

00040224

VERSION=HPPA 8000

17:27:23 OCT 13, 2001 CP= 2281.620

Robinson 2 RPV -- Oper. Temp & Press - 1.75 mil intf - 7.8 alpha - noz 9 no pr

***** POST1 ELEMENT TABLE LISTING *****

ELEM	GAPSTAT	GAPFORC	GAPSTRCH
101	3.0000	0.0000	0.68186E-03
102	3.0000	0.0000	0.69807E-03
103	3.0000	0.0000	0.71212E-03 <
121	3.0000	0.0000	0.52359E-03
122	3.0000	0.0000	0.52807E-03
123	3.0000	0.0000	0.53172E-03 <
141	3.0000	0.0000	0.34862E-03
142	3.0000	0.0000	0.35711E-03
143	3.0000	-0.29104E-10	0.36217E-03 <
161	3.0000	0.0000	0.36092E-03
162	3.0000	0.0000	0.36744E-03
163	3.0000	0.0000	0.37060E-03 <
181	3.0000	0.29104E-10	0.31367E-03
182	3.0000	0.0000	0.32180E-03
183	3.0000	0.0000	0.32549E-03 < Limiting
201	3.0000	0.0000	0.90619E-03 <
202	3.0000	0.0000	0.86815E-03
203	3.0000	0.0000	0.79032E-03
204	3.0000	0.0000	0.72301E-03
205	3.0000	0.0000	0.65376E-03
206	3.0000	0.0000	0.56824E-03
207	3.0000	0.0000	0.49598E-03
208	3.0000	0.0000	0.47929E-03
209	3.0000	0.0000	0.48117E-03
221	3.0000	0.0000	0.92870E-03 <
222	3.0000	0.0000	0.88852E-03
223	3.0000	0.0000	0.78531E-03
224	3.0000	0.0000	0.65534E-03
225	3.0000	0.0000	0.51496E-03
226	3.0000	0.0000	0.38528E-03
227	3.0000	0.0000	0.29226E-03
228	3.0000	0.0000	0.23697E-03
229	3.0000	0.0000	0.22352E-03
241	3.0000	0.0000	0.84020E-03 <
242	3.0000	0.0000	0.79033E-03
243	3.0000	0.0000	0.65812E-03
244	3.0000	-0.29104E-10	0.48923E-03
245	3.0000	0.0000	0.29977E-03
246	3.0000	0.0000	0.12333E-03
247	3.0000	0.0000	0.15009E-06
248	1.0000	-309.75	-0.61950E-06
249	1.0000	-154.50	-0.30899E-06
261	3.0000	0.0000	0.86124E-03 <
262	3.0000	0.0000	0.81103E-03
263	3.0000	0.0000	0.67302E-03
264	3.0000	0.0000	0.49053E-03
265	3.0000	0.0000	0.29026E-03

266	3.0000	0.0000	0.11880E-03	
267	3.0000	0.0000	0.27124E-06	
268	1.0000	-183.97	-0.36795E-06	
269	1.0000	-8757.3	-0.17515E-04	
281	3.0000	0.0000	0.82859E-03	< Limiting
282	3.0000	0.0000	0.78021E-03	
283	3.0000	0.0000	0.64541E-03	
284	3.0000	0.0000	0.46554E-03	
285	3.0000	0.0000	0.26155E-03	
286	3.0000	0.0000	0.82023E-04	
287	1.0000	-184.88	-0.36976E-06	
288	1.0000	-444.88	-0.88977E-06	
289	1.0000	-220.98	-0.44195E-06	
301	3.0000	0.0000	0.41826E-03	
302	3.0000	0.0000	0.44256E-03	
303	3.0000	0.0000	0.48092E-03	
304	3.0000	0.0000	0.52189E-03	
305	3.0000	0.0000	0.59214E-03	
306	3.0000	0.0000	0.71347E-03	
307	3.0000	0.0000	0.82714E-03	
308	3.0000	0.0000	0.88253E-03	
309	3.0000	0.58208E-10	0.89286E-03	<
321	3.0000	0.0000	0.19199E-03	
322	3.0000	0.0000	0.20877E-03	
323	3.0000	0.0000	0.26557E-03	
324	3.0000	0.0000	0.35631E-03	
325	3.0000	0.0000	0.49057E-03	
326	3.0000	0.0000	0.65998E-03	
327	3.0000	0.0000	0.81819E-03	
328	3.0000	0.0000	0.92107E-03	
329	3.0000	0.0000	0.95250E-03	<
341	1.0000	-319.76	-0.63951E-06	
342	1.0000	-516.71	-0.10334E-05	
343	1.0000	-115.58	-0.23117E-06	
344	3.0000	0.0000	0.83161E-04	
345	3.0000	0.0000	0.25104E-03	
346	3.0000	0.0000	0.47184E-03	
347	3.0000	0.0000	0.67399E-03	
348	3.0000	0.0000	0.80518E-03	
349	3.0000	0.0000	0.84501E-03	<
361	1.0000	-128.07	-0.25613E-06	
362	1.0000	-208.39	-0.41678E-06	
363	3.0000	0.0000	0.14375E-06	
364	3.0000	0.0000	0.90294E-04	
365	3.0000	0.0000	0.24456E-03	
366	3.0000	0.0000	0.45811E-03	
367	3.0000	0.0000	0.66210E-03	
368	3.0000	0.0000	0.80257E-03	
369	3.0000	0.0000	0.84782E-03	<
381	1.0000	-335.80	-0.67161E-06	
382	1.0000	-535.05	-0.10701E-05	
383	1.0000	-162.69	-0.32538E-06	
384	3.0000	0.0000	0.72302E-04	
385	3.0000	0.0000	0.22467E-03	
386	3.0000	0.0000	0.42531E-03	

387	3.0000	0.0000	0.61489E-03	
388	3.0000	0.0000	0.74578E-03	
389	3.0000	0.0000	0.78755E-03	< Limiting
401	3.0000	0.0000	0.94001E-03	<
402	3.0000	-0.58208E-10	0.88786E-03	
403	3.0000	0.0000	0.77794E-03	
404	3.0000	0.0000	0.67032E-03	
405	3.0000	0.0000	0.57044E-03	
406	3.0000	0.0000	0.47253E-03	
407	3.0000	0.0000	0.40998E-03	
408	3.0000	0.0000	0.41520E-03	
409	3.0000	0.0000	0.42816E-03	
421	3.0000	0.0000	0.99119E-03	<
422	3.0000	0.0000	0.93700E-03	
423	3.0000	0.0000	0.80016E-03	
424	3.0000	0.0000	0.63241E-03	
425	3.0000	0.0000	0.46632E-03	
426	3.0000	0.0000	0.33077E-03	
427	3.0000	0.0000	0.22756E-03	
428	3.0000	0.0000	0.16930E-03	
429	3.0000	0.0000	0.15356E-03	
441	3.0000	0.0000	0.83532E-03	<
442	3.0000	0.0000	0.77748E-03	
443	3.0000	0.0000	0.62451E-03	
444	3.0000	0.0000	0.42686E-03	
445	3.0000	0.0000	0.21523E-03	
446	3.0000	0.0000	0.41575E-04	
447	1.0000	-569.87	-0.11397E-05	
448	1.0000	-857.10	-0.17142E-05	
449	1.0000	-454.20	-0.90840E-06	
461	3.0000	0.0000	0.78364E-03	<
462	3.0000	0.0000	0.73322E-03	
463	3.0000	0.0000	0.59451E-03	
464	3.0000	0.0000	0.41038E-03	
465	3.0000	0.0000	0.21507E-03	
466	3.0000	0.0000	0.68026E-04	
467	1.0000	-185.01	-0.37003E-06	
468	1.0000	-303.55	-0.60711E-06	
469	1.0000	-131.24	-0.26248E-06	
481	3.0000	0.0000	0.66209E-03	< Limiting
482	3.0000	0.0000	0.62674E-03	
483	3.0000	0.0000	0.52528E-03	
484	3.0000	0.0000	0.38379E-03	
485	3.0000	0.0000	0.21243E-03	
486	3.0000	0.0000	0.54927E-04	
487	1.0000	-371.07	-0.74214E-06	
488	1.0000	-657.00	-0.13140E-05	
489	1.0000	-360.81	-0.72163E-06	
501	3.0000	0.0000	0.36530E-03	
502	3.0000	0.0000	0.39108E-03	
503	3.0000	0.0000	0.39038E-03	
504	3.0000	0.0000	0.40166E-03	
505	3.0000	-0.29104E-10	0.45345E-03	
506	3.0000	0.0000	0.57772E-03	
507	3.0000	0.58208E-10	0.71031E-03	

508	3.0000	0.0000	0.80667E-03
509	3.0000	0.0000	0.87423E-03
510	3.0000	0.0000	0.91727E-03 <
511	3.0000	-0.58208E-10	0.89557E-03
512	3.0000	0.0000	0.78382E-03
513	3.0000	0.0000	0.64040E-03
514	3.0000	0.0000	0.53157E-03
515	3.0000	0.0000	0.45377E-03
516	3.0000	0.0000	0.39673E-03
521	3.0000	0.0000	0.98900E-04
522	3.0000	0.0000	0.12632E-05
523	3.0000	0.0000	0.11650E-03
524	3.0000	0.0000	0.22166E-03
525	3.0000	0.0000	0.35266E-03
526	3.0000	0.0000	0.50487E-03
527	3.0000	0.0000	0.67398E-03
528	3.0000	0.0000	0.82413E-03
529	3.0000	0.0000	0.92762E-03
530	3.0000	0.0000	0.97546E-03 <
531	3.0000	0.0000	0.93481E-03
532	3.0000	0.0000	0.80071E-03
533	3.0000	0.0000	0.61663E-03
534	3.0000	0.0000	0.44332E-03
535	3.0000	0.0000	0.30817E-03
536	3.0000	0.0000	0.18721E-03
541	1.0000	-1274.9	-0.25498E-05
542	1.0000	-1179.9	-0.23597E-05
543	1.0000	-1064.5	-0.21290E-05
544	1.0000	-552.81	-0.11056E-05
545	3.0000	0.0000	0.44662E-04
546	3.0000	0.0000	0.23225E-03
547	3.0000	0.0000	0.44851E-03
548	3.0000	0.0000	0.63134E-03
549	3.0000	0.0000	0.74861E-03
550	3.0000	0.0000	0.79973E-03 <
551	3.0000	0.0000	0.75423E-03
552	3.0000	0.0000	0.60438E-03
553	3.0000	0.0000	0.38573E-03
554	3.0000	0.0000	0.17004E-03
555	3.0000	0.0000	0.10493E-06
556	1.0000	-822.89	-0.16458E-05
561	1.0000	-447.81	-0.89563E-06
562	1.0000	-346.99	-0.69398E-06
563	1.0000	-313.80	-0.62761E-06
564	1.0000	-123.26	-0.24653E-06
565	3.0000	0.0000	0.61507E-04
566	3.0000	0.0000	0.21333E-03
567	3.0000	0.0000	0.40710E-03
568	3.0000	0.0000	0.58137E-03
569	3.0000	0.0000	0.69311E-03
570	3.0000	0.0000	0.73766E-03 <
571	3.0000	0.0000	0.69237E-03
572	3.0000	0.0000	0.55899E-03
573	3.0000	0.0000	0.36746E-03
574	3.0000	0.0000	0.18288E-03

575	3.0000	0.0000	0.52586E-04	
576	1.0000	-235.62	-0.47125E-06	
581	1.0000	-878.12	-0.17562E-05	
582	1.0000	-874.65	-0.17493E-05	
583	1.0000	-630.07	-0.12601E-05	
584	1.0000	-213.42	-0.42684E-06	
585	3.0000	0.0000	0.56428E-04	
586	3.0000	0.0000	0.19771E-03	
587	3.0000	0.0000	0.35515E-03	
588	3.0000	0.0000	0.48696E-03	
589	3.0000	0.0000	0.56522E-03	
590	3.0000	0.0000	0.59654E-03	< Limiting
591	3.0000	0.0000	0.56669E-03	
592	3.0000	0.0000	0.47810E-03	
593	3.0000	0.0000	0.34456E-03	
594	3.0000	0.0000	0.20216E-03	
595	3.0000	0.0000	0.60416E-04	
596	1.0000	-385.99	-0.77197E-06	
601	3.0000	0.0000	0.43119E-03	
602	3.0000	0.0000	0.41933E-03	
603	3.0000	0.0000	0.38839E-03	
604	3.0000	0.0000	0.39629E-03	
605	3.0000	0.0000	0.48189E-03	
606	3.0000	0.0000	0.63636E-03	
607	3.0000	0.0000	0.77867E-03	
608	3.0000	0.0000	0.84989E-03	
609	3.0000	0.0000	0.86631E-03	<
621	3.0000	0.0000	0.78361E-04	
622	3.0000	-0.72760E-11	0.10163E-03	
623	3.0000	0.0000	0.18086E-03	
624	3.0000	0.0000	0.30426E-03	
625	3.0000	0.0000	0.44940E-03	
626	3.0000	0.0000	0.62825E-03	
627	3.0000	0.0000	0.78764E-03	
628	3.0000	0.0000	0.87856E-03	
629	3.0000	0.0000	0.90054E-03	<
641	1.0000	-881.14	-0.17623E-05	
642	1.0000	-1505.9	-0.30118E-05	
643	1.0000	-962.30	-0.19246E-05	
644	1.0000	-21.587	-0.43174E-07	
645	3.0000	0.0000	0.16240E-03	
646	3.0000	0.0000	0.37621E-03	
647	3.0000	0.0000	0.54824E-03	
648	3.0000	0.0000	0.63619E-03	
649	3.0000	0.0000	0.65498E-03	<
661	1.0000	-323.54	-0.64707E-06	
662	1.0000	-516.13	-0.10323E-05	
663	1.0000	-182.17	-0.36435E-06	
664	3.0000	0.0000	0.56556E-04	
665	3.0000	0.0000	0.17873E-03	
666	3.0000	0.0000	0.34081E-03	
667	3.0000	0.0000	0.47116E-03	
668	3.0000	0.0000	0.53909E-03	
669	3.0000	0.0000	0.55318E-03	<

681	1.0000	-643.15	-0.12863E-05	
682	1.0000	-927.33	-0.18547E-05	
683	1.0000	-149.98	-0.29995E-06	
684	3.0000	0.0000	0.95330E-04	
685	3.0000	0.0000	0.19926E-03	
686	3.0000	0.0000	0.29109E-03	
687	3.0000	0.0000	0.34379E-03	
688	3.0000	0.0000	0.35888E-03	< Limiting
689	3.0000	0.0000	0.35565E-03	
701	3.0000	0.0000	0.87651E-03	<
702	3.0000	0.0000	0.82669E-03	
703	3.0000	0.0000	0.72279E-03	
704	3.0000	0.0000	0.60809E-03	
705	3.0000	0.0000	0.49096E-03	
706	3.0000	0.0000	0.39182E-03	
707	3.0000	0.0000	0.37395E-03	
708	3.0000	0.0000	0.45465E-03	
709	3.0000	0.0000	0.50618E-03	
721	3.0000	0.0000	0.90714E-03	<
722	3.0000	0.0000	0.86192E-03	
723	3.0000	0.0000	0.74498E-03	
724	3.0000	0.0000	0.59323E-03	
725	3.0000	0.0000	0.43601E-03	
726	3.0000	0.0000	0.30080E-03	
727	3.0000	0.0000	0.17674E-03	
728	3.0000	0.0000	0.93828E-04	
729	3.0000	0.0000	0.67793E-04	
741	3.0000	0.0000	0.64889E-03	<
742	3.0000	0.0000	0.61016E-03	
743	3.0000	0.0000	0.50112E-03	
744	3.0000	0.0000	0.34181E-03	
745	3.0000	0.0000	0.14934E-03	
746	1.0000	-138.87	-0.27774E-06	
747	1.0000	-1166.3	-0.23327E-05	
748	1.0000	-1567.5	-0.31349E-05	
749	1.0000	-859.58	-0.17192E-05	
761	3.0000	0.0000	0.53063E-03	<
762	3.0000	0.29104E-10	0.50614E-03	
763	3.0000	0.0000	0.43169E-03	
764	3.0000	0.0000	0.31550E-03	
765	3.0000	-0.14552E-10	0.16648E-03	
766	3.0000	0.0000	0.43163E-04	
767	1.0000	-373.58	-0.74715E-06	
768	1.0000	-536.27	-0.10725E-05	
769	1.0000	-273.94	-0.54788E-06	
781	3.0000	0.0000	0.30931E-03	
782	3.0000	0.0000	0.31232E-03	< Limiting
783	3.0000	0.29104E-10	0.30871E-03	
784	3.0000	0.0000	0.27914E-03	
785	3.0000	0.0000	0.19149E-03	
786	3.0000	0.0000	0.71048E-04	
787	1.0000	-369.43	-0.73886E-06	
788	1.0000	-933.73	-0.18675E-05	
789	1.0000	-577.80	-0.11556E-05	

801	3.0000	0.0000	0.42975E-03
802	3.0000	0.0000	0.51319E-03
803	3.0000	0.0000	0.48965E-03
804	3.0000	0.0000	0.39332E-03
805	3.0000	0.0000	0.35396E-03
806	3.0000	0.29104E-10	0.45115E-03
807	3.0000	0.0000	0.59341E-03
808	3.0000	0.0000	0.70295E-03
809	3.0000	0.0000	0.78072E-03
810	3.0000	0.0000	0.84108E-03
811	3.0000	0.0000	0.85035E-03 <
812	3.0000	0.0000	0.76541E-03
813	3.0000	0.0000	0.63064E-03
814	3.0000	0.0000	0.49735E-03
815	3.0000	0.0000	0.39537E-03
816	3.0000	0.0000	0.36930E-03
821	3.0000	0.72760E-11	0.90324E-04
822	3.0000	0.0000	0.44204E-04
823	3.0000	0.72760E-11	0.71100E-04
824	3.0000	0.0000	0.15030E-03
825	3.0000	0.0000	0.27754E-03
826	3.0000	0.0000	0.42157E-03
827	3.0000	0.0000	0.56699E-03
828	3.0000	0.0000	0.69913E-03
829	3.0000	0.0000	0.79557E-03
830	3.0000	0.0000	0.86331E-03
831	3.0000	0.0000	0.87518E-03 <
832	3.0000	0.0000	0.79865E-03
833	3.0000	0.58208E-10	0.64900E-03
834	3.0000	0.0000	0.47830E-03
835	3.0000	0.0000	0.32600E-03
836	3.0000	0.0000	0.18626E-03
841	1.0000	-1809.8	-0.36195E-05
842	1.0000	-1951.5	-0.39030E-05
843	1.0000	-1746.0	-0.34920E-05
844	1.0000	-1258.5	-0.25171E-05
845	1.0000	-411.09	-0.82218E-06
846	3.0000	0.0000	0.10705E-03
847	3.0000	0.0000	0.28508E-03
848	3.0000	0.0000	0.43074E-03
849	3.0000	0.0000	0.51987E-03
850	3.0000	0.0000	0.58184E-03
851	3.0000	0.0000	0.60221E-03 <
852	3.0000	0.0000	0.54428E-03
853	3.0000	0.0000	0.39820E-03
854	3.0000	0.0000	0.20411E-03
855	3.0000	0.0000	0.18564E-04
856	1.0000	-1048.0	-0.20960E-05
861	1.0000	-710.72	-0.14214E-05
862	1.0000	-681.53	-0.13631E-05
863	1.0000	-551.45	-0.11029E-05
864	1.0000	-371.18	-0.74237E-06
865	3.0000	0.0000	0.11625E-04
866	3.0000	-0.72760E-11	0.11888E-03
867	3.0000	0.0000	0.24848E-03

868	3.0000	-0.29104E-10	0.35340E-03	
869	3.0000	0.0000	0.41204E-03	
870	3.0000	0.0000	0.45692E-03	
871	3.0000	0.0000	0.48208E-03	<
872	3.0000	0.0000	0.45983E-03	
873	3.0000	0.0000	0.36936E-03	
874	3.0000	0.0000	0.23185E-03	
875	3.0000	0.0000	0.87619E-04	
876	1.0000	-150.76	-0.30152E-06	
881	1.0000	-1028.2	-0.20564E-05	
882	1.0000	-1332.0	-0.26640E-05	
883	1.0000	-1009.9	-0.20199E-05	
884	1.0000	-364.90	-0.72981E-06	
885	3.0000	0.0000	0.43363E-04	
886	3.0000	0.0000	0.13690E-03	
887	3.0000	0.0000	0.20617E-03	
888	3.0000	0.0000	0.22844E-03	
889	3.0000	0.0000	0.21557E-03	
890	3.0000	0.0000	0.22256E-03	
891	3.0000	0.0000	0.25951E-03	
892	3.0000	0.0000	0.30504E-03	
893	3.0000	0.0000	0.31678E-03	< Limiting
894	3.0000	0.0000	0.27098E-03	
895	3.0000	0.0000	0.14952E-03	
896	1.0000	-17.531	-0.35061E-07	
901	3.0000	0.0000	0.58319E-03	
902	3.0000	0.0000	0.59915E-03	
903	3.0000	0.0000	0.46199E-03	
904	3.0000	0.0000	0.34702E-03	
905	3.0000	0.0000	0.37138E-03	
906	3.0000	0.0000	0.52812E-03	
907	3.0000	0.0000	0.67486E-03	
908	3.0000	0.0000	0.73833E-03	
909	3.0000	0.0000	0.75375E-03	
910	3.0000	0.0000	0.77614E-03	<
911	3.0000	0.0000	0.77222E-03	
912	3.0000	0.0000	0.67797E-03	
913	3.0000	0.0000	0.52677E-03	
914	3.0000	0.0000	0.39404E-03	
915	3.0000	0.0000	0.35413E-03	
916	3.0000	0.0000	0.44930E-03	
921	1.0000	-0.14903	-0.29805E-09	
922	1.0000	-20.590	-0.41181E-07	
923	3.0000	0.72760E-11	0.91284E-04	
924	3.0000	0.0000	0.23470E-03	
925	3.0000	0.0000	0.39814E-03	
926	3.0000	0.0000	0.55295E-03	
927	3.0000	0.0000	0.67503E-03	
928	3.0000	0.0000	0.72480E-03	
929	3.0000	0.0000	0.72954E-03	
930	3.0000	0.0000	0.76452E-03	
931	3.0000	0.0000	0.78520E-03	<
932	3.0000	0.0000	0.71726E-03	
933	3.0000	0.0000	0.57148E-03	
934	3.0000	0.0000	0.40612E-03	

935	3.0000	0.0000	0.23397E-03
936	3.0000	0.0000	0.79991E-04
941	1.0000	-2603.2	-0.52064E-05
942	1.0000	-2444.4	-0.48889E-05
943	1.0000	-1749.7	-0.34994E-05
944	1.0000	-732.78	-0.14656E-05
945	3.0000	0.0000	0.60135E-04
946	3.0000	0.0000	0.24043E-03
947	3.0000	0.0000	0.36827E-03
948	3.0000	0.0000	0.39794E-03
949	3.0000	0.0000	0.38693E-03
950	3.0000	-0.29104E-10	0.42475E-03
951	3.0000	0.0000	0.47276E-03 <
952	3.0000	-0.29104E-10	0.43544E-03
953	3.0000	0.0000	0.28743E-03
954	3.0000	0.0000	0.97608E-04
955	1.0000	-663.71	-0.13274E-05
956	1.0000	-1900.9	-0.38017E-05
961	1.0000	-1056.5	-0.21129E-05
962	1.0000	-921.65	-0.18433E-05
963	1.0000	-447.73	-0.89546E-06
964	3.0000	0.0000	0.17054E-04
965	3.0000	0.0000	0.11591E-03
966	3.0000	0.0000	0.22842E-03
967	3.0000	0.0000	0.28631E-03
968	3.0000	0.0000	0.27404E-03
969	3.0000	0.0000	0.24284E-03
970	3.0000	0.0000	0.27922E-03
971	3.0000	0.0000	0.34654E-03
972	3.0000	0.0000	0.36964E-03 <
973	3.0000	0.0000	0.30260E-03
974	3.0000	0.0000	0.17954E-03
975	3.0000	0.0000	0.47455E-04
976	1.0000	-475.69	-0.95139E-06
981	1.0000	-1665.0	-0.33301E-05
982	1.0000	-1554.3	-0.31086E-05
983	1.0000	-461.19	-0.92237E-06
984	3.0000	0.0000	0.95267E-04
985	3.0000	0.0000	0.18589E-03
986	3.0000	0.0000	0.21436E-03
987	3.0000	0.0000	0.15832E-03
988	3.0000	0.0000	0.55904E-04
989	1.0000	-176.90	-0.35381E-06
990	3.0000	0.0000	0.60310E-05
991	3.0000	0.0000	0.12010E-03
992	3.0000	0.0000	0.25113E-03
993	3.0000	0.0000	0.31576E-03 < Limiting
994	3.0000	0.0000	0.28101E-03
995	3.0000	0.0000	0.14009E-03
996	1.0000	-474.91	-0.94982E-06
1001	3.0000	0.0000	0.67137E-03
1002	3.0000	0.0000	0.66193E-03
1003	3.0000	0.0000	0.63799E-03
1004	3.0000	0.0000	0.56972E-03
1005	3.0000	0.0000	0.43073E-03

1006	3.0000	0.0000	0.32465E-03	
1007	3.0000	0.0000	0.41534E-03	
1008	3.0000	0.0000	0.68048E-03	
1009	3.0000	0.0000	0.82589E-03	<
1021	3.0000	0.0000	0.66016E-03	
1022	3.0000	0.0000	0.66593E-03	<
1023	3.0000	0.0000	0.65167E-03	
1024	3.0000	0.0000	0.58926E-03	
1025	3.0000	0.0000	0.46648E-03	
1026	3.0000	0.0000	0.31305E-03	
1027	3.0000	0.0000	0.13389E-03	
1028	3.0000	0.0000	0.74622E-05	
1029	1.0000	-175.19	-0.35037E-06	
1041	3.0000	0.0000	0.31771E-03	
1042	3.0000	0.0000	0.33306E-03	
1043	3.0000	0.0000	0.34052E-03	<
1044	3.0000	0.0000	0.28210E-03	
1045	3.0000	0.0000	0.12937E-03	
1046	1.0000	-346.72	-0.69344E-06	
1047	1.0000	-1700.7	-0.34014E-05	
1048	1.0000	-2373.8	-0.47476E-05	
1049	1.0000	-1379.1	-0.27582E-05	
1061	3.0000	0.0000	0.20336E-03	
1062	3.0000	0.0000	0.22943E-03	
1063	3.0000	0.0000	0.26372E-03	<
1064	3.0000	0.0000	0.25779E-03	
1065	3.0000	0.0000	0.16580E-03	
1066	3.0000	0.0000	0.46503E-04	
1067	1.0000	-506.75	-0.10135E-05	
1068	1.0000	-989.53	-0.19791E-05	
1069	1.0000	-574.45	-0.11489E-05	
1081	1.0000	-259.17	-0.51834E-06	
1082	1.0000	-79.247	-0.15849E-06	
1083	3.0000	0.0000	0.10622E-03	
1084	3.0000	0.0000	0.21858E-03	
1085	3.0000	0.0000	0.22762E-03	< Limiting
1086	3.0000	0.0000	0.13511E-03	
1087	1.0000	-149.49	-0.29898E-06	
1088	1.0000	-1284.0	-0.25681E-05	
1089	1.0000	-904.69	-0.18094E-05	
1101	3.0000	0.0000	0.60884E-03	
1102	3.0000	0.0000	0.86367E-03	<
1103	3.0000	0.0000	0.81700E-03	
1104	3.0000	0.0000	0.52676E-03	
1105	3.0000	-0.29104E-10	0.31439E-03	
1106	3.0000	0.0000	0.35956E-03	
1107	3.0000	0.0000	0.52705E-03	
1108	3.0000	0.0000	0.62907E-03	
1109	3.0000	0.0000	0.63038E-03	
1110	3.0000	0.0000	0.63377E-03	
1111	3.0000	0.58208E-10	0.67584E-03	
1112	3.0000	0.0000	0.68756E-03	
1113	3.0000	0.0000	0.63560E-03	
1114	3.0000	0.0000	0.50365E-03	
1115	3.0000	0.0000	0.35324E-03	

1116	3.0000	0.0000	<u>0.36075E-03</u>
1121	3.0000	0.0000	<u>0.46328E-04</u>
1122	1.0000	-397.18	-0.79436E-06
1123	1.0000	-184.78	-0.36956E-06
1124	3.0000	0.0000	0.81726E-04
1125	3.0000	0.0000	0.25629E-03
1126	3.0000	0.0000	0.44063E-03
1127	3.0000	0.0000	0.56253E-03
1128	3.0000	0.0000	0.62054E-03
1129	3.0000	0.0000	0.60523E-03
1130	3.0000	0.0000	0.60757E-03
1131	3.0000	0.0000	0.67029E-03
1132	3.0000	0.0000	0.72699E-03 <
1133	3.0000	0.0000	0.69569E-03
1134	3.0000	0.0000	0.57930E-03
1135	3.0000	0.0000	0.40725E-03
1136	3.0000	0.0000	<u>0.20901E-03</u>
1141	1.0000	-2535.7	-0.50715E-05
1142	1.0000	-3004.0	-0.60080E-05
1143	1.0000	-2704.9	-0.54098E-05
1144	1.0000	-1898.1	-0.37963E-05
1145	1.0000	-830.52	-0.16610E-05
1146	3.0000	0.0000	0.63624E-04
1147	3.0000	0.0000	0.20789E-03
1148	3.0000	0.0000	0.27870E-03
1149	3.0000	0.0000	0.25761E-03
1150	3.0000	0.0000	0.25423E-03
1151	3.0000	0.0000	0.32226E-03
1152	3.0000	0.0000	0.40670E-03 <
1153	3.0000	0.0000	0.40345E-03
1154	3.0000	0.0000	0.27721E-03
1155	3.0000	0.0000	0.69450E-04
1156	1.0000	-1134.3	<u>-0.22686E-05</u>
1161	1.0000	-1008.5	-0.20170E-05
1162	1.0000	-1378.9	-0.27579E-05
1163	1.0000	-1139.8	-0.22795E-05
1164	1.0000	-638.87	-0.12777E-05
1165	1.0000	-48.239	-0.96478E-07
1166	3.0000	0.0000	0.96911E-04
1167	3.0000	0.0000	0.18144E-03
1168	3.0000	0.0000	0.20830E-03
1169	3.0000	0.0000	0.17244E-03
1170	3.0000	0.0000	0.16106E-03
1171	3.0000	0.0000	0.22505E-03
1172	3.0000	0.0000	0.31884E-03
1173	3.0000	0.0000	0.36734E-03 < Limiting
1174	3.0000	0.0000	0.31816E-03
1175	3.0000	0.0000	0.17185E-03
1176	3.0000	0.0000	<u>0.15878E-04</u>
1181	1.0000	-952.77	-0.19055E-05
1182	1.0000	-2055.9	-0.41119E-05
1183	1.0000	-1684.2	-0.33684E-05
1184	1.0000	-422.32	-0.84465E-06
1185	3.0000	0.0000	0.84995E-04
1186	3.0000	-0.14552E-10	0.16089E-03

1187	3.0000	0.0000	0.15872E-03	
1188	3.0000	0.0000	0.79159E-04	
1189	1.0000	-282.21	-0.56442E-06	
1190	1.0000	-751.65	-0.15033E-05	
1191	1.0000	-271.88	-0.54375E-06	
1192	3.0000	0.0000	0.11525E-03	
1193	3.0000	0.0000	0.28609E-03	
1194	3.0000	0.0000	0.37824E-03	<
1195	3.0000	0.0000	0.31016E-03	
1196	3.0000	0.0000	0.12574E-03	
1201	3.0000	0.0000	0.91871E-03	<
1202	3.0000	0.0000	0.74488E-03	
1203	3.0000	0.0000	0.43518E-03	
1204	3.0000	0.0000	0.31879E-03	
1205	3.0000	0.0000	0.41832E-03	
1206	3.0000	0.0000	0.60082E-03	
1207	3.0000	0.0000	0.70409E-03	
1208	3.0000	0.0000	0.68100E-03	
1209	3.0000	0.0000	0.63779E-03	
1221	1.0000	-278.98	-0.55795E-06	
1222	1.0000	-43.744	-0.87488E-07	
1223	3.0000	0.0000	0.14872E-03	
1224	3.0000	0.0000	0.35604E-03	
1225	3.0000	0.0000	0.53614E-03	
1226	3.0000	0.0000	0.68601E-03	
1227	3.0000	0.0000	0.73365E-03	<
1228	3.0000	0.0000	0.65376E-03	
1229	3.0000	0.0000	0.57877E-03	
1241	1.0000	-1818.6	-0.36371E-05	
1242	1.0000	-2878.2	-0.57563E-05	
1243	1.0000	-1589.4	-0.31788E-05	
1244	1.0000	-48.748	-0.97495E-07	
1245	3.0000	0.0000	0.18471E-03	
1246	3.0000	0.0000	0.35715E-03	
1247	3.0000	0.0000	0.38656E-03	<
1248	3.0000	0.29104E-10	0.28265E-03	
1249	3.0000	0.0000	0.20643E-03	
1261	1.0000	-822.63	-0.16453E-05	
1262	1.0000	-1117.2	-0.22344E-05	
1263	1.0000	-128.99	-0.25797E-06	
1264	3.0000	0.0000	0.10543E-03	
1265	3.0000	0.0000	0.23364E-03	
1266	3.0000	0.0000	0.32130E-03	<
1267	3.0000	0.0000	0.29572E-03	
1268	3.0000	0.0000	0.19158E-03	
1269	3.0000	0.0000	0.12542E-03	
1281	1.0000	-1259.5	-0.25190E-05	
1282	1.0000	-1480.4	-0.29609E-05	
1283	3.0000	0.0000	0.66146E-04	
1284	3.0000	0.0000	0.24504E-03	
1285	3.0000	0.0000	0.31102E-03	< Limiting
1286	3.0000	0.0000	0.25670E-03	
1287	3.0000	0.0000	0.10809E-03	
1288	1.0000	-405.78	-0.81155E-06	
1289	1.0000	-526.67	-0.10533E-05	

1301	3.0000	0.0000	0.99389E-03
1302	3.0000	0.0000	0.11405E-02 <
1303	3.0000	0.0000	0.83182E-03
1304	3.0000	0.0000	0.44984E-03
1305	3.0000	0.0000	0.32391E-03
1306	3.0000	0.0000	0.48255E-03
1307	3.0000	0.0000	0.66756E-03
1308	3.0000	0.0000	0.69477E-03
1309	3.0000	0.0000	0.58269E-03
1310	3.0000	0.0000	0.55730E-03
1311	3.0000	0.0000	0.65063E-03
1312	3.0000	0.0000	0.68137E-03
1313	3.0000	0.0000	0.59609E-03
1314	3.0000	0.0000	0.42588E-03
1315	3.0000	0.0000	0.34308E-03
1316	3.0000	0.0000	0.56251E-03
1321	1.0000	-233.63	-0.46727E-06
1322	1.0000	-768.59	-0.15372E-05
1323	3.0000	0.0000	0.28122E-04
1324	3.0000	0.0000	0.22224E-03
1325	3.0000	0.0000	0.46591E-03
1326	3.0000	0.0000	0.67272E-03
1327	3.0000	0.0000	0.76879E-03 <
1328	3.0000	0.0000	0.69829E-03
1329	3.0000	0.0000	0.52344E-03
1330	3.0000	0.0000	0.50109E-03
1331	3.0000	0.0000	0.64753E-03
1332	3.0000	0.0000	0.75437E-03
1333	3.0000	0.0000	0.72329E-03
1334	3.0000	0.0000	0.58560E-03
1335	3.0000	0.0000	0.38118E-03
1336	3.0000	0.0000	0.13792E-03
1341	1.0000	-3595.5	-0.71911E-05
1342	1.0000	-3839.7	-0.76795E-05
1343	1.0000	-2670.5	-0.53410E-05
1344	1.0000	-1020.5	-0.20410E-05
1345	3.0000	0.0000	0.90904E-04
1346	3.0000	0.0000	0.31663E-03
1347	3.0000	-0.29104E-10	0.41856E-03 <
1348	3.0000	0.29104E-10	0.32623E-03
1349	3.0000	0.0000	0.15046E-03
1350	3.0000	0.0000	0.12638E-03
1351	3.0000	0.0000	0.27342E-03
1352	3.0000	0.0000	0.41104E-03
1353	3.0000	0.0000	0.39931E-03
1354	3.0000	0.0000	0.23831E-03
1355	3.0000	0.0000	0.12850E-04
1356	1.0000	-1930.7	-0.38614E-05
1361	1.0000	-1733.2	-0.34664E-05
1362	1.0000	-1981.2	-0.39624E-05
1363	1.0000	-945.97	-0.18919E-05
1364	3.0000	0.0000	0.43929E-04
1365	3.0000	0.0000	0.20446E-03
1366	3.0000	0.0000	0.34928E-03
1367	3.0000	0.0000	0.36617E-03

1368	3.0000	0.0000	0.25221E-03	
1369	3.0000	0.0000	0.10165E-03	
1370	3.0000	0.0000	0.79911E-04	
1371	3.0000	0.0000	0.19877E-03	
1372	3.0000	0.0000	0.33542E-03	
1373	3.0000	0.0000	0.38683E-03	< Limiting
1374	3.0000	0.0000	0.31770E-03	
1375	3.0000	0.0000	0.15988E-03	
1376	1.0000	-107.05	-0.21410E-06	
1381	1.0000	-2156.6	-0.43133E-05	
1382	1.0000	-2845.0	-0.56899E-05	
1383	1.0000	-977.07	-0.19541E-05	
1384	3.0000	0.0000	0.18836E-03	
1385	3.0000	0.0000	0.37173E-03	
1386	3.0000	0.0000	0.40821E-03	
1387	3.0000	0.0000	0.27830E-03	
1388	3.0000	0.0000	0.69468E-04	
1389	1.0000	-987.16	-0.19743E-05	
1390	1.0000	-1333.9	-0.26677E-05	
1391	1.0000	-293.66	-0.58732E-06	
1392	3.0000	0.0000	0.16668E-03	
1393	3.0000	0.0000	0.36137E-03	
1394	3.0000	0.0000	0.43975E-03	<
1395	3.0000	0.0000	0.32398E-03	
1396	3.0000	0.0000	0.63349E-04	

