

50-305

RESPONSE TO NUREG-0737 ITEM II.D.1

Docket # *50-305*

Control # *8403280048*

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

.3820	456.	178.	1.	-121.	286.	-256.	.0198	-.0268	.0037	.0078	.0035	-.0614	1224.
.3830	267.	94.	-109.	-49.	305.	-257.	.0208	-.0303	.0042	.0057	.0029	-.0618	1223.
.3840	100.	21.	-25.	23.	319.	-272.	.0214	-.0318	.0044	.0044	.0020	-.0617	1278.
.3850	-34.	-37.	43.	91.	329.	-299.	.0217	-.0333	.0044	.0036	.0008	-.0613	1382.
.3860	-112.	-79.	84.	152.	336.	-334.	.0216	-.0347	.0043	.0031	-.0005	-.0603	1512.
.3870	-125.	-106.	89.	203.	339.	-372.	.0209	-.0359	.0043	.0027	-.0019	-.0588	1652.
.3880	-82.	-113.	64.	239.	340.	-420.	.0199	-.0369	.0046	.0023	-.0031	-.0568	1796.
.3890	-2.	-96.	18.	254.	338.	-481.	.0185	-.0377	.0050	.0017	-.0041	-.0543	1947.
.3900	101.	-59.	-40.	250.	331.	-545.	.0167	-.0382	.0054	.0009	-.0051	-.0518	2085.
.3910	225.	-20.	-108.	237.	319.	-600.	.0144	-.0383	.0060	-.0003	-.0060	-.0497	2189.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.16.

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	55	MEMBER	4	SEQUENCE	76	LOCATION	END	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3920	365.	10.	-179.	221.	304.	-638.	.0115	-.0381	.0067	-.0023	-.0072	-.0483	2253.		
.3930	499.	37.	-242.	198.	285.	-668.	.0082	-.0374	.0074	-.0051	-.0088	-.0477	2288.		
.3940	597.	68.	-283.	160.	260.	-694.	.0044	-.0364	.0082	-.0084	-.0105	-.0478	2307.		
.3950	643.	98.	-294.	110.	230.	-714.	.0003	-.0350	.0089	-.0123	-.0122	-.0489	2306.		
.3960	645.	113.	-280.	53.	200.	-718.	-.0039	-.0333	.0099	-.0172	-.0140	-.0509	2272.		
.3970	610.	109.	-247.	-8.	170.	-703.	-.0084	-.0312	.0113	-.0233	-.0158	-.0536	2199.		
.3980	527.	95.	-189.	-76.	140.	-672.	-.0129	-.0289	.0129	-.0300	-.0174	-.0568	2100.		
.3990	384.	72.	-101.	-149.	108.	-628.	-.0173	-.0264	.0145	-.0371	-.0188	-.0604	1990.		
.4000	186.	37.	14.	-217.	77.	-567.	-.0217	-.0239	.0161	-.0444	-.0200	-.0642	1862.		

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)
.1830	328.	-1674.	-391.	1833.	21.	3743.	.0015	-.0548	-.0049	-.0148	.0523	.0426	12679.

SECTION	56	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA						
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	-.0000	.0000	0.		
.0050	-0.	-0.	0.	1.	0.	0.	.0000	-.0000	.0000	-.0000	-.0000	.0000	2.		
.0060	-0.	1.	1.	1.	0.	1.	-.0000	-.0000	.0000	.0000	-.0001	.0000	4.		
.0070	-1.	2.	1.	2.	0.	3.	-.0001	.0000	.0000	.0001	-.0003	-.0000	11.		
.0080	-3.	2.	1.	3.	0.	8.	-.0002	.0000	-.0001	.0003	-.0007	-.0001	26.		
.0090	-6.	1.	2.	4.	0.	15.	-.0004	.0000	-.0003	.0007	-.0014	-.0002	48.		
.0100	-9.	2.	2.	6.	0.	24.	-.0008	.0000	-.0006	.0013	-.0023	-.0005	76.		
.0110	-15.	9.	4.	10.	0.	39.	-.0014	.0000	-.0010	.0022	-.0037	-.0009	123.		
.0120	-25.	22.	7.	17.	-0.	65.	-.0024	.0000	-.0016	.0036	-.0055	-.0016	204.		
.0130	-40.	34.	11.	28.	0.	103.	-.0037	.0001	-.0024	.0055	-.0079	-.0025	326.		
.0140	-59.	34.	15.	39.	0.	153.	-.0055	.0001	-.0035	.0080	-.0108	-.0035	480.		
.0150	-79.	16.	18.	46.	-0.	206.	-.0075	.0002	-.0048	.0109	-.0141	-.0048	641.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.16.

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 56 MEMBER 1 SEQUENCE 76 LOCATION BEG TYPE VA

.0070	-1.	2.	1.	2.	0.	3.	-0.001	.0000	.0000	.0001	-0.0003	-0.0000	11.
.0080	-3.	2.	1.	3.	0.	8.	-0.002	.0000	-0.0001	.0003	-0.0007	-0.0001	26.
.0090	-6.	1.	2.	4.	0.	15.	-0.004	.0000	-0.0003	.0007	-0.0014	-0.0002	48.
.0100	-9.	2.	2.	6.	0.	24.	-0.008	.0000	-0.0006	.0013	-0.0023	-0.0005	76.
.0110	-15.	9.	4.	10.	0.	39.	-0.014	.0000	-0.0010	.0022	-0.0037	-0.0009	123.
.0120	-25.	22.	7.	17.	-0.	65.	-0.024	.0000	-0.0016	.0036	-0.0055	-0.0016	204.
.0130	-40.	34.	11.	26.	0.	103.	-0.037	.0001	-0.0024	.0055	-0.0079	-0.0025	326.
.0140	-59.	34.	15.	39.	0.	153.	-0.055	.0001	-0.0035	.0080	-0.0108	-0.0035	480.
.0150	-79.	16.	18.	46.	-0.	206.	-0.075	.0002	-0.0048	.0109	-0.0141	-0.0048	641.

ADLPIPE PAGE 2136

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CONDITION 24

LOADS
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ENGLISH UNITS

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

SECTION	56	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA						
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)		
.0160	-96.	-15.	17.	44.	-0.	250.	-0.0095	.0003	-0.0064	.0138	-0.0175	-0.0064	771.		
.0170	-105.	-51.	11.	29.	0.	275.	-0.0114	.0004	-0.0080	.0162	-0.0204	-0.0083	841.		
.0180	-105.	-87.	1.	2.	0.	273.	-0.0128	.0004	-0.0093	.0176	-0.0221	-0.0103	832.		
.0190	-91.	-124.	-12.	-32.	-0.	239.	-0.0134	.0003	-0.0100	.0176	-0.0218	-0.0121	732.		
.0200	-67.	-161.	-24.	-63.	0.	174.	-0.0131	.0002	-0.0096	.0158	-0.0188	-0.0131	561.		
.0210	-31.	-188.	-30.	-78.	0.	81.	-0.0116	-0.0001	-0.0079	.0121	-0.0128	-0.0130	342.		
.0220	17.	-171.	-26.	-67.	-0.	-44.	-0.0090	-0.0005	-0.0048	.0069	-0.0039	-0.0123	244.		
.0230	64.	-110.	-11.	-29.	-0.	-167.	-0.0059	-0.0010	-0.0006	.0007	-0.0069	-0.0105	515.		
.0240	98.	-45.	9.	24.	0.	-255.	-0.0026	-0.0016	.0040	-0.0057	.0175	-0.0070	779.		
.0250	121.	-34.	23.	60.	0.	-315.	.0008	-0.0023	.0076	-0.0108	.0266	-0.0025	974.		
.0260	153.	-71.	20.	51.	0.	-399.	.0044	-0.0029	.0089	-0.0135	.0333	.0012	1224.		
.0270	205.	-35.	1.	3.	-0.	-536.	.0078	-0.0036	.0081	-0.0140	.0371	.0023	1630.		
.0280	238.	116.	-24.	-63.	0.	-620.	.0100	-0.0044	.0065	-0.0136	.0369	.0031	1895.		
.0290	227.	256.	-55.	-143.	0.	-592.	.0112	-0.0050	.0041	-0.0124	.0337	.0061	1852.		
.0300	232.	309.	-92.	-241.	0.	-604.	.0131	-0.0054	.0002	-0.0092	.0315	.0083	1978.		
.0310	253.	311.	-117.	-306.	0.	-661.	.0162	-0.0056	-0.0027	-0.0068	.0314	.0107	2215.		
.0320	235.	399.	-108.	-281.	-0.	-612.	.0191	-0.0055	-0.0015	-0.0083	.0329	.0166	2048.		
.0330	174.	614.	-61.	-160.	0.	-460.	.0212	-0.0051	.0033	-0.0129	.0363	.0250	1481.		
.0340	127.	746.	5.	14.	0.	-331.	.0278	-0.0042	.0092	-0.0174	.0414	.0329	1008.		
.0350	95.	629.	69.	180.	0.	-247.	.0265	-0.0028	.0139	-0.0198	.0447	.0392	929.		
.0360	60.	444.	107.	279.	-0.	-158.	.0272	-0.0009	.0154	-0.0192	.0424	.0418	974.		
.0370	26.	436.	109.	283.	-0.	-67.	.0243	.0013	.0132	-0.0153	.0325	.0378	885.		
.0380	-11.	502.	80.	208.	-0.	29.	.0182	.0039	.0078	-0.0086	.0150	.0283	639.		
.0390	-64.	353.	29.	76.	0.	168.	.0105	.0069	-0.0004	.0012	-0.0069	.0173	561.		
.0400	-116.	-73.	-38.	-99.	-0.	304.	.0028	.0100	-0.0106	.0127	-0.0269	.0065	971.		
.0410	-122.	-500.	-97.	-254.	-0.	318.	-0.0029	.0131	-0.0182	.0204	-0.0397	-0.0052	1239.		
.0420	-117.	-680.	-107.	-279.	0.	304.	-0.0062	.0158	-0.0175	.0179	-0.0442	-0.0137	1256.		
.0430	-145.	-612.	-50.	-131.	0.	377.	-0.0084	.0180	-0.0081	.0063	-0.0394	-0.0163	1214.		
.0440	-172.	-569.	51.	133.	-0.	448.	-0.0085	.0196	.0051	-0.0078	-0.0251	-0.0151	1422.		
.0450	-157.	-813.	162.	422.	-0.	409.	-0.0057	.0208	.0179	-0.0200	-0.0063	-0.0128	1789.		
.0460	-135.	-1153.	251.	654.	-0.	352.	-0.0031	.0213	.0277	-0.0287	.0081	-0.0113	2260.		
.0470	-161.	-1163.	290.	757.	-0.	419.	-0.0053	.0209	.0320	-0.0322	.0120	-0.0131	2633.		
.0480	-218.	-879.	268.	698.	-0.	570.	-0.0117	.0196	.0296	-0.0293	.0049	-0.0194	2740.		
.0490	-257.	-752.	199.	519.	0.	671.	-0.0187	.0176	.0210	-0.0197	-0.0092	-0.0282	2580.		
.0500	-375.	-896.	119.	310.	-0.	718.	-0.0244	.0150	.0089	-0.0045	-0.0239	-0.0366	2380.		
.0510	-299.	-939.	60.	156.	0.	780.	-0.0296	.0117	-0.0020	.0108	-0.0335	-0.0430	2419.		
.0520	-333.	-658.	44.	115.	0.	870.	-0.0331	.0077	-0.0059	.0180	-0.0360	-0.0447	2668.		
.0530	-359.	-248.	70.	203.	-0.	936.	-0.0329	.0033	-0.0015	.0152	-0.0302	-0.0402	2912.		

ADLPIPE PAGE 2137

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.16.

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	56	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		

.0450	-157.	-813.	162.	422.	-0.	409.	-.057	.0208	.0179	-.0200	-.0563	-.0128	1789.
.0460	-135.	-1153.	251.	654.	-0.	352.	-.031	.0213	.0277	-.0287	.0081	-.0113	2260.
.0470	-161.	-1163.	290.	757.	-0.	419.	-.053	.0209	.0320	-.0322	.0120	-.0131	2633.
.0480	-213.	-879.	268.	698.	-0.	570.	-.0117	.0196	.0296	-.0293	.0049	-.0194	2740.
.0490	-257.	-752.	199.	519.	0.	671.	-.0187	.0176	.0210	-.0197	-.0092	-.0282	2580.
.0500	-275.	-896.	119.	310.	-0.	718.	-.0244	.0150	.0089	-.0045	-.0239	-.0366	2380.
.0510	-299.	-939.	60.	156.	0.	780.	-.0296	.0117	-.0020	.0108	-.0335	-.0430	2419.
.0520	-333.	-658.	44.	115.	0.	870.	-.0331	.0077	-.0059	.0180	-.0360	-.0447	2668.
.0530	-359.	-248.	78.	203.	-0.	936.	-.0379	.0033	-.0015	.0152	-.0302	-.0402	2912.

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FORCES AND MOMENTS ACT ON THE PIPING

SECTION	56	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA						
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	-350.	41.	146.	380.	-0.	913.	-.0291	-.0013	.0071	.0084	-.0151	-.0319	3009.		
.0550	-307.	174.	218.	568.	-0.	800.	-.0233	-.0059	.0158	.0021	.0051	-.0232	2985.		
.0560	-358.	232.	268.	698.	-0.	673.	-.0177	-.0104	.0234	-.0044	.0217	-.0150	2948.		
.0570	-227.	518.	276.	719.	-0.	592.	-.0151	-.0145	.0281	-.0092	.0289	-.0100	2833.		
.0580	-203.	840.	231.	603.	-0.	530.	-.0165	-.0182	.0261	-.0072	.0266	-.0113	2442.		
.0590	-164.	975.	134.	351.	-0.	427.	-.0198	-.0212	.0175	.0019	.0176	-.0175	1680.		
.0600	-98.	813.	4.	11.	-0.	255.	-.0222	-.0234	.0064	.0124	.0055	-.0246	776.		
.0610	-13.	631.	-124.	-324.	-0.	34.	-.0233	-.0251	-.0027	.0192	-.0039	-.0311	992.		
.0620	81.	696.	-216.	-562.	-0.	-211.	-.0231	-.0261	-.0061	.0193	-.0058	-.0361	1827.		
.0630	178.	892.	-253.	-659.	-0.	-465.	-.0201	-.0266	-.0017	.0104	.0016	-.0367	2453.		
.0640	283.	957.	-243.	-633.	-0.	-737.	-.0133	-.0264	.0089	-.0053	.0175	-.0313	2956.		
.0650	391.	844.	-204.	-531.	0.	-1021.	-.0045	-.0254	.0213	-.0215	.0384	-.0230	3501.		
.0660	484.	693.	-159.	-414.	-0.	-1261.	.0033	-.0238	.0315	-.0336	.0566	-.0155	4037.		
.0670	538.	629.	-143.	-372.	0.	-1404.	.0078	-.0216	.0370	-.0400	.0640	-.0109	4418.		
.0680	560.	655.	-187.	-486.	-0.	-1462.	.0081	-.0189	.0344	-.0383	.0576	-.0114	4686.		
.0690	561.	641.	-287.	-748.	0.	-1465.	.0046	-.0157	.0224	-.0257	.0398	-.0173	5003.		
.0700	534.	461.	-408.	-1063.	0.	-1393.	-.0010	-.0121	.0045	-.0047	.0154	-.0250	5332.		
.0710	477.	201.	-513.	-1337.	0.	-1244.	-.0065	-.0081	-.0134	.0173	-.0091	-.0303	5556.		
.0720	410.	61.	-573.	-1495.	0.	-1070.	-.0100	-.0040	-.0260	.0335	-.0264	-.0316	5592.		
.0730	345.	49.	-563.	-1468.	0.	-901.	-.0100	.0002	-.0301	.0408	-.0316	-.0272	5240.		
.0740	278.	-0.	-475.	-1239.	0.	-726.	-.0060	.0044	-.0255	.0394	-.0243	-.0157	4368.		
.0750	218.	-138.	-338.	-682.	0.	-568.	.0012	.0086	-.0155	.0323	-.0074	.0005	3191.		
.0760	174.	-273.	-195.	-509.	0.	-454.	.0095	.0126	-.0042	.0234	.0125	.0167	2076.		
.0770	131.	-343.	-74.	-193.	0.	-342.	.0162	.0164	.0045	.0163	.0273	.0295	1194.		
.0780	69.	-368.	8.	21.	0.	-180.	.0189	.0199	.0076	.0156	.0315	.0369	552.		
.0790	-3.	-413.	36.	93.	0.	8.	.0173	.0231	.0028	.0236	.0246	.0375	285.		
.0800	-72.	-554.	18.	46.	0.	187.	.0130	.0259	-.0085	.0388	.0095	.0328	587.		
.0810	-145.	-775.	-11.	-28.	0.	378.	.0074	.0282	-.0215	.0561	-.0089	.0263	1153.		
.0820	-220.	-919.	-15.	-39.	0.	574.	.0018	.0299	-.0316	.0705	-.0243	.0203	1750.		
.0830	-269.	-889.	18.	48.	0.	703.	-.0016	.0309	-.0354	.0774	-.0311	.0157	2143.		
.0840	-277.	-790.	91.	238.	0.	722.	-.0012	.0312	-.0313	.0741	-.0273	.0144	2313.		
.0850	-255.	-752.	198.	517.	0.	664.	.0029	.0308	-.0209	.0629	-.0146	.0170	2559.		
.0860	-215.	-745.	317.	828.	-0.	560.	.0024	.0299	-.0080	.0486	.0034	.0208	3039.		
.0870	-161.	-687.	416.	1085.	-0.	421.	.0134	.0283	.0038	.0347	.0207	.0226	3539.		
.0880	-110.	-573.	470.	1225.	-0.	286.	.0167	.0263	.0125	.0226	.0317	.0217	3826.		
.0890	-73.	-448.	474.	1235.	-0.	191.	.0174	.0237	.0161	.0152	.0349	.0177	3802.		
.0900	-47.	-353.	438.	1142.	0.	121.	.0158	.0209	.0145	.0138	.0325	.0107	3495.		
.0910	-20.	-309.	384.	1001.	0.	52.	.0138	.0177	.0108	.0150	.0278	.0029	3048.		

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ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.16.

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 56 MEMBER 1 SEQUENCE 76 LOCATION DEG TYPE VA

.0830	-269.	-389.	18.	48.	0.	703.	-.0016	.0309	-.0354	.0774	-.0311	.0157	2143.
.0840	-277.	-790.	91.	238.	0.	722.	-.0012	.0312	-.0313	.0741	-.0273	.0144	2313.
.0850	-255.	-752.	198.	517.	0.	664.	.0029	.0308	-.0209	.0629	-.0146	.0170	2559.
.0860	-215.	-745.	317.	828.	-0.	560.	.0024	.0299	-.0080	.0486	.0034	.0208	3039.
.0870	-161.	-687.	416.	1085.	-0.	421.	.0134	.0283	.0038	.0347	.0207	.0226	3539.
.0880	-110.	-573.	470.	1225.	-0.	286.	.0167	.0263	.0125	.0226	.0317	.0217	3826.
.0890	-73.	-448.	474.	1235.	-0.	191.	.0174	.0237	.0161	.0152	.0349	.0177	3802.
.0900	-47.	-353.	438.	1142.	0.	121.	.0158	.0209	.0145	.0138	.0325	.0107	3495.
.0910	-20.	-309.	384.	1001.	0.	52.	.0138	.0177	.0108	.0150	.0278	.0029	3048.

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ADLPIPE STRESS ANALYSIS

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

CONDITION 24

LOADS
SHOCK
PRESSURE

ENGLISH UNITS

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

SECTION	56	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA						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)			
.0920	3.	-248.	338.	881.	0.	-8.	.0126	.0144	.0090	.0142	.0240	-.0028	2680.		
.0930	15.	-78.	323.	843.	0.	-39.	.0123	.0109	.0109	.0104	.0240	-.0058	2569.		
.0940	21.	156.	344.	898.	-0.	-55.	.0129	.0073	.0159	.0051	.0284	-.0066	2737.		
.0950	29.	322.	378.	987.	-0.	-75.	.0145	.0039	.0220	-.0002	.0340	-.0058	3011.		
.0960	39.	402.	391.	1019.	-0.	-102.	.0157	.0008	.0257	-.0031	.0363	-.0058	3116.		
.0970	44.	497.	355.	927.	-0.	-114.	.0146	-.0020	.0241	-.0005	.0314	-.0097	2841.		
.0980	36.	634.	265.	691.	-0.	-95.	.0103	-.0044	.0162	.0082	.0175	-.0183	2121.		
.0990	22.	742.	126.	330.	-0.	-58.	.0039	-.0063	.0034	.0213	-.0038	-.0300	1019.		
.1000	16.	775.	-39.	-102.	0.	-42.	-.0029	-.0075	-.0121	.0367	-.0274	-.0434	335.		
.1010	26.	754.	-199.	-520.	-0.	-67.	-.0086	-.0082	-.0269	.0512	-.0474	-.0562	1594.		
.1020	50.	733.	-325.	-848.	0.	-131.	-.0117	-.0082	-.0371	.0607	-.0602	-.0660	2611.		
.1030	88.	761.	-409.	-1068.	0.	-230.	-.0116	-.0077	-.0411	.0626	-.0641	-.0714	3322.		
.1040	139.	822.	-461.	-1203.	0.	-363.	-.0085	-.0065	-.0402	.0581	-.0595	-.0729	3822.		
.1050	196.	824.	-493.	-1285.	0.	-511.	-.0032	-.0047	-.0367	.0505	-.0493	-.0711	4205.		
.1060	240.	734.	-514.	-1342.	0.	-625.	.0028	-.0023	-.0330	.0426	-.0373	-.0669	4503.		
.1070	255.	636.	-537.	-1400.	0.	-665.	.0080	.0008	-.0305	.0363	-.0268	-.0615	4715.		
.1080	230.	571.	-560.	-1460.	0.	-601.	.0118	.0043	-.0298	.0322	-.0189	-.0551	4801.		
.1090	173.	470.	-570.	-1488.	0.	-452.	.0146	.0082	-.0299	.0303	-.0130	-.0472	4730.		
.1100	118.	357.	-552.	-1440.	0.	-308.	.0176	.0125	-.0298	.0301	-.0071	-.0394	4480.		
.1110	42.	257.	-500.	-1304.	0.	-110.	.0206	.0171	-.0282	.0298	-.0008	-.0299	3981.		
.1120	-65.	142.	-418.	-1090.	0.	169.	.0232	.0219	-.0247	.0284	.0052	-.0175	3355.		
.1130	-164.	-33.	-317.	-827.	0.	427.	.0260	.0267	-.0207	.0275	.0099	-.0057	2831.		
.1140	-231.	-211.	-222.	-579.	0.	604.	.0283	.0314	-.0182	.0284	.0118	.0022	2544.		
.1150	-290.	-300.	-155.	-405.	-0.	756.	.0287	.0360	-.0181	.0304	.0091	.0061	2609.		
.1160	-357.	-350.	-115.	-300.	0.	931.	.0271	.0404	-.0198	.0325	.0013	.0075	2976.		
.1170	-421.	-487.	-85.	-220.	0.	1099.	.0243	.0444	-.0223	.0352	-.0089	.0072	3410.		
.1180	-448.	-645.	-57.	-148.	0.	1170.	.0216	.0480	-.0246	.0370	-.0165	.0038	3587.		
.1190	-458.	-767.	-28.	-72.	-0.	1195.	.0203	.0510	-.0232	.0322	-.0191	.0017	3643.		
.1200	-451.	-857.	24.	61.	-0.	1176.	.0215	.0534	-.0153	.0177	-.0149	.0032	3583.		
.1210	-392.	-918.	116.	302.	0.	1022.	.0256	.0551	-.0017	-.0029	-.0024	.0051	3241.		
.1220	-295.	-938.	235.	613.	0.	771.	.0310	.0561	.0148	-.0257	.0152	.0062	2996.		
.1230	-185.	-852.	340.	886.	-0.	483.	.0359	.0564	.0305	-.0483	.0315	.0053	3069.		
.1240	-98.	-745.	404.	1054.	0.	257.	.0383	.0559	.0420	-.0668	.0395	.0025	3299.		
.1250	-44.	-712.	423.	1103.	0.	115.	.0365	.0549	.0454	-.0746	.0361	-.0045	3372.		
.1260	-2.	-695.	385.	1005.	0.	4.	.0306	.0533	.0393	-.0703	.0221	-.0175	3058.		
.1270	15.	-666.	291.	759.	0.	-40.	.0228	.0511	.0277	-.0613	.0003	-.0315	2314.		
.1280	20.	-600.	182.	474.	0.	-53.	.0157	.0484	.0159	-.0530	-.0228	-.0429	1452.		
.1290	16.	-519.	123.	321.	0.	-41.	.0107	.0453	.0078	-.0461	-.0392	-.0497	983.		

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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 56 MEMBER 1 SEQUENCE 76 LOCATION BEG TYPE VA

.1210	-392.	-938.	116.	302.	0.	1022.	116.	0.256	.0551	-.0017	-.0029	-.0024	.0051	3241.
.1220	-295.	-938.	235.	613.	0.	771.	0.310	.0561	.0148	-.0257	.0152	.0062	.0062	2996.
.1230	-185.	-852.	340.	886.	-0.	423.	.0359	.0564	.0305	-.0483	.0315	.0053	.0053	3069.
.1240	-98.	-745.	404.	1054.	0.	257.	.0383	.0559	.0420	-.0668	.0395	.0025	.0025	3299.
.1250	-44.	-712.	423.	1103.	0.	115.	.0365	.0549	.0454	-.0746	.0361	-.0045	-.0045	3372.
.1260	-2.	-695.	385.	1005.	0.	4.	.0306	.0533	.0393	-.0703	.0221	-.0175	-.0175	3058.
.1270	15.	-666.	291.	759.	0.	-40.	.0228	.0511	.0277	-.0613	.0003	-.0315	-.0315	2314.
.1280	20.	-600.	182.	474.	0.	-53.	.0157	.0484	.0159	-.0530	-.0228	-.0429	-.0429	1452.
.1290	16.	-519.	123.	321.	0.	-41.	.0107	.0453	.0078	-.0461	-.0392	-.0497	-.0497	983.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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

CONDITION 24

LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	56	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA					STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	FX	RY	RZ		(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
.1300	3.	-393.	138.	359.	0.	-7.	.0084	.0418	.0056	-.0421	-.0447	-.0505		1091.
.1310	-10.	-177.	198.	517.	0.	26.	.0098	.0380	.0098	-.0447	-.0404	-.0446		1576.
.1320	-48.	6.	279.	727.	0.	126.	.0138	.0340	.0182	-.0527	-.0318	-.0312		2244.
.1330	-104.	87.	363.	947.	0.	271.	.0179	.0301	.0254	-.0576	-.0237	-.0159		2996.
.1340	-168.	93.	418.	1090.	0.	439.	.0198	.0262	.0268	-.0545	-.0209	-.0033		3574.
.1350	-238.	114.	402.	1049.	0.	621.	.0195	.0224	.0217	-.0463	-.0272	.0058		3707.
.1360	-313.	185.	323.	843.	0.	816.	.0172	.0188	.0115	-.0347	-.0417	.0122		3568.
.1370	-407.	191.	235.	613.	-0.	1061.	.0130	.0153	-.0013	-.0189	-.0592	.0178		3728.
.1380	-482.	117.	168.	438.	-0.	1256.	.0093	.0119	-.0138	-.0010	-.0728	.0228		4046.
.1390	-506.	9.	114.	297.	0.	1320.	.0094	.0086	-.0217	.0099	-.0785	.0301		4117.
.1400	-478.	-58.	75.	196.	-0.	1248.	.0140	.0054	-.0225	.0097	-.0752	.0411		3843.
.1410	-408.	-21.	72.	189.	-0.	1065.	.0212	.0021	-.0178	.0032	-.0533	.0531		3291.
.1420	-325.	76.	93.	243.	0.	848.	.0289	-.0012	-.0106	-.0053	-.0468	.0651		2684.
.1430	-222.	211.	86.	224.	-0.	580.	.0366	-.0043	-.0044	-.0148	-.0308	.0755		1891.
.1440	-109.	322.	27.	71.	0.	285.	.0434	-.0073	-.0015	-.0235	-.0199	.0837		894.
.1450	-6.	397.	-56.	-145.	-0.	16.	.0475	-.0100	-.0032	-.0263	-.0153	.0879		445.
.1460	85.	514.	-145.	-378.	-0.	-223.	.0483	-.0124	-.0089	-.0226	-.0159	.0873		1335.
.1470	165.	684.	-250.	-653.	0.	-430.	.0478	-.0144	-.0155	-.0191	-.0195	.0855		2379.
.1480	254.	888.	-361.	-941.	0.	-663.	.0482	-.0157	-.0203	-.0197	-.0218	.0839		3501.
.1490	340.	1061.	-428.	-1117.	0.	-888.	.0493	-.0163	-.0215	-.0231	-.0190	.0836		4340.
.1500	409.	1240.	-432.	-1126.	0.	-1067.	.0504	-.0161	-.0180	-.0291	-.0099	.0846		4718.
.1510	473.	1499.	-401.	-1046.	0.	-1234.	.0520	-.0148	-.0098	-.0406	.0036	.0864		4921.
.1520	521.	1720.	-361.	-940.	0.	-1360.	.0537	-.0124	-.0012	-.0570	.0174	.0892		5030.
.1530	545.	1765.	-306.	-799.	0.	-1421.	.0531	-.0086	.0110	-.0701	.0284	.0898		4959.
.1540	533.	1613.	-248.	-647.	0.	-1389.	.0484	-.0034	.0164	-.0753	.0339	.0857		4662.
.1550	501.	1403.	-221.	-576.	-0.	-1308.	.0399	.0030	.0172	-.0757	.0315	.0758		4347.
.1560	468.	1241.	-232.	-605.	-0.	-1219.	.0286	.0105	.0150	-.0748	.0214	.0602		4140.
.1570	403.	1015.	-240.	-626.	0.	-1052.	.0144	.0189	.0114	-.0714	.0066	.0420		3723.
.1580	322.	637.	-217.	-566.	-0.	-839.	-.0014	.0281	.0074	-.0644	-.0077	.0220		3079.
.1590	240.	119.	-172.	-448.	-0.	-648.	-.0162	.0376	.0052	-.0587	-.0184	.0026		2396.
.1600	169.	-471.	-109.	-284.	0.	-441.	-.0289	.0471	.0072	-.0589	-.0253	-.0127		1594.
.1610	70.	-1021.	-13.	-33.	0.	-181.	-.0408	.0562	.0127	-.0622	-.0278	-.0247		561.
.1620	-31.	-1477.	111.	290.	-0.	80.	-.0524	.0644	.0193	-.0648	-.0259	-.0361		914.
.1630	-124.	-1921.	226.	589.	0.	323.	-.0624	.0714	.0260	-.0682	-.0225	-.0452		2044.
.1640	-197.	-2349.	307.	801.	-0.	515.	-.0701	.0767	.0315	-.0726	-.0194	-.0520		2895.
.1650	-260.	-2695.	370.	965.	-0.	678.	-.0769	.0802	.0345	-.0738	-.0167	-.0579		3588.
.1660	-333.	-2945.	435.	1134.	0.	869.	-.0833	.0814	.0354	-.0704	-.0148	-.0618		4345.
.1670	-392.	-3056.	488.	1272.	0.	1023.	-.0880	.0803	.0348	-.0650	-.0133	-.0633		4967.

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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	56	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA
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.1590	248.	119.	172.	-448.	-0.	-648.	-.162	.0376	.0052	-.0587	-.0184	.0026	2396.
.1600	169.	-471.	-109.	-284.	0.	-441.	-.289	.0471	.0072	-.0589	-.0253	-.0127	1594.
.1610	70.	-1021.	-13.	-33.	0.	-181.	-.0408	.0562	.0127	-.0622	-.0278	-.0247	561.
.1620	-31.	-1477.	111.	270.	-0.	80.	-.0524	.0644	.0193	-.0648	-.0259	-.0361	914.
.1630	-124.	-1921.	226.	589.	0.	323.	-.0624	.0714	.0260	-.0682	-.0225	-.0452	2044.
.1640	-197.	-2349.	307.	801.	-0.	515.	-.0701	.0767	.0315	-.0726	-.0194	-.0520	2895.
.1650	-260.	-2695.	370.	965.	-0.	678.	-.0769	.0802	.0345	-.0738	-.0167	-.0579	3588.
.1660	-333.	-2945.	435.	1134.	0.	869.	-.0833	.0814	.0354	-.0704	-.0148	-.0618	4345.
.1670	-392.	-3056.	488.	1272.	0.	1023.	-.0880	.0803	.0348	-.0650	-.0133	-.0633	4967.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	56	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	FX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.1680	-425.	-3029.	516.	1345.	0.	1109.	-.0899	.0768	.0333	-.0596	-.0118	-.0619	5303.	
.1690	-432.	-2859.	533.	1389.	0.	1127.	-.0895	.0709	.0303	-.0521	-.0094	-.0583	5441.	
.1700	-428.	-2559.	549.	1433.	-0.	1116.	-.0877	.0627	.0262	-.0415	-.0068	-.0528	5525.	
.1710	-414.	-2123.	546.	1424.	-0.	1080.	-.0843	.0527	.0211	-.0305	-.0052	-.0447	5437.	
.1720	-362.	-1520.	504.	1316.	-0.	945.	-.0789	.0410	.0145	-.0201	-.0043	-.0363	4928.	
.1730	-298.	-876.	443.	1156.	-0.	776.	-.0723	.0282	.0069	-.0090	-.0040	-.0265	4237.	
.1740	-231.	-248.	383.	1000.	-0.	604.	-.0654	.0147	-.0012	.0038	-.0032	-.0160	3552.	
.1750	-149.	419.	316.	824.	-0.	388.	-.0578	.0012	-.0088	.0154	-.0012	-.0056	2770.	
.1760	-49.	1114.	231.	602.	-0.	127.	-.0491	-.0118	-.0145	.0219	.0021	.0053	1870.	
.1770	71.	1766.	142.	369.	-0.	-185.	-.0395	-.0239	-.0178	.0242	.0074	.0158	1256.	
.1780	196.	2278.	64.	167.	-0.	-512.	-.0298	-.0345	-.0190	.0239	.0149	.0256	1637.	
.1790	333.	2675.	-12.	-32.	-0.	-869.	-.0205	-.0432	-.0184	.0206	.0240	.0334	2645.	
.1800	473.	2981.	-98.	-256.	-0.	-1233.	-.0117	-.0498	-.0159	.0127	.0331	.0393	3830.	
.1810	586.	3136.	-183.	-477.	-0.	-1527.	-.0047	-.0539	-.0120	.0022	.0407	.0440	4867.	
.1820	679.	3138.	-253.	-660.	-0.	-1770.	-.0004	-.0556	-.0083	-.0068	.0473	.0449	5747.	
.1830	750.	2972.	-316.	-825.	-0.	-1956.	.0015	-.0548	-.0049	-.0148	.0523	.0426	6458.	
.1840	799.	2671.	-381.	-993.	0.	-2083.	.0015	-.0516	-.0013	-.0239	.0549	.0383	7019.	
.1850	819.	2270.	-435.	-1134.	-0.	-2136.	-.0004	-.0464	.0025	-.0328	.0557	.0321	7356.	
.1860	804.	1772.	-462.	-1205.	0.	-2097.	-.0046	-.0394	.0061	-.0392	.0555	.0242	7358.	
.1870	769.	1214.	-467.	-1219.	0.	-2006.	-.0103	-.0311	.0092	-.0431	.0547	.0145	7141.	
.1880	769.	619.	-465.	-1214.	0.	-1850.	-.0168	-.0219	.0119	-.0462	.0520	.0048	6730.	
.1890	624.	35.	-456.	-1189.	0.	-1626.	-.0244	-.0123	.0135	-.0470	.0475	-.0052	6129.	
.1900	513.	-522.	-432.	-1127.	-0.	-1338.	-.0333	-.0028	.0130	-.0434	.0416	-.0158	5321.	
.1910	378.	-1065.	-400.	-1042.	0.	-986.	-.0426	.0062	.0109	-.0364	.0344	-.0255	4366.	
.1920	241.	-1532.	-369.	-961.	-0.	-628.	-.0512	.0144	.0077	-.0282	.0273	-.0340	3494.	
.1930	104.	-1872.	-329.	-857.	0.	-270.	-.0586	.0212	.0046	-.0198	.0219	-.0407	2733.	
.1940	-40.	-2077.	-259.	-676.	0.	103.	-.0648	.0265	.0026	-.0109	.0197	-.0447	2080.	
.1950	-179.	-2150.	-160.	-417.	0.	468.	-.0692	.0302	.0025	-.0025	.0212	-.0457	1907.	
.1960	-300.	-2106.	-47.	-124.	0.	783.	-.0714	.0321	.0039	.0042	.0254	-.0443	2413.	
.1970	-399.	-1978.	69.	179.	0.	1041.	-.0718	.0324	.0058	.0104	.0308	-.0413	3214.	
.1980	-480.	-1782.	183.	478.	0.	1251.	-.0716	.0311	.0069	.0181	.0348	-.0387	4075.	
.1990	-539.	-1504.	280.	729.	-0.	1407.	-.0717	.0284	.0056	.0280	.0353	-.0378	4820.	
.2000	-572.	-1154.	338.	881.	-0.	1491.	-.0719	.0245	.0023	.0389	.0314	-.0395	5268.	
.2010	-574.	-792.	360.	938.	0.	1497.	-.0722	.0198	-.0033	.0503	.0236	-.0434	5375.	
.2020	-547.	-465.	364.	948.	0.	1426.	-.0722	.0144	-.0096	.0616	.0145	-.0491	5209.	
.2030	-489.	-166.	363.	946.	0.	1275.	-.0713	.0087	-.0146	.0707	.0068	-.0556	4828.	
.2040	-400.	124.	361.	942.	0.	1044.	-.0686	.0030	-.0162	.0740	.0024	-.0611	4277.	
.2050	-286.	388.	365.	951.	0.	745.	-.0637	-.0027	-.0136	.0707	.0024	-.0649	3675.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.16.

