753.	-0.	409.	.0027	-.0073	.0045	.0050	.1070	.0053	344.	

MAXIMUM VALUE OF STRESS OCCURS AT

TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.1850	-0.	-13093.	-0.	5753.	-0.	-3124.	-.0238	.0516	-.0594	-.0519	-.0474	.0118	2627.

SECTION	37	MEMBER	2	SEQUENCE	560	LOCATION	DIS	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.	
.0010	0.	-0.	0.	0.	0.	0.	-.0000	.0000	.0000	.0000	-.0000	-.0000	0.	
.0020	0.	-0.	0.	0.	0.	0.	-.0000	.0000	.0000	.0000	-.0000	-.0000	0.	
.0030	0.	-0.	0.	0.	0.	0.	-.0000	.0000	.0000	.0000	-.0000	-.0000	0.	
.0040	0.	-0.	0.	0.	0.	0.	-.0000	.0000	.0000	.0000	-.0001	-.0000	0.	
.0050	0.	0.	0.	0.	0.	0.	-.0000	-.0000	.0000	-.0000	-.0001	-.0000	0.	
.0060	0.	2.	0.	0.	0.	0.	-.0000	-.0000	.0000	-.0000	-.0001	.0000	0.	
.0070	0.	5.	0.	0.	0.	0.	-.0000	-.0000	.0000	-.0000	-.0002	.0000	0.	
.0080	0.	12.	0.	0.	0.	0.	-.0001	-.0001	.0000	-.0000	-.0004	.0000	0.	
.0090	0.	23.	0.	0.	0.	0.	-.0001	-.0001	.0001	-.0000	-.0005	.0000	0.	
.0100	0.	38.	0.	0.	0.	0.	-.0000	-.0002	.0000	-.0001	-.0002	.0000	0.	
.0110	0.	57.	0.	0.	0.	0.	.0002	-.0002	-.0001	-.0001	.0008	.0001	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.39.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.0010	0.	-0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.0020	0.	-0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.0030	0.	-0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.0040	0.	-0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.0050	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.0060	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.0070	0.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.0080	0.	12.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.0090	0.	23.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.0100	0.	38.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.0110	0.	57.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	37	MEMBER	2	SEQUENCE	560	LOCATION	DIS	TYPE	RU	STRESS					
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	(PSI)		
.0120	0.	83.	0.	0.	0.	0.	.0005	-.0004	-.0003	-.0002	.0027	.0001	0.		
.0130	0.	118.	0.	0.	0.	0.	.0010	-.0005	-.0006	-.0003	.0055	.0002	0.		
.0140	0.	161.	0.	0.	0.	0.	.0016	-.0007	-.0010	-.0005	.0091	.0003	0.		
.0150	0.	210.	0.	0.	0.	0.	.0023	-.0009	-.0015	-.0006	.0132	.0005	0.		
.0160	0.	261.	0.	0.	0.	0.	.0029	-.0011	-.0020	-.0008	.0172	.0007	0.		
.0170	0.	311.	0.	0.	0.	0.	.0033	-.0014	-.0024	-.0010	.0207	.0009	0.		
.0180	0.	358.	0.	0.	0.	0.	.0035	-.0015	-.0027	-.0012	.0231	.0012	0.		
.0190	0.	386.	0.	0.	0.	0.	.0035	-.0017	-.0030	-.0014	.0249	.0013	0.		
.0200	0.	387.	0.	0.	0.	0.	.0035	-.0017	-.0033	-.0015	.0264	.0014	0.		
.0210	0.	352.	0.	0.	0.	0.	.0038	-.0015	-.0037	-.0017	.0286	.0013	0.		
.0220	0.	282.	0.	0.	0.	0.	.0048	-.0012	-.0045	-.0018	.0338	.0009	0.		
.0230	0.	177.	0.	0.	0.	0.	.0064	-.0008	-.0054	-.0017	.0407	.0003	0.		
.0240	0.	58.	0.	0.	0.	0.	.0080	-.0003	-.0062	-.0016	.0455	-.0006	0.		
.0250	0.	-40.	0.	0.	0.	0.	.0090	.0002	-.0063	-.0014	.0454	-.0018	0.		
.0260	0.	-101.	0.	0.	0.	0.	.0096	.0004	-.0058	-.0011	.0419	-.0030	0.		
.0270	0.	-136.	0.	0.	0.	0.	.0106	.0006	-.0053	-.0008	.0401	-.0043	0.		
.0280	0.	-180.	0.	0.	0.	0.	.0113	.0008	-.0045	-.0002	.0366	-.0055	0.		
.0290	0.	-269.	0.	0.	0.	0.	.0105	.0012	-.0029	.0005	.0262	-.0065	0.		
.0300	0.	-405.	0.	0.	0.	0.	.0095	.0018	-.0015	.0013	.0167	-.0071	0.		
.0310	0.	-562.	0.	0.	0.	0.	.0088	.0024	-.0004	.0023	.0114	-.0073	0.		
.0320	0.	-750.	0.	0.	0.	0.	.0075	.0033	.0007	.0033	.0052	-.0070	0.		
.0330	0.	-1002.	0.	0.	0.	0.	.0057	.0044	.0018	.0046	-.0012	-.0062	0.		
.0340	0.	-1303.	0.	0.	0.	0.	.0038	.0057	.0029	.0062	-.0052	-.0049	0.		
.0350	0.	-1590.	0.	0.	0.	0.	.0011	.0069	.0044	.0079	-.0107	-.0032	0.		
.0360	0.	-1819.	0.	0.	0.	0.	-.0029	.0079	.0068	.0096	-.0213	-.0010	0.		
.0370	0.	-1995.	0.	0.	0.	0.	-.0071	.0087	.0094	.0113	-.0313	.0014	0.		
.0380	0.	-2136.	0.	0.	0.	0.	-.0105	.0093	.0114	.0128	-.0362	.0039	0.		
.0390	0.	-2257.	0.	0.	0.	0.	-.0136	.0098	.0131	.0141	-.0404	.0062	0.		
.0400	0.	-2371.	0.	0.	0.	0.	-.0171	.0103	.0147	.0151	-.0479	.0082	0.		
.0410	0.	-2440.	0.	0.	0.	0.	-.0194	.0106	.0154	.0155	-.0512	.0095	0.		
.0420	0.	-2396.	0.	0.	0.	0.	-.0203	.0104	.0153	.0154	-.0511	.0102	0.		
.0430	0.	-2229.	0.	0.	0.	0.	-.0207	.0097	.0150	.0145	-.0535	.0100	0.		
.0440	0.	-2021.	0.	0.	0.	0.	-.0203	.0088	.0144	.0133	-.0574	.0090	0.		
.0450	0.	-1791.	0.	0.	0.	0.	-.0183	.0078	.0133	.0118	-.0574	.0071	0.		
.0460	0.	-1443.	0.	0.	0.	0.	-.0153	.0063	.0119	.0098	-.0554	.0046	0.		
.0470	0.	-935.	0.	0.	0.	0.	-.0125	.0041	.0109	.0075	-.0566	.0018	0.		
.0480	0.	-374.	0.	0.	0.	0.	-.0095	.0016	.0097	.0051	-.0574	-.0010	0.		
.0490	0.	132.	0.	0.	0.	0.	-.0053	-.0006	.0078	.0029	-.0504	-.0037	0.		

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.0390	0.	-2257.	0.	0.	0.	0.	0.	-0.136	.0090	.0131	.0141	-.0404	.0062	0.
.0400	0.	-2371.	0.	0.	0.	0.	0.	-.171	.0103	.0147	.0151	-.0479	.0082	0.
.0410	0.	-2440.	0.	0.	0.	0.	0.	-.194	.0106	.0154	.0155	-.0512	.0095	0.
.0420	0.	-2396.	0.	0.	0.	0.	0.	-.203	.0104	.0153	.0154	-.0511	.0102	0.
.0430	0.	-2279.	0.	0.	0.	0.	0.	-.2207	.0097	.0150	.0145	-.0535	.0100	0.
.0440	0.	-2021.	0.	0.	0.	0.	0.	-.2203	.0098	.0144	.0133	-.0574	.0090	0.
.0450	0.	-1791.	0.	0.	0.	0.	0.	-.2133	.0078	.0133	.0118	-.0574	.0071	0.
.0460	0.	-1443.	0.	0.	0.	0.	0.	-.2153	.0063	.0119	.0092	-.0554	.0046	0.
.0470	0.	-935.	0.	0.	0.	0.	0.	-.2125	.0041	.0109	.0075	-.0566	.0018	0.
.0480	0.	-374.	0.	0.	0.	0.	0.	-.2095	.0016	.0097	.0051	-.0574	-.0010	0.
.0490	0.	172.	0.	0.	0.	0.	0.	-.2053	-.0006	.0078	.0029	-.0504	-.0037	0.

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DIS/ADLPIPE

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
37	2	560					.0500	0.	585.	0.	0.	0.	0.	-.0006	-.0025	.0054	.0008	-.0370	-.0060	0.
							.0510	0.	995.	0.	0.	0.	0.	.0036	-.0043	.0029	-.0012	-.0247	-.0076	0.
							.0520	0.	1328.	0.	0.	0.	0.	.0069	-.0058	.0004	-.0029	-.0118	-.0085	0.
							.0530	0.	1542.	0.	0.	0.	0.	.0093	-.0067	-.0020	-.0043	.0011	-.0086	0.
							.0540	0.	1683.	0.	0.	0.	0.	.0106	-.0073	-.0042	-.0055	.0131	-.0079	0.
							.0550	0.	1763.	0.	0.	0.	0.	.0109	-.0077	-.0061	-.0064	.0236	-.0063	0.
							.0560	0.	1737.	0.	0.	0.	0.	.0105	-.0076	-.0078	-.0070	.0376	-.0042	0.
							.0570	0.	1623.	0.	0.	0.	0.	.0097	-.0071	-.0093	-.0073	.0436	-.0018	0.
							.0580	0.	1493.	0.	0.	0.	0.	.0087	-.0065	-.0105	-.0074	.0532	.0008	0.
							.0590	0.	1312.	0.	0.	0.	0.	.0076	-.0057	-.0116	-.0073	.0618	.0033	0.
							.0600	0.	953.	0.	0.	0.	0.	.0068	-.0041	-.0126	-.0069	.0596	.0053	0.
							.0610	0.	411.	0.	0.	0.	0.	.0061	-.0018	-.0135	-.0062	.0761	.0067	0.
							.0620	0.	-182.	0.	0.	0.	0.	.0057	.0008	-.0141	-.0053	.0799	.0074	0.
							.0630	0.	-778.	0.	0.	0.	0.	.0054	.0034	-.0143	-.0044	.0800	.0074	0.
							.0640	0.	-1453.	0.	0.	0.	0.	.0054	.0063	-.0141	-.0032	.0766	.0066	0.
							.0650	0.	-2203.	0.	0.	0.	0.	.0058	.0096	-.0136	-.0019	.0715	.0051	0.
							.0660	0.	-2881.	0.	0.	0.	0.	.0066	.0125	-.0129	-.0005	.0559	.0032	0.
							.0670	0.	-3395.	0.	0.	0.	0.	.0076	.0148	-.0116	.0008	.0596	.0012	0.
							.0680	0.	-3767.	0.	0.	0.	0.	.0086	.0164	-.0100	.0021	.0535	-.0005	0.
							.0690	0.	-4004.	0.	0.	0.	0.	.0094	.0174	-.0083	.0033	.0491	-.0018	0.
							.0700	0.	-4064.	0.	0.	0.	0.	.0099	.0177	-.0066	.0043	.0455	-.0024	0.
							.0710	0.	-3954.	0.	0.	0.	0.	.0096	.0172	-.0048	.0050	.0419	-.0023	0.
							.0720	0.	-3707.	0.	0.	0.	0.	.0088	.0161	-.0033	.0055	.0387	-.0015	0.
							.0730	0.	-3296.	0.	0.	0.	0.	.0070	.0143	-.0017	.0054	.0344	-.0000	0.
							.0740	0.	-2689.	0.	0.	0.	0.	.0040	.0117	.0001	.0049	.0250	.0021	0.
							.0750	0.	-1948.	0.	0.	0.	0.	-.0004	.0085	.0023	.0038	.0103	.0045	0.
							.0760	0.	-1163.	0.	0.	0.	0.	-.0050	.0051	.0045	.0024	-.0059	.0068	0.
							.0770	0.	-339.	0.	0.	0.	0.	-.0093	.0015	.0063	.0006	-.0205	.0090	0.
							.0780	0.	531.	0.	0.	0.	0.	-.0125	-.0023	.0075	-.0018	-.0326	.0106	0.
							.0790	0.	1362.	0.	0.	0.	0.	-.0143	-.0059	.0078	-.0045	-.0401	.0116	0.
							.0800	0.	2037.	0.	0.	0.	0.	-.0143	-.0089	.0069	-.0076	-.0413	.0117	0.
							.0810	0.	2521.	0.	0.	0.	0.	-.0127	-.0110	.0048	-.0108	-.0381	.0108	0.
							.0820	0.	2837.	0.	0.	0.	0.	-.0102	-.0123	.0019	-.0144	-.0335	.0093	0.
							.0830	0.	2971.	0.	0.	0.	0.	-.0071	-.0129	-.0017	-.0183	-.0281	.0071	0.
							.0840	0.	2892.	0.	0.	0.	0.	-.0041	-.0126	-.0057	-.0222	-.0233	.0047	0.
							.0850	0.	2613.	0.	0.	0.	0.	-.0019	-.0114	-.0098	-.0261	-.0222	.0023	0.
							.0860	0.	2176.	0.	0.	0.	0.	-.0008	-.0095	-.0138	-.0300	-.0246	.0002	0.
							.0870	0.	1606.	0.	0.	0.	0.	-.0005	-.0070	-.0179	-.0336	-.0272	-.0012	0.

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ADLPIPE STRESS ANALYSIS

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

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

.0770	0.	-339.	0.	0.	0.	0.	0.	-0.093	.0015	.0063	.0006	-.0205	.0090	0.
.0780	0.	531.	0.	0.	0.	0.	0.	-.0125	-.0023	.0075	-.0018	-.0326	.0106	0.
.0790	0.	1362.	0.	0.	0.	0.	0.	-.0143	-.0059	.0071	-.0045	-.0401	.0116	0.
.0800	0.	2037.	0.	0.	0.	0.	0.	-.0143	-.0089	.0069	-.0076	-.0413	.0117	0.
.0810	0.	2921.	0.	0.	0.	0.	0.	-.0127	-.0110	.0045	-.0108	-.0381	.0108	0.
.0820	0.	2837.	0.	0.	0.	0.	0.	-.0102	-.0123	.0019	-.0144	-.0335	.0093	0.
.0830	0.	2971.	0.	0.	0.	0.	0.	-.0071	-.0129	-.0017	-.0183	-.0281	.0071	0.
.0840	0.	2892.	0.	0.	0.	0.	0.	-.0041	-.0126	-.0057	-.0222	-.0233	.0047	0.
.0850	0.	2613.	0.	0.	0.	0.	0.	-.0019	-.0114	-.0098	-.0261	-.0222	.0023	0.
.0860	0.	2176.	0.	0.	0.	0.	0.	-.0008	-.0095	-.0178	-.0300	-.0246	.0002	0.
.0870	0.	1606.	0.	0.	0.	0.	0.	-.0005	-.0070	-.0179	-.0336	-.0272	-.0012	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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

CONDITION 24
LOADS
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ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
37	2	560					.0880	0.	917.	0.	0.	0.	0.	-0.0008	-0.0040	-0.0220	-0.0369	-0.0280	-0.0017	0.
							.0890	0.	139.	0.	0.	0.	0.	-0.0020	-0.0006	-0.0260	-0.0396	-0.0271	-0.0013	0.
							.0900	0.	-704.	0.	0.	0.	0.	-0.0039	.0031	-0.0299	-0.0417	-0.0246	.0001	0.
							.0910	0.	-1601.	0.	0.	0.	0.	-0.0064	.0070	-0.0333	-0.0430	-0.0201	.0024	0.
							.0920	0.	-2524.	0.	0.	0.	0.	-0.0094	.0110	-0.0360	-0.0433	-0.0153	.0053	0.
							.0930	0.	-3430.	0.	0.	0.	0.	-0.0129	.0149	-0.0376	-0.0428	-0.0118	.0085	0.
							.0940	0.	-4306.	0.	0.	0.	0.	-0.0166	.0187	-0.0382	-0.0412	-0.0095	.0117	0.
							.0950	0.	-5178.	0.	0.	0.	0.	-0.0199	.0225	-0.0379	-0.0388	-0.0076	.0146	0.
							.0960	0.	-6066.	0.	0.	0.	0.	-0.0225	.0264	-0.0367	-0.0354	-0.0059	.0168	0.
							.0970	0.	-6945.	0.	0.	0.	0.	-0.0243	.0302	-0.0348	-0.0312	-0.0040	.0180	0.
							.0980	0.	-7792.	0.	0.	0.	0.	-0.0248	.0339	-0.0326	-0.0265	-0.0012	.0180	0.
							.0990	0.	-8617.	0.	0.	0.	0.	-0.0237	.0375	-0.0301	-0.0212	.0028	.0167	0.
							.1000	0.	-9426.	0.	0.	0.	0.	-0.0212	.0410	-0.0274	-0.0155	.0070	.0138	0.
							.1010	0.	-10162.	0.	0.	0.	0.	-0.0175	.0442	-0.0243	-0.0095	.0099	.0094	0.
							.1020	0.	-10734.	0.	0.	0.	0.	-0.0129	.0467	-0.0206	-0.0035	.0096	.0037	0.
							.1030	0.	-11085.	0.	0.	0.	0.	-0.0079	.0482	-0.0162	.0026	.0046	-.0031	0.
							.1040	0.	-11200.	0.	0.	0.	0.	-0.0027	.0487	-0.0109	.0086	-.0049	-.0107	0.
							.1050	0.	-11038.	0.	0.	0.	0.	.0026	.0480	-0.0052	.0146	-0.0167	-.0188	0.
							.1060	0.	-10557.	0.	0.	0.	0.	.0082	.0459	.0008	.0204	-0.0282	-.0268	0.
							.1070	0.	-9785.	0.	0.	0.	0.	.0142	.0425	.0067	.0260	-0.0370	-.0345	0.
							.1080	0.	-8792.	0.	0.	0.	0.	.0202	.0382	.0127	.0316	-0.0428	-.0415	0.
							.1090	0.	-7532.	0.	0.	0.	0.	.0261	.0327	.0187	.0370	-0.0458	-.0475	0.
							.1100	0.	-5932.	0.	0.	0.	0.	.0323	.0258	.0244	.0420	-0.0416	-.0522	0.
							.1110	0.	-4267.	0.	0.	0.	0.	.0375	.0186	.0302	.0469	-0.0367	-.0554	0.
							.1120	0.	-2840.	0.	0.	0.	0.	.0406	.0123	.0363	.0521	-0.0350	-.0574	0.
							.1130	0.	-1545.	0.	0.	0.	0.	.0423	.0067	.0421	.0571	-0.0325	-.0578	0.
							.1140	0.	-214.	0.	0.	0.	0.	.0429	.0009	.0472	.0613	-0.0274	-.0565	0.
							.1150	0.	921.	0.	0.	0.	0.	.0421	-.0040	.0512	.0647	-0.0213	-.0539	0.
							.1160	0.	1532.	0.	0.	0.	0.	.0402	-.0067	.0537	.0677	-0.0137	-.0502	0.
							.1170	0.	1702.	0.	0.	0.	0.	.0375	-.0074	.0544	.0700	-0.0041	-.0457	0.
							.1180	0.	1631.	0.	0.	0.	0.	.0341	-.0073	.0534	.0710	.0069	-.0406	0.
							.1190	0.	1356.	0.	0.	0.	0.	.0289	-.0059	.0519	.0710	.0104	-.0351	0.
							.1200	0.	501.	0.	0.	0.	0.	.0221	-.0022	.0499	.0708	.0065	-.0299	0.
							.1210	0.	-720.	0.	0.	0.	0.	.0156	.0031	.0473	.0704	.0028	-.0251	0.
							.1220	0.	-1980.	0.	0.	0.	0.	.0093	.0086	.0444	.0695	-0.0019	-.0208	0.
							.1230	0.	-3318.	0.	0.	0.	0.	.0037	.0144	.0417	.0685	-0.0070	-.0171	0.
							.1240	0.	-4903.	0.	0.	0.	0.	-.0010	.0213	.0390	.0680	-0.0116	-.0144	0.
							.1250	0.	-6548.	0.	0.	0.	0.	-.0044	.0285	.0365	.0680	-0.0130	-.0124	0.

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ADLPIPE STRESS ANALYSIS

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

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

.1150	0.	921.	0.	0.	0.	0.	0.	.0471	-.0040	.0512	.0647	-.0213	-.0539	0.
.1160	0.	1572.	0.	0.	0.	0.	0.	.0402	-.0067	.0537	.0677	-.0137	-.0502	0.
.1170	0.	1702.	0.	0.	0.	0.	0.	.0375	-.0074	.0544	.0700	-.0041	-.0457	0.
.1180	0.	1651.	0.	0.	0.	0.	0.	.0341	-.0073	.0534	.0710	.0369	-.0406	0.
.1190	0.	1356.	0.	0.	0.	0.	0.	.0289	-.0059	.0519	.0710	.0104	-.0351	0.
.1200	0.	501.	0.	0.	0.	0.	0.	.0221	-.0025	.0499	.0708	.0065	-.0299	0.
.1210	0.	-720.	0.	0.	0.	0.	0.	.0156	.0031	.0473	.0704	.0028	-.0251	0.
.1220	0.	-1980.	0.	0.	0.	0.	0.	.0093	.0086	.0444	.0695	-.0019	-.0208	0.
.1230	0.	-3318.	0.	0.	0.	0.	0.	.0037	.0144	.0417	.0685	-.0070	-.0171	0.
.1240	0.	-4203.	0.	0.	0.	0.	0.	-.0010	.0213	.0390	.0680	-.0116	-.0144	0.
.1250	0.	-5548.	0.	0.	0.	0.	0.	-.0044	.0285	.0365	.0680	-.0130	-.0124	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	37	MEMBER	2	SEQUENCE	560	LOCATION	DIS	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.1260	0.	-7913.	0.	0.	0.	0.		-.0063	.0344	.0343	.0681	-.0098	-.0110	0.	
.1270	0.	-8992.	0.	0.	0.	0.		-.0077	.0391	.0330	.0685	-.0079	-.0100	0.	
.1280	0.	-9945.	0.	0.	0.	0.		-.0084	.0432	.0324	.0696	-.0049	-.0095	0.	
.1290	0.	-10623.	0.	0.	0.	0.		-.0082	.0462	.0327	.0712	-.0009	-.0095	0.	
.1300	0.	-10737.	0.	0.	0.	0.		-.0079	.0467	.0344	.0727	-.0001	-.0097	0.	
.1310	0.	-10320.	0.	0.	0.	0.		-.0078	.0449	.0374	.0739	-.0043	-.0100	0.	
.1320	0.	-9579.	0.	0.	0.	0.		-.0084	.0416	.0416	.0752	-.0153	-.0106	0.	
.1330	0.	-8476.	0.	0.	0.	0.		-.0086	.0369	.0462	.0763	-.0266	-.0114	0.	
.1340	0.	-6861.	0.	0.	0.	0.		-.0078	.0298	.0507	.0768	-.0351	-.0124	0.	
.1350	0.	-4885.	0.	0.	0.	0.		-.0059	.0212	.0548	.0767	-.0400	-.0136	0.	
.1360	0.	-2859.	0.	0.	0.	0.		-.0027	.0124	.0582	.0764	-.0403	-.0154	0.	
.1370	0.	-822.	0.	0.	0.	0.		.0014	.0036	.0611	.0760	-.0399	-.0179	0.	
.1380	0.	1327.	0.	0.	0.	0.		.0061	-.0058	.0637	.0749	-.0399	-.0211	0.	
.1390	0.	3441.	0.	0.	0.	0.		.0110	-.0150	.0662	.0735	-.0432	-.0250	0.	
.1400	0.	5230.	0.	0.	0.	0.		.0159	-.0227	.0685	.0721	-.0495	-.0296	0.	
.1410	0.	6645.	0.	0.	0.	0.		.0214	-.0289	.0701	.0709	-.0546	-.0350	0.	
.1420	0.	7791.	0.	0.	0.	0.		.0269	-.0339	.0712	.0696	-.0500	-.0406	0.	
.1430	0.	8579.	0.	0.	0.	0.		.0326	-.0373	.0715	.0683	-.0638	-.0463	0.	
.1440	0.	8827.	0.	0.	0.	0.		.0383	-.0384	.0709	.0675	-.0645	-.0518	0.	
.1450	0.	8574.	0.	0.	0.	0.		.0441	-.0373	.0693	.0671	-.0500	-.0567	0.	
.1460	0.	7982.	0.	0.	0.	0.		.0495	-.0347	.0667	.0668	-.0504	-.0605	0.	
.1470	0.	7047.	0.	0.	0.	0.		.0531	-.0306	.0640	.0668	-.0416	-.0628	0.	
.1480	0.	5685.	0.	0.	0.	0.		.0549	-.0247	.0610	.0673	-.0329	-.0634	0.	
.1490	0.	4011.	0.	0.	0.	0.		.0544	-.0174	.0581	.0682	-.0249	-.0622	0.	
.1500	0.	2222.	0.	0.	0.	0.		.0514	-.0097	.0553	.0692	-.0188	-.0589	0.	
.1510	0.	337.	0.	0.	0.	0.		.0465	-.0015	.0526	.0702	-.0127	-.0535	0.	
.1520	0.	-1698.	0.	0.	0.	0.		.0397	.0074	.0499	.0715	-.0068	-.0465	0.	
.1530	0.	-3760.	0.	0.	0.	0.		.0320	.0163	.0471	.0728	.0012	-.0382	0.	
.1540	0.	-5633.	0.	0.	0.	0.		.0235	.0245	.0444	.0737	.0102	-.0290	0.	
.1550	0.	-7246.	0.	0.	0.	0.		.0149	.0315	.0417	.0742	.0202	-.0194	0.	
.1560	0.	-8607.	0.	0.	0.	0.		.0073	.0374	.0388	.0742	.0333	-.0100	0.	
.1570	0.	-9607.	0.	0.	0.	0.		.0004	.0418	.0362	.0736	.0447	-.0016	0.	
.1580	0.	-10108.	0.	0.	0.	0.		-.0051	.0439	.0338	.0719	.0543	.0055	0.	
.1590	0.	-10124.	0.	0.	0.	0.		-.0088	.0440	.0315	.0691	.0622	.0109	0.	
.1600	0.	-9740.	0.	0.	0.	0.		-.0108	.0423	.0294	.0655	.0657	.0140	0.	
.1610	0.	-8949.	0.	0.	0.	0.		-.0110	.0389	.0274	.0608	.0655	.0150	0.	
.1620	0.	-7720.	0.	0.	0.	0.		-.0090	.0336	.0252	.0551	.0652	.0139	0.	
.1630	0.	-6138.	0.	0.	0.	0.		-.0055	.0267	.0229	.0485	.0627	.0110	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.39.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

.1520	0.	-1070.	0.	0.	0.	0.	0.	0.	.0320	.0163	.0471	.0728	.0012	-.0382	0.
.1540	0.	-5633.	0.	0.	0.	0.	0.	0.	.0235	.0245	.0444	.0737	.0102	-.0290	0.
.1550	0.	-7246.	0.	0.	0.	0.	0.	0.	.0149	.0315	.0417	.0742	.0202	-.0194	0.
.1560	0.	-8607.	0.	0.	0.	0.	0.	0.	.0073	.0374	.0388	.0742	.0333	-.0100	0.
.1570	0.	-9607.	0.	0.	0.	0.	0.	0.	.0004	.0418	.0362	.0736	.0447	-.0016	0.
.1580	0.	-10100.	0.	0.	0.	0.	0.	0.	-.0051	.0430	.0338	.0719	.0543	.0055	0.
.1590	0.	-10124.	0.	0.	0.	0.	0.	0.	-.0088	.0440	.0319	.0691	.0622	.0109	0.
.1600	0.	-9740.	0.	0.	0.	0.	0.	0.	-.0100	.0427	.0294	.0655	.0657	.0140	0.
.1610	0.	-8949.	0.	0.	0.	0.	0.	0.	-.0110	.0389	.0274	.0608	.0655	.0150	0.
.1620	0.	-7720.	0.	0.	0.	0.	0.	0.	-.0090	.0336	.0252	.0551	.0652	.0119	0.
.1630	0.	-6138.	0.	0.	0.	0.	0.	0.	-.0055	.0267	.0229	.0405	.0627	.0110	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.39.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS
37	(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
	.1640	0.	-4372.	0.	0.	0.	0.	-.0007	.0190	.0207	.0414	.0585	.0067	0.
	.1650	0.	-2527.	0.	0.	0.	0.	.0050	.0110	.0184	.0341	.0542	.0013	0.
	.1660	0.	-665.	0.	0.	0.	0.	.0108	.0029	.0161	.0266	.0483	-.0046	0.
	.1670	0.	1082.	0.	0.	0.	0.	.0166	-.0047	.0138	.0193	.0429	-.0105	0.
	.1680	0.	2557.	0.	0.	0.	0.	.0217	-.0111	.0115	.0124	.0378	-.0159	0.
	.1690	0.	3685.	0.	0.	0.	0.	.0258	-.0160	.0088	.0060	.0344	-.0204	0.
	.1700	0.	4449.	0.	0.	0.	0.	.0286	-.0193	.0060	.0002	.0322	-.0236	0.
	.1710	0.	4797.	0.	0.	0.	0.	.0295	-.0209	.0029	-.0052	.0294	-.0253	0.
	.1720	0.	4648.	0.	0.	0.	0.	.0291	-.0202	-.0009	-.0100	.0296	-.0256	0.
	.1730	0.	4005.	0.	0.	0.	0.	.0271	-.0174	-.0053	-.0144	.0303	-.0245	0.
	.1740	0.	2949.	0.	0.	0.	0.	.0237	-.0128	-.0102	-.0185	.0312	-.0222	0.
	.1750	0.	1555.	0.	0.	0.	0.	.0193	-.0068	-.0156	-.0223	.0327	-.0189	0.
	.1760	0.	-122.	0.	0.	0.	0.	.0138	.0005	-.0211	-.0260	.0317	-.0149	0.
	.1770	0.	-2002.	0.	0.	0.	0.	.0070	.0087	-.0268	-.0295	.0289	-.0106	0.
	.1780	0.	-3959.	0.	0.	0.	0.	.0012	.0172	-.0322	-.0329	.0225	-.0063	0.
	.1790	0.	-5897.	0.	0.	0.	0.	-.0053	.0256	-.0373	-.0362	.0137	-.0023	0.
	.1800	0.	-7753.	0.	0.	0.	0.	-.0114	.0337	-.0419	-.0393	.0029	.0013	0.
	.1810	0.	-9441.	0.	0.	0.	0.	-.0171	.0410	-.0460	-.0423	-.0107	.0043	0.
	.1820	0.	-10862.	0.	0.	0.	0.	-.0214	.0472	-.0497	-.0451	-.0222	.0068	0.
	.1830	0.	-11954.	0.	0.	0.	0.	-.0245	.0520	-.0529	-.0477	-.0318	.0088	0.
	.1840	0.	-12706.	0.	0.	0.	0.	-.0267	.0552	-.0554	-.0500	-.0402	.0104	0.
	.1850	0.	-13093.	0.	0.	0.	0.	-.0282	.0569	-.0570	-.0519	-.0474	.0118	0.
	.1860	0.	-13070.	0.	0.	0.	0.	-.0292	.0568	-.0578	-.0536	-.0542	.0132	0.
	.1870	0.	-12643.	0.	0.	0.	0.	-.0298	.0550	-.0577	-.0550	-.0589	.0146	0.
	.1880	0.	-11869.	0.	0.	0.	0.	-.0303	.0516	-.0569	-.0562	-.0532	.0163	0.
	.1890	0.	-10796.	0.	0.	0.	0.	-.0307	.0469	-.0556	-.0572	-.0659	.0181	0.
	.1900	0.	-9456.	0.	0.	0.	0.	-.0307	.0411	-.0542	-.0582	-.0652	.0202	0.
	.1910	0.	-7917.	0.	0.	0.	0.	-.0306	.0344	-.0528	-.0591	-.0625	.0224	0.
	.1920	0.	-6285.	0.	0.	0.	0.	-.0301	.0273	-.0515	-.0601	-.0572	.0244	0.
	.1930	0.	-4640.	0.	0.	0.	0.	-.0292	.0202	-.0504	-.0610	-.0502	.0261	0.
	.1940	0.	-3030.	0.	0.	0.	0.	-.0279	.0132	-.0496	-.0620	-.0425	.0273	0.
	.1950	0.	-1518.	0.	0.	0.	0.	-.0260	.0066	-.0489	-.0629	-.0339	.0277	0.
	.1960	0.	-189.	0.	0.	0.	0.	-.0232	.0008	-.0483	-.0636	-.0244	.0272	0.
	.1970	0.	899.	0.	0.	0.	0.	-.0195	-.0039	-.0480	-.0640	-.0137	.0256	0.
	.1980	0.	1720.	0.	0.	0.	0.	-.0148	-.0075	-.0477	-.0640	-.0015	.0231	0.
	.1990	0.	2241.	0.	0.	0.	0.	-.0094	-.0097	-.0476	-.0635	.0121	.0198	0.
	.2000	0.	2436.	0.	0.	0.	0.	-.0036	-.0106	-.0474	-.0625	.0260	.0158	0.
	.2010	0.	2310.	0.	0.	0.	0.	.0021	-.0100	-.0472	-.0609	.0394	.0114	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.39.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.1910	0.	-7917.	0.	0.	0.	0.	0.	-.0306	.0344	-.0528	-.0591	-.0525	.0224	0.
.1920	0.	-6285.	0.	0.	0.	0.	0.	-.0301	.0273	-.0515	-.0601	-.0572	.0244	0.
.1930	0.	-4640.	0.	0.	0.	0.	0.	-.0292	.0202	-.0504	-.0610	-.0502	.0261	0.
.1940	0.	-3070.	0.	0.	0.	0.	0.	-.0279	.0172	-.0496	-.0620	-.0425	.0273	0.
.1950	0.	-1518.	0.	0.	0.	0.	0.	-.0260	.0066	-.0489	-.0629	-.0339	.0277	0.
.1960	0.	-109.	0.	0.	0.	0.	0.	-.0237	.0008	-.0483	-.0636	-.0244	.0272	0.
.1970	0.	899.	0.	0.	0.	0.	0.	-.0195	-.0039	-.0480	-.0640	-.0137	.0256	0.
.1980	0.	1720.	0.	0.	0.	0.	0.	-.0148	-.0075	-.0477	-.0640	-.0015	.0231	0.
.1990	0.	2241.	0.	0.	0.	0.	0.	-.0094	-.0097	-.0476	-.0635	.0121	.0198	0.
.2000	0.	2436.	0.	0.	0.	0.	0.	-.0036	-.0100	-.0474	-.0625	.0260	.0158	0.
.2010	0.	2310.	0.	0.	0.	0.	0.	.0021	-.0100	-.0472	-.0609	.0394	.0114	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 19.28.39.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	37	MEMBER	2	SEQUENCE	560	LOCATION	DIS	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2020	0.	1900.	0.	0.	0.	0.	.0075	-.0083	-.0467	-.0587	.0521	.0071	0.		
.2030	0.	1236.	0.	0.	0.	0.	.0123	-.0054	-.0461	-.0560	.0637	.0030	0.		
.2040	0.	354.	0.	0.	0.	0.	.0159	-.0015	-.0452	-.0528	.0728	-.0005	0.		
.2050	0.	-687.	0.	0.	0.	0.	.0180	.0030	-.0438	-.0492	.0784	-.0031	0.		
.2060	0.	-1815.	0.	0.	0.	0.	.0185	.0079	-.0419	-.0452	.0804	-.0047	0.		
.2070	0.	-2968.	0.	0.	0.	0.	.0174	.0129	-.0394	-.0409	.0792	-.0051	0.		
.2080	0.	-4097.	0.	0.	0.	0.	.0147	.0178	-.0365	-.0362	.0753	-.0043	0.		
.2090	0.	-5150.	0.	0.	0.	0.	.0111	.0224	-.0333	-.0312	.0705	-.0024	0.		
.2100	0.	-6075.	0.	0.	0.	0.	.0069	.0264	-.0297	-.0260	.0665	.0004	0.		
.2110	0.	-6832.	0.	0.	0.	0.	.0026	.0297	-.0260	-.0204	.0635	.0039	0.		
.2120	0.	-7396.	0.	0.	0.	0.	-.0018	.0322	-.0219	-.0145	.0510	.0079	0.		
.2130	0.	-7739.	0.	0.	0.	0.	-.0060	.0336	-.0172	-.0082	.0582	.0119	0.		
.2140	0.	-7849.	0.	0.	0.	0.	-.0099	.0341	-.0120	-.0017	.0547	.0158	0.		
.2150	0.	-7732.	0.	0.	0.	0.	-.0132	.0336	-.0063	.0052	.0504	.0192	0.		
.2160	0.	-7401.	0.	0.	0.	0.	-.0157	.0322	.0000	.0123	.0453	.0219	0.		
.2170	0.	-6863.	0.	0.	0.	0.	-.0173	.0298	.0067	.0194	.0400	.0237	0.		
.2180	0.	-6124.	0.	0.	0.	0.	-.0177	.0266	.0135	.0265	.0350	.0246	0.		
.2190	0.	-5221.	0.	0.	0.	0.	-.0170	.0227	.0203	.0334	.0306	.0244	0.		
.2200	0.	-4210.	0.	0.	0.	0.	-.0153	.0183	.0269	.0399	.0269	.0233	0.		
.2210	0.	-3145.	0.	0.	0.	0.	-.0127	.0137	.0330	.0459	.0236	.0212	0.		
.2220	0.	-2064.	0.	0.	0.	0.	-.0096	.0090	.0385	.0511	.0202	.0183	0.		
.2230	0.	-1011.	0.	0.	0.	0.	-.0061	.0044	.0432	.0554	.0162	.0147	0.		
.2240	0.	-40.	0.	0.	0.	0.	-.0025	.0002	.0470	.0587	.0111	.0105	0.		
.2250	0.	802.	0.	0.	0.	0.	.0010	-.0035	.0497	.0610	.0049	.0059	0.		
.2260	0.	1487.	0.	0.	0.	0.	.0042	-.0065	.0513	.0620	-.0022	.0011	0.		
.2270	0.	1991.	0.	0.	0.	0.	.0071	-.0087	.0518	.0620	-.0098	-.0037	0.		
.2280	0.	2296.	0.	0.	0.	0.	.0096	-.0100	.0512	.0610	-.0177	-.0085	0.		
.2290	0.	2400.	0.	0.	0.	0.	.0116	-.0104	.0495	.0591	-.0257	-.0130	0.		
.2300	0.	2316.	0.	0.	0.	0.	.0132	-.0101	.0470	.0566	-.0328	-.0172	0.		
.2310	0.	2061.	0.	0.	0.	0.	.0144	-.0090	.0439	.0536	-.0388	-.0208	0.		
.2320	0.	1655.	0.	0.	0.	0.	.0151	-.0072	.0403	.0505	-.0437	-.0238	0.		
.2330	0.	1128.	0.	0.	0.	0.	.0152	-.0049	.0367	.0475	-.0480	-.0262	0.		
.2340	0.	520.	0.	0.	0.	0.	.0148	-.0023	.0334	.0448	-.0519	-.0278	0.		
.2350	0.	-141.	0.	0.	0.	0.	.0136	.0006	.0305	.0426	-.0558	-.0285	0.		
.2360	0.	-826.	0.	0.	0.	0.	.0116	.0036	.0283	.0412	-.0598	-.0284	0.		
.2370	0.	-1498.	0.	0.	0.	0.	.0091	.0065	.0269	.0406	-.0532	-.0275	0.		
.2380	0.	-2121.	0.	0.	0.	0.	.0062	.0092	.0263	.0409	-.0652	-.0258	0.		
.2390	0.	-2675.	0.	0.	0.	0.	.0031	.0116	.0264	.0421	-.0654	-.0234	0.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.39.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

