

50-305

RESPONSE TO NUREG-0737 ITEM II.D.1

Docket # *50-305*

Control # *8403280048*

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

.0960	429.	4992.	254.	2049.	378.	-585.	-.0008	.0193	-.0016	-.0429	-.0023	.0277	869.
.0970	387.	6743.	287.	1657.	286.	-1017.	-.0011	.0241	-.0015	-.0417	-.0013	.0291	789.
.0980	342.	8898.	330.	1240.	178.	-1364.	-.0015	.0290	-.0014	-.0400	.0005	.0293	743.
.0990	297.	10954.	375.	822.	49.	-1600.	-.0017	.0340	-.0013	-.0379	.0032	.0282	722.
.1000	259.	12298.	413.	424.	-89.	-1702.	-.0019	.0391	-.0012	-.0354	.0062	.0257	705.
.1010	175.	12507.	437.	56.	-219.	-1652.	-.0019	.0439	-.0011	-.0325	.0078	.0216	669.
.1020	97.	11923.	439.	-283.	-320.	-1448.	-.0019	.0481	-.0011	-.0290	.0066	.0160	606.
.1030	11.	11026.	413.	-596.	-373.	-1102.	-.0017	.0513	-.0011	-.0250	.0010	.0093	525.
.1040	-68.	9838.	394.	-893.	-377.	-645.	-.0015	.0535	-.0011	-.0205	-.0085	.0016	467.
.1050	-137.	8682.	264.	-1189.	-349.	-108.	-.0011	.0549	-.0011	-.0155	-.0200	-.0066	499.
.1060	-201.	8071.	159.	-1500.	-314.	476.	-.0008	.0542	-.0011	-.0100	-.0312	-.0150	644.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.41.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	38	MEMBER	1	SEQUENCE	60	LOCATION	END	TYPE	RU						
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)		
.1070	-261.	8122.	60.	-1852.	-298.	1073.	-.0004	.0526	-.0010	-.0044	-.0398	-.0233	867.		
.1080	-307.	7676.	-10.	-2273.	-303.	1650.	.0000	.0499	-.0008	.0014	-.0457	-.0309	1134.		
.1090	-337.	5481.	-35.	-2791.	-335.	2177.	.0004	.0456	-.0005	.0073	-.0489	-.0378	1427.		
.1100	-387.	5225.	8.	-3409.	-454.	2644.	.0008	.0399	.0000	.0133	-.0459	-.0437	1741.		
.1110	-432.	5957.	96.	-4106.	-571.	3029.	.0011	.0339	.0007	.0193	-.0421	-.0482	2060.		
.1120	-434.	5496.	189.	-4844.	-625.	3300.	.0013	.0286	.0013	.0251	-.0409	-.0511	2365.		
.1130	-417.	5321.	263.	-5582.	-658.	3447.	.0015	.0239	.0020	.0306	-.0388	-.0523	2646.		
.1140	-417.	7048.	306.	-6263.	-689.	3478.	.0016	.0189	.0026	.0359	-.0339	-.0518	2888.		
.1150	-418.	8507.	310.	-6822.	-699.	3396.	.0015	.0144	.0030	.0403	-.0280	-.0497	3071.		
.1160	-387.	7033.	286.	-7209.	-709.	3205.	.0014	.0117	.0033	.0434	-.0205	-.0459	3179.		
.1170	-336.	4011.	267.	-7409.	-739.	2944.	.0012	.0105	.0033	.0448	-.0111	-.0406	3213.		
.1180	-289.	3464.	288.	-7437.	-783.	2666.	.0009	.0102	.0032	.0448	-.0005	-.0343	3186.		
.1190	-209.	4610.	349.	-7318.	-715.	2411.	.0007	.0113	.0031	.0433	.0036	-.0271	3105.		
.1200	-50.	4506.	436.	-7092.	-526.	2189.	.0005	.0145	.0028	.0405	.0015	-.0195	2986.		
.1210	152.	3672.	549.	-6803.	-315.	2023.	.0004	.0192	.0025	.0369	-.0002	-.0117	2851.		
.1220	332.	4114.	687.	-6471.	-76.	1944.	.0003	.0242	.0022	.0331	-.0027	-.0044	2711.		
.1230	477.	4518.	826.	-6096.	158.	1943.	.0003	.0296	.0020	.0294	-.0055	.0021	2568.		
.1240	611.	2807.	933.	-5672.	355.	1983.	.0003	.0360	.0016	.0262	-.0082	.0077	2416.		
.1250	724.	695.	978.	-5203.	470.	2042.	.0002	.0428	.0012	.0239	-.0085	.0124	2251.		
.1260	792.	1012.	944.	-4703.	499.	2106.	.0002	.0487	.0007	.0228	-.0050	.0160	2078.		
.1270	836.	2785.	821.	-4198.	543.	2158.	.0002	.0537	.0002	.0230	-.0027	.0187	1907.		
.1280	887.	3282.	630.	-3729.	578.	2169.	.0002	.0581	-.0003	.0244	.0006	.0204	1747.		
.1290	925.	2894.	428.	-3342.	591.	2143.	.0001	.0614	-.0008	.0269	.0047	.0212	1611.		
.1300	915.	3705.	280.	-3062.	613.	2101.	.0001	.0623	-.0010	.0304	.0057	.0208	1510.		
.1310	872.	4884.	209.	-2886.	642.	2035.	.0001	.0608	-.0009	.0346	.0018	.0194	1440.		
.1320	835.	4259.	189.	-2782.	699.	1919.	.0001	.0578	-.0007	.0393	-.0086	.0170	1385.		
.1330	791.	2651.	175.	-2712.	722.	1738.	.0001	.0530	-.0005	.0444	-.0198	.0137	1325.		
.1340	690.	2288.	121.	-2637.	705.	1502.	.0001	.0460	-.0002	.0499	-.0284	.0095	1250.		
.1350	524.	2825.	-8.	-2526.	671.	1228.	-.0000	.0374	.0000	.0556	-.0337	.0046	1159.		
.1360	327.	2461.	-213.	-2373.	607.	945.	-.0002	.0286	.0001	.0612	-.0345	-.0012	1054.		
.1370	122.	1663.	-453.	-2198.	545.	715.	-.0003	.0196	.0001	.0664	-.0347	-.0076	953.		
.1380	-76.	1905.	-669.	-2036.	474.	598.	-.0004	.0103	.0001	.0711	-.0354	-.0147	873.		
.1390	-229.	2405.	-819.	-1922.	430.	623.	-.0003	.0012	.0002	.0750	-.0391	-.0223	829.		
.1400	-309.	1458.	-891.	-1880.	428.	782.	.0000	-.0066	.0004	.0778	-.0455	-.0301	835.		
.1410	-344.	-172.	-887.	-1919.	443.	1062.	.0004	-.0128	.0006	.0793	-.0504	-.0378	898.		
.1420	-379.	-437.	-819.	-2028.	520.	1449.	.0008	-.0176	.0009	.0797	-.0550	-.0454	1022.		
.1430	-416.	377.	-711.	-2186.	630.	1932.	.0012	-.0206	.0012	.0790	-.0579	-.0525	1190.		
.1440	-426.	560.	-585.	-2370.	725.	2359.	.0016	-.0213	.0014	.0773	-.0576	-.0588	1373.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.41.

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

CONDITION 24
LOADS
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ENGLISH UNITS

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

.1340	690.	2238.	121.	-2637.	705.	1502.	.0001	.0460	-.0002	.0499	-.0284	.0095	1250.
.1350	524.	2825.	-8.	-2526.	671.	1228.	-.0000	.0374	.0000	.0556	-.0337	.0046	1159.
.1360	327.	2461.	-213.	-2373.	607.	945.	-.0002	.0286	.0001	.0612	-.0345	-.0012	1054.
.1370	127.	1663.	-453.	-2198.	545.	715.	-.0003	.0196	.0001	.0664	-.0347	-.0076	953.
.1380	-76.	1905.	-669.	-2076.	474.	596.	-.0004	.0103	.0001	.0711	-.0354	-.0147	873.
.1390	-229.	2405.	-819.	-1922.	430.	623.	-.0003	.0012	.0002	.0750	-.0391	-.0223	829.
.1400	-309.	1458.	-891.	-1880.	428.	782.	.0000	-.0066	.0004	.0778	-.0455	-.0301	835.
.1410	-344.	-172.	-887.	-1919.	443.	1062.	.0004	-.0128	.0006	.0793	-.0504	-.0378	898.
.1420	-379.	-437.	-819.	-2028.	520.	1449.	.0008	-.0176	.0009	.0797	-.0550	-.0454	1022.
.1430	-416.	377.	-711.	-2186.	630.	1902.	.0012	-.0206	.0012	.0790	-.0579	-.0525	1190.
.1440	-426.	560.	-585.	-2370.	725.	2359.	.0016	-.0213	.0014	.0773	-.0576	-.0588	1373.

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DIS/ADLPIPE

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

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	PX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
38	1	60					.1450	-413.	163.	-450.	-2567.	755.	2768.	.0020	-.0198	.0015	.0748	-.0528	-.0640	1545.
							.1460	-410.	389.	-312.	-2767.	711.	3087.	.0022	-.0168	.0016	.0716	-.0436	-.0678	1688.
							.1470	-424.	954.	-181.	-2966.	685.	3271.	.0024	-.0124	.0017	.0681	-.0351	-.0700	1793.
							.1480	-443.	709.	-67.	-3166.	676.	3270.	.0024	-.0063	.0016	.0642	-.0265	-.0702	1846.
							.1490	-458.	70.	36.	-3372.	693.	3061.	.0022	.0011	.0015	.0602	-.0184	-.0683	1849.
							.1500	-470.	178.	143.	-3587.	737.	2645.	.0018	.0088	.0014	.0562	-.0118	-.0642	1813.
							.1510	-459.	664.	266.	-3802.	761.	2025.	.0014	.0169	.0014	.0522	-.0054	-.0581	1755.
							.1520	-420.	525.	404.	-4004.	759.	1215.	.0008	.0254	.0013	.0483	.0004	-.0502	1706.
							.1530	-380.	238.	550.	-4176.	699.	251.	.0001	.0338	.0013	.0445	.0078	-.0409	1702.
							.1540	-375.	938.	685.	-4303.	611.	-805.	-.0007	.0415	.0012	.0412	.0160	-.0309	1774.
							.1550	-401.	2226.	780.	-4365.	502.	-1892.	-.0016	.0479	.0012	.0384	.0250	-.0206	1920.
							.1560	-429.	2833.	810.	-4346.	345.	-2936.	-.0025	.0531	.0011	.0363	.0366	-.0106	2109.
							.1570	-447.	2788.	769.	-4227.	190.	-3837.	-.0032	.0565	.0009	.0348	.0465	-.0016	2292.
							.1580	-457.	3017.	671.	-4003.	29.	-4501.	-.0038	.0577	.0007	.0338	.0546	.0059	2417.
							.1590	-458.	3418.	533.	-3676.	-143.	-4864.	-.0041	.0568	.0005	.0333	.0508	.0115	2447.
							.1600	-440.	3519.	370.	-3257.	-281.	-4888.	-.0041	.0541	.0003	.0328	.0630	.0149	2360.
							.1610	-405.	3415.	193.	-2768.	-377.	-4570.	-.0039	.0497	.0000	.0324	.0519	.0161	2149.
							.1620	-353.	3575.	18.	-2241.	-468.	-3934.	-.0034	.0433	-.0002	.0319	.0608	.0154	1826.
							.1630	-280.	3511.	-144.	-1704.	-517.	-3024.	-.0027	.0355	-.0003	.0311	.0578	.0130	1408.
							.1640	-182.	3547.	-282.	-1184.	-534.	-1908.	-.0018	.0268	-.0004	.0300	.0535	.0093	926.
							.1650	-72.	3022.	-385.	-705.	-546.	-653.	-.0009	.0177	-.0004	.0286	.0491	.0048	444.
							.1660	31.	2980.	-450.	-281.	-533.	669.	.0001	.0087	-.0004	.0268	.0432	-.0001	361.
							.1670	131.	3322.	-493.	80.	-522.	1978.	.0011	.0003	-.0003	.0248	.0380	-.0047	822.
							.1680	243.	3354.	-536.	378.	-499.	3191.	.0019	-.0069	-.0002	.0225	.0331	-.0086	1305.
							.1690	371.	2997.	-592.	615.	-475.	4239.	.0027	-.0127	-.0001	.0199	.0299	-.0114	1729.
							.1700	500.	2871.	-656.	798.	-440.	5068.	.0033	-.0168	-.0001	.0168	.0280	-.0127	2066.
							.1710	617.	3196.	-709.	934.	-379.	5645.	.0037	-.0191	-.0001	.0132	.0258	-.0124	2301.
							.1720	718.	3523.	-724.	1028.	-353.	5947.	.0038	-.0193	-.0002	.0087	.0262	-.0106	2426.
							.1730	803.	3706.	-688.	1090.	-339.	5984.	.0038	-.0173	-.0002	.0032	.0271	-.0074	2445.
							.1740	870.	4014.	-595.	1128.	-340.	5784.	.0035	-.0136	-.0003	-.0031	.0280	-.0030	2369.
							.1750	919.	4480.	-459.	1151.	-354.	5382.	.0032	-.0084	-.0004	-.0103	.0294	.0021	2213.
							.1760	949.	4806.	-300.	1169.	-337.	4823.	.0027	-.0021	-.0005	-.0181	.0286	.0075	1996.
							.1770	953.	4926.	-137.	1192.	-298.	4154.	.0022	.0052	-.0006	-.0264	.0261	.0128	1738.
							.1780	920.	5146.	20.	1228.	-224.	3424.	.0016	.0128	-.0008	-.0347	.0204	.0176	1463.
							.1790	851.	5490.	159.	1284.	-144.	2679.	.0010	.0204	-.0011	-.0429	.0123	.0215	1194.
							.1800	762.	5638.	273.	1360.	-71.	1952.	.0004	.0276	-.0013	-.0507	.0022	.0245	955.
							.1810	660.	5553.	352.	1449.	10.	1270.	-.0000	.0342	-.0016	-.0579	-.0106	.0263	773.
							.1820	544.	5558.	399.	1527.	47.	639.	-.0004	.0397	-.0019	-.0643	-.0218	.0269	665.

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DIS/ADLPIPE

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18.28.42.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
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INTERNAL FORCES IN THE PIPING
FORCES AND MOMENTS ACT ON THE PIPING

.1720	718.	3523.	-724.	1028.	-353.	5947.	.0038	-.0193	-.0002	.0087	.0262	-.0106	2426.
.1730	803.	3706.	-683.	1090.	-339.	5934.	.0038	-.0173	-.0002	.0033	.0271	-.0074	2445.
.1740	870.	4014.	-595.	1128.	-340.	5784.	.0035	-.0136	-.0003	-.0031	.0280	-.0030	2369.
.1750	919.	4480.	-459.	1151.	-354.	5352.	.0032	-.0084	-.0004	-.0103	.0294	.0021	2213.
.1760	949.	4866.	-300.	1169.	-337.	4823.	.0027	-.0021	-.0005	-.0181	.0286	.0075	1996.
.1770	957.	4926.	-137.	1192.	-298.	4154.	.0022	.0052	-.0006	-.0264	.0261	.0128	1738.
.1780	920.	5146.	20.	1228.	-224.	3424.	.0016	.0128	-.0008	-.0347	.0204	.0176	1463.
.1790	851.	5490.	159.	1284.	-144.	2679.	.0010	.0204	-.0011	-.0429	.0123	.0215	1194.
.1800	762.	5638.	273.	1360.	-71.	1952.	.0004	.0276	-.0013	-.0507	.0022	.0245	955.
.1810	660.	5553.	352.	1449.	10.	1270.	-.0000	.0342	-.0016	-.0579	-.0106	.0263	773.
.1820	544.	5558.	399.	1527.	47.	639.	-.0004	.0397	-.0019	-.0643	-.0216	.0269	665.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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18.28.42.

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

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
38	1	60					.1830	409.	5828.	425.	1571.	60.	61.	-.0008	.0439	-.0021	-.0698	-.0312	.0265	631.
							.1840	256.	6150.	444.	1554.	68.	-474.	-.0011	.0467	-.0022	-.0743	-.0395	.0251	652.
							.1850	90.	6435.	478.	1457.	68.	-978.	-.0013	.0480	-.0023	-.0779	-.0468	.0232	705.
							.1860	-80.	6842.	542.	1273.	61.	-1462.	-.0016	.0475	-.0021	-.0804	-.0536	.0208	778.
							.1870	-246.	7242.	634.	1012.	18.	-1936.	-.0018	.0453	-.0018	-.0819	-.0587	.0184	877.
							.1880	-398.	7308.	733.	706.	-27.	-2407.	-.0019	.0415	-.0014	-.0824	-.0635	.0160	1007.
							.1890	-540.	7000.	810.	394.	-78.	-2872.	-.0021	.0363	-.0010	-.0819	-.0566	.0139	1164.
							.1900	-674.	6666.	843.	116.	-139.	-3320.	-.0023	.0300	-.0006	-.0807	-.0665	.0122	1334.
							.1910	-797.	6502.	822.	-99.	-186.	-3730.	-.0025	.0228	-.0003	-.0788	-.0642	.0109	1499.
							.1920	-892.	6313.	758.	-235.	-234.	-4073.	-.0027	.0151	-.0000	-.0765	-.0594	.0102	1640.
							.1930	-942.	6030.	676.	-294.	-281.	-4313.	-.0028	.0075	.0002	-.0739	-.0529	.0098	1738.
							.1940	-946.	5786.	605.	-287.	-321.	-4405.	-.0027	.0001	.0003	-.0714	-.0455	.0096	1776.
							.1950	-906.	5557.	565.	-227.	-354.	-4315.	-.0026	-.0068	.0005	-.0688	-.0373	.0094	1740.
							.1960	-827.	5136.	560.	-127.	-378.	-4027.	-.0024	-.0129	.0006	-.0664	-.0280	.0091	1624.
							.1970	-717.	4559.	578.	12.	-392.	-3540.	-.0020	-.0177	.0008	-.0639	-.0174	.0086	1429.
							.1980	-584.	4080.	600.	196.	-406.	-2875.	-.0015	-.0211	.0009	-.0613	-.0053	.0078	1168.
							.1990	-430.	3793.	604.	439.	-429.	-2068.	-.0009	-.0230	.0009	-.0585	.0080	.0069	866.
							.2000	-258.	3645.	568.	752.	-459.	-1165.	-.0003	-.0233	.0008	-.0554	.0217	.0060	586.
							.2010	-76.	3650.	483.	1144.	-492.	-218.	.0003	-.0220	.0006	-.0519	.0347	.0051	507.
							.2020	107.	3810.	349.	1608.	-533.	721.	.0009	-.0194	.0003	-.0479	.0471	.0045	739.
							.2030	283.	3965.	176.	2129.	-575.	1599.	.0014	-.0155	-.0002	-.0437	.0583	.0043	1093.
							.2040	453.	3936.	-19.	2682.	-603.	2363.	.0019	-.0107	-.0007	-.0393	.0671	.0047	1455.
							.2050	612.	3799.	-213.	3238.	-606.	2967.	.0022	-.0052	-.0012	-.0347	.0726	.0056	1779.
							.2060	752.	3792.	-384.	3766.	-591.	3371.	.0025	.0007	-.0017	-.0301	.0748	.0072	2042.
							.2070	862.	3979.	-521.	4242.	-563.	3546.	.0025	.0067	-.0022	-.0255	.0738	.0093	2230.
							.2080	929.	4219.	-625.	4650.	-530.	3479.	.0024	.0125	-.0026	-.0209	.0703	.0119	2340.
							.2090	943.	4382.	-708.	4983.	-505.	3177.	.0022	.0178	-.0029	-.0163	.0657	.0147	2380.
							.2100	899.	4431.	-785.	5230.	-505.	2661.	.0017	.0226	-.0032	-.0115	.0617	.0175	2363.
							.2110	805.	4347.	-867.	5380.	-528.	1970.	.0012	.0266	-.0034	-.0066	.0585	.0202	2309.
							.2120	673.	4150.	-960.	5418.	-561.	1154.	.0006	.0298	-.0036	-.0014	.0557	.0225	2234.
							.2130	517.	3980.	-1054.	5322.	-594.	268.	-.0001	.0320	-.0038	.0039	.0526	.0243	2152.
							.2140	347.	3972.	-1131.	5069.	-618.	-631.	-.0007	.0333	-.0038	.0094	.0489	.0253	2065.
							.2150	173.	4087.	-1172.	4639.	-624.	-1490.	-.0013	.0337	-.0037	.0150	.0445	.0254	1971.
							.2160	2.	4190.	-1162.	4024.	-609.	-2265.	-.0017	.0333	-.0034	.0204	.0395	.0246	1869.
							.2170	-163.	4218.	-1090.	3227.	-575.	-2924.	-.0021	.0321	-.0029	.0256	.0346	.0228	1763.
							.2180	-319.	4175.	-959.	2273.	-527.	-3443.	-.0024	.0301	-.0023	.0306	.0301	.0200	1669.
							.2190	-463.	4011.	-780.	1202.	-471.	-3815.	-.0025	.0273	-.0015	.0351	.0262	.0164	1616.
							.2200	-593.	3675.	-573.	67.	-412.	-4036.	-.0026	.0241	-.0007	.0391	.0230	.0122	1628.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.42.

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

CONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

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

.2100	899.	4431.	-785.	5230.	-505.	2661.	.0017	.0226	-.0032	-.0115	.0617	.0175	2380.
.2110	805.	4347.	-867.	5380.	-528.	1970.	.0012	.0266	-.0034	-.0066	.0585	.0202	2309.
.2120	673.	4150.	-960.	5418.	-561.	1154.	.0006	.0298	-.0036	-.0014	.0557	.0225	2234.
.2130	517.	3980.	-1054.	5322.	-594.	268.	-.0001	.0320	-.0038	.0039	.0526	.0243	2152.
.2140	347.	3972.	-1131.	5069.	-618.	-631.	-.0007	.0333	-.0038	.0094	.0489	.0253	2065.
.2150	173.	4087.	-1172.	4639.	-624.	-1490.	-.0013	.0337	-.0037	.0150	.0445	.0254	1971.
.2160	2.	4190.	-1162.	4024.	-609.	-2265.	-.0017	.0333	-.0034	.0204	.0395	.0246	1869.
.2170	-163.	4218.	-1090.	3227.	-575.	-2924.	-.0021	.0321	-.0029	.0256	.0346	.0228	1763.
.2180	-319.	4175.	-959.	2273.	-527.	-3443.	-.0024	.0301	-.0023	.0306	.0301	.0200	1669.
.2190	-463.	4011.	-780.	1202.	-471.	-3815.	-.0025	.0273	-.0015	.0351	.0262	.0164	1616.
.2200	-593.	3675.	-573.	67.	-412.	-4036.	-.0026	.0241	-.0007	.0391	.0230	.0122	1628.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

8/31/02.

18.28.42.

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	38	MEMBER	1	SEQUENCE	60	LOCATION	END	TYPE	RU	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ				(IN)	(DEG)	(DEG)	(DEG)	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)								
.2210	-707.	3281.	-360.	-1075.	-349.	-4110.	-.0026	.0207	.0002	.0426	.0202	.0074	1711.	
.2220	-801.	3006.	-164.	-2167.	-277.	-4041.	-.0025	.0171	.0010	.0455	.0175	.0024	1843.	
.2230	-867.	2873.	1.	-3157.	-192.	-3835.	-.0023	.0136	.0017	.0476	.0143	-.0027	1995.	
.2240	-897.	2757.	130.	-4007.	-90.	-3502.	-.0021	.0103	.0022	.0489	.0103	-.0076	2136.	
.2250	-885.	2568.	229.	-4691.	25.	-3057.	-.0017	.0075	.0026	.0493	.0052	-.0122	2247.	
.2260	-836.	2338.	311.	-5196.	143.	-2522.	-.0013	.0051	.0029	.0487	-.0008	-.0164	2319.	
.2270	-758.	2117.	390.	-5521.	255.	-1925.	-.0009	.0033	.0031	.0470	-.0073	-.0200	2349.	
.2280	-661.	1935.	471.	-5671.	355.	-1294.	-.0005	.0022	.0031	.0444	-.0144	-.0229	2339.	
.2290	-554.	1852.	551.	-5657.	438.	-655.	-.0001	.0019	.0030	.0410	-.0215	-.0251	2292.	
.2300	-443.	1898.	619.	-5495.	496.	-32.	.0002	.0022	.0029	.0371	-.0281	-.0265	2214.	
.2310	-333.	1992.	662.	-5206.	526.	556.	.0005	.0031	.0026	.0328	-.0336	-.0273	2112.	
.2320	-225.	2017.	669.	-4818.	531.	1096.	.0008	.0047	.0022	.0286	-.0387	-.0273	1994.	
.2330	-124.	1989.	638.	-4362.	516.	1574.	.0010	.0067	.0018	.0247	-.0431	-.0267	1873.	
.2340	-31.	1995.	575.	-3881.	485.	1978.	.0012	.0090	.0013	.0213	-.0473	-.0254	1759.	
.2350	56.	2012.	490.	-3417.	445.	2297.	.0013	.0116	.0008	.0185	-.0516	-.0234	1662.	
.2360	141.	1952.	397.	-3012.	402.	2520.	.0014	.0143	.0003	.0164	-.0560	-.0208	1584.	
.2370	221.	1800.	311.	-2706.	356.	2642.	.0014	.0171	-.0001	.0151	-.0598	-.0176	1524.	
.2380	293.	1642.	248.	-2528.	305.	2661.	.0013	.0197	-.0003	.0146	-.0623	-.0140	1478.	
.2390	349.	1506.	218.	-2495.	247.	2583.	.0012	.0221	-.0004	.0149	-.0630	-.0101	1445.	
.2400	390.	1336.	225.	-2608.	187.	2420.	.0010	.0243	-.0004	.0159	-.0619	-.0059	1430.	
.2410	417.	1132.	265.	-2853.	124.	2189.	.0008	.0261	-.0003	.0175	-.0591	-.0018	1444.	
.2420	431.	926.	327.	-3205.	60.	1914.	.0005	.0276	-.0001	.0196	-.0549	.0021	1498.	
.2430	437.	725.	395.	-3627.	0.	1620.	.0003	.0284	.0003	.0223	-.0495	.0057	1594.	
.2440	436.	484.	455.	-4082.	-53.	1333.	.0001	.0288	.0006	.0253	-.0429	.0087	1723.	
.2450	430.	183.	497.	-4534.	-97.	1080.	-.0001	.0285	.0009	.0286	-.0352	.0110	1871.	
.2460	419.	-128.	520.	-4957.	-128.	879.	-.0002	.0278	.0012	.0320	-.0269	.0124	2021.	
.2470	404.	-449.	532.	-5331.	-148.	743.	-.0003	.0264	.0015	.0353	-.0182	.0129	2161.	
.2480	385.	-765.	544.	-5649.	-162.	678.	-.0003	.0244	.0017	.0385	-.0095	.0124	2284.	
.2490	362.	-1015.	565.	-5906.	-172.	682.	-.0002	.0220	.0019	.0415	-.0011	.0110	2387.	
.2500	335.	-1239.	597.	-6102.	-174.	748.	-.0001	.0191	.0022	.0442	.0065	.0088	2468.	
.2510	303.	-1505.	634.	-6234.	-165.	863.	.0000	.0160	.0024	.0469	.0129	.0058	2527.	
.2520	263.	-1781.	663.	-6298.	-144.	1010.	.0002	.0126	.0026	.0495	.0180	.0022	2560.	
.2530	214.	-2015.	670.	-6286.	-113.	1172.	.0004	.0092	.0028	.0521	.0215	-.0017	2566.	
.2540	159.	-2260.	642.	-6191.	-75.	1329.	.0005	.0059	.0029	.0548	.0234	-.0058	2541.	
.2550	104.	-2567.	571.	-6005.	-34.	1466.	.0007	.0028	.0030	.0575	.0236	-.0098	2481.	
.2560	55.	-2961.	455.	-5728.	4.	1567.	.0008	-.0001	.0029	.0602	.0223	-.0136	2383.	
.2570	12.	-3582.	302.	-5364.	39.	1623.	.0009	-.0028	.0028	.0628	.0197	-.0171	2249.	
.2580	-29.	-4310.	125.	-4920.	71.	1628.	.0010	-.0053	.0026	.0650	.0163	-.0201	2080.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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18.28.42.

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

.2480	385.	-765.	544.	-5649.	-162.	678.	-.0003	.0244	.0017	.0385	-.0095	.0124	2284.
.2490	362.	-1015.	565.	-5906.	-172.	682.	-.0002	.0220	.0019	.0415	-.0011	.0110	2387.
.2500	335.	-1239.	597.	-6102.	-174.	748.	-.0001	.0191	.0022	.0442	.0065	.0088	2468.
.2510	303.	-1505.	634.	-6274.	-165.	863.	.0000	.0160	.0024	.0469	.0129	.0058	2527.
.2520	267.	-1781.	667.	-6292.	-144.	1010.	.0002	.0126	.0026	.0495	.0180	.0022	2560.
.2530	214.	-2015.	670.	-6286.	-113.	1172.	.0004	.0092	.0028	.0521	.0215	-.0017	2566.
.2540	159.	-2260.	642.	-6191.	-75.	1329.	.0005	.0059	.0029	.0548	.0234	-.0058	2541.
.2550	104.	-2567.	571.	-6005.	-34.	1466.	.0007	.0028	.0030	.0575	.0236	-.0098	2481.
.2560	55.	-2961.	455.	-5728.	4.	1567.	.0008	-.0001	.0029	.0602	.0223	-.0136	2383.
.2570	12.	-3582.	302.	-5364.	39.	1623.	.0009	-.0028	.0028	.0628	.0197	-.0171	2249.
.2580	-29.	-4310.	125.	-4920.	71.	1628.	.0010	-.0053	.0026	.0650	.0163	-.0201	2080.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.42.

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

CONDITION 24

LOADS

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ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU								
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)	
.2590	-75.	-4886.	-57.	-4407.	99.	1579.	.0010	-.0076	.0024	.0666	.0123	-.0226	1879.	
.2600	-120.	-5341.	-227.	-3834.	126.	1477.	.0009	-.0097	.0021	.0674	.0078	-.0246	1650.	
.2610	-161.	-5796.	-375.	-3208.	154.	1324.	.0009	-.0116	.0019	.0672	.0028	-.0261	1394.	
.2620	-200.	-6135.	-494.	-2530.	183.	1130.	.0008	-.0136	.0016	.0658	-.0025	-.0271	1114.	
.2630	-245.	-6288.	-586.	-1802.	215.	904.	.0007	-.0155	.0013	.0632	-.0077	-.0277	814.	
.2640	-294.	-6384.	-657.	-1026.	254.	657.	.0005	-.0175	.0010	.0593	-.0127	-.0278	499.	
.2650	-343.	-6418.	-714.	-207.	302.	401.	.0004	-.0194	.0006	.0541	-.0171	-.0276	218.	
.2660	-382.	-6448.	-763.	641.	357.	145.	.0002	-.0214	.0002	.0479	-.0208	-.0270	300.	
.2670	-406.	-6448.	-803.	1493.	419.	-102.	.0001	-.0234	-.0002	.0406	-.0237	-.0260	624.	
.2680	-418.	-6171.	-825.	2318.	489.	-333.	.0000	-.0253	-.0007	.0325	-.0255	-.0247	960.	
.2690	-417.	-5621.	-820.	3080.	569.	-549.	-.0001	-.0269	-.0011	.0238	-.0263	-.0230	1276.	
.2700	-397.	-5139.	-778.	3741.	659.	-752.	-.0001	-.0282	-.0014	.0147	-.0262	-.0209	1554.	
.2710	-358.	-5072.	-693.	4268.	753.	-950.	-.0002	-.0293	-.0017	.0055	-.0252	-.0186	1780.	
.2720	-312.	-5262.	-562.	4636.	844.	-1148.	-.0002	-.0305	-.0018	-.0034	-.0233	-.0161	1946.	
.2730	-271.	-5380.	-391.	4841.	927.	-1354.	-.0003	-.0315	-.0018	-.0118	-.0208	-.0134	2051.	
.2740	-235.	-5504.	-197.	4888.	1001.	-1575.	-.0003	-.0320	-.0017	-.0194	-.0180	-.0107	2100.	
.2750	-203.	-5716.	-2.	4797.	1061.	-1816.	-.0005	-.0322	-.0015	-.0259	-.0153	-.0079	2102.	
.2760	-179.	-5787.	171.	4593.	1101.	-2074.	-.0006	-.0323	-.0012	-.0311	-.0127	-.0053	2070.	
.2770	-172.	-5527.	310.	4300.	1119.	-2340.	-.0007	-.0324	-.0009	-.0350	-.0103	-.0029	2018.	
.2780	-181.	-5182.	407.	3977.	1117.	-2603.	-.0009	-.0324	-.0007	-.0376	-.0087	-.0008	1959.	
.2790	-200.	-5122.	466.	3632.	1091.	-2846.	-.0011	-.0320	-.0004	-.0389	-.0083	.0009	1903.	
.2800	-222.	-5240.	494.	3302.	1037.	-3051.	-.0012	-.0316	-.0002	-.0392	-.0095	.0022	1851.	
.2810	-244.	-5255.	499.	3010.	954.	-3198.	-.0014	-.0313	.0001	-.0387	-.0126	.0028	1803.	
.2820	-267.	-5181.	484.	2779.	844.	-3271.	-.0014	-.0310	.0002	-.0374	-.0175	.0027	1755.	
.2830	-290.	-5142.	447.	2630.	712.	-3262.	-.0015	-.0304	.0003	-.0357	-.0237	.0021	1705.	
.2840	-315.	-5001.	382.	2575.	561.	-3162.	-.0015	-.0294	.0004	-.0336	-.0309	.0008	1652.	
.2850	-340.	-4556.	286.	2619.	395.	-2968.	-.0014	-.0283	.0003	-.0313	-.0389	-.0011	1596.	
.2860	-358.	-3959.	158.	2758.	215.	-2682.	-.0013	-.0272	.0002	-.0289	-.0475	-.0035	1546.	
.2870	-365.	-3513.	1.	2981.	27.	-2311.	-.0011	-.0258	-.0001	-.0265	-.0566	-.0063	1514.	
.2880	-362.	-3186.	-176.	3264.	-162.	-1863.	-.0009	-.0241	-.0004	-.0242	-.0661	-.0093	1510.	
.2890	-350.	-2756.	-361.	3578.	-342.	-1348.	-.0007	-.0220	-.0007	-.0221	-.0757	-.0124	1540.	
.2900	-321.	-2281.	-541.	3883.	-503.	-781.	-.0004	-.0198	-.0011	-.0202	-.0852	-.0155	1602.	
.2910	-267.	-1966.	-704.	4142.	-637.	-182.	-.0001	-.0175	-.0014	-.0187	-.0943	-.0184	1683.	
.2920	-195.	-1721.	-834.	4320.	-740.	427.	.0002	-.0150	-.0017	-.0176	-.1027	-.0211	1767.	
.2930	-117.	-1290.	-916.	4392.	-811.	1026.	.0006	-.0123	-.0019	-.0170	-.1097	-.0234	1839.	
.2940	-40.	-728.	-943.	4344.	-855.	1591.	.0009	-.0095	-.0020	-.0169	-.1151	-.0252	1888.	
.2950	34.	-336.	-915.	4174.	-877.	2095.	.0011	-.0068	-.0019	-.0173	-.1184	-.0266	1907.	
.2960	103.	-178.	-841.	3894.	-888.	2520.	.0014	-.0042	-.0018	-.0183	-.1191	-.0275	1895.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.42.

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

.2860	-358.	-3959.	158.	2758.	215.	-2682.	-.0013	-.0272	.0002	-.0289	-.0475	-.0035	1546.
.2870	-365.	-3513.	1.	2981.	27.	-2311.	-.0011	-.0258	-.0001	-.0265	-.0566	-.0063	1514.
.2880	-362.	-3186.	-176.	3264.	-162.	-1863.	-.0009	-.0241	-.0004	-.0242	-.0561	-.0093	1510.
.2890	-350.	-2756.	-361.	3578.	-342.	-1348.	-.0007	-.0220	-.0007	-.0221	-.0757	-.0124	1540.
.2900	-321.	-2281.	-541.	3803.	-503.	-781.	-.0004	-.0198	-.0011	-.0202	-.0852	-.0155	1602.
.2910	-267.	-1966.	-704.	4142.	-637.	-182.	-.0001	-.0175	-.0014	-.0187	-.0743	-.0184	1683.
.2920	-195.	-1721.	-834.	4320.	-740.	427.	.0002	-.0150	-.0017	-.0176	-.1027	-.0211	1767.
.2930	-117.	-1290.	-916.	4392.	-811.	1026.	.0006	-.0123	-.0019	-.0170	-.1097	-.0234	1839.
.2940	-40.	-728.	-943.	4344.	-855.	1591.	.0009	-.0095	-.0020	-.0169	-.1151	-.0252	1888.
.2950	34.	-336.	-915.	4174.	-877.	2095.	.0011	-.0068	-.0019	-.0173	-.1184	-.0266	1907.
.2960	103.	-178.	-841.	3894.	-888.	2520.	.0014	-.0042	-.0018	-.0183	-.1191	-.0275	1895.