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VERSION=HPPA 8000

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Robinson 2 RPV -- Oper. Temp & Press - 2.00 mil intf - 7.8 alpha - noz 9 no pr

***** POST1 ELEMENT TABLE LISTING *****

ELEM	GAPSTAT	GAPFORC	GAPSTRCH
101	3.0000	0.0000	0.55689E-03
102	3.0000	0.0000	0.57309E-03
103	3.0000	0.0000	0.58712E-03 <
121	3.0000	0.0000	0.39864E-03
122	3.0000	0.0000	0.40312E-03
123	3.0000	0.0000	0.40677E-03 <
141	3.0000	0.0000	0.22368E-03
142	3.0000	0.0000	0.23218E-03
143	3.0000	0.0000	0.23725E-03 <
161	3.0000	0.0000	0.23599E-03
162	3.0000	0.0000	0.24251E-03
163	3.0000	0.0000	0.24568E-03 <
181	3.0000	0.0000	0.18875E-03
182	3.0000	0.0000	0.19689E-03
183	3.0000	0.0000	0.20060E-03 < Limiting
201	3.0000	0.0000	0.74367E-03 <
202	3.0000	0.0000	0.70794E-03
203	3.0000	0.0000	0.63700E-03
204	3.0000	0.0000	0.58083E-03
205	3.0000	0.0000	0.52507E-03
206	3.0000	0.0000	0.45265E-03
207	3.0000	0.0000	0.39246E-03
208	3.0000	0.0000	0.38329E-03
209	3.0000	0.0000	0.38819E-03
221	3.0000	0.0000	0.72587E-03 <
222	3.0000	0.0000	0.69027E-03
223	3.0000	0.0000	0.60095E-03
224	3.0000	0.29104E-10	0.49449E-03
225	3.0000	0.0000	0.38566E-03
226	3.0000	0.0000	0.29035E-03
227	3.0000	0.0000	0.22079E-03
228	3.0000	0.0000	0.18547E-03
229	3.0000	0.0000	0.17752E-03
241	3.0000	0.0000	0.60127E-03 <
242	3.0000	0.0000	0.55871E-03
243	3.0000	0.0000	0.44816E-03
244	3.0000	0.0000	0.31524E-03
245	3.0000	0.0000	0.17413E-03
246	3.0000	0.0000	0.53254E-04
247	1.0000	-189.58	-0.37916E-06
248	1.0000	-363.29	-0.72657E-06
249	1.0000	-183.38	-0.36677E-06
261	3.0000	0.0000	0.59044E-03 <
262	3.0000	0.0000	0.55093E-03
263	3.0000	0.0000	0.44402E-03
264	3.0000	0.0000	0.31072E-03
265	3.0000	0.0000	0.17196E-03

266	3.0000	0.0000	0.63960E-04	
267	1.0000	-22.598	-0.45197E-07	
268	1.0000	-111.54	-0.22307E-06	
269	1.0000	-36.958	-0.73916E-07	
281	3.0000	0.0000	0.53104E-03	< Limiting
282	3.0000	0.0000	0.49663E-03	
283	3.0000	0.0000	0.40172E-03	
284	3.0000	0.0000	0.28187E-03	
285	3.0000	0.0000	0.14744E-03	
286	3.0000	0.0000	0.32505E-04	
287	1.0000	-244.70	-0.48940E-06	
288	1.0000	-350.12	-0.70023E-06	
289	1.0000	-175.34	-0.35067E-06	
301	3.0000	0.0000	0.32384E-03	
302	3.0000	0.0000	0.34500E-03	
303	3.0000	0.0000	0.37566E-03	
304	3.0000	0.0000	0.40425E-03	
305	3.0000	0.0000	0.46173E-03	
306	3.0000	0.0000	0.56990E-03	
307	3.0000	0.0000	0.67334E-03	
308	3.0000	0.0000	0.72277E-03	
309	3.0000	0.0000	0.73118E-03	<
321	3.0000	0.0000	0.14585E-03	
322	3.0000	0.0000	0.15611E-03	
323	3.0000	0.0000	0.19054E-03	
324	3.0000	0.0000	0.25817E-03	
325	3.0000	0.0000	0.35689E-03	
326	3.0000	0.0000	0.49704E-03	
327	3.0000	0.0000	0.63436E-03	
328	3.0000	0.0000	0.72506E-03	
329	3.0000	0.0000	0.75248E-03	<
341	1.0000	-343.64	-0.68727E-06	
342	1.0000	-585.37	-0.11707E-05	
343	1.0000	-407.70	-0.81541E-06	
344	3.0000	0.0000	0.13394E-06	
345	3.0000	0.0000	0.12041E-03	
346	3.0000	0.0000	0.29633E-03	
347	3.0000	0.0000	0.46552E-03	
348	3.0000	0.0000	0.57683E-03	
349	3.0000	0.0000	0.60991E-03	<
361	1.0000	-106.89	-0.21379E-06	
362	1.0000	-169.33	-0.33867E-06	
363	1.0000	-99.025	-0.19805E-06	
364	3.0000	0.0000	0.34809E-04	
365	3.0000	0.0000	0.12401E-03	
366	3.0000	0.0000	0.27768E-03	
367	3.0000	0.0000	0.43481E-03	
368	3.0000	0.0000	0.54590E-03	
369	3.0000	0.0000	0.58105E-03	<
381	1.0000	-288.32	-0.57664E-06	
382	1.0000	-457.62	-0.91524E-06	
383	1.0000	-226.75	-0.45349E-06	
384	3.0000	0.0000	0.22305E-04	
385	3.0000	0.0000	0.11009E-03	
386	3.0000	0.0000	0.24165E-03	

387	3.0000	0.0000	0.37267E-03	
388	3.0000	0.0000	0.46518E-03	
389	3.0000	0.0000	0.49358E-03	< Limiting
401	3.0000	0.0000	0.76881E-03	<
402	3.0000	0.0000	0.72006E-03	
403	3.0000	0.0000	0.61973E-03	
404	3.0000	0.0000	0.52635E-03	
405	3.0000	0.0000	0.44103E-03	
406	3.0000	0.0000	0.35609E-03	
407	3.0000	0.0000	0.30381E-03	
408	3.0000	0.0000	0.31542E-03	
409	3.0000	0.0000	0.33081E-03	
421	3.0000	0.0000	0.77584E-03	<
422	3.0000	0.0000	0.72786E-03	
423	3.0000	0.0000	0.60937E-03	
424	3.0000	0.0000	0.47163E-03	
425	3.0000	0.0000	0.34241E-03	
426	3.0000	0.0000	0.23791E-03	
427	3.0000	0.0000	0.15724E-03	
428	3.0000	0.0000	0.11348E-03	
429	3.0000	0.0000	0.10169E-03	
441	3.0000	0.0000	0.58343E-03	<
442	3.0000	0.0000	0.53483E-03	
443	3.0000	0.0000	0.40894E-03	
444	3.0000	0.0000	0.25519E-03	
445	3.0000	0.0000	0.10019E-03	
446	1.0000	-149.37	-0.29875E-06	
447	1.0000	-789.04	-0.15781E-05	
448	1.0000	-946.82	-0.18936E-05	
449	1.0000	-497.07	-0.99414E-06	
461	3.0000	0.0000	0.50337E-03	<
462	3.0000	0.0000	0.46541E-03	
463	3.0000	0.0000	0.36247E-03	
464	3.0000	0.0000	0.23353E-03	
465	3.0000	0.0000	0.10414E-03	
466	3.0000	0.0000	0.17205E-04	
467	1.0000	-310.05	-0.62009E-06	
468	1.0000	-274.20	-0.54841E-06	
469	1.0000	-119.88	-0.23976E-06	
481	3.0000	0.0000	0.35903E-03	< Limiting
482	3.0000	0.0000	0.33876E-03	
483	3.0000	0.0000	0.27997E-03	
484	3.0000	0.0000	0.20134E-03	
485	3.0000	0.0000	0.10079E-03	
486	3.0000	0.0000	0.79230E-05	
487	1.0000	-424.44	-0.84887E-06	
488	1.0000	-576.16	-0.11523E-05	
489	1.0000	-313.35	-0.62671E-06	
501	3.0000	0.0000	0.29167E-03	
502	3.0000	0.0000	0.31491E-03	
503	3.0000	0.0000	0.31512E-03	
504	3.0000	0.0000	0.30085E-03	
505	3.0000	0.0000	0.32627E-03	
506	3.0000	0.0000	0.43148E-03	
507	3.0000	0.0000	0.55170E-03	

508	3.0000	0.0000	0.63847E-03
509	3.0000	0.0000	0.69981E-03
510	3.0000	0.0000	0.74132E-03 <
511	3.0000	0.0000	0.72307E-03
512	3.0000	0.0000	0.61957E-03
513	3.0000	0.0000	0.48714E-03
514	3.0000	0.29104E-10	0.39043E-03
515	3.0000	0.0000	0.33137E-03
516	3.0000	0.0000	0.29878E-03
521	3.0000	0.0000	0.89309E-04
522	3.0000	0.0000	0.77591E-04
523	3.0000	-0.72760E-11	0.10285E-03
524	3.0000	0.0000	0.15535E-03
525	3.0000	0.0000	0.24509E-03
526	3.0000	0.0000	0.36213E-03
527	3.0000	0.0000	0.49625E-03
528	3.0000	0.0000	0.61958E-03
529	3.0000	0.0000	0.70713E-03
530	3.0000	0.0000	0.75083E-03 <
531	3.0000	0.0000	0.71794E-03
532	3.0000	0.0000	0.60379E-03
533	3.0000	0.0000	0.45121E-03
534	3.0000	0.0000	0.31668E-03
535	3.0000	0.0000	0.21012E-03
536	3.0000	0.0000	0.13102E-03
541	1.0000	-1253.0	-0.25060E-05
542	1.0000	-1222.7	-0.24455E-05
543	1.0000	-1047.0	-0.20940E-05
544	1.0000	-758.59	-0.15172E-05
545	1.0000	-170.01	-0.34002E-06
546	3.0000	0.0000	0.10713E-03
547	3.0000	0.0000	0.26417E-03
548	3.0000	0.0000	0.40211E-03
549	3.0000	0.0000	0.49238E-03
550	3.0000	0.0000	0.53637E-03 <
551	3.0000	0.0000	0.50378E-03
552	3.0000	0.0000	0.38653E-03
553	3.0000	0.0000	0.21862E-03
554	3.0000	0.0000	0.68734E-04
555	1.0000	-328.29	-0.65658E-06
556	1.0000	-932.63	-0.18653E-05
561	1.0000	-426.38	-0.85277E-06
562	1.0000	-339.22	-0.67843E-06
563	1.0000	-283.36	-0.56671E-06
564	1.0000	-245.08	-0.49016E-06
565	3.0000	0.0000	0.93158E-05
566	3.0000	0.0000	0.97594E-04
567	3.0000	0.0000	0.22106E-03
568	3.0000	0.0000	0.33715E-03
569	3.0000	0.0000	0.41241E-03
570	3.0000	0.0000	0.44713E-03 <
571	3.0000	0.0000	0.41977E-03
572	3.0000	0.29104E-10	0.32981E-03
573	3.0000	0.0000	0.20104E-03
574	3.0000	0.0000	0.87260E-04

575	3.0000	0.0000	0.98701E-05	
576	1.0000	-296.50	-0.59299E-06	
581	1.0000	-792.32	-0.15846E-05	
582	1.0000	-778.14	-0.15563E-05	
583	1.0000	-545.37	-0.10907E-05	
584	1.0000	-268.31	-0.53662E-06	
585	3.0000	0.0000	0.72503E-05	
586	3.0000	0.0000	0.80669E-04	
587	3.0000	0.0000	0.16401E-03	
588	3.0000	0.0000	0.23093E-03	
589	3.0000	0.0000	0.26692E-03	
590	3.0000	0.0000	0.28648E-03	< Limiting
591	3.0000	0.0000	0.27756E-03	
592	3.0000	-0.14552E-10	0.23845E-03	
593	3.0000	0.0000	0.17281E-03	
594	3.0000	0.0000	0.10168E-03	
595	3.0000	0.0000	0.21518E-04	
596	1.0000	-412.84	-0.82567E-06	
601	3.0000	0.0000	0.33010E-03	
602	3.0000	0.0000	0.31608E-03	
603	3.0000	0.0000	0.27931E-03	
604	3.0000	0.0000	0.27912E-03	
605	3.0000	0.0000	0.35242E-03	
606	3.0000	0.0000	0.49231E-03	
607	3.0000	0.0000	0.61633E-03	
608	3.0000	0.0000	0.67258E-03	
609	3.0000	0.58208E-10	0.68323E-03	<
621	3.0000	0.0000	0.19678E-04	
622	3.0000	0.0000	0.40891E-04	
623	3.0000	0.0000	0.11187E-03	
624	3.0000	0.0000	0.21383E-03	
625	3.0000	0.0000	0.33513E-03	
626	3.0000	0.0000	0.47066E-03	
627	3.0000	0.0000	0.59077E-03	
628	3.0000	0.0000	0.65527E-03	
629	3.0000	0.0000	0.66793E-03	<
641	1.0000	-947.62	-0.18952E-05	
642	1.0000	-1622.2	-0.32444E-05	
643	1.0000	-1110.8	-0.22216E-05	
644	1.0000	-395.75	-0.79149E-06	
645	3.0000	0.0000	0.62951E-04	
646	3.0000	0.0000	0.20918E-03	
647	3.0000	0.0000	0.32668E-03	
648	3.0000	0.0000	0.37906E-03	
649	3.0000	0.0000	0.38546E-03	<
661	1.0000	-324.23	-0.64847E-06	
662	1.0000	-498.41	-0.99683E-06	
663	1.0000	-261.40	-0.52279E-06	
664	3.0000	0.0000	0.99814E-05	
665	3.0000	0.0000	0.77078E-04	
666	3.0000	0.0000	0.16783E-03	
667	3.0000	0.0000	0.23524E-03	
668	3.0000	0.0000	0.26061E-03	<
669	3.0000	0.0000	0.25965E-03	
681	1.0000	-593.48	-0.11870E-05	

682	1.0000	-842.16	-0.16843E-05	
683	1.0000	-195.00	-0.39000E-06	
684	3.0000	0.0000	0.51209E-04	
685	3.0000	0.0000	0.90315E-04	
686	3.0000	0.0000	0.10951E-03	< Limiting
687	3.0000	0.0000	0.95384E-04	
688	3.0000	0.0000	0.64025E-04	
689	3.0000	0.0000	0.44198E-04	
701	3.0000	-0.58208E-10	0.69219E-03	<
702	3.0000	0.0000	0.64792E-03	
703	3.0000	0.0000	0.55852E-03	
704	3.0000	0.0000	0.46307E-03	
705	3.0000	0.0000	0.36106E-03	
706	3.0000	0.0000	0.27431E-03	
707	3.0000	0.0000	0.26451E-03	
708	3.0000	0.0000	0.35059E-03	
709	3.0000	0.0000	0.40409E-03	
721	3.0000	0.0000	0.67349E-03	<
722	3.0000	0.0000	0.63722E-03	
723	3.0000	0.0000	0.54563E-03	
724	3.0000	0.0000	0.43416E-03	
725	3.0000	0.0000	0.32130E-03	
726	3.0000	0.0000	0.21010E-03	
727	3.0000	0.0000	0.10701E-03	
728	3.0000	0.0000	0.32016E-04	
729	3.0000	0.0000	0.80106E-05	
741	3.0000	0.0000	0.37870E-03	<
742	3.0000	0.0000	0.35197E-03	
743	3.0000	0.0000	0.27756E-03	
744	3.0000	0.0000	0.17357E-03	
745	3.0000	0.0000	0.49791E-04	
746	1.0000	-516.01	-0.10320E-05	
747	1.0000	-1315.6	-0.26313E-05	
748	1.0000	-1684.8	-0.33696E-05	
749	1.0000	-925.76	-0.18515E-05	
761	3.0000	0.0000	0.23709E-03	<
762	3.0000	0.0000	0.22744E-03	
763	3.0000	0.0000	0.19474E-03	
764	3.0000	0.0000	0.14202E-03	
765	3.0000	0.0000	0.65365E-04	
766	1.0000	-20.577	-0.41155E-07	
767	1.0000	-447.09	-0.89418E-06	
768	1.0000	-520.59	-0.10412E-05	
769	1.0000	-276.06	-0.55212E-06	
781	1.0000	-5.3767	-0.10753E-07	
782	3.0000	0.0000	0.18017E-04	
783	3.0000	0.0000	0.60460E-04	
784	3.0000	0.0000	0.97677E-04	< Limiting
785	3.0000	0.0000	0.82831E-04	
786	3.0000	0.0000	0.26742E-04	
787	1.0000	-412.59	-0.82519E-06	
788	1.0000	-850.19	-0.17004E-05	
789	1.0000	-530.84	-0.10617E-05	

801	3.0000	0.29104E-10	0.32729E-03
802	3.0000	0.0000	0.41269E-03
803	3.0000	0.0000	0.38829E-03
804	3.0000	0.0000	0.28483E-03
805	3.0000	0.0000	0.23636E-03
806	3.0000	0.0000	0.32144E-03
807	3.0000	0.0000	0.45093E-03
808	3.0000	0.0000	0.54399E-03
809	3.0000	0.0000	0.60687E-03
810	3.0000	0.0000	0.65989E-03
811	3.0000	0.0000	0.67086E-03 <
812	3.0000	0.0000	0.59710E-03
813	3.0000	0.0000	0.47865E-03
814	3.0000	0.0000	0.36071E-03
815	3.0000	0.0000	0.27261E-03
816	3.0000	0.0000	0.25794E-03
821	3.0000	0.0000	0.31552E-04
822	1.0000	-81.025	-0.16205E-06
823	3.0000	0.0000	0.14534E-04
824	3.0000	0.0000	0.80791E-04
825	3.0000	0.0000	0.18645E-03
826	3.0000	0.0000	0.30913E-03
827	3.0000	0.0000	0.41601E-03
828	3.0000	0.0000	0.51191E-03
829	3.0000	0.0000	0.58245E-03
830	3.0000	0.0000	0.63790E-03
831	3.0000	0.58208E-10	0.65126E-03 <
832	3.0000	0.0000	0.59224E-03
833	3.0000	0.0000	0.47598E-03
834	3.0000	0.0000	0.34933E-03
835	3.0000	0.0000	0.22524E-03
836	3.0000	0.0000	0.11076E-03
841	1.0000	-1923.4	-0.38469E-05
842	1.0000	-2083.8	-0.41676E-05
843	1.0000	-1858.5	-0.37171E-05
844	1.0000	-1390.7	-0.27814E-05
845	1.0000	-781.34	-0.15627E-05
846	3.0000	0.0000	0.17933E-04
847	3.0000	0.0000	0.13163E-03
848	3.0000	0.0000	0.22712E-03
849	3.0000	0.0000	0.28397E-03
850	3.0000	0.0000	0.33013E-03
851	3.0000	0.0000	0.34951E-03 <
852	3.0000	-0.29104E-10	0.31086E-03
853	3.0000	0.0000	0.20783E-03
854	3.0000	0.0000	0.80887E-04
855	1.0000	-346.57	-0.69314E-06
856	1.0000	-1263.0	-0.25259E-05
861	1.0000	-695.60	-0.13912E-05
862	1.0000	-699.80	-0.13996E-05
863	1.0000	-559.45	-0.11189E-05
864	1.0000	-410.91	-0.82182E-06
865	1.0000	-215.29	-0.43058E-06
866	3.0000	0.0000	0.31827E-04
867	3.0000	0.0000	0.94055E-04

868	3.0000	0.0000	0.14886E-03	
869	3.0000	0.0000	0.17543E-03	
870	3.0000	0.0000	0.20108E-03	
871	3.0000	0.0000	0.22183E-03	<
872	3.0000	0.14552E-10	0.21305E-03	
873	3.0000	0.0000	0.16545E-03	
874	3.0000	0.0000	0.96945E-04	
875	3.0000	0.0000	0.21328E-04	
876	1.0000	-319.46	-0.63893E-06	
881	1.0000	-980.10	-0.19602E-05	
882	1.0000	-1268.1	-0.25361E-05	
883	1.0000	-961.70	-0.19234E-05	
884	1.0000	-417.03	-0.83406E-06	
885	1.0000	-20.119	-0.40237E-07	
886	3.0000	0.0000	0.38462E-04	
887	3.0000	0.0000	0.48149E-04	
888	3.0000	0.0000	0.24874E-04	
889	1.0000	-124.24	-0.24849E-06	
890	1.0000	-226.19	-0.45237E-06	
891	1.0000	-32.425	-0.64850E-07	
892	3.0000	0.0000	0.49126E-04	
893	3.0000	0.0000	0.10113E-03	
894	3.0000	0.0000	0.12104E-03	< Limiting
895	3.0000	0.0000	0.74819E-04	
896	1.0000	-182.97	-0.36593E-06	
901	3.0000	0.0000	0.49067E-03	
902	3.0000	-0.29104E-10	0.50717E-03	
903	3.0000	0.0000	0.36301E-03	
904	3.0000	0.0000	0.22924E-03	
905	3.0000	0.0000	0.23602E-03	
906	3.0000	0.0000	0.38109E-03	
907	3.0000	0.0000	0.51915E-03	
908	3.0000	0.0000	0.57547E-03	
909	3.0000	0.0000	0.58716E-03	
910	3.0000	0.0000	0.60623E-03	<
911	3.0000	0.0000	0.60098E-03	
912	3.0000	0.0000	0.51269E-03	
913	3.0000	0.0000	0.37186E-03	
914	3.0000	0.0000	0.25224E-03	
915	3.0000	0.0000	0.23233E-03	
916	3.0000	0.0000	0.34826E-03	
921	1.0000	-252.94	-0.50587E-06	
922	1.0000	-267.03	-0.53407E-06	
923	3.0000	0.0000	0.36804E-04	
924	3.0000	0.0000	0.14249E-03	
925	3.0000	0.0000	0.28017E-03	
926	3.0000	0.0000	0.40839E-03	
927	3.0000	0.0000	0.50281E-03	
928	3.0000	0.0000	0.54018E-03	
929	3.0000	0.0000	0.54215E-03	
930	3.0000	0.0000	0.57036E-03	
931	3.0000	0.0000	0.58338E-03	<
932	3.0000	0.0000	0.52255E-03	
933	3.0000	0.0000	0.40475E-03	
934	3.0000	0.0000	0.27560E-03	

935	3.0000	0.0000	0.13263E-03	
936	3.0000	0.0000	0.22254E-04	
941	1.0000	-2696.5	-0.53930E-05	
942	1.0000	-2541.5	-0.50831E-05	
943	1.0000	-1880.5	-0.37609E-05	
944	1.0000	-1109.4	-0.22188E-05	
945	1.0000	-208.30	-0.41660E-06	
946	3.0000	0.0000	0.96329E-04	
947	3.0000	0.0000	0.18923E-03	
948	3.0000	0.14552E-10	0.21687E-03	
949	3.0000	0.0000	0.21202E-03	
950	3.0000	0.0000	0.23945E-03	
951	3.0000	0.0000	0.26438E-03	<
952	3.0000	0.0000	0.22114E-03	
953	3.0000	0.0000	0.10625E-03	
954	1.0000	-121.92	-0.24384E-06	
955	1.0000	-1137.2	-0.22744E-05	
956	1.0000	-2053.7	-0.41075E-05	
961	1.0000	-1059.7	-0.21194E-05	
962	1.0000	-936.02	-0.18720E-05	
963	1.0000	-585.80	-0.11716E-05	
964	1.0000	-301.60	-0.60320E-06	
965	3.0000	0.0000	0.47459E-05	
966	3.0000	0.0000	0.68125E-04	
967	3.0000	0.0000	0.11935E-03	
968	3.0000	0.0000	0.13238E-03	
969	3.0000	0.0000	0.12741E-03	
970	3.0000	0.0000	0.14644E-03	
971	3.0000	0.0000	0.16813E-03	<
972	3.0000	0.0000	0.15305E-03	
973	3.0000	-0.72760E-11	0.94241E-04	
974	3.0000	0.0000	0.32101E-04	
975	1.0000	-219.39	-0.43879E-06	
976	1.0000	-675.93	-0.13519E-05	
981	1.0000	-1694.1	-0.33882E-05	
982	1.0000	-1577.4	-0.31548E-05	
983	1.0000	-712.91	-0.14258E-05	
984	3.0000	0.22737E-12	0.34256E-05	
985	3.0000	0.0000	0.42788E-04	
986	3.0000	0.0000	0.44422E-04	
987	3.0000	0.0000	0.11232E-04	
988	1.0000	-312.24	-0.62448E-06	
989	1.0000	-632.29	-0.12646E-05	
990	1.0000	-560.00	-0.11200E-05	
991	1.0000	-170.19	-0.34037E-06	
992	3.0000	0.0000	0.42191E-04	
993	3.0000	0.0000	0.88057E-04	
994	3.0000	0.0000	0.93284E-04	< Limiting
995	3.0000	0.0000	0.25284E-04	
996	1.0000	-804.94	-0.16099E-05	
1001	3.0000	0.0000	0.49370E-03	
1002	3.0000	0.0000	0.48549E-03	
1003	3.0000	0.0000	0.46748E-03	
1004	3.0000	0.0000	0.41132E-03	
1005	3.0000	0.29104E-10	0.28349E-03	

1006	3.0000	0.0000	0.19643E-03	
1007	3.0000	-0.29104E-10	0.30912E-03	
1008	3.0000	0.0000	0.58368E-03	
1009	3.0000	0.0000	0.73540E-03	<
1021	3.0000	-0.29104E-10	0.45713E-03	
1022	3.0000	0.0000	0.46154E-03	<
1023	3.0000	0.0000	0.45269E-03	
1024	3.0000	0.0000	0.41664E-03	
1025	3.0000	0.0000	0.33316E-03	
1026	3.0000	0.0000	0.20331E-03	
1027	3.0000	0.0000	0.66431E-04	
1028	1.0000	-257.28	-0.51455E-06	
1029	1.0000	-256.73	-0.51346E-06	
1041	3.0000	0.0000	0.12969E-03	
1042	3.0000	0.0000	0.13665E-03	<
1043	3.0000	0.0000	0.13505E-03	
1044	3.0000	0.0000	0.99455E-04	
1045	3.0000	0.0000	0.12114E-04	
1046	1.0000	-877.17	-0.17543E-05	
1047	1.0000	-1889.7	-0.37794E-05	
1048	1.0000	-2503.6	-0.50072E-05	
1049	1.0000	-1423.0	-0.28459E-05	
1061	3.0000	0.72760E-11	0.89046E-04	<
1062	3.0000	0.0000	0.88933E-04	
1063	3.0000	0.0000	0.87244E-04	
1064	3.0000	0.0000	0.70201E-04	
1065	3.0000	0.0000	0.22249E-04	
1066	1.0000	-273.69	-0.54738E-06	
1067	1.0000	-756.51	-0.15130E-05	
1068	1.0000	-1043.9	-0.20877E-05	
1069	1.0000	-612.25	-0.12245E-05	
1081	1.0000	-446.50	-0.89300E-06	
1082	1.0000	-708.41	-0.14168E-05	
1083	1.0000	-240.28	-0.48055E-06	
1084	3.0000	0.0000	0.33101E-04	
1085	3.0000	0.0000	0.47027E-04	< Limiting
1086	3.0000	0.0000	0.10202E-04	
1087	1.0000	-598.17	-0.11963E-05	
1088	1.0000	-1393.2	-0.27864E-05	
1089	1.0000	-933.31	-0.18666E-05	
1101	3.0000	0.0000	0.50776E-03	
1102	3.0000	0.0000	0.76871E-03	<
1103	3.0000	0.0000	0.72093E-03	
1104	3.0000	0.0000	0.42500E-03	
1105	3.0000	0.0000	0.19441E-03	
1106	3.0000	0.0000	0.22060E-03	
1107	3.0000	0.0000	0.37770E-03	
1108	3.0000	0.0000	0.47157E-03	
1109	3.0000	0.0000	0.46475E-03	
1110	3.0000	0.0000	0.46264E-03	
1111	3.0000	0.0000	0.49861E-03	
1112	3.0000	0.0000	0.50990E-03	
1113	3.0000	0.0000	0.46629E-03	
1114	3.0000	0.0000	0.34698E-03	
1115	3.0000	0.0000	0.21189E-03	

1116	3.0000	0.0000	0.24093E-03
1121	1.0000	-67.836	-0.13567E-06
1122	1.0000	-633.67	-0.12673E-05
1123	1.0000	-455.96	-0.91191E-06
1124	3.0000	0.0000	0.23496E-04
1125	3.0000	0.0000	0.15991E-03
1126	3.0000	0.0000	0.32067E-03
1127	3.0000	0.0000	0.41725E-03
1128	3.0000	0.0000	0.44900E-03
1129	3.0000	0.0000	0.42090E-03
1130	3.0000	0.0000	0.41671E-03
1131	3.0000	0.0000	0.46638E-03
1132	3.0000	0.0000	0.51413E-03 <
1133	3.0000	0.0000	0.49464E-03
1134	3.0000	0.0000	0.41529E-03
1135	3.0000	0.0000	0.27715E-03
1136	3.0000	0.0000	0.11177E-03
1141	1.0000	-2675.1	-0.53502E-05
1142	1.0000	-3102.2	-0.62045E-05
1143	1.0000	-2823.6	-0.56473E-05
1144	1.0000	-2033.7	-0.40674E-05
1145	1.0000	-1227.9	-0.24558E-05
1146	1.0000	-151.71	-0.30341E-06
1147	3.0000	0.0000	0.69404E-04
1148	3.0000	0.0000	0.10857E-03
1149	3.0000	0.0000	0.85844E-04
1150	3.0000	0.0000	0.81296E-04
1151	3.0000	0.0000	0.12851E-03
1152	3.0000	0.0000	0.18433E-03 <
1153	3.0000	-0.14552E-10	0.17844E-03
1154	3.0000	0.0000	0.99704E-04
1155	1.0000	-259.23	-0.51845E-06
1156	1.0000	-1569.3	-0.31385E-05
1161	1.0000	-1164.1	-0.23282E-05
1162	1.0000	-1412.6	-0.28251E-05
1163	1.0000	-1188.2	-0.23764E-05
1164	1.0000	-764.85	-0.15297E-05
1165	1.0000	-459.91	-0.91982E-06
1166	3.0000	0.0000	0.79850E-09
1167	3.0000	0.0000	0.41887E-04
1168	3.0000	0.0000	0.66349E-04
1169	3.0000	0.0000	0.53696E-04
1170	3.0000	0.0000	0.58301E-04
1171	3.0000	0.0000	0.87727E-04
1172	3.0000	0.0000	0.12681E-03
1173	3.0000	0.0000	0.13694E-03 <
1174	3.0000	0.0000	0.10216E-03
1175	3.0000	0.0000	0.27775E-04
1176	1.0000	-421.53	-0.84305E-06
1181	1.0000	-1326.9	-0.26538E-05
1182	1.0000	-2115.3	-0.42305E-05
1183	1.0000	-1740.2	-0.34805E-05
1184	1.0000	-697.41	-0.13948E-05
1185	1.0000	-29.249	-0.58499E-07
1186	3.0000	0.0000	0.35563E-04

1187	3.0000	0.0000	0.24830E-04	
1188	1.0000	-178.36	-0.35672E-06	
1189	1.0000	-772.76	-0.15455E-05	
1190	1.0000	-1063.7	-0.21275E-05	
1191	1.0000	-900.66	-0.18013E-05	
1192	1.0000	-280.21	-0.56042E-06	
1193	3.0000	-0.36380E-11	0.61802E-04	
1194	3.0000	0.0000	0.13010E-03	< Limiting
1195	3.0000	0.0000	0.10591E-03	
1196	1.0000	-28.376	-0.56752E-07	
1201	3.0000	0.0000	0.82786E-03	<
1202	3.0000	0.0000	0.64576E-03	
1203	3.0000	0.0000	0.32657E-03	
1204	3.0000	0.0000	0.18775E-03	
1205	3.0000	0.0000	0.26779E-03	
1206	3.0000	0.0000	0.44067E-03	
1207	3.0000	0.0000	0.53398E-03	
1208	3.0000	0.0000	0.50646E-03	
1209	3.0000	0.0000	0.46359E-03	
1221	1.0000	-349.66	-0.69931E-06	
1222	1.0000	-384.12	-0.76824E-06	
1223	3.0000	0.0000	0.78098E-04	
1224	3.0000	0.0000	0.24157E-03	
1225	3.0000	0.0000	0.40033E-03	
1226	3.0000	0.0000	0.51240E-03	
1227	3.0000	0.0000	0.53745E-03	<
1228	3.0000	0.0000	0.45602E-03	
1229	3.0000	0.0000	0.38549E-03	
1241	1.0000	-1848.8	-0.36975E-05	
1242	1.0000	-3012.5	-0.60250E-05	
1243	1.0000	-1819.5	-0.36390E-05	
1244	1.0000	-595.97	-0.11919E-05	
1245	3.0000	0.0000	0.58164E-04	
1246	3.0000	0.0000	0.17194E-03	
1247	3.0000	0.0000	0.18623E-03	<
1248	3.0000	0.0000	0.97950E-04	
1249	3.0000	0.0000	0.33796E-04	
1261	1.0000	-830.84	-0.16617E-05	
1262	1.0000	-1190.3	-0.23806E-05	
1263	1.0000	-489.74	-0.97949E-06	
1264	3.0000	0.0000	0.14840E-05	
1265	3.0000	0.0000	0.69800E-04	
1266	3.0000	0.0000	0.13063E-03	<
1267	3.0000	0.0000	0.12579E-03	
1268	3.0000	0.0000	0.62573E-04	
1269	3.0000	0.0000	0.24947E-04	
1281	1.0000	-1278.7	-0.25574E-05	
1282	1.0000	-1679.5	-0.33590E-05	
1283	1.0000	-166.05	-0.33210E-06	
1284	3.0000	0.0000	0.98241E-04	
1285	3.0000	0.72760E-11	0.11721E-03	< Limiting
1286	3.0000	0.0000	0.71575E-04	
1287	1.0000	-164.90	-0.32979E-06	
1288	1.0000	-978.02	-0.19560E-05	
1289	1.0000	-678.48	-0.13570E-05	

1301	3.0000	0.0000	0.89345E-03
1302	3.0000	0.0000	0.10433E-02 <
1303	3.0000	0.0000	0.72741E-03
1304	3.0000	0.0000	0.33340E-03
1305	3.0000	0.0000	0.18577E-03
1306	3.0000	0.0000	0.32812E-03
1307	3.0000	0.0000	0.50251E-03
1308	3.0000	0.0000	0.52668E-03
1309	3.0000	0.0000	0.42128E-03
1310	3.0000	0.0000	0.39856E-03
1311	3.0000	0.0000	0.48568E-03
1312	3.0000	0.0000	0.51554E-03
1313	3.0000	0.0000	0.43697E-03
1314	3.0000	0.0000	0.27628E-03
1315	3.0000	0.0000	0.21306E-03
1316	3.0000	0.0000	<u>0.45485E-03</u>
1321	1.0000	-558.11	-0.11162E-05
1322	1.0000	-966.14	-0.19323E-05
1323	1.0000	-205.54	-0.41107E-06
1324	3.0000	0.0000	0.12873E-03
1325	3.0000	-0.29104E-10	0.33931E-03
1326	3.0000	0.0000	0.51017E-03
1327	3.0000	0.0000	0.58063E-03 <
1328	3.0000	0.0000	0.50908E-03
1329	3.0000	0.0000	0.35262E-03
1330	3.0000	0.0000	0.33549E-03
1331	3.0000	0.0000	0.46878E-03
1332	3.0000	0.0000	0.56649E-03
1333	3.0000	0.0000	0.54947E-03
1334	3.0000	0.0000	0.44684E-03
1335	3.0000	0.0000	0.26572E-03
1336	3.0000	0.0000	<u>0.66871E-04</u>
1341	1.0000	-3698.0	-0.73960E-05
1342	1.0000	-3875.4	-0.77508E-05
1343	1.0000	-2827.8	-0.56556E-05
1344	1.0000	-1487.9	-0.29758E-05
1345	1.0000	-98.518	-0.19704E-06
1346	3.0000	0.0000	0.14755E-03
1347	3.0000	0.0000	0.21875E-03 <
1348	3.0000	0.0000	0.14028E-03
1349	1.0000	-3.6521	-0.73042E-08
1350	1.0000	-104.36	-0.20871E-06
1351	3.0000	0.0000	0.10908E-03
1352	3.0000	0.0000	0.21879E-03
1353	3.0000	0.0000	0.21285E-03
1354	3.0000	0.0000	0.10578E-03
1355	1.0000	-490.75	-0.98149E-06
1356	1.0000	-2192.0	<u>-0.43840E-05</u>
1361	1.0000	-1758.1	-0.35163E-05
1362	1.0000	-1940.7	-0.38815E-05
1363	1.0000	-1150.0	-0.23000E-05
1364	1.0000	-238.94	-0.47789E-06
1365	3.0000	0.0000	0.68742E-04
1366	3.0000	0.0000	0.15904E-03
1367	3.0000	0.0000	0.17393E-03