.2290	0.	7400.	0.	0.	0.	0.	0.	.0116	-.0104	.0495	.0591	-.0257	-.0130	0.
.2300	0.	2318.	0.	0.	0.	0.	0.	.0132	-.0101	.0470	.0566	-.0328	-.0172	0.
.2310	0.	2061.	0.	0.	0.	0.	0.	.0144	-.0090	.0439	.0536	-.0388	-.0208	0.
.2320	0.	1655.	0.	0.	0.	0.	0.	.0151	-.0072	.0403	.0505	-.0437	-.0238	0.
.2330	0.	1128.	0.	0.	0.	0.	0.	.0152	-.0049	.0367	.0475	-.0480	-.0262	0.
.2340	0.	520.	0.	0.	0.	0.	0.	.0148	-.0027	.0334	.0448	-.0519	-.0278	0.
.2350	0.	-141.	0.	0.	0.	0.	0.	.0136	.0006	.0305	.0426	-.0558	-.0285	0.
.2360	0.	-826.	0.	0.	0.	0.	0.	.0116	.0036	.0283	.0412	-.0598	-.0284	0.
.2370	0.	-1498.	0.	0.	0.	0.	0.	.0091	.0065	.0269	.0406	-.0532	-.0275	0.
.2380	0.	-2121.	0.	0.	0.	0.	0.	.0062	.0092	.0263	.0409	-.0652	-.0258	0.
.2390	0.	-2675.	0.	0.	0.	0.	0.	.0031	.0116	.0264	.0421	-.0654	-.0234	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.39.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	37	MEMBER	2	SEQUENCE	560	LOCATION	DIS	TYPE	RU						
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)		
.2400	0.	-3152.	0.	0.	0.	0.	-.0000	.0137	.0274	.0441	-.0637	-.0206	0.		
.2410	0.	-3574.	0.	0.	0.	0.	-.0030	.0154	.0290	.0470	-.0603	-.0174	0.		
.2420	0.	-3793.	0.	0.	0.	0.	-.0057	.0165	.0311	.0504	-.0555	-.0140	0.		
.2430	0.	-3914.	0.	0.	0.	0.	-.0080	.0170	.0337	.0542	-.0495	-.0107	0.		
.2440	0.	-3898.	0.	0.	0.	0.	-.0096	.0169	.0365	.0582	-.0424	-.0077	0.		
.2450	0.	-3752.	0.	0.	0.	0.	-.0105	.0163	.0394	.0622	-.0343	-.0051	0.		
.2460	0.	-3471.	0.	0.	0.	0.	-.0105	.0151	.0422	.0661	-.0256	-.0032	0.		
.2470	0.	-3052.	0.	0.	0.	0.	-.0096	.0133	.0447	.0695	-.0168	-.0020	0.		
.2480	0.	-2505.	0.	0.	0.	0.	-.0079	.0109	.0471	.0725	-.0080	-.0015	0.		
.2490	0.	-1846.	0.	0.	0.	0.	-.0053	.0080	.0491	.0749	.0005	-.0018	0.		
.2500	0.	-1105.	0.	0.	0.	0.	-.0022	.0048	.0510	.0768	.0082	-.0028	0.		
.2510	0.	-306.	0.	0.	0.	0.	.0014	.0013	.0527	.0781	.0145	-.0045	0.		
.2520	0.	526.	0.	0.	0.	0.	.0052	-.0023	.0543	.0790	.0194	-.0066	0.		
.2530	0.	1363.	0.	0.	0.	0.	.0091	-.0059	.0558	.0794	.0226	-.0091	0.		
.2540	0.	2166.	0.	0.	0.	0.	.0127	-.0094	.0573	.0793	.0241	-.0117	0.		
.2550	0.	2905.	0.	0.	0.	0.	.0159	-.0126	.0587	.0789	.0239	-.0143	0.		
.2560	0.	3566.	0.	0.	0.	0.	.0186	-.0155	.0599	.0781	.0223	-.0168	0.		
.2570	0.	4143.	0.	0.	0.	0.	.0208	-.0180	.0608	.0767	.0194	-.0190	0.		
.2580	0.	4642.	0.	0.	0.	0.	.0223	-.0202	.0614	.0747	.0156	-.0208	0.		
.2590	0.	5063.	0.	0.	0.	0.	.0232	-.0220	.0613	.0719	.0113	-.0221	0.		
.2600	0.	5395.	0.	0.	0.	0.	.0235	-.0235	.0605	.0684	.0066	-.0229	0.		
.2610	0.	5642.	0.	0.	0.	0.	.0232	-.0245	.0589	.0639	.0013	-.0233	0.		
.2620	0.	5835.	0.	0.	0.	0.	.0224	-.0254	.0564	.0585	-.0042	-.0231	0.		
.2630	0.	5988.	0.	0.	0.	0.	.0212	-.0260	.0528	.0519	-.0098	-.0225	0.		
.2640	0.	6095.	0.	0.	0.	0.	.0196	-.0265	.0482	.0444	-.0151	-.0215	0.		
.2650	0.	6152.	0.	0.	0.	0.	.0178	-.0267	.0425	.0359	-.0200	-.0201	0.		
.2660	0.	6175.	0.	0.	0.	0.	.0158	-.0268	.0358	.0267	-.0242	-.0184	0.		
.2670	0.	6174.	0.	0.	0.	0.	.0138	-.0268	.0283	.0169	-.0277	-.0164	0.		
.2680	0.	6139.	0.	0.	0.	0.	.0116	-.0267	.0202	.0067	-.0302	-.0142	0.		
.2690	0.	6044.	0.	0.	0.	0.	.0095	-.0263	.0117	-.0035	-.0317	-.0118	0.		
.2700	0.	5880.	0.	0.	0.	0.	.0073	-.0256	.0033	-.0133	-.0324	-.0092	0.		
.2710	0.	5688.	0.	0.	0.	0.	.0051	-.0247	-.0050	-.0226	-.0323	-.0065	0.		
.2720	0.	5516.	0.	0.	0.	0.	.0029	-.0240	-.0126	-.0311	-.0313	-.0036	0.		
.2730	0.	5354.	0.	0.	0.	0.	.0007	-.0233	-.0195	-.0387	-.0296	-.0005	0.		
.2740	0.	5150.	0.	0.	0.	0.	-.0015	-.0224	-.0254	-.0450	-.0275	.0025	0.		
.2750	0.	4909.	0.	0.	0.	0.	-.0038	-.0213	-.0301	-.0499	-.0253	.0055	0.		
.2760	0.	4704.	0.	0.	0.	0.	-.0060	-.0205	-.0336	-.0536	-.0231	.0084	0.		
.2770	0.	4570.	0.	0.	0.	0.	-.0081	-.0199	-.0359	-.0562	-.0209	.0112	0.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.39.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.2670	0.	6174.	0.	0.	0.	0.	0.	.138	-.0268	.0283	.0169	-.0277	-.0164	0.
.2680	0.	6139.	0.	0.	0.	0.	0.	.116	-.0267	.0202	.0067	-.0302	-.0142	0.
.2690	0.	6044.	0.	0.	0.	0.	0.	.095	-.0263	.0117	-.0035	-.0317	-.0118	0.
.2700	0.	5880.	0.	0.	0.	0.	0.	.073	-.0256	.0033	-.0133	-.0324	-.0092	0.
.2710	0.	5688.	0.	0.	0.	0.	0.	.051	-.0247	-.0050	-.0226	-.0323	-.0065	0.
.2720	0.	5516.	0.	0.	0.	0.	0.	.029	-.0240	-.0126	-.0311	-.0313	-.0036	0.
.2730	0.	5354.	0.	0.	0.	0.	0.	.007	-.0233	-.0195	-.0387	-.0296	-.0005	0.
.2740	0.	5150.	0.	0.	0.	0.	0.	-.0015	-.0224	-.0254	-.0450	-.0275	.0025	0.
.2750	0.	4909.	0.	0.	0.	0.	0.	-.0038	-.0213	-.0301	-.0499	-.0253	.0055	0.
.2760	0.	4704.	0.	0.	0.	0.	0.	-.0060	-.0205	-.0336	-.0536	-.0231	.0084	0.
.2770	0.	4570.	0.	0.	0.	0.	0.	-.0081	-.0199	-.0359	-.0562	-.0209	.0112	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.39.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	37	MEMBER	2	SEQUENCE	560	LOCATION	DIS	TYPE	RU					
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)	
.2780	0.	4456.	0.	0.	0.	0.	-.0100	-.0194	-.0372	-.0576	-.0193	.0137	0.	
.2790	0.	4318.	0.	0.	0.	0.	-.0118	-.0188	-.0374	-.0580	-.0186	.0156	0.	
.2800	0.	4192.	0.	0.	0.	0.	-.0134	-.0183	-.0368	-.0577	-.0193	.0171	0.	
.2810	0.	4143.	0.	0.	0.	0.	-.0147	-.0180	-.0355	-.0570	-.0216	.0179	0.	
.2820	0.	4119.	0.	0.	0.	0.	-.0156	-.0179	-.0336	-.0559	-.0255	.0180	0.	
.2830	0.	4054.	0.	0.	0.	0.	-.0160	-.0176	-.0316	-.0546	-.0305	.0172	0.	
.2840	0.	3939.	0.	0.	0.	0.	-.0158	-.0171	-.0294	-.0532	-.0362	.0155	0.	
.2850	0.	3818.	0.	0.	0.	0.	-.0150	-.0166	-.0273	-.0518	-.0426	.0130	0.	
.2860	0.	3697.	0.	0.	0.	0.	-.0138	-.0161	-.0254	-.0507	-.0495	.0098	0.	
.2870	0.	3529.	0.	0.	0.	0.	-.0121	-.0153	-.0236	-.0497	-.0568	.0059	0.	
.2880	0.	3286.	0.	0.	0.	0.	-.0100	-.0143	-.0220	-.0487	-.0545	.0015	0.	
.2890	0.	2987.	0.	0.	0.	0.	-.0077	-.0130	-.0206	-.0478	-.0725	-.0034	0.	
.2900	0.	2652.	0.	0.	0.	0.	-.0054	-.0115	-.0194	-.0470	-.0804	-.0085	0.	
.2910	0.	2281.	0.	0.	0.	0.	-.0030	-.0099	-.0183	-.0462	-.0883	-.0136	0.	
.2920	0.	1871.	0.	0.	0.	0.	-.0006	-.0081	-.0173	-.0453	-.0957	-.0186	0.	
.2930	0.	1426.	0.	0.	0.	0.	.0016	-.0062	-.0165	-.0443	-.1020	-.0234	0.	
.2940	0.	956.	0.	0.	0.	0.	.0037	-.0042	-.0158	-.0433	-.1070	-.0277	0.	
.2950	0.	477.	0.	0.	0.	0.	.0056	-.0021	-.0153	-.0421	-.1100	-.0314	0.	
.2960	0.	21.	0.	0.	0.	0.	.0074	-.0001	-.0151	-.0410	-.1107	-.0343	0.	
.2970	0.	-391.	0.	0.	0.	0.	.0091	.0017	-.0153	-.0401	-.1086	-.0364	0.	
.2980	0.	-764.	0.	0.	0.	0.	.0105	.0033	-.0161	-.0393	-.1037	-.0376	0.	
.2990	0.	-1102.	0.	0.	0.	0.	.0116	.0048	-.0173	-.0387	-.0964	-.0379	0.	
.3000	0.	-1371.	0.	0.	0.	0.	.0124	.0060	-.0190	-.0385	-.0873	-.0371	0.	
.3010	0.	-1536.	0.	0.	0.	0.	.0127	.0067	-.0211	-.0387	-.0769	-.0354	0.	
.3020	0.	-1601.	0.	0.	0.	0.	.0124	.0070	-.0236	-.0394	-.0661	-.0327	0.	
.3030	0.	-1593.	0.	0.	0.	0.	.0114	.0069	-.0264	-.0405	-.0552	-.0293	0.	
.3040	0.	-1502.	0.	0.	0.	0.	.0100	.0065	-.0294	-.0420	-.0445	-.0251	0.	
.3050	0.	-1300.	0.	0.	0.	0.	.0081	.0057	-.0324	-.0439	-.0341	-.0203	0.	
.3060	0.	-986.	0.	0.	0.	0.	.0058	.0043	-.0355	-.0461	-.0243	-.0151	0.	
.3070	0.	-597.	0.	0.	0.	0.	.0032	.0026	-.0384	-.0484	-.0154	-.0097	0.	
.3080	0.	-161.	0.	0.	0.	0.	.0005	.0007	-.0409	-.0507	-.0079	-.0044	0.	
.3090	0.	319.	0.	0.	0.	0.	-.0023	-.0014	-.0430	-.0529	-.0019	.0006	0.	
.3100	0.	638.	0.	0.	0.	0.	-.0049	-.0036	-.0446	-.0550	.0023	.0052	0.	
.3110	0.	1370.	0.	0.	0.	0.	-.0073	-.0060	-.0455	-.0567	.0044	.0091	0.	
.3120	0.	1884.	0.	0.	0.	0.	-.0094	-.0082	-.0458	-.0581	.0047	.0123	0.	
.3130	0.	2353.	0.	0.	0.	0.	-.0109	-.0102	-.0456	-.0591	.0035	.0144	0.	
.3140	0.	2754.	0.	0.	0.	0.	-.0120	-.0120	-.0448	-.0597	.0009	.0156	0.	
.3150	0.	3069.	0.	0.	0.	0.	-.0125	-.0133	-.0437	-.0599	-.0027	.0159	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.39.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.3050	0.	-1300.	0.	0.	0.	0.	0.	.0057	.0057	-.0324	-.0439	-.0341	-.0203	0.
.3060	0.	-986.	0.	0.	0.	0.	0.	.0058	.0047	-.0355	-.0461	-.0243	-.0151	0.
.3070	0.	-597.	0.	0.	0.	0.	0.	.0072	.0026	-.0384	-.0484	-.0154	-.0097	0.
.3080	0.	-161.	0.	0.	0.	0.	0.	.0005	.0007	-.0409	-.0507	-.0079	-.0044	0.
.3090	0.	315.	0.	0.	0.	0.	0.	-.0023	-.0014	-.0430	-.0529	-.0019	.0006	0.
.3100	0.	638.	0.	0.	0.	0.	0.	-.0049	-.0036	-.0446	-.0550	.0023	.0052	0.
.3110	0.	1370.	0.	0.	0.	0.	0.	-.0073	-.0060	-.0455	-.0567	.0044	.0091	0.
.3120	0.	1834.	0.	0.	0.	0.	0.	-.0094	-.0082	-.0458	-.0581	.0047	.0123	0.
.3130	0.	2353.	0.	0.	0.	0.	0.	-.0109	-.0102	-.0456	-.0591	.0035	.0144	0.
.3140	0.	2754.	0.	0.	0.	0.	0.	-.0120	-.0120	-.0448	-.0597	.0009	.0156	0.
.3150	0.	3069.	0.	0.	0.	0.	0.	-.0125	-.0133	-.0437	-.0599	-.0027	.0159	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.39.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	37	MEMBER	2	SEQUENCE	560	LOCATION	DIS	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3160	0.	3291.	0.	0.	0.	0.	-.0123	-.0143	-.0423	-.0596	-.0069	.0151	0.		
.3170	0.	3412.	0.	0.	0.	0.	-.0116	-.0148	-.0407	-.0591	-.0114	.0136	0.		
.3180	0.	3420.	0.	0.	0.	0.	-.0104	-.0149	-.0389	-.0581	-.0159	.0112	0.		
.3190	0.	3313.	0.	0.	0.	0.	-.0088	-.0144	-.0372	-.0569	-.0204	.0083	0.		
.3200	0.	3119.	0.	0.	0.	0.	-.0070	-.0136	-.0353	-.0553	-.0247	.0051	0.		
.3210	0.	2870.	0.	0.	0.	0.	-.0050	-.0125	-.0335	-.0536	-.0287	.0016	0.		
.3220	0.	2575.	0.	0.	0.	0.	-.0029	-.0112	-.0316	-.0515	-.0321	-.0019	0.		
.3230	0.	2241.	0.	0.	0.	0.	-.0009	-.0097	-.0297	-.0492	-.0347	-.0052	0.		
.3240	0.	1900.	0.	0.	0.	0.	.0011	-.0083	-.0278	-.0467	-.0361	-.0082	0.		
.3250	0.	1602.	0.	0.	0.	0.	.0030	-.0070	-.0258	-.0439	-.0362	-.0108	0.		
.3260	0.	1382.	0.	0.	0.	0.	.0047	-.0060	-.0237	-.0410	-.0352	-.0129	0.		
.3270	0.	1246.	0.	0.	0.	0.	.0062	-.0054	-.0213	-.0379	-.0334	-.0143	0.		
.3280	0.	1211.	0.	0.	0.	0.	.0074	-.0053	-.0187	-.0347	-.0310	-.0152	0.		
.3290	0.	1311.	0.	0.	0.	0.	.0084	-.0057	-.0159	-.0315	-.0284	-.0154	0.		
.3300	0.	1571.	0.	0.	0.	0.	.0091	-.0068	-.0130	-.0285	-.0257	-.0150	0.		
.3310	0.	1985.	0.	0.	0.	0.	.0096	-.0086	-.0100	-.0257	-.0229	-.0140	0.		
.3320	0.	2533.	0.	0.	0.	0.	.0099	-.0110	-.0071	-.0233	-.0199	-.0124	0.		
.3330	0.	3201.	0.	0.	0.	0.	.0101	-.0139	-.0045	-.0213	-.0166	-.0103	0.		
.3340	0.	3979.	0.	0.	0.	0.	.0100	-.0173	-.0023	-.0199	-.0130	-.0077	0.		
.3350	0.	4839.	0.	0.	0.	0.	.0098	-.0210	-.0006	-.0192	-.0091	-.0045	0.		
.3360	0.	5741.	0.	0.	0.	0.	.0092	-.0250	.0005	-.0192	-.0052	-.0009	0.		
.3370	0.	6645.	0.	0.	0.	0.	.0083	-.0289	.0010	-.0198	-.0011	.0032	0.		
.3380	0.	7516.	0.	0.	0.	0.	.0070	-.0327	.0008	-.0210	.0033	.0077	0.		
.3390	0.	8322.	0.	0.	0.	0.	.0052	-.0362	.0001	-.0227	.0080	.0127	0.		
.3400	0.	9027.	0.	0.	0.	0.	.0031	-.0392	-.0013	-.0248	.0133	.0181	0.		
.3410	0.	9605.	0.	0.	0.	0.	.0005	-.0418	-.0032	-.0271	.0193	.0237	0.		
.3420	0.	10035.	0.	0.	0.	0.	-.0023	-.0436	-.0055	-.0296	.0260	.0296	0.		
.3430	0.	10305.	0.	0.	0.	0.	-.0055	-.0448	-.0081	-.0319	.0333	.0355	0.		
.3440	0.	10414.	0.	0.	0.	0.	-.0089	-.0453	-.0108	-.0340	.0410	.0414	0.		
.3450	0.	10371.	0.	0.	0.	0.	-.0123	-.0451	-.0136	-.0359	.0491	.0471	0.		
.3460	0.	10192.	0.	0.	0.	0.	-.0157	-.0443	-.0161	-.0373	.0573	.0524	0.		
.3470	0.	9893.	0.	0.	0.	0.	-.0189	-.0430	-.0184	-.0383	.0653	.0572	0.		
.3480	0.	9491.	0.	0.	0.	0.	-.0218	-.0413	-.0204	-.0387	.0730	.0612	0.		
.3490	0.	9010.	0.	0.	0.	0.	-.0242	-.0392	-.0220	-.0388	.0801	.0644	0.		
.3500	0.	8484.	0.	0.	0.	0.	-.0261	-.0369	-.0233	-.0384	.0865	.0667	0.		
.3510	0.	7938.	0.	0.	0.	0.	-.0273	-.0345	-.0241	-.0377	.0918	.0680	0.		
.3520	0.	7390.	0.	0.	0.	0.	-.0280	-.0321	-.0246	-.0368	.0959	.0683	0.		
.3530	0.	6853.	0.	0.	0.	0.	-.0280	-.0298	-.0248	-.0356	.0986	.0677	0.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.39.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.3430	0.	10305.	0.	0.	0.	0.	0.	-0.055	-0.0448	-0.0081	-0.0319	.0333	.0355	0.
.3440	0.	10414.	0.	0.	0.	0.	0.	-0.089	-0.0457	-0.0108	-0.0340	.0410	.0414	0.
.3450	0.	10371.	0.	0.	0.	0.	0.	-0.023	-0.0451	-0.0136	-0.0359	.0491	.0471	0.
.3460	0.	10192.	0.	0.	0.	0.	0.	-0.0157	-0.0447	-0.0161	-0.0373	.0573	.0524	0.
.3470	0.	9893.	0.	0.	0.	0.	0.	-0.0189	-0.0430	-0.0184	-0.0383	.0653	.0572	0.
.3480	0.	9491.	0.	0.	0.	0.	0.	-0.0218	-0.0413	-0.0204	-0.0387	.0730	.0612	0.
.3490	0.	9010.	0.	0.	0.	0.	0.	-0.0242	-0.0392	-0.0220	-0.0388	.0801	.0644	0.
.3500	0.	8484.	0.	0.	0.	0.	0.	-0.0261	-0.0369	-0.0233	-0.0384	.0865	.0667	0.
.3510	0.	7938.	0.	0.	0.	0.	0.	-0.0273	-0.0345	-0.0241	-0.0377	.0918	.0680	0.
.3520	0.	7390.	0.	0.	0.	0.	0.	-0.0280	-0.0321	-0.0246	-0.0368	.0959	.0683	0.
.3530	0.	6852.	0.	0.	0.	0.	0.	-0.0280	-0.0290	-0.0248	-0.0356	.0986	.0677	0.

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ADLPIPE STRESS ANALYSIS

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18.28.39.

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

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INTERNAL FORCES IN THE PIPING
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SECTION	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	RU								STRESS
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	(PSI)	
.3540	0.	6347.	0.	0.	0.	0.	-0.0276	-0.0276	-0.0247	-0.0344	.0996	.0662	0.	
.3550	0.	5889.	0.	0.	0.	0.	-0.0267	-0.0256	-0.0243	-0.0331	.0989	.0639	0.	
.3560	0.	5481.	0.	0.	0.	0.	-0.0256	-0.0238	-0.0237	-0.0318	.0962	.0610	0.	
.3570	0.	5121.	0.	0.	0.	0.	-0.0243	-0.0223	-0.0228	-0.0305	.0918	.0578	0.	
.3580	0.	4800.	0.	0.	0.	0.	-0.0231	-0.0209	-0.0218	-0.0291	.0858	.0543	0.	
.3590	0.	4518.	0.	0.	0.	0.	-0.0219	-0.0196	-0.0204	-0.0277	.0784	.0507	0.	
.3600	0.	4273.	0.	0.	0.	0.	-0.0210	-0.0186	-0.0189	-0.0262	.0699	.0474	0.	
.3610	0.	4057.	0.	0.	0.	0.	-0.0205	-0.0176	-0.0171	-0.0245	.0604	.0444	0.	
.3620	0.	3852.	0.	0.	0.	0.	-0.0204	-0.0167	-0.0151	-0.0226	.0501	.0418	0.	
.3630	0.	3639.	0.	0.	0.	0.	-0.0208	-0.0158	-0.0128	-0.0205	.0394	.0398	0.	
.3640	0.	3403.	0.	0.	0.	0.	-0.0218	-0.0148	-0.0103	-0.0181	.0282	.0384	0.	
.3650	0.	3178.	0.	0.	0.	0.	-0.0234	-0.0136	-0.0075	-0.0153	.0168	.0376	0.	
.3660	0.	2836.	0.	0.	0.	0.	-0.0254	-0.0123	-0.0047	-0.0124	.0055	.0374	0.	
.3670	0.	2486.	0.	0.	0.	0.	-0.0278	-0.0108	-0.0018	-0.0093	-.0052	.0376	0.	
.3680	0.	2077.	0.	0.	0.	0.	-0.0304	-0.0090	.0009	-0.0061	-.0150	.0383	0.	
.3690	0.	1606.	0.	0.	0.	0.	-0.0330	-0.0070	.0034	-0.0029	-0.0238	.0393	0.	
.3700	0.	1088.	0.	0.	0.	0.	-0.0356	-0.0047	.0054	.0001	-0.0311	.0404	0.	
.3710	0.	543.	0.	0.	0.	0.	-0.0380	-0.0024	.0069	.0026	-0.0369	.0415	0.	
.3720	0.	-18.	0.	0.	0.	0.	-0.0400	.0001	.0077	.0047	-0.0410	.0426	0.	
.3730	0.	-587.	0.	0.	0.	0.	-0.0415	.0026	.0078	.0061	-0.0433	.0434	0.	
.3740	0.	-1144.	0.	0.	0.	0.	-0.0425	.0050	.0070	.0068	-0.0440	.0438	0.	
.3750	0.	-1650.	0.	0.	0.	0.	-0.0429	.0072	.0053	.0066	-0.0433	.0439	0.	
.3760	0.	-2068.	0.	0.	0.	0.	-0.0427	.0090	.0029	.0054	-0.0414	.0436	0.	
.3770	0.	-2381.	0.	0.	0.	0.	-0.0419	.0104	-.0002	.0034	-0.0388	.0428	0.	
.3780	0.	-2583.	0.	0.	0.	0.	-0.0406	.0112	-0.0038	.0006	-0.0354	.0416	0.	
.3790	0.	-2663.	0.	0.	0.	0.	-0.0388	.0116	-0.0079	-0.0029	-0.0315	.0400	0.	
.3800	0.	-2602.	0.	0.	0.	0.	-0.0365	.0113	-0.0122	-0.0069	-0.0271	.0381	0.	
.3810	0.	-2397.	0.	0.	0.	0.	-0.0339	.0104	-0.0165	-0.0113	-0.0222	.0358	0.	
.3820	0.	-2053.	0.	0.	0.	0.	-0.0308	.0089	-0.0206	-0.0158	-0.0167	.0334	0.	
.3830	0.	-1589.	0.	0.	0.	0.	-0.0274	.0069	-0.0244	-0.0202	-0.0105	.0308	0.	
.3840	0.	-1021.	0.	0.	0.	0.	-0.0239	.0044	-0.0276	-0.0243	-0.0039	.0282	0.	
.3850	0.	-358.	0.	0.	0.	0.	-0.0203	.0016	-0.0302	-0.0279	.0031	.0256	0.	
.3860	0.	387.	0.	0.	0.	0.	-0.0167	-.0017	-0.0320	-0.0309	.0103	.0233	0.	
.3870	0.	1172.	0.	0.	0.	0.	-0.0132	-.0051	-0.0330	-0.0333	.0180	.0212	0.	
.3880	0.	1935.	0.	0.	0.	0.	-0.0099	-0.0084	-0.0333	-0.0347	.0262	.0193	0.	
.3890	0.	2637.	0.	0.	0.	0.	-0.0067	-0.0115	-0.0329	-0.0353	.0347	.0177	0.	
.3900	0.	3269.	0.	0.	0.	0.	-0.0039	-0.0142	-0.0317	-0.0350	.0435	.0164	0.	
.3910	0.	3819.	0.	0.	0.	0.	-0.0013	-0.0166	-0.0300	-0.0339	.0522	.0154	0.	

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.3800	0.	-2607.	0.	0.	0.	0.	0.	-.0361	.0113	-.0122	-.0069	-.0271	.0381	0.
.3810	0.	-2397.	0.	0.	0.	0.	0.	-.0379	.0104	-.0165	-.0113	-.0222	.0358	0.
.3820	0.	-2053.	0.	0.	0.	0.	0.	-.0308	.0089	-.0206	-.0158	-.0167	.0334	0.
.3830	0.	-1589.	0.	0.	0.	0.	0.	-.0274	.0069	-.0244	-.0202	-.0105	.0308	0.
.3840	0.	-1021.	0.	0.	0.	0.	0.	-.0239	.0044	-.0276	-.0243	-.0039	.0282	0.
.3850	0.	-358.	0.	0.	0.	0.	0.	-.0203	.0016	-.0302	-.0279	.0031	.0256	0.
.3860	0.	387.	0.	0.	0.	0.	0.	-.0167	-.0017	-.0320	-.0309	.0103	.0233	0.
.3870	0.	1172.	0.	0.	0.	0.	0.	-.0132	-.0051	-.0330	-.0333	.0180	.0212	0.
.3880	0.	1935.	0.	0.	0.	0.	0.	-.0099	-.0024	-.0333	-.0347	.0262	.0193	0.
.3890	0.	2637.	0.	0.	0.	0.	0.	-.0067	-.0115	-.0329	-.0353	.0347	.0177	0.
.3900	0.	3269.	0.	0.	0.	0.	0.	-.0039	-.0142	-.0317	-.0350	.0435	.0164	0.
.3910	0.	3819.	0.	0.	0.	0.	0.	-.0013	-.0166	-.0300	-.0339	.0522	.0154	0.

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SECTION	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
37	2	560					.3920	0.	4244.	0.	0.	0.	0.	.0009	-.0185	-.0277	-.0319	.0507	.0146	0.
							.3930	0.	4497.	0.	0.	0.	0.	.0027	-.0196	-.0250	-.0292	.0588	.0140	0.
							.3940	0.	4563.	0.	0.	0.	0.	.0043	-.0198	-.0220	-.0258	.0765	.0134	0.
							.3950	0.	4459.	0.	0.	0.	0.	.0057	-.0194	-.0188	-.0217	.0836	.0127	0.
							.3960	0.	4198.	0.	0.	0.	0.	.0069	-.0183	-.0154	-.0172	.0901	.0119	0.
							.3970	0.	3776.	0.	0.	0.	0.	.0082	-.0164	-.0119	-.0121	.0959	.0109	0.
							.3980	0.	3195.	0.	0.	0.	0.	.0096	-.0139	-.0083	-.0067	.1007	.0095	0.
							.3990	0.	2490.	0.	0.	0.	0.	.0110	-.0108	-.0046	-.0009	.1045	.0076	0.
							.4000	0.	1713.	0.	0.	0.	0.	.0126	-.0074	-.0008	.0050	.1070	.0053	0.

MAXIMUM VALUE OF DISCONTINUITY FORCE OCCURS AT

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	FORCE (LB)
.1850	0.	-13093.	0.	0.	0.	0.	-.0282	.0569	-.0570	-.0519	-.0474	.0118	13093.

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
37	2	560					0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
							.0010	-0.	0.	-0.	0.	0.	-0.	-.0000	.0000	.0000	.0000	-.0000	-.0000	0.
							.0020	0.	0.	0.	0.	-0.	-0.	-.0000	.0000	.0000	.0000	-.0000	-.0000	0.
							.0030	-0.	0.	-0.	0.	0.	-0.	-.0000	.0000	.0000	.0000	-.0000	-.0000	0.
							.0040	-0.	0.	0.	0.	0.	-0.	-.0000	.0000	.0000	.0000	-.0001	-.0000	0.
							.0050	-0.	0.	-0.	0.	-0.	-0.	-.0000	-.0000	.0000	-.0000	-.0001	-.0000	0.
							.0060	-0.	0.	-0.	0.	0.	-0.	-.0000	-.0000	.0000	-.0000	-.0001	.0000	0.
							.0070	-0.	0.	-0.	0.	-0.	-0.	-.0000	-.0000	.0000	-.0000	-.0002	.0000	0.
							.0080	-0.	0.	-0.	0.	-0.	-0.	-.0001	-.0001	.0000	-.0000	-.0004	.0000	0.
							.0090	-0.	0.	-0.	0.	0.	-0.	-.0001	-.0001	.0001	-.0000	-.0005	.0000	0.
							.0100	-0.	0.	-0.	0.	-0.	-0.	-.0000	-.0002	.0000	-.0001	-.0002	.0000	0.
							.0110	-0.	0.	-0.	0.	-0.	-0.	.0002	-.0002	-.0001	-.0001	.0008	.0001	0.
							.0120	-0.	0.	0.	0.	-0.	-0.	.0005	-.0004	-.0003	-.0002	.0027	.0001	0.
							.0130	0.	-0.	0.	-0.	-0.	-0.	.0010	-.0005	-.0006	-.0003	.0055	.0002	0.
							.0140	-0.	0.	-0.	0.	-0.	-0.	.0016	-.0007	-.0010	-.0005	.0091	.0003	0.
							.0150	0.	0.	0.	0.	-0.	-0.	.0023	-.0009	-.0015	-.0006	.0132	.0005	0.

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DIS/ADLPIPE ADLPIPE STRESS ANALYSIS
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.0050	-0.	0.	-0.	0.	-0.	-0.	-0.0000	-0.0000	.0000	-0.0000	-0.0001	-0.0000	0.
.0060	-0.	0.	-0.	0.	-0.	-0.	-0.0000	-0.0000	.0000	-0.0000	-0.0001	-0.0000	0.
.0070	-0.	0.	-0.	0.	-0.	-0.	-0.0000	-0.0000	.0000	-0.0000	-0.0002	-0.0000	0.
.0080	-0.	0.	-0.	0.	-0.	-0.	-0.0001	-0.0001	.0000	-0.0000	-0.0004	-0.0000	0.
.0090	-0.	0.	-0.	0.	-0.	-0.	-0.0001	-0.0001	.0001	-0.0000	-0.0005	-0.0000	0.
.0100	-0.	0.	-0.	0.	-0.	-0.	-0.0000	-0.0002	.0000	-0.0001	-0.0002	-0.0000	0.
.0110	-0.	0.	-0.	0.	-0.	-0.	.0002	-0.0002	-0.0001	-0.0001	.0008	.0001	0.
.0120	-0.	0.	-0.	0.	-0.	-0.	.0005	-0.0004	-0.0003	-0.0002	.0027	.0001	0.
.0130	-0.	0.	-0.	0.	-0.	-0.	.0010	-0.0005	-0.0006	-0.0003	.0055	.0002	0.
.0140	-0.	0.	-0.	0.	-0.	-0.	.0016	-0.0007	-0.0010	-0.0005	.0091	.0003	0.
.0150	-0.	0.	-0.	0.	-0.	-0.	.0023	-0.0009	-0.0015	-0.0006	.0132	.0005	0.