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18.28.42.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	38	MEMBER	1	SEQUENCE	60	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2970	158.	-62.	-731.	3524.	-888.	2850.	.0015	-.0020	-.0016	-.0199	-.1170	-.0279	1853.		
.2980	193.	63.	-599.	3090.	-879.	3074.	.0016	-.0001	-.0013	-.0219	-.1120	-.0278	1784.		
.2990	214.	83.	-455.	2619.	-859.	3184.	.0016	.0015	-.0011	-.0244	-.1046	-.0271	1690.		
.3000	223.	9.	-304.	2134.	-833.	3179.	.0016	.0027	-.0008	-.0274	-.0952	-.0259	1572.		
.3010	223.	9.	-145.	1655.	-802.	3060.	.0015	.0032	-.0005	-.0308	-.0845	-.0241	1433.		
.3020	215.	95.	22.	1200.	-766.	2831.	.0014	.0031	-.0003	-.0345	-.0733	-.0219	1272.		
.3030	197.	96.	196.	785.	-726.	2499.	.0012	.0025	.0000	-.0385	-.0621	-.0192	1091.		
.3040	168.	-33.	371.	422.	-687.	2076.	.0009	.0014	.0003	-.0425	-.0510	-.0161	894.		
.3050	129.	-204.	540.	124.	-654.	1576.	.0007	-.0004	.0005	-.0465	-.0403	-.0128	686.		
.3060	80.	-396.	690.	-103.	-631.	1019.	.0003	-.0027	.0007	-.0503	-.0302	-.0094	483.		
.3070	22.	-646.	810.	-250.	-617.	431.	-.0000	-.0054	.0009	-.0536	-.0213	-.0060	318.		
.3080	-43.	-866.	892.	-316.	-613.	-160.	-.0003	-.0083	.0009	-.0563	-.0137	-.0028	284.		
.3090	-112.	-925.	930.	-305.	-618.	-722.	-.0007	-.0113	.0010	-.0583	-.0077	.0003	401.		
.3100	-177.	-896.	925.	-227.	-628.	-1226.	-.0010	-.0145	.0010	-.0594	-.0037	.0029	560.		
.3110	-230.	-968.	880.	-92.	-642.	-1647.	-.0012	-.0175	.0009	-.0597	-.0017	.0050	710.		
.3120	-272.	-1148.	805.	87.	-655.	-1964.	-.0014	-.0204	.0008	-.0593	-.0015	.0066	832.		
.3130	-302.	-1303.	714.	300.	-669.	-2162.	-.0014	-.0229	.0007	-.0582	-.0029	.0076	916.		
.3140	-321.	-1416.	615.	537.	-683.	-2233.	-.0015	-.0249	.0006	-.0565	-.0056	.0080	961.		
.3150	-321.	-1582.	515.	792.	-695.	-2179.	-.0014	-.0264	.0005	-.0543	-.0093	.0079	971.		
.3160	-303.	-1774.	417.	1060.	-707.	-2007.	-.0013	-.0273	.0004	-.0519	-.0136	.0072	954.		
.3170	-269.	-1858.	322.	1340.	-715.	-1728.	-.0011	-.0276	.0002	-.0492	-.0182	.0062	923.		
.3180	-223.	-1849.	230.	1628.	-714.	-1358.	-.0008	-.0272	.0001	-.0464	-.0227	.0048	898.		
.3190	-164.	-1918.	138.	1922.	-702.	-920.	-.0005	-.0262	-.0001	-.0435	-.0271	.0032	900.		
.3200	-91.	-2150.	49.	2214.	-680.	-440.	-.0002	-.0248	-.0003	-.0406	-.0312	.0014	946.		
.3210	-7.	-2462.	-36.	2497.	-650.	58.	.0001	-.0230	-.0005	-.0377	-.0349	-.0004	1036.		
.3220	84.	-2800.	-113.	2760.	-614.	544.	.0005	-.0211	-.0007	-.0347	-.0379	-.0021	1156.		
.3230	176.	-3215.	-178.	2992.	-573.	993.	.0008	-.0189	-.0009	-.0318	-.0401	-.0037	1286.		
.3240	264.	-3680.	-230.	3180.	-530.	1379.	.0010	-.0167	-.0010	-.0289	-.0411	-.0052	1407.		
.3250	341.	-4091.	-267.	3313.	-486.	1683.	.0013	-.0147	-.0011	-.0258	-.0408	-.0065	1504.		
.3260	402.	-4405.	-288.	3382.	-443.	1889.	.0014	-.0130	-.0012	-.0227	-.0393	-.0077	1565.		
.3270	442.	-4706.	-293.	3387.	-398.	1989.	.0015	-.0117	-.0011	-.0194	-.0371	-.0088	1584.		
.3280	457.	-5065.	-287.	3333.	-355.	1977.	.0016	-.0109	-.0011	-.0160	-.0344	-.0098	1562.		
.3290	442.	-5435.	-274.	3231.	-314.	1857.	.0015	-.0108	-.0009	-.0123	-.0314	-.0109	1501.		
.3300	398.	-5793.	-264.	3100.	-277.	1634.	.0015	-.0115	-.0008	-.0085	-.0283	-.0121	1411.		
.3310	325.	-6166.	-266.	2960.	-243.	1317.	.0013	-.0130	-.0006	-.0046	-.0252	-.0133	1304.		
.3320	227.	-6549.	-286.	2831.	-214.	916.	.0012	-.0152	-.0004	-.0008	-.0219	-.0146	1197.		
.3330	105.	-6866.	-322.	2732.	-190.	442.	.0010	-.0180	-.0002	.0029	-.0184	-.0159	1113.		
.3340	-38.	-7061.	-371.	2674.	-173.	-91.	.0007	-.0215	-.0001	.0063	-.0146	-.0172	1076.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.42.

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

.3240	264.	-3680.	-230.	2180.	-530.	1379.	.0010	-.0167	-.0010	-.0289	-.0411	-.0052	1407.
.3250	341.	-4091.	-267.	3313.	-486.	1683.	.0013	-.0147	-.0011	-.0258	-.0408	-.0065	1504.
.3260	402.	-4405.	-288.	3382.	-443.	1889.	.0014	-.0130	-.0012	-.0227	-.0393	-.0077	1565.
.3270	442.	-4700.	-297.	3387.	-798.	1989.	.0015	-.0117	-.0011	-.0194	-.0371	-.0088	1584.
.3280	457.	-5065.	-287.	3333.	-355.	1977.	.0016	-.0109	-.0011	-.0160	-.0344	-.0098	1562.
.3290	442.	-5435.	-274.	3231.	-314.	1857.	.0015	-.0108	-.0009	-.0123	-.0314	-.0109	1501.
.3300	398.	-5793.	-264.	3100.	-277.	1634.	.0015	-.0115	-.0008	-.0085	-.0283	-.0121	1411.
.3310	325.	-6166.	-266.	2960.	-243.	1317.	.0013	-.0130	-.0006	-.0046	-.0252	-.0133	1304.
.3320	227.	-6549.	-286.	2831.	-214.	916.	.0012	-.0152	-.0004	-.0008	-.0219	-.0146	1197.
.3330	165.	-6866.	-322.	2732.	-190.	442.	.0010	-.0180	-.0002	.0029	-.0184	-.0159	1113.
.3340	-38.	-7061.	-371.	2674.	-173.	-91.	.0007	-.0215	-.0001	.0063	-.0146	-.0172	1076.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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S/RV PIPING KEWAUNEE GKW0RF 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.3350								-194.	-7223.	-422.	2664.	-161.	-672.	.0005	-.0255	.0000	.0093	-.0107	-.0183	1104.
.3360								-357.	-7440.	-469.	2703.	-153.	-1290.	.0002	-.0298	.0001	.0116	-.0066	-.0192	1204.
.3370								-521.	-7689.	-505.	2791.	-150.	-1935.	-.0001	-.0344	.0002	.0133	-.0025	-.0196	1364.
.3380								-681.	-7923.	-529.	2925.	-147.	-2595.	-.0004	-.0389	.0002	.0143	.0019	-.0196	1570.
.3390								-832.	-8149.	-544.	3098.	-143.	-3258.	-.0007	-.0433	.0002	.0146	.0067	-.0188	1805.
.3400								-965.	-8387.	-555.	3304.	-137.	-3912.	-.0010	-.0474	.0002	.0143	.0120	-.0173	2056.
.3410								-1074.	-8590.	-565.	3530.	-129.	-4545.	-.0013	-.0510	.0001	.0134	.0181	-.0150	2310.
.3420								-1156.	-8687.	-576.	3761.	-118.	-5140.	-.0016	-.0539	-.0000	.0120	.0249	-.0118	2556.
.3430								-1208.	-8695.	-582.	3980.	-103.	-5680.	-.0019	-.0561	-.0001	.0103	.0323	-.0079	2784.
.3440								-1225.	-8685.	-581.	4168.	-83.	-6148.	-.0021	-.0576	-.0003	.0084	.0403	-.0032	2981.
.3450								-1208.	-8717.	-566.	4305.	-58.	-6524.	-.0024	-.0583	-.0004	.0063	.0486	.0020	3137.
.3460								-1159.	-8762.	-533.	4380.	-26.	-6794.	-.0025	-.0583	-.0005	.0041	.0570	.0077	3244.
.3470								-1082.	-8772.	-480.	4384.	12.	-6940.	-.0026	-.0577	-.0005	.0020	.0654	.0135	3294.
.3480								-978.	-8735.	-410.	4320.	57.	-6952.	-.0027	-.0564	-.0005	-.0001	.0735	.0193	3285.
.3490								-852.	-8658.	-328.	4198.	105.	-6824.	-.0026	-.0546	-.0004	-.0019	.0811	.0249	3215.
.3500								-706.	-8530.	-243.	4033.	154.	-6555.	-.0025	-.0524	-.0003	-.0035	.0879	.0301	3089.
.3510								-546.	-8343.	-164.	3844.	201.	-6149.	-.0023	-.0500	-.0002	-.0048	.0937	.0348	2911.
.3520								-379.	-8127.	-101.	3651.	244.	-5616.	-.0020	-.0474	-.0002	-.0057	.0982	.0388	2690.
.3530								-207.	-7918.	-59.	3472.	282.	-4975.	-.0016	-.0447	-.0001	-.0064	.1012	.0420	2437.
.3540								-35.	-7732.	-42.	3318.	313.	-4247.	-.0012	-.0421	-.0001	-.0067	.1026	.0444	2166.
.3550								134.	-7556.	-49.	3197.	336.	-3460.	-.0008	-.0395	-.0001	-.0068	.1020	.0461	1895.
.3560								295.	-7351.	-76.	3109.	349.	-2645.	-.0003	-.0372	-.0002	-.0066	.0995	.0470	1644.
.3570								440.	-7070.	-116.	3049.	352.	-1836.	.0001	-.0350	-.0003	-.0062	.0952	.0472	1435.
.3580								565.	-6691.	-166.	3008.	344.	-1067.	.0006	-.0329	-.0004	-.0057	.0891	.0469	1288.
.3590								665.	-6252.	-221.	2974.	322.	-372.	.0010	-.0310	-.0005	-.0051	.0815	.0461	1210.
.3600								739.	-5812.	-279.	2931.	289.	220.	.0013	-.0292	-.0006	-.0043	.0726	.0449	1185.
.3610								781.	-5406.	-339.	2865.	244.	635.	.0016	-.0276	-.0007	-.0034	.0627	.0435	1186.
.3620								786.	-5011.	-397.	2759.	190.	1007.	.0017	-.0261	-.0008	-.0024	.0520	.0421	1181.
.3630								756.	-4587.	-450.	2600.	132.	1179.	.0018	-.0245	-.0009	-.0013	.0406	.0406	1147.
.3640								698.	-4157.	-497.	2375.	72.	1203.	.0017	-.0228	-.0009	-.0001	.0289	.0392	1069.
.3650								620.	-3752.	-532.	2075.	15.	1087.	.0016	-.0210	-.0008	.0010	.0169	.0380	940.
.3660								527.	-3369.	-551.	1694.	-37.	847.	.0013	-.0190	-.0008	.0019	.0052	.0369	760.
.3670								420.	-2963.	-546.	1232.	-79.	506.	.0010	-.0169	-.0006	.0027	-.0059	.0362	535.
.3680								304.	-2527.	-510.	695.	-110.	90.	.0007	-.0145	-.0004	.0031	-.0161	.0357	285.
.3690								186.	-2144.	-439.	98.	-131.	-372.	.0003	-.0119	-.0002	.0030	-.0250	.0354	163.
.3700								75.	-1874.	-336.	-540.	-141.	-853.	-.0000	-.0091	.0001	.0023	-.0324	.0353	409.
.3710								-24.	-1692.	-204.	-1193.	-142.	-1323.	-.0004	-.0063	.0004	.0010	-.0382	.0353	717.
.3720								-111.	-1514.	-52.	-1831.	-133.	-1755.	-.0008	-.0035	.0007	-.0009	-.0422	.0354	1019.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.42.

S/RV PIPING KEWAUNEE GKW0RF 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

.3610	781.	-5406.	-397.	2865.	244.	825.	.0016	-.0276	-.0007	-.0034	.0527	.0435	1186.
.3620	786.	-5011.	-397.	2759.	190.	1007.	.0017	-.0261	-.0008	-.0024	.0520	.0421	1181.
.3630	756.	-4587.	-450.	2600.	132.	1179.	.0018	-.0245	-.0009	-.0013	.0406	.0406	1147.
.3640	698.	-4157.	-497.	2375.	72.	1203.	.0017	-.0228	-.0009	-.0001	.0289	.0392	1069.
.3650	620.	-3752.	-532.	2075.	15.	1087.	.0016	-.0210	-.0008	.0010	.0169	.0380	940.
.3660	527.	-3369.	-551.	1694.	-37.	847.	.0013	-.0190	-.0008	.0019	.0052	.0369	760.
.3670	420.	-2963.	-546.	1232.	-79.	506.	.0010	-.0169	-.0006	.0027	-.0059	.0362	535.
.3680	304.	-2527.	-510.	695.	-110.	90.	.0007	-.0145	-.0004	.0031	-.0161	.0357	285.
.3690	186.	-2144.	-439.	98.	-131.	-372.	.0003	-.0119	-.0002	.0030	-.0250	.0354	163.
.3700	75.	-1874.	-336.	-540.	-141.	-853.	-.0000	-.0091	.0001	.0023	-.0324	.0353	409.
.3710	-24.	-1692.	-204.	-1103.	-142.	-1323.	-.0004	-.0063	.0004	.0010	-.0382	.0353	717.
.3720	-111.	-1514.	-52.	-1871.	-133.	-1755.	-.0008	-.0035	.0007	-.0009	-.0422	.0354	1019.

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

CONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

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

SECTION	38	MEMBER	1	SEQUENCE	60	LOCATION	END	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.3730	-184.	-1311.	111.	-2421.	-110.	-2123.	-.0010	-.0008	.0010	-.0035	-.0443	.0356	1293.	
.3740	-236.	-1154.	274.	-2936.	-75.	-2410.	-.0013	.0017	.0013	-.0068	-.0447	.0358	1525.	
.3750	-262.	-1073.	429.	-3353.	-27.	-2600.	-.0015	.0039	.0015	-.0106	-.0435	.0358	1703.	
.3760	-264.	-1030.	571.	-3655.	34.	-2686.	-.0015	.0056	.0016	-.0149	-.0411	.0358	1820.	
.3770	-243.	-982.	700.	-3835.	106.	-2664.	-.0015	.0067	.0017	-.0196	-.0378	.0356	1874.	
.3780	-203.	-900.	816.	-3892.	189.	-2538.	-.0015	.0072	.0017	-.0244	-.0336	.0353	1866.	
.3790	-147.	-762.	915.	-3832.	280.	-2317.	-.0013	.0071	.0016	-.0293	-.0289	.0347	1801.	
.3800	-76.	-565.	996.	-3666.	376.	-2017.	-.0011	.0063	.0016	-.0339	-.0236	.0340	1686.	
.3810	4.	-433.	1056.	-3409.	473.	-1652.	-.0009	.0049	.0015	-.0382	-.0177	.0330	1532.	
.3820	83.	-366.	1091.	-3075.	568.	-1242.	-.0006	.0028	.0013	-.0418	-.0113	.0318	1350.	
.3830	154.	-337.	1101.	-2681.	656.	-803.	-.0003	.0028	.0012	-.0446	-.0043	.0305	1153.	
.3840	221.	-478.	1080.	-2242.	733.	-356.	-.0000	-.0002	.0010	-.0464	.0031	.0290	957.	
.3850	287.	-836.	1026.	-1775.	796.	82.	.0003	-.0062	.0008	-.0472	.0106	.0275	781.	
.3860	351.	-1233.	940.	-1295.	843.	492.	.0006	-.0099	.0007	-.0467	.0183	.0260	651.	
.3870	405.	-1423.	824.	-815.	877.	860.	.0008	-.0136	.0005	-.0451	.0263	.0246	591.	
.3880	446.	-1353.	684.	-349.	899.	1172.	.0010	-.0171	.0003	-.0424	.0347	.0233	609.	
.3890	474.	-1167.	530.	93.	911.	1418.	.0012	-.0201	.0001	-.0388	.0434	.0221	677.	
.3900	494.	-1004.	371.	500.	913.	1590.	.0013	-.0226	-.0000	-.0344	.0522	.0211	763.	
.3910	505.	-914.	216.	866.	903.	1688.	.0014	-.0248	-.0001	-.0293	.0608	.0202	843.	
.3920	505.	-908.	75.	1191.	883.	1716.	.0014	-.0262	-.0002	-.0238	.0691	.0195	910.	
.3930	492.	-970.	-53.	1476.	858.	1681.	.0013	-.0268	-.0003	-.0179	.0770	.0190	962.	
.3940	474.	-1035.	-171.	1726.	830.	1597.	.0012	-.0264	-.0004	-.0119	.0844	.0185	1001.	
.3950	455.	-1006.	-286.	1942.	801.	1478.	.0011	-.0251	-.0005	-.0059	.0912	.0181	1031.	
.3960	442.	-855.	-401.	2125.	774.	1340.	.0009	-.0230	-.0007	.0002	.0974	.0176	1055.	
.3970	431.	-808.	-515.	2272.	750.	1198.	.0008	-.0201	-.0008	.0062	.1030	.0170	1074.	
.3980	419.	-302.	-620.	2375.	731.	1065.	.0006	-.0163	-.0010	.0119	.1077	.0161	1085.	
.3990	404.	-16.	-707.	2427.	715.	952.	.0005	-.0119	-.0011	.0174	.1113	.0149	1085.	
.4000	387.	157.	-772.	2417.	700.	869.	.0003	-.0071	-.0012	.0227	.1136	.0132	1068.	

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)	
.3470	-1082.	-8772.	-480.	4384.	12.	-6940.	-.0026	-.0577	-.0005	.0020	.0654	.0135	3294.	

SECTION	38	MEMBER	2	SEQUENCE	818	LOCATION	END	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	

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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

4000 404. 187. 152. -772. 2417. 700. 869. .0003 -.0071 -.0012 .0227 .1136 .0132 1068.

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)
.3470	-1082.	-8772.	-480.	4384.	12.	-6940.	-.0026	-.0577	-.0005	.0020	.0654	.0135	3294.

SECTION	38	MEMBER	2	SEQUENCE	818	LOCATION	END	TYPE	RU	STRESS (PSI)
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ADLPIPE PAGE 1570 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.28.42.

S/RV PIPING KIWAUNEE 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	38	MEMBER	2	SEQUENCE	818	LOCATION	END	TYPE	RU	STRESS (PSI)			
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	0.	0.	-0.	-0.	0.	-0.	.0000	.0000	-.0000	-.0000	-.0000	-.0000	0.
.0020	0.	0.	-0.	-0.	0.	-0.	.0000	.0000	-.0000	-.0000	-.0000	-.0000	0.
.0030	0.	2.	-0.	-0.	1.	-0.	.0000	.0000	.0000	-.0000	-.0000	-.0000	0.
.0040	0.	4.	-0.	0.	1.	-0.	.0000	.0000	.0000	-.0000	-.0001	.0000	0.
.0050	0.	8.	0.	0.	1.	-0.	.0000	-.0000	.0000	-.0000	-.0001	.0000	0.
.0060	0.	16.	0.	-0.	1.	-0.	.0000	-.0000	.0000	.0000	-.0001	-.0000	1.
.0070	0.	39.	0.	-0.	2.	0.	.0000	-.0000	-.0000	.0000	-.0002	-.0000	1.
.0080	0.	68.	-0.	-1.	5.	1.	.0000	-.0000	-.0000	.0000	-.0003	-.0000	2.
.0090	0.	95.	-0.	-2.	6.	1.	.0000	-.0001	.0000	.0000	-.0004	-.0000	3.
.0100	0.	108.	-1.	-2.	2.	2.	.0000	-.0002	.0000	.0000	-.0002	-.0000	1.
.0110	-0.	106.	-1.	-2.	-12.	1.	.0000	-.0003	.0000	.0000	.0006	-.0000	5.
.0120	-1.	109.	-2.	-2.	-36.	1.	.0000	-.0004	.0000	.0000	.0021	-.0000	14.
.0130	-3.	138.	-4.	0.	-72.	1.	.0000	-.0006	.0000	.0000	.0044	-.0000	29.
.0140	-6.	182.	-6.	3.	-117.	1.	.0000	-.0008	.0000	-.0000	.0074	-.0000	47.
.0150	-10.	198.	-8.	7.	-167.	-3.	.0000	-.0011	.0000	-.0001	.0108	.0000	67.
.0160	-14.	166.	-8.	13.	-216.	-13.	.0000	-.0013	.0001	-.0001	.0141	.0001	87.
.0170	-19.	104.	-6.	21.	-257.	-30.	.0001	-.0016	.0001	-.0001	.0169	.0002	104.
.0180	-23.	23.	-2.	31.	-285.	-55.	.0001	-.0019	.0001	-.0002	.0190	.0003	117.
.0190	-23.	-105.	2.	43.	-304.	-85.	.0002	-.0021	.0002	-.0003	.0204	.0005	128.
.0200	-18.	-314.	4.	59.	-319.	-116.	.0003	-.0022	.0002	-.0004	.0217	.0007	138.
.0210	-5.	-540.	2.	78.	-342.	-141.	.0003	-.0021	.0003	-.0005	.0236	.0009	152.
.0220	14.	-662.	-1.	103.	-403.	-149.	.0004	-.0018	.0003	-.0006	.0280	.0011	177.
.0230	39.	-621.	-6.	130.	-480.	-130.	.0005	-.0013	.0004	-.0008	.0337	.0011	206.
.0240	70.	-324.	-4.	154.	-525.	-75.	.0004	-.0006	.0004	-.0010	.0379	.0010	222.
.0250	100.	238.	-3.	170.	-503.	19.	.0004	.0001	.0004	-.0011	.0381	.0007	213.
.0260	125.	741.	15.	176.	-443.	142.	.0002	.0007	.0005	-.0012	.0355	.0002	199.
.0270	137.	689.	46.	173.	-416.	280.	-.0000	.0010	.0005	-.0011	.0341	-.0004	213.
.0280	133.	-111.	75.	162.	-374.	430.	-.0004	.0013	.0005	-.0009	.0312	-.0012	238.
.0290	110.	-1190.	91.	140.	-243.	581.	-.0007	.0017	.0004	-.0006	.0226	-.0020	259.
.0300	70.	-1760.	91.	102.	-125.	701.	-.0011	.0024	.0002	-.0003	.0148	-.0027	289.
.0310	26.	-1432.	72.	46.	-69.	757.	-.0014	.0033	-.0000	.0002	.0104	-.0032	306.
.0320	-6.	-723.	35.	-30.	6.	722.	-.0016	.0045	-.0004	.0007	.0053	-.0036	290.
.0330	-19.	-342.	-7.	-118.	92.	590.	-.0017	.0058	-.0008	.0011	.0001	-.0038	244.
.0340	-29.	-289.	-29.	-199.	147.	388.	-.0016	.0073	-.0011	.0016	-.0030	-.0039	185.
.0350	-54.	-75.	-14.	-264.	217.	155.	-.0015	.0088	-.0013	.0022	-.0075	-.0037	150.
.0360	-93.	387.	36.	-318.	340.	-99.	-.0014	.0100	-.0016	.0029	-.0163	-.0033	191.
.0370	-136.	632.	96.	-379.	440.	-389.	-.0012	.0109	-.0018	.0038	-.0250	-.0027	281.

ADLPIPE PAGE 1571 DIS/ADLPIPE ADLPIPE STRESS ANALYSIS 83/12/02. 18.28.42.

S/RV PIPING KIWAUNEE 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

.0270	137.	689.	46.	173.	-416.	280.	-.0000	.0010	.0005	-.0011	.0341	-.0004	213.
.0280	133.	-111.	75.	162.	-374.	430.	-.0004	.0013	.0005	-.0009	.0312	-.0012	238.
.0290	110.	-1190.	91.	140.	-243.	531.	-.0007	.0017	.0004	-.0006	.0226	-.0020	259.
.0300	70.	-1760.	91.	102.	-125.	701.	-.0011	.0024	.0002	-.0003	.0148	-.0027	289.
.0310	26.	-1472.	72.	46.	-69.	757.	-.0014	.0033	-.0000	.0002	.0104	-.0032	306.
.0320	-6.	-723.	25.	-70.	6.	722.	-.0016	.0045	-.0004	.0007	.0053	-.0036	290.
.0330	-19.	-342.	-7.	-118.	92.	590.	-.0017	.0058	-.0008	.0011	.0001	-.0038	244.
.0340	-29.	-289.	-29.	-199.	147.	388.	-.0016	.0073	-.0011	.0016	-.0030	-.0039	185.
.0350	-54.	-75.	-14.	-264.	217.	155.	-.0015	.0088	-.0013	.0022	-.0075	-.0037	150.
.0360	-93.	327.	36.	-318.	740.	-99.	-.0014	.0100	-.0016	.0029	-.0163	-.0033	191.
.0370	-134.	672.	96.	-379.	440.	-399.	-.0012	.0109	-.0018	.0038	-.0250	-.0027	281.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.42.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	38	MEMBER	2	SEQUENCE	818	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.0380	-175.	334.	134.	-466.	461.	-706.	-.0010	.0115	-.0021	.0048	-.0295	-.0022	387.		
.0390	-213.	-280.	120.	-585.	480.	-1003.	-.0008	.0119	-.0026	.0058	-.0334	-.0016	504.		
.0400	-257.	-602.	51.	-726.	558.	-1234.	-.0006	.0123	-.0031	.0068	-.0398	-.0010	617.		
.0410	-301.	-13.	-51.	-855.	590.	-1384.	-.0005	.0127	-.0037	.0076	-.0426	-.0003	694.		
.0420	-325.	1426.	-157.	-935.	575.	-1446.	-.0003	.0127	-.0042	.0082	-.0427	.0003	729.		
.0430	-305.	2583.	-243.	-942.	586.	-1422.	-.0001	.0121	-.0045	.0085	-.0450	.0007	724.		
.0440	-238.	2344.	-287.	-862.	610.	-1318.	.0000	.0110	-.0045	.0084	-.0486	.0008	678.		
.0450	-150.	1266.	-275.	-699.	579.	-1110.	.0001	.0096	-.0042	.0080	-.0490	.0006	575.		
.0460	-82.	969.	-217.	-484.	526.	-758.	.0001	.0079	-.0037	.0073	-.0477	.0004	418.		
.0470	-44.	1798.	-144.	-268.	527.	-288.	.0000	.0057	-.0031	.0065	-.0489	.0001	264.		
.0480	-17.	2443.	-89.	-103.	531.	204.	-.0002	.0032	-.0025	.0055	-.0496	-.0002	232.		
.0490	15.	2030.	-73.	-16.	440.	645.	-.0002	.0008	-.0019	.0044	-.0440	-.0006	313.		
.0500	41.	1180.	-94.	-0.	281.	1031.	-.0004	-.0016	-.0015	.0033	-.0337	-.0007	429.		
.0510	55.	708.	-136.	-28.	123.	1365.	-.0003	-.0037	-.0010	.0021	-.0229	-.0005	550.		
.0520	70.	645.	-178.	-75.	-25.	1603.	-.0001	-.0054	-.0006	.0008	-.0122	.0001	644.		
.0530	104.	878.	-199.	-120.	-171.	1691.	.0003	-.0066	-.0001	-.0006	-.0014	.0011	684.		
.0540	162.	1466.	-183.	-146.	-296.	1620.	.0010	-.0073	.0006	-.0023	.0088	.0025	663.		
.0550	237.	1980.	-121.	-145.	-395.	1405.	.0018	-.0079	.0015	-.0042	.0179	.0041	588.		
.0560	317.	1775.	-16.	-118.	-480.	1079.	.0027	-.0081	.0026	-.0062	.0267	.0058	476.		
.0570	375.	1106.	122.	-70.	-564.	717.	.0036	-.0081	.0037	-.0082	.0354	.0075	367.		
.0580	384.	738.	273.	-10.	-647.	400.	.0042	-.0079	.0047	-.0101	.0438	.0090	305.		
.0590	348.	486.	406.	38.	-723.	149.	.0047	-.0074	.0056	-.0117	.0513	.0103	297.		
.0600	301.	-392.	487.	44.	-795.	-78.	.0050	-.0061	.0063	-.0129	.0581	.0112	321.		
.0610	264.	-1498.	501.	-7.	-852.	-294.	.0051	-.0039	.0066	-.0138	.0537	.0117	362.		
.0620	235.	-1571.	460.	-96.	-873.	-456.	.0051	-.0013	.0066	-.0144	.0572	.0117	397.		
.0630	213.	-502.	389.	-190.	-840.	-535.	.0048	.0018	.0064	-.0145	.0678	.0113	407.		
.0640	208.	487.	321.	-247.	-762.	-544.	.0045	.0053	.0061	-.0145	.0655	.0104	389.		
.0650	218.	750.	288.	-235.	-673.	-497.	.0040	.0090	.0058	-.0142	.0618	.0091	349.		
.0660	225.	798.	305.	-145.	-596.	-397.	.0033	.0125	.0055	-.0135	.0572	.0074	293.		
.0670	218.	974.	360.	-4.	-534.	-271.	.0025	.0152	.0052	-.0125	.0518	.0053	240.		
.0680	188.	1011.	419.	130.	-492.	-161.	.0016	.0173	.0048	-.0110	.0463	.0029	214.		
.0690	119.	965.	441.	209.	-474.	-74.	.0004	.0187	.0041	-.0090	.0422	.0004	210.		
.0700	-0.	1269.	396.	212.	-461.	2.	-.0007	.0193	.0031	-.0066	.0388	-.0020	204.		
.0710	-152.	1822.	275.	140.	-443.	36.	-.0019	.0190	.0017	-.0037	.0355	-.0043	187.		
.0720	-298.	2129.	94.	16.	-438.	-31.	-.0029	.0180	.0002	-.0006	.0323	-.0062	176.		
.0730	-413.	2222.	-114.	-116.	-435.	-218.	-.0037	.0160	-.0015	.0026	.0280	-.0078	201.		
.0740	-492.	2484.	-309.	-212.	-377.	-488.	-.0042	.0131	-.0030	.0057	.0196	-.0089	262.		
.0750	-536.	2692.	-458.	-242.	-247.	-800.	-.0045	.0094	-.0043	.0084	.0067	-.0095	350.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.42.

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

.0650	219.	750.	288.	-275.	-673.	-497.	.0040	.0090	.0058	-.0142	.0518	.0091	349.
.0660	225.	798.	305.	-145.	-596.	-397.	.0033	.0125	.0055	-.0135	.0572	.0074	293.
.0670	218.	974.	360.	-4.	-534.	-271.	.0025	.0152	.0052	-.0125	.0518	.0053	240.
.0680	188.	1011.	419.	170.	-492.	-161.	.0016	.0173	.0048	-.0110	.0463	.0029	214.
.0690	119.	975.	441.	209.	-474.	-74.	.0004	.0167	.0041	-.0090	.0422	.0004	210.
.0700	-0.	1269.	796.	210.	-461.	2.	-.0007	.0193	.0031	-.0066	.0388	-.0020	204.
.0710	-152.	1822.	275.	140.	-443.	36.	-.0019	.0190	.0017	-.0037	.0355	-.0043	187.
.0720	-298.	2129.	94.	16.	-438.	-31.	-.0029	.0180	.0002	-.0006	.0323	-.0062	176.
.0730	-413.	2222.	-114.	-110.	-435.	-218.	-.0037	.0160	-.0015	.0026	.0280	-.0078	201.
.0740	-492.	2464.	-309.	-212.	-377.	-488.	-.0042	.0131	-.0030	.0057	.0196	-.0089	262.
.0750	-536.	2672.	-458.	-242.	-247.	-800.	-.0045	.0094	-.0043	.0084	.0067	-.0095	350.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.42.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	38	MEMBER	2	SEQUENCE	818	LOCATION	END	TYPE	RU						
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)		
.0760	-549.	2485.	-544.	-200.	-87.	-1118.	-.0045	.0054	-.0052	.0107	-.0071	-.0098	457.		
.0770	-545.	1999.	-569.	-95.	69.	-1388.	-.0043	.0011	-.0057	.0124	-.0195	-.0097	559.		
.0780	-535.	1669.	-552.	57.	207.	-1551.	-.0041	-.0034	-.0059	.0135	-.0296	-.0093	628.		
.0790	-523.	1411.	-520.	230.	300.	-1582.	-.0039	-.0077	-.0058	.0140	-.0357	-.0089	653.		
.0800	-504.	925.	-505.	404.	323.	-1474.	-.0036	-.0113	-.0055	.0139	-.0366	-.0083	627.		
.0810	-480.	424.	-522.	567.	308.	-1223.	-.0033	-.0141	-.0051	.0132	-.0337	-.0076	555.		
.0820	-448.	337.	-572.	721.	293.	-844.	-.0030	-.0160	-.0045	.0118	-.0293	-.0067	461.		
.0830	-392.	584.	-636.	880.	285.	-395.	-.0025	-.0171	-.0037	.0098	-.0240	-.0056	404.		
.0840	-301.	760.	-688.	1068.	297.	56.	-.0019	-.0172	-.0027	.0071	-.0190	-.0041	446.		
.0850	-172.	760.	-697.	1315.	361.	463.	-.0010	-.0164	-.0013	.0037	-.0169	-.0023	578.		
.0860	-18.	712.	-642.	1637.	469.	793.	.0001	-.0150	.0004	-.0003	-.0178	-.0001	754.		
.0870	143.	580.	-522.	2024.	569.	1015.	.0014	-.0130	.0025	-.0048	-.0190	.0024	937.		
.0880	291.	285.	-355.	2440.	635.	1109.	.0028	-.0106	.0048	-.0095	-.0188	.0053	1105.		
.0890	408.	-3.	-174.	2832.	674.	1079.	.0042	-.0078	.0071	-.0143	-.0174	.0083	1246.		
.0900	482.	-42.	-11.	3146.	687.	933.	.0055	-.0046	.0092	-.0189	-.0146	.0114	1345.		
.0910	516.	189.	109.	3338.	667.	673.	.0068	-.0010	.0110	-.0231	-.0104	.0145	1392.		
.0920	525.	651.	180.	3390.	628.	311.	.0079	.0028	.0125	-.0267	-.0062	.0173	1389.		
.0930	516.	1404.	213.	3310.	583.	-120.	.0088	.0067	.0135	-.0296	-.0034	.0198	1349.		
.0940	495.	2420.	224.	3123.	529.	-580.	.0096	.0108	.0142	-.0317	-.0019	.0217	1292.		
.0950	465.	3616.	234.	2862.	460.	-1030.	.0101	.0151	.0145	-.0331	-.0010	.0231	1234.		
.0960	429.	4992.	254.	2557.	378.	-1442.	.0103	.0197	.0147	-.0339	-.0004	.0237	1188.		
.0970	387.	6743.	287.	2230.	286.	-1791.	.0102	.0246	.0146	-.0342	.0002	.0236	1153.		
.0980	342.	8898.	330.	1899.	178.	-2047.	.0097	.0297	.0143	-.0339	.0014	.0227	1123.		
.0990	293.	10984.	375.	1572.	49.	-2186.	.0088	.0349	.0139	-.0333	.0035	.0209	1081.		
.1000	239.	12298.	417.	1250.	-89.	-2180.	.0075	.0401	.0132	-.0321	.0057	.0181	1009.		
.1010	175.	12507.	437.	929.	-219.	-2001.	.0058	.0449	.0124	-.0306	.0067	.0145	890.		
.1020	97.	11027.	439.	595.	-320.	-1641.	.0037	.0490	.0112	-.0284	.0049	.0100	712.		
.1030	11.	11026.	413.	230.	-373.	-1125.	.0013	.0521	.0098	-.0257	-.0009	.0049	484.		
.1040	-68.	9838.	354.	-186.	-377.	-509.	-.0013	.0542	.0081	-.0226	-.0104	-.0007	265.		
.1050	-137.	8682.	264.	-660.	-349.	167.	-.0040	.0552	.0063	-.0190	-.0218	-.0065	307.		
.1060	-201.	8071.	159.	-1183.	-314.	878.	-.0067	.0548	.0043	-.0153	-.0328	-.0124	604.		
.1070	-261.	8122.	60.	-1732.	-298.	1596.	-.0092	.0532	.0023	-.0113	-.0413	-.0181	953.		
.1080	-307.	7676.	-10.	-2294.	-303.	2265.	-.0115	.0504	.0004	-.0075	-.0472	-.0233	1299.		
.1090	-337.	5481.	-35.	-2860.	-335.	2851.	-.0136	.0460	-.0013	-.0037	-.0506	-.0281	1626.		
.1100	-367.	5225.	8.	-3393.	-454.	3419.	-.0153	.0403	-.0028	.0001	-.0482	-.0319	1942.		
.1110	-432.	5957.	96.	-3914.	-571.	3893.	-.0166	.0343	-.0041	.0037	-.0450	-.0347	2227.		
.1120	-434.	5496.	189.	-4466.	-625.	4168.	-.0173	.0291	-.0053	.0070	-.0441	-.0366	2464.		
.1130	-417.	5321.	267.	-5056.	-658.	4280.	-.0175	.0243	-.0064	.0100	-.0421	-.0373	2671.		

