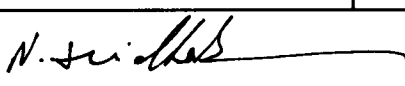


SOFTWARE RELEASE NOTICE

1. SRN Number:		
2. Project Title: Models for Evaluating Corrosion Under Disbonded Coating on Steel Pipeline		Project No. 20.01136
3. SRN Title: TECTRAN, Version 1.0		
4. Originator/Requestor: N. Sridhar		Date: 09/06/2002
5. Summary of Actions <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <input checked="" type="checkbox"/> Release of new software <input type="checkbox"/> Release of modified software: <div style="margin-left: 20px;"> <input type="checkbox"/> Enhancements made <input type="checkbox"/> Corrections made </div> </div> <div> <input type="checkbox"/> Change of access software <div style="margin-left: 20px;"> X Software Retirement <i>VS 8/5/03</i> </div> </div> </div>		
6. Validation Status <div style="margin-top: 10px;"> <input checked="" type="checkbox"/> Validated <input type="checkbox"/> Limited Validation <input type="checkbox"/> Not Validated Explain: _____ </div>		
7. Persons Authorized Access		
Name	Read Only/Read-Write	Addition/Change/Delete
N. Sridhar S. Brossia L.T. Yang	RO/RW RO RO	A/C/D
8. Element Manager Approval: <i>[Signature]</i>		Date: 9/5/02
9. Remarks: <i>Software transferred to Div. 18 (N. Sridhar)</i>		

SOFTWARE SUMMARY FORM

01. Summary Date: 09/06/2002	02. Summary prepared by (Name and phone) N. Sridhar	03. Summary Action:	
04. Software Date: 09/06/02	05. Short Title: GTI Disbonded coating project, 20.01136		
06. Software Title: TECTRAN, Version 1.0		07. Internal Software ID:	
08. Software Type: <input type="checkbox"/> Automated Data System <input checked="" type="checkbox"/> Computer Program <input type="checkbox"/> Subroutine/Module	09. Processing Mode: <input type="checkbox"/> Interactive <input checked="" type="checkbox"/> Batch <input type="checkbox"/> Combination	10. Application Area a. General: <input type="checkbox"/> Scientific/Engineering <input checked="" type="checkbox"/> Auxiliary Analyses <input type="checkbox"/> Total System PA <input type="checkbox"/> Subsystem PA <input type="checkbox"/> Other b. Specific: Will be used for non-NRC programs	
11. Submitting Organization and Address: CNWRA/SwRI 6220 Culebra Road San Antonio, TX 78228		12. Technical Contact(s) and Phone: N. Sridhar, (210) 522-5538	
13. Software Application: Determines the spatial and temporal changes of species in a crevice due to electrochemical and chemical reactions. Specifically, it addresses the environment under a disbonded coating on steel pipes.			
14. Computer Platform PC	15. Computer Operating System: Windows	16. Programming Language(s): Fortran 77	17. Number of Source Program Statements: 18,000
18. Computer Memory Requirements: 500Mb storage	19. Tape Drives: None	20. Disk Units:	21. Graphics: Excel, Grapher, etc.
22. Other Operational Requirements			
23. Software Availability: <input type="checkbox"/> Available <input type="checkbox"/> Limited <input checked="" type="checkbox"/> In-House ONLY		24. Documentation Availability: <input type="checkbox"/> Available <input type="checkbox"/> Preliminary <input checked="" type="checkbox"/> In-House ONLY	
25.  Software Developer: N. Sridhar Date: 9/6/2002			

CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES
QA VERIFICATION REPORT
FOR

→ DEVELOPED OR ACQUIRED TO BE MODIFIED SOFTWARE ←

Software Title/Name:	<u>Tectran</u>
Version:	<u>1.0</u>
Demonstration workstation:	
Operating System:	<u>DOS</u>
Developer:	<u>N. Sridhar</u>

Software Requirements Description (SRD) [TOP-018, Section 5.3]

SRD Version:	<u>Revision 1.0 March 1999</u>
SRD Approval Date:	<u>June 6, 2000 Feb 9/23/02</u>

SRD and any changes thereto reviewed in accordance with QAP-002 requirements?
Reviewed Feb. 9, 1999 Yes: ☒ No: ☐ N/A: ☐

Is a Software Change Report(s) (SCR) used for minor modifications (i.e., acquired code), problems or changes to a configured version of software?
Yes: ☐ No: ☐ N/A: ☒

Comments:

Software Development Plan (SDP) [TOP-018, Section 5.4]

SDP Version:	<u>No SDP*</u>
SDP (EM) Approval Date:	

The SDP addresses applicable sections of TOP-018, Appendix B, SDP Template?
See notebook #290 Yes: ☐ No: ☐ N/A: ☒

Is the waiver (if used) in accordance with specified guidelines?
Yes: ☐ No: ☐ N/A: ☒

Comments: * See email Sugar to sridhar July 19, 2001

Design and Development [TOP-018, Section 5.5.1 - 5.5.4]

Is code development in accordance with the conventions (i.e., coding conventions) described in the SDP/SCR?
No SDP. Yes: ☐ No: ☐ N/A: ☒

Module(s) Reviewed:	<u>main.f</u>	}
	<u>mass tran.f</u>	
	<u>set b con.f</u>	
Comments:		

**CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES
QA VERIFICATION REPORT
FOR**

→ DEVELOPED OR ACQUIRED TO BE MODIFIED SOFTWARE ←

Is code internally documented to allow a user to understand the function(s) being performed and to follow the flow of execution of individual routines?

*Ref TOP-018 } - No purpose for setb con.f
S.5.3. } - Data elements not defined*

Yes: ☐ No: ☒ N/A: ☐

Module(s) Reviewed:

Coefs.f

Comments:

*Setb con.f
mass tran.f*

Is development of the code and informal module/subroutine-level testing documented in scientific notebook and/or SCR?

Yes: ☒ No: ☐ N/A: ☐

SCR's and/or Scientific Notebook(s) Reviewed:

Tests and data are located

Comments:

on enclosed CD ⇒ file "Tests"

Software designed so that individual runs are uniquely identified by date, time, name of software and version?

Yes: ☒ No: ☐ N/A: ☐

Date and Time Displayed: *Mon Sep 23 15:40:49 2002*

Name/Version Displayed: *TECRAN Version 1.0 Beta*

Comments:

See attached example output from "Testart"

Medium and Header Documentation [TOP-018, Section 5.5.6]

A program title block of main program contains: Program Title, Customer Name, Customer Office/Division, Customer Contact(s), Customer Phone Number, Associated Documentation, Software Developer and Phone Number, Date, and Disclaimer/Notice?

Yes: ☐ No: ☒ N/A: ☐

Comments:

main.f No customer telephone #.

Source code module headers contain: Program Name, Client Name, Contract reference, Revision Number, Revision History, and Reference to SRD/SCR requirement(s)?

Yes: ☐ No: ☒ N/A: ☐

Module(s) Reviewed:

mass tran.f

Comments:

*Coefs.f
Setb con.f*

The physical labeling of software medium (tapes, disks, etc.) contains: Program Name, Module/Name/Title, Module Revision, File type (ASCII, OBJ, EXE), Recording Date, and Operating System(s)?

Yes: ☒ No: ☐ N/A: ☐

Comments:

TECRAN Version 1.0

CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES
QA VERIFICATION REPORT
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Code Reviews [TOP-018, Section 5.5.6]

Are code reviews (if implemented) documented in a scientific notebook or in another format that allows others to understand the code review process and results?

Yes: ☐ No: ☐ N/A: ☒

Documented in Scientific Notebook No.: _____

Comments: *Not required - no SDP.*

Acceptance and Installation Testing [TOP-018, Section 5.6]

Does *acceptance testing* demonstrate whether or not requirements in the SRD and/or SCR(s) have been fulfilled?

Refer to reviewer comment for draft final report.

Yes: ☐ No: ☐ N/A: ☐

Has *acceptance testing* been conducted for each intended computer platform and operating system?

Yes: ☐ No: ☐ N/A: ☐

Computer Platforms: _____ Operating Systems: _____

Location of Acceptance Test Results: _____

Comments:

Has *installation testing* been conducted for each intended computer platform and operating system?

Yes: ☐ No: ☐ N/A: ☐

Computer Platforms: _____ Operating Systems: _____

Location of Acceptance Test Results: _____

Comments:

User Documentation [TOP-018, Section 5.5.7]

Is there a Users' Manual for the software and is it up-to-date?

Yes: ☐ No: ☐ N/A: ☐

User's Manual Version and Date: _____

Comments:

CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES
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Are there basic instructions for the *installation* and *use* of the software?

Yes: ☒ No: ☐ N/A: ☐

Location of Instructions: see enclosed

Comments: "Shortened Instructions for Running FECTRAW"

Configuration Control [TOP-018, Section 5.7, 5.9.3]

Is the Software Summary Form (Form TOP-4-1) completed and signed?

Yes: ☒ No: ☐ N/A: ☐

Date of Approval: Sept. 6, 2002

Is the list of files attached to the Software Summary Form complete and accurate?

Yes: ☒ No: ☐ N/A: ☐

Comments:

Is the source code available or, is the executable code available in the case of (acquired/commercial codes)?

Yes: ☒ No: ☐ N/A: ☐

Location of Source Code: see enclosed CD.

Comments:

Have all the script/make files and executable files been submitted to the Software Custodian?

Yes: ☒ No: ☐ N/A: ☐

Location of script/make files: see enclosed CD.

Comments:

Software Release [TOP-018, Section 5.9]

Upon acceptance of the software as verified above, has a Software Release Notice (SRN), Form TOP-6 been issued and does the version number of the software match the documentation?

Yes: ☐ No: ☐ N/A: ☐

SRN Number: _____

Comments:

CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES
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Software Validation [TOP-018, Section 5.10]

Has a Software Validation Test Plan (SVTP) been prepared for the range of application of the software?

Yes: ☐ No: ☐ N/A: ☒

Version and Date of SVTP: _____

Date Reviewed and Approved via QAP-002: _____

Comments: *Validation Plan & Results Combined into one report*

Has a Software Validation Test Report (SVTR) been prepared that documents the results of the validation cases, interpretation of the results, and determination if the software has been validated?

Yes: ☒ No: ☐ N/A: ☐

Version and Date of SVTR: *1.0 , Sept 17, 2002*

Date Reviewed and Approved via QAP-002: *Sept. 20, 2002*

Comments:

Additional Comments:

Software Developer/Date

Software Custodian/Date

QA Verification Report
Comments on TECTRAN, Version 1.0

Reviewed main.f, coefs.f, setbcon.f, and masstran.f.