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INTERNAL FORCES IN THE PIPING
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SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
37	2	560					.0160	0.	0.	0.	0.	0.	-0.	.0029	-0.0011	-0.0020	-0.0008	.0172	.0007	0.
							.0170	-0.	0.	-0.	-0.	0.	-0.	.0033	-0.0014	-0.0024	-0.0010	.0207	.0009	0.
							.0180	-0.	0.	-0.	0.	0.	-0.	.0035	-0.0015	-0.0027	-0.0012	.0231	.0012	0.
							.0190	-0.	0.	0.	0.	0.	-0.	.0035	-0.0017	-0.0030	-0.0014	.0249	.0013	0.
							.0200	0.	0.	0.	0.	0.	-0.	.0035	-0.0017	-0.0033	-0.0015	.0264	.0014	0.
							.0210	-0.	-0.	-0.	-0.	0.	0.	.0038	-0.0015	-0.0037	-0.0017	.0286	.0013	0.
							.0220	0.	-0.	0.	-0.	0.	0.	.0048	-0.0012	-0.0045	-0.0018	.0338	.0009	0.
							.0230	0.	0.	0.	0.	-0.	-0.	.0064	-0.0008	-0.0054	-0.0017	.0407	.0003	0.
							.0240	-0.	0.	0.	0.	0.	-0.	.0080	-0.0003	-0.0062	-0.0016	.0455	-0.0006	0.
							.0250	0.	0.	0.	0.	-0.	-0.	.0090	.0002	-0.0063	-0.0014	.0454	-0.0018	0.
							.0260	0.	0.	0.	-0.	-0.	0.	.0096	.0004	-0.0058	-0.0011	.0419	-0.0030	0.
							.0270	0.	0.	0.	0.	-0.	-0.	.0106	.0006	-0.0053	-0.0008	.0401	-0.0043	0.
							.0280	0.	-0.	0.	-0.	-0.	0.	.0113	.0008	-0.0045	-0.0002	.0366	-0.0055	0.
							.0290	0.	0.	0.	0.	-0.	-0.	.0105	.0012	-0.0029	.0005	.0262	-0.0065	0.
							.0300	-0.	-0.	-0.	-0.	0.	0.	.0095	.0018	-0.0015	.0013	.0167	-0.0071	0.
							.0310	-0.	-0.	-0.	-0.	0.	0.	.0088	.0024	-0.0004	.0023	.0114	-0.0073	0.
							.0320	0.	0.	0.	0.	-0.	-0.	.0075	.0033	.0007	.0033	.0052	-0.0070	0.
							.0330	0.	0.	0.	0.	0.	-0.	.0057	.0044	.0018	.0046	-0.0012	-0.0062	0.
							.0340	0.	-0.	0.	-0.	0.	0.	.0038	.0057	.0029	.0062	-0.0052	-0.0049	0.
							.0350	0.	0.	0.	0.	0.	-0.	.0011	.0069	.0044	.0079	-0.0107	-0.0032	0.
							.0360	0.	0.	0.	0.	0.	-0.	-0.0029	.0079	.0068	.0096	-0.0213	-0.0010	0.
							.0370	0.	-0.	0.	-0.	0.	0.	-0.0071	.0087	.0094	.0113	-0.0313	.0014	0.
							.0380	0.	-0.	0.	-0.	0.	0.	-0.0105	.0095	.0114	.0128	-0.0362	.0039	0.
							.0390	0.	-0.	0.	0.	0.	0.	-0.0136	.0098	.0131	.0141	-0.0404	.0062	0.
							.0400	0.	-0.	0.	-0.	0.	0.	-0.0171	.0103	.0147	.0151	-0.0479	.0082	0.
							.0410	-0.	-0.	-0.	0.	0.	0.	-0.0194	.0106	.0154	.0155	-0.0512	.0095	0.
							.0420	0.	-0.	0.	-0.	-0.	0.	-0.0203	.0104	.0153	.0154	-0.0511	.0102	0.
							.0430	0.	-0.	0.	-0.	0.	0.	-0.0207	.0097	.0150	.0145	-0.0535	.0100	0.
							.0440	0.	-0.	-0.	0.	0.	-0.	-0.0203	.0088	.0144	.0133	-0.0574	.0090	0.
							.0450	0.	-0.	0.	0.	-0.	-0.	-0.0183	.0078	.0133	.0118	-0.0574	.0071	0.
							.0460	0.	-0.	0.	-0.	-0.	0.	-0.0153	.0063	.0119	.0098	-0.0554	.0046	0.
							.0470	0.	-0.	-0.	-0.	0.	-0.	-0.0125	.0041	.0109	.0075	-0.0566	.0018	0.
							.0480	0.	-0.	0.	-0.	-0.	0.	-0.0095	.0016	.0097	.0051	-0.0574	-0.0010	0.
							.0490	0.	-0.	0.	-0.	-0.	0.	-0.0053	-0.0006	.0078	.0029	-0.0504	-0.0037	0.
							.0500	0.	-0.	0.	-0.	-0.	0.	-0.0006	-0.0025	.0054	.0008	-0.0378	-0.0060	0.
							.0510	0.	0.	0.	0.	-0.	-0.	.0036	-0.0043	.0029	-0.0012	-0.0247	-0.0076	0.
							.0520	0.	-0.	0.	-0.	-0.	0.	.0069	-0.0058	.0004	-0.0029	-0.0118	-0.0085	0.
							.0530	0.	-0.	0.	-0.	-0.	-0.	.0093	-0.0067	-0.0020	-0.0043	.0011	-0.0086	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.39.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.0430	0.	-0.	0.	-0.	0.	0.	-0.0207	.0097	.0150	.0145	-.0535	.0100	0.
.0440	0.	-0.	-0.	0.	0.	0.	-0.0203	.0088	.0144	.0133	-.0574	.0090	0.
.0450	0.	-0.	0.	0.	0.	-0.	-.0183	.0078	.0133	.0118	-.0574	.0071	0.
.0460	0.	-0.	0.	-0.	-0.	0.	-.0152	.0063	.0119	.0098	-.0554	.0046	0.
.0470	0.	-0.	-0.	-0.	0.	-0.	-.0125	.0041	.0109	.0075	-.0566	.0018	0.
.0480	0.	-0.	0.	-0.	-0.	0.	-.0095	.0016	.0097	.0051	-.0574	-.0010	0.
.0490	0.	-0.	0.	-0.	-0.	-0.	-.0053	-.0006	.0078	.0029	-.0504	-.0037	0.
.0500	0.	-0.	0.	-0.	-0.	0.	-.0066	-.0025	.0054	.0008	-.0378	-.0060	0.
.0510	0.	0.	0.	0.	0.	-0.	.0036	-.0043	.0029	-.0012	-.0247	-.0076	0.
.0520	0.	-0.	0.	-0.	-0.	0.	.0069	-.0058	.0004	-.0029	-.0118	-.0085	0.
.0530	0.	-0.	0.	-0.	-0.	-0.	.0093	-.0067	-.0020	-.0043	.0011	-.0086	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.39.

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

CONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

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

SECTION	37	MEMBER	2	SEQUENCE	560	LOCATION	END	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.0540	0.	-0.	-0.	-0.	-0.	0.	.0106	-.0073	-.0042	-.0055	.0131	-.0079	0.	
.0550	0.	-0.	-0.	-0.	-0.	0.	.0109	-.0077	-.0061	-.0064	.0236	-.0063	0.	
.0560	0.	-0.	-0.	-0.	-0.	0.	.0105	-.0076	-.0078	-.0070	.0336	-.0042	0.	
.0570	-0.	0.	0.	-0.	-0.	0.	.0097	-.0071	-.0093	-.0073	.0436	-.0018	0.	
.0580	-0.	0.	-0.	-0.	-0.	0.	.0087	-.0065	-.0105	-.0074	.0532	.0008	0.	
.0590	-0.	0.	-0.	0.	-0.	0.	.0076	-.0057	-.0116	-.0073	.0518	.0033	0.	
.0600	-0.	0.	0.	-0.	-0.	0.	.0068	-.0041	-.0126	-.0069	.0596	.0053	0.	
.0610	-0.	-0.	-0.	-0.	-0.	0.	.0061	-.0018	-.0135	-.0062	.0761	.0067	0.	
.0620	-0.	0.	-0.	0.	0.	0.	.0057	.0008	-.0141	-.0053	.0799	.0074	0.	
.0630	-0.	0.	0.	0.	-0.	0.	.0054	.0034	-.0143	-.0044	.0800	.0074	0.	
.0640	-0.	-0.	-0.	-0.	-0.	0.	.0054	.0063	-.0141	-.0032	.0766	.0066	0.	
.0650	-0.	-0.	-0.	-0.	0.	0.	.0058	.0096	-.0136	-.0019	.0715	.0051	0.	
.0660	-0.	-0.	-0.	-0.	-0.	0.	.0066	.0125	-.0129	-.0005	.0659	.0032	0.	
.0670	-0.	0.	-0.	0.	0.	0.	.0076	.0148	-.0116	.0008	.0596	.0012	0.	
.0680	-0.	-0.	-0.	-0.	-0.	0.	.0086	.0164	-.0100	.0021	.0535	-.0005	0.	
.0690	-0.	0.	-0.	0.	-0.	-0.	.0094	.0174	-.0083	.0033	.0491	-.0018	0.	
.0700	-0.	0.	-0.	0.	-0.	-0.	.0099	.0177	-.0066	.0043	.0455	-.0024	0.	
.0710	0.	0.	0.	0.	-0.	-0.	.0096	.0172	-.0048	.0050	.0419	-.0023	0.	
.0720	0.	0.	0.	0.	-0.	-0.	.0088	.0161	-.0033	.0055	.0387	-.0015	0.	
.0730	0.	0.	0.	0.	-0.	-0.	.0070	.0143	-.0017	.0054	.0344	-.0000	0.	
.0740	0.	-0.	0.	0.	-0.	-0.	.0040	.0117	.0001	.0049	.0250	.0021	0.	
.0750	0.	0.	0.	0.	-0.	-0.	-.0004	.0085	.0023	.0038	.0103	.0045	0.	
.0760	0.	0.	0.	0.	0.	-0.	-.0050	.0051	.0045	.0024	-.0059	.0068	0.	
.0770	-0.	0.	-0.	0.	0.	0.	-.0093	.0015	.0063	.0006	-.0205	.0090	0.	
.0780	-0.	0.	-0.	0.	0.	-0.	-.0125	-.0023	.0075	-.0018	-.0326	.0106	0.	
.0790	-0.	0.	-0.	-0.	0.	-0.	-.0143	-.0059	.0078	-.0045	-.0401	.0116	0.	
.0800	-0.	0.	0.	-0.	0.	-0.	-.0143	-.0089	.0069	-.0076	-.0413	.0117	0.	
.0810	-0.	0.	-0.	0.	0.	-0.	-.0127	-.0110	.0048	-.0108	-.0381	.0108	0.	
.0820	-0.	-0.	-0.	-0.	-0.	0.	-.0102	-.0123	.0019	-.0144	-.0335	.0093	0.	
.0830	-0.	0.	-0.	-0.	0.	0.	-.0071	-.0129	-.0017	-.0183	-.0281	.0071	0.	
.0840	-0.	-0.	-0.	-0.	-0.	0.	-.0041	-.0126	-.0057	-.0222	-.0233	.0047	0.	
.0850	-0.	-0.	-0.	-0.	-0.	0.	-.0019	-.0114	-.0098	-.0261	-.0222	.0023	0.	
.0860	-0.	0.	-0.	-0.	-0.	0.	-.0008	-.0095	-.0138	-.0300	-.0246	.0002	0.	
.0870	-0.	-0.	-0.	-0.	0.	0.	-.0005	-.0070	-.0179	-.0336	-.0272	-.0012	0.	
.0880	-0.	-0.	-0.	-0.	0.	0.	-.0008	-.0040	-.0220	-.0369	-.0280	-.0017	0.	
.0890	-0.	-0.	-0.	-0.	-0.	0.	-.0020	-.0006	-.0260	-.0396	-.0271	-.0013	0.	
.0900	-0.	-0.	-0.	-0.	-0.	0.	-.0039	.0031	-.0299	-.0417	-.0246	.0001	0.	
.0910	-0.	-0.	-0.	-0.	-0.	0.	-.0064	.0070	-.0333	-.0430	-.0201	.0024	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.39.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.0810	-0.	0.	-0.	0.	0.	-0.	-.0127	-.0110	.0048	-.0108	-.0381	.0108	0.
.0820	-0.	-0.	-0.	-0.	-0.	0.	-.0102	-.0123	.0019	-.0144	-.0335	.0093	0.
.0830	-0.	0.	-0.	-0.	0.	0.	-.0071	-.0129	-.0017	-.0183	-.0281	.0071	0.
.0840	-0.	-0.	-0.	-0.	-0.	0.	-.0041	-.0126	-.0057	-.0222	-.0233	.0047	0.
.0850	-0.	-0.	-0.	-0.	-0.	0.	-.0019	-.0114	-.0098	-.0261	-.0222	.0023	0.
.0860	-0.	0.	-0.	-0.	-0.	0.	-.0008	-.0095	-.0138	-.0300	-.0246	.0002	0.
.0870	-0.	-0.	-0.	-0.	0.	0.	-.0005	-.0070	-.0179	-.0336	-.0272	-.0012	0.
.0880	-0.	-0.	-0.	-0.	0.	0.	-.0008	-.0040	-.0220	-.0369	-.0280	-.0017	0.
.0890	-0.	-0.	-0.	-0.	-0.	0.	-.0020	-.0006	-.0260	-.0396	-.0271	-.0013	0.
.0900	-0.	-0.	-0.	-0.	-0.	0.	-.0039	.0031	-.0299	-.0417	-.0246	.0001	0.
.0910	-0.	-0.	-0.	-0.	-0.	0.	-.0064	.0070	-.0333	-.0430	-.0201	.0024	0.

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DIS/ADLPIPE ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.39.

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

CONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	STRESS
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	HX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	(PSI)
.0920	-0.	-0.	-0.	-0.	0.	0.	0.
.0930	-0.	0.	-0.	-0.	-0.	0.	0.
.0940	-0.	0.	-0.	-0.	0.	0.	0.
.0950	-0.	-0.	-0.	-0.	0.	0.	0.
.0960	-0.	0.	-0.	0.	0.	0.	0.
.0970	-0.	-0.	-0.	-0.	0.	0.	0.
.0980	-0.	-0.	-0.	-0.	-0.	0.	0.
.0990	-0.	-0.	-0.	-0.	0.	0.	0.
.1000	-0.	-0.	-0.	-0.	0.	0.	0.
.1010	-0.	-0.	-0.	-0.	0.	0.	0.
.1020	-0.	-0.	-0.	-0.	0.	0.	0.
.1030	-0.	-0.	-0.	-0.	0.	0.	0.
.1040	-0.	-0.	-0.	0.	0.	0.	0.
.1050	-0.	-0.	0.	0.	0.	0.	0.
.1060	0.	-0.	0.	0.	0.	-0.	0.
.1070	0.	-0.	0.	0.	-0.	-0.	0.
.1080	0.	-0.	0.	0.	0.	-0.	0.
.1090	0.	-0.	0.	0.	-0.	-0.	0.
.1100	0.	-0.	0.	0.	0.	-0.	0.
.1110	0.	0.	0.	0.	-0.	-0.	0.
.1120	0.	0.	0.	0.	-0.	-0.	0.
.1130	0.	0.	0.	0.	-0.	-0.	0.
.1140	0.	0.	0.	0.	0.	-0.	0.
.1150	0.	-0.	0.	0.	-0.	-0.	0.
.1160	0.	0.	0.	0.	-0.	-0.	0.
.1170	0.	0.	0.	0.	-0.	-0.	0.
.1180	0.	0.	0.	0.	-0.	-0.	0.
.1190	0.	0.	0.	0.	0.	-0.	0.
.1200	0.	0.	0.	0.	-0.	-0.	0.
.1210	0.	0.	0.	0.	-0.	-0.	0.
.1220	0.	-0.	0.	0.	0.	-0.	0.
.1230	0.	0.	0.	0.	0.	-0.	0.
.1240	0.	0.	0.	0.	0.	-0.	0.
.1250	0.	-0.	0.	0.	0.	0.	0.
.1260	0.	0.	0.	0.	0.	-0.	0.
.1270	0.	0.	0.	0.	0.	-0.	0.
.1280	0.	-0.	0.	0.	0.	0.	0.
.1290	0.	-0.	0.	0.	0.	-0.	0.

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DIS/ADLPIPE ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.39.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.1190	0.	0.	0.	0.	0.	-0.	-0.	.0221	-.0022	.0499	.0708	.0065	-.0299	0.
.1200	0.	0.	0.	0.	0.	-0.	-0.	.0156	.0031	.0473	.0704	.0028	-.0251	0.
.1210	0.	-0.	0.	0.	0.	0.	-0.	.0093	.0086	.0444	.0695	-.0019	-.0208	0.
.1220	0.	0.	0.	0.	0.	0.	-0.	.0037	.0144	.0417	.0685	-.0070	-.0171	0.
.1230	0.	0.	0.	0.	0.	0.	-0.	-.0010	.0213	.0390	.0680	-.0116	-.0144	0.
.1240	0.	-0.	0.	0.	0.	0.	0.	-.0044	.0285	.0365	.0680	-.0130	-.0124	0.
.1250	0.	0.	0.	0.	0.	0.	-0.	-.0062	.0344	.0343	.0681	-.0098	-.0110	0.
.1260	0.	0.	0.	0.	0.	0.	-0.	-.0077	.0391	.0330	.0685	-.0079	-.0100	0.
.1270	0.	-0.	0.	0.	0.	0.	0.	-.0084	.0432	.0324	.0696	-.0049	-.0095	0.
.1280	0.	0.	0.	0.	0.	0.	-0.	-.0082	.0462	.0327	.0712	-.0009	-.0095	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.39.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
37	2	560					.1300	0.	-0.	0.	0.	0.	0.	-.0079	.0467	.0344	.0727	-.0001	-.0097	0.
							.1310	0.	-0.	0.	-0.	0.	0.	-.0078	.0449	.0374	.0739	-.0043	-.0100	0.
							.1320	0.	0.	0.	0.	0.	-0.	-.0084	.0416	.0416	.0752	-.0153	-.0106	0.
							.1330	0.	-0.	0.	0.	0.	-0.	-.0086	.0369	.0462	.0763	-.0266	-.0114	0.
							.1340	0.	-0.	0.	-0.	0.	0.	-.0078	.0298	.0507	.0768	-.0351	-.0124	0.
							.1350	0.	-0.	0.	0.	0.	0.	-.0059	.0212	.0548	.0767	-.0400	-.0136	0.
							.1360	0.	-0.	0.	0.	0.	-0.	-.0027	.0124	.0582	.0764	-.0403	-.0154	0.
							.1370	0.	-0.	0.	0.	0.	-0.	.0014	.0036	.0611	.0760	-.0399	-.0179	0.
							.1380	0.	-0.	0.	0.	0.	-0.	.0061	-.0058	.0637	.0749	-.0399	-.0211	0.
							.1390	0.	-0.	0.	-0.	0.	0.	.0110	-.0150	.0662	.0735	-.0432	-.0250	0.
							.1400	0.	-0.	0.	0.	-0.	-0.	.0159	-.0227	.0685	.0721	-.0495	-.0296	0.
							.1410	0.	0.	0.	0.	-0.	-0.	.0214	-.0289	.0701	.0709	-.0546	-.0350	0.
							.1420	0.	-0.	0.	-0.	-0.	-0.	.0269	-.0339	.0712	.0696	-.0500	-.0406	0.
							.1430	0.	-0.	-0.	0.	-0.	-0.	.0326	-.0373	.0715	.0683	-.0538	-.0463	0.
							.1440	0.	0.	0.	0.	-0.	-0.	.0383	-.0384	.0709	.0675	-.0645	-.0518	0.
							.1450	0.	0.	0.	0.	-0.	-0.	.0441	-.0373	.0693	.0671	-.0600	-.0567	0.
							.1460	0.	0.	0.	0.	-0.	-0.	.0495	-.0347	.0667	.0668	-.0504	-.0605	0.
							.1470	0.	-0.	0.	0.	-0.	-0.	.0531	-.0306	.0640	.0668	-.0416	-.0628	0.
							.1480	0.	-0.	0.	-0.	-0.	0.	.0549	-.0247	.0610	.0673	-.0329	-.0634	0.
							.1490	0.	0.	0.	0.	-0.	-0.	.0544	-.0174	.0581	.0682	-.0249	-.0622	0.
							.1500	0.	-0.	0.	0.	-0.	-0.	.0514	-.0097	.0553	.0692	-.0188	-.0589	0.
							.1510	0.	-0.	0.	0.	-0.	-0.	.0465	-.0015	.0526	.0702	-.0127	-.0535	0.
							.1520	0.	-0.	0.	0.	-0.	-0.	.0397	.0074	.0499	.0715	-.0068	-.0465	0.
							.1530	0.	0.	0.	0.	-0.	-0.	.0320	.0163	.0471	.0728	.0012	-.0382	0.
							.1540	0.	0.	0.	0.	0.	-0.	.0235	.0245	.0444	.0737	.0102	-.0290	0.
							.1550	0.	0.	0.	0.	0.	-0.	.0149	.0315	.0417	.0742	.0202	-.0194	0.
							.1560	0.	0.	0.	0.	-0.	-0.	.0073	.0374	.0388	.0742	.0333	-.0100	0.
							.1570	0.	-0.	0.	0.	0.	0.	.0004	.0418	.0362	.0736	.0447	-.0016	0.
							.1580	0.	0.	0.	0.	-0.	-0.	-.0051	.0439	.0338	.0719	.0543	.0055	0.
							.1590	0.	0.	0.	0.	0.	-0.	-.0088	.0440	.0315	.0691	.0622	.0109	0.
							.1600	0.	0.	0.	0.	0.	-0.	-.0108	.0423	.0294	.0655	.0657	.0140	0.
							.1610	0.	-0.	0.	0.	-0.	0.	-.0110	.0389	.0274	.0608	.0655	.0150	0.
							.1620	-0.	0.	-0.	0.	0.	-0.	-.0090	.0336	.0252	.0551	.0652	.0139	0.
							.1630	0.	0.	0.	0.	0.	-0.	-.0055	.0267	.0229	.0485	.0627	.0110	0.
							.1640	0.	-0.	0.	0.	0.	-0.	-.0007	.0190	.0207	.0414	.0585	.0067	0.
							.1650	0.	0.	0.	0.	-0.	-0.	.0050	.0110	.0184	.0341	.0542	.0013	0.
							.1660	0.	0.	0.	0.	-0.	-0.	.0108	.0029	.0161	.0266	.0483	-.0046	0.
							.1670	0.	0.	0.	0.	-0.	-0.	.0166	-.0047	.0138	.0193	.0429	-.0105	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.39.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.1560	0.	0.	0.	0.	-0.	-0.	.0073	.0374	.0388	.0742	.0333	-.0100	0.
.1570	0.	-0.	0.	0.	0.	0.	.0004	.0418	.0362	.0736	.0447	-.0016	0.
.1580	0.	0.	0.	0.	-0.	-0.	-.0051	.0439	.0338	.0719	.0543	.0055	0.
.1590	0.	0.	0.	0.	0.	0.	-.0088	.0440	.0315	.0691	.0622	.0109	0.
.1600	0.	0.	0.	0.	0.	0.	-.0108	.0423	.0294	.0655	.0657	.0140	0.
.1610	0.	-0.	0.	0.	-0.	-0.	-.0110	.0389	.0274	.0608	.0655	.0150	0.
.1620	-0.	0.	-0.	0.	0.	0.	-.0090	.0736	.0252	.0551	.0652	.0139	0.
.1630	0.	0.	0.	0.	0.	0.	-.0055	.0267	.0229	.0485	.0627	.0110	0.
.1640	0.	-0.	0.	0.	0.	0.	-.0007	.0190	.0207	.0414	.0585	.0067	0.
.1650	0.	0.	0.	0.	-0.	-0.	.0050	.0110	.0184	.0341	.0542	.0013	0.
.1660	0.	0.	0.	0.	-0.	-0.	.0108	.0029	.0161	.0266	.0483	-.0046	0.
.1670	0.	0.	0.	0.	-0.	-0.	.0166	-.0047	.0138	.0193	.0429	-.0105	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.39.

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

CONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU								
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)	
.1680	0.	0.	0.	0.	-0.	-0.	.0217	-.0111	.0115	.0124	.0378	-.0159	0.	
.1690	0.	0.	0.	0.	-0.	-0.	.0258	-.0160	.0088	.0060	.0344	-.0204	0.	
.1700	0.	0.	0.	0.	-0.	-0.	.0286	-.0193	.0060	.0002	.0322	-.0236	0.	
.1710	0.	-0.	0.	-0.	-0.	0.	.0295	-.0209	.0029	-.0052	.0294	-.0253	0.	
.1720	0.	0.	0.	0.	-0.	-0.	.0291	-.0202	-.0009	-.0100	.0296	-.0256	0.	
.1730	0.	-0.	0.	-0.	-0.	0.	.0271	-.0174	-.0053	-.0144	.0303	-.0245	0.	
.1740	0.	0.	-0.	0.	-0.	-0.	.0237	-.0128	-.0102	-.0185	.0312	-.0222	0.	
.1750	-0.	0.	-0.	0.	-0.	-0.	.0193	-.0068	-.0156	-.0223	.0327	-.0189	0.	
.1760	-0.	0.	-0.	-0.	-0.	-0.	.0138	.0005	-.0211	-.0260	.0317	-.0149	0.	
.1770	-0.	-0.	-0.	-0.	-0.	0.	.0078	.0087	-.0268	-.0295	.0289	-.0106	0.	
.1780	-0.	-0.	-0.	-0.	-0.	0.	.0012	.0172	-.0322	-.0329	.0225	-.0063	0.	
.1790	-0.	0.	-0.	0.	-0.	-0.	-.0053	.0256	-.0373	-.0362	.0137	-.0023	0.	
.1800	-0.	-0.	-0.	-0.	0.	0.	-.0114	.0337	-.0419	-.0393	.0029	.0013	0.	
.1810	-0.	0.	-0.	0.	-0.	-0.	-.0171	.0410	-.0460	-.0423	-.0107	.0043	0.	
.1820	-0.	-0.	-0.	-0.	-0.	0.	-.0214	.0472	-.0497	-.0451	-.0222	.0068	0.	
.1830	-0.	-0.	-0.	-0.	-0.	0.	-.0245	.0520	-.0529	-.0477	-.0318	.0088	0.	
.1840	-0.	0.	-0.	0.	0.	0.	-.0267	.0552	-.0554	-.0500	-.0402	.0104	0.	
.1850	-0.	-0.	-0.	-0.	-0.	0.	-.0282	.0569	-.0570	-.0519	-.0474	.0118	0.	
.1860	-0.	-0.	-0.	-0.	-0.	0.	-.0292	.0568	-.0578	-.0536	-.0542	.0132	0.	
.1870	-0.	-0.	-0.	-0.	0.	0.	-.0298	.0550	-.0577	-.0550	-.0589	.0146	0.	
.1880	-0.	-0.	-0.	-0.	0.	0.	-.0303	.0516	-.0569	-.0562	-.0532	.0163	0.	
.1890	-0.	0.	-0.	-0.	0.	0.	-.0307	.0469	-.0556	-.0572	-.0559	.0181	0.	
.1900	-0.	-0.	-0.	-0.	0.	0.	-.0307	.0411	-.0542	-.0582	-.0652	.0202	0.	
.1910	-0.	-0.	-0.	-0.	0.	0.	-.0306	.0344	-.0528	-.0591	-.0625	.0224	0.	
.1920	-0.	-0.	-0.	-0.	0.	0.	-.0301	.0273	-.0515	-.0601	-.0572	.0244	0.	
.1930	-0.	-0.	-0.	-0.	-0.	0.	-.0292	.0202	-.0504	-.0610	-.0502	.0261	0.	
.1940	-0.	-0.	-0.	-0.	-0.	0.	-.0279	.0132	-.0496	-.0620	-.0425	.0273	0.	
.1950	-0.	-0.	-0.	-0.	0.	0.	-.0260	.0066	-.0489	-.0629	-.0339	.0277	0.	
.1960	-0.	-0.	-0.	-0.	0.	0.	-.0232	.0008	-.0483	-.0636	-.0244	.0272	0.	
.1970	-0.	0.	-0.	-0.	0.	0.	-.0195	-.0039	-.0480	-.0640	-.0137	.0256	0.	
.1980	-0.	0.	-0.	-0.	-0.	0.	-.0148	-.0075	-.0477	-.0640	-.0015	.0231	0.	
.1990	-0.	-0.	-0.	-0.	-0.	0.	-.0094	-.0097	-.0476	-.0635	.0121	.0198	0.	
.2000	-0.	-0.	-0.	-0.	-0.	0.	-.0036	-.0106	-.0474	-.0625	.0260	.0158	0.	
.2010	-0.	0.	-0.	-0.	-0.	0.	.0021	-.0100	-.0472	-.0609	.0394	.0114	0.	
.2020	-0.	0.	-0.	-0.	-0.	0.	.0075	-.0083	-.0467	-.0587	.0521	.0071	0.	
.2030	-0.	0.	-0.	-0.	-0.	-0.	.0123	-.0054	-.0461	-.0560	.0637	.0030	0.	
.2040	-0.	-0.	-0.	-0.	-0.	0.	.0159	-.0015	-.0452	-.0528	.0728	-.0005	0.	
.2050	-0.	-0.	-0.	-0.	-0.	0.	.0180	.0030	-.0438	-.0492	.0784	-.0031	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.40.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.1950	-0.	-0.	-0.	-0.	0.	0.	-0.232	.0008	-.0483	-.0636	-.0244	.0272	0.
.1960	-0.	-0.	-0.	-0.	0.	0.	-0.195	-.0039	-.0480	-.0640	-.0137	.0256	0.
.1970	-0.	-0.	-0.	-0.	0.	0.	-0.148	-.0075	-.0477	-.0640	-.0015	.0231	0.
.1980	-0.	-0.	-0.	-0.	-0.	0.	-.0094	-.0097	-.0476	-.0635	.0121	.0198	0.
.1990	-0.	-0.	-0.	-0.	-0.	0.	-.0076	-.0106	-.0474	-.0625	.0260	.0158	0.
.2000	-0.	-0.	-0.	-0.	-0.	0.	.0021	-.0100	-.0472	-.0609	.0394	.0114	0.
.2010	-0.	-0.	-0.	-0.	-0.	0.	.0075	-.0083	-.0467	-.0587	.0521	.0071	0.
.2020	-0.	-0.	-0.	-0.	-0.	0.	.0123	-.0054	-.0461	-.0560	.0637	.0030	0.
.2030	-0.	-0.	-0.	-0.	-0.	0.	.0159	-.0015	-.0452	-.0528	.0728	-.0005	0.
.2040	-0.	-0.	-0.	-0.	-0.	0.	.0130	.0030	-.0438	-.0492	.0784	-.0031	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.40.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	37	MEMBER	2	SEQUENCE	560	LOCATION	END	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.2060	-0.	0.	-0.	-0.	-0.	-0.		.0185	.0079	-.0419	-.0452	.0804	-.0047	0.
.2070	-0.	-0.	0.	-0.	0.	0.		.0174	.0129	-.0394	-.0409	.0792	-.0051	0.
.2080	-0.	0.	-0.	-0.	0.	-0.		.0147	.0178	-.0365	-.0362	.0753	-.0043	0.
.2090	-0.	0.	-0.	0.	-0.	-0.		.0111	.0224	-.0333	-.0312	.0705	-.0024	0.
.2100	-0.	-0.	-0.	0.	0.	0.		.0069	.0264	-.0297	-.0260	.0665	.0004	0.
.2110	-0.	0.	-0.	-0.	-0.	-0.		.0026	.0297	-.0260	-.0204	.0535	.0039	0.
.2120	-0.	0.	-0.	0.	0.	-0.		-.0018	.0322	-.0219	-.0145	.0510	.0079	0.
.2130	-0.	0.	-0.	-0.	-0.	-0.		-.0060	.0336	-.0172	-.0082	.0582	.0119	0.
.2140	-0.	-0.	-0.	-0.	0.	0.		-.0099	.0341	-.0120	-.0017	.0547	.0158	0.
.2150	-0.	-0.	-0.	-0.	0.	0.		-.0132	.0336	-.0063	.0052	.0504	.0192	0.
.2160	-0.	0.	0.	0.	0.	-0.		-.0157	.0322	.0000	.0123	.0453	.0219	0.
.2170	-0.	-0.	0.	-0.	0.	0.		-.0173	.0298	.0067	.0194	.0400	.0237	0.
.2180	0.	-0.	0.	-0.	0.	0.		-.0177	.0266	.0135	.0265	.0350	.0246	0.
.2190	-0.	0.	0.	0.	0.	0.		-.0170	.0227	.0203	.0334	.0306	.0244	0.
.2200	-0.	-0.	-0.	-0.	0.	0.		-.0153	.0183	.0269	.0399	.0269	.0233	0.
.2210	0.	0.	0.	0.	0.	-0.		-.0127	.0137	.0330	.0459	.0236	.0212	0.
.2220	0.	-0.	0.	0.	0.	0.		-.0096	.0090	.0385	.0511	.0202	.0183	0.
.2230	-0.	-0.	-0.	-0.	0.	0.		-.0061	.0044	.0432	.0554	.0162	.0147	0.
.2240	0.	-0.	0.	0.	0.	0.		-.0025	.0002	.0470	.0587	.0111	.0105	0.
.2250	0.	0.	0.	0.	0.	-0.		.0010	-.0035	.0497	.0610	.0049	.0059	0.
.2260	0.	-0.	0.	0.	-0.	-0.		.0042	-.0065	.0513	.0620	-.0022	.0011	0.
.2270	0.	0.	0.	0.	0.	-0.		.0071	-.0087	.0518	.0620	-.0098	-.0037	0.
.2280	0.	-0.	0.	-0.	0.	0.		.0096	-.0100	.0512	.0610	-.0177	-.0085	0.
.2290	0.	-0.	0.	-0.	-0.	0.		.0116	-.0104	.0495	.0591	-.0257	-.0130	0.
.2300	0.	-0.	0.	0.	-0.	-0.		.0132	-.0101	.0470	.0566	-.0328	-.0172	0.
.2310	0.	0.	0.	0.	-0.	-0.		.0144	-.0090	.0439	.0536	-.0388	-.0208	0.
.2320	0.	-0.	0.	0.	0.	-0.		.0151	-.0072	.0403	.0505	-.0437	-.0238	0.
.2330	0.	-0.	0.	0.	-0.	-0.		.0152	-.0049	.0367	.0475	-.0480	-.0262	0.
.2340	0.	-0.	0.	0.	-0.	-0.		.0148	-.0023	.0334	.0448	-.0519	-.0278	0.
.2350	0.	-0.	0.	-0.	-0.	0.		.0136	.0006	.0305	.0426	-.0558	-.0285	0.
.2360	0.	-0.	0.	0.	-0.	-0.		.0116	.0036	.0283	.0412	-.0598	-.0284	0.
.2370	0.	-0.	0.	0.	-0.	-0.		.0091	.0065	.0269	.0406	-.0632	-.0275	0.
.2380	0.	-0.	0.	0.	-0.	-0.		.0062	.0092	.0263	.0409	-.0652	-.0258	0.
.2390	0.	0.	0.	0.	-0.	-0.		.0031	.0116	.0264	.0421	-.0654	-.0234	0.
.2400	0.	0.	0.	0.	0.	-0.		-.0000	.0137	.0274	.0441	-.0637	-.0206	0.
.2410	0.	-0.	0.	0.	-0.	-0.		-.0030	.0154	.0290	.0470	-.0603	-.0174	0.
.2420	0.	-0.	0.	0.	0.	0.		-.0057	.0165	.0311	.0504	-.0555	-.0140	0.
.2430	0.	0.	0.	0.	-0.	-0.		-.0080	.0170	.0337	.0542	-.0495	-.0107	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.40.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

.2330	0.	-0.	0.	0.	-0.	-0.	.0152	-.0049	.0367	.0475	-.0480	-.0262	0.
.2340	0.	-0.	0.	0.	-0.	-0.	.0148	-.0023	.0334	.0448	-.0519	-.0278	0.
.2350	0.	-0.	0.	-0.	-0.	0.	.0136	.0006	.0305	.0426	-.0558	-.0285	0.
.2360	0.	-0.	0.	0.	-0.	-0.	.0116	.0036	.0283	.0412	-.0598	-.0284	0.
.2370	0.	-0.	0.	0.	-0.	-0.	.0091	.0065	.0269	.0406	-.0632	-.0275	0.
.2380	0.	-0.	0.	0.	-0.	-0.	.0062	.0092	.0263	.0409	-.0652	-.0258	0.
.2390	0.	0.	0.	0.	-0.	-0.	.0031	.0116	.0264	.0421	-.0654	-.0234	0.
.2400	0.	0.	0.	0.	0.	-0.	-.0000	.0137	.0274	.0441	-.0637	-.0206	0.
.2410	0.	-0.	0.	0.	-0.	-0.	-.0030	.0154	.0290	.0470	-.0603	-.0174	0.
.2420	0.	-0.	0.	0.	0.	0.	-.0057	.0165	.0311	.0504	-.0555	-.0140	0.
.2430	0.	0.	0.	0.	-0.	-0.	-.0080	.0170	.0337	.0542	-.0495	-.0107	0.