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ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.42.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.1030	11.	11076.	413.	230.	-373.	-1125.	.0013	.0521	.0098	-.0257	-.0009	.0049	484.
.1040	-63.	9878.	354.	-186.	-377.	-509.	-.0013	.0542	.0081	-.0226	-.0104	-.0007	265.
.1050	-137.	3682.	264.	-660.	-349.	167.	-.0040	.0552	.0063	-.0160	-.0218	-.0065	307.
.1060	-201.	8071.	159.	-1113.	-314.	878.	-.0067	.0548	.0043	-.0153	-.0328	-.0124	604.
.1070	-261.	3122.	60.	-1772.	-290.	1596.	-.0092	.0532	.0023	-.0113	-.0413	-.0181	953.
.1080	-307.	7676.	-16.	-2294.	-303.	2295.	-.0115	.0504	.0004	-.0075	-.0472	-.0233	1299.
.1090	-337.	5481.	-35.	-2860.	-335.	2851.	-.0136	.0460	-.0013	-.0037	-.0506	-.0281	1626.
.1100	-387.	5225.	8.	-3393.	-454.	3419.	-.0153	.0403	-.0028	.0001	-.0482	-.0319	1942.
.1110	-432.	5957.	96.	-3914.	-571.	3893.	-.0166	.0343	-.0041	.0037	-.0450	-.0347	2227.
.1120	-434.	5496.	189.	-4466.	-625.	4168.	-.0173	.0291	-.0053	.0070	-.0441	-.0366	2464.
.1130	-417.	5321.	267.	-5056.	-652.	4280.	-.0175	.0243	-.0064	.0100	-.0421	-.0373	2671.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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S/RV PIPING KEWAUNEE CKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
.1140	-417.	7048.	306.	-5652.	-629.	4311.	-.0173	.0194	-.0074	.0127	-.0374	-.0367	2866.							
.1150	-418.	8507.	310.	-6202.	-699.	4231.	-.0165	.0151	-.0083	.0150	-.0315	-.0349	3026.							
.1160	-387.	7033.	286.	-6637.	-709.	3980.	-.0152	.0123	-.0091	.0164	-.0241	-.0319	3118.							
.1170	-336.	4011.	267.	-6876.	-739.	3615.	-.0134	.0108	-.0095	.0171	-.0148	-.0279	3131.							
.1180	-289.	3464.	288.	-6862.	-783.	3244.	-.0112	.0105	-.0095	.0170	-.0045	-.0228	3062.							
.1190	-209.	4610.	349.	-6621.	-715.	2828.	-.0087	.0116	-.0091	.0162	-.0000	-.0169	2903.							
.1200	-50.	4506.	436.	-6221.	-526.	2289.	-.0059	.0148	-.0084	.0146	-.0012	-.0107	2668.							
.1210	152.	3672.	549.	-5705.	-315.	1718.	-.0029	.0195	-.0075	.0126	-.0018	-.0045	2394.							
.1220	332.	4114.	687.	-5097.	-76.	1280.	-.0000	.0245	-.0065	.0106	-.0031	.0018	2109.							
.1230	477.	4518.	826.	-4443.	158.	990.	.0027	.0299	-.0055	.0089	-.0047	.0078	1828.							
.1240	611.	2807.	933.	-3807.	355.	762.	.0050	.0362	-.0049	.0078	-.0064	.0130	1565.							
.1250	724.	695.	978.	-3247.	470.	594.	.0070	.0428	-.0047	.0074	-.0061	.0175	1338.							
.1260	792.	1012.	944.	-2814.	499.	522.	.0085	.0488	-.0051	.0081	-.0025	.0211	1166.							
.1270	836.	2785.	821.	-2555.	543.	485.	.0096	.0539	-.0061	.0098	.0000	.0238	1066.							
.1280	887.	3262.	630.	-2470.	578.	395.	.0103	.0584	-.0076	.0123	.0035	.0254	1030.							
.1290	925.	2894.	428.	-2486.	591.	293.	.0106	.0616	-.0094	.0155	.0077	.0259	1032.							
.1300	915.	3705.	280.	-2501.	613.	271.	.0104	.0625	-.0112	.0196	.0088	.0254	1039.							
.1310	872.	4864.	209.	-2467.	642.	291.	.0098	.0612	-.0131	.0242	.0051	.0239	1030.							
.1320	835.	4259.	189.	-2404.	699.	248.	.0087	.0581	-.0149	.0292	-.0051	.0212	1010.							
.1330	791.	2651.	175.	-2362.	722.	156.	.0072	.0532	-.0169	.0345	-.0161	.0174	993.							
.1340	690.	2288.	121.	-2394.	705.	122.	.0052	.0461	-.0189	.0401	-.0248	.0127	1003.							
.1350	524.	2825.	-8.	-2541.	671.	180.	.0028	.0376	-.0212	.0457	-.0303	.0073	1057.							
.1360	327.	2461.	-213.	-2799.	607.	291.	.0000	.0288	-.0236	.0511	-.0315	.0012	1155.							
.1370	122.	1663.	-453.	-3104.	545.	472.	-.0030	.0198	-.0259	.0561	-.0320	-.0053	1279.							
.1380	-76.	1905.	-669.	-3373.	474.	750.	-.0060	.0105	-.0279	.0606	-.0330	-.0121	1400.							
.1390	-229.	2405.	-819.	-3560.	430.	1080.	-.0091	.0014	-.0295	.0643	-.0369	-.0190	1503.							
.1400	-309.	1458.	-891.	-3663.	428.	1400.	-.0119	-.0065	-.0305	.0670	-.0433	-.0259	1583.							
.1410	-344.	-172.	-887.	-3693.	443.	1749.	-.0146	-.0128	-.0309	.0684	-.0482	-.0324	1649.							
.1420	-379.	-437.	-819.	-3666.	520.	2208.	-.0170	-.0176	-.0307	.0687	-.0524	-.0383	1730.							
.1430	-416.	377.	-711.	-3607.	630.	2733.	-.0192	-.0206	-.0300	.0678	-.0547	-.0435	1834.							
.1440	-426.	560.	-585.	-3540.	725.	3210.	-.0211	-.0212	-.0290	.0658	-.0539	-.0480	1940.							
.1450	-413.	163.	-450.	-3468.	755.	3595.	-.0225	-.0198	-.0276	.0630	-.0490	-.0516	2027.							
.1460	-410.	389.	-312.	-3391.	711.	3907.	-.0276	-.0168	-.0261	.0596	-.0400	-.0542	2095.							
.1470	-424.	954.	-181.	-3327.	685.	4120.	-.0242	-.0123	-.0244	.0558	-.0316	-.0556	2143.							
.1480	-443.	709.	-67.	-3299.	676.	4155.	-.0243	-.0062	-.0227	.0517	-.0231	-.0558	2146.							
.1490	-458.	70.	36.	-3300.	693.	3978.	-.0239	.0011	-.0210	.0473	-.0149	-.0546	2093.							
.1500	-470.	178.	143.	-3301.	737.	3584.	-.0228	.0088	-.0192	.0428	-.0081	-.0521	1978.							
.1510	-459.	664.	266.	-3271.	761.	2944.	-.0213	.0169	-.0174	.0385	-.0016	-.0484	1792.							

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S/RV PIPING KEWAUNEE CKW08F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

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

.1410	-344.	-172.	-887.	-2693.	443.	1749.	-.0146	-.0128	-.0309	.0684	-.0482	-.0324	1649.
.1420	-379.	-477.	-819.	-3666.	520.	2208.	-.0170	-.0176	-.0307	.0687	-.0524	-.0383	1730.
.1430	-416.	377.	-711.	-2607.	630.	2733.	-.0192	-.0206	-.0300	.0672	-.0547	-.0435	1834.
.1440	-426.	560.	-585.	-3540.	725.	3210.	-.0211	-.0212	-.0290	.0658	-.0539	-.0480	1940.
.1450	-417.	163.	-450.	-3468.	755.	3595.	-.0225	-.0198	-.0276	.0630	-.0490	-.0516	2027.
.1460	-410.	389.	-312.	-3391.	711.	3907.	-.0236	-.0168	-.0261	.0596	-.0400	-.0542	2095.
.1470	-424.	954.	-181.	-3327.	685.	4120.	-.0242	-.0127	-.0244	.0558	-.0316	-.0556	2143.
.1480	-447.	709.	-67.	-3299.	676.	4155.	-.0243	-.0062	-.0227	.0517	-.0231	-.0558	2146.
.1490	-458.	70.	36.	-3300.	693.	3978.	-.0239	.0011	-.0210	.0473	-.0149	-.0546	2093.
.1500	-470.	178.	143.	-3301.	737.	3584.	-.0228	.0088	-.0192	.0428	-.0081	-.0521	1978.
.1510	-459.	664.	266.	-3271.	761.	2944.	-.0217	.0169	-.0174	.0385	-.0016	-.0484	1792.

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

CONDITION 24
LOADS
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ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	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)	(DEG)	(DEG)	(DEG)	(DEG)	(DEG)	(DEG)	(PSI)
.1520	-420.	525.	404.	-3197.	759.	2055.	-.0192	.0254	-.0157	.0343	.0042	-.0439	1555.						
.1530	-380.	238.	550.	-3077.	699.	1012.	-.0168	.0339	-.0141	.0304	.0114	-.0385	1330.						
.1540	-375.	938.	685.	-2932.	611.	-56.	-.0143	.0415	-.0126	.0271	.0191	-.0326	1202.						
.1550	-401.	2226.	780.	-2805.	502.	-1091.	-.0117	.0481	-.0115	.0245	.0276	-.0264	1225.						
.1560	-429.	2833.	810.	-2726.	345.	-2077.	-.0092	.0533	-.0107	.0225	.0383	-.0203	1382.						
.1570	-447.	2788.	769.	-2690.	190.	-2943.	-.0069	.0567	-.0103	.0213	.0475	-.0148	1602.						
.1580	-457.	3017.	671.	-2661.	29.	-3587.	-.0049	.0579	-.0103	.0209	.0547	-.0098	1792.						
.1590	-458.	3418.	533.	-2609.	-143.	-3948.	-.0032	.0571	-.0105	.0210	.0601	-.0057	1900.						
.1600	-440.	3519.	370.	-2517.	-281.	-4008.	-.0018	.0544	-.0109	.0216	.0616	-.0024	1903.						
.1610	-405.	3415.	193.	-2381.	-377.	-3761.	-.0008	.0499	-.0113	.0224	.0500	-.0001	1793.						
.1620	-353.	3575.	18.	-2204.	-468.	-3227.	-.0001	.0436	-.0117	.0232	.0584	.0015	1579.						
.1630	-280.	3811.	-144.	-1992.	-517.	-2464.	.0003	.0358	-.0119	.0239	.0552	.0023	1288.						
.1640	-182.	3547.	-282.	-1749.	-534.	-1544.	.0005	.0270	-.0120	.0243	.0508	.0026	960.						
.1650	-72.	3022.	-385.	-1474.	-546.	-509.	.0006	.0180	-.0118	.0243	.0463	.0025	663.						
.1660	31.	2980.	-450.	-1181.	-533.	607.	.0006	.0089	-.0113	.0240	.0405	.0024	574.						
.1670	131.	3322.	-493.	-906.	-522.	1716.	.0007	.0005	-.0106	.0232	.0354	.0025	806.						
.1680	243.	3354.	-536.	-694.	-499.	2705.	.0009	-.0067	-.0098	.0219	.0306	.0029	1139.						
.1690	371.	2997.	-592.	-570.	-475.	3497.	.0013	-.0125	-.0089	.0200	.0275	.0037	1435.						
.1700	500.	2871.	-656.	-515.	-440.	4068.	.0020	-.0166	-.0077	.0174	.0258	.0051	1655.						
.1710	617.	3196.	-709.	-483.	-379.	4411.	.0030	-.0189	-.0063	.0141	.0239	.0071	1787.						
.1720	718.	3523.	-724.	-421.	-353.	4510.	.0041	-.0190	-.0046	.0099	.0245	.0097	1823.						
.1730	803.	3706.	-688.	-286.	-339.	4378.	.0054	-.0171	-.0024	.0049	.0253	.0128	1766.						
.1740	870.	4014.	-595.	-63.	-340.	4044.	.0069	-.0133	.0002	-.0010	.0263	.0161	1629.						
.1750	919.	4480.	-459.	233.	-354.	3544.	.0083	-.0081	.0031	-.0076	.0276	.0194	1432.						
.1760	949.	4806.	-300.	568.	-337.	2925.	.0096	-.0017	.0062	-.0148	.0269	.0225	1203.						
.1770	953.	4926.	-137.	919.	-298.	2248.	.0107	.0056	.0095	-.0223	.0246	.0252	982.						
.1780	920.	5146.	20.	1268.	-224.	1585.	.0116	.0132	.0127	-.0299	.0192	.0273	819.						
.1790	851.	5490.	159.	1603.	-144.	977.	.0121	.0208	.0158	-.0373	.0116	.0286	755.						
.1800	762.	5638.	273.	1905.	-71.	429.	.0122	.0281	.0188	-.0443	.0018	.0291	784.						
.1810	660.	5553.	352.	2152.	10.	-51.	.0119	.0347	.0214	-.0509	-.0106	.0286	864.						
.1820	544.	5558.	399.	2326.	47.	-450.	.0113	.0402	.0238	-.0568	-.0215	.0273	951.						
.1830	409.	5028.	425.	2420.	60.	-757.	.0103	.0444	.0258	-.0620	-.0309	.0251	1018.						
.1840	256.	6150.	444.	2441.	68.	-986.	.0090	.0472	.0276	-.0666	-.0392	.0223	1057.						
.1850	90.	6435.	478.	2413.	68.	-1159.	.0076	.0485	.0291	-.0704	-.0464	.0190	1075.						
.1860	-80.	6842.	542.	2357.	61.	-1301.	.0060	.0480	.0304	-.0734	-.0533	.0155	1081.						
.1870	-246.	7242.	634.	2281.	18.	-1445.	.0044	.0458	.0316	-.0755	-.0586	.0118	1083.						
.1880	-398.	7308.	733.	2173.	-27.	-1610.	.0028	.0420	.0324	-.0768	-.0536	.0082	1085.						
.1890	-540.	7000.	810.	2015.	-78.	-1793.	.0014	.0368	.0329	-.0773	-.0570	.0048	1083.						

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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

.1750	351.	5490.	159.	1603.	-144.	977.	.0121	.0208	.0158	-.0373	.0116	.0286	755.
.1800	762.	5638.	273.	1905.	-71.	429.	.0122	.0281	.0188	-.0443	.0018	.0291	784.
.1810	660.	5553.	352.	2152.	10.	-51.	.0119	.0347	.0214	-.0509	-.0106	.0286	864.
.1820	544.	5558.	399.	2326.	47.	-450.	.0113	.0402	.0238	-.0568	-.0215	.0273	951.
.1830	409.	5628.	425.	2420.	60.	-757.	.0103	.0444	.0258	-.0620	-.0309	.0251	1018.
.1840	259.	6150.	444.	2441.	68.	-986.	.0090	.0472	.0276	-.0666	-.0392	.0223	1057.
.1850	91.	6435.	478.	2413.	68.	-1159.	.0076	.0485	.0291	-.0704	-.0464	.0190	1075.
.1860	-60.	6844.	542.	2357.	61.	-1301.	.0060	.0480	.0304	-.0734	-.0533	.0155	1081.
.1870	-246.	7242.	634.	2281.	18.	-1445.	.0044	.0458	.0316	-.0755	-.0586	.0118	1083.
.1880	-398.	7308.	733.	2173.	-27.	-1610.	.0028	.0420	.0324	-.0768	-.0636	.0082	1085.
.1890	-540.	7000.	810.	2015.	-78.	-1793.	.0014	.0368	.0329	-.0773	-.0670	.0048	1083.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
36	2	818					.1900	-674.	6666.	843.	1802.	-139.	-1971.	.0002	.0305	.0330	-.0770	-.0672	.0019	1073.
							.1910	-797.	6502.	822.	1545.	-186.	-2135.	-.0008	.0232	.0327	-.0760	-.0652	-.0005	1060.
							.1920	-892.	6313.	758.	1281.	-234.	-2290.	-.0016	.0156	.0321	-.0744	-.0606	-.0022	1057.
							.1930	-942.	6030.	676.	1059.	-281.	-2428.	-.0020	.0080	.0313	-.0724	-.0543	-.0033	1069.
							.1940	-946.	5786.	605.	924.	-321.	-2513.	-.0022	.0005	.0303	-.0701	-.0471	-.0039	1082.
							.1950	-906.	5557.	565.	903.	-354.	-2504.	-.0021	-.0064	.0294	-.0675	-.0391	-.0038	1077.
							.1960	-827.	5136.	560.	992.	-378.	-2372.	-.0017	-.0125	.0284	-.0647	-.0299	-.0033	1043.
							.1970	-717.	4559.	578.	1167.	-392.	-2105.	-.0012	-.0173	.0274	-.0616	-.0194	-.0024	979.
							.1980	-584.	4080.	600.	1397.	-406.	-1707.	-.0005	-.0208	.0263	-.0582	-.0074	-.0011	900.
							.1990	-430.	3793.	604.	1646.	-429.	-1208.	.0003	-.0227	.0250	-.0545	.0059	.0005	837.
							.2000	-258.	3645.	568.	1889.	-459.	-650.	.0013	-.0230	.0233	-.0502	.0194	.0024	823.
							.2010	-76.	3650.	483.	2111.	-492.	-67.	.0023	-.0217	.0213	-.0455	.0322	.0046	870.
							.2020	107.	3810.	349.	2306.	-533.	508.	.0034	-.0191	.0190	-.0403	.0444	.0069	971.
							.2030	283.	3965.	176.	2480.	-575.	1032.	.0045	-.0152	.0164	-.0348	.0554	.0095	1102.
							.2040	453.	3936.	-19.	2644.	-603.	1457.	.0057	-.0104	.0136	-.0289	.0641	.0121	1235.
							.2050	612.	3799.	-213.	2812.	-606.	1743.	.0069	-.0049	.0107	-.0230	.0596	.0148	1350.
							.2060	752.	3792.	-384.	2998.	-591.	1866.	.0081	.0010	.0079	-.0170	.0718	.0174	1437.
							.2070	862.	3979.	-521.	3200.	-563.	1822.	.0092	.0070	.0051	-.0111	.0710	.0197	1495.
							.2080	929.	4219.	-625.	3400.	-530.	1622.	.0101	.0128	.0025	-.0053	.0676	.0218	1527.
							.2090	943.	4382.	-708.	3567.	-505.	1292.	.0108	.0182	-.0000	.0003	.0631	.0234	1536.
							.2100	899.	4431.	-785.	3661.	-505.	863.	.0111	.0230	-.0025	.0058	.0591	.0244	1523.
							.2110	805.	4347.	-867.	3646.	-528.	361.	.0112	.0270	-.0049	.0110	.0559	.0248	1485.
							.2120	673.	4150.	-960.	3499.	-561.	-192.	.0109	.0301	-.0073	.0159	.0529	.0244	1424.
							.2130	517.	3980.	-1054.	3215.	-594.	-766.	.0102	.0323	-.0096	.0205	.0496	.0233	1348.
							.2140	347.	3972.	-1131.	2807.	-618.	-1325.	.0093	.0336	-.0117	.0247	.0457	.0215	1270.
							.2150	173.	4087.	-1172.	2294.	-624.	-1836.	.0081	.0341	-.0135	.0284	.0413	.0189	1206.
							.2160	2.	4190.	-1162.	1700.	-609.	-2268.	.0067	.0337	-.0150	.0315	.0365	.0158	1164.
							.2170	-163.	4218.	-1090.	1047.	-575.	-2597.	.0051	.0324	-.0161	.0340	.0317	.0120	1147.
							.2180	-319.	4175.	-959.	356.	-527.	-2806.	.0032	.0304	-.0168	.0357	.0274	.0079	1154.
							.2190	-463.	4011.	-780.	-357.	-471.	-2889.	.0013	.0276	-.0171	.0367	.0238	.0034	1183.
							.2200	-593.	3675.	-573.	-1079.	-412.	-2851.	-.0007	.0244	-.0170	.0372	.0209	-.0012	1234.
							.2210	-707.	3281.	-360.	-1796.	-349.	-2697.	-.0027	.0209	-.0167	.0370	.0185	-.0058	1308.
							.2220	-801.	3006.	-164.	-2495.	-277.	-2440.	-.0047	.0174	-.0163	.0364	.0161	-.0102	1405.
							.2230	-867.	2873.	1.	-3155.	-192.	-2100.	-.0064	.0138	-.0157	.0353	.0134	-.0142	1523.
							.2240	-897.	2757.	130.	-3747.	-90.	-1708.	-.0080	.0105	-.0150	.0338	.0098	-.0177	1653.
							.2250	-885.	2568.	229.	-4233.	25.	-1287.	-.0092	.0077	-.0142	.0319	.0053	-.0207	1775.
							.2260	-836.	2338.	311.	-4573.	143.	-850.	-.0101	.0053	-.0133	.0297	-.0001	-.0230	1868.
							.2270	-758.	2117.	390.	-4741.	255.	-409.	-.0107	.0035	-.0122	.0270	-.0061	-.0245	1912.

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ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.42.

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

CONDITION 24

LOADS

SHOCK

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ENGLISH UNITS

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

.2170	-163.	4218.	-1090.	1047.	-575.	-2597.	.0051	.0324	-.0161	.0340	.0317	.0120	1164.
.2180	-319.	4175.	-959.	356.	-527.	-2806.	.0032	.0304	-.0168	.0357	.0274	.0079	1154.
.2190	-463.	4011.	-730.	-357.	-471.	-2889.	.0013	.0276	-.0171	.0367	.0238	.0034	1183.
.2200	-597.	3675.	-573.	-1079.	-412.	-2851.	-.0007	.0244	-.0170	.0372	.0209	-.0012	1234.
.2210	-707.	3281.	-360.	-1796.	-349.	-2697.	-.0027	.0209	-.0167	.0370	.0185	-.0058	1308.
.2220	-801.	3096.	-164.	-2495.	-277.	-2440.	-.0047	.0174	-.0163	.0364	.0161	-.0102	1405.
.2230	-867.	2873.	1.	-3155.	-192.	-2100.	-.0064	.0138	-.0157	.0353	.0134	-.0142	1523.
.2240	-897.	2757.	130.	-3747.	-90.	-1708.	-.0080	.0105	-.0150	.0338	.0098	-.0177	1653.
.2250	-885.	2568.	229.	-4233.	25.	-1287.	-.0092	.0077	-.0142	.0319	.0053	-.0207	1775.
.2260	-836.	2338.	311.	-4573.	147.	-850.	-.0101	.0053	-.0133	.0297	-.0001	-.0230	1868.
.2270	-758.	2117.	390.	-4741.	255.	-409.	-.0107	.0035	-.0122	.0270	-.0061	-.0245	1912.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.42.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	38	MEMBER	2	SEQUENCE	818	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2280	-661.	1935.	471.	-4729.	355.	29.	-.0111	.0024	-.0109	.0242	-.0126	-.0253	1903.		
.2290	-554.	1852.	551.	-4555.	438.	453.	-.0111	.0020	-.0096	.0212	-.0193	-.0255	1845.		
.2300	-443.	1898.	619.	-4257.	496.	854.	-.0108	.0023	-.0083	.0181	-.0256	-.0249	1754.		
.2310	-333.	1992.	662.	-3882.	526.	1221.	-.0104	.0033	-.0070	.0152	-.0311	-.0238	1647.		
.2320	-225.	2017.	669.	-3479.	531.	1546.	-.0097	.0048	-.0059	.0125	-.0360	-.0222	1543.		
.2330	-124.	1989.	638.	-3086.	516.	1821.	-.0088	.0068	-.0051	.0102	-.0405	-.0201	1453.		
.2340	-31.	1995.	575.	-2731.	485.	2039.	-.0078	.0092	-.0045	.0084	-.0448	-.0175	1382.		
.2350	56.	2012.	490.	-2437.	445.	2184.	-.0066	.0118	-.0042	.0071	-.0493	-.0147	1325.		
.2360	141.	1952.	397.	-2218.	402.	2239.	-.0053	.0145	-.0041	.0062	-.0539	-.0115	1275.		
.2370	221.	1800.	311.	-2083.	356.	2199.	-.0039	.0172	-.0042	.0058	-.0580	-.0082	1224.		
.2380	293.	1642.	248.	-2032.	305.	2075.	-.0025	.0198	-.0044	.0058	-.0608	-.0048	1172.		
.2390	349.	1506.	218.	-2059.	247.	1884.	-.0010	.0222	-.0047	.0061	-.0618	-.0014	1124.		
.2400	390.	1336.	225.	-2158.	187.	1640.	.0004	.0244	-.0050	.0066	-.0610	.0020	1090.		
.2410	417.	1132.	265.	-2323.	124.	1356.	.0017	.0262	-.0053	.0074	-.0585	.0051	1081.		
.2420	431.	926.	327.	-2550.	60.	1051.	.0029	.0276	-.0057	.0084	-.0546	.0079	1107.		
.2430	437.	725.	395.	-2836.	0.	745.	.0039	.0285	-.0062	.0097	-.0495	.0103	1177.		
.2440	436.	484.	455.	-3172.	-53.	461.	.0047	.0288	-.0068	.0112	-.0431	.0122	1286.		
.2450	430.	183.	497.	-3541.	-97.	219.	.0053	.0286	-.0075	.0129	-.0357	.0135	1424.		
.2460	419.	-128.	520.	-3918.	-128.	40.	.0056	.0278	-.0082	.0147	-.0275	.0142	1573.		
.2470	404.	-449.	532.	-4268.	-148.	-65.	.0056	.0264	-.0091	.0166	-.0190	.0142	1714.		
.2480	385.	-765.	544.	-4561.	-162.	-92.	.0054	.0244	-.0099	.0186	-.0104	.0135	1832.		
.2490	362.	-1015.	565.	-4776.	-172.	-42.	.0049	.0219	-.0107	.0207	-.0020	.0122	1918.		
.2500	335.	-1239.	597.	-4908.	-174.	78.	.0041	.0190	-.0115	.0228	.0056	.0104	1971.		
.2510	303.	-1505.	634.	-4967.	-165.	256.	.0031	.0158	-.0122	.0251	.0121	.0080	1997.		
.2520	263.	-1781.	663.	-4973.	-144.	484.	.0019	.0125	-.0131	.0276	.0173	.0051	2006.		
.2530	214.	-2015.	670.	-4946.	-113.	744.	.0006	.0091	-.0140	.0303	.0209	.0021	2008.		
.2540	159.	-2260.	642.	-4906.	-75.	1012.	-.0008	.0057	-.0151	.0332	.0230	-.0012	2010.		
.2550	104.	-2567.	571.	-4863.	-34.	1257.	-.0022	.0026	-.0163	.0364	.0234	-.0045	2016.		
.2560	55.	-2961.	455.	-4817.	4.	1457.	-.0036	-.0003	-.0177	.0397	.0223	-.0077	2020.		
.2570	12.	-3582.	302.	-4760.	39.	1598.	-.0049	-.0031	-.0192	.0431	.0199	-.0108	2015.		
.2580	-29.	-4310.	125.	-4670.	71.	1687.	-.0061	-.0056	-.0206	.0463	.0166	-.0137	1993.		
.2590	-75.	-4886.	-57.	-4520.	99.	1728.	-.0072	-.0080	-.0219	.0493	.0128	-.0162	1942.		
.2600	-120.	-5341.	-227.	-4288.	126.	1717.	-.0082	-.0101	-.0230	.0516	.0084	-.0184	1854.		
.2610	-161.	-5796.	-375.	-3957.	154.	1646.	-.0090	-.0121	-.0236	.0533	.0036	-.0203	1721.		
.2620	-200.	-6135.	-494.	-3518.	183.	1530.	-.0096	-.0140	-.0238	.0541	-.0016	-.0219	1541.		
.2630	-245.	-6288.	-586.	-2974.	215.	1393.	-.0102	-.0160	-.0236	.0539	-.0066	-.0232	1321.		
.2640	-294.	-6384.	-657.	-2340.	254.	1245.	-.0106	-.0180	-.0229	.0528	-.0114	-.0241	1068.		
.2650	-347.	-6418.	-714.	-1635.	302.	1086.	-.0108	-.0199	-.0218	.0506	-.0156	-.0247	797.		

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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

.2550	104.	-2567.	571.	-4863.	-34.	1257.	-.0022	.0026	-.0163	.0364	.0234	-.0045	2016.
.2560	55.	-2961.	455.	-4817.	4.	1457.	-.0036	-.0003	-.0177	.0397	.0223	-.0077	2020.
.2570	12.	-3582.	302.	-4760.	39.	1598.	-.0049	-.0031	-.0192	.0431	.0199	-.0108	2015.
.2580	-29.	-4310.	125.	-4670.	71.	1687.	-.0061	-.0056	-.0206	.0463	.0166	-.0137	1993.
.2590	-75.	-4836.	-57.	-4520.	99.	1728.	-.0072	-.0080	-.0219	.0493	.0128	-.0162	1942.
.2600	-120.	-5341.	-227.	-4288.	126.	1717.	-.0082	-.0101	-.0230	.0516	.0084	-.0184	1854.
.2610	-161.	-5796.	-375.	-3957.	154.	1646.	-.0090	-.0121	-.0236	.0533	.0036	-.0203	1721.
.2620	-200.	-6135.	-494.	-3518.	183.	1530.	-.0096	-.0140	-.0238	.0541	-.0016	-.0219	1541.
.2630	-245.	-6288.	-586.	-2974.	215.	1393.	-.0102	-.0160	-.0236	.0539	-.0066	-.0232	1321.
.2640	-294.	-6384.	-657.	-2340.	254.	1245.	-.0106	-.0180	-.0229	.0528	-.0114	-.0241	1068.
.2650	-347.	-6418.	-714.	-1635.	302.	1086.	-.0108	-.0199	-.0218	.0506	-.0156	-.0247	797.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.42.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	38	MEMBER	2	SEQUENCE	818	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2660	-382.	-6448.	-763.	-886.	357.	908.	-.0109	-.0219	-.0202	.0474	-.0190	-.0249	529.		
.2670	-406.	-6448.	-803.	-113.	419.	711.	-.0108	-.0239	-.0183	.0433	-.0216	-.0248	334.		
.2680	-418.	-6171.	-825.	668.	489.	503.	-.0105	-.0258	-.0160	.0383	-.0231	-.0243	389.		
.2690	-417.	-5621.	-820.	1441.	569.	284.	-.0101	-.0274	-.0134	.0325	-.0234	-.0235	632.		
.2700	-397.	-5139.	-778.	2186.	659.	41.	-.0095	-.0286	-.0105	.0262	-.0228	-.0223	916.		
.2710	-358.	-5072.	-693.	2882.	753.	-233.	-.0087	-.0297	-.0074	.0194	-.0214	-.0209	1199.		
.2720	-312.	-5262.	-562.	3512.	844.	-523.	-.0078	-.0309	-.0041	.0124	-.0191	-.0194	1465.		
.2730	-271.	-5380.	-391.	4058.	927.	-812.	-.0070	-.0319	-.0007	.0055	-.0161	-.0176	1702.		
.2740	-235.	-5504.	-197.	4494.	1001.	-1105.	-.0061	-.0325	.0025	-.0011	-.0129	-.0159	1900.		
.2750	-203.	-5716.	-2.	4792.	1061.	-1410.	-.0052	-.0327	.0055	-.0072	-.0099	-.0142	2049.		
.2760	-179.	-5787.	171.	4936.	1101.	-1716.	-.0045	-.0327	.0081	-.0126	-.0071	-.0126	2143.		
.2770	-172.	-5527.	310.	4928.	1119.	-1997.	-.0038	-.0328	.0102	-.0171	-.0047	-.0113	2181.		
.2780	-181.	-5182.	407.	4792.	1117.	-2240.	-.0033	-.0328	.0118	-.0205	-.0031	-.0102	2169.		
.2790	-200.	-5122.	466.	4565.	1091.	-2446.	-.0030	-.0324	.0129	-.0230	-.0028	-.0093	2124.		
.2800	-222.	-5240.	494.	4290.	1037.	-2607.	-.0028	-.0320	.0135	-.0245	-.0042	-.0089	2057.		
.2810	-244.	-5255.	499.	4008.	954.	-2709.	-.0028	-.0317	.0137	-.0250	-.0078	-.0087	1979.		
.2820	-267.	-5181.	484.	3748.	844.	-2737.	-.0029	-.0314	.0136	-.0247	-.0132	-.0089	1893.		
.2830	-290.	-5142.	447.	3524.	712.	-2682.	-.0032	-.0308	.0131	-.0237	-.0201	-.0095	1800.		
.2840	-315.	-5001.	382.	3340.	561.	-2532.	-.0037	-.0298	.0123	-.0221	-.0281	-.0103	1697.		
.2850	-340.	-4556.	286.	3192.	395.	-2288.	-.0042	-.0287	.0112	-.0200	-.0369	-.0113	1584.		
.2860	-358.	-3959.	158.	3074.	215.	-1966.	-.0049	-.0275	.0100	-.0176	-.0464	-.0126	1467.		
.2870	-365.	-3513.	1.	2982.	27.	-1582.	-.0056	-.0261	.0086	-.0149	-.0565	-.0139	1354.		
.2880	-362.	-3186.	-176.	2912.	-162.	-1139.	-.0063	-.0243	.0071	-.0122	-.0669	-.0152	1256.		
.2890	-350.	-2756.	-361.	2857.	-342.	-648.	-.0069	-.0223	.0056	-.0096	-.0774	-.0163	1183.		
.2900	-321.	-2281.	-541.	2802.	-503.	-140.	-.0075	-.0200	.0043	-.0072	-.0877	-.0173	1144.		
.2910	-267.	-1966.	-704.	2735.	-637.	353.	-.0079	-.0176	.0031	-.0053	-.0976	-.0181	1136.		
.2920	-195.	-1721.	-834.	2653.	-740.	810.	-.0082	-.0151	.0023	-.0040	-.1064	-.0186	1153.		
.2930	-117.	-1290.	-916.	2560.	-811.	1261.	-.0084	-.0124	.0018	-.0035	-.1138	-.0189	1190.		
.2940	-40.	-728.	-943.	2458.	-855.	1671.	-.0084	-.0096	.0017	-.0037	-.1194	-.0189	1241.		
.2950	34.	-336.	-915.	2344.	-877.	2027.	-.0083	-.0068	.0021	-.0047	-.1228	-.0186	1292.		
.2960	103.	-178.	-841.	2212.	-888.	2314.	-.0081	-.0043	.0028	-.0065	-.1236	-.0181	1333.		
.2970	158.	-62.	-731.	2061.	-888.	2535.	-.0079	-.0020	.0040	-.0090	-.1215	-.0175	1358.		
.2980	193.	63.	-599.	1891.	-879.	2687.	-.0075	-.0001	.0054	-.0122	-.1165	-.0166	1365.		
.2990	214.	83.	-455.	1709.	-859.	2757.	-.0071	.0015	.0071	-.0160	-.1089	-.0155	1347.		
.3000	223.	9.	-304.	1526.	-833.	2733.	-.0067	.0027	.0090	-.0203	-.0994	-.0144	1300.		
.3010	223.	9.	-145.	1365.	-802.	2613.	-.0061	.0032	.0110	-.0249	-.0886	-.0131	1226.		
.3020	215.	95.	22.	1243.	-766.	2401.	-.0055	.0031	.0132	-.0298	-.0772	-.0117	1128.		
.3030	197.	96.	196.	1176.	-726.	2105.	-.0048	.0025	.0154	-.0346	-.0657	-.0102	1011.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.42.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