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	56	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA
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.1970	-399.	-1978.	69.	179.	0.	1041.	-.0718	.0324	.0058	.0104	.0308	-.0413	3214.
.1980	-480.	-1782.	183.	478.	0.	1251.	-.0716	.0311	.0069	.0181	.0348	-.0387	4075.
.1990	-530.	-1504.	280.	729.	-0.	1407.	-.0717	.0284	.0058	.0280	.0353	-.0378	4820.
.2000	-572.	-1154.	338.	881.	-0.	1491.	-.0719	.0245	.0023	.0389	.0314	-.0395	5268.
.2010	-574.	-792.	360.	938.	0.	1497.	-.0722	.0198	-.0033	.0503	.0236	-.0434	5375.
.2020	-547.	-465.	364.	948.	0.	1426.	-.0722	.0144	-.0096	.0616	.0145	-.0491	5209.
.2030	-489.	-166.	363.	946.	0.	1275.	-.0713	.0087	-.0146	.0707	.0068	-.0556	4828.
.2040	-400.	124.	361.	942.	0.	1044.	-.0686	.0030	-.0162	.0740	.0024	-.0611	4277.
.2050	-286.	388.	365.	951.	0.	745.	-.0637	-.0027	-.0136	.0707	.0024	-.0649	3675.

ADLPIPE PAGE 2141

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.16.

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	56	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA						
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	-152.	591.	378.	986.	0.	397.	-.0573	-.0080	-.0077	.0620	.0067	-.0673	3233.		
.2070	-11.	726.	392.	1023.	-0.	28.	-.0500	-.0128	.0001	.0521	.0132	-.0690	3112.		
.2080	128.	815.	388.	1013.	0.	-333.	-.0428	-.0170	.0082	.0397	.0190	-.0703	3242.		
.2090	251.	865.	357.	930.	0.	-656.	-.0365	-.0205	.0148	.0276	.0216	-.0721	3461.		
.2100	352.	854.	300.	782.	0.	-919.	-.0320	-.0234	.0184	.0189	.0202	-.0750	3671.		
.2110	426.	773.	222.	580.	0.	-1110.	-.0291	-.0256	.0188	.0142	.0152	-.0787	3811.		
.2120	472.	656.	128.	334.	0.	-1230.	-.0273	-.0271	.0171	.0120	.0080	-.0821	3877.		
.2130	492.	555.	28.	72.	0.	-1283.	-.0258	-.0282	.0149	.0102	.0008	-.0841	3908.		
.2140	487.	479.	-60.	-156.	0.	-1270.	-.0241	-.0287	.0136	.0081	-.0039	-.0838	3892.		
.2150	461.	407.	-126.	-327.	0.	-1202.	-.0216	-.0290	.0138	.0053	-.0047	-.0807	3789.		
.2160	421.	327.	-175.	-456.	0.	-1097.	-.0181	-.0289	.0156	.0012	-.0017	-.0748	3615.		
.2170	369.	254.	-216.	-562.	-0.	-963.	-.0139	-.0285	.0181	-.0034	.0037	-.0670	3392.		
.2180	302.	200.	-252.	-657.	0.	-786.	-.0100	-.0279	.0198	-.0067	.0094	-.0587	3116.		
.2190	218.	161.	-290.	-757.	0.	-568.	-.0072	-.0272	.0196	-.0070	.0135	-.0512	2878.		
.2200	128.	122.	-341.	-889.	0.	-334.	-.0055	-.0264	.0168	-.0042	.0148	-.0452	2890.		
.2210	42.	71.	-405.	-1057.	0.	-110.	-.0044	-.0255	.0115	.0012	.0135	-.0410	3234.		
.2220	-36.	10.	-470.	-1227.	-0.	95.	-.0037	-.0245	.0049	.0082	.0109	-.0383	3743.		
.2230	-105.	-38.	-521.	-1358.	-0.	275.	-.0028	-.0235	-.0014	.0155	.0086	-.0362	4215.		
.2240	-160.	-59.	-548.	-1430.	0.	418.	-.0011	-.0226	-.0058	.0211	.0081	-.0337	4531.		
.2250	-197.	-63.	-549.	-1432.	0.	513.	.0021	-.0217	-.0078	.0240	.0103	-.0304	4627.		
.2260	-215.	-65.	-521.	-1360.	0.	562.	.0064	-.0209	-.0075	.0250	.0145	-.0265	4476.		
.2270	-221.	-55.	-471.	-1229.	0.	576.	.0113	-.0201	-.0060	.0254	.0193	-.0226	4129.		
.2280	-217.	-16.	-412.	-1076.	0.	565.	.0161	-.0193	-.0044	.0259	.0222	-.0194	3697.		
.2290	-207.	49.	-356.	-929.	0.	539.	.0204	-.0186	-.0039	.0275	.0215	-.0176	3268.		
.2300	-194.	116.	-304.	-792.	0.	507.	.0237	-.0178	-.0051	.0313	.0167	-.0174	2861.		
.2310	-183.	175.	-250.	-652.	0.	478.	.0260	-.0169	-.0078	.0375	.0087	-.0187	2460.		
.2320	-176.	243.	-191.	-497.	0.	460.	.0277	-.0159	-.0108	.0445	-.0014	-.0203	2062.		
.2330	-174.	333.	-121.	-316.	-0.	454.	.0293	-.0147	-.0127	.0504	-.0116	-.0214	1681.		
.2340	-174.	433.	-35.	-92.	0.	455.	.0312	-.0131	-.0125	.0541	-.0202	-.0215	1412.		
.2350	-178.	516.	67.	175.	-0.	463.	.0334	-.0113	-.0106	.0552	-.0259	-.0203	1507.		
.2360	-183.	570.	179.	468.	0.	477.	.0361	-.0090	-.0053	.0532	-.0286	-.0179	2033.		
.2370	-190.	604.	291.	759.	-0.	496.	.0387	-.0063	.0012	.0483	-.0289	-.0150	2759.		
.2380	-201.	618.	395.	1030.	-0.	524.	.0408	-.0031	.0085	.0417	-.0279	-.0125	3515.		
.2390	-218.	593.	484.	1263.	-0.	567.	.0416	.0006	.0156	.0345	-.0264	-.0113	4213.		
.2400	-238.	506.	552.	1440.	-0.	622.	.0412	.0047	.0218	.0275	-.0252	-.0117	4773.		
.2410	-260.	354.	594.	1548.	0.	677.	.0395	.0091	.0267	.0207	-.0244	-.0140	5141.		
.2420	-280.	151.	610.	1591.	-0.	729.	.0367	.0139	.0306	.0143	-.0240	-.0181	5323.		
.2430	-299.	-75.	605.	1579.	-0.	779.	.0329	.0187	.0337	.0079	-.0234	-.0237	5357.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.16.

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 56 MEMBER 1 SEQUENCE 76 LOCATION BEG TYPE VA

.2350	-178.	516.	67.	175.	-0.	463.	.0334	-.0113	-.0100	.0552	-.0259	-.0203	1507.
.2360	-183.	570.	179.	468.	0.	477.	.0361	-.0090	-.0053	.0532	-.0286	-.0179	2033.
.2370	-190.	604.	291.	759.	-0.	496.	.0387	-.0063	.0012	.0483	-.0289	-.0150	2759.
.2380	-201.	618.	395.	1030.	-0.	524.	.0408	-.0031	.0085	.0417	-.0279	-.0125	3515.
.2390	-218.	593.	484.	1263.	-0.	567.	.0416	.0006	.0156	.0345	-.0264	-.0113	4213.
.2400	-238.	506.	552.	1440.	-0.	622.	.0412	.0047	.0218	.0275	-.0252	-.0117	4773.
.2410	-260.	354.	594.	1548.	0.	677.	.0395	.0091	.0267	.0207	-.0244	-.0140	5141.
.2420	-280.	151.	610.	1591.	-0.	729.	.0367	.0139	.0306	.0143	-.0240	-.0181	5323.
.2430	-299.	-75.	605.	1579.	-0.	779.	.0329	.0187	.0337	.0079	-.0234	-.0237	5357.

ADLPIPE PAGE 2142

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

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.16.

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	56	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA						
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)		
.2440	-316.	-308.	583.	1519.	-0.	824.	.0284	.0234	.0363	.0015	-.0222	-.0304	5258.		
.2450	-331.	-545.	542.	1414.	-0.	863.	.0235	.0278	.0383	-.0049	-.0204	-.0374	5038.		
.2460	-345.	-790.	486.	1268.	-0.	899.	.0185	.0317	.0395	-.0107	-.0180	-.0443	4727.		
.2470	-358.	-1031.	416.	1085.	-0.	935.	.0135	.0350	.0397	-.0154	-.0152	-.0508	4357.		
.2480	-371.	-1241.	332.	866.	-0.	966.	.0086	.0375	.0386	-.0186	-.0127	-.0568	3946.		
.2490	-379.	-1394.	234.	609.	-0.	989.	.0041	.0389	.0362	-.0203	-.0106	-.0618	3533.		
.2500	-385.	-1486.	125.	327.	-0.	1004.	.0001	.0392	.0324	-.0202	-.0092	-.0655	3212.		
.2510	-387.	-1522.	13.	33.	-0.	1010.	-.0029	.0384	.0273	-.0182	-.0082	-.0673	3074.		
.2520	-382.	-1501.	-101.	-263.	0.	995.	-.0045	.0363	.0213	-.0146	-.0073	-.0669	3131.		
.2530	-365.	-1411.	-212.	-554.	-0.	952.	-.0045	.0331	.0149	-.0102	-.0064	-.0641	3349.		
.2540	-337.	-1242.	-318.	-829.	-0.	880.	-.0028	.0287	.0084	-.0053	-.0055	-.0586	3677.		
.2550	-300.	-1002.	-413.	-1077.	-0.	783.	.0007	.0235	.0019	-.0000	-.0046	-.0507	4050.		
.2560	-254.	-713.	-495.	-1292.	-0.	662.	.0057	.0175	-.0044	.0058	-.0037	-.0403	4417.		
.2570	-199.	-390.	-565.	-1474.	-0.	520.	.0121	.0109	-.0106	.0118	-.0030	-.0280	4755.		
.2580	-138.	-39.	-621.	-1620.	-0.	359.	.0196	.0042	-.0165	.0180	-.0027	-.0141	5048.		
.2590	-72.	332.	-661.	-1723.	-0.	188.	.0278	-.0026	-.0220	.0242	-.0031	.0007	5272.		
.2600	-5.	699.	-682.	-1780.	-0.	14.	.0363	-.0090	-.0268	.0300	-.0041	.0162	5415.		
.2610	61.	1028.	-687.	-1793.	-0.	-159.	.0451	-.0148	-.0309	.0352	-.0058	.0321	5476.		
.2620	127.	1298.	-676.	-1764.	-0.	-332.	.0537	-.0197	-.0341	.0395	-.0078	.0477	5461.		
.2630	191.	1512.	-650.	-1694.	-0.	-499.	.0619	-.0236	-.0364	.0426	-.0102	.0624	5374.		
.2640	249.	1676.	-609.	-1588.	-0.	-649.	.0691	-.0262	-.0375	.0444	-.0129	.0758	5217.		
.2650	298.	1780.	-557.	-1452.	-0.	-777.	.0752	-.0274	-.0377	.0447	-.0160	.0875	5008.		
.2660	339.	1798.	-496.	-1294.	-0.	-885.	.0799	-.0273	-.0372	.0436	-.0192	.0971	4769.		
.2670	374.	1720.	-430.	-1121.	-0.	-975.	.0833	-.0257	-.0362	.0416	-.0223	.1044	4520.		
.2680	398.	1566.	-360.	-938.	-0.	-1039.	.0850	-.0227	-.0347	.0385	-.0251	.1093	4259.		
.2690	410.	1364.	-287.	-748.	-0.	-1070.	.0852	-.0185	-.0325	.0340	-.0274	.1119	3970.		
.2700	408.	1122.	-212.	-552.	0.	-1063.	.0838	-.0133	-.0298	.0283	-.0290	.1127	3644.		
.2710	394.	834.	-136.	-355.	-0.	-1028.	.0812	-.0072	-.0267	.0217	-.0296	.1116	3308.		
.2720	373.	514.	-63.	-164.	-0.	-974.	.0775	-.0005	-.0235	.0145	-.0290	.1089	3004.		
.2730	343.	198.	7.	17.	-0.	-896.	.0730	.0065	-.0202	.0066	-.0276	.1049	2725.		
.2740	298.	-100.	72.	189.	-0.	-777.	.0674	.0137	-.0170	-.0013	-.0257	.1003	2432.		
.2750	237.	-391.	135.	353.	0.	-618.	.0611	.0208	-.0143	-.0086	-.0238	.0954	2163.		
.2760	169.	-679.	192.	500.	-0.	-440.	.0544	.0275	-.0126	-.0145	-.0217	.0902	2025.		
.2770	98.	-934.	239.	623.	0.	-256.	.0475	.0336	-.0118	-.0193	-.0196	.0848	2049.		
.2780	23.	-1126.	279.	728.	0.	-59.	.0407	.0389	-.0116	-.0234	-.0178	.0798	2222.		
.2790	-59.	-1255.	318.	828.	0.	153.	.0341	.0433	-.0116	-.0268	-.0162	.0759	2563.		
.2800	-139.	-1344.	356.	929.	0.	362.	.0282	.0467	-.0118	-.0295	-.0144	.0731	3032.		
.2810	-208.	-1396.	392.	1022.	0.	543.	.0233	.0489	-.0122	-.0316	-.0124	.0713	3520.		

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

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.17.

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	56	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA						
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.2730	343.	198.	7.	17.	-0.	-896.	.0730	.0065	-.0202	.0066	-.0276	.1049	2725.
.2740	298.	-100.	72.	189.	-0.	-777.	.0674	.0137	-.0170	-.0013	-.0257	.1003	2432.
.2750	237.	-391.	135.	353.	0.	-618.	.0611	.0208	-.0143	-.0086	-.0238	.0954	2133.
.2760	169.	-679.	192.	500.	-0.	-440.	.0544	.0275	-.0126	-.0145	-.0217	.0902	2025.
.2770	98.	-934.	239.	623.	0.	-256.	.0475	.0336	-.0118	-.0193	-.0196	.0848	2049.
.2780	23.	-1126.	279.	728.	0.	-59.	.0407	.0389	-.0116	-.0234	-.0178	.0798	2222.
.2790	-59.	-1255.	318.	828.	0.	153.	.0341	.0433	-.0116	-.0268	-.0162	.0759	2563.
.2800	-139.	-1344.	356.	929.	0.	36.	.0282	.0467	-.0118	-.0295	-.0144	.0731	3032.
.2810	-208.	-1396.	392.	1022.	0.	543.	.0233	.0489	-.0122	-.0316	-.0124	.0713	3520.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.17.

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	56	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA					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	-266.	-1397.	424.	1107.	-0.	695.	.0195	.0501	-.0124	-.0336	-.0104	.0707		3976.
.2830	-317.	-1340.	457.	1193.	-0.	828.	.0165	.0502	-.0124	-.0354	-.0090	.0712		4418.
.2840	-359.	-1243.	490.	1277.	0.	937.	.0141	.0492	-.0125	-.0364	-.0089	.0723		4818.
.2850	-382.	-1135.	513.	1339.	0.	996.	.0124	.0472	-.0133	-.0362	-.0101	.0733		5075.
.2860	-380.	-1026.	522.	1361.	0.	990.	.0116	.0443	-.0150	-.0353	-.0129	.0737		5119.
.2870	-357.	-903.	517.	1350.	0.	930.	.0113	.0406	-.0172	-.0339	-.0173	.0736		4987.
.2880	-318.	-755.	505.	1318.	0.	829.	.0114	.0362	-.0197	-.0322	-.0227	.0730		4735.
.2890	-259.	-592.	485.	1265.	0.	677.	.0121	.0313	-.0219	-.0310	-.0282	.0721		4364.
.2900	-177.	-438.	456.	1189.	0.	462.	.0140	.0259	-.0235	-.0310	-.0327	.0711		3882.
.2910	-75.	-299.	423.	1102.	0.	196.	.0171	.0202	-.0242	-.0327	-.0354	.0705		3405.
.2920	38.	-153.	390.	1017.	0.	-99.	.0210	.0142	-.0238	-.0357	-.0361	.0703		3109.
.2930	155.	19.	357.	932.	0.	-405.	.0254	.0082	-.0224	-.0397	-.0351	.0703		3091.
.2940	273.	204.	319.	833.	0.	-712.	.0299	.0023	-.0208	-.0444	-.0330	.0704		3333.
.2950	386.	376.	273.	712.	0.	-1007.	.0344	-.0034	-.0197	-.0485	-.0304	.0704		3751.
.2960	486.	537.	219.	572.	0.	-1267.	.0381	-.0088	-.0197	-.0509	-.0279	.0698		4229.
.2970	565.	713.	159.	415.	0.	-1473.	.0406	-.0138	-.0209	-.0516	-.0260	.0686		4656.
.2980	618.	912.	92.	240.	0.	-1613.	.0420	-.0181	-.0230	-.0511	-.0249	.0669		4960.
.2990	644.	1103.	23.	61.	0.	-1680.	.0422	-.0217	-.0256	-.0497	-.0238	.0653		5115.
.3000	643.	1252.	-39.	-101.	0.	-1678.	.0416	-.0243	-.0284	-.0473	-.0220	.0637		5113.
.3010	618.	1363.	-90.	-235.	0.	-1611.	.0400	-.0260	-.0307	-.0447	-.0188	.0623		4953.
.3020	568.	1459.	-131.	-342.	0.	-1482.	.0378	-.0265	-.0320	-.0430	-.0144	.0610		4628.
.3030	496.	1532.	-160.	-418.	0.	-1293.	.0346	-.0259	-.0321	-.0426	-.0089	.0597		4133.
.3040	404.	1543.	-176.	-460.	0.	-1052.	.0304	-.0240	-.0314	-.0425	-.0028	.0579		3494.
.3050	299.	1463.	-183.	-477.	-0.	-781.	.0253	-.0210	-.0302	-.0426	.0036	.0550		2785.
.3060	189.	1308.	-185.	-483.	-0.	-492.	.0192	-.0168	-.0286	-.0432	.0095	.0506		2098.
.3070	71.	1100.	-183.	-477.	-0.	-186.	.0120	-.0116	-.0264	-.0447	.0142	.0448		1557.
.3080	-51.	838.	-171.	-446.	-0.	134.	.0039	-.0056	-.0236	-.0466	.0177	.0377		1416.
.3090	-171.	503.	-148.	-386.	-0.	446.	-.0048	.0011	-.0201	-.0488	.0204	.0293		1795.
.3100	-278.	100.	-117.	-306.	-0.	724.	-.0135	.0080	-.0159	-.0518	.0225	.0199		2393.
.3110	-369.	-336.	-79.	-206.	-0.	961.	-.0217	.0150	-.0107	-.0560	.0242	.0100		2991.
.3120	-445.	-764.	-30.	-79.	-0.	1161.	-.0297	.0216	-.0046	-.0608	.0252	-.0001		3540.
.3130	-506.	-1162.	27.	70.	-0.	1320.	-.0371	.0276	.0020	-.0656	.0254	-.0104		4020.
.3140	-546.	-1532.	85.	222.	-0.	1425.	-.0437	.0326	.0085	-.0701	.0247	-.0204		4386.
.3150	-565.	-1867.	140.	365.	-0.	1473.	-.0491	.0363	.0143	-.0737	.0229	-.0298		4616.
.3160	-565.	-2135.	192.	501.	-0.	1474.	-.0534	.0385	.0194	-.0758	.0199	-.0382		4736.
.3170	-551.	-2299.	242.	630.	-0.	1438.	-.0567	.0390	.0235	-.0762	.0160	-.0453		4775.
.3180	-523.	-2344.	286.	745.	-0.	1363.	-.0585	.0376	.0267	-.0753	.0114	-.0506		4725.
.3190	-479.	-2288.	323.	842.	-0.	1249.	-.0587	.0344	.0291	-.0729	.0067	-.0537		4581.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.17.

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	56	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA					STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ		

.3110	-509.	-536.	-79.	-206.	-0.	981.	-.0217	.0150	-.0107	-.0560	.0242	.0100	2991.
.3120	-445.	-764.	-30.	-79.	-0.	1161.	-.0297	.0216	-.0046	-.0608	.0252	-.0001	3540.
.3130	-506.	-1162.	27.	70.	-0.	1320.	-.0371	.0276	.0020	-.0656	.0254	-.0104	4020.
.3140	-546.	-1532.	85.	222.	-0.	1425.	-.0437	.0326	.0085	-.0701	.0247	-.0204	4386.
.3150	-565.	-1867.	140.	365.	-0.	1473.	-.0491	.0363	.0143	-.0737	.0229	-.0298	4616.
.3160	-565.	-2135.	192.	501.	-0.	1474.	-.0534	.0385	.0194	-.0758	.0199	-.0382	4736.
.3170	-551.	-2299.	242.	630.	-0.	1438.	-.0567	.0390	.0235	-.0762	.0160	-.0453	4775.
.3180	-523.	-2344.	286.	745.	-0.	1363.	-.0585	.0376	.0267	-.0753	.0114	-.0506	4725.
.3190	-479.	-2288.	323.	842.	-0.	1249.	-.0587	.0344	.0291	-.0729	.0067	-.0537	4581.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.17.

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	56	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA					
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	-422.	-2141.	354.	924.	-0.	1100.	-.0573	.0295	.0304	-.0689	.0026	-.0545	4370.	
.3210	-356.	-1891.	381.	994.	-0.	928.	-.0544	.0228	.0309	-.0632	-.0009	-.0531	4135.	
.3220	-285.	-1525.	399.	1041.	-0.	743.	-.0504	.0147	.0306	-.0565	-.0037	-.0495	3891.	
.3230	-212.	-1070.	406.	1060.	-0.	554.	-.0454	.0055	.0295	-.0489	-.0060	-.0439	3638.	
.3240	-140.	-576.	403.	1051.	-0.	366.	-.0398	-.0045	.0274	-.0400	-.0075	-.0368	3386.	
.3250	-70.	-80.	389.	1015.	-0.	182.	-.0338	-.0149	.0244	-.0299	-.0082	-.0286	3136.	
.3260	-2.	417.	363.	946.	-0.	6.	-.0276	-.0253	.0208	-.0194	-.0081	-.0199	2878.	
.3270	60.	911.	324.	846.	-0.	-156.	-.0217	-.0353	.0170	-.0095	-.0073	-.0110	2616.	
.3280	114.	1364.	277.	724.	-0.	-298.	-.0162	-.0445	.0135	-.0002	-.0057	-.0023	2381.	
.3290	163.	1730.	224.	585.	-0.	-426.	-.0114	-.0525	.0101	.0084	-.0031	.0058	2202.	
.3300	208.	1990.	164.	427.	-0.	-543.	-.0071	-.0591	.0070	.0159	.0004	.0128	2102.	
.3310	247.	2151.	96.	249.	-0.	-643.	-.0038	-.0641	.0045	.0218	.0044	.0185	2099.	
.3320	274.	2219.	24.	62.	-0.	-714.	-.0017	-.0673	.0027	.0262	.0085	.0227	2181.	
.3330	289.	2180.	-48.	-126.	-0.	-754.	-.0010	-.0688	.0015	.0295	.0126	.0253	2326.	
.3340	297.	2023.	-121.	-316.	-0.	-774.	-.0012	-.0686	.0007	.0317	.0167	.0264	2544.	
.3350	299.	1762.	-195.	-509.	-0.	-781.	-.0023	-.0668	.0005	.0327	.0205	.0261	2836.	
.3360	295.	1430.	-265.	-692.	-0.	-770.	-.0042	-.0636	.0009	.0326	.0242	.0246	3149.	
.3370	283.	1057.	-327.	-854.	-0.	-739.	-.0068	-.0593	.0019	.0318	.0275	.0221	3434.	
.3380	268.	660.	-381.	-994.	-0.	-698.	-.0097	-.0542	.0033	.0305	.0304	.0190	3694.	
.3390	252.	246.	-429.	-1118.	-0.	-658.	-.0127	-.0486	.0049	.0291	.0329	.0155	3946.	
.3400	237.	-167.	-469.	-1223.	-0.	-617.	-.0155	-.0429	.0063	.0281	.0346	.0118	4167.	
.3410	219.	-545.	-499.	-1302.	-0.	-572.	-.0181	-.0374	.0073	.0281	.0354	.0082	4327.	
.3420	201.	-856.	-521.	-1359.	-0.	-523.	-.0206	-.0324	.0078	.0293	.0351	.0049	4431.	
.3430	184.	-1094.	-536.	-1398.	-0.	-479.	-.0225	-.0280	.0077	.0314	.0339	.0021	4496.	
.3440	171.	-1264.	-542.	-1414.	-0.	-445.	-.0235	-.0246	.0070	.0347	.0322	.0001	4510.	
.3450	161.	-1362.	-537.	-1400.	-0.	-420.	-.0238	-.0221	.0059	.0392	.0303	-.0010	4445.	
.3460	155.	-1369.	-519.	-1353.	-0.	-404.	-.0232	-.0208	.0047	.0446	.0284	-.0011	4296.	
.3470	153.	-1280.	-491.	-1280.	-0.	-399.	-.0216	-.0205	.0034	.0501	.0268	-.0002	4077.	
.3480	156.	-1116.	-453.	-1181.	-0.	-406.	-.0192	-.0213	.0023	.0559	.0253	.0016	3799.	
.3490	162.	-910.	-406.	-1060.	-0.	-422.	-.0162	-.0228	.0009	.0622	.0240	.0039	3470.	
.3500	172.	-677.	-355.	-925.	-0.	-448.	-.0129	-.0251	-.0007	.0690	.0226	.0062	3125.	
.3510	185.	-417.	-302.	-787.	-0.	-483.	-.0093	-.0279	-.0025	.0757	.0209	.0083	2810.	
.3520	200.	-138.	-250.	-653.	-0.	-523.	-.0058	-.0310	-.0044	.0820	.0188	.0097	2544.	
.3530	217.	131.	-199.	-519.	-0.	-565.	-.0026	-.0342	-.0063	.0880	.0166	.0103	2334.	
.3540	235.	363.	-149.	-388.	-0.	-612.	.0004	-.0372	-.0081	.0934	.0145	.0100	2205.	
.3550	255.	551.	-102.	-265.	-0.	-664.	.0032	-.0400	-.0095	.0976	.0127	.0087	2175.	
.3560	274.	699.	-57.	-149.	-0.	-715.	.0057	-.0422	-.0103	.1001	.0115	.0066	2222.	
.3570	289.	806.	-14.	-36.	-0.	-755.	.0078	-.0439	-.0103	.1012	.0107	.0037	2298.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.17.

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	56	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	

.3480	150.	-1110.	-400.	-1100.	-0.	-400.	-0.192	-0.0213	.0023	.0559	.0253	.0016	3799.
.3490	162.	-910.	-406.	-1060.	-0.	-422.	-0.162	-0.0228	.0009	.0622	.0240	.0039	3470.
.3500	172.	-677.	-355.	-925.	-0.	-448.	-0.129	-0.0251	-.0007	.0690	.0226	.0062	3125.
.3510	185.	-417.	-302.	-787.	-0.	-483.	-.0093	-0.0279	-.0025	.0757	.0209	.0083	2810.
.3520	200.	-138.	-250.	-653.	-0.	-523.	-.0058	-0.0310	-.0044	.0820	.0188	.0097	2544.
.3530	217.	131.	-199.	-519.	-0.	-565.	-.0026	-0.0342	-.0063	.0880	.0166	.0103	2334.
.3540	235.	363.	-149.	-388.	-0.	-612.	.0004	-0.0372	-.0081	.0934	.0145	.0100	2205.
.3550	255.	551.	-102.	-265.	-0.	-664.	.0032	-0.0400	-.0095	.0976	.0127	.0087	2175.
.3560	274.	699.	-57.	-149.	-0.	-715.	.0057	-0.0422	-.0103	.1001	.0115	.0066	2222.
.3570	289.	806.	-14.	-36.	-0.	-755.	.0078	-0.0439	-.0103	.1012	.0107	.0037	2298.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.17.

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	56	MEMBER	1	SEQUENCE	76	LOCATION	BEG	TYPE	VA					
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	298.	860.	27.	72.	-0.	-778.	.0093	-.0449	-.0097	.1009	.0105	.0001	2375.	
.3590	301.	852.	62.	163.	0.	-785.	.0103	-.0453	-.0089	.0996	.0104	-.0042	2438.	
.3600	296.	789.	89.	233.	-0.	-772.	.0108	-.0450	-.0080	.0973	.0103	-.0091	2454.	
.3610	281.	689.	108.	282.	-0.	-734.	.0107	-.0440	-.0071	.0945	.0099	-.0145	2391.	
.3620	255.	567.	119.	311.	-0.	-665.	.0101	-.0425	-.0063	.0912	.0092	-.0201	2234.	
.3630	219.	426.	123.	320.	0.	-570.	.0091	-.0406	-.0056	.0874	.0083	-.0257	1989.	
.3640	174.	267.	119.	311.	-0.	-455.	.0080	-.0384	-.0049	.0830	.0077	-.0308	1676.	
.3650	123.	98.	112.	293.	-0.	-321.	.0071	-.0359	-.0040	.0781	.0076	-.0352	1322.	
.3660	65.	-57.	104.	272.	0.	-170.	.0064	-.0334	-.0027	.0726	.0083	-.0386	976.	
.3670	3.	-182.	95.	248.	0.	-9.	.0060	-.0310	-.0010	.0664	.0095	-.0411	755.	
.3680	-60.	-282.	84.	220.	0.	157.	.0061	-.0287	.0009	.0598	.0113	-.0427	821.	
.3690	-123.	-365.	72.	187.	0.	320.	.0064	-.0267	.0027	.0533	.0131	-.0436	1128.	
.3700	-183.	-432.	56.	147.	0.	476.	.0070	-.0250	.0040	.0474	.0146	-.0443	1516.	
.3710	-238.	-468.	37.	96.	0.	620.	.0076	-.0236	.0048	.0421	.0154	-.0451	1909.	
.3720	-287.	-468.	13.	33.	0.	748.	.0082	-.0225	.0050	.0376	.0150	-.0461	2278.	
.3730	-329.	-448.	-15.	-38.	0.	858.	.0087	-.0219	.0046	.0338	.0137	-.0475	2613.	
.3740	-363.	-426.	-42.	-109.	0.	946.	.0093	-.0216	.0037	.0310	.0118	-.0493	2897.	
.3750	-386.	-404.	-68.	-177.	0.	1007.	.0100	-.0217	.0026	.0285	.0095	-.0512	3109.	
.3760	-398.	-368.	-91.	-237.	0.	1039.	.0110	-.0220	.0017	.0260	.0074	-.0533	3242.	
.3770	-402.	-314.	-108.	-282.	0.	1048.	.0122	-.0227	.0012	.0231	.0056	-.0553	3302.	
.3780	-398.	-255.	-117.	-306.	0.	1039.	.0135	-.0236	.0012	.0199	.0045	-.0571	3295.	
.3790	-389.	-208.	-119.	-310.	0.	1014.	.0151	-.0247	.0017	.0167	.0039	-.0586	3225.	
.3800	-374.	-170.	-115.	-300.	0.	975.	.0169	-.0260	.0023	.0135	.0038	-.0598	3102.	
.3810	-358.	-128.	-106.	-276.	0.	933.	.0185	-.0273	.0030	.0104	.0038	-.0607	2959.	
.3820	-344.	-74.	-92.	-240.	0.	897.	.0198	-.0288	.0037	.0078	.0035	-.0614	2825.	
.3830	-335.	-13.	-75.	-195.	0.	873.	.0208	-.0303	.0042	.0057	.0029	-.0618	2721.	
.3840	-330.	45.	-56.	-145.	0.	861.	.0214	-.0318	.0044	.0044	.0020	-.0617	2657.	
.3850	-332.	100.	-34.	-89.	0.	865.	.0217	-.0333	.0044	.0036	.0008	-.0613	2646.	
.3860	-341.	162.	-10.	-25.	0.	889.	.0216	-.0347	.0043	.0031	-.0005	-.0603	2705.	
.3870	-358.	239.	18.	46.	0.	935.	.0209	-.0359	.0043	.0027	-.0019	-.0588	2847.	
.3880	-384.	316.	47.	124.	0.	1001.	.0199	-.0369	.0046	.0023	-.0031	-.0568	3068.	
.3890	-414.	373.	78.	203.	0.	1080.	.0185	-.0377	.0050	.0017	-.0041	-.0543	3343.	
.3900	-446.	409.	107.	278.	0.	1162.	.0167	-.0382	.0054	.0009	-.0051	-.0518	3636.	
.3910	-475.	443.	131.	341.	0.	1240.	.0144	-.0383	.0060	-.0003	-.0060	-.0497	3911.	
.3920	-501.	483.	147.	384.	0.	1308.	.0115	-.0381	.0067	-.0023	-.0072	-.0483	4147.	
.3930	-523.	512.	156.	407.	0.	1363.	.0082	-.0374	.0074	-.0051	-.0088	-.0477	4327.	
.3940	-536.	502.	158.	411.	0.	1398.	.0044	-.0364	.0082	-.0084	-.0105	-.0478	4431.	
.3950	-538.	455.	151.	394.	0.	1403.	.0003	-.0350	.0089	-.0123	-.0122	-.0489	4432.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.17.

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 56 MEMBER 1 SEQUENCE 76 LOCATION DEG TYPE VA

.3870	-358.	239.	18.	46.	0.	935.	.0209	-.0359	.0043	.0027	-.0019	-.0588	2847.
.3880	-384.	316.	47.	124.	0.	1001.	.0199	-.0369	.0046	.0023	-.0031	-.0568	3068.
.3890	-414.	373.	78.	203.	0.	1080.	.0185	-.0377	.0050	.0017	-.0041	-.0543	3343.
.3900	-446.	409.	107.	278.	0.	1162.	.0167	-.0382	.0054	.0009	-.0051	-.0518	3636.
.3910	-475.	443.	131.	341.	0.	1240.	.0144	-.0383	.0060	-.0003	-.0060	-.0497	3911.
.3920	-501.	483.	147.	384.	0.	1308.	.0115	-.0381	.0067	-.0023	-.0072	-.0483	4147.
.3930	-523.	512.	156.	407.	0.	1363.	.0082	-.0374	.0074	-.0051	-.0088	-.0477	4327.
.3940	-536.	502.	158.	411.	0.	1398.	.0044	-.0364	.0082	-.0084	-.0105	-.0478	4431.
.3950	-538.	455.	151.	394.	0.	1403.	.0003	-.0350	.0089	-.0123	-.0122	-.0489	4432.

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DIS/ADLPIPE ADLPIPE STRESS ANALYSIS
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
 2 SAFETY COLD FKW24F--2 PSV

83/12/02. 18.29.17.

CONDITION 24
 LOADS
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 ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	VA	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS
TIME	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.3960	-528.	388.	137.	357.	0.	1376.	-.0039	-.0333	.0099	-.0172	-.0140	-.0509	4324.						
.3970	-506.	315.	116.	304.	0.	1321.	-.0084	-.0312	.0113	-.0233	-.0158	-.0536	4123.						
.3980	-474.	229.	92.	240.	0.	1237.	-.0129	-.0289	.0129	-.0300	-.0174	-.0568	3834.						
.3990	-429.	116.	64.	167.	0.	1120.	-.0173	-.0264	.0145	-.0371	-.0188	-.0604	3444.						
.4000	-371.	-14.	31.	80.	0.	957.	-.0213	-.0239	.0161	-.0444	-.0200	-.0642	2952.						

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)
.1860	-804.	-1772.	462.	1205.	0.	2097.	-.0046	-.0394	.0061	-.0392	.0555	.0242	7358.

SECTION	MEMBER	SEQUENCE	LOCATION	DIS	TYPE	VA	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS
TIME	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	0.	0.	0.	0.	0.	0.	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0020	0.	0.	0.	0.	0.	0.	-.0000	.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	-.0000	-.0000	.0000	0.
.0030	0.	0.	0.	0.	0.	0.	.0000	-.0000	.0000	-.0000	.0000	.0000	.0000	-.0000	.0000	.0000	.0000	.0000	0.
.0040	0.	0.	0.	0.	0.	0.	.0000	-.0000	.0000	-.0000	-.0000	.0000	.0000	-.0000	.0000	-.0000	-.0000	.0000	0.
.0050	0.	0.	0.	0.	0.	0.	.0000	-.0000	.0000	-.0000	-.0000	.0000	.0000	-.0000	-.0000	-.0000	-.0000	.0000	0.
.0060	0.	0.	0.	0.	0.	0.	-.0000	-.0000	.0000	-.0000	-.0001	-.0000	-.0000	-.0000	.0000	-.0001	-.0001	-.0000	0.
.0070	0.	0.	0.	0.	0.	0.	-.0001	.0000	.0000	.0000	-.0003	-.0001	.0000	.0000	.0000	-.0003	-.0001	-.0001	0.
.0080	0.	0.	0.	0.	0.	0.	-.0002	.0000	-.0000	.0002	-.0007	-.0004	.0002	.0000	.0000	-.0007	-.0004	-.0004	0.
.0090	0.	0.	0.	0.	0.	0.	-.0003	.0000	-.0001	.0005	-.0014	-.0007	.0005	.0000	.0000	-.0014	-.0007	-.0007	0.
.0100	0.	0.	0.	0.	0.	0.	-.0006	.0000	-.0003	.0011	-.0023	-.0014	.0011	.0000	.0000	-.0023	-.0014	-.0014	0.
.0110	0.	0.	0.	0.	0.	0.	-.0010	.0000	-.0006	.0018	-.0037	-.0024	.0018	.0000	.0000	-.0037	-.0024	-.0024	0.
.0120	0.	0.	0.	0.	0.	0.	-.0017	.0000	-.0009	.0029	-.0055	-.0040	.0029	.0000	.0000	-.0055	-.0040	-.0040	0.
.0130	0.	0.	0.	0.	0.	0.	-.0028	.0001	-.0013	.0045	-.0079	-.0063	.0045	.0001	.0001	-.0079	-.0063	-.0063	0.
.0140	0.	0.	0.	0.	0.	0.	-.0041	.0001	-.0019	.0066	-.0108	-.0091	.0066	.0001	.0001	-.0108	-.0091	-.0091	0.
.0150	0.	0.	0.	0.	0.	0.	-.0056	.0002	-.0028	.0092	-.0141	-.0123	.0092	.0002	.0002	-.0141	-.0123	-.0123	0.
.0160	0.	0.	0.	0.	0.	0.	-.0071	.0003	-.0037	.0122	-.0175	-.0156	.0122	.0003	.0003	-.0175	-.0156	-.0156	0.
.0170	0.	0.	0.	0.	0.	0.	-.0085	.0004	-.0047	.0151	-.0204	-.0184	.0151	.0004	.0004	-.0204	-.0184	-.0184	0.
.0180	0.	0.	0.	0.	0.	0.	-.0095	.0004	-.0056	.0175	-.0221	-.0203	.0175	.0004	.0004	-.0221	-.0203	-.0203	0.
.0190	0.	0.	0.	0.	0.	0.	-.0099	.0003	-.0061	.0188	-.0218	-.0208	.0188	.0003	.0003	-.0218	-.0208	-.0208	0.