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ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.40.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	37	MEMBER	2	SEQUENCE	560	LOCATION	END	TYPE	RU								
TIME	FX	FY	FZ	HX	MY	MZ				DZ	RX	RY	RZ	STRESS			
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)			(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)			
.2440	0.	0.	-0.	0.	-0.	-0.			-.0096	.0169	.0365	.0582	-.0424	-.0077	0.		
.2450	0.	0.	0.	0.	0.	-0.			-.0105	.0163	.0394	.0622	-.0343	-.0051	0.		
.2460	0.	0.	0.	0.	0.	-0.			-.0105	.0151	.0422	.0661	-.0256	-.0032	0.		
.2470	0.	-0.	-0.	0.	-0.	0.			-.0096	.0133	.0447	.0695	-.0168	-.0020	0.		
.2480	0.	-0.	0.	0.	0.	0.			-.0079	.0109	.0471	.0725	-.0080	-.0015	0.		
.2490	0.	0.	0.	0.	0.	-0.			-.0053	.0080	.0491	.0749	.0005	-.0018	0.		
.2500	0.	0.	0.	0.	0.	-0.			-.0022	.0045	.0510	.0768	.0082	-.0028	0.		
.2510	0.	0.	0.	0.	0.	-0.			.0014	.0013	.0527	.0781	.0145	-.0045	0.		
.2520	0.	-0.	0.	0.	0.	-0.			.0052	-.0023	.0543	.0790	.0194	-.0066	0.		
.2530	0.	0.	0.	0.	0.	-0.			.0091	-.0059	.0558	.0794	.0226	-.0091	0.		
.2540	0.	0.	0.	0.	0.	-0.			.0127	-.0094	.0573	.0793	.0241	-.0117	0.		
.2550	0.	0.	0.	0.	0.	-0.			.0159	-.0126	.0587	.0789	.0239	-.0143	0.		
.2560	0.	0.	0.	0.	-0.	-0.			.0186	-.0155	.0599	.0781	.0223	-.0168	0.		
.2570	0.	0.	0.	0.	-0.	-0.			.0208	-.0180	.0608	.0767	.0194	-.0190	0.		
.2580	0.	0.	0.	0.	-0.	-0.			.0223	-.0202	.0614	.0747	.0156	-.0208	0.		
.2590	0.	0.	0.	0.	-0.	-0.			.0232	-.0220	.0613	.0719	.0113	-.0221	0.		
.2600	0.	0.	0.	0.	0.	-0.			.0235	-.0235	.0605	.0684	.0066	-.0229	0.		
.2610	0.	0.	0.	0.	0.	-0.			.0232	-.0245	.0589	.0639	.0013	-.0233	0.		
.2620	0.	0.	0.	0.	0.	-0.			.0224	-.0254	.0564	.0585	-.0042	-.0231	0.		
.2630	0.	0.	0.	0.	0.	-0.			.0212	-.0260	.0528	.0519	-.0098	-.0225	0.		
.2640	0.	0.	0.	0.	0.	-0.			.0196	-.0265	.0482	.0444	-.0151	-.0215	0.		
.2650	0.	0.	0.	0.	0.	-0.			.0178	-.0267	.0425	.0359	-.0200	-.0201	0.		
.2660	0.	0.	0.	0.	-0.	-0.			.0158	-.0268	.0358	.0267	-.0242	-.0184	0.		
.2670	0.	0.	0.	0.	-0.	-0.			.0138	-.0268	.0283	.0169	-.0277	-.0164	0.		
.2680	0.	0.	0.	0.	0.	-0.			.0116	-.0267	.0202	.0067	-.0302	-.0142	0.		
.2690	0.	0.	0.	-0.	0.	-0.			.0095	-.0263	.0117	-.0035	-.0317	-.0118	0.		
.2700	0.	-0.	0.	-0.	-0.	0.			.0073	-.0256	.0033	-.0133	-.0324	-.0092	0.		
.2710	0.	0.	-0.	-0.	-0.	-0.			.0051	-.0247	-.0050	-.0226	-.0323	-.0065	0.		
.2720	-0.	-0.	-0.	-0.	-0.	0.			.0029	-.0240	-.0126	-.0311	-.0313	-.0036	0.		
.2730	-0.	0.	-0.	-0.	-0.	-0.			.0007	-.0233	-.0195	-.0387	-.0296	-.0005	0.		
.2740	-0.	0.	-0.	-0.	-0.	-0.			-.0015	-.0224	-.0254	-.0450	-.0275	.0025	0.		
.2750	-0.	0.	-0.	-0.	-0.	-0.			-.0038	-.0213	-.0301	-.0499	-.0253	.0055	0.		
.2760	-0.	0.	-0.	-0.	-0.	-0.			-.0060	-.0205	-.0336	-.0536	-.0231	.0084	0.		
.2770	-0.	0.	-0.	-0.	-0.	-0.			-.0081	-.0199	-.0359	-.0562	-.0209	.0112	0.		
.2780	-0.	-0.	-0.	-0.	-0.	0.			-.0100	-.0194	-.0372	-.0576	-.0193	.0137	0.		
.2790	-0.	0.	-0.	-0.	0.	-0.			-.0118	-.0188	-.0374	-.0580	-.0186	.0156	0.		
.2800	-0.	-0.	-0.	-0.	-0.	0.			-.0134	-.0183	-.0368	-.0577	-.0193	.0171	0.		
.2810	-0.	0.	-0.	-0.	0.	0.			-.0147	-.0180	-.0355	-.0570	-.0216	.0179	0.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.40.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

.2710	0.	0.	-0.	-0.	-0.	-0.	-0.	.0051	-.0247	-.0050	-.0226	-.0323	-.0065	0.
.2720	-0.	-0.	-0.	-0.	-0.	-0.	0.	.0029	-.0240	-.0126	-.0311	-.0313	-.0036	0.
.2730	-0.	0.	-0.	-0.	-0.	-0.	-0.	.0007	-.0233	-.0195	-.0327	-.0296	-.0005	0.
.2740	-0.	0.	-0.	-0.	-0.	-0.	-0.	-.0015	-.0224	-.0254	-.0450	-.0275	.0025	0.
.2750	-0.	0.	-0.	-0.	-0.	-0.	-0.	-.0036	-.0213	-.0301	-.0499	-.0253	.0055	0.
.2760	-0.	0.	-0.	-0.	-0.	-0.	-0.	-.0060	-.0205	-.0336	-.0536	-.0231	.0084	0.
.2770	-0.	0.	-0.	-0.	-0.	-0.	-0.	-.0081	-.0199	-.0359	-.0562	-.0209	.0112	0.
.2780	-0.	-0.	-0.	-0.	-0.	-0.	0.	-.0100	-.0194	-.0372	-.0576	-.0193	.0137	0.
.2790	-0.	0.	-0.	0.	0.	-0.	-0.	-.0118	-.0188	-.0374	-.0580	-.0186	.0156	0.
.2800	-0.	-0.	-0.	-0.	-0.	-0.	0.	-.0134	-.0183	-.0368	-.0577	-.0193	.0171	0.
.2810	-0.	0.	-0.	-0.	0.	0.	0.	-.0147	-.0180	-.0355	-.0570	-.0216	.0179	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.40.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU								STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	(PSI)	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
.2820	-0.	-0.	-0.	-0.	-0.	0.	-.0156	-.0179	-.0336	-.0559	-.0255	.0180	0.	
.2830	-0.	0.	-0.	-0.	-0.	-0.	-.0160	-.0176	-.0316	-.0546	-.0305	.0172	0.	
.2840	-0.	0.	-0.	-0.	0.	0.	-.0158	-.0171	-.0294	-.0532	-.0362	.0155	0.	
.2850	-0.	-0.	-0.	-0.	0.	0.	-.0150	-.0166	-.0273	-.0518	-.0426	.0130	0.	
.2860	-0.	0.	-0.	0.	0.	-0.	-.0138	-.0161	-.0254	-.0507	-.0495	.0098	0.	
.2870	-0.	-0.	-0.	-0.	0.	0.	-.0121	-.0153	-.0236	-.0497	-.0568	.0059	0.	
.2880	-0.	-0.	-0.	-0.	0.	0.	-.0100	-.0143	-.0220	-.0487	-.0645	.0015	0.	
.2890	-0.	-0.	-0.	-0.	0.	0.	-.0077	-.0130	-.0206	-.0478	-.0725	-.0034	0.	
.2900	-0.	-0.	-0.	-0.	-0.	0.	-.0054	-.0115	-.0194	-.0470	-.0804	-.0085	0.	
.2910	-0.	0.	-0.	-0.	-0.	-0.	-.0030	-.0099	-.0183	-.0462	-.0883	-.0136	0.	
.2920	-0.	0.	-0.	-0.	0.	0.	-.0006	-.0081	-.0173	-.0453	-.0957	-.0186	0.	
.2930	-0.	-0.	-0.	-0.	0.	0.	.0016	-.0062	-.0165	-.0443	-.1020	-.0234	0.	
.2940	0.	0.	0.	-0.	0.	-0.	.0037	-.0042	-.0158	-.0433	-.1070	-.0277	0.	
.2950	-0.	-0.	-0.	-0.	0.	0.	.0056	-.0021	-.0153	-.0421	-.1100	-.0314	0.	
.2960	-0.	-0.	-0.	-0.	-0.	0.	.0074	-.0001	-.0151	-.0410	-.1107	-.0343	0.	
.2970	0.	0.	0.	-0.	-0.	-0.	.0091	.0017	-.0153	-.0401	-.1086	-.0364	0.	
.2980	-0.	-0.	-0.	-0.	-0.	0.	.0105	.0033	-.0161	-.0393	-.1037	-.0376	0.	
.2990	0.	-0.	0.	-0.	-0.	0.	.0116	.0048	-.0173	-.0387	-.0964	-.0379	0.	
.3000	-0.	0.	-0.	0.	-0.	-0.	.0124	.0060	-.0190	-.0385	-.0873	-.0371	0.	
.3010	-0.	-0.	-0.	-0.	-0.	-0.	.0127	.0067	-.0211	-.0387	-.0769	-.0354	0.	
.3020	-0.	-0.	-0.	-0.	-0.	0.	.0124	.0070	-.0236	-.0394	-.0661	-.0327	0.	
.3030	-0.	0.	-0.	0.	-0.	-0.	.0114	.0069	-.0264	-.0405	-.0552	-.0293	0.	
.3040	-0.	0.	-0.	0.	-0.	-0.	.0100	.0065	-.0294	-.0420	-.0445	-.0251	0.	
.3050	-0.	0.	-0.	0.	-0.	-0.	.0081	.0057	-.0324	-.0439	-.0341	-.0203	0.	
.3060	-0.	0.	-0.	0.	-0.	-0.	.0058	.0043	-.0355	-.0461	-.0243	-.0151	0.	
.3070	-0.	0.	-0.	0.	-0.	-0.	.0032	.0026	-.0384	-.0484	-.0154	-.0097	0.	
.3080	-0.	0.	-0.	-0.	-0.	0.	.0005	.0007	-.0409	-.0507	-.0079	-.0044	0.	
.3090	-0.	-0.	-0.	-0.	-0.	0.	-.0023	-.0014	-.0430	-.0529	-.0019	.0006	0.	
.3100	-0.	0.	-0.	0.	-0.	-0.	-.0049	-.0036	-.0446	-.0550	.0023	.0052	0.	
.3110	-0.	0.	-0.	0.	-0.	-0.	-.0073	-.0060	-.0455	-.0567	.0044	.0091	0.	
.3120	-0.	0.	-0.	-0.	-0.	0.	-.0094	-.0082	-.0458	-.0581	.0047	.0123	0.	
.3130	-0.	0.	-0.	-0.	-0.	0.	-.0109	-.0102	-.0456	-.0591	.0035	.0144	0.	
.3140	-0.	0.	-0.	-0.	-0.	0.	-.0120	-.0120	-.0448	-.0597	.0009	.0156	0.	
.3150	-0.	0.	-0.	-0.	-0.	0.	-.0125	-.0133	-.0437	-.0599	-.0027	.0159	0.	
.3160	-0.	0.	-0.	-0.	-0.	0.	-.0123	-.0143	-.0423	-.0596	-.0069	.0151	0.	
.3170	-0.	0.	-0.	-0.	-0.	0.	-.0116	-.0148	-.0407	-.0591	-.0114	.0136	0.	
.3180	-0.	-0.	-0.	-0.	-0.	0.	-.0104	-.0149	-.0389	-.0581	-.0159	.0112	0.	
.3190	-0.	0.	-0.	-0.	-0.	0.	-.0088	-.0144	-.0372	-.0569	-.0204	.0083	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.40.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

.3090	-0.	-0.	-0.	-0.	-0.	0.	-.0023	-.0014	-.0430	-.0529	-.0019	.0006	0.
.3100	-0.	0.	-0.	0.	-0.	-0.	-.0049	-.0036	-.0446	-.0550	.0023	.0052	0.
.3110	-0.	0.	-0.	0.	-0.	-0.	-.0073	-.0060	-.0455	-.0567	.0044	.0091	0.
.3120	-0.	0.	-0.	-0.	-0.	0.	-.0094	-.0087	-.0458	-.0581	.0047	.0123	0.
.3130	-0.	0.	-0.	-0.	-0.	0.	-.0109	-.0102	-.0456	-.0591	.0035	.0144	0.
.3140	-0.	0.	-0.	-0.	-0.	0.	-.0120	-.0120	-.0448	-.0597	.0009	.0156	0.
.3150	-0.	0.	-0.	-0.	-0.	0.	-.0135	-.0133	-.0437	-.0599	-.0027	.0159	0.
.3160	-0.	0.	-0.	-0.	-0.	0.	-.0123	-.0143	-.0423	-.0596	-.0069	.0151	0.
.3170	-0.	0.	-0.	-0.	-0.	0.	-.0116	-.0148	-.0407	-.0591	-.0114	.0136	0.
.3180	-0.	-0.	-0.	-0.	-0.	0.	-.0104	-.0149	-.0389	-.0581	-.0159	.0112	0.
.3190	-0.	0.	-0.	-0.	-0.	0.	-.0088	-.0144	-.0372	-.0569	-.0204	.0083	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.40.

S/RV PIPING KEWAUNEE GKM0FF 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	37	MEMBER	2	SEQUENCE	560	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3200	-0.	-0.	-0.	-0.	-0.	-0.	-.0070	-.0136	-.0353	-.0553	-.0247	.0051	0.		
.3210	-0.	0.	-0.	-0.	-0.	-0.	-.0050	-.0125	-.0335	-.0536	-.0287	.0016	0.		
.3220	-0.	-0.	-0.	-0.	-0.	0.	-.0029	-.0112	-.0316	-.0515	-.0321	-.0019	0.		
.3230	-0.	0.	-0.	-0.	-0.	0.	-.0009	-.0097	-.0297	-.0492	-.0347	-.0052	0.		
.3240	-0.	-0.	-0.	-0.	-0.	0.	.0011	-.0083	-.0278	-.0467	-.0361	-.0082	0.		
.3250	-0.	0.	-0.	-0.	-0.	-0.	.0030	-.0070	-.0258	-.0439	-.0362	-.0108	0.		
.3260	-0.	0.	-0.	-0.	-0.	-0.	.0047	-.0060	-.0237	-.0410	-.0352	-.0129	0.		
.3270	-0.	-0.	-0.	-0.	-0.	0.	.0062	-.0054	-.0213	-.0379	-.0334	-.0143	0.		
.3280	-0.	-0.	-0.	-0.	-0.	0.	.0074	-.0053	-.0187	-.0347	-.0310	-.0152	0.		
.3290	-0.	-0.	-0.	-0.	-0.	-0.	.0084	-.0057	-.0159	-.0315	-.0284	-.0154	0.		
.3300	0.	-0.	-0.	-0.	-0.	0.	.0091	-.0068	-.0130	-.0285	-.0257	-.0150	0.		
.3310	0.	-0.	-0.	-0.	-0.	0.	.0096	-.0086	-.0100	-.0257	-.0229	-.0140	0.		
.3320	0.	-0.	-0.	-0.	-0.	0.	.0099	-.0110	-.0071	-.0233	-.0199	-.0124	0.		
.3330	0.	-0.	0.	-0.	-0.	-0.	.0101	-.0139	-.0045	-.0213	-.0166	-.0103	0.		
.3340	0.	-0.	0.	-0.	-0.	0.	.0100	-.0173	-.0023	-.0199	-.0130	-.0077	0.		
.3350	0.	-0.	-0.	-0.	-0.	0.	.0098	-.0210	-.0006	-.0192	-.0091	-.0045	0.		
.3360	0.	0.	0.	-0.	-0.	-0.	.0092	-.0250	.0005	-.0192	-.0052	-.0009	0.		
.3370	0.	0.	-0.	-0.	-0.	-0.	.0083	-.0289	.0010	-.0198	-.0011	.0032	0.		
.3380	0.	-0.	-0.	-0.	-0.	0.	.0070	-.0327	.0008	-.0210	.0033	.0077	0.		
.3390	0.	-0.	0.	-0.	-0.	0.	.0052	-.0362	.0001	-.0227	.0080	.0127	0.		
.3400	0.	-0.	-0.	-0.	-0.	0.	.0031	-.0392	-.0013	-.0248	.0133	.0181	0.		
.3410	-0.	0.	-0.	-0.	-0.	-0.	.0005	-.0418	-.0032	-.0271	.0193	.0237	0.		
.3420	-0.	-0.	-0.	-0.	-0.	0.	-.0023	-.0436	-.0055	-.0296	.0260	.0296	0.		
.3430	-0.	-0.	-0.	-0.	0.	0.	-.0055	-.0448	-.0081	-.0319	.0333	.0355	0.		
.3440	-0.	0.	-0.	-0.	0.	0.	-.0089	-.0453	-.0108	-.0340	.0410	.0414	0.		
.3450	-0.	-0.	-0.	-0.	-0.	0.	-.0123	-.0451	-.0136	-.0359	.0491	.0471	0.		
.3460	-0.	0.	-0.	-0.	-0.	-0.	-.0157	-.0443	-.0161	-.0373	.0573	.0524	0.		
.3470	-0.	0.	-0.	-0.	-0.	0.	-.0189	-.0430	-.0184	-.0383	.0653	.0572	0.		
.3480	-0.	0.	-0.	-0.	0.	-0.	-.0218	-.0413	-.0204	-.0387	.0730	.0612	0.		
.3490	-0.	0.	-0.	0.	-0.	-0.	-.0242	-.0392	-.0220	-.0388	.0801	.0644	0.		
.3500	-0.	0.	-0.	-0.	0.	-0.	-.0261	-.0369	-.0233	-.0384	.0865	.0667	0.		
.3510	-0.	0.	-0.	-0.	0.	0.	-.0273	-.0345	-.0241	-.0377	.0918	.0680	0.		
.3520	-0.	0.	-0.	0.	-0.	-0.	-.0280	-.0321	-.0246	-.0368	.0954	.0683	0.		
.3530	-0.	-0.	-0.	-0.	0.	0.	-.0280	-.0298	-.0248	-.0356	.0986	.0677	0.		
.3540	-0.	0.	-0.	-0.	0.	0.	-.0276	-.0276	-.0247	-.0344	.0996	.0662	0.		
.3550	-0.	-0.	-0.	-0.	0.	0.	-.0267	-.0256	-.0243	-.0331	.0989	.0639	0.		
.3560	-0.	0.	-0.	0.	0.	-0.	-.0256	-.0238	-.0237	-.0318	.0962	.0610	0.		
.3570	-0.	0.	-0.	0.	0.	-0.	-.0243	-.0223	-.0228	-.0305	.0918	.0578	0.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.40.

S/RV PIPING KEWAUNEE GKM0FF 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.3470	-0.	0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.189	-0.0430	-0.0184	-0.0383	.0653	.0572	0.
.3480	-0.	0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.0218	-0.0413	-0.0204	-0.0387	.0730	.0612	0.
.3490	-0.	0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.0242	-0.0392	-0.0220	-0.0388	.0801	.0644	0.
.3500	-0.	0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.0261	-0.0369	-0.0233	-0.0384	.0865	.0667	0.
.3510	-0.	0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.0273	-0.0345	-0.0241	-0.0377	.0918	.0680	0.
.3520	-0.	0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.0280	-0.0321	-0.0246	-0.0368	.0959	.0683	0.
.3530	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.0280	-0.0298	-0.0248	-0.0356	.0986	.0677	0.
.3540	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.0276	-0.0276	-0.0247	-0.0344	.0996	.0662	0.
.3550	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.0267	-0.0256	-0.0243	-0.0331	.0989	.0639	0.
.3560	-0.	0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.0256	-0.0238	-0.0237	-0.0318	.0962	.0610	0.
.3570	-0.	0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.0243	-0.0223	-0.0228	-0.0305	.0918	.0578	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.40.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	37	MEMBER	2	SEQUENCE	560	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.3580	-0.	0.	-0.	0.	0.	-0.		-0.0231	-0.0209	-0.0218	-0.0291	.0858	.0543	0.	
.3590	-0.	-0.	-0.	-0.	0.	0.		-0.0219	-0.0196	-0.0204	-0.0277	.0784	.0507	0.	
.3600	-0.	0.	-0.	-0.	0.	-0.		-0.0210	-0.0186	-0.0189	-0.0262	.0699	.0474	0.	
.3610	-0.	0.	-0.	-0.	0.	0.		-0.0205	-0.0176	-0.0171	-0.0245	.0604	.0444	0.	
.3620	-0.	-0.	-0.	-0.	0.	0.		-0.0204	-0.0167	-0.0151	-0.0226	.0501	.0418	0.	
.3630	-0.	0.	-0.	-0.	0.	0.		-0.0208	-0.0158	-0.0128	-0.0205	.0394	.0398	0.	
.3640	-0.	-0.	-0.	-0.	0.	0.		-0.0218	-0.0148	-0.0103	-0.0181	.0282	.0384	0.	
.3650	-0.	-0.	-0.	-0.	0.	0.		-0.0234	-0.0136	-0.0075	-0.0153	.0168	.0376	0.	
.3660	-0.	-0.	-0.	-0.	0.	0.		-0.0254	-0.0123	-0.0047	-0.0124	.0055	.0374	0.	
.3670	-0.	-0.	-0.	-0.	0.	0.		-0.0278	-0.0108	-0.0018	-0.0093	-.0052	.0376	0.	
.3680	-0.	0.	-0.	-0.	0.	0.		-0.0304	-0.0090	.0009	-0.0061	-.0150	.0383	0.	
.3690	-0.	-0.	-0.	-0.	0.	0.		-0.0330	-0.0070	.0034	-0.0029	-0.0238	.0393	0.	
.3700	-0.	-0.	-0.	-0.	0.	0.		-0.0356	-0.0047	.0054	.0001	-0.0311	.0404	0.	
.3710	-0.	-0.	-0.	-0.	0.	0.		-0.0380	-0.0024	.0069	.0026	-0.0369	.0415	0.	
.3720	-0.	-0.	0.	-0.	0.	0.		-0.0400	.0001	.0077	.0047	-0.0410	.0426	0.	
.3730	-0.	-0.	-0.	-0.	0.	0.		-0.0415	.0026	.0078	.0061	-0.0433	.0434	0.	
.3740	-0.	-0.	-0.	-0.	0.	0.		-0.0425	.0050	.0070	.0068	-0.0440	.0438	0.	
.3750	-0.	-0.	-0.	-0.	0.	0.		-0.0429	.0072	.0053	.0066	-0.0433	.0439	0.	
.3760	-0.	-0.	-0.	-0.	0.	0.		-0.0427	.0090	.0029	.0054	-0.0414	.0436	0.	
.3770	-0.	-0.	-0.	-0.	0.	0.		-0.0419	.0104	-0.0002	.0034	-0.0388	.0428	0.	
.3780	-0.	-0.	-0.	-0.	0.	0.		-0.0406	.0112	-0.0038	.0006	-0.0354	.0416	0.	
.3790	-0.	-0.	-0.	-0.	0.	0.		-0.0388	.0116	-0.0079	-0.0029	-0.0315	.0400	0.	
.3800	-0.	-0.	-0.	-0.	0.	0.		-0.0365	.0113	-0.0122	-0.0069	-0.0271	.0381	0.	
.3810	-0.	-0.	-0.	-0.	0.	0.		-0.0339	.0104	-0.0165	-0.0113	-0.0222	.0358	0.	
.3820	-0.	-0.	-0.	-0.	0.	0.		-0.0308	.0089	-0.0206	-0.0158	-0.0167	.0334	0.	
.3830	-0.	-0.	-0.	-0.	0.	0.		-0.0274	.0069	-0.0244	-0.0202	-0.0105	.0308	0.	
.3840	-0.	-0.	-0.	-0.	0.	0.		-0.0239	.0044	-0.0276	-0.0243	-0.0039	.0282	0.	
.3850	-0.	-0.	-0.	-0.	0.	0.		-0.0203	.0016	-0.0302	-0.0279	.0031	.0256	0.	
.3860	-0.	-0.	-0.	-0.	0.	0.		-0.0167	-0.0017	-0.0320	-0.0309	.0103	.0233	0.	
.3870	-0.	0.	-0.	-0.	-0.	0.		-0.0132	-0.0051	-0.0330	-0.0333	.0180	.0212	0.	
.3880	-0.	-0.	-0.	-0.	-0.	0.		-0.0099	-0.0084	-0.0333	-0.0347	.0262	.0193	0.	
.3890	-0.	-0.	-0.	-0.	0.	0.		-0.0067	-0.0115	-0.0329	-0.0353	.0347	.0177	0.	
.3900	-0.	-0.	-0.	-0.	-0.	0.		-0.0039	-0.0142	-0.0317	-0.0350	.0435	.0164	0.	
.3910	-0.	0.	-0.	-0.	-0.	0.		-0.0013	-0.0166	-0.0300	-0.0339	.0522	.0154	0.	
.3920	-0.	0.	0.	-0.	0.	-0.		.0009	-0.0185	-0.0277	-0.0319	.0607	.0146	0.	
.3930	-0.	0.	-0.	-0.	-0.	-0.		.0027	-0.0196	-0.0250	-0.0292	.0688	.0140	0.	
.3940	-0.	0.	-0.	-0.	-0.	-0.		.0047	-0.0198	-0.0220	-0.0258	.0765	.0134	0.	
.3950	-0.	0.	-0.	-0.	0.	-0.		.0057	-0.0194	-0.0188	-0.0217	.0836	.0127	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.40.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.3850	-0.	-0.	-0.	-0.	0.	0.	-0.0203	.0016	-.0302	-.0279	.0031	.0256	0.
.3860	-0.	-0.	-0.	-0.	0.	0.	-.0167	-.0017	-.0320	-.0309	.0103	.0233	0.
.3870	-0.	0.	-0.	-0.	0.	0.	-.0132	-.0051	-.0330	-.0333	.0180	.0212	0.
.3880	-0.	-0.	-0.	-0.	0.	0.	-.0099	-.0084	-.0333	-.0347	.0262	.0193	0.
.3890	-0.	-0.	-0.	-0.	0.	0.	-.0067	-.0115	-.0319	-.0353	.0347	.0177	0.
.3900	-0.	-0.	-0.	-0.	0.	0.	-.0079	-.0142	-.0317	-.0350	.0435	.0164	0.
.3910	-0.	0.	-0.	-0.	0.	0.	-.0013	-.0166	-.0300	-.0339	.0522	.0154	0.
.3920	-0.	0.	0.	0.	0.	-0.	.0009	-.0185	-.0277	-.0319	.0607	.0146	0.
.3930	-0.	0.	-0.	-0.	0.	-0.	.0027	-.0196	-.0250	-.0292	.0688	.0140	0.
.3940	-0.	0.	-0.	0.	0.	-0.	.0047	-.0198	-.0220	-.0258	.0765	.0134	0.
.3950	-0.	0.	-0.	0.	0.	-0.	.0057	-.0194	-.0188	-.0217	.0836	.0127	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.40.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	37	MEMBER	2	SEQUENCE	560	LOCATION	END	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.3960	-0.	0.	-0.	-0.	-0.	0.	.0069	-.0183	-.0154	-.0172	.0901	.0119	0.	
.3970	-0.	0.	-0.	0.	-0.	-0.	.0082	-.0164	-.0119	-.0121	.0959	.0109	0.	
.3980	-0.	0.	0.	-0.	0.	-0.	.0096	-.0139	-.0083	-.0067	.1007	.0095	0.	
.3990	0.	0.	0.	-0.	-0.	-0.	.0110	-.0108	-.0046	-.0009	.1045	.0076	0.	
.4000	0.	0.	0.	0.	-0.	-0.	.0126	-.0074	-.0008	.0050	.1070	.0053	0.	

MAXIMUM VALUE OF STRESS OCCURS AT

TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.1480	0.	-0.	0.	-0.	-0.	0.	.0549	-.0247	.0610	.0673	-.0329	-.0634	0.	

SECTION	38	MEMBER	1	SEQUENCE	59	LOCATION	BEG	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.	
.0010	-0.	-0.	-0.	0.	-0.	-0.	.0000	.0000	-.0000	.0000	-.0000	-.0000	0.	
.0020	-0.	-0.	-0.	0.	-0.	-0.	-.0000	.0000	-.0000	.0000	-.0000	-.0000	0.	
.0030	-0.	-2.	-0.	0.	-1.	-0.	-.0000	.0000	-.0000	.0000	-.0000	-.0000	0.	
.0040	-0.	-4.	-0.	0.	-1.	-0.	-.0000	.0000	-.0000	.0000	-.0001	-.0000	0.	
.0050	-0.	-8.	-0.	0.	-1.	-0.	-.0000	-.0000	.0000	.0000	-.0001	-.0000	0.	
.0060	-0.	-18.	0.	-1.	-1.	-0.	.0000	-.0000	.0000	-.0000	-.0001	-.0000	1.	
.0070	1.	-39.	1.	-3.	-2.	2.	.0000	-.0000	.0000	-.0000	-.0002	.0000	2.	
.0080	2.	-68.	2.	-7.	-5.	5.	.0000	-.0001	.0000	-.0000	-.0004	.0000	4.	
.0090	3.	-95.	4.	-14.	-6.	10.	.0000	-.0001	.0000	-.0000	-.0005	.0000	7.	
.0100	5.	-108.	6.	-23.	-2.	17.	.0000	-.0002	.0000	-.0001	-.0002	.0000	11.	
.0110	7.	-106.	9.	-34.	12.	24.	.0000	-.0003	.0000	-.0001	.0008	.0001	17.	
.0120	9.	-109.	11.	-46.	36.	35.	-.0000	-.0004	-.0000	-.0002	.0027	.0001	27.	
.0130	12.	-138.	13.	-58.	72.	50.	-.0000	-.0006	-.0001	-.0003	.0055	.0002	42.	
.0140	15.	-182.	15.	-70.	117.	67.	-.0001	-.0008	-.0001	-.0004	.0091	.0003	61.	
.0150	15.	-198.	16.	-83.	167.	79.	-.0001	-.0011	-.0002	-.0005	.0132	.0004	81.	
.0160	10.	-166.	18.	-97.	216.	78.	-.0003	-.0014	-.0003	-.0006	.0172	.0006	100.	
.0170	-3.	-104.	22.	-115.	257.	57.	-.0005	-.0016	-.0003	-.0008	.0207	.0008	115.	
.0180	-23.	-23.	27.	-127.	285.	13.	-.0008	-.0019	-.0004	-.0010	.0231	.0010	127.	
.0190	-49.	105.	30.	-153.	304.	-53.	-.0011	-.0021	-.0005	-.0011	.0249	.0012	138.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.40.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

.0090	3.	-95.	4.	-14.	-6.	10.	.0000	-.0001	.0000	-.0000	-.0005	.0000	7.
.0100	5.	-108.	6.	-23.	-2.	17.	.0000	-.0002	.0000	-.0001	-.0002	.0000	11.
.0110	7.	-104.	9.	-34.	12.	24.	.0000	-.0003	.0000	-.0001	.0008	.0001	17.
.0120	9.	-109.	11.	-46.	26.	35.	-.0009	-.0004	-.0000	-.0002	.0027	.0001	27.
.0130	12.	-138.	13.	-58.	72.	50.	-.0000	-.0006	-.0001	-.0003	.0055	.0002	42.
.0140	15.	-182.	15.	-70.	117.	67.	-.0001	-.0008	-.0001	-.0004	.0091	.0003	61.
.0150	15.	-198.	16.	-93.	167.	79.	-.0001	-.0011	-.0002	-.0005	.0132	.0004	81.
.0160	10.	-166.	18.	-97.	216.	78.	-.0003	-.0014	-.0003	-.0006	.0172	.0006	100.
.0170	-3.	-104.	22.	-115.	257.	57.	-.0005	-.0016	-.0003	-.0008	.0207	.0008	115.
.0180	-23.	-23.	27.	-127.	285.	13.	-.0008	-.0019	-.0004	-.0010	.0231	.0010	127.
.0190	-40.	105.	30.	-153.	304.	-53.	-.0011	-.0021	-.0005	-.0011	.0249	.0012	138.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.40.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	RU										
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	HX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)			
.0200	-77.	314.	26.	-150.	319.	-138.	-.0013	-.0021	-.0006	-.0013	.0264	.0013	152.			
.0210	-102.	540.	11.	-115.	342.	-232.	-.0015	-.0020	-.0009	-.0015	.0286	.0012	172.			
.0220	-118.	662.	-16.	-46.	403.	-323.	-.0014	-.0017	-.0011	-.0016	.0338	.0008	208.			
.0230	-117.	621.	-53.	57.	480.	-386.	-.0011	-.0011	-.0014	-.0016	.0407	.0002	248.			
.0240	-88.	324.	-93.	177.	525.	-393.	-.0004	-.0005	-.0016	-.0016	.0455	-.0007	273.			
.0250	-29.	-238.	-120.	274.	503.	-327.	.0006	.0001	-.0018	-.0015	.0454	-.0018	265.			
.0260	50.	-741.	-121.	310.	443.	-203.	.0019	.0005	-.0016	-.0012	.0419	-.0030	232.			
.0270	135.	-689.	-98.	286.	416.	-47.	.0032	.0009	-.0013	-.0008	.0401	-.0042	203.			
.0280	222.	111.	-71.	257.	374.	136.	.0045	.0013	-.0008	-.0003	.0366	-.0054	190.			
.0290	302.	1190.	-59.	266.	243.	330.	.0057	.0019	-.0003	.0003	.0262	-.0064	196.			
.0300	352.	1760.	-58.	296.	128.	478.	.0065	.0027	.0002	.0011	.0167	-.0070	231.			
.0310	366.	1432.	-64.	338.	69.	562.	.0067	.0036	.0007	.0019	.0114	-.0071	265.			
.0320	350.	723.	-87.	426.	-6.	603.	.0065	.0046	.0012	.0029	.0052	-.0068	296.			
.0330	307.	342.	-123.	566.	-92.	601.	.0059	.0059	.0017	.0040	-.0012	-.0059	333.			
.0340	232.	289.	-151.	706.	-147.	542.	.0047	.0074	.0023	.0053	-.0052	-.0045	362.			
.0350	129.	75.	-144.	777.	-217.	435.	.0031	.0088	.0033	.0068	-.0107	-.0026	368.			
.0360	1.	-387.	-94.	742.	-340.	289.	.0010	.0099	.0047	.0084	-.0213	-.0004	347.			
.0370	-150.	-632.	-11.	611.	-440.	99.	-.0013	.0107	.0062	.0100	-.0313	.0021	305.			
.0380	-315.	-334.	78.	440.	-461.	-125.	-.0038	.0114	.0078	.0114	-.0362	.0046	261.			
.0390	-476.	280.	142.	293.	-480.	-358.	-.0062	.0119	.0091	.0127	-.0404	.0070	267.			
.0400	-625.	602.	167.	204.	-558.	-597.	-.0083	.0124	.0099	.0136	-.0479	.0090	338.			
.0410	-755.	13.	163.	143.	-590.	-847.	-.0099	.0127	.0103	.0140	-.0512	.0104	418.			
.0420	-834.	-1426.	140.	94.	-575.	-1039.	-.0109	.0124	.0102	.0138	-.0511	.0110	478.			
.0430	-833.	-2583.	104.	64.	-586.	-1090.	-.0109	.0115	.0096	.0131	-.0535	.0108	497.			
.0440	-746.	-2344.	55.	83.	-610.	-1004.	-.0098	.0105	.0087	.0120	-.0574	.0097	473.			
.0450	-595.	-1266.	7.	123.	-579.	-819.	-.0078	.0094	.0076	.0106	-.0574	.0077	405.			
.0460	-390.	-969.	-16.	108.	-526.	-539.	-.0051	.0077	.0064	.0089	-.0554	.0051	305.			
.0470	-148.	-1798.	-10.	18.	-527.	-177.	-.0020	.0053	.0052	.0069	-.0566	.0021	223.			
.0480	58.	-2443.	7.	-101.	-531.	195.	.0011	.0027	.0040	.0049	-.0574	-.0009	231.			
.0490	317.	-2030.	21.	-209.	-440.	513.	.0040	.0003	.0028	.0030	-.0504	-.0037	284.			
.0500	501.	-1180.	30.	-301.	-281.	766.	.0064	-.0018	.0016	.0012	-.0378	-.0062	349.			
.0510	648.	-708.	35.	-375.	-123.	953.	.0081	-.0039	.0004	-.0005	-.0247	-.0080	414.			
.0520	742.	-645.	34.	-407.	25.	1041.	.0091	-.0055	-.0008	-.0021	-.0118	-.0090	448.			
.0530	774.	-878.	28.	-385.	171.	1002.	.0091	-.0067	-.0019	-.0033	.0011	-.0091	436.			
.0540	744.	-1466.	28.	-324.	296.	848.	.0082	-.0077	-.0028	-.0044	.0131	-.0084	383.			
.0550	662.	-1980.	36.	-233.	395.	603.	.0066	-.0083	-.0037	-.0053	.0236	-.0069	304.			
.0560	533.	-1775.	50.	-101.	480.	285.	.0043	-.0085	-.0044	-.0059	.0336	-.0048	228.			
.0570	374.	-1106.	73.	41.	564.	-65.	.0017	-.0083	-.0049	-.0062	.0436	-.0023	228.			