.2930	-117.	-1290.	-916.	2560.	-811.	1261.	-.0084	-.0124	.0018	-.0035	-.1138	-.0189	1190.
.2940	-40.	-728.	-943.	2458.	-855.	1671.	-.0084	-.0096	.0017	-.0037	-.1194	-.0189	1241.
.2950	34.	-336.	-915.	2344.	-877.	2027.	-.0083	-.0068	.0021	-.0047	-.1228	-.0186	1292.
.2960	107.	-178.	-841.	2212.	-888.	2314.	-.0081	-.0043	.0028	-.0065	-.1236	-.0181	1333.
.2970	158.	-62.	-731.	2061.	-888.	2535.	-.0079	-.0020	.0040	-.0090	-.1215	-.0175	1358.
.2980	193.	63.	-599.	1891.	-879.	2687.	-.0075	-.0001	.0054	-.0122	-.1165	-.0166	1365.
.2990	214.	83.	-455.	1709.	-859.	2757.	-.0071	.0015	.0071	-.0160	-.1089	-.0155	1347.
.3000	223.	9.	-304.	1526.	-833.	2733.	-.0067	.0027	.0090	-.0203	-.0994	-.0144	1300.
.3010	223.	9.	-145.	1365.	-802.	2613.	-.0061	.0032	.0110	-.0249	-.0886	-.0131	1226.
.3020	215.	95.	22.	1243.	-766.	2401.	-.0055	.0031	.0132	-.0298	-.0772	-.0117	1128.
.3030	197.	96.	196.	1176.	-726.	2105.	-.0048	.0025	.0154	-.0346	-.0657	-.0102	1011.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.42.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU								
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)	
.3040	168.	-33.	371.	1165.	-687.	1739.	-.0041	.0014	.0177	-.0394	-.0544	-.0087	884.	
.3050	129.	-204.	540.	1204.	-654.	1318.	-.0035	-.0004	.0198	-.0439	-.0436	-.0072	763.	
.3060	80.	-396.	690.	1278.	-631.	860.	-.0028	-.0027	.0217	-.0480	-.0334	-.0058	668.	
.3070	22.	-646.	810.	1371.	-617.	387.	-.0022	-.0055	.0234	-.0514	-.0244	-.0044	623.	
.3080	-43.	-866.	892.	1468.	-613.	-75.	-.0016	-.0084	.0246	-.0540	-.0168	-.0032	639.	
.3090	-112.	-925.	930.	1555.	-618.	-499.	-.0011	-.0114	.0255	-.0558	-.0108	-.0021	701.	
.3100	-177.	-896.	925.	1623.	-628.	-873.	-.0007	-.0145	.0259	-.0567	-.0069	-.0012	781.	
.3110	-230.	-968.	880.	1668.	-642.	-1187.	-.0004	-.0176	.0259	-.0567	-.0049	-.0005	861.	
.3120	-272.	-1148.	805.	1698.	-655.	-1421.	-.0002	-.0205	.0255	-.0558	-.0048	.0000	927.	
.3130	-302.	-1307.	714.	1727.	-669.	-1557.	.0000	-.0230	.0247	-.0542	-.0063	.0004	971.	
.3140	-321.	-1416.	615.	1766.	-683.	-1591.	.0001	-.0250	.0237	-.0520	-.0090	.0006	993.	
.3150	-321.	-1582.	515.	1821.	-695.	-1537.	.0002	-.0265	.0225	-.0493	-.0128	.0007	996.	
.3160	-303.	-1774.	417.	1894.	-707.	-1402.	.0002	-.0274	.0212	-.0461	-.0172	.0006	987.	
.3170	-269.	-1858.	322.	1984.	-715.	-1190.	.0002	-.0277	.0197	-.0427	-.0218	.0005	972.	
.3180	-223.	-1849.	230.	2088.	-714.	-912.	.0001	-.0273	.0182	-.0392	-.0263	.0004	958.	
.3190	-164.	-1918.	138.	2198.	-702.	-592.	.0001	-.0263	.0165	-.0355	-.0306	.0002	956.	
.3200	-91.	-2150.	49.	2312.	-680.	-257.	.0000	-.0249	.0149	-.0318	-.0346	.0000	972.	
.3210	-7.	-2462.	-36.	2425.	-650.	72.	.0000	-.0232	.0133	-.0281	-.0381	-.0001	1008.	
.3220	84.	-2800.	-113.	2535.	-614.	377.	.0000	-.0213	.0116	-.0244	-.0410	-.0003	1057.	
.3230	176.	-3215.	-178.	2635.	-573.	641.	-.0000	-.0191	.0101	-.0209	-.0430	-.0005	1112.	
.3240	264.	-3680.	-230.	2719.	-530.	852.	-.0000	-.0170	.0085	-.0174	-.0438	-.0008	1163.	
.3250	341.	-4091.	-267.	2778.	-486.	1001.	-.0001	-.0150	.0070	-.0140	-.0432	-.0013	1201.	
.3260	402.	-4405.	-288.	2806.	-443.	1085.	-.0003	-.0133	.0056	-.0107	-.0416	-.0019	1220.	
.3270	442.	-4706.	-293.	2800.	-398.	1104.	-.0006	-.0121	.0043	-.0074	-.0391	-.0028	1218.	
.3280	457.	-5065.	-287.	2760.	-355.	1063.	-.0010	-.0113	.0029	-.0041	-.0362	-.0039	1195.	
.3290	442.	-5435.	-274.	2684.	-314.	972.	-.0016	-.0112	.0016	-.0008	-.0330	-.0054	1152.	
.3300	398.	-5793.	-264.	2572.	-277.	839.	-.0023	-.0120	.0003	.0025	-.0297	-.0073	1091.	
.3310	325.	-6166.	-266.	2427.	-243.	667.	-.0032	-.0135	-.0010	.0059	-.0264	-.0095	1015.	
.3320	227.	-6549.	-286.	2260.	-214.	462.	-.0042	-.0157	-.0023	.0091	-.0230	-.0119	930.	
.3330	105.	-6866.	-322.	2088.	-190.	233.	-.0054	-.0185	-.0036	.0123	-.0194	-.0146	847.	
.3340	-38.	-7061.	-371.	1933.	-173.	-15.	-.0065	-.0220	-.0049	.0153	-.0155	-.0174	779.	
.3350	-194.	-7223.	-422.	1819.	-161.	-284.	-.0077	-.0260	-.0060	.0180	-.0115	-.0202	742.	
.3360	-357.	-7440.	-469.	1765.	-153.	-577.	-.0088	-.0304	-.0069	.0203	-.0074	-.0228	748.	
.3370	-521.	-7689.	-505.	1781.	-150.	-894.	-.0098	-.0350	-.0076	.0222	-.0032	-.0251	802.	
.3380	-681.	-7923.	-529.	1867.	-147.	-1232.	-.0106	-.0395	-.0081	.0236	.0012	-.0270	900.	
.3390	-832.	-8149.	-544.	2011.	-143.	-1594.	-.0111	-.0440	-.0084	.0246	.0059	-.0282	1031.	
.3400	-965.	-8387.	-555.	2194.	-137.	-1982.	-.0113	-.0480	-.0084	.0250	.0113	-.0288	1188.	
.3410	-1074.	-8590.	-565.	2399.	-129.	-2396.	-.0111	-.0516	-.0083	.0249	.0174	-.0285	1362.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.42.

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

.3310	725.	-6166.	-266.	2427.	-243.	667.	-.0072	-.0122	-.0010	.0059	-.0264	-.0095	1091.
.3320	227.	-6549.	-286.	2260.	-214.	462.	-.0042	-.0157	-.0023	.0091	-.0230	-.0119	930.
.3330	125.	-6866.	-322.	2088.	-190.	233.	-.0054	-.0185	-.0036	.0123	-.0194	-.0146	847.
.3340	-37.	-7061.	-371.	1933.	-173.	-15.	-.0065	-.0220	-.0049	.0153	-.0155	-.0174	779.
.3350	-154.	-7223.	-422.	1819.	-161.	-284.	-.0077	-.0260	-.0060	.0180	-.0115	-.0202	742.
.3360	-357.	-7440.	-469.	1765.	-153.	-577.	-.0088	-.0304	-.0069	.0203	-.0074	-.0228	748.
.3370	-521.	-7689.	-505.	1781.	-150.	-894.	-.0098	-.0350	-.0076	.0222	-.0032	-.0251	802.
.3380	-681.	-7923.	-529.	1867.	-147.	-1232.	-.0106	-.0395	-.0081	.0236	-.0012	-.0270	900.
.3390	-832.	-8149.	-544.	2011.	-143.	-1594.	-.0111	-.0440	-.0084	.0246	.0059	-.0282	1031.
.3400	-965.	-8387.	-555.	2194.	-137.	-1982.	-.0113	-.0480	-.0084	.0250	.0113	-.0288	1188.
.3410	-1074.	-8590.	-565.	2399.	-129.	-2396.	-.0111	-.0516	-.0083	.0249	.0174	-.0285	1362.

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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	38	MEMBER	2	SEQUENCE	218	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3420	-1156.	-8687.	-576.	2610.	-118.	-2827.	-.0106	-.0546	-.0020	.0244	.0243	-.0273	1545.		
.3430	-1208.	-8695.	-582.	2616.	-103.	-3264.	-.0096	-.0568	-.0076	.0235	.0318	-.0253	1731.		
.3440	-1225.	-8685.	-581.	3006.	-83.	-3697.	-.0083	-.0583	-.0071	.0223	.0398	-.0224	1912.		
.3450	-1208.	-8717.	-566.	3173.	-58.	-4108.	-.0067	-.0590	-.0064	.0208	.0483	-.0187	2083.		
.3460	-1159.	-8762.	-533.	3313.	-26.	-4475.	-.0047	-.0590	-.0057	.0190	.0569	-.0143	2234.		
.3470	-1082.	-8772.	-480.	3423.	12.	-4776.	-.0025	-.0583	-.0048	.0171	.0655	-.0093	2358.		
.3480	-978.	-8735.	-410.	3501.	57.	-4996.	-.0001	-.0571	-.0039	.0151	.0738	-.0039	2448.		
.3490	-852.	-8658.	-328.	3543.	105.	-5121.	.0024	-.0552	-.0030	.0132	.0817	.0017	2499.		
.3500	-706.	-8530.	-243.	3548.	154.	-5143.	.0049	-.0531	-.0021	.0113	.0887	.0074	2508.		
.3510	-546.	-8343.	-164.	3516.	201.	-5056.	.0074	-.0506	-.0014	.0096	.0947	.0130	2472.		
.3520	-379.	-8127.	-101.	3449.	244.	-4859.	.0097	-.0480	-.0007	.0081	.0994	.0184	2393.		
.3530	-207.	-7918.	-59.	3353.	282.	-4560.	.0119	-.0453	-.0003	.0069	.1027	.0235	2274.		
.3540	-35.	-7732.	-42.	3233.	313.	-4177.	.0139	-.0427	-.0000	.0060	.1042	.0281	2123.		
.3550	134.	-7556.	-49.	3099.	336.	-3728.	.0157	-.0401	.0001	.0055	.1037	.0321	1950.		
.3560	295.	-7351.	-76.	2958.	349.	-3235.	.0172	-.0378	.0000	.0052	.1013	.0356	1764.		
.3570	440.	-7070.	-116.	2817.	352.	-2716.	.0184	-.0355	-.0002	.0052	.0969	.0384	1577.		
.3580	565.	-6691.	-166.	2677.	344.	-2196.	.0193	-.0334	-.0004	.0053	.0908	.0405	1396.		
.3590	665.	-6252.	-221.	2533.	322.	-1703.	.0199	-.0315	-.0008	.0056	.0831	.0420	1231.		
.3600	739.	-5812.	-279.	2373.	289.	-1258.	.0202	-.0297	-.0012	.0060	.0741	.0429	1084.		
.3610	781.	-5406.	-339.	2187.	244.	-876.	.0203	-.0280	-.0016	.0064	.0639	.0432	951.		
.3620	786.	-5011.	-397.	1966.	190.	-565.	.0200	-.0264	-.0020	.0068	.0529	.0429	824.		
.3630	756.	-4587.	-450.	1699.	132.	-333.	.0196	-.0248	-.0024	.0071	.0413	.0422	697.		
.3640	698.	-4157.	-497.	1381.	72.	-194.	.0190	-.0231	-.0027	.0072	.0292	.0411	560.		
.3650	620.	-3752.	-532.	1010.	15.	-153.	.0183	-.0212	-.0029	.0070	.0170	.0398	410.		
.3660	527.	-3369.	-551.	591.	-37.	-206.	.0174	-.0193	-.0029	.0064	.0050	.0382	252.		
.3670	420.	-2963.	-546.	140.	-79.	-334.	.0166	-.0171	-.0027	.0053	-.0063	.0365	149.		
.3680	304.	-2527.	-510.	-324.	-110.	-517.	.0157	-.0147	-.0022	.0038	-.0167	.0348	249.		
.3690	186.	-2144.	-439.	-780.	-131.	-745.	.0148	-.0120	-.0015	.0016	-.0257	.0332	436.		
.3700	75.	-1874.	-336.	-1212.	-141.	-1004.	.0140	-.0092	-.0004	-.0011	-.0331	.0317	634.		
.3710	-24.	-1692.	-204.	-1601.	-142.	-1275.	.0133	-.0064	.0010	-.0044	-.0389	.0303	823.		
.3720	-111.	-1514.	-52.	-1934.	-133.	-1532.	.0127	-.0036	.0026	-.0082	-.0429	.0291	992.		
.3730	-184.	-1311.	111.	-2199.	-110.	-1756.	.0122	-.0009	.0045	-.0125	-.0449	.0281	1130.		
.3740	-236.	-1154.	274.	-2388.	-75.	-1939.	.0118	.0017	.0065	-.0171	-.0451	.0273	1235.		
.3750	-262.	-1073.	429.	-2495.	-27.	-2075.	.0115	.0039	.0086	-.0220	-.0436	.0267	1303.		
.3760	-264.	-1030.	571.	-2513.	34.	-2158.	.0113	.0055	.0108	-.0269	-.0409	.0264	1329.		
.3770	-243.	-982.	700.	-2434.	106.	-2178.	.0113	.0066	.0129	-.0317	-.0372	.0262	1312.		
.3780	-203.	-900.	816.	-2261.	189.	-2131.	.0113	.0071	.0150	-.0364	-.0327	.0262	1249.		
.3790	-147.	-762.	915.	-2002.	280.	-2024.	.0114	.0071	.0169	-.0406	-.0275	.0263	1148.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.43.

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

.3690	186.	-1144.	-429.	-790.	-101.	-745.	.0148	-.0120	-.0015	.0016	-.0257	.0332	436.
.3700	75.	-1374.	-336.	-1212.	-141.	-1004.	.0140	-.0092	-.0004	-.0011	-.0371	.0317	634.
.3710	-24.	-1632.	-204.	-1601.	-142.	-1275.	.0133	-.0064	.0010	-.0044	-.0389	.0303	823.
.3720	-111.	-1514.	-52.	-1974.	-133.	-1532.	.0127	-.0037	.0026	-.0082	-.0429	.0291	992.
.3730	-184.	-1211.	111.	-2109.	-110.	-1756.	.0122	-.0009	.0045	-.0125	-.0449	.0281	1130.
.3740	-236.	-1154.	274.	-2381.	-75.	-1939.	.0118	.0017	.0065	-.0171	-.0451	.0273	1235.
.3750	-262.	-1073.	429.	-2495.	-27.	-2075.	.0115	.0039	.0086	-.0220	-.0436	.0267	1303.
.3760	-264.	-1070.	571.	-2513.	34.	-2158.	.0113	.0055	.0108	-.0269	-.0409	.0264	1329.
.3770	-243.	-982.	700.	-2434.	106.	-2178.	.0113	.0066	.0129	-.0317	-.0372	.0262	1312.
.3780	-207.	-900.	816.	-2161.	189.	-2151.	.0113	.0071	.0150	-.0364	-.0327	.0262	1249.
.3790	-147.	-762.	915.	-2002.	280.	-2024.	.0114	.0071	.0169	-.0406	-.0275	.0263	1148.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.43.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	38	MEMBER	2	SEQUENCE	818	LOCATION	END	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.3800	-76.	-565.	996.	-1674.	376.	-1865.		.0115	.0063	.0186	-.0443	-.0217	.0264	1017.
.3810	4.	-433.	1056.	-1297.	473.	-1660.		.0116	.0048	.0201	-.0474	-.0153	.0265	867.
.3820	83.	-366.	1091.	-892.	568.	-1407.		.0117	.0027	.0212	-.0495	-.0084	.0267	706.
.3830	154.	-337.	1101.	-479.	656.	-1111.		.0118	.0002	.0219	-.0508	-.0010	.0268	552.
.3840	221.	-478.	1080.	-82.	733.	-797.		.0118	-.0029	.0221	-.0510	.0068	.0268	436.
.3850	287.	-836.	1026.	277.	796.	-492.		.0119	-.0063	.0219	-.0501	.0146	.0268	392.
.3860	351.	-1233.	940.	584.	843.	-210.		.0118	-.0100	.0211	-.0481	.0226	.0266	420.
.3870	405.	-1423.	824.	832.	877.	49.		.0118	-.0137	.0199	-.0451	.0308	.0264	485.
.3880	446.	-1353.	684.	1020.	899.	280.		.0117	-.0172	.0183	-.0411	.0392	.0261	557.
.3890	474.	-1167.	530.	1153.	911.	469.		.0115	-.0202	.0162	-.0364	.0480	.0257	619.
.3900	494.	-1004.	371.	1241.	913.	602.		.0114	-.0227	.0139	-.0310	.0568	.0253	664.
.3910	505.	-914.	216.	1299.	903.	678.		.0111	-.0248	.0114	-.0251	.0654	.0248	691.
.3920	505.	-908.	75.	1340.	883.	707.		.0109	-.0263	.0087	-.0189	.0736	.0242	704.
.3930	492.	-970.	-53.	1370.	858.	696.		.0105	-.0268	.0060	-.0124	.0813	.0236	706.
.3940	474.	-1035.	-171.	1383.	830.	650.		.0102	-.0264	.0032	-.0059	.0886	.0229	698.
.3950	455.	-1006.	-286.	1371.	801.	568.		.0098	-.0252	.0004	.0006	.0952	.0221	677.
.3960	442.	-855.	-401.	1323.	774.	457.		.0093	-.0231	-.0024	.0069	.1013	.0211	642.
.3970	431.	-608.	-515.	1243.	750.	336.		.0088	-.0201	-.0052	.0130	.1068	.0200	598.
.3980	419.	-302.	-620.	1136.	731.	227.		.0081	-.0163	-.0078	.0188	.1114	.0186	550.
.3990	404.	-16.	-707.	1012.	715.	144.		.0074	-.0119	-.0103	.0241	.1149	.0170	501.
.4000	387.	157.	-772.	873.	700.	94.		.0065	-.0071	-.0126	.0291	.1171	.0151	451.

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)
.1170	-336.	4011.	267.	-6876.	-739.	3615.	-.0134	.0108	-.0095	.0171	-.0148	-.0279	3131.

SECTION	39	MEMBER	1	SEQUENCE	818	LOCATION	BEG	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ		DX	DY	DZ	RX	RY	RZ	STRESS
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)		(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
0.0000	0.	0.	0.	0.	0.	0.		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	0.	0.	-0.	0.	-0.	0.		.0000	.0000	-.0000	-.0000	-.0000	-.0000	0.
.0020	0.	1.	-0.	0.	-0.	0.		.0000	.0000	-.0000	-.0000	-.0000	-.0000	0.
.0030	0.	2.	-0.	0.	-1.	0.		.0000	.0000	.0000	-.0000	-.0000	-.0000	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.43.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	39	MEMBER	1	SEQUENCE	B18	LOCATION	BEG	TYPE	RU	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	PX	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	0.0000	0.
.0010	0.	0.	-0.	0.	-0.	0.	.0000	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0020	0.	1.	-0.	0.	-0.	0.	.0000	.0000	-.0000	-.0000	-.0000	-.0000	-.0000	0.
.0030	0.	2.	-0.	0.	-1.	0.	.0000	.0000	.0000	-.0000	-.0000	-.0000	-.0000	0.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.43.

S/RV PIPING KEWAUNEE GKWC0F 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	39	MEMBER	1	SEQUENCE	B18	LOCATION	BEG	TYPE	RU	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	PX	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)		
.0040	0.	1.	-0.	-0.	-1.	0.	.0000	.0000	.0000	-.0000	-.0001	.0000	.0000	0.
.0050	0.	-1.	-0.	-0.	-1.	0.	.0000	-.0000	.0000	-.0000	-.0001	.0000	.0000	0.
.0060	0.	-5.	-0.	0.	-1.	0.	.0000	-.0000	.0000	.0000	-.0001	-.0000	-.0000	1.
.0070	-0.	-16.	-0.	0.	-2.	-0.	.0000	-.0000	-.0000	.0000	-.0002	-.0000	-.0000	1.
.0080	-0.	-36.	-0.	1.	-5.	-1.	.0000	-.0000	-.0000	.0000	-.0003	-.0000	-.0000	2.
.0090	-0.	-60.	-0.	2.	-6.	-1.	.0000	-.0001	.0000	.0000	-.0004	-.0000	-.0000	3.
.0100	-0.	-73.	-0.	2.	-2.	-2.	.0000	-.0002	.0000	.0000	-.0002	-.0000	-.0000	1.
.0110	0.	-68.	-0.	2.	12.	-1.	.0000	-.0003	.0000	.0000	.0006	-.0000	-.0000	5.
.0120	1.	-63.	-0.	2.	36.	-1.	.0000	-.0004	.0000	.0000	.0021	-.0000	-.0000	14.
.0130	1.	-90.	-0.	-0.	72.	-1.	.0000	-.0006	.0000	.0000	.0044	-.0000	-.0000	29.
.0140	1.	-143.	-0.	-3.	117.	-1.	.0000	-.0008	.0000	-.0000	.0074	-.0000	-.0000	47.
.0150	1.	-178.	-0.	-7.	167.	3.	.0000	-.0011	.0000	-.0001	.0108	.0000	.0000	67.
.0160	2.	-169.	-1.	-13.	216.	13.	.0000	-.0013	.0001	-.0001	.0141	.0001	.0001	87.
.0170	4.	-134.	-1.	-21.	257.	30.	.0001	-.0016	.0001	-.0001	.0169	.0002	.0002	104.
.0180	7.	-94.	-1.	-31.	285.	55.	.0001	-.0019	.0001	-.0002	.0190	.0003	.0003	117.
.0190	10.	-20.	-1.	-43.	304.	85.	.0002	-.0021	.0002	-.0003	.0204	.0005	.0005	128.
.0200	13.	146.	-0.	-59.	319.	116.	.0003	-.0022	.0002	-.0004	.0217	.0007	.0007	138.
.0210	14.	342.	1.	-78.	342.	141.	.0003	-.0021	.0003	-.0005	.0236	.0009	.0009	152.
.0220	12.	450.	2.	-103.	403.	149.	.0004	-.0018	.0003	-.0006	.0280	.0011	.0011	177.
.0230	5.	462.	3.	-130.	480.	130.	.0005	-.0013	.0004	-.0008	.0337	.0011	.0011	206.
.0240	-7.	304.	2.	-154.	525.	75.	.0004	-.0006	.0004	-.0010	.0379	.0010	.0010	222.
.0250	-25.	-89.	-1.	-170.	503.	-19.	.0004	.0001	.0004	-.0011	.0381	.0007	.0007	213.
.0260	-45.	-508.	-4.	-176.	443.	-142.	.0002	.0007	.0005	-.0012	.0355	.0002	.0002	199.
.0270	-64.	-566.	-5.	-173.	416.	-280.	-.0000	.0010	.0005	-.0011	.0341	-.0004	-.0004	213.
.0280	-83.	-22.	-4.	-162.	374.	-430.	-.0004	.0013	.0005	-.0009	.0312	-.0012	-.0012	238.
.0290	-104.	890.	-4.	-140.	243.	-581.	-.0007	.0017	.0004	-.0006	.0226	-.0020	-.0020	259.
.0300	-121.	1518.	-4.	-102.	128.	-701.	-.0011	.0024	.0002	-.0003	.0148	-.0027	-.0027	289.
.0310	-126.	1251.	-5.	-46.	69.	-757.	-.0014	.0033	-.0000	.0002	.0104	-.0032	-.0032	306.
.0320	-113.	525.	-11.	30.	-6.	-722.	-.0016	.0045	-.0004	.0007	.0053	-.0036	-.0036	290.
.0330	-79.	196.	-22.	118.	-92.	-590.	-.0017	.0058	-.0008	.0011	.0001	-.0038	-.0038	244.
.0340	-33.	329.	-31.	199.	-147.	-388.	-.0016	.0073	-.0011	.0016	-.0030	-.0039	-.0039	185.
.0350	12.	305.	-33.	264.	-217.	-155.	-.0015	.0088	-.0013	.0022	-.0075	-.0037	-.0037	150.
.0360	57.	-69.	-26.	318.	-340.	99.	-.0014	.0100	-.0016	.0029	-.0163	-.0033	-.0033	191.
.0370	110.	-321.	-16.	379.	-440.	389.	-.0012	.0109	-.0018	.0038	-.0250	-.0027	-.0027	281.
.0380	173.	-139.	-9.	466.	-461.	706.	-.0010	.0115	-.0021	.0046	-.0295	-.0022	-.0022	387.
.0390	224.	291.	-9.	585.	-480.	1003.	-.0008	.0119	-.0026	.0058	-.0334	-.0016	-.0016	504.
.0400	279.	639.	-17.	726.	-558.	1234.	-.0006	.0123	-.0031	.0068	-.0398	-.0010	-.0010	617.
.0410	303.	389.	-23.	855.	-590.	1384.	-.0005	.0127	-.0037	.0076	-.0426	-.0003	-.0003	694.

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ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.43.

S/RV PIPING KEWAUNEE GKWC0F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

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

.0710	-126.	1271.	-5.	-46.	69.	-757.	-.0014	.0033	-.0000	.0002	.0104	-.0032	306.
.0320	-117.	575.	-11.	30.	-6.	-722.	-.0016	.0045	-.0004	.0007	.0053	-.0036	290.
.0330	-79.	196.	-22.	118.	-92.	-590.	-.0017	.0058	-.0008	.0011	.0001	-.0038	244.
.0340	-37.	325.	-31.	199.	-147.	-388.	-.0016	.0077	-.0011	.0016	-.0030	-.0039	185.
.0350	12.	305.	-33.	264.	-217.	-155.	-.0015	.0088	-.0013	.0022	-.0075	-.0037	150.
.0360	57.	-85.	-26.	318.	-340.	99.	-.0014	.0100	-.0016	.0029	-.0163	-.0033	191.
.0370	110.	-321.	-16.	379.	-440.	389.	-.0012	.0109	-.0018	.0038	-.0250	-.0027	281.
.0380	173.	-139.	-9.	466.	-461.	706.	-.0010	.0115	-.0021	.0048	-.0295	-.0022	387.
.0390	234.	291.	-9.	585.	-480.	1003.	-.0008	.0119	-.0026	.0058	-.0334	-.0016	504.
.0400	279.	639.	-17.	726.	-555.	1234.	-.0006	.0123	-.0031	.0068	-.0398	-.0010	617.
.0410	363.	389.	-27.	855.	-590.	1364.	-.0005	.0127	-.0037	.0076	-.0426	-.0003	694.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.43.

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	39	MEMBER	1	SEQUENCE	818	LOCATION	BEG	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.0420	309.	-753.	-21.	935.	-575.	1446.	-.0003	.0127	-.0042	.0082	-.0427	.0003	729.	
.0430	302.	-2078.	-8.	942.	-586.	1422.	-.0001	.0121	-.0045	.0085	-.0450	.0007	724.	
.0440	288.	-2075.	15.	862.	-610.	1318.	.0000	.0110	-.0045	.0084	-.0486	.0008	678.	
.0450	257.	-867.	50.	699.	-579.	1110.	.0001	.0096	-.0042	.0080	-.0490	.0006	575.	
.0460	192.	-388.	93.	484.	-526.	758.	.0001	.0079	-.0037	.0073	-.0477	.0004	418.	
.0470	98.	-1403.	133.	268.	-527.	288.	.0000	.0057	-.0031	.0065	-.0489	.0001	264.	
.0480	3.	-2359.	157.	103.	-531.	-204.	-.0002	.0032	-.0025	.0055	-.0496	-.0002	232.	
.0490	-76.	-2028.	159.	16.	-440.	-645.	-.0003	.0008	-.0019	.0044	-.0440	-.0006	313.	
.0500	-145.	-1214.	144.	0.	-281.	-1031.	-.0004	-.0016	-.0015	.0033	-.0337	-.0007	429.	
.0510	-216.	-975.	118.	28.	-123.	-1365.	-.0003	-.0037	-.0010	.0021	-.0229	-.0005	550.	
.0520	-279.	-1040.	87.	75.	25.	-1603.	-.0001	-.0054	-.0006	.0008	-.0122	.0001	644.	
.0530	-318.	-1069.	51.	120.	171.	-1691.	.0003	-.0066	-.0001	-.0006	-.0014	.0011	684.	
.0540	-329.	-1497.	13.	146.	296.	-1620.	.0010	-.0073	.0006	-.0023	.0088	.0025	663.	
.0550	-313.	-2126.	-26.	145.	395.	-1405.	.0018	-.0079	.0015	-.0042	.0179	.0041	588.	
.0560	-273.	-1926.	-66.	118.	480.	-1079.	.0027	-.0081	.0026	-.0062	.0267	.0058	476.	
.0570	-226.	-1053.	-103.	70.	564.	-717.	.0036	-.0081	.0037	-.0082	.0354	.0075	367.	
.0580	-193.	-799.	-133.	10.	647.	-400.	.0042	-.0079	.0047	-.0101	.0438	.0090	305.	
.0590	-175.	-1033.	-158.	-38.	723.	-149.	.0047	-.0074	.0056	-.0117	.0513	.0103	297.	
.0600	-152.	-301.	-187.	-44.	795.	78.	.0050	-.0061	.0063	-.0129	.0581	.0112	321.	
.0610	-120.	1184.	-223.	7.	852.	294.	.0051	-.0039	.0066	-.0138	.0637	.0117	362.	
.0620	-91.	1461.	-262.	96.	873.	456.	.0051	-.0013	.0066	-.0144	.0572	.0117	397.	
.0630	-78.	222.	-294.	190.	840.	535.	.0048	.0018	.0064	-.0145	.0678	.0113	407.	
.0640	-72.	-640.	-314.	247.	762.	544.	.0045	.0053	.0061	-.0145	.0655	.0104	389.	
.0650	-69.	-301.	-314.	235.	673.	497.	.0040	.0090	.0058	-.0142	.0618	.0091	349.	
.0660	-72.	42.	-288.	145.	596.	397.	.0033	.0125	.0055	-.0135	.0572	.0074	293.	
.0670	-71.	-203.	-240.	4.	534.	271.	.0025	.0152	.0052	-.0125	.0518	.0053	240.	
.0680	-56.	-275.	-184.	-130.	492.	161.	.0016	.0173	.0048	-.0110	.0463	.0029	214.	
.0690	-29.	-79.	-130.	-209.	474.	74.	.0004	.0187	.0041	-.0090	.0422	.0004	210.	
.0700	-3.	-367.	-83.	-212.	461.	-2.	-.0007	.0193	.0031	-.0066	.0388	-.0020	204.	
.0710	23.	-984.	-42.	-140.	443.	-36.	-.0019	.0190	.0017	-.0037	.0355	-.0043	187.	
.0720	79.	-1155.	-7.	-16.	438.	31.	-.0029	.0180	.0002	-.0006	.0323	-.0062	176.	
.0730	154.	-1144.	30.	116.	435.	218.	-.0037	.0160	-.0015	.0026	.0280	-.0078	201.	
.0740	240.	-1661.	75.	212.	377.	488.	-.0042	.0131	-.0030	.0057	.0196	-.0089	262.	
.0750	326.	-2254.	128.	242.	247.	800.	-.0045	.0094	-.0043	.0084	.0067	-.0095	350.	
.0760	407.	-2101.	186.	200.	87.	1118.	-.0045	.0054	-.0052	.0107	-.0071	-.0098	457.	
.0770	472.	-1630.	244.	95.	-69.	1388.	-.0043	.0011	-.0057	.0124	-.0195	-.0097	559.	
.0780	508.	-1679.	300.	-57.	-207.	1551.	-.0041	-.0034	-.0059	.0135	-.0296	-.0093	628.	
.0790	513.	-1926.	347.	-270.	-300.	1582.	-.0039	-.0077	-.0058	.0140	-.0357	-.0089	653.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.43.