Reference TOP-018, 5.5.3:

Data elements not fully defined as to purpose, units and possible values
In-line comments exist but are limited in providing information on function and flow

Reference TOP-018, 5.5.6:

- The program title block in main.f does not include the customer telephone number, contract number, and identified the software as being version "1.0-Beta".
- The source code header information does not include:
 - Program name
 - Client name
 - Contract number
 - Revision history or space to document future revisions
- Module setbcon.f does not have its "purpose" defined.

Reference TOP-018, Section 5.6:

Acceptance testing demonstrates whether the requirements specified in the Software Requirements Specification (SRD) have been met. Testing has been completed as part of the technical review of the draft final report and as part of the validation. Traceability of testing problems and results to the specific SRD requirement(s) is not clear. Does the final report supercede the SRD?

Reference TOP-018, Section 5.5.7:

There is no User's Manual for the software. TOP-018 requires that a firm date be established for a User's Manual.

*Sp: dhr to disposition these
issues via email.*

Discussed Sept. 24, 2002

Rory Zuer

TECTRAN, VERSION 1.0

Volume in drive R is NEW
Volume Serial Number is BD2D-9810

Directory of R:\

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
09/05/02	09:03a	<DIR>	Final Report
09/05/02	09:03a	<DIR>	srd
09/05/02	09:02a	<DIR>	tec3d
09/05/02	09:01a	<DIR>	tests
			6 File(s) 0 bytes

Directory of R:\Final Report

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
03/07/01	04:50p		0 0chapter.pdf
02/14/02	02:14p		19,968 Chuck French letter.doc
02/20/01	09:03a		38,912 Shortened Instructions for running TECTRAN.doc
03/08/01	10:41a		80,896 annual report01-APDX A.doc
03/08/01	10:41a		45,568 annual report01-APDX B.doc
03/08/01	02:25p		20,992 cover letter.doc
02/14/02	10:24a		1,447,027 disbondcorrosion_swrimodel.pdf
03/07/01	03:38p		495,104 final ch2-expt.doc
03/07/01	03:28p		308,736 final report-ch1intro.doc
03/07/01	03:42p		0 final report-ch1intro.pdf
03/08/01	11:11a		259,072 final report-ch3TEC.doc
03/08/01	10:36a		617,472 final report-ch4UFL.doc
03/08/01	10:39a		118,784 final report-ch5 oli.doc
10/30/01	08:18a		103,424 final report-preface.doc
03/07/01	05:41p		29,696 final rport-ch6summary.doc
03/02/01	03:38p		36,864 finalreport-ch7refs.doc
02/19/01	05:37p		34,304 finalreport-refs.doc
03/09/01	09:25a		1,310,192 finrpt.pdf
09/05/02	09:03a	<DIR>	redlinestrikeout
			21 File(s) 4,967,011 bytes

Directory of R:\Final Report\redlinestrikeout

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
02/27/01	09:07a		100,864 0 final report-preface.doc
02/27/01	09:08a		315,392 1 final report-ch1intro.doc
02/27/01	09:08a		500,224 2 final ch2-expt.doc
02/27/01	09:08a		264,704 3 final report-ch3TEC.doc
02/27/01	09:08a		660,480 4 final report-ch4UFL.doc
02/27/01	09:09a		116,224 5 final report-ch5 oli.doc
02/27/01	09:09a		31,744 6 final rport-ch6summary.doc
03/08/01	11:11a		259,072 final report-ch3TEC.doc
			10 File(s) 2,248,704 bytes

Directory of R:\srd

```

01/01/01 12:00a      <DIR>      .
01/01/01 12:00a      <DIR>      ..
07/23/97 01:47p                9,250 corr.aux
07/23/97 01:47p            189,700 corr.dvi
07/23/97 01:47p                1,688 corr.lof
07/23/97 01:47p                8,744 corr.log
07/23/97 01:47p                599 corr.lot
07/23/97 01:46p            112,911 corr.tex
07/23/97 01:47p                4,754 corr.toc
09/16/97 12:50p                75 exp.txt
09/05/02 09:03a      <DIR>      figures
06/23/98 04:03p            10,491 ftd.tex
03/06/96 11:07a            19,314 gem.tex
09/14/99 01:13p        675,639 multiflo.wpd
06/23/98 04:06p                2,386 srdv1.aux
06/23/98 04:06p            65,892 srdv1.dvi
06/23/98 04:06p                7,393 srdv1.log
06/23/98 04:06p            39,569 srdv1.tex
06/23/98 04:06p                1,408 srdv1.toc
      19 File(s)      1,149,813 bytes

```

Directory of R:\srd\figures

```

01/01/01 12:00a      <DIR>      .
01/01/01 12:00a      <DIR>      ..
07/31/94 05:47p                9,076 adsor10.eps.gz
10/13/94 09:26a            13,900 conc.eps.gz
02/18/94 04:49p                3,783 cylin.eps.gz
08/25/94 12:46p                7,720 ehph.eps.gz
06/21/94 03:56p                8,456 geom.eps.gz
06/25/94 12:14p            12,654 nacl.eps.gz
07/26/94 08:37a                6,058 penapor.eps.gz
07/25/94 04:20p            11,944 penavol.eps.gz
06/24/94 09:41a            13,614 ph2to3r1a.eps.gz
10/13/94 10:36a            16,873 ph2to3r1b.eps.gz
08/26/94 02:35p            17,679 ph2to3r1bx.eps.gz
06/24/94 09:28a                9,992 ph3to2r1a.eps.gz
08/26/94 02:28p            13,631 ph3to2r1b.eps.gz
06/24/94 09:30a                9,342 ph3to2r2a.eps.gz
08/26/94 02:29p            11,119 ph3to2r2b.eps.gz
08/26/94 11:02a                9,218 ph5to2a.eps.gz
08/26/94 02:33p                9,984 ph5to2b.eps.gz
08/25/94 12:47p                6,544 por1000c.eps.gz
10/13/94 09:28a                8,342 rateac.eps.gz
10/13/94 09:29a                8,674 rateacl.eps.gz
08/25/94 12:46p                7,543 uo2fetot.eps.gz
08/25/94 12:47p            10,636 vol1000c.eps.gz
10/13/94 09:27a                8,341 volac.eps.gz
      25 File(s)      235,123 bytes

```

Directory of R:\tec3d

```

01/01/01 12:00a      <DIR>      .
01/01/01 12:00a      <DIR>      ..
06/28/99 04:33p            1,997 ADDRESS.H
08/18/99 07:49p            12,581 Allot.f

```

06/28/99	11:24a	3,592	BLKDATA.F
01/22/01	04:58p	10,427	BNDCOND.F
08/04/99	04:31p	4,135	CALCDT.F
02/26/99	12:36p	9,136	CALCPSI.F
08/05/99	11:18a	11,229	COEFIMP.F
08/05/99	11:18a	13,391	COEFS.F
08/08/99	06:59p	4,429	COM.H
12/31/98	03:07p	2,289	COMALL.H
02/26/99	11:33a	360	COMPRS.H
11/10/98	07:08p	3,623	CONSRV.F
11/10/98	05:12p	714	CXKIN.H
02/09/99	09:29p	8,514	DATAALL.F
06/03/99	01:35p	37,016	DATABASE.F
11/10/98	05:12p	142	DEBYE.H
08/05/99	10:39a	10,763	DERIVES.F
01/22/01	05:21p	7,087	DISBOND.INP
06/29/00	03:24p	8,444	DUNN3DHI.inp
09/05/02	08:51a	<DIR>	Debug
08/07/99	05:27p	10,563	ELECHEM.F
02/09/99	09:31p	6,826	EQJAC.F
02/09/99	09:56p	36,105	EQLIB.F
02/09/99	09:57p	7,634	EQRES.F
11/29/98	11:44a	148	FIELDS.H
11/10/98	07:17p	522	FLOGK.F
11/10/98	05:12p	503	FRFMT.H
02/09/99	09:39p	5,319	GAMEQ.F
09/08/99	02:49p	4,346	GAMEXTD.F
11/10/98	05:12p	72	GAS.H
11/10/98	05:12p	114	GMFWT.H
11/10/98	05:12p	179	IMPL.H
01/21/01	10:28a	29,294	INIT.F
09/05/02	08:30a	40,309	INPUT1.F
11/11/98	03:49p	5,176	IONEXC.F
01/20/99	07:55p	217	IOUNITS.H
08/05/99	11:14a	15,958	ITERS.F
09/27/99	12:29p	49,097	Input2.f
02/18/99	11:00a	749	KINETIC.H
09/05/02	08:30a	14,832	KINRXNS.F
01/21/01	10:16a	12,950	Kinrxnaq.f
08/05/99	11:04a	5,832	LINMONOD.F
01/18/01	06:11p	7,135	LOWCL958.INP
02/09/99	09:59p	5,040	LUSLV.F
08/04/99	04:28p	9,158	MAIN.F
07/04/99	04:07p	4,964	MASSBAL.F
08/02/99	09:14p	8,869	MASSTRAN.F
11/10/98	05:12p	77	MINRL.H
11/10/98	05:12p	532	OFILES.H
01/20/99	08:04p	2,705	OPENUNTS.F
09/21/99	09:13a	54,788	Output.f
10/07/99	03:30p	2,564	PARAMTRS.H
10/06/99	04:06p	1,851	PH.LVL
01/21/01	10:22a	13,328	PLOTS1D.F
11/29/98	08:43p	19,147	PLOTS2D.F
11/29/98	08:39p	12,851	PLOTS3D.F
02/09/99	09:47p	6,129	PREPROC.F
08/08/99	08:35p	20,270	Rxns.f
06/28/99	12:39a	1,548	SCALARS.H