1368	3.0000	0.0000	0.10044E-03	
1369	3.0000	0.0000	0.40471E-05	
1370	1.0000	-2.4244	-0.48488E-08	
1371	3.0000	0.0000	0.78173E-04	
1372	3.0000	0.0000	0.16755E-03	
1373	3.0000	0.0000	0.19137E-03	< Limiting
1374	3.0000	0.0000	0.14884E-03	
1375	3.0000	0.0000	0.54795E-04	
1376	1.0000	-479.87	-0.95974E-06	
1381	1.0000	-2328.9	-0.46577E-05	
1382	1.0000	-2873.3	-0.57466E-05	
1383	1.0000	-1319.5	-0.26389E-05	
1384	3.0000	0.0000	0.79113E-04	
1385	3.0000	0.0000	0.19773E-03	
1386	3.0000	0.0000	0.20695E-03	
1387	3.0000	0.0000	0.10724E-03	
1388	1.0000	-324.43	-0.64887E-06	
1389	1.0000	-1412.4	-0.28248E-05	
1390	1.0000	-1570.2	-0.31404E-05	
1391	1.0000	-909.21	-0.18184E-05	
1392	3.0000	0.0000	0.31766E-04	
1393	3.0000	0.0000	0.16746E-03	
1394	3.0000	0.0000	0.24356E-03	<
1395	3.0000	0.0000	0.17863E-03	
1396	1.0000	-169.47	-0.33894E-06	

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VERSION=HPPA 8000

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Robinson 2 RPV -- Oper. Temp & Press - 2.25 mil intf - 7.8 alpha - noz 9 no pr

***** POST1 ELEMENT TABLE LISTING *****

ELEM	GAPSTAT	GAPFORC	GAPSTRCH
101	3.0000	0.0000	0.43263E-03
102	3.0000	0.0000	0.44885E-03
103	3.0000	0.0000	0.46291E-03<
121	3.0000	0.0000	0.27405E-03
122	3.0000	0.0000	0.27855E-03
123	3.0000	-0.29104E-10	0.28221E-03 <
141	3.0000	0.0000	0.98469E-04
142	3.0000	0.0000	0.10698E-03
143	3.0000	0.0000	0.11206E-03 <
161	3.0000	0.0000	0.11028E-03
162	3.0000	0.0000	0.11680E-03
163	3.0000	0.0000	0.11998E-03<
181	3.0000	0.0000	0.62584E-04
182	3.0000	0.0000	0.70716E-04
183	3.0000	0.0000	0.74415E-04 < Limiting
201	3.0000	0.0000	0.63077E-03 <
202	3.0000	0.0000	0.59592E-03
203	3.0000	0.0000	0.52326E-03
204	3.0000	0.0000	0.45429E-03
205	3.0000	0.0000	0.37426E-03
206	3.0000	0.0000	0.30413E-03
207	3.0000	0.0000	0.23808E-03
208	3.0000	0.0000	0.24098E-03
209	3.0000	0.0000	0.25320E-03
221	3.0000	0.0000	0.59230E-03 <
222	3.0000	0.0000	0.55805E-03
223	3.0000	0.0000	0.46902E-03
224	3.0000	0.0000	0.35447E-03
225	3.0000	0.0000	0.21985E-03
226	3.0000	0.0000	0.18132E-05
227	3.0000	0.0000	0.79552E-06
228	3.0000	0.0000	0.80358E-06
229	3.0000	0.0000	0.45010E-06
241	3.0000	0.0000	0.41762E-03 <
242	3.0000	0.0000	0.37684E-03
243	3.0000	0.0000	0.27151E-03
244	3.0000	0.0000	0.14934E-03
245	3.0000	0.0000	0.31655E-04
246	1.0000	-268.60	-0.53720E-06
247	1.0000	-696.97	-0.13939E-05
248	1.0000	-632.02	-0.12640E-05
249	1.0000	-294.75	-0.58950E-06
261	3.0000	0.0000	0.34876E-03 <
262	3.0000	0.0000	0.31521E-03
263	3.0000	0.0000	0.22809E-03
264	3.0000	0.0000	0.13354E-03
265	3.0000	0.0000	0.54272E-04

266	3.0000	0.0000	0.46996E-07	
267	1.0000	-180.91	-0.36182E-06	
268	1.0000	-86.080	-0.17216E-06	
269	1.0000	-26.525	-0.53050E-07	
281	3.0000	0.0000	0.24052E-03	< Limiting
282	3.0000	0.0000	0.21820E-03	
283	3.0000	0.0000	0.15936E-03	
284	3.0000	0.0000	0.97044E-04	
285	3.0000	0.0000	0.32262E-04	
286	1.0000	-100.32	-0.20065E-06	
287	1.0000	-314.43	-0.62886E-06	
288	1.0000	-295.18	-0.59036E-06	
289	1.0000	-142.44	-0.28489E-06	
301	3.0000	0.0000	0.22943E-03	
302	3.0000	0.0000	0.24857E-03	
303	3.0000	0.0000	0.27340E-03	
304	3.0000	0.0000	0.29329E-03	
305	3.0000	0.0000	0.33710E-03	
306	3.0000	0.0000	0.42949E-03	
307	3.0000	0.0000	0.51566E-03	
308	3.0000	0.0000	0.55184E-03	
309	3.0000	0.0000	0.55530E-03	<
321	3.0000	0.72760E-11	0.93541E-04	
322	3.0000	0.0000	0.10272E-03	
323	3.0000	0.72760E-11	0.13026E-03	
324	3.0000	0.0000	0.17523E-03	
325	3.0000	0.0000	0.24661E-03	
326	3.0000	0.0000	0.34297E-03	
327	3.0000	0.0000	0.44096E-03	
328	3.0000	0.0000	0.50538E-03	
329	3.0000	0.0000	0.52366E-03	<
341	1.0000	-404.12	-0.80824E-06	
342	1.0000	-687.94	-0.13759E-05	
343	1.0000	-528.12	-0.10562E-05	
344	1.0000	-274.59	-0.54917E-06	
345	3.0000	0.0000	0.25554E-04	
346	3.0000	0.0000	0.13225E-03	
347	3.0000	0.0000	0.24393E-03	
348	3.0000	0.0000	0.31770E-03	
349	3.0000	0.0000	0.33786E-03	<
361	1.0000	-111.62	-0.22325E-06	
362	1.0000	-155.74	-0.31148E-06	
363	1.0000	-133.67	-0.26734E-06	
364	1.0000	-44.181	-0.88363E-07	
365	3.0000	0.0000	0.31115E-04	
366	3.0000	0.0000	0.10725E-03	
367	3.0000	0.0000	0.19478E-03	
368	3.0000	0.0000	0.25886E-03	
369	3.0000	0.0000	0.27755E-03	<
381	1.0000	-244.03	-0.48805E-06	
382	1.0000	-374.23	-0.74847E-06	
383	1.0000	-224.53	-0.44907E-06	
384	1.0000	-81.912	-0.16382E-06	
385	3.0000	0.0000	0.10301E-04	
386	3.0000	0.36380E-11	0.61730E-04	

387	3.0000	0.0000	0.11782E-03	
388	3.0000	0.14552E-10	0.15803E-03	
389	3.0000	0.0000	0.16782E-03	< Limiting
401	3.0000	0.0000	0.58840E-03	<
402	3.0000	0.0000	0.54509E-03	
403	3.0000	0.0000	0.45911E-03	
404	3.0000	0.29104E-10	0.38437E-03	
405	3.0000	0.0000	0.31520E-03	
406	3.0000	0.0000	0.24364E-03	
407	3.0000	0.0000	0.19989E-03	
408	3.0000	0.0000	0.21704E-03	
409	3.0000	0.0000	0.23438E-03	
421	3.0000	0.0000	0.54074E-03	<
422	3.0000	0.0000	0.50274E-03	
423	3.0000	0.0000	0.41237E-03	
424	3.0000	0.0000	0.31633E-03	
425	3.0000	0.0000	0.23162E-03	
426	3.0000	0.0000	0.15392E-03	
427	3.0000	0.0000	0.94903E-04	
428	3.0000	0.0000	0.58227E-04	
429	3.0000	0.0000	0.47831E-04	
441	3.0000	0.0000	0.30314E-03	<
442	3.0000	0.0000	0.26880E-03	
443	3.0000	0.0000	0.18380E-03	
444	3.0000	0.0000	0.91999E-04	
445	3.0000	0.0000	0.86513E-05	
446	1.0000	-483.60	-0.96720E-06	
447	1.0000	-901.60	-0.18032E-05	
448	1.0000	-1055.4	-0.21107E-05	
449	1.0000	-560.78	-0.11216E-05	
461	3.0000	0.0000	0.19031E-03	<
462	3.0000	0.14552E-10	0.17032E-03	
463	3.0000	0.0000	0.11873E-03	
464	3.0000	0.0000	0.65836E-04	
465	3.0000	-0.18190E-11	0.20012E-04	
466	1.0000	-130.40	-0.26080E-06	
467	1.0000	-301.72	-0.60344E-06	
468	1.0000	-270.75	-0.54150E-06	
469	1.0000	-133.82	-0.26764E-06	
481	3.0000	0.0000	0.23087E-04	
482	3.0000	0.0000	0.23093E-04	
483	3.0000	-0.18190E-11	0.21365E-04	
484	3.0000	0.0000	0.24249E-04	< Limiting
485	3.0000	0.0000	0.98080E-05	
486	1.0000	-133.29	-0.26657E-06	
487	1.0000	-383.05	-0.76609E-06	
488	1.0000	-494.25	-0.98850E-06	
489	1.0000	-275.55	-0.55110E-06	
501	3.0000	0.14552E-10	0.19262E-03	
502	3.0000	0.0000	0.21719E-03	
503	3.0000	0.14552E-10	0.21488E-03	
504	3.0000	0.0000	0.19486E-03	
505	3.0000	0.0000	0.21220E-03	
506	3.0000	-0.29104E-10	0.30440E-03	
507	3.0000	0.0000	0.40866E-03	

508	3.0000	0.0000	0.47643E-03
509	3.0000	0.0000	0.52262E-03
510	3.0000	0.0000	0.55941E-03 <
511	3.0000	0.0000	0.54825E-03
512	3.0000	0.0000	0.46080E-03
513	3.0000	0.0000	0.34656E-03
514	3.0000	0.0000	0.26566E-03
515	3.0000	0.0000	0.21894E-03
516	3.0000	0.0000	0.19451E-03
521	3.0000	0.0000	0.31983E-04
522	3.0000	0.0000	0.21288E-04
523	3.0000	0.0000	0.44774E-04
524	3.0000	0.0000	0.90073E-04
525	3.0000	0.0000	0.15881E-03
526	3.0000	0.0000	0.24994E-03
527	3.0000	0.0000	0.33970E-03
528	3.0000	0.0000	0.42119E-03
529	3.0000	0.0000	0.48072E-03
530	3.0000	0.0000	0.51565E-03 <
531	3.0000	0.0000	0.49448E-03
532	3.0000	0.0000	0.41127E-03
533	3.0000	0.0000	0.30223E-03
534	3.0000	0.0000	0.20843E-03
535	3.0000	0.0000	0.12826E-03
536	3.0000	0.0000	0.67648E-04
541	1.0000	-1384.4	-0.27687E-05
542	1.0000	-1368.8	-0.27376E-05
543	1.0000	-1168.8	-0.23375E-05
544	1.0000	-878.23	-0.17565E-05
545	1.0000	-533.13	-0.10663E-05
546	3.0000	0.0000	0.14043E-04
547	3.0000	0.0000	0.97774E-04
548	3.0000	0.0000	0.17751E-03
549	3.0000	0.14552E-10	0.23058E-03
550	3.0000	0.0000	0.26218E-03 <
551	3.0000	0.0000	0.24352E-03
552	3.0000	0.0000	0.16693E-03
553	3.0000	0.0000	0.62733E-04
554	1.0000	-125.29	-0.25059E-06
555	1.0000	-638.73	-0.12775E-05
556	1.0000	-1053.8	-0.21076E-05
561	1.0000	-446.48	-0.89296E-06
562	1.0000	-389.47	-0.77893E-06
563	1.0000	-296.00	-0.59201E-06
564	1.0000	-239.82	-0.47965E-06
565	1.0000	-222.20	-0.44439E-06
566	3.0000	0.0000	0.15633E-06
567	3.0000	0.0000	0.53370E-04
568	3.0000	0.0000	0.10369E-03
569	3.0000	0.0000	0.13541E-03
570	3.0000	0.0000	0.15555E-03 <
571	3.0000	0.14552E-10	0.14191E-03
572	3.0000	0.0000	0.95506E-04
573	3.0000	0.0000	0.35309E-04
574	3.0000	0.0000	0.13632E-07

575	1.0000	-192.87	-0.38575E-06	
576	1.0000	-307.84	-0.61567E-06	
581	1.0000	-749.50	-0.14990E-05	
582	1.0000	-738.30	-0.14766E-05	
583	1.0000	-499.25	-0.99851E-06	
584	1.0000	-257.40	-0.51480E-06	
585	1.0000	-177.35	-0.35470E-06	
586	1.0000	-56.550	-0.11310E-06	
587	1.0000	-32.610	-0.65219E-07	
588	1.0000	-40.916	-0.81832E-07	
589	1.0000	-106.58	-0.21315E-06	
590	1.0000	-89.400	-0.17880E-06	
591	1.0000	-65.780	-0.13156E-06	
592	1.0000	-41.883	-0.83765E-07	
593	1.0000	-37.051	-0.74103E-07	
594	3.0000	0.0000	0.11215E-07	< Limiting
595	1.0000	-134.50	-0.26901E-06	
596	1.0000	-430.09	-0.86019E-06	
601	3.0000	0.0000	0.23846E-03	
602	3.0000	0.0000	0.22199E-03	
603	3.0000	0.0000	0.17395E-03	
604	3.0000	0.0000	0.15943E-03	
605	3.0000	0.0000	0.21898E-03	
606	3.0000	0.0000	0.34548E-03	
607	3.0000	0.0000	0.45413E-03	
608	3.0000	0.0000	0.49601E-03	
609	3.0000	0.0000	0.50075E-03	
621	1.0000	-89.129	-0.17826E-06	
622	1.0000	-55.918	-0.11184E-06	
623	3.0000	0.0000	0.44732E-04	
624	3.0000	0.0000	0.12174E-03	
625	3.0000	0.0000	0.21793E-03	
626	3.0000	0.0000	0.31866E-03	
627	3.0000	0.0000	0.39895E-03	
628	3.0000	0.0000	0.43714E-03	
629	3.0000	0.0000	0.44120E-03	
641	1.0000	-1041.3	-0.20825E-05	
642	1.0000	-1785.3	-0.35705E-05	
643	1.0000	-1286.8	-0.25736E-05	
644	1.0000	-760.78	-0.15216E-05	
645	1.0000	-212.65	-0.42530E-06	
646	3.0000	0.0000	0.56486E-04	
647	3.0000	0.0000	0.12105E-03	
648	3.0000	-0.14552E-10	0.14821E-03	
649	3.0000	0.0000	0.14853E-03	
661	1.0000	-404.60	-0.80920E-06	
662	1.0000	-628.15	-0.12563E-05	
663	1.0000	-412.65	-0.82529E-06	
664	1.0000	-279.47	-0.55894E-06	
665	1.0000	-133.50	-0.26699E-06	
666	3.0000	0.0000	0.21231E-04	
667	3.0000	0.0000	0.55466E-04	
668	3.0000	0.0000	0.74495E-04	
669	3.0000	0.0000	0.74362E-04	
681	1.0000	-673.08	-0.13462E-05	

682	1.0000	-1015.4	-0.20307E-05
683	1.0000	-483.78	-0.96755E-06
684	1.0000	-184.48	-0.36895E-06
685	1.0000	-176.43	-0.35287E-06
686	1.0000	-213.50	-0.42700E-06
687	1.0000	-333.18	-0.66636E-06
688	1.0000	-469.59	-0.93919E-06
689	1.0000	-283.86	-0.56772E-06
701	3.0000	0.0000	0.50662E-03
702	3.0000	0.0000	0.46844E-03
703	3.0000	0.0000	0.39359E-03
704	3.0000	-0.29104E-10	0.31394E-03
705	3.0000	0.0000	0.22572E-03
706	3.0000	0.0000	0.15383E-03
707	3.0000	0.0000	0.16100E-03
708	3.0000	0.0000	0.25881E-03
709	3.0000	-0.29104E-10	0.31480E-03
721	3.0000	-0.29104E-10	0.44249E-03
722	3.0000	0.0000	0.41539E-03
723	3.0000	0.0000	0.35073E-03
724	3.0000	0.0000	0.28254E-03
725	3.0000	0.0000	0.20335E-03
726	3.0000	0.0000	0.11847E-03
727	3.0000	0.0000	0.42088E-04
728	1.0000	-86.462	-0.17292E-06
729	1.0000	-108.48	-0.21697E-06
741	3.0000	0.0000	0.14091E-03
742	3.0000	0.0000	0.11820E-03
743	3.0000	0.0000	0.70512E-04
744	3.0000	0.0000	0.21858E-04
745	1.0000	-286.38	-0.57277E-06
746	1.0000	-859.62	-0.17192E-05
747	1.0000	-1490.0	-0.29801E-05
748	1.0000	-1850.4	-0.37009E-05
749	1.0000	-1017.7	-0.20355E-05
761	3.0000	0.0000	0.68303E-04
762	3.0000	0.0000	0.51281E-04
763	3.0000	0.0000	0.27225E-06
764	1.0000	-9.5468	-0.19094E-07
765	1.0000	-168.37	-0.33675E-06
766	1.0000	-346.31	-0.69262E-06
767	1.0000	-581.72	-0.11634E-05
768	1.0000	-680.80	-0.13616E-05
769	1.0000	-373.73	-0.74746E-06
781	1.0000	-331.55	-0.66310E-06
782	1.0000	-610.34	-0.12207E-05
783	1.0000	-452.33	-0.90465E-06
784	1.0000	-245.00	-0.49001E-06
785	1.0000	-192.53	-0.38507E-06
786	1.0000	-344.05	-0.68809E-06
787	1.0000	-713.73	-0.14275E-05
788	1.0000	-1074.4	-0.21487E-05
789	1.0000	-638.05	-0.12761E-05
801	3.0000	0.0000	0.23535E-03
802	3.0000	0.0000	0.32566E-03

803	3.0000	0.0000	0.29878E-03
804	3.0000	0.0000	0.18496E-03
805	3.0000	-0.72760E-11	0.11852E-03
806	3.0000	0.0000	0.18799E-03
807	3.0000	0.0000	0.30471E-03
808	3.0000	-0.29104E-10	0.38443E-03
809	3.0000	0.0000	0.43055E-03
810	3.0000	0.0000	0.47383E-03
811	3.0000	0.0000	0.48683E-03
812	3.0000	0.0000	0.42569E-03
813	3.0000	0.0000	0.32217E-03
814	3.0000	0.0000	0.21807E-03
815	3.0000	0.0000	0.14595E-03
816	3.0000	0.0000	0.15024E-03
821	1.0000	-92.247	-0.18449E-06
822	1.0000	-312.57	-0.62514E-06
823	1.0000	-171.48	-0.34297E-06
824	3.0000	0.0000	0.22344E-04
825	3.0000	0.0000	0.10071E-03
826	3.0000	0.0000	0.19739E-03
827	3.0000	0.0000	0.27854E-03
828	3.0000	0.0000	0.33135E-03
829	3.0000	0.0000	0.36775E-03
830	3.0000	0.0000	0.40738E-03
831	3.0000	0.0000	0.42238E-03
832	3.0000	0.0000	0.38519E-03
833	3.0000	0.0000	0.30780E-03
834	3.0000	0.0000	0.22040E-03
835	3.0000	0.0000	0.12297E-03
836	3.0000	0.0000	0.39646E-04
841	1.0000	-2090.7	-0.41813E-05
842	1.0000	-2258.2	-0.45164E-05
843	1.0000	-2035.0	-0.40699E-05
844	1.0000	-1562.5	-0.31249E-05
845	1.0000	-1046.7	-0.20935E-05
846	1.0000	-400.69	-0.80137E-06
847	3.0000	0.0000	0.83233E-05
848	3.0000	0.0000	0.42254E-04
849	3.0000	0.0000	0.63299E-04
850	3.0000	0.0000	0.93694E-04
851	3.0000	0.0000	0.11255E-03
852	3.0000	0.0000	0.90130E-04
853	3.0000	0.0000	0.34937E-04
854	1.0000	-194.22	-0.38844E-06
855	1.0000	-784.28	-0.15686E-05
856	1.0000	-1467.5	-0.29349E-05
861	1.0000	-855.58	-0.17112E-05
862	1.0000	-904.45	-0.18089E-05
863	1.0000	-755.98	-0.15120E-05
864	1.0000	-558.77	-0.11175E-05
865	1.0000	-443.80	-0.88760E-06
866	1.0000	-224.94	-0.44989E-06
867	1.0000	-65.819	-0.13164E-06
868	3.0000	0.0000	0.47703E-07
869	3.0000	0.0000	0.19241E-06

870	3.0000	0.0000	0.36753E-04
871	3.0000	0.0000	0.48991E-04
872	3.0000	0.0000	0.33450E-04
873	3.0000	0.0000	0.46939E-07
874	1.0000	-128.98	-0.25796E-06
875	1.0000	-315.42	-0.63085E-06
876	1.0000	-542.08	-0.10842E-05
881	1.0000	-1252.2	-0.25044E-05
882	1.0000	-1508.3	-0.30167E-05
883	1.0000	-1207.7	-0.24155E-05
884	1.0000	-689.24	-0.13785E-05
885	1.0000	-405.83	-0.81167E-06
886	1.0000	-257.97	-0.51593E-06
887	1.0000	-298.27	-0.59653E-06
888	1.0000	-484.99	-0.96999E-06
889	1.0000	-742.32	-0.14846E-05
890	1.0000	-822.45	-0.16449E-05
891	1.0000	-727.78	-0.14556E-05
892	1.0000	-537.02	-0.10740E-05
893	1.0000	-327.51	-0.65503E-06
894	1.0000	-151.46	-0.30292E-06
895	1.0000	-231.85	-0.46369E-06
896	1.0000	-633.27	-0.12665E-05
901	3.0000	0.0000	0.40388E-03
902	3.0000	-0.29104E-10	0.41818E-03
903	3.0000	0.0000	0.26431E-03
904	3.0000	0.0000	0.11401E-03
905	3.0000	0.0000	0.10280E-03
906	3.0000	0.0000	0.23371E-03
907	3.0000	0.0000	0.36125E-03
908	3.0000	0.0000	0.40246E-03
909	3.0000	0.0000	0.40070E-03
910	3.0000	0.0000	0.41752E-03
911	3.0000	0.0000	0.42245E-03
912	3.0000	0.0000	0.34916E-03
913	3.0000	0.0000	0.22097E-03
914	3.0000	0.0000	0.11892E-03
915	3.0000	0.0000	0.12032E-03
916	3.0000	0.0000	0.25177E-03
921	1.0000	-449.04	-0.89808E-06
922	1.0000	-498.36	-0.99672E-06
923	1.0000	-118.44	-0.23688E-06
924	3.0000	0.0000	0.61516E-04
925	3.0000	0.0000	0.16909E-03
926	3.0000	0.0000	0.27680E-03
927	3.0000	0.0000	0.33343E-03
928	3.0000	0.0000	0.33622E-03
929	3.0000	0.0000	0.31673E-03
930	3.0000	0.0000	0.33995E-03
931	3.0000	0.0000	0.36672E-03
932	3.0000	0.0000	0.34146E-03
933	3.0000	0.0000	0.26538E-03
934	3.0000	0.0000	0.16259E-03
935	3.0000	0.0000	0.56109E-04
936	1.0000	-198.92	<u>-0.39783E-06</u>

941	1.0000	-2866.9	-0.57337E-05
942	1.0000	-2728.6	-0.54571E-05
943	1.0000	-2073.3	-0.41465E-05
944	1.0000	-1331.0	-0.26620E-05
945	1.0000	-688.78	-0.13776E-05
946	1.0000	-58.260	-0.11652E-06
947	3.0000	0.0000	0.26300E-04
948	3.0000	0.0000	0.16509E-04
949	1.0000	-47.291	-0.94582E-07
950	3.0000	0.0000	0.11737E-04
951	3.0000	-0.36380E-11	0.41913E-04
952	3.0000	0.0000	0.36603E-04
953	1.0000	-102.03	-0.20405E-06
954	1.0000	-628.85	-0.12577E-05
955	1.0000	-1365.7	-0.27315E-05
956	1.0000	-2243.8	-0.44877E-05
961	1.0000	-1300.8	-0.26017E-05
962	1.0000	-1181.3	-0.23626E-05
963	1.0000	-784.59	-0.15692E-05
964	1.0000	-504.30	-0.10086E-05
965	1.0000	-374.13	-0.74826E-06
966	1.0000	-126.23	-0.25245E-06
967	1.0000	-37.092	-0.74184E-07
968	1.0000	-49.335	-0.98669E-07
969	1.0000	-128.02	-0.25604E-06
970	1.0000	-49.398	-0.98796E-07
971	3.0000	-0.35527E-14	0.47187E-07
972	1.0000	-6.5956	-0.13191E-07
973	1.0000	-159.34	-0.31868E-06
974	1.0000	-288.40	-0.57681E-06
975	1.0000	-498.24	-0.99647E-06
976	1.0000	-882.76	-0.17655E-05
981	1.0000	-1993.4	-0.39868E-05
982	1.0000	-1866.8	-0.37335E-05
983	1.0000	-1032.6	-0.20652E-05
984	1.0000	-395.58	-0.79115E-06
985	1.0000	-256.76	-0.51351E-06
986	1.0000	-292.57	-0.58514E-06
987	1.0000	-527.16	-0.10543E-05
988	1.0000	-879.50	-0.17590E-05
989	1.0000	-1192.7	-0.23854E-05
990	1.0000	-1140.9	-0.22818E-05
991	1.0000	-858.39	-0.17168E-05
992	1.0000	-518.14	-0.10363E-05
993	1.0000	-278.28	-0.55655E-06
994	1.0000	-142.72	-0.28544E-06
995	1.0000	-415.70	-0.83140E-06
996	1.0000	-1181.7	-0.23633E-05
1001	3.0000	0.0000	0.31520E-03
1002	3.0000	0.0000	0.31115E-03
1003	3.0000	0.0000	0.30221E-03
1004	3.0000	0.0000	0.25392E-03
1005	3.0000	0.0000	0.13600E-03
1006	3.0000	0.0000	0.67190E-04
1007	3.0000	0.0000	0.20354E-03

1008	3.0000	0.0000	0.48697E-03
1009	3.0000	0.0000	0.64666E-03
1021	3.0000	0.0000	0.26341E-03
1022	3.0000	0.0000	0.27127E-03
1023	3.0000	0.0000	0.27771E-03
1024	3.0000	0.0000	0.27104E-03
1025	3.0000	0.0000	0.20408E-03
1026	3.0000	0.0000	0.97703E-04
1027	1.0000	-21.601	-0.43202E-07
1028	1.0000	-595.20	-0.11904E-05
1029	1.0000	-334.60	-0.66921E-06
1041	1.0000	-138.95	-0.27791E-06
1042	1.0000	-223.98	-0.44796E-06
1043	1.0000	-157.86	-0.31573E-06
1044	1.0000	-137.66	-0.27532E-06
1045	1.0000	-523.36	-0.10467E-05
1046	1.0000	-1264.0	-0.25280E-05
1047	1.0000	-2176.5	-0.43530E-05
1048	1.0000	-2778.4	-0.55569E-05
1049	1.0000	-1525.1	-0.30501E-05
1061	1.0000	-75.826	-0.15165E-06
1062	1.0000	-158.55	-0.31709E-06
1063	1.0000	-177.80	-0.35559E-06
1064	1.0000	-160.58	-0.32116E-06
1065	1.0000	-348.58	-0.69716E-06
1066	1.0000	-616.77	-0.12335E-05
1067	1.0000	-1046.3	-0.20926E-05
1068	1.0000	-1369.3	-0.27385E-05
1069	1.0000	-789.77	-0.15795E-05
1081	1.0000	-707.36	-0.14147E-05
1082	1.0000	-1241.1	-0.24821E-05
1083	1.0000	-846.90	-0.16938E-05
1084	1.0000	-394.43	-0.78887E-06
1085	1.0000	-290.27	-0.58055E-06
1086	1.0000	-484.33	-0.96865E-06
1087	1.0000	-1043.6	-0.20871E-05
1088	1.0000	-1782.8	-0.35657E-05
1089	1.0000	-1121.3	-0.22425E-05
1101	3.0000	0.29104E-10	0.40656E-03
1102	3.0000	0.0000	0.67821E-03
1103	3.0000	0.0000	0.62759E-03
1104	3.0000	0.0000	0.32148E-03
1105	3.0000	0.0000	0.78844E-04
1106	3.0000	0.0000	0.83403E-04
1107	3.0000	0.0000	0.22692E-03
1108	3.0000	0.0000	0.31627E-03
1109	3.0000	0.0000	0.30368E-03
1110	3.0000	0.0000	0.29326E-03
1111	3.0000	0.0000	0.31978E-03
1112	3.0000	0.0000	0.33035E-03
1113	3.0000	0.0000	0.29428E-03
1114	3.0000	0.0000	0.18648E-03
1115	3.0000	0.0000	0.72446E-04
1116	3.0000	0.0000	0.12817E-03
1121	1.0000	-468.76	-0.93752E-06

1122	1.0000	-797.50	-0.15950E-05
1123	1.0000	-688.59	-0.13772E-05
1124	1.0000	-269.27	-0.53854E-06
1125	3.0000	0.0000	0.74310E-04
1126	3.0000	0.0000	0.20295E-03
1127	3.0000	0.0000	0.28646E-03
1128	3.0000	0.0000	0.30052E-03
1129	3.0000	0.0000	0.26029E-03
1130	3.0000	0.0000	0.24688E-03
1131	3.0000	0.0000	0.27337E-03
1132	3.0000	0.0000	0.30831E-03
1133	3.0000	0.0000	0.30625E-03
1134	3.0000	0.0000	0.26202E-03
1135	3.0000	0.0000	0.15046E-03
1136	3.0000	0.0000	0.30357E-04
1141	1.0000	-2942.8	<u>-0.58856E-05</u>
1142	1.0000	-3290.3	<u>-0.65806E-05</u>
1143	1.0000	-3047.3	<u>-0.60945E-05</u>
1144	1.0000	-2311.9	<u>-0.46237E-05</u>
1145	1.0000	-1537.9	<u>-0.30757E-05</u>
1146	1.0000	-676.07	<u>-0.13521E-05</u>
1147	1.0000	-181.64	<u>-0.36327E-06</u>
1148	1.0000	-89.047	<u>-0.17809E-06</u>
1149	1.0000	-309.55	<u>-0.61910E-06</u>
1150	1.0000	-385.23	<u>-0.77046E-06</u>
1151	1.0000	-270.08	<u>-0.54016E-06</u>
1152	1.0000	-82.895	<u>-0.16579E-06</u>
1153	1.0000	-56.735	<u>-0.11347E-06</u>
1154	1.0000	-220.89	<u>-0.44177E-06</u>
1155	1.0000	-867.71	<u>-0.17354E-05</u>
1156	1.0000	-1869.3	<u>-0.37386E-05</u>
1161	1.0000	-1419.0	<u>-0.28380E-05</u>
1162	1.0000	-1721.8	<u>-0.34435E-05</u>
1163	1.0000	-1513.3	<u>-0.30266E-05</u>
1164	1.0000	-1050.9	<u>-0.21018E-05</u>
1165	1.0000	-748.27	<u>-0.14965E-05</u>
1166	1.0000	-415.67	<u>-0.83134E-06</u>
1167	1.0000	-216.83	<u>-0.43365E-06</u>
1168	1.0000	-117.01	<u>-0.23402E-06</u>
1169	1.0000	-202.29	<u>-0.40458E-06</u>
1170	1.0000	-187.46	<u>-0.37492E-06</u>
1171	1.0000	-129.66	<u>-0.25932E-06</u>
1172	1.0000	-104.39	<u>-0.20878E-06</u>
1173	1.0000	-147.82	<u>-0.29565E-06</u>
1174	1.0000	-186.45	<u>-0.37289E-06</u>
1175	1.0000	-421.09	<u>-0.84218E-06</u>
1176	1.0000	-791.67	<u>-0.15833E-05</u>
1181	1.0000	-1711.6	<u>-0.34232E-05</u>
1182	1.0000	-2445.4	<u>-0.48907E-05</u>
1183	1.0000	-2080.4	<u>-0.41607E-05</u>
1184	1.0000	-1071.5	<u>-0.21430E-05</u>
1185	1.0000	-485.79	<u>-0.97158E-06</u>
1186	1.0000	-266.69	<u>-0.53338E-06</u>
1187	1.0000	-342.82	<u>-0.68564E-06</u>
1188	1.0000	-667.05	<u>-0.13341E-05</u>

1189	1.0000	-1218.4	-0.24367E-05
1190	1.0000	-1499.1	-0.29982E-05
1191	1.0000	-1391.8	-0.27836E-05
1192	1.0000	-987.41	-0.19748E-05
1193	1.0000	-506.21	-0.10124E-05
1194	1.0000	-120.89	-0.24178E-06
1195	1.0000	-171.52	-0.34305E-06
1196	1.0000	-683.56	-0.13671E-05
1201	3.0000	0.0000	0.73716E-03
1202	3.0000	0.0000	0.54614E-03
1203	3.0000	0.0000	0.21715E-03
1204	3.0000	0.0000	0.53903E-04
1205	3.0000	0.0000	0.11543E-03
1206	3.0000	0.0000	0.27980E-03
1207	3.0000	0.0000	0.36914E-03
1208	3.0000	0.0000	0.34140E-03
1209	3.0000	0.0000	0.30173E-03
1221	1.0000	-424.31	-0.84862E-06
1222	1.0000	-755.24	-0.15105E-05
1223	3.0000	0.0000	0.37378E-07
1224	3.0000	0.0000	0.12310E-03
1225	3.0000	0.0000	0.25810E-03
1226	3.0000	0.0000	0.34997E-03
1227	3.0000	0.0000	0.35682E-03
1228	3.0000	0.0000	0.28718E-03
1229	3.0000	0.0000	0.23319E-03
1241	1.0000	-1935.2	-0.38704E-05
1242	1.0000	-3265.1	-0.65302E-05
1243	1.0000	-2072.2	-0.41445E-05
1244	1.0000	-1095.7	-0.21914E-05
1245	1.0000	-380.93	-0.76185E-06
1246	3.0000	0.0000	0.15184E-04
1247	3.0000	0.0000	0.14016E-04
1248	1.0000	-289.58	-0.57915E-06
1249	1.0000	-280.90	-0.56181E-06
1261	1.0000	-976.24	-0.19525E-05
1262	1.0000	-1441.4	-0.28828E-05
1263	1.0000	-785.75	-0.15715E-05
1264	1.0000	-475.60	-0.95120E-06
1265	1.0000	-313.87	-0.62774E-06
1266	1.0000	-70.030	-0.14006E-06
1267	1.0000	-16.832	-0.33665E-07
1268	1.0000	-144.78	-0.28955E-06
1269	1.0000	-139.28	-0.27857E-06
1281	1.0000	-1420.9	-0.28418E-05
1282	1.0000	-1999.2	-0.39984E-05
1283	1.0000	-719.81	-0.14396E-05
1284	1.0000	-121.61	-0.24323E-06
1285	1.0000	-136.76	-0.27353E-06
1286	1.0000	-343.74	-0.68749E-06
1287	1.0000	-815.26	-0.16305E-05
1288	1.0000	-1387.5	-0.27751E-05
1289	1.0000	-857.80	-0.17156E-05
1301	3.0000	0.0000	0.79201E-03
1302	3.0000	0.0000	0.94915E-03 <

1303	3.0000	0.0000	0.62506E-03
1304	3.0000	0.0000	0.22345E-03
1305	3.0000	0.0000	0.53221E-04
1306	3.0000	0.0000	0.17389E-03
1307	3.0000	0.29104E-10	0.34117E-03
1308	3.0000	0.0000	0.36379E-03
1309	3.0000	0.0000	0.27208E-03
1310	3.0000	0.0000	0.25198E-03
1311	3.0000	0.0000	0.32294E-03
1312	3.0000	0.0000	0.34597E-03
1313	3.0000	0.0000	0.27140E-03
1314	3.0000	0.0000	0.12095E-03
1315	3.0000	0.0000	0.79279E-04
1316	3.0000	0.0000	0.34315E-03
1321	1.0000	-906.66	-0.18133E-05
1322	1.0000	-1115.1	-0.22303E-05
1323	1.0000	-594.09	-0.11882E-05
1324	3.0000	0.0000	0.50445E-04
1325	3.0000	0.0000	0.21329E-03
1326	3.0000	0.0000	0.36497E-03
1327	3.0000	0.0000	0.40280E-03 <
1328	3.0000	0.0000	0.34024E-03
1329	3.0000	0.14552E-10	0.22633E-03
1330	3.0000	0.0000	0.21850E-03
1331	3.0000	0.0000	0.30512E-03
1332	3.0000	0.0000	0.37301E-03
1333	3.0000	0.0000	0.36855E-03
1334	3.0000	0.0000	0.29746E-03
1335	3.0000	0.0000	0.14343E-03
1336	1.0000	-78.558	-0.15712E-06
1341	1.0000	-3894.1	-0.77882E-05
1342	1.0000	-3992.6	-0.79852E-05
1343	1.0000	-3026.7	-0.60533E-05
1344	1.0000	-1770.1	-0.35401E-05
1345	1.0000	-809.53	-0.16191E-05
1346	3.0000	0.0000	0.10657E-06
1347	3.0000	0.0000	0.32812E-04 <
1348	1.0000	-46.260	-0.92520E-07
1349	1.0000	-567.92	-0.11358E-05
1350	1.0000	-583.09	-0.11662E-05
1351	1.0000	-176.48	-0.35296E-06
1352	3.0000	0.0000	0.22536E-04
1353	3.0000	0.0000	0.15865E-04
1354	1.0000	-225.58	-0.45117E-06
1355	1.0000	-1109.2	-0.22184E-05
1356	1.0000	-2469.3	-0.49386E-05
1361	1.0000	-1880.8	-0.37617E-05
1362	1.0000	-2079.7	-0.41594E-05
1363	1.0000	-1346.7	-0.26934E-05
1364	1.0000	-655.68	-0.13114E-05
1365	1.0000	-395.97	-0.79194E-06
1366	1.0000	-35.311	-0.70622E-07
1367	3.0000	0.0000	0.49430E-05 < Limiting
1368	1.0000	-21.865	-0.43730E-07
1369	1.0000	-224.51	-0.44902E-06