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

CONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

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

.0650	-29.	-79.	-130.	-209.	474.	74.	.0004	.0187	.0041	-.0090	.0422	.0004	210.
.0700	-3.	-367.	-83.	-212.	461.	-2.	-.0007	.0193	.0031	-.0066	.0388	-.0020	204.
.0710	23.	-934.	-42.	-140.	443.	-36.	-.0019	.0190	.0017	-.0037	.0355	-.0043	187.
.0720	79.	-1155.	-7.	-16.	425.	71.	-.0029	.0180	.0002	-.0006	.0323	-.0062	176.
.0730	154.	-1144.	30.	116.	435.	218.	-.0037	.0160	-.0015	.0026	.0280	-.0078	201.
.0740	240.	-1661.	75.	212.	777.	478.	-.0042	.0131	-.0030	.0057	.0196	-.0089	262.
.0750	326.	-2254.	120.	242.	247.	800.	-.0045	.0094	-.0043	.0084	.0067	-.0095	350.
.0760	407.	-2101.	186.	200.	87.	1118.	-.0045	.0054	-.0052	.0107	-.0071	-.0098	457.
.0770	472.	-1670.	244.	95.	-69.	1388.	-.0043	.0011	-.0057	.0124	-.0195	-.0097	559.
.0780	508.	-1679.	300.	-57.	-207.	1551.	-.0041	-.0034	-.0059	.0135	-.0226	-.0093	628.
.0790	517.	-1926.	347.	-270.	-300.	1582.	-.0039	-.0077	-.0058	.0140	-.0357	-.0089	653.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.43.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
39	1	818					.0800	487.	-1629.	380.	-404.	-323.	1474.	-.0036	-.0113	-.0055	.0139	-.0366	-.0083	627.
							.0810	426.	-1937.	397.	-567.	-508.	1223.	-.0033	-.0141	-.0051	.0132	-.0337	-.0076	555.
							.0820	331.	-1036.	398.	-721.	-293.	844.	-.0030	-.0160	-.0045	.0118	-.0293	-.0067	461.
							.0830	213.	-1352.	387.	-880.	-285.	395.	-.0025	-.0171	-.0037	.0098	-.0240	-.0056	404.
							.0840	89.	-1440.	367.	-1068.	-297.	-56.	-.0019	-.0172	-.0027	.0071	-.0190	-.0041	446.
							.0850	-34.	-1260.	345.	-1315.	-361.	-463.	-.0010	-.0164	-.0013	.0037	-.0169	-.0023	578.
							.0860	-148.	-1094.	329.	-1637.	-469.	-793.	.0001	-.0150	.0004	-.0003	-.0178	-.0001	754.
							.0870	-246.	-881.	320.	-2024.	-569.	-1015.	.0014	-.0130	.0025	-.0048	-.0190	.0024	937.
							.0880	-321.	-488.	313.	-2440.	-635.	-1109.	.0028	-.0106	.0046	-.0095	-.0188	.0053	1105.
							.0890	-374.	-137.	302.	-2832.	-674.	-1079.	.0042	-.0078	.0071	-.0143	-.0174	.0083	1246.
							.0900	-404.	-48.	280.	-3146.	-687.	-933.	.0055	-.0046	.0092	-.0189	-.0146	.0114	1345.
							.0910	-409.	-113.	242.	-3338.	-667.	-673.	.0068	-.0010	.0110	-.0231	-.0104	.0145	1392.
							.0920	-384.	-308.	189.	-3390.	-628.	-311.	.0079	.0028	.0125	-.0267	-.0062	.0173	1389.
							.0930	-337.	-875.	124.	-3310.	-583.	120.	.0088	.0067	.0135	-.0296	-.0034	.0198	1349.
							.0940	-275.	-1326.	57.	-3123.	-529.	580.	.0096	.0108	.0142	-.0317	-.0019	.0217	1292.
							.0950	-204.	-2878.	-7.	-2862.	-460.	1030.	.0101	.0151	.0145	-.0331	-.0010	.0231	1234.
							.0960	-130.	-3903.	-66.	-2557.	-378.	1442.	.0103	.0197	.0147	-.0339	-.0004	.0237	1188.
							.0970	-54.	-5248.	-115.	-2230.	-286.	1791.	.0102	.0246	.0146	-.0342	.0002	.0236	1153.
							.0980	19.	-7111.	-153.	-1899.	-178.	2047.	.0097	.0297	.0143	-.0339	.0014	.0227	1123.
							.0990	86.	-8949.	-179.	-1572.	-49.	2186.	.0088	.0349	.0139	-.0333	.0035	.0209	1081.
							.1000	142.	-9979.	-193.	-1250.	89.	2180.	.0075	.0401	.0132	-.0321	.0057	.0181	1009.
							.1010	178.	-9857.	-195.	-929.	219.	2001.	.0058	.0449	.0124	-.0306	.0067	.0145	890.
							.1020	190.	-9233.	-185.	-595.	320.	1641.	.0037	.0490	.0112	-.0284	.0049	.0100	712.
							.1030	180.	-8514.	-167.	-230.	373.	1125.	.0013	.0521	.0098	-.0257	-.0009	.0049	484.
							.1040	163.	-7463.	-150.	186.	377.	509.	-.0013	.0542	.0081	-.0226	-.0104	-.0007	265.
							.1050	141.	-6410.	-139.	660.	349.	-167.	-.0040	.0552	.0063	-.0190	-.0218	-.0065	307.
							.1060	114.	-6044.	-135.	1183.	314.	-878.	-.0067	.0548	.0043	-.0153	-.0328	-.0124	604.
							.1070	80.	-6422.	-128.	1732.	298.	-1596.	-.0092	.0532	.0023	-.0113	-.0413	-.0181	953.
							.1080	53.	-6052.	-150.	2294.	303.	-2265.	-.0115	.0504	.0004	-.0075	-.0472	-.0233	1299.
							.1090	37.	-3827.	-171.	2860.	335.	-2851.	-.0136	.0460	-.0013	-.0037	-.0506	-.0281	1626.
							.1100	-2.	-4605.	-184.	3393.	454.	-3419.	-.0153	.0403	-.0028	.0001	-.0482	-.0319	1942.
							.1110	-43.	-6384.	-202.	3914.	571.	-3893.	-.0166	.0343	-.0041	.0037	-.0450	-.0347	2227.
							.1120	-50.	-5604.	-245.	4466.	625.	-4168.	-.0173	.0291	-.0053	.0070	-.0441	-.0366	2464.
							.1130	-42.	-4766.	-313.	5056.	658.	-4280.	-.0175	.0243	-.0064	.0100	-.0421	-.0373	2671.
							.1140	-50.	-6997.	-393.	5652.	689.	-4311.	-.0173	.0194	-.0074	.0127	-.0374	-.0367	2866.
							.1150	-63.	-9434.	-482.	6202.	699.	-4231.	-.0165	.0151	-.0083	.0150	-.0315	-.0349	3026.
							.1160	-56.	-7934.	-572.	6637.	709.	-3980.	-.0152	.0123	-.0091	.0164	-.0241	-.0319	3118.
							.1170	-45.	-4360.	-641.	6876.	739.	-3615.	-.0134	.0100	-.0095	.0171	-.0148	-.0279	3131.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.43.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.1070	80.	-4421.	-130.	1732.	298.	-1596.	-.0092	.0532	.0023	-.0113	-.0413	-.0124	604.
.1080	53.	-6052.	-150.	2294.	303.	-2265.	-.0115	.0504	.0004	-.0075	-.0472	-.0233	1299.
.1090	37.	-7827.	-171.	2860.	325.	-2851.	-.0136	.0460	-.0013	-.0037	-.0506	-.0281	1626.
.1100	-2.	-4605.	-186.	3353.	454.	-7419.	-.0153	.0403	-.0026	.0001	-.0482	-.0319	1942.
.1110	-47.	-6384.	-202.	3914.	571.	-3893.	-.0166	.0343	-.0041	.0037	-.0450	-.0247	2227.
.1120	-50.	-5604.	-745.	4466.	625.	-4168.	-.0173	.0291	-.0053	.0070	-.0441	-.0266	2464.
.1130	-42.	-4766.	-313.	5056.	654.	-4280.	-.0175	.0243	-.0064	.0100	-.0421	-.0373	2671.
.1140	-50.	-6997.	-393.	5652.	689.	-4311.	-.0173	.0194	-.0074	.0127	-.0374	-.0367	2866.
.1150	-83.	-9434.	-482.	6202.	699.	-4231.	-.0165	.0151	-.0083	.0150	-.0315	-.0349	3026.
.1160	-56.	-7934.	-572.	6677.	707.	-3980.	-.0152	.0123	-.0091	.0164	-.0241	-.0319	3118.
.1170	-45.	-4360.	-641.	6879.	729.	-3615.	-.0134	.0108	-.0095	.0171	-.0148	-.0279	3131.

ADLPIPE PAGE 1584

DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.43.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	39	MEMBER	1	SEQUENCE	213	LOCATION	BEG	TYPE	RU	DX	DY	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ				(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)										
.1180	-69.	-4233.	-669.	6862.	783.	-3244.	-.0112	.0105	-.0095	.0170	-.0045	-.0228	.0170	-.0045	-.0228	3062.
.1190	-102.	-6053.	-668.	6621.	715.	-2628.	-.0087	.0116	-.0091	.0162	-.0000	-.0169	.0162	-.0000	-.0169	2903.
.1200	-105.	-5376.	-661.	6221.	526.	-2289.	-.0059	.0148	-.0084	.0146	-.0012	-.0107	.0146	-.0012	-.0107	2668.
.1210	-100.	-3440.	-648.	5705.	315.	-1718.	-.0029	.0195	-.0075	.0126	-.0018	-.0045	.0126	-.0018	-.0045	2394.
.1220	-136.	-3902.	-617.	5097.	76.	-1280.	-.0000	.0245	-.0065	.0106	-.0031	.0018	.0106	-.0031	.0018	2109.
.1230	-207.	-4888.	-567.	4443.	-158.	-990.	.0027	.0299	-.0055	.0089	-.0047	.0078	.0089	-.0047	.0078	1828.
.1240	-275.	-2735.	-511.	3807.	-355.	-762.	.0050	.0362	-.0049	.0078	-.0064	.0130	.0078	-.0064	.0130	1565.
.1250	-337.	404.	-452.	3247.	-470.	-594.	.0070	.0428	-.0047	.0074	-.0061	.0175	.0074	-.0061	.0175	1338.
.1260	-410.	261.	-394.	2814.	-499.	-522.	.0085	.0488	-.0051	.0081	-.0025	.0211	.0081	-.0025	.0211	1166.
.1270	-474.	-1825.	-353.	2555.	-543.	-485.	.0096	.0539	-.0061	.0098	-.0000	.0238	.0098	-.0000	.0238	1066.
.1280	-494.	-1709.	-338.	2470.	-578.	-395.	.0103	.0584	-.0076	.0123	.0035	.0254	.0123	.0035	.0254	1030.
.1290	-489.	-304.	-328.	2486.	-591.	-293.	.0106	.0616	-.0094	.0155	.0077	.0259	.0155	.0077	.0259	1032.
.1300	-493.	-1069.	-292.	2501.	-613.	-271.	.0104	.0625	-.0112	.0196	.0088	.0254	.0196	.0088	.0254	1039.
.1310	-491.	-2813.	-220.	2467.	-642.	-291.	.0098	.0612	-.0131	.0242	.0051	.0239	.0242	.0051	.0239	1030.
.1320	-443.	-2123.	-126.	2404.	-699.	-248.	.0087	.0581	-.0149	.0292	-.0051	.0212	.0292	-.0051	.0212	1010.
.1330	-353.	-125.	-24.	2362.	-722.	-156.	.0072	.0532	-.0169	.0345	-.0161	.0174	.0345	-.0161	.0174	993.
.1340	-262.	-364.	72.	2394.	-705.	-122.	.0052	.0461	-.0189	.0401	-.0248	.0127	.0401	-.0248	.0127	1003.
.1350	-181.	-2033.	147.	2541.	-671.	-180.	.0028	.0376	-.0212	.0457	-.0303	.0073	.0457	-.0303	.0073	1057.
.1360	-97.	-1908.	191.	2799.	-607.	-291.	.0000	.0288	-.0236	.0511	-.0315	.0012	.0511	-.0315	.0012	1155.
.1370	-19.	-811.	219.	3104.	-545.	-472.	-.0030	.0198	-.0259	.0561	-.0320	-.0053	.0561	-.0320	-.0053	1279.
.1380	36.	-1543.	252.	3373.	-474.	-750.	-.0060	.0105	-.0279	.0606	-.0330	-.0121	.0606	-.0330	-.0121	1400.
.1390	81.	-3088.	292.	3560.	-430.	-1080.	-.0091	.0014	-.0295	.0643	-.0369	-.0190	.0643	-.0369	-.0190	1503.
.1400	134.	-2507.	328.	3663.	-428.	-1400.	-.0119	-.0065	-.0305	.0670	-.0433	-.0259	.0670	-.0433	-.0259	1583.
.1410	173.	-706.	351.	3693.	-443.	-1749.	-.0146	-.0128	-.0309	.0684	-.0482	-.0324	.0684	-.0482	-.0324	1649.
.1420	165.	-778.	360.	3666.	-520.	-2208.	-.0170	-.0176	-.0307	.0687	-.0524	-.0383	.0687	-.0524	-.0383	1730.
.1430	121.	-2140.	349.	3607.	-630.	-2733.	-.0192	-.0206	-.0300	.0678	-.0547	-.0435	.0678	-.0547	-.0435	1834.
.1440	78.	-2124.	313.	3540.	-725.	-3210.	-.0211	-.0212	-.0290	.0658	-.0539	-.0480	.0658	-.0539	-.0480	1940.
.1450	45.	-1134.	260.	3468.	-755.	-3595.	-.0225	-.0198	-.0276	.0630	-.0490	-.0516	.0630	-.0490	-.0516	2027.
.1460	5.	-1328.	199.	3391.	-711.	-3907.	-.0236	-.0168	-.0261	.0596	-.0400	-.0542	.0596	-.0400	-.0542	2095.
.1470	-41.	-2112.	127.	3327.	-685.	-4120.	-.0242	-.0123	-.0244	.0558	-.0316	-.0556	.0558	-.0316	-.0556	2143.
.1480	-69.	-1424.	38.	3299.	-676.	-4155.	-.0243	-.0062	-.0227	.0517	-.0231	-.0558	.0517	-.0231	-.0558	2146.
.1490	-75.	-46.	-64.	3300.	-693.	-3978.	-.0239	.0011	-.0210	.0473	-.0149	-.0546	.0473	-.0149	-.0546	2093.
.1500	-58.	-10.	-164.	3301.	-737.	-3584.	-.0228	.0088	-.0192	.0428	-.0081	-.0521	.0428	-.0081	-.0521	1978.
.1510	-4.	-624.	-255.	3271.	-761.	-2944.	-.0213	.0169	-.0174	.0385	-.0016	-.0484	.0385	-.0016	-.0484	1792.
.1520	96.	-62.	-329.	3197.	-759.	-2055.	-.0192	.0254	-.0157	.0343	.0042	-.0439	.0343	.0042	-.0439	1555.
.1530	222.	975.	-382.	3077.	-699.	-1012.	-.0168	.0339	-.0141	.0304	.0114	-.0385	.0304	.0114	-.0385	1330.
.1540	342.	607.	-412.	2932.	-611.	56.	-.0143	.0415	-.0126	.0271	.0191	-.0326	.0271	.0191	-.0326	1202.
.1550	452.	-580.	-429.	2805.	-502.	1091.	-.0117	.0481	-.0115	.0245	.0276	-.0264	.0245	.0276	-.0264	1225.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.43.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.1450	45.	-1134.	260.	3468.	-711.	-3595.	-.0225	-.0198	-.0276	.0630	-.0490	-.0516	2027.
.1460	5.	-1328.	199.	3391.	-711.	-3907.	-.0236	-.0168	-.0261	.0596	-.0400	-.0542	2095.
.1470	-41.	-2112.	127.	3227.	-685.	-4120.	-.0242	-.0123	-.0244	.0558	-.0316	-.0556	2143.
.1480	-29.	-1424.	37.	3299.	-676.	-4155.	-.0243	-.0067	-.0227	.0517	-.0231	-.0558	2146.
.1490	-75.	-46.	-64.	3300.	-697.	-3978.	-.0239	.0011	-.0210	.0477	-.0149	-.0546	2093.
.1500	-1.	-10.	-164.	3301.	-737.	-3534.	-.0228	.0027	-.0192	.0428	-.0081	-.0521	1978.
.1510	-4.	-624.	-255.	3271.	-761.	-2944.	-.0213	.0165	-.0174	.0385	-.0016	-.0484	1792.
.1520	94.	-62.	-329.	3197.	-759.	-2055.	-.0192	.0254	-.0157	.0343	.0042	-.0439	1555.
.1530	222.	975.	-782.	3077.	-699.	-1012.	-.0168	.0339	-.0141	.0304	.0114	-.0385	1330.
.1540	342.	607.	-412.	2972.	-611.	56.	-.0143	.0415	-.0126	.0271	.0191	-.0326	1202.
.1550	452.	-580.	-429.	2805.	-502.	1091.	-.0117	.0481	-.0115	.0245	.0276	-.0264	1225.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.43.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	39	MEMBER	1	SEQUENCE	318	LOCATION	BEG	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.1560	565.	-735.	-440.	2726.	-345.	2077.	-.0092	.0533	-.0107	.0225	.0383	-.0203	1382.		
.1570	671.	-231.	-443.	2690.	-190.	2943.	-.0069	.0567	-.0103	.0213	.0475	-.0148	1602.		
.1580	747.	-575.	-425.	2661.	-29.	3587.	-.0049	.0579	-.0103	.0209	.0547	-.0098	1792.		
.1590	780.	-1319.	-381.	2609.	143.	3948.	-.0032	.0571	-.0105	.0210	.0501	-.0057	1900.		
.1600	769.	-1433.	-315.	2517.	281.	4008.	-.0018	.0544	-.0109	.0216	.0516	-.0024	1903.		
.1610	710.	-1240.	-232.	2381.	377.	3761.	-.0008	.0499	-.0113	.0224	.0600	-.0001	1793.		
.1620	607.	-1726.	-136.	2204.	468.	3227.	-.0001	.0436	-.0117	.0232	.0584	.0015	1579.		
.1630	469.	-2594.	-36.	1992.	517.	2464.	.0003	.0358	-.0119	.0239	.0552	.0023	1288.		
.1640	313.	-2797.	63.	1749.	534.	1544.	.0005	.0270	-.0120	.0243	.0508	.0026	960.		
.1650	137.	-2606.	163.	1474.	546.	509.	.0006	.0180	-.0118	.0243	.0463	.0025	663.		
.1660	-61.	-3069.	262.	1101.	533.	-607.	.0006	.0089	-.0113	.0240	.0405	.0024	574.		
.1670	-267.	-3930.	349.	906.	522.	-1716.	.0007	.0005	-.0106	.0232	.0354	.0025	806.		
.1680	-455.	-4224.	409.	694.	499.	-2705.	.0009	-.0067	-.0098	.0219	.0306	.0029	1139.		
.1690	-610.	-3983.	433.	570.	475.	-3497.	.0013	-.0125	-.0089	.0200	.0275	.0037	1435.		
.1700	-733.	-4101.	424.	515.	440.	-4068.	.0020	-.0166	-.0077	.0174	.0258	.0051	1655.		
.1710	-825.	-4700.	392.	483.	379.	-4411.	.0030	-.0189	-.0063	.0141	.0239	.0071	1787.		
.1720	-883.	-4987.	349.	421.	353.	-4510.	.0041	-.0190	-.0046	.0099	.0245	.0097	1823.		
.1730	-904.	-4861.	305.	286.	339.	-4378.	.0054	-.0171	-.0024	.0049	.0253	.0128	1766.		
.1740	-892.	-4874.	264.	63.	340.	-4044.	.0069	-.0133	.0002	-.0010	.0263	.0161	1629.		
.1750	-849.	-5120.	223.	-233.	354.	-3544.	.0083	-.0081	.0031	-.0076	.0276	.0194	1432.		
.1760	-778.	-5145.	176.	-568.	337.	-2925.	.0096	-.0017	.0062	-.0148	.0269	.0225	1203.		
.1770	-690.	-4836.	124.	-919.	298.	-2248.	.0107	.0056	.0095	-.0223	.0246	.0252	982.		
.1780	-599.	-4690.	71.	-1268.	224.	-1585.	.0116	.0132	.0127	-.0299	.0192	.0273	819.		
.1790	-510.	-4762.	20.	-1603.	144.	-977.	.0121	.0208	.0158	-.0373	.0116	.0286	755.		
.1800	-418.	-4574.	-26.	-1905.	71.	-429.	.0122	.0281	.0188	-.0443	.0018	.0291	784.		
.1810	-323.	-4115.	-73.	-2152.	-10.	51.	.0119	.0347	.0214	-.0509	-.0106	.0286	864.		
.1820	-227.	-3883.	-123.	-2326.	-47.	450.	.0113	.0402	.0236	-.0568	-.0215	.0273	951.		
.1830	-138.	-4072.	-178.	-2420.	-60.	757.	.0103	.0444	.0258	-.0620	-.0309	.0251	1018.		
.1840	-53.	-4242.	-238.	-2441.	-68.	986.	.0090	.0472	.0276	-.0666	-.0392	.0223	1057.		
.1850	29.	-4282.	-296.	-2413.	-68.	1159.	.0076	.0485	.0291	-.0704	-.0464	.0190	1075.		
.1860	111.	-4607.	-346.	-2357.	-61.	1301.	.0060	.0480	.0304	-.0734	-.0533	.0155	1081.		
.1870	198.	-5131.	-384.	-2281.	-18.	1445.	.0044	.0458	.0316	-.0755	-.0586	.0118	1083.		
.1880	297.	-5347.	-416.	-2173.	27.	1610.	.0028	.0420	.0324	-.0768	-.0636	.0082	1085.		
.1890	389.	-5170.	-446.	-2015.	78.	1793.	.0014	.0368	.0329	-.0773	-.0670	.0048	1083.		
.1900	477.	-5103.	-480.	-1802.	139.	1971.	.0002	.0305	.0330	-.0770	-.0672	.0019	1073.		
.1910	550.	-5343.	-517.	-1545.	186.	2135.	-.0008	.0232	.0327	-.0760	-.0652	-.0005	1060.		
.1920	612.	-5467.	-552.	-1281.	234.	2290.	-.0016	.0156	.0321	-.0744	-.0606	-.0022	1057.		
.1930	662.	-5392.	-576.	-1059.	281.	2428.	-.0020	.0080	.0313	-.0724	-.0543	-.0033	1069.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.43.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

.1830	-130.	-4072.	-178.	-2420.	-60.	757.	.0103	.0444	.0258	-.0620	-.0309	.0251	1018.
.1840	-53.	-4242.	-238.	-2441.	-68.	986.	.0090	.0472	.0276	-.0666	-.0392	.0223	1057.
.1850	29.	-4202.	-296.	-2413.	-68.	1159.	.0076	.0485	.0291	-.0704	-.0464	.0190	1075.
.1860	111.	-4607.	-340.	-2357.	-61.	1301.	.0060	.0480	.0304	-.0734	-.0533	.0155	1081.
.1870	198.	-5131.	-384.	-2281.	-18.	1445.	.0044	.0453	.0316	-.0755	-.0586	.0118	1083.
.1880	297.	-5347.	-416.	-2173.	27.	1610.	.0028	.0420	.0324	-.0768	-.0636	.0082	1085.
.1890	789.	-5170.	-446.	-2015.	78.	1793.	.0014	.0368	.0329	-.0773	-.0670	.0048	1083.
.1900	477.	-5103.	-480.	-1802.	139.	1971.	.0002	.0305	.0330	-.0770	-.0672	.0019	1073.
.1910	550.	-5343.	-517.	-1545.	186.	2135.	-.0008	.0232	.0327	-.0760	-.0652	-.0005	1060.
.1920	612.	-5467.	-552.	-1281.	234.	2290.	-.0016	.0156	.0321	-.0744	-.0606	-.0022	1057.
.1930	662.	-5392.	-576.	-1059.	281.	2428.	-.0020	.0080	.0313	-.0724	-.0543	-.0033	1069.

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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	39	MEMBER	1	SEQUENCE	818	LOCATION	BEG	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.1940	691.	-5431.	-500.	-924.	321.	2513.	-.0022	.0005	.0303	-.0701	-.0471	-.0039	1082.	
.1950	689.	-5560.	-560.	-903.	354.	2504.	-.0021	-.0064	.0294	-.0675	-.0391	-.0038	1077.	
.1960	652.	-5401.	-520.	-992.	378.	2372.	-.0017	-.0125	.0284	-.0647	-.0299	-.0033	1043.	
.1970	575.	-4978.	-463.	-1167.	392.	2105.	-.0012	-.0173	.0274	-.0616	-.0194	-.0024	979.	
.1980	462.	-4658.	-396.	-1397.	406.	1707.	-.0005	-.0208	.0263	-.0582	-.0074	-.0011	900.	
.1990	322.	-4493.	-321.	-1646.	429.	1208.	.0003	-.0227	.0250	-.0545	.0059	.0005	837.	
.2000	165.	-4308.	-243.	-1889.	459.	650.	.0013	-.0230	.0233	-.0502	.0194	.0024	823.	
.2010	-2.	-4147.	-162.	-2111.	492.	67.	.0023	-.0217	.0213	-.0455	.0322	.0046	870.	
.2020	-172.	-4126.	-78.	-2306.	533.	-508.	.0034	-.0191	.0190	-.0403	.0444	.0069	971.	
.2030	-336.	-4093.	11.	-2480.	575.	-1032.	.0045	-.0152	.0164	-.0348	.0554	.0095	1102.	
.2040	-482.	-3817.	104.	-2644.	603.	-1457.	.0057	-.0104	.0136	-.0289	.0641	.0121	1235.	
.2050	-597.	-3405.	203.	-2812.	606.	-1743.	.0069	-.0049	.0107	-.0230	.0696	.0148	1350.	
.2060	-676.	-3159.	310.	-2998.	591.	-1866.	.0081	.0010	.0079	-.0170	.0718	.0174	1437.	
.2070	-713.	-3131.	425.	-3200.	563.	-1822.	.0092	.0070	.0051	-.0111	.0710	.0197	1495.	
.2080	-710.	-3140.	543.	-3400.	530.	-1622.	.0101	.0128	.0025	-.0053	.0676	.0218	1527.	
.2090	-671.	-3096.	656.	-3567.	505.	-1292.	.0108	.0182	-.0000	.0003	.0631	.0234	1536.	
.2100	-601.	-3013.	757.	-3661.	505.	-863.	.0111	.0230	-.0025	.0058	.0591	.0244	1523.	
.2110	-504.	-2862.	835.	-3646.	528.	-361.	.0112	.0270	-.0049	.0110	.0559	.0248	1485.	
.2120	-382.	-2626.	885.	-3499.	561.	192.	.0109	.0301	-.0073	.0159	.0529	.0244	1424.	
.2130	-242.	-2456.	906.	-3215.	594.	766.	.0102	.0323	-.0096	.0205	.0496	.0233	1348.	
.2140	-93.	-2502.	896.	-2807.	618.	1325.	.0093	.0336	-.0117	.0247	.0457	.0215	1270.	
.2150	58.	-2676.	858.	-2294.	624.	1836.	.0081	.0341	-.0135	.0284	.0413	.0189	1206.	
.2160	202.	-2794.	795.	-1700.	609.	2268.	.0067	.0337	-.0150	.0315	.0365	.0158	1164.	
.2170	333.	-2842.	708.	-1047.	575.	2597.	.0051	.0324	-.0161	.0340	.0317	.0120	1147.	
.2180	445.	-2919.	601.	-356.	527.	2806.	.0032	.0304	-.0168	.0357	.0274	.0079	1154.	
.2190	536.	-2976.	478.	357.	471.	2889.	.0013	.0276	-.0171	.0367	.0238	.0034	1183.	
.2200	604.	-2859.	342.	1079.	412.	2851.	-.0007	.0244	-.0170	.0372	.0209	-.0012	1234.	
.2210	648.	-2634.	198.	1796.	349.	2697.	-.0027	.0209	-.0167	.0370	.0185	-.0058	1308.	
.2220	665.	-2523.	50.	2495.	277.	2440.	-.0047	.0174	-.0163	.0364	.0161	-.0102	1405.	
.2230	659.	-2574.	-98.	3155.	192.	2100.	-.0064	.0138	-.0157	.0353	.0134	-.0142	1523.	
.2240	634.	-2620.	-239.	3747.	90.	1708.	-.0080	.0105	-.0150	.0338	.0098	-.0177	1653.	
.2250	595.	-2548.	-364.	4233.	-25.	1287.	-.0092	.0077	-.0142	.0319	.0053	-.0207	1775.	
.2260	542.	-2429.	-465.	4573.	-143.	850.	-.0101	.0053	-.0133	.0297	-.0001	-.0230	1868.	
.2270	476.	-2318.	-534.	4741.	-255.	409.	-.0107	.0035	-.0122	.0270	-.0061	-.0245	1912.	
.2280	400.	-2192.	-568.	4729.	-355.	-29.	-.0111	.0024	-.0109	.0242	-.0126	-.0253	1903.	
.2290	315.	-2099.	-570.	4555.	-438.	-453.	-.0111	.0020	-.0096	.0212	-.0193	-.0255	1845.	
.2300	216.	-2107.	-546.	4257.	-496.	-854.	-.0108	.0023	-.0083	.0181	-.0256	-.0249	1754.	
.2310	126.	-2158.	-503.	3682.	-526.	-1221.	-.0104	.0033	-.0070	.0152	-.0311	-.0238	1647.	

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

.2210	645.	-2634.	192.	1796.	349.	2697.	-.0027	.0209	-.0167	.0370	.0185	-.0058	1308.
.2220	665.	-2523.	50.	2495.	277.	2440.	-.0047	.0174	-.0163	.0364	.0161	-.0102	1405.
.2230	659.	-2574.	-98.	3155.	192.	2100.	-.0064	.0138	-.0157	.0353	.0134	-.0142	1523.
.2240	634.	-2620.	-239.	2747.	96.	1700.	-.0080	.0105	-.0150	.0338	.0098	-.0177	1653.
.2250	595.	-2548.	-364.	4233.	-25.	1287.	-.0092	.0077	-.0142	.0319	.0053	-.0207	1775.
.2260	542.	-2429.	-465.	4573.	-143.	850.	-.0101	.0053	-.0133	.0297	-.0001	-.0230	1868.
.2270	476.	-2310.	-534.	4741.	-255.	499.	-.0107	.0035	-.0122	.0270	-.0061	-.0245	1912.
.2280	400.	-2193.	-568.	4729.	-355.	-29.	-.0111	.0024	-.0109	.0242	-.0126	-.0253	1903.
.2290	315.	-2099.	-570.	4555.	-438.	-453.	-.0111	.0020	-.0096	.0212	-.0193	-.0255	1845.
.2300	226.	-2107.	-546.	4257.	-496.	-854.	-.0108	.0023	-.0083	.0181	-.0256	-.0249	1754.
.2310	136.	-2158.	-507.	3882.	-520.	-1221.	-.0104	.0023	-.0070	.0152	-.0211	-.0238	1647.

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

SECTION	MEMBER	SEQUENCE	LOCATION	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
39	1	818	BEG			.2320	48.	-2116.	-451.	3479.	-531.	-1546.	-.0097	.0048	-.0059	.0125	-.0360	-.0222	1543.
						.2330	-37.	-2003.	-394.	3086.	-516.	-1821.	-.0088	.0068	-.0051	.0102	-.0405	-.0201	1453.
						.2340	-117.	-1934.	-336.	2731.	-485.	-2039.	-.0078	.0092	-.0045	.0084	-.0448	-.0175	1382.
						.2350	-188.	-1873.	-282.	2437.	-445.	-2184.	-.0066	.0118	-.0042	.0071	-.0493	-.0147	1325.
						.2360	-244.	-1706.	-237.	2218.	-402.	-2239.	-.0053	.0145	-.0041	.0062	-.0539	-.0115	1275.
						.2370	-282.	-1457.	-205.	2083.	-356.	-2199.	-.0039	.0172	-.0042	.0058	-.0580	-.0082	1224.
						.2380	-305.	-1266.	-187.	2032.	-305.	-2075.	-.0025	.0198	-.0044	.0058	-.0608	-.0048	1172.
						.2390	-315.	-1129.	-183.	2059.	-247.	-1884.	-.0010	.0222	-.0047	.0061	-.0618	-.0014	1124.
						.2400	-314.	-911.	-193.	2158.	-187.	-1640.	.0004	.0244	-.0050	.0066	-.0610	.0020	1090.
						.2410	-303.	-623.	-215.	2323.	-124.	-1356.	.0017	.0262	-.0053	.0074	-.0585	.0051	1081.
						.2420	-282.	-378.	-249.	2550.	-60.	-1051.	.0029	.0276	-.0057	.0084	-.0546	.0079	1107.
						.2430	-255.	-210.	-294.	2836.	-0.	-745.	.0039	.0285	-.0062	.0097	-.0495	.0103	1177.
						.2440	-225.	-17.	-348.	3172.	53.	-461.	.0047	.0288	-.0068	.0112	-.0431	.0122	1286.
						.2450	-196.	267.	-408.	3541.	97.	-219.	.0053	.0286	-.0075	.0129	-.0357	.0135	1424.
						.2460	-170.	552.	-470.	3918.	128.	-40.	.0056	.0278	-.0082	.0147	-.0275	.0142	1573.
						.2470	-150.	795.	-526.	4268.	148.	65.	.0056	.0264	-.0091	.0166	-.0190	-.0142	1714.
						.2480	-136.	988.	-569.	4561.	162.	92.	.0054	.0244	-.0099	.0186	-.0104	.0135	1832.
						.2490	-128.	1100.	-594.	4776.	172.	42.	.0049	.0219	-.0107	.0207	-.0020	.0122	1918.
						.2500	-123.	1201.	-600.	4908.	174.	-78.	.0041	.0190	-.0115	.0228	.0056	.0104	1971.
						.2510	-122.	1341.	-588.	4967.	165.	-256.	.0031	.0158	-.0122	.0251	.0121	.0080	1997.
						.2520	-125.	1450.	-562.	4973.	144.	-484.	.0019	.0125	-.0131	.0276	.0173	.0051	2006.
						.2530	-130.	1490.	-525.	4946.	113.	-744.	.0006	.0091	-.0140	.0303	.0209	.0021	2008.
						.2540	-135.	1578.	-479.	4906.	75.	-1012.	-.0008	.0057	-.0151	.0332	.0230	-.0012	2010.
						.2550	-135.	1775.	-427.	4863.	34.	-1257.	-.0022	.0026	-.0163	.0364	.0234	-.0045	2016.
						.2560	-125.	2058.	-371.	4817.	-4.	-1457.	-.0036	-.0003	-.0177	.0397	.0223	-.0077	2020.
						.2570	-104.	2551.	-311.	4760.	-39.	-1598.	-.0049	-.0031	-.0192	.0431	.0199	-.0108	2015.
						.2580	-77.	3118.	-247.	4670.	-71.	-1687.	-.0061	-.0056	-.0206	.0463	.0166	-.0137	1993.
						.2590	-47.	3532.	-177.	4520.	-99.	-1728.	-.0072	-.0080	-.0219	.0493	.0128	-.0162	1942.
						.2600	-13.	3922.	-100.	4288.	-126.	-1717.	-.0082	-.0101	-.0230	.0516	.0084	-.0184	1854.
						.2610	30.	4399.	-18.	3957.	-154.	-1646.	-.0090	-.0121	-.0236	.0533	.0036	-.0203	1721.
						.2620	78.	4698.	70.	3518.	-187.	-1530.	-.0096	-.0140	-.0238	.0541	-.0016	-.0219	1541.
						.2630	121.	4743.	161.	2974.	-215.	-1393.	-.0102	-.0160	-.0236	.0539	-.0066	-.0232	1321.
						.2640	150.	4826.	250.	2340.	-254.	-1245.	-.0106	-.0180	-.0229	.0528	-.0114	-.0241	1068.
						.2650	189.	4956.	334.	1635.	-302.	-1086.	-.0108	-.0199	-.0218	.0506	-.0156	-.0247	797.
						.2660	215.	5060.	406.	886.	-357.	-908.	-.0109	-.0219	-.0202	.0474	-.0190	-.0249	529.
						.2670	238.	5036.	465.	113.	-419.	-711.	-.0108	-.0239	-.0183	.0433	-.0216	-.0248	334.
						.2680	251.	4718.	507.	-668.	-489.	-503.	-.0105	-.0258	-.0160	.0383	-.0231	-.0243	389.
						.2690	256.	4292.	535.	-1441.	-569.	-254.	-.0101	-.0274	-.0134	.0325	-.0234	-.0235	632.

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

.2580	-77.	3118.	-247.	4670.	-71.	-1687.	-.061	-.0056	-.0206	.0463	.0128	-.0137	1993.
.2590	-47.	3532.	-177.	4520.	-99.	-1728.	-.072	-.0080	-.0219	.0493	.0128	-.0162	1942.
.2600	-13.	3922.	-100.	4288.	-126.	-1717.	-.082	-.0101	-.0230	.0516	.0084	-.0184	1854.
.2610	30.	4399.	-18.	3957.	-154.	-1646.	-.090	-.0121	-.0236	.0533	.0036	-.0203	1721.
.2620	78.	4898.	70.	3518.	-183.	-1530.	-.096	-.0140	-.0238	.0541	-.0016	-.0219	1541.
.2630	121.	4743.	161.	2974.	-215.	-1393.	-.102	-.0160	-.0236	.0539	-.0066	-.0232	1321.
.2640	158.	4828.	250.	2340.	-254.	-1245.	-.106	-.0180	-.0229	.0528	-.0114	-.0241	1068.
.2650	189.	4956.	334.	1635.	-302.	-1086.	-.108	-.0199	-.0218	.0506	-.0156	-.0247	797.
.2660	215.	5060.	406.	886.	-357.	-908.	-.109	-.0219	-.0202	.0474	-.0190	-.0249	529.
.2670	238.	5036.	465.	113.	-419.	-711.	-.108	-.0239	-.0183	.0433	-.0216	-.0248	334.
.2680	251.	4718.	508.	-668.	-489.	-503.	-.105	-.0258	-.0160	.0383	-.0231	-.0243	389.
.2690	256.	4292.	535.	-1441.	-569.	-284.	-.101	-.0274	-.0134	.0325	-.0234	-.0235	632.