11/10/98	05:12p	271	SCRATCH.H
11/30/98	04:40p	4,458	SETBCON.F
11/10/98	07:58p	3,376	SETCONN.F
08/07/99	05:30p	3,277	SOLPRD.F
01/04/99	12:11p	2,447	SOLPRODT.F
02/09/99	08:38p	19,343	SOLVE1D.F
08/05/99	11:00a	2,179	SOURCE.F
11/10/98	08:02p	6,486	SPECIATE.F
11/10/98	08:04p	7,722	STARTUP.F
02/09/99	09:50p	8,340	STDYST.F
11/10/98	05:12p	354	SURFKIN.H
11/10/98	05:12p	300	TDCONST.H
11/10/98	08:07p	4,088	TEXTAB.F
11/10/98	05:12p	1,566	TITLE.H
01/29/99	01:08p	6,820	TRANSD.F
11/10/98	05:12p	260	UNITS.H
06/28/99	05:25p	3,852	UPDATE.F
03/29/99	03:48p	20,424	UTILITY.F
03/29/99	04:26p	45,947	WATSOLV.F
11/10/98	05:12p	276	WATSOLV.H
11/10/98	08:10p	1,998	ZONEK.F
01/27/01	12:48p	8,518	database.gri
01/22/01	05:25p	980,171	disbond.out
01/22/01	05:25p	520,412	disbond.scr
10/07/99	04:04p	7,544	dunn2dhi.inp
06/29/00	03:27p	15,891	dunn2dhi.out
10/07/99	04:03p	0	dunn2dhi.scr
06/29/00	03:24p	1,392,880	dunn3dhi.out
06/29/00	03:24p	0	dunn3dhi.scr
09/13/99	04:37p	40,843	gem data input-output.wpd
10/04/99	04:04p	8,669	gri513d.inp
01/18/01	06:12p	658,866	lowcl958.out
01/18/01	06:12p	129,372	lowcl958.scr
01/18/01	06:11p	18,628	lowcl958_aq1.dat
01/18/01	06:11p	18,628	lowcl958_aq2.dat
01/18/01	06:12p	18,628	lowcl958_aq3.dat
01/18/01	06:12p	77,492	lowcl958_brk.dat
01/18/01	06:11p	5,600	lowcl958_ele1.dat
01/18/01	06:11p	5,600	lowcl958_ele2.dat
01/18/01	06:12p	5,600	lowcl958_ele3.dat
01/18/01	06:11p	7,324	lowcl958_gas1.dat
01/18/01	06:11p	7,324	lowcl958_gas2.dat
01/18/01	06:12p	7,324	lowcl958_gas3.dat
01/18/01	06:11p	6,925	lowcl958_min1.dat
01/18/01	06:11p	6,925	lowcl958_min2.dat
01/18/01	06:12p	6,925	lowcl958_min3.dat
01/18/01	06:11p	10,873	lowcl958_psi1.dat
01/18/01	06:11p	10,873	lowcl958_psi2.dat
01/18/01	06:12p	10,873	lowcl958_psi3.dat
01/18/01	06:11p	27,149	lowcl958_sec1.dat
01/18/01	06:11p	27,149	lowcl958_sec2.dat
01/18/01	06:12p	27,149	lowcl958_sec3.dat
01/18/01	06:11p	5,609	lowcl958_vol1.dat
01/18/01	06:11p	5,609	lowcl958_vol2.dat
01/18/01	06:12p	5,609	lowcl958_vol3.dat
09/04/02	04:52p	41,456	software release tectran.BK!
09/05/02	08:51a	41,508	software release tectran.wpd

09/04/02	05:21p	7,605	software summary tectran.BK!
09/05/02	08:50a	8,175	software summary tectran.wpd
01/19/01	02:46p	7,129	tb1d958.inp
01/19/01	02:47p	542,415	tb1d958.out
01/19/01	02:49p	724,452	tb1d958.scr
01/19/01	02:46p	18,628	tb1d958_aq1.dat
01/19/01	02:47p	18,628	tb1d958_aq2.dat
01/19/01	02:49p	433,372	tb1d958_brk.dat
01/19/01	02:46p	5,600	tb1d958_ele1.dat
01/19/01	02:47p	5,600	tb1d958_ele2.dat
01/19/01	02:46p	7,324	tb1d958_gas1.dat
01/19/01	02:47p	7,324	tb1d958_gas2.dat
01/19/01	02:46p	6,925	tb1d958_min1.dat
01/19/01	02:47p	6,925	tb1d958_min2.dat
01/19/01	02:46p	10,873	tb1d958_psi1.dat
01/19/01	02:47p	10,873	tb1d958_psi2.dat
01/19/01	02:46p	27,149	tb1d958_sec1.dat
01/19/01	02:47p	27,149	tb1d958_sec2.dat
01/19/01	02:46p	5,609	tb1d958_vol1.dat
01/19/01	02:47p	5,609	tb1d958_vol2.dat
09/05/02	08:30a	1,458,176	tec.exe
02/01/01	03:33p	1,474,610	tec2.exe
09/21/99	01:20p	1,323,059	tec2d.exe
10/07/99	03:09p	1,323,059	tec3d.exe
08/19/99	06:19a	173,259	tec3d.zip
08/19/99	06:22a	397,887	tec3dexe.zip
01/22/01	05:03p	1,470,518	tecfix3d.exe
02/01/01	02:49p	15,353	tectran.dsp
05/10/99	08:57p	537	tectran.dsw
09/05/02	08:36a	45,568	tectran.opt
09/04/02	05:04p	5,460	tectran.plg
	149 File(s)	14,456,150 bytes	

Directory of R:\tec3d\Debug

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
09/04/02	05:04p	38,619	ALLOT.obj
09/04/02	05:04p	350,485	BLKDATA.obj
09/04/02	05:04p	47,783	BNDCOND.obj
09/04/02	05:04p	28,901	CALCDT.obj
09/04/02	05:04p	73,018	CALCPSI.obj
09/04/02	05:04p	54,424	COEFS.obj
09/04/02	05:04p	34,708	CONSRV.obj
09/04/02	05:04p	52,458	Coefimp.obj
09/04/02	05:04p	26,802	DATAALL.obj
09/04/02	05:04p	97,380	DATABASE.obj
09/04/02	05:04p	55,792	DERIVES.obj
09/04/02	05:04p	58,368	DF60.PDB
09/04/02	05:04p	49,017	ELECHEM.obj
09/04/02	05:04p	32,274	EQJAC.obj
09/04/02	05:04p	156,973	EQLIB.obj
09/04/02	05:04p	37,184	EQRES.obj
09/04/02	05:04p	2,001	FLOGK.obj
09/04/02	05:04p	29,275	GAMEQ.obj
09/04/02	05:04p	33,180	GAMEXTD.obj
09/04/02	05:04p	129,903	INIT.obj

09/04/02	05:04p	119,182	INPUT1.obj
09/04/02	05:04p	39,729	IONEXC.obj
09/04/02	05:04p	81,145	ITERS.obj
09/04/02	05:04p	173,379	Input2.obj
09/04/02	05:04p	59,774	KINRXNAQ.obj
09/04/02	05:04p	56,828	KINRXNS.obj
09/04/02	05:04p	41,744	LINMONOD.obj
09/04/02	05:04p	12,111	LUSLV.obj
09/04/02	05:04p	43,636	MAIN.obj
09/04/02	05:04p	61,008	MASSBAL.obj
09/04/02	05:04p	66,287	MASSTRAN.obj
09/04/02	05:04p	7,948	OPENUNTS.obj
09/04/02	05:04p	289,995	OUTPUT.obj
09/04/02	05:04p	79,160	PLOTS1D.obj
09/04/02	05:04p	96,323	PLOTS2D.obj
09/04/02	05:04p	75,971	PLOTS3D.obj
09/04/02	05:04p	37,855	PREPROC.obj
09/04/02	05:04p	127,590	RXNS.obj
09/04/02	05:04p	40,781	SETBCON.obj
09/04/02	05:04p	35,661	SETCONN.obj
09/04/02	05:04p	27,337	SOLPRD.obj
09/04/02	05:04p	27,052	SOLPRODT.obj
09/04/02	05:04p	30,244	SOLVE1D.obj
09/04/02	05:04p	29,302	SOURCE.obj
09/04/02	05:04p	33,677	SPECIATE.obj
09/04/02	05:03p	46,062	STARTUP.obj
09/04/02	05:03p	50,228	STDYST.obj
09/04/02	05:03p	34,210	TEXTAB.obj
09/04/02	05:03p	39,965	TRANSD.obj
09/04/02	05:03p	39,241	UPDATE.obj
09/04/02	05:03p	37,401	UTILITY.obj
09/04/02	05:03p	68,553	WATSOLV.obj
09/04/02	05:03p	28,227	ZONEK.obj
09/04/02	05:04p	1,164,288	tec.pdb
02/01/01	03:33p	1,164,288	tec2.pdb
09/21/99	01:20p	1,164,288	tec2d.pdb
10/07/99	03:09p	1,164,288	tec3d.pdb
01/22/01	05:03p	1,164,288	tecfix3d.pdb
60 File(s)		9,247,591	bytes

Directory of R:\tests

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
01/25/00	10:20p		9,136 Alyeska3.inp
01/31/01	05:12p		8,178 BRUSSO4.INP
08/08/99	10:10a		7,879 DATABASE.GRI
02/12/01	03:19p		7,000 DISBOND0.INP
02/04/01	03:35p		7,178 DISBOND2.INP
02/12/01	03:31p		7,186 DISBOND4.INP
10/07/99	07:23p		8,461 DUNN3DHI.INP
02/01/01	02:50p		7,092 DUNNGRI1.INP
09/05/02	08:52a	<DIR>	alyeska
09/05/02	08:52a	<DIR>	binary
08/08/99	01:04p		2,692 binary.inp
09/05/02	08:53a	<DIR>	brusseau
09/05/02	08:53a	<DIR>	brusso

01/31/01	12:29a	7,358	brusso0.inp
01/30/01	09:09p	7,487	brusso1.inp
01/28/01	01:34p	7,558	brusso2.inp
01/31/01	04:40p	7,431	brusso3.inp
01/31/01	04:40p	22,886	brusso3.out
01/31/01	04:40p	0	brusso3.scr
01/31/01	05:50p	726,596	brusso4.out
01/31/01	05:57p	1,456,320	brusso4.scr
01/25/01	11:11p	7,243	brussom.inp
09/05/02	08:53a	<DIR>	clst
09/05/02	08:53a	<DIR>	coreldraw figs
09/05/02	08:53a	<DIR>	disbond
09/05/02	08:54a	<DIR>	disbond coupon
02/04/01	03:23p	7,177	disbond.inp
02/04/01	03:25p	1,004,957	disbond.out
02/04/01	03:25p	110,948	disbond.scr
02/12/01	03:20p	1,004,132	disbond0.out
02/12/01	03:20p	110,948	disbond0.scr
02/12/01	03:19p	22,876	disbond0_aq1.dat
02/12/01	03:19p	22,876	disbond0_aq2.dat
02/12/01	03:20p	22,876	disbond0_aq3.dat
02/12/01	03:20p	22,876	disbond0_aq4.dat
02/12/01	03:20p	22,876	disbond0_aq5.dat
02/12/01	03:20p	83,940	disbond0_brk.dat
02/12/01	03:19p	5,600	disbond0_ele1.dat
02/12/01	03:19p	5,600	disbond0_ele2.dat
02/12/01	03:20p	5,600	disbond0_ele3.dat
02/12/01	03:20p	5,600	disbond0_ele4.dat
02/12/01	03:20p	5,600	disbond0_ele5.dat
02/12/01	03:19p	7,324	disbond0_gas1.dat
02/12/01	03:19p	7,324	disbond0_gas2.dat
02/12/01	03:20p	7,324	disbond0_gas3.dat
02/12/01	03:20p	7,324	disbond0_gas4.dat
02/12/01	03:20p	7,324	disbond0_gas5.dat
02/12/01	03:19p	6,925	disbond0_min1.dat
02/12/01	03:19p	6,925	disbond0_min2.dat
02/12/01	03:20p	6,925	disbond0_min3.dat
02/12/01	03:20p	6,925	disbond0_min4.dat
02/12/01	03:20p	6,925	disbond0_min5.dat
02/12/01	03:19p	14,821	disbond0_psi1.dat
02/12/01	03:19p	14,821	disbond0_psi2.dat
02/12/01	03:20p	14,821	disbond0_psi3.dat
02/12/01	03:20p	14,821	disbond0_psi4.dat
02/12/01	03:20p	14,821	disbond0_psi5.dat
02/12/01	03:19p	27,149	disbond0_sec1.dat
02/12/01	03:19p	27,149	disbond0_sec2.dat
02/12/01	03:20p	27,149	disbond0_sec3.dat
02/12/01	03:20p	27,149	disbond0_sec4.dat
02/12/01	03:20p	27,149	disbond0_sec5.dat
02/12/01	03:19p	5,609	disbond0_vol1.dat
02/12/01	03:19p	5,609	disbond0_vol2.dat
02/12/01	03:20p	5,609	disbond0_vol3.dat
02/12/01	03:20p	5,609	disbond0_vol4.dat
02/12/01	03:20p	5,609	disbond0_vol5.dat
02/02/01	06:27p	23,552	disbond1.GRF
02/04/01	03:52p	1,004,957	disbond2.out
02/04/01	03:52p	765,436	disbond2.scr