1370	1.0000	-180.93	-0.36186E-06
1371	1.0000	-24.277	-0.48554E-07
1372	3.0000	0.0000	0.34443E-07
1373	1.0000	-27.168	-0.54336E-07
1374	1.0000	-122.91	-0.24581E-06
1375	1.0000	-324.93	-0.64986E-06
1376	1.0000	-858.89	-0.17178E-05
1381	1.0000	-2509.7	-0.50194E-05
1382	1.0000	-3017.1	-0.60342E-05
1383	1.0000	-1693.8	-0.33877E-05
1384	1.0000	-251.89	-0.50379E-06
1385	3.0000	0.18190E-11	0.29548E-04
1386	3.0000	0.0000	0.27936E-04
1387	1.0000	-214.19	-0.42838E-06
1388	1.0000	-928.16	-0.18563E-05
1389	1.0000	-1632.7	-0.32654E-05
1390	1.0000	-1739.3	-0.34786E-05
1391	1.0000	-1301.8	-0.26036E-05
1392	1.0000	-660.74	-0.13215E-05
1393	1.0000	-16.767	-0.33535E-07
1394	3.0000	0.0000	0.51568E-04 <
1395	3.0000	0.0000	0.35529E-04
1396	1.0000	-775.00	-0.15500E-05

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804.370

Robinson 2 RPV -- Oper. Temp & Press - 2.50 mil intf - 7.8 alpha - noz 9 press

***** POST1 ELEMENT TABLE LISTING *****

ELEM	GAPSTAT	GAPFORC	GAPSTRCH
901	3.0000	0.0000	0.10202E-02
902	3.0000	0.0000	0.10326E-02 <
903	3.0000	0.0000	0.83220E-03
904	3.0000	0.0000	0.63024E-03
905	3.0000	0.0000	0.58058E-03
906	3.0000	0.0000	0.67968E-03
907	3.0000	0.0000	0.78305E-03
908	3.0000	0.0000	0.79032E-03
909	3.0000	0.0000	0.75531E-03
910	3.0000	0.0000	0.78324E-03
911	3.0000	-0.58208E-10	0.83295E-03
912	3.0000	0.0000	0.79797E-03
913	3.0000	0.0000	0.69545E-03
914	3.0000	0.0000	0.62175E-03
915	3.0000	0.0000	0.65716E-03
916	3.0000	0.0000	<u>0.83155E-03</u>
921	3.0000	0.0000	0.40063E-03
922	3.0000	0.0000	0.38867E-03
923	3.0000	0.0000	0.45290E-03
924	3.0000	0.0000	0.57442E-03
925	3.0000	0.0000	0.69999E-03
926	3.0000	0.0000	0.86130E-03
927	3.0000	0.0000	0.94775E-03
928	3.0000	0.0000	0.92196E-03
929	3.0000	0.0000	0.86685E-03
930	3.0000	0.0000	0.90848E-03
931	3.0000	0.0000	0.99620E-03
932	3.0000	0.0000	0.10146E-02 <
933	3.0000	0.0000	0.92731E-03
934	3.0000	0.0000	0.77651E-03
935	3.0000	0.0000	0.61458E-03
936	3.0000	0.0000	<u>0.48032E-03</u>
941	1.0000	-1935.7	-0.38714E-05
942	1.0000	-1901.7	-0.38034E-05
943	1.0000	-977.23	-0.19545E-05
944	3.0000	0.0000	0.11690E-05
945	3.0000	0.0000	0.31562E-03
946	3.0000	0.0000	0.57231E-03
947	3.0000	0.0000	0.68697E-03
948	3.0000	0.0000	0.65965E-03
949	3.0000	0.0000	0.60478E-03
950	3.0000	0.0000	0.65170E-03
951	3.0000	0.0000	0.75635E-03
952	3.0000	0.0000	0.79153E-03 <
953	3.0000	0.0000	0.68676E-03
954	3.0000	0.0000	0.46162E-03
955	3.0000	0.0000	0.17194E-03

956	1.0000	-661.88	-0.13238E-05	
961	1.0000	-447.46	-0.89492E-06	
962	1.0000	-549.30	-0.10986E-05	
963	3.0000	0.0000	0.58729E-06	
964	3.0000	0.0000	0.19375E-03	
965	3.0000	0.0000	0.34953E-03	
966	3.0000	0.0000	0.50402E-03	
967	3.0000	0.0000	0.55904E-03	
968	3.0000	0.0000	0.51713E-03	
969	3.0000	0.0000	0.46154E-03	
970	3.0000	-0.29104E-10	0.51238E-03	
971	3.0000	0.0000	0.62062E-03	
972	3.0000	0.0000	0.69485E-03	<
973	3.0000	0.0000	0.65549E-03	
974	3.0000	0.0000	0.51250E-03	
975	3.0000	0.0000	0.30845E-03	
976	3.0000	0.0000	0.10277E-03	
981	1.0000	-1898.7	-0.37973E-05	
982	1.0000	-1879.5	-0.37590E-05	
983	1.0000	-849.98	-0.17000E-05	
984	3.0000	0.0000	0.84380E-05	
985	3.0000	0.0000	0.11037E-03	
986	3.0000	0.0000	0.16379E-03	
987	3.0000	0.0000	0.13412E-03	
988	3.0000	0.0000	0.47534E-04	
989	1.0000	-190.08	-0.38016E-06	
990	3.0000	0.0000	0.30373E-06	
991	3.0000	0.0000	0.15074E-03	
992	3.0000	0.0000	0.29498E-03	
993	3.0000	0.0000	0.35322E-03	< Limiting
994	3.0000	0.29104E-10	0.29587E-03	
995	3.0000	0.0000	0.12366E-03	
996	1.0000	-683.56	-0.13671E-05	

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Robinson 2 RPV - Oper. T & P - 2.75 mil intf - 7.8 alpha - noz 1 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
101	3.0000	0.0000	0.75584E-03
102	3.0000	0.0000	0.77440E-03
103	3.0000	0.0000	0.79028E-03 <
121	3.0000	0.58208E-10	0.65861E-03
122	3.0000	0.0000	0.66579E-03
123	3.0000	0.0000	0.67149E-03 <
141	3.0000	-0.29104E-10	0.46443E-03
142	3.0000	0.0000	0.47551E-03
143	3.0000	0.0000	0.48254E-03 <
161	3.0000	0.0000	0.48775E-03
162	3.0000	0.0000	0.49704E-03
163	3.0000	0.0000	0.50230E-03 <
181	3.0000	0.0000	0.20206E-03
182	3.0000	0.0000	0.21254E-03
183	3.0000	0.0000	0.21793E-03 < Limiting

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VERSION=HPPA 8000

14:20:50 OCT 17, 2001 CP= 3782.130

Robinson 2 RPV - Oper. T & P - 2.75 mil intf - 7.8 alpha - noz 2 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
201	3.0000	0.0000	0.93828E-03 <
202	3.0000	0.0000	0.90643E-03
203	3.0000	0.0000	0.84856E-03
204	3.0000	0.0000	0.81232E-03
205	3.0000	0.0000	0.76615E-03
206	3.0000	0.0000	0.67735E-03
207	3.0000	0.0000	0.56838E-03
208	3.0000	0.0000	0.50797E-03
209	3.0000	0.0000	0.52060E-03
221	3.0000	0.0000	0.10736E-02 <
222	3.0000	0.0000	0.10388E-02
223	3.0000	0.0000	0.95189E-03
224	3.0000	0.0000	0.84589E-03
225	3.0000	0.0000	0.71964E-03
226	3.0000	0.0000	0.56444E-03
227	3.0000	0.0000	0.41086E-03
228	3.0000	0.0000	0.24460E-03
229	3.0000	0.0000	0.16612E-05
241	3.0000	0.0000	0.10211E-02 <
242	3.0000	0.0000	0.97137E-03
243	3.0000	0.0000	0.83684E-03
244	3.0000	0.0000	0.65485E-03
245	3.0000	0.0000	0.42690E-03
246	3.0000	0.0000	0.21927E-03
247	3.0000	0.0000	0.56862E-06
248	1.0000	-405.38	-0.81076E-06
249	1.0000	-128.14	-0.25629E-06
261	3.0000	0.0000	0.10439E-02 <
262	3.0000	0.0000	0.98849E-03
263	3.0000	0.0000	0.83296E-03
264	3.0000	0.0000	0.61793E-03
265	3.0000	0.0000	0.35823E-03
266	3.0000	0.0000	0.24250E-05
267	3.0000	0.0000	0.61028E-06
268	3.0000	0.0000	0.62615E-06
269	3.0000	0.0000	0.43077E-06
281	3.0000	0.0000	0.72932E-03 < Limiting
282	3.0000	0.0000	0.67134E-03
283	3.0000	0.29104E-10	0.51141E-03
284	3.0000	0.0000	0.30411E-03
285	3.0000	0.0000	0.85661E-04
286	1.0000	-251.06	-0.50212E-06
287	1.0000	-853.27	-0.17065E-05
288	1.0000	-786.29	-0.15726E-05
289	1.0000	-363.40	-0.72681E-06

00040224

VERSION=HPPA 8000

14:20:54 OCT 17, 2001 CP= 3785.920

Robinson 2 RPV - Oper. T & P - 2.75 mil intf - 7.8 alpha - noz 3 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
301	3.0000	0.0000	0.56195E-03
302	3.0000	0.0000	0.58383E-03
303	3.0000	0.0000	0.60863E-03
304	3.0000	0.0000	0.62777E-03
305	3.0000	0.0000	0.66789E-03
306	3.0000	0.0000	0.76011E-03
307	3.0000	0.0000	0.84036E-03
308	3.0000	0.0000	0.86317E-03 <
309	3.0000	0.0000	0.85872E-03
321	3.0000	0.0000	0.34717E-03
322	3.0000	0.0000	0.37067E-03
323	3.0000	0.0000	0.44582E-03
324	3.0000	0.0000	0.53326E-03
325	3.0000	0.0000	0.66764E-03
326	3.0000	0.0000	0.81299E-03
327	3.0000	0.0000	0.92458E-03
328	3.0000	0.0000	0.97985E-03
329	3.0000	0.0000	0.99029E-03 <
341	1.0000	-166.57	-0.33314E-06
342	1.0000	-119.20	-0.23841E-06
343	3.0000	0.0000	0.12669E-05
344	3.0000	0.0000	0.22716E-03
345	3.0000	0.0000	0.42564E-03
346	3.0000	0.0000	0.62748E-03
347	3.0000	0.0000	0.78202E-03
348	3.0000	0.0000	0.86560E-03
349	3.0000	0.0000	0.88492E-03 <
361	3.0000	0.0000	0.56118E-04
362	3.0000	0.0000	0.84145E-04
363	3.0000	0.0000	0.15905E-03
364	3.0000	0.0000	0.25666E-03
365	3.0000	0.0000	0.40015E-03
366	3.0000	0.0000	0.58032E-03
367	3.0000	0.0000	0.73925E-03
368	3.0000	0.0000	0.83956E-03
369	3.0000	0.0000	0.86761E-03 <
381	1.0000	-429.21	-0.85843E-06
382	1.0000	-705.80	-0.14116E-05
383	1.0000	-452.57	-0.90513E-06
384	1.0000	-15.593	-0.31186E-07
385	3.0000	0.0000	0.10052E-03
386	3.0000	0.0000	0.25713E-03
387	3.0000	0.0000	0.41018E-03
388	3.0000	0.0000	0.51458E-03
389	3.0000	0.0000	0.54563E-03 < Limiting

00040224 VERSION=HPPA 8000 14:20:59 OCT 17, 2001 CP= 3789.710

Robinson 2 RPV - Oper. T & P - 2.75 mil intf - 7.8 alpha - noz 4 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH	
401	3.0000	0.0000	0.87027E-03	<
402	3.0000	0.0000	0.83169E-03	
403	3.0000	0.0000	0.75785E-03	
404	3.0000	0.0000	0.69839E-03	
405	3.0000	0.0000	0.64382E-03	
406	3.0000	0.0000	0.58652E-03	
407	3.0000	0.0000	0.55674E-03	
408	3.0000	0.0000	0.59134E-03	
409	3.0000	0.0000	0.61548E-03	
421	3.0000	0.0000	0.99967E-03	<
422	3.0000	0.0000	0.96672E-03	
423	3.0000	0.0000	0.88485E-03	
424	3.0000	0.0000	0.78304E-03	
425	3.0000	0.0000	0.65749E-03	
426	3.0000	0.0000	0.52686E-03	
427	3.0000	0.0000	0.43208E-03	
428	3.0000	0.0000	0.36764E-03	
429	3.0000	0.0000	0.35287E-03	
441	3.0000	0.0000	0.85939E-03	<
442	3.0000	0.58208E-10	0.82300E-03	
443	3.0000	0.0000	0.72674E-03	
444	3.0000	0.0000	0.59598E-03	
445	3.0000	0.0000	0.41306E-03	
446	3.0000	0.0000	0.19727E-03	
447	3.0000	0.0000	0.35926E-06	
448	1.0000	-482.13	-0.96427E-06	
449	1.0000	-329.65	-0.65930E-06	
461	3.0000	0.0000	0.78621E-03	<
462	3.0000	0.0000	0.75402E-03	
463	3.0000	0.0000	0.66501E-03	
464	3.0000	0.0000	0.54595E-03	
465	3.0000	0.0000	0.39410E-03	
466	3.0000	0.0000	0.23586E-03	
467	3.0000	0.0000	0.10015E-03	
468	3.0000	0.0000	0.51107E-06	
469	3.0000	0.0000	0.72638E-07	
481	3.0000	0.0000	0.40776E-03	< Limiting
482	3.0000	0.0000	0.38434E-03	
483	3.0000	0.0000	0.31611E-03	
484	3.0000	0.0000	0.22262E-03	
485	3.0000	0.0000	0.99853E-04	
486	1.0000	-129.48	-0.25896E-06	
487	1.0000	-729.16	-0.14583E-05	
488	1.0000	-902.04	-0.18041E-05	
489	1.0000	-505.45	-0.10109E-05	

00040224 VERSION=HPPA 8000 14:21:03 OCT 17, 2001 CP= 3793.510

Robinson 2 RPV - Oper. T & P - 2.75 mil intf - 7.8 alpha - noz 5 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
501	3.0000	0.0000	0.58989E-03
502	3.0000	0.0000	0.62181E-03
503	3.0000	0.0000	0.60852E-03
504	3.0000	0.0000	0.56331E-03
505	3.0000	0.0000	0.55297E-03
506	3.0000	0.0000	0.62570E-03
507	3.0000	0.0000	0.71283E-03
508	3.0000	0.0000	0.76043E-03
509	3.0000	0.0000	0.78858E-03
510	3.0000	0.0000	0.82483E-03
511	3.0000	0.0000	0.82799E-03 <
512	3.0000	0.0000	0.75616E-03
513	3.0000	0.0000	0.65531E-03
514	3.0000	0.0000	0.59436E-03
515	3.0000	0.0000	0.57318E-03
516	3.0000	0.0000	0.57303E-03
521	3.0000	0.0000	0.36073E-03
522	3.0000	0.0000	0.35014E-03
523	3.0000	0.0000	0.38511E-03
524	3.0000	0.0000	0.44849E-03
525	3.0000	0.0000	0.54571E-03
526	3.0000	0.0000	0.67676E-03
527	3.0000	0.0000	0.79828E-03
528	3.0000	0.0000	0.87863E-03
529	3.0000	0.0000	0.92429E-03
530	3.0000	0.0000	0.96018E-03 <
531	3.0000	0.0000	0.95379E-03
532	3.0000	0.0000	0.88065E-03
533	3.0000	0.0000	0.75767E-03
534	3.0000	0.0000	0.62664E-03
535	3.0000	0.0000	0.50759E-03
536	3.0000	0.0000	0.42012E-03
541	1.0000	-750.97	-0.15019E-05
542	1.0000	-772.68	-0.15454E-05
543	1.0000	-361.70	-0.72340E-06
544	3.0000	0.0000	0.60454E-04
545	3.0000	0.0000	0.21816E-03
546	3.0000	0.0000	0.42267E-03
547	3.0000	-0.58208E-10	0.59675E-03
548	3.0000	0.0000	0.70875E-03
549	3.0000	0.0000	0.76818E-03
550	3.0000	0.0000	0.80685E-03 <
551	3.0000	0.0000	0.79384E-03
552	3.0000	0.0000	0.70507E-03
553	3.0000	0.0000	0.54907E-03
554	3.0000	0.0000	0.36504E-03

555	3.0000	0.14552E-10	0.16487E-03	
556	3.0000	0.0000	0.41187E-05	
561	3.0000	0.0000	0.23027E-04	
562	3.0000	0.0000	0.28622E-04	
563	3.0000	0.0000	0.73232E-04	
564	3.0000	0.0000	0.13932E-03	
565	3.0000	0.0000	0.24064E-03	
566	3.0000	0.0000	0.37969E-03	
567	3.0000	0.0000	0.52368E-03	
568	3.0000	-0.58208E-10	0.63346E-03	
569	3.0000	0.0000	0.69554E-03	
570	3.0000	0.58208E-10	0.72941E-03	<
571	3.0000	0.0000	0.71069E-03	
572	3.0000	0.0000	0.62891E-03	
573	3.0000	0.0000	0.49558E-03	
574	3.0000	0.29104E-10	0.35340E-03	
575	3.0000	0.0000	0.21865E-03	
576	3.0000	-0.72760E-11	0.98381E-04	
581	1.0000	-1101.1	-0.22021E-05	
582	1.0000	-1062.0	-0.21241E-05	
583	1.0000	-811.90	-0.16238E-05	
584	1.0000	-531.88	-0.10638E-05	
585	1.0000	-13756.	-0.27513E-04	
586	3.0000	0.0000	0.68657E-04	
587	3.0000	0.0000	0.18113E-03	
588	3.0000	0.0000	0.27082E-03	
589	3.0000	0.0000	0.31880E-03	
590	3.0000	0.0000	0.34239E-03	< Limiting
591	3.0000	0.0000	0.32654E-03	
592	3.0000	0.0000	0.26788E-03	
593	3.0000	0.0000	0.17357E-03	
594	3.0000	0.0000	0.74604E-04	
595	1.0000	-12697.	-0.25394E-04	
596	1.0000	-749.06	-0.14981E-05	

00040224 VERSION=HPPA 8000 14:21:07 OCT 17, 2001 CP= 3797.290

Robinson 2 RPV - Oper. T & P - 2.75 mil intf - 7.8 alpha - noz 6 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
601	3.0000	0.0000	0.68951E-03
602	3.0000	0.0000	0.65911E-03
603	3.0000	0.0000	0.57627E-03
604	3.0000	0.0000	0.52254E-03
605	3.0000	0.0000	0.54564E-03
606	3.0000	0.0000	0.64675E-03
607	3.0000	0.0000	0.72846E-03
608	3.0000	0.0000	0.73642E-03 <
609	3.0000	0.0000	0.72303E-03
621	3.0000	0.0000	0.34220E-03
622	3.0000	0.0000	0.36220E-03
623	3.0000	0.0000	0.43703E-03
624	3.0000	0.0000	0.52818E-03
625	3.0000	0.0000	0.65443E-03
626	3.0000	0.0000	0.78084E-03
627	3.0000	0.0000	0.84934E-03 <
628	3.0000	0.0000	0.84862E-03
629	3.0000	0.0000	0.83070E-03
641	1.0000	-679.95	-0.13599E-05
642	1.0000	-992.98	-0.19860E-05
643	3.0000	0.0000	0.11396E-06
644	3.0000	0.0000	0.18712E-03
645	3.0000	0.0000	0.38783E-03
646	3.0000	0.0000	0.55266E-03
647	3.0000	0.0000	0.62921E-03 <
648	3.0000	-0.58208E-10	0.62616E-03
649	3.0000	0.0000	0.60740E-03
661	1.0000	-11295.	-0.22589E-04
662	3.0000	0.0000	0.28236E-04
663	3.0000	0.0000	0.14862E-03
664	3.0000	0.0000	0.26107E-03
665	3.0000	0.0000	0.36135E-03
666	3.0000	0.0000	0.45310E-03
667	3.0000	0.0000	0.48437E-03 <
668	3.0000	0.0000	0.48001E-03
669	3.0000	0.0000	0.46657E-03
681	1.0000	-681.75	-0.13635E-05
682	1.0000	-978.70	-0.19574E-05
683	1.0000	-278.66	-0.55732E-06
684	3.0000	0.0000	0.41260E-04
685	3.0000	0.0000	0.64602E-04 < Limiting
686	3.0000	0.0000	0.90066E-06
687	3.0000	0.0000	0.60651E-06
688	3.0000	0.0000	0.31580E-06
689	3.0000	0.0000	0.57329E-07

00040224

VERSION=HPPA 8000

14:21:11 OCT 17, 2001 CP= 3801.080

Robinson 2 RPV - Oper. T & P - 2.75 mil intf - 7.8 alpha - noz 7 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
701	3.0000	0.0000	0.73913E-03
702	3.0000	0.0000	0.71090E-03
703	3.0000	0.0000	0.65968E-03
704	3.0000	0.0000	0.60990E-03
705	3.0000	0.0000	0.55416E-03
706	3.0000	0.0000	0.51961E-03
707	3.0000	0.0000	0.56726E-03
708	3.0000	0.0000	0.70683E-03
709	3.0000	0.0000	0.78224E-03 <
721	3.0000	0.0000	0.85447E-03 <
722	3.0000	0.0000	0.84014E-03
723	3.0000	0.0000	0.80065E-03
724	3.0000	0.0000	0.73998E-03
725	3.0000	0.0000	0.63944E-03
726	3.0000	0.0000	0.52668E-03
727	3.0000	0.0000	0.43411E-03
728	3.0000	0.0000	0.36688E-03
729	3.0000	0.0000	0.35104E-03
741	3.0000	0.0000	0.63042E-03 <
742	3.0000	0.0000	0.61974E-03
743	3.0000	0.0000	0.58556E-03
744	3.0000	0.0000	0.51576E-03
745	3.0000	0.0000	0.36614E-03
746	3.0000	0.0000	0.15783E-03
747	1.0000	-229.80	-0.45960E-06
748	1.0000	-1052.3	-0.21047E-05
749	1.0000	-640.09	-0.12802E-05
761	3.0000	0.0000	0.48240E-03 <
762	3.0000	0.0000	0.47582E-03
763	3.0000	0.0000	0.45634E-03
764	3.0000	0.0000	0.42879E-03
765	3.0000	0.0000	0.33957E-03
766	3.0000	0.0000	0.22404E-03
767	3.0000	0.0000	0.96983E-04
768	3.0000	0.0000	0.19001E-04
769	1.0000	-1870.6	-0.37412E-05
781	3.0000	0.0000	0.36183E-07
782	3.0000	0.0000	0.18418E-06
783	3.0000	0.0000	0.44735E-06
784	3.0000	0.0000	0.84600E-06
785	3.0000	0.0000	0.47103E-04 < Limiting
786	1.0000	-37.704	-0.75407E-07
787	1.0000	-609.69	-0.12194E-05
788	1.0000	-1034.9	-0.20698E-05
789	1.0000	-619.42	-0.12388E-05

00040224

VERSION=HPPA 8000

14:21:15 OCT 17, 2001 CP= 3805.010

Robinson 2 RPV - Oper. T & P - 2.75 mil intf - 7.8 alpha - noz 8 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
801	3.0000	0.0000	0.68543E-03
802	3.0000	0.0000	0.80454E-03 <
803	3.0000	0.0000	0.76465E-03
804	3.0000	0.0000	0.60790E-03
805	3.0000	0.0000	0.49469E-03
806	3.0000	0.0000	0.52407E-03
807	3.0000	0.0000	0.60687E-03
808	3.0000	0.0000	0.65368E-03
809	3.0000	0.0000	0.66826E-03
810	3.0000	0.0000	0.70052E-03
811	3.0000	0.0000	0.72937E-03
812	3.0000	0.0000	0.69436E-03
813	3.0000	0.0000	0.61508E-03
814	3.0000	0.0000	0.54169E-03
815	3.0000	0.0000	0.50962E-03
816	3.0000	0.0000	0.55657E-03
821	3.0000	0.0000	0.36915E-03
822	3.0000	0.0000	0.34160E-03
823	3.0000	0.0000	0.36325E-03
824	3.0000	0.0000	0.41985E-03
825	3.0000	0.0000	0.51079E-03
826	3.0000	0.0000	0.62671E-03
827	3.0000	0.0000	0.73108E-03
828	3.0000	0.0000	0.78191E-03
829	3.0000	0.0000	0.79028E-03
830	3.0000	0.0000	0.81759E-03
831	3.0000	0.0000	0.85184E-03 <
832	3.0000	0.0000	0.84543E-03
833	3.0000	0.0000	0.77741E-03
834	3.0000	0.0000	0.66846E-03
835	3.0000	0.0000	0.54329E-03
836	3.0000	0.0000	0.44502E-03
841	1.0000	-1260.9	-0.25219E-05
842	1.0000	-1541.5	-0.30830E-05
843	1.0000	-1226.1	-0.24522E-05
844	1.0000	-435.68	-0.87136E-06
845	3.0000	0.0000	0.10426E-03
846	3.0000	0.0000	0.31501E-03
847	3.0000	0.0000	0.48115E-03
848	3.0000	0.0000	0.55289E-03
849	3.0000	0.0000	0.56016E-03
850	3.0000	0.58208E-10	0.58381E-03
851	3.0000	0.58208E-10	0.61990E-03
852	3.0000	0.0000	0.62366E-03 <
853	3.0000	0.0000	0.55520E-03
854	3.0000	0.29104E-10	0.41176E-03

855	3.0000	0.0000	0.19623E-03
856	1.0000	-79.915	-0.15983E-06
861	1.0000	-47.232	-0.94464E-07
862	1.0000	-290.58	-0.58115E-06
863	3.0000	0.0000	0.78208E-07
864	3.0000	0.0000	0.77215E-04
865	3.0000	0.0000	0.18115E-03
866	3.0000	0.0000	0.30746E-03
867	3.0000	0.0000	0.40347E-03
868	3.0000	0.0000	0.44245E-03
869	3.0000	0.0000	0.43645E-03
870	3.0000	0.0000	0.44675E-03
871	3.0000	0.0000	0.48057E-03
872	3.0000	0.0000	0.49874E-03 <
873	3.0000	0.0000	0.47278E-03
874	3.0000	0.0000	0.39522E-03
875	3.0000	0.0000	0.26435E-03
876	3.0000	0.0000	0.11887E-03
881	1.0000	-1275.9	-0.25518E-05
882	1.0000	-1585.5	-0.31711E-05
883	1.0000	-1221.6	-0.24433E-05
884	1.0000	-690.98	-0.13820E-05
885	1.0000	-235.75	-0.47150E-06
886	3.0000	0.0000	0.26680E-04
887	3.0000	0.0000	0.55063E-04
888	3.0000	0.0000	0.38930E-04
889	1.0000	-42.564	-0.85129E-07
890	1.0000	-160.88	-0.32177E-06
891	3.0000	0.0000	0.12770E-06
892	3.0000	0.0000	0.65027E-04
893	3.0000	0.0000	0.11194E-03 < Limiting
894	3.0000	0.0000	0.11604E-03
895	3.0000	0.0000	0.47356E-04
896	1.0000	-489.34	-0.97868E-06

00040224

VERSION=HPPA 8000

14:21:19 OCT 17, 2001 CP= 3808.940

Robinson 2 RPV - Oper. T & P - 2.75 mil intf - 7.8 alpha - noz 9 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
901	3.0000	0.0000	0.90970E-03
902	3.0000	0.0000	0.92727E-03 <
903	3.0000	0.0000	0.72660E-03
904	3.0000	0.0000	0.52120E-03
905	3.0000	0.0000	0.46226E-03
906	3.0000	0.0000	0.55323E-03
907	3.0000	0.0000	0.64472E-03
908	3.0000	0.0000	0.64494E-03
909	3.0000	0.0000	0.60936E-03
910	3.0000	0.0000	0.63392E-03
911	3.0000	0.0000	0.67537E-03
912	3.0000	0.0000	0.63619E-03
913	3.0000	0.0000	0.53932E-03
914	3.0000	0.0000	0.47825E-03
915	3.0000	0.0000	0.52517E-03
916	3.0000	0.0000	0.71241E-03
921	3.0000	0.0000	0.32955E-03
922	3.0000	0.0000	0.32908E-03
923	3.0000	0.0000	0.39333E-03
924	3.0000	0.0000	0.49506E-03
925	3.0000	0.0000	0.61214E-03
926	3.0000	0.0000	0.73837E-03
927	3.0000	0.0000	0.79947E-03
928	3.0000	0.0000	0.76720E-03
929	3.0000	0.0000	0.71334E-03
930	3.0000	0.0000	0.74639E-03
931	3.0000	0.0000	0.81547E-03
932	3.0000	0.0000	0.81914E-03 <
933	3.0000	0.0000	0.73431E-03
934	3.0000	0.0000	0.61009E-03
935	3.0000	0.0000	0.49026E-03
936	3.0000	0.0000	0.38020E-03
941	1.0000	-2138.7	-0.42775E-05
942	1.0000	-1936.8	-0.38736E-05
943	1.0000	-1031.6	-0.20633E-05
944	3.0000	0.36380E-11	0.44520E-04
945	3.0000	0.0000	0.24547E-03
946	3.0000	0.0000	0.44601E-03
947	3.0000	0.0000	0.53685E-03
948	3.0000	0.0000	0.51351E-03
949	3.0000	0.0000	0.46552E-03
950	3.0000	0.0000	0.49750E-03
951	3.0000	0.0000	0.56604E-03
952	3.0000	0.0000	0.57042E-03 <
953	3.0000	0.0000	0.46002E-03
954	3.0000	0.0000	0.26483E-03

955	3.0000	0.0000	0.42145E-04	
956	1.0000	-1193.2	-0.23864E-05	
961	1.0000	-632.42	-0.12648E-05	
962	1.0000	-382.20	-0.76440E-06	
963	3.0000	0.0000	0.40427E-04	
964	3.0000	0.0000	0.15306E-03	
965	3.0000	0.0000	0.26420E-03	
966	3.0000	0.0000	0.37368E-03	
967	3.0000	0.0000	0.42337E-03	
968	3.0000	0.0000	0.40522E-03	
969	3.0000	0.0000	0.37113E-03	
970	3.0000	0.0000	0.39431E-03	
971	3.0000	0.29104E-10	0.44536E-03	
972	3.0000	0.0000	0.45840E-03	<
973	3.0000	0.0000	0.40042E-03	
974	3.0000	0.0000	0.29289E-03	
975	3.0000	0.0000	0.15600E-03	
976	3.0000	0.0000	0.27977E-06	
981	1.0000	-2029.3	-0.40586E-05	
982	1.0000	-1837.6	-0.36753E-05	
983	1.0000	-963.15	-0.19263E-05	
984	1.0000	-244.91	-0.48982E-06	
985	3.0000	0.0000	0.17231E-04	
986	3.0000	0.0000	0.38357E-04	
987	3.0000	0.0000	0.19050E-04	
988	1.0000	-225.83	-0.45167E-06	
989	1.0000	-569.75	-0.11395E-05	
990	1.0000	-485.00	-0.97000E-06	
991	1.0000	-76.526	-0.15305E-06	
992	3.0000	0.0000	0.49355E-04	
993	3.0000	0.0000	0.79376E-04	< Limiting
994	3.0000	0.0000	0.62588E-04	
995	1.0000	-177.35	-0.35470E-06	
996	1.0000	-1105.2	-0.22104E-05	

00040224

VERSION=HPPA 8000

14:21:23 OCT 17, 2001 CP= 3812.670

Robinson 2 RPV - Oper. T & P - 2.75 mil intf - 7.8 alpha - noz 10 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
1001	3.0000	0.0000	0.51740E-03
1002	3.0000	0.0000	0.53061E-03
1003	3.0000	0.0000	0.56000E-03
1004	3.0000	0.0000	0.55862E-03
1005	3.0000	0.0000	0.48800E-03
1006	3.0000	0.0000	0.46422E-03
1007	3.0000	0.0000	0.65365E-03
1008	3.0000	0.0000	0.10108E-02
1009	3.0000	0.0000	0.12037E-02 <
1021	3.0000	-0.58208E-10	0.64307E-03
1022	3.0000	0.0000	0.67283E-03
1023	3.0000	0.0000	0.72340E-03
1024	3.0000	0.0000	0.74401E-03 <
1025	3.0000	0.0000	0.67758E-03
1026	3.0000	0.0000	0.56594E-03
1027	3.0000	0.0000	0.43581E-03
1028	3.0000	0.0000	0.33871E-03
1029	3.0000	0.0000	0.31338E-03
1041	3.0000	0.0000	0.40709E-03
1042	3.0000	-0.29104E-10	0.43304E-03
1043	3.0000	0.0000	0.47461E-03 <
1044	3.0000	0.0000	0.46667E-03
1045	3.0000	0.0000	0.32683E-03
1046	3.0000	0.0000	0.10756E-03
1047	1.0000	-805.51	-0.16110E-05
1048	1.0000	-1875.6	-0.37512E-05
1049	1.0000	-1123.1	-0.22463E-05
1061	3.0000	0.0000	0.34776E-03
1062	3.0000	0.0000	0.35999E-03
1063	3.0000	0.0000	0.38493E-03 <
1064	3.0000	0.0000	0.38433E-03
1065	3.0000	0.0000	0.29994E-03
1066	3.0000	0.0000	0.15998E-03
1067	3.0000	0.0000	0.35477E-06
1068	1.0000	-514.18	-0.10284E-05
1069	1.0000	-325.27	-0.65054E-06
1081	1.0000	-400.61	-0.80123E-06
1082	1.0000	-618.61	-0.12372E-05
1083	1.0000	-174.60	-0.34920E-06
1084	3.0000	0.0000	0.32377E-04 < Limiting
1085	3.0000	-0.18190E-11	0.26973E-04
1086	1.0000	-257.45	-0.51489E-06
1087	1.0000	-916.70	-0.18334E-05
1088	1.0000	-1713.3	-0.34266E-05
1089	1.0000	-1052.0	-0.21041E-05

00040224 VERSION=HPPA 8000 14:21:27 OCT 17, 2001 CP= 3816.420

Robinson 2 RPV - Oper. T & P - 2.75 mil intf - 7.8 alpha - noz 11 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
1101	3.0000	0.0000	0.91634E-03
1102	3.0000	0.0000	0.12480E-02 <
1103	3.0000	0.0000	0.11854E-02
1104	3.0000	0.0000	0.80869E-03
1105	3.0000	0.0000	0.49628E-03
1106	3.0000	0.0000	0.45373E-03
1107	3.0000	0.0000	0.55001E-03
1108	3.0000	0.0000	0.58600E-03
1109	3.0000	0.0000	0.51226E-03
1110	3.0000	0.0000	0.47209E-03
1111	3.0000	-0.29104E-10	0.52396E-03
1112	3.0000	0.0000	0.58763E-03
1113	3.0000	0.0000	0.59746E-03
1114	3.0000	0.0000	0.53259E-03
1115	3.0000	0.0000	0.46256E-03
1116	3.0000	0.0000	0.56317E-03
1121	3.0000	0.0000	0.36345E-03
1122	3.0000	0.0000	0.30211E-03
1123	3.0000	0.0000	0.32298E-03
1124	3.0000	0.0000	0.40195E-03
1125	3.0000	0.0000	0.54176E-03
1126	3.0000	0.0000	0.67729E-03
1127	3.0000	0.0000	0.76310E-03
1128	3.0000	0.0000	0.74316E-03
1129	3.0000	0.0000	0.63525E-03
1130	3.0000	0.0000	0.58658E-03
1131	3.0000	0.0000	0.65092E-03
1132	3.0000	0.0000	0.76182E-03
1133	3.0000	0.0000	0.81359E-03 <
1134	3.0000	0.0000	0.77377E-03
1135	3.0000	0.0000	0.64129E-03
1136	3.0000	0.0000	0.49932E-03
1141	1.0000	-1915.2	-0.38304E-05
1142	1.0000	-2519.5	-0.50390E-05
1143	1.0000	-2225.7	-0.44514E-05
1144	1.0000	-1148.5	-0.22969E-05
1145	3.0000	0.0000	0.39757E-04
1146	3.0000	0.0000	0.26678E-03
1147	3.0000	0.0000	0.43392E-03
1148	3.0000	0.0000	0.45955E-03
1149	3.0000	-0.29104E-10	0.38063E-03
1150	3.0000	0.0000	0.34344E-03
1151	3.0000	0.0000	0.40144E-03
1152	3.0000	-0.29104E-10	0.50388E-03
1153	3.0000	0.0000	0.54876E-03 <
1154	3.0000	0.0000	0.47214E-03