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

SECTION	39	MEMBER	1	SEQUENCE	818	LOCATION	BEG	TYPE	RU	DZ	RX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)					
.2700	258.	4119.	543.	-2186.	-659.	-41.	-.0095	-.0286	-.0105	.0262	-.0228	-.0223	916.	
.2710	262.	4307.	533.	-2862.	-757.	273.	-.0087	-.0297	-.0074	.0194	-.0214	-.0209	1199.	
.2720	265.	4470.	506.	-3512.	-844.	523.	-.0078	-.0309	-.0041	.0124	-.0191	-.0194	1465.	
.2730	263.	4437.	465.	-4058.	-927.	812.	-.0070	-.0319	-.0007	.0055	-.0161	-.0176	1702.	
.2740	262.	4668.	410.	-4494.	-1001.	1105.	-.0061	-.0325	.0025	-.0011	-.0129	-.0159	1900.	
.2750	270.	5237.	339.	-4792.	-1061.	1410.	-.0052	-.0327	.0055	-.0072	-.0099	-.0142	2049.	
.2760	286.	5499.	253.	-4936.	-1101.	1716.	-.0045	-.0327	.0081	-.0126	-.0071	-.0126	2143.	
.2770	303.	5115.	158.	-4928.	-1119.	1997.	-.0038	-.0328	.0102	-.0171	-.0047	-.0113	2181.	
.2780	321.	4701.	60.	-4792.	-1117.	2240.	-.0033	-.0328	.0118	-.0205	-.0031	-.0102	2169.	
.2790	343.	4887.	-31.	-4565.	-1091.	2446.	-.0030	-.0324	.0129	-.0230	-.0028	-.0093	2124.	
.2800	368.	5252.	-106.	-4290.	-1037.	2607.	-.0028	-.0320	.0135	-.0245	-.0042	-.0089	2057.	
.2810	394.	5148.	-155.	-4008.	-954.	2709.	-.0028	-.0317	.0137	-.0250	-.0078	-.0087	1979.	
.2820	415.	4775.	-175.	-3748.	-844.	2737.	-.0029	-.0314	.0136	-.0247	-.0132	-.0089	1893.	
.2830	430.	4603.	-167.	-3524.	-712.	2682.	-.0032	-.0308	.0131	-.0237	-.0201	-.0095	1800.	
.2840	432.	4778.	-134.	-3340.	-561.	2532.	-.0037	-.0298	.0123	-.0221	-.0281	-.0103	1697.	
.2850	421.	4381.	-78.	-3192.	-395.	2288.	-.0042	-.0287	.0112	-.0200	-.0369	-.0113	1584.	
.2860	399.	3635.	-4.	-3074.	-215.	1986.	-.0049	-.0275	.0100	-.0176	-.0464	-.0126	1467.	
.2870	369.	3045.	83.	-2982.	-27.	1582.	-.0056	-.0261	.0086	-.0149	-.0565	-.0139	1354.	
.2880	326.	2759.	178.	-2912.	162.	1139.	-.0063	-.0243	.0071	-.0122	-.0669	-.0152	1256.	
.2890	268.	2447.	276.	-2857.	742.	648.	-.0069	-.0223	.0056	-.0096	-.0774	-.0163	1183.	
.2900	202.	2012.	767.	-2802.	507.	140.	-.0075	-.0200	.0043	-.0072	-.0877	-.0173	1144.	
.2910	137.	1659.	443.	-2735.	637.	-353.	-.0090	-.0176	.0031	-.0053	-.0976	-.0181	1136.	
.2920	73.	1377.	500.	-2653.	740.	-818.	-.0082	-.0151	.0023	-.0040	-.1064	-.0186	1153.	
.2930	5.	985.	535.	-2560.	511.	-1261.	-.0084	-.0124	.0018	-.0035	-.1138	-.0189	1190.	
.2940	-64.	565.	549.	-2458.	255.	-1671.	-.0094	-.0096	.0017	-.0037	-.1194	-.0189	1241.	
.2950	-17.	251.	538.	-2344.	877.	-2027.	-.0083	-.0082	.0021	-.0047	-.1228	-.0186	1292.	
.2960	-120.	283.	502.	-2212.	688.	-2314.	-.0081	-.0043	.0028	-.0065	-.1236	-.0181	1353.	
.2970	-224.	91.	442.	-2061.	288.	-2535.	-.0079	-.0020	.0040	-.0090	-.1215	-.0175	1358.	
.2980	-21.	-40.	350.	-1891.	879.	-2657.	-.0075	-.0001	.0054	-.0122	-.1165	-.0166	1365.	
.2990	-235.	36.	250.	-1709.	659.	-2757.	-.0071	.0015	.0071	-.0160	-.1089	-.0155	1365.	
.3000	-394.	300.	13.	-1520.	577.	-2773.	-.0067	.0027	.0090	-.0203	-.0964	-.0144	1300.	
.3010	-38.	257.	20.	-1365.	807.	-2613.	-.0061	.0032	.0110	-.0249	-.0896	-.0131	1226.	
.3020	-267.	46.	0.	-1243.	766.	-2401.	-.0055	.0031	.0132	-.0298	-.0772	-.0117	1128.	
.3030	-214.	52.	-202.	-1176.	726.	-2105.	-.0048	.0025	.0154	-.0326	-.0657	-.0102	1011.	
.3040	-173.	292.	-297.	-1165.	687.	-1739.	-.0041	.0014	.0177	-.0394	-.0544	-.0087	884.	
.3050	-112.	423.	-375.	-1204.	654.	-1318.	-.0035	-.0004	.0198	-.0439	-.0436	-.0072	763.	
.3060	-41.	478.	-478.	-1278.	631.	-880.	-.0028	-.0027	.0217	-.0480	-.0374	-.0058	668.	
.3070	24.	454.	-442.	-1371.	617.	-337.	-.0022	-.0055	.0234	-.0514	-.0244	-.0044	623.	

S/RV PIPING KEWAUNEE CRKOPF 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	39	MEMBER	1	SEQUENCE	818	LOCATION	BEG	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3080	110.	501.	-511.	-1468.	613.	79.	-.0016	-.0004	.0246	-.0540	-.0168	-.0032	639.		
.3090	179.	528.	-525.	-1555.	618.	499.	-.0011	-.0114	.0255	-.0558	-.0108	-.0021	701.		
.3100	243.	498.	-527.	-1823.	628.	873.	-.0007	-.0145	.0259	-.0567	-.0069	-.0012	781.		
.3110	299.	404.	-518.	-1665.	642.	1137.	-.0004	-.0176	.0259	-.0567	-.0049	-.0005	861.		
.3120	342.	424.	-497.	-1698.	655.	1421.	-.0002	-.0205	.0255	-.0558	-.0048	.0000	927.		
.3130	367.	466.	-465.	-1727.	669.	1557.	.0000	-.0230	.0247	-.0542	-.0063	.0004	971.		
.3140	372.	523.	-421.	-1766.	683.	1591.	.0001	-.0250	.0237	-.0520	-.0090	.0006	993.		
.3150	760.	659.	-367.	-1821.	695.	1537.	.0002	-.0265	.0225	-.0493	-.0128	.0007	996.		
.3160	333.	796.	-306.	-1894.	707.	1402.	.0002	-.0274	.0212	-.0461	-.0172	.0006	987.		
.3170	290.	817.	-239.	-1984.	715.	1190.	.0002	-.0277	.0197	-.0427	-.0218	.0005	972.		
.3180	229.	836.	-171.	-2088.	714.	912.	.0001	-.0273	.0182	-.0392	-.0263	.0004	958.		
.3190	156.	1047.	-103.	-2198.	702.	592.	.0001	-.0263	.0165	-.0355	-.0306	.0002	956.		
.3200	77.	1414.	-38.	-2312.	680.	257.	.0000	-.0249	.0149	-.0318	-.0346	.0000	972.		
.3210	-3.	1752.	24.	-2425.	650.	-72.	.0000	-.0232	.0133	-.0281	-.0351	-.0001	1008.		
.3220	-82.	2090.	82.	-2535.	614.	-377.	.0000	-.0213	.0116	-.0244	-.0410	-.0003	1057.		
.3230	-155.	2616.	134.	-2635.	573.	-641.	-.0000	-.0191	.0101	-.0209	-.0430	-.0005	1112.		
.3240	-218.	3273.	178.	-2719.	530.	-852.	-.0000	-.0170	.0085	-.0174	-.0438	-.0008	1163.		
.3250	-267.	3908.	214.	-2778.	486.	-1001.	-.0001	-.0150	.0070	-.0140	-.0432	-.0013	1201.		
.3260	-301.	4146.	242.	-2808.	443.	-1095.	-.0003	-.0133	.0056	-.0107	-.0416	-.0019	1220.		
.3270	-316.	4495.	260.	-2800.	398.	-1104.	-.0006	-.0121	.0043	-.0074	-.0391	-.0028	1218.		
.3280	-312.	4933.	272.	-2760.	355.	-1063.	-.0010	-.0113	.0029	-.0041	-.0362	-.0039	1195.		
.3290	-291.	5453.	278.	-2694.	314.	-972.	-.0016	-.0112	.0016	-.0008	-.0330	-.0054	1152.		
.3300	-252.	5786.	280.	-2572.	277.	-839.	-.0023	-.0120	.0003	.0025	-.0297	-.0073	1091.		
.3310	-197.	6062.	277.	-2427.	243.	-667.	-.0032	-.0135	-.0010	.0059	-.0264	-.0095	1015.		
.3320	-126.	6370.	271.	-2260.	214.	-462.	-.0042	-.0157	-.0023	.0091	-.0230	-.0119	930.		
.3330	-44.	6673.	264.	-2088.	190.	-233.	-.0054	-.0185	-.0036	.0123	-.0194	-.0146	847.		
.3340	46.	6725.	260.	-1923.	173.	19.	-.0065	-.0220	-.0049	.0153	-.0155	-.0174	779.		
.3350	143.	6726.	262.	-1719.	161.	254.	-.0077	-.0260	-.0060	.0180	-.0115	-.0202	742.		
.3360	246.	6763.	273.	-1765.	157.	577.	-.0088	-.0304	-.0069	.0203	-.0074	-.0228	748.		
.3370	250.	6878.	294.	-1701.	150.	894.	-.0098	-.0350	-.0076	.0222	-.0032	-.0251	802.		
.3380	451.	6899.	323.	-1667.	147.	1232.	-.0108	-.0395	-.0081	.0236	.0012	-.0270	900.		
.3390	549.	6952.	356.	-1611.	147.	1594.	-.0111	-.0440	-.0084	.0246	.0059	-.0282	1031.		
.3400	639.	7021.	390.	-1604.	137.	1982.	-.0113	-.0480	-.0084	.0250	.0113	-.0288	1188.		
.3410	722.	7088.	420.	-2399.	129.	2396.	-.0111	-.0516	-.0083	.0249	.0174	-.0285	1362.		
.3420	794.	7081.	443.	-2610.	111.	2827.	-.0106	-.0546	-.0080	.0244	.0243	-.0273	1545.		
.3430	852.	7046.	459.	-2616.	103.	3264.	-.0096	-.0568	-.0076	.0235	.0318	-.0253	1731.		
.3440	895.	7040.	465.	-2606.	87.	3697.	-.0083	-.0583	-.0071	.0223	.0398	-.0224	1912.		
.3450	927.	7104.	465.	-2473.	71.	4128.	-.0067	-.0590	-.0064	.0208	.0473	-.0187	2083.		

S/RV PIPING KEWAUNEE CRKOPF 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

.3390	46.	6777.	262.	-1819.	161.	244.	-0.077	-0.020	-0.049	.0153	-0.015	-0.0174	779.
.3395	143.	6726.	262.	-1819.	161.	244.	-0.077	-0.020	-0.049	.0180	-0.015	-0.0202	742.
.3398	246.	6763.	273.	-1765.	157.	277.	-0.093	-0.034	-0.069	.0203	-0.0174	-0.0228	748.
.3400	317.	6771.	294.	-1751.	150.	294.	-0.098	-0.036	-0.076	.0222	-0.022	-0.0251	802.
.3402	411.	6879.	321.	-1687.	147.	322.	-0.116	-0.045	-0.081	.0236	-0.022	-0.0270	900.
.3405	541.	6951.	358.	-1611.	143.	354.	-0.131	-0.044	-0.084	.0246	-0.019	-0.0282	1031.
.3408	639.	7074.	401.	-1474.	137.	392.	-0.147	-0.040	-0.084	.0250	-0.013	-0.0288	1188.
.3410	712.	7222.	426.	-1339.	129.	426.	-0.151	-0.036	-0.083	.0249	-0.0174	-0.0285	1362.
.3420	794.	7371.	443.	-1210.	118.	467.	-0.156	-0.034	-0.080	.0244	-0.023	-0.0273	1549.
.3430	852.	7546.	459.	-1086.	108.	518.	-0.156	-0.036	-0.076	.0235	-0.0218	-0.0253	1731.
.3440	885.	7744.	465.	-966.	97.	577.	-0.153	-0.033	-0.071	.0223	-0.0218	-0.0224	1912.
.3450	922.	7964.	465.	-847.	87.	643.	-0.147	-0.030	-0.064	.0208	-0.0213	-0.0187	2083.

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DIS/ADLPIPE

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S/RV FITTING KEWAUNEE GKI OFF 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	RU	DX	DY	DZ	RX	RY	RZ	STRESS
TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	HX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
.3430	928.	7165.	447.	-3317.	26.	4475.	-0.047	-0.0590	-0.0057	.0190	.0569	-0.0143	2234.
.3470	917.	7210.	425.	-3423.	-12.	4776.	-0.025	-0.0583	-0.0048	.0171	.0555	-0.0093	2358.
.3480	874.	7268.	375.	-3501.	-57.	4986.	-0.001	-0.0571	-0.0039	.0151	.0738	-0.0039	2448.
.3490	814.	7325.	261.	-3543.	-105.	5121.	.0024	-0.0552	-0.0030	.0132	.0817	.0017	2499.
.3500	734.	7312.	324.	-3548.	-154.	5143.	.0049	-0.0531	-0.0021	.0113	.0887	.0074	2508.
.3510	634.	7208.	288.	-3516.	-201.	5056.	.0074	-0.0506	-0.0014	.0096	.0947	.0130	2472.
.3520	517.	7001.	253.	-3449.	-244.	4859.	.0097	-0.0480	-0.0007	.0081	.0994	.0184	2393.
.3530	366.	6888.	225.	-3353.	-282.	4569.	.0119	-0.0453	-0.0003	.0069	.1027	.0235	2274.
.3540	246.	6906.	204.	-3233.	-317.	4177.	.0139	-0.0427	-0.0000	.0060	.1042	.0281	2123.
.3550	105.	6773.	193.	-3099.	-336.	3728.	.0157	-0.0401	.0001	.0055	.1037	.0321	1950.
.3560	-35.	6559.	194.	-2958.	-349.	3235.	.0172	-0.0378	.0000	.0052	.1013	.0356	1764.
.3570	-169.	6276.	207.	-2817.	-352.	2716.	.0184	-0.0355	-0.0002	.0052	.0969	.0384	1577.
.3580	-291.	5934.	232.	-2677.	-344.	2196.	.0193	-0.0334	-0.0004	.0053	.0908	.0405	1396.
.3590	-394.	5540.	265.	-2533.	-322.	1703.	.0199	-0.0315	-0.0008	.0056	.0831	.0420	1231.
.3600	-478.	5195.	301.	-2373.	-289.	1258.	.0202	-0.0297	-0.0012	.0060	.0741	.0429	1084.
.3610	-536.	4827.	337.	-2187.	-244.	876.	.0203	-0.0280	-0.0016	.0064	.0639	.0432	951.
.3620	-571.	4463.	368.	-1966.	-190.	565.	.0200	-0.0264	-0.0020	.0068	.0529	.0429	824.
.3630	-584.	3711.	389.	-1699.	-132.	333.	.0196	-0.0248	-0.0024	.0071	.0413	.0422	697.
.3640	-572.	3291.	396.	-1381.	-72.	194.	.0190	-0.0231	-0.0027	.0072	.0292	.0411	560.
.3650	-534.	2881.	385.	-1010.	-15.	103.	.0183	-0.0212	-0.0029	.0070	.0170	.0396	410.
.3660	-475.	2457.	353.	-591.	37.	206.	.0174	-0.0193	-0.0029	.0064	.0050	.0382	252.
.3670	-400.	1926.	303.	-140.	79.	334.	.0166	-0.0171	-0.0027	.0053	-0.0063	.0365	149.
.3680	-317.	1334.	234.	324.	110.	517.	.0157	-0.0147	-0.0022	.0038	-0.0167	.0348	249.
.3690	-231.	1353.	151.	780.	131.	745.	.0148	-0.0120	-0.0015	.0016	-0.0257	.0332	436.
.3700	-142.	1192.	54.	1212.	141.	1004.	.0140	-0.0092	-0.0004	.0011	-0.0331	.0317	634.
.3710	-55.	1063.	-51.	1601.	142.	1275.	.0133	-0.0064	.0010	-0.0044	-0.0389	.0303	823.
.3720	21.	901.	-161.	1924.	123.	1572.	.0127	-0.0036	.0026	-0.0082	-0.0429	.0291	992.
.3730	83.	741.	-272.	2199.	110.	1756.	.0122	-0.0009	.0045	-0.0125	-0.0449	.0281	1130.
.3740	122.	607.	-381.	2388.	75.	1939.	.0118	.0017	.0065	-0.0171	-0.0451	.0273	1235.
.3750	158.	493.	-482.	2495.	27.	2075.	.0115	.0039	.0086	-0.0220	-0.0436	.0267	1303.
.3760	173.	398.	-574.	2510.	-34.	2157.	.0110	.0055	.0108	-0.0269	-0.0409	.0264	1329.
.3770	169.	325.	-656.	2474.	-106.	2170.	.0107	.0066	.0129	-0.0317	-0.0372	.0262	1312.
.3780	147.	265.	-730.	2281.	-139.	2131.	.0103	.0071	.0150	-0.0364	-0.0327	.0262	1249.
.3790	112.	1800.	-741.	2000.	-150.	2034.	.0104	.0071	.0169	-0.0406	-0.0275	.0263	1148.
.3800	67.	899.	-756.	1674.	-176.	1885.	.0105	.0063	.0186	-0.0443	-0.0217	.0264	1017.
.3810	17.	742.	-751.	1297.	-173.	1620.	.0106	.0048	.0201	-0.0474	-0.0193	.0265	867.
.3820	-49.	502.	-729.	892.	-152.	1407.	.0107	.0027	.0212	-0.0495	-0.0084	.0267	706.
.3830	-110.	332.	-655.	474.	-156.	1111.	.0108	.0002	.0219	-0.0500	-0.0010	.0266	552.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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S/RV FITTING KEWAUNEE GKI OFF 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

.3720	87.	641.	-272.	2199.	110.	1756.	.1127	-.0007	.0045	-.0125	-.0449	.0281	1130.
.3740	128.	907.	-211.	2388.	75.	1929.	.1118	.0117	.0065	-.0171	-.0451	.0273	1235.
.3750	158.	983.	-487.	2495.	27.	2071.	.1115	.0030	.0016	-.0220	-.0436	.0267	1303.
.3760	177.	1076.	-174.	2510.	-24.	2107.	.1112	.0015	.0100	-.0279	-.0409	.0264	1329.
.3770	185.	981.	-451.	2474.	-10.	2171.	.1112	.0066	.0129	-.0317	-.0371	.0262	1312.
.3780	149.	961.	-706.	2061.	-119.	2121.	.1113	.0071	.0100	-.0364	-.0327	.0262	1249.
.3790	112.	1000.	-741.	2002.	-110.	2034.	.1114	.0071	.0169	-.0406	-.0275	.0263	1149.
.3800	64.	989.	-756.	1674.	-276.	1865.	.1115	.0063	.0186	-.0443	-.0217	.0264	1017.
.3810	17.	742.	-751.	1207.	-477.	1660.	.1116	.0048	.0201	-.0474	-.0193	.0265	867.
.3820	-48.	651.	-751.	802.	-567.	1407.	.1117	.0027	.0210	-.0495	-.0094	.0267	706.
.3830	-119.	502.	-657.	474.	-658.	1111.	.1118	.0002	.0219	-.0500	-.0010	.0268	552.

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S/PV PIPING KEWAUNEE CRK/CEP 2 RUP DISK
2 SAFETY GILD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	29	MEMBER	1	SEQUENCE	818	LOCATION	BEG	TYPE	RU	DZ	RX	RY	RZ	STRESS
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)	
.3840	-191.	647.	-634.	82.	-733.	797.	.1110	-.0029	.0221	-.0510	.0068	.0268	436.	
.3850	-256.	922.	-569.	-277.	-796.	492.	.1119	-.0067	.0219	-.0501	.0146	.0268	392.	
.3860	-711.	1082.	-498.	-594.	-747.	210.	.1118	-.0100	.0211	-.0481	.0226	.0266	420.	
.3870	-360.	989.	-418.	-872.	-677.	-49.	.1118	-.0137	.0199	-.0451	.0308	.0264	485.	
.3880	-402.	783.	-335.	-1020.	-899.	-280.	.1117	-.0172	.0183	-.0411	.0392	.0261	557.	
.3890	-435.	628.	-251.	-1153.	-911.	-469.	.1115	-.0202	.0162	-.0364	.0480	.0257	619.	
.3900	-454.	481.	-166.	-1241.	-915.	-602.	.1114	-.0227	.0139	-.0310	.0568	.0253	664.	
.3910	-460.	195.	-78.	-1299.	-903.	-678.	.1111	-.0248	.0114	-.0251	.0654	.0248	691.	
.3920	-456.	-39.	17.	-1340.	-883.	-707.	.1109	-.0263	.0087	-.0189	.0736	.0242	704.	
.3930	-446.	-28.	107.	-1370.	-858.	-696.	.1105	-.0268	.0060	-.0124	.0813	.0236	706.	
.3940	-430.	126.	199.	-1383.	-830.	-650.	.1102	-.0264	.0032	-.0059	.0886	.0229	698.	
.3950	-406.	160.	285.	-1371.	-801.	-568.	.1098	-.0252	.0004	.0006	.0952	.0221	677.	
.3960	-374.	-16.	362.	-1302.	-774.	-457.	.1093	-.0231	-.0024	.0069	.1013	.0211	642.	
.3970	-339.	-247.	427.	-1243.	-750.	-336.	.1088	-.0201	-.0052	.0130	.1068	.0200	598.	
.3980	-306.	-378.	482.	-1176.	-731.	-227.	.1081	-.0163	-.0078	.0188	.1114	.0186	550.	
.3990	-276.	-393.	529.	-1012.	-715.	-144.	.1074	-.0119	-.0103	.0241	.1149	.0170	501.	
.4000	-248.	-361.	567.	-873.	-700.	-94.	.1065	-.0071	-.0126	.0291	.1171	.0151	451.	

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)
.1170	45.	4360.	641.	-6876.	-739.	3615.	-.0174	.0108	-.0095	.0171	-.0148	-.0279	3131.

SECTION	29	MEMBER	1	SEQUENCE	811	LOCATION	END	TYPE	RU	DZ	RX	RY	RZ	STRESS
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.	0.	0.	0.	.0000	.0000	-.0000	.0000	-.0000	.0000	0.	
.0060	-0.	0.	0.	0.	0.	0.	.0000	-.0000	-.0000	-.0000	-.0001	.0000	1.	
.0070	0.	0.	0.	0.	0.	0.	.0000	-.0000	-.0000	-.0000	-.0001	.0000	1.	

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S/PV PIPING KEWAUNEE CRK/CEP 2 RUP DISK
2 SAFETY GILD FKW24F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

TIME (SEC)	F1 (LB)	FY (LB)	F2 (LB)	F3 (FT-LB)	F4 (FT-LB)	F5 (FT-LB)	F6 (IN)	F7 (IN)	F8 (IN)	F9 (DEG)	F10 (DEG)	F11 (DEG)	STRESS (PSI)
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.
.0010	-7.	-7.	0.	0.	0.	0.	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.
.0020	-0.	-1.	0.	0.	0.	0.	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.
.0030	-0.	-1.	0.	0.	0.	0.	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.
.0040	-0.	-1.	0.	0.	0.	0.	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.
.0050	-0.	1.	0.	0.	0.	0.	0.0000	0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.
.0060	-0.	1.	0.	0.	0.	0.	0.0000	-0.0000	-0.0000	-0.0000	-0.0001	-0.0000	1.
.0070	0.	16.	0.	0.	0.	0.	0.0000	-0.0000	-0.0000	-0.0000	-0.0001	-0.0000	1.

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ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.43.

S/RV PIPING REHAULING GRIFFIN 2 RUP DISK
2 SAFETY CLD FK424F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	D9	MEMBER	1	SEQUENCE	051	LOCATION	END	TYPE	RU	TIME (SEC)	FY (LB)	FZ (LB)	F3 (FT-LB)	F4 (FT-LB)	F5 (FT-LB)	F6 (IN)	F7 (IN)	F8 (IN)	F9 (DEG)	F10 (DEG)	F11 (DEG)	STRESS (PSI)
.0080	0.	36.	0.	0.	5.	-0.	0.0000	-0.0000	-0.0000	-0.0000	-0.0002	0.0000	2.									
.0090	0.	60.	0.	0.	6.	0.	0.0000	-0.0001	-0.0000	-0.0000	-0.0003	0.0000	2.									
.0100	0.	73.	0.	-0.	7.	2.	0.0000	-0.0001	-0.0000	-0.0000	-0.0001	0.0000	1.									
.0110	-0.	68.	0.	-1.	-12.	4.	0.0000	-0.0002	-0.0000	-0.0000	0.0004	0.0000	5.									
.0120	-1.	63.	0.	-0.	-36.	7.	0.0000	-0.0004	-0.0000	-0.0000	0.0013	0.0000	15.									
.0130	-1.	90.	0.	1.	-72.	0.	0.0000	-0.0005	-0.0000	0.0000	0.0028	0.0001	29.									
.0140	-1.	142.	0.	5.	-117.	7.	0.0000	-0.0007	-0.0000	0.0001	0.0047	0.0001	47.									
.0150	-1.	178.	0.	11.	-167.	7.	0.0000	-0.0010	-0.0000	0.0001	0.0070	0.0000	67.									
.0160	-2.	169.	1.	20.	-216.	7.	0.0001	-0.0013	-0.0000	0.0002	0.0092	0.0000	87.									
.0170	-4.	134.	1.	30.	-257.	8.	0.0001	-0.0016	-0.0000	0.0003	0.0111	-0.0000	104.									
.0180	-7.	94.	1.	40.	-285.	6.	0.0001	-0.0019	-0.0000	0.0004	0.0125	-0.0001	115.									
.0190	-10.	20.	1.	49.	-304.	3.	0.0002	-0.0021	-0.0000	0.0005	0.0135	-0.0002	124.									
.0200	-13.	-146.	0.	59.	-319.	-2.	0.0003	-0.0023	-0.0001	0.0007	0.0145	-0.0003	130.									
.0210	-14.	-342.	-1.	71.	-342.	-18.	0.0004	-0.0027	-0.0001	0.0008	0.0158	-0.0005	140.									
.0220	-12.	-450.	-2.	84.	-403.	-44.	0.0005	-0.0020	-0.0001	0.0010	0.0188	-0.0006	166.									
.0230	-5.	462.	-3.	104.	-480.	-85.	0.0006	-0.0014	-0.0002	0.0013	0.0228	-0.0008	200.									
.0240	7.	-304.	-2.	137.	-525.	-141.	0.0007	-0.0007	-0.0002	0.0016	0.0260	-0.0009	225.									
.0250	25.	69.	1.	178.	-503.	-205.	0.0008	0.0002	-0.0003	0.0019	0.0266	-0.0009	230.									
.0260	45.	500.	4.	211.	-443.	-260.	0.0008	0.0009	-0.0004	0.0022	0.0254	-0.0008	223.									
.0270	64.	566.	5.	217.	-416.	-294.	0.0007	0.0012	-0.0005	0.0023	0.0246	-0.0006	222.									
.0280	87.	20.	4.	202.	-374.	-320.	0.0005	0.0013	-0.0007	0.0023	0.0227	-0.0002	213.									
.0290	104.	-890.	4.	179.	-243.	-354.	0.0002	0.0014	-0.0009	0.0022	0.0171	0.0000	187.									
.0300	121.	-1518.	4.	158.	-129.	-375.	-0.0003	0.0018	-0.0012	0.0018	0.0119	0.0001	172.									
.0310	126.	-1251.	5.	90.	-69.	-381.	-0.0010	0.0019	-0.0014	0.0014	0.0088	0.0001	159.									
.0320	113.	-525.	11.	62.	6.	-277.	-0.0019	0.0047	-0.0017	0.0010	0.0055	0.0001	122.									
.0330	75.	-196.	20.	10.	92.	-119.	-0.0029	0.0058	-0.0020	0.0008	0.0022	0.0003	68.									
.0340	37.	-329.	31.	32.	147.	92.	-0.0041	0.0072	-0.0023	0.0006	0.0003	0.0003	77.									
.0350	-12.	-305.	32.	71.	217.	265.	-0.0057	0.0087	-0.0027	0.0001	-0.0026	0.0000	138.									
.0360	-57.	69.	26.	-61.	340.	409.	-0.0065	0.0100	-0.0031	-0.0036	-0.0036	-0.0005	216.									
.0370	-110.	329.	16.	-233.	440.	599.	-0.0076	0.0110	-0.0035	-0.0015	-0.0149	-0.0009	312.									
.0380	-177.	179.	8.	-373.	461.	654.	-0.0085	0.0115	-0.0047	-0.0027	-0.0190	-0.0009	419.									
.0390	-234.	-251.	9.	-505.	490.	1105.	-0.0092	0.0118	-0.0044	-0.0037	-0.0225	-0.0007	524.									
.0400	-279.	-639.	17.	-576.	537.	1275.	-0.0096	0.0121	-0.0047	-0.0046	-0.0271	-0.0006	604.									
.0410	-303.	-339.	23.	-650.	590.	1341.	-0.0095	0.0125	-0.0050	-0.0056	-0.0292	-0.0007	643.									
.0420	-309.	753.	21.	-751.	575.	1330.	-0.0089	0.0120	-0.0052	-0.0065	-0.0297	-0.0007	655.									
.0430	-303.	2078.	8.	-871.	556.	1297.	-0.0079	0.0128	-0.0054	-0.0074	-0.0317	-0.0004	670.									
.0440	-268.	2078.	-17.	-1001.	611.	1277.	-0.0065	0.0117	-0.0054	-0.0079	-0.0347	-0.0004	695.									
.0450	-257.	567.	-20.	-1100.	579.	1221.	-0.0047	0.0099	-0.0053	-0.0082	-0.0358	0.0015	708.									

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ADLPIPE STRESS ANALYSIS

83/12/02.

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S/RV PIPING REHAULING GRIFFIN 2 RUP DISK
2 SAFETY CLD FK424F--2 PSV

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

INTERNAL FORCES IN THE PIPING

.0350	-10.	-301.	33.	71.	217.	285.	-0.053	.0017	-0.0027	.0001	-0.0026	.0000	138.
.0360	-57.	69.	26.	-71.	340.	429.	-0.065	.0100	-0.0031	-0.0006	-0.0036	-0.0005	216.
.0370	-110.	321.	16.	-273.	447.	539.	-0.076	.0110	-0.0035	-0.0015	-0.0149	-0.0009	312.
.0380	-177.	179.	5.	-755.	461.	674.	-0.085	.0115	-0.0040	-0.0020	-0.0190	-0.0009	419.
.0390	-234.	-251.	8.	-762.	475.	810.	-0.092	.0117	-0.0044	-0.0022	-0.0225	-0.0007	524.
.0400	-279.	-259.	17.	-576.	527.	971.	-0.096	.0111	-0.0047	-0.0040	-0.0271	-0.0006	604.
.0410	-303.	-259.	27.	-250.	590.	1241.	-0.095	.0125	-0.0050	-0.0050	-0.0292	-0.0007	643.
.0420	-309.	752.	21.	-750.	675.	1370.	-0.089	.0130	-0.0052	-0.0065	-0.0297	-0.0007	655.
.0430	-202.	2072.	8.	-671.	756.	1527.	-0.079	.0122	-0.0054	-0.0074	-0.0317	-0.0004	670.
.0440	-219.	2075.	-15.	-1001.	818.	1677.	-0.085	.0117	-0.0054	-0.0079	-0.0347	.0004	695.
.0450	-257.	667.	-50.	-1100.	979.	1835.	-0.047	.0099	-0.0053	-0.0082	-0.0358	.0015	708.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.43.

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	DX	DY	DZ	FX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	MZ	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)							
.0460	-192.	388.	-93.	-1323.	526.	971.	-0.0024	.0081	-0.0051	-0.0085	-0.0358	.0023	691.
.0470	-98.	1403.	-133.	-1468.	527.	592.	.0001	.0062	-0.0045	-0.0087	-0.0370	.0028	670.
.0480	-3.	2359.	-157.	-1517.	531.	228.	.0029	.0040	-0.0036	-0.0087	-0.0375	.0035	652.
.0490	76.	2028.	-159.	-1447.	440.	-35.	.0056	.0015	-0.0024	-0.0064	-0.0340	.0047	607.
.0500	145.	1214.	-144.	-1292.	281.	-277.	.0083	-0.0012	-0.0009	-0.0080	-0.0273	.0059	542.
.0510	216.	975.	-118.	-1093.	123.	-583.	.0109	-0.0034	.0011	-0.0077	-0.0201	.0063	499.
.0520	279.	1040.	-87.	-858.	-25.	-908.	.0132	-0.0050	.0032	-0.0073	-0.0128	.0062	501.
.0530	318.	1069.	-51.	-591.	-171.	-1167.	.0152	-0.0062	.0055	-0.0068	-0.0052	.0057	528.
.0540	329.	1497.	-13.	-264.	-296.	-1338.	.0167	-0.0068	.0080	-0.0059	.0020	.0049	560.
.0550	313.	2126.	26.	90.	-395.	-1411.	.0178	-0.0072	.0106	-0.0047	.0089	.0040	589.
.0560	273.	1926.	66.	477.	-480.	-1380.	.0185	-0.0075	.0131	-0.0031	.0157	.0032	617.
.0570	226.	1053.	103.	860.	-564.	-1317.	.0187	-0.0077	.0154	-0.0013	.0226	.0022	670.
.0580	193.	799.	153.	1176.	-647.	-1335.	.0187	-0.0076	.0176	.0002	.0290	.0008	762.
.0590	175.	1033.	158.	1457.	-727.	-1423.	.0183	-0.0070	.0195	.0014	.0348	-0.0008	867.
.0600	152.	301.	187.	1722.	-795.	-1450.	.0176	-0.0060	.0210	.0025	.0400	-0.0022	958.
.0610	120.	-1184.	223.	2002.	-852.	-1272.	.0165	-0.0044	.0221	.0036	.0443	-0.0029	1032.
.0620	91.	-1461.	262.	2259.	-873.	-1279.	.0152	-0.0018	.0228	.0046	.0474	-0.0035	1099.
.0630	78.	-222.	294.	2457.	-840.	-1233.	.0136	.0017	.0229	.0053	.0486	-0.0042	1154.
.0640	70.	640.	314.	2582.	-783.	-1191.	.0118	.0055	.0225	.0059	.0482	-0.0047	1181.
.0650	69.	301.	314.	2595.	-673.	-1122.	.0097	.0091	.0214	.0065	.0465	-0.0050	1166.
.0660	72.	-42.	263.	2450.	-596.	-1041.	.0073	.0125	.0197	.0066	.0437	-0.0052	1095.
.0670	71.	203.	240.	2159.	-534.	-908.	.0047	.0153	.0174	.0063	.0397	-0.0050	964.
.0680	56.	275.	104.	1786.	-492.	-662.	.0017	.0174	.0146	.0058	.0352	-0.0043	789.
.0690	29.	79.	130.	1320.	-474.	-336.	-0.0014	.0187	.0115	.0049	.0314	-0.0032	601.
.0700	3.	367.	87.	956.	-461.	-23.	-0.0047	.0194	.0080	.0037	.0284	-0.0022	426.
.0710	-29.	984.	47.	521.	-447.	285.	-0.0031	.0193	.0044	.0021	.0254	-0.0015	297.
.0720	-79.	1155.	7.	80.	-431.	678.	-0.0114	.0184	.0007	.0002	.0224	-0.0006	326.
.0730	-154.	1144.	-30.	-394.	-425.	1167.	-0.0146	.0164	-0.0030	-0.0018	.0181	.0005	523.
.0740	-240.	1561.	-75.	-883.	-277.	1672.	-0.0176	.0137	-0.0066	-0.0039	.0110	.0015	774.
.0750	-326.	2254.	-122.	-1392.	-247.	2138.	-0.0201	.0102	-0.0101	-0.0059	.0011	.0022	1029.
.0760	-407.	3101.	-168.	-1679.	-27.	2547.	-0.0219	.0062	-0.0132	-0.0074	-0.0091	.0027	1269.
.0770	-473.	1571.	-244.	-2292.	69.	3059.	-0.0239	.0017	-0.0159	-0.0085	-0.0179	.0032	1471.
.0780	-507.	1674.	-308.	-2682.	207.	3021.	-0.0231	-0.0018	-0.0180	-0.0091	-0.0249	.0035	1613.
.0790	-517.	1926.	-347.	-2893.	300.	3035.	-0.0232	-0.0070	-0.0195	-0.0093	-0.0289	.0038	1687.
.0800	-407.	1629.	-308.	-2616.	227.	2910.	-0.0204	-0.0102	-0.0203	-0.0089	-0.0292	.0042	1687.
.0810	-426.	1087.	-397.	-3004.	707.	2615.	-0.0175	-0.0137	-0.0204	-0.0081	-0.0266	.0046	1603.
.0820	-331.	1076.	-387.	-2762.	287.	2129.	-0.0138	-0.0157	-0.0197	-0.0069	-0.0226	.0046	1438.
.0830	-213.	1052.	-357.	-2470.	240.	1523.	-0.0094	-0.0166	-0.0183	-0.0052	-0.0175	.0043	1214.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.43.