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.40.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

.0470	-148.	-1798.	-10.	18.	-527.	-177.	-.0020	.0052	.0052	.0069	-.0566	.0021	223.
.0480	98.	-2443.	7.	-101.	-531.	195.	.0011	.0027	.0040	.0049	-.0574	-.0009	231.
.0490	317.	-2030.	21.	-209.	-440.	513.	.0040	.0003	.0028	.0030	-.0504	-.0037	284.
.0500	501.	-1150.	30.	-301.	-221.	756.	.0064	-.0010	.0016	.0012	-.0378	-.0062	349.
.0510	748.	-708.	35.	-375.	-123.	953.	.0071	-.0039	.0004	-.0005	-.0247	-.0080	414.
.0520	742.	-645.	74.	-407.	25.	1041.	.0081	-.0055	-.0008	-.0021	-.0118	-.0090	448.
.0530	774.	-878.	20.	-385.	171.	1002.	.0091	-.0067	-.0019	-.0033	.0011	-.0091	436.
.0540	744.	-1466.	28.	-324.	296.	848.	.0082	-.0077	-.0028	-.0044	.0131	-.0084	383.
.0550	662.	-1980.	36.	-233.	395.	603.	.0066	-.0083	-.0037	-.0053	.0236	-.0069	304.
.0560	533.	-1775.	50.	-101.	470.	235.	.0043	-.0085	-.0044	-.0059	.0236	-.0048	228.
.0570	374.	-1106.	73.	41.	564.	-65.	.0017	-.0083	-.0049	-.0062	.0436	-.0023	228.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.40.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
38	1	59	BEG			.0580	207.	-738.	109.	149.	647.	-392.	-.0011	-.0080	-.0052	-.0064	.0532	.0003	309.
						.0590	43.	-486.	141.	246.	723.	-682.	-.0037	-.0075	-.0054	-.0065	.0518	.0028	411.
						.0600	-115.	392.	140.	404.	795.	-956.	-.0060	-.0060	-.0056	-.0063	.0596	.0050	524.
						.0610	-260.	1498.	102.	627.	852.	-1207.	-.0079	-.0036	-.0058	-.0059	.0761	.0065	644.
						.0620	-366.	1571.	43.	855.	873.	-1385.	-.0090	-.0009	-.0061	-.0054	.0799	.0075	741.
						.0630	-416.	502.	-29.	1075.	840.	-1452.	-.0093	.0019	-.0063	-.0049	.0800	.0077	800.
						.0640	-410.	-437.	-118.	1332.	762.	-1409.	-.0087	.0052	-.0065	-.0042	.0766	.0071	836.
						.0650	-354.	-750.	-215.	1619.	673.	-1264.	-.0074	.0089	-.0065	-.0033	.0715	.0058	867.
						.0660	-256.	-798.	-291.	1846.	598.	-1012.	-.0055	.0123	-.0063	-.0023	.0559	.0042	878.
						.0670	-137.	-974.	-326.	1947.	534.	-678.	-.0033	.0150	-.0057	-.0014	.0596	.0024	854.
						.0680	-29.	-1011.	-321.	1913.	492.	-324.	-.0013	.0171	-.0047	-.0003	.0535	.0008	803.
						.0690	44.	-965.	-289.	1758.	474.	2.	.0004	.0185	-.0034	.0007	.0491	-.0004	730.
						.0700	77.	-1269.	-243.	1493.	461.	289.	.0015	.0190	-.0020	.0017	.0455	-.0010	638.
						.0710	67.	-1822.	-197.	1151.	443.	519.	.0019	.0186	-.0007	.0025	.0419	-.0010	537.
						.0720	9.	-2129.	-157.	759.	438.	652.	.0016	.0175	.0006	.0031	.0387	-.0002	441.
						.0730	-85.	-2222.	-114.	316.	435.	727.	.0007	.0155	.0017	.0033	.0344	.0011	363.
						.0740	-193.	-2464.	-61.	-179.	377.	748.	-.0007	.0126	.0026	.0031	.0250	.0030	344.
						.0750	-304.	-2692.	7.	-701.	247.	731.	-.0023	.0089	.0034	.0026	.0103	.0051	418.
						.0760	-412.	-2485.	90.	-1224.	87.	673.	-.0040	.0049	.0039	.0016	-.0059	.0072	562.
						.0770	-499.	-1999.	190.	-1755.	-69.	606.	-.0055	.0007	.0042	.0003	-.0205	.0091	746.
						.0780	-544.	-1669.	302.	-2291.	-207.	581.	-.0065	-.0037	.0042	-.0014	-.0326	.0104	952.
						.0790	-537.	-1411.	403.	-2781.	-300.	612.	-.0070	-.0080	.0038	-.0037	-.0401	.0111	1149.
						.0800	-477.	-925.	464.	-3155.	-323.	693.	-.0067	-.0115	.0027	-.0063	-.0413	.0110	1303.
						.0810	-362.	-424.	471.	-3379.	-308.	824.	-.0056	-.0142	.0010	-.0092	-.0381	.0100	1401.
						.0820	-197.	-337.	427.	-3464.	-293.	999.	-.0040	-.0161	-.0014	-.0126	-.0335	.0083	1452.
						.0830	0.	-584.	336.	-3413.	-285.	1182.	-.0020	-.0172	-.0045	-.0164	-.0281	.0061	1454.
						.0840	210.	-760.	205.	-3214.	-297.	1333.	.0002	-.0173	-.0081	-.0204	-.0233	.0037	1401.
						.0850	414.	-760.	43.	-2869.	-361.	1435.	.0022	-.0166	-.0121	-.0245	-.0222	.0014	1295.
						.0860	592.	-712.	-138.	-2405.	-469.	1464.	.0038	-.0151	-.0163	-.0286	-.0246	-.0005	1146.
						.0870	717.	-580.	-325.	-1851.	-569.	1388.	.0045	-.0132	-.0206	-.0326	-.0272	-.0017	956.
						.0880	766.	-285.	-514.	-1223.	-635.	1180.	.0043	-.0107	-.0248	-.0363	-.0280	-.0020	728.
						.0890	729.	3.	-702.	-547.	-674.	838.	.0070	-.0078	-.0288	-.0396	-.0271	-.0013	484.
						.0900	605.	42.	-884.	145.	-687.	373.	.0006	-.0046	-.0323	-.0422	-.0246	.0004	319.
						.0910	403.	-189.	-1051.	820.	-667.	-194.	-.0027	-.0011	-.0353	-.0440	-.0201	.0029	431.
						.0920	146.	-651.	-1191.	1438.	-628.	-815.	-.0066	.0026	-.0375	-.0450	-.0153	.0061	710.
						.0930	-139.	-1404.	-1293.	1965.	-583.	-1433.	-.0108	.0064	-.0308	-.0450	-.0118	.0097	1004.
						.0940	-426.	-2420.	-1350.	2389.	-529.	-2009.	-.0148	.0102	-.0392	-.0440	-.0095	.0132	1271.
						.0950	-702.	-3616.	-1368.	2737.	-460.	-2532.	-.0185	.0143	-.0386	-.0421	-.0076	.0164	1507.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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

CONDITION 24

LOADS

SHOCK

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ENGLISH UNITS

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

.0040	210.	-760.	105.	-3214.	-297.	1313.	.0002	-.0173	-.0081	-.0204	-.0223	.0037	1401.
.0050	414.	-760.	43.	-2869.	-361.	1435.	.0022	-.0166	-.0121	-.0245	-.0222	.0014	1295.
.0060	592.	-711.	-136.	-2405.	-469.	1464.	.0038	-.0151	-.0163	-.0286	-.0246	-.0005	1146.
.0070	717.	-520.	-325.	-1851.	-569.	1388.	.0045	-.0132	-.0206	-.0326	-.0272	-.0017	956.
.0080	766.	-285.	-514.	-1223.	-635.	1180.	.0043	-.0107	-.0245	-.0363	-.0280	-.0020	728.
.0090	729.	3.	-702.	-547.	-674.	838.	.0070	-.0070	-.0288	-.0396	-.0271	-.0013	484.
.0090	605.	42.	-884.	145.	-687.	373.	.0006	-.0046	-.0323	-.0422	-.0246	.0004	319.
.0091	403.	-189.	-1051.	820.	-667.	-194.	-.0027	-.0011	-.0353	-.0440	-.0201	.0029	431.
.0020	146.	-651.	-1191.	1438.	-628.	-815.	-.0066	.0026	-.0375	-.0450	-.0153	.0061	710.
.0030	-139.	-1404.	-1293.	1965.	-583.	-1433.	-.0108	.0064	-.0388	-.0450	-.0118	.0097	1004.
.0040	-426.	-2420.	-1350.	2389.	-529.	-2009.	-.0140	.0102	-.0392	-.0440	-.0095	.0132	1271.
.0050	-702.	-3616.	-1368.	2737.	-460.	-2532.	-.0185	.0143	-.0386	-.0421	-.0076	.0164	1507.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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

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

SECTION	38	MEMBER	1	SEQUENCE	59	LOCATION	BEG	TYPE	RU						
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)		
.0060	-956.	-4992.	-1357.	3041.	-378.	-3000.	-.0215	.0186	-.0373	-.0393	-.0059	.0189	1721.		
.0070	-1179.	-6743.	-1327.	3321.	-286.	-3404.	-.0236	.0231	-.0352	-.0357	-.0040	.0204	1912.		
.0080	-1358.	-8898.	-1289.	3595.	-178.	-3727.	-.0245	.0277	-.0327	-.0314	-.0012	.0207	2079.		
.0090	-1481.	-10984.	-1257.	3893.	-49.	-3952.	-.0243	.0325	-.0293	-.0267	.0328	.0197	2226.		
.1000	-1536.	-12298.	-1240.	4226.	89.	-4058.	-.0225	.0374	-.0267	-.0215	.0070	.0171	2351.		
.1010	-1512.	-12507.	-1231.	4561.	219.	-4016.	-.0193	.0422	-.0233	-.0160	.0099	.0130	2440.		
.1020	-1401.	-11923.	-1216.	4843.	320.	-3807.	-.0146	.0464	-.0197	-.0103	.0096	.0074	2475.		
.1030	-1211.	-11026.	-1184.	5035.	373.	-3440.	-.0087	.0497	-.0157	-.0045	.0046	.0007	2452.		
.1040	-959.	-9838.	-1129.	5127.	377.	-2952.	-.0018	.0521	-.0114	.0015	-.0049	-.0068	2379.		
.1050	-662.	-8682.	-1046.	5112.	349.	-2376.	.0056	.0533	-.0069	.0075	-.0167	-.0149	2266.		
.1060	-337.	-8071.	-928.	4981.	314.	-1738.	.0134	.0530	-.0021	.0136	-.0282	-.0231	2121.		
.1070	0.	-8122.	-774.	4754.	298.	-1072.	.0210	.0514	.0030	.0197	-.0370	-.0311	1959.		
.1080	329.	-7676.	-581.	4454.	303.	-415.	.0281	.0488	.0084	.0259	-.0428	-.0385	1799.		
.1090	642.	-5481.	-331.	4071.	335.	232.	.0346	.0448	.0141	.0322	-.0458	-.0449	1626.		
.1100	938.	-5225.	-1.	3411.	454.	874.	.0400	.0391	.0202	.0382	-.0416	-.0501	1425.		
.1110	1192.	-5957.	372.	2712.	571.	1440.	.0442	.0330	.0265	.0441	-.0367	-.0540	1253.		
.1120	1372.	-5496.	742.	2063.	625.	1844.	.0470	.0279	.0328	.0503	-.0350	-.0564	1138.		
.1130	1476.	-5321.	1115.	1400.	658.	2089.	.0483	.0231	.0389	.0561	-.0325	-.0573	1043.		
.1140	1518.	-7048.	1493.	664.	689.	2213.	.0480	.0179	.0445	.0611	-.0274	-.0565	968.		
.1150	1484.	-8507.	1809.	38.	699.	2168.	.0461	.0132	.0491	.0653	-.0213	-.0542	914.		
.1160	1356.	-7033.	1989.	-251.	709.	1879.	.0428	.0107	.0523	.0687	-.0137	-.0507	812.		
.1170	1154.	-4011.	2032.	-211.	739.	1384.	.0383	.0099	.0540	.0711	-.0041	-.0463	635.		
.1180	918.	-3464.	1974.	33.	783.	778.	.0329	.0097	.0541	.0720	.0069	-.0412	443.		
.1190	665.	-4610.	1812.	524.	715.	83.	.0270	.0106	.0529	.0719	.0104	-.0356	357.		
.1200	390.	-4506.	1539.	1320.	526.	-726.	.0209	.0138	.0506	.0712	.0065	-.0301	640.		
.1210	118.	-3672.	1210.	2267.	315.	-1581.	.0151	.0186	.0475	.0700	.0028	-.0249	1116.		
.1220	-107.	-4114.	880.	3171.	76.	-2343.	.0097	.0236	.0443	.0682	-.0019	-.0201	1583.		
.1230	-281.	-4518.	550.	4034.	-158.	-2998.	.0050	.0290	.0410	.0664	-.0070	-.0159	2018.		
.1240	-431.	-2807.	197.	4932.	-355.	-3599.	.0011	.0356	.0379	.0649	-.0116	-.0127	2454.		
.1250	-557.	-695.	-149.	5760.	-470.	-4132.	-.0020	.0427	.0352	.0638	-.0130	-.0101	2851.		
.1260	-650.	-1012.	-430.	6351.	-499.	-4545.	-.0045	.0486	.0333	.0631	-.0098	-.0082	3140.		
.1270	-717.	-2785.	-672.	6718.	-543.	-4845.	-.0063	.0533	.0322	.0628	-.0079	-.0069	3331.		
.1280	-781.	-3262.	-857.	6943.	-578.	-5098.	-.0075	.0577	.0319	.0633	-.0049	-.0061	3464.		
.1290	-832.	-2894.	-965.	6960.	-591.	-5263.	-.0080	.0609	.0326	.0644	-.0009	-.0058	3510.		
.1300	-832.	-3705.	-958.	6657.	-613.	-5244.	-.0079	.0617	.0344	.0658	-.0001	-.0060	3409.		
.1310	-903.	-4864.	-854.	6087.	-642.	-5047.	-.0070	.0602	.0369	.0673	-.0043	-.0064	3184.		
.1320	-752.	-4259.	-696.	5393.	-699.	-4741.	-.0056	.0572	.0401	.0691	-.0153	-.0073	2895.		
.1330	-697.	-2651.	-495.	4567.	-722.	-4350.	-.0037	.0526	.0436	.0709	-.0266	-.0085	2548.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.40.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.1230	-261.	-451.	550.	4034.	-158.	-2998.	.0050	.0290	.0410	.0664	-.0070	-.0159	2018.
.1240	-431.	-2007.	197.	4932.	-355.	-7599.	.0011	.0356	.0379	.0649	-.0116	-.0127	2454.
.1250	-557.	-695.	-149.	5760.	-470.	-4172.	-.0020	.0427	.0352	.0638	-.0130	-.0101	2851.
.1260	-650.	-1012.	-439.	6351.	-499.	-4545.	-.0045	.0486	.0333	.0631	-.0098	-.0082	3140.
.1270	-717.	-2725.	-672.	6713.	-543.	-4845.	-.0063	.0533	.0322	.0628	-.0079	-.0069	3331.
.1280	-781.	-7262.	-857.	6943.	-575.	-5092.	-.0075	.0577	.0319	.0633	-.0049	-.0061	3464.
.1290	-832.	-2394.	-965.	6960.	-591.	-5263.	-.0080	.0609	.0326	.0644	-.0009	-.0058	3510.
.1300	-832.	-3705.	-950.	6657.	-613.	-5244.	-.0079	.0617	.0344	.0658	-.0001	-.0060	3409.
.1310	-803.	-4364.	-854.	6087.	-642.	-5047.	-.0070	.0602	.0369	.0673	-.0043	-.0064	3184.
.1320	-752.	-4259.	-696.	5393.	-699.	-4741.	-.0056	.0572	.0401	.0691	-.0153	-.0073	2895.
.1330	-697.	-2651.	-695.	4567.	-722.	-4350.	-.0077	.0526	.0436	.0709	-.0266	-.0085	2548.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.40.

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

CONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	RU	DX	DY	DZ	RX	RY	RZ	STRESS
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.1340	-627.	-2288.	-242.	3545.	-705.	-3852.	-.0013	.0456	.0472	.0724	-.0351	-.0100	2120.
.1350	-547.	-2825.	30.	2411.	-671.	-3278.	.0015	.0370	.0508	.0736	-.0400	-.0119	1655.
.1360	-464.	-2461.	282.	1315.	-607.	-2686.	.0047	.0282	.0541	.0746	-.0403	-.0144	1225.
.1370	-353.	-1663.	513.	274.	-545.	-2038.	.0087	.0194	.0571	.0754	-.0399	-.0177	854.
.1380	-182.	-1905.	747.	-766.	-474.	-1279.	.0134	.0100	.0597	.0758	-.0399	-.0216	628.
.1390	50.	-2405.	976.	-1737.	-430.	-434.	.0189	.0008	.0619	.0757	-.0432	-.0262	739.
.1400	317.	-1458.	1169.	-2505.	-428.	408.	.0250	-.0068	.0635	.0755	-.0495	-.0315	1033.
.1410	607.	172.	1327.	-3056.	-443.	1215.	.0314	-.0128	.0647	.0752	-.0546	-.0373	1332.
.1420	925.	437.	1457.	-3437.	-520.	2018.	.0380	-.0175	.0652	.0746	-.0500	-.0433	1613.
.1430	1249.	-377.	1546.	-3611.	-630.	2781.	.0443	-.0207	.0651	.0738	-.0538	-.0493	1846.
.1440	1544.	-560.	1567.	-3505.	-725.	3432.	.0502	-.0213	.0645	.0732	-.0645	-.0549	1990.
.1450	1791.	-163.	1528.	-3162.	-755.	3950.	.0551	-.0198	.0633	.0726	-.0500	-.0597	2053.
.1460	1981.	-389.	1454.	-2684.	-711.	4343.	.0587	-.0169	.0617	.0719	-.0504	-.0633	2068.
.1470	2093.	-954.	1345.	-2078.	-685.	4578.	.0608	-.0125	.0598	.0713	-.0416	-.0652	2036.
.1480	2093.	-709.	1197.	-1324.	-676.	4580.	.0609	-.0064	.0577	.0709	-.0329	-.0654	1932.
.1490	1974.	-70.	1028.	-483.	-693.	4343.	.0590	.0011	.0556	.0708	-.0249	-.0636	1775.
.1500	1746.	-178.	862.	354.	-727.	3901.	.0549	.0088	.0534	.0706	-.0188	-.0596	1599.
.1510	1406.	-664.	697.	1189.	-761.	3249.	.0488	.0168	.0513	.0704	-.0127	-.0536	1422.
.1520	960.	-525.	518.	2062.	-759.	2385.	.0410	.0253	.0492	.0704	-.0068	-.0459	1301.
.1530	429.	-238.	337.	2912.	-699.	1356.	.0317	.0338	.0472	.0704	.0012	-.0369	1319.
.1540	-147.	-938.	179.	3630.	-611.	253.	.0216	.0413	.0454	.0701	.0102	-.0270	1481.
.1550	-736.	-2226.	51.	4174.	-502.	-869.	.0112	.0476	.0437	.0695	.0202	-.0168	1723.
.1560	-1307.	-2833.	-54.	4549.	-345.	-1964.	.0011	.0527	.0422	.0687	.0333	-.0071	1993.
.1570	-1802.	-2788.	-133.	4726.	-190.	-2921.	-.0078	.0561	.0407	.0674	.0447	.0018	2231.
.1580	-2169.	-3017.	-176.	4662.	-29.	-3634.	-.0151	.0573	.0392	.0654	.0543	.0091	2372.
.1590	-2380.	-3418.	-190.	4389.	143.	-4060.	-.0202	.0563	.0377	.0627	.0522	.0144	2400.
.1600	-2421.	-3519.	-193.	3979.	281.	-4190.	-.0229	.0536	.0359	.0592	.0657	.0174	2321.
.1610	-2293.	-3415.	-180.	3444.	377.	-4030.	-.0231	.0492	.0339	.0551	.0655	.0181	2133.
.1620	-2011.	-3575.	-140.	2767.	468.	-3608.	-.0210	.0428	.0317	.0501	.0652	.0166	1834.
.1630	-1599.	-3811.	-77.	1991.	517.	-2972.	-.0170	.0349	.0292	.0446	.0627	.0132	1450.
.1640	-1096.	-3547.	1.	1182.	534.	-3204.	-.0115	.0263	.0266	.0386	.0585	.0082	1026.
.1650	-539.	-3022.	91.	365.	546.	-1368.	-.0050	.0173	.0238	.0325	.0542	.0022	609.
.1660	47.	-2920.	197.	-456.	533.	-509.	.0019	.0083	.0209	.0267	.0483	-.0044	348.
.1670	606.	-3322.	312.	-1249.	522.	294.	.0027	-.0002	.0181	.0200	.0429	-.0108	556.
.1680	1106.	-3354.	420.	-1954.	499.	957.	.0147	-.0074	.0152	.0140	.0378	-.0168	896.
.1690	1509.	-2997.	514.	-2544.	475.	1419.	.0195	-.0131	.0123	.0084	.0344	-.0216	1184.
.1700	1793.	-2371.	587.	-2998.	440.	1657.	.0227	-.0172	.0092	.0030	.0322	-.0251	1386.
.1710	1946.	-3196.	623.	-3270.	379.	1653.	.0241	-.0196	.0058	-.0021	.0294	-.0270	1478.

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ADLPIPE STRESS ANALYSIS

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

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

.1610	-2293.	-7415.	-180.	3444.	377.	-4030.	-0.0231	.0492	.0339	.0551	.0655	.0174	2321.
.1620	-2011.	-3575.	-140.	2767.	468.	-7608.	-0.0210	.0428	.0317	.0501	.0552	.0166	1834.
.1630	-1599.	-3811.	-77.	1991.	517.	-2972.	-0.0170	.0349	.0292	.0446	.0627	.0132	1450.
.1640	-1096.	-7547.	1.	1182.	534.	-7204.	-0.0115	.0267	.0266	.0386	.0585	.0082	1026.
.1650	-039.	-7022.	21.	365.	546.	-1368.	-0.0050	.0177	.0238	.0325	.0542	.0022	609.
.1660	47.	-3930.	197.	-456.	533.	-509.	.0019	.0083	.0209	.0267	.0483	-.0044	348.
.1670	606.	-3322.	312.	-1249.	522.	294.	.0027	-.0002	.0181	.0200	.0429	-.0108	556.
.1680	1106.	-2354.	420.	-1954.	499.	957.	.0147	-.0074	.0152	.0140	.0378	-.0168	896.
.1690	1509.	-2997.	514.	-2544.	475.	1419.	.0195	-.0131	.0123	.0084	.0344	-.0216	1184.
.1700	1793.	-3871.	587.	-2998.	440.	1657.	.0227	-.0172	.0092	.0030	.0322	-.0251	1386.
.1710	1946.	-7198.	623.	-3270.	379.	1653.	.0241	-.0196	.0058	-.0021	.0294	-.0270	1478.

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ADLPIPE STRESS ANALYSIS

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

SECTION	38	MEMBER	1	SEQUENCE	59	LOCATION	BEG	TYPE	RU					STRESS
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	PX	RY	RZ	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	
.1720	1956.	-3523.	606.	-3299.	353.	1386.		.0236	-.0198	.0020	-.0071	.0296	-.0272	1443.
.1730	1834.	-3706.	525.	-3059.	339.	895.		.0215	-.0179	-.0023	-.0118	.0303	-.0259	1286.
.1740	1607.	-4014.	385.	-2572.	340.	242.		.0179	-.0142	-.0070	-.0166	.0312	-.0232	1046.
.1750	1299.	-4480.	193.	-1876.	354.	-510.		.0133	-.0091	-.0123	-.0213	.0327	-.0194	793.
.1760	939.	-4806.	-45.	-1002.	337.	-1300.		.0080	-.0028	-.0180	-.0261	.0317	-.0149	672.
.1770	556.	-4926.	-317.	-5.	298.	-2070.		.0024	.0045	-.0239	-.0307	.0289	-.0099	839.
.1780	180.	-5146.	-606.	1046.	224.	-2750.		-.0029	.0121	-.0299	-.0354	.0225	-.0049	1184.
.1790	-164.	-5490.	-901.	2095.	144.	-3292.		-.0078	.0196	-.0359	-.0400	.0137	-.0002	1567.
.1800	-457.	-5638.	-1193.	3112.	71.	-3665.		-.0119	.0268	-.0416	-.0443	.0029	.0040	1929.
.1810	-686.	-5553.	-1469.	4059.	-10.	-3841.		-.0151	.0334	-.0471	-.0484	-.0107	.0076	2242.
.1820	-850.	-5558.	-1707.	4874.	-47.	-3826.		-.0173	.0389	-.0519	-.0521	-.0222	.0106	2487.
.1830	-953.	-5828.	-1892.	5524.	-60.	-3633.		-.0187	.0431	-.0561	-.0554	-.0318	.0130	2653.
.1840	-1005.	-6150.	-2014.	5999.	-68.	-3294.		-.0193	.0458	-.0594	-.0581	-.0402	.0149	2747.
.1850	-1020.	-6435.	-2063.	6281.	-68.	-2847.		-.0195	.0470	-.0618	-.0603	-.0474	.0164	2767.
.1860	-1008.	-6842.	-2029.	6338.	-61.	-2320.		-.0192	.0465	-.0632	-.0619	-.0542	.0177	2708.
.1870	-984.	-7242.	-1915.	6168.	-18.	-1756.		-.0189	.0442	-.0636	-.0631	-.0589	.0190	2573.
.1880	-960.	-7308.	-1737.	5806.	27.	-1195.		-.0187	.0404	-.0632	-.0638	-.0632	.0204	2379.
.1890	-946.	-7000.	-1515.	5286.	78.	-674.		-.0186	.0353	-.0622	-.0641	-.0659	.0219	2139.
.1900	-944.	-6666.	-1267.	4636.	139.	-218.		-.0187	.0290	-.0607	-.0642	-.0652	.0235	1863.
.1910	-953.	-6502.	-1016.	3907.	186.	156.		-.0191	.0218	-.0590	-.0642	-.0625	.0251	1571.
.1920	-971.	-6313.	-780.	3159.	234.	431.		-.0196	.0142	-.0572	-.0641	-.0572	.0266	1283.
.1930	-986.	-6030.	-571.	2435.	281.	615.		-.0200	.0066	-.0555	-.0640	-.0502	.0277	1014.
.1940	-976.	-5786.	-392.	1756.	321.	745.		-.0201	-.0008	-.0538	-.0639	-.0425	.0284	776.
.1950	-924.	-5557.	-243.	1138.	354.	851.		-.0197	-.0076	-.0523	-.0638	-.0339	.0283	588.
.1960	-820.	-5136.	-126.	600.	378.	952.		-.0187	-.0136	-.0508	-.0637	-.0244	.0273	476.
.1970	-663.	-4559.	-42.	147.	392.	1055.		-.0170	-.0183	-.0493	-.0634	-.0137	.0253	456.
.1980	-458.	-4080.	10.	-233.	406.	1159.		-.0146	-.0217	-.0479	-.0629	-.0015	.0225	502.
.1990	-219.	-3793.	27.	-542.	429.	1247.		-.0116	-.0236	-.0464	-.0621	.0121	.0190	572.
.2000	36.	-3645.	5.	-772.	459.	1299.		-.0084	-.0238	-.0448	-.0609	.0260	.0149	634.
.2010	289.	-3650.	-58.	-925.	492.	1300.		-.0051	-.0225	-.0432	-.0594	.0394	.0106	670.
.2020	523.	-3810.	-159.	-1010.	533.	1241.		-.0021	-.0199	-.0415	-.0575	.0521	.0064	677.
.2030	723.	-3965.	-294.	-1027.	575.	1113.		.0006	-.0161	-.0398	-.0552	.0637	.0026	650.
.2040	873.	-3936.	-457.	-970.	607.	910.		.0025	-.0112	-.0379	-.0526	.0728	-.0006	586.
.2050	960.	-3799.	-637.	-849.	606.	632.		.0036	-.0057	-.0360	-.0496	.0784	-.0029	489.
.2060	975.	-3792.	-822.	-682.	591.	285.		.0037	.0002	-.0338	-.0464	.0804	-.0041	380.
.2070	914.	-3979.	-1002.	-483.	563.	-120.		.0028	.0061	-.0315	-.0428	.0792	-.0041	302.
.2080	772.	-4219.	-1171.	-259.	530.	-564.		.0009	.0118	-.0290	-.0388	.0753	-.0029	327.
.2090	575.	-4381.	-1322.	-24.	505.	-1020.		-.0019	.0172	-.0262	-.0345	.0705	-.0006	457.

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ADLPIPE STRESS ANALYSIS

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18.28.40.

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

.1990	-219.	-3793.	17.	-542.	429.	1247.	-.0116	-.0236	-.0464	-.0621	.0121	.0190	572.
.2000	36.	-3645.	5.	-772.	459.	1299.	-.0084	-.0238	-.0448	-.0609	.0260	.0149	634.
.2010	285.	-3650.	-58.	-925.	492.	1300.	-.0051	-.0225	-.0432	-.0594	.0394	.0106	670.
.2020	523.	-3610.	-159.	-1011.	533.	1241.	-.0021	-.0199	-.0415	-.0575	.0521	.0064	677.
.2030	727.	-3665.	-294.	-1007.	575.	1113.	.0006	-.0161	-.0252	-.0552	.0637	.0026	650.
.2040	873.	-3936.	-457.	-976.	607.	916.	.0025	-.0112	-.0379	-.0526	.0728	-.0006	586.
.2050	960.	-3799.	-637.	-849.	606.	632.	.0036	-.0057	-.0360	-.0496	.0784	-.0029	489.
.2060	975.	-3792.	-822.	-692.	591.	285.	.0037	.0002	-.0338	-.0464	.0804	-.0041	380.
.2070	914.	-3979.	-1002.	-493.	563.	-120.	.0028	.0061	-.0315	-.0428	.0792	-.0041	302.
.2080	772.	-4219.	-1171.	-259.	530.	-564.	.0009	.0118	-.0290	-.0388	.0753	-.0029	327.
.2090	575.	-4392.	-1322.	-94.	501.	-1020.	-.0019	.0170	-.0262	-.0345	.0705	-.0006	457.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	38	MEMBER	1	SEQUENCE	59	LOCATION	BEG	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.2100	321.	-4471.	-1447.	199.	505.	-1458.		-.0053	.0220	-.0231	-.0299	.0565	.0025	624.	
.2110	32.	-4347.	-1529.	393.	525.	-1849.		-.0091	.0260	-.0196	-.0248	.0635	.0063	787.	
.2120	-269.	-4150.	-1589.	541.	561.	-2164.		-.0130	.0292	-.0158	-.0192	.0610	.0104	923.	
.2130	-563.	-3980.	-1587.	629.	594.	-2381.		-.0168	.0315	-.0114	-.0132	.0582	.0146	1017.	
.2140	-830.	-3972.	-1525.	648.	618.	-2480.		-.0200	.0328	-.0066	-.0067	.0547	.0185	1058.	
.2150	-1051.	-4087.	-1397.	599.	624.	-2453.		-.0225	.0332	-.0012	.0002	.0504	.0219	1044.	
.2160	-1217.	-4190.	-1203.	489.	609.	-2298.		-.0241	.0327	.0045	.0075	.0453	.0245	974.	
.2170	-1317.	-4218.	-946.	320.	575.	-2015.		-.0246	.0315	.0107	.0150	.0400	.0261	851.	
.2180	-1350.	-4175.	-631.	95.	527.	-1617.		-.0241	.0295	.0170	.0226	.0350	.0267	684.	
.2190	-1319.	-4011.	-275.	-170.	471.	-1170.		-.0226	.0268	.0234	.0301	.0306	.0262	496.	
.2200	-1234.	-3675.	102.	-450.	412.	-591.		-.0202	.0236	.0296	.0372	.0269	.0247	341.	
.2210	-1106.	-3281.	480.	-723.	349.	-36.		-.0171	.0202	.0353	.0439	.0236	.0223	322.	
.2220	-942.	-3006.	837.	-974.	277.	508.		-.0133	.0167	.0405	.0498	.0202	.0190	455.	
.2230	-751.	-2673.	1157.	-1150.	192.	1019.		-.0091	.0132	.0448	.0546	.0162	.0150	630.	
.2240	-541.	-2757.	1419.	-1313.	90.	1473.		-.0046	.0099	.0481	.0587	.0111	.0105	793.	
.2250	-321.	-2568.	1610.	-1345.	-25.	1853.		.0001	.0071	.0502	.0615	.0049	.0057	919.	
.2260	-100.	-2338.	1722.	-1261.	-143.	2146.		.0046	.0047	.0511	.0630	-.0022	.0006	1000.	
.2270	110.	-2117.	1753.	-1053.	-255.	2339.		.0089	.0030	.0508	.0633	-.0098	-.0044	1034.	
.2280	302.	-1935.	1704.	-718.	-355.	2428.		.0129	.0019	.0494	.0625	-.0177	-.0093	1026.	
.2290	409.	-1852.	1581.	-271.	-438.	2414.		.0164	.0016	.0470	.0606	-.0257	-.0139	991.	
.2300	607.	-1898.	1296.	282.	-496.	2309.		.0192	.0019	.0438	.0580	-.0328	-.0180	954.	
.2310	716.	-1992.	1161.	852.	-526.	2128.		.0215	.0028	.0400	.0549	-.0388	-.0215	944.	
.2320	795.	-2017.	893.	1469.	-531.	1887.		.0231	.0044	.0360	.0515	-.0437	-.0244	983.	
.2330	846.	-1989.	609.	2080.	-516.	1598.		.0241	.0064	.0319	.0482	-.0480	-.0266	1073.	
.2340	866.	-1995.	326.	2657.	-485.	1271.		.0243	.0087	.0282	.0451	-.0519	-.0279	1198.	
.2350	854.	-2012.	63.	3179.	-445.	907.		.0238	.0113	.0249	.0425	-.0558	-.0285	1339.	
.2360	808.	-1952.	-166.	2674.	-402.	509.		.0226	.0141	.0223	.0406	-.0598	-.0281	1481.	
.2370	726.	-1800.	-347.	4008.	-356.	80.		.0207	.0168	.0206	.0396	-.0632	-.0270	1615.	
.2380	611.	-1642.	-470.	4291.	-305.	-370.		.0182	.0195	.0198	.0395	-.0652	-.0251	1733.	
.2390	467.	-1506.	-530.	4484.	-247.	-872.		.0151	.0219	.0199	.0404	-.0654	-.0225	1833.	
.2400	300.	-1336.	-530.	4594.	-187.	-1295.		.0117	.0241	.0210	.0421	-.0637	-.0195	1917.	
.2410	119.	-1132.	-472.	4623.	-124.	-1741.		.0081	.0260	.0229	.0447	-.0603	-.0161	1983.	
.2420	-83.	-926.	-264.	4571.	-80.	-2151.		.0045	.0274	.0256	.0480	-.0555	-.0127	2027.	
.2430	-236.	-725.	-218.	4444.	-6.	-2503.		.0011	.0283	.0288	.0517	-.0495	-.0093	2047.	
.2440	-366.	-494.	-47.	4258.	53.	-2781.		-.0018	.0287	.0323	.0557	-.0424	-.0063	2041.	
.2450	-504.	-193.	133.	4035.	97.	-3971.		-.0042	.0285	.0360	.0598	-.0343	-.0038	2011.	
.2460	-581.	128.	310.	3786.	128.	-3056.		-.0058	.0278	.0396	.0638	-.0256	-.0020	1953.	
.2470	-609.	449.	402.	3519.	148.	-2029.		-.0065	.0265	.0431	.0676	-.0168	-.0009	1864.	

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ADLPIPE STRESS ANALYSIS

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18.28.40.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.2360	80.	-1952.	-166.	7874.	-402.	509.	.0226	.0141	.0223	.0406	-.0598	-.0281	1481.
.2370	726.	-1800.	-347.	4008.	-356.	80.	.0207	.0160	.0206	.0396	-.0632	-.0270	1615.
.2380	611.	-1642.	-470.	4291.	-709.	-270.	.0182	.0195	.0198	.0395	-.0652	-.0251	1733.
.2390	467.	-1506.	-530.	4484.	-747.	-272.	.0151	.0219	.0199	.0404	-.0554	-.0225	1833.
.2400	300.	-1336.	-530.	4554.	-117.	-175.	.0117	.0241	.0210	.0421	-.0537	-.0195	1917.
.2410	119.	-1172.	-472.	4602.	-124.	-1741.	.0081	.0260	.0229	.0447	-.0603	-.0161	1983.
.2420	-63.	-926.	-364.	4571.	-60.	-2151.	.0045	.0274	.0256	.0480	-.0555	-.0127	2027.
.2430	-236.	-725.	-218.	4444.	0.	-2503.	.0011	.0283	.0288	.0517	-.0495	-.0093	2047.
.2440	-386.	-484.	-47.	4258.	53.	-2751.	-.0018	.0287	.0323	.0557	-.0424	-.0063	2041.
.2450	-504.	-183.	133.	4035.	97.	-2971.	-.0042	.0285	.0360	.0598	-.0343	-.0038	2011.
.2460	-581.	128.	312.	3786.	128.	-3056.	-.0050	.0278	.0396	.0638	-.0256	-.0020	1953.
.2470	-609.	449.	482.	3519.	148.	-3029.	-.0065	.0265	.0431	.0676	-.0168	-.0009	1864.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.40.