1155	3.0000	0.0000	0.24737E-03	
1156	1.0000	-74.758	-0.14952E-06	
1161	1.0000	-390.37	-0.78074E-06	
1162	1.0000	-898.85	-0.17977E-05	
1163	1.0000	-669.28	-0.13386E-05	
1164	3.0000	0.0000	0.10495E-06	
1165	3.0000	0.0000	0.11706E-03	
1166	3.0000	0.0000	0.25634E-03	
1167	3.0000	0.0000	0.35071E-03	
1168	3.0000	0.0000	0.36871E-03	
1169	3.0000	0.0000	0.32194E-03	
1170	3.0000	0.0000	0.30699E-03	
1171	3.0000	0.0000	0.34318E-03	
1172	3.0000	0.0000	0.41162E-03	
1173	3.0000	0.0000	0.45063E-03	<
1174	3.0000	0.0000	0.41967E-03	
1175	3.0000	0.0000	0.29189E-03	
1176	3.0000	0.0000	0.12936E-03	
1181	1.0000	-1599.1	-0.31982E-05	
1182	1.0000	-2382.2	-0.47643E-05	
1183	1.0000	-2010.8	-0.40216E-05	
1184	1.0000	-986.38	-0.19728E-05	
1185	1.0000	-392.72	-0.78545E-06	
1186	1.0000	-200.69	-0.40137E-06	
1187	3.0000	0.0000	0.10407E-04	
1188	1.0000	-165.10	-0.33020E-06	
1189	1.0000	-717.99	-0.14360E-05	
1190	1.0000	-992.08	-0.19842E-05	
1191	1.0000	-825.04	-0.16501E-05	
1192	1.0000	-204.42	-0.40884E-06	
1193	3.0000	0.0000	0.65050E-04	
1194	3.0000	0.0000	0.12177E-03	< Limiting
1195	3.0000	0.0000	0.78507E-04	
1196	1.0000	-351.07	-0.70213E-06	

00040224 VERSION=HPPA 8000 14:21:31 OCT 17, 2001 CP= 3820.150

Robinson 2 RPV - Oper. T & P - 2.75 mil intf - 7.8 alpha - noz 12 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
1201	3.0000	0.0000	0.13273E-02 <
1202	3.0000	0.0000	0.10968E-02
1203	3.0000	0.0000	0.68306E-03
1204	3.0000	0.0000	0.46710E-03
1205	3.0000	0.0000	0.48055E-03
1206	3.0000	0.0000	0.59961E-03
1207	3.0000	0.0000	0.63371E-03
1208	3.0000	0.0000	0.52947E-03
1209	3.0000	0.0000	0.44355E-03
1221	3.0000	0.0000	0.29447E-03
1222	3.0000	0.0000	0.33428E-03
1223	3.0000	0.0000	0.47366E-03
1224	3.0000	0.0000	0.62827E-03
1225	3.0000	0.0000	0.77541E-03
1226	3.0000	0.0000	0.86198E-03 <
1227	3.0000	0.0000	0.80863E-03
1228	3.0000	0.0000	0.63416E-03
1229	3.0000	0.0000	0.52109E-03
1241	1.0000	-1600.9	-0.32018E-05
1242	1.0000	-2309.9	-0.46197E-05
1243	1.0000	-460.29	-0.92058E-06
1244	3.0000	0.0000	0.18906E-03
1245	3.0000	0.0000	0.41973E-03
1246	3.0000	0.0000	0.55556E-03 <
1247	3.0000	0.0000	0.51665E-03
1248	3.0000	0.0000	0.36004E-03
1249	3.0000	0.0000	0.26461E-03
1261	1.0000	-615.74	-0.12315E-05
1262	1.0000	-463.52	-0.92704E-06
1263	3.0000	0.0000	0.10786E-03
1264	3.0000	0.0000	0.25432E-03
1265	3.0000	-0.29104E-10	0.37763E-03
1266	3.0000	0.0000	0.44926E-03 <
1267	3.0000	0.0000	0.41481E-03
1268	3.0000	0.0000	0.31085E-03
1269	3.0000	0.0000	0.25296E-03
1281	1.0000	-1422.6	-0.28452E-05
1282	1.0000	-1915.5	-0.38311E-05
1283	1.0000	-490.57	-0.98114E-06
1284	3.0000	0.0000	0.55656E-04
1285	3.0000	0.0000	0.90349E-04 < Limiting
1286	3.0000	0.0000	0.63308E-04
1287	1.0000	-137.91	-0.27581E-06
1288	1.0000	-929.96	-0.18599E-05
1289	1.0000	-661.33	-0.13227E-05

00040224 VERSION=HPPA 8000 14:21:36 OCT 17, 2001 CP= 3823.930

Robinson 2 RPV - Oper. T & P - 2.75 mil intf - 7.8 alpha - noz 13 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
1301	3.0000	0.0000	0.13929E-02
1302	3.0000	0.0000	0.15789E-02 <
1303	3.0000	0.0000	0.11811E-02
1304	3.0000	0.0000	0.68717E-03
1305	3.0000	0.0000	0.46298E-03
1306	3.0000	0.0000	0.53881E-03
1307	3.0000	0.0000	0.65696E-03
1308	3.0000	0.0000	0.59753E-03
1309	3.0000	0.0000	0.39467E-03
1310	3.0000	0.0000	0.35399E-03
1311	3.0000	0.0000	0.50869E-03
1312	3.0000	0.0000	0.62476E-03
1313	3.0000	0.0000	0.61224E-03
1314	3.0000	0.0000	0.51333E-03
1315	3.0000	0.0000	0.52156E-03
1316	3.0000	0.0000	0.84811E-03
1321	3.0000	0.0000	0.32458E-03
1322	3.0000	0.0000	0.27551E-03
1323	3.0000	0.0000	0.36678E-03
1324	3.0000	0.0000	0.54959E-03
1325	3.0000	0.0000	0.74299E-03
1326	3.0000	0.0000	0.91671E-03
1327	3.0000	0.0000	0.93121E-03
1328	3.0000	0.0000	0.73990E-03
1329	3.0000	0.0000	0.47374E-03
1330	3.0000	0.0000	0.43709E-03
1331	3.0000	0.0000	0.63855E-03
1332	3.0000	0.0000	0.85234E-03
1333	3.0000	0.0000	0.93334E-03 <
1334	3.0000	0.0000	0.87173E-03
1335	3.0000	0.0000	0.69200E-03
1336	3.0000	0.0000	0.48914E-03
1341	1.0000	-3066.7	-0.61333E-05
1342	1.0000	-3440.8	-0.68815E-05
1343	1.0000	-2027.3	-0.40545E-05
1344	3.0000	0.0000	0.23403E-04
1345	3.0000	0.0000	0.29793E-03
1346	3.0000	0.0000	0.55390E-03
1347	3.0000	0.58208E-10	0.60245E-03
1348	3.0000	0.0000	0.43514E-03
1349	3.0000	0.0000	0.21374E-03
1350	3.0000	0.0000	0.18515E-03
1351	3.0000	0.0000	0.35965E-03
1352	3.0000	0.0000	0.55983E-03
1353	3.0000	0.0000	0.63033E-03 <
1354	3.0000	0.0000	0.52047E-03

1355	3.0000	0.0000	0.24336E-03
1356	1.0000	-650.86	-0.13017E-05
1361	1.0000	-1025.2	-0.20505E-05
1362	1.0000	-1554.3	-0.31087E-05
1363	1.0000	-323.73	-0.64745E-06
1364	3.0000	0.0000	0.16613E-03
1365	3.0000	0.0000	0.33490E-03
1366	3.0000	0.0000	0.47850E-03
1367	3.0000	0.0000	0.48645E-03
1368	3.0000	0.0000	0.36558E-03
1369	3.0000	0.0000	0.22195E-03
1370	3.0000	0.0000	0.21096E-03
1371	3.0000	0.0000	0.32067E-03
1372	3.0000	-0.29104E-10	0.46561E-03
1373	3.0000	0.0000	0.53558E-03 <
1374	3.0000	0.0000	0.49728E-03
1375	3.0000	0.0000	0.34086E-03
1376	3.0000	0.0000	0.13100E-03
1381	1.0000	-2514.3	-0.50286E-05
1382	1.0000	-3135.2	-0.62705E-05
1383	1.0000	-1671.5	-0.33431E-05
1384	1.0000	-9.2115	-0.18423E-07
1385	3.0000	0.0000	0.12246E-03
1386	3.0000	0.0000	0.16033E-03
1387	3.0000	0.0000	0.90322E-04
1388	1.0000	-342.39	-0.68479E-06
1389	1.0000	-1408.1	-0.28163E-05
1390	1.0000	-1550.1	-0.31001E-05
1391	1.0000	-848.57	-0.16971E-05
1392	3.0000	0.0000	0.42116E-04
1393	3.0000	0.0000	0.17493E-03
1394	3.0000	0.14552E-10	0.23887E-03 < Limiting
1395	3.0000	0.0000	0.15431E-03
1396	1.0000	-427.86	-0.85572E-06

00040224 VERSION=HPPA 8000 15:38:54 OCT 17, 2001 CP= 7895.430

Robinson 2 RPV - Oper. T & P - 3.00 mil intf - 7.8 alpha - noz 1 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
101	3.0000	0.0000	0.63610E-03
102	3.0000	0.0000	0.65462E-03
103	3.0000	0.0000	0.67043E-03 <
121	3.0000	0.0000	0.53844E-03
122	3.0000	0.0000	0.54552E-03
123	3.0000	0.0000	0.55110E-03 <
141	3.0000	0.0000	0.34232E-03
142	3.0000	0.0000	0.35326E-03
143	3.0000	0.0000	0.36013E-03 <
161	3.0000	0.29104E-10	0.36427E-03
162	3.0000	0.0000	0.37340E-03
163	3.0000	0.0000	0.37848E-03 <
181	3.0000	0.0000	0.77184E-04
182	3.0000	0.0000	0.87497E-04
183	3.0000	0.72760E-11	0.92694E-04 <Limiting

00040224 VERSION=HPPA 8000 15:38:59 OCT 17, 2001 CP= 7899.480

Robinson 2 RPV - Oper. T & P - 3.00 mil intf - 7.8 alpha - noz 2 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
201	3.0000	0.0000	0.73533E-03 <
202	3.0000	0.0000	0.70695E-03
203	3.0000	0.0000	0.65818E-03
204	3.0000	0.0000	0.63586E-03
205	3.0000	0.0000	0.61154E-03
206	3.0000	0.0000	0.56012E-03
207	3.0000	0.0000	0.51203E-03
208	3.0000	0.0000	0.51295E-03
209	3.0000	0.0000	0.52217E-03
221	3.0000	0.0000	0.77437E-03 <
222	3.0000	0.0000	0.75124E-03
223	3.0000	0.0000	0.69708E-03
224	3.0000	0.0000	0.63933E-03
225	3.0000	0.0000	0.56775E-03
226	3.0000	0.29104E-10	0.48192E-03
227	3.0000	0.0000	0.40274E-03
228	3.0000	0.0000	0.35586E-03
229	3.0000	0.0000	0.34200E-03
241	3.0000	0.0000	0.63554E-03 <
242	3.0000	0.0000	0.60657E-03
243	3.0000	0.0000	0.53414E-03
244	3.0000	0.0000	0.45304E-03
245	3.0000	0.0000	0.34829E-03
246	3.0000	0.0000	0.22380E-03
247	3.0000	0.0000	0.11048E-03
248	3.0000	0.0000	0.49231E-04
249	3.0000	0.0000	0.30473E-04
261	3.0000	0.0000	0.60582E-03 <
262	3.0000	0.0000	0.57888E-03
263	3.0000	0.0000	0.50782E-03
264	3.0000	0.0000	0.42636E-03
265	3.0000	0.0000	0.33200E-03
266	3.0000	0.0000	0.24223E-03
267	3.0000	0.0000	0.16150E-03
268	3.0000	0.0000	0.13760E-03
269	3.0000	0.0000	0.13185E-03
281	3.0000	0.0000	0.28097E-03 < Limiting
282	3.0000	0.0000	0.25710E-03
283	3.0000	0.0000	0.19216E-03
284	3.0000	0.0000	0.11765E-03
285	3.0000	-0.18190E-11	0.32659E-04
286	1.0000	-18286.	-0.36572E-04
287	1.0000	-476.84	-0.95368E-06
288	1.0000	-450.99	-0.90198E-06
289	1.0000	-214.77	-0.42954E-06

00040224

VERSION=HPPA 8000

15:39:05 OCT 17, 2001 CP= 7903.630

Robinson 2 RPV - Oper. T & P - 3.00 mil intf - 7.8 alpha - noz 3 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
301	3.0000	0.0000	0.47520E-03
302	3.0000	0.0000	0.49306E-03
303	3.0000	0.0000	0.51131E-03
304	3.0000	0.0000	0.51763E-03
305	3.0000	0.0000	0.54437E-03
306	3.0000	0.0000	0.61949E-03
307	3.0000	0.0000	0.68381E-03
308	3.0000	0.0000	0.69626E-03 <
309	3.0000	0.0000	0.68828E-03
321	3.0000	0.0000	0.30764E-03
322	3.0000	0.0000	0.33247E-03
323	3.0000	0.0000	0.38579E-03
324	3.0000	0.0000	0.45892E-03
325	3.0000	0.0000	0.54985E-03
326	3.0000	0.0000	0.65208E-03
327	3.0000	0.0000	0.73092E-03
328	3.0000	0.0000	0.76646E-03
329	3.0000	0.0000	0.77026E-03 <
341	1.0000	-190.88	-0.38176E-06
342	1.0000	-70.019	-0.14004E-06
343	3.0000	0.0000	0.73040E-04
344	3.0000	0.0000	0.18663E-03
345	3.0000	0.0000	0.31373E-03
346	3.0000	0.0000	0.45351E-03
347	3.0000	0.0000	0.55967E-03
348	3.0000	0.0000	0.61302E-03
349	3.0000	0.0000	0.62189E-03 <
361	3.0000	0.0000	0.67027E-04
362	3.0000	-0.72760E-11	0.99025E-04
363	3.0000	0.0000	0.15191E-03
364	3.0000	0.0000	0.21809E-03
365	3.0000	0.0000	0.30068E-03
366	3.0000	0.0000	0.40397E-03
367	3.0000	0.0000	0.49808E-03
368	3.0000	0.0000	0.55615E-03
369	3.0000	0.0000	0.56961E-03 <
381	1.0000	-375.46	-0.75093E-06
382	1.0000	-617.48	-0.12350E-05
383	1.0000	-407.81	-0.81562E-06
384	1.0000	-211.36	-0.42272E-06
385	3.0000	0.0000	0.54739E-07
386	3.0000	0.0000	0.76448E-04
387	3.0000	0.0000	0.15371E-03
388	3.0000	0.0000	0.20706E-03
389	3.0000	0.0000	0.22040E-03 < Limiting

00040224

VERSION=HPPA 8000

15:39:09 OCT 17, 2001 CP= 7907.520

Robinson 2 RPV - Oper. T & P - 3.00 mil intf - 7.8 alpha - noz 4 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH	
401	3.0000	0.0000	0.70917E-03	<
402	3.0000	0.0000	0.67277E-03	
403	3.0000	0.0000	0.60545E-03	
404	3.0000	0.0000	0.55711E-03	
405	3.0000	0.0000	0.51614E-03	
406	3.0000	0.0000	0.47165E-03	
407	3.0000	0.0000	0.45341E-03	
408	3.0000	0.0000	0.49472E-03	
409	3.0000	0.0000	0.52141E-03	
421	3.0000	0.0000	0.79793E-03	<
422	3.0000	0.0000	0.77005E-03	
423	3.0000	-0.58208E-10	0.70256E-03	
424	3.0000	0.0000	0.62404E-03	
425	3.0000	0.0000	0.52945E-03	
426	3.0000	0.0000	0.43300E-03	
427	3.0000	0.0000	0.36068E-03	
428	3.0000	0.0000	0.31566E-03	
429	3.0000	0.0000	0.30646E-03	
441	3.0000	0.0000	0.61786E-03	<
442	3.0000	0.0000	0.59057E-03	
443	3.0000	-0.29104E-10	0.51958E-03	
444	3.0000	0.0000	0.42683E-03	
445	3.0000	0.0000	0.28980E-03	
446	3.0000	0.0000	0.12637E-03	
447	1.0000	-87.338	-0.17468E-06	
448	1.0000	-567.65	-0.11353E-05	
449	1.0000	-356.03	-0.71207E-06	
461	3.0000	0.0000	0.50771E-03	<
462	3.0000	0.0000	0.48884E-03	
463	3.0000	0.0000	0.43753E-03	
464	3.0000	0.0000	0.37491E-03	
465	3.0000	0.0000	0.28766E-03	
466	3.0000	0.0000	0.18043E-03	
467	3.0000	0.0000	0.81352E-04	
468	3.0000	0.0000	0.50896E-06	
469	3.0000	0.0000	0.10109E-06	
481	3.0000	0.0000	0.97233E-04	< Limiting
482	3.0000	0.0000	0.90574E-04	
483	3.0000	0.0000	0.70112E-04	
484	3.0000	0.0000	0.47090E-04	
485	3.0000	0.0000	0.34219E-05	
486	1.0000	-349.33	-0.69867E-06	
487	1.0000	-719.87	-0.14397E-05	
488	1.0000	-842.55	-0.16851E-05	
489	1.0000	-469.98	-0.93995E-06	

00040224

VERSION=HPPA 8000

15:39:14 OCT 17, 2001 CP= 7911.500

Robinson 2 RPV - Oper. T & P - 3.00 mil intf - 7.8 alpha - noz 5 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
501	3.0000	0.0000	0.49140E-03
502	3.0000	0.0000	0.52380E-03
503	3.0000	0.0000	0.50650E-03
504	3.0000	0.0000	0.45278E-03
505	3.0000	0.0000	0.43274E-03
506	3.0000	0.0000	0.49451E-03
507	3.0000	0.0000	0.57202E-03
508	3.0000	0.0000	0.61198E-03
509	3.0000	0.0000	0.63399E-03
510	3.0000	0.0000	0.66688E-03
511	3.0000	0.0000	0.67111E-03 <
512	3.0000	0.0000	0.60551E-03
513	3.0000	0.0000	0.51508E-03
514	3.0000	0.0000	0.46705E-03
515	3.0000	0.0000	0.45814E-03
516	3.0000	0.0000	0.46887E-03
521	3.0000	0.0000	0.30938E-03
522	3.0000	0.0000	0.30056E-03
523	3.0000	0.0000	0.32018E-03
524	3.0000	0.0000	0.36569E-03
525	3.0000	0.29104E-10	0.43557E-03
526	3.0000	0.0000	0.54269E-03
527	3.0000	0.0000	0.64425E-03
528	3.0000	0.0000	0.70619E-03
529	3.0000	0.0000	0.73576E-03
530	3.0000	0.0000	0.76325E-03 <
531	3.0000	0.0000	0.76005E-03
532	3.0000	0.0000	0.70148E-03
533	3.0000	0.0000	0.60172E-03
534	3.0000	0.0000	0.50094E-03
535	3.0000	0.0000	0.41456E-03
536	3.0000	0.0000	0.35019E-03
541	1.0000	-844.29	-0.16886E-05
542	1.0000	-903.57	-0.18071E-05
543	1.0000	-607.63	-0.12153E-05
544	1.0000	-21.062	-0.42123E-07
545	3.0000	0.0000	0.12482E-03
546	3.0000	0.0000	0.29818E-03
547	3.0000	0.0000	0.43897E-03
548	3.0000	0.0000	0.51490E-03
549	3.0000	0.0000	0.54391E-03
550	3.0000	0.0000	0.56833E-03 <
551	3.0000	0.0000	0.56243E-03
552	3.0000	0.29104E-10	0.50083E-03
553	3.0000	0.0000	0.38551E-03
554	3.0000	0.0000	0.24826E-03

555	3.0000	0.0000	0.98167E-04
556	1.0000	-232.88	-0.46575E-06
561	3.0000	0.0000	0.20543E-06
562	3.0000	0.0000	0.12321E-07
563	3.0000	0.0000	0.59934E-06
564	3.0000	0.0000	0.97537E-04
565	3.0000	0.0000	0.17834E-03
566	3.0000	0.0000	0.28388E-03
567	3.0000	0.0000	0.36891E-03
568	3.0000	0.0000	0.41781E-03
569	3.0000	0.0000	0.43488E-03
570	3.0000	0.0000	0.44991E-03 <
571	3.0000	0.0000	0.44286E-03
572	3.0000	0.0000	0.40212E-03
573	3.0000	0.0000	0.33133E-03
574	3.0000	0.0000	0.25901E-03
575	3.0000	0.0000	0.17167E-03
576	3.0000	0.0000	0.82652E-04
581	1.0000	-1072.3	-0.21446E-05
582	1.0000	-1094.4	-0.21887E-05
583	1.0000	-789.71	-0.15794E-05
584	1.0000	-545.70	-0.10914E-05
585	1.0000	-324.27	-0.64854E-06
586	1.0000	-61.640	-0.12328E-06
587	3.0000	0.0000	0.20514E-04
588	3.0000	0.0000	0.32085E-04 < Limiting
589	3.0000	0.0000	0.25352E-04
590	3.0000	0.0000	0.27345E-04
591	3.0000	0.0000	0.26731E-04
592	3.0000	0.0000	0.19132E-04
593	3.0000	0.0000	0.24435E-05
594	1.0000	-5092.3	-0.10185E-04
595	1.0000	-314.10	-0.62821E-06
596	1.0000	-718.24	-0.14365E-05

00040224 VERSION=HPPA 8000 15:39:18 OCT 17, 2001 CP= 7915.500

Robinson 2 RPV - Oper. T & P - 3.00 mil intf - 7.8 alpha - noz 6 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
601	3.0000	0.0000	0.58844E-03
602	3.0000	0.0000	0.55471E-03
603	3.0000	0.0000	0.46403E-03
604	3.0000	-0.29104E-10	0.39812E-03
605	3.0000	0.0000	0.41047E-03
606	3.0000	0.0000	0.50192E-03
607	3.0000	0.58208E-10	0.58095E-03
608	3.0000	0.0000	0.59302E-03
609	3.0000	0.0000	0.58263E-03
621	3.0000	0.0000	0.28788E-03
622	3.0000	0.0000	0.30000E-03
623	3.0000	0.0000	0.34885E-03
624	3.0000	0.0000	0.41748E-03
625	3.0000	0.0000	0.50827E-03
626	3.0000	0.0000	0.61509E-03
627	3.0000	0.0000	0.68357E-03
628	3.0000	0.0000	0.69217E-03
629	3.0000	0.58208E-10	0.67949E-03
641	1.0000	-754.36	-0.15087E-05
642	1.0000	-1156.7	-0.23135E-05
643	1.0000	-435.48	-0.87096E-06
644	3.0000	0.0000	0.75935E-04
645	3.0000	0.0000	0.22757E-03
646	3.0000	0.0000	0.37706E-03
647	3.0000	0.0000	0.45990E-03
648	3.0000	0.0000	0.47138E-03
649	3.0000	0.0000	0.45934E-03
661	1.0000	-161.84	-0.32369E-06
662	1.0000	-3.7829	-0.75658E-08
663	3.0000	0.0000	0.66391E-04
664	3.0000	0.0000	0.14757E-03
665	3.0000	0.0000	0.22605E-03
666	3.0000	0.0000	0.31060E-03
667	3.0000	0.0000	0.35941E-03
668	3.0000	0.0000	0.36812E-03
669	3.0000	0.0000	0.35907E-03
681	1.0000	-841.12	-0.16822E-05
682	1.0000	-1300.0	-0.25999E-05
683	1.0000	-754.55	-0.15091E-05
684	1.0000	-373.55	-0.74710E-06
685	1.0000	-254.38	-0.50876E-06
686	1.0000	-186.27	-0.37255E-06
687	1.0000	-225.28	-0.45056E-06
688	1.0000	-332.88	-0.66577E-06
689	1.0000	-215.57	-0.43114E-06

00040224

VERSION=HPPA 8000

15:39:24 OCT 17, 2001 CP= 7919.570

Robinson 2 RPV - Oper. T & P - 3.00 mil intf - 7.8 alpha - noz 7 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
701	3.0000	0.0000	0.59832E-03
702	3.0000	0.0000	0.56686E-03
703	3.0000	0.0000	0.51075E-03
704	3.0000	0.0000	0.46323E-03
705	3.0000	0.0000	0.41799E-03
706	3.0000	0.0000	0.39529E-03
707	3.0000	0.0000	0.45561E-03
708	3.0000	0.0000	0.60219E-03
709	3.0000	0.0000	0.68037E-03
721	3.0000	0.0000	0.70100E-03
722	3.0000	0.0000	0.68181E-03
723	3.0000	0.0000	0.63327E-03
724	3.0000	0.0000	0.57235E-03
725	3.0000	0.0000	0.49217E-03
726	3.0000	0.0000	0.41619E-03
727	3.0000	0.0000	0.34691E-03
728	3.0000	0.0000	0.30476E-03
729	3.0000	0.0000	0.29660E-03
741	3.0000	0.0000	0.47786E-03
742	3.0000	0.0000	0.46151E-03
743	3.0000	0.0000	0.41495E-03
744	3.0000	0.0000	0.33981E-03
745	3.0000	0.0000	0.20603E-03
746	3.0000	0.0000	0.48149E-04
747	1.0000	-709.32	-0.14186E-05
748	1.0000	-1227.1	-0.24541E-05
749	1.0000	-700.54	-0.14011E-05
761	3.0000	0.0000	0.37031E-03
762	3.0000	0.0000	0.35971E-03
763	3.0000	0.0000	0.32951E-03
764	3.0000	0.0000	0.28977E-03
765	3.0000	0.0000	0.21177E-03
766	3.0000	0.0000	0.11540E-03
767	3.0000	0.0000	0.23102E-04
768	1.0000	-104.67	-0.20935E-06
769	1.0000	-87.129	-0.17426E-06
781	1.0000	-244.46	-0.48891E-06
782	1.0000	-436.43	-0.87285E-06
783	1.0000	-332.08	-0.66415E-06
784	1.0000	-191.30	-0.38260E-06
785	1.0000	-282.80	-0.56560E-06
786	1.0000	-599.82	-0.11996E-05
787	1.0000	-1037.2	-0.20745E-05
788	1.0000	-1384.4	-0.27687E-05
789	1.0000	-776.99	-0.15540E-05

00040224

VERSION=HPPA 8000

15:39:30

OCT 17, 2001 CP=

7923.930

Robinson 2 RPV - Oper. T & P - 3.00 mil intf - 7.8 alpha - noz 8 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
801	3.0000	0.0000	0.57959E-03
802	3.0000	0.0000	0.70158E-03
803	3.0000	0.0000	0.65899E-03
804	3.0000	0.29104E-10	0.49592E-03
805	3.0000	0.0000	0.37204E-03
806	3.0000	0.0000	0.39102E-03
807	3.0000	0.0000	0.46351E-03
808	3.0000	0.0000	0.50644E-03
809	3.0000	-0.29104E-10	0.52379E-03
810	3.0000	0.0000	0.55733E-03
811	3.0000	0.0000	0.58128E-03
812	3.0000	0.0000	0.54118E-03
813	3.0000	0.0000	0.46466E-03
814	3.0000	0.0000	0.40259E-03
815	3.0000	0.0000	0.38272E-03
816	3.0000	0.0000	0.44280E-03
821	3.0000	0.29104E-10	0.30484E-03
822	3.0000	0.0000	0.28542E-03
823	3.0000	0.0000	0.29991E-03
824	3.0000	0.0000	0.33317E-03
825	3.0000	0.0000	0.40424E-03
826	3.0000	0.0000	0.48608E-03
827	3.0000	0.0000	0.57001E-03
828	3.0000	0.0000	0.61879E-03
829	3.0000	0.0000	0.63368E-03
830	3.0000	0.0000	0.66208E-03
831	3.0000	0.0000	0.68690E-03
832	3.0000	0.0000	0.66884E-03
833	3.0000	0.0000	0.60074E-03
834	3.0000	0.0000	0.51424E-03
835	3.0000	0.0000	0.42828E-03
836	3.0000	0.0000	0.35428E-03
841	1.0000	-1440.3	-0.28807E-05
842	1.0000	-1620.8	-0.32415E-05
843	1.0000	-1392.3	-0.27847E-05
844	1.0000	-870.18	-0.17404E-05
845	3.0000	0.0000	0.35964E-05
846	3.0000	0.0000	0.16448E-03
847	3.0000	0.0000	0.31183E-03
848	3.0000	0.0000	0.38801E-03
849	3.0000	0.0000	0.40707E-03
850	3.0000	0.0000	0.43233E-03
851	3.0000	0.0000	0.45472E-03
852	3.0000	0.0000	0.43766E-03
853	3.0000	0.0000	0.36123E-03
854	3.0000	0.0000	0.23845E-03

855	3.0000	0.0000	0.80090E-04
856	1.0000	-563.62	-0.11272E-05
861	1.0000	-244.76	-0.48952E-06
862	1.0000	-321.00	-0.64199E-06
863	1.0000	-147.19	-0.29438E-06
864	3.0000	0.0000	0.18064E-04
865	3.0000	0.0000	0.84394E-04
866	3.0000	0.0000	0.17968E-03
867	3.0000	0.0000	0.26578E-03
868	3.0000	0.0000	0.31267E-03
869	3.0000	0.0000	0.32249E-03
870	3.0000	0.0000	0.34118E-03
871	3.0000	0.0000	0.35411E-03
872	3.0000	0.0000	0.34187E-03
873	3.0000	0.0000	0.29501E-03
874	3.0000	0.0000	0.23101E-03
875	3.0000	0.0000	0.14128E-03
876	3.0000	0.0000	0.46058E-04
881	1.0000	-1577.6	-0.31553E-05
882	1.0000	-1792.0	-0.35840E-05
883	1.0000	-1488.2	-0.29765E-05
884	1.0000	-1002.7	-0.20053E-05
885	1.0000	-695.31	-0.13906E-05
886	1.0000	-418.50	-0.83700E-06
887	1.0000	-299.94	-0.59988E-06
888	1.0000	-367.24	-0.73448E-06
889	1.0000	-579.74	-0.11595E-05
890	1.0000	-634.01	-0.12680E-05
891	1.0000	-560.13	-0.11203E-05
892	1.0000	-410.19	-0.82038E-06
893	1.0000	-289.57	-0.57914E-06
894	1.0000	-214.48	-0.42897E-06
895	1.0000	-437.08	-0.87415E-06
896	1.0000	-936.88	-0.18738E-05

00040224

VERSION=HPPA 8000

15:39:35 OCT 17, 2001 CP= 7927.910

Robinson 2 RPV - Oper. T & P - 3.00 mil intf - 7.8 alpha - noz 9 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
901	3.0000	0.0000	0.80305E-03
902	3.0000	0.0000	0.82054E-03
903	3.0000	0.0000	0.61523E-03
904	3.0000	0.0000	0.40132E-03
905	3.0000	-0.29104E-10	0.33199E-03
906	3.0000	0.0000	0.41257E-03
907	3.0000	0.0000	0.49563E-03
908	3.0000	0.0000	0.49478E-03
909	3.0000	0.0000	0.46195E-03
910	3.0000	0.0000	0.48502E-03
911	3.0000	0.0000	0.52215E-03
912	3.0000	0.0000	0.48434E-03
913	3.0000	0.0000	0.39619E-03
914	3.0000	0.0000	0.34611E-03
915	3.0000	0.0000	0.40442E-03
916	3.0000	0.0000	0.60093E-03
921	3.0000	0.0000	0.26646E-03
922	3.0000	0.0000	0.26623E-03
923	3.0000	0.0000	0.31550E-03
924	3.0000	0.0000	0.39563E-03
925	3.0000	0.0000	0.48749E-03
926	3.0000	0.0000	0.58366E-03
927	3.0000	0.0000	0.63115E-03
928	3.0000	0.0000	0.60078E-03
929	3.0000	0.0000	0.55186E-03
930	3.0000	0.0000	0.58144E-03
931	3.0000	0.0000	0.64116E-03
932	3.0000	0.0000	0.64269E-03
933	3.0000	0.58208E-10	0.57303E-03
934	3.0000	0.0000	0.48118E-03
935	3.0000	0.0000	0.38824E-03
936	3.0000	0.0000	0.30153E-03
941	1.0000	-2250.2	-0.45003E-05
942	1.0000	-2084.7	-0.41694E-05
943	1.0000	-1346.5	-0.26929E-05
944	1.0000	-286.40	-0.57280E-06
945	3.0000	0.0000	0.11675E-03
946	3.0000	0.0000	0.28074E-03
947	3.0000	0.0000	0.36395E-03
948	3.0000	0.0000	0.34892E-03
949	3.0000	0.0000	0.30912E-03
950	3.0000	0.0000	0.33597E-03
951	3.0000	0.0000	0.38874E-03
952	3.0000	0.0000	0.38192E-03
953	3.0000	0.0000	0.28247E-03
954	3.0000	0.0000	0.13077E-03

955	1.0000	-277.15	-0.55429E-06
956	1.0000	-1507.4	-0.30149E-05
961	1.0000	-693.51	-0.13870E-05
962	1.0000	-551.01	-0.11020E-05
963	1.0000	-72.338	-0.14468E-06
964	3.0000	0.0000	0.64480E-04
965	3.0000	0.0000	0.14642E-03
966	3.0000	0.0000	0.24014E-03
967	3.0000	0.0000	0.28957E-03
968	3.0000	0.0000	0.28413E-03
969	3.0000	-0.14552E-10	0.26126E-03
970	3.0000	0.0000	0.28059E-03
971	3.0000	0.0000	0.30951E-03
972	3.0000	0.0000	0.30233E-03
973	3.0000	0.0000	0.24280E-03
974	3.0000	0.0000	0.16495E-03
975	3.0000	0.0000	0.73422E-04
976	1.0000	-165.38	-0.33075E-06
981	1.0000	-2294.3	-0.45887E-05
982	1.0000	-2138.5	-0.42770E-05
983	1.0000	-1317.0	-0.26339E-05
984	1.0000	-702.96	-0.14059E-05
985	1.0000	-468.10	-0.93620E-06
986	1.0000	-373.23	-0.74645E-06
987	1.0000	-491.98	-0.98396E-06
988	1.0000	-786.50	-0.15730E-05
989	1.0000	-1076.4	-0.21528E-05
990	1.0000	-1005.4	-0.20108E-05
991	1.0000	-731.72	-0.14634E-05
992	1.0000	-457.84	-0.91569E-06
993	1.0000	-331.41	-0.66283E-06
994	1.0000	-329.14	-0.65828E-06
995	1.0000	-704.56	-0.14091E-05
996	1.0000	-1479.7	-0.29595E-05

00040224 VERSION=HPPA 8000 15:39:39 OCT 17, 2001 CP= 7931.980

Robinson 2 RPV - Oper. T & P - 3.00 mil intf - 7.8 alpha - noz 10 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
1001	3.0000	0.0000	0.36578E-03
1002	3.0000	0.0000	0.37604E-03
1003	3.0000	0.0000	0.40222E-03
1004	3.0000	0.0000	0.40685E-03
1005	3.0000	0.0000	0.34923E-03
1006	3.0000	0.0000	0.33726E-03
1007	3.0000	0.0000	0.53832E-03
1008	3.0000	0.0000	0.90101E-03
1009	3.0000	0.0000	0.10960E-02
1021	3.0000	0.0000	0.47298E-03
1022	3.0000	0.0000	0.49818E-03
1023	3.0000	0.0000	0.54198E-03
1024	3.0000	0.0000	0.56857E-03
1025	3.0000	0.0000	0.52838E-03
1026	3.0000	0.0000	0.45345E-03
1027	3.0000	0.0000	0.34483E-03
1028	3.0000	0.0000	0.27003E-03
1029	3.0000	0.0000	0.25211E-03
1041	3.0000	0.0000	0.23972E-03
1042	3.0000	0.0000	0.25912E-03
1043	3.0000	0.0000	0.28910E-03
1044	3.0000	0.0000	0.28056E-03
1045	3.0000	0.0000	0.16954E-03
1046	3.0000	0.0000	0.11095E-04
1047	1.0000	-1270.8	-0.25416E-05
1048	1.0000	-2009.6	-0.40192E-05
1049	1.0000	-1169.5	-0.23391E-05
1061	3.0000	0.0000	0.22850E-03
1062	3.0000	0.0000	0.23442E-03
1063	3.0000	0.0000	0.24358E-03
1064	3.0000	0.0000	0.23828E-03
1065	3.0000	0.0000	0.17048E-03
1066	3.0000	0.0000	0.75372E-04
1067	1.0000	-254.52	-0.50904E-06
1068	1.0000	-630.43	-0.12609E-05
1069	1.0000	-374.97	-0.74995E-06
1081	1.0000	-685.09	-0.13702E-05
1082	1.0000	-1203.8	-0.24075E-05
1083	1.0000	-842.94	-0.16859E-05
1084	1.0000	-451.32	-0.90263E-06
1085	1.0000	-448.31	-0.89662E-06
1086	1.0000	-770.42	-0.15408E-05
1087	1.0000	-1358.3	-0.27167E-05
1088	1.0000	-2036.6	-0.40732E-05
1089	1.0000	-1205.1	-0.24103E-05