S/RV PIPING KEWAUNEE GKW08F 2 RUP DISK
2 SAFETY CGLD FKW24F--2 PSVCONDITION 24
LOADS
SHOCK
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ENGLISH UNITS

.0730	-154.	1144.	-30.	-374.	-435.	1167.	-146.	.0164	-.0030	-.0018	.0181	.0005	523.
.0740	-240.	1661.	-75.	-393.	-377.	1676.	-.176	.0137	-.0066	-.0035	.0110	.0005	774.
.0750	-326.	2254.	-120.	-1201.	-247.	2176.	-.0201	.0102	-.0101	-.0059	.0011	.0022	1029.
.0760	-417.	2801.	-165.	-1275.	-17.	2547.	-.119	.0082	-.0172	-.0074	-.0091	.0027	1269.
.0770	-493.	3472.	-244.	-2202.	49.	2816.	-.0209	.0017	-.0159	-.0085	-.0179	.0032	1471.
.0780	-567.	4179.	-320.	-2643.	207.	3024.	-.0231	-.0023	-.0180	-.0091	-.0249	.0035	1613.
.0790	-617.	4926.	-347.	-2893.	700.	3035.	-.0232	-.0070	-.0195	-.0092	-.0289	.0038	1687.
.0800	-417.	1639.	-700.	-7016.	307.	2910.	-.0204	-.0108	-.0203	-.0099	-.0292	.0042	1687.
.0810	-426.	1627.	-707.	-2004.	707.	2615.	-.0175	-.0127	-.0204	-.0081	-.0266	.0046	1603.
.0820	-714.	1176.	-707.	-2781.	707.	2175.	-.0137	-.0157	-.0197	-.0069	-.0226	.0046	1438.
.0830	-217.	1351.	-207.	-2643.	207.	1523.	-.0094	-.0168	-.0183	-.0052	-.0175	.0043	1214.

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DIC/ALLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.43.

S/RV PIPING REPAUMEE OKWOLF 2 RUP DIK
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	DS	MEMBER	1	SEQUENCE	051	LOCATION	END	TYPE	RU	DZ	PX	RY	RZ	STRESS
TIME	FX	FY	FZ	MX	MY	PZ	DX	DY	DZ	PX	RY	RZ		(PSI)
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)		
.0840	-59.	1440.	-367.	-2270.	297.	853.	-.0045	-.0167	-.0162	-.0031	-.0123	.0038		966.
.0850	34.	1260.	-745.	-1790.	361.	160.	.0007	-.0160	-.0135	-.0005	-.0087	.0031		736.
.0860	148.	1094.	-329.	-1322.	439.	-537.	.0060	-.0146	-.0103	.0024	-.0071	.0021		603.
.0870	246.	881.	-320.	-852.	569.	-1197.	.0110	-.0127	-.0067	.0055	-.0060	.0008		632.
.0880	321.	488.	-313.	-378.	635.	-1782.	.0157	-.0104	-.0026	.0085	-.0043	-.0006		774.
.0890	374.	137.	-302.	111.	674.	-2287.	.0198	-.0077	.0017	.0115	-.0020	-.0023		958.
.0900	404.	48.	-200.	624.	687.	-2706.	.0232	-.0046	.0063	.0141	.0010	-.0041		1148.
.0910	409.	113.	-242.	1150.	667.	-3003.	.0257	-.0010	.0110	.0163	.0047	-.0059		1319.
.0920	384.	308.	-189.	1693.	620.	-3148.	.0273	.0029	.0158	.0178	.0081	-.0075		1456.
.0930	337.	875.	-124.	2190.	583.	-3152.	.0280	.0070	.0206	.0186	.0099	-.0089		1558.
.0940	275.	1822.	-57.	2609.	529.	-3050.	.0279	.0114	.0251	.0185	.0102	-.0101		1625.
.0950	204.	2878.	7.	2929.	460.	-2868.	.0268	.0160	.0294	.0176	.0095	-.0110		1655.
.0960	130.	3903.	00.	3148.	378.	-2605.	.0251	.0210	.0323	.0160	.0082	-.0117		1648.
.0970	54.	5248.	115.	3264.	286.	-2277.	.0226	.0264	.0367	.0139	.0067	-.0120		1601.
.0980	-19.	7111.	157.	3276.	178.	-1876.	.0196	.0321	.0397	.0113	.0054	-.0116		1516.
.0990	-86.	8949.	179.	3185.	49.	-1410.	.0162	.0379	.0421	.0084	.0046	-.0106		1398.
.1000	-142.	9939.	193.	2990.	-80.	-903.	.0124	.0435	.0440	.0050	.0037	-.0089		1254.
.1010	-178.	9857.	195.	2682.	-219.	-399.	.0085	.0483	.0453	.0010	.0018	-.0065		1092.
.1020	-150.	6233.	105.	2255.	-320.	65.	.0046	.0521	.0462	-.0025	-.0023	-.0038		914.
.1030	-180.	8514.	167.	1731.	-373.	499.	.0006	.0551	.0466	-.0086	-.0094	-.0005		738.
.1040	-163.	7463.	150.	1162.	-377.	958.	-.0032	.0568	.0466	-.0140	-.0190	.0073		623.
.1050	-141.	6410.	139.	590.	-349.	1440.	-.0068	.0574	.0465	-.0197	-.0297	.0075		640.
.1060	-114.	6044.	135.	35.	-314.	1902.	-.0101	.0569	.0461	-.0253	-.0399	.0119		774.
.1070	-80.	6422.	137.	-489.	-298.	2318.	-.0131	.0554	.0457	-.0308	-.0481	.0162		958.
.1080	-53.	6052.	150.	-947.	-303.	2732.	-.0157	.0525	.0452	-.0358	-.0541	.0204		1169.
.1090	-37.	3857.	171.	-1220.	-332.	3135.	-.0177	.0477	.0447	-.0403	-.0582	.0247		1391.
.1100	2.	4805.	174.	-1771.	-454.	3401.	-.0191	.0418	.0443	-.0448	-.0585	.0278		1543.
.1110	47.	6384.	202.	-2094.	-571.	3507.	-.0198	.0365	.0439	-.0489	-.0580	.0300		1655.
.1120	50.	5604.	245.	-2258.	-625.	3710.	-.0199	.0310	.0436	-.0519	-.0583	.0324		1763.
.1130	42.	4785.	313.	-2240.	-650.	3905.	-.0192	.0259	.0432	-.0529	-.0571	.0343		1826.
.1140	51.	6997.	367.	-2114.	-670.	3060.	-.0177	.0218	.0431	-.0552	-.0531	.0348		1787.
.1150	67.	6434.	400.	-1964.	-690.	3662.	-.0154	.0183	.0427	-.0556	-.0474	.0342		1673.
.1160	54.	7674.	572.	-1452.	-729.	3479.	-.0124	.0150	.0421	-.0547	-.0402	.0323		1545.
.1170	45.	4360.	641.	-1107.	-739.	3232.	-.0095	.0123	.0412	-.0528	-.0317	.0318		1394.
.1180	69.	4273.	669.	-842.	-783.	2626.	-.0040	.0119	.0397	-.0504	-.0223	.0286		1151.
.1190	100.	6053.	683.	-619.	-815.	1900.	.0011	.0137	.0377	-.0471	-.0163	.0245		853.
.1200	107.	5378.	671.	-270.	-828.	1340.	.0066	.0167	.0351	-.0422	-.0171	.0210		588.
.1210	100.	7440.	647.	100.	-740.	610.	.0102	.0206	.0370	-.0367	-.0090	.0177		355.

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S/RV PIPING REPAUMEE OKWOLF 2 RUP DIK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24
LOADS
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.1110	47.	6384.	202.	-2094.	-571.	7507.	-0.198	.0365	.0439	-.0489	-.0520	.0320	1655.
.1120	50.	5604.	245.	-2258.	-625.	7718.	-.0199	.0310	.0436	-.0519	-.0583	.0324	1763.
.1130	42.	4766.	313.	-2240.	-650.	7905.	-.0192	.0259	.0433	-.0539	-.0571	.0343	1826.
.1140	50.	6997.	297.	-2114.	-600.	7060.	-.0177	.0218	.0431	-.0552	-.0531	.0348	1787.
.1150	67.	6434.	407.	-1974.	-620.	7662.	-.0154	.0183	.0427	-.0556	-.0474	.0342	1673.
.1160	56.	7974.	572.	-1452.	-709.	8479.	-.0124	.0150	.0421	-.0547	-.0402	.0333	1545.
.1170	45.	4360.	641.	-1107.	-729.	7200.	-.0085	.0123	.0412	-.0528	-.0317	.0318	1394.
.1180	69.	4233.	669.	-842.	-783.	7626.	-.0040	.0119	.0397	-.0504	-.0223	.0286	1151.
.1190	102.	6057.	667.	-609.	-715.	7908.	.0011	.0137	.0377	-.0471	-.0163	.0245	853.
.1200	107.	5376.	661.	-270.	-526.	7340.	.0066	.0167	.0351	-.0420	-.0131	.0210	588.
.1210	100.	3446.	640.	120.	-715.	618.	.0123	.0206	.0320	-.0362	-.0090	.0177	355.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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S/RV PIPING KEWAUNEE GYM00F 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	39	MEMBER	1	SEQUENCE	251	LOCATION	END	TYPE	RU					
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)
.1220	136.	7908.	617.	451.	-76.	57.		.0181	.0259	.0283	-.0301	-.0048	.0135	185.
.1230	207.	4888.	567.	661.	158.	-873.		.0238	.0316	.0239	-.0242	-.0011	.0088	444.
.1240	275.	2735.	511.	794.	355.	-1710.		.0290	.0371	.0189	-.0186	.0016	.0047	770.
.1250	337.	-404.	452.	824.	470.	-2441.		.0337	.0427	.0133	-.0138	.0046	.0013	1051.
.1260	410.	-261.	394.	731.	499.	-3172.		.0374	.0487	.0072	-.0101	.0089	-.0021	1322.
.1270	474.	1825.	353.	621.	543.	-3776.		.0399	.0545	.0007	-.0071	.0124	-.0050	1551.
.1280	494.	1709.	338.	569.	578.	-4051.		.0412	.0590	-.0062	-.0043	.0166	-.0066	1658.
.1290	489.	304.	320.	466.	591.	-4107.		.0409	.0617	-.0133	-.0021	.0211	-.0075	1676.
.1300	493.	1069.	292.	127.	613.	-4166.		.0393	.0629	-.0208	-.0012	.0228	-.0087	1691.
.1310	491.	2813.	220.	-489.	642.	-4131.		.0362	.0622	-.0285	-.0017	.0197	-.0097	1689.
.1320	443.	2123.	126.	-1273.	699.	-3740.		.0316	.0588	-.0364	-.0030	.0108	-.0093	1610.
.1330	357.	125.	24.	-2144.	722.	-3022.		.0257	.0532	-.0441	-.0049	.0003	-.0077	1515.
.1340	262.	364.	-70.	-3044.	705.	-2233.		.0187	.0463	-.0515	-.0075	-.0098	-.0058	1541.
.1350	181.	2033.	-147.	-3563.	671.	-1448.		.0109	.0303	-.0584	-.0103	-.0150	-.0038	1677.
.1360	97.	1908.	-191.	-4522.	607.	-583.		.0025	.0294	-.0646	-.0129	-.0177	-.0013	1846.
.1370	19.	311.	-219.	-5078.	545.	299.		-.0061	.0200	-.0700	-.0155	-.0190	.0014	2053.
.1380	-36.	1543.	-252.	-5642.	474.	1077.		-.0148	.0110	-.0745	-.0183	-.0222	.0039	2313.
.1390	-81.	3088.	-292.	-6191.	430.	1812.		-.0232	.0024	-.0781	-.0210	-.0271	.0063	2594.
.1400	-134.	2507.	-323.	-6611.	428.	2604.		-.0312	-.0057	-.0807	-.0229	-.0336	.0092	2857.
.1410	-173.	706.	-351.	-6049.	443.	3308.		-.0385	-.0126	-.0822	-.0238	-.0381	.0119	3058.
.1420	-185.	778.	-360.	-6904.	520.	3694.		-.0449	-.0173	-.0825	-.0238	-.0406	.0133	3149.
.1430	-121.	2140.	-349.	-6747.	670.	3820.		-.0504	-.0198	-.0817	-.0228	-.0403	.0138	3122.
.1440	-70.	2124.	-313.	-6358.	725.	3910.		-.0549	-.0205	-.0797	-.0208	-.0374	.0143	3009.
.1450	-45.	1174.	-260.	-5805.	755.	3996.		-.0585	-.0194	-.0768	-.0181	-.0318	.0148	2844.
.1460	-5.	1328.	-190.	-5178.	711.	3948.		-.0610	-.0163	-.0731	-.0153	-.0239	.0145	2628.
.1470	41.	2112.	-127.	-4470.	685.	3755.		-.0621	-.0116	-.0687	-.0124	-.0161	.0133	2359.
.1480	69.	1424.	-38.	-3642.	676.	3531.		-.0642	-.0057	-.0639	-.0091	-.0077	.0115	2054.
.1490	75.	40.	64.	-2728.	693.	3304.		-.0647	.0011	-.0587	-.0055	.0009	.0091	1742.
.1500	58.	10.	164.	-1620.	737.	3082.		-.0647	.0088	-.0534	-.0020	.0086	.0061	1460.
.1510	4.	624.	-255.	-980.	761.	2904.		-.0642	.0171	-.0482	.0013	.0157	.0027	1267.
.1520	-96.	62.	304.	-276.	759.	2710.		-.0634	.0254	-.0433	.0047	.0215	-.0003	1214.
.1530	-222.	-975.	262.	361.	690.	2510.		-.0621	.0335	-.0389	.0067	.0273	-.0033	1248.
.1540	-342.	-607.	412.	779.	611.	2320.		-.0603	.0413	-.0350	.0083	.0330	-.0066	1275.
.1550	-452.	580.	429.	1055.	502.	2955.		-.0579	.0483	-.0318	.0092	.0390	-.0099	1282.
.1560	-565.	735.	440.	1204.	345.	3004.		-.0549	.0535	-.0292	.0077	.0461	-.0122	1311.
.1570	-671.	271.	407.	1294.	190.	3097.		-.0513	.0568	-.0273	.0077	.0518	-.0134	1349.
.1580	-747.	575.	405.	167.	25.	3135.		-.0469	.0501	-.0260	.0077	.0554	-.0138	1342.
.1590	-750.	1319.	311.	211.	-147.	2072.		-.0410	.0375	-.0253	.0054	.0568	-.0134	1277.

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DIS/ADLPIPE

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18.28.43.

S/RV PIPING KEWAUNEE GYM00F 2 RUP DISK
2 SAFETY COLD FKW24F--2 PSV

CONDITION 24

LOADS

SHOCK

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ENGLISH UNITS

.1480	69.	1424.	-30.	-2642.	676.	3531.	-.0642	-.0057	-.0639	-.0091	-.0077	.0115	2054.
.1490	75.	46.	64.	-2728.	693.	3304.	-.0647	.0011	-.0587	-.0055	.0009	.0091	1742.
.1500	58.	10.	164.	-1820.	737.	3062.	-.0647	.0088	-.0534	-.0020	.0086	.0061	1460.
.1510	4.	624.	255.	-970.	761.	2904.	-.0642	.0171	-.0482	.0013	.0157	.0027	1267.
.1520	-96.	62.	319.	-276.	759.	2916.	-.0674	.0254	-.0433	.0042	.0215	-.0003	1214.
.1530	-222.	-975.	312.	361.	695.	7010.	-.0621	.0225	-.0389	.0067	.0273	-.0033	1248.
.1540	-742.	-807.	412.	779.	611.	7020.	-.0603	.0413	-.0350	.0083	.0330	-.0066	1275.
.1550	-452.	580.	429.	1055.	502.	2975.	-.0579	.0483	-.0318	.0092	.0390	-.0099	1282.
.1560	-565.	735.	440.	1234.	345.	2004.	-.0549	.0525	-.0292	.0095	.0461	-.0122	1311.
.1570	-671.	231.	443.	1294.	190.	3097.	-.0513	.0568	-.0273	.0091	.0518	-.0134	1349.
.1580	-747.	575.	425.	1162.	29.	3135.	-.0489	.0501	-.0260	.0077	.0554	-.0138	1342.
.1590	-780.	1319.	361.	821.	-142.	3072.	-.0410	.0575	-.0253	.0054	.0568	-.0134	1277.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

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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	39	MEMBER	1	SEQUENCE	851	LOCATION	END	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.1600	-769.	1473.	315.	318.	-281.	2910.	-.0358	.0549	-.0252	.0024	.0552	-.0120	1180.	
.1610	-710.	1240.	232.	-297.	-377.	2634.	-.0291	.0504	-.0253	-.0010	.0514	-.0099	1074.	
.1620	-607.	1726.	136.	-979.	-468.	2232.	-.0216	.0442	-.0256	-.0046	.0478	-.0072	996.	
.1630	-469.	2594.	36.	-1666.	-517.	1758.	-.0136	.0366	-.0259	-.0081	.0434	-.0039	994.	
.1640	-313.	2797.	-63.	-2319.	-534.	1270.	-.0052	.0280	-.0259	-.0113	.0386	.0002	1082.	
.1650	-137.	2606.	-163.	-2943.	-546.	726.	.0035	.0189	-.0255	-.0143	.0339	.0044	1236.	
.1660	61.	3069.	-262.	-3537.	-522.	57.	.0123	.0100	-.0245	-.0173	.0284	.0082	1436.	
.1670	267.	3930.	-349.	-4046.	-522.	-689.	.0209	.0019	-.0228	-.0201	.0235	.0115	1660.	
.1680	455.	4224.	-409.	-4372.	-499.	-1390.	.0292	-.0052	-.0201	-.0224	.0192	.0144	1852.	
.1690	610.	3983.	-433.	-4462.	-475.	-1991.	.0369	-.0111	-.0165	-.0241	.0167	.0169	1970.	
.1700	733.	4101.	-424.	-4328.	-440.	-2525.	.0438	-.0152	-.0118	-.0250	.0158	.0186	2018.	
.1710	825.	4700.	-392.	-4011.	-379.	-3017.	.0498	-.0173	-.0061	-.0253	.0153	.0193	2020.	
.1720	883.	4987.	-349.	-3566.	-353.	-3434.	.0547	-.0173	.0004	-.0250	.0164	.0191	1992.	
.1730	904.	4861.	-305.	-3033.	-339.	-3758.	.0586	-.0154	.0077	-.0242	.0176	.0182	1943.	
.1740	892.	4374.	-264.	-2437.	-340.	-2985.	.0613	-.0116	.0157	-.0229	.0156	.0166	1879.	
.1750	849.	5120.	-223.	-1772.	-354.	-4095.	.0622	-.0063	.0242	-.0211	.0195	.0146	1796.	
.1760	778.	5145.	-176.	-1018.	-337.	-4078.	.0632	.0001	.0331	-.0187	.0192	.0124	1692.	
.1770	690.	4836.	-124.	-198.	-298.	-3960.	.0625	.0072	.0422	-.0160	.0178	.0102	1596.	
.1780	599.	4690.	-71.	673.	-224.	-3804.	.0606	.0148	.0515	-.0132	.0141	.0079	1550.	
.1790	510.	4742.	-20.	1419.	-144.	-3612.	.0579	.0224	.0607	-.0109	.0083	.0056	1558.	
.1800	418.	4574.	26.	2142.	-71.	-3337.	.0542	.0297	.0697	-.0089	.0032	.0037	1592.	
.1810	323.	4115.	73.	2812.	10.	-2955.	.0496	.0361	.0784	-.0075	-.0104	.0023	1637.	
.1820	227.	3883.	123.	3474.	47.	-2494.	.0444	.0415	.0866	-.0064	-.0205	.0015	1703.	
.1830	138.	4072.	170.	4023.	60.	-1995.	.0386	.0458	.0944	-.0057	-.0296	.0010	1802.	
.1840	53.	4242.	230.	4592.	68.	-1465.	.0323	.0436	.1015	-.0051	-.0376	.0009	1931.	
.1850	-19.	4282.	290.	5080.	68.	-900.	.0257	.0499	.1078	-.0048	-.0449	.0010	2071.	
.1860	-111.	4607.	340.	5472.	61.	-305.	.0190	.0496	.1133	-.0049	-.0519	.0014	2199.	
.1870	-198.	5131.	304.	5779.	18.	336.	.0122	.0476	.1179	-.0053	-.0582	.0021	2307.	
.1880	-293.	5347.	416.	5912.	-27.	1023.	.0056	.0439	.1215	-.0060	-.0643	.0030	2408.	
.1890	-389.	5170.	446.	6032.	-78.	1710.	-.0005	.0386	.1240	-.0069	-.0688	.0041	2516.	
.1900	-477.	5103.	480.	6122.	-120.	2319.	-.0060	.0322	.1254	-.0076	-.0703	.0049	2627.	
.1910	-550.	5343.	517.	6195.	-166.	2013.	-.0107	.0251	.1258	-.0083	-.0694	.0055	2731.	
.1920	-612.	5467.	557.	6245.	-214.	2215.	-.0143	.0175	.1250	-.0086	-.0654	.0059	2820.	
.1930	-662.	5392.	576.	6240.	-281.	3527.	-.0168	.0098	.1229	-.0084	-.0607	.0063	2879.	
.1940	-711.	5471.	580.	6144.	-321.	3703.	-.0190	.0024	.1196	-.0081	-.0545	.0066	2882.	
.1950	-689.	5560.	580.	5947.	-354.	3701.	-.0177	-.0045	.1150	-.0076	-.0472	.0066	2815.	
.1960	-652.	5411.	520.	5670.	-378.	3492.	-.0160	-.0106	.1092	-.0064	-.0385	.0065	2677.	
.1970	-575.	4938.	467.	5376.	-380.	3077.	-.0130	-.0156	.1027	-.0047	-.0283	.0061	2476.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.43.

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

CONDITION
 LOADS
 SHOCK

.1870	-198.	5131.	304.	5779.	18.	336.	0122	.0476	.1179	-.0053	-.0582	.0011	2307.
.1880	-297.	5347.	416.	5912.	-27.	1023.	.0056	.0439	.1215	-.0060	-.0643	.0030	2408.
.1890	-389.	5170.	448.	6032.	-78.	1710.	-.0005	.0386	.1240	-.0069	-.0688	.0041	2516.
.1900	-477.	5103.	487.	6122.	-139.	2319.	-.0060	.0322	.1254	-.0076	-.0703	.0049	2627.
.1910	-550.	5343.	517.	6195.	-186.	2813.	-.0107	.0251	.1258	-.0083	-.0694	.0055	2731.
.1920	-617.	5447.	552.	6245.	-234.	3215.	-.0143	.0175	.1250	-.0086	-.0659	.0059	2820.
.1930	-662.	5392.	576.	6240.	-281.	3527.	-.0168	.0092	.1229	-.0086	-.0607	.0063	2879.
.1940	-691.	5431.	580.	6144.	-321.	3705.	-.0180	.0024	.1196	-.0083	-.0545	.0066	2882.
.1950	-689.	5560.	560.	5947.	-354.	3701.	-.0177	-.0045	.1150	-.0076	-.0472	.0066	2815.
.1960	-652.	5411.	520.	5670.	-378.	3493.	-.0160	-.0106	.1092	-.0064	-.0385	.0065	2677.
.1970	-575.	4978.	467.	5376.	-392.	3073.	-.0130	-.0156	.1022	-.0047	-.0283	.0061	2476.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.43.

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	39	MEMBER	1	SEQUENCE	851	LOCATION	END	TYPE	RU					
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS	
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)	
.1980	-482.	4658.	396.	4957.	-406.	2455.	-.0086	-.0192	.0942	-.0027	-.0166	.0055	2226.	
.1990	-322.	4493.	321.	4538.	-429.	1690.	-.0032	-.0212	.0852	-.0004	-.0039	.0047	1951.	
.2000	-165.	4308.	243.	4080.	-459.	834.	.0030	-.0215	.0752	.0020	.0089	.0040	1681.	
.2010	2.	4147.	162.	3572.	-492.	-83.	.0097	-.0203	.0646	.0042	.0210	.0032	1447.	
.2020	172.	4126.	78.	3005.	-533.	-1041.	.0166	-.0176	.0533	.0061	.0322	.0023	1294.	
.2030	336.	4093.	-11.	2382.	-575.	-1995.	.0233	-.0138	.0415	.0078	.0423	.0010	1268.	
.2040	482.	3817.	-104.	1709.	-603.	-2879.	.0296	-.0091	.0295	.0091	.0504	-.0003	1365.	
.2050	597.	3405.	-203.	986.	-606.	-3633.	.0350	-.0037	.0173	.0103	.0558	-.0018	1530.	
.2060	676.	3159.	-310.	205.	-591.	-4213.	.0394	.0021	.0053	.0110	.0584	-.0032	1709.	
.2070	713.	3131.	-425.	-627.	-563.	-4594.	.0424	.0080	-.0065	.0114	.0582	-.0045	1874.	
.2080	710.	3140.	-543.	-1487.	-530.	-4766.	.0440	.0139	-.0177	.0115	.0556	-.0057	2015.	
.2090	671.	3096.	-656.	-2341.	-505.	-4743.	.0441	.0192	-.0282	.0111	.0516	-.0068	2132.	
.2100	601.	3013.	-757.	-3148.	-505.	-4542.	.0427	.0240	-.0377	.0102	.0476	-.0078	2227.	
.2110	504.	2862.	-835.	-3869.	-520.	-4170.	.0397	.0279	-.0459	.0090	.0439	-.0086	2293.	
.2120	382.	2626.	-885.	-4470.	-561.	-3630.	.0355	.0310	-.0528	.0074	.0401	-.0090	2322.	
.2130	242.	2456.	-906.	-4934.	-594.	-2945.	.0300	.0332	-.0582	.0055	.0361	-.0092	2318.	
.2140	93.	2502.	-896.	-5257.	-618.	-2159.	.0235	.0345	-.0619	.0033	.0317	-.0090	2294.	
.2150	-58.	2676.	-858.	-5431.	-624.	-1314.	.0163	.0350	-.0641	.0010	.0271	-.0086	2256.	
.2160	-202.	2794.	-795.	-5452.	-609.	-450.	.0086	.0346	-.0646	-.0013	.0226	-.0080	2209.	
.2170	-333.	2842.	-708.	-5322.	-575.	398.	.0008	.0334	-.0636	-.0034	.0186	-.0072	2154.	
.2180	-445.	2919.	-601.	-5051.	-527.	1200.	-.0070	.0314	-.0613	-.0054	.0154	-.0062	2094.	
.2190	-536.	2976.	-478.	-4657.	-471.	1935.	-.0144	.0287	-.0576	-.0071	.0131	-.0049	2032.	
.2200	-604.	2859.	-342.	-4158.	-412.	2587.	-.0212	.0254	-.0530	-.0087	.0115	-.0035	1972.	
.2210	-648.	2674.	-198.	-3579.	-349.	3132.	-.0273	.0218	-.0474	-.0100	.0105	-.0020	1914.	
.2220	-665.	2523.	-50.	-2944.	-277.	3546.	-.0324	.0182	-.0414	-.0112	.0098	-.0005	1853.	
.2230	-659.	2574.	98.	-2275.	-192.	3830.	-.0364	.0147	-.0349	-.0122	.0090	.0009	1790.	
.2240	-634.	2620.	239.	-1600.	-90.	4000.	-.0393	.0114	-.0284	-.0130	.0078	.0023	1729.	
.2250	-595.	2548.	364.	-955.	25.	4065.	-.0411	.0085	-.0220	-.0135	.0059	.0036	1676.	
.2260	-542.	2429.	465.	-388.	143.	4024.	-.0416	.0061	-.0159	-.0138	.0032	.0048	1623.	
.2270	-476.	2318.	534.	64.	255.	3874.	-.0410	.0043	-.0104	-.0139	-.0003	.0058	1558.	
.2280	-400.	2193.	568.	384.	355.	3625.	-.0393	.0031	-.0056	-.0138	-.0045	.0066	1470.	
.2290	-315.	2099.	570.	575.	438.	3291.	-.0365	.0027	-.0015	-.0137	-.0093	.0073	1352.	
.2300	-226.	2107.	546.	654.	496.	2892.	-.0329	.0030	.0018	-.0134	-.0143	.0079	1206.	
.2310	-136.	2158.	503.	649.	526.	2449.	-.0286	.0040	.0044	-.0131	-.0192	.0083	1038.	
.2320	-48.	2116.	451.	579.	531.	1980.	-.0237	.0055	.0064	-.0129	-.0239	.0087	855.	
.2330	37.	2003.	394.	458.	516.	1490.	-.0184	.0075	.0078	-.0128	-.0287	.0089	659.	
.2340	117.	1934.	336.	294.	485.	985.	-.0128	.0098	.0087	-.0129	-.0338	.0089	456.	
.2350	188.	1873.	282.	104.	445.	492.	-.0073	.0124	.0091	-.0133	-.0392	.0087	270.	

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.44.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.2240	-624.	2620.	227.	-1670.	-70.	4000.	-0.093	.0114	-.0284	-.0130	.0078	.0037	1729.
.2250	-595.	2548.	364.	-955.	25.	4065.	-.0411	.0085	-.0220	-.0135	.0059	.0036	1676.
.2260	-542.	2429.	465.	-398.	143.	4024.	-.0416	.0061	-.0159	-.0138	.0032	.0048	1623.
.2270	-476.	2318.	534.	64.	255.	3874.	-.0410	.0043	-.0104	-.0139	-.0003	.0058	1558.
.2280	-400.	2193.	588.	384.	351.	3625.	-.0393	.0031	-.0056	-.0130	-.0045	.0066	1470.
.2290	-315.	2099.	670.	975.	438.	3291.	-.0365	.0027	-.0015	-.0137	-.0093	.0073	1352.
.2300	-228.	2107.	548.	674.	496.	2892.	-.0329	.0030	.0018	-.0134	-.0143	.0079	1206.
.2310	-136.	2158.	503.	649.	526.	2449.	-.0286	.0040	.0044	-.0131	-.0192	.0083	1038.
.2320	-48.	2116.	451.	579.	531.	1980.	-.0237	.0055	.0064	-.0129	-.0239	.0087	855.
.2330	37.	2003.	394.	458.	516.	1490.	-.0184	.0075	.0078	-.0128	-.0287	.0089	659.
.2340	117.	1974.	336.	294.	485.	925.	-.0128	.0098	.0087	-.0125	-.0338	.0089	456.
.2350	188.	1873.	282.	174.	445.	492.	-.0073	.0124	.0091	-.0123	-.0392	.0087	270.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.44.