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DIS/ADLPIPE ADLPIPE STRESS ANALYSIS
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
 2 SAFETY COLD FKW24F--2 PSV

83/12/02. 18.29.17.

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	VA
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.0110	0.	0.	0.	0.	0.	0.	0.	-.0010	.0000	-.0006	.0018	-.0037	-.0024	0.
.0120	0.	0.	0.	0.	0.	0.	0.	-.0017	.0000	-.0009	.0029	-.0055	-.0040	0.
.0130	0.	0.	0.	0.	0.	0.	0.	-.0028	.0001	-.0012	.0045	-.0079	-.0063	0.
.0140	0.	0.	0.	0.	0.	0.	0.	-.0041	.0001	-.0019	.0066	-.0108	-.0091	0.
.0150	0.	0.	0.	0.	0.	0.	0.	-.0056	.0002	-.0021	.0092	-.0141	-.0123	0.
.0160	0.	0.	0.	0.	0.	0.	0.	-.0071	.0003	-.0037	.0122	-.0175	-.0156	0.
.0170	0.	0.	0.	0.	0.	0.	0.	-.0085	.0004	-.0047	.0151	-.0204	-.0184	0.
.0180	0.	0.	0.	0.	0.	0.	0.	-.0095	.0004	-.0056	.0175	-.0221	-.0203	0.
.0190	0.	0.	0.	0.	0.	0.	0.	-.0099	.0003	-.0061	.0188	-.0218	-.0208	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	56	MEMBER	1	SEQUENCE	77	LOCATION	DIS	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	FX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.0200	0.	0.	0.	0.	0.	0.	0.	-.0096	.0002	-.0060	.0181	-.0188	-.0194	0.	
.0210	0.	0.	0.	0.	0.	0.	0.	-.0085	-.0001	-.0050	.0150	-.0128	-.0160	0.	
.0220	0.	0.	0.	0.	0.	0.	0.	-.0066	-.0005	-.0031	.0094	-.0039	-.0107	0.	
.0230	0.	0.	0.	0.	0.	0.	0.	-.0044	-.0010	-.0003	.0017	.0069	-.0044	0.	
.0240	0.	0.	0.	0.	0.	0.	0.	-.0022	-.0016	.0028	-.0066	.0175	.0023	0.	
.0250	0.	0.	0.	0.	0.	0.	0.	-.0000	-.0023	.0051	-.0130	.0266	.0090	0.	
.0260	0.	0.	0.	0.	0.	0.	0.	.0024	-.0029	.0059	-.0154	.0333	.0158	0.	
.0270	0.	0.	0.	0.	0.	0.	0.	.0050	-.0036	.0052	-.0141	.0371	.0219	0.	
.0280	0.	0.	0.	0.	0.	0.	0.	.0067	-.0044	.0039	-.0113	.0369	.0258	0.	
.0290	0.	0.	0.	0.	0.	0.	0.	.0074	-.0050	.0021	-.0072	.0337	.0277	0.	
.0300	0.	0.	0.	0.	0.	0.	0.	.0087	-.0054	-.0007	-.0004	.0315	.0304	0.	
.0310	0.	0.	0.	0.	0.	0.	0.	.0111	-.0056	-.0028	.0044	.0314	.0349	0.	
.0320	0.	0.	0.	0.	0.	0.	0.	.0130	-.0056	-.0021	.0020	.0329	.0390	0.	
.0330	0.	0.	0.	0.	0.	0.	0.	.0140	-.0052	.0013	-.0070	.0363	.0418	0.	
.0340	0.	0.	0.	0.	0.	0.	0.	.0155	-.0043	.0055	-.0179	.0414	.0450	0.	
.0350	0.	0.	0.	0.	0.	0.	0.	.0173	-.0029	.0089	-.0264	.0447	.0482	0.	
.0360	0.	0.	0.	0.	0.	0.	0.	.0178	-.0010	.0102	-.0294	.0424	.0476	0.	
.0370	0.	0.	0.	0.	0.	0.	0.	.0161	.0013	.0088	-.0257	.0325	.0402	0.	
.0380	0.	0.	0.	0.	0.	0.	0.	.0124	.0039	.0051	-.0162	.0150	.0272	0.	
.0390	0.	0.	0.	0.	0.	0.	0.	.0075	.0069	-.0005	-.0016	-.0069	.0112	0.	
.0400	0.	0.	0.	0.	0.	0.	0.	.0027	.0100	-.0075	.0163	-.0269	-.0046	0.	
.0410	0.	0.	0.	0.	0.	0.	0.	-.0004	.0131	-.0128	.0297	-.0397	-.0168	0.	
.0420	0.	0.	0.	0.	0.	0.	0.	-.0021	.0158	-.0125	.0281	-.0442	-.0249	0.	
.0430	0.	0.	0.	0.	0.	0.	0.	-.0033	.0180	-.0062	.0111	-.0394	-.0301	0.	
.0440	0.	0.	0.	0.	0.	0.	0.	-.0034	.0197	.0029	-.0127	-.0251	-.0315	0.	
.0450	0.	0.	0.	0.	0.	0.	0.	-.0013	.0208	.0120	-.0355	-.0063	-.0278	0.	
.0460	0.	0.	0.	0.	0.	0.	0.	.0007	.0213	.0189	-.0527	.0081	-.0241	0.	
.0470	0.	0.	0.	0.	0.	0.	0.	-.0007	.0209	.0221	-.0599	.0120	-.0285	0.	
.0480	0.	0.	0.	0.	0.	0.	0.	-.0052	.0197	.0205	-.0548	.0049	-.0403	0.	
.0490	0.	0.	0.	0.	0.	0.	0.	-.0099	.0177	.0147	-.0387	-.0092	-.0527	0.	
.0500	0.	0.	0.	0.	0.	0.	0.	-.0137	.0150	.0067	-.0158	-.0239	-.0629	0.	
.0510	0.	0.	0.	0.	0.	0.	0.	-.0173	.0117	-.0004	.0051	-.0335	-.0716	0.	
.0520	0.	0.	0.	0.	0.	0.	0.	-.0201	.0077	-.0026	.0138	-.0360	-.0766	0.	
.0530	0.	0.	0.	0.	0.	0.	0.	-.0205	.0033	.0008	.0078	-.0302	-.0744	0.	
.0540	0.	0.	0.	0.	0.	0.	0.	-.0185	-.0014	.0072	-.0055	-.0151	-.0654	0.	
.0550	0.	0.	0.	0.	0.	0.	0.	-.0150	-.0059	.0138	-.0187	.0051	-.0525	0.	
.0560	0.	0.	0.	0.	0.	0.	0.	-.0117	-.0104	.0196	-.0299	.0217	-.0397	0.	
.0570	0.	0.	0.	0.	0.	0.	0.	-.0104	-.0145	.0231	-.0355	.0289	-.0317	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.17.

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	56	MEMBER	1	SEQUENCE	77	LOCATION	DIS	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	FX	RY	RZ	STRESS	

.0480	0.	0.	0.	0.	0.	0.	0.	-.0052	.0197	.0205	-.0548	.0049	-.0403	0.
.0490	0.	0.	0.	0.	0.	0.	0.	-.0099	.0177	.0147	-.0387	-.0092	-.0527	0.
.0500	0.	0.	0.	0.	0.	0.	0.	-.0137	.0150	.0067	-.0158	-.0239	-.0629	0.
.0510	0.	0.	0.	0.	0.	0.	0.	-.0173	.0117	-.0004	.0051	-.0335	-.0716	0.
.0520	0.	0.	0.	0.	0.	0.	0.	-.0201	.0077	-.0026	.0138	-.0360	-.0766	0.
.0530	0.	0.	0.	0.	0.	0.	0.	-.0205	.0033	.0008	.0078	-.0302	-.0744	0.
.0540	0.	0.	0.	0.	0.	0.	0.	-.0185	-.0014	.0072	-.0055	-.0151	-.0654	0.
.0550	0.	0.	0.	0.	0.	0.	0.	-.0150	-.0059	.0138	-.0187	.0051	-.0525	0.
.0560	0.	0.	0.	0.	0.	0.	0.	-.0117	-.0104	.0196	-.0299	.0217	-.0397	0.
.0570	0.	0.	0.	0.	0.	0.	0.	-.0104	-.0145	.0231	-.0355	.0289	-.0317	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

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	56	MEMBER	1	SEQUENCE	77	LOCATION	DIS	TYPE	VA					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)		
.0580	0.	0.	0.	0.	0.	0.	-.0118	-.0182	.0220	-.0292	.0266	-.0307	0.	
.0590	0.	0.	0.	0.	0.	0.	-.0143	-.0212	.0164	-.0109	.0176	-.0331	0.	
.0600	0.	0.	0.	0.	0.	0.	-.0160	-.0235	.0089	.0120	.0055	-.0339	0.	
.0610	0.	0.	0.	0.	0.	0.	-.0166	-.0251	.0027	.0311	-.0039	-.0323	0.	
.0620	0.	0.	0.	0.	0.	0.	-.0164	-.0262	.0003	.0399	-.0058	-.0284	0.	
.0630	0.	0.	0.	0.	0.	0.	-.0144	-.0266	.0033	.0345	.0016	-.0197	0.	
.0640	0.	0.	0.	0.	0.	0.	-.0099	-.0264	.0105	.0179	.0175	-.0043	0.	
.0650	0.	0.	0.	0.	0.	0.	-.0040	-.0255	.0190	-.0021	.0384	.0143	0.	
.0660	0.	0.	0.	0.	0.	0.	.0012	-.0238	.0263	-.0184	.0566	.0306	0.	
.0670	0.	0.	0.	0.	0.	0.	.0041	-.0217	.0302	-.0264	.0640	.0405	0.	
.0680	0.	0.	0.	0.	0.	0.	.0042	-.0190	.0284	-.0205	.0576	.0421	0.	
.0690	0.	0.	0.	0.	0.	0.	.0020	-.0158	.0202	.0017	.0398	.0363	0.	
.0700	0.	0.	0.	0.	0.	0.	-.0017	-.0121	.0081	.0343	.0154	.0259	0.	
.0710	0.	0.	0.	0.	0.	0.	-.0055	-.0081	-.0040	.0662	-.0091	.0152	0.	
.0720	0.	0.	0.	0.	0.	0.	-.0080	-.0040	-.0126	.0882	-.0264	.0076	0.	
.0730	0.	0.	0.	0.	0.	0.	-.0081	.0002	-.0153	.0945	-.0316	.0058	0.	
.0740	0.	0.	0.	0.	0.	0.	-.0058	.0044	-.0120	.0847	-.0243	.0108	0.	
.0750	0.	0.	0.	0.	0.	0.	-.0013	.0086	-.0049	.0646	-.0074	.0213	0.	
.0760	0.	0.	0.	0.	0.	0.	.0041	.0126	.0028	.0420	.0125	.0333	0.	
.0770	0.	0.	0.	0.	0.	0.	.0085	.0164	.0088	.0234	.0273	.0420	0.	
.0780	0.	0.	0.	0.	0.	0.	.0104	.0199	.0108	.0148	.0315	.0435	0.	
.0790	0.	0.	0.	0.	0.	0.	.0095	.0231	.0073	.0202	.0246	.0373	0.	
.0800	0.	0.	0.	0.	0.	0.	.0069	.0259	-.0005	.0371	.0095	.0259	0.	
.0810	0.	0.	0.	0.	0.	0.	.0035	.0282	-.0096	.0571	-.0089	.0124	0.	
.0820	0.	0.	0.	0.	0.	0.	.0000	.0300	-.0166	.0720	-.0243	-.0007	0.	
.0830	0.	0.	0.	0.	0.	0.	-.0019	.0309	-.0194	.0757	-.0311	-.0100	0.	
.0840	0.	0.	0.	0.	0.	0.	-.0011	.0312	-.0168	.0654	-.0273	-.0120	0.	
.0850	0.	0.	0.	0.	0.	0.	.0022	.0309	-.0100	.0440	-.0146	-.0073	0.	
.0860	0.	0.	0.	0.	0.	0.	.0064	.0299	-.0014	.0184	.0034	.0003	0.	
.0870	0.	0.	0.	0.	0.	0.	.0105	.0284	.0065	-.0050	.0207	.0072	0.	
.0880	0.	0.	0.	0.	0.	0.	.0134	.0263	.0120	-.0222	.0317	.0112	0.	
.0890	0.	0.	0.	0.	0.	0.	.0145	.0238	.0140	-.0300	.0349	.0107	0.	
.0900	0.	0.	0.	0.	0.	0.	.0141	.0209	.0125	-.0280	.0325	.0063	0.	
.0910	0.	0.	0.	0.	0.	0.	.0134	.0178	.0097	-.0216	.0278	.0010	0.	
.0920	0.	0.	0.	0.	0.	0.	.0131	.0144	.0083	-.0180	.0240	-.0025	0.	
.0930	0.	0.	0.	0.	0.	0.	.0134	.0109	.0095	-.0204	.0240	-.0044	0.	
.0940	0.	0.	0.	0.	0.	0.	.0141	.0073	.0132	-.0277	.0284	-.0046	0.	
.0950	0.	0.	0.	0.	0.	0.	.0154	.0039	.0177	-.0363	.0340	-.0031	0.	

ADLPIPE PAGE 2149

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.17.

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 56 MEMBER 1 SEQUENCE 77 LOCATION DIS TYPE VA

.0870	0.	0.	0.	0.	0.	0.	0.	.0105	.0284	.0065	-.0050	.0207	.0072	0.
.0880	0.	0.	0.	0.	0.	0.	0.	.0134	.0263	.0120	-.0222	.0317	.0112	0.
.0890	0.	0.	0.	0.	0.	0.	0.	.0145	.0238	.0140	-.0300	.0349	.0107	0.
.0900	0.	0.	0.	0.	0.	0.	0.	.0141	.0209	.0125	-.0280	.0325	.0063	0.
.0910	0.	0.	0.	0.	0.	0.	0.	.0134	.0178	.0097	-.0216	.0278	.0010	0.
.0920	0.	0.	0.	0.	0.	0.	0.	.0131	.0144	.0083	-.0180	.0240	-.0025	0.
.0930	0.	0.	0.	0.	0.	0.	0.	.0134	.0109	.0095	-.0204	.0240	-.0044	0.
.0940	0.	0.	0.	0.	0.	0.	0.	.0141	.0073	.0132	-.0277	.0284	-.0046	0.
.0950	0.	0.	0.	0.	0.	0.	0.	.0154	.0039	.0177	-.0363	.0340	-.0031	0.

ADLPIPE PAGE 2149

DIS/ADLPIPE ADLPIPE STRESS ANALYSIS
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
 2 SAFETY COLD FKW24F--2 PSV

83/12/02. 18.29.17.

CONDITION 24
 LOADS
 SHOCK
 PRESSURE
 ENGLISH UNITS

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

SECTION	56	MEMBER	1	SEQUENCE	77	LOCATION	DIS	TYPE	VA					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)		
.0960	0.	0.	0.	0.	0.	0.	.0165	.0007	.0207	-.0404	.0363	-.0021	0.	0.
.0970	0.	0.	0.	0.	0.	0.	.0162	-.0021	.0200	-.0344	.0314	-.0055	0.	0.
.0980	0.	0.	0.	0.	0.	0.	.0138	-.0045	.0150	-.0171	.0175	-.0148	0.	0.
.0990	0.	0.	0.	0.	0.	0.	.0099	-.0063	.0065	.0093	-.0038	-.0279	0.	0.
.1000	0.	0.	0.	0.	0.	0.	.0060	-.0076	-.0040	.0404	-.0274	-.0419	0.	0.
.1010	0.	0.	0.	0.	0.	0.	.0029	-.0083	-.0139	.0702	-.0474	-.0538	0.	0.
.1020	0.	0.	0.	0.	0.	0.	.0016	-.0083	-.0208	.0917	-.0502	-.0612	0.	0.
.1030	0.	0.	0.	0.	0.	0.	.0024	-.0077	-.0235	.1016	-.0541	-.0630	0.	0.
.1040	0.	0.	0.	0.	0.	0.	.0052	-.0066	-.0229	.1021	-.0595	-.0596	0.	0.
.1050	0.	0.	0.	0.	0.	0.	.0095	-.0048	-.0207	.0975	-.0493	-.0524	0.	0.
.1060	0.	0.	0.	0.	0.	0.	.0141	-.0023	-.0183	.0917	-.0373	-.0441	0.	0.
.1070	0.	0.	0.	0.	0.	0.	.0181	.0007	-.0170	.0876	-.0268	-.0372	0.	0.
.1080	0.	0.	0.	0.	0.	0.	.0207	.0042	-.0168	.0856	-.0189	-.0331	0.	0.
.1090	0.	0.	0.	0.	0.	0.	.0226	.0082	-.0172	.0847	-.0130	-.0306	0.	0.
.1100	0.	0.	0.	0.	0.	0.	.0246	.0125	-.0174	.0828	-.0071	-.0282	0.	0.
.1110	0.	0.	0.	0.	0.	0.	.0263	.0171	-.0164	.0775	-.0008	-.0258	0.	0.
.1120	0.	0.	0.	0.	0.	0.	.0276	.0219	-.0141	.0683	.0052	-.0237	0.	0.
.1130	0.	0.	0.	0.	0.	0.	.0290	.0267	-.0114	.0578	.0099	-.0213	0.	0.
.1140	0.	0.	0.	0.	0.	0.	.0304	.0315	-.0098	.0496	.0118	-.0199	0.	0.
.1150	0.	0.	0.	0.	0.	0.	.0306	.0361	-.0100	.0452	.0091	-.0216	0.	0.
.1160	0.	0.	0.	0.	0.	0.	.0294	.0404	-.0117	.0435	.0013	-.0265	0.	0.
.1170	0.	0.	0.	0.	0.	0.	.0275	.0444	-.0140	.0432	-.0089	-.0330	0.	0.
.1180	0.	0.	0.	0.	0.	0.	.0258	.0480	-.0162	.0424	-.0165	-.0390	0.	0.
.1190	0.	0.	0.	0.	0.	0.	.0250	.0511	-.0162	.0348	-.0191	-.0420	0.	0.
.1200	0.	0.	0.	0.	0.	0.	.0259	.0535	-.0118	.0154	-.0149	-.0398	0.	0.
.1210	0.	0.	0.	0.	0.	0.	.0289	.0552	-.0036	-.0139	-.0024	-.0323	0.	0.
.1220	0.	0.	0.	0.	0.	0.	.0330	.0562	.0068	-.0481	.0152	-.0220	0.	0.
.1230	0.	0.	0.	0.	0.	0.	.0368	.0564	.0166	-.0807	.0315	-.0124	0.	0.
.1240	0.	0.	0.	0.	0.	0.	.0388	.0560	.0235	-.1054	.0395	-.0069	0.	0.
.1250	0.	0.	0.	0.	0.	0.	.0379	.0549	.0251	-.1150	.0361	-.0087	0.	0.
.1260	0.	0.	0.	0.	0.	0.	.0343	.0533	.0203	-.1071	.0221	-.0177	0.	0.
.1270	0.	0.	0.	0.	0.	0.	.0292	.0512	.0116	-.0591	.0003	-.0300	0.	0.
.1280	0.	0.	0.	0.	0.	0.	.0245	.0485	.0028	-.0704	-.0228	-.0410	0.	0.
.1290	0.	0.	0.	0.	0.	0.	.0209	.0453	-.0032	-.0579	-.0392	-.0482	0.	0.
.1300	0.	0.	0.	0.	0.	0.	.0189	.0418	-.0047	-.0553	-.0447	-.0502	0.	0.
.1310	0.	0.	0.	0.	0.	0.	.0192	.0380	-.0018	-.0636	-.0404	-.0456	0.	0.
.1320	0.	0.	0.	0.	0.	0.	.0209	.0340	.0041	-.0793	-.0318	-.0358	0.	0.
.1330	0.	0.	0.	0.	0.	0.	.0224	.0301	.0093	-.0923	-.0237	-.0258	0.	0.

ADLPIPE PAGE 2150

DIS/ADLPIPE ADLPIPE STRESS ANALYSIS
 S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
 2 SAFETY COLD FKW24F--2 PSV

83/12/02. 18.29.17.

CONDITION 24
 LOADS
 SHOCK
 PRESSURE
 ENGLISH UNITS

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

SECTION	56	MEMBER	1	SEQUENCE	77	LOCATION	DIS	TYPE	VA
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.1250	0.	0.	0.	0.	0.	0.	0.	.0379	.0549	.0251	-.1150	.0361	-.0087	0.
.1260	0.	0.	0.	0.	0.	0.	0.	.0343	.0533	.0203	-.1071	.0221	-.0177	0.
.1270	0.	0.	0.	0.	0.	0.	0.	.0292	.0512	.0116	-.0891	.0003	-.0300	0.
.1280	0.	0.	0.	0.	0.	0.	0.	.0245	.0485	.0028	-.0704	-.0228	-.0410	0.
.1290	0.	0.	0.	0.	0.	0.	0.	.0209	.0453	-.0032	-.0579	-.0392	-.0482	0.
.1300	0.	0.	0.	0.	0.	0.	0.	.0189	.0418	-.0047	-.0553	-.0447	-.0502	0.
.1310	0.	0.	0.	0.	0.	0.	0.	.0192	.0380	-.0018	-.0636	-.0404	-.0456	0.
.1320	0.	0.	0.	0.	0.	0.	0.	.0209	.0340	.0041	-.0793	-.0318	-.0358	0.
.1330	0.	0.	0.	0.	0.	0.	0.	.0224	.0301	.0093	-.0923	-.0237	-.0258	0.

ADLPIPE PAGE 2150 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.29.17.

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	56	MEMBER	1	SEQUENCE	77	LOCATION	DIS	TYPE	VA						
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)		
.1340	0.	0.	0.	0.	0.	0.	.0224	.0262	.0107	-.0944	-.0209	-.0194	0.		
.1350	0.	0.	0.	0.	0.	0.	.0209	.0224	.0075	-.0847	-.0272	-.0169	0.		
.1360	0.	0.	0.	0.	0.	0.	.0181	.0188	.0006	-.0656	-.0417	-.0176	0.		
.1370	0.	0.	0.	0.	0.	0.	.0138	.0153	-.0079	-.0413	-.0592	-.0210	0.		
.1380	0.	0.	0.	0.	0.	0.	.0099	.0119	-.0159	-.0171	-.0728	-.0231	0.		
.1390	0.	0.	0.	0.	0.	0.	.0087	.0086	-.0209	-.0010	-.0785	-.0182	0.		
.1400	0.	0.	0.	0.	0.	0.	.0107	.0054	-.0213	.0025	-.0752	-.0046	0.		
.1410	0.	0.	0.	0.	0.	0.	.0147	.0021	-.0180	-.0037	-.0633	.0141	0.		
.1420	0.	0.	0.	0.	0.	0.	.0189	-.0012	-.0128	-.0142	-.0468	.0341	0.		
.1430	0.	0.	0.	0.	0.	0.	.0232	-.0043	-.0085	-.0230	-.0308	.0543	0.		
.1440	0.	0.	0.	0.	0.	0.	.0271	-.0073	-.0067	-.0261	-.0199	.0732	0.		
.1450	0.	0.	0.	0.	0.	0.	.0292	-.0101	-.0081	-.0210	-.0153	.0873	0.		
.1460	0.	0.	0.	0.	0.	0.	.0291	-.0125	-.0120	-.0088	-.0159	.0955	0.		
.1470	0.	0.	0.	0.	0.	0.	.0281	-.0144	-.0167	.0048	-.0195	.1012	0.		
.1480	0.	0.	0.	0.	0.	0.	.0278	-.0158	-.0205	.0147	-.0218	.1082	0.		
.1490	0.	0.	0.	0.	0.	0.	.0280	-.0164	-.0216	.0178	-.0190	.1160	0.		
.1500	0.	0.	0.	0.	0.	0.	.0281	-.0162	-.0193	.0121	-.0099	.1237	0.		
.1510	0.	0.	0.	0.	0.	0.	.0287	-.0149	-.0139	-.0023	.0036	.1316	0.		
.1520	0.	0.	0.	0.	0.	0.	.0292	-.0125	-.0067	-.0225	.0174	.1390	0.		
.1530	0.	0.	0.	0.	0.	0.	.0283	-.0087	-.0003	-.0409	.0284	.1418	0.		
.1540	0.	0.	0.	0.	0.	0.	.0246	-.0035	.0034	-.0516	.0339	.1365	0.		
.1550	0.	0.	0.	0.	0.	0.	.0185	.0029	.0038	-.0546	.0315	.1236	0.		
.1560	0.	0.	0.	0.	0.	0.	.0107	.0104	.0019	-.0526	.0214	.1049	0.		
.1570	0.	0.	0.	0.	0.	0.	.0011	.0188	-.0009	-.0485	.0066	.0805	0.		
.1580	0.	0.	0.	0.	0.	0.	-.0096	.0280	-.0036	-.0437	-.0077	.0528	0.		
.1590	0.	0.	0.	0.	0.	0.	-.0195	.0376	-.0051	-.0423	-.0184	.0263	0.		
.1600	0.	0.	0.	0.	0.	0.	-.0282	.0472	-.0039	-.0485	-.0253	.0034	0.		
.1610	0.	0.	0.	0.	0.	0.	-.0364	.0563	-.0002	-.0610	-.0278	-.0181	0.		
.1620	0.	0.	0.	0.	0.	0.	-.0445	.0645	.0045	-.0754	-.0259	-.0390	0.		
.1630	0.	0.	0.	0.	0.	0.	-.0515	.0715	.0092	-.0898	-.0225	-.0570	0.		
.1640	0.	0.	0.	0.	0.	0.	-.0570	.0769	.0129	-.1019	-.0194	-.0708	0.		
.1650	0.	0.	0.	0.	0.	0.	-.0619	.0803	.0149	-.1092	-.0167	-.0827	0.		
.1660	0.	0.	0.	0.	0.	0.	-.0667	.0816	.0158	-.1119	-.0148	-.0936	0.		
.1670	0.	0.	0.	0.	0.	0.	-.0704	.0805	.0158	-.1115	-.0133	-.1008	0.		
.1680	0.	0.	0.	0.	0.	0.	-.0722	.0770	.0151	-.1088	-.0118	-.1024	0.		
.1690	0.	0.	0.	0.	0.	0.	-.0725	.0711	.0135	-.1029	-.0094	-.0996	0.		
.1700	0.	0.	0.	0.	0.	0.	-.0719	.0629	.0114	-.0939	-.0068	-.0936	0.		
.1710	0.	0.	0.	0.	0.	0.	-.0703	.0528	.0086	-.0826	-.0052	-.0842	0.		

ADLPIPE PAGE 2151 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.29.17.

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 56 MEMBER 1 SEQUENCE 77 LOCATION DIS TYPE VA

.1630	0.	0.	0.	0.	0.	0.	0.	0.	-.0515	.0715	.0092	-.0898	-.0225	-.0570	0.
.1640	0.	0.	0.	0.	0.	0.	0.	0.	-.0570	.0769	.0129	-.1019	-.0194	-.0708	0.
.1650	0.	0.	0.	0.	0.	0.	0.	0.	-.0619	.0803	.0149	-.1092	-.0167	-.0827	0.
.1660	0.	0.	0.	0.	0.	0.	0.	0.	-.0667	.0816	.0158	-.1119	-.0148	-.0936	0.
.1670	0.	0.	0.	0.	0.	0.	0.	0.	-.0704	.0805	.0158	-.1115	-.0133	-.1008	0.
.1680	0.	0.	0.	0.	0.	0.	0.	0.	-.0722	.0770	.0151	-.1088	-.0118	-.1024	0.
.1690	0.	0.	0.	0.	0.	0.	0.	0.	-.0725	.0711	.0135	-.1029	-.0094	-.0996	0.
.1700	0.	0.	0.	0.	0.	0.	0.	0.	-.0719	.0629	.0114	-.0939	-.0068	-.0936	0.
.1710	0.	0.	0.	0.	0.	0.	0.	0.	-.0703	.0528	.0086	-.0826	-.0052	-.0842	0.

ADLPIPE PAGE 2151

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.17.

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	56	MEMBER	1	SEQUENCE	77	LOCATION	DIS	TYPE	VA						
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)	
.1720	0.	0.	0.	0.	0.	0.	0.	-.0673	.0411	.0047	-.0682	-.0043	-.0708	0.	
.1730	0.	0.	0.	0.	0.	0.	0.	-.0634	.0282	.0001	-.0513	-.0040	-.0550	0.	
.1740	0.	0.	0.	0.	0.	0.	0.	-.0595	.0148	-.0047	-.0328	-.0032	-.0381	0.	
.1750	0.	0.	0.	0.	0.	0.	0.	-.0550	.0012	-.0091	-.0148	-.0012	-.0198	0.	
.1760	0.	0.	0.	0.	0.	0.	0.	-.0497	-.0119	-.0124	-.0001	.0021	.0007	0.	
.1770	0.	0.	0.	0.	0.	0.	0.	-.0436	-.0240	-.0143	.0107	.0074	.0226	0.	
.1780	0.	0.	0.	0.	0.	0.	0.	-.0374	-.0346	-.0147	.0178	.0149	.0444	0.	
.1790	0.	0.	0.	0.	0.	0.	0.	-.0312	-.0434	-.0140	.0218	.0240	.0652	0.	
.1800	0.	0.	0.	0.	0.	0.	0.	-.0252	-.0500	-.0122	.0221	.0331	.0844	0.	
.1810	0.	0.	0.	0.	0.	0.	0.	-.0204	-.0541	-.0095	.0196	.0407	.0999	0.	
.1820	0.	0.	0.	0.	0.	0.	0.	-.0173	-.0558	-.0069	.0173	.0473	.1097	0.	
.1830	0.	0.	0.	0.	0.	0.	0.	-.0158	-.0549	-.0045	.0153	.0523	.1142	0.	
.1840	0.	0.	0.	0.	0.	0.	0.	-.0154	-.0518	-.0021	.0125	.0549	.1145	0.	
.1850	0.	0.	0.	0.	0.	0.	0.	-.0162	-.0465	.0004	.0088	.0557	.1102	0.	
.1860	0.	0.	0.	0.	0.	0.	0.	-.0186	-.0395	.0030	.0049	.0555	.1010	0.	
.1870	0.	0.	0.	0.	0.	0.	0.	-.0219	-.0312	.0054	.0015	.0547	.0879	0.	
.1880	0.	0.	0.	0.	0.	0.	0.	-.0257	-.0220	.0074	-.0018	.0520	.0725	0.	
.1890	0.	0.	0.	0.	0.	0.	0.	-.0303	-.0123	.0087	-.0035	.0475	.0543	0.	
.1900	0.	0.	0.	0.	0.	0.	0.	-.0357	-.0028	.0087	-.0021	.0416	.0331	0.	
.1910	0.	0.	0.	0.	0.	0.	0.	-.0415	.0063	.0077	.0018	.0344	.0106	0.	
.1920	0.	0.	0.	0.	0.	0.	0.	-.0467	.0144	.0059	.0069	.0273	-.0110	0.	
.1930	0.	0.	0.	0.	0.	0.	0.	-.0512	.0213	.0041	.0116	.0219	-.0308	0.	
.1940	0.	0.	0.	0.	0.	0.	0.	-.0550	.0267	.0033	.0139	.0197	-.0484	0.	
.1950	0.	0.	0.	0.	0.	0.	0.	-.0577	.0303	.0038	.0128	.0212	-.0629	0.	
.1960	0.	0.	0.	0.	0.	0.	0.	-.0588	.0323	.0053	.0088	.0254	-.0729	0.	
.1970	0.	0.	0.	0.	0.	0.	0.	-.0587	.0325	.0072	.0038	.0308	-.0794	0.	
.1980	0.	0.	0.	0.	0.	0.	0.	-.0582	.0312	.0086	.0006	.0348	-.0844	0.	
.1990	0.	0.	0.	0.	0.	0.	0.	-.0577	.0285	.0086	.0013	.0353	-.0893	0.	
.2000	0.	0.	0.	0.	0.	0.	0.	-.0573	.0246	.0067	.0067	.0314	-.0940	0.	
.2010	0.	0.	0.	0.	0.	0.	0.	-.0567	.0198	.0033	.0159	.0236	-.0982	0.	
.2020	0.	0.	0.	0.	0.	0.	0.	-.0559	.0145	-.0007	.0269	.0145	-.1013	0.	
.2030	0.	0.	0.	0.	0.	0.	0.	-.0543	.0088	-.0038	.0361	.0068	-.1022	0.	
.2040	0.	0.	0.	0.	0.	0.	0.	-.0514	.0030	-.0047	.0395	.0024	-.0993	0.	
.2050	0.	0.	0.	0.	0.	0.	0.	-.0470	-.0027	-.0028	.0359	.0024	-.0921	0.	
.2060	0.	0.	0.	0.	0.	0.	0.	-.0415	-.0080	.0013	.0267	.0067	-.0818	0.	
.2070	0.	0.	0.	0.	0.	0.	0.	-.0355	-.0128	.0067	.0147	.0132	-.0700	0.	
.2080	0.	0.	0.	0.	0.	0.	0.	-.0295	-.0170	.0122	.0026	.0190	-.0582	0.	
.2090	0.	0.	0.	0.	0.	0.	0.	-.0242	-.0206	.0166	-.0064	.0216	-.0481	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.17.

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	56	MEMBER	1	SEQUENCE	77	LOCATION	DIS	TYPE	VA
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.2010	0.	0.	0.	0.	0.	0.	0.	0.	-.0567	.0198	.0033	.0159	.0236	-.0982	0.
.2020	0.	0.	0.	0.	0.	0.	0.	0.	-.0559	.0145	-.0007	.0269	.0145	-.1013	0.
.2030	0.	0.	0.	0.	0.	0.	0.	0.	-.0543	.0088	-.0038	.0361	.0068	-.1022	0.
.2040	0.	0.	0.	0.	0.	0.	0.	0.	-.0514	.0030	-.0047	.0395	.0024	-.0993	0.
.2050	0.	0.	0.	0.	0.	0.	0.	0.	-.0470	-.0027	-.0028	.0359	.0024	-.0921	0.
.2060	0.	0.	0.	0.	0.	0.	0.	0.	-.0415	-.0080	.0013	.0267	.0067	-.0818	0.
.2070	0.	0.	0.	0.	0.	0.	0.	0.	-.0355	-.0128	.0067	.0147	.0132	-.0700	0.
.2080	0.	0.	0.	0.	0.	0.	0.	0.	-.0295	-.0170	.0122	.0026	.0190	-.0582	0.
.2090	0.	0.	0.	0.	0.	0.	0.	0.	-.0242	-.0206	.0166	-.0064	.0216	-.0481	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

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	56	MEMBER	1	SEQUENCE	77	LOCATION	DIS	TYPE	VA						
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	0.	0.	0.	0.	0.	0.	0.	-.0202	-.0234	.0190	-.0098	.0202	-.0414	0.	
.2110	0.	0.	0.	0.	0.	0.	0.	-.0173	-.0256	.0193	-.0070	.0152	-.0381	0.	
.2120	0.	0.	0.	0.	0.	0.	0.	-.0153	-.0272	.0182	-.0003	.0080	-.0371	0.	
.2130	0.	0.	0.	0.	0.	0.	0.	-.0136	-.0282	.0167	.0075	.0008	-.0371	0.	
.2140	0.	0.	0.	0.	0.	0.	0.	-.0119	-.0288	.0159	.0138	-.0039	-.0374	0.	
.2150	0.	0.	0.	0.	0.	0.	0.	-.0098	-.0290	.0164	.0173	-.0047	-.0368	0.	
.2160	0.	0.	0.	0.	0.	0.	0.	-.0071	-.0289	.0178	.0179	-.0017	-.0347	0.	
.2170	0.	0.	0.	0.	0.	0.	0.	-.0039	-.0285	.0198	.0172	.0037	-.0318	0.	
.2180	0.	0.	0.	0.	0.	0.	0.	-.0010	-.0279	.0212	.0173	.0094	-.0300	0.	
.2190	0.	0.	0.	0.	0.	0.	0.	.0011	-.0272	.0214	.0207	.0135	-.0304	0.	
.2200	0.	0.	0.	0.	0.	0.	0.	.0026	-.0264	.0197	.0284	.0148	-.0330	0.	
.2210	0.	0.	0.	0.	0.	0.	0.	.0037	-.0255	.0162	.0399	.0135	-.0370	0.	
.2220	0.	0.	0.	0.	0.	0.	0.	.0047	-.0245	.0118	.0531	.0109	-.0418	0.	
.2230	0.	0.	0.	0.	0.	0.	0.	.0059	-.0235	.0076	.0652	.0086	-.0463	0.	
.2240	0.	0.	0.	0.	0.	0.	0.	.0078	-.0226	.0047	.0734	.0081	-.0490	0.	
.2250	0.	0.	0.	0.	0.	0.	0.	.0106	-.0217	.0034	.0764	.0103	-.0492	0.	
.2260	0.	0.	0.	0.	0.	0.	0.	.0144	-.0209	.0035	.0748	.0145	-.0470	0.	
.2270	0.	0.	0.	0.	0.	0.	0.	.0185	-.0201	.0046	.0704	.0193	-.0436	0.	
.2280	0.	0.	0.	0.	0.	0.	0.	.0226	-.0193	.0056	.0653	.0222	-.0401	0.	
.2290	0.	0.	0.	0.	0.	0.	0.	.0264	-.0186	.0058	.0615	.0215	-.0373	0.	
.2300	0.	0.	0.	0.	0.	0.	0.	.0295	-.0178	.0048	.0603	.0167	-.0360	0.	
.2310	0.	0.	0.	0.	0.	0.	0.	.0320	-.0169	.0028	.0614	.0087	-.0361	0.	
.2320	0.	0.	0.	0.	0.	0.	0.	.0339	-.0159	.0007	.0627	-.0014	-.0371	0.	
.2330	0.	0.	0.	0.	0.	0.	0.	.0357	-.0147	-.0008	.0620	-.0116	-.0380	0.	
.2340	0.	0.	0.	0.	0.	0.	0.	.0376	-.0132	-.0008	.0575	-.0202	-.0382	0.	
.2350	0.	0.	0.	0.	0.	0.	0.	.0396	-.0113	.0008	.0488	-.0259	-.0373	0.	
.2360	0.	0.	0.	0.	0.	0.	0.	.0418	-.0091	.0039	.0361	-.0286	-.0354	0.	
.2370	0.	0.	0.	0.	0.	0.	0.	.0440	-.0063	.0081	.0206	-.0289	-.0331	0.	
.2380	0.	0.	0.	0.	0.	0.	0.	.0456	-.0031	.0129	.0040	-.0279	-.0317	0.	
.2390	0.	0.	0.	0.	0.	0.	0.	.0464	.0005	.0175	-.0117	-.0264	-.0320	0.	
.2400	0.	0.	0.	0.	0.	0.	0.	.0463	.0046	.0214	-.0252	-.0252	-.0345	0.	
.2410	0.	0.	0.	0.	0.	0.	0.	.0453	.0091	.0245	-.0359	-.0244	-.0388	0.	
.2420	0.	0.	0.	0.	0.	0.	0.	.0436	.0139	.0268	-.0440	-.0240	-.0448	0.	
.2430	0.	0.	0.	0.	0.	0.	0.	.0412	.0187	.0286	-.0499	-.0234	-.0522	0.	
.2440	0.	0.	0.	0.	0.	0.	0.	.0382	.0234	.0301	-.0541	-.0222	-.0605	0.	
.2450	0.	0.	0.	0.	0.	0.	0.	.0350	.0278	.0312	-.0566	-.0204	-.0690	0.	
.2460	0.	0.	0.	0.	0.	0.	0.	.0316	.0318	.0319	-.0571	-.0180	-.0772	0.	
.2470	0.	0.	0.	0.	0.	0.	0.	.0281	.0351	.0319	-.0551	-.0152	-.0851	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.17.