00040224 VERSION=HPPA 8000 15:39:44 OCT 17, 2001 CP= 7936.270

Robinson 2 RPV - Oper. T & P - 3.00 mil intf - 7.8 alpha - noz 11 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
1101	3.0000	0.0000	0.80384E-03
1102	3.0000	0.0000	0.11386E-02
1103	3.0000	0.0000	0.10750E-02
1104	3.0000	0.0000	0.69379E-03
1105	3.0000	0.0000	0.37372E-03
1106	3.0000	0.29104E-10	0.32110E-03
1107	3.0000	0.0000	0.40699E-03
1108	3.0000	-0.29104E-10	0.43345E-03
1109	3.0000	0.0000	0.35795E-03
1110	3.0000	0.0000	0.31920E-03
1111	3.0000	0.0000	0.36676E-03
1112	3.0000	0.0000	0.42548E-03
1113	3.0000	0.0000	0.43916E-03
1114	3.0000	0.0000	0.38803E-03
1115	3.0000	0.0000	0.32993E-03
1116	3.0000	0.0000	0.44300E-03
1121	3.0000	0.0000	0.28799E-03
1122	3.0000	0.0000	0.23573E-03
1123	3.0000	0.0000	0.25363E-03
1124	3.0000	-0.29104E-10	0.31813E-03
1125	3.0000	0.0000	0.43957E-03
1126	3.0000	0.0000	0.55143E-03
1127	3.0000	0.0000	0.60634E-03
1128	3.0000	0.0000	0.57120E-03
1129	3.0000	0.0000	0.46441E-03
1130	3.0000	0.0000	0.41798E-03
1131	3.0000	0.0000	0.47460E-03
1132	3.0000	0.0000	0.57423E-03
1133	3.0000	0.0000	0.62613E-03
1134	3.0000	0.0000	0.61131E-03
1135	3.0000	0.0000	0.52085E-03
1136	3.0000	-0.29104E-10	0.39968E-03
1141	1.0000	-2147.0	-0.42940E-05
1142	1.0000	-2634.2	-0.52684E-05
1143	1.0000	-2355.3	-0.47106E-05
1144	1.0000	-1473.0	-0.29459E-05
1145	1.0000	-262.86	-0.52573E-06
1146	3.0000	0.0000	0.14200E-03
1147	3.0000	0.0000	0.26962E-03
1148	3.0000	0.0000	0.28648E-03
1149	3.0000	0.0000	0.21505E-03
1150	3.0000	0.0000	0.18231E-03
1151	3.0000	0.0000	0.23003E-03
1152	3.0000	0.0000	0.31293E-03
1153	3.0000	0.0000	0.34749E-03
1154	3.0000	0.0000	0.28941E-03

1155	3.0000	0.0000	0.12335E-03
1156	1.0000	-620.71	-0.12414E-05
1161	1.0000	-691.34	-0.13827E-05
1162	1.0000	-963.26	-0.19265E-05
1163	1.0000	-752.18	-0.15044E-05
1164	1.0000	-277.30	-0.55460E-06
1165	3.0000	0.0000	0.46875E-04
1166	3.0000	0.0000	0.14887E-03
1167	3.0000	0.14552E-10	0.22521E-03
1168	3.0000	0.0000	0.24162E-03
1169	3.0000	0.0000	0.20481E-03
1170	3.0000	0.14552E-10	0.19559E-03
1171	3.0000	0.0000	0.22437E-03
1172	3.0000	0.0000	0.26443E-03
1173	3.0000	0.0000	0.27880E-03
1174	3.0000	0.0000	0.25053E-03
1175	3.0000	0.0000	0.15643E-03
1176	3.0000	0.0000	0.40166E-04
1181	1.0000	-2008.5	-0.40170E-05
1182	1.0000	-2645.8	-0.52917E-05
1183	1.0000	-2282.9	-0.45657E-05
1184	1.0000	-1360.4	-0.27207E-05
1185	1.0000	-792.01	-0.15840E-05
1186	1.0000	-493.39	-0.98678E-06
1187	1.0000	-446.35	-0.89270E-06
1188	1.0000	-711.87	-0.14237E-05
1189	1.0000	-1246.1	-0.24922E-05
1190	1.0000	-1503.8	-0.30076E-05
1191	1.0000	-1369.0	-0.27379E-05
1192	1.0000	-946.98	-0.18940E-05
1193	1.0000	-494.74	-0.98949E-06
1194	1.0000	-187.23	-0.37446E-06
1195	1.0000	-362.89	-0.72578E-06
1196	1.0000	-962.08	-0.19242E-05

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VERSION=HPPA 8000

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OCT 17, 2001 CP=

7940.310

Robinson 2 RPV - Oper. T & P - 3.00 mil intf - 7.8 alpha - noz 12 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
1201	3.0000	0.0000	0.12165E-02
1202	3.0000	0.0000	0.98370E-03
1203	3.0000	0.0000	0.56412E-03
1204	3.0000	0.0000	0.33762E-03
1205	3.0000	0.0000	0.34174E-03
1206	3.0000	0.0000	0.44946E-03
1207	3.0000	0.0000	0.47868E-03
1208	3.0000	0.0000	0.37977E-03
1209	3.0000	0.0000	0.29879E-03
1221	3.0000	0.0000	0.22677E-03
1222	3.0000	0.0000	0.25952E-03
1223	3.0000	0.0000	0.37669E-03
1224	3.0000	0.0000	0.51397E-03
1225	3.0000	0.0000	0.62513E-03
1226	3.0000	0.0000	0.68881E-03
1227	3.0000	0.0000	0.63393E-03
1228	3.0000	0.0000	0.47142E-03
1229	3.0000	0.0000	0.36624E-03
1241	1.0000	-1645.1	-0.32903E-05
1242	1.0000	-2506.0	-0.50120E-05
1243	1.0000	-962.59	-0.19252E-05
1244	3.0000	0.0000	0.77435E-04
1245	3.0000	0.0000	0.25362E-03
1246	3.0000	0.0000	0.37037E-03
1247	3.0000	0.0000	0.34070E-03
1248	3.0000	0.0000	0.20445E-03
1249	3.0000	0.0000	0.12018E-03
1261	1.0000	-620.89	-0.12418E-05
1262	1.0000	-703.44	-0.14069E-05
1263	3.0000	0.0000	0.29678E-04
1264	3.0000	0.0000	0.13337E-03
1265	3.0000	0.0000	0.22537E-03
1266	3.0000	0.0000	0.29376E-03
1267	3.0000	0.0000	0.27863E-03
1268	3.0000	0.0000	0.20367E-03
1269	3.0000	0.0000	0.15566E-03
1281	1.0000	-1537.7	-0.30754E-05
1282	1.0000	-2252.9	-0.45057E-05
1283	1.0000	-990.32	-0.19806E-05
1284	1.0000	-365.50	-0.73101E-06
1285	1.0000	-251.57	-0.50315E-06
1286	1.0000	-365.70	-0.73141E-06
1287	1.0000	-808.44	-0.16169E-05
1288	1.0000	-1417.1	-0.28341E-05
1289	1.0000	-888.84	-0.17777E-05

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VERSION=HPPA 8000

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Robinson 2 RPV - Oper. T & P - 3.00 mil intf - 7.8 alpha - noz 13 pressure

***** POST1 ELEMENT TABLE LISTING *****

STAT ELEM	MIXED GAPSTAT	MIXED GAPFORC	MIXED GAPSTRCH
1301	3.0000	0.0000	0.12783E-02
1302	3.0000	0.0000	0.14657E-02 <
1303	3.0000	0.0000	0.10658E-02
1304	3.0000	0.0000	0.56639E-03
1305	3.0000	0.0000	0.33375E-03
1306	3.0000	0.0000	0.40089E-03
1307	3.0000	0.0000	0.50887E-03
1308	3.0000	0.0000	0.44730E-03
1309	3.0000	0.0000	0.25207E-03
1310	3.0000	0.0000	0.21303E-03
1311	3.0000	0.0000	0.35792E-03
1312	3.0000	0.0000	0.46722E-03
1313	3.0000	0.0000	0.45944E-03
1314	3.0000	0.0000	0.37369E-03
1315	3.0000	-0.29104E-10	0.39202E-03
1316	3.0000	0.0000	0.72872E-03
1321	3.0000	0.14552E-10	0.24712E-03
1322	3.0000	0.0000	0.20265E-03
1323	3.0000	0.0000	0.28432E-03
1324	3.0000	0.0000	0.44898E-03
1325	3.0000	0.0000	0.62519E-03
1326	3.0000	0.0000	0.76719E-03 <
1327	3.0000	0.0000	0.76412E-03
1328	3.0000	0.0000	0.57685E-03
1329	3.0000	0.0000	0.32705E-03
1330	3.0000	0.0000	0.29335E-03
1331	3.0000	0.0000	0.47722E-03
1332	3.0000	0.0000	0.67303E-03
1333	3.0000	0.0000	0.75290E-03
1334	3.0000	0.0000	0.71562E-03
1335	3.0000	0.0000	0.57519E-03
1336	3.0000	0.0000	0.39029E-03
1341	1.0000	-3252.1	-0.65041E-05
1342	1.0000	-3515.4	-0.70307E-05
1343	1.0000	-2285.5	-0.45710E-05
1344	1.0000	-349.08	-0.69815E-06
1345	3.0000	0.0000	0.18177E-03
1346	3.0000	0.29104E-10	0.39036E-03
1347	3.0000	0.0000	0.42620E-03
1348	3.0000	0.0000	0.27684E-03
1349	3.0000	0.0000	0.83387E-04
1350	3.0000	0.36380E-11	0.60407E-04
1351	3.0000	0.0000	0.20860E-03
1352	3.0000	0.0000	0.37492E-03
1353	3.0000	-0.29104E-10	0.42946E-03 <
1354	3.0000	0.0000	0.34096E-03

1355	3.0000	0.0000	0.12374E-03	
1356	1.0000	-1179.8	-0.23596E-05	
1361	1.0000	-1228.9	-0.24579E-05	
1362	1.0000	-1477.5	-0.29551E-05	
1363	1.0000	-556.39	-0.11128E-05	
1364	3.0000	0.0000	0.82873E-04	
1365	3.0000	0.0000	0.20768E-03	
1366	3.0000	0.0000	0.31543E-03	
1367	3.0000	0.0000	0.32798E-03	
1368	3.0000	0.0000	0.24295E-03	
1369	3.0000	0.0000	0.14070E-03	
1370	3.0000	0.0000	0.13658E-03	
1371	3.0000	0.0000	0.21658E-03	
1372	3.0000	0.29104E-10	0.30475E-03	
1373	3.0000	0.0000	0.33839E-03	<
1374	3.0000	0.0000	0.30006E-03	
1375	3.0000	0.0000	0.19454E-03	
1376	3.0000	0.0000	0.38177E-04	
1381	1.0000	-2765.0	-0.55301E-05	
1382	1.0000	-3215.5	-0.64310E-05	
1383	1.0000	-1908.1	-0.38161E-05	
1384	1.0000	-570.96	-0.11419E-05	
1385	1.0000	-35.102	-0.70204E-07	
1386	3.0000	0.0000	0.87197E-05	
1387	1.0000	-251.44	-0.50289E-06	
1388	1.0000	-967.06	-0.19341E-05	
1389	1.0000	-1734.4	-0.34688E-05	
1390	1.0000	-1836.1	-0.36723E-05	
1391	1.0000	-1331.7	-0.26635E-05	
1392	1.0000	-629.62	-0.12592E-05	
1393	1.0000	-42.483	-0.84966E-07	
1394	3.0000	0.0000	0.31209E-04	< Limiting
1395	1.0000	-38.520	-0.77040E-07	
1396	1.0000	-1079.6	-0.21592E-05	

United States Nuclear Regulatory Commission
Enclosure II to Serial: RNP-RA/01-0161
50 Pages

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

"FINITE ELEMENT GAP ANALYSIS OF CRDM PENETRATIONS"

PERFORMED BY
STRUCTURAL INTEGRITY ASSOCIATES, INC.



**STRUCTURAL
INTEGRITY
Associates, Inc.**

CALCULATION PACKAGE

FILE No: W-CPL-62Q-302

PROJECT No: W-CPL-62Q


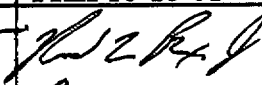
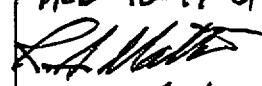
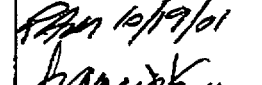
PROJECT NAME: Robinson CRDM Response to the NRC Bulletin

CLIENT: Carolina Power & Light

CALCULATION TITLE: Finite Element Gap Analysis of CRDM Penetrations (Robinson 2)

PROBLEM STATEMENT OR OBJECTIVE OF THE CALCULATION:

Develop a finite element model of the top head and CRDM penetrations for H.B. Robinson, Unit 2. The model is then used to evaluate the gaps between the CRDM tubes and the hemispherical head during normal operating conditions.

Document Revision	Affected Pages	Revision Description	Project Mgr. Approval Signature & Date	Preparer(s) & Checker(s) Signatures & Date
0	1 - 23 A1 - A4 B1 - B6 C1 - C8 Project CD-Rom	Original Issue	Richard Mattson RAM 10-18-01	Preparer: Richard Bax RLB 10-18-01 Checkers: William Weitze WFW 10-18-01 Francis Ku FHK 10-18-01
1	1, 9 C2 D1 - D8 Project CD-Rom	Inclusion of Annular Pressurization Study (Appendix D)	 10/19/01	 RLB 10-19-01  WFW 10/19/01  FHK 10/19/01

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1.0 Problem

Develop a finite element model of the top head and CRDM penetrations for H. B. Robinson, Unit 2. The model is then used to evaluate the gaps between the CRDM tubes and the hemispherical head during normal operating conditions.

2.0 Finite Element Model

A finite element model has been constructed using the ANSYS finite element software package [1]. The model includes the upper hemispherical head, the upper closure flange and the CRDM housing tubes. Due to the symmetrical nature of upper head structure and the layout of the CRDM tubes [5], only 45° of the total circumference was modeled. Additional details are described in the following sections. The resulting model can be seen in Figure 1.

2.1 Hemispherical Head/Upper Closure Flange

References 2, 3, 4a, 4b and 4c provided the closure flange and hemispherical head dimensions used in the finite element model. The flange and head were constructed using the ANSYS 8-node SOLID45 elements. The following assumptions were made during the construction of the segment of the finite element model:

- The clad material was not specifically modeled. However, the clad thickness was included as base metal in terms of dimensions and modeling of the closure head.
- The clad was assumed to be a constant 0.218 inches thick throughout the structure.
- The top face of the bottom closure flange is not specifically modeled. The bottom closure flange mating surface is treated as a rigid surface that is connected to the bottom face of the modeled closure flange via a series of gap elements (described later in the loads section of this calculation).
- The radius of curvature near the base of closure flange was initially assumed to be 2.5 inches. However, Reference 14 later indicated a radius of $2^{+/-} \frac{1}{32}$ inches. Since the area affected is remote from the area of interest, the 2.5 inch radius was retained.
- The closure bolt holes were not specifically modeled, thus the closure flange is a solid structure. However, the radial locations of the bolt holes were modeled to provide loading points for the bolt preload.
- Some additional assumptions/variations in the hemispherical head will be described in the following section of the CRDM housings.

See Figure 2 for the dimensions used for the hemispherical head and closure flange.



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2.2 CRDM Housing Tube Penetrations

A total of 13 full and partial CRDM housing tube penetrations were modeled. They also were modeled using the ANSYS 8-node SOLID45 element. Based on the 45° section modeled, the following tube configurations were actually included:

- 1 is modeled as 45° (top dead center) (Tube 1)
- 7 are modeled as 180° (along the symmetry boundary) (Tubes 2,6,10,22,26,46,58)
- 5 are fully modeled as 360° (Tubes 14,30,38,50,62)

See Figure 3 for the locations of the penetrations modeled. The dimensions were provided in Reference 5.

2.2.1 Hemispherical Head CRDM Penetration Dimensions

Based on Reference 7, the penetration hole in the hemispherical head consists of a primary hole of 3.997 inches in diameter with a counter bore region located nearest the outside surface of the closure head that has a diameter of 4.031 inches [12] (see Figure 5a). For this analysis, the hole was simplified to a constant 3.997 inch diameter (Figure 5b).

Per References 7 and 12, the interference region is assumed to begin at the top of the CRDM-to-head J-groove weld (at the top edge of the weld butter) and rises to a location $\frac{1}{16}$ inch below the lip of the hole, at the lowest elevation point of the hole as located on the outside surface of the hemispherical head (see Figure 5a). Since lowest edge elevation varies with each tube due to its location on the hemispherical head, it was necessary to use values resulting from the model building process rather than specifically calculating them (see the resulting ANSYS input files for resulting elevations, see Section 5.5 and Appendix C).

The layout of the weld attachment region and the interference zone as modeled for this evaluation is shown in Figure 5b.

2.2.2 CRDM Tube Dimensions

Per Reference 2 the CRDM tube outside diameter at the penetration is 4.000 inches with an inner diameter at 2.75 inches.

For this analysis, the tube outside diameter is set at a constant 3.9968 inches and inner diameter at 2.7468 inches (to maintain the original 0.625 inch wall thickness). The outside CRDM diameter of 3.9968 inches creates for a 0.0001 inch radial gap between the CRDM tube and the hemispherical head hole (modeled at 3.997 inches diameter). This gap was necessary to support CONTAC52 elements, which were used to simulate the interference fit



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between the CRDM and the hemispherical head penetration holes (see Section 5.5 for additional details on the interference loading).

In addition, the upper part of the CRDM tube and the bolted flange connections (both of which occur outside the reactor vessel) are not modeled, and the total height of the tube beyond the hemispherical head is arbitrary.

Finally, the actual CRDM tubes are intended to project through and slightly into the hemispherical head. This projection was not modeled, nor was the fillet weld region of the CRDM-to-closure head weld. The resulting CRDM tube remains flush with the inside surface of the hemispherical head. The lack of the fillet welds and tube stubs should have no significant effect on the evaluation as their effect on the radial gap evaluation at the interference zone will be minimal.

2.2.3 CRDM-to-Head Weld

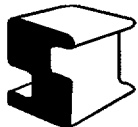
A key set of dimensions was the varying height of the CRDM tube to hemispherical head weld. The weld height varies around the circumference of the tube based on each tube's position on the hemispherical head (see Figures 4 and 5 and References 2 and 6).

While the specific weld and weld material were not modeled, the weld attachment height is important and must be included. To determine these heights, the following observations and assumptions were made:

- The 0.25 inch butter (though not modeled specifically) was not considered as part of the weld attachment height calculation. The butter was not modeled but considered part of the hemispherical head.
- The weld location varies along an inclined plane around the circumference [6].

Based on Reference 7, the height of the J-groove portion of the weld as it runs axially along the CRDM tube is a constant $\frac{13}{16}$ inches from the bottom of the weld butter to the closure head base metal/clad interface (as projected along the head to a hole diameter of $3\frac{25}{32}$ inches assuming the machining of the weld prep had not yet been performed, see Figures 4 and 5).

To determine the specific weld height for each CRDM tube modeled, a simple ANSYS model was thus developed that penetrates the inner surface of the hemispherical head at each tube location using the diameter of 3.78125 inches. For this model it is necessary to specifically exclude the inner clad, resulting in an inner surface radius for the hemispherical head of 74.656 inches [2]. The resulting intersections of the 3.78125 inch diameter penetration and the inner hemispherical head surface were then shifted $\frac{13}{16}$ inches up to determine the top height of the welds (excluding the weld butter). The ANSYS file used for



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this study is named WELD.INP and included with the Project CD-ROM. The resulting heights are also included in Appendix A.

In the final finite element model the height values determined above were used in conjunction with the actual modeled CRDM tubes to create a series of angled planes, which were used to divide the CRDM tube at the top of the weld (see Figure 5b).

The final weld connection between the hemispherical head and the CRDM tubes is via a series of degree-of-freedom couples between the nodes along the inner surface of the hole in the hemispherical head and the outer surface nodes of the CRDM tubes. These couples are only applied along the modeled weld height and can be seen in Figures 6 and 7.

3.0 Materials

Reference 2 indicates the following materials were used for the modeled components.

Component	Material
Upper Head	SA-302 Grade B
Closure Flange	SA-302 Grade B
CRDM Housing Tube	SB-167 (Alloy 600)

Note that the closure stud was not actually modeled and its properties are not included in this evaluation. No welds were specifically modeled nor were the weld materials included.

The material properties used for this evaluation are based on the 1989 ASME Code [8]. The 1989 code was used as it represents the current regularly accepted source of material properties. The temperature for which properties were based was 600°F. The normal operating temperature for this evaluation was constant 598°F [9]. The properties used are indicated in the following table:


Material	Modulus of Elasticity E, psi	Mean Coefficient of Thermal Expansion, α , in/in/°F
SA-302 Grade B	26.4e6	7.83e-6
SB-167 (Alloy 600)	28.7e6	7.82e-6

A Poisson's Ratio of 0.3 and a metal density of 0.283 lb/in³ were assumed for all of the materials.

4.0 Mechanical Boundary Conditions

Symmetry boundary conditions were applied along the circumferential free ends of the model. See Figure 8 for these boundaries.

In the case of the closure surface, a series of CONTAC52 gap elements were developed at the compression surface (see Figure 2). The gap elements attach the compression surface of the closure

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flange to a series of nodes that are fixed in the vertical direction. These nodes simulate the compression surface of the lower (un-modeled) flange. The nodes that make up this contact region are 0.1 inches below the compression surface of the modeled flange, but behave as if they are in direct contact. In addition, the node pairs of each gap element are coupled for horizontal translations and have a weak spring element (COMBIN14, k=100 lb/in) between them. These additions are included to provide initial numeric stability in the analysis. See Figure 9 for applied couples and vertical restraint on gap elements.

5.0 Loading

A series of gap evaluations were performed under normal operating conditions. The only variation between the evaluations was the interference loads between the CRDM tube and the hemispherical head. The loads that exist for the normal operating condition are defined in the following sections as are interference loads used in the gap evaluations.

5.1 Temperature

A uniform temperature of 598°F [9] was applied over the entire model with the stress free temperature being 70°F.

5.2 Pressure

The normal operating pressure is 2235 psig [10]. The pressure was applied to the inside surface of the hemispherical head, the hemispherical head side end of the CRDM tube, the inside surface of the CRDM tubes, and to the flange closure face out to a radius of 79.5945 inches [2] (radius of inner O-ring).


In addition, a cap pressure was applied to the outside free end of the CRDM tubes to simulate line load in each tube. The pressure was calculated as:

$$P_{\text{cap_tube}} = \frac{P \cdot r_{\text{inside}}^2}{(r_{\text{outside}}^2 - r_{\text{inside}}^2)} = \frac{2235 \cdot 1.375^2}{(2.0^2 - 1.375^2)} = 2003.22 \text{ psi}$$

Note that the applied cap load was actually applied in the negative direction in ANSYS, thus providing a traction load. See Figure 10 for the applied pressure surfaces.

5.3 Closure Bolt Load

A total closure bolt load is the sum of the o-ring seating loads and the design blow off load. The resulting total bolt load is 52929 kips, as specified in Reference 2.

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Since the bolts were not specifically modeled into the finite element model, it was necessary to simulate the bolt load via the application of a pressure load to the top of the flange. The applied pressure load area was based on a ring with a mean diameter equal to the closure bolt circle (88.5 inches [2]) and the width equal to the diameter of the closure bolt holes (7.5 inches diameter [2]). The resulting area was calculated as:

$$\text{Bolt Load Area} = \left[(R_{\text{bolt_circle}} + R_{\text{bolt_hole}})^2 - (R_{\text{bolt_circle}} - R_{\text{bolt_hole}})^2 \right] \cdot \pi$$

$$\text{Bolt Load Area} = \left[\left(88.5 + \left(\frac{7.5}{2} \right) \right)^2 - \left(88.5 - \left(\frac{7.5}{2} \right) \right)^2 \right] \cdot \pi = 4170.46 \text{ in}^2$$

The applied pressure to simulate the bolt load is therefore the total bolt load divided by the bolt load area, which results in a pressure of 12691 psi. See Figure 11 for the applied pressures for the bolt load simulation. Using pressure allows a more rapid model development and should involve no significant loss of accuracy since the areas of interest were the CRDM tubes.

An updated reference has indicated that the actual bolt load should be 59,900 kips [15], a difference of 11.6%. A subsequent investigation of the effects of this enlarged load indicates that there is very little effect on the overall gap results. Results were therefore reported based on the 52,929 kip bolt pre-load.


5.4 Gasket/Spring Loads

During closure, there are three other active loads applied to the upper flange; two gasket loads and a spring load. The gasket squash loads and their radius of application were defined in Reference 2 as:

- Inner Gasket: Total Squash Load = 1.5 kips/in at a radius of 79.5945 inches for a total squash load of 750,160 lb.
- Outer Gasket: Total Squash Load = 1.5 kips/in at a radius of 80.91 inches for a total squash load of 762,559 lb.

The gasket loads are applied as a series of nodal loads at the bottom of the flange in a positive vertical direction. The total squash load for a 45° section of the model is 93,770 lbs and 95,320 lbs for the inner and outer gaskets, respectively. At each radius of load application there are 37 equally spaced circumferential nodes (for a total of 74 nodes in two lines, 37 for the inner gasket and 37 for the outer gasket with the two rows of nodes lying side by side in the finite element model).

The total load on the inner 35 nodes for each of the gaskets was 2,604.7 lbs for the inner gasket and 2,647.8 lbs for the outer gasket. The 2 symmetry edge nodes for the inner gasket are loaded

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with 1302.4 lbs while the outer gasket symmetry nodes received 1323.9 lbs. Figure 12 shows the applied load as two sets of small upward arrows nearest the outside edge of the closure flange.

The core hold down spring load is the reaction of the core support assembly (not modeled for this evaluation) to the applied closure stud preload. For the upper closure flange the response load and its radius of application was defined in Reference 11 as:

- Spring Load: Total Load = 1.25 kips/in at a radius of 76.032 inches for a total load of 597,154 lbs.

Note that the 76.032 inch radius was based on the lower closure flange “Core Support Reaction Radius.” The radius of load application for the upper flange was therefore assumed to also be 76.032 inches. Any variation from the actual load path on the upper flange should have little effect on the final gap results due to the relatively small spring load as compared to the O-ring loads and the closure load.

The spring load was simulated in the same manner as the gasket loadings; it was simulated with a series of evenly spaced circumferential nodal loads. The total load for the 45° model was 74,644 lbs. The inner 35 nodes therefore received a load of 2,073.5 lbs in the positive vertical direction while the symmetry edge nodes were loaded at 1,036.7 lbs. Figure 12 shows the applied load as a row of large upward arrows furthest from the outside edge of the closure flange.

5.5 CRDM Housing Interference Load

The final load applied to the finite element model was the interference load between the CRDM tube outside surfaces and the inside interference zone of the hemispherical head. This load was the only load that changed between the gap analyses.

As there were no “as-built” interference values available, a series of evaluations were performed to determine the effects of various interference loads on gap opening. Per References 2 and 6, the “design” interference value was 0.000 to 0.003 inches of diametrical interference. A series of evaluations were therefore performed starting with the maximum interference of 0.003 inches. Table 1 lists the evaluations performed along with the ANSYS input file used (the ANSYS input files are included with the Project CD-Rom).


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Table 1
Interference Values Evaluations


Diametrical Interference Value Evaluated (inches)	ANSYS Input File Name
0.003	CRDM30-3.INP
0.00275	CRDM27-3.INP
0.0025	CRDM25-3.INP
0.002	CRDM20-3.INP

For all evaluations, the application of the interference was via a CONTAC52 gap element. The CONTAC52 element allows the entry of a negative gap value, which is treated as an interference value rather than the typical positive physical gap. Each tube was thus modeled with a series of gap elements simulating the specified interference value. The interference values entered into ANSYS were halved, as the ANSYS element was established as a radial gap. The values were also evenly spaced down the interference zone tube for each modeled tube. The use of CONTAC52 elements in this application was verified in a separate study shown in Appendix B.

6.0 Results


Analyses were performed for each of four initial diametrical interference fits: 3 mils, 2.75 mils, 2.5 mils and 2 mils. The results indicate that, for all these cases, all nozzles show a very lightly loaded residual interference zone just above the J-groove weld for all initial interferences. Above this zone, only the 2 mils case exhibits potential leak paths for all of the modeled CRDM tubes. The 2.5 mils case exhibits 6 out the thirteen nozzles as having potential leak paths, while the 3 mils and 2.75 mils cases possess only one tube with possible leak potential. Based on the results of these initial analyses, a second set of evaluations were performed for the 3 mils, 2.75 mils and 2.5 mils cases assuming the existence of a pressure load between the CRDM and the penetration hole, as a result of a through-wall crack in the CRDM tube (see Appendix D for a study regarding potential annular pressurization). The results of these "pressurized" analyses indicate that, except for the lightly loaded ring just above the J-groove weld, all nozzles exhibit a leak path even with an initial interference fit up to 3 mils.

The details of these analyses are presented in Appendix C, including the residual interference in the lightly loaded ring just above the J-groove weld.


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7.0 References

- 1) ANSYS Mechanical, Revision 5.7, ANSYS Inc., December 2000
- 2) FAX from Ted Huminski (CP&L) to Richard Bax (SI) dated 09/29/01 at 4:21 PM, referencing CE Document CENC-1111, "Analytical Report for Carolina Power and Light Reactor Vessel," SI File W-CPL-62Q-201P
- 3) Email from Ted Huminski (CP&L) to Richard Bax (SI) dated 10/02/01 at 11:34 AM, referencing CE Drawing E232-271-4, "General Arrangement-Elevation, Westinghouse Electric Corp., 155-1/2" ID Reactor Vessel," per Technical Manual 727-922-78, "Instruction Manual, Reactor Vessel, Carolina Power and Light," CE Book Number 6866, November, 1969, SI File No. W-CPL-62Q-201P
- 4) FAX from Ted Huminski (CP&L) to Richard Bax (SI) dated 10/04/01 at 9:18 AM, SI File W-CPL-62Q-201P
 - a. Referencing CE Drawing E-232-275-10 from CE Document CENC-1111, "Analytical Report for Carolina Power and Light Reactor Vessel"
 - b. Referencing CE Drawing E232-277-6
 - c. Referencing CENC-1111 (sheet 4 of the fax)
- 5) FAX from Ted Huminski (CP&L) to Richard Bax (SI) dated 09/29/01 at 4:34 PM, "H.B. Robinson Info," SI File W-CPL-62Q-201P
- 6) Email from Ted Huminski (CP&L) to Richard Bax (SI) dated 10/02/01 at 11:34 AM, referencing CE Drawing E232-285-3, "Control Rod Penetration Details, Westinghouse Electric Corp., 155-1/2" ID Reactor Vessel," SI File No. W-CPL-62Q-201P
- 7) FAX from Ted Huminski (CP&L) to Richard Bax (SI) dated 10/11/01 at 7:36 AM, SI File W-CPL-62Q-201P
- 8) ASME Boiler and Pressure Vessel Code, 1989 Edition, Section III, Appendices
- 9) MRP-48, "PWR Materials Reliability Program Response to NRC Bulletin 2001-1," EPRI Report No. 1006284, August 2001, SI File No. MRP-01-215
- 10) FAX from Ted Huminski (CP&L) to Richard Bax (SI) dated 10/13/01 at 5:13 PM, referencing "HBR 2 Updated FSAR, Table 5.3.0-1," SI File W-CPL-62Q-201P

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- 11) FAX from Ted Huminski (CP&L) to Richard Bax (SI) dated 10/02/01 at 2:37 PM, Subject: Stress Report Pages 26 of 31 and 5 of 74 from CE Document CENC-1111, "Analytical Report for Carolina Power and Light Reactor Vessel," SI File W-CPL-62Q-201P
- 12) FAX from Ted Huminski (CP&L) to Richard Bax (SI) dated 10/13/01 at 5:13 PM, referencing Detail C of CE Drawing E232-285-3, "Control Rod Penetration Details, Westinghouse Electric Corp., 155-1/2" ID Reactor Vessel," SI File W-CPL-62Q-201P
- 13) J. H. Keenan and F. G. Keyes, "Thermodynamic Properties of Steam," 1st Edition, 1936, John Wiley & Sons, Inc., New York (Thirty Sixth Printing, 1964)
- 14) Email from Ted Huminski (CP&L) to Richard Bax (SI) dated 10/13/01 at 3:03 PM, referencing CE Drawing 232-277-6, SI File No. W-CPL-62Q-201P
- 15) FAX from Ronald Knott (CP&L) to Richard Bax (SI) dated 10/16/01 at 5:10 PM, referencing Stress Report Pages 7 of 74 and 27 of 74 from CE Document CENC-1111, "Analytical Report for Carolina Power and Light Reactor Vessel," SI File W-CPL-62Q-201P

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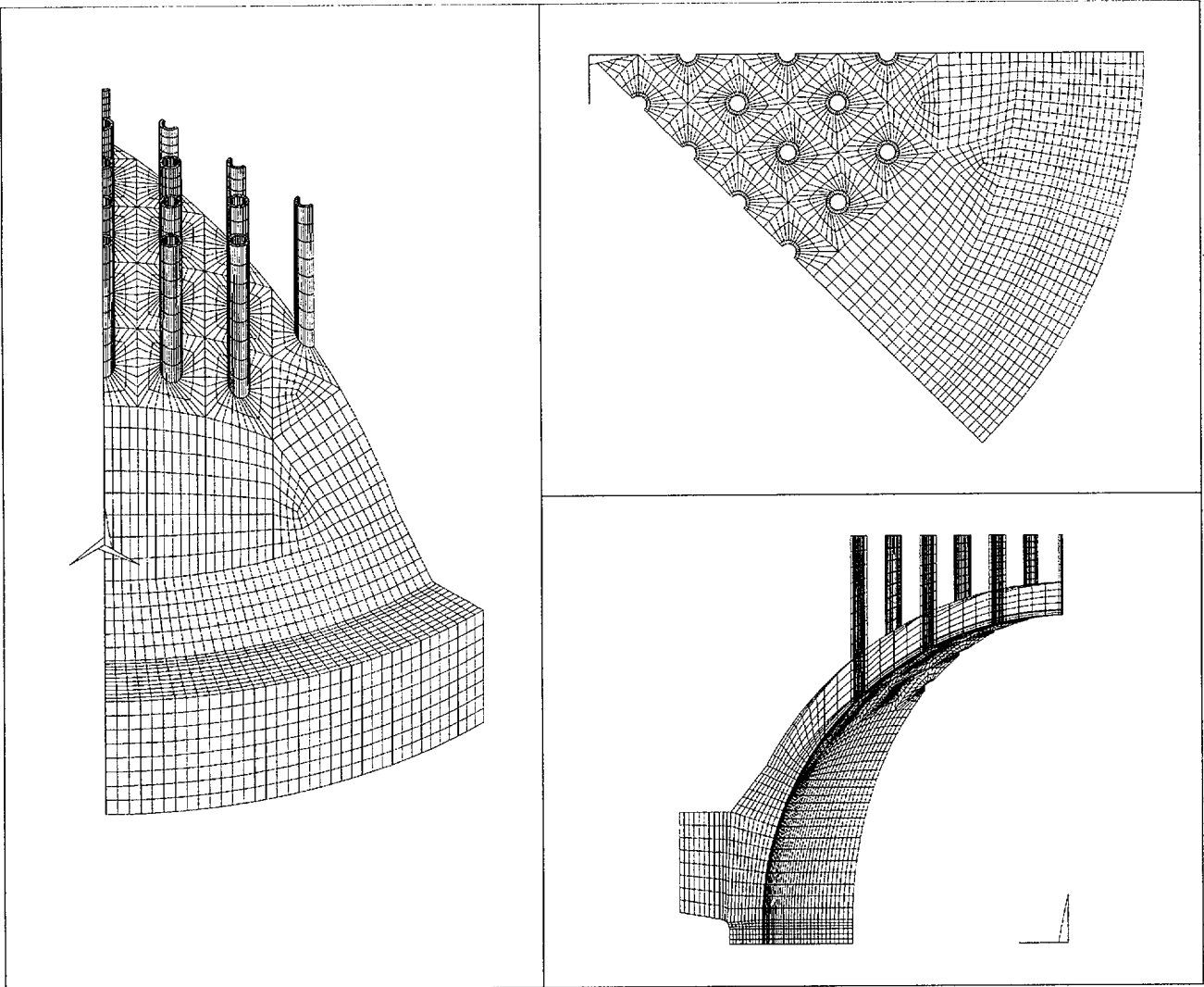


Figure 1 – Finite Element Model



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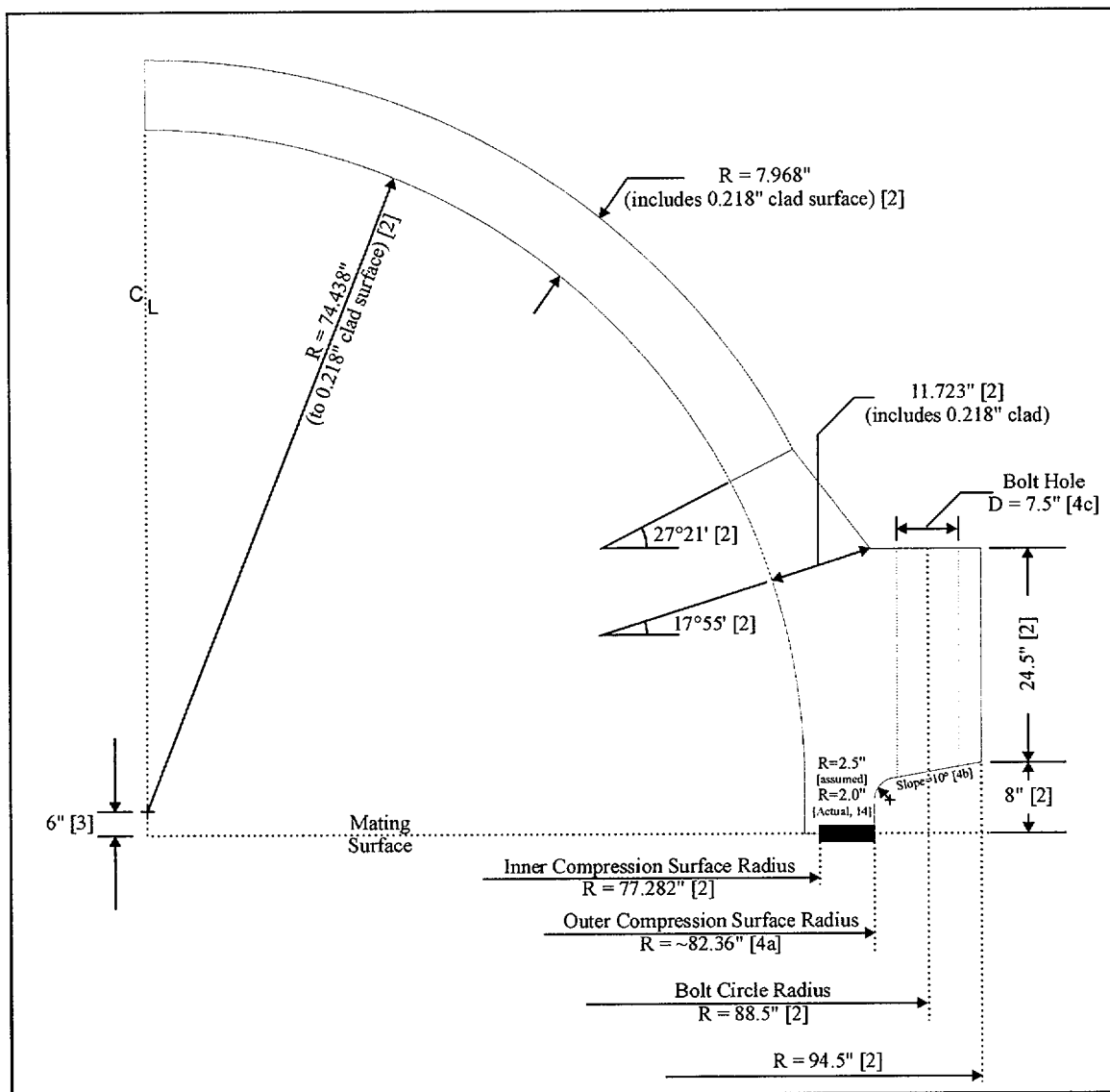
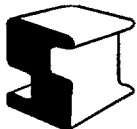