02/04/01	03:36p	22,876	disbond2_aq1.dat
02/04/01	03:38p	22,876	disbond2_aq2.dat
02/04/01	03:41p	22,876	disbond2_aq3.dat
02/04/01	03:47p	22,876	disbond2_aq4.dat
02/04/01	03:52p	22,876	disbond2_aq5.dat
02/04/01	03:52p	578,515	disbond2_brk.dat
02/04/01	03:36p	5,600	disbond2_ele1.dat
02/04/01	03:38p	5,600	disbond2_ele2.dat
02/04/01	03:41p	5,600	disbond2_ele3.dat
02/04/01	03:47p	5,600	disbond2_ele4.dat
02/04/01	03:52p	5,600	disbond2_ele5.dat
02/04/01	03:36p	7,324	disbond2_gas1.dat
02/04/01	03:38p	7,324	disbond2_gas2.dat
02/04/01	03:41p	7,324	disbond2_gas3.dat
02/04/01	03:47p	7,324	disbond2_gas4.dat
02/04/01	03:52p	7,324	disbond2_gas5.dat
02/04/01	03:36p	6,925	disbond2_min1.dat
02/04/01	03:38p	6,925	disbond2_min2.dat
02/04/01	03:41p	6,925	disbond2_min3.dat
02/04/01	03:47p	6,925	disbond2_min4.dat
02/04/01	03:52p	6,925	disbond2_min5.dat
02/04/01	03:36p	14,821	disbond2_psi1.dat
02/04/01	03:38p	14,821	disbond2_psi2.dat
02/04/01	03:41p	14,821	disbond2_psi3.dat
02/04/01	03:47p	14,821	disbond2_psi4.dat
02/04/01	03:52p	14,821	disbond2_psi5.dat
02/04/01	03:36p	27,149	disbond2_sec1.dat
02/04/01	03:38p	27,149	disbond2_sec2.dat
02/04/01	03:41p	27,149	disbond2_sec3.dat
02/04/01	03:47p	27,149	disbond2_sec4.dat
02/04/01	03:52p	27,149	disbond2_sec5.dat
02/04/01	03:36p	5,609	disbond2_vol1.dat
02/04/01	03:38p	5,609	disbond2_vol2.dat
02/04/01	03:41p	5,609	disbond2_vol3.dat
02/04/01	03:47p	5,609	disbond2_vol4.dat
02/04/01	03:52p	5,609	disbond2_vol5.dat
02/12/01	03:32p	1,004,957	disbond4.out
02/12/01	03:32p	110,996	disbond4.scr
02/12/01	03:31p	22,876	disbond4_aq1.dat
02/12/01	03:31p	22,876	disbond4_aq2.dat
02/12/01	03:31p	22,876	disbond4_aq3.dat
02/12/01	03:32p	22,876	disbond4_aq4.dat
02/12/01	03:32p	22,876	disbond4_aq5.dat
02/12/01	03:32p	83,940	disbond4_brk.dat
02/12/01	03:31p	5,600	disbond4_ele1.dat
02/12/01	03:31p	5,600	disbond4_ele2.dat
02/12/01	03:31p	5,600	disbond4_ele3.dat
02/12/01	03:32p	5,600	disbond4_ele4.dat
02/12/01	03:32p	5,600	disbond4_ele5.dat
02/12/01	03:31p	7,324	disbond4_gas1.dat
02/12/01	03:31p	7,324	disbond4_gas2.dat
02/12/01	03:31p	7,324	disbond4_gas3.dat
02/12/01	03:32p	7,324	disbond4_gas4.dat
02/12/01	03:32p	7,324	disbond4_gas5.dat
02/12/01	03:31p	6,925	disbond4_min1.dat
02/12/01	03:31p	6,925	disbond4_min2.dat
02/12/01	03:31p	6,925	disbond4_min3.dat

02/12/01	03:32p	6,925	disbond4_min4.dat
02/12/01	03:32p	6,925	disbond4_min5.dat
02/12/01	03:31p	14,821	disbond4_psi1.dat
02/12/01	03:31p	14,821	disbond4_psi2.dat
02/12/01	03:31p	14,821	disbond4_psi3.dat
02/12/01	03:32p	14,821	disbond4_psi4.dat
02/12/01	03:32p	14,821	disbond4_psi5.dat
02/12/01	03:31p	27,149	disbond4_sec1.dat
02/12/01	03:31p	27,149	disbond4_sec2.dat
02/12/01	03:31p	27,149	disbond4_sec3.dat
02/12/01	03:32p	27,149	disbond4_sec4.dat
02/12/01	03:32p	27,149	disbond4_sec5.dat
02/12/01	03:31p	5,609	disbond4_vol1.dat
02/12/01	03:31p	5,609	disbond4_vol2.dat
02/12/01	03:31p	5,609	disbond4_vol3.dat
02/12/01	03:32p	5,609	disbond4_vol4.dat
02/12/01	03:32p	5,609	disbond4_vol5.dat
02/04/01	03:24p	22,876	disbond_aq1.dat
02/04/01	03:24p	22,876	disbond_aq2.dat
02/04/01	03:24p	22,876	disbond_aq3.dat
02/04/01	03:24p	22,876	disbond_aq4.dat
02/04/01	03:25p	22,876	disbond_aq5.dat
02/04/01	03:25p	83,940	disbond_brk.dat
02/04/01	03:24p	5,600	disbond_ele1.dat
02/04/01	03:24p	5,600	disbond_ele2.dat
02/04/01	03:24p	5,600	disbond_ele3.dat
02/04/01	03:24p	5,600	disbond_ele4.dat
02/04/01	03:25p	5,600	disbond_ele5.dat
02/04/01	03:24p	7,324	disbond_gas1.dat
02/04/01	03:24p	7,324	disbond_gas2.dat
02/04/01	03:24p	7,324	disbond_gas3.dat
02/04/01	03:24p	7,324	disbond_gas4.dat
02/04/01	03:25p	7,324	disbond_gas5.dat
02/04/01	03:24p	6,925	disbond_min1.dat
02/04/01	03:24p	6,925	disbond_min2.dat
02/04/01	03:24p	6,925	disbond_min3.dat
02/04/01	03:24p	6,925	disbond_min4.dat
02/04/01	03:25p	6,925	disbond_min5.dat
02/04/01	03:24p	14,821	disbond_psi1.dat
02/04/01	03:24p	14,821	disbond_psi2.dat
02/04/01	03:24p	14,821	disbond_psi3.dat
02/04/01	03:24p	14,821	disbond_psi4.dat
02/04/01	03:25p	14,821	disbond_psi5.dat
02/04/01	03:24p	27,149	disbond_sec1.dat
02/04/01	03:24p	27,149	disbond_sec2.dat
02/04/01	03:24p	27,149	disbond_sec3.dat
02/04/01	03:24p	27,149	disbond_sec4.dat
02/04/01	03:25p	27,149	disbond_sec5.dat
02/04/01	03:24p	5,609	disbond_vol1.dat
02/04/01	03:24p	5,609	disbond_vol2.dat
02/04/01	03:24p	5,609	disbond_vol3.dat
02/04/01	03:24p	5,609	disbond_vol4.dat
02/04/01	03:25p	5,609	disbond_vol5.dat
02/04/01	04:16p	12,288	disbondgap.grf
02/04/01	04:12p	3,584	disbondgap.xls
02/04/01	02:03p	11,264	disbondph.grf
02/04/01	04:36p	42,496	disbondpot.grf