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	56	MEMBER	1	SEQUENCE	77	LOCATION	DIS	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS	

.2390	0.	0.	0.	0.	0.	0.	0.	.0464	.0005	.0175	-.0117	-.0264	-.0320	0.
.2400	0.	0.	0.	0.	0.	0.	0.	.0463	.0046	.0214	-.0252	-.0252	-.0345	0.
.2410	0.	0.	0.	0.	0.	0.	0.	.0453	.0091	.0245	-.0359	-.0244	-.0388	0.
.2420	0.	0.	0.	0.	0.	0.	0.	.0436	.0139	.0260	-.0440	-.0240	-.0448	0.
.2430	0.	0.	0.	0.	0.	0.	0.	.0412	.0187	.0286	-.0499	-.0234	-.0522	0.
.2440	0.	0.	0.	0.	0.	0.	0.	.0382	.0234	.0301	-.0541	-.0222	-.0605	0.
.2450	0.	0.	0.	0.	0.	0.	0.	.0350	.0278	.0312	-.0566	-.0204	-.0690	0.
.2460	0.	0.	0.	0.	0.	0.	0.	.0316	.0318	.0319	-.0571	-.0180	-.0772	0.
.2470	0.	0.	0.	0.	0.	0.	0.	.0281	.0351	.0319	-.0551	-.0152	-.0851	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.17.

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	56	MEMBER	1	SEQUENCE	77	LOCATION	DIS	TYPE	VA						STRESS
TIME	FX	FY	FZ	MX	MY	MZ				DZ	RX	RY	RZ	(PSI)	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)			(IN)	(IN)	(DEG)	(DEG)	(DEG)		
.2480	0.	0.	0.	0.	0.	0.	0.	.0246	.0376	.0311	-.0503	-.0127	-.0921	0.	
.2490	0.	0.	0.	0.	0.	0.	0.	.0212	.0390	.0293	-.0426	-.0106	-.0980	0.	
.2500	0.	0.	0.	0.	0.	0.	0.	.0181	.0393	.0267	-.0322	-.0092	-.1022	0.	
.2510	0.	0.	0.	0.	0.	0.	0.	.0155	.0385	.0233	-.0194	-.0082	-.1042	0.	
.2520	0.	0.	0.	0.	0.	0.	0.	.0137	.0364	.0194	-.0050	-.0073	-.1033	0.	
.2530	0.	0.	0.	0.	0.	0.	0.	.0130	.0332	.0151	.0100	-.0064	-.0989	0.	
.2540	0.	0.	0.	0.	0.	0.	0.	.0133	.0288	.0108	.0250	-.0055	-.0908	0.	
.2550	0.	0.	0.	0.	0.	0.	0.	.0146	.0235	.0065	.0394	-.0046	-.0793	0.	
.2560	0.	0.	0.	0.	0.	0.	0.	.0170	.0175	.0023	.0530	-.0037	-.0646	0.	
.2570	0.	0.	0.	0.	0.	0.	0.	.0202	.0110	-.0018	.0657	-.0030	-.0470	0.	
.2580	0.	0.	0.	0.	0.	0.	0.	.0241	.0042	-.0058	.0773	-.0027	-.0273	0.	
.2590	0.	0.	0.	0.	0.	0.	0.	.0284	-.0026	-.0096	.0872	-.0031	-.0061	0.	
.2600	0.	0.	0.	0.	0.	0.	0.	.0330	-.0090	-.0130	.0951	-.0041	.0157	0.	
.2610	0.	0.	0.	0.	0.	0.	0.	.0377	-.0148	-.0159	.1008	-.0058	.0379	0.	
.2620	0.	0.	0.	0.	0.	0.	0.	.0423	-.0198	-.0183	.1040	-.0078	.0598	0.	
.2630	0.	0.	0.	0.	0.	0.	0.	.0467	-.0236	-.0202	.1046	-.0102	.0806	0.	
.2640	0.	0.	0.	0.	0.	0.	0.	.0505	-.0263	-.0215	.1025	-.0129	.0995	0.	
.2650	0.	0.	0.	0.	0.	0.	0.	.0535	-.0275	-.0222	.0978	-.0160	.1159	0.	
.2660	0.	0.	0.	0.	0.	0.	0.	.0558	-.0274	-.0226	.0910	-.0192	.1295	0.	
.2670	0.	0.	0.	0.	0.	0.	0.	.0572	-.0258	-.0227	.0827	-.0223	.1401	0.	
.2680	0.	0.	0.	0.	0.	0.	0.	.0577	-.0228	-.0226	.0728	-.0251	.1473	0.	
.2690	0.	0.	0.	0.	0.	0.	0.	.0572	-.0186	-.0222	.0614	-.0274	.1511	0.	
.2700	0.	0.	0.	0.	0.	0.	0.	.0557	-.0134	-.0215	.0485	-.0290	.1516	0.	
.2710	0.	0.	0.	0.	0.	0.	0.	.0534	-.0073	-.0207	.0347	-.0296	.1492	0.	
.2720	0.	0.	0.	0.	0.	0.	0.	.0506	-.0006	-.0198	.0205	-.0290	.1446	0.	
.2730	0.	0.	0.	0.	0.	0.	0.	.0472	.0065	-.0189	.0060	-.0276	.1377	0.	
.2740	0.	0.	0.	0.	0.	0.	0.	.0431	.0137	-.0181	-.0083	-.0257	.1287	0.	
.2750	0.	0.	0.	0.	0.	0.	0.	.0385	.0208	-.0176	-.0215	-.0238	.1180	0.	
.2760	0.	0.	0.	0.	0.	0.	0.	.0336	.0275	-.0178	-.0328	-.0217	.1063	0.	
.2770	0.	0.	0.	0.	0.	0.	0.	.0287	.0336	-.0185	-.0421	-.0196	.0941	0.	
.2780	0.	0.	0.	0.	0.	0.	0.	.0238	.0389	-.0196	-.0501	-.0178	.0820	0.	
.2790	0.	0.	0.	0.	0.	0.	0.	.0189	.0434	-.0208	-.0572	-.0162	.0703	0.	
.2800	0.	0.	0.	0.	0.	0.	0.	.0144	.0467	-.0220	-.0634	-.0144	.0598	0.	
.2810	0.	0.	0.	0.	0.	0.	0.	.0107	.0490	-.0231	-.0690	-.0124	.0514	0.	
.2820	0.	0.	0.	0.	0.	0.	0.	.0076	.0502	-.0241	-.0741	-.0104	.0453	0.	
.2830	0.	0.	0.	0.	0.	0.	0.	.0051	.0502	-.0249	-.0791	-.0090	.0409	0.	
.2840	0.	0.	0.	0.	0.	0.	0.	.0029	.0492	-.0256	-.0831	-.0089	.0380	0.	
.2850	0.	0.	0.	0.	0.	0.	0.	.0013	.0472	-.0266	-.0852	-.0101	.0368	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.17.

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	56	MEMBER	1	SEQUENCE	77	LOCATION	DIS	TYPE	VA
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.2770	0.	0.	0.	0.	0.	0.	0.	0.	.0287	.0336	-.0185	-.0421	-.0196	.0941	0.
.2780	0.	0.	0.	0.	0.	0.	0.	0.	.0238	.0389	-.0196	-.0501	-.0178	.0820	0.
.2790	0.	0.	0.	0.	0.	0.	0.	0.	.0189	.0434	-.0208	-.0572	-.0162	.0703	0.
.2800	0.	0.	0.	0.	0.	0.	0.	0.	.0144	.0467	-.0220	-.0634	-.0144	.0598	0.
.2810	0.	0.	0.	0.	0.	0.	0.	0.	.0107	.0490	-.0231	-.0690	-.0124	.0514	0.
.2820	0.	0.	0.	0.	0.	0.	0.	0.	.0076	.0502	-.0241	-.0741	-.0104	.0453	0.
.2830	0.	0.	0.	0.	0.	0.	0.	0.	.0051	.0502	-.0249	-.0791	-.0090	.0409	0.
.2840	0.	0.	0.	0.	0.	0.	0.	0.	.0029	.0492	-.0256	-.0831	-.0089	.0380	0.
.2850	0.	0.	0.	0.	0.	0.	0.	0.	.0013	.0472	-.0266	-.0852	-.0101	.0368	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.17.

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	56	MEMBER	1	SEQUENCE	77	LOCATION	DIS	TYPE	VA						
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)		
.2860	0.	0.	0.	0.	0.	0.	.0003	.0443	-.0282	-.0851	-.0129	.0375	0.		
.2870	0.	0.	0.	0.	0.	0.	-.0002	.0407	-.0301	-.0833	-.0173	.0396	0.		
.2880	0.	0.	0.	0.	0.	0.	-.0004	.0363	-.0320	-.0804	-.0227	.0427	0.		
.2890	0.	0.	0.	0.	0.	0.	-.0001	.0313	-.0338	-.0772	-.0282	.0473	0.		
.2900	0.	0.	0.	0.	0.	0.	.0011	.0259	-.0351	-.0746	-.0327	.0542	0.		
.2910	0.	0.	0.	0.	0.	0.	.0032	.0202	-.0357	-.0730	-.0354	.0633	0.		
.2920	0.	0.	0.	0.	0.	0.	.0059	.0143	-.0356	-.0729	-.0361	.0739	0.		
.2930	0.	0.	0.	0.	0.	0.	.0089	.0082	-.0347	-.0738	-.0351	.0851	0.		
.2940	0.	0.	0.	0.	0.	0.	.0122	.0023	-.0336	-.0748	-.0330	.0965	0.		
.2950	0.	0.	0.	0.	0.	0.	.0153	-.0035	-.0329	-.0745	-.0304	.1073	0.		
.2960	0.	0.	0.	0.	0.	0.	.0181	-.0089	-.0328	-.0719	-.0279	.1162	0.		
.2970	0.	0.	0.	0.	0.	0.	.0200	-.0138	-.0335	-.0668	-.0260	.1225	0.		
.2980	0.	0.	0.	0.	0.	0.	.0211	-.0182	-.0347	-.0599	-.0249	.1259	0.		
.2990	0.	0.	0.	0.	0.	0.	.0214	-.0217	-.0363	-.0519	-.0238	.1267	0.		
.3000	0.	0.	0.	0.	0.	0.	.0211	-.0244	-.0379	-.0436	-.0220	.1251	0.		
.3010	0.	0.	0.	0.	0.	0.	.0201	-.0261	-.0391	-.0361	-.0188	.1212	0.		
.3020	0.	0.	0.	0.	0.	0.	.0187	-.0266	-.0396	-.0305	-.0144	.1152	0.		
.3030	0.	0.	0.	0.	0.	0.	.0166	-.0260	-.0393	-.0273	-.0089	.1070	0.		
.3040	0.	0.	0.	0.	0.	0.	.0138	-.0241	-.0383	-.0257	-.0028	.0964	0.		
.3050	0.	0.	0.	0.	0.	0.	.0104	-.0211	-.0371	-.0252	.0036	.0836	0.		
.3060	0.	0.	0.	0.	0.	0.	.0065	-.0169	-.0356	-.0255	.0095	.0686	0.		
.3070	0.	0.	0.	0.	0.	0.	.0018	-.0117	-.0337	-.0272	.0142	.0516	0.		
.3080	0.	0.	0.	0.	0.	0.	-.0034	-.0056	-.0314	-.0302	.0177	.0328	0.		
.3090	0.	0.	0.	0.	0.	0.	-.0091	.0010	-.0287	-.0347	.0204	.0129	0.		
.3100	0.	0.	0.	0.	0.	0.	-.0146	.0080	-.0254	-.0406	.0225	-.0066	0.		
.3110	0.	0.	0.	0.	0.	0.	-.0197	.0150	-.0215	-.0484	.0242	-.0251	0.		
.3120	0.	0.	0.	0.	0.	0.	-.0247	.0217	-.0170	-.0579	.0252	-.0426	0.		
.3130	0.	0.	0.	0.	0.	0.	-.0293	.0277	-.0120	-.0682	.0254	-.0587	0.		
.3140	0.	0.	0.	0.	0.	0.	-.0333	.0327	-.0072	-.0782	.0247	-.0725	0.		
.3150	0.	0.	0.	0.	0.	0.	-.0366	.0364	-.0026	-.0870	.0229	-.0837	0.		
.3160	0.	0.	0.	0.	0.	0.	-.0391	.0386	.0013	-.0941	.0199	-.0921	0.		
.3170	0.	0.	0.	0.	0.	0.	-.0410	.0391	.0048	-.0993	.0160	-.0979	0.		
.3180	0.	0.	0.	0.	0.	0.	-.0421	.0378	.0078	-.1025	.0114	-.1005	0.		
.3190	0.	0.	0.	0.	0.	0.	-.0421	.0346	.0102	-.1037	.0067	-.0994	0.		
.3200	0.	0.	0.	0.	0.	0.	-.0412	.0296	.0120	-.1027	.0026	-.0948	0.		
.3210	0.	0.	0.	0.	0.	0.	-.0394	.0229	.0134	-.0996	-.0009	-.0870	0.		
.3220	0.	0.	0.	0.	0.	0.	-.0369	.0148	.0143	-.0946	-.0037	-.0767	0.		
.3230	0.	0.	0.	0.	0.	0.	-.0339	.0055	.0147	-.0877	-.0060	-.0642	0.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.17.

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 56 MEMBER 1 SEQUENCE 77 LOCATION DIS TYPE VA

.3150	0.	0.	0.	0.	0.	0.	0.	0.	-.0366	.0364	-.0026	-.0870	.0229	-.0837	0.
.3160	0.	0.	0.	0.	0.	0.	0.	0.	-.0391	.0386	.0013	-.0941	.0199	-.0921	0.
.3170	0.	0.	0.	0.	0.	0.	0.	0.	-.0410	.0391	.0048	-.0993	.0160	-.0979	0.
.3180	0.	0.	0.	0.	0.	0.	0.	0.	-.0421	.0378	.0078	-.1025	.0114	-.1005	0.
.3190	0.	0.	0.	0.	0.	0.	0.	0.	-.0421	.0346	.0102	-.1037	.0067	-.0994	0.
.3200	0.	0.	0.	0.	0.	0.	0.	0.	-.0412	.0296	.0120	-.1027	.0026	-.0948	0.
.3210	0.	0.	0.	0.	0.	0.	0.	0.	-.0394	.0229	.0134	-.0996	-.0009	-.0870	0.
.3220	0.	0.	0.	0.	0.	0.	0.	0.	-.0369	.0148	.0143	-.0946	-.0037	-.0767	0.
.3230	0.	0.	0.	0.	0.	0.	0.	0.	-.0339	.0055	.0147	-.0877	-.0060	-.0642	0.

ADLPIPE PAGE 2155

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.17.

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	56	MEMBER	1	SEQUENCE	77	LOCATION	DIS	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	PX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3240	0.	0.	0.	0.	0.	0.	-.0305	-.0045	.0146	-.0785	-.0075	-.0502	0.		
.3250	0.	0.	0.	0.	0.	0.	-.0270	-.0149	.0138	-.0670	-.0082	-.0353	0.		
.3260	0.	0.	0.	0.	0.	0.	-.0234	-.0253	.0127	-.0540	-.0081	-.0201	0.		
.3270	0.	0.	0.	0.	0.	0.	-.0201	-.0353	.0115	-.0404	-.0073	-.0053	0.		
.3280	0.	0.	0.	0.	0.	0.	-.0170	-.0445	.0103	-.0267	-.0057	.0087	0.		
.3290	0.	0.	0.	0.	0.	0.	-.0144	-.0526	.0093	-.0130	-.0031	.0214	0.		
.3300	0.	0.	0.	0.	0.	0.	-.0121	-.0592	.0085	.0003	.0004	.0326	0.		
.3310	0.	0.	0.	0.	0.	0.	-.0104	-.0642	.0080	.0127	.0044	.0420	0.		
.3320	0.	0.	0.	0.	0.	0.	-.0095	-.0675	.0079	.0239	.0085	.0488	0.		
.3330	0.	0.	0.	0.	0.	0.	-.0095	-.0689	.0082	.0341	.0126	.0529	0.		
.3340	0.	0.	0.	0.	0.	0.	-.0101	-.0687	.0087	.0433	.0167	.0547	0.		
.3350	0.	0.	0.	0.	0.	0.	-.0111	-.0669	.0095	.0513	.0205	.0546	0.		
.3360	0.	0.	0.	0.	0.	0.	-.0126	-.0637	.0106	.0579	.0242	.0527	0.		
.3370	0.	0.	0.	0.	0.	0.	-.0146	-.0593	.0122	.0630	.0275	.0492	0.		
.3380	0.	0.	0.	0.	0.	0.	-.0167	-.0542	.0140	.0669	.0304	.0445	0.		
.3390	0.	0.	0.	0.	0.	0.	-.0187	-.0487	.0158	.0700	.0329	.0395	0.		
.3400	0.	0.	0.	0.	0.	0.	-.0206	-.0429	.0174	.0728	.0346	.0344	0.		
.3410	0.	0.	0.	0.	0.	0.	-.0223	-.0374	.0187	.0758	.0354	.0291	0.		
.3420	0.	0.	0.	0.	0.	0.	-.0238	-.0323	.0197	.0790	.0351	.0240	0.		
.3430	0.	0.	0.	0.	0.	0.	-.0249	-.0279	.0202	.0825	.0339	.0196	0.		
.3440	0.	0.	0.	0.	0.	0.	-.0255	-.0245	.0203	.0864	.0322	.0163	0.		
.3450	0.	0.	0.	0.	0.	0.	-.0254	-.0221	.0201	.0905	.0303	.0143	0.		
.3460	0.	0.	0.	0.	0.	0.	-.0247	-.0207	.0198	.0941	.0284	.0137	0.		
.3470	0.	0.	0.	0.	0.	0.	-.0233	-.0204	.0194	.0969	.0268	.0144	0.		
.3480	0.	0.	0.	0.	0.	0.	-.0213	-.0212	.0190	.0991	.0253	.0164	0.		
.3490	0.	0.	0.	0.	0.	0.	-.0188	-.0228	.0185	.1010	.0240	.0193	0.		
.3500	0.	0.	0.	0.	0.	0.	-.0161	-.0251	.0177	.1028	.0226	.0226	0.		
.3510	0.	0.	0.	0.	0.	0.	-.0131	-.0279	.0167	.1045	.0209	.0259	0.		
.3520	0.	0.	0.	0.	0.	0.	-.0101	-.0310	.0156	.1059	.0188	.0288	0.		
.3530	0.	0.	0.	0.	0.	0.	-.0072	-.0342	.0143	.1070	.0166	.0310	0.		
.3540	0.	0.	0.	0.	0.	0.	-.0043	-.0373	.0131	.1076	.0145	.0324	0.		
.3550	0.	0.	0.	0.	0.	0.	-.0015	-.0400	.0121	.1073	.0127	.0330	0.		
.3560	0.	0.	0.	0.	0.	0.	.0013	-.0423	.0114	.1056	.0115	.0328	0.		
.3570	0.	0.	0.	0.	0.	0.	.0038	-.0440	.0111	.1025	.0107	.0313	0.		
.3580	0.	0.	0.	0.	0.	0.	.0059	-.0450	.0111	.0983	.0105	.0286	0.		
.3590	0.	0.	0.	0.	0.	0.	.0078	-.0453	.0113	.0936	.0104	.0245	0.		
.3600	0.	0.	0.	0.	0.	0.	.0094	-.0450	.0114	.0888	.0103	.0192	0.		
.3610	0.	0.	0.	0.	0.	0.	.0106	-.0441	.0115	.0847	.0099	.0124	0.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.17.

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 56 MEMBER 1 SEQUENCE 77 LOCATION DIS TYPE VA

.3520	0.	0.	0.	0.	0.	0.	0.	-.0101	-.0310	.0156	.1059	.0188	.0288	0.
.3530	0.	0.	0.	0.	0.	0.	0.	-.0072	-.0342	.0143	.1070	.0166	.0310	0.
.3540	0.	0.	0.	0.	0.	0.	0.	-.0043	-.0373	.0131	.1076	.0145	.0324	0.
.3550	0.	0.	0.	0.	0.	0.	0.	-.0015	-.0400	.0121	.1073	.0127	.0330	0.
.3560	0.	0.	0.	0.	0.	0.	0.	.0013	-.0423	.0114	.1056	.0115	.0328	0.
.3570	0.	0.	0.	0.	0.	0.	0.	.0038	-.0440	.0111	.1025	.0107	.0313	0.
.3580	0.	0.	0.	0.	0.	0.	0.	.0059	-.0450	.0111	.0983	.0105	.0286	0.
.3590	0.	0.	0.	0.	0.	0.	0.	.0078	-.0453	.0113	.0936	.0104	.0245	0.
.3600	0.	0.	0.	0.	0.	0.	0.	.0094	-.0450	.0114	.0888	.0103	.0192	0.
.3610	0.	0.	0.	0.	0.	0.	0.	.0106	-.0441	.0115	.0842	.0099	.0124	0.

ADLPIPE PAGE 2156

DIS/ADLPIPE ADLPIPE STRESS ANALYSIS
 S/RV PIPING KEWAUNEE GKW02F 2 RUP DISK
 2 SAFETY COLD FKW24F--2 PSV

83/12/02. 18.29.17.

CONDITION 24
 LOADS
 SHOCK
 PRESSURE
 ENGLISH UNITS

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

SECTION	56	MEMBER	1	SEQUENCE	77	LOCATION	DIS	TYPE	VA						
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	0.	0.	0.	0.	0.	0.	.0114	-.0426	.0114	.0798	.0092	.0042	0.		
.3630	0.	0.	0.	0.	0.	0.	.0120	-.0406	.0113	.0757	.0083	-.0048	0.		
.3640	0.	0.	0.	0.	0.	0.	.0125	-.0384	.0112	.0716	.0077	-.0142	0.		
.3650	0.	0.	0.	0.	0.	0.	.0131	-.0359	.0111	.0674	.0076	-.0234	0.		
.3660	0.	0.	0.	0.	0.	0.	.0138	-.0334	.0113	.0627	.0083	-.0324	0.		
.3670	0.	0.	0.	0.	0.	0.	.0146	-.0310	.0118	.0574	.0095	-.0408	0.		
.3680	0.	0.	0.	0.	0.	0.	.0157	-.0287	.0125	.0517	.0113	-.0484	0.		
.3690	0.	0.	0.	0.	0.	0.	.0169	-.0267	.0130	.0464	.0131	-.0553	0.		
.3700	0.	0.	0.	0.	0.	0.	.0183	-.0249	.0133	.0420	.0146	-.0617	0.		
.3710	0.	0.	0.	0.	0.	0.	.0197	-.0235	.0133	.0386	.0154	-.0678	0.		
.3720	0.	0.	0.	0.	0.	0.	.0210	-.0225	.0128	.0364	.0150	-.0735	0.		
.3730	0.	0.	0.	0.	0.	0.	.0223	-.0219	.0119	.0352	.0137	-.0789	0.		
.3740	0.	0.	0.	0.	0.	0.	.0236	-.0216	.0107	.0350	.0118	-.0839	0.		
.3750	0.	0.	0.	0.	0.	0.	.0250	-.0216	.0093	.0350	.0095	-.0881	0.		
.3760	0.	0.	0.	0.	0.	0.	.0266	-.0220	.0081	.0347	.0074	-.0913	0.		
.3770	0.	0.	0.	0.	0.	0.	.0282	-.0227	.0072	.0334	.0056	-.0937	0.		
.3780	0.	0.	0.	0.	0.	0.	.0299	-.0236	.0067	.0311	.0045	-.0952	0.		
.3790	0.	0.	0.	0.	0.	0.	.0317	-.0247	.0065	.0280	.0039	-.0957	0.		
.3800	0.	0.	0.	0.	0.	0.	.0335	-.0259	.0064	.0244	.0038	-.0955	0.		
.3810	0.	0.	0.	0.	0.	0.	.0352	-.0273	.0064	.0205	.0038	-.0948	0.		
.3820	0.	0.	0.	0.	0.	0.	.0365	-.0288	.0064	.0166	.0035	-.0942	0.		
.3830	0.	0.	0.	0.	0.	0.	.0375	-.0303	.0063	.0129	.0029	-.0937	0.		
.3840	0.	0.	0.	0.	0.	0.	.0380	-.0319	.0059	.0097	.0020	-.0933	0.		
.3850	0.	0.	0.	0.	0.	0.	.0382	-.0333	.0055	.0068	.0008	-.0929	0.		
.3860	0.	0.	0.	0.	0.	0.	.0380	-.0347	.0051	.0040	-.0005	-.0929	0.		
.3870	0.	0.	0.	0.	0.	0.	.0372	-.0359	.0047	.0010	-.0019	-.0931	0.		
.3880	0.	0.	0.	0.	0.	0.	.0360	-.0370	.0045	-.0023	-.0031	-.0934	0.		
.3890	0.	0.	0.	0.	0.	0.	.0345	-.0377	.0045	-.0057	-.0041	-.0938	0.		
.3900	0.	0.	0.	0.	0.	0.	.0325	-.0382	.0045	-.0092	-.0051	-.0943	0.		
.3910	0.	0.	0.	0.	0.	0.	.0301	-.0383	.0045	-.0127	-.0060	-.0951	0.		
.3920	0.	0.	0.	0.	0.	0.	.0272	-.0381	.0045	-.0164	-.0072	-.0962	0.		
.3930	0.	0.	0.	0.	0.	0.	.0240	-.0375	.0046	-.0200	-.0088	-.0975	0.		
.3940	0.	0.	0.	0.	0.	0.	.0204	-.0365	.0047	-.0234	-.0105	-.0990	0.		
.3950	0.	0.	0.	0.	0.	0.	.0166	-.0350	.0047	-.0267	-.0122	-.1003	0.		
.3960	0.	0.	0.	0.	0.	0.	.0126	-.0333	.0048	-.0303	-.0140	-.1013	0.		
.3970	0.	0.	0.	0.	0.	0.	.0085	-.0312	.0051	-.0344	-.0158	-.1019	0.		
.3980	0.	0.	0.	0.	0.	0.	.0043	-.0289	.0055	-.0388	-.0174	-.1021	0.		
.3990	0.	0.	0.	0.	0.	0.	.0002	-.0264	.0060	-.0432	-.0188	-.1014	0.		

ADLPIPE PAGE 2157

DIS/ADLPIPE ADLPIPE STRESS ANALYSIS
 S/RV PIPING KEWAUNEE GKW02F 2 RUP DISK
 2 SAFETY COLD FKW24F--2 PSV

83/12/02. 18.29.17.

CONDITION 24
 LOADS
 SHOCK
 PRESSURE
 ENGLISH UNITS

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

SECTION	56	MEMBER	1	SEQUENCE	77	LOCATION	DIS	TYPE	VA
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.3910	0.	0.	0.	0.	0.	0.	0.	0.0301	-0.0383	.0045	-0.0127	-0.0060	-0.0951	0.
.3920	0.	0.	0.	0.	0.	0.	0.	0.0272	-0.0381	.0045	-0.0164	-0.0072	-0.0962	0.
.3930	0.	0.	0.	0.	0.	0.	0.	0.0240	-0.0375	.0046	-0.0200	-0.0088	-0.0975	0.
.3940	0.	0.	0.	0.	0.	0.	0.	0.0204	-0.0365	.0047	-0.0234	-0.0105	-0.0990	0.
.3950	0.	0.	0.	0.	0.	0.	0.	0.0166	-0.0350	.0047	-0.0267	-0.0122	-0.1003	0.
.3960	0.	0.	0.	0.	0.	0.	0.	0.0126	-0.0333	.0048	-0.0303	-0.0140	-0.1013	0.
.3970	0.	0.	0.	0.	0.	0.	0.	0.0085	-0.0312	.0051	-0.0344	-0.0158	-0.1019	0.
.3980	0.	0.	0.	0.	0.	0.	0.	0.0043	-0.0289	.0055	-0.0388	-0.0174	-0.1021	0.
.3990	0.	0.	0.	0.	0.	0.	0.	0.0002	-0.0264	.0060	-0.0432	-0.0188	-0.1014	0.

ADLPIPE PAGE 2157

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.17.

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	56	MEMBER	1	SEQUENCE	77	LOCATION	DIS	TYPE	VA						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)			
.4000	0.	0.	0.	0.	0.	0.	-0.0037	-0.0239	.0064	-0.0474	-0.0200	-0.0995			0.

MAXIMUM VALUE OF DISCONTINUITY FORCE OCCURS AT

TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	FORCE
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(LB)
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.

SECTION	56	MEMBER	1	SEQUENCE	77	LOCATION	END	TYPE	VA						STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ			(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)			
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.
.0010	0.	0.	0.	0.	0.	0.	-0.0000	.0000	-0.0000	-0.0000	-0.0000	-0.0000			0.
.0020	0.	0.	0.	0.	0.	0.	-0.0000	.0000	.0000	-0.0000	-0.0000	.0000			0.
.0030	0.	0.	0.	0.	0.	0.	.0000	-0.0000	.0000	-0.0000	.0000	.0000			0.
.0040	0.	0.	0.	0.	0.	0.	.0000	-0.0000	.0000	-0.0000	.0000	.0000			0.
.0050	0.	0.	0.	0.	0.	0.	.0000	-0.0000	.0000	-0.0000	.0000	.0000			1.
.0060	0.	-1.	-1.	-1.	0.	0.	-0.0000	-0.0000	.0000	-0.0000	-0.0001	-0.0000			3.
.0070	1.	-2.	-1.	-1.	0.	0.	-0.0001	.0000	.0000	.0000	-0.0003	-0.0001			7.
.0080	3.	-2.	-1.	-2.	0.	0.	-0.0002	.0000	-0.0000	.0002	-0.0007	-0.0004			16.
.0090	6.	-1.	-2.	-3.	0.	0.	-0.0003	.0000	-0.0001	.0005	-0.0014	-0.0007			29.
.0100	9.	-2.	-2.	-4.	0.	0.	-0.0006	.0000	-0.0003	.0011	-0.0023	-0.0014			47.
.0110	15.	-9.	-4.	-6.	0.	0.	-0.0010	.0000	-0.0006	.0018	-0.0037	-0.0024			76.
.0120	25.	-22.	-7.	-11.	0.	0.	-0.0017	.0000	-0.0009	.0029	-0.0055	-0.0040			126.
.0130	40.	-34.	-11.	-17.	0.	0.	-0.0028	.0001	-0.0013	.0045	-0.0079	-0.0063			201.
.0140	59.	-34.	-15.	-24.	0.	0.	-0.0041	.0001	-0.0019	.0066	-0.0108	-0.0091			296.
.0150	79.	-16.	-18.	-29.	0.	0.	-0.0056	.0002	-0.0028	.0092	-0.0141	-0.0123			395.
.0160	96.	15.	-17.	-27.	0.	0.	-0.0071	.0003	-0.0037	.0122	-0.0175	-0.0156			475.
.0170	105.	51.	-11.	-18.	0.	0.	-0.0085	.0004	-0.0047	.0151	-0.0204	-0.0184			519.
.0180	105.	87.	-1.	-1.	0.	0.	-0.0095	.0004	-0.0056	.0175	-0.0221	-0.0203			513.
.0190	91.	124.	12.	20.	0.	0.	-0.0099	.0003	-0.0061	.0188	-0.0218	-0.0208			452.
.0200	67.	161.	24.	39.	0.	0.	-0.0096	.0002	-0.0060	.0181	-0.0188	-0.0194			346.
.0210	31.	178.	30.	48.	0.	0.	-0.0085	-0.0001	-0.0050	.0150	-0.0128	-0.0160			211.
.0220	-17.	171.	26.	42.	0.	0.	-0.0066	-0.0005	-0.0031	.0094	-0.0039	-0.0107			151.
.0230	-64.	110.	11.	18.	0.	0.	-0.0044	-0.0010	-0.0003	.0017	.0069	-0.0044			318.

ADLPIPE PAGE 2158

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.17.

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	56	MEMBER	1	SEQUENCE	77	LOCATION	END	TYPE	VA						
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.0150	79.	-16.	-18.	-29.	-0.	-127.	-.056	.0002	-.0028	.0092	-.0141	-.0123	395.
.0160	96.	15.	-17.	-27.	-0.	-154.	-.071	.0003	-.0037	.0122	-.0175	-.0156	475.
.0170	105.	51.	-11.	-18.	0.	-170.	-.085	.0004	-.0047	.0151	-.0204	-.0184	519.
.0180	105.	37.	-1.	-1.	0.	-169.	-.095	.0004	-.0056	.0175	-.0221	-.0203	513.
.0190	91.	124.	12.	30.	-0.	-147.	-.099	.0003	-.0061	.0188	-.0218	-.0208	452.
.0200	67.	161.	24.	39.	0.	-107.	-.096	.0002	-.0060	.0151	-.0188	-.0194	346.
.0210	31.	188.	30.	48.	0.	-50.	-.085	-.0001	-.0050	.0150	-.0128	-.0160	211.
.0220	-17.	171.	26.	42.	-0.	27.	-.066	-.0005	-.0031	.0094	-.0039	-.0107	151.
.0230	-64.	110.	11.	18.	-0.	103.	-.044	-.0010	-.0003	.0017	.0069	-.0044	318.

ADLPIPE PAGE 2158 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.29.17.
 S/RV PIPING KEWAUNEE GKM08F 2 RUP DISK
 2 SAFETY COLD FKM24F--2 PSV

CONDITION 24
 LOADS
 SHOCK
 PRESSURE
 ENGLISH UNITS

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

SECTION	56	MEMBER	1	SEQUENCE	77	LOCATION	END	TYPE	VA						
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)		
.0240	-98.	45.	-9.	-15.	0.	157.	-.0022	-.0016	.0028	-.0066	.0175	.0023	480.		
.0250	-121.	34.	-23.	-37.	0.	194.	-.0000	-.0023	.0051	-.0130	.0266	.0090	601.		
.0260	-153.	71.	-20.	-32.	0.	246.	.0024	-.0029	.0059	-.0154	.0333	.0158	755.		
.0270	-205.	35.	-1.	-2.	-0.	330.	.0050	-.0036	.0052	-.0141	.0371	.0219	1005.		
.0280	-238.	-116.	24.	39.	0.	382.	.0067	-.0044	.0039	-.0113	.0369	.0258	1169.		
.0290	-227.	-256.	55.	88.	0.	365.	.0074	-.0050	.0021	-.0072	.0337	.0277	1142.		
.0300	-232.	-309.	92.	148.	0.	373.	.0087	-.0054	-.0007	-.0004	.0315	.0304	1220.		
.0310	-253.	-311.	117.	189.	0.	407.	.0111	-.0056	-.0028	.0044	.0314	.0349	1366.		
.0320	-235.	-399.	108.	173.	-0.	377.	.0130	-.0056	-.0021	.0020	.0329	.0390	1263.		
.0330	-176.	-614.	61.	99.	0.	284.	.0140	-.0052	.0013	-.0070	.0363	.0418	913.		
.0340	-127.	-746.	-5.	-9.	0.	204.	.0155	-.0043	.0055	-.0179	.0414	.0450	622.		
.0350	-95.	-629.	-69.	-111.	0.	152.	.0173	-.0029	.0089	-.0264	.0447	.0482	573.		
.0360	-60.	-444.	-107.	-172.	-0.	97.	.0178	-.0010	.0102	-.0294	.0424	.0476	601.		
.0370	-26.	-436.	-109.	-175.	-0.	41.	.0161	.0013	.0088	-.0257	.0325	.0402	546.		
.0380	11.	-502.	-80.	-128.	-0.	-18.	.0124	.0039	.0051	-.0162	.0150	.0272	394.		
.0390	64.	-353.	-29.	-47.	0.	-104.	.0075	.0069	-.0005	-.0016	-.0069	.0112	346.		
.0400	116.	73.	38.	61.	-0.	-187.	.0027	.0100	-.0075	.0163	-.0269	-.0046	599.		
.0410	122.	500.	97.	157.	-0.	-196.	-.0004	.0131	-.0128	.0297	-.0397	-.0168	764.		
.0420	117.	680.	107.	172.	0.	-188.	-.0021	.0158	-.0125	.0281	-.0442	-.0249	774.		
.0430	145.	612.	50.	81.	0.	-232.	-.0033	.0180	-.0062	.0111	-.0394	-.0301	749.		
.0440	172.	569.	-51.	-82.	-0.	-276.	-.0034	.0197	.0029	-.0127	-.0251	-.0315	877.		
.0450	157.	813.	-162.	-260.	-0.	-252.	-.0013	.0208	.0120	-.0355	-.0063	-.0278	1103.		
.0460	135.	1153.	-251.	-404.	-0.	-217.	.0007	.0213	.0189	-.0527	.0081	-.0241	1394.		
.0470	161.	1163.	-290.	-467.	-0.	-259.	-.0007	.0209	.0221	-.0599	.0120	-.0285	1623.		
.0480	218.	879.	-268.	-430.	-0.	-351.	-.0052	.0197	.0205	-.0548	.0049	-.0403	1690.		
.0490	257.	752.	-199.	-320.	0.	-414.	-.0099	.0177	.0147	-.0387	-.0092	-.0527	1591.		
.0500	275.	896.	-119.	-191.	-0.	-443.	-.0137	.0150	.0067	-.0158	-.0239	-.0629	1467.		
.0510	299.	939.	-60.	-96.	0.	-481.	-.0173	.0117	-.0004	.0051	-.0335	-.0716	1492.		
.0520	333.	658.	-44.	-71.	0.	-536.	-.0201	.0077	-.0026	.0138	-.0360	-.0766	1645.		
.0530	359.	248.	-78.	-125.	-0.	-577.	-.0205	.0033	.0008	.0078	-.0302	-.0744	1796.		
.0540	350.	-41.	-146.	-234.	-0.	-563.	-.0185	-.0014	.0072	-.0055	-.0151	-.0654	1855.		
.0550	307.	-174.	-218.	-350.	-0.	-493.	-.0150	-.0059	.0138	-.0187	.0051	-.0525	1841.		
.0560	258.	-282.	-268.	-430.	-0.	-415.	-.0117	-.0104	.0196	-.0299	.0217	-.0397	1818.		
.0570	227.	-518.	-276.	-443.	-0.	-365.	-.0104	-.0145	.0231	-.0355	.0289	-.0317	1747.		
.0580	203.	-840.	-231.	-372.	-0.	-327.	-.0118	-.0182	.0220	-.0292	.0266	-.0307	1505.		
.0590	164.	-975.	-134.	-216.	-0.	-263.	-.0143	-.0212	.0164	-.0109	.0176	-.0331	1036.		
.0600	98.	-813.	-4.	-7.	-0.	-157.	-.0160	-.0235	.0089	.0120	.0055	-.0339	478.		
.0610	13.	-631.	124.	200.	-0.	-21.	-.0166	-.0251	.0027	.0311	-.0039	-.0323	612.		