Figure 2 – Top Hemispherical Head / Closure Flange Dimensions



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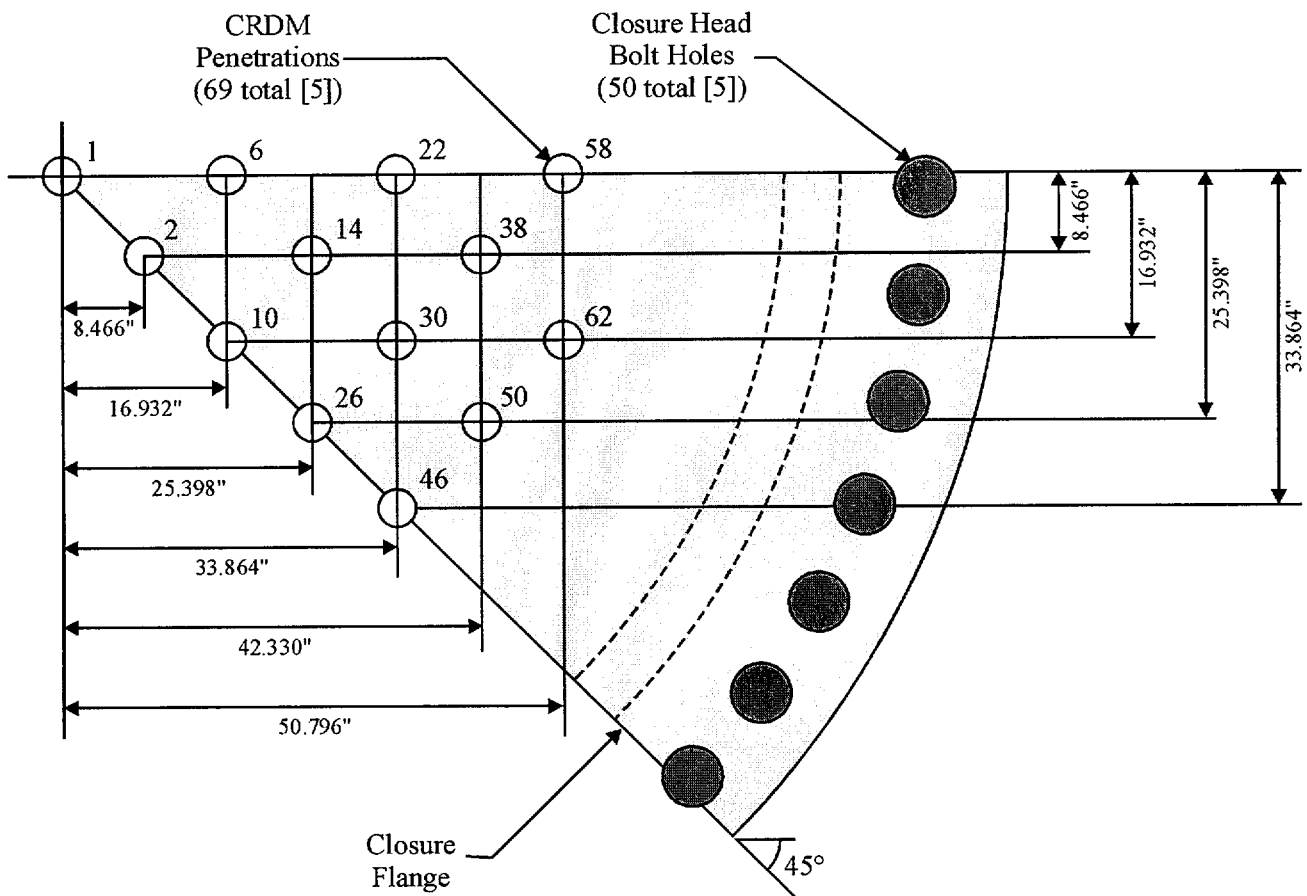
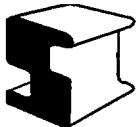


Figure 3 – CRDM Penetration Locations



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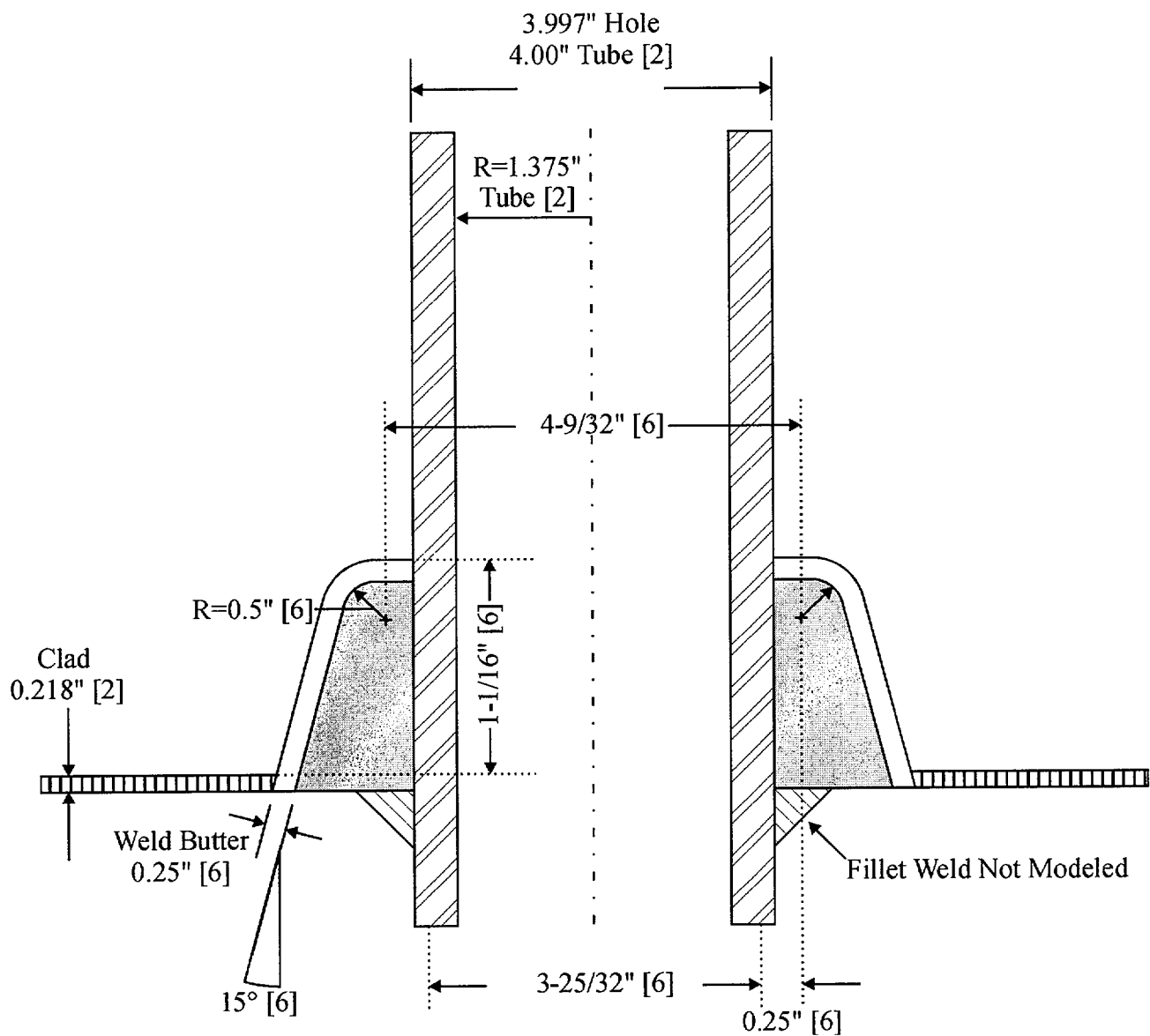


Figure 4 – CRDM Penetration / J-Groove Weld Dimensions



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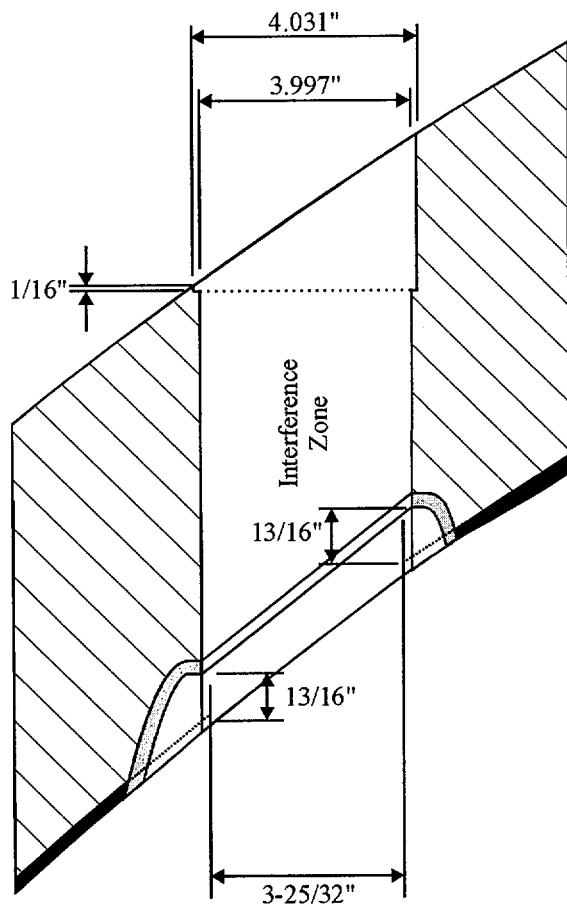


Figure 5a
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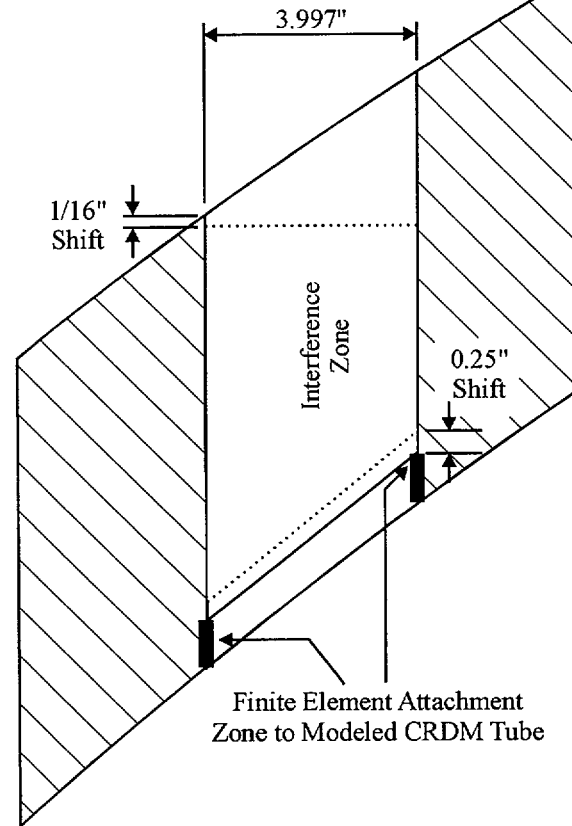


Figure 5b
As-Modeled



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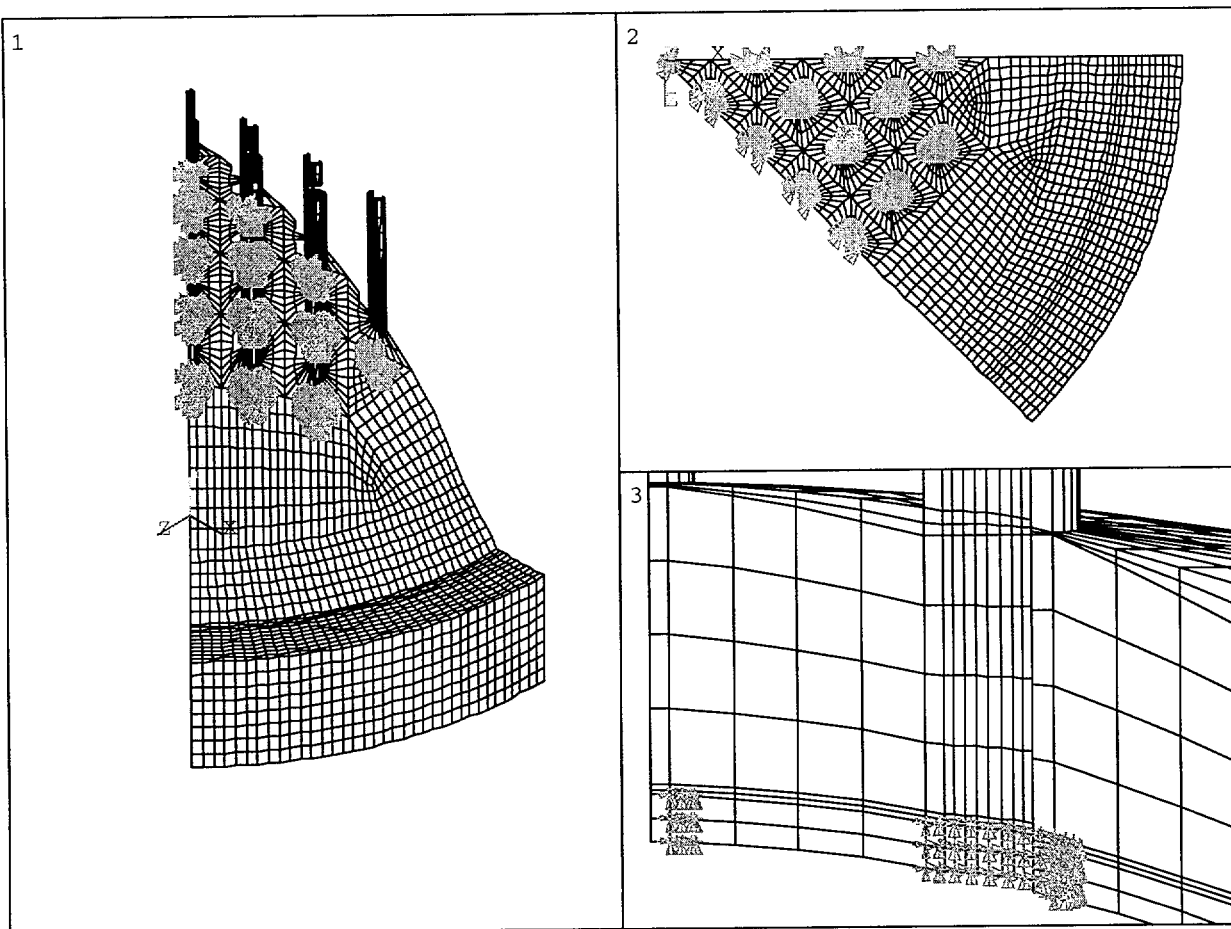
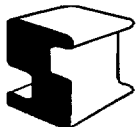


Figure 6 – Applied Couples Attaching CRDM Tube to Hemispherical Head



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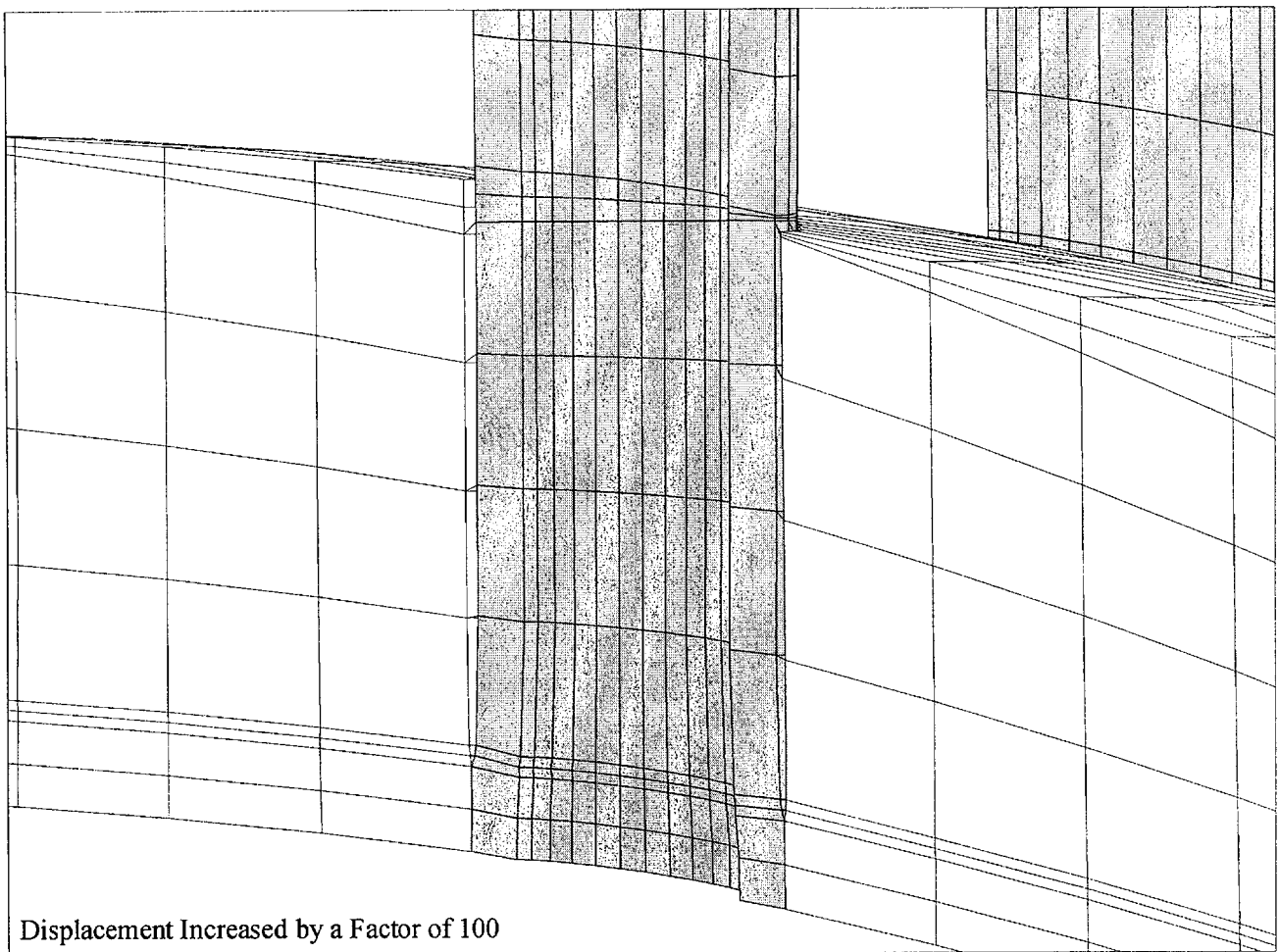


Figure 7 – Example of Gap Opening Case with Weld Couples



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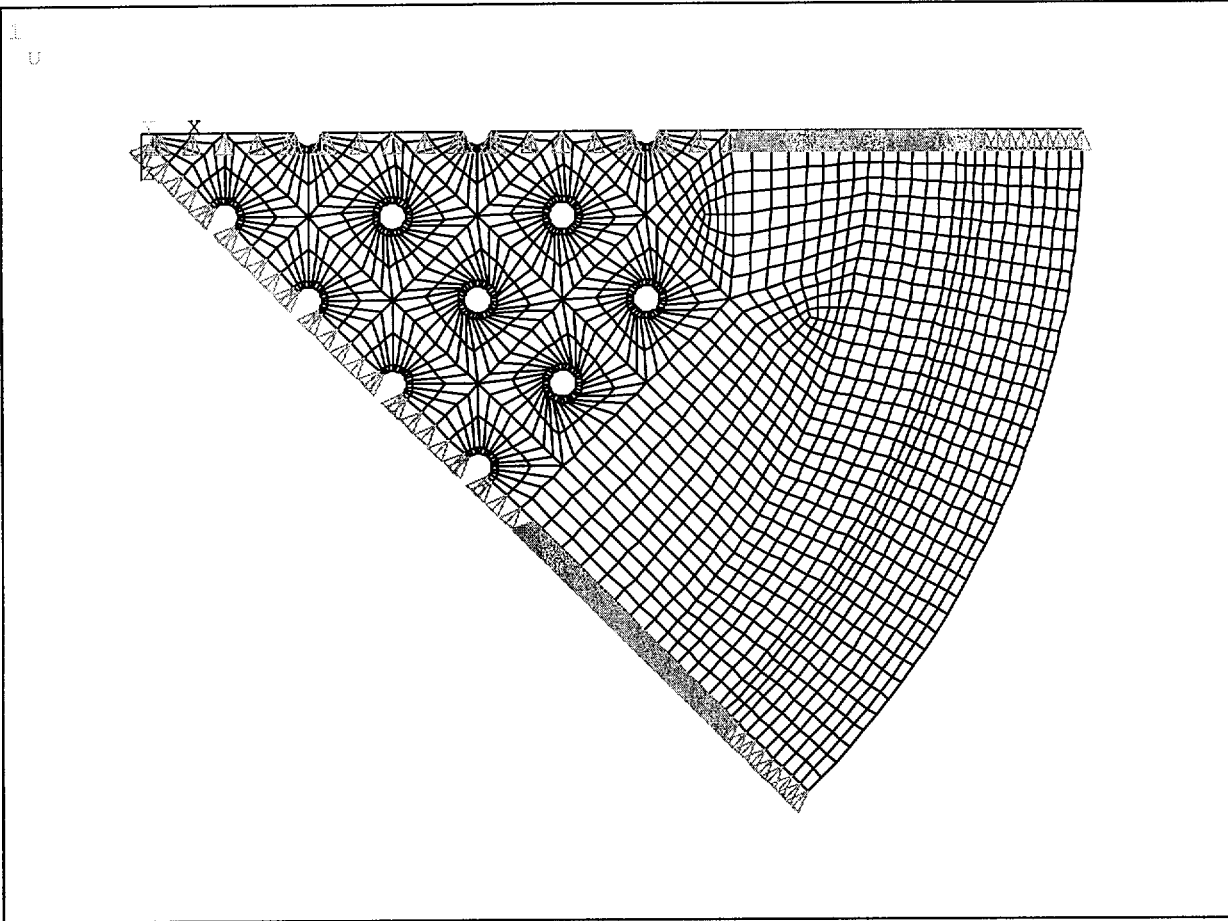


Figure 8 – Applied Symmetry Boundary Conditions



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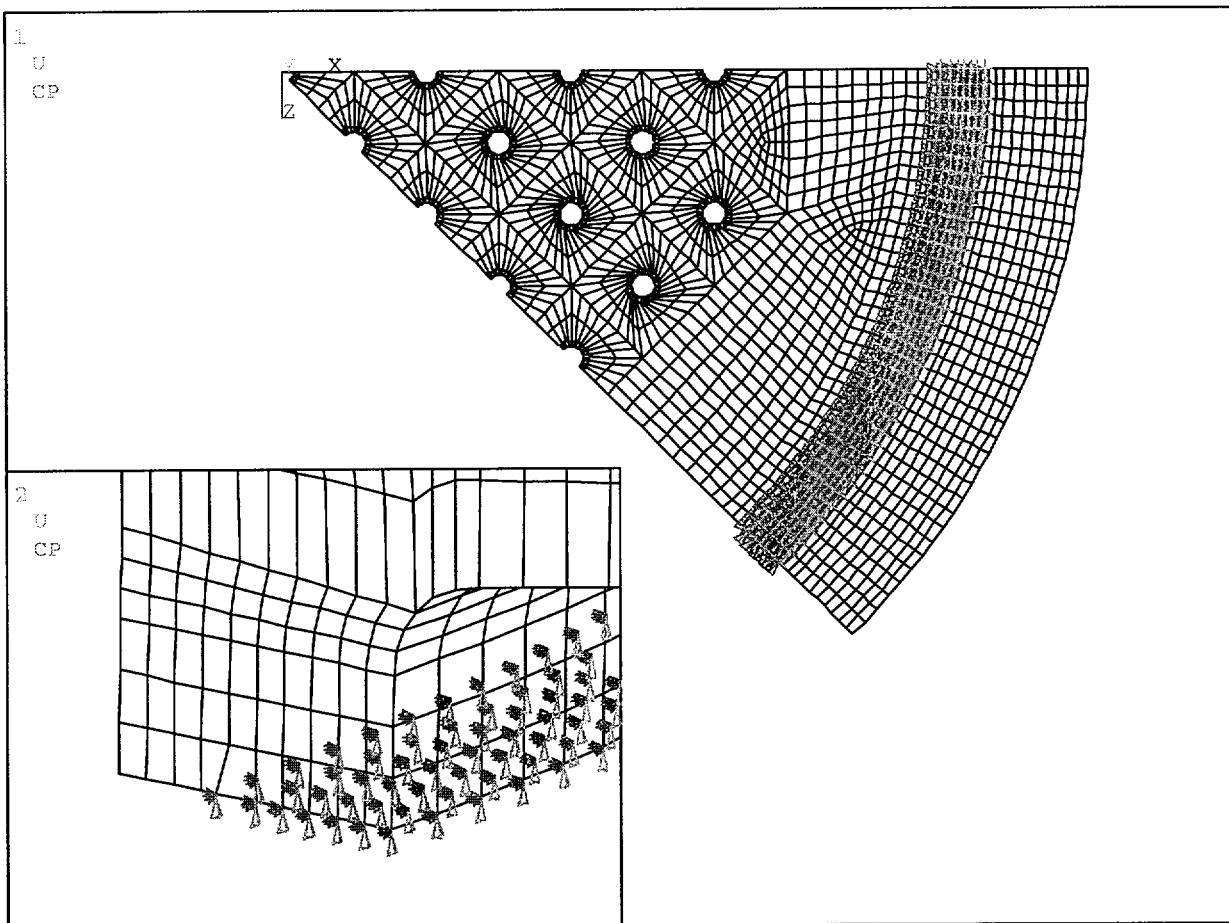


Figure 9 – Applied Couples and Vertical Restraint at Contact Surface
(Lower Flange Contact Simulated with Gap Elements)



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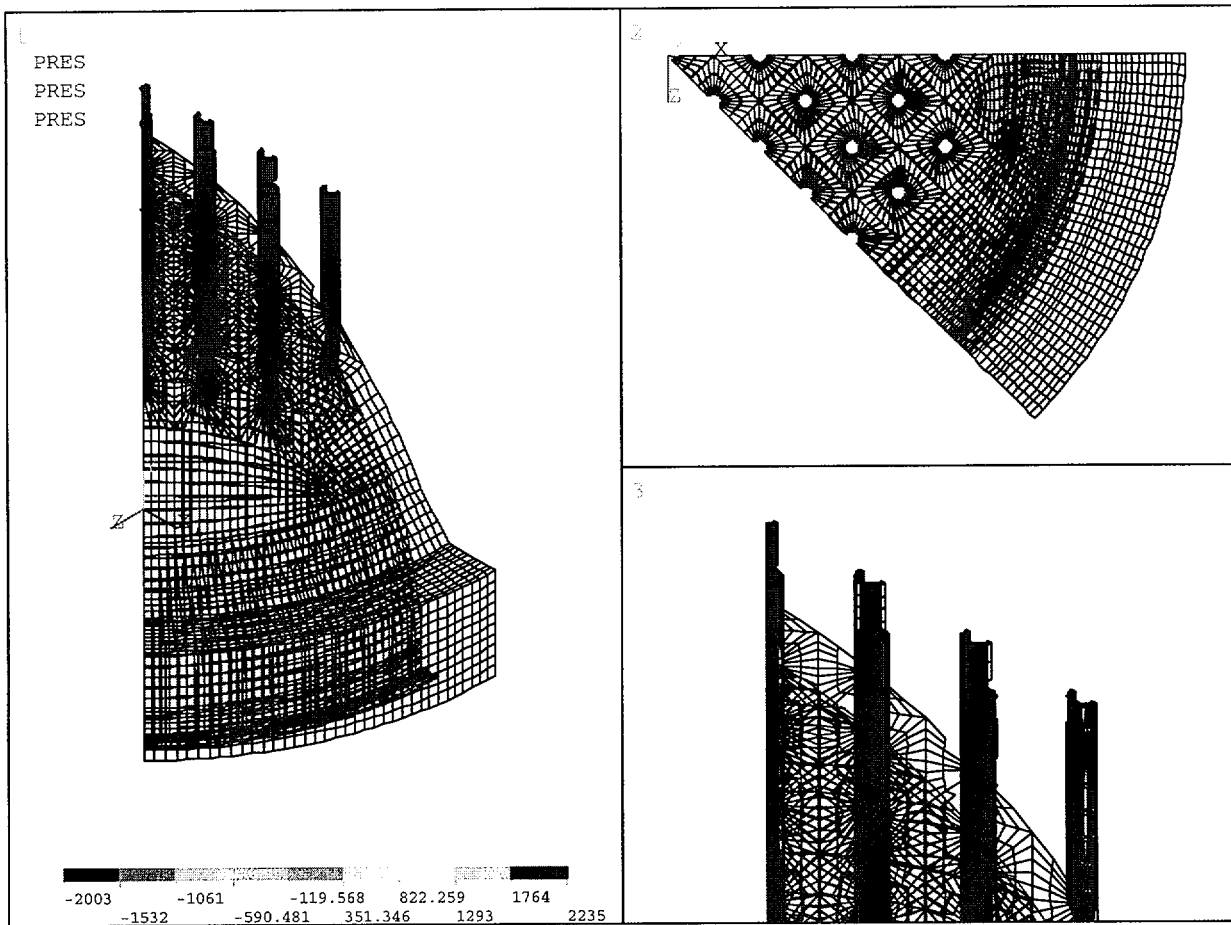


Figure 10 – Applied Normal Operating Pressure Load



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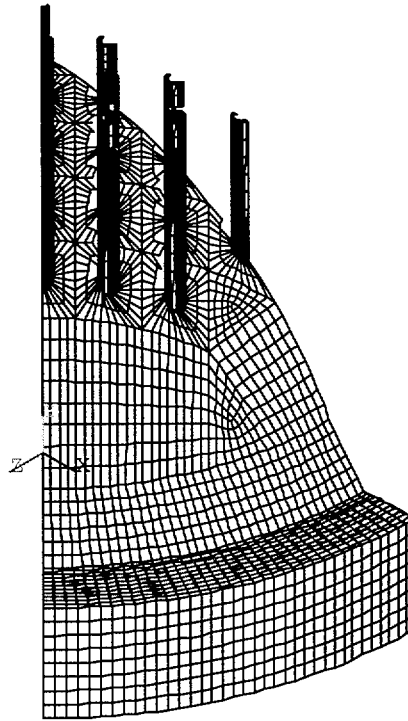


Figure 11 – Applied Pressures To Simulate Closure Bolt Load



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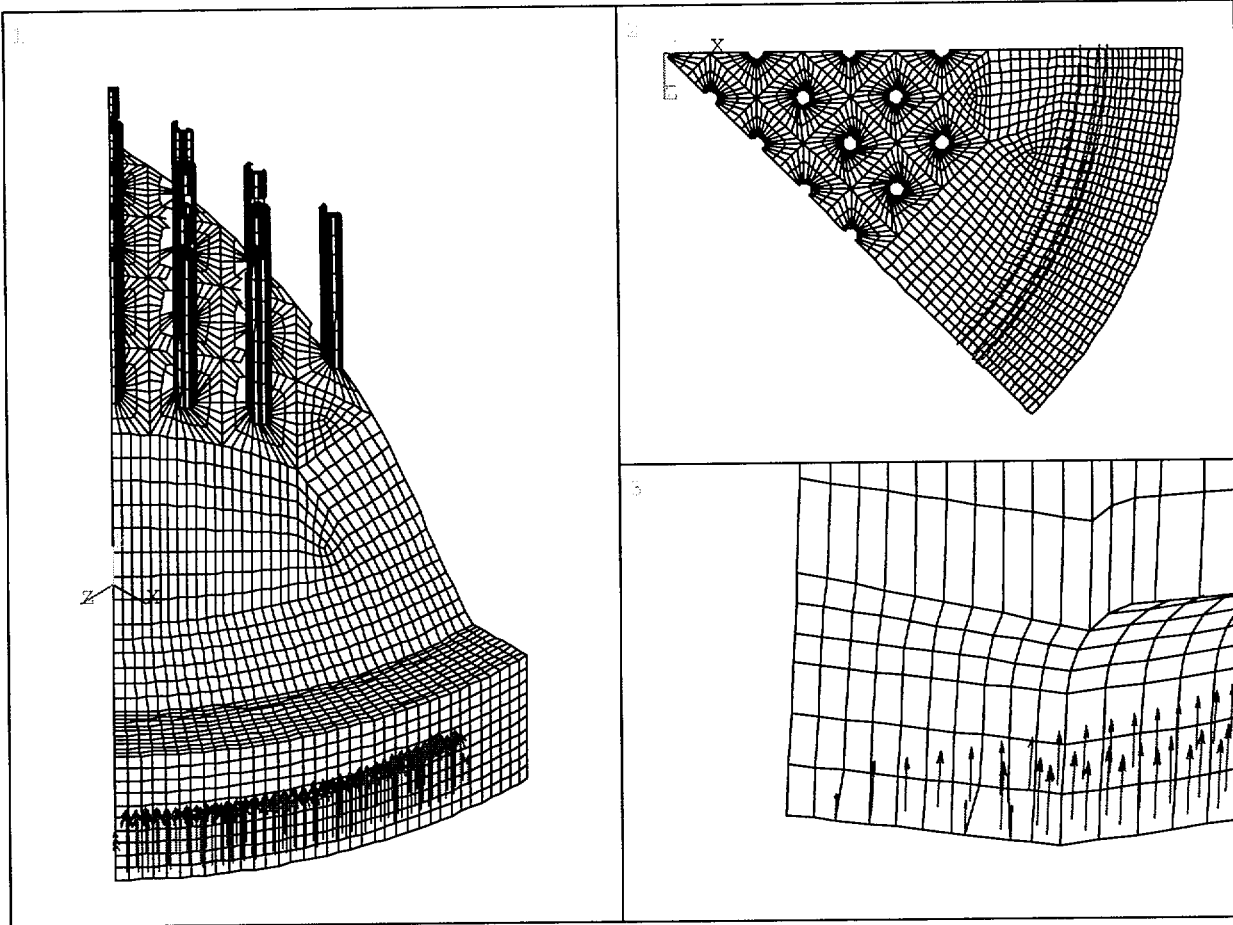
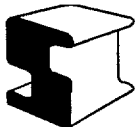



Figure 12 – Applied Gasket and Spring Loads



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APPENDIX A

CRDM to Hemispherical Head Weld Heights Resulting From ANSYS Input File WELD.INP

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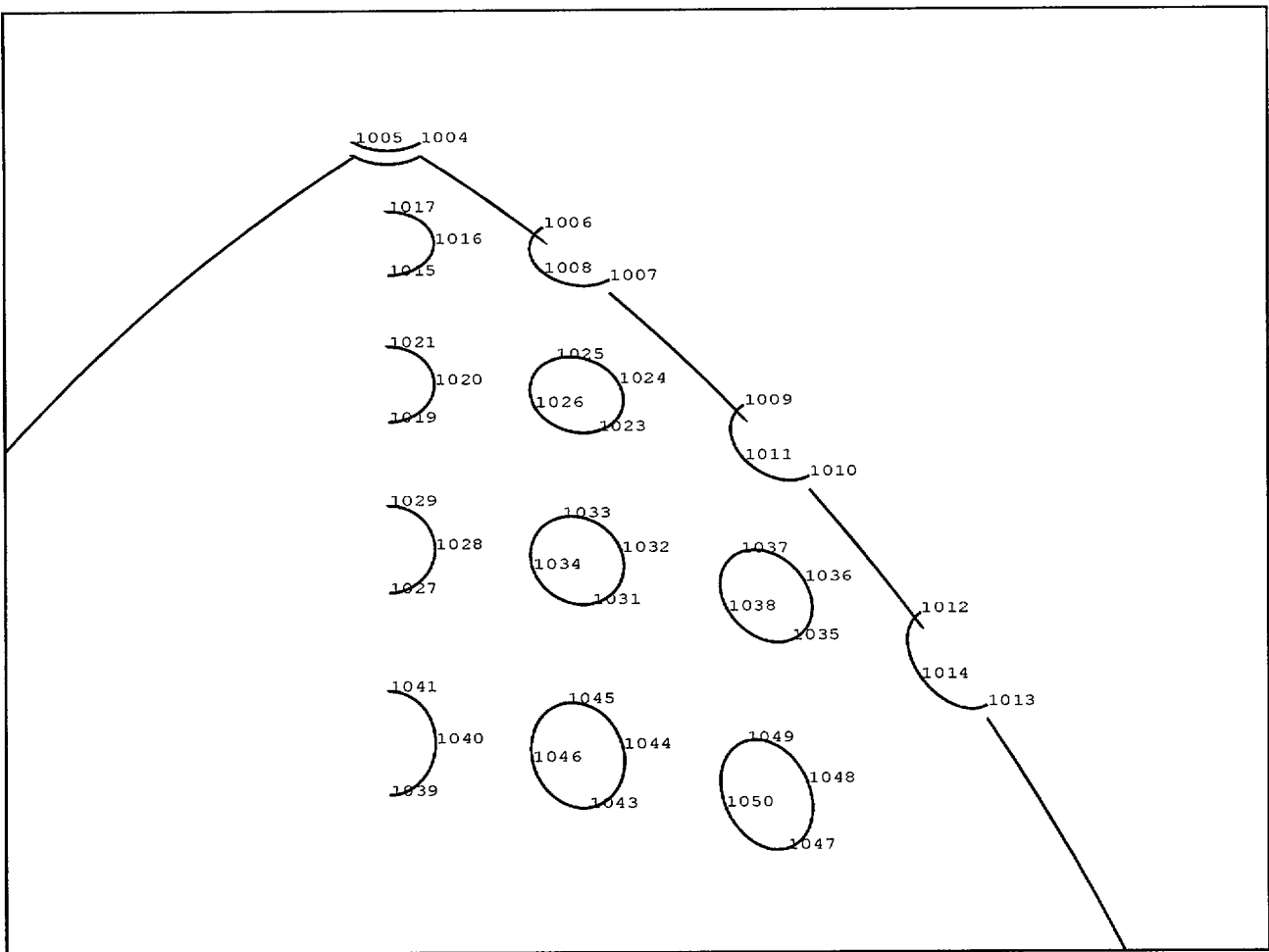


Figure A-1 Key Point Numbers Of Calculated Weld Heights




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A simple ANSYS model was developed in order to quickly determine the maximum and minimum weld elevation for each CRDM tube-to-hemispherical head weld. The model was of the inner base metal surface of the hemispherical head, which occurs at a radius of 74.656 inches [2].