02/04/01	04:04p		3,584	disbondpot.xls
04/06/00	10:30p		8,483	dunhic2.inp
09/05/02	08:55a	<DIR>		dunn
01/31/01	07:41p		7,698	dunn2dhi.inp
01/31/01	07:42p		1,094,468	dunn2dhi.out
01/31/01	07:41p		0	dunn2dhi.scr
07/05/99	07:11a		34,304	dunnexp.grf
02/01/01	02:50p		384,302	dunngril1.out
02/01/01	02:51p		32,431	dunngril1.scr
01/31/01	07:28p		7,084	dunnhi.inp
01/31/01	07:36p		922,862	dunnhi.out
01/31/01	07:36p		1,456,169	dunnhi.scr
01/31/01	07:28p		20,044	dunnhi_aq1.dat
01/31/01	07:29p		20,044	dunnhi_aq2.dat
01/31/01	07:34p		20,044	dunnhi_aq3.dat
01/31/01	07:36p		20,044	dunnhi_aq4.dat
01/31/01	07:36p		947,136	dunnhi_brk.dat
01/31/01	07:28p		5,600	dunnhi_ele1.dat
01/31/01	07:29p		5,600	dunnhi_ele2.dat
01/31/01	07:34p		5,600	dunnhi_ele3.dat
01/31/01	07:36p		5,600	dunnhi_ele4.dat
01/31/01	07:28p		7,324	dunnhi_gas1.dat
01/31/01	07:29p		7,324	dunnhi_gas2.dat
01/31/01	07:34p		7,324	dunnhi_gas3.dat
01/31/01	07:36p		7,324	dunnhi_gas4.dat
01/31/01	07:28p		6,925	dunnhi_min1.dat
01/31/01	07:29p		6,925	dunnhi_min2.dat
01/31/01	07:34p		6,925	dunnhi_min3.dat
01/31/01	07:36p		6,925	dunnhi_min4.dat
01/31/01	07:28p		12,189	dunnhi_psi1.dat
01/31/01	07:29p		12,189	dunnhi_psi2.dat
01/31/01	07:34p		12,189	dunnhi_psi3.dat
01/31/01	07:36p		12,189	dunnhi_psi4.dat
01/31/01	07:28p		34,229	dunnhi_sec1.dat
01/31/01	07:29p		34,229	dunnhi_sec2.dat
01/31/01	07:34p		34,229	dunnhi_sec3.dat
01/31/01	07:36p		34,229	dunnhi_sec4.dat
01/31/01	07:28p		5,609	dunnhi_vol1.dat
01/31/01	07:29p		5,609	dunnhi_vol2.dat
01/31/01	07:34p		5,609	dunnhi_vol3.dat
01/31/01	07:36p		5,609	dunnhi_vol4.dat
01/31/01	07:24p		7,044	dunnlo.inp
08/19/99	06:03a		35,840	dunntim.grf
08/19/99	05:39a		19,456	dunntim2.grf
04/30/99	09:32a		3,273,564	gril2.xls
04/30/99	09:32a		3,872	gril2s.xls
04/30/99	09:32a		11,485	gril3.grf
04/30/99	09:32a		2,280,597	gril3.xls
04/30/99	09:32a		10,279	gril3ph.grf
04/30/99	09:32a		12,330	gril3s.grf
04/30/99	09:32a		4,338	gril3s.xls
09/05/02	08:55a	<DIR>		gri44to492d
09/05/02	08:56a	<DIR>		gri44to493d
09/05/02	08:57a	<DIR>		gri45
09/05/02	08:57a	<DIR>		gri452d
09/05/02	08:57a	<DIR>		gri46
09/05/02	08:57a	<DIR>		gri47

07/04/99	04:52p		236,935	gri48.zip
06/10/99	08:56a		19,456	gri49.grf
07/04/99	04:52p		405,406	gri49.zip
09/05/02	08:57a	<DIR>		gri50-51
10/02/99	04:35p		7,081	gri50.inp
07/04/99	04:52p		242,570	gri50.zip
07/04/99	10:50p		64,000	gri50_br.xls
07/03/99	10:27p		5,600	gri50_ele3.xyp
07/03/99	10:28p		5,600	gri50_ele6.xyp
07/05/99	07:08a		63,488	gri50br.xls
09/05/02	08:58a	<DIR>		gri513d
09/05/02	08:58a	<DIR>		gri51a
09/05/02	08:58a	<DIR>		gri51b
09/05/02	08:58a	<DIR>		gri51c
07/05/99	06:27a		14,336	gri51exp.xls
09/05/02	08:58a	<DIR>		gri523d
09/05/02	08:58a	<DIR>		gri53
09/07/99	10:38p		7,234	gri53.inp
09/05/02	08:58a	<DIR>		gri54
07/25/99	08:57p		16,405	grimodel.zip
01/28/01	10:41p		7,094	lc2958.inp
01/27/01	10:17a		7,015	lc858.inp
01/28/01	11:25p		7,097	logap958.inp
01/18/01	08:59p		7,124	lowcl458.inp
01/28/01	10:20p		7,094	lowcl958.inp
01/28/01	10:47p		7,094	medcl958.inp
09/27/99	07:58p		21,504	reaction rates.xls
09/05/02	08:58a	<DIR>		reactive
01/30/00	05:57p		7,120	tb1d258.inp
01/24/01	09:31p		7,055	tb1d458.inp
06/29/00	08:44p		7,127	tb1d458m.inp
01/23/01	11:45p		7,056	tb1d508.inp
01/23/01	11:30p		7,056	tb1d558.inp
01/23/01	11:34p		7,056	tb1d658.inp
01/24/01	11:36p		7,056	tb1d758.inp
01/24/01	11:31p		7,056	tb1d858.inp
02/20/01	08:54a		7,137	tb1d958.inp
02/20/01	08:54a		892,625	tb1d958.out
02/20/01	08:54a		111,636	tb1d958.scr
02/20/01	08:54a		18,628	tb1d958_aq1.dat
02/20/01	08:54a		18,628	tb1d958_aq2.dat
02/20/01	08:54a		18,628	tb1d958_aq3.dat
02/20/01	08:54a		18,628	tb1d958_aq4.dat
02/20/01	08:54a		18,628	tb1d958_aq5.dat
02/20/01	08:54a		66,012	tb1d958_brk.dat
02/20/01	08:54a		5,600	tb1d958_ele1.dat
02/20/01	08:54a		5,600	tb1d958_ele2.dat
02/20/01	08:54a		5,600	tb1d958_ele3.dat
02/20/01	08:54a		5,600	tb1d958_ele4.dat
02/20/01	08:54a		5,600	tb1d958_ele5.dat
02/20/01	08:54a		7,324	tb1d958_gas1.dat
02/20/01	08:54a		7,324	tb1d958_gas2.dat
02/20/01	08:54a		7,324	tb1d958_gas3.dat
02/20/01	08:54a		7,324	tb1d958_gas4.dat
02/20/01	08:54a		7,324	tb1d958_gas5.dat
02/20/01	08:54a		5,609	tb1d958_min1.dat
02/20/01	08:54a		5,609	tb1d958_min2.dat

02/20/01	08:54a		5,609	tbld958_min3.dat
02/20/01	08:54a		5,609	tbld958_min4.dat
02/20/01	08:54a		5,609	tbld958_min5.dat
02/20/01	08:54a		10,873	tbld958_psi1.dat
02/20/01	08:54a		10,873	tbld958_psi2.dat
02/20/01	08:54a		10,873	tbld958_psi3.dat
02/20/01	08:54a		10,873	tbld958_psi4.dat
02/20/01	08:54a		10,873	tbld958_psi5.dat
02/20/01	08:54a		27,149	tbld958_sec1.dat
02/20/01	08:54a		27,149	tbld958_sec2.dat
02/20/01	08:54a		27,149	tbld958_sec3.dat
02/20/01	08:54a		27,149	tbld958_sec4.dat
02/20/01	08:54a		27,149	tbld958_sec5.dat
02/20/01	08:54a		4,293	tbld958_vol1.dat
02/20/01	08:54a		4,293	tbld958_vol2.dat
02/20/01	08:54a		4,293	tbld958_vol3.dat
02/20/01	08:54a		4,293	tbld958_vol4.dat
02/20/01	08:54a		4,293	tbld958_vol5.dat
10/01/99	03:27p		6,794	tb2dBULL1.inp
07/04/99	08:08p		747,582	tecfixruns.zip
02/20/01	08:54a		7,137	test.inp
09/05/02	08:59a	<DIR>		transcanada
09/05/02	09:01a	<DIR>		turnbull
10/02/99	02:55p		155	turnbull.dat
06/19/00	02:33p		26,112	turnbull.grf
10/02/99	02:29p		3,584	turnbull.xls
			326 File(s)	24,561,663 bytes

Directory of R:\tests\alyeska

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
09/02/99	09:43p		12,670 ALYESKA2-100H.SRF
09/02/99	09:42p		17,349 ALYESKA2-10Y.SRF
09/02/99	09:43p		15,199 ALYESKA2-1Y.SRF
09/02/99	09:27p		10,056 ALYESKA2_AQ3.GRD
09/02/99	09:33p		10,056 ALYESKA2_AQ3M.GRD
09/02/99	09:18p		10,056 ALYESKA2_AQ6.GRD
09/02/99	09:30p		10,056 ALYESKA2_AQ6M.GRD
09/02/99	09:25p		10,056 ALYESKA2_AQ7.GRD
09/02/99	09:32p		10,056 ALYESKA2_AQ7M.GRD
09/03/99	07:11a		16,147 ALYESKA3-10H.SRF
09/03/99	07:07a		10,056 ALYESKA3_AQ2.GRD
09/02/99	08:26p		8,824 Alyeska2.inp
09/03/99	06:38a		8,833 Alyeska3.inp
08/21/99	05:57p		7,891 alyeska.inp
08/21/99	10:50p		8,603,685 alyeska.out
09/02/99	08:38p		2,553,031 alyeska2.out
09/02/99	10:08p		531,552 alyeska2.zip
09/02/99	08:27p		56,788 alyeska2_aq1.xyp
09/02/99	08:27p		56,788 alyeska2_aq2.xyp
09/02/99	08:44p		39,925 alyeska2_aq3.dat
09/02/99	08:27p		56,788 alyeska2_aq3.xyp
09/02/99	08:29p		56,788 alyeska2_aq4.xyp
09/02/99	08:31p		56,788 alyeska2_aq5.xyp
09/02/99	08:46p		30,988 alyeska2_aq6.dat
09/02/99	08:34p		56,788 alyeska2_aq6.xyp