S/RV PIPING KEWAUNEE GKWO&F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	38	MEMBER	1	SEQUENCE	59	LOCATION	BEG	TYPE	RU	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	(PSI)	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
.2480	-590.	765.	643.	3238.	162.	-2891.	-.0064	.0245	.0463	.0709	-.0080	-.0006	1743.	
.2490	-525.	1015.	791.	2941.	172.	-2652.	-.0054	.0221	.0492	.0737	.0005	-.0012	1591.	
.2500	-420.	1239.	923.	2624.	174.	-2323.	-.0037	.0193	.0518	.0761	.0082	-.0024	1408.	
.2510	-282.	1505.	1056.	2276.	165.	-1920.	-.0012	.0162	.0541	.0779	.0145	-.0044	1197.	
.2520	-121.	1721.	1178.	1882.	144.	-1485.	.0017	.0129	.0562	.0793	.0194	-.0058	959.	
.2530	50.	2015.	1294.	1432.	113.	-983.	.0049	.0095	.0581	.0802	.0226	-.0095	698.	
.2540	220.	2260.	1404.	927.	75.	-503.	.0082	.0062	.0597	.0807	.0241	-.0124	424.	
.2550	377.	2567.	1501.	375.	34.	-51.	.0115	.0031	.0611	.0808	.0239	-.0153	153.	
.2560	513.	2961.	1585.	-214.	-4.	357.	.0145	.0003	.0621	.0803	.0213	-.0180	167.	
.2570	622.	3382.	1651.	-827.	-39.	711.	.0172	-.0023	.0628	.0793	.0194	-.0204	438.	
.2580	703.	4310.	1698.	-1449.	-71.	1009.	.0194	-.0047	.0629	.0776	.0156	-.0224	709.	
.2590	754.	4886.	1724.	-2059.	-99.	1249.	.0211	-.0069	.0624	.0752	.0113	-.0238	967.	
.2600	776.	5341.	1722.	-2623.	-126.	1434.	.0223	-.0089	.0612	.0718	.0066	-.0248	1201.	
.2610	772.	5796.	1686.	-3115.	-154.	1572.	.0230	-.0108	.0591	.0676	.0013	-.0252	1401.	
.2620	748.	6175.	1615.	-3525.	-183.	1677.	.0232	-.0127	.0560	.0622	-.0042	-.0251	1568.	
.2630	710.	6288.	1505.	-3841.	-215.	1760.	.0230	-.0146	.0518	.0558	-.0098	-.0246	1698.	
.2640	662.	6384.	1352.	-4043.	-254.	1824.	.0224	-.0166	.0467	.0483	-.0151	-.0236	1783.	
.2650	607.	6418.	1154.	-4120.	-302.	1874.	.0215	-.0185	.0405	.0399	-.0200	-.0222	1820.	
.2660	549.	6448.	917.	-4078.	-357.	1912.	.0203	-.0205	.0334	.0307	-.0242	-.0205	1813.	
.2670	491.	6448.	649.	-3927.	-419.	1942.	.0189	-.0225	.0255	.0208	-.0277	-.0185	1766.	
.2680	437.	6171.	362.	-3675.	-489.	1958.	.0172	-.0244	.0172	.0106	-.0302	-.0163	1683.	
.2690	373.	5621.	66.	-3327.	-569.	1948.	.0153	-.0261	.0086	.0004	-.0317	-.0139	1564.	
.2700	308.	5139.	-225.	-2899.	-659.	1908.	.0133	-.0275	.0000	-.0095	-.0324	-.0112	1418.	
.2710	238.	5072.	-488.	-2438.	-753.	1843.	.0111	-.0286	-.0082	-.0189	-.0323	-.0085	1263.	
.2720	165.	5262.	-704.	-1995.	-744.	1766.	.0087	-.0297	-.0158	-.0276	-.0313	-.0055	1122.	
.2730	85.	5380.	-866.	-1593.	-927.	1671.	.0062	-.0307	-.0225	-.0353	-.0296	-.0024	999.	
.2740	-8.	5504.	-975.	-1232.	-1001.	1545.	.0036	-.0313	-.0281	-.0417	-.0275	.0007	889.	
.2750	-113.	5716.	-1030.	-934.	-1061.	1371.	.0009	-.0314	-.0326	-.0468	-.0253	.0038	796.	
.2760	-225.	5787.	-1025.	-748.	-1101.	1230.	-.0017	-.0315	-.0359	-.0506	-.0231	.0068	727.	
.2770	-337.	5527.	-964.	-695.	-1119.	1076.	-.0042	-.0316	-.0380	-.0533	-.0209	.0096	683.	
.2780	-447.	5182.	-863.	-741.	-1117.	925.	-.0065	-.0316	-.0391	-.0548	-.0193	.0121	654.	
.2790	-557.	5122.	-741.	-853.	-1091.	772.	-.0084	-.0313	-.0393	-.0553	-.0186	.0141	636.	
.2800	-643.	5240.	-606.	-1020.	-1037.	641.	-.0098	-.0309	-.0387	-.0550	-.0193	.0156	641.	
.2810	-705.	5255.	-461.	-1280.	-954.	554.	-.0107	-.0306	-.0376	-.0543	-.0216	.0164	678.	
.2820	-736.	5181.	-323.	-1568.	-844.	510.	-.0109	-.0303	-.0362	-.0532	-.0255	.0165	743.	
.2830	-738.	5142.	-209.	-1845.	-712.	494.	-.0103	-.0297	-.0346	-.0520	-.0305	.0158	818.	
.2840	-709.	5001.	-127.	-2097.	-561.	505.	-.0091	-.0297	-.0330	-.0506	-.0362	.0141	894.	
.2850	-645.	4556.	-75.	-2370.	-395.	551.	-.0072	-.0277	-.0316	-.0494	-.0426	.0117	977.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.40.

S/RV PIPING KEWAUNEE GKWO&F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.2750	-117.	5716.	-1030.	-934.	-1061.	1371.	-.0009	-.0314	-.0326	-.0468	-.0253	.0038	796.
.2760	-225.	5707.	-1025.	-748.	-1101.	1270.	-.0017	-.0315	-.0359	-.0506	-.0271	.0068	727.
.2770	-337.	5527.	-964.	-695.	-1119.	1076.	-.0042	-.0316	-.0380	-.0533	-.0209	.0096	683.
.2780	-447.	5132.	-867.	-741.	-1117.	925.	-.0065	-.0316	-.0391	-.0542	-.0193	.0121	654.
.2790	-557.	5132.	-741.	-827.	-1091.	772.	-.0074	-.0313	-.0393	-.0553	-.0186	.0141	636.
.2800	-645.	5240.	-677.	-1070.	-1007.	641.	-.0088	-.0309	-.0397	-.0550	-.0193	.0156	641.
.2810	-705.	5255.	-461.	-1280.	-854.	554.	-.0107	-.0306	-.0376	-.0543	-.0216	.0164	678.
.2820	-736.	5181.	-323.	-1568.	-844.	510.	-.0109	-.0307	-.0362	-.0532	-.0255	.0165	743.
.2830	-738.	5142.	-209.	-1845.	-710.	494.	-.0103	-.0297	-.0346	-.0520	-.0305	.0158	818.
.2840	-709.	5001.	-127.	-2007.	-561.	505.	-.0091	-.0297	-.0330	-.0506	-.0362	.0141	894.
.2850	-645.	4824.	-75.	-2370.	-395.	551.	-.0072	-.0277	-.0316	-.0494	-.0426	.0117	977.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.40.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.2860	-548.	3959.	-51.	-2568.	-215.	626.	-.0047	-.0262	-.0303	-.0483	-.0495	.0025	1064.	
.2870	-427.	3513.	-60.	-2757.	-27.	711.	-.0016	-.0253	-.0292	-.0474	-.0568	.0047	1142.	
.2880	-367.	3136.	-101.	-2887.	162.	786.	.0019	-.0236	-.0284	-.0466	-.0545	.0003	1203.	
.2890	-133.	2756.	-163.	-2967.	342.	848.	.0056	-.0216	-.0279	-.0459	-.0725	-.0044	1246.	
.2900	30.	2281.	-234.	-3004.	503.	893.	.0094	-.0195	-.0274	-.0453	-.0804	-.0094	1274.	
.2910	196.	1966.	-305.	-3000.	637.	917.	.0133	-.0172	-.0271	-.0447	-.0883	-.0144	1285.	
.2920	358.	1721.	-365.	-2950.	740.	913.	.0170	-.0147	-.0269	-.0441	-.0957	-.0193	1275.	
.2930	509.	1290.	-410.	-2857.	811.	882.	.0204	-.0121	-.0267	-.0434	-.1020	-.0239	1243.	
.2940	644.	728.	-434.	-2710.	855.	825.	.0234	-.0094	-.0264	-.0426	-.1070	-.0280	1190.	
.2950	758.	336.	-436.	-2538.	877.	745.	.0259	-.0067	-.0263	-.0418	-.1100	-.0315	1118.	
.2960	848.	170.	-418.	-2326.	888.	653.	.0278	-.0042	-.0262	-.0410	-.1107	-.0343	1033.	
.2970	908.	62.	-383.	-2086.	888.	555.	.0290	-.0020	-.0262	-.0403	-.1086	-.0363	937.	
.2980	939.	-63.	-342.	-1808.	879.	448.	.0296	-.0001	-.0264	-.0398	-.1037	-.0374	827.	
.2990	938.	-83.	-301.	-1489.	859.	333.	.0294	.0015	-.0265	-.0394	-.0964	-.0375	703.	
.3000	905.	-9.	-264.	-1143.	837.	217.	.0285	.0027	-.0277	-.0394	-.0873	-.0367	574.	
.3010	844.	-9.	-231.	-790.	802.	107.	.0268	.0032	-.0288	-.0397	-.0769	-.0349	454.	
.3020	755.	-95.	-205.	-432.	766.	0.	.0245	.0031	-.0302	-.0405	-.0661	-.0322	353.	
.3030	637.	-96.	-192.	-66.	726.	-112.	.0216	.0025	-.0319	-.0416	-.0552	-.0287	296.	
.3040	493.	33.	-190.	292.	687.	-227.	.0182	.0014	-.0331	-.0430	-.0445	-.0245	313.	
.3050	331.	204.	-195.	609.	654.	-336.	.0143	-.0003	-.0358	-.0448	-.0341	-.0198	383.	
.3060	156.	396.	-207.	865.	631.	-433.	.0102	-.0024	-.0379	-.0467	-.0243	-.0147	463.	
.3070	-24.	646.	-215.	1056.	617.	-520.	.0060	-.0053	-.0399	-.0488	-.0154	-.0095	534.	
.3080	-201.	866.	-229.	1176.	613.	-594.	.0019	-.0082	-.0417	-.0508	-.0079	-.0043	583.	
.3090	-764.	925.	-240.	1206.	618.	-644.	-.0019	-.0112	-.0432	-.0527	-.0019	.0005	602.	
.3100	-507.	896.	-245.	1137.	626.	-660.	-.0053	-.0143	-.0444	-.0544	.0023	.0049	585.	
.3110	-610.	968.	-236.	975.	642.	-641.	-.0081	-.0174	-.0451	-.0559	.0044	.0087	534.	
.3120	-681.	1143.	-221.	740.	655.	-588.	-.0102	-.0202	-.0454	-.0569	.0047	.0116	462.	
.3130	-712.	1303.	-201.	453.	669.	-507.	-.0116	-.0227	-.0452	-.0576	.0035	.0136	383.	
.3140	-703.	1416.	-180.	137.	683.	-404.	-.0122	-.0247	-.0448	-.0579	.0009	.0147	323.	
.3150	-657.	1582.	-162.	-183.	695.	-286.	-.0120	-.0261	-.0440	-.0579	-.0027	.0148	310.	
.3160	-578.	1774.	-152.	-489.	707.	-159.	-.0111	-.0270	-.0430	-.0575	-.0069	.0140	351.	
.3170	-469.	1852.	-153.	-764.	715.	-31.	-.0095	-.0273	-.0418	-.0569	-.0114	.0124	420.	
.3180	-338.	1849.	-170.	-992.	714.	86.	-.0075	-.0269	-.0405	-.0559	-.0159	.0101	492.	
.3190	-156.	1918.	-202.	-1162.	702.	185.	-.0051	-.0259	-.0392	-.0548	-.0204	.0072	550.	
.3200	-47.	2150.	-249.	-1281.	680.	264.	-.0024	-.0245	-.0378	-.0533	-.0247	.0040	592.	
.3210	107.	2482.	-307.	-1359.	650.	323.	.0003	-.0227	-.0364	-.0517	-.0287	.0006	618.	
.3220	341.	2810.	-373.	-1397.	614.	388.	.0020	-.0207	-.0348	-.0499	-.0321	-.0028	629.	
.3230	762.	3215.	-425.	-1297.	573.	365.	.0055	-.0184	-.0332	-.0478	-.0347	-.0060	624.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.40.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

.3130	-712.	1303.	-291.	453.	669.	-507.	-1116	-0227	-0452	-0576	.0035	.0136	383.
.3140	-707.	1416.	-180.	137.	693.	-404.	-1122	-0247	-0448	-0579	.0009	.0147	323.
.3150	-657.	1532.	-162.	-133.	690.	-236.	-1120	-0261	-0440	-0579	-0027	.0148	310.
.3160	-575.	1734.	-157.	-499.	709.	-159.	-1111	-0270	-0430	-0575	-0069	.0140	351.
.3170	-469.	1852.	-157.	-764.	715.	-31.	-1095	-0273	-0418	-0569	-0114	.0124	420.
.3180	-337.	1949.	-170.	-902.	714.	36.	-1075	-0262	-0405	-0559	-0159	.0101	492.
.3190	-194.	1918.	-202.	-1162.	702.	125.	-1051	-0259	-0392	-0548	-0204	.0072	550.
.3200	-47.	2150.	-249.	-1251.	680.	264.	-1024	-0245	-0378	-0533	-0247	.0040	592.
.3210	107.	2422.	-303.	-1359.	650.	323.	-1003	-0227	-0364	-0517	-0287	.0006	618.
.3220	241.	2650.	-367.	-1397.	614.	358.	-1020	-0207	-0348	-0499	-0321	-0028	629.
.3230	362.	3015.	-425.	-1397.	573.	365.	-1055	-0184	-0332	-0478	-0347	-0060	624.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.40.

S/RV PIPING KEWAUNEE GKW02F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSVCONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITSINTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	RU	DZ	FX	RY	RZ	STRESS		
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	FX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3240	462.	3680.	-480.	-1378.	520.	352.	.0077	-0162	-0314	-0455	-0361	-0089	609.
.3250	538.	4091.	-518.	-1371.	436.	336.	.0096	-0141	-0294	-0429	-0362	-0114	599.
.3260	592.	4405.	-529.	-1398.	443.	331.	.0112	-0124	-0272	-0401	-0352	-0133	603.
.3270	623.	4706.	-511.	-1471.	398.	348.	.0123	-0110	-0246	-0371	-0334	-0148	627.
.3280	634.	5085.	-461.	-1603.	355.	401.	.0132	-0102	-0218	-0339	-0310	-0156	678.
.3290	632.	5435.	-378.	-1812.	314.	512.	.0136	-0101	-0188	-0307	-0284	-0158	766.
.3300	621.	5793.	-265.	-2107.	277.	694.	.0139	-0107	-0158	-0275	-0257	-0155	897.
.3310	606.	6166.	-129.	-2477.	243.	954.	.0139	-0121	-0123	-0244	-0229	-0146	1070.
.3320	588.	6549.	19.	-2901.	214.	1238.	.0136	-0142	-0091	-0217	-0199	-0133	1277.
.3330	569.	6866.	167.	-3360.	190.	1690.	.0131	-0170	-0062	-0193	-0166	-0114	1511.
.3340	550.	7061.	310.	-3826.	173.	2152.	.0124	-0205	-0036	-0174	-0130	-0090	1766.
.3350	529.	7223.	438.	-4306.	161.	2657.	.0115	-0244	-0016	-0161	-0091	-0062	2031.
.3360	504.	7440.	544.	-4742.	153.	3130.	.0102	-0288	-0000	-0155	-0052	-0029	2292.
.3370	469.	7639.	622.	-5125.	150.	3695.	.0085	-0333	.0009	-0155	-0011	.0009	2536.
.3380	422.	7923.	671.	-5441.	147.	4178.	.0064	-0378	.0012	-0162	.0033	.0051	2753.
.3390	357.	8149.	688.	-5679.	143.	4596.	.0038	-0422	.0009	-0174	.0080	.0098	2932.
.3400	271.	8387.	674.	-5833.	137.	4930.	.0006	-0462	.0000	-0190	.0133	.0149	3065.
.3410	163.	8590.	632.	-5901.	129.	5157.	-0030	-0498	-0013	-0210	.0193	.0204	3145.
.3420	37.	8687.	566.	-5885.	118.	5284.	-0071	-0527	-0029	-0231	.0260	.0261	3169.
.3430	-116.	8698.	487.	-5792.	103.	5246.	-0116	-0549	-0048	-0253	.0323	.0319	3136.
.3440	-278.	8635.	391.	-5673.	83.	5106.	-0164	-0564	-0067	-0274	.0410	.0378	3051.
.3450	-445.	8717.	298.	-5422.	58.	4856.	-0214	-0571	-0086	-0292	.0491	.0435	2921.
.3460	-608.	8782.	212.	-5176.	26.	4514.	-0263	-0571	-0104	-0308	.0573	.0489	2756.
.3470	-757.	8772.	139.	-4906.	-12.	4101.	-0309	-0564	-0119	-0319	.0653	.0537	2566.
.3480	-887.	8735.	61.	-4623.	-57.	3641.	-0352	-0551	-0131	-0327	.0730	.0579	2361.
.3490	-978.	8658.	37.	-4378.	-105.	3156.	-0390	-0533	-0140	-0330	.0801	.0613	2153.
.3500	-1035.	8530.	1.	-4063.	-154.	2674.	-0420	-0512	-0146	-0330	.0865	.0638	1953.
.3510	-1049.	8343.	-10.	-3807.	-201.	2215.	-0442	-0488	-0150	-0326	.0918	.0653	1769.
.3520	-1019.	8127.	-21.	-3571.	-244.	1793.	-0456	-0462	-0151	-0320	.0959	.0658	1607.
.3530	-947.	7918.	-31.	-3356.	-282.	1422.	-0462	-0436	-0150	-0317	.0986	.0653	1467.
.3540	-836.	7722.	-42.	-3162.	-313.	1111.	-0459	-0410	-0148	-0303	.0996	.0640	1351.
.3550	-692.	7552.	-55.	-2991.	-336.	866.	-0449	-0385	-0145	-0297	.0989	.0619	1257.
.3560	-502.	7351.	-70.	-2830.	-349.	676.	-0473	-0361	-0141	-0283	.0962	.0591	1180.
.3570	-338.	7070.	-94.	-2698.	-352.	567.	-0412	-0340	-0137	-0272	.0918	.0560	1115.
.3580	-192.	6831.	-110.	-2565.	-344.	499.	-0389	-0320	-0132	-0260	.0858	.0526	1058.
.3590	29.	6250.	-147.	-2479.	-322.	475.	-0363	-0301	-0126	-0248	.0784	.0492	1006.
.3600	189.	5810.	-180.	-2324.	-289.	457.	-0339	-0284	-0119	-0234	.0699	.0459	960.
.3610	320.	5470.	-170.	-2221.	-244.	524.	-0316	-0260	-0111	-0219	.0504	.0430	921.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.41.

S/RV PIPING KEWAUNEE GKW02F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSVCONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING

.3510	-1045.	8343.	-10.	-3307.	-201.	2215.	-.0442	-.0488	-.0150	-.0326	.0918	.0653	1769.
.3520	-1019.	8127.	-21.	-3571.	-244.	1793.	-.0456	-.0462	-.0151	-.0320	.0959	.0658	1607.
.3530	-947.	7918.	-31.	-3356.	-282.	1422.	-.0462	-.0436	-.0150	-.0313	.0986	.0653	1467.
.3540	-836.	7722.	-42.	-3162.	-317.	1111.	-.0469	-.0410	-.0149	-.0303	.0996	.0640	1351.
.3550	-692.	7556.	-55.	-2991.	-336.	866.	-.0449	-.0395	-.0148	-.0293	.0989	.0619	1257.
.3560	-527.	7351.	-70.	-2832.	-349.	676.	-.0473	-.0361	-.0148	-.0283	.0982	.0591	1180.
.3570	-338.	7070.	-84.	-2698.	-352.	567.	-.0412	-.0340	-.0127	-.0272	.0918	.0560	1115.
.3580	-152.	6831.	-110.	-2565.	-344.	499.	-.0389	-.0320	-.0122	-.0260	.0858	.0526	1058.
.3590	27.	6252.	-143.	-2439.	-332.	459.	-.0363	-.0301	-.0122	-.0248	.0784	.0492	1006.
.3600	189.	5812.	-162.	-2324.	-319.	437.	-.0339	-.0284	-.0119	-.0234	.0699	.0459	960.
.3610	227.	5416.	-170.	-2221.	-244.	524.	-.0316	-.0262	-.0111	-.0219	.0604	.0430	921.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

23/12/02.

18.28.41.

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

SECTION	38	MEMBER	1	SEQUENCE	59	LOCATION	BEG	TYPE	PU							
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS			
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)			
.3620	421.	5011.	-169.	-2126.	-190.	572.	-.0296	-.0253	-.0101	-.0202	.0501	.0405	887.			
.3630	480.	4527.	-150.	-2035.	-132.	621.	-.0281	-.0238	-.0089	-.0182	.0394	.0385	856.			
.3640	497.	4157.	-115.	-1944.	-72.	660.	-.0270	-.0222	-.0075	-.0159	.0282	.0372	824.			
.3650	472.	3752.	-61.	-1847.	-15.	684.	-.0265	-.0204	-.0059	-.0133	.0168	.0365	790.			
.3660	409.	3369.	12.	-1739.	37.	688.	-.0264	-.0185	-.0041	-.0106	.0055	.0364	751.			
.3670	313.	2963.	101.	-1509.	79.	668.	-.0268	-.0164	-.0023	-.0077	-.0052	.0368	700.			
.3680	190.	2527.	199.	-1442.	110.	620.	-.0276	-.0141	-.0006	-.0047	-.0150	.0376	631.			
.3690	46.	2144.	301.	-1228.	131.	545.	-.0287	-.0115	.0010	-.0019	-.0238	.0387	542.			
.3700	-109.	1874.	401.	-985.	141.	448.	-.0299	-.0088	.0023	.0008	-.0311	.0400	430.			
.3710	-265.	1692.	493.	-654.	142.	330.	-.0312	-.0061	.0032	.0030	-.0369	.0413	300.			
.3720	-414.	1514.	567.	-294.	133.	202.	-.0324	-.0033	.0037	.0047	-.0410	.0426	153.			
.3730	-550.	1311.	614.	119.	110.	62.	-.0335	-.0006	.0035	.0057	-.0433	.0436	70.			
.3740	-665.	1154.	629.	577.	75.	-83.	-.0344	.0019	.0026	.0060	-.0440	.0442	236.			
.3750	-753.	1073.	610.	1065.	27.	-223.	-.0349	.0041	.0010	.0055	-.0433	.0445	437.			
.3760	-809.	1030.	559.	1560.	-34.	-348.	-.0351	.0058	-.0012	.0041	-.0414	.0443	641.			
.3770	-832.	982.	477.	2047.	-106.	-455.	-.0348	.0069	-.0040	.0019	-.0388	.0437	842.			
.3780	-822.	900.	368.	2513.	-189.	-543.	-.0341	.0073	-.0074	-.0011	-.0354	.0425	1034.			
.3790	-783.	762.	239.	2937.	-200.	-607.	-.0330	.0072	-.0110	-.0046	-.0315	.0409	1209.			
.3800	-709.	565.	100.	3293.	-376.	-643.	-.0316	.0064	-.0149	-.0026	-.0271	.0390	1355.			
.3810	-613.	433.	-40.	3558.	-473.	-648.	-.0298	.0049	-.0127	-.0128	-.0222	.0366	1463.			
.3820	-497.	366.	-170.	3714.	-568.	-622.	-.0277	.0028	-.0222	-.0171	-.0167	.0341	1528.			
.3830	-366.	337.	-286.	3752.	-656.	-570.	-.0255	.0002	-.0254	-.0212	-.0105	.0313	1546.			
.3840	-227.	478.	-380.	3665.	-733.	-497.	-.0232	-.0028	-.0280	-.0249	-.0039	.0285	1513.			
.3850	-86.	836.	-446.	3446.	-796.	-406.	-.0209	-.0061	-.0299	-.0281	.0031	.0258	1429.			
.3860	51.	1233.	-480.	3096.	-643.	-300.	-.0186	-.0097	-.0310	-.0307	.0103	.0232	1293.			
.3870	172.	1423.	-485.	2635.	-877.	-194.	-.0165	-.0134	-.0312	-.0325	.0180	.0208	1117.			
.3880	285.	1353.	-466.	2098.	-999.	-103.	-.0147	-.0169	-.0307	-.0335	.0262	.0186	917.			
.3890	738.	1167.	-429.	1515.	-911.	-35.	-.0131	-.0199	-.0294	-.0336	.0347	.0168	710.			
.3900	423.	1004.	-375.	905.	-913.	-5.	-.0119	-.0225	-.0274	-.0329	.0435	.0152	516.			
.3910	450.	914.	-307.	287.	-903.	-1.	-.0109	-.0246	-.0248	-.0314	.0522	.0140	380.			
.3920	447.	903.	-276.	-304.	-883.	-30.	-.0103	-.0261	-.0216	-.0292	.0507	.0131	375.			
.3930	415.	970.	-171.	-829.	-858.	-124.	-.0100	-.0266	-.0181	-.0263	.0488	.0124	481.			
.3940	357.	1035.	-121.	-1270.	-830.	-257.	-.0098	-.0262	-.0144	-.0229	.0765	.0118	618.			
.3950	281.	1006.	-84.	-1628.	-801.	-425.	-.0097	-.0249	-.0104	-.0189	.0876	.0112	748.			
.3960	193.	855.	-60.	-1900.	-774.	-618.	-.0096	-.0229	-.0064	-.0145	.0901	.0105	860.			
.3970	99.	638.	-51.	-2081.	-750.	-828.	-.0094	-.0200	-.0023	-.0097	.0959	.0096	948.			
.3980	4.	302.	-50.	-2166.	-721.	-1049.	-.0090	-.0183	.0018	-.0046	.1007	.0084	1009.			
.3990	-24.	16.	-60.	-2171.	-715.	-1216.	-.0083	-.0119	.0058	.0007	.1045	.0068	1048.			

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

23/12/02.

18.28.41.

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

.3890	767.	1167.	-429.	1515.	-211.	-39.	-.0131	-.0199	-.0294	-.0336	.0347	.0168	710.
.3900	427.	1004.	-375.	205.	-213.	-5.	-.0119	-.0225	-.0274	-.0329	.0435	.0152	516.
.3910	450.	914.	-307.	207.	-903.	-1.	-.0109	-.0246	-.0249	-.0314	.0522	.0140	380.
.3920	447.	903.	-270.	-704.	-587.	-30.	-.0103	-.0261	-.0216	-.0292	.0507	.0131	375.
.3930	410.	971.	-177.	-829.	-351.	-124.	-.0100	-.0266	-.0181	-.0263	.0588	.0124	481.
.3940	757.	1075.	-121.	-1270.	-30.	-257.	-.0098	-.0262	-.0144	-.0229	.0765	.0118	618.
.3950	281.	1006.	-84.	-1620.	-901.	-425.	-.0097	-.0249	-.0104	-.0189	.0836	.0112	748.
.3960	193.	855.	-69.	-1900.	-774.	-617.	-.0096	-.0229	-.0064	-.0145	.0901	.0105	860.
.3970	99.	601.	-51.	-2081.	-750.	-828.	-.0094	-.0200	-.0023	-.0097	.0959	.0096	948.
.3980	4.	392.	-50.	-2160.	-731.	-1049.	-.0090	-.0163	.0018	-.0046	.1007	.0084	1009.
.3990	-84.	16.	-60.	-2171.	-715.	-1266.	-.0083	-.0119	.0059	.0007	.1045	.0068	1048.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.41.

S/RV PIPING KEWAUNEE GKW09F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	38	MEMBER	1	SEQUENCE	59	LOCATION	BEG	TYPE	RU	DZ	RX	RY	RZ	STRESS	
TIME	FX	FY	FZ	MX	MY	MZ			DY	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)			(IN)						
.4000	-158.	-157.	-80.	-2119.	-700.	-1462.			-0.0071	-0.0072	.0099	.0061	.1070	.0047	1070.

MAXIMUM VALUE OF STRESS OCCURS AT

TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.1290	832.	2894.	965.	-6960.	591.	5263.	-0.0080	.0609	.0326	.0644	-0.0009	-0.0058	3510.

SECTION	38	MEMBER	1	SEQUENCE	60	LOCATION	DIS	TYPE	RU	DZ	RX	RY	RZ	STRESS	
TIME	FX	FY	FZ	MX	MY	MZ			DY	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)			(IN)						
0.0000	0.	0.	0.	0.	0.	0.			0.0000	0.0000	0.0000	0.0000	0.0000	0.	
.0010	-0.	0.	0.	0.	0.	0.			.0000	.0000	-.0000	-.0000	.0000	0.	
.0020	-0.	0.	0.	0.	0.	0.			.0000	.0000	-.0000	-.0000	.0000	0.	
.0030	0.	0.	0.	0.	0.	0.			-.0000	.0000	-.0000	-.0000	.0000	0.	
.0040	0.	0.	0.	0.	0.	0.			-.0000	.0000	-.0000	-.0001	.0000	0.	
.0050	0.	0.	-0.	0.	0.	0.			-.0000	-.0000	.0000	-.0001	.0000	0.	
.0060	-0.	0.	-0.	0.	0.	0.			.0000	-.0000	.0000	-.0001	-.0000	0.	
.0070	-1.	0.	-1.	0.	0.	0.			.0000	-.0000	.0000	-.0002	-.0000	0.	
.0080	-2.	0.	-2.	0.	0.	0.			.0000	-.0000	.0000	-.0003	-.0000	0.	
.0090	-4.	0.	-4.	0.	0.	0.			.0000	-.0001	.0000	-.0004	-.0000	0.	
.0100	-5.	0.	-5.	0.	0.	0.			.0000	-.0002	.0000	-.0005	-.0000	0.	
.0110	-6.	0.	-6.	0.	0.	0.			.0000	-.0003	.0000	-.0007	-.0000	0.	
.0120	-7.	0.	-7.	0.	0.	0.			.0000	-.0004	.0000	-.0009	-.0000	0.	
.0130	-9.	0.	-9.	0.	0.	0.			.0000	-.0006	.0000	-.0014	-.0000	0.	
.0140	-9.	0.	-9.	0.	0.	0.			.0000	-.0008	.0000	-.0001	.0000	0.	
.0150	-5.	0.	-5.	0.	0.	0.			.0000	-.0011	.0000	-.0001	.0116	.0001	0.
.0160	5.	0.	-10.	0.	0.	0.			-.0000	-.0013	.0000	-.0002	.0152	.0002	0.
.0170	27.	0.	-18.	0.	0.	0.			-.0000	-.0016	.0000	-.0003	.0182	.0004	0.
.0180	46.	0.	-25.	0.	0.	0.			-.0001	-.0019	.0000	-.0003	.0204	.0006	0.
.0190	73.	0.	-32.	0.	0.	0.			-.0001	-.0021	.0000	-.0004	.0220	.0009	0.
.0200	95.	0.	-30.	0.	0.	0.			-.0001	-.0022	.0000	-.0006	.0233	.0012	0.
.0210	108.	0.	-13.	0.	0.	0.			-.0002	-.0021	.0000	-.0008	.0253	.0015	0.
.0220	105.	0.	17.	0.	0.	0.			-.0001	-.0010	-.0000	-.0010	.0300	.0016	0.
.0230	77.	0.	60.	0.	0.	0.			-.0001	-.0010	-.0001	-.0013	.0361	.0015	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.41.

S/RV PIPING KEWAUNEE GKW09F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.0130	-9.	0.	-9.	0.	0.	0.	0.	.0000	-.0004	.0000	-.0000	.0023	-.0000	0.
.0140	-9.	0.	-9.	0.	0.	0.	0.	.0000	-.0008	.0000	-.0001	.0020	.0000	0.
.0150	-5.	0.	-8.	0.	0.	0.	0.	.0000	-.0011	.0000	-.0001	.0116	.0001	0.
.0160	5.	0.	-10.	0.	0.	0.	0.	-.0000	-.0013	.0000	-.0002	.0152	.0002	0.
.0170	22.	0.	-16.	0.	0.	0.	0.	-.0000	-.0016	.0000	-.0003	.0182	.0004	0.
.0180	46.	0.	-25.	0.	0.	0.	0.	-.0001	-.0019	.0000	-.0003	.0204	.0006	0.
.0190	73.	0.	-32.	0.	0.	0.	0.	-.0001	-.0021	.0000	-.0004	.0220	.0009	0.
.0200	95.	0.	-30.	0.	0.	0.	0.	-.0001	-.0022	.0000	-.0006	.0233	.0012	0.
.0210	102.	0.	-13.	0.	0.	0.	0.	-.0002	-.0021	.0000	-.0008	.0253	.0015	0.
.0220	105.	0.	17.	0.	0.	0.	0.	-.0001	-.0018	-.0000	-.0010	.0300	.0016	0.
.0230	77.	0.	60.	0.	0.	0.	0.	-.0001	-.0012	-.0001	-.0013	.0361	.0015	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.41.

S/RV PIPING KEWAUNEE GKWC2F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
38	1	60					.0240	18.	0.	102.	0.	0.	0.	-.0000	-.0005	-.0001	-.0016	.0406	.0010	0.
							.0250	-72.	0.	124.	0.	0.	0.	.0001	.0001	-.0002	-.0018	.0406	.0002	0.
							.0260	-175.	0.	106.	0.	0.	0.	.0003	.0006	-.0002	-.0018	.0377	-.0008	0.
							.0270	-273.	0.	52.	0.	0.	0.	.0004	.0010	-.0001	-.0016	.0362	-.0020	0.
							.0280	-355.	0.	-4.	0.	0.	0.	.0005	.0013	.0000	-.0012	.0331	-.0034	0.
							.0290	-412.	0.	-32.	0.	0.	0.	.0006	.0018	.0000	-.0008	.0239	-.0047	0.
							.0300	-422.	0.	-53.	0.	0.	0.	.0006	.0025	.0000	-.0003	.0155	-.0057	0.
							.0310	-391.	0.	-8.	0.	0.	0.	.0006	.0034	.0000	.0003	.0107	-.0062	0.
							.0320	-345.	0.	52.	0.	0.	0.	.0005	.0045	-.0001	.0009	.0053	-.0064	0.
							.0330	-288.	0.	131.	0.	0.	0.	.0004	.0058	-.0002	.0016	-.0003	-.0061	0.
							.0340	-203.	0.	180.	0.	0.	0.	.0003	.0073	-.0003	.0023	-.0038	-.0053	0.
							.0350	-75.	0.	158.	0.	0.	0.	.0001	.0082	-.0002	.0031	-.0086	-.0041	0.
							.0360	93.	0.	58.	0.	0.	0.	-.0001	.0100	-.0001	.0043	-.0180	-.0025	0.
							.0370	287.	0.	-65.	0.	0.	0.	-.0004	.0108	.0001	.0057	-.0272	-.0007	0.
							.0380	490.	0.	-212.	0.	0.	0.	-.0007	.0114	.0003	.0072	-.0319	.0012	0.
							.0390	689.	0.	-262.	0.	0.	0.	-.0010	.0119	.0004	.0086	-.0359	.0031	0.
							.0400	882.	0.	-218.	0.	0.	0.	-.0013	.0123	.0003	.0098	-.0426	.0048	0.
							.0410	1056.	0.	-112.	0.	0.	0.	-.0015	.0127	.0002	.0107	-.0456	.0062	0.
							.0420	1161.	0.	17.	0.	0.	0.	-.0017	.0126	-.0000	.0112	-.0456	.0072	0.
							.0430	1138.	0.	139.	0.	0.	0.	-.0016	.0119	-.0002	.0112	-.0480	.0074	0.
							.0440	963.	0.	232.	0.	0.	0.	-.0014	.0108	-.0003	.0107	-.0516	.0068	0.
							.0450	745.	0.	268.	0.	0.	0.	-.0011	.0095	-.0004	.0096	-.0519	.0055	0.
							.0460	472.	0.	233.	0.	0.	0.	-.0007	.0079	-.0003	.0083	-.0504	.0037	0.
							.0470	192.	0.	154.	0.	0.	0.	-.0003	.0056	-.0002	.0069	-.0516	.0014	0.
							.0480	-81.	0.	83.	0.	0.	0.	.0001	.0030	-.0001	.0055	-.0523	-.0010	0.
							.0490	-731.	0.	52.	0.	0.	0.	.0005	.0006	-.0001	.0042	-.0462	-.0031	0.
							.0500	-542.	0.	63.	0.	0.	0.	.0008	-.0017	-.0001	.0029	-.0351	-.0049	0.
							.0510	-703.	0.	101.	0.	0.	0.	.0010	-.0038	-.0001	.0017	-.0235	-.0060	0.
							.0520	-613.	0.	145.	0.	0.	0.	.0012	-.0055	-.0002	.0004	-.0121	-.0064	0.
							.0530	-978.	0.	171.	0.	0.	0.	.0013	-.0066	-.0002	-.0009	-.0005	-.0059	0.
							.0540	-906.	0.	152.	0.	0.	0.	.0013	-.0074	-.0002	-.0024	.0103	-.0044	0.
							.0550	-859.	0.	87.	0.	0.	0.	.0013	-.0080	-.0001	-.0041	.0199	-.0023	0.
							.0560	-650.	0.	-34.	0.	0.	0.	.0012	-.0083	.0000	-.0058	.0291	.0004	0.
							.0570	-749.	0.	-194.	0.	0.	0.	.0011	-.0082	.0003	-.0075	.0382	.0032	0.
							.0580	-591.	0.	-382.	0.	0.	0.	.0008	-.0079	.0005	-.0090	.0470	.0060	0.
							.0590	-391.	0.	-547.	0.	0.	0.	.0006	-.0074	.0009	-.0102	.0549	.0084	0.
							.0600	-185.	0.	-627.	0.	0.	0.	.0003	-.0061	.0009	-.0112	.0621	.0104	0.
							.0610	-4.	0.	-627.	0.	0.	0.	.0000	-.0038	.0009	-.0119	.0680	.0118	0.

ADLPIPE PAGE 1550

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.41.