A series of cylinders were then intersected with the inner hemispherical head surface area. These cylinders were located at the CRDM tube locations (see Figure 3) and were modeled with a diameter of $3\frac{25}{32}$ inches [7].

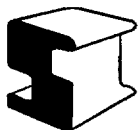
The resulting intersection consisted of a circular set of lines where then copied. These copies were moved $\frac{13}{16}$ inches upward, along the axial path of the CRDM tube. The $\frac{13}{16}$ inch value is the height from the clad/base-metal interface of the hemispherical head to the bottom of the weld prep butter [7]. The resulting lines were then post-processed to determine the final heights. Those heights were then used in the final finite element models to develop a plane that divided the modeled CRDM tube structure along the top of the weld and along the top of the weld butter.

The ANSYS input file developed for this study was named WELD.INP (include on the project CD-Rom). The resulting post-processed output file of heights was named WELD_H.OUT, the results of which are shown in Table A-1.

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**Table A-1
Weld Height Results**

Modeled Tube #	Local CRDM Tube Weld Height	Elevation at Top of CRDM Tube Weld (excluding weld butter), As Measured from Mating Surface Head, (in)			
		Keypoint #	Inside Closure Head Surface Height (in)	Keypoint #	Top of Weld Height (in)
1	Highest	4	80.63206	1004	81.44456
2	Highest	17	79.97209	1017	80.78459
	Lowest	15	79.35752	1015	80.17002
6	Highest	6	79.12507	1006	79.93757
	Lowest	7	78.24422	1007	79.05672
10	Highest	21	77.32393	1021	78.13643
	Lowest	19	76.04295	1019	76.85545
14	Highest	25	76.38781	1025	77.20031
	Lowest	23	74.93462	1023	75.74712
22	Highest	9	73.46274	1009	74.27524
	Lowest	10	71.5372	1010	72.3497
26	Highest	29	72.4503	1029	73.2628
	Lowest	27	70.374	1027	71.1865
30	Highest	33	71.41898	1033	72.23148
	Lowest	31	69.19271	1031	70.00521
38	Highest	37	68.20669	1037	69.01919
	Lowest	35	65.52488	1035	66.33738
46	Highest	41	64.80043	1041	65.61293
	Lowest	39	61.63556	1039	62.44806
50	Highest	45	63.61699	1045	64.42949
	Lowest	43	60.28071	1043	61.09321
58	Highest	12	62.40729	1012	63.21979
	Lowest	13	58.8927	1013	59.7052
62	Highest	49	59.9025	1049	60.715
	Lowest	47	56.00556	1047	56.81806



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APPENDIX B

CASE STUDY FOR USE OF CONTAC52 ELEMENTS TO IMPOSE INTERFERENCE FIT LOADS



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A comparison study was performed using the ANSYS software package [1] to verify that the CONTAC52 element would be an adequate means of simulating the interference load between the CRDM housing tube and the closure head. The verification consisted of two finite element models. The first would use the CONTAC52 gap element while the other would use a simple application of imposed displacement.

Model #1 – CONTAC52 Elements

The first model was a simple tube and plate model as shown in Figure B-1. The plate was 20"x20"x4" and was assumed to be infinitely rigid (Modulus of Elasticity, $E = 30e12$ psi).

A 4 inch diameter hole was centered through the plate into which was inserted a 3.998 inch diameter, 10 inch long tube that had a wall thickness of 0.499 inches. The slight reduction in tube diameter was necessary to support the interference function CONTAC52 elements. The tube was inserted such that its base was flush with the bottom of the plate leaving 6 inches of the tube protruding from the top. The tube was modeled with a Modulus of Elasticity, E , of $30e6$ psi.

CONTAC52 elements were applied at the plate to tube interface with an interference value of -0.01 inches. This should simulate the existence of a 0.01 inch radial interference between the tube and the plate throughout the circumference of the tube and the 4 inch thickness of the plate.

The plate sides and bottom along with the bottom of the tube are held with symmetry boundary conditions. See ANSYS input file TEST2.INP on the project CD-Rom.


The resulting stress intensity in the tube is shown in Figure B-2 and peaks at 233629 psi.

Model #2 – Imposed Displacements

The second model models only the tube from the previous model. Dimensions, mesh density and materials are all the same. The interference load for this analysis consisted of a series of imposed -0.01 inch radial displacements located at the same locations as the gap elements in the previous analysis.

The base of the tube was held with symmetric boundary conditions and a pair of opposing nodes was held in the circumferential direction to prevent rigid body motion. Figure B-3 shows the resulting model and the boundary conditions (including the imposed -0.01 inch radial displacements). See ANSYS input file TEST2a.INP on the project CD-Rom.

The resulting stress intensity for this load is shown in Figure B-4 and peaks at 233776 psi. The stress intensity for this load method is 0.0629% greater than for the theoretically same load applied via the CONTAC52 elements. Clearly use of the CONTAC52 element for interference loading was acceptable.

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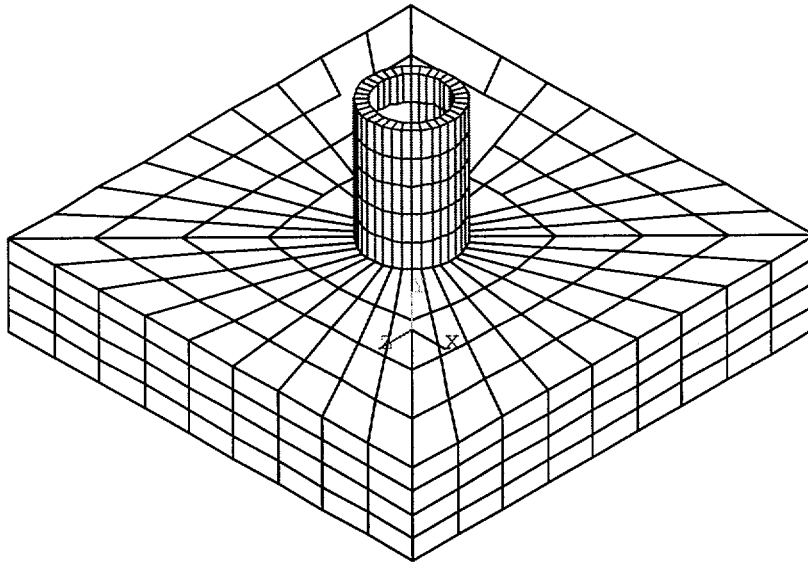


Figure B-1 – Finite Element Model Using Gaps



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NODAL SOLUTION

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AUG 21 2001
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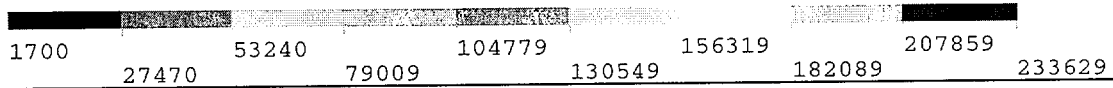
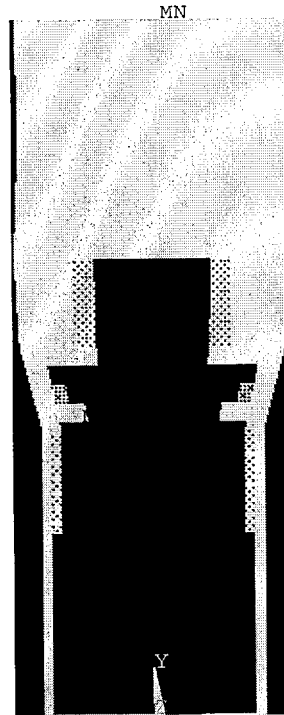


Figure B-2 – Stress Intensity in Tube for Gap Interference Analysis



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1
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TYPE NUM
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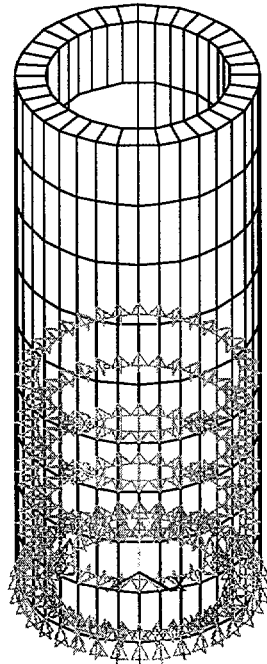


Figure B-3 – Finite Element Model with Boundary Conditions
Using Imposed Displacements for Loading



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NODAL SOLUTION

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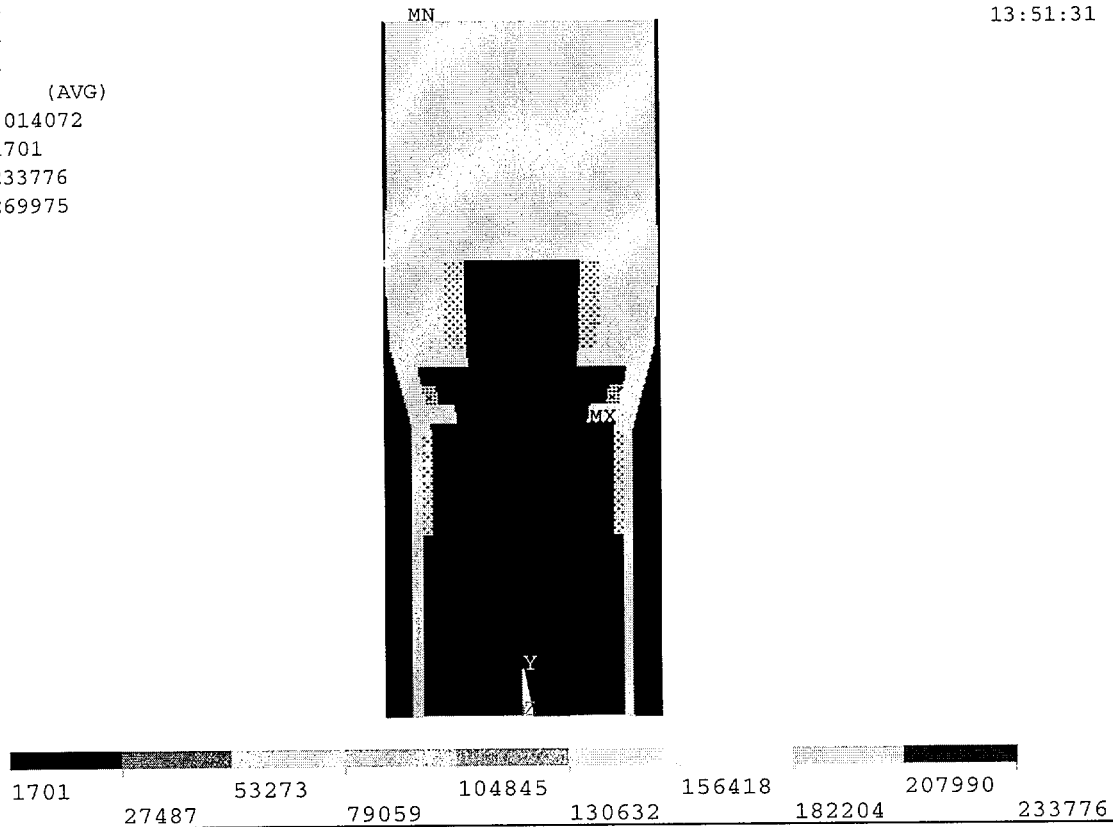


Figure B-4 – Stress Intensity in Tube for Imposed Displacement Analysis



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APPENDIX C

Results Review for CRDM Gap Evaluation for
Normal Operating Conditions
With and Without Pressurization Between CRDM Tube and Hemispherical Head



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C1.0 Additional Evaluations

Due to the lack of gaps in three of the four original normal operating condition cases described in the primary section of the calculation, additional evaluations were performed in an attempt to develop a more comprehensive simulation of the gap opening condition.

C2.0 Finite Element Model Modifications

Three of the original evaluations, the 0.003 inch, 0.00275 inch and 0.0025 inch interference cases, were repeated with only a single addition made to the finite element model. The addition consisted of a pressure load that was applied to the outside diameter of the CRDM tube and to the inside surface of the hemispherical head hole at all 13 modeled CRDM penetrations.

The inclusion of this pressure was based on the assumption that through-wall cracks in the CRDM tubes would result in the pressurization of the region between the CRDM tubes and the hemispherical head (see Appendix D for a more complete study of this assumption).

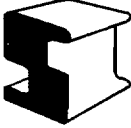
The pressure resulting from CRDM leakage was assumed to be at steam saturation rather than actual normal operating pressure. For a normal operating temperature of 598°F [9], the steam saturation pressure was established as approximately 1550 psi [13].

The input files are named CRDM30-P.INP, CRDM27-P.INP and CRDM25-P.INP for the 0.003 inch, 0.00275 inch and 0.0025 inch diametrical interference cases, respectively.

C3.0 Results

For each evaluation (a total of 7), a series of gap results were determined via post-processing within the analysis input file. The post-processing captured the contact element number, the gap opening (or interference) and the contact element's position relative to its specific tube and wrote them to files with the extension of *.RES. In addition, the post-processing was used to capture the "Status" of each of the contact elements, recording them in a *.GAP output file. The "Status" of a contact element is either a value of 1 (gap closed and not sliding), 2 (gap closed but sliding) and 3 (gap is open). Status 2, "Gap Closed but Sliding," indicates the contact element is no longer in precisely the same orientation it began the evaluation with. As the tube is growing due to thermal expansion and line load pressure, it is expected the majority (if not all) of the contact elements would result in type 2 condition if closed.

All of the resulting contact element data was collected into a series of Excel spreadsheets. For the non-pressurized evaluations (4 total) the Excel file names are CPL30-3.XLS, CPL27-3.XLS, CPL25-3.XLS and CPL20-3.XLS (included in the Project CD-ROM). For the pressurized evaluations (3 total) the Excel file names are CPL30-P.XLS, CPL27-P.XLS and CPL25-P.XLS. Interpretation of these results is included in the following sections.

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C3.1 0.003 Inch Interference Cases

Non-Pressurized

For the 0.003 inch interference condition, 119 of the 1420 modeled contact elements were open, or 8.38%.

Only tube 46 and to a lesser extent, tube 26, show any consistent gaps through which leakage might occur. For tube 46, there exists a vertical path of gaps through 4 of the 5 rings of applied contact elements on the downhill side of the tube. The one closed point occurs at the bottom ring nearest the CRDM J-groove weld.

For tube 26, there exists a vertical path of gaps through 3 out of the 5 rings of applied contact elements. The closed points occur at the top ring and at the bottom ring (nearest the J-groove weld) of contact elements.

No other CRDM tubes show any significant grouping of gaps.

Pressurized

For the pressurized case, 607 of the 1420 modeled contact elements were open, or 42.75%. This represents a significant increase from the original case having only 8.38% open for the non-pressurized case.

All of the tubes show potential leakage paths. However, in all cases the bottom ring of contact elements remained closed. Since the bottom ring (just above the J-groove weld) is the potential trouble area, a more in-depth review was performed. Table C-1 shows the minimum interference anywhere along the bottom ring of each of the CRDM penetrations for both the pressurized and non-pressurized case.



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Table C-1
Minimum Interference For Bottom Ring
0.003 Inch Diametrical Interference Case

CRDM Tube #	Minimum Interference (inches) For Bottom Interference Zone Ring	
	wo/Pressure	w/Pressure
1	-0.000064609	-0.000054150
2	-0.000065648	-0.000054419
6	-0.000087442	-0.000074289
10	-0.000066877	-0.000055161
14	-0.000111900	-0.000094158
22	-0.000087176	-0.000071974
26	-0.000065848	-0.000053103
30	-0.000107100	-0.000086428
38	-0.000098461	-0.000077773
46	-0.000054167	-0.000042051
50	-0.000090520	-0.000066650
58	-0.000069123	-0.000050235
62	-0.000075576	-0.000053310

C3.2 0.00275 Inch Interference Cases


Non-Pressurized

For the 0.00275 inch interference condition, 181 of the 1420 modeled contact elements were open, or 12.75%. The resulting distribution of gaps is essentially the same as the 0.003 inch interference case. The extra gaps tended to extend the 0.003 inch non-pressurized case open gaps circumferentially around the CRDM tube. The following tubes have some potential for leakage; tube 1, 26, 46 and 62

For tube 46, there exists a vertical path of gaps through 4 of the 5 rings of applied contact elements on the downhill side of the tube. The one closed point occurs at the bottom ring nearest the CRDM J-groove weld.

For tube 1, 26 and 62 there exists a vertical path of gaps through 3 out of the 5 rings of applied contact elements. The closed points occur at the top ring and at the bottom ring (nearest the J-groove weld) of contact elements.

No other CRDM tubes show any significant grouping of gap openings.

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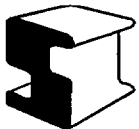
Pressurized

For the pressurized case, 692 of the 1420 modeled gaps were open, or 48.73%. This again represents a significant increase from the original case, which had only 12.75% open.

There is not a significant change in the gap alignment for this case as compared to the pressurized 0.003 inch interference case. The gap regions tend to expand circumferentially increasing the size of the leak path. However, once again the bottom ring of gaps remains closed. Table C-2 summarizes the resulting minimum interference anywhere along the bottom ring of each of the CRDM penetrations for both the pressurized and non-pressurized case.

Table C-2
Minimum Interference For Bottom Ring
0.00275 Inch Diametrical Interference Case

CRDM Tube #	Minimum Interference (inches) For Bottom Interference Zone Ring	
	wo/Pressure	w/Pressure
1	-0.000056496	-0.000045968
2	-0.000057417	-0.000046633
6	-0.000077327	-0.000065653
10	-0.000058955	-0.000047017
14	-0.000098439	-0.000079858
22	-0.000078153	-0.000062861
26	-0.000058065	-0.000045626
30	-0.000093600	-0.000072579
38	-0.000085091	-0.000064472
46	-0.000047420	-0.000035080
50	-0.000077554	-0.000054332
58	-0.000060992	-0.000041495
62	-0.000063125	-0.000041497



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C3.3 0.0025 Inch Interference Cases

Non-Pressurized

For the 0.0025 inch interference condition, 317 of the 1420 modeled contact elements were open, or 22.32%. The distribution of gaps for this evaluation saw a much larger number of tubes that have potential leak paths. However, in no case was the bottom ring of contact elements ever open. For all tubes this ring of interference nearest the J-groove weld remained closed.

Tubes 1, 2, 6, 10, 26 and 46 have vertical paths of gaps for 4 of the 5 interference rings (the fifth being the lowest ring nearest the weld).

Tubes 14, 22, 38, 50, 58 and 62 have vertical paths of gaps that extend through 3 of the 5 rings. The two rings of interference that remained closed were the bottom (nearest the weld) and the top (nearest the outside diameter of the head). Thus the middle portion of the CRDM interference zone was open.

Only tube 30 showed limited gaps such that no leak paths were readily apparent.

Pressurized

For the pressurized case, 755 of the 1420 modeled contact elements were open, or 53.17%, as compared to the non-pressurized 0.0025 case result of 22.32%. The increase in gaps from the 0.00275 inch pressurized case is much smaller when compared to the number of gaps for the non-pressurized evaluations. See Table C-3 for the comparison.

**Table C-3
Comparison of Open Gaps
No Pressure and Pressure Case**

Interference Value (inches)	Percentage of Open Gaps	
	w/Pressure	wo/Pressure
0.003	42.75%	8.38%
0.00275	48.73%	12.75%
0.0025	53.17%	22.32%

The results of this evaluation continue the trend established by the previous two pressurized interference cases. The open contact elements continue to increase circumferentially, but the bottom ring contact elements remain closed. Table C-4 compares the minimum interference value for the bottom ring of contact elements for all tubes for the pressurized and non-pressurized 0.0025 inch interference case.


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Table C-4
Minimum Interference For Bottom Ring
0.0025 Inch Diametrical Interference Case

CRDM Tube #	Minimum Interference (inches) For Bottom Interference Zone Ring	
	wo/Pressure	w/Pressure
1	-0.000048338	-0.000037783
2	-0.000049263	-0.000038783
6	-0.000067255	-0.000057061
10	-0.000050825	-0.000038968
14	-0.000085479	-0.000065799
22	-0.000068245	-0.000054471
26	-0.000050277	-0.000037528
30	-0.000079802	-0.000058840
38	-0.000071736	-0.000050893
46	-0.000040512	-0.000028088
50	-0.000064794	-0.000041795
58	-0.000052433	-0.000032769
62	-0.000051984	-0.000029524

C3.3 0.002 Inch Interference Cases

Non-Pressurized Case Only

For the 0.002 inch interference condition, 688 of the 1420 modeled contact elements were open, or 48.45%. The distribution of gaps for this evaluation saw all of the tubes possessing potential leak paths. However, in no case was the bottom ring of contact elements ever open. For all tubes this ring of interference nearest the J-groove weld remained closed.

Table C-5 shows the minimum interference value for the bottom ring of contact elements for all tubes for the non-pressurized 0.002 inch interference case.


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Table C-5
Minimum Interference For Bottom Ring
0.002 Inch Diametrical Interference Case

CRDM Tube #	Minimum Interference For Bottom Interference Zone Ring (inches)
	wo/Pressure
1	-0.000032029
2	-0.000032911
6	-0.000049257
10	-0.000034398
14	-0.000058487
22	-0.000048331
26	-0.000034106
30	-0.000053234
38	-0.000046265
46	-0.000026625
50	-0.000039979
58	-0.000031762
62	-0.000029263



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APPENDIX D

Annular Gap Pressurization Feasibility Study



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D1.0 Annular Gap Pressurization

The primary concern of this evaluation is the potential leakage paths between the CRDM tube and the wall of the closure head in the event of a through-wall crack developing in the CRDM tube. At this time, these through-wall cracks initiate at the crevice formed at the top of the CRDM J-groove weld. It is therefore obvious to assume that once a through-wall crack has formed, the region local to the crack will be pressurized. The basis of this study is to show that this local pressurization can expand a region of local gaps such that a leak path from the crack location to the outside can be formed.

D2.0 First Pass Annular Pressure Study

For this study, the 0.0025 inch interference case evaluation was used as the initial baseline. Tube 62 was selected as having a region of open contact elements that did not include a leak path to the outside surface. The remaining tubes were not evaluated within the scope of this study but were left unmodified from the original evaluation conditions.

Figure D-1 shows the region of open contact elements that resulted during normal operating conditions for tube 62. Assuming a crack formed in this region, any element face that had open contact elements at all of its corners had a pressure applied to it equal to the normal operating pressure.

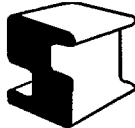
In addition, it was assumed that the crack through the tube wall occurred right at the weld interface and that the bottom ring of contact elements opened immediately as part of the crack opening and the small interference values documented in Appendix C. Therefore the elements directly below the open gap region and those space elements directly below that were also pressurized to normal operating pressure.

Finally, those element faces adjacent to the open contact elements but which have closed contact elements at other corners had a pressure of $\frac{1}{2}$ the normal operating pressure. The input file for this evaluation is named CRDM25K2.INP and included on the Project CD-Rom.

The resulting pressure load is shown in Figure D-2. Note that an identical pattern of pressure was applied to the hole face on the hemispherical head.

D3.0 First Pressure Pass Results

The resulting open contact pattern for the pressurized case described above is shown in Figure D-3. Note that the top ring remained closed, as did the bottom, with growth in the gap region occurring only in the circumferential directions.

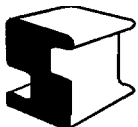
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D4.0 Second Pass Annular Pressure Study

Based on the results of the first pass annular pressure study, the applied annular pressure regions were increased using the same methodology described above in Section D2.0. The resulting pressure region for tube 62 is shown in Figure D-4. The input file for this evaluation is named CRDM25K3.INP and included on the Project CD-Rom.

D5.0 Second Pressure Pass Results

The results of the second pass show that a leak path has now been opened at the top ring of interference. The bottom ring remains closed (through it was assumed to be open due to the crack and low interference values). The resulting open contact elements for this case are shown in Figure D-5.



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Interference Zone (Grey)
(Diametrical Interference = 0.0025 inches)

Space (White)
(Thickness of Butter)

Weld (Green)

Open Contact Element (Gaps)

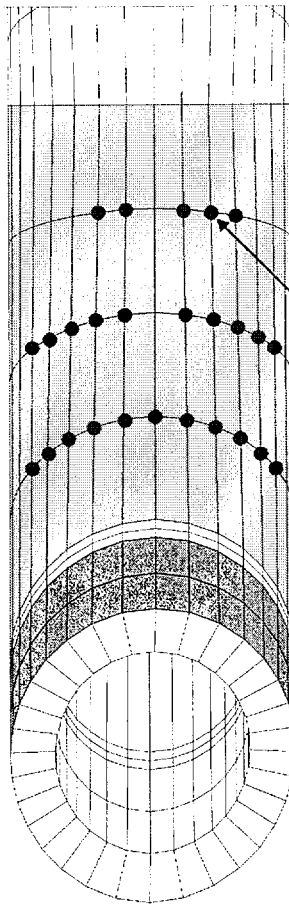


Figure D-1 – Contact Element Condition for Tube 62 at Normal Operating Conditions



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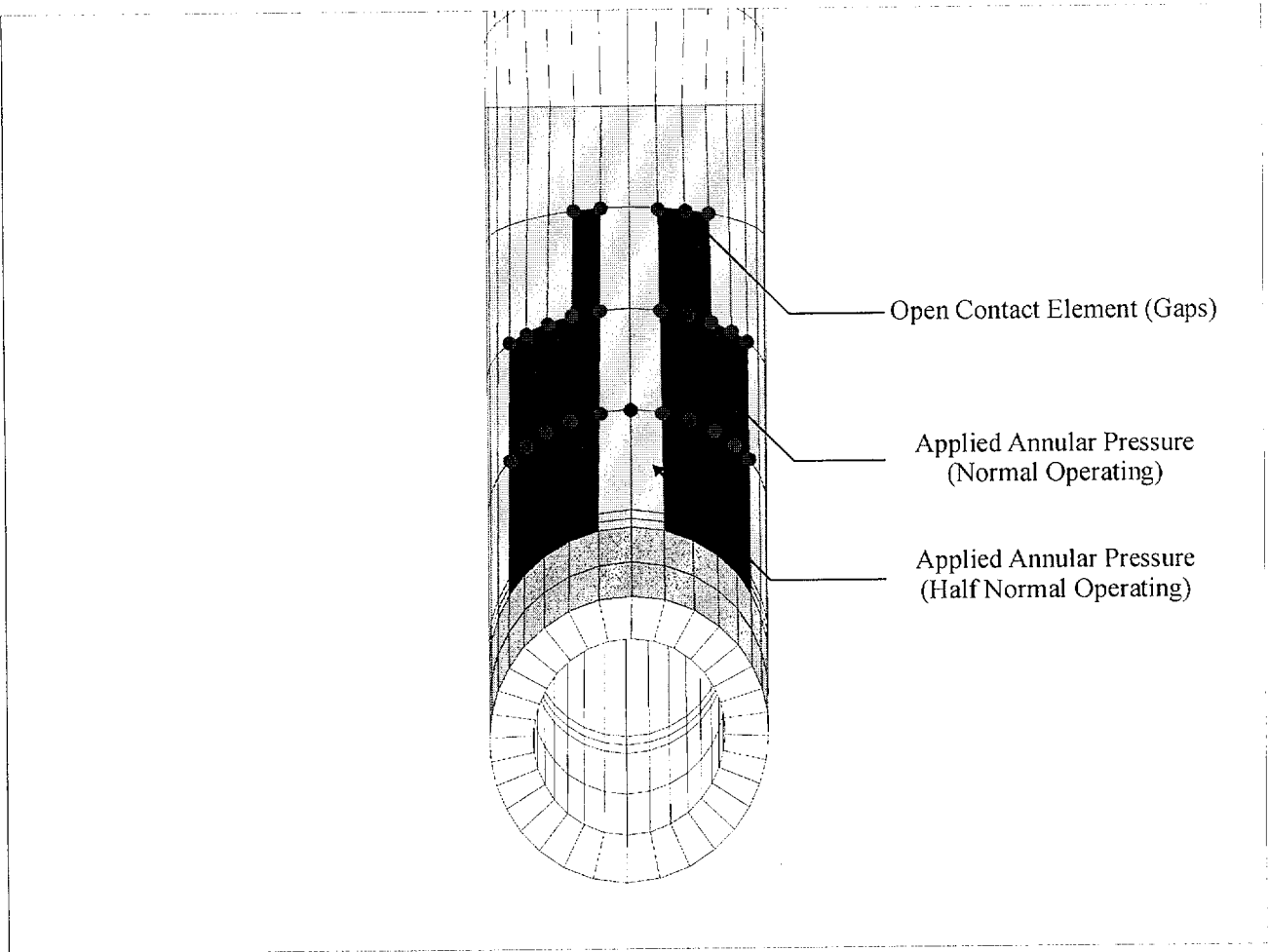


Figure D-2 – Applied First Pass Annular Pressure



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Interference Zone (Grey)
(Diametrical Interference = 0.0025 inches)

Space (White)
(Thickness of Butter)

Weld (Green)

Open Contact Element (Gaps)

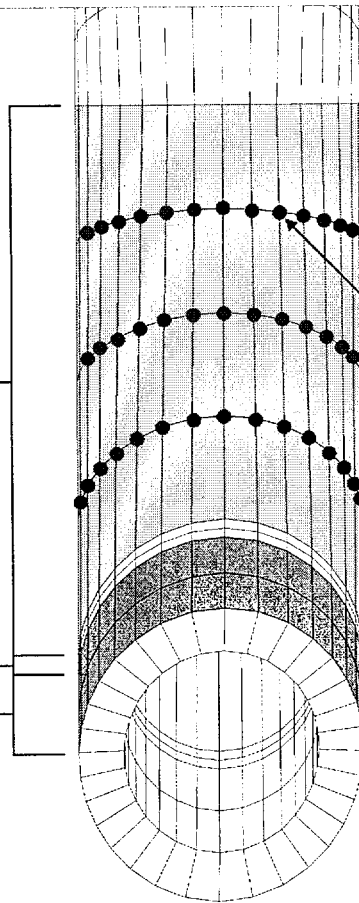


Figure D-3 – Contact Element Results Following First Annulus Pressure Pass



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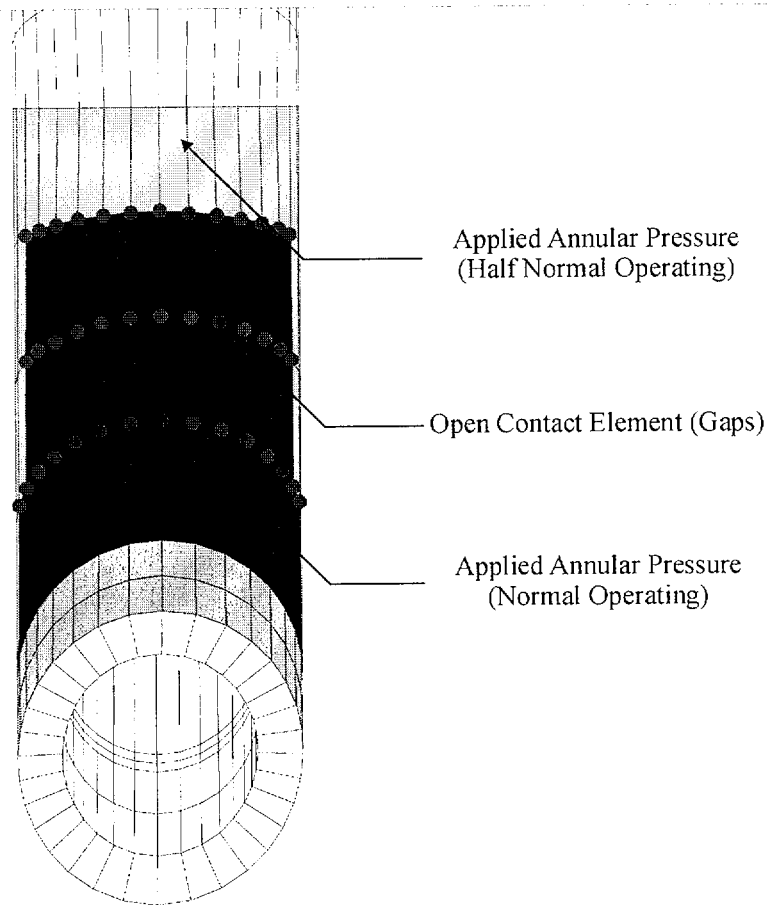


Figure D-4 – Applied Second Pass Annular Pressure



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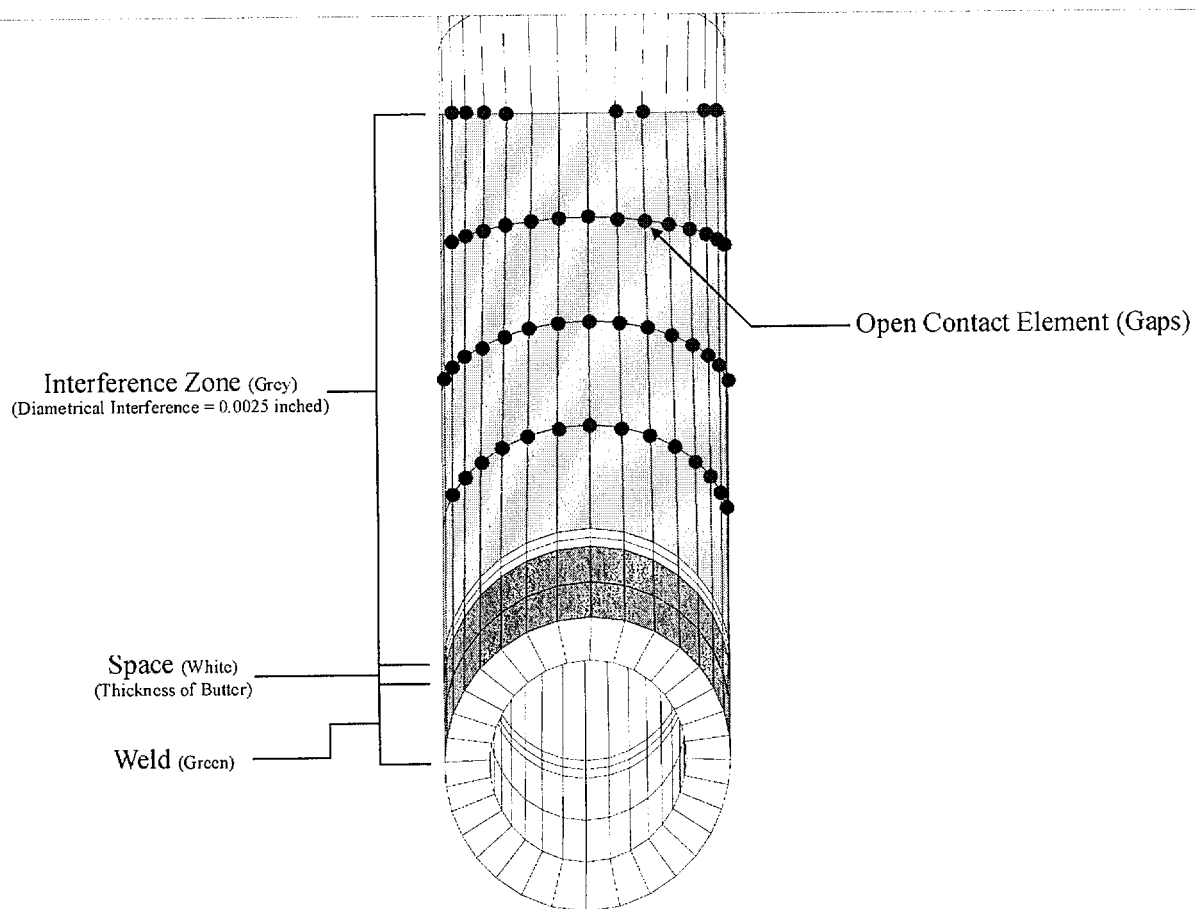


Figure D-5 – Contact Element Results Following Second Annulus Pressure Pass



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