09/02/99	08:43p	39,925	alyeska2_aq7.dat
09/02/99	08:38p	56,788	alyeska2_aq7.xyp
09/02/99	08:38p	437,643	alyeska2_brk.xyp
09/02/99	08:27p	22,888	alyeska2_gas1.xyp
09/02/99	08:27p	22,888	alyeska2_gas2.xyp
09/02/99	08:27p	22,888	alyeska2_gas3.xyp
09/02/99	08:29p	22,888	alyeska2_gas4.xyp
09/02/99	08:31p	22,888	alyeska2_gas5.xyp
09/02/99	08:34p	22,888	alyeska2_gas6.xyp
09/02/99	08:38p	22,888	alyeska2_gas7.xyp
09/02/99	08:27p	21,538	alyeska2_min1.xyp
09/02/99	08:27p	21,538	alyeska2_min2.xyp
09/02/99	08:27p	21,538	alyeska2_min3.xyp
09/02/99	08:29p	21,538	alyeska2_min4.xyp
09/02/99	08:31p	21,538	alyeska2_min5.xyp
09/02/99	08:34p	21,538	alyeska2_min6.xyp
09/02/99	08:38p	21,538	alyeska2_min7.xyp
09/02/99	08:27p	39,163	alyeska2_psi1.xyp
09/02/99	08:27p	39,163	alyeska2_psi2.xyp
09/02/99	08:27p	39,163	alyeska2_psi3.xyp
09/02/99	08:29p	39,163	alyeska2_psi4.xyp
09/02/99	08:31p	39,163	alyeska2_psi5.xyp
09/02/99	08:34p	39,163	alyeska2_psi6.xyp
09/02/99	08:38p	39,163	alyeska2_psi7.xyp
09/02/99	08:27p	87,404	alyeska2_sec1.xyp
09/02/99	08:27p	87,404	alyeska2_sec2.xyp
09/02/99	08:27p	87,404	alyeska2_sec3.xyp
09/02/99	08:29p	87,404	alyeska2_sec4.xyp
09/02/99	08:31p	87,404	alyeska2_sec5.xyp
09/02/99	08:34p	87,404	alyeska2_sec6.xyp
09/02/99	08:38p	87,404	alyeska2_sec7.xyp
09/02/99	08:27p	25,063	alyeska2_vol1.xyp
09/02/99	08:27p	25,063	alyeska2_vol2.xyp
09/02/99	08:27p	25,063	alyeska2_vol3.xyp
09/02/99	08:29p	25,063	alyeska2_vol4.xyp
09/02/99	08:31p	25,063	alyeska2_vol5.xyp
09/02/99	08:34p	25,063	alyeska2_vol6.xyp
09/02/99	08:38p	25,063	alyeska2_vol7.xyp
09/03/99	07:11a	974,866	alyeska3.out
09/03/99	06:44a	56,788	alyeska3_aq1.xyp
09/03/99	07:07a	36,878	alyeska3_aq2.dat
09/03/99	07:06a	36,878	alyeska3_aq2.xyp
09/03/99	07:11a	17,283	alyeska3_brk.xyp
09/03/99	06:44a	22,888	alyeska3_gas1.xyp
09/03/99	07:00a	22,888	alyeska3_gas2.xyp
09/03/99	06:44a	21,538	alyeska3_min1.xyp
09/03/99	07:00a	21,538	alyeska3_min2.xyp
09/03/99	06:44a	39,163	alyeska3_psi1.xyp
09/03/99	07:00a	39,163	alyeska3_psi2.xyp
09/03/99	06:44a	87,404	alyeska3_sec1.xyp
09/03/99	07:00a	87,404	alyeska3_sec2.xyp
09/03/99	06:44a	25,063	alyeska3_vol1.xyp
09/03/99	07:00a	25,063	alyeska3_vol2.xyp
08/21/99	07:33p	209,358	alyeska_aq1.xyp
08/21/99	08:02p	209,358	alyeska_aq2.xyp
08/21/99	10:09p	209,358	alyeska_aq3.xyp
08/21/99	10:29p	209,358	alyeska_aq4.xyp

08/21/99	10:33p	209,358	alyeska_aq5.xyp
08/21/99	10:44p	209,358	alyeska_aq6.xyp
08/21/99	10:50p	209,358	alyeska_aq7.xyp
08/21/99	10:50p	518,325	alyeska_brk.xyp
08/20/99	06:02a	5,600	alyeska_ele1.xyp
08/20/99	06:02a	5,600	alyeska_ele2.xyp
08/20/99	06:05a	5,600	alyeska_ele3.xyp
08/20/99	06:05a	5,600	alyeska_ele4.xyp
08/20/99	06:06a	5,600	alyeska_ele5.xyp
08/20/99	06:08a	5,600	alyeska_ele6.xyp
08/20/99	06:08a	5,600	alyeska_ele7.xyp
08/21/99	07:33p	70,193	alyeska_gas1.xyp
08/21/99	08:02p	70,193	alyeska_gas2.xyp
08/21/99	10:09p	70,193	alyeska_gas3.xyp
08/21/99	10:29p	70,193	alyeska_gas4.xyp
08/21/99	10:33p	70,193	alyeska_gas5.xyp
08/21/99	10:44p	70,193	alyeska_gas6.xyp
08/21/99	10:50p	70,193	alyeska_gas7.xyp
08/21/99	07:33p	79,208	alyeska_min1.xyp
08/21/99	08:02p	79,208	alyeska_min2.xyp
08/21/99	10:09p	79,208	alyeska_min3.xyp
08/21/99	10:29p	79,208	alyeska_min4.xyp
08/21/99	10:33p	79,208	alyeska_min5.xyp
08/21/99	10:44p	79,208	alyeska_min6.xyp
08/21/99	10:50p	79,208	alyeska_min7.xyp
08/21/99	07:33p	144,283	alyeska_psi1.xyp
08/21/99	08:02p	144,283	alyeska_psi2.xyp
08/21/99	10:09p	144,283	alyeska_psi3.xyp
08/21/99	10:29p	144,283	alyeska_psi4.xyp
08/21/99	10:33p	144,283	alyeska_psi5.xyp
08/21/99	10:44p	144,283	alyeska_psi6.xyp
08/21/99	10:50p	144,283	alyeska_psi7.xyp
08/21/99	07:33p	322,464	alyeska_sec1.xyp
08/21/99	08:02p	322,464	alyeska_sec2.xyp
08/21/99	10:09p	322,464	alyeska_sec3.xyp
08/21/99	10:29p	322,464	alyeska_sec4.xyp
08/21/99	10:33p	322,464	alyeska_sec5.xyp
08/21/99	10:44p	322,464	alyeska_sec6.xyp
08/21/99	10:50p	322,464	alyeska_sec7.xyp
08/21/99	07:33p	92,223	alyeska_vol1.xyp
08/21/99	08:02p	92,223	alyeska_vol2.xyp
08/21/99	10:09p	92,223	alyeska_vol3.xyp
08/21/99	10:29p	92,223	alyeska_vol4.xyp
08/21/99	10:33p	92,223	alyeska_vol5.xyp
08/21/99	10:44p	92,223	alyeska_vol6.xyp
08/21/99	10:50p	92,223	alyeska_vol7.xyp
130 File(s)		22,660,395	bytes

Directory of R:\tests\binary

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
08/08/99	12:04p	2,692	binary.inp
08/08/99	12:04p	121,329	binary.out
08/08/99	12:04p	11,206	binary.scr
08/08/99	12:04p	5,884	binary_aq1.xyp
08/12/02	08:39a	4,600	binary_aq2.xyp

08/08/99	12:04p	1,841	binary_brk.xyp
08/08/99	12:04p	5,600	binary_ele1.xyp
08/12/02	08:43a	3,790	binary_ele2.xyp
08/08/99	12:04p	3,076	binary_gas1.xyp
08/08/99	12:04p	3,076	binary_gas2.xyp
08/08/99	12:04p	1,661	binary_min1.xyp
08/08/99	12:04p	1,661	binary_min2.xyp
08/08/99	12:04p	4,293	binary_psi1.xyp
08/08/99	12:04p	4,293	binary_psi2.xyp
08/08/99	12:04p	1,661	binary_sec1.xyp
08/08/99	12:04p	1,661	binary_sec2.xyp
08/08/99	12:04p	2,977	binary_vol1.xyp
08/08/99	12:04p	2,977	binary_vol2.xyp
08/12/02	08:40a	36,352	conc0.5.grf
09/22/99	06:17a	2,023	conc1.xyp
09/22/99	06:23a	2,234	pot.xyp
08/12/02	08:44a	32,768	pot0.5.grf
24 File(s)		257,655	bytes

Directory of R:\tests\brusseau

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
10/04/99	04:58p	22,520	BRUSSO1.SRF
10/06/99	04:40p	14,068	BRUSSO2.SRF
10/04/99	06:48a	19,096	BRUSSO2PH.SRF
10/05/99	06:26a	7,456	BRUSSO2_AQ1.GRD
10/05/99	08:40p	7,456	BRUSSO2_AQ2.GRD
10/06/99	09:30a	10,056	BRUSSO2_AQ3.GRD
10/06/99	04:35p	7,256	BRUSSO2_AQ4.GRD
10/06/99	01:43p	6,843	BRUSSO3.INP
10/06/99	10:57a	7,256	BRUSSO3_AQ1.GRD
10/06/99	10:51a	7,256	BRUSSO3_AQ3.GRD
10/06/99	02:16p	7,256	BRUSSO3_AQ5.GRD
10/04/99	04:29p	8,678	BRUSSODM.INP
10/04/99	04:55p	10,056	BRUSSODM_AQ1.GRD
10/04/99	05:36p	10,056	BRUSSODM_AQ2.GRD
10/06/99	04:06p	1,851	PH.LVL
10/07/99	06:14a	18,944	brussol-2d.grf
10/03/99	05:14p	7,159	brussol.inp
10/03/99	05:22p	812,206	brussol.out
10/03/99	05:22p	1,456,181	brussol.scr
10/03/99	05:14p	21,460	brussol_aq1.dat
10/03/99	05:15p	21,460	brussol_aq2.dat
10/03/99	05:21p	21,460	brussol_aq3.dat
10/03/99	05:22p	21,460	brussol_aq4.dat
10/03/99	05:22p	1,025,808	brussol_brk.dat
10/03/99	05:14p	5,600	brussol_ele1.dat
10/03/99	05:15p	5,600	brussol_ele2.dat
10/03/99	05:21p	5,600	brussol_ele3.dat
10/03/99	05:22p	5,600	brussol_ele4.dat
10/03/99	05:14p	5,908	brussol_gas1.dat
10/03/99	05:15p	5,908	brussol_gas2.dat
10/03/99	05:21p	5,908	brussol_gas3.dat
10/03/99	05:22p	5,908	brussol_gas4.dat
10/03/99	05:14p	6,925	brussol_min1.dat
10/03/99	05:15p	6,925	brussol_min2.dat