ADLPIPE PAGE 2159 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.29.18.
 S/RV PIPING KEWAUNEE GKM08F 2 RUP DISK
 2 SAFETY COLD FKM24F--2 PSV

CONDITION 24
 LOADS
 SHOCK
 PRESSURE
 ENGLISH UNITS

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

SECTION	56	MEMBER	1	SEQUENCE	77	LOCATION	END	TYPE	VA
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.0520	359.	248.	-78.	-125.	-0.	-577.	-205	.0033	.0008	.0078	-.0302	-.0744	1796.
.0530	350.	-41.	-146.	-234.	-0.	-563.	-.0185	-.0014	.0072	-.0055	-.0151	-.0654	1855.
.0540	307.	-174.	-218.	-350.	-0.	-493.	-.0150	-.0059	.0138	-.0187	.0051	-.0525	1841.
.0550	258.	-232.	-268.	-430.	-0.	-415.	-.0117	-.0104	.0196	-.0299	.0217	-.0397	1818.
.0560	227.	-118.	-276.	-443.	-0.	-365.	-.0104	-.0145	.0231	-.0355	.0289	-.0317	1747.
.0570	207.	-810.	-231.	-372.	-0.	-327.	-.0118	-.0182	.0220	-.0292	.0266	-.0307	1505.
.0580	164.	-975.	-134.	-216.	-0.	-263.	-.0143	-.0212	.0164	-.0109	.0176	-.0331	1036.
.0590	98.	-813.	-4.	-7.	-0.	-157.	-.0160	-.0235	.0089	.0120	.0055	-.0339	478.
.0600	13.	-631.	124.	200.	-0.	-21.	-.0166	-.0251	.0027	.0311	-.0039	-.0323	612.

ADLPIPE PAGE 2159

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.18.

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	56	MEMBER	1	SEQUENCE	77	LOCATION	END	TYPE	VA					
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	-81.	-696.	216.	347.	-0.	130.	-.0164	-.0262	.0003	.0399	-.0058	-.0284	1126.	
.0630	-178.	-892.	253.	406.	-0.	286.	-.0144	-.0266	.0033	.0345	.0016	-.0197	1513.	
.0640	-283.	-957.	243.	391.	-0.	455.	-.0099	-.0264	.0105	.0179	.0175	-.0043	1823.	
.0650	-391.	-844.	204.	328.	0.	630.	-.0040	-.0255	.0190	-.0021	.0384	.0143	2159.	
.0660	-484.	-693.	159.	255.	-0.	778.	.0012	-.0238	.0263	-.0184	.0566	.0306	2490.	
.0670	-538.	-629.	143.	229.	0.	866.	.0041	-.0217	.0302	-.0264	.0640	.0405	2724.	
.0680	-560.	-655.	187.	300.	-0.	901.	.0042	-.0190	.0284	-.0205	.0576	.0421	2890.	
.0690	-561.	-641.	287.	461.	0.	903.	.0020	-.0158	.0202	.0017	.0398	.0363	3085.	
.0700	-534.	-461.	408.	656.	0.	859.	-.0017	-.0121	.0081	.0343	.0154	.0259	3288.	
.0710	-477.	-201.	513.	824.	0.	767.	-.0055	-.0081	-.0040	.0662	-.0091	.0152	3426.	
.0720	-410.	-61.	573.	922.	0.	660.	-.0080	-.0040	-.0126	.0882	-.0264	.0076	3448.	
.0730	-345.	-49.	563.	905.	0.	555.	-.0081	.0002	-.0153	.0945	-.0316	.0058	3231.	
.0740	-278.	0.	475.	764.	0.	448.	-.0058	.0044	-.0120	.0847	-.0243	.0108	2693.	
.0750	-218.	138.	338.	544.	0.	350.	-.0013	.0086	-.0049	.0646	-.0074	.0213	1968.	
.0760	-174.	273.	195.	314.	0.	280.	.0041	.0126	.0028	.0420	.0125	.0333	1280.	
.0770	-131.	343.	71.	119.	0.	211.	.0085	.0164	.0088	.0234	.0273	.0420	737.	
.0780	-69.	366.	-0.	-13.	0.	111.	.0104	.0199	.0108	.0148	.0315	.0435	341.	
.0790	3.	413.	-36.	-58.	0.	-5.	.0095	.0231	.0073	.0202	.0246	.0373	176.	
.0800	72.	554.	-18.	-28.	0.	-116.	.0069	.0259	-.0005	.0371	.0095	.0259	362.	
.0810	145.	775.	11.	17.	0.	-233.	.0035	.0282	-.0096	.0571	-.0089	.0124	711.	
.0820	220.	919.	15.	24.	0.	-354.	.0000	.0300	-.0166	.0720	-.0243	-.0007	1079.	
.0830	269.	889.	-18.	-30.	0.	-433.	-.0019	.0309	-.0194	.0757	-.0311	-.0100	1321.	
.0840	277.	790.	-91.	-147.	0.	-445.	-.0011	.0312	-.0168	.0654	-.0273	-.0120	1426.	
.0850	255.	752.	-198.	-319.	0.	-409.	.0022	.0309	-.0100	.0440	-.0146	-.0073	1578.	
.0860	215.	745.	-317.	-510.	-0.	-345.	.0064	.0299	-.0014	.0184	.0034	.0003	1874.	
.0870	161.	687.	-416.	-669.	-0.	-260.	.0105	.0284	.0065	-.0050	.0207	.0072	2182.	
.0880	110.	573.	-470.	-755.	-0.	-176.	.0134	.0263	.0120	-.0222	.0317	.0112	2359.	
.0890	73.	448.	-474.	-762.	-0.	-118.	.0145	.0238	.0140	-.0300	.0349	.0107	2344.	
.0900	47.	353.	-438.	-704.	0.	-75.	.0141	.0209	.0125	-.0280	.0325	.0063	2155.	
.0910	20.	309.	-384.	-617.	0.	-32.	.0134	.0178	.0097	-.0216	.0278	.0010	1880.	
.0920	-3.	248.	-338.	-543.	0.	5.	.0131	.0144	.0083	-.0180	.0240	-.0025	1652.	
.0930	-15.	78.	-323.	-520.	0.	24.	.0134	.0109	.0095	-.0204	.0240	-.0044	1584.	
.0940	-21.	-156.	-344.	-554.	-0.	34.	.0141	.0073	.0132	-.0277	.0284	-.0046	1687.	
.0950	-29.	-322.	-378.	-609.	-0.	46.	.0154	.0039	.0177	-.0363	.0340	-.0031	1857.	
.0960	-39.	-402.	-391.	-629.	-0.	63.	.0165	.0007	.0207	-.0404	.0363	-.0021	1921.	
.0970	-44.	-497.	-355.	-572.	-0.	70.	.0162	-.0021	.0200	-.0344	.0314	-.0055	1752.	
.0980	-36.	-634.	-265.	-426.	-0.	59.	.0138	-.0045	.0150	-.0171	.0175	-.0148	1308.	
.0990	-22.	-742.	-126.	-203.	-0.	36.	.0099	-.0063	.0065	.0093	-.0038	-.0279	628.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.18.

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 56 MEMBER 1 SEQUENCE 77 LOCATION END TYPE VA

.0910	20.	309.	-384.	-617.	0.	-32.	.0134	.0178	.0097	-.0216	.0278	.0010	1880.
.0920	-3.	248.	-330.	-543.	0.	5.	.0131	.0144	.0083	-.0180	.0240	-.0025	1652.
.0930	-15.	78.	-323.	-520.	0.	24.	.0134	.0109	.0095	-.0204	.0240	-.0044	1584.
.0940	-21.	-156.	-344.	-554.	-0.	34.	.0141	.0073	.0132	-.0277	.0284	-.0046	1687.
.0950	-29.	-322.	-376.	-609.	-0.	46.	.0154	.0039	.0177	-.0363	.0340	-.0031	1857.
.0960	-39.	-402.	-391.	-629.	-0.	62.	.0165	.0007	.0207	-.0404	.0363	-.0021	1921.
.0970	-44.	-497.	-355.	-572.	-0.	70.	.0162	-.0021	.0200	-.0344	.0314	-.0055	1752.
.0980	-36.	-634.	-265.	-426.	-0.	59.	.0138	-.0045	.0150	-.0171	.0175	-.0148	1308.
.0990	-22.	-742.	-126.	-203.	-0.	36.	.0099	-.0063	.0065	-.0093	-.0038	-.0279	628.

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

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.18.

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	56	MEMBER	1	SEQUENCE	77	LOCATION	END	TYPE	VA						
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)
.1000	-16.	-775.	39.	63.	0.	26.	.0060	-.0076	-.0040	.0404	-.0274	-.0419		207.	
.1010	-26.	-754.	199.	320.	-0.	41.	.0029	-.0083	-.0139	.0702	-.0474	-.0538		983.	
.1020	-50.	-733.	325.	523.	0.	81.	.0016	-.0083	-.0208	.0917	-.0602	-.0612		1610.	
.1030	-88.	-761.	409.	658.	0.	142.	.0024	-.0077	-.0235	.1016	-.0541	-.0630		2048.	
.1040	-139.	-822.	461.	742.	0.	224.	.0052	-.0066	-.0229	.1021	-.0595	-.0596		2356.	
.1050	-196.	-824.	493.	792.	0.	315.	.0095	-.0048	-.0207	.0975	-.0493	-.0524		2593.	
.1060	-240.	-734.	514.	827.	0.	385.	.0141	-.0023	-.0183	.0917	-.0373	-.0441		2776.	
.1070	-255.	-636.	537.	863.	0.	410.	.0181	.0007	-.0170	.0876	-.0268	-.0372		2907.	
.1080	-230.	-571.	560.	900.	0.	370.	.0207	.0042	-.0168	.0856	-.0189	-.0331		2961.	
.1090	-173.	-470.	570.	918.	0.	279.	.0226	.0082	-.0172	.0847	-.0130	-.0306		2917.	
.1100	-118.	-357.	552.	888.	0.	190.	.0246	.0125	-.0174	.0828	-.0071	-.0282		2762.	
.1110	-42.	-257.	500.	804.	0.	68.	.0263	.0171	-.0164	.0775	-.0008	-.0258		2455.	
.1120	65.	-142.	418.	672.	0.	-104.	.0276	.0219	-.0141	.0683	.0052	-.0237		2069.	
.1130	164.	33.	317.	510.	0.	-263.	.0290	.0267	-.0114	.0578	.0099	-.0213		1746.	
.1140	231.	211.	222.	357.	0.	-372.	.0304	.0315	-.0098	.0496	.0118	-.0199		1569.	
.1150	290.	300.	155.	250.	-0.	-466.	.0306	.0361	-.0100	.0452	.0091	-.0216		1609.	
.1160	357.	350.	115.	185.	0.	-574.	.0294	.0404	-.0117	.0435	.0013	-.0265		1835.	
.1170	421.	487.	85.	136.	0.	-678.	.0275	.0444	-.0140	.0432	-.0089	-.0330		2102.	
.1180	448.	645.	57.	92.	0.	-721.	.0258	.0480	-.0162	.0424	-.0165	-.0390		2212.	
.1190	458.	767.	28.	45.	-0.	-737.	.0250	.0511	-.0162	.0348	-.0191	-.0420		2246.	
.1200	451.	857.	-24.	-38.	-0.	-725.	.0259	.0535	-.0118	.0154	-.0149	-.0398		2209.	
.1210	392.	918.	-116.	-126.	0.	-630.	.0289	.0552	-.0036	-.0139	-.0024	-.0323		1999.	
.1220	295.	938.	-235.	-378.	0.	-475.	.0330	.0562	.0068	-.0481	.0152	-.0220		1847.	
.1230	185.	852.	-340.	-546.	-0.	-298.	.0368	.0564	.0166	-.0807	.0315	-.0124		1892.	
.1240	98.	745.	-404.	-650.	0.	-158.	.0388	.0560	.0235	-.1054	.0395	-.0069		2034.	
.1250	44.	712.	-423.	-680.	0.	-71.	.0379	.0549	.0251	-.1150	.0361	-.0087		2079.	
.1260	2.	695.	-385.	-620.	0.	-2.	.0343	.0533	.0203	-.1071	.0221	-.0177		1885.	
.1270	-15.	666.	-291.	-468.	0.	25.	.0292	.0512	.0116	-.0891	.0003	-.0300		1427.	
.1280	-20.	600.	-182.	-292.	0.	33.	.0245	.0485	.0028	-.0704	-.0228	-.0410		896.	
.1290	-16.	519.	-123.	-155.	0.	25.	.0209	.0453	-.0032	-.0579	-.0392	-.0482		606.	
.1300	-3.	393.	-138.	-211.	0.	4.	.0189	.0418	-.0047	-.0553	-.0447	-.0502		673.	
.1310	10.	177.	-198.	-319.	0.	-16.	.0192	.0380	-.0018	-.0636	-.0404	-.0456		972.	
.1320	48.	-6.	-279.	-448.	0.	-77.	.0209	.0340	.0041	-.0793	-.0318	-.0358		1384.	
.1330	104.	-87.	-363.	-584.	0.	-167.	.0224	.0301	.0093	-.0923	-.0237	-.0258		1847.	
.1340	168.	-93.	-418.	-672.	0.	-271.	.0224	.0262	.0107	-.0944	-.0209	-.0194		2204.	
.1350	238.	-114.	-402.	-647.	0.	-383.	.0209	.0224	.0075	-.0847	-.0272	-.0169		2286.	
.1360	313.	-185.	-323.	-520.	0.	-503.	.0181	.0188	.0006	-.0656	-.0417	-.0176		2200.	
.1370	407.	-191.	-235.	-378.	-0.	-654.	.0138	.0153	-.0079	-.0413	-.0592	-.0210		2299.	

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

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.18.

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

SECTION 56 MEMBER 1 SEQUENCE 77 LOCATION END TYPE VA

.1290	-16.	519.	-123.	-198.	0.	25.	.0209	.0453	-.0032	-.0579	-.0392	-.0482	606.
.1300	-3.	393.	-138.	-221.	0.	4.	.0189	.0418	-.0047	-.0553	-.0447	-.0502	673.
.1310	10.	177.	-198.	-319.	0.	-16.	.0192	.0380	-.0018	-.0636	-.0404	-.0456	972.
.1320	48.	-6.	-279.	-448.	0.	-77.	.0209	.0340	.0041	-.0793	-.0318	-.0358	1384.
.1330	104.	-87.	-363.	-584.	0.	-167.	.0224	.0301	.0093	-.0923	-.0237	-.0258	1847.
.1340	168.	-92.	-417.	-672.	0.	-271.	.0224	.0262	.0107	-.0944	-.0209	-.0194	2204.
.1350	238.	-114.	-402.	-647.	0.	-383.	.0209	.0224	.0075	-.0847	-.0272	-.0169	2286.
.1360	313.	-185.	-323.	-520.	0.	-503.	.0181	.0188	.0006	-.0656	-.0417	-.0176	2200.
.1370	407.	-191.	-235.	-378.	-0.	-654.	.0138	.0153	-.0079	-.0413	-.0592	-.0210	2299.

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

ADLPIPE STRESS ANALYSIS

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

SECTION	56	MEMBER	1	SEQUENCE	77	LOCATION	END	TYPE	VA						
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)		
.1380	482.	-117.	-168.	-270.	-0.	-774.	.0099	.0119	-.0159	-.0171	-.0728	-.0231	2495.		
.1390	506.	-9.	-114.	-183.	0.	-814.	.0087	.0086	-.0209	-.0010	-.0785	-.0182	2539.		
.1400	478.	58.	-75.	-121.	-0.	-769.	.0107	.0054	-.0213	.0025	-.0752	-.0046	2369.		
.1410	408.	21.	-72.	-116.	-0.	-657.	.0147	.0021	-.0180	-.0037	-.0633	.0141	2029.		
.1420	325.	-76.	-93.	-150.	0.	-523.	.0189	-.0012	-.0128	-.0142	-.0468	.0341	1655.		
.1430	222.	-211.	-86.	-138.	-0.	-358.	.0232	-.0043	-.0085	-.0230	-.0308	.0543	1166.		
.1440	109.	-322.	-27.	-44.	0.	-176.	.0271	-.0073	-.0067	-.0261	-.0199	.0732	551.		
.1450	6.	-397.	56.	90.	-0.	-10.	.0292	-.0101	-.0081	-.0210	-.0153	.0873	274.		
.1460	-85.	-514.	145.	233.	-0.	137.	.0291	-.0125	-.0120	-.0088	-.0159	.0955	823.		
.1470	-165.	-684.	250.	403.	0.	265.	.0221	-.0144	-.0167	.0048	-.0195	.1012	1467.		
.1480	-254.	-888.	361.	580.	0.	409.	.0278	-.0158	-.0205	.0147	-.0218	.1082	2159.		
.1490	-340.	-1061.	428.	689.	0.	547.	.0280	-.0164	-.0216	.0178	-.0190	.1160	2676.		
.1500	-409.	-1240.	432.	694.	0.	658.	.0281	-.0162	-.0193	.0121	-.0099	.1237	2909.		
.1510	-473.	-1499.	401.	645.	0.	761.	.0287	-.0149	-.0139	-.0023	.0036	.1316	3034.		
.1520	-521.	-1720.	361.	580.	0.	839.	.0292	-.0125	-.0067	-.0225	.0174	.1390	3101.		
.1530	-545.	-1765.	306.	493.	0.	876.	.0283	-.0087	-.0003	-.0409	.0284	.1418	3058.		
.1540	-533.	-1613.	248.	399.	0.	857.	.0246	-.0035	.0034	-.0516	.0339	.1365	2875.		
.1550	-501.	-1403.	221.	355.	-0.	806.	.0185	.0029	.0038	-.0546	.0315	.1236	2680.		
.1560	-468.	-1241.	232.	373.	-0.	752.	.0107	.0104	.0019	-.0526	.0214	.1049	2553.		
.1570	-403.	-1015.	240.	386.	0.	649.	.0011	.0188	-.0009	-.0485	.0066	.0805	2296.		
.1580	-322.	-637.	217.	349.	-0.	518.	-.0096	.0280	-.0036	-.0437	-.0077	.0528	1899.		
.1590	-248.	-119.	172.	276.	-0.	399.	-.0195	.0376	-.0051	-.0423	-.0184	.0263	1477.		
.1600	-169.	471.	109.	175.	0.	272.	-.0282	.0472	-.0039	-.0485	-.0253	.0034	983.		
.1610	-70.	1021.	13.	21.	0.	112.	-.0364	.0563	-.0002	-.0610	-.0278	-.0181	346.		
.1620	31.	1477.	-111.	-179.	-0.	-49.	-.0445	.0645	.0045	-.0754	-.0259	-.0390	563.		
.1630	124.	1921.	-226.	-363.	0.	-199.	-.0515	.0715	.0092	-.0898	-.0225	-.0570	1260.		
.1640	197.	2349.	-307.	-494.	-0.	-317.	-.0570	.0769	.0129	-.1019	-.0194	-.0708	1785.		
.1650	260.	2695.	-370.	-595.	-0.	-418.	-.0619	.0803	.0149	-.1092	-.0167	-.0827	2213.		
.1660	333.	2945.	-435.	-699.	0.	-536.	-.0667	.0816	.0158	-.1119	-.0148	-.0936	2679.		
.1670	392.	3056.	-488.	-784.	0.	-631.	-.0704	.0805	.0158	-.1115	-.0133	-.1008	3062.		
.1680	425.	3029.	-516.	-829.	0.	-684.	-.0722	.0770	.0151	-.1088	-.0118	-.1024	3270.		
.1690	432.	2859.	-533.	-857.	0.	-695.	-.0725	.0711	.0135	-.1029	-.0094	-.0996	3355.		
.1700	428.	2559.	-549.	-883.	-0.	-688.	-.0719	.0629	.0114	-.0939	-.0068	-.0936	3407.		
.1710	414.	2123.	-546.	-878.	-0.	-666.	-.0703	.0528	.0086	-.0826	-.0052	-.0842	3352.		
.1720	362.	1520.	-504.	-811.	-0.	-583.	-.0673	.0411	.0047	-.0682	-.0043	-.0708	3039.		
.1730	298.	876.	-443.	-713.	-0.	-479.	-.0634	.0282	.0001	-.0513	-.0040	-.0550	2612.		
.1740	231.	248.	-383.	-616.	-0.	-372.	-.0595	.0148	-.0047	-.0328	-.0032	-.0381	2190.		
.1750	149.	-419.	-316.	-508.	-0.	-239.	-.0550	.0012	-.0091	-.0148	-.0012	-.0198	1708.		

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

ADLPIPE STRESS ANALYSIS

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

SECTION 56 MEMBER 1 SEQUENCE 77 LOCATION END TYPE VA

.1670	392.	3058.	-488.	-784.	0.	-631.	-.0704	.0805	.0158	-.1115	-.0133	-.1008	3062.
.1680	425.	3029.	-516.	-829.	0.	-684.	-.0722	.0770	.0151	-.1088	-.0118	-.1024	3270.
.1690	432.	2859.	-533.	-857.	0.	-695.	-.0725	.0711	.0135	-.1029	-.0094	-.0996	3355.
.1700	428.	2559.	-549.	-883.	-0.	-688.	-.0719	.0629	.0114	-.0939	-.0068	-.0936	3407.
.1710	414.	2123.	-546.	-878.	-0.	-666.	-.0703	.0528	.0086	-.0826	-.0052	-.0842	3352.
.1720	362.	1520.	-504.	-811.	-0.	-583.	-.0673	.0411	.0047	-.0682	-.0043	-.0708	3039.
.1730	298.	876.	-443.	-713.	-0.	-479.	-.0634	.0282	.0001	-.0513	-.0040	-.0550	2612.
.1740	231.	248.	-383.	-616.	-0.	-372.	-.0595	.0148	-.0047	-.0328	-.0032	-.0381	2190.
.1750	149.	-419.	-316.	-508.	-0.	-239.	-.0550	.0012	-.0091	-.0148	-.0012	-.0198	1708.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.18.

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

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

SECTION	56	MEMBER	1	SEQUENCE	77	LOCATION	END	TYPE	VA						
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)		
.1760	49.	-1114.	-231.	-371.	-0.	-79.	-.0497	-.0119	-.0124	-.0001	.0021	.0007	1153.		
.1770	-71.	-1766.	-142.	-228.	-0.	114.	-.0436	-.0240	-.0143	.0107	.0074	.0226	774.		
.1780	-196.	-2278.	-64.	-103.	-0.	315.	-.0374	-.0346	-.0147	.0178	.0149	.0444	1009.		
.1790	-333.	-2675.	12.	20.	-0.	336.	-.0312	-.0434	-.0140	.0218	.0240	.0652	1631.		
.1800	-473.	-2981.	98.	158.	-0.	750.	-.0252	-.0500	-.0122	.0221	.0331	.0844	2362.		
.1810	-586.	-3136.	183.	294.	-0.	942.	-.0204	-.0541	-.0095	.0196	.0407	.0999	3001.		
.1820	-679.	-3138.	253.	407.	-0.	1092.	-.0173	-.0558	-.0069	.0173	.0473	.1097	3544.		
.1830	-750.	-2972.	316.	509.	-0.	1206.	-.0158	-.0549	-.0045	.0153	.0523	.1142	3982.		
.1840	-799.	-2671.	381.	612.	0.	1284.	-.0154	-.0518	-.0021	.0125	.0549	.1145	4328.		
.1850	-819.	-2270.	435.	699.	-0.	1317.	-.0162	-.0465	.0004	.0088	.0557	.1102	4536.		
.1860	-804.	-1772.	462.	743.	0.	1293.	-.0186	-.0395	.0030	.0049	.0555	.1010	4537.		
.1870	-769.	-1214.	467.	752.	0.	1237.	-.0219	-.0312	.0054	.0015	.0547	.0879	4403.		
.1880	-709.	-619.	465.	748.	0.	1141.	-.0257	-.0220	.0074	-.0018	.0520	.0725	4150.		
.1890	-624.	-35.	456.	733.	0.	1003.	-.0303	-.0123	.0087	-.0035	.0475	.0543	3779.		
.1900	-513.	522.	432.	695.	-0.	825.	-.0357	-.0028	.0087	-.0021	.0416	.0331	3281.		
.1910	-378.	1065.	400.	643.	0.	608.	-.0415	.0063	.0077	.0018	.0344	.0106	2692.		
.1920	-241.	1532.	369.	593.	-0.	388.	-.0467	.0144	.0059	.0069	.0273	-.0110	2154.		
.1930	-104.	1872.	329.	528.	0.	167.	-.0512	.0213	.0041	.0116	.0219	-.0308	1685.		
.1940	40.	2077.	259.	417.	0.	-64.	-.0550	.0267	.0033	.0139	.0197	-.0484	1283.		
.1950	179.	2150.	160.	257.	0.	-288.	-.0577	.0303	.0038	.0128	.0212	-.0629	1176.		
.1960	300.	2106.	47.	76.	0.	-483.	-.0588	.0323	.0053	.0088	.0254	-.0729	1488.		
.1970	399.	1978.	-69.	-111.	0.	-642.	-.0587	.0325	.0072	.0038	.0308	-.0794	1982.		
.1980	480.	1782.	-183.	-295.	0.	-772.	-.0582	.0312	.0086	.0006	.0348	-.0844	2513.		
.1990	539.	1504.	-280.	-450.	-0.	-868.	-.0577	.0285	.0086	.0013	.0353	-.0893	2972.		
.2000	572.	1154.	-338.	-544.	-0.	-919.	-.0573	.0246	.0067	.0067	.0314	-.0940	3249.		
.2010	574.	792.	-360.	-579.	0.	-923.	-.0567	.0198	.0033	.0159	.0236	-.0982	3314.		
.2020	547.	465.	-364.	-585.	0.	-879.	-.0559	.0145	-.0007	.0269	.0145	-.1013	3212.		
.2030	489.	166.	-363.	-583.	0.	-786.	-.0543	.0088	-.0038	.0361	.0068	-.1022	2977.		
.2040	400.	-124.	-361.	-581.	0.	-644.	-.0514	.0030	-.0047	.0395	.0024	-.0993	2637.		
.2050	286.	-388.	-365.	-587.	0.	-459.	-.0470	-.0027	-.0028	.0359	.0024	-.0921	2266.		
.2060	152.	-591.	-378.	-608.	0.	-245.	-.0415	-.0080	.0013	.0267	.0067	-.0818	1994.		
.2070	11.	-726.	-392.	-630.	-0.	-17.	-.0355	-.0128	.0067	.0147	.0132	-.0700	1919.		
.2080	-128.	-815.	-388.	-624.	0.	205.	-.0295	-.0170	.0122	.0026	.0190	-.0582	1999.		
.2090	-251.	-865.	-357.	-573.	0.	404.	-.0242	-.0206	.0166	-.0064	.0216	-.0481	2134.		
.2100	-352.	-854.	-300.	-482.	0.	567.	-.0202	-.0234	.0190	-.0098	.0202	-.0414	2264.		
.2110	-426.	-773.	-222.	-358.	0.	685.	-.0173	-.0256	.0193	-.0070	.0152	-.0381	2350.		
.2120	-472.	-656.	-128.	-206.	0.	758.	-.0153	-.0272	.0182	-.0003	.0080	-.0371	2391.		
.2130	-492.	-555.	-28.	-45.	0.	791.	-.0136	-.0282	.0167	.0075	.0008	-.0371	2410.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.18.

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 56 MEMBER 1 SEQUENCE 77 LOCATION END TYPE VA

.2050	286.	-388.	-365.	-587.	0.	-459.	-0.0470	-0.0027	-0.0028	.0359	.0024	-0.0921	2266.
.2060	152.	-591.	-378.	-608.	0.	-245.	-0.0415	-0.0080	.0013	.0267	.0067	-0.0818	1994.
.2070	11.	-726.	-392.	-630.	-0.	-17.	-0.0355	-0.0128	.0067	.0147	.0132	-0.0700	1919.
.2080	-128.	-815.	-388.	-674.	0.	205.	-0.0295	-0.0170	.0122	.0026	.0190	-0.0582	1999.
.2090	-251.	-865.	-357.	-573.	0.	404.	-0.0242	-0.0206	.0166	-0.0064	.0216	-0.0481	2134.
.2100	-352.	-854.	-300.	-482.	0.	567.	-0.0202	-0.0234	.0190	-0.0098	.0202	-0.0414	2264.
.2110	-426.	-773.	-222.	-358.	0.	685.	-0.0173	-0.0256	.0193	-0.0070	.0152	-0.0381	2350.
.2120	-472.	-656.	-128.	-206.	0.	758.	-0.0153	-0.0272	.0182	-0.0003	.0080	-0.0371	2391.
.2130	-492.	-555.	-28.	-45.	0.	791.	-0.0136	-0.0282	.0167	.0075	.0008	-0.0371	2410.

ADLPIPE PAGE 2163 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.29.18.

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	56	MEMBER	1	SEQUENCE	77	LOCATION	END	TYPE	VA						
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	-487.	-479.	60.	96.	0.	783.	-0.0119	-0.0288	.0159	.0138	-0.0039	-0.0374	2400.		
.2150	-461.	-407.	126.	202.	0.	741.	-0.0098	-0.0290	.0164	.0173	-0.0047	-0.0368	2336.		
.2160	-421.	-327.	175.	281.	0.	677.	-0.0071	-0.0289	.0178	.0179	-0.0017	-0.0347	2229.		
.2170	-369.	-254.	216.	347.	-0.	594.	-0.0039	-0.0285	.0198	.0172	.0037	-0.0318	2092.		
.2180	-302.	-200.	252.	405.	0.	485.	-0.0010	-0.0279	.0212	.0173	.0034	-0.0300	1922.		
.2190	-218.	-161.	290.	467.	0.	350.	.0011	-0.0272	.0214	.0207	.0135	-0.0304	1775.		
.2200	-128.	-122.	341.	548.	0.	206.	.0026	-0.0264	.0197	.0284	.0148	-0.0330	1782.		
.2210	-42.	-71.	405.	652.	0.	68.	.0037	-0.0255	.0162	.0399	.0135	-0.0370	1994.		
.2220	36.	-10.	470.	750.	-0.	-58.	.0047	-0.0245	.0118	.0531	.0109	-0.0418	2308.		
.2230	105.	38.	521.	837.	-0.	-170.	.0059	-0.0235	.0076	.0652	.0086	-0.0463	2599.		
.2240	160.	59.	548.	882.	0.	-258.	.0078	-0.0226	.0047	.0734	.0081	-0.0490	2794.		
.2250	197.	63.	549.	883.	0.	-316.	.0106	-0.0217	.0034	.0764	.0103	-0.0492	2853.		
.2260	215.	65.	521.	839.	0.	-346.	.0144	-0.0209	.0035	.0748	.0145	-0.0470	2760.		
.2270	221.	55.	471.	758.	0.	-355.	.0185	-0.0201	.0046	.0704	.0193	-0.0436	2546.		
.2280	217.	16.	412.	663.	0.	-349.	.0226	-0.0193	.0056	.0653	.0222	-0.0401	2279.		
.2290	207.	-49.	356.	573.	0.	-333.	.0264	-0.0186	.0058	.0615	.0215	-0.0373	2015.		
.2300	194.	-116.	304.	489.	0.	-312.	.0295	-0.0178	.0048	.0603	.0167	-0.0360	1764.		
.2310	183.	-175.	250.	402.	0.	-295.	.0320	-0.0169	.0028	.0614	.0087	-0.0361	1517.		
.2320	176.	-243.	191.	307.	0.	-284.	.0339	-0.0159	.0007	.0627	-0.0014	-0.0371	1271.		
.2330	174.	-333.	121.	195.	-0.	-280.	.0357	-0.0147	-0.0008	.0620	-0.0116	-0.0380	1037.		
.2340	174.	-433.	35.	57.	0.	-281.	.0376	-0.0132	-0.0008	.0575	-0.0202	-0.0382	871.		
.2350	178.	-516.	-67.	-108.	-0.	-286.	.0396	-0.0113	.0008	.0488	-0.0259	-0.0373	929.		
.2360	183.	-570.	-170.	-289.	0.	-294.	.0418	-0.0091	.0039	.0361	-0.0286	-0.0354	1254.		
.2370	190.	-604.	-291.	-468.	-0.	-306.	.0440	-0.0063	.0081	.0206	-0.0289	-0.0331	1701.		
.2380	201.	-618.	-395.	-635.	-0.	-323.	.0456	-0.0031	.0129	.0040	-0.0279	-0.0317	2167.		
.2390	218.	-573.	-484.	-779.	-0.	-350.	.0464	.0005	.0175	-0.0117	-0.0264	-0.0320	2597.		
.2400	238.	-506.	-552.	-888.	-0.	-384.	.0463	.0046	.0214	-0.0252	-0.0252	-0.0345	2943.		
.2410	260.	-354.	-594.	-955.	0.	-418.	.0453	.0091	.0245	-0.0359	-0.0244	-0.0388	3170.		
.2420	280.	-151.	-610.	-981.	-0.	-450.	.0436	.0139	.0268	-0.0440	-0.0240	-0.0448	3282.		
.2430	299.	75.	-605.	-974.	-0.	-480.	.0412	.0187	.0286	-0.0499	-0.0234	-0.0522	3303.		
.2440	316.	308.	-583.	-937.	-0.	-508.	.0382	.0234	.0301	-0.0541	-0.0222	-0.0605	3242.		
.2450	331.	545.	-542.	-872.	-0.	-532.	.0350	.0278	.0312	-0.0566	-0.0204	-0.0690	3107.		
.2460	345.	790.	-486.	-782.	-0.	-554.	.0316	.0318	.0319	-0.0571	-0.0180	-0.0772	2915.		
.2470	358.	1031.	-416.	-669.	-0.	-576.	.0281	.0351	.0319	-0.0551	-0.0152	-0.0851	2687.		
.2480	371.	1241.	-332.	-534.	-0.	-596.	.0246	.0376	.0311	-0.0503	-0.0127	-0.0921	2433.		
.2490	379.	1394.	-234.	-376.	-0.	-610.	.0212	.0390	.0293	-0.0426	-0.0106	-0.0980	2179.		
.2500	385.	1486.	-125.	-202.	-0.	-619.	.0181	.0393	.0267	-0.0322	-0.0092	-0.1022	1981.		
.2510	387.	1522.	-13.	-20.	-0.	-623.	.0155	.0385	.0233	-0.0194	-0.0082	-0.1042	1895.		

ADLPIPE PAGE 2164 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.29.18.

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	56	MEMBER	1	SEQUENCE	77	LOCATION	END	TYPE	VA
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.2430	299.	75.	-605.	-974.	-0.	-480.	.0412	.0187	.0286	-.0499	-.0234	-.0522	3303.
.2440	316.	308.	-583.	-937.	-0.	-508.	.0382	.0234	.0301	-.0541	-.0222	-.0605	3242.
.2450	331.	545.	-542.	-872.	-0.	-532.	.0350	.0278	.0312	-.0566	-.0204	-.0690	3107.
.2460	345.	770.	-486.	-782.	-0.	-554.	.0316	.0317	.0319	-.0571	-.0180	-.0772	2915.
.2470	358.	1031.	-416.	-669.	-0.	-576.	.0281	.0351	.0319	-.0551	-.0152	-.0851	2687.
.2480	371.	1241.	-332.	-574.	-0.	-596.	.0246	.0376	.0311	-.0503	-.0127	-.0921	2433.
.2490	379.	1394.	-234.	-376.	-0.	-610.	.0212	.0390	.0293	-.0426	-.0106	-.0980	2179.
.2500	385.	1486.	-125.	-202.	-0.	-619.	.0181	.0393	.0267	-.0322	-.0092	-.1022	1981.
.2510	387.	1522.	-13.	-20.	-0.	-623.	.0155	.0385	.0233	-.0194	-.0082	-.1042	1895.