S/RV PIPING KEWAUNEE GKWC2F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.0510	-703.	0.	101.	0.	0.	0.	0.	.0010	-.0038	-.0001	.0017	-.0235	-.0060	0.
.0520	-813.	0.	145.	0.	0.	0.	0.	.0012	-.0055	-.0002	.0004	-.0121	-.0064	0.
.0530	-878.	0.	171.	0.	0.	0.	0.	.0013	-.0066	-.0002	-.0009	-.0105	-.0059	0.
.0540	-906.	0.	155.	0.	0.	0.	0.	.0013	-.0074	-.0002	-.0024	.0103	-.0044	0.
.0550	-899.	0.	85.	0.	0.	0.	0.	.0013	-.0080	-.0001	-.0041	.0199	-.0023	0.
.0560	-850.	0.	-34.	0.	0.	0.	0.	.0012	-.0083	.0000	-.0058	.0291	.0004	0.
.0570	-749.	0.	-194.	0.	0.	0.	0.	.0011	-.0082	.0003	-.0075	.0382	.0032	0.
.0580	-591.	0.	-382.	0.	0.	0.	0.	.0008	-.0079	.0005	-.0090	.0470	.0060	0.
.0590	-391.	0.	-547.	0.	0.	0.	0.	.0006	-.0074	.0008	-.0102	.0549	.0084	0.
.0600	-185.	0.	-627.	0.	0.	0.	0.	.0003	-.0061	.0009	-.0112	.0621	.0104	0.
.0610	-4.	0.	-603.	0.	0.	0.	0.	.0000	-.0038	.0009	-.0119	.0680	.0118	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.41.

S/RV PIPING KEWAUNEE GKW00F 2 RUP DISK
Z SAFETY COLD FKW24F--2 PSVCONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITSINTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

SECTION	30	MEMBER	1	SEQUENCE	60	LOCATION	DIS	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.0620	31.	0.	-502.	0.	0.	0.		-.0002	-.0011	.0007	-.0122	.0717	.0126	0.	
.0630	203.	0.	-360.	0.	0.	0.		-.0003	.0018	.0005	-.0123	.0720	.0126	0.	
.0640	202.	0.	-703.	0.	0.	0.		-.0003	.0052	.0003	-.0123	.0594	.0117	0.	
.0650	136.	0.	-73.	0.	0.	0.		-.0002	.0090	.0001	-.0121	.0652	.0102	0.	
.0660	30.	0.	-13.	0.	0.	0.		-.0000	.0124	.0000	-.0118	.0603	.0081	0.	
.0670	-82.	0.	-34.	0.	0.	0.		.0001	.0152	.0000	-.0111	.0545	.0055	0.	
.0680	-159.	0.	-97.	0.	0.	0.		.0002	.0172	.0001	-.0099	.0488	.0028	0.	
.0690	-163.	0.	-152.	0.	0.	0.		.0002	.0186	.0002	-.0081	.0446	.0002	0.	
.0700	-77.	0.	-153.	0.	0.	0.		.0001	.0192	.0002	-.0058	.0412	-.0020	0.	
.0710	85.	0.	-78.	0.	0.	0.		-.0001	.0189	.0001	-.0032	.0377	-.0038	0.	
.0720	289.	0.	63.	0.	0.	0.		-.0004	.0178	-.0001	-.0003	.0346	-.0049	0.	
.0730	498.	0.	229.	0.	0.	0.		-.0007	.0159	-.0003	.0026	.0302	-.0053	0.	
.0740	685.	0.	370.	0.	0.	0.		-.0010	.0129	-.0005	.0053	.0215	-.0051	0.	
.0750	840.	0.	451.	0.	0.	0.		-.0012	.0092	-.0004	.0076	.0080	-.0043	0.	
.0760	961.	0.	455.	0.	0.	0.		-.0014	.0052	-.0006	.0093	-.0067	-.0033	0.	
.0770	1044.	0.	380.	0.	0.	0.		-.0015	.0010	-.0005	.0105	-.0199	-.0022	0.	
.0780	1079.	0.	250.	0.	0.	0.		-.0015	-.0035	-.0004	.0111	-.0306	-.0012	0.	
.0790	1060.	0.	118.	0.	0.	0.		-.0015	-.0078	-.0002	.0111	-.0373	-.0007	0.	
.0800	982.	0.	41.	0.	0.	0.		-.0014	-.0114	-.0001	.0104	-.0382	-.0006	0.	
.0810	843.	0.	51.	0.	0.	0.		-.0012	-.0141	-.0001	.0090	-.0352	-.0010	0.	
.0820	645.	0.	145.	0.	0.	0.		-.0009	-.0161	-.0002	.0068	-.0307	-.0017	0.	
.0830	392.	0.	300.	0.	0.	0.		-.0006	-.0171	-.0004	.0039	-.0254	-.0025	0.	
.0840	91.	0.	482.	0.	0.	0.		-.0001	-.0172	-.0007	.0003	-.0205	-.0032	0.	
.0850	-242.	0.	654.	0.	0.	0.		.0003	-.0165	-.0009	-.0041	-.0187	-.0034	0.	
.0860	-574.	0.	780.	0.	0.	0.		.0008	-.0150	-.0011	-.0092	-.0202	-.0031	0.	
.0870	-859.	0.	847.	0.	0.	0.		.0012	-.0131	-.0012	-.0147	-.0218	-.0021	0.	
.0880	-1057.	0.	869.	0.	0.	0.		.0015	-.0106	-.0012	-.0204	-.0220	-.0002	0.	
.0890	-1137.	0.	876.	0.	0.	0.		.0016	-.0078	-.0013	-.0260	-.0208	.0025	0.	
.0900	-1087.	0.	895.	0.	0.	0.		.0016	-.0046	-.0013	-.0312	-.0181	.0059	0.	
.0910	-920.	0.	942.	0.	0.	0.		.0017	-.0011	-.0013	-.0356	-.0138	.0099	0.	
.0920	-670.	0.	1011.	0.	0.	0.		.0010	.0027	-.0014	-.0392	-.0094	.0141	0.	
.0930	-377.	0.	1081.	0.	0.	0.		.0005	.0066	-.0015	-.0416	-.0063	.0182	0.	
.0940	-69.	0.	1126.	0.	0.	0.		.0001	.0106	-.0016	-.0430	-.0045	.0220	0.	
.0950	237.	0.	1134.	0.	0.	0.		-.0003	.0148	-.0016	-.0433	-.0033	.0253	0.	
.0960	528.	0.	1104.	0.	0.	0.		-.0008	.0193	-.0016	-.0429	-.0023	.0277	0.	
.0970	792.	0.	1041.	0.	0.	0.		-.0011	.0241	-.0015	-.0417	-.0013	.0291	0.	
.0980	1016.	0.	560.	0.	0.	0.		-.0015	.0290	-.0014	-.0400	.0005	.0293	0.	
.0990	1189.	0.	893.	0.	0.	0.		-.0017	.0340	-.0013	-.0379	.0032	.0282	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.41.

S/RV PIPING KEWAUNEE GKW00F 2 RUP DISK
Z SAFETY COLD FKW24F--2 PSVCONDITION 24
LOADS
SHOCK

.0890	-1137.	0.	876.	0.	0.	0.	0.	.0016	-.0078	-.0013	-.0260	-.0208	.0025	0.
.0900	-1087.	0.	895.	0.	0.	0.	0.	.0016	-.0046	-.0013	-.0312	-.0181	.0059	0.
.0910	-920.	0.	942.	0.	0.	0.	0.	.0013	-.0011	-.0013	-.0356	-.0138	.0099	0.
.0920	-670.	0.	1011.	0.	0.	0.	0.	.0010	.0027	-.0014	-.0392	-.0094	.0141	0.
.0930	-377.	0.	1081.	0.	0.	0.	0.	.0009	.0066	-.0015	-.0416	-.0063	.0182	0.
.0940	-69.	0.	1126.	0.	0.	0.	0.	.0001	.0106	-.0016	-.0430	-.0045	.0220	0.
.0950	237.	0.	1134.	0.	0.	0.	0.	-.0003	.0148	-.0016	-.0433	-.0033	.0253	0.
.0960	529.	0.	1104.	0.	0.	0.	0.	-.0008	.0193	-.0016	-.0429	-.0023	.0277	0.
.0970	792.	0.	1041.	0.	0.	0.	0.	-.0011	.0241	-.0015	-.0417	-.0013	.0291	0.
.0980	1016.	0.	960.	0.	0.	0.	0.	-.0015	.0290	-.0014	-.0400	.0005	.0293	0.
.0990	1189.	0.	882.	0.	0.	0.	0.	-.0017	.0340	-.0013	-.0379	.0032	.0282	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.41.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	RU								
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)	
.1000	1297.	0.	827.	0.	0.	0.	-.0019	.0391	-.0012	-.0354	.0062	.0257	0.	
.1010	1337.	0.	795.	0.	0.	0.	-.0019	.0439	-.0011	-.0325	.0078	.0216	0.	
.1020	1305.	0.	777.	0.	0.	0.	-.0019	.0481	-.0011	-.0290	.0066	.0160	0.	
.1030	1200.	0.	771.	0.	0.	0.	-.0017	.0513	-.0011	-.0250	.0010	.0093	0.	
.1040	1027.	0.	775.	0.	0.	0.	-.0015	.0535	-.0011	-.0205	-.0085	.0016	0.	
.1050	800.	0.	782.	0.	0.	0.	-.0011	.0545	-.0011	-.0155	-.0200	-.0066	0.	
.1060	538.	0.	769.	0.	0.	0.	-.0008	.0542	-.0011	-.0100	-.0312	-.0150	0.	
.1070	261.	0.	713.	0.	0.	0.	-.0004	.0526	-.0010	-.0044	-.0398	-.0233	0.	
.1080	-22.	0.	592.	0.	0.	0.	.0000	.0499	-.0008	.0014	-.0457	-.0309	0.	
.1090	-305.	0.	366.	0.	0.	0.	.0004	.0456	-.0005	.0073	-.0489	-.0378	0.	
.1100	-551.	0.	-7.	0.	0.	0.	.0008	.0399	.0000	.0133	-.0459	-.0437	0.	
.1110	-760.	0.	-468.	0.	0.	0.	.0011	.0339	.0007	.0193	-.0421	-.0482	0.	
.1120	-938.	0.	-931.	0.	0.	0.	.0013	.0286	.0013	.0251	-.0409	-.0511	0.	
.1130	-1059.	0.	-1378.	0.	0.	0.	.0015	.0229	.0020	.0306	-.0388	-.0523	0.	
.1140	-1101.	0.	-1799.	0.	0.	0.	.0016	.0189	.0026	.0359	-.0339	-.0518	0.	
.1150	-1066.	0.	-2119.	0.	0.	0.	.0015	.0144	.0030	.0403	-.0280	-.0497	0.	
.1160	-968.	0.	-2276.	0.	0.	0.	.0014	.0117	.0033	.0434	-.0205	-.0459	0.	
.1170	-818.	0.	-2299.	0.	0.	0.	.0012	.0105	.0033	.0448	-.0111	-.0406	0.	
.1180	-630.	0.	-2262.	0.	0.	0.	.0009	.0102	.0032	.0448	-.0005	-.0343	0.	
.1190	-456.	0.	-2160.	0.	0.	0.	.0007	.0113	.0031	.0433	.0036	-.0271	0.	
.1200	-340.	0.	-1975.	0.	0.	0.	.0005	.0145	.0028	.0405	.0015	-.0195	0.	
.1210	-270.	0.	-1759.	0.	0.	0.	.0004	.0192	.0025	.0369	-.0002	-.0117	0.	
.1220	-225.	0.	-1567.	0.	0.	0.	.0003	.0242	.0022	.0331	-.0027	-.0044	0.	
.1230	-195.	0.	-1376.	0.	0.	0.	.0003	.0296	.0020	.0294	-.0055	.0021	0.	
.1240	-180.	0.	-1130.	0.	0.	0.	.0003	.0360	.0016	.0262	-.0082	.0077	0.	
.1250	-167.	0.	-829.	0.	0.	0.	.0002	.0428	.0012	.0239	-.0085	.0124	0.	
.1260	-142.	0.	-505.	0.	0.	0.	.0002	.0487	.0007	.0228	-.0050	.0160	0.	
.1270	-119.	0.	-149.	0.	0.	0.	.0002	.0537	.0002	.0230	-.0027	.0187	0.	
.1280	-106.	0.	227.	0.	0.	0.	.0002	.0581	-.0003	.0244	.0006	.0204	0.	
.1290	-93.	0.	537.	0.	0.	0.	.0001	.0614	-.0008	.0269	.0047	.0212	0.	
.1300	-77.	0.	678.	0.	0.	0.	.0001	.0623	-.0010	.0304	.0057	.0208	0.	
.1310	-69.	0.	644.	0.	0.	0.	.0001	.0608	-.0009	.0346	.0018	.0194	0.	
.1320	-67.	0.	509.	0.	0.	0.	.0001	.0579	-.0007	.0393	-.0086	.0170	0.	
.1330	-94.	0.	320.	0.	0.	0.	.0001	.0530	-.0005	.0444	-.0198	.0137	0.	
.1340	-63.	0.	121.	0.	0.	0.	.0001	.0460	-.0002	.0499	-.0284	.0095	0.	
.1350	22.	0.	-23.	0.	0.	0.	-.0000	.0374	.0000	.0556	-.0337	.0046	0.	
.1360	137.	0.	-60.	0.	0.	0.	-.0002	.0286	.0001	.0612	-.0345	-.0012	0.	
.1370	231.	0.	-11.	0.	0.	0.	-.0003	.0196	.0001	.0664	-.0347	-.0076	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.41.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

.1270	-119.	0.	-149.	0.	0.	0.	0.	.0002	.0537	.0002	.0230	-.0027	.0187	0.
.1280	-106.	0.	207.	0.	0.	0.	0.	.0003	.0581	-.0003	.0244	.0306	.0204	0.
.1290	-93.	0.	537.	0.	0.	0.	0.	.0001	.0614	-.0008	.0269	.0047	.0212	0.
.1300	-77.	0.	678.	0.	0.	0.	0.	.0001	.0623	-.0010	.0304	.0057	.0208	0.
.1310	-67.	0.	644.	0.	0.	0.	0.	.0001	.0608	-.0009	.0346	.0018	.0194	0.
.1320	-83.	0.	507.	0.	0.	0.	0.	.0001	.0579	-.0007	.0393	-.0086	.0170	0.
.1330	-94.	0.	320.	0.	0.	0.	0.	.0001	.0530	-.0005	.0444	-.0198	.0137	0.
.1340	-63.	0.	121.	0.	0.	0.	0.	.0001	.0460	-.0002	.0499	-.0284	.0095	0.
.1350	22.	0.	-23.	0.	0.	0.	0.	-.0000	.0374	.0000	.0556	-.0337	.0046	0.
.1360	137.	0.	-60.	0.	0.	0.	0.	-.0002	.0206	.0001	.0612	-.0345	-.0012	0.
.1370	231.	0.	-61.	0.	0.	0.	0.	-.0003	.0196	.0001	.0664	-.0347	-.0076	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.41.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	38	MEMBER	1	SEQUENCE	60	LOCATION	DIS	TYPE	RU						
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	FZ (DEG)	STRESS (PSI)		
.1380	258.	0.	-79.	0.	0.	0.	-.0004	.0103	.0001	.0711	-.0354	-.0147	0.		
.1390	179.	0.	-157.	0.	0.	0.	-.0003	.0012	.0002	.0750	-.0391	-.0223	0.		
.1400	-8.	0.	-278.	0.	0.	0.	.0000	-.0066	.0004	.0778	-.0455	-.0301	0.		
.1410	-264.	0.	-440.	0.	0.	0.	.0004	-.0128	.0006	.0793	-.0504	-.0378	0.		
.1420	-545.	0.	-638.	0.	0.	0.	.0008	-.0176	.0009	.0797	-.0550	-.0454	0.		
.1430	-833.	0.	-835.	0.	0.	0.	.0012	-.0206	.0012	.0790	-.0579	-.0525	0.		
.1440	-1118.	0.	-982.	0.	0.	0.	.0016	-.0213	.0014	.0773	-.0576	-.0588	0.		
.1450	-1378.	0.	-1078.	0.	0.	0.	.0020	-.0198	.0015	.0748	-.0528	-.0640	0.		
.1460	-1571.	0.	-1142.	0.	0.	0.	.0022	-.0168	.0016	.0716	-.0436	-.0678	0.		
.1470	-1668.	0.	-1164.	0.	0.	0.	.0024	-.0124	.0017	.0681	-.0351	-.0700	0.		
.1480	-1651.	0.	-1131.	0.	0.	0.	.0024	-.0063	.0016	.0642	-.0265	-.0702	0.		
.1490	-1516.	0.	-1065.	0.	0.	0.	.0022	.0011	.0015	.0602	-.0184	-.0683	0.		
.1500	-1276.	0.	-1005.	0.	0.	0.	.0018	.0088	.0014	.0562	-.0118	-.0642	0.		
.1510	-947.	0.	-962.	0.	0.	0.	.0014	.0169	.0014	.0522	-.0054	-.0581	0.		
.1520	-539.	0.	-921.	0.	0.	0.	.0008	.0254	.0013	.0483	.0004	-.0502	0.		
.1530	-48.	0.	-887.	0.	0.	0.	.0001	.0338	.0013	.0445	.0078	-.0409	0.		
.1540	522.	0.	-865.	0.	0.	0.	-.0007	.0415	.0012	.0412	.0160	-.0309	0.		
.1550	1137.	0.	-831.	0.	0.	0.	-.0016	.0479	.0012	.0384	.0250	-.0206	0.		
.1560	1736.	0.	-756.	0.	0.	0.	-.0025	.0531	.0011	.0363	.0366	-.0106	0.		
.1570	2249.	0.	-636.	0.	0.	0.	-.0032	.0565	.0009	.0348	.0465	-.0016	0.		
.1580	2627.	0.	-495.	0.	0.	0.	-.0038	.0577	.0007	.0338	.0546	.0059	0.		
.1590	2837.	0.	-343.	0.	0.	0.	-.0041	.0568	.0005	.0333	.0608	.0115	0.		
.1600	2861.	0.	-177.	0.	0.	0.	-.0041	.0541	.0003	.0328	.0630	.0149	0.		
.1610	2698.	0.	-13.	0.	0.	0.	-.0039	.0497	.0000	.0324	.0619	.0161	0.		
.1620	2365.	0.	122.	0.	0.	0.	-.0034	.0433	-.0002	.0319	.0608	.0154	0.		
.1630	1879.	0.	221.	0.	0.	0.	-.0027	.0355	-.0003	.0311	.0578	.0130	0.		
.1640	1278.	0.	282.	0.	0.	0.	-.0018	.0268	-.0004	.0300	.0535	.0093	0.		
.1650	611.	0.	294.	0.	0.	0.	-.0009	.0177	-.0004	.0286	.0491	.0048	0.		
.1660	-74.	0.	253.	0.	0.	0.	.0001	.0087	-.0004	.0268	.0432	-.0001	0.		
.1670	-737.	0.	181.	0.	0.	0.	.0011	.0003	-.0003	.0248	.0380	-.0047	0.		
.1680	-1349.	0.	116.	0.	0.	0.	.0019	-.0069	-.0002	.0225	.0331	-.0086	0.		
.1690	-1880.	0.	78.	0.	0.	0.	.0027	-.0127	-.0001	.0199	.0299	-.0114	0.		
.1700	-2293.	0.	70.	0.	0.	0.	.0033	-.0168	-.0001	.0168	.0280	-.0127	0.		
.1710	-2563.	0.	86.	0.	0.	0.	.0037	-.0191	-.0001	.0132	.0258	-.0124	0.		
.1720	-2674.	0.	119.	0.	0.	0.	.0038	-.0193	-.0002	.0087	.0262	-.0106	0.		
.1730	-2638.	0.	163.	0.	0.	0.	.0038	-.0173	-.0002	.0033	.0271	-.0074	0.		
.1740	-2477.	0.	211.	0.	0.	0.	.0035	-.0136	-.0003	-.0031	.0280	-.0030	0.		
.1750	-2218.	0.	266.	0.	0.	0.	.0032	-.0084	-.0004	-.0103	.0294	.0021	0.		

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

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.1650	0.11.	0.	94.	0.	0.	0.	0.	-.0009	.0177	-.0004	.0286	.0491	.0048	0.
.1660	-74.	0.	253.	0.	0.	0.	0.	.0001	.0087	-.0004	.0268	.0432	-.0001	0.
.1670	-737.	0.	181.	0.	0.	0.	0.	.0011	.0003	-.0003	.0248	.0380	-.0047	0.
.1680	-1749.	0.	116.	0.	0.	0.	0.	.0019	-.0069	-.0002	.0225	.0331	-.0086	0.
.1690	-1880.	0.	78.	0.	0.	0.	0.	.0027	-.0127	-.0001	.0199	.0299	-.0114	0.
.1700	-2293.	0.	70.	0.	0.	0.	0.	.0023	-.0168	-.0001	.0168	.0280	-.0127	0.
.1710	-2563.	0.	86.	0.	0.	0.	0.	.0037	-.0191	-.0001	.0132	.0258	-.0124	0.
.1720	-2674.	0.	119.	0.	0.	0.	0.	.0038	-.0193	-.0002	.0087	.0262	-.0106	0.
.1730	-2638.	0.	163.	0.	0.	0.	0.	.0038	-.0173	-.0002	.0033	.0271	-.0074	0.
.1740	-2477.	0.	211.	0.	0.	0.	0.	.0035	-.0136	-.0003	-.0031	.0280	-.0030	0.
.1750	-2218.	0.	266.	0.	0.	0.	0.	.0032	-.0084	-.0004	-.0103	.0294	.0021	0.

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INTERNAL FORCES IN THE PIPING
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SECTION	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
38	1	60					.1760	-1889.	0.	345.	0.	0.	0.	.0027	-.0021	-.0005	-.0181	.0286	.0075	0.
							.1770	-1508.	0.	453.	0.	0.	0.	.0022	.0052	-.0006	-.0264	.0261	.0128	0.
							.1780	-1099.	0.	587.	0.	0.	0.	.0016	.0128	-.0008	-.0347	.0204	.0176	0.
							.1790	-688.	0.	742.	0.	0.	0.	.0010	.0204	-.0011	-.0429	.0123	.0215	0.
							.1800	-305.	0.	920.	0.	0.	0.	.0004	.0276	-.0013	-.0507	.0022	.0245	0.
							.1810	26.	0.	1117.	0.	0.	0.	-.0000	.0342	-.0016	-.0579	-.0106	.0263	0.
							.1820	306.	0.	1308.	0.	0.	0.	-.0004	.0397	-.0019	-.0643	-.0218	.0269	0.
							.1830	544.	0.	1467.	0.	0.	0.	-.0008	.0439	-.0021	-.0698	-.0312	.0265	0.
							.1840	749.	0.	1570.	0.	0.	0.	-.0011	.0467	-.0022	-.0743	-.0395	.0251	0.
							.1850	930.	0.	1585.	0.	0.	0.	-.0013	.0480	-.0023	-.0779	-.0468	.0232	0.
							.1860	1088.	0.	1487.	0.	0.	0.	-.0016	.0475	-.0021	-.0804	-.0536	.0208	0.
							.1870	1230.	0.	1280.	0.	0.	0.	-.0018	.0453	-.0018	-.0819	-.0587	.0184	0.
							.1880	1359.	0.	1003.	0.	0.	0.	-.0019	.0415	-.0014	-.0824	-.0635	.0150	0.
							.1890	1485.	0.	704.	0.	0.	0.	-.0021	.0363	-.0010	-.0819	-.0666	.0139	0.
							.1900	1618.	0.	424.	0.	0.	0.	-.0023	.0300	-.0006	-.0807	-.0665	.0122	0.
							.1910	1750.	0.	193.	0.	0.	0.	-.0025	.0228	-.0003	-.0788	-.0642	.0109	0.
							.1920	1863.	0.	21.	0.	0.	0.	-.0027	.0151	-.0000	-.0765	-.0594	.0102	0.
							.1930	1928.	0.	-105.	0.	0.	0.	-.0028	.0075	.0002	-.0739	-.0529	.0098	0.
							.1940	1922.	0.	-214.	0.	0.	0.	-.0027	.0001	.0003	-.0714	-.0455	.0096	0.
							.1950	1830.	0.	-322.	0.	0.	0.	-.0026	-.0068	.0005	-.0688	-.0373	.0094	0.
							.1960	1647.	0.	-433.	0.	0.	0.	-.0024	-.0129	.0006	-.0664	-.0280	.0091	0.
							.1970	1380.	0.	-536.	0.	0.	0.	-.0020	-.0177	.0008	-.0639	-.0174	.0086	0.
							.1980	1042.	0.	-610.	0.	0.	0.	-.0015	-.0211	.0009	-.0613	-.0053	.0078	0.
							.1990	649.	0.	-631.	0.	0.	0.	-.0009	-.0230	.0009	-.0585	.0080	.0069	0.
							.2000	222.	0.	-574.	0.	0.	0.	-.0003	-.0233	.0008	-.0554	.0217	.0060	0.
							.2010	-213.	0.	-425.	0.	0.	0.	.0003	-.0220	.0006	-.0519	.0347	.0051	0.
							.2020	-630.	0.	-190.	0.	0.	0.	.0009	-.0194	.0003	-.0479	.0471	.0045	0.
							.2030	-1006.	0.	118.	0.	0.	0.	.0014	-.0155	-.0002	-.0437	.0583	.0043	0.
							.2040	-1324.	0.	476.	0.	0.	0.	.0019	-.0107	-.0007	-.0393	.0671	.0047	0.
							.2050	-1572.	0.	850.	0.	0.	0.	.0022	-.0052	-.0012	-.0347	.0726	.0056	0.
							.2060	-1727.	0.	1206.	0.	0.	0.	.0025	.0007	-.0017	-.0301	.0748	.0072	0.
							.2070	-1775.	0.	1523.	0.	0.	0.	.0025	.0067	-.0022	-.0255	.0738	.0093	0.
							.2080	-1706.	0.	1796.	0.	0.	0.	.0024	.0125	-.0026	-.0209	.0703	.0119	0.
							.2090	-1518.	0.	2030.	0.	0.	0.	.0022	.0178	-.0029	-.0163	.0657	.0147	0.
							.2100	-1220.	0.	2232.	0.	0.	0.	.0017	.0226	-.0032	-.0115	.0617	.0175	0.
							.2110	-837.	0.	2407.	0.	0.	0.	.0012	.0266	-.0034	-.0066	.0585	.0202	0.
							.2120	-403.	0.	2549.	0.	0.	0.	.0006	.0298	-.0036	-.0014	.0557	.0225	0.
							.2130	47.	0.	2641.	0.	0.	0.	-.0001	.0320	-.0038	.0039	.0526	.0243	0.

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.2030	-1006.	0.	118.	0.	0.	0.	0.	.0014	-.0155	-.0002	-.0437	.0583	.0043	0.
.2040	-1326.	0.	476.	0.	0.	0.	0.	.0019	-.0107	-.0007	-.0393	.0671	.0047	0.
.2050	-1572.	0.	850.	0.	0.	0.	0.	.0022	-.0052	-.0012	-.0347	.0726	.0056	0.
.2060	-1727.	0.	1206.	0.	0.	0.	0.	.0025	.0007	-.0017	-.0301	.0748	.0072	0.
.2070	-1775.	0.	1523.	0.	0.	0.	0.	.0025	.0067	-.0022	-.0255	.0738	.0093	0.
.2080	-1766.	0.	1796.	0.	0.	0.	0.	.0024	.0125	-.0026	-.0209	.0703	.0119	0.
.2090	-1518.	0.	2030.	0.	0.	0.	0.	.0022	.0178	-.0029	-.0163	.0657	.0147	0.
.2100	-1220.	0.	2232.	0.	0.	0.	0.	.0017	.0226	-.0032	-.0115	.0617	.0175	0.
.2110	-837.	0.	2407.	0.	0.	0.	0.	.0012	.0266	-.0034	-.0066	.0585	.0202	0.
.2120	-403.	0.	2549.	0.	0.	0.	0.	.0006	.0298	-.0036	-.0014	.0557	.0225	0.
.2130	47.	0.	2641.	0.	0.	0.	0.	-.0001	.0320	-.0038	.0039	.0526	.0243	0.

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SECTION	38	MEMBER	1	SEQUENCE	60	LOCATION	DIS	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2140	482.	0.	2656.	0.	0.	0.	-.0007	.0333	-.0030	.0094	.0489	.0253	0.		
.2150	878.	0.	2569.	0.	0.	0.	-.0013	.0337	-.0037	.0150	.0445	.0254	0.		
.2160	1215.	0.	2365.	0.	0.	0.	-.0017	.0333	-.0034	.0204	.0395	.0246	0.		
.2170	1480.	0.	2036.	0.	0.	0.	-.0021	.0321	-.0029	.0256	.0346	.0228	0.		
.2180	1668.	0.	1590.	0.	0.	0.	-.0024	.0301	-.0023	.0306	.0301	.0200	0.		
.2190	1781.	0.	1055.	0.	0.	0.	-.0025	.0273	-.0015	.0351	.0262	.0164	0.		
.2200	1826.	0.	471.	0.	0.	0.	-.0026	.0241	-.0007	.0391	.0230	.0122	0.		
.2210	1812.	0.	-119.	0.	0.	0.	-.0026	.0207	.0002	.0426	.0202	.0074	0.		
.2220	1743.	0.	-673.	0.	0.	0.	-.0025	.0171	.0010	.0455	.0175	.0024	0.		
.2230	1618.	0.	-1157.	0.	0.	0.	-.0023	.0136	.0017	.0476	.0143	-.0027	0.		
.2240	1438.	0.	-1548.	0.	0.	0.	-.0021	.0103	.0022	.0489	.0103	-.0076	0.		
.2250	1206.	0.	-1838.	0.	0.	0.	-.0017	.0075	.0026	.0493	.0052	-.0122	0.		
.2260	937.	0.	-2033.	0.	0.	0.	-.0013	.0051	.0029	.0487	-.0008	-.0164	0.		
.2270	648.	0.	-2143.	0.	0.	0.	-.0009	.0033	.0031	.0470	-.0073	-.0200	0.		
.2280	359.	0.	-2175.	0.	0.	0.	-.0005	.0022	.0031	.0444	-.0144	-.0229	0.		
.2290	85.	0.	-2132.	0.	0.	0.	-.0001	.0019	.0030	.0410	-.0215	-.0251	0.		
.2300	-164.	0.	-2015.	0.	0.	0.	.0002	.0022	.0029	.0371	-.0281	-.0265	0.		
.2310	-383.	0.	-1823.	0.	0.	0.	.0005	.0031	.0026	.0328	-.0338	-.0273	0.		
.2320	-570.	0.	-1562.	0.	0.	0.	.0008	.0047	.0022	.0286	-.0387	-.0273	0.		
.2330	-722.	0.	-1247.	0.	0.	0.	.0010	.0067	.0018	.0247	-.0431	-.0267	0.		
.2340	-836.	0.	-901.	0.	0.	0.	.0012	.0090	.0013	.0213	-.0473	-.0254	0.		
.2350	-911.	0.	-553.	0.	0.	0.	.0013	.0116	.0008	.0185	-.0516	-.0234	0.		
.2360	-949.	0.	-231.	0.	0.	0.	.0014	.0143	.0003	.0164	-.0560	-.0208	0.		
.2370	-947.	0.	36.	0.	0.	0.	.0014	.0171	-.0001	.0151	-.0598	-.0176	0.		
.2380	-904.	0.	222.	0.	0.	0.	.0013	.0197	-.0003	.0146	-.0623	-.0140	0.		
.2390	-816.	0.	312.	0.	0.	0.	.0012	.0221	-.0004	.0149	-.0630	-.0101	0.		
.2400	-690.	0.	305.	0.	0.	0.	.0010	.0243	-.0004	.0159	-.0619	-.0059	0.		
.2410	-536.	0.	207.	0.	0.	0.	.0008	.0261	-.0003	.0175	-.0591	-.0018	0.		
.2420	-368.	0.	37.	0.	0.	0.	.0005	.0276	-.0001	.0196	-.0549	.0021	0.		
.2430	-202.	0.	-178.	0.	0.	0.	.0003	.0284	.0003	.0223	-.0495	.0057	0.		
.2440	-50.	0.	-408.	0.	0.	0.	.0001	.0288	.0006	.0253	-.0429	.0087	0.		
.2450	74.	0.	-630.	0.	0.	0.	-.0001	.0285	.0009	.0286	-.0352	.0110	0.		
.2460	161.	0.	-832.	0.	0.	0.	-.0002	.0278	.0012	.0320	-.0269	.0124	0.		
.2470	205.	0.	-1015.	0.	0.	0.	-.0003	.0264	.0015	.0353	-.0182	.0129	0.		
.2480	205.	0.	-1187.	0.	0.	0.	-.0003	.0244	.0017	.0385	-.0095	.0124	0.		
.2490	163.	0.	-1356.	0.	0.	0.	-.0002	.0220	.0019	.0415	-.0011	.0110	0.		
.2500	85.	0.	-1525.	0.	0.	0.	-.0001	.0191	.0022	.0442	.0065	.0088	0.		
.2510	-21.	0.	-1689.	0.	0.	0.	.0000	.0160	.0024	.0469	.0129	.0058	0.		

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.2410	-534.	0.	207.	0.	0.	0.	.0008	.0261	-.0003	.0175	-.0591	-.0018	0.
.2420	-348.	0.	37.	0.	0.	0.	.0005	.0276	-.0001	.0196	-.0549	.0021	0.
.2430	-202.	0.	-178.	0.	0.	0.	.0003	.0284	.0003	.0223	-.0495	.0057	0.
.2440	-50.	0.	-102.	0.	0.	0.	.0001	.0288	.0006	.0252	-.0422	.0087	0.
.2450	74.	0.	-430.	0.	0.	0.	-.0001	.0285	.0009	.0286	-.0352	.0110	0.
.2460	161.	0.	-132.	0.	0.	0.	-.0002	.0278	.0012	.0320	-.0269	.0124	0.
.2470	205.	0.	-1015.	0.	0.	0.	-.0003	.0264	.0015	.0353	-.0182	.0129	0.
.2480	205.	0.	-1187.	0.	0.	0.	-.0003	.0244	.0017	.0385	-.0095	.0124	0.
.2490	167.	0.	-1356.	0.	0.	0.	-.0002	.0220	.0019	.0415	-.0011	.0110	0.
.2500	85.	0.	-1525.	0.	0.	0.	-.0001	.0191	.0022	.0442	.0065	.0088	0.
.2510	-21.	0.	-1689.	0.	0.	0.	.0000	.0160	.0024	.0469	.0129	.0058	0.

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INTERNAL FORCES IN THE PIPING
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SECTION	38	MEMBER	1	SEQUENCE	60	LOCATION	DIS	TYPE	RU						
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)		
.2520	-142.	0.	-1840.	0.	0.	0.	.0002	.0126	.0026	.0495	.0180	.0022	0.		
.2530	-264.	0.	-1965.	0.	0.	0.	.0004	.0092	.0025	.0521	.0215	-.0017	0.		
.2540	-379.	0.	-2046.	0.	0.	0.	.0005	.0059	.0029	.0548	.0234	-.0058	0.		
.2550	-481.	0.	-2072.	0.	0.	0.	.0007	.0028	.0030	.0575	.0236	-.0098	0.		
.2560	-568.	0.	-2040.	0.	0.	0.	.0008	-.0001	.0029	.0602	.0223	-.0136	0.		
.2570	-635.	0.	-1952.	0.	0.	0.	.0009	-.0028	.0028	.0628	.0197	-.0171	0.		
.2580	-674.	0.	-1823.	0.	0.	0.	.0010	-.0053	.0026	.0650	.0163	-.0201	0.		
.2590	-680.	0.	-1668.	0.	0.	0.	.0010	-.0076	.0024	.0666	.0123	-.0226	0.		
.2600	-656.	0.	-1495.	0.	0.	0.	.0009	-.0097	.0021	.0674	.0078	-.0246	0.		
.2610	-612.	0.	-1311.	0.	0.	0.	.0009	-.0116	.0019	.0672	.0028	-.0261	0.		
.2620	-548.	0.	-1120.	0.	0.	0.	.0008	-.0136	.0016	.0658	-.0025	-.0271	0.		
.2630	-466.	0.	-919.	0.	0.	0.	.0007	-.0155	.0013	.0632	-.0077	-.0277	0.		
.2640	-368.	0.	-695.	0.	0.	0.	.0005	-.0175	.0010	.0593	-.0127	-.0278	0.		
.2650	-264.	0.	-440.	0.	0.	0.	.0004	-.0194	.0006	.0541	-.0171	-.0276	0.		
.2660	-167.	0.	-153.	0.	0.	0.	.0002	-.0214	.0002	.0479	-.0208	-.0270	0.		
.2670	-84.	0.	154.	0.	0.	0.	.0001	-.0234	-.0002	.0406	-.0237	-.0260	0.		
.2680	-15.	0.	463.	0.	0.	0.	.0000	-.0253	-.0007	.0325	-.0255	-.0247	0.		
.2690	43.	0.	754.	0.	0.	0.	-.0001	-.0269	-.0011	.0238	-.0263	-.0230	0.		
.2700	89.	0.	1002.	0.	0.	0.	-.0001	-.0282	-.0014	.0147	-.0262	-.0209	0.		
.2710	120.	0.	1181.	0.	0.	0.	-.0002	-.0293	-.0017	.0055	-.0252	-.0186	0.		
.2720	148.	0.	1267.	0.	0.	0.	-.0002	-.0305	-.0018	-.0034	-.0233	-.0161	0.		
.2730	186.	0.	1257.	0.	0.	0.	-.0003	-.0315	-.0018	-.0118	-.0208	-.0134	0.		
.2740	243.	0.	1172.	0.	0.	0.	-.0003	-.0320	-.0017	-.0194	-.0180	-.0107	0.		
.2750	316.	0.	1032.	0.	0.	0.	-.0005	-.0322	-.0015	-.0259	-.0153	-.0079	0.		
.2760	404.	0.	854.	0.	0.	0.	-.0006	-.0323	-.0012	-.0311	-.0127	-.0053	0.		
.2770	509.	0.	654.	0.	0.	0.	-.0007	-.0324	-.0009	-.0350	-.0103	-.0029	0.		
.2780	629.	0.	456.	0.	0.	0.	-.0009	-.0324	-.0007	-.0376	-.0087	-.0008	0.		
.2790	753.	0.	275.	0.	0.	0.	-.0011	-.0320	-.0004	-.0389	-.0083	.0009	0.		
.2800	865.	0.	112.	0.	0.	0.	-.0012	-.0316	-.0002	-.0392	-.0095	.0022	0.		
.2810	949.	0.	-38.	0.	0.	0.	-.0014	-.0313	.0001	-.0387	-.0126	.0028	0.		
.2820	1003.	0.	-161.	0.	0.	0.	-.0014	-.0310	.0002	-.0374	-.0175	.0027	0.		
.2830	1028.	0.	-238.	0.	0.	0.	-.0015	-.0304	.0003	-.0357	-.0237	.0021	0.		
.2840	1023.	0.	-255.	0.	0.	0.	-.0015	-.0294	.0004	-.0336	-.0309	.0008	0.		
.2850	984.	0.	-212.	0.	0.	0.	-.0014	-.0283	.0003	-.0313	-.0389	-.0011	0.		
.2860	906.	0.	-107.	0.	0.	0.	-.0013	-.0272	.0002	-.0289	-.0475	-.0035	0.		
.2870	791.	0.	59.	0.	0.	0.	-.0011	-.0258	-.0001	-.0265	-.0566	-.0063	0.		
.2880	649.	0.	277.	0.	0.	0.	-.0009	-.0241	-.0004	-.0242	-.0661	-.0093	0.		
.2890	483.	0.	524.	0.	0.	0.	-.0007	-.0220	-.0007	-.0221	-.0757	-.0124	0.		