10/03/99	05:21p	6,925	brusso1_min3.dat
10/03/99	05:22p	6,925	brusso1_min4.dat
10/03/99	05:14p	13,505	brusso1_psi1.dat
10/03/99	05:15p	13,505	brusso1_psi2.dat
10/03/99	05:21p	13,505	brusso1_psi3.dat
10/03/99	05:22p	13,505	brusso1_psi4.dat
10/03/99	05:14p	27,149	brusso1_sec1.dat
10/03/99	05:15p	27,149	brusso1_sec2.dat
10/03/99	05:21p	27,149	brusso1_sec3.dat
10/03/99	05:22p	27,149	brusso1_sec4.dat
10/03/99	05:14p	5,609	brusso1_vol1.dat
10/03/99	05:15p	5,609	brusso1_vol2.dat
10/03/99	05:21p	5,609	brusso1_vol3.dat
10/03/99	05:22p	5,609	brusso1_vol4.dat
10/06/99	02:46p	7,303	brusso2.inp
10/06/99	03:20p	6,362,023	brusso2.out
10/06/99	03:20p	259,806	brusso2.scr
10/06/99	04:42p	605,028	brusso2.zip
10/06/99	02:48p	313,858	brusso2_aq1.dat
10/06/99	02:55p	313,858	brusso2_aq2.dat
10/06/99	03:01p	313,858	brusso2_aq3.dat
10/06/99	03:20p	313,858	brusso2_aq4.dat
10/06/99	03:20p	182,715	brusso2_brk.dat
10/06/99	02:48p	105,193	brusso2_gas1.dat
10/06/99	02:55p	105,193	brusso2_gas2.dat
10/06/99	03:01p	105,193	brusso2_gas3.dat
10/06/99	03:20p	105,193	brusso2_gas4.dat
10/06/99	02:48p	79,678	brusso2_min1.dat
10/06/99	02:55p	79,678	brusso2_min2.dat
10/06/99	03:01p	79,678	brusso2_min3.dat
10/06/99	03:20p	79,678	brusso2_min4.dat
10/06/99	02:48p	216,283	brusso2_psi1.dat
10/06/99	02:55p	216,283	brusso2_psi2.dat
10/06/99	03:01p	216,283	brusso2_psi3.dat
10/06/99	03:20p	216,283	brusso2_psi4.dat
10/06/99	02:48p	420,419	brusso2_sec1.dat
10/06/99	02:55p	420,419	brusso2_sec2.dat
10/06/99	03:01p	420,419	brusso2_sec3.dat
10/06/99	03:20p	420,419	brusso2_sec4.dat
10/06/99	02:48p	99,193	brusso2_vol1.dat
10/06/99	02:55p	99,193	brusso2_vol2.dat
10/06/99	03:01p	99,193	brusso2_vol3.dat
10/06/99	03:20p	99,193	brusso2_vol4.dat
10/08/99	10:50p	1,138	brusso2pot.dat.csv
10/08/99	10:32p	20,000	brusso2pot.txt
10/06/99	02:16p	7,603,640	brusso3.out
10/06/99	02:16p	255,477	brusso3.scr
10/06/99	01:45p	313,858	brusso3_aq1.dat
10/06/99	01:45p	313,858	brusso3_aq2.dat
10/06/99	01:51p	313,858	brusso3_aq3.dat
10/06/99	01:57p	313,858	brusso3_aq4.dat
10/06/99	02:16p	313,858	brusso3_aq5.dat
10/06/99	02:16p	179,664	brusso3_brk.dat
10/06/99	01:45p	105,193	brusso3_gas1.dat
10/06/99	01:45p	105,193	brusso3_gas2.dat
10/06/99	01:51p	105,193	brusso3_gas3.dat
10/06/99	01:57p	105,193	brusso3_gas4.dat

10/06/99	02:16p	105,193	brusso3_gas5.dat
10/06/99	01:45p	79,678	brusso3_min1.dat
10/06/99	01:45p	79,678	brusso3_min2.dat
10/06/99	01:51p	79,678	brusso3_min3.dat
10/06/99	01:57p	79,678	brusso3_min4.dat
10/06/99	02:16p	79,678	brusso3_min5.dat
10/06/99	01:45p	216,283	brusso3_psi1.dat
10/06/99	01:45p	216,283	brusso3_psi2.dat
10/06/99	01:51p	216,283	brusso3_psi3.dat
10/06/99	01:57p	216,283	brusso3_psi4.dat
10/06/99	02:16p	216,283	brusso3_psi5.dat
10/06/99	01:45p	420,419	brusso3_sec1.dat
10/06/99	01:45p	420,419	brusso3_sec2.dat
10/06/99	01:51p	420,419	brusso3_sec3.dat
10/06/99	01:57p	420,419	brusso3_sec4.dat
10/06/99	02:16p	420,419	brusso3_sec5.dat
10/06/99	01:45p	99,193	brusso3_vol1.dat
10/06/99	01:45p	99,193	brusso3_vol2.dat
10/06/99	01:51p	99,193	brusso3_vol3.dat
10/06/99	01:57p	99,193	brusso3_vol4.dat
10/06/99	02:16p	99,193	brusso3_vol5.dat
10/04/99	05:10p	5,460,548	brussodm.out
10/04/99	05:37p	414,622	brussodm.scr
10/04/99	04:33p	392,343	brussodm_aq1.dat
10/04/99	05:10p	392,343	brussodm_aq2.dat
10/04/99	05:37p	270,117	brussodm_brk.dat
10/04/99	04:33p	168,208	brussodm_gas1.dat
10/04/99	05:10p	168,208	brussodm_gas2.dat
10/04/99	04:33p	106,178	brussodm_min1.dat
10/04/99	05:10p	106,178	brussodm_min2.dat
10/04/99	04:33p	262,268	brussodm_psi1.dat
10/04/99	05:10p	262,268	brussodm_psi2.dat
10/04/99	04:33p	700,494	brussodm_sec1.dat
10/04/99	05:10p	700,494	brussodm_sec2.dat
10/04/99	04:33p	132,193	brussodm_vol1.dat
10/04/99	05:10p	132,193	brussodm_vol2.dat
10/07/99	09:28a	127	brussoexp.dat
10/09/99	12:02a	13,312	brussopot.grf
131 File(s)		40,082,586	bytes

Directory of R:\tests\brusso

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
10/08/99	12:24a	14,125	BRUSSO2.SRF
10/25/99	08:36p	6,056	BRUSSO2AQ3R.GRD
10/25/99	08:20p	6,056	BRUSSO2AQ4R.GRD
10/04/99	07:48a	19,096	BRUSSO2PH.SRF
10/05/99	07:26a	7,456	BRUSSO2_AQ1.GRD
10/05/99	09:40p	7,456	BRUSSO2_AQ2.GRD
10/06/99	10:30a	10,056	BRUSSO2_AQ3.GRD
10/08/99	12:12a	9,656	BRUSSO2_AQ4.GRD
05/02/01	07:35a	43,520	Plrotection.grf
10/07/99	07:14a	18,944	brussol-2d.grf
01/28/01	01:26p	1,312,254	brussol.out
10/03/99	06:22p	1,456,181	brussol.scr
01/30/01	09:10p	21,460	brussol_aq1.dat

01/30/01	09:10p	21,460	brussol_aq2.dat
01/30/01	09:10p	21,460	brussol_aq3.dat
01/30/01	09:11p	21,460	brussol_aq4.dat
01/30/01	09:13p	21,460	brussol_aq5.dat
01/30/01	09:17p	21,460	brussol_aq6.dat
01/30/01	09:17p	858,681	brussol_brk.dat
01/30/01	09:10p	5,600	brussol_ele1.dat
01/30/01	09:10p	5,600	brussol_ele2.dat
01/30/01	09:10p	5,600	brussol_ele3.dat
01/30/01	09:11p	5,600	brussol_ele4.dat
01/30/01	09:13p	5,600	brussol_ele5.dat
01/30/01	09:17p	5,600	brussol_ele6.dat
01/30/01	09:10p	5,908	brussol_gas1.dat
01/30/01	09:10p	5,908	brussol_gas2.dat
01/30/01	09:10p	5,908	brussol_gas3.dat
01/30/01	09:11p	5,908	brussol_gas4.dat
01/30/01	09:13p	5,908	brussol_gas5.dat
01/30/01	09:17p	5,908	brussol_gas6.dat
01/30/01	09:10p	5,609	brussol_min1.dat
01/30/01	09:10p	5,609	brussol_min2.dat
01/30/01	09:10p	5,609	brussol_min3.dat
01/30/01	09:11p	5,609	brussol_min4.dat
01/30/01	09:13p	5,609	brussol_min5.dat
01/30/01	09:17p	5,609	brussol_min6.dat
01/30/01	09:10p	13,505	brussol_psi1.dat
01/30/01	09:10p	13,505	brussol_psi2.dat
01/30/01	09:10p	13,505	brussol_psi3.dat
01/30/01	09:11p	13,505	brussol_psi4.dat
01/30/01	09:13p	13,505	brussol_psi5.dat
01/30/01	09:17p	13,505	brussol_psi6.dat
01/30/01	09:10p	42,725	brussol_sec1.dat
01/30/01	09:10p	42,725	brussol_sec2.dat
01/30/01	09:10p	42,725	brussol_sec3.dat
01/30/01	09:11p	42,725	brussol_sec4.dat
01/30/01	09:13p	42,725	brussol_sec5.dat
01/30/01	09:17p	42,725	brussol_sec6.dat
01/30/01	09:10p	4,293	brussol_vol1.dat
01/30/01	09:10p	4,293	brussol_vol2.dat
01/30/01	09:10p	4,293	brussol_vol3.dat
01/30/01	09:11p	4,293	brussol_vol4.dat
01/30/01	09:13p	4,293	brussol_vol5.dat
01/30/01	09:17p	4,293	brussol_vol6.dat
01/28/01	01:41p	1,312,254	brusso2.out
10/06/99	12:32a	638,353	brusso2.scr
01/28/01	01:34p	21,460	brusso2_aq1.dat
01/28/01	01:34p	21,460	brusso2_aq2.dat
01/28/01	01:34p	21,460	brusso2_aq3.dat
01/28/01	01:35p	21,460	brusso2_aq4.dat
01/28/01	01:37p	21,460	brusso2_aq5.dat
01/28/01	01:41p	21,460	brusso2_aq6.dat
01/28/01	01:41p	858,681	brusso2_brk.dat
01/28/01	01:34p	5,600	brusso2_ele1.dat
01/28/01	01:34p	5,600	brusso2_ele2.dat
01/28/01	01:34p	5,600	brusso2_ele3.dat
01/28/01	01:35p	5,600	brusso2_ele4.dat
01/28/01	01:37p	5,600	brusso2_ele5.dat
01/28/01	01:41p	5,600	brusso2_ele6.dat