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DIS/ADLPIPE ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.18.

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	56	MEMBER	1	SEQUENCE	77	LOCATION	END	TYPE	VA						
TIME	FX	FY	FZ	HX	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)		
.2520	382.	1501.	101.	162.	0.	-614.	.0137	.0364	.0194	-.0050	-.0073	-.1033	1931.		
.2530	365.	1411.	212.	341.	-0.	-587.	.0130	.0332	.0151	.0100	-.0064	-.0989	2065.		
.2540	337.	1242.	318.	511.	-0.	-542.	.0133	.0288	.0108	.0250	-.0055	-.0908	2267.		
.2550	300.	1002.	413.	664.	-0.	-483.	.0146	.0235	.0065	.0394	-.0046	-.0793	2497.		
.2560	254.	713.	495.	797.	-0.	-408.	.0170	.0175	.0023	.0530	-.0037	-.0646	2723.		
.2570	199.	390.	565.	909.	-0.	-320.	.0202	.0110	-.0018	.0657	-.0030	-.0470	2932.		
.2580	138.	39.	621.	999.	-0.	-221.	.0241	.0042	-.0058	.0773	-.0027	-.0273	3113.		
.2590	72.	-332.	661.	1062.	-0.	-116.	.0284	-.0026	-.0096	.0872	-.0031	-.0061	3251.		
.2600	5.	-699.	682.	1098.	-0.	-9.	.0330	-.0090	-.0130	.0951	-.0041	.0157	3339.		
.2610	-61.	-1028.	687.	1106.	-0.	98.	.0377	-.0148	-.0159	.1008	-.0058	.0379	3376.		
.2620	-127.	-1298.	676.	1088.	-0.	205.	.0423	-.0198	-.0183	.1040	-.0078	.0598	3367.		
.2630	-191.	-1512.	650.	1045.	-0.	308.	.0467	-.0236	-.0202	.1046	-.0102	.0806	3313.		
.2640	-249.	-1676.	609.	979.	-0.	400.	.0505	-.0263	-.0215	.1025	-.0129	.0995	3217.		
.2650	-298.	-1780.	557.	895.	-0.	479.	.0535	-.0275	-.0222	.0978	-.0160	.1159	3088.		
.2660	-339.	-1798.	496.	798.	-0.	546.	.0558	-.0274	-.0226	.0910	-.0192	.1295	2941.		
.2670	-374.	-1720.	430.	691.	-0.	601.	.0572	-.0258	-.0227	.0827	-.0223	.1401	2787.		
.2680	-398.	-1566.	360.	579.	-0.	641.	.0577	-.0228	-.0226	.0728	-.0251	.1473	2626.		
.2690	-410.	-1364.	287.	461.	-0.	660.	.0572	-.0186	-.0222	.0614	-.0274	.1511	2448.		
.2700	-408.	-1122.	212.	340.	-0.	656.	.0557	-.0134	-.0215	.0485	-.0290	.1516	2247.		
.2710	-394.	-834.	136.	219.	-0.	634.	.0534	-.0073	-.0207	.0347	-.0296	.1492	2040.		
.2720	-373.	-514.	63.	101.	-0.	601.	.0506	-.0006	-.0198	.0205	-.0290	.1446	1853.		
.2730	-343.	-198.	-7.	-10.	-0.	552.	.0472	.0065	-.0189	.0060	-.0276	.1377	1680.		
.2740	-298.	100.	-72.	-117.	-0.	479.	.0431	.0137	-.0181	-.0083	-.0257	.1287	1499.		
.2750	-237.	391.	-135.	-217.	0.	381.	.0385	.0208	-.0176	-.0215	-.0238	.1180	1334.		
.2760	-169.	679.	-192.	-308.	-0.	271.	.0336	.0275	-.0178	-.0328	-.0217	.1063	1248.		
.2770	-98.	934.	-239.	-384.	0.	158.	.0287	.0336	-.0185	-.0421	-.0196	.0941	1263.		
.2780	-23.	1126.	-279.	-449.	0.	37.	.0238	.0389	-.0196	-.0501	-.0178	.0820	1370.		
.2790	59.	1255.	-318.	-511.	0.	-94.	.0189	.0434	-.0208	-.0572	-.0162	.0703	1580.		
.2800	139.	1344.	-356.	-573.	0.	-223.	.0144	.0467	-.0220	-.0634	-.0144	.0598	1869.		
.2810	208.	1396.	-392.	-630.	0.	-335.	.0107	.0490	-.0231	-.0690	-.0124	.0514	2171.		
.2820	266.	1397.	-424.	-683.	-0.	-429.	.0076	.0502	-.0241	-.0741	-.0104	.0453	2452.		
.2830	317.	1340.	-457.	-736.	-0.	-511.	.0051	.0502	-.0249	-.0791	-.0090	.0409	2724.		
.2840	359.	1243.	-490.	-787.	0.	-578.	.0029	.0492	-.0256	-.0831	-.0089	.0380	2971.		
.2850	382.	1135.	-513.	-825.	0.	-614.	.0013	.0472	-.0266	-.0852	-.0101	.0368	3129.		
.2860	380.	1026.	-522.	-879.	0.	-610.	.0003	.0443	-.0282	-.0851	-.0129	.0375	3156.		
.2870	357.	903.	-517.	-832.	0.	-574.	-.0002	.0407	-.0301	-.0833	-.0173	.0396	3075.		
.2880	318.	755.	-505.	-812.	0.	-511.	-.0004	.0363	-.0320	-.0804	-.0227	.0427	2920.		
.2890	259.	592.	-485.	-780.	0.	-417.	-.0001	.0313	-.0338	-.0772	-.0282	.0473	2691.		

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DIS/ADLPIPE ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.18.

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	56	MEMBER	1	SEQUENCE	77	LOCATION	END	TYPE	VA
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.2810	208.	1396.	-392.	-630.	0.	-335.	.0107	.0490	-.0231	-.0690	-.0124	.0514	2171.
.2820	266.	1397.	-424.	-657.	-0.	-429.	.0076	.0502	-.0241	-.0741	-.0104	.0453	2452.
.2830	317.	1340.	-457.	-736.	-0.	-511.	.0051	.0502	-.0249	-.0791	-.0090	.0409	2724.
.2840	359.	1243.	-490.	-797.	0.	-578.	.0029	.0492	-.0256	-.0831	-.0089	.0380	2971.
.2850	382.	1135.	-513.	-825.	0.	-614.	.0013	.0472	-.0266	-.0852	-.0101	.0368	3129.
.2860	380.	1026.	-522.	-879.	0.	-610.	.0003	.443	-.0282	-.0851	-.0129	.0375	3156.
.2870	357.	903.	-517.	-832.	0.	-574.	-.0002	.0407	-.0301	-.0833	-.0173	.0396	3075.
.2880	318.	755.	-505.	-812.	0.	-511.	-.0004	.0363	-.0320	-.0804	-.0227	.0427	2920.
.2890	259.	592.	-485.	-780.	0.	-417.	-.0001	.0313	-.0338	-.0772	-.0282	.0473	2691.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	56	MEMBER	1	SEQUENCE	77	LOCATION	END	TYPE	VA						
LINE	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)		
.2900	177.	438.	-456.	-733.	0.	-285.	.0011	.0259	-.0351	-.0746	-.0327	.0542	2394.		
.2910	75.	299.	-423.	-680.	0.	-121.	.0032	.0202	-.0357	-.0730	-.0354	.0633	2099.		
.2920	-38.	153.	-390.	-627.	0.	81.	.0059	.0143	-.0356	-.0729	-.0361	.0739	1917.		
.2930	-155.	-19.	-357.	-575.	0.	250.	.0089	.0082	-.0347	-.0738	-.0351	.0851	1906.		
.2940	-273.	-204.	-319.	-513.	0.	439.	.0122	.0023	-.0336	-.0748	-.0330	.0965	2055.		
.2950	-386.	-376.	-273.	-439.	0.	621.	.0153	-.0035	-.0329	-.0745	-.0304	.1073	2313.		
.2960	-486.	-537.	-219.	-353.	0.	781.	.0181	-.0089	-.0328	-.0719	-.0279	.1162	2608.		
.2970	-565.	-713.	-159.	-256.	0.	908.	.0200	-.0138	-.0335	-.0668	-.0260	.1225	2871.		
.2980	-618.	-912.	-92.	-148.	0.	995.	.0211	-.0182	-.0347	-.0599	-.0249	.1259	3059.		
.2990	-644.	-1103.	-23.	-38.	0.	1036.	.0214	-.0217	-.0363	-.0519	-.0238	.1267	3154.		
.3000	-643.	-1252.	39.	62.	0.	1035.	.0211	-.0244	-.0379	-.0436	-.0220	.1251	3153.		
.3010	-618.	-1363.	90.	145.	0.	993.	.0201	-.0261	-.0391	-.0361	-.0188	.1212	3054.		
.3020	-568.	-1459.	131.	211.	0.	914.	.0187	-.0266	-.0396	-.0305	-.0144	.1152	2854.		
.3030	-496.	-1532.	160.	258.	0.	797.	.0166	-.0260	-.0393	-.0273	-.0089	.1070	2549.		
.3040	-404.	-1543.	176.	284.	0.	649.	.0138	-.0241	-.0383	-.0257	-.0028	.0964	2155.		
.3050	-299.	-1463.	183.	294.	-0.	482.	.0104	-.0211	-.0371	-.0252	.0036	.0836	1717.		
.3060	-189.	-1308.	185.	298.	-0.	303.	.0065	-.0169	-.0356	-.0255	.0095	.0686	1294.		
.3070	-71.	-1100.	183.	294.	-0.	115.	.0018	-.0117	-.0337	-.0272	.0142	.0516	960.		
.3080	51.	-838.	171.	275.	-0.	-83.	-.0034	-.0056	-.0314	-.0302	.0177	.0328	873.		
.3090	171.	-503.	148.	238.	-0.	-275.	-.0091	.0010	-.0287	-.0347	.0204	.0129	1107.		
.3100	278.	-100.	117.	189.	-0.	-447.	-.0146	.0080	-.0254	-.0406	.0225	-.0066	1475.		
.3110	369.	336.	79.	127.	-0.	-593.	-.0197	.0150	-.0215	-.0484	.0242	-.0251	1844.		
.3120	445.	764.	30.	49.	-0.	-716.	-.0247	.0217	-.0170	-.0579	.0252	-.0426	2183.		
.3130	506.	1162.	-27.	-43.	-0.	-814.	-.0293	.0277	-.0120	-.0682	.0254	-.0587	2478.		
.3140	546.	1532.	-85.	-137.	-0.	-879.	-.0333	.0327	-.0072	-.0782	.0247	-.0725	2705.		
.3150	565.	1867.	-140.	-225.	-0.	-908.	-.0366	.0364	-.0026	-.0870	.0229	-.0837	2846.		
.3160	565.	2135.	-192.	-309.	-0.	-909.	-.0391	.0386	.0013	-.0941	.0199	-.0921	2920.		
.3170	551.	2299.	-242.	-388.	-0.	-887.	-.0410	.0391	.0048	-.0993	.0160	-.0979	2944.		
.3180	523.	2344.	-286.	-459.	-0.	-840.	-.0421	.0378	.0078	-.1025	.0114	-.1005	2914.		
.3190	479.	2288.	-323.	-519.	-0.	-770.	-.0421	.0346	.0102	-.1037	.0067	-.0994	2824.		
.3200	422.	2141.	-354.	-570.	-0.	-678.	-.0412	.0296	.0120	-.1027	.0026	-.0948	2695.		
.3210	356.	1891.	-381.	-613.	-0.	-572.	-.0394	.0229	.0134	-.0996	-.0009	-.0870	2550.		
.3220	285.	1525.	-399.	-642.	-0.	-458.	-.0369	.0148	.0143	-.0946	-.0037	-.0767	2399.		
.3230	212.	1070.	-406.	-654.	-0.	-341.	-.0339	.0055	.0147	-.0877	-.0060	-.0642	2243.		
.3240	140.	576.	-403.	-648.	-0.	-226.	-.0305	-.0045	.0146	-.0785	-.0075	-.0502	2088.		
.3250	70.	80.	-389.	-626.	-0.	-112.	-.0270	-.0149	.0138	-.0670	-.0082	-.0353	1934.		
.3260	2.	-417.	-363.	-583.	-0.	-3.	-.0234	-.0253	.0127	-.0540	-.0081	-.0201	1775.		
.3270	-60.	-911.	-324.	-522.	-0.	96.	-.0201	-.0353	.0115	-.0404	-.0073	-.0053	1613.		

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ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.18.

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 56 MEMBER 1 SEQUENCE 77 LOCATION END TYPE VA

.3190	479.	2288.	-323.	-519.	-0.	-770.	-.0421	.0346	.0102	-.1037	.0067	-.0994	2824.
.3200	422.	2141.	-354.	-570.	-0.	-678.	-.0412	.0296	.0120	-.1027	.0026	-.0948	2695.
.3210	356.	1891.	-381.	-613.	-0.	-572.	-.0394	.0229	.0134	-.0996	-.0009	-.0870	2550.
.3220	285.	1525.	-399.	-642.	-0.	-458.	-.0369	.0148	.0143	-.0946	-.0037	-.0767	2399.
.3230	212.	1070.	-406.	-654.	-0.	-341.	-.0339	.0055	.0147	-.0877	-.0060	-.0642	2243.
.3240	140.	576.	-403.	-648.	-0.	-226.	-.0305	-.0045	.0146	-.0785	-.0075	-.0502	2088.
.3250	70.	80.	-389.	-626.	-0.	-112.	-.0270	-.0149	.0138	-.0670	-.0082	-.0353	1934.
.3260	2.	-417.	-363.	-583.	-0.	-3.	-.0234	-.0253	.0127	-.0540	-.0081	-.0201	1775.
.3270	-60.	-911.	-324.	-522.	-0.	96.	-.0201	-.0353	.0115	-.0404	-.0073	-.0053	1613.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.18.

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	56	MEMBER	1	SEQUENCE	77	LOCATION	END	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	FZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.3280	-114.	-1364.	-277.	-446.	-0.	184.		-.0170	-.0445	.0103	-.0267	-.0057	.0087	1468.	
.3290	-163.	-1730.	-224.	-361.	-0.	263.		-.0144	-.0526	.0093	-.0130	-.0031	.0214	1358.	
.3300	-208.	-1990.	-164.	-264.	-0.	335.		-.0121	-.0592	.0085	.0003	.0004	.0326	1296.	
.3310	-247.	-2151.	-96.	-154.	-0.	397.		-.0104	-.0642	.0080	.0127	.0044	.0420	1294.	
.3320	-274.	-2219.	-24.	-38.	-0.	440.		-.0095	-.0675	.0079	.0239	.0085	.0488	1345.	
.3330	-289.	-2180.	48.	77.	-0.	465.		-.0095	-.0689	.0082	.0341	.0126	.0529	1434.	
.3340	-297.	-2023.	121.	195.	-0.	477.		-.0101	-.0687	.0087	.0433	.0167	.0547	1569.	
.3350	-299.	-1762.	195.	314.	-0.	481.		-.0111	-.0669	.0095	.0513	.0205	.0546	1749.	
.3360	-295.	-1430.	265.	427.	-0.	475.		-.0126	-.0637	.0106	.0579	.0242	.0527	1942.	
.3370	-283.	-1057.	327.	526.	-0.	456.		-.0146	-.0593	.0122	.0630	.0275	.0492	2118.	
.3380	-268.	-660.	381.	613.	-0.	430.		-.0167	-.0542	.0140	.0669	.0304	.0445	2278.	
.3390	-252.	-246.	429.	690.	-0.	405.		-.0187	-.0487	.0158	.0700	.0329	.0395	2433.	
.3400	-237.	167.	469.	754.	-0.	381.		-.0206	-.0429	.0174	.0728	.0346	.0344	2570.	
.3410	-219.	545.	499.	803.	-0.	353.		-.0223	-.0374	.0187	.0758	.0354	.0291	2668.	
.3420	-201.	856.	521.	838.	-0.	323.		-.0238	-.0323	.0197	.0790	.0351	.0240	2732.	
.3430	-184.	1094.	536.	862.	-0.	296.		-.0249	-.0279	.0202	.0825	.0339	.0196	2772.	
.3440	-171.	1264.	542.	872.	-0.	274.		-.0255	-.0245	.0203	.0864	.0322	.0163	2781.	
.3450	-161.	1362.	537.	863.	-0.	259.		-.0254	-.0221	.0201	.0905	.0303	.0143	2741.	
.3460	-155.	1369.	519.	834.	-0.	249.		-.0247	-.0207	.0198	.0941	.0284	.0137	2649.	
.3470	-153.	1280.	491.	789.	-0.	246.		-.0233	-.0204	.0194	.0969	.0268	.0144	2514.	
.3480	-156.	1116.	453.	728.	-0.	250.		-.0213	-.0212	.0190	.0991	.0253	.0164	2342.	
.3490	-162.	910.	406.	654.	-0.	260.		-.0188	-.0228	.0185	.1010	.0240	.0193	2140.	
.3500	-172.	677.	355.	570.	-0.	276.		-.0161	-.0251	.0177	.1028	.0226	.0226	1927.	
.3510	-185.	417.	302.	486.	-0.	298.		-.0131	-.0279	.0167	.1045	.0209	.0259	1732.	
.3520	-200.	138.	250.	402.	-0.	322.		-.0101	-.0310	.0156	.1059	.0188	.0288	1568.	
.3530	-217.	-131.	199.	320.	-0.	349.		-.0072	-.0342	.0143	.1070	.0166	.0310	1439.	
.3540	-235.	-363.	149.	239.	-0.	377.		-.0043	-.0373	.0131	.1076	.0145	.0324	1360.	
.3550	-255.	-551.	102.	163.	-0.	410.		-.0015	-.0400	.0121	.1073	.0127	.0330	1341.	
.3560	-274.	-699.	57.	92.	-0.	441.		.0013	-.0423	.0114	.1056	.0115	.0328	1370.	
.3570	-289.	-806.	14.	22.	-0.	465.		.0038	-.0440	.0111	.1025	.0107	.0313	1417.	
.3580	-298.	-860.	-27.	-44.	-0.	479.		.0059	-.0450	.0111	.0983	.0105	.0286	1465.	
.3590	-301.	-852.	-62.	-101.	0.	484.		.0078	-.0453	.0113	.0936	.0104	.0245	1503.	
.3600	-296.	-789.	-89.	-144.	-0.	476.		.0094	-.0450	.0114	.0888	.0103	.0192	1513.	
.3610	-281.	-689.	-108.	-174.	-0.	452.		.0106	-.0441	.0115	.0842	.0099	.0124	1474.	
.3620	-255.	-567.	-119.	-192.	-0.	410.		.0114	-.0426	.0114	.0798	.0092	.0042	1377.	
.3630	-219.	-426.	-123.	-197.	0.	352.		.0120	-.0406	.0113	.0757	.0083	-.0048	1227.	
.3640	-174.	-267.	-119.	-192.	-0.	280.		.0125	-.0384	.0112	.0716	.0077	-.0142	1034.	
.3650	-123.	-98.	-112.	-181.	-0.	198.		.0131	-.0359	.0111	.0674	.0076	-.0234	815.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.18.

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	56	MEMBER	1	SEQUENCE	77	LOCATION	END	TYPE	VA						
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.3570	-289.	-886.	14.	22.	-0.	465.	.038	-.0440	.0111	.1025	.0107	.0313	1417.
.3580	-298.	-860.	-27.	-44.	-0.	479.	.059	-.0450	.0111	.0983	.0105	.0286	1465.
.3590	-301.	-852.	-62.	-101.	0.	484.	.0078	-.0453	.0113	.0936	.0104	.0245	1503.
.3600	-296.	-789.	-80.	-144.	-0.	476.	.0094	-.0450	.0114	.0888	.0103	.0192	1513.
.3610	-281.	-689.	-100.	-174.	-0.	452.	.0106	-.0441	.0115	.0842	.0099	.0124	1474.
.3620	-255.	-567.	-116.	-192.	-0.	410.	.0114	-.0426	.0114	.0798	.0092	.0042	1377.
.3630	-219.	-426.	-123.	-197.	0.	352.	.0120	-.0406	.0113	.0757	.0083	-.0048	1227.
.3640	-174.	-267.	-119.	-192.	-0.	280.	.0125	-.0384	.0112	.0716	.0077	-.0142	1034.
.3650	-123.	-98.	-112.	-181.	-0.	198.	.0131	-.0359	.0111	.0674	.0076	-.0234	815.

ADLPIPE PAGE 2167 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.29.18.

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	Seq	MEMBER	SEQUENCE	77	LOCATION	END	TYPE	VA						
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)	
.3660	-65.	57.	-104.	-168.	0.	105.	.0138	-.0334	.0113	.0627	.0083	-.0324	602.	
.3670	-3.	182.	-95.	-153.	0.	5.	.0146	-.0310	.0118	.0574	.0095	-.0408	466.	
.3680	60.	282.	-84.	-135.	0.	-97.	.0157	-.0287	.0125	.0517	.0113	-.0484	506.	
.3690	123.	365.	-72.	-115.	0.	-197.	.0167	-.0267	.0130	.0464	.0131	-.0553	695.	
.3700	183.	432.	-56.	-91.	0.	-294.	.0183	-.0249	.0133	.0420	.0146	-.0617	935.	
.3710	238.	468.	-37.	-59.	0.	-382.	.0197	-.0235	.0133	.0386	.0154	-.0678	1177.	
.3720	287.	468.	-13.	-20.	0.	-461.	.0210	-.0225	.0128	.0364	.0150	-.0735	1405.	
.3730	329.	448.	15.	23.	0.	-529.	.0223	-.0219	.0119	.0352	.0137	-.0789	1611.	
.3740	363.	426.	42.	67.	0.	-583.	.0236	-.0216	.0107	.0350	.0118	-.0839	1786.	
.3750	386.	404.	68.	109.	0.	-621.	.0250	-.0216	.0093	.0350	.0095	-.0881	1917.	
.3760	398.	368.	91.	146.	0.	-641.	.0266	-.0220	.0081	.0347	.0074	-.0913	1999.	
.3770	402.	314.	108.	174.	0.	-646.	.0282	-.0227	.0072	.0334	.0056	-.0937	2036.	
.3780	398.	255.	117.	189.	0.	-641.	.0299	-.0236	.0067	.0311	.0045	-.0952	2032.	
.3790	389.	208.	119.	191.	0.	-625.	.0317	-.0247	.0065	.0280	.0039	-.0957	1988.	
.3800	374.	170.	115.	185.	0.	-601.	.0335	-.0259	.0064	.0244	.0038	-.0955	1913.	
.3810	358.	128.	106.	170.	0.	-575.	.0352	-.0273	.0064	.0205	.0038	-.0948	1824.	
.3820	344.	74.	92.	148.	0.	-553.	.0365	-.0288	.0064	.0166	.0035	-.0942	1742.	
.3830	335.	13.	75.	120.	0.	-538.	.0375	-.0303	.0063	.0129	.0029	-.0937	1678.	
.3840	330.	-45.	56.	89.	0.	-531.	.0380	-.0319	.0059	.0097	.0020	-.0933	1638.	
.3850	332.	-100.	34.	55.	0.	-534.	.0382	-.0333	.0055	.0068	.0008	-.0929	1632.	
.3860	341.	-162.	10.	16.	0.	-548.	.0380	-.0347	.0051	.0040	-.0005	-.0929	1668.	
.3870	358.	-239.	-18.	-29.	0.	-576.	.0372	-.0359	.0047	.0010	-.0019	-.0931	1755.	
.3880	384.	-316.	-47.	-76.	0.	-617.	.0360	-.0370	.0045	-.0023	-.0031	-.0934	1892.	
.3890	414.	-373.	-78.	-125.	0.	-666.	.0345	-.0377	.0045	-.0057	-.0041	-.0938	2061.	
.3900	446.	-409.	-107.	-171.	0.	-717.	.0325	-.0382	.0045	-.0092	-.0051	-.0943	2242.	
.3910	475.	-443.	-131.	-210.	0.	-764.	.0301	-.0383	.0045	-.0127	-.0060	-.0951	2412.	
.3920	501.	-483.	-147.	-237.	0.	-806.	.0272	-.0381	.0045	-.0164	-.0072	-.0962	2557.	
.3930	523.	-512.	-156.	-251.	0.	-840.	.0240	-.0375	.0046	-.0200	-.0088	-.0975	2668.	
.3940	536.	-502.	-158.	-253.	0.	-862.	.0204	-.0365	.0047	-.0234	-.0105	-.0990	2732.	
.3950	538.	-455.	-151.	-243.	0.	-865.	.0166	-.0350	.0047	-.0267	-.0122	-.1003	2733.	
.3960	528.	-388.	-137.	-220.	0.	-849.	.0126	-.0333	.0048	-.0303	-.0140	-.1013	2666.	
.3970	506.	-315.	-116.	-187.	0.	-814.	.0085	-.0312	.0051	-.0344	-.0158	-.1019	2542.	
.3980	474.	-229.	-92.	-148.	0.	-763.	.0043	-.0289	.0055	-.0388	-.0174	-.1021	2364.	
.3990	429.	-116.	-64.	-103.	0.	-691.	.0002	-.0264	.0060	-.0432	-.0188	-.1014	2124.	
.4000	371.	14.	-31.	-49.	0.	-596.	-.0037	-.0239	.0064	-.0474	-.0200	-.0995	1820.	

ADLPIPE PAGE 2168 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.29.18.

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

.3950	538.	-455.	-151.	-243.	0.	-849.	.126	-.0333	.0048	-.0303	-.0140	-.1013	2666.
.3960	528.	-338.	-137.	-220.	0.	-849.	.126	-.0333	.0048	-.0303	-.0140	-.1013	2666.
.3970	508.	-315.	-116.	-187.	0.	-814.	.0085	-.0312	.0051	-.0344	-.0158	-.1019	2542.
.3980	474.	-229.	-92.	-148.	0.	-763.	.0043	-.0289	.0055	-.0388	-.0174	-.1021	2364.
.3990	429.	-116.	-64.	-103.	0.	-691.	.0002	-.0264	.0060	-.0432	-.0188	-.1014	2124.
.4000	371.	14.	-31.	-49.	0.	-596.	-.0077	-.0239	.0064	-.0474	-.0200	-.0995	1820.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.18.

S/RV PIPING KEWAUNEE GKWORF 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

MAXIMUM VALUE OF STRESS OCCURS AT

TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.1860	-804.	-1772.	462.	743.	0.	1293.	-.0186	-.0395	.0030	.0049	.0555	.1010	4537.

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	DIS	TYPE	VA	DZ	RX	RY	RZ	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)	
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	0.	0.	0.	0.	0.	0.	.0000	.0000	.0000	.0000	-.0000	-.0000	-.0000	0.
.0020	0.	0.	0.	0.	0.	0.	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0030	0.	0.	0.	0.	0.	0.	-.0000	-.0000	-.0000	-.0000	.0000	.0000	.0000	0.
.0040	0.	0.	0.	0.	0.	0.	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	.0000	0.
.0050	0.	0.	0.	0.	0.	0.	-.0000	-.0000	-.0000	-.0001	-.0000	.0000	.0000	0.
.0060	0.	0.	0.	0.	0.	0.	-.0000	-.0000	.0000	-.0001	-.0001	-.0000	.0000	0.
.0070	0.	0.	0.	0.	0.	0.	-.0000	-.0000	.0000	-.0000	-.0003	-.0002	.0000	0.
.0080	0.	0.	0.	0.	0.	0.	-.0000	.0000	.0000	.0001	-.0007	-.0005	.0000	0.
.0090	0.	0.	0.	0.	0.	0.	-.0000	.0000	.0000	.0004	-.0014	-.0011	.0000	0.
.0100	0.	0.	0.	0.	0.	0.	-.0000	.0000	.0000	.0009	-.0023	-.0019	.0000	0.
.0110	0.	0.	0.	0.	0.	0.	-.0000	.0000	.0000	.0016	-.0037	-.0033	.0000	0.
.0120	0.	0.	0.	0.	0.	0.	-.0001	.0000	.0000	.0026	-.0055	-.0054	.0000	0.
.0130	0.	0.	0.	0.	0.	0.	-.0001	.0001	.0000	.0039	-.0079	-.0086	.0000	0.
.0140	0.	0.	0.	0.	0.	0.	-.0002	.0001	.0001	.0057	-.0108	-.0126	.0000	0.
.0150	0.	0.	0.	0.	0.	0.	-.0003	.0002	.0001	.0082	-.0141	-.0170	.0000	0.
.0160	0.	0.	0.	0.	0.	0.	-.0005	.0003	.0001	.0112	-.0175	-.0212	.0000	0.
.0170	0.	0.	0.	0.	0.	0.	-.0008	.0004	.0002	.0145	-.0204	-.0246	.0000	0.
.0180	0.	0.	0.	0.	0.	0.	-.0012	.0004	.0003	.0175	-.0221	-.0264	.0000	0.
.0190	0.	0.	0.	0.	0.	0.	-.0016	.0003	.0003	.0195	-.0218	-.0261	.0000	0.
.0200	0.	0.	0.	0.	0.	0.	-.0021	.0002	.0004	.0195	-.0188	-.0233	.0000	0.
.0210	0.	0.	0.	0.	0.	0.	-.0027	-.0001	.0004	.0167	-.0128	-.0178	.0000	0.
.0220	0.	0.	0.	0.	0.	0.	-.0033	-.0005	.0004	.0109	-.0039	-.0098	.0000	0.
.0230	0.	0.	0.	0.	0.	0.	-.0038	-.0010	.0004	.0024	.0069	-.0007	.0000	0.
.0240	0.	0.	0.	0.	0.	0.	-.0043	-.0016	.0004	-.0071	.0175	.0080	.0000	0.
.0250	0.	0.	0.	0.	0.	0.	-.0047	-.0022	.0004	-.0144	.0266	.0161	.0000	0.
.0260	0.	0.	0.	0.	0.	0.	-.0050	-.0029	.0004	-.0166	.0333	.0248	.0000	0.
.0270	0.	0.	0.	0.	0.	0.	-.0052	-.0036	.0004	-.0142	.0371	.0339	.0000	0.
.0280	0.	0.	0.	0.	0.	0.	-.0052	-.0044	.0004	-.0099	.0369	.0397	.0000	0.
.0290	0.	0.	0.	0.	0.	0.	-.0050	-.0050	.0004	-.0039	.0337	.0410	.0000	0.
.0300	0.	0.	0.	0.	0.	0.	-.0047	-.0054	.0004	.0050	.0315	.0440	.0000	0.
.0310	0.	0.	0.	0.	0.	0.	-.0041	-.0056	.0003	.0113	.0314	.0497	.0000	0.
.0320	0.	0.	0.	0.	0.	0.	-.0034	-.0056	.0001	.0083	.0329	.0528	.0000	0.
.0730	0.	0.	0.	0.	0.	0.	-.0025	-.0052	-.0002	-.0034	.0363	.0522	.0000	0.

.0200	0.	0.	0.	0.	0.	0.	0.	-.0021	.0002	.0004	.0195	-.0188	-.0233	0.
.0210	0.	0.	0.	0.	0.	0.	0.	-.0027	-.0001	.0004	.0167	-.0128	-.0178	0.
.0220	0.	0.	0.	0.	0.	0.	0.	-.0033	-.0005	.0004	.0109	-.0039	-.0098	0.
.0230	0.	0.	0.	0.	0.	0.	0.	-.0038	-.0010	.0004	.0024	.0069	-.0007	0.
.0240	0.	0.	0.	0.	0.	0.	0.	-.0043	-.0016	.0004	-.0071	.0175	.0080	0.
.0250	0.	0.	0.	0.	0.	0.	0.	-.0047	-.0022	.0004	-.0144	.0266	.0161	0.
.0260	0.	0.	0.	0.	0.	0.	0.	-.0050	-.0029	.0004	-.0166	.0333	.0248	0.
.0270	0.	0.	0.	0.	0.	0.	0.	-.0052	-.0036	.0004	-.0142	.0371	.0339	0.
.0280	0.	0.	0.	0.	0.	0.	0.	-.0052	-.0044	.0004	-.0099	.0369	.0397	0.
.0290	0.	0.	0.	0.	0.	0.	0.	-.0050	-.0050	.0004	-.0039	.0337	.0410	0.
.0300	0.	0.	0.	0.	0.	0.	0.	-.0047	-.0054	.0004	.0050	.0315	.0440	0.
.0310	0.	0.	0.	0.	0.	0.	0.	-.0041	-.0056	.0003	.0113	.0314	.0497	0.
.0320	0.	0.	0.	0.	0.	0.	0.	-.0034	-.0056	.0001	.0083	.0329	.0528	0.

.0330 0. 0. 0. 0. 0. 0. 0. -.0025 -.0052 -.0002 -.0034 .0363 .0522 0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.18.

S/RV PIPING KEWAUNEE GW00F 2 RUP DISK
2 SAFETY COLD FK024F--2 PSV

CONDITION 24
LOAD
SHOCK
PRESSURE
ENGLISH UNITS

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

S/RV PIPING KEWAUNEE GKW00F 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	56	MEMBER	2	SEQUENCE	827	LOCATION	DIS	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	FX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.0340	0.	0.	0.	0.	0.	0.	-.0014	-.0044	-.0006	-.0182	.0414	.0524	0.		
.0350	0.	0.	0.	0.	0.	0.	-.0003	-.0029	-.0009	-.0304	.0447	.0538	0.		
.0360	0.	0.	0.	0.	0.	0.	.0009	-.0010	-.0012	-.0356	.0424	.0511	0.		
.0370	0.	0.	0.	0.	0.	0.	.0022	.0012	-.0013	-.0320	.0325	.0417	0.		
.0380	0.	0.	0.	0.	0.	0.	.0034	.0039	-.0014	-.0209	.0150	.0265	0.		
.0390	0.	0.	0.	0.	0.	0.	.0047	.0068	-.0015	-.0033	-.0069	.0074	0.		
.0400	0.	0.	0.	0.	0.	0.	.0058	.0100	-.0015	.0185	-.0269	-.0114	0.		
.0410	0.	0.	0.	0.	0.	0.	.0069	.0132	-.0015	.0354	-.0397	-.0240	0.		
.0420	0.	0.	0.	0.	0.	0.	.0079	.0159	-.0016	.0344	-.0442	-.0317	0.		
.0430	0.	0.	0.	0.	0.	0.	.0088	.0181	-.0018	.0140	-.0394	-.0386	0.		
.0440	0.	0.	0.	0.	0.	0.	.0096	.0197	-.0020	-.0156	-.0251	-.0416	0.		
.0450	0.	0.	0.	0.	0.	0.	.0102	.0209	-.0022	-.0449	-.0063	-.0369	0.		
.0460	0.	0.	0.	0.	0.	0.	.0107	.0214	-.0022	-.0674	.0081	-.0320	0.		
.0470	0.	0.	0.	0.	0.	0.	.0111	.0210	-.0021	-.0769	.0120	-.0379	0.		
.0480	0.	0.	0.	0.	0.	0.	.0113	.0198	-.0017	-.0705	.0049	-.0531	0.		
.0490	0.	0.	0.	0.	0.	0.	.0114	.0177	-.0011	-.0503	-.0092	-.0678	0.		
.0500	0.	0.	0.	0.	0.	0.	.0113	.0151	-.0003	-.0228	-.0239	-.0790	0.		
.0510	0.	0.	0.	0.	0.	0.	.0109	.0118	.0005	.0016	-.0335	-.0891	0.		
.0520	0.	0.	0.	0.	0.	0.	.0103	.0078	.0015	.0113	-.0360	-.0961	0.		
.0530	0.	0.	0.	0.	0.	0.	.0094	.0033	.0024	.0032	-.0302	-.0954	0.		
.0540	0.	0.	0.	0.	0.	0.	.0083	-.0014	.0034	-.0140	-.0151	-.0859	0.		
.0550	0.	0.	0.	0.	0.	0.	.0068	-.0060	.0045	-.0314	.0051	-.0704	0.		
.0560	0.	0.	0.	0.	0.	0.	.0052	-.0104	.0058	-.0456	.0217	-.0548	0.		
.0570	0.	0.	0.	0.	0.	0.	.0033	-.0146	.0073	-.0517	.0289	-.0449	0.		
.0580	0.	0.	0.	0.	0.	0.	.0013	-.0183	.0090	-.0428	.0266	-.0426	0.		
.0590	0.	0.	0.	0.	0.	0.	-.0009	-.0213	.0109	-.0188	.0176	-.0427	0.		
.0600	0.	0.	0.	0.	0.	0.	-.0032	-.0236	.0129	.0117	.0055	-.0396	0.		
.0610	0.	0.	0.	0.	0.	0.	-.0056	-.0252	.0149	.0384	-.0039	-.0331	0.		
.0620	0.	0.	0.	0.	0.	0.	-.0079	-.0262	.0167	.0525	-.0058	-.0237	0.		
.0630	0.	0.	0.	0.	0.	0.	-.0102	-.0267	.0184	.0493	.0016	-.0092	0.		
.0640	0.	0.	0.	0.	0.	0.	-.0123	-.0265	.0199	.0321	.0175	.0122	0.		
.0650	0.	0.	0.	0.	0.	0.	-.0142	-.0255	.0211	.0099	.0384	.0372	0.		
.0660	0.	0.	0.	0.	0.	0.	-.0158	-.0239	.0222	-.0091	.0566	.0589	0.		
.0670	0.	0.	0.	0.	0.	0.	-.0169	-.0217	.0232	-.0181	.0540	.0720	0.		
.0680	0.	0.	0.	0.	0.	0.	-.0176	-.0190	.0240	-.0096	.0576	.0749	0.		
.0690	0.	0.	0.	0.	0.	0.	-.0179	-.0159	.0247	.0185	.0398	.0691	0.		
.0700	0.	0.	0.	0.	0.	0.	-.0177	-.0122	.0252	.0581	.0154	.0572	0.		
.0710	0.	0.	0.	0.	0.	0.	-.0171	-.0082	.0253	.0962	-.0091	.0431	0.		