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

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
39	1	851					.2360	244.	1706.	237.	-82.	402.	45.	-.0018	.0151	.0094	-.0139	-.0448	.0084	166.
							.2370	282.	1457.	205.	-239.	356.	-339.	.0034	.0177	.0094	-.0145	-.0499	.0080	220.
							.2380	305.	1266.	187.	-353.	305.	-669.	.0082	.0203	.0093	-.0151	-.0538	.0075	327.
							.2390	315.	1129.	183.	-415.	247.	-953.	.0125	.0226	.0091	-.0156	-.0562	.0068	429.
							.2400	314.	911.	193.	-424.	187.	-1189.	.0162	.0247	.0090	-.0160	-.0567	.0059	512.
							.2410	303.	623.	215.	-307.	124.	-1369.	.0193	.0264	.0088	-.0163	-.0557	.0050	573.
							.2420	282.	378.	249.	-309.	60.	-1489.	.0217	.0278	.0086	-.0166	-.0532	.0041	611.
							.2430	255.	210.	294.	-193.	0.	-1553.	.0234	.0286	.0083	-.0168	-.0495	.0032	628.
							.2440	225.	17.	342.	-43.	-53.	-1567.	.0245	.0288	.0078	-.0169	-.0443	.0025	629.
							.2450	196.	-267.	408.	133.	-97.	-1543.	.0250	.0285	.0072	-.0169	-.0379	.0019	623.
							.2460	170.	-552.	470.	312.	-128.	-1492.	.0248	.0276	.0062	-.0168	-.0304	.0015	614.
							.2470	150.	-795.	526.	464.	-148.	-1417.	.0241	.0261	.0049	-.0167	-.0223	.0012	601.
							.2480	136.	-988.	569.	558.	-162.	-1316.	.0229	.0240	.0031	-.0164	-.0140	.0012	577.
							.2490	128.	-1100.	594.	570.	-172.	-1190.	.0212	.0215	.0007	-.0161	-.0059	.0015	534.
							.2500	123.	-1201.	600.	492.	-174.	-1032.	.0190	.0186	-.0022	-.0158	.0017	.0020	464.
							.2510	122.	-1341.	588.	329.	-165.	-845.	.0165	.0154	-.0057	-.0155	.0083	.0028	370.
							.2520	125.	-1450.	562.	87.	-144.	-640.	.0137	.0120	-.0098	-.0152	.0140	.0038	266.
							.2530	130.	-1490.	525.	-225.	-113.	-430.	.0105	.0085	-.0145	-.0150	.0184	.0048	200.
							.2540	135.	-1578.	479.	-599.	-75.	-207.	.0072	.0052	-.0196	-.0150	.0213	.0058	256.
							.2550	135.	-1775.	427.	-1022.	-34.	44.	.0036	.0020	-.0251	-.0151	.0227	.0069	411.
							.2560	125.	-2058.	371.	-1482.	4.	335.	-.0001	-.0011	-.0308	-.0154	.0224	.0080	610.
							.2570	104.	-2551.	311.	-1960.	39.	663.	-.0039	-.0039	-.0368	-.0157	.0208	.0090	830.
							.2580	77.	-3118.	247.	-2445.	71.	994.	-.0077	-.0067	-.0428	-.0159	.0182	.0098	1060.
							.2590	47.	-3532.	177.	-2927.	99.	1302.	-.0115	-.0092	-.0487	-.0159	.0150	.0103	1286.
							.2600	13.	-3922.	100.	-3385.	126.	1603.	-.0152	-.0115	-.0543	-.0155	.0113	.0106	1504.
							.2610	-30.	-4399.	10.	-3796.	154.	1919.	-.0187	-.0136	-.0596	-.0145	.0071	.0108	1708.
							.2620	-78.	-4698.	-70.	-4146.	183.	2228.	-.0221	-.0156	-.0644	-.0130	.0026	.0109	1890.
							.2630	-121.	-4743.	-161.	-4419.	215.	2486.	-.0251	-.0176	-.0685	-.0108	-.0018	.0107	2037.
							.2640	-158.	-4826.	-250.	-4591.	254.	2671.	-.0279	-.0196	-.0718	-.0079	-.0056	.0101	2134.
							.2650	-189.	-4956.	-334.	-4638.	302.	2786.	-.0304	-.0216	-.0742	-.0043	-.0087	.0092	2175.
							.2660	-215.	-5060.	-406.	-4542.	357.	2847.	-.0326	-.0237	-.0756	-.0001	-.0109	.0079	2156.
							.2670	-238.	-5036.	-465.	-4295.	419.	2851.	-.0345	-.0256	-.0758	.0047	-.0121	.0064	2076.
							.2680	-251.	-4718.	-508.	-3904.	489.	2767.	-.0361	-.0274	-.0750	.0100	-.0120	.0043	1930.
							.2690	-256.	-4292.	-535.	-3372.	569.	2591.	-.0374	-.0288	-.0730	.0156	-.0105	.0017	1722.
							.2700	-258.	-4119.	-543.	-2703.	659.	2365.	-.0385	-.0300	-.0700	.0217	-.0079	-.0013	1465.
							.2710	-262.	-4307.	-533.	-1913.	753.	2126.	-.0395	-.0312	-.0661	.0279	-.0042	-.0044	1187.
							.2720	-265.	-4470.	-506.	-1042.	844.	1862.	-.0403	-.0324	-.0613	.0340	.0002	-.0076	921.
							.2730	-263.	-4437.	-465.	-130.	927.	1557.	-.0411	-.0334	-.0558	.0399	.0050	-.0111	729.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.44.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

.2630	-121.	-4740.	-161.	-4419.	215.	2486.	-.051	-.0176	-.0685	-.0108	-.0018	.0107	2037.
.2640	-158.	-4826.	-250.	-4591.	254.	2671.	-.079	-.0196	-.0718	-.0079	-.0056	.0101	2134.
.2650	-189.	-4956.	-324.	-4678.	302.	2786.	-.0304	-.0216	-.0742	-.0043	-.0087	.0092	2175.
.2660	-215.	-5060.	-406.	-4542.	357.	2847.	-.0326	-.0237	-.0756	-.0001	-.0100	.0079	2156.
.2670	-238.	-5076.	-465.	-4295.	419.	2851.	-.0340	-.0256	-.0758	.0047	-.0121	.0064	2076.
.2680	-251.	-4718.	-508.	-3904.	480.	2767.	-.0261	-.0274	-.0750	.0100	-.0120	.0043	1930.
.2690	-256.	-4292.	-535.	-3372.	569.	2591.	-.0374	-.0286	-.0730	.0156	-.0105	.0017	1722.
.2700	-258.	-4119.	-543.	-2703.	659.	2365.	-.0385	-.0300	-.0700	.0217	-.0079	-.0013	1465.
.2710	-262.	-4307.	-533.	-1913.	753.	2126.	-.0395	-.0312	-.0661	.0279	-.0342	-.0044	1187.
.2720	-265.	-4470.	-506.	-1042.	844.	1862.	-.0403	-.0324	-.0613	.0340	.0002	-.0076	921.
.2730	-267.	-4437.	-465.	-170.	927.	1557.	-.0411	-.0334	-.0558	.0399	.0050	-.0111	729.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.44.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

SECTION	39	MEMBER	1	SEQUENCE	851	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.2740	-262.	-4668.	-410.	802.	1001.	1257.	-.0417	-.0341	-.0499	.0452	.0098	-.0146	721.		
.2750	-270.	-5237.	-339.	1742.	1061.	1020.	-.0424	-.0345	-.0437	.0499	.0142	-.0176	915.		
.2760	-286.	-5499.	-253.	2657.	1101.	854.	-.0430	-.0346	-.0375	.0538	.0180	-.0202	1204.		
.2770	-303.	-5115.	-158.	3506.	1119.	732.	-.0436	-.0346	-.0314	.0567	.0208	-.0224	1506.		
.2780	-321.	-4701.	-60.	4249.	1117.	653.	-.0441	-.0344	-.0257	.0586	.0224	-.0241	1782.		
.2790	-343.	-4887.	31.	4846.	1091.	642.	-.0446	-.0341	-.0205	.0593	.0221	-.0251	2010.		
.2800	-368.	-5252.	106.	5244.	1037.	708.	-.0449	-.0338	-.0162	.0589	.0194	-.0255	2164.		
.2810	-394.	-5148.	155.	5405.	954.	834.	-.0451	-.0335	-.0126	.0574	.0139	-.0251	2228.		
.2820	-415.	-4775.	175.	5327.	844.	1001.	-.0451	-.0330	-.0100	.0547	.0060	-.0241	2201.		
.2830	-430.	-4683.	167.	5031.	712.	1185.	-.0448	-.0324	-.0083	.0511	-.0040	-.0226	2094.		
.2840	-432.	-4738.	134.	4543.	561.	1356.	-.0442	-.0314	-.0075	.0469	-.0153	-.0206	1916.		
.2850	-421.	-4381.	78.	3890.	395.	1500.	-.0433	-.0302	-.0074	.0419	-.0279	-.0182	1680.		
.2860	-399.	-3635.	4.	3106.	215.	1628.	-.0419	-.0287	-.0078	.0365	-.0415	-.0155	1410.		
.2870	-369.	-3045.	-83.	2233.	27.	1738.	-.0402	-.0271	-.0086	.0307	-.0558	-.0125	1136.		
.2880	-326.	-2759.	-178.	1308.	-162.	1793.	-.0381	-.0253	-.0095	.0247	-.0706	-.0094	893.		
.2890	-268.	-2447.	-276.	374.	-342.	1763.	-.0356	-.0231	-.0103	.0187	-.0852	-.0066	736.		
.2900	-202.	-2012.	-367.	-502.	-503.	1680.	-.0328	-.0207	-.0108	.0129	-.0992	-.0038	732.		
.2910	-137.	-1659.	-443.	-1256.	-637.	1586.	-.0297	-.0182	-.0108	.0076	-.1121	-.0011	851.		
.2920	-73.	-1377.	-500.	-1847.	-740.	1474.	-.0264	-.0156	-.0100	.0030	-.1233	.0014	994.		
.2930	-5.	-985.	-535.	-2259.	-811.	1309.	-.0229	-.0127	-.0084	-.0008	-.1323	.0036	1097.		
.2940	64.	-565.	-549.	-2480.	-855.	1096.	-.0195	-.0098	-.0057	-.0039	-.1389	.0053	1141.		
.2950	127.	-351.	-538.	-2495.	-877.	884.	-.0160	-.0069	-.0021	-.0060	-.1428	.0069	1119.		
.2960	180.	-263.	-502.	-2303.	-888.	696.	-.0127	-.0043	.0025	-.0073	-.1438	.0082	1029.		
.2970	224.	-91.	-442.	-1913.	-888.	518.	-.0097	-.0021	.0080	-.0077	-.1417	.0093	872.		
.2980	261.	40.	-359.	-1342.	-879.	342.	-.0069	-.0001	.0144	-.0074	-.1365	.0099	658.		
.2990	285.	-86.	-258.	-609.	-859.	188.	-.0046	.0015	.0214	-.0064	-.1285	.0102	429.		
.3000	294.	-300.	-142.	245.	-833.	85.	-.0027	.0026	.0289	-.0048	-.1183	.0103	350.		
.3010	286.	-257.	-22.	1165.	-802.	37.	-.0013	.0031	.0366	-.0028	-.1068	.0101	568.		
.3020	262.	-46.	95.	2097.	-766.	39.	-.0004	.0031	.0443	-.0005	-.0946	.0097	896.		
.3030	224.	-52.	203.	3000.	-726.	88.	-.0001	.0025	.0517	.0019	-.0823	.0090	1239.		
.3040	173.	-282.	297.	3838.	-687.	180.	-.0002	.0013	.0586	.0043	-.0701	.0081	1566.		
.3050	112.	-423.	375.	4579.	-654.	313.	-.0007	-.0005	.0649	.0067	-.0584	.0070	1861.		
.3060	41.	-406.	436.	5206.	-631.	488.	-.0015	-.0029	.0703	.0087	-.0478	.0060	2113.		
.3070	-34.	-454.	482.	5704.	-617.	697.	-.0025	-.0056	.0747	.0105	-.0385	.0050	2319.		
.3080	-110.	-601.	511.	6065.	-613.	913.	-.0037	-.0086	.0779	.0119	-.0307	.0041	2474.		
.3090	-179.	-628.	525.	6284.	-618.	1116.	-.0048	-.0116	.0800	.0128	-.0249	.0033	2573.		
.3100	-243.	-498.	527.	6367.	-628.	1312.	-.0059	-.0147	.0809	.0132	-.0212	.0026	2621.		
.3110	-299.	-404.	518.	6328.	-642.	1502.	-.0067	-.0178	.0805	.0133	-.0195	.0022	2623.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.44.

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

CONDITION 24

LOADS

SHOCK

PRESSURE

ENGLISH UNITS

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

.3010	286.	-257.	-22.	1165.	-802.	37.	-.0013	.0031	.0366	-.0028	-.1068	.0101	568.
.3020	262.	-46.	95.	2097.	-766.	39.	-.0004	.0031	.0443	-.0005	-.0946	.0097	896.
.3030	224.	-52.	203.	3000.	-726.	88.	-.0001	.0025	.0517	.0019	-.0823	.0090	1239.
.3040	173.	-282.	297.	3171.	-697.	186.	-.0002	.0017	.0586	.0043	-.0701	.0081	1566.
.3050	112.	-423.	375.	4579.	-654.	313.	-.0007	-.0005	.0649	.0067	-.0584	.0070	1861.
.3060	41.	-408.	436.	5206.	-631.	498.	-.0015	-.0029	.0703	.0087	-.0478	.0060	2113.
.3070	-34.	-454.	482.	5704.	-617.	697.	-.0025	-.0056	.0747	.0105	-.0385	.0050	2319.
.3080	-110.	-601.	511.	6065.	-613.	913.	-.0037	-.0086	.0779	.0119	-.0307	.0041	2474.
.3090	-179.	-628.	525.	6284.	-618.	1116.	-.0048	-.0116	.0800	.0128	-.0249	.0033	2573.
.3100	-247.	-478.	517.	6367.	-627.	1312.	-.0059	-.0147	.0809	.0132	-.0212	.0026	2621.
.3110	-299.	-404.	518.	6321.	-642.	1522.	-.0067	-.0178	.0805	.0133	-.0195	.0022	2623.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.44.

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	39	MEMBER	1	SEQUENCE	851	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3120	-342.	-424.	497.	6175.	-655.	1659.	-.0073	-.0206	.0790	.0131	-.0197	.0021	2579.		
.3130	-367.	-468.	465.	5912.	-669.	1745.	-.0075	-.0232	.0763	.0126	-.0215	.0020	2488.		
.3140	-372.	-523.	421.	5554.	-683.	1754.	-.0073	-.0252	.0725	.0121	-.0245	.0020	2353.		
.3150	-360.	-659.	367.	5123.	-695.	1704.	-.0067	-.0267	.0678	.0115	-.0286	.0021	2185.		
.3160	-333.	-796.	306.	4645.	-707.	1598.	-.0059	-.0277	.0623	.0111	-.0333	.0023	1992.		
.3170	-290.	-817.	239.	4139.	-715.	1416.	-.0047	-.0280	.0561	.0108	-.0381	.0025	1779.		
.3180	-229.	-836.	171.	3627.	-714.	1148.	-.0033	-.0276	.0494	.0108	-.0426	.0024	1553.		
.3190	-156.	-1047.	103.	3129.	-702.	813.	-.0018	-.0267	.0423	.0111	-.0466	.0021	1328.		
.3200	-77.	-1414.	38.	2657.	-680.	438.	-.0004	-.0254	.0349	.0117	-.0501	.0016	1115.		
.3210	3.	-1752.	-24.	2213.	-650.	42.	.0008	-.0238	.0273	.0125	-.0529	.0009	926.		
.3220	82.	-2090.	-82.	1801.	-614.	-362.	.0017	-.0220	.0198	.0135	-.0550	-.0002	777.		
.3230	155.	-2616.	-134.	1431.	-573.	-753.	.0022	-.0200	.0123	.0147	-.0560	-.0015	689.		
.3240	218.	-3273.	-178.	1113.	-530.	-1108.	.0021	-.0181	.0050	.0161	-.0558	-.0031	665.		
.3250	267.	-3808.	-214.	848.	-486.	-1405.	.0013	-.0163	-.0022	.0177	-.0543	-.0048	687.		
.3260	301.	-4146.	-242.	632.	-443.	-1621.	-.0003	-.0148	-.0090	.0194	-.0516	-.0066	720.		
.3270	316.	-4495.	-260.	457.	-398.	-1736.	-.0026	-.0136	-.0156	.0211	-.0482	-.0083	738.		
.3280	312.	-4983.	-272.	311.	-355.	-1743.	-.0058	-.0130	-.0219	.0228	-.0443	-.0099	725.		
.3290	291.	-5453.	-278.	179.	-314.	-1643.	-.0097	-.0131	-.0278	.0242	-.0401	-.0113	675.		
.3300	252.	-5786.	-280.	53.	-277.	-1432.	-.0143	-.0139	-.0335	.0255	-.0360	-.0125	586.		
.3310	197.	-6062.	-277.	-65.	-243.	-1106.	-.0195	-.0155	-.0389	.0265	-.0320	-.0133	455.		
.3320	126.	-6370.	-271.	-175.	-214.	-676.	-.0252	-.0179	-.0439	.0274	-.0279	-.0138	293.		
.3330	44.	-6633.	-264.	-284.	-190.	-166.	-.0312	-.0208	-.0487	.0281	-.0237	-.0140	153.		
.3340	-46.	-6725.	-260.	-403.	-173.	399.	-.0374	-.0243	-.0532	.0287	-.0194	-.0141	238.		
.3350	-143.	-6726.	-262.	-537.	-161.	1005.	-.0436	-.0283	-.0574	.0292	-.0151	-.0139	462.		
.3360	-246.	-6763.	-273.	-591.	-153.	1634.	-.0496	-.0327	-.0613	.0297	-.0109	-.0136	714.		
.3370	-350.	-6838.	-294.	-861.	-150.	2253.	-.0552	-.0373	-.0649	.0303	-.0066	-.0132	970.		
.3380	-451.	-6899.	-323.	-1036.	-147.	2828.	-.0602	-.0419	-.0681	.0309	-.0022	-.0130	1210.		
.3390	-548.	-6952.	-356.	-1195.	-143.	3338.	-.0645	-.0464	-.0708	.0317	.0027	-.0130	1424.		
.3400	-639.	-7028.	-390.	-1315.	-137.	3769.	-.0677	-.0505	-.0731	.0327	.0082	-.0131	1603.		
.3410	-722.	-7088.	-420.	-1379.	-129.	4102.	-.0699	-.0541	-.0748	.0338	.0145	-.0136	1737.		
.3420	-794.	-7081.	-443.	-1380.	-118.	4318.	-.0709	-.0570	-.0760	.0352	.0216	-.0143	1820.		
.3430	-852.	-7046.	-459.	-1312.	-103.	4404.	-.0705	-.0592	-.0766	.0367	.0295	-.0153	1845.		
.3440	-895.	-7048.	-465.	-1175.	-83.	4361.	-.0688	-.0607	-.0766	.0383	.0380	-.0166	1813.		
.3450	-922.	-7104.	-460.	-970.	-58.	4187.	-.0656	-.0614	-.0760	.0401	.0470	-.0180	1725.		
.3460	-928.	-7165.	-447.	-706.	-26.	3879.	-.0611	-.0615	-.0749	.0419	.0563	-.0195	1582.		
.3470	-913.	-7210.	-425.	-397.	12.	3437.	-.0552	-.0608	-.0733	.0436	.0658	-.0210	1388.		
.3480	-874.	-7268.	-395.	-58.	57.	2873.	-.0482	-.0595	-.0713	.0453	.0751	-.0225	1153.		
.3490	-814.	-7325.	-361.	291.	105.	2208.	-.0400	-.0578	-.0690	.0467	.0840	-.0238	895.		

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02. 18.28.44.

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

.3390	-548.	-6912.	-356.	-1195.	-143.	3338.	-0645	-0464	-0708	.0317	.0027	-.0130	1210.
.3400	-639.	-7028.	-390.	-1315.	-137.	3769.	-0677	-0505	-0731	.0327	.0082	-.0131	1603.
.3410	-722.	-7038.	-420.	-1379.	-129.	4102.	-0699	-0541	-0748	.0338	.0145	-.0136	1737.
.3420	-794.	-7051.	-447.	-1300.	-118.	4316.	-0709	-0570	-0760	.0352	.0216	-.0143	1820.
.3430	-852.	-7046.	-459.	-1312.	-103.	4404.	-0705	-0592	-0766	.0367	.0295	-.0153	1845.
.3440	-895.	-7048.	-465.	-1175.	-87.	4361.	-0688	-0607	-0766	.0383	.0380	-.0166	1813.
.3450	-922.	-7104.	-460.	-970.	-58.	4187.	-0656	-0614	-0760	.0401	.0470	-.0180	1725.
.3460	-928.	-7165.	-447.	-706.	-26.	3279.	-0611	-0615	-0749	.0419	.0563	-.0195	1582.
.3470	-913.	-7210.	-425.	-397.	12.	3437.	-0552	-0608	-0733	.0436	.0658	-.0210	1388.
.3480	-874.	-7268.	-395.	-58.	57.	2873.	-0482	-0595	-0713	.0453	.0751	-.0225	1153.
.3490	-814.	-7325.	-361.	291.	105.	2288.	-0400	-0578	-0690	.0467	.0940	-.0238	895.

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DIS/ADLPIPE

ADLPIPE STRESS ANALYSIS

83/12/02.

18.28.44.

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

CONDITION 24
LOADS
SHOCK
PRESSURE
ENGLISH UNITS

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

SECTION	MEMBER	SEQUENCE	LOCATION	END	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)
39	1	851					.3500	-734.	-7312.	-324.	628.	154.	1462.	-.0310	-.0556	-.0664	.0478	.0922	-.0248	642.
							.3510	-634.	-7208.	-288.	928.	201.	652.	-.0213	-.0531	-.0636	.0484	.0993	-.0255	462.
							.3520	-517.	-7081.	-253.	1169.	244.	-207.	-.0111	-.0504	-.0608	.0485	.1050	-.0259	486.
							.3530	-386.	-6988.	-225.	1331.	282.	-1088.	-.0007	-.0477	-.0579	.0479	.1091	-.0260	699.
							.3540	-246.	-6906.	-204.	1399.	313.	-1959.	.0097	-.0450	-.0550	.0466	.1113	-.0256	974.
							.3550	-105.	-6773.	-193.	1362.	336.	-2787.	.0197	-.0424	-.0521	.0445	.1114	-.0249	1252.
							.3560	35.	-6559.	-194.	1212.	349.	-3551.	.0292	-.0400	-.0493	.0417	.1092	-.0238	1512.
							.3570	169.	-6276.	-207.	950.	352.	-4235.	.0379	-.0377	-.0465	.0381	.1049	-.0224	1747.
							.3580	291.	-5934.	-232.	588.	344.	-4815.	.0456	-.0355	-.0436	.0339	.0986	-.0208	1952.
							.3590	396.	-5540.	-265.	150.	322.	-5263.	.0522	-.0334	-.0406	.0291	.0905	-.0189	2117.
							.3600	478.	-5095.	-301.	-338.	289.	-5558.	.0576	-.0314	-.0373	.0238	.0806	-.0167	2237.
							.3610	536.	-4627.	-337.	-845.	244.	-5701.	.0616	-.0296	-.0338	.0182	.0695	-.0144	2315.
							.3620	571.	-4163.	-368.	-1344.	190.	-5708.	.0644	-.0279	-.0298	.0123	.0572	-.0120	2354.
							.3630	584.	-3711.	-389.	-1801.	132.	-5589.	.0658	-.0261	-.0252	.0062	.0443	-.0096	2357.
							.3640	572.	-3291.	-396.	-2181.	72.	-5340.	.0661	-.0242	-.0201	.0002	.0309	-.0073	2315.
							.3650	534.	-2881.	-385.	-2452.	15.	-4960.	.0652	-.0222	-.0143	-.0057	.0173	-.0050	2220.
							.3660	475.	-2457.	-353.	-2590.	-37.	-4477.	.0634	-.0201	-.0078	-.0111	.0041	-.0028	2076.
							.3670	400.	-2020.	-303.	-2585.	-79.	-3937.	.0608	-.0178	-.0006	-.0160	-.0082	-.0008	1890.
							.3680	318.	-1624.	-234.	-2433.	-110.	-3381.	.0576	-.0152	.0072	-.0203	-.0192	.0007	1672.
							.3690	231.	-1353.	-151.	-2135.	-131.	-2825.	.0541	-.0125	.0155	-.0239	-.0286	.0020	1422.
							.3700	142.	-1192.	-54.	-1701.	-141.	-2279.	.0504	-.0096	.0243	-.0266	-.0364	.0029	1143.
							.3710	55.	-1063.	51.	-1145.	-142.	-1771.	.0467	-.0068	.0333	-.0284	-.0422	.0036	848.
							.3720	-21.	-925.	161.	-489.	-133.	-1340.	.0432	-.0040	.0424	-.0294	-.0459	.0039	575.
							.3730	-83.	-841.	272.	246.	-110.	-1013.	.0400	-.0012	.0514	-.0296	-.0474	.0038	421.
							.3740	-128.	-887.	381.	1037.	-75.	-786.	.0374	.0014	.0600	-.0290	-.0468	.0035	523.
							.3750	-158.	-983.	483.	1853.	-27.	-650.	.0352	.0035	.0681	-.0276	-.0442	.0029	788.
							.3760	-173.	-1008.	574.	2658.	34.	-604.	.0337	.0052	.0755	-.0256	-.0402	.0022	1094.
							.3770	-169.	-985.	650.	3413.	106.	-657.	.0328	.0063	.0819	-.0232	-.0348	.0014	1395.
							.3780	-148.	-995.	706.	4089.	189.	-803.	.0325	.0068	.0872	-.0204	-.0284	.0005	1674.
							.3790	-112.	-1000.	741.	4664.	280.	-1018.	.0328	.0067	.0912	-.0173	-.0211	-.0003	1919.
							.3800	-66.	-889.	756.	5126.	376.	-1271.	.0336	.0060	.0938	-.0141	-.0131	-.0010	2125.
							.3810	-13.	-742.	751.	5464.	473.	-1544.	.0349	.0046	.0949	-.0109	-.0046	-.0015	2287.
							.3820	49.	-602.	729.	5665.	568.	-1848.	.0364	.0025	.0945	-.0078	.0045	-.0016	2402.
							.3830	119.	-522.	689.	5718.	656.	-2186.	.0382	-.0000	.0926	-.0049	.0139	-.0021	2471.
							.3840	191.	-647.	634.	5626.	733.	-2518.	.0401	-.0031	.0893	-.0025	.0235	-.0022	2491.
							.3850	256.	-922.	569.	5401.	796.	-2796.	.0420	-.0066	.0845	-.0004	.0328	-.0020	2461.
							.3860	311.	-1083.	496.	5051.	843.	-3013.	.0437	-.0104	.0785	.0012	.0418	-.0016	2384.
							.3870	360.	-989.	418.	4591.	877.	-3190.	.0451	-.0141	.0712	.0024	.0507	-.0011	2271.

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18.28.44.

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.3770	-177.	-985.	650.	2413.	106.	-657.	.0228	.0063	.0819	-.0232	-.0348	.0014	1094.
.3780	-148.	-995.	706.	4089.	189.	-803.	.0225	.0068	.0872	-.0204	-.0284	.0005	1674.
.3790	-112.	-1000.	741.	4664.	280.	-1018.	.0328	.0067	.0912	-.0173	-.0211	-.0003	1919.
.3800	-66.	-829.	756.	5176.	376.	-1271.	.0336	.0060	.0938	-.0141	-.0131	-.0010	2125.
.3810	-13.	-742.	751.	5464.	473.	-1544.	.0349	.0046	.0949	-.0109	-.0046	-.0015	2287.
.3820	49.	-602.	720.	5665.	568.	-1848.	.0364	.0025	.0945	-.0070	.0045	-.0018	2402.
.3830	119.	-522.	689.	5718.	656.	-2188.	.0382	-.0000	.0926	-.0049	.0139	-.0021	2471.
.3840	191.	-447.	634.	5626.	733.	-2518.	.0401	-.0031	.0893	-.0025	.0235	-.0022	2491.
.3850	256.	-322.	569.	5401.	796.	-2796.	.0420	-.0066	.0845	-.0004	.0328	-.0020	2461.
.3860	311.	-193.	496.	5051.	843.	-3013.	.0437	-.0104	.0785	.0012	.0418	-.0016	2384.
.3870	360.	-989.	418.	4591.	877.	-3190.	.0451	-.0141	.0712	.0024	.0507	-.0011	2271.

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SECTION	39	MEMBER	1	SEQUENCE	851	LOCATION	END	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.3880	402.	-783.	335.	4039.	899.	-3341.	.0463	-.0174	.0630	.0031	.0597	-.0007	2134.		
.3890	435.	-628.	251.	3416.	911.	-3447.	.0470	-.0204	.0538	.0036	.0687	-.0003	1982.		
.3900	454.	-460.	166.	2736.	913.	-3485.	.0473	-.0229	.0440	.0038	.0775	.0001	1815.		
.3910	460.	-195.	78.	2002.	903.	-3458.	.0472	-.0249	.0336	.0038	.0859	.0005	1644.		
.3920	456.	29.	-13.	1220.	883.	-3394.	.0465	-.0263	.0228	.0036	.0937	.0007	1490.		
.3930	446.	28.	-107.	407.	858.	-3314.	.0453	-.0268	.0119	.0031	.1008	.0007	1383.		
.3940	430.	-126.	-199.	-410.	830.	-3218.	.0436	-.0265	.0010	.0026	.1074	.0004	1343.		
.3950	406.	-160.	-285.	-1198.	801.	-3083.	.0414	-.0252	-.0097	.0021	.1135	.0001	1366.		
.3960	374.	16.	-362.	-1933.	774.	-2910.	.0388	-.0231	-.0200	.0016	.1189	-.0004	1436.		
.3970	339.	247.	-427.	-2601.	750.	-2716.	.0357	-.0200	-.0298	.0011	.1238	-.0009	1539.		
.3980	306.	378.	-482.	-3204.	731.	-2524.	.0324	-.0162	-.0389	.0007	.1280	-.0015	1663.		
.3990	276.	393.	-529.	-3747.	715.	-2338.	.0287	-.0118	-.0472	.0002	.1312	-.0022	1795.		
.4000	248.	361.	-567.	-4282.	700.	-2139.	.0247	-.0070	-.0547	-.0003	.1330	-.0028	1923.		

MAXIMUM VALUE OF STRESS OCCURS AT

TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
.1420	-165.	778.	-360.	-6904.	520.	3694.	-.0449	-.0173	-.0825	-.0238	-.0406	.0133	3149.		

SECTION	40	MEMBER	1	SEQUENCE	851	LOCATION	BEG	TYPE	RU						
TIME	FX	FY	FZ	MX	MY	MZ	DX	DY	DZ	RX	RY	RZ	STRESS		
(SEC)	(LB)	(LB)	(LB)	(FT-LB)	(FT-LB)	(FT-LB)	(IN)	(IN)	(IN)	(DEG)	(DEG)	(DEG)	(PSI)		
0.0000	0.	0.	0.	0.	0.	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.		
.0010	-0.	0.	0.	-0.	-0.	-0.	-.0000	.0000	.0000	.0000	-.0000	.0000	0.		
.0020	-0.	2.	0.	-0.	-0.	-0.	-.0000	.0000	.0000	.0000	-.0000	.0000	0.		
.0030	-0.	3.	0.	-0.	-1.	-0.	-.0000	.0000	-.0000	.0000	-.0000	.0000	0.		
.0040	-0.	3.	0.	-0.	-1.	-0.	-.0000	.0000	-.0000	.0000	-.0000	.0000	0.		
.0050	-0.	2.	0.	-0.	-1.	-0.	.0000	.0000	-.0000	.0000	-.0000	.0000	0.		
.0060	-0.	2.	0.	0.	-1.	-0.	.0000	-.0000	-.0000	-.0000	-.0001	.0000	1.		
.0070	-0.	-2.	0.	-0.	-2.	-0.	.0000	-.0000	-.0000	-.0000	-.0001	.0000	1.		
.0080	-0.	-14.	0.	-0.	-5.	0.	.0000	-.0000	-.0000	-.0000	-.0002	.0000	2.		
.0090	-1.	-30.	0.	-0.	-6.	-0.	.0000	-.0001	-.0000	-.0000	-.0003	.0000	2.		
.0100	-1.	-41.	0.	0.	-2.	-2.	.0000	-.0001	-.0000	-.0000	-.0001	.0000	1.		
.0110	-2.	-40.	-0.	1.	12.	-4.	.0000	-.0002	-.0000	-.0000	.0004	.0000	5.		

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0.0000	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.0010	-0.	0.	0.	-0.	-0.	-0.	-0.	-0.0000	.0000	.0000	.0000	.0000	.0000	0.
.0020	-0.	2.	0.	-0.	-0.	-0.	-0.	-0.0000	.0000	.0000	.0000	.0000	.0000	0.
.0030	-0.	3.	0.	-0.	-1.	-0.	-0.	-0.0000	.0000	-0.0000	.0000	-0.0000	.0000	0.
.0040	-0.	3.	0.	-0.	-1.	-0.	-0.	-0.0000	.0000	-0.0000	.0000	-0.0000	.0000	0.
.0050	-0.	2.	0.	-0.	-1.	-0.	-0.	.0000	.0000	-0.0000	.0000	-0.0000	.0000	0.
.0060	-0.	2.	0.	0.	-1.	-0.	-0.	.0000	-0.0000	-0.0000	-0.0000	-0.0001	.0000	1.
.0070	-0.	-2.	0.	-0.	-2.	-0.	-0.	.0000	-0.0000	-0.0000	-0.0000	-0.0001	.0000	1.
.0080	-0.	-14.	0.	-0.	-5.	0.	0.	.0000	-0.0000	-0.0000	-0.0000	-0.0002	.0000	2.
.0090	-1.	-30.	0.	-0.	-6.	-0.	0.	.0000	-0.0001	-0.0000	-0.0000	-0.0003	.0000	2.
.0100	-1.	-41.	0.	0.	-2.	-0.	-2.	.0000	-0.0001	-0.0000	-0.0000	-0.0001	.0000	1.
.0110	-2.	-40.	-0.	1.	12.	-4.	-4.	.0000	-0.0002	-0.0000	-0.0000	.0004	.0000	5.

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SECTION	MEMBER	SEQUENCE	LOCATION	BEG	TYPE	RU	TIME (SEC)	FX (LB)	FY (LB)	FZ (LB)	MX (FT-LB)	MY (FT-LB)	MZ (FT-LB)	DX (IN)	DY (IN)	DZ (IN)	RX (DEG)	RY (DEG)	RZ (DEG)	STRESS (PSI)	
40	1	851					.0120	-3.	-39.	-1.	0.	36.	-7.	.0000	-0.0004	-0.0000	-0.0000	.0013	.0000	.0000	15.
							.0130	-4.	-59.	-1.	-1.	72.	-8.	.0000	-0.0005	-0.0000	.0000	.0028	.0001	.0000	29.
							.0140	-5.	-99.	-1.	-5.	117.	-7.	.0000	-0.0007	-0.0000	.0001	.0047	.0001	.0000	47.
							.0150	-5.	-134.	0.	-11.	167.	-7.	.0000	-0.0010	-0.0000	.0001	.0070	.0000	.0000	67.
							.0160	-6.	-143.	2.	-20.	216.	-7.	.0001	-0.0013	-0.0000	.0002	.0092	.0000	.0000	87.
							.0170	-7.	-136.	4.	-30.	257.	-8.	.0001	-0.0016	-0.0000	.0003	.0111	-0.0000	.0000	104.
							.0180	-8.	-126.	5.	-40.	285.	-6.	.0001	-0.0019	-0.0000	.0004	.0125	-0.0001	.0000	115.
							.0190	-8.	-100.	6.	-49.	304.	-3.	.0002	-0.0021	-0.0000	.0005	.0135	-0.0002	.0000	124.
							.0200	-7.	-17.	6.	-59.	319.	2.	.0003	-0.0023	-0.0001	.0007	.0145	-0.0003	.0000	130.
							.0210	-5.	98.	7.	-71.	342.	16.	.0004	-0.0022	-0.0001	.0008	.0158	-0.0005	.0000	140.
							.0220	2.	185.	6.	-84.	403.	44.	.0005	-0.0020	-0.0001	.0010	.0188	-0.0006	.0000	166.
							.0230	11.	235.	8.	-104.	480.	85.	.0006	-0.0014	-0.0002	.0013	.0228	-0.0008	.0000	200.
							.0240	23.	206.	16.	-137.	525.	141.	.0007	-0.0007	-0.0002	.0016	.0260	-0.0009	.0000	225.
							.0250	37.	60.	28.	-178.	503.	205.	.0008	.0002	-0.0003	.0019	.0266	-0.0009	.0000	230.
							.0260	47.	-126.	39.	-211.	443.	260.	.0008	.0009	-0.0004	.0022	.0254	-0.0008	.0000	223.
							.0270	49.	-185.	39.	-217.	416.	294.	.0007	.0012	-0.0005	.0023	.0246	-0.0006	.0000	222.
							.0280	49.	38.	34.	-202.	374.	320.	.0005	.0013	-0.0007	.0023	.0227	-0.0002	.0000	213.
							.0290	58.	528.	28.	-179.	243.	354.	.0002	.0014	-0.0009	.0022	.0171	.0000	.0000	187.
							.0300	73.	978.	16.	-138.	128.	385.	-0.0003	.0018	-0.0012	.0018	.0119	.0001	.0000	172.
							.0310	84.	933.	-1.	-90.	69.	381.	-0.0010	.0029	-0.0014	.0014	.0088	.0001	.0000	159.
							.0320	76.	529.	-4.	-68.	-6.	297.	-0.0019	.0043	-0.0017	.0010	.0055	.0001	.0000	122.
							.0330	42.	285.	10.	-80.	-92.	119.	-0.0029	.0058	-0.0020	.0008	.0022	.0003	.0000	68.
							.0340	6.	363.	25.	-82.	-147.	-92.	-0.0041	.0072	-0.0023	.0006	.0003	.0003	.0000	77.
							.0350	-7.	458.	27.	-31.	-217.	-265.	-0.0053	.0087	-0.0027	.0001	-0.0026	.0000	.0000	138.
							.0360	-4.	367.	10.	81.	-340.	-409.	-0.0065	.0100	-0.0031	-0.0006	-0.0086	-0.0005	.0000	216.
							.0370	-21.	236.	-19.	233.	-440.	-599.	-0.0076	.0110	-0.0035	-0.0015	-0.0149	-0.0009	.0000	312.
							.0380	-67.	228.	-50.	385.	-461.	-854.	-0.0085	.0115	-0.0040	-0.0026	-0.0190	-0.0009	.0000	419.
							.0390	-117.	341.	-68.	502.	-480.	-1105.	-0.0092	.0118	-0.0044	-0.0037	-0.0225	-0.0007	.0000	524.
							.0400	-143.	521.	-71.	576.	-558.	-1275.	-0.0096	.0121	-0.0047	-0.0046	-0.0271	-0.0006	.0000	604.
							.0410	-144.	471.	-75.	650.	-590.	-1341.	-0.0095	.0125	-0.0050	-0.0056	-0.0292	-0.0007	.0000	643.
							.0420	-134.	-76.	-86.	750.	-575.	-1330.	-0.0089	.0130	-0.0052	-0.0065	-0.0297	-0.0007	.0000	655.
							.0430	-132.	-970.	-101.	871.	-586.	-1297.	-0.0079	.0128	-0.0054	-0.0074	-0.0317	-0.0004	.0000	670.
							.0440	-154.	-1217.	-115.	1001.	-610.	-1277.	-0.0065	.0117	-0.0054	-0.0079	-0.0347	.0004	.0000	695.
							.0450	-172.	-614.	-135.	1150.	-579.	-1205.	-0.0047	.0099	-0.0053	-0.0082	-0.0358	.0015	.0000	708.
							.0460	-145.	-253.	-168.	1323.	-526.	-971.	-0.0024	.0081	-0.0051	-0.0085	-0.0358	.0023	.0000	691.
							.0470	-80.	-833.	-200.	1468.	-527.	-592.	.0001	.0062	-0.0045	-0.0087	-0.0370	.0028	.0000	670.
							.0480	-34.	-1595.	-209.	1517.	-531.	-228.	.0029	.0040	-0.0036	-0.0087	-0.0375	.0035	.0000	652.
							.0490	-32.	-1661.	-194.	1447.	-440.	35.	.0056	.0015	-0.0024	-0.0084	-0.0340	.0047	.0000	607.

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