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

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.2790	753.	0.	275.	0.	0.	0.	0.	-.0011	-.0320	-.0004	-.0389	-.0083	.0009	0.
.2800	865.	0.	112.	0.	0.	0.	0.	-.0012	-.0316	-.0002	-.0392	-.0095	.0022	0.
.2810	949.	0.	-38.	0.	0.	0.	0.	-.0014	-.0313	.0001	-.0387	-.0126	.0028	0.
.2820	1003.	0.	-161.	0.	0.	0.	0.	-.0014	-.0310	.0002	-.0374	-.0175	.0027	0.
.2830	1023.	0.	-232.	0.	0.	0.	0.	-.0015	-.0304	.0003	-.0357	-.0237	.0021	0.
.2840	1023.	0.	-255.	0.	0.	0.	0.	-.0015	-.0294	.0004	-.0376	-.0309	.0008	0.
.2850	984.	0.	-212.	0.	0.	0.	0.	-.0014	-.0283	.0003	-.0313	-.0389	-.0011	0.
.2860	906.	0.	-107.	0.	0.	0.	0.	-.0013	-.0272	.0002	-.0289	-.0475	-.0035	0.
.2870	791.	0.	59.	0.	0.	0.	0.	-.0011	-.0258	-.0001	-.0265	-.0566	-.0063	0.
.2880	649.	0.	277.	0.	0.	0.	0.	-.0009	-.0241	-.0004	-.0242	-.0661	-.0093	0.
.2890	483.	0.	524.	0.	0.	0.	0.	-.0007	-.0220	-.0007	-.0221	-.0757	-.0124	0.

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INTERNAL FORCES IN THE PIPING
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SECTION	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	RU	STRESS
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	(PSI)
.2900	291.	0.	775.	0.	0.	0.	0.
.2910	72.	0.	1008.	0.	0.	0.	0.
.2920	-162.	0.	1199.	0.	0.	0.	0.
.2930	-392.	0.	1326.	0.	0.	0.	0.
.2940	-604.	0.	1376.	0.	0.	0.	0.
.2950	-792.	0.	1351.	0.	0.	0.	0.
.2960	-949.	0.	1259.	0.	0.	0.	0.
.2970	-1065.	0.	1115.	0.	0.	0.	0.
.2980	-1132.	0.	941.	0.	0.	0.	0.
.2990	-1151.	0.	756.	0.	0.	0.	0.
.3000	-1128.	0.	568.	0.	0.	0.	0.
.3010	-1068.	0.	376.	0.	0.	0.	0.
.3020	-970.	0.	183.	0.	0.	0.	0.
.3030	-834.	0.	-4.	0.	0.	0.	0.
.3040	-661.	0.	-181.	0.	0.	0.	0.
.3050	-459.	0.	-345.	0.	0.	0.	0.
.3060	-236.	0.	-487.	0.	0.	0.	0.
.3070	2.	0.	-595.	0.	0.	0.	0.
.3080	244.	0.	-662.	0.	0.	0.	0.
.3090	476.	0.	-690.	0.	0.	0.	0.
.3100	680.	0.	-682.	0.	0.	0.	0.
.3110	840.	0.	-644.	0.	0.	0.	0.
.3120	952.	0.	-585.	0.	0.	0.	0.
.3130	1014.	0.	-513.	0.	0.	0.	0.
.3140	1024.	0.	-435.	0.	0.	0.	0.
.3150	979.	0.	-352.	0.	0.	0.	0.
.3160	880.	0.	-265.	0.	0.	0.	0.
.3170	738.	0.	-169.	0.	0.	0.	0.
.3180	562.	0.	-60.	0.	0.	0.	0.
.3190	360.	0.	64.	0.	0.	0.	0.
.3200	138.	0.	200.	0.	0.	0.	0.
.3210	-94.	0.	340.	0.	0.	0.	0.
.3220	-324.	0.	476.	0.	0.	0.	0.
.3230	-538.	0.	604.	0.	0.	0.	0.
.3240	-725.	0.	711.	0.	0.	0.	0.
.3250	-879.	0.	785.	0.	0.	0.	0.
.3260	-994.	0.	817.	0.	0.	0.	0.
.3270	-1065.	0.	804.	0.	0.	0.	0.

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S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
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.3170	738.	0.	-169.	0.	0.	0.	0.	-.0011	-.0276	.0002	-.0492	-.0182	.0062	0.
.3180	562.	0.	-60.	0.	0.	0.	0.	-.0008	-.0272	.0001	-.0464	-.0227	.0048	0.
.3190	360.	0.	64.	0.	0.	0.	0.	-.0005	-.0262	-.0001	-.0435	-.0271	.0032	0.
.3200	138.	0.	200.	0.	0.	0.	0.	-.0002	-.0248	-.0003	-.0406	-.0312	.0014	0.
.3210	-94.	0.	340.	0.	0.	0.	0.	.0001	-.0230	-.0005	-.0377	-.0349	-.0004	0.
.3220	-324.	0.	476.	0.	0.	0.	0.	.0005	-.0211	-.0007	-.0347	-.0379	-.0021	0.
.3230	-538.	0.	604.	0.	0.	0.	0.	.0008	-.0189	-.0009	-.0318	-.0401	-.0037	0.
.3240	-725.	0.	711.	0.	0.	0.	0.	.0010	-.0167	-.0010	-.0289	-.0411	-.0052	0.
.3250	-879.	0.	785.	0.	0.	0.	0.	.0013	-.0147	-.0011	-.0258	-.0408	-.0065	0.
.3260	-994.	0.	817.	0.	0.	0.	0.	.0014	-.0130	-.0012	-.0227	-.0393	-.0077	0.
.3270	-1065.	0.	804.	0.	0.	0.	0.	.0015	-.0117	-.0011	-.0194	-.0371	-.0088	0.

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SECTION	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	RU								STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	(PSI)	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
.3280	-1091.	0.	748.	0.	0.	0.	.0016	-.0109	-.0011	-.0160	-.0344	-.0098	0.	
.3290	-1074.	0.	652.	0.	0.	0.	.0015	-.0108	-.0009	-.0123	-.0314	-.0109	0.	
.3300	-1019.	0.	529.	0.	0.	0.	.0015	-.0115	-.0008	-.0085	-.0283	-.0121	0.	
.3310	-931.	0.	395.	0.	0.	0.	.0013	-.0130	-.0006	-.0046	-.0252	-.0133	0.	
.3320	-815.	0.	267.	0.	0.	0.	.0012	-.0152	-.0004	-.0008	-.0219	-.0146	0.	
.3330	-673.	0.	155.	0.	0.	0.	.0010	-.0180	-.0002	.0029	-.0184	-.0159	0.	
.3340	-512.	0.	61.	0.	0.	0.	.0007	-.0215	-.0001	.0063	-.0146	-.0172	0.	
.3350	-335.	0.	-15.	0.	0.	0.	.0005	-.0255	.0000	.0093	-.0107	-.0183	0.	
.3360	-147.	0.	-75.	0.	0.	0.	.0002	-.0298	.0001	.0116	-.0066	-.0192	0.	
.3370	51.	0.	-117.	0.	0.	0.	-.0001	-.0344	.0002	.0133	-.0025	-.0196	0.	
.3380	260.	0.	-142.	0.	0.	0.	-.0004	-.0389	.0002	.0143	.0019	-.0196	0.	
.3390	475.	0.	-144.	0.	0.	0.	-.0007	-.0433	.0002	.0146	.0067	-.0188	0.	
.3400	694.	0.	-119.	0.	0.	0.	-.0010	-.0474	.0002	.0143	.0120	-.0173	0.	
.3410	911.	0.	-67.	0.	0.	0.	-.0013	-.0510	.0001	.0134	.0181	-.0150	0.	
.3420	1123.	0.	9.	0.	0.	0.	-.0016	-.0539	-.0000	.0120	.0249	-.0118	0.	
.3430	1323.	0.	99.	0.	0.	0.	-.0019	-.0561	-.0001	.0103	.0323	-.0079	0.	
.3440	1503.	0.	190.	0.	0.	0.	-.0021	-.0576	-.0003	.0084	.0403	-.0032	0.	
.3450	1654.	0.	268.	0.	0.	0.	-.0024	-.0583	-.0004	.0063	.0486	.0020	0.	
.3460	1767.	0.	321.	0.	0.	0.	-.0025	-.0583	-.0005	.0041	.0570	.0077	0.	
.3470	1839.	0.	341.	0.	0.	0.	-.0026	-.0577	-.0005	.0020	.0654	.0135	0.	
.3480	1861.	0.	329.	0.	0.	0.	-.0027	-.0564	-.0005	-.0001	.0735	.0193	0.	
.3490	1830.	0.	291.	0.	0.	0.	-.0026	-.0546	-.0004	-.0019	.0811	.0249	0.	
.3500	1741.	0.	235.	0.	0.	0.	-.0025	-.0524	-.0003	-.0035	.0879	.0301	0.	
.3510	1595.	0.	174.	0.	0.	0.	-.0023	-.0500	-.0002	-.0048	.0937	.0348	0.	
.3520	1398.	0.	122.	0.	0.	0.	-.0020	-.0474	-.0002	-.0057	.0982	.0388	0.	
.3530	1155.	0.	90.	0.	0.	0.	-.0016	-.0447	-.0001	-.0064	.1012	.0420	0.	
.3540	871.	0.	84.	0.	0.	0.	-.0012	-.0421	-.0001	-.0067	.1026	.0444	0.	
.3550	557.	0.	104.	0.	0.	0.	-.0008	-.0395	-.0001	-.0068	.1020	.0461	0.	
.3560	227.	0.	148.	0.	0.	0.	-.0003	-.0372	-.0002	-.0066	.0995	.0470	0.	
.3570	-102.	0.	210.	0.	0.	0.	.0001	-.0350	-.0003	-.0062	.0952	.0472	0.	
.3580	-413.	0.	284.	0.	0.	0.	.0006	-.0329	-.0004	-.0057	.0891	.0469	0.	
.3590	-693.	0.	363.	0.	0.	0.	.0010	-.0310	-.0005	-.0051	.0815	.0461	0.	
.3600	-927.	0.	441.	0.	0.	0.	.0013	-.0292	-.0006	-.0043	.0726	.0449	0.	
.3610	-1103.	0.	510.	0.	0.	0.	.0016	-.0276	-.0007	-.0034	.0527	.0435	0.	
.3620	-1207.	0.	565.	0.	0.	0.	.0017	-.0261	-.0008	-.0024	.0520	.0421	0.	
.3630	-1237.	0.	601.	0.	0.	0.	.0018	-.0245	-.0009	-.0013	.0406	.0406	0.	
.3640	-1195.	0.	612.	0.	0.	0.	.0017	-.0228	-.0009	-.0001	.0289	.0392	0.	
.3650	-1092.	0.	593.	0.	0.	0.	.0016	-.0210	-.0008	.0010	.0169	.0380	0.	

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.3550	557.	0.	134.	0.	0.	0.	0.	-.0008	-.0395	-.0001	-.0068	.1020	.0461	0.
.3560	227.	0.	148.	0.	0.	0.	0.	-.0003	-.0372	-.0002	-.0066	.0995	.0470	0.
.3570	-102.	0.	210.	0.	0.	0.	0.	.0001	-.0350	-.0003	-.0062	.0952	.0472	0.
.3580	-417.	0.	224.	0.	0.	0.	0.	.0006	-.0320	-.0004	-.0057	.0891	.0469	0.
.3590	-693.	0.	363.	0.	0.	0.	0.	.0010	-.0310	-.0005	-.0051	.0815	.0461	0.
.3600	-927.	0.	441.	0.	0.	0.	0.	.0013	-.0297	-.0006	-.0043	.0726	.0449	0.
.3610	-1103.	0.	510.	0.	0.	0.	0.	.0016	-.0276	-.0007	-.0034	.0527	.0435	0.
.3620	-1207.	0.	565.	0.	0.	0.	0.	.0017	-.0261	-.0008	-.0024	.0520	.0421	0.
.3630	-1237.	0.	601.	0.	0.	0.	0.	.0018	-.0245	-.0009	-.0013	.0406	.0406	0.
.3640	-1195.	0.	612.	0.	0.	0.	0.	.0017	-.0228	-.0009	-.0001	.0289	.0392	0.
.3650	-1092.	0.	597.	0.	0.	0.	0.	.0016	-.0210	-.0008	.0010	.0169	.0380	0.

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SECTION	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
38	1	60					.3660	-936.	0.	539.	0.	0.	0.	.0013	-.0190	-.0008	.0019	.0052	.0369	0.
							.3670	-733.	0.	445.	0.	0.	0.	.0010	-.0169	-.0006	.0027	-.0059	.0362	0.
							.3680	-493.	0.	311.	0.	0.	0.	.0007	-.0145	-.0004	.0031	-.0161	.0357	0.
							.3690	-232.	0.	138.	0.	0.	0.	.0003	-.0119	-.0002	.0030	-.0250	.0354	0.
							.3700	33.	0.	-65.	0.	0.	0.	-.0000	-.0091	.0001	.0023	-.0324	.0353	0.
							.3710	289.	0.	-289.	0.	0.	0.	-.0004	-.0063	.0004	.0010	-.0382	.0353	0.
							.3720	525.	0.	-515.	0.	0.	0.	-.0008	-.0035	.0007	-.0009	-.0422	.0354	0.
							.3730	733.	0.	-725.	0.	0.	0.	-.0010	-.0008	.0010	-.0035	-.0443	.0356	0.
							.3740	900.	0.	-903.	0.	0.	0.	-.0013	.0017	.0013	-.0068	-.0447	.0358	0.
							.3750	1015.	0.	-1039.	0.	0.	0.	-.0015	.0039	.0015	-.0106	-.0435	.0358	0.
							.3760	1073.	0.	-1130.	0.	0.	0.	-.0015	.0056	.0016	-.0149	-.0411	.0358	0.
							.3770	1075.	0.	-1178.	0.	0.	0.	-.0015	.0067	.0017	-.0196	-.0378	.0356	0.
							.3780	1025.	0.	-1184.	0.	0.	0.	-.0015	.0072	.0017	-.0244	-.0336	.0353	0.
							.3790	927.	0.	-1154.	0.	0.	0.	-.0013	.0071	.0016	-.0293	-.0289	.0347	0.
							.3800	785.	0.	-1096.	0.	0.	0.	-.0011	.0063	.0016	-.0339	-.0236	.0340	0.
							.3810	609.	0.	-1016.	0.	0.	0.	-.0009	.0049	.0015	-.0382	-.0177	.0330	0.
							.3820	414.	0.	-921.	0.	0.	0.	-.0006	.0028	.0013	-.0418	-.0113	.0318	0.
							.3830	212.	0.	-815.	0.	0.	0.	-.0003	.0002	.0012	-.0446	-.0043	.0305	0.
							.3840	7.	0.	-700.	0.	0.	0.	-.0000	-.0028	.0010	-.0464	.0031	.0290	0.
							.3850	-200.	0.	-581.	0.	0.	0.	.0003	-.0062	.0008	-.0472	.0106	.0275	0.
							.3860	-402.	0.	-459.	0.	0.	0.	.0006	-.0099	.0007	-.0467	.0183	.0260	0.
							.3870	-583.	0.	-339.	0.	0.	0.	.0008	-.0136	.0005	-.0451	.0263	.0246	0.
							.3880	-731.	0.	-218.	0.	0.	0.	.0010	-.0171	.0003	-.0424	.0347	.0233	0.
							.3890	-842.	0.	-101.	0.	0.	0.	.0012	-.0201	.0001	-.0388	.0434	.0221	0.
							.3900	-917.	0.	4.	0.	0.	0.	.0013	-.0226	-.0000	-.0344	.0522	.0211	0.
							.3910	-955.	0.	91.	0.	0.	0.	.0014	-.0248	-.0001	-.0293	.0608	.0202	0.
							.3920	-952.	0.	162.	0.	0.	0.	.0014	-.0262	-.0002	-.0238	.0691	.0195	0.
							.3930	-908.	0.	226.	0.	0.	0.	.0013	-.0268	-.0003	-.0179	.0770	.0190	0.
							.3940	-831.	0.	293.	0.	0.	0.	.0012	-.0264	-.0004	-.0119	.0844	.0185	0.
							.3950	-736.	0.	370.	0.	0.	0.	.0011	-.0251	-.0005	-.0059	.0912	.0181	0.
							.3960	-634.	0.	461.	0.	0.	0.	.0009	-.0230	-.0007	.0002	.0974	.0176	0.
							.3970	-530.	0.	566.	0.	0.	0.	.0008	-.0201	-.0008	.0062	.1030	.0170	0.
							.3980	-423.	0.	675.	0.	0.	0.	.0006	-.0163	-.0010	.0119	.1077	.0161	0.
							.3990	-320.	0.	776.	0.	0.	0.	.0005	-.0119	-.0011	.0174	.1113	.0149	0.
							.4000	-229.	0.	851.	0.	0.	0.	.0003	-.0071	-.0012	.0227	.1136	.0132	0.

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DIS/ADLPIPE ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.41.

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

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.3030	-908.	0.	226.	0.	0.	0.	0.	.0013	-.0268	-.0003	-.0179	.0770	.0190	0.
.3940	-631.	0.	293.	0.	0.	0.	0.	.0012	-.0264	-.0004	-.0119	.0844	.0185	0.
.3950	-736.	0.	370.	0.	0.	0.	0.	.0011	-.0251	-.0005	-.0059	.0912	.0181	0.
.3960	-634.	0.	461.	0.	0.	0.	0.	.0009	-.0230	-.0007	.0002	.0974	.0176	0.
.3970	-530.	0.	566.	0.	0.	0.	0.	.0008	-.0201	-.0008	.0062	.1030	.0170	0.
.3980	-423.	0.	675.	0.	0.	0.	0.	.0006	-.0163	-.0010	.0119	.1077	.0161	0.
.3990	-320.	0.	776.	0.	0.	0.	0.	.0005	-.0119	-.0011	.0174	.1113	.0149	0.
.4000	-229.	0.	851.	0.	0.	0.	0.	.0003	-.0071	-.0012	.0227	.1136	.0132	0.

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INTERNAL FORCES IN THE PIPING
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MAXIMUM VALUE OF DISCONTINUITY FORCE OCCURS AT

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	FORCE (LB)
.1600	2861.	0.	-177.	0.	0.	0.	-.0041	.0541	.0003	.0328	.0530	.0149	2867.

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
38	1	60					0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
							.0010	0.	0.	-0.	0.	0.	-0.	.0000	.0000	-.0000	-.0000	-.0000	.0000	0.
							.0020	0.	0.	-0.	0.	0.	-0.	.0000	.0000	-.0000	-.0000	-.0000	.0000	0.
							.0030	0.	2.	-0.	0.	1.	-0.	-.0000	.0000	-.0000	-.0000	-.0300	.0000	0.
							.0040	0.	4.	-0.	0.	1.	-0.	-.0000	.0000	-.0000	-.0000	-.0301	.0000	0.
							.0050	0.	8.	0.	-0.	1.	-0.	-.0000	-.0000	.0000	-.0000	-.0001	.0000	0.
							.0060	0.	18.	0.	-0.	1.	0.	.0000	-.0000	.0000	.0000	-.0001	-.0000	1.
							.0070	0.	39.	0.	-0.	2.	1.	.0000	-.0000	.0000	.0000	-.0002	-.0000	1.
							.0080	0.	68.	-0.	-1.	5.	1.	.0000	-.0000	.0000	.0000	-.0003	-.0000	2.
							.0090	0.	95.	-0.	-1.	6.	2.	.0000	-.0001	.0000	.0000	-.0004	-.0000	3.
							.0100	0.	108.	-1.	-1.	2.	2.	.0000	-.0002	.0000	.0000	-.0002	-.0000	1.
							.0110	-0.	106.	-1.	0.	-12.	1.	.0000	-.0003	.0000	.0000	.0007	-.0000	5.
							.0120	-1.	109.	-2.	3.	-36.	-1.	.0000	-.0004	.0000	.0000	.0023	-.0000	15.
							.0130	-3.	138.	-4.	9.	-72.	-5.	.0000	-.0006	.0000	-.0000	.0048	-.0000	29.
							.0140	-6.	182.	-6.	16.	-117.	-11.	.0000	-.0008	.0000	-.0001	.0080	.0000	48.
							.0150	-10.	198.	-8.	23.	-167.	-22.	.0000	-.0011	.0000	-.0001	.0116	.0001	68.
							.0160	-14.	166.	-8.	30.	-216.	-42.	-.0000	-.0013	.0000	-.0002	.0152	.0002	89.
							.0170	-19.	104.	-6.	33.	-257.	-69.	-.0000	-.0016	.0000	-.0003	.0182	.0004	107.
							.0180	-23.	23.	-2.	35.	-285.	-101.	-.0001	-.0019	.0000	-.0003	.0204	.0006	122.
							.0190	-23.	-105.	2.	40.	-304.	-131.	-.0001	-.0021	.0000	-.0004	.0220	.0009	134.
							.0200	-18.	-314.	4.	51.	-319.	-152.	-.0001	-.0022	.0000	-.0006	.0233	.0012	143.
							.0210	-5.	-540.	2.	74.	-342.	-152.	-.0002	-.0021	.0000	-.0008	.0253	.0015	153.
							.0220	14.	-662.	-1.	106.	-403.	-121.	-.0001	-.0018	-.0000	-.0010	.0300	.0016	174.
							.0230	39.	-621.	-6.	142.	-480.	-51.	-.0001	-.0012	-.0001	-.0013	.0361	.0015	202.
							.0240	70.	-324.	-9.	172.	-525.	64.	-.0000	-.0005	-.0001	-.0016	.0406	.0010	223.
							.0250	100.	238.	-3.	177.	-503.	220.	.0001	.0001	-.0002	-.0018	.0406	.0002	232.
							.0260	125.	741.	15.	145.	-443.	391.	.0003	.0006	-.0002	-.0018	.0377	-.0008	244.
							.0270	137.	689.	46.	81.	-416.	555.	.0004	.0010	-.0001	-.0016	.0362	-.0020	280.
							.0280	133.	-111.	75.	11.	-374.	696.	.0005	.0013	.0000	-.0012	.0331	-.0034	317.
							.0290	110.	-1190.	91.	-43.	-243.	801.	.0006	.0018	.0000	-.0008	.0239	-.0047	336.
							.0300	70.	-1760.	91.	-80.	-128.	842.	.0006	.0025	.0000	-.0003	.0155	-.0057	343.

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18.28.41.

S/RV PIPING KEWAUNEE GKWOFF 2 RUP DISK
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.0180	-23.	23.	-2.	35.	-285.	-101.	-.0001	-.0019	.0000	-.0003	.0204	.0006	122.
.0190	-23.	-105.	2.	40.	-304.	-131.	-.0001	-.0021	.0000	-.0004	.0220	.0009	134.
.0200	-18.	-314.	4.	51.	-319.	-152.	-.0001	-.0022	.0000	-.0006	.0233	.0012	143.
.0210	-5.	-540.	2.	74.	-342.	-152.	-.0002	-.0021	.0000	-.0008	.0253	.0015	153.
.0220	14.	-662.	-1.	106.	-403.	-121.	-.0001	-.0018	-.0000	-.0010	.0300	.0016	174.
.0230	39.	-621.	-6.	142.	-480.	-51.	-.0001	-.0017	-.0001	-.0013	.0361	.0015	202.
.0240	70.	-324.	-9.	172.	-525.	64.	-.0000	-.0005	-.0001	-.0016	.0406	.0010	223.
.0250	100.	238.	-3.	177.	-503.	220.	.0001	.0001	-.0002	-.0018	.0406	.0002	232.
.0260	125.	741.	15.	145.	-443.	391.	.0003	.0006	-.0002	-.0018	.0377	-.0008	244.
.0270	137.	689.	46.	81.	-416.	555.	.0004	.0010	-.0001	-.0016	.0362	-.0020	280.
.0280	133.	-111.	75.	11.	-74.	676.	.0005	.0013	.0000	-.0012	.0331	-.0034	317.
.0290	110.	-1190.	91.	-43.	-243.	801.	.0006	.0018	.0000	-.0008	.0239	-.0047	336.
.0300	70.	-1760.	91.	-20.	-128.	842.	.0006	.0025	.0000	-.0003	.0155	-.0057	343.

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INTERNAL FORCES IN THE PIPING
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SECTION	38	MEMBER	1	SEQUENCE	60	LOCATION	END	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ								STRESS
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.0310	26.	-1432.	72.	-99.	-69.	809.	.0006	.0034	.0000	.0003	.0107	-.0062	328.	
.0320	-6.	-723.	35.	-100.	6.	711.	.0005	.0045	-.0001	.0009	.0053	-.0064	288.	
.0330	-19.	-342.	-7.	-103.	92.	552.	.0004	.0058	-.0002	.0016	-.0003	-.0061	228.	
.0340	-29.	-289.	-29.	-141.	147.	330.	.0003	.0073	-.0003	.0023	-.0038	-.0053	155.	
.0350	-54.	-75.	-14.	-236.	217.	48.	.0001	.0088	-.0002	.0031	-.0086	-.0041	130.	
.0360	-93.	787.	36.	-389.	340.	-286.	-.0001	.0100	-.0001	.0043	-.0180	-.0025	237.	
.0370	-136.	632.	96.	-571.	440.	-662.	-.0004	.0108	.0001	.0057	-.0272	-.0007	393.	
.0380	-175.	334.	134.	-733.	461.	-1056.	-.0007	.0114	.0003	.0072	-.0319	.0012	548.	
.0390	-213.	-280.	120.	-826.	480.	-1428.	-.0010	.0119	.0004	.0086	-.0359	.0031	690.	
.0400	-257.	-602.	51.	-829.	550.	-1748.	-.0013	.0123	.0003	.0098	-.0426	.0048	808.	
.0410	-301.	-13.	-51.	-754.	590.	-1986.	-.0015	.0127	.0002	.0107	-.0456	.0062	885.	
.0420	-325.	1426.	-157.	-620.	575.	-2096.	-.0017	.0126	-.0000	.0112	-.0456	.0072	907.	
.0430	-305.	2583.	-243.	-455.	586.	-2033.	-.0016	.0119	-.0002	.0112	-.0480	.0074	868.	
.0440	-238.	2344.	-287.	-288.	610.	-1793.	-.0014	.0108	-.0003	.0107	-.0516	.0068	769.	
.0450	-150.	1266.	-275.	-149.	579.	-1411.	-.0011	.0095	-.0004	.0096	-.0519	.0055	615.	
.0460	-82.	969.	-217.	-49.	526.	-923.	-.0007	.0079	-.0003	.0083	-.0504	.0037	427.	
.0470	-44.	1798.	-144.	20.	527.	-377.	-.0003	.0056	-.0002	.0069	-.0516	.0014	260.	
.0480	-17.	2443.	-89.	76.	531.	171.	.0001	.0030	-.0001	.0055	-.0523	-.0010	226.	
.0490	15.	2030.	-73.	129.	440.	674.	.0005	.0006	-.0001	.0042	-.0462	-.0031	327.	
.0500	41.	1180.	-94.	187.	281.	1113.	.0008	-.0017	-.0001	.0029	-.0351	-.0049	467.	
.0510	55.	708.	-136.	244.	123.	1476.	.0010	-.0038	-.0001	.0017	-.0235	-.0060	602.	
.0520	70.	645.	-178.	281.	-25.	1743.	.0012	-.0055	-.0002	.0004	-.0121	-.0064	709.	
.0530	104.	878.	-199.	278.	-171.	1899.	.0013	-.0066	-.0002	-.0009	-.0005	-.0059	773.	
.0540	162.	1466.	-183.	219.	-296.	1943.	.0013	-.0074	-.0002	-.0024	.0103	-.0044	794.	
.0550	237.	1980.	-121.	97.	-395.	1879.	.0013	-.0080	-.0001	-.0041	.0199	-.0023	771.	
.0560	317.	1775.	-16.	-85.	-480.	1714.	.0012	-.0083	.0000	-.0058	.0291	.0004	715.	
.0570	375.	1106.	122.	-313.	-564.	1467.	.0011	-.0082	.0003	-.0075	.0382	.0032	643.	
.0580	384.	738.	273.	-556.	-647.	1167.	.0008	-.0079	.0005	-.0090	.0470	.0060	580.	
.0590	348.	486.	406.	-774.	-723.	844.	.0006	-.0074	.0008	-.0102	.0549	.0084	544.	
.0600	301.	-392.	487.	-930.	-795.	523.	.0003	-.0061	.0009	-.0112	.0621	.0104	534.	
.0610	264.	-1498.	501.	-1009.	-852.	233.	.0000	-.0038	.0009	-.0119	.0680	.0118	538.	
.0620	235.	-1571.	460.	-1015.	-873.	13.	-.0002	-.0011	.0007	-.0122	.0717	.0126	537.	
.0630	213.	-502.	389.	-967.	-840.	-108.	-.0003	.0018	.0005	-.0123	.0720	.0126	516.	
.0640	208.	487.	321.	-890.	-762.	-127.	-.0003	.0052	.0003	-.0123	.0694	.0117	473.	
.0650	218.	750.	288.	-811.	-673.	-62.	-.0002	.0090	.0001	-.0121	.0652	.0102	424.	
.0660	225.	798.	305.	-754.	-596.	54.	-.0000	.0124	.0000	-.0118	.0603	.0081	386.	
.0670	218.	974.	360.	-724.	-534.	166.	.0001	.0152	.0000	-.0111	.0545	.0055	367.	
.0680	188.	1011.	419.	-708.	-492.	215.	.0002	.0172	.0001	-.0099	.0483	.0028	356.	

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18.28.41.

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

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INTERNAL FORCES IN THE PIPING
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.0580	384.	738.	273.	-556.	-647.	1167.	.0008	-.0079	.0005	-.0090	.0470	.0060	580.
.0590	348.	486.	406.	-774.	-723.	844.	.0006	-.0074	.0008	-.0102	.0549	.0084	544.
.0600	301.	-392.	487.	-930.	-795.	523.	.0003	-.0061	.0009	-.0112	.0621	.0104	534.
.0610	264.	-1498.	501.	-1009.	-852.	233.	.0000	-.0038	.0009	-.0119	.0680	.0118	538.
.0620	235.	-1571.	460.	-1015.	-873.	13.	-.0002	-.0011	.0007	-.0122	.0717	.0126	537.
.0630	213.	-502.	389.	-967.	-840.	-108.	-.0003	.0018	.0005	-.0123	.0720	.0126	516.
.0640	208.	487.	321.	-890.	-762.	-127.	-.0003	.0052	.0003	-.0123	.0694	.0117	473.
.0650	218.	750.	288.	-811.	-673.	-62.	-.0002	.0090	.0001	-.0121	.0652	.0102	424.
.0660	225.	798.	305.	-754.	-596.	54.	-.0000	.0124	.0000	-.0118	.0603	.0081	386.
.0670	210.	974.	360.	-724.	-534.	166.	.0001	.0152	.0000	-.0111	.0545	.0055	367.
.0680	180.	1011.	419.	-708.	-492.	215.	.0002	.0172	.0001	-.0099	.0488	.0028	356.

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18.28.41.

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

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU										STRESS
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)			
.0690	119.	965.	441.	-673.	-474.	163.	.0002	.0186	.0002	-.0081	.0446	.0002	337.			
.0700	-0.	1269.	396.	-580.	-461.	1.	.0001	.0192	.0002	-.0058	.0412	-.0020	297.			
.0710	-152.	1822.	275.	-411.	-443.	-268.	-.0001	.0189	.0001	-.0032	.0377	-.0038	265.			
.0720	-298.	2129.	94.	-171.	-438.	-627.	-.0004	.0178	-.0001	-.0003	.0346	-.0049	315.			
.0730	-413.	2222.	-114.	112.	-435.	-1044.	-.0007	.0159	-.0003	.0026	.0302	-.0053	456.			
.0740	-492.	2464.	-309.	406.	-377.	-1471.	-.0010	.0129	-.0005	.0053	.0215	-.0051	631.			
.0750	-536.	2692.	-458.	674.	-247.	-1871.	-.0012	.0092	-.0006	.0076	.0080	-.0043	804.			
.0760	-549.	2485.	-544.	888.	-87.	-2216.	-.0014	.0052	-.0006	.0093	-.0067	-.0033	959.			
.0770	-545.	1999.	-569.	1044.	69.	-2477.	-.0015	.0010	-.0005	.0105	-.0199	-.0022	1079.			
.0780	-535.	1669.	-552.	1160.	207.	-2621.	-.0015	-.0035	-.0004	.0111	-.0306	-.0012	1153.			
.0790	-523.	1411.	-520.	1271.	300.	-2627.	-.0015	-.0078	-.0002	.0111	-.0373	-.0007	1177.			
.0800	-504.	925.	-505.	1414.	323.	-2483.	-.0014	-.0114	-.0001	.0104	-.0382	-.0006	1154.			
.0810	-480.	424.	-522.	1612.	308.	-2183.	-.0012	-.0141	-.0001	.0090	-.0352	-.0010	1096.			
.0820	-448.	337.	-572.	1865.	293.	-1739.	-.0009	-.0161	-.0002	.0068	-.0307	-.0017	1030.			
.0830	-392.	584.	-636.	2152.	285.	-1180.	-.0006	-.0171	-.0004	.0039	-.0254	-.0025	992.			
.0840	-301.	760.	-688.	2443.	297.	-546.	-.0001	-.0172	-.0007	.0003	-.0205	-.0032	1012.			
.0850	-172.	760.	-697.	2709.	361.	119.	.0003	-.0165	-.0009	-.0041	-.0187	-.0034	1098.			
.0860	-18.	712.	-642.	2922.	469.	756.	.0008	-.0150	-.0011	-.0092	-.0202	-.0031	1226.			
.0870	143.	580.	-522.	3068.	569.	1300.	.0012	-.0131	-.0012	-.0147	-.0218	-.0021	1357.			
.0880	291.	285.	-355.	3150.	635.	1692.	.0015	-.0106	-.0012	-.0204	-.0220	-.0002	1457.			
.0890	408.	-3.	-174.	3179.	674.	1895.	.0016	-.0078	-.0013	-.0260	-.0208	.0025	1510.			
.0900	482.	-42.	-11.	3158.	687.	1896.	.0016	-.0046	-.0013	-.0312	-.0181	.0059	1507.			
.0910	516.	189.	109.	3120.	667.	1706.	.0013	-.0011	-.0013	-.0356	-.0138	.0099	1452.			
.0920	525.	651.	180.	3030.	628.	1361.	.0010	.0027	-.0014	-.0392	-.0094	.0141	1356.			
.0930	516.	1404.	213.	2885.	583.	912.	.0005	.0066	-.0015	-.0416	-.0063	.0182	1236.			
.0940	495.	2420.	224.	2674.	529.	411.	.0001	.0106	-.0016	-.0430	-.0045	.0220	1106.			
.0950	465.	3616.	234.	2393.	460.	-99.	-.0003	.0148	-.0016	-.0433	-.0033	.0253	979.			
.0960	429.	4992.	254.	2049.	378.	-585.	-.0008	.0193	-.0016	-.0429	-.0023	.0277	869.			
.0970	387.	6743.	287.	1657.	286.	-1017.	-.0011	.0241	-.0015	-.0417	-.0013	.0291	789.			
.0980	342.	8898.	330.	1240.	178.	-1364.	-.0015	.0290	-.0014	-.0400	.0005	.0293	743.			
.0990	293.	10984.	375.	822.	49.	-1600.	-.0017	.0340	-.0013	-.0379	.0032	.0282	722.			
.1000	239.	12298.	413.	424.	-89.	-1702.	-.0019	.0391	-.0012	-.0354	.0062	.0257	705.			
.1010	175.	12507.	437.	56.	-219.	-1652.	-.0019	.0439	-.0011	-.0325	.0078	.0216	669.			
.1020	97.	11923.	439.	-283.	-320.	-1448.	-.0019	.0481	-.0011	-.0290	.0066	.0160	606.			
.1030	11.	11026.	413.	-596.	-373.	-1102.	-.0017	.0513	-.0011	-.0250	.0010	.0093	525.			
.1040	-68.	9838.	354.	-893.	-377.	-645.	-.0015	.0535	-.0011	-.0205	-.0085	.0016	467.			
.1050	-137.	8682.	264.	-1189.	-349.	-108.	-.0011	.0545	-.0011	-.0155	-.0200	-.0066	499.			
.1060	-201.	8071.	159.	-1500.	-314.	476.	-.0008	.0542	-.0011	-.0100	-.0312	-.0150	644.			

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/31/02.

18.28.41.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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