S/RV PIPING KEWAUNEE GKW00F 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

.0630	0.	0.	0.	0.	0.	0.	0.	0.	-.0102	-.0267	.0184	.0493	.0016	-.0092	0.
.0640	0.	0.	0.	0.	0.	0.	0.	0.	-.0123	-.0265	.0199	.0321	.0175	.0122	0.
.0650	0.	0.	0.	0.	0.	0.	0.	0.	-.0142	-.0255	.0211	.0099	.0384	.0372	0.
.0660	0.	0.	0.	0.	0.	0.	0.	0.	-.0158	-.0239	.0222	-.0091	.0566	.0589	0.
.0670	0.	0.	0.	0.	0.	0.	0.	0.	-.0169	-.0217	.0232	-.0181	.0540	.0720	0.
.0680	0.	0.	0.	0.	0.	0.	0.	0.	-.0176	-.0190	.0240	-.0096	.0576	.0749	0.
.0690	0.	0.	0.	0.	0.	0.	0.	0.	-.0179	-.0159	.0247	.0185	.0398	.0691	0.
.0700	0.	0.	0.	0.	0.	0.	0.	0.	-.0177	-.0122	.0252	.0581	.0154	.0572	0.
.0710	0.	0.	0.	0.	0.	0.	0.	0.	-.0171	-.0082	.0253	.0562	-.0091	.0431	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.18.

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	56	MEMBER	2	SEQUENCE	327	LOCATION	DIS	TYPE	VA						
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)	
.0720	0.	0.	0.	0.	0.	0.	0.	-.0161	-.0040	.0250	.1218	-.0264	.0316	0.	
.0730	0.	0.	0.	0.	0.	0.	0.	-.0148	.0002	.0242	.1275	-.0316	.0260	0.	
.0740	0.	0.	0.	0.	0.	0.	0.	-.0132	.0044	.0230	.1126	-.0243	.0271	0.	
.0750	0.	0.	0.	0.	0.	0.	0.	-.0114	.0086	.0215	.0844	-.0074	.0340	0.	
.0760	0.	0.	0.	0.	0.	0.	0.	-.0095	.0126	.0196	.0534	.0125	.0435	0.	
.0770	0.	0.	0.	0.	0.	0.	0.	-.0074	.0164	.0177	.0277	.0273	.0497	0.	
.0780	0.	0.	0.	0.	0.	0.	0.	-.0052	.0199	.0157	.0143	.0315	.0475	0.	
.0790	0.	0.	0.	0.	0.	0.	0.	-.0030	.0231	.0137	.0181	.0246	.0371	0.	
.0800	0.	0.	0.	0.	0.	0.	0.	-.0008	.0260	.0117	.0360	.0095	.0217	0.	
.0810	0.	0.	0.	0.	0.	0.	0.	.0013	.0283	.0098	.0577	-.0089	.0040	0.	
.0820	0.	0.	0.	0.	0.	0.	0.	.0033	.0300	.0078	.0728	-.0243	-.0136	0.	
.0830	0.	0.	0.	0.	0.	0.	0.	.0051	.0310	.0059	.0746	-.0311	-.0258	0.	
.0840	0.	0.	0.	0.	0.	0.	0.	.0067	.0313	.0040	.0601	-.0273	-.0283	0.	
.0850	0.	0.	0.	0.	0.	0.	0.	.0081	.0309	.0021	.0324	-.0146	-.0222	0.	
.0860	0.	0.	0.	0.	0.	0.	0.	.0093	.0300	.0005	-.0002	.0034	-.0123	0.	
.0870	0.	0.	0.	0.	0.	0.	0.	.0103	.0284	-.0009	-.0294	.0207	-.0022	0.	
.0880	0.	0.	0.	0.	0.	0.	0.	.0111	.0263	-.0019	-.0497	.0317	.0048	0.	
.0890	0.	0.	0.	0.	0.	0.	0.	.0119	.0238	-.0026	-.0577	.0349	.0064	0.	
.0900	0.	0.	0.	0.	0.	0.	0.	.0126	.0209	-.0029	-.0536	.0325	.0035	0.	
.0910	0.	0.	0.	0.	0.	0.	0.	.0133	.0178	-.0028	-.0441	.0278	-.0001	0.	
.0920	0.	0.	0.	0.	0.	0.	0.	.0140	.0144	-.0024	-.0378	.0240	-.0024	0.	
.0930	0.	0.	0.	0.	0.	0.	0.	.0146	.0109	-.0018	-.0394	.0240	-.0035	0.	
.0940	0.	0.	0.	0.	0.	0.	0.	.0153	.0073	-.0009	-.0479	.0284	-.0033	0.	
.0950	0.	0.	0.	0.	0.	0.	0.	.0160	.0039	.0003	-.0585	.0340	-.0014	0.	
.0960	0.	0.	0.	0.	0.	0.	0.	.0167	.0007	.0018	-.0632	.0363	.0002	0.	
.0970	0.	0.	0.	0.	0.	0.	0.	.0175	-.0021	.0036	-.0552	.0314	-.0030	0.	
.0980	0.	0.	0.	0.	0.	0.	0.	.0182	-.0045	.0056	-.0326	.0175	-.0126	0.	
.0990	0.	0.	0.	0.	0.	0.	0.	.0190	-.0064	.0079	.0019	-.0038	-.0266	0.	
.1000	0.	0.	0.	0.	0.	0.	0.	.0199	-.0077	.0102	.0427	-.0274	-.0409	0.	
.1010	0.	0.	0.	0.	0.	0.	0.	.0207	-.0083	.0124	.0819	-.0474	-.0523	0.	
.1020	0.	0.	0.	0.	0.	0.	0.	.0215	-.0084	.0145	.1107	-.0602	-.0583	0.	
.1030	0.	0.	0.	0.	0.	0.	0.	.0224	-.0078	.0164	.1256	-.0641	-.0578	0.	
.1040	0.	0.	0.	0.	0.	0.	0.	.0234	-.0067	.0178	.1291	-.0595	-.0514	0.	
.1050	0.	0.	0.	0.	0.	0.	0.	.0245	-.0048	.0189	.1263	-.0493	-.0410	0.	
.1060	0.	0.	0.	0.	0.	0.	0.	.0257	-.0024	.0196	.1219	-.0373	-.0300	0.	
.1070	0.	0.	0.	0.	0.	0.	0.	.0271	.0006	.0199	.1190	-.0268	-.0223	0.	
.1080	0.	0.	0.	0.	0.	0.	0.	.0287	.0042	.0197	.1184	-.0189	-.0196	0.	
.1090	0.	0.	0.	0.	0.	0.	0.	.0305	.0082	.0191	.1181	-.0130	-.0205	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.18.

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

.1010	0.	0.	0.	0.	0.	0.	0.	.0207	-.0083	.0124	.0819	-.0474	-.0523	0.
.1020	0.	0.	0.	0.	0.	0.	0.	.0215	-.0084	.0145	.1107	-.0602	-.0583	0.
.1030	0.	0.	0.	0.	0.	0.	0.	.0224	-.0078	.0164	.1256	-.0541	-.0578	0.
.1040	0.	0.	0.	0.	0.	0.	0.	.0234	-.0067	.0178	.1291	-.0595	-.0514	0.
.1050	0.	0.	0.	0.	0.	0.	0.	.0245	-.0048	.0189	.1263	-.0493	-.0410	0.
.1060	0.	0.	0.	0.	0.	0.	0.	.0257	-.0024	.0196	.1219	-.0373	-.0300	0.
.1070	0.	0.	0.	0.	0.	0.	0.	.0271	.0006	.0199	.1190	-.0268	-.0223	0.
.1080	0.	0.	0.	0.	0.	0.	0.	.0287	.0042	.0197	.1184	-.0189	-.0196	0.
.1090	0.	0.	0.	0.	0.	0.	0.	.0305	.0082	.0191	.1181	-.0130	-.0205	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.18.

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	56	MEMBER	2	SEQUENCE	827	LOCATION	DIS	TYPE	VA						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)		
.1100	0.	0.	0.	0.	0.	0.	0.	.0325	.0125	.0180	.1151	-.0071	-.0213	0.	0.
.1110	0.	0.	0.	0.	0.	0.	0.	.0345	.0171	.0165	.1068	-.0008	-.0234	0.	0.
.1120	0.	0.	0.	0.	0.	0.	0.	.0365	.0218	.0146	.0928	.0052	-.0275	0.	0.
.1130	0.	0.	0.	0.	0.	0.	0.	.0384	.0267	.0124	.0763	.0099	-.0309	0.	0.
.1140	0.	0.	0.	0.	0.	0.	0.	.0403	.0315	.0099	.0626	.0118	-.0335	0.	0.
.1150	0.	0.	0.	0.	0.	0.	0.	.0419	.0361	.0073	.0543	.0091	-.0386	0.	0.
.1160	0.	0.	0.	0.	0.	0.	0.	.0433	.0404	.0046	.0503	.0013	-.0474	0.	0.
.1170	0.	0.	0.	0.	0.	0.	0.	.0443	.0445	.0018	.0482	-.0089	-.0577	0.	0.
.1180	0.	0.	0.	0.	0.	0.	0.	.0451	.0481	-.0011	.0458	-.0165	-.0652	0.	0.
.1190	0.	0.	0.	0.	0.	0.	0.	.0455	.0511	-.0040	.0365	-.0191	-.0689	0.	0.
.1200	0.	0.	0.	0.	0.	0.	0.	.0455	.0536	-.0070	.0140	-.0149	-.0662	0.	0.
.1210	0.	0.	0.	0.	0.	0.	0.	.0451	.0553	-.0098	-.0207	-.0024	-.0552	0.	0.
.1220	0.	0.	0.	0.	0.	0.	0.	.0444	.0563	-.0126	-.0619	.0152	-.0393	0.	0.
.1230	0.	0.	0.	0.	0.	0.	0.	.0436	.0565	-.0152	-.1006	.0315	-.0232	0.	0.
.1240	0.	0.	0.	0.	0.	0.	0.	.0425	.0561	-.0175	-.1290	.0395	-.0127	0.	0.
.1250	0.	0.	0.	0.	0.	0.	0.	.0414	.0550	-.0194	-.1397	.0361	-.0112	0.	0.
.1260	0.	0.	0.	0.	0.	0.	0.	.0403	.0534	-.0211	-.1296	.0221	-.0178	0.	0.
.1270	0.	0.	0.	0.	0.	0.	0.	.0391	.0512	-.0224	-.1061	.0003	-.0291	0.	0.
.1280	0.	0.	0.	0.	0.	0.	0.	.0380	.0485	-.0234	-.0810	-.0228	-.0398	0.	0.
.1290	0.	0.	0.	0.	0.	0.	0.	.0369	.0454	-.0244	-.0651	-.0392	-.0473	0.	0.
.1300	0.	0.	0.	0.	0.	0.	0.	.0358	.0418	-.0252	-.0633	-.0447	-.0500	0.	0.
.1310	0.	0.	0.	0.	0.	0.	0.	.0347	.0380	-.0259	-.0752	-.0404	-.0462	0.	0.
.1320	0.	0.	0.	0.	0.	0.	0.	.0336	.0340	-.0265	-.0957	-.0318	-.0386	0.	0.
.1330	0.	0.	0.	0.	0.	0.	0.	.0325	.0301	-.0268	-.1135	-.0237	-.0319	0.	0.
.1340	0.	0.	0.	0.	0.	0.	0.	.0312	.0262	-.0268	-.1189	-.0209	-.0293	0.	0.
.1350	0.	0.	0.	0.	0.	0.	0.	.0299	.0224	-.0265	-.1082	-.0272	-.0308	0.	0.
.1360	0.	0.	0.	0.	0.	0.	0.	.0283	.0188	-.0259	-.0845	-.0417	-.0359	0.	0.
.1370	0.	0.	0.	0.	0.	0.	0.	.0265	.0152	-.0250	-.0550	-.0592	-.0448	0.	0.
.1380	0.	0.	0.	0.	0.	0.	0.	.0243	.0119	-.0240	-.0269	-.0728	-.0513	0.	0.
.1390	0.	0.	0.	0.	0.	0.	0.	.0217	.0086	-.0228	-.0076	-.0785	-.0479	0.	0.
.1400	0.	0.	0.	0.	0.	0.	0.	.0188	.0054	-.0215	-.0019	-.0752	-.0326	0.	0.
.1410	0.	0.	0.	0.	0.	0.	0.	.0155	.0021	-.0202	-.0080	-.0633	-.0098	0.	0.
.1420	0.	0.	0.	0.	0.	0.	0.	.0119	-.0012	-.0188	-.0196	-.0468	.0150	0.	0.
.1430	0.	0.	0.	0.	0.	0.	0.	.0080	-.0044	-.0174	-.0281	-.0308	.0413	0.	0.
.1440	0.	0.	0.	0.	0.	0.	0.	.0039	-.0074	-.0159	-.0277	-.0199	.0668	0.	0.
.1450	0.	0.	0.	0.	0.	0.	0.	-.0002	-.0101	-.0144	-.0177	-.0153	.0869	0.	0.
.1460	0.	0.	0.	0.	0.	0.	0.	-.0043	-.0125	-.0130	-.0003	-.0159	.1005	0.	0.
.1470	0.	0.	0.	0.	0.	0.	0.	-.0083	-.0145	-.0117	.0195	-.0195	.1109	0.	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.19.

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

.1390	0.	0.	0.	0.	0.	0.	0.	0.	.0217	.0036	-.0228	-.0076	-.0785	-.0479	0.
.1400	0.	0.	0.	0.	0.	0.	0.	0.	.0188	.0054	-.0215	-.0019	-.0752	-.0326	0.
.1410	0.	0.	0.	0.	0.	0.	0.	0.	.0155	.0021	-.0202	-.0080	-.0633	-.0098	0.
.1420	0.	0.	0.	0.	0.	0.	0.	0.	.0119	-.0012	-.0188	-.0196	-.0468	.0150	0.
.1430	0.	0.	0.	0.	0.	0.	0.	0.	.0080	-.0044	-.0174	-.0201	-.0308	.0413	0.
.1440	0.	0.	0.	0.	0.	0.	0.	0.	.0039	-.0074	-.0159	-.0277	-.0199	.0668	0.
.1450	0.	0.	0.	0.	0.	0.	0.	0.	-.0002	-.0101	-.0144	-.0177	-.0153	.0869	0.
.1460	0.	0.	0.	0.	0.	0.	0.	0.	-.0043	-.0125	-.0130	-.0003	-.0159	.1005	0.
.1470	0.	0.	0.	0.	0.	0.	0.	0.	-.0083	-.0145	-.0117	.0195	-.0195	.1109	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.19.

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	56	MEMBER	2	SEQUENCE	827	LOCATION	DIS	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	PX	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.	-.0121	-.0159	-.0106	.0358	-.0218	.1230	0.		
.1490	0.	0.	0.	0.	0.	0.	-.0158	-.0165	-.0098	.0428	-.0190	.1360	0.		
.1500	0.	0.	0.	0.	0.	0.	-.0191	-.0163	-.0093	.0374	-.0399	.1476	0.		
.1510	0.	0.	0.	0.	0.	0.	-.0221	-.0151	-.0092	.0211	.0036	.1593	0.		
.1520	0.	0.	0.	0.	0.	0.	-.0247	-.0126	-.0094	-.0014	.0174	.1695	0.		
.1530	0.	0.	0.	0.	0.	0.	-.0269	-.0089	-.0099	-.0229	.0284	.1737	0.		
.1540	0.	0.	0.	0.	0.	0.	-.0287	-.0037	-.0106	-.0371	.0339	.1677	0.		
.1550	0.	0.	0.	0.	0.	0.	-.0300	.0028	-.0116	-.0417	.0315	.1530	U.		
.1560	0.	0.	0.	0.	0.	0.	-.0310	.0103	-.0127	-.0391	.0214	.1322	0.		
.1570	0.	0.	0.	0.	0.	0.	-.0315	.0187	-.0139	-.0344	.0066	.1041	0.		
.1580	0.	0.	0.	0.	0.	0.	-.0318	.0279	-.0154	-.0310	-.0077	.0716	0.		
.1590	0.	0.	0.	0.	0.	0.	-.0318	.0376	-.0170	-.0322	-.0184	.0409	0.		
.1600	0.	0.	0.	0.	0.	0.	-.0316	.0472	-.0188	-.0421	-.0253	.0133	0.		
.1610	0.	0.	0.	0.	0.	0.	-.0313	.0564	-.0206	-.0603	-.0278	-.0140	0.		
.1620	0.	0.	0.	0.	0.	0.	-.0310	.0647	-.0224	-.0819	-.0259	-.0408	0.		
.1630	0.	0.	0.	0.	0.	0.	-.0307	.0717	-.0241	-.1030	-.0225	-.0642	0.		
.1640	0.	0.	0.	0.	0.	0.	-.0305	.0771	-.0257	-.1199	-.0194	-.0824	0.		
.1650	0.	0.	0.	0.	0.	0.	-.0304	.0806	-.0269	-.1308	-.0167	-.0979	0.		
.1660	0.	0.	0.	0.	0.	0.	-.0306	.0819	-.0279	-.1374	-.0148	-.1131	0.		
.1670	0.	0.	0.	0.	0.	0.	-.0311	.0808	-.0285	-.1401	-.0133	-.1238	0.		
.1680	0.	0.	0.	0.	0.	0.	-.0319	.0773	-.0288	-.1390	-.0118	-.1273	0.		
.1690	0.	0.	0.	0.	0.	0.	-.0330	.0714	-.0284	-.1341	-.0094	-.1249	0.		
.1700	0.	0.	0.	0.	0.	0.	-.0345	.0632	-.0278	-.1260	-.0068	-.1187	0.		
.1710	0.	0.	0.	0.	0.	0.	-.0363	.0530	-.0267	-.1146	-.0052	-.1085	0.		
.1720	0.	0.	0.	0.	0.	0.	-.0384	.0412	-.0252	-.0978	-.0043	-.0921	0.		
.1730	0.	0.	0.	0.	0.	0.	-.0409	.0283	-.0232	-.0772	-.0040	-.0724	0.		
.1740	0.	0.	0.	0.	0.	0.	-.0435	.0148	-.0210	-.0552	-.0032	-.0516	0.		
.1750	0.	0.	0.	0.	0.	0.	-.0463	.0012	-.0184	-.0333	-.0012	-.0285	0.		
.1760	0.	0.	0.	0.	0.	0.	-.0492	-.0120	-.0156	-.0136	.0021	-.0022	0.		
.1770	0.	0.	0.	0.	0.	0.	-.0521	-.0242	-.0126	.0024	.0074	.0268	0.		
.1780	0.	0.	0.	0.	0.	0.	-.0550	-.0349	-.0096	.0141	.0149	.0558	0.		
.1790	0.	0.	0.	0.	0.	0.	-.0577	-.0437	-.0065	.0225	.0240	.0847	0.		
.1800	0.	0.	0.	0.	0.	0.	-.0601	-.0503	-.0034	.0278	.0331	.1121	0.		
.1810	0.	0.	0.	0.	0.	0.	-.0621	-.0544	-.0004	.0303	.0407	.1342	0.		
.1820	0.	0.	0.	0.	0.	0.	-.0636	-.0561	.0024	.0321	.0473	.1494	0.		
.1830	0.	0.	0.	0.	0.	0.	-.0645	-.0552	.0050	.0339	.0523	.1581	0.		
.1840	0.	0.	0.	0.	0.	0.	-.0649	-.0520	.0073	.0348	.0549	.1612	0.		
.1850	0.	0.	0.	0.	0.	0.	-.0646	-.0467	.0093	.0342	.0557	.1582	0.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.19.

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

.1770	0.	0.	0.	0.	0.	0.	0.	-.0521	-.0242	-.0126	.0024	.0074	.0268	0.
.1780	0.	0.	0.	0.	0.	0.	0.	-.0550	-.0349	-.0096	.0141	.0149	.0558	0.
.1790	0.	0.	0.	0.	0.	0.	0.	-.0577	-.0437	-.0065	.0225	.0240	.0847	0.
.1800	0.	0.	0.	0.	0.	0.	0.	-.0601	-.0503	-.0034	.0278	.0331	.1121	0.
.1810	0.	0.	0.	0.	0.	0.	0.	-.0621	-.0544	-.0004	.0303	.0407	.1342	0.
.1820	0.	0.	0.	0.	0.	0.	0.	-.0636	-.0561	.0024	.0321	.0473	.1494	0.
.1830	0.	0.	0.	0.	0.	0.	0.	-.0645	-.0552	.0050	.0339	.0523	.1581	0.
.1840	0.	0.	0.	0.	0.	0.	0.	-.0649	-.0520	.0073	.0348	.0549	.1612	0.
.1850	0.	0.	0.	0.	0.	0.	0.	-.0646	-.0467	.0093	.0342	.0557	.1582	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.19.

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	56	MEMBER	2	SEQUENCE	827	LOCATION	D15	TYPE	VA					
TIME	FX	FY	FZ	M	MY	MZ	DX	DY	DZ	FX	PY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.1860	0.	0.	0.	0.	0.	0.	-.0636	-.0397	.0110	.0320	.0555	.1481	0.	
.1870	0.	0.	0.	0.	0.	0.	-.0620	-.0313	.0123	.0289	.0547	.1330	0.	
.1880	0.	0.	0.	0.	0.	0.	-.0598	-.0220	.0132	.0255	.0520	.1140	0.	
.1890	0.	0.	0.	0.	0.	0.	-.0571	-.0123	.0137	.0232	.0475	.0908	0.	
.1900	0.	0.	0.	0.	0.	0.	-.0538	-.0027	.0139	.0232	.0416	.0631	0.	
.1910	0.	0.	0.	0.	0.	0.	-.0502	.0064	.0137	.0252	.0344	.0327	0.	
.1920	0.	0.	0.	0.	0.	0.	-.0463	.0146	.0133	.0285	.0273	.0031	0.	
.1930	0.	0.	0.	0.	0.	0.	-.0422	.0215	.0125	.0308	.0219	-.0247	0.	
.1940	0.	0.	0.	0.	0.	0.	-.0381	.0269	.0115	.0290	.0197	-.0508	0.	
.1950	0.	0.	0.	0.	0.	0.	-.0340	.0305	.0103	.0221	.0212	-.0734	0.	
.1960	0.	0.	0.	0.	0.	0.	-.0301	.0325	.0089	.0115	.0254	-.0905	0.	
.1970	0.	0.	0.	0.	0.	0.	-.0265	.0327	.0076	-.0002	.0308	-.1028	0.	
.1980	0.	0.	0.	0.	0.	0.	-.0232	.0314	.0063	-.0101	.0348	-.1125	0.	
.1990	0.	0.	0.	0.	0.	0.	-.0203	.0286	.0052	-.0150	.0353	-.1209	0.	
.2000	0.	0.	0.	0.	0.	0.	-.0178	.0247	.0043	-.0131	.0314	-.1275	0.	
.2010	0.	0.	0.	0.	0.	0.	-.0158	.0199	.0037	-.0051	.0236	-.1318	0.	
.2020	0.	0.	0.	0.	0.	0.	-.0143	.0145	.0034	.0057	.0145	-.1333	0.	
.2030	0.	0.	0.	0.	0.	0.	-.0132	.0088	.0034	.0148	.0068	-.1308	0.	
.2040	0.	0.	0.	0.	0.	0.	-.0125	.0030	.0037	.0184	.0024	-.1227	0.	
.2050	0.	0.	0.	0.	0.	0.	-.0120	-.0027	.0042	.0145	.0024	-.1088	0.	
.2060	0.	0.	0.	0.	0.	0.	-.0118	-.0081	.0051	.0046	.0067	-.0907	0.	
.2070	0.	0.	0.	0.	0.	0.	-.0118	-.0129	.0063	-.0083	.0132	-.0706	0.	
.2080	0.	0.	0.	0.	0.	0.	-.0117	-.0171	.0078	-.0201	.0190	-.0507	0.	
.2090	0.	0.	0.	0.	0.	0.	-.0115	-.0207	.0096	-.0273	.0216	-.0334	0.	
.2100	0.	0.	0.	0.	0.	0.	-.0110	-.0235	.0116	-.0273	.0202	-.0207	0.	
.2110	0.	0.	0.	0.	0.	0.	-.0103	-.0257	.0139	-.0200	.0152	-.0132	0.	
.2120	0.	0.	0.	0.	0.	0.	-.0093	-.0272	.0163	-.0077	.0080	-.0095	0.	
.2130	0.	0.	0.	0.	0.	0.	-.0078	-.0282	.0189	.0059	.0008	-.0084	0.	
.2140	0.	0.	0.	0.	0.	0.	-.0060	-.0288	.0214	.0173	-.0039	-.0089	0.	
.2150	0.	0.	0.	0.	0.	0.	-.0038	-.0290	.0239	.0247	-.0047	-.0098	0.	
.2160	0.	0.	0.	0.	0.	0.	-.0012	-.0289	.0263	.0282	-.0017	-.0100	0.	
.2170	0.	0.	0.	0.	0.	0.	.0017	-.0285	.0285	.0298	.0037	-.0102	0.	
.2180	0.	0.	0.	0.	0.	0.	.0049	-.0280	.0305	.0321	.0094	-.0123	0.	
.2190	0.	0.	0.	0.	0.	0.	.0084	-.0272	.0323	.0377	.0135	-.0176	0.	
.2200	0.	0.	0.	0.	0.	0.	.0119	-.0264	.0339	.0483	.0148	-.0255	0.	
.2210	0.	0.	0.	0.	0.	0.	.0156	-.0255	.0352	.0636	.0135	-.0345	0.	
.2220	0.	0.	0.	0.	0.	0.	.0193	-.0245	.0362	.0807	.0109	-.0439	0.	
.2230	0.	0.	0.	0.	0.	0.	.0227	-.0235	.0367	.0957	.0086	-.0524	0.	

ADLPIPE PAGE 2174

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.19.

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

.2150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0038	-0.0290	.0239	.0247	-0.0047	-0.0088	0.
.2160	0.	0.	0.	0.	0.	0.	0.	0.	0.	-0.0012	-0.0289	.0263	.0282	-0.0017	-0.0100	0.
.2170	0.	0.	0.	0.	0.	0.	0.	0.	0.	.0017	-0.0285	.0285	.0298	.0037	-0.0102	0.
.2180	0.	0.	0.	0.	0.	0.	0.	0.	0.	.0049	-0.0280	.0305	.0321	.0094	-0.0123	0.
.2190	0.	0.	0.	0.	0.	0.	0.	0.	0.	.0084	-0.0272	.0323	.0377	.0135	-0.0176	0.
.2200	0.	0.	0.	0.	0.	0.	0.	0.	0.	.0119	-0.0264	.0339	.0483	.0148	-0.0255	0.
.2210	0.	0.	0.	0.	0.	0.	0.	0.	0.	.0156	-0.0255	.0352	.0636	.0135	-0.0345	0.
.2220	0.	0.	0.	0.	0.	0.	0.	0.	0.	.0193	-0.0245	.0362	.0807	.0109	-0.0439	0.
.2230	0.	0.	0.	0.	0.	0.	0.	0.	0.	.0229	-0.0235	.0367	.0957	.0086	-0.0524	0.

ADLPIPE PAGE 2174

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.17.

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	56	MEMBER	2	SEQUENCE	827	LOCATION	DIS	TYPE	VA								
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	FX	RY	RZ	STRESS				
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)				
.2240	0.	0.	0.	0.	0.	0.	.0265	-0.0226	.0369	.1055	.0081	-0.0584	0.				
.2250	0.	0.	0.	0.	0.	0.	.0299	-0.0217	.0366	.1085	.0103	-0.0607	0.				
.2260	0.	0.	0.	0.	0.	0.	.0331	-0.0209	.0359	.1053	.0145	-0.0596	0.				
.2270	0.	0.	0.	0.	0.	0.	.0362	-0.0201	.0347	.0980	.0193	-0.0565	0.				
.2280	0.	0.	0.	0.	0.	0.	.0391	-0.0193	.0332	.0894	.0222	-0.0528	0.				
.2290	0.	0.	0.	0.	0.	0.	.0418	-0.0186	.0314	.0823	.0215	-0.0494	0.				
.2300	0.	0.	0.	0.	0.	0.	.0443	-0.0178	.0293	.0781	.0167	-0.0474	0.				
.2310	0.	0.	0.	0.	0.	0.	.0467	-0.0170	.0269	.0760	.0087	-0.0469	0.				
.2320	0.	0.	0.	0.	0.	0.	.0489	-0.0159	.0244	.0739	-0.0014	-0.0475	0.				
.2330	0.	0.	0.	0.	0.	0.	.0509	-0.0147	.0218	.0690	-0.0116	-0.0482	0.				
.2340	0.	0.	0.	0.	0.	0.	.0529	-0.0132	.0190	.0595	-0.0202	-0.0484	0.				
.2350	0.	0.	0.	0.	0.	0.	.0546	-0.0114	.0163	.0448	-0.0259	-0.0477	0.				
.2360	0.	0.	0.	0.	0.	0.	.0563	-0.0091	.0136	.0256	-0.0286	-0.0461	0.				
.2370	0.	0.	0.	0.	0.	0.	.0577	-0.0064	.0111	.0035	-0.0289	-0.0442	0.				
.2380	0.	0.	0.	0.	0.	0.	.0570	-0.0032	.0088	-0.0191	-0.0279	-0.0434	0.				
.2390	0.	0.	0.	0.	0.	0.	.0602	.0005	.0069	-0.0401	-0.0264	-0.0448	0.				
.2400	0.	0.	0.	0.	0.	0.	.0612	.0046	.0054	-0.0576	-0.0252	-0.0484	0.				
.2410	0.	0.	0.	0.	0.	0.	.0620	.0091	.0043	-0.0707	-0.0244	-0.0540	0.				
.2420	0.	0.	0.	0.	0.	0.	.0625	.0138	.0037	-0.0797	-0.0240	-0.0612	0.				
.2430	0.	0.	0.	0.	0.	0.	.0629	.0187	.0036	-0.0853	-0.0234	-0.0697	0.				
.2440	0.	0.	0.	0.	0.	0.	.0630	.0234	.0039	-0.0887	-0.0222	-0.0790	0.				
.2450	0.	0.	0.	0.	0.	0.	.0628	.0279	.0048	-0.0883	-0.0204	-0.0883	0.				
.2460	0.	0.	0.	0.	0.	0.	.0624	.0319	.0060	-0.0856	-0.0180	-0.0974	0.				
.2470	0.	0.	0.	0.	0.	0.	.0617	.0352	.0077	-0.0794	-0.0152	-0.1060	0.				
.2480	0.	0.	0.	0.	0.	0.	.0607	.0377	.0096	-0.0697	-0.0127	-0.1138	0.				
.2490	0.	0.	0.	0.	0.	0.	.0594	.0391	.0118	-0.0563	-0.0106	-0.1202	0.				
.2500	0.	0.	0.	0.	0.	0.	.0578	.0395	.0142	-0.0395	-0.0092	-0.1247	0.				
.2510	0.	0.	0.	0.	0.	0.	.0559	.0386	.0166	-0.0202	-0.0082	-0.1269	0.				
.2520	0.	0.	0.	0.	0.	0.	.0537	.0366	.0191	.0009	-0.0073	-0.1257	0.				
.2530	0.	0.	0.	0.	0.	0.	.0513	.0333	.0214	.0225	-0.0064	-0.1203	0.				
.2540	0.	0.	0.	0.	0.	0.	.0485	.0290	.0235	.0436	-0.0055	-0.1106	0.				
.2550	0.	0.	0.	0.	0.	0.	.0455	.0236	.0254	.0636	-0.0046	-0.0969	0.				
.2560	0.	0.	0.	0.	0.	0.	.0422	.0176	.0269	.0820	-0.0037	-0.0794	0.				
.2570	0.	0.	0.	0.	0.	0.	.0388	.0110	.0280	.0988	-0.0030	-0.0587	0.				
.2580	0.	0.	0.	0.	0.	0.	.0352	.0042	.0287	.1137	-0.0027	-0.0353	0.				
.2590	0.	0.	0.	0.	0.	0.	.0315	-0.0026	.0288	.1259	-0.0031	-0.0104	0.				
.2600	0.	0.	0.	0.	0.	0.	.0278	-0.0091	.0284	.1351	-0.0041	.0154	0.				
.2610	0.	0.	0.	0.	0.	0.	.0241	-0.0149	.0275	.1410	-0.0058	.0415	0.				

ADLPIPE PAGE 2175

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.18.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

.2530	0.	0.	0.	0.	0.	0.	0.	.513	.0333	.0214	.0225	-.0064	-.1203	0.
.2540	0.	0.	0.	0.	0.	0.	0.	.485	.0290	.0235	.0436	-.0055	-.1106	0.
.2550	0.	0.	0.	0.	0.	0.	0.	.455	.0236	.0254	.0636	-.0046	-.0969	0.
.2560	0.	0.	0.	0.	0.	0.	0.	.422	.0176	.0269	.0820	-.0037	-.0794	0.
.2570	0.	0.	0.	0.	0.	0.	0.	.388	.0110	.0280	.0998	-.0030	-.0587	0.
.2580	0.	0.	0.	0.	0.	0.	0.	.352	.0042	.0287	.1137	-.0027	-.0353	0.
.2590	0.	0.	0.	0.	0.	0.	0.	.315	-.0026	.0288	.1259	-.0031	-.0104	0.
.2600	0.	0.	0.	0.	0.	0.	0.	.278	-.0091	.0284	.1351	-.0041	.0154	0.
.2610	0.	0.	0.	0.	0.	0.	0.	.241	-.0149	.0275	.1410	-.0058	.0415	0.

ADLPIPE PAGE 2175

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.19.

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

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	DIS	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2620	0.	0.	0.	0.	0.	0.	.0204	-.0199	.0260	.1436	-.0078	.0673	0.		
.2630	0.	0.	0.	0.	0.	0.	.0169	-.0238	.0239	.1427	-.0102	.0919	0.		
.2640	0.	0.	0.	0.	0.	0.	.0136	-.0264	.0214	.1381	-.0129	.1141	0.		
.2650	0.	0.	0.	0.	0.	0.	.0104	-.0277	.0183	.1303	-.0160	.1333	0.		
.2660	0.	0.	0.	0.	0.	0.	.0075	-.0275	.0149	.1200	-.0192	.1494	0.		
.2670	0.	0.	0.	0.	0.	0.	.0049	-.0259	.0110	.1078	-.0223	.1620	0.		
.2680	0.	0.	0.	0.	0.	0.	.0027	-.0230	.0068	.0939	-.0251	.1706	0.		
.2690	0.	0.	0.	0.	0.	0.	.0007	-.0188	.0024	.0782	-.0274	.1751	0.		
.2700	0.	0.	0.	0.	0.	0.	-.0009	-.0135	-.0023	.0609	-.0290	.1754	0.		
.2710	0.	0.	0.	0.	0.	0.	-.0022	-.0074	-.0071	.0427	-.0296	.1723	0.		
.2720	0.	0.	0.	0.	0.	0.	-.0032	-.0006	-.0120	.0241	-.0290	.1664	0.		
.2730	0.	0.	0.	0.	0.	0.	-.0039	.0065	-.0169	.0056	-.0276	.1578	0.		
.2740	0.	0.	0.	0.	0.	0.	-.0043	.0137	-.0219	-.0125	-.0257	.1462	0.		
.2750	0.	0.	0.	0.	0.	0.	-.0045	.0208	-.0267	-.0294	-.0238	.1319	0.		
.2760	0.	0.	0.	0.	0.	0.	-.0045	.0276	-.0314	-.0440	-.0217	.1161	0.		
.2770	0.	0.	0.	0.	0.	0.	-.0044	.0337	-.0360	-.0561	-.0196	.0999	0.		
.2780	0.	0.	0.	0.	0.	0.	-.0042	.0391	-.0403	-.0664	-.0178	.0833	0.		
.2790	0.	0.	0.	0.	0.	0.	-.0040	.0435	-.0444	-.0758	-.0162	.0668	0.		
.2800	0.	0.	0.	0.	0.	0.	-.0038	.0469	-.0482	-.0843	-.0144	.0517	0.		
.2810	0.	0.	0.	0.	0.	0.	-.0038	.0492	-.0517	-.0919	-.0124	.0392	0.		
.2820	0.	0.	0.	0.	0.	0.	-.0040	.0503	-.0549	-.0990	-.0104	.0297	0.		
.2830	0.	0.	0.	0.	0.	0.	-.0043	.0504	-.0578	-.1059	-.0090	.0223	0.		
.2840	0.	0.	0.	0.	0.	0.	-.0050	.0494	-.0602	-.1118	-.0089	.0170	0.		
.2850	0.	0.	0.	0.	0.	0.	-.0059	.0473	-.0623	-.1153	-.0101	.0145	0.		
.2860	0.	0.	0.	0.	0.	0.	-.0071	.0444	-.0640	-.1156	-.0129	.0153	0.		
.2870	0.	0.	0.	0.	0.	0.	-.0086	.0407	-.0652	-.1135	-.0173	.0187	0.		
.2880	0.	0.	0.	0.	0.	0.	-.0104	.0363	-.0660	-.1100	-.0227	.0241	0.		
.2890	0.	0.	0.	0.	0.	0.	-.0125	.0314	-.0664	-.1056	-.0282	.0321	0.		
.2900	0.	0.	0.	0.	0.	0.	-.0147	.0259	-.0665	-.1013	-.0327	.0438	0.		
.2910	0.	0.	0.	0.	0.	0.	-.0171	.0202	-.0661	-.0977	-.0354	.0589	0.		
.2920	0.	0.	0.	0.	0.	0.	-.0195	.0143	-.0654	-.0957	-.0361	.0761	0.		
.2930	0.	0.	0.	0.	0.	0.	-.0219	.0082	-.0645	-.0948	-.0351	.0942	0.		
.2940	0.	0.	0.	0.	0.	0.	-.0241	.0023	-.0632	-.0935	-.0330	.1125	0.		
.2950	0.	0.	0.	0.	0.	0.	-.0261	-.0035	-.0617	-.0905	-.0304	.1299	0.		
.2960	0.	0.	0.	0.	0.	0.	-.0277	-.0089	-.0600	-.0847	-.0279	.1447	0.		
.2970	0.	0.	0.	0.	0.	0.	-.0290	-.0139	-.0581	-.0761	-.0260	.1556	0.		
.2980	0.	0.	0.	0.	0.	0.	-.0298	-.0183	-.0561	-.0653	-.0249	.1621	0.		
.2990	0.	0.	0.	0.	0.	0.	-.0301	-.0218	-.0541	-.0533	-.0238	.1645	0.		

ADLPIPE PAGE 2176

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.19.

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

SECTION 56 MEMBER 2 SEQUENCE 827 LOCATION DIS TYPE VA

.2900	0.	0.	0.	0.	0.	0.	0.	0.	-.147	.0259	-.0665	-.1013	-.0327	.0438	0.
.2910	0.	0.	0.	0.	0.	0.	0.	0.	-.171	.0202	-.0661	-.0977	-.0354	.0589	0.
.2920	0.	0.	0.	0.	0.	0.	0.	0.	-.0195	.0143	-.0654	-.0957	-.0361	.0761	0.
.2930	0.	0.	0.	0.	0.	0.	0.	0.	-.0219	.0082	-.0645	-.0948	-.0351	.0942	0.
.2940	0.	0.	0.	0.	0.	0.	0.	0.	-.0241	.0023	-.0632	-.0935	-.0330	.1125	0.
.2950	0.	0.	0.	0.	0.	0.	0.	0.	-.0261	-.0035	-.0617	-.0905	-.0304	.1299	0.
.2960	0.	0.	0.	0.	0.	0.	0.	0.	-.0277	-.0089	-.0600	-.0847	-.0279	.1447	0.
.2970	0.	0.	0.	0.	0.	0.	0.	0.	-.0290	-.0139	-.0581	-.0761	-.0260	.1556	0.
.2980	0.	0.	0.	0.	0.	0.	0.	0.	-.0298	-.0183	-.0561	-.0653	-.0249	.1621	0.
.2990	0.	0.	0.	0.	0.	0.	0.	0.	-.0301	-.0218	-.0541	-.0533	-.0238	.1645	0.

ADLPIPE PAGE 2176

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.19.

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	56	MEMBER	2	SEQUENCE	827	LOCATION	DIS	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.3000	0.	0.	0.	0.	0.	0.	0.	-.0299	-.0245	-.0520	-.0414	-.0220	.1627	0.	
.3010	0.	0.	0.	0.	0.	0.	0.	-.0291	-.0262	-.0500	-.0308	-.0188	.1574	0.	
.3020	0.	0.	0.	0.	0.	0.	0.	-.0279	-.0267	-.0481	-.0228	-.0144	.1485	0.	
.3030	0.	0.	0.	0.	0.	0.	0.	-.0262	-.0261	-.0463	-.0179	-.0089	.1360	0.	
.3040	0.	0.	0.	0.	0.	0.	0.	-.0242	-.0243	-.0446	-.0154	-.0028	.1200	0.	
.3050	0.	0.	0.	0.	0.	0.	0.	-.0218	-.0212	-.0430	-.0144	.0036	.1011	0.	
.3060	0.	0.	0.	0.	0.	0.	0.	-.0192	-.0170	-.0416	-.0147	.0095	.0797	0.	
.3070	0.	0.	0.	0.	0.	0.	0.	-.0165	-.0118	-.0404	-.0165	.0142	.0558	0.	
.3080	0.	0.	0.	0.	0.	0.	0.	-.0138	-.0057	-.0393	-.0202	.0177	.0297	0.	
.3090	0.	0.	0.	0.	0.	0.	0.	-.0111	.0010	-.0383	-.0260	.0204	.0029	0.	
.3100	0.	0.	0.	0.	0.	0.	0.	-.0085	.0080	-.0375	-.0337	.0225	-.0228	0.	
.3110	0.	0.	0.	0.	0.	0.	0.	-.0062	.0150	-.0367	-.0438	.0242	-.0467	0.	
.3120	0.	0.	0.	0.	0.	0.	0.	-.0043	.0218	-.0360	-.0561	.0252	-.0687	0.	
.3130	0.	0.	0.	0.	0.	0.	0.	-.0026	.0278	-.0354	-.0697	.0254	-.0883	0.	
.3140	0.	0.	0.	0.	0.	0.	0.	-.0014	.0328	-.0347	-.0832	.0247	-.1045	0.	
.3150	0.	0.	0.	0.	0.	0.	0.	-.0007	.0366	-.0339	-.0952	.0229	-.1167	0.	
.3160	0.	0.	0.	0.	0.	0.	0.	-.0004	.0389	-.0330	-.1054	.0199	-.1252	0.	
.3170	0.	0.	0.	0.	0.	0.	0.	-.0005	.0394	-.0319	-.1134	.0160	-.1302	0.	
.3180	0.	0.	0.	0.	0.	0.	0.	-.0011	.0380	-.0307	-.1193	.0114	-.1311	0.	
.3190	0.	0.	0.	0.	0.	0.	0.	-.0021	.0348	-.0292	-.1226	.0067	-.1275	0.	
.3200	0.	0.	0.	0.	0.	0.	0.	-.0035	.0298	-.0274	-.1235	.0026	-.1195	0.	
.3210	0.	0.	0.	0.	0.	0.	0.	-.0052	.0231	-.0254	-.1219	-.0009	-.1078	0.	
.3220	0.	0.	0.	0.	0.	0.	0.	-.0072	.0150	-.0230	-.1180	-.0037	-.0933	0.	
.3230	0.	0.	0.	0.	0.	0.	0.	-.0094	.0056	-.0204	-.1115	-.0060	-.0766	0.	
.3240	0.	0.	0.	0.	0.	0.	0.	-.0117	-.0045	-.0174	-.1021	-.0075	-.0584	0.	
.3250	0.	0.	0.	0.	0.	0.	0.	-.0141	-.0149	-.0141	-.0898	-.0082	-.0394	0.	
.3260	0.	0.	0.	0.	0.	0.	0.	-.0166	-.0254	-.0105	-.0753	-.0081	-.0202	0.	
.3270	0.	0.	0.	0.	0.	0.	0.	-.0191	-.0354	-.0066	-.0594	-.0073	-.0018	0.	
.3280	0.	0.	0.	0.	0.	0.	0.	-.0215	-.0447	-.0025	-.0430	-.0057	.0154	0.	
.3290	0.	0.	0.	0.	0.	0.	0.	-.0238	-.0528	.0019	-.0262	-.0031	.0309	0.	
.3300	0.	0.	0.	0.	0.	0.	0.	-.0260	-.0594	.0064	-.0093	.0004	.0448	0.	
.3310	0.	0.	0.	0.	0.	0.	0.	-.0279	-.0644	.0110	.0071	.0044	.0564	0.	
.3320	0.	0.	0.	0.	0.	0.	0.	-.0297	-.0677	.0157	.0225	.0085	.0649	0.	
.3330	0.	0.	0.	0.	0.	0.	0.	-.0313	-.0692	.0203	.0369	.0126	.0699	0.	
.3340	0.	0.	0.	0.	0.	0.	0.	-.0326	-.0689	.0250	.0504	.0167	.0721	0.	
.3350	0.	0.	0.	0.	0.	0.	0.	-.0336	-.0670	.0295	.0628	.0205	.0722	0.	
.3360	0.	0.	0.	0.	0.	0.	0.	-.0344	-.0638	.0338	.0735	.0242	.0700	0.	
.3370	0.	0.	0.	0.	0.	0.	0.	-.0350	-.0595	.0379	.0822	.0275	.0657	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.19.

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	56	MEMBER	2	SEQUENCE	827	LOCATION	DIS	TYPE	VA						
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.3290	0.	0.	0.	0.	0.	0.	0.	-.0238	-.0528	.0019	-.0262	-.0031	.0309	0.
.3300	0.	0.	0.	0.	0.	0.	0.	-.0260	-.0594	.0064	-.0093	.0004	.0448	0.
.3310	0.	0.	0.	0.	0.	0.	0.	-.0279	-.0644	.0110	.0071	.0044	.0564	0.
.3320	0.	0.	0.	0.	0.	0.	0.	-.0297	-.0677	.0157	.0225	.0085	.0649	0.
.3330	0.	0.	0.	0.	0.	0.	0.	-.0313	-.0692	.0203	.0369	.0126	.0699	0.
.3340	0.	0.	0.	0.	0.	0.	0.	-.0326	-.0680	.0250	.0504	.0167	.0721	0.
.3350	0.	0.	0.	0.	0.	0.	0.	-.0336	-.0670	.0295	.0628	.0205	.0722	0.
.3360	0.	0.	0.	0.	0.	0.	0.	-.0344	-.0638	.0338	.0735	.0242	.0700	0.
.3370	0.	0.	0.	0.	0.	0.	0.	-.0350	-.0595	.0379	.0822	.0275	.0657	0.

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

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.19.

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	DIS	TYPE	VA						STRESS
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RY	RY	RZ		(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
.3380	0.	0.	0.	0.	0.	0.	0.	-.0353	-.0543	.0417	.0892	.0304	.0602	0.	0.
.3390	0.	0.	0.	0.	0.	0.	0.	-.0355	-.0487	.0452	.0951	.0329	.0543	0.	0.
.3400	0.	0.	0.	0.	0.	0.	0.	-.0354	-.0429	.0483	.1003	.0346	.0483	0.	0.
.3410	0.	0.	0.	0.	0.	0.	0.	-.0351	-.0373	.0511	.1050	.0354	.0420	0.	0.
.3420	0.	0.	0.	0.	0.	0.	0.	-.0347	-.0322	.0535	.1095	.0351	.0358	0.	0.
.3430	0.	0.	0.	0.	0.	0.	0.	-.0341	-.0278	.0554	.1139	.0339	.0304	0.	0.
.3440	0.	0.	0.	0.	0.	0.	0.	-.0333	-.0244	.0569	.1182	.0322	.0263	0.	0.
.3450	0.	0.	0.	0.	0.	0.	0.	-.0324	-.0219	.0579	.1219	.0303	.0238	0.	0.
.3460	0.	0.	0.	0.	0.	0.	0.	-.0314	-.0206	.0585	.1245	.0284	.0227	0.	0.
.3470	0.	0.	0.	0.	0.	0.	0.	-.0302	-.0203	.0587	.1256	.0268	.0234	0.	0.
.3480	0.	0.	0.	0.	0.	0.	0.	-.0290	-.0211	.0586	.1256	.0253	.0255	0.	0.
.3490	0.	0.	0.	0.	0.	0.	0.	-.0276	-.0227	.0580	.1248	.0240	.0288	0.	0.
.3500	0.	0.	0.	0.	0.	0.	0.	-.0260	-.0250	.0572	.1235	.0226	.0327	0.	0.
.3510	0.	0.	0.	0.	0.	0.	0.	-.0244	-.0279	.0560	.1221	.0209	.0368	0.	0.
.3520	0.	0.	0.	0.	0.	0.	0.	-.0225	-.0310	.0547	.1205	.0188	.0406	0.	0.
.3530	0.	0.	0.	0.	0.	0.	0.	-.0206	-.0342	.0531	.1187	.0166	.0437	0.	0.
.3540	0.	0.	0.	0.	0.	0.	0.	-.0184	-.0373	.0514	.1163	.0145	.0461	0.	0.
.3550	0.	0.	0.	0.	0.	0.	0.	-.0161	-.0400	.0496	.1132	.0127	.0479	0.	0.
.3560	0.	0.	0.	0.	0.	0.	0.	-.0135	-.0423	.0477	.1089	.0115	.0489	0.	0.
.3570	0.	0.	0.	0.	0.	0.	0.	-.0108	-.0440	.0458	.1033	.0107	.0483	0.	0.
.3580	0.	0.	0.	0.	0.	0.	0.	-.0078	-.0451	.0438	.0967	.0105	.0460	0.	0.
.3590	0.	0.	0.	0.	0.	0.	0.	-.0045	-.0454	.0420	.0899	.0104	.0421	0.	0.
.3600	0.	0.	0.	0.	0.	0.	0.	-.0011	-.0451	.0401	.0836	.0103	.0365	0.	0.
.3610	0.	0.	0.	0.	0.	0.	0.	.0026	-.0441	.0384	.0778	.0099	.0289	0.	0.
.3620	0.	0.	0.	0.	0.	0.	0.	.0065	-.0426	.0367	.0728	.0092	.0191	0.	0.
.3630	0.	0.	0.	0.	0.	0.	0.	.0106	-.0407	.0351	.0685	.0083	.0080	0.	0.
.3640	0.	0.	0.	0.	0.	0.	0.	.0149	-.0384	.0337	.0647	.0077	-.0040	0.	0.
.3650	0.	0.	0.	0.	0.	0.	0.	.0193	-.0360	.0323	.0608	.0076	-.0162	0.	0.
.3660	0.	0.	0.	0.	0.	0.	0.	.0238	-.0334	.0310	.0566	.0083	-.0286	0.	0.
.3670	0.	0.	0.	0.	0.	0.	0.	.0283	-.0310	.0298	.0518	.0095	-.0406	0.	0.
.3680	0.	0.	0.	0.	0.	0.	0.	.0328	-.0287	.0287	.0468	.0113	-.0519	0.	0.
.3690	0.	0.	0.	0.	0.	0.	0.	.0372	-.0266	.0277	.0422	.0131	-.0625	0.	0.
.3700	0.	0.	0.	0.	0.	0.	0.	.0416	-.0249	.0267	.0387	.0146	-.0724	0.	0.
.3710	0.	0.	0.	0.	0.	0.	0.	.0457	-.0235	.0258	.0365	.0154	-.0817	0.	0.
.3720	0.	0.	0.	0.	0.	0.	0.	.0497	-.0225	.0248	.0356	.0150	-.0903	0.	0.
.3730	0.	0.	0.	0.	0.	0.	0.	.0534	-.0218	.0239	.0361	.0137	-.0982	0.	0.
.3740	0.	0.	0.	0.	0.	0.	0.	.0568	-.0215	.0230	.0374	.0118	-.1051	0.	0.
.3750	0.	0.	0.	0.	0.	0.	0.	.0600	-.0216	.0221	.0390	.0095	-.1107	0.	0.

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

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.19.

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION 56 MEMBER 2 SEQUENCE 827 LOCATION DIS TYPE VA

.3670	0.	0.	0.	0.	0.	0.	0.	.283	-.0310	.0298	.0518	.0095	-.0406	0.
.3680	0.	0.	0.	0.	0.	0.	0.	.328	-.0287	.0287	.0468	.0113	-.0519	0.
.3690	0.	0.	0.	0.	0.	0.	0.	.0372	-.0266	.0277	.0422	.0131	-.0625	0.
.3700	0.	0.	0.	0.	0.	0.	0.	.0416	-.0249	.0267	.0387	.0146	-.0724	0.
.3710	0.	0.	0.	0.	0.	0.	0.	.0457	-.0235	.0258	.0365	.0154	-.0817	0.
.3720	0.	0.	0.	0.	0.	0.	0.	.0497	-.0225	.0248	.0356	.0150	-.0903	0.
.3730	0.	0.	0.	0.	0.	0.	0.	.0534	-.0218	.0239	.0361	.0137	-.0982	0.
.3740	0.	0.	0.	0.	0.	0.	0.	.0568	-.0215	.0230	.0374	.0118	-.1051	0.
.3750	0.	0.	0.	0.	0.	0.	0.	.0600	-.0216	.0221	.0390	.0095	-.1107	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
SHOCK
PRESSURE

ENGLISH UNITS

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

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	DIS	TYPE	VA						STRESS
TIME	FX	FY	FZ	MX	MY	MZ				DZ	RX	RY	RZ		(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)			(IN)	(IN)	(DEG)	(DEG)	(DEG)		
.3760	0.	0.	0.	0.	0.	0.	0.	.0628	-.0220	.0211	.0400	.0074	-.1147	0.	0.
.3770	0.	0.	0.	0.	0.	0.	0.	.0653	-.0227	.0200	.0397	.0056	-.1172	0.	0.
.3780	0.	0.	0.	0.	0.	0.	0.	.0674	-.0236	.0188	.0380	.0045	-.1185	0.	0.
.3790	0.	0.	0.	0.	0.	0.	0.	.0693	-.0247	.0175	.0350	.0039	-.1185	0.	0.
.3800	0.	0.	0.	0.	0.	0.	0.	.0708	-.0259	.0162	.0311	.0038	-.1174	0.	0.
.3810	0.	0.	0.	0.	0.	0.	0.	.0720	-.0273	.0147	.0267	.0038	-.1158	0.	0.
.3820	0.	0.	0.	0.	0.	0.	0.	.0729	-.0288	.0132	.0219	.0035	-.1143	0.	0.
.3830	0.	0.	0.	0.	0.	0.	0.	.0736	-.0303	.0116	.0172	.0029	-.1133	0.	0.
.3840	0.	0.	0.	0.	0.	0.	0.	.0740	-.0319	.0100	.0129	.0020	-.1126	0.	0.
.3850	0.	0.	0.	0.	0.	0.	0.	.0741	-.0333	.0083	.0088	.0008	-.1124	0.	0.
.3860	0.	0.	0.	0.	0.	0.	0.	.0739	-.0347	.0065	.0046	-.0005	-.1128	0.	0.
.3870	0.	0.	0.	0.	0.	0.	0.	.0735	-.0360	.0048	-.0000	-.0019	-.1140	0.	0.
.3880	0.	0.	0.	0.	0.	0.	0.	.0728	-.0370	.0031	-.0050	-.0031	-.1159	0.	0.
.3890	0.	0.	0.	0.	0.	0.	0.	.0717	-.0378	.0015	-.0103	-.0041	-.1181	0.	0.
.3900	0.	0.	0.	0.	0.	0.	0.	.0704	-.0382	-.0001	-.0155	-.0051	-.1204	0.	0.
.3910	0.	0.	0.	0.	0.	0.	0.	.0686	-.0384	-.0016	-.0204	-.0060	-.1229	0.	0.
.3920	0.	0.	0.	0.	0.	0.	0.	.0665	-.0381	-.0030	-.0250	-.0072	-.1256	0.	0.
.3930	0.	0.	0.	0.	0.	0.	0.	.0640	-.0375	-.0043	-.0291	-.0088	-.1281	0.	0.
.3940	0.	0.	0.	0.	0.	0.	0.	.0611	-.0365	-.0054	-.0327	-.0105	-.1303	0.	0.
.3950	0.	0.	0.	0.	0.	0.	0.	.0577	-.0351	-.0064	-.0356	-.0122	-.1318	0.	0.
.3960	0.	0.	0.	0.	0.	0.	0.	.0539	-.0333	-.0073	-.0383	-.0140	-.1322	0.	0.
.3970	0.	0.	0.	0.	0.	0.	0.	.0497	-.0312	-.0081	-.0412	-.0158	-.1316	0.	0.
.3980	0.	0.	0.	0.	0.	0.	0.	.0451	-.0289	-.0088	-.0442	-.0174	-.1298	0.	0.
.3990	0.	0.	0.	0.	0.	0.	0.	.0402	-.0264	-.0094	-.0469	-.0188	-.1265	0.	0.
.4000	0.	0.	0.	0.	0.	0.	0.	.0349	-.0239	-.0100	-.0492	-.0200	-.1212	0.	0.

MAXIMUM VALUE OF DISCONTINUITY FORCE OCCURS AT

TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	FORCE
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(LB)
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	END	TYPE	VA						STRESS
TIME	FX	FY	FZ	MX	MY	MZ				DZ	RX	RY	RZ		(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)			(IN)	(IN)	(DEG)	(DEG)	(DEG)		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.29.19.

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	56	MEMBER	2	SEQUENCE	827	LOCATION	END	TYPE	VA
---------	----	--------	---	----------	-----	----------	-----	------	----

(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(LB)
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	END	TYPE	VA	VA	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	(PSI)	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		

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DIS/ADLPIPE
S/RV PIPING KEWAUNEE CKM08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.19.

CONDITION 24
LOADS
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ENGLISH UNITS

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

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	END	TYPE	VA	VA	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	(PSI)	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.	
.0010	0.	0.	0.	0.	0.	0.	.0000	.0000	.0000	.0000	-.0000	-.0000	-.0000	0.	
.0020	0.	0.	0.	0.	0.	0.	-.0000	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.	
.0030	0.	0.	0.	0.	0.	-0.	-.0000	-.0000	-.0000	-.0000	.0000	.0000	.0000	0.	
.0040	0.	0.	-0.	0.	-0.	0.	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000	.0000	0.	
.0050	0.	0.	-0.	0.	0.	0.	-.0000	-.0000	-.0000	-.0001	-.0000	-.0000	.0000	0.	
.0060	0.	-1.	-1.	0.	0.	0.	-.0000	-.0000	.0000	-.0001	-.0001	-.0000	-.0000	0.	
.0070	1.	-2.	-1.	0.	0.	0.	-.0000	-.0000	.0000	-.0000	-.0003	-.0002	-.0000	0.	
.0080	3.	-2.	-1.	0.	0.	0.	-.0000	.0000	.0000	.0001	-.0007	-.0005	-.0000	0.	
.0090	6.	-1.	-2.	0.	0.	0.	-.0000	.0000	.0000	.0004	-.0014	-.0011	-.0000	0.	
.0100	9.	-2.	-2.	0.	0.	0.	-.0000	.0000	.0000	.0009	-.0023	-.0019	-.0000	0.	
.0110	15.	-2.	-4.	0.	0.	0.	-.0000	.0000	.0000	.0016	-.0037	-.0033	-.0000	0.	
.0120	25.	-22.	-7.	0.	-0.	0.	-.0001	.0000	.0000	.0026	-.0055	-.0054	-.0000	0.	
.0130	40.	-34.	-11.	0.	0.	0.	-.0001	.0001	.0000	.0039	-.0079	-.0086	-.0000	0.	
.0140	59.	-34.	-15.	0.	0.	0.	-.0002	.0001	.0001	.0057	-.0108	-.0126	-.0000	0.	
.0150	79.	-16.	-18.	0.	-0.	0.	-.0003	.0002	.0001	.0082	-.0141	-.0170	-.0000	0.	
.0160	96.	15.	-17.	0.	-0.	0.	-.0005	.0003	.0001	.0112	-.0175	-.0212	-.0000	0.	
.0170	105.	51.	-11.	0.	0.	0.	-.0008	.0004	.0002	.0145	-.0204	-.0246	-.0000	0.	
.0180	105.	87.	-1.	0.	0.	0.	-.0012	.0004	.0003	.0175	-.0221	-.0264	-.0000	0.	
.0190	91.	124.	12.	0.	-0.	0.	-.0016	.0003	.0003	.0195	-.0218	-.0261	-.0000	0.	
.0200	67.	161.	24.	0.	0.	0.	-.0021	.0002	.0004	.0195	-.0188	-.0233	-.0000	0.	
.0210	31.	188.	30.	0.	0.	0.	-.0027	-.0001	.0004	.0167	-.0128	-.0178	-.0000	0.	
.0220	-17.	171.	26.	0.	-0.	0.	-.0033	-.0005	.0004	.0109	-.0039	-.0098	-.0000	0.	
.0230	-64.	110.	11.	0.	-0.	0.	-.0038	-.0010	.0004	.0024	.0069	-.0007	-.0000	0.	
.0240	-98.	45.	-9.	0.	0.	-0.	-.0043	-.0016	.0004	-.0071	.0175	.0080	-.0000	0.	
.0250	-121.	34.	-23.	0.	0.	0.	-.0047	-.0022	.0004	-.0144	.0266	.0161	-.0000	0.	
.0260	-153.	71.	-20.	0.	0.	-0.	-.0050	-.0029	.0004	-.0166	.0333	.0248	-.0000	0.	
.0270	-205.	35.	-1.	0.	-0.	-0.	-.0052	-.0036	.0004	-.0142	.0371	.0339	-.0000	0.	
.0280	-238.	-116.	24.	-0.	0.	-0.	-.0052	-.0044	.0004	-.0099	.0369	.0397	-.0000	0.	
.0290	-227.	-256.	55.	-0.	0.	-0.	-.0050	-.0050	.0004	-.0039	.0337	.0410	-.0000	0.	
.0300	-232.	-309.	92.	-0.	0.	-0.	-.0047	-.0054	.0004	.0050	.0315	.0440	-.0000	0.	
.0310	-253.	-311.	117.	-0.	0.	-0.	-.0041	-.0056	.0003	.0113	.0314	.0497	-.0000	0.	
.0320	-235.	-399.	108.	-0.	-0.	-0.	-.0034	-.0056	.0001	.0083	.0329	.0528	-.0000	0.	
.0330	-176.	-614.	61.	-0.	0.	-0.	-.0025	-.0052	-.0002	-.0034	.0363	.0522	-.0000	0.	
.0340	-127.	-746.	-5.	-0.	0.	-0.	-.0014	-.0044	-.0006	-.0182	.0414	.0524	-.0000	0.	
.0350	-95.	-629.	-69.	-0.	0.	-0.	-.0003	-.0029	-.0009	-.0304	.0447	.0538	-.0000	0.	
.0360	-60.	-444.	-107.	-0.	-0.	-0.	.0009	-.0010	-.0012	-.0356	.0424	.0511	-.0000	0.	
.0370	-26.	-436.	-109.	-0.	-0.	-0.	.0022	.0012	-.0013	-.0320	.0325	.0417	-.0000	0.	

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DIS/ADLPIPE
S/RV PIPING KEWAUNEE CKM08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.19.

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	END	TYPE	VA
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.0290	-227.	-256.	55.	-0.	0.	-0.	-0.	-.0050	-.0050	.0004	-.0039	.0369	.0397	0.
.0300	-232.	-309.	92.	-0.	0.	-0.	-0.	-.0047	-.0054	.0004	.0050	.0315	.0440	0.
.0310	-253.	-311.	117.	-0.	0.	-0.	-0.	-.0041	-.0056	.0003	.0113	.0314	.0497	0.
.0320	-235.	-399.	108.	-0.	-0.	-0.	-0.	-.0074	-.0056	.0001	.0083	.0329	.0528	0.
.0330	-176.	-614.	61.	-0.	0.	-0.	-0.	-.0025	-.0052	-.0002	-.0034	.0363	.0522	0.
.0340	-127.	-746.	-5.	-0.	0.	-0.	-0.	-.0014	-.0044	-.0006	-.0182	.0414	.0524	0.
.0350	-95.	-629.	-69.	-0.	0.	-0.	-0.	-.0003	-.0029	-.0009	-.0304	.0447	.0538	0.
.0360	-60.	-444.	-107.	-0.	-0.	-0.	-0.	.0009	-.0010	-.0012	-.0356	.0424	.0511	0.
.0370	-26.	-436.	-109.	-0.	-0.	-0.	-0.	.0022	.0012	-.0013	-.0320	.0325	.0417	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

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	END	TYPE	VA						STRESS
TIME	FX	FY	FZ	MX	MY	MZ									(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
.0380	11.	-502.	-80.	-0.	-0.	-0.		.0034	.0039	-.0014	-.0209	.0150	.0265	0.	
.0390	64.	-352.	-29.	-0.	0.	-0.		.0047	.0068	-.0015	-.0033	-.0069	.0074	0.	
.0400	116.	73.	38.	-0.	-0.	-0.		.0058	.0100	-.0015	.0185	-.0269	-.0114	0.	
.0410	122.	500.	97.	-0.	-0.	-0.		.0069	.0132	-.0015	.0354	-.0397	-.0240	0.	
.0420	117.	680.	107.	-0.	0.	0.		.0079	.0159	-.0016	.0344	-.0442	-.0317	0.	
.0430	145.	612.	50.	-0.	0.	0.		.0088	.0181	-.0018	.0140	-.0394	-.0386	0.	
.0440	172.	569.	-51.	-0.	-0.	0.		.0096	.0197	-.0020	-.0156	-.0251	-.0416	0.	
.0450	157.	813.	-162.	-0.	-0.	0.		.0102	.0209	-.0022	-.0449	-.0063	-.0369	0.	
.0460	135.	1153.	-251.	0.	-0.	0.		.0107	.0214	-.0022	-.0674	.0081	-.0320	0.	
.0470	161.	1163.	-290.	0.	-0.	0.		.0111	.0210	-.0021	-.0769	.0120	-.0379	0.	
.0480	218.	879.	-268.	0.	-0.	0.		.0113	.0198	-.0017	-.0705	.0049	-.0531	0.	
.0490	257.	752.	-199.	0.	0.	0.		.0114	.0177	-.0011	-.0503	-.0092	-.0678	0.	
.0500	275.	896.	-119.	0.	-0.	0.		.0113	.0151	-.0003	-.0228	-.0239	-.0790	0.	
.0510	299.	939.	-60.	0.	0.	0.		.0109	.0118	.0005	.0016	-.0335	-.0891	0.	
.0520	333.	658.	-44.	0.	0.	0.		.0103	.0078	.0015	.0113	-.0360	-.0961	0.	
.0530	359.	248.	-78.	0.	-0.	0.		.0094	.0033	.0024	.0032	-.0302	-.0954	0.	
.0540	350.	-41.	-146.	0.	-0.	0.		.0083	-.0014	.0034	-.0140	-.0151	-.0859	0.	
.0550	307.	-174.	-218.	0.	-0.	0.		.0068	-.0060	.0045	-.0314	.0051	-.0704	0.	
.0560	258.	-282.	-268.	0.	-0.	0.		.0052	-.0104	.0058	-.0456	.0217	-.0548	0.	
.0570	227.	-518.	-276.	0.	-0.	0.		.0033	-.0146	.0073	-.0517	.0289	-.0449	0.	
.0580	203.	-840.	-231.	0.	-0.	-0.		.0013	-.0183	.0090	-.0428	.0266	-.0426	0.	
.0590	164.	-975.	-134.	0.	-0.	-0.		-.0009	-.0213	.0109	-.0188	.0176	-.0427	0.	
.0600	98.	-813.	-4.	-0.	-0.	-0.		-.0032	-.0236	.0129	.0117	.0055	-.0396	0.	
.0610	13.	-631.	124.	-0.	-0.	-0.		-.0056	-.0252	.0149	.0384	-.0039	-.0331	0.	
.0620	-81.	-696.	216.	-0.	-0.	-0.		-.0079	-.0262	.0167	.0525	-.0058	-.0237	0.	
.0630	-178.	-892.	253.	-0.	-0.	-0.		-.0102	-.0267	.0184	.0493	.0016	-.0092	0.	
.0640	-283.	-957.	243.	-0.	-0.	-0.		-.0123	-.0265	.0199	.0321	.0175	.0122	0.	
.0650	-391.	-044.	204.	-0.	0.	-0.		-.0142	-.0255	.0211	.0099	.0384	.0372	0.	
.0660	-484.	-693.	159.	-0.	-0.	-0.		-.0158	-.0239	.0222	-.0091	.0566	.0589	0.	
.0670	-538.	-629.	143.	-0.	0.	-0.		-.0169	-.0217	.0232	-.0181	.0640	.0720	0.	
.0680	-560.	-655.	187.	-0.	-0.	-0.		-.0176	-.0190	.0240	-.0096	.0576	.0749	0.	
.0690	-561.	-641.	287.	-0.	0.	-0.		-.0179	-.0159	.0247	.0185	.0398	.0691	0.	
.0700	-534.	-461.	408.	-0.	0.	-0.		-.0177	-.0122	.0252	.0581	.0154	.0572	0.	
.0710	-477.	-201.	513.	-0.	0.	-0.		-.0171	-.0082	.0253	.0962	-.0091	.0431	0.	
.0720	-410.	-61.	573.	0.	0.	-0.		-.0161	-.0040	.0250	.1218	-.0264	.0316	0.	
.0730	-345.	-49.	563.	0.	0.	0.		-.0148	.0002	.0242	.1275	-.0316	.0260	0.	
.0740	-278.	0.	475.	0.	0.	0.		-.0132	.0044	.0230	.1126	-.0243	.0271	0.	
.0750	-218.	138.	338.	0.	0.	0.		-.0114	.0086	.0215	.0844	-.0074	.0340	0.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.29.19.

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 56 MEMBER 2 SEQUENCE 827 LOCATION END TYPE VA

.0670	-538.	-629.	143.	-0.	0.	-0.	-0.169	-.0217	.0232	-.0181	.0640	.0720	0.
.0680	-560.	-655.	187.	-0.	0.	-0.	-0.176	-.0190	.0240	-.0096	.0576	.0749	0.
.0690	-561.	-641.	287.	-0.	0.	-0.	-0.179	-.0159	.0247	.0185	.0398	.0691	0.
.0700	-534.	-461.	408.	-0.	0.	-0.	-0.177	-.0122	.0252	.0581	.0154	.0572	0.
.0710	-477.	-201.	513.	-0.	0.	-0.	-0.171	-.0082	.0253	.0962	-.0091	.0431	0.
.0720	-410.	-61.	573.	0.	0.	-0.	-0.161	-.0040	.0250	.1218	-.0264	.0316	0.
.0730	-345.	-49.	563.	0.	0.	0.	-0.148	.0002	.0242	.1275	-.0316	.0260	0.
.0740	-278.	0.	475.	0.	0.	0.	-0.132	.0044	.0230	.1126	-.0243	.0271	0.
.0750	-218.	138.	378.	0.	0.	0.	-0.114	.0086	.0215	.0844	-.0074	.0340	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
SHOCK
PRESSURE

ENGLISH UNITS

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

SECTION	56	MEMBER	2	SEQUENCE	827	LOCATION	END	TYPE	VA						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	PX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.0760	-174.	273.	195.	0.	0.	0.	-.0095	.0126	.0196	.0534	.0125	.0435	0.		
.0770	-131.	343.	74.	0.	0.	0.	-.0074	.0164	.0177	.0277	.0273	.0497	0.		
.0780	-69.	368.	-8.	0.	0.	0.	-.0052	.0199	.0157	.0143	.0315	.0475	0.		
.0790	3.	413.	-36.	0.	0.	0.	-.0030	.0231	.0137	.0181	.0246	.0371	0.		
.0800	72.	554.	-18.	0.	0.	0.	-.0008	.0260	.0117	.0360	.0095	.0217	0.		
.0810	145.	775.	11.	0.	0.	0.	.0013	.0283	.0098	.0577	-.0089	.0040	0.		
.0820	220.	919.	15.	0.	0.	0.	.0033	.0300	.0078	.0728	-.0243	-.0136	0.		
.0830	269.	889.	-18.	-0.	0.	0.	.0051	.0310	.0059	.0746	-.0311	-.0258	0.		
.0840	277.	790.	-91.	-0.	0.	0.	.0067	.0313	.0040	.0601	-.0273	-.0283	0.		
.0850	255.	752.	-198.	-0.	0.	0.	.0081	.0309	.0021	.0324	-.0146	-.0222	0.		
.0860	215.	745.	-317.	-0.	-0.	-0.	.0093	.0300	.0005	-.0002	.0034	-.0123	0.		
.0870	161.	687.	-416.	-0.	-0.	0.	.0103	.0284	-.0009	-.0294	.0207	-.0022	0.		
.0880	110.	573.	-470.	-0.	-0.	0.	.0111	.0263	-.0019	-.0497	.0317	.0048	0.		
.0890	73.	448.	-474.	-0.	-0.	-0.	.0119	.0238	-.0026	-.0577	.0349	.0064	0.		
.0900	47.	353.	-438.	-0.	0.	-0.	.0126	.0209	-.0029	-.0536	.0325	.0035	0.		
.0910	20.	309.	-384.	-0.	0.	-0.	.0133	.0178	-.0028	-.0441	.0278	-.0001	0.		
.0920	-3.	248.	-338.	-0.	0.	-0.	.0140	.0144	-.0024	-.0378	.0240	-.0024	0.		
.0930	-15.	78.	-323.	-0.	0.	-0.	.0146	.0109	-.0018	-.0394	.0240	-.0035	0.		
.0940	-21.	-156.	-344.	-0.	-0.	-0.	.0153	.0073	-.0009	-.0479	.0284	-.0033	0.		
.0950	-29.	-322.	-378.	-0.	-0.	-0.	.0160	.0039	.0003	-.0585	.0340	-.0014	0.		
.0960	-39.	-402.	-391.	-0.	-0.	-0.	.0167	.0007	.0018	-.0632	.0363	.0002	0.		
.0970	-44.	-497.	-355.	-0.	-0.	0.	.0175	-.0021	.0036	-.0552	.0314	-.0030	0.		
.0980	-36.	-634.	-265.	-0.	-0.	-0.	.0182	-.0045	.0056	-.0326	.0175	-.0126	0.		
.0990	-22.	-742.	-126.	-0.	-0.	0.	.0190	-.0064	.0079	.0019	-.0038	-.0266	0.		
.1000	-16.	-775.	39.	-0.	0.	-0.	.0199	-.0077	.0102	.0427	-.0274	-.0409	0.		
.1010	-26.	-754.	199.	-0.	-0.	-0.	.0207	-.0083	.0124	.0819	-.0474	-.0523	0.		
.1020	-50.	-733.	325.	-0.	0.	0.	.0215	-.0084	.0145	.1107	-.0502	-.0583	0.		
.1030	-88.	-761.	409.	0.	0.	0.	.0224	-.0078	.0164	.1256	-.0541	-.0578	0.		
.1040	-139.	-822.	461.	-0.	0.	0.	.0234	-.0067	.0178	.1291	-.0595	-.0514	0.		
.1050	-196.	-824.	493.	0.	0.	0.	.0245	-.0048	.0189	.1263	-.0493	-.0410	0.		
.1060	-240.	-734.	514.	-0.	0.	0.	.0257	-.0024	.0196	.1219	-.0373	-.0300	0.		
.1070	-255.	-636.	537.	-0.	0.	0.	.0271	.0006	.0199	.1190	-.0268	-.0223	0.		
.1080	-230.	-571.	560.	0.	0.	0.	.0287	.0042	.0197	.1184	-.0189	-.0196	0.		
.1090	-173.	-470.	570.	0.	0.	0.	.0305	.0082	.0191	.1181	-.0130	-.0205	0.		
.1100	-118.	-357.	552.	0.	0.	0.	.0325	.0125	.0180	.1151	-.0071	-.0213	0.		
.1110	-42.	-257.	500.	0.	0.	0.	.0345	.0171	.0165	.1068	-.0008	-.0234	0.		
.1120	65.	-142.	418.	0.	0.	0.	.0365	.0218	.0146	.0928	.0052	-.0275	0.		
.1130	164.	33.	317.	0.	0.	0.	.0384	.0267	.0124	.0763	.0099	-.0309	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
SHOCK
PRESSURE

ENGLISH UNITS

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

SECTION 56 MEMBER 2 SEQUENCE 827 LOCATION END TYPE VA