01/28/01	01:34p	5,908	brusso2_gas1.dat
01/28/01	01:34p	5,908	brusso2_gas2.dat
01/28/01	01:34p	5,908	brusso2_gas3.dat
01/28/01	01:35p	5,908	brusso2_gas4.dat
01/28/01	01:37p	5,908	brusso2_gas5.dat
01/28/01	01:41p	5,908	brusso2_gas6.dat
01/28/01	01:34p	5,609	brusso2_min1.dat
01/28/01	01:34p	5,609	brusso2_min2.dat
01/28/01	01:34p	5,609	brusso2_min3.dat
01/28/01	01:35p	5,609	brusso2_min4.dat
01/28/01	01:37p	5,609	brusso2_min5.dat
01/28/01	01:41p	5,609	brusso2_min6.dat
01/28/01	01:34p	13,505	brusso2_psi1.dat
01/28/01	01:34p	13,505	brusso2_psi2.dat
01/28/01	01:34p	13,505	brusso2_psi3.dat
01/28/01	01:35p	13,505	brusso2_psi4.dat
01/28/01	01:37p	13,505	brusso2_psi5.dat
01/28/01	01:41p	13,505	brusso2_psi6.dat
01/28/01	01:34p	42,725	brusso2_sec1.dat
01/28/01	01:34p	42,725	brusso2_sec2.dat
01/28/01	01:34p	42,725	brusso2_sec3.dat
01/28/01	01:35p	42,725	brusso2_sec4.dat
01/28/01	01:37p	42,725	brusso2_sec5.dat
01/28/01	01:41p	42,725	brusso2_sec6.dat
01/28/01	01:34p	4,293	brusso2_vol1.dat
01/28/01	01:34p	4,293	brusso2_vol2.dat
01/28/01	01:34p	4,293	brusso2_vol3.dat
01/28/01	01:35p	4,293	brusso2_vol4.dat
01/28/01	01:37p	4,293	brusso2_vol5.dat
01/28/01	01:41p	4,293	brusso2_vol6.dat
10/25/99	08:05p	216,898	brusso2aq3r.dat
10/25/99	08:04p	218,415	brusso2aq4r.dat
10/08/99	11:50p	1,138	brusso2pot.dat.csv
10/08/99	11:32p	20,000	brusso2pot.txt
10/25/99	08:41p	24,374	brusso2r.SRF
01/30/01	10:41p	21,460	brusso3_aq1.dat
01/30/01	10:42p	21,460	brusso3_aq2.dat
01/30/01	10:45p	21,460	brusso3_aq3.dat
01/30/01	11:27p	21,460	brusso3_aq4.dat
01/31/01	12:06a	21,460	brusso3_aq5.dat
01/30/01	10:23p	21,460	brusso3_aq6.dat
01/31/01	12:15a	2,448,930	brusso3_brk.dat
01/30/01	10:41p	5,600	brusso3_ele1.dat
01/30/01	10:42p	5,600	brusso3_ele2.dat
01/30/01	10:45p	5,600	brusso3_ele3.dat
05/02/01	07:30a	3,920	brusso3_ele4.dat
01/31/01	12:06a	5,600	brusso3_ele5.dat
01/30/01	10:23p	5,600	brusso3_ele6.dat
01/30/01	10:41p	5,908	brusso3_gas1.dat
01/30/01	10:42p	5,908	brusso3_gas2.dat
01/30/01	10:45p	5,908	brusso3_gas3.dat
01/30/01	11:27p	5,908	brusso3_gas4.dat
01/31/01	12:06a	5,908	brusso3_gas5.dat
01/30/01	10:23p	5,908	brusso3_gas6.dat
01/30/01	10:41p	5,609	brusso3_min1.dat
01/30/01	10:42p	5,609	brusso3_min2.dat
01/30/01	10:45p	5,609	brusso3_min3.dat

01/30/01	11:27p	5,609	brusso3_min4.dat
01/31/01	12:06a	5,609	brusso3_min5.dat
01/30/01	10:23p	5,609	brusso3_min6.dat
01/30/01	10:41p	13,505	brusso3_psi1.dat
01/30/01	10:42p	13,505	brusso3_psi2.dat
01/30/01	10:45p	13,505	brusso3_psi3.dat
01/30/01	11:27p	13,505	brusso3_psi4.dat
01/31/01	12:06a	13,505	brusso3_psi5.dat
01/30/01	10:23p	13,505	brusso3_psi6.dat
01/30/01	10:41p	42,725	brusso3_sec1.dat
01/30/01	10:42p	42,725	brusso3_sec2.dat
01/30/01	10:45p	42,725	brusso3_sec3.dat
01/30/01	11:27p	42,725	brusso3_sec4.dat
01/31/01	12:06a	42,725	brusso3_sec5.dat
01/30/01	10:23p	42,725	brusso3_sec6.dat
01/30/01	10:41p	4,293	brusso3_vol1.dat
01/30/01	10:42p	4,293	brusso3_vol2.dat
01/30/01	10:45p	4,293	brusso3_vol3.dat
01/30/01	11:27p	4,293	brusso3_vol4.dat
01/31/01	12:06a	4,293	brusso3_vol5.dat
01/30/01	10:23p	4,293	brusso3_vol6.dat
01/31/01	05:16p	21,460	brusso4_aq1.dat
01/31/01	05:50p	21,460	brusso4_aq2.dat
01/31/01	04:53p	21,460	brusso4_aq3.dat
01/31/01	05:57p	1,028,520	brusso4_brk.dat
01/31/01	05:16p	5,600	brusso4_ele1.dat
01/31/01	05:50p	5,600	brusso4_ele2.dat
01/31/01	04:53p	5,600	brusso4_ele3.dat
01/31/01	05:16p	5,908	brusso4_gas1.dat
01/31/01	05:50p	5,908	brusso4_gas2.dat
01/31/01	04:53p	5,908	brusso4_gas3.dat
01/31/01	05:16p	5,609	brusso4_min1.dat
01/31/01	05:50p	5,609	brusso4_min2.dat
01/31/01	04:53p	5,609	brusso4_min3.dat
01/31/01	05:16p	13,505	brusso4_psi1.dat
01/31/01	05:50p	13,505	brusso4_psi2.dat
01/31/01	04:53p	13,505	brusso4_psi3.dat
01/31/01	05:16p	42,725	brusso4_sec1.dat
01/31/01	05:50p	42,725	brusso4_sec2.dat
01/31/01	04:53p	42,725	brusso4_sec3.dat
01/31/01	05:16p	4,293	brusso4_vol1.dat
01/31/01	05:50p	4,293	brusso4_vol2.dat
01/31/01	04:53p	4,293	brusso4_vol3.dat
01/31/01	07:11p	15,360	brussoph.grf
01/31/01	05:59p	48,640	brussopot.grf
01/31/01	05:56p	146	gap profile.dat
01/30/01	11:46p	130	phdist.dat
01/30/01	08:45p	237	potexpt.dat
177 File(s)		12,681,033 bytes	

Directory of R:\tests\clst

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
08/30/99	09:18p		7,599 clst1.inp
08/30/99	08:45p		1,345,608 clst1.out
08/30/99	08:45p		262,530 clst1.scr

08/30/99	08:42p	21,460	clst1_aq1.xyp
08/30/99	08:42p	21,460	clst1_aq2.xyp
08/30/99	08:44p	21,460	clst1_aq3.xyp
08/30/99	08:45p	21,460	clst1_aq4.xyp
08/30/99	08:45p	21,460	clst1_aq5.xyp
08/30/99	09:44p	11,110	clst1_aq6.xyp
08/08/99	11:44a	896,743	clst1_brk.x
08/30/99	09:10p	127,874	clst1_brk.xyp
08/30/99	08:42p	5,600	clst1_ele1.xyp
08/30/99	08:42p	5,600	clst1_ele2.xyp
08/30/99	08:44p	5,600	clst1_ele3.xyp
08/30/99	08:45p	5,600	clst1_ele4.xyp
08/30/99	08:45p	5,600	clst1_ele5.xyp
08/30/99	08:45p	5,600	clst1_ele6.xyp
08/30/99	08:42p	7,324	clst1_gas1.xyp
08/30/99	08:42p	7,324	clst1_gas2.xyp
08/30/99	08:44p	7,324	clst1_gas3.xyp
08/30/99	08:45p	7,324	clst1_gas4.xyp
08/30/99	08:45p	7,324	clst1_gas5.xyp
08/30/99	08:45p	7,324	clst1_gas6.xyp
08/30/99	08:42p	9,557	clst1_min1.xyp
08/30/99	08:42p	9,557	clst1_min2.xyp
08/30/99	08:44p	9,557	clst1_min3.xyp
08/30/99	08:45p	9,557	clst1_min4.xyp
08/30/99	08:45p	9,557	clst1_min5.xyp
08/30/99	08:45p	9,557	clst1_min6.xyp
08/30/99	08:42p	13,505	clst1_psi1.xyp
08/30/99	08:42p	13,505	clst1_psi2.xyp
08/30/99	08:44p	13,505	clst1_psi3.xyp
08/30/99	08:45p	13,505	clst1_psi4.xyp
08/30/99	08:45p	13,505	clst1_psi5.xyp
08/30/99	08:45p	13,505	clst1_psi6.xyp
08/30/99	08:42p	39,893	clst1_sec1.xyp
08/30/99	08:42p	39,893	clst1_sec2.xyp
08/30/99	08:44p	39,893	clst1_sec3.xyp
08/30/99	08:45p	39,893	clst1_sec4.xyp
08/30/99	08:45p	39,893	clst1_sec5.xyp
08/30/99	09:13p	25,743	clst1_sec6.xyp
08/30/99	08:42p	8,241	clst1_vol1.xyp
08/30/99	08:42p	8,241	clst1_vol2.xyp
08/30/99	08:44p	8,241	clst1_vol3.xyp
08/30/99	08:45p	8,241	clst1_vol4.xyp
08/30/99	08:45p	8,241	clst1_vol5.xyp
08/30/99	08:45p	8,241	clst1_vol6.xyp
08/30/99	10:03p	26,112	clst1cr.grf
08/31/99	06:10a	31,232	clst1o2.grf
08/30/99	09:18p	7,605	clst2.inp
08/30/99	09:19p	1,345,608	clst2.out
08/30/99	09:19p	86,601	clst2.scr
08/30/99	09:18p	21,460	clst2_aq1.xyp
08/30/99	09:19p	21,460	clst2_aq2.xyp
08/30/99	09:19p	21,460	clst2_aq3.xyp
08/30/99	09:19p	21,460	clst2_aq4.xyp
08/30/99	09:19p	21,460	clst2_aq5.xyp
08/30/99	09:19p	21,460	clst2_aq6.xyp
08/30/99	09:30p	42,514	clst2_brk.xyp
08/30/99	09:18p	5,600	clst2_ele1.xyp

08/30/99	09:19p	5,600	clst2_ele2.xyp
08/30/99	09:19p	5,600	clst2_ele3.xyp
08/30/99	09:19p	5,600	clst2_ele4.xyp
08/30/99	09:19p	5,600	clst2_ele5.xyp
08/30/99	09:19p	5,600	clst2_ele6.xyp
08/30/99	09:18p	7,324	clst2_gas1.xyp
08/30/99	09:19p	7,324	clst2_gas2.xyp
08/30/99	09:19p	7,324	clst2_gas3.xyp
08/30/99	09:19p	7,324	clst2_gas4.xyp
08/30/99	09:19p	7,324	clst2_gas5.xyp
08/30/99	09:19p	7,324	clst2_gas6.xyp
08/30/99	09:18p	9,557	clst2_min1.xyp
08/30/99	09:19p	9,557	clst2_min2.xyp
08/30/99	09:19p	9,557	clst2_min3.xyp
08/30/99	09:19p	9,557	clst2_min4.xyp
08/30/99	09:19p	9,557	clst2_min5.xyp
08/30/99	09:19p	9,557	clst2_min6.xyp
08/30/99	09:18p	13,505	clst2_psi1.xyp
08/30/99	09:19p	13,505	clst2_psi2.xyp
08/30/99	09:19p	13,505	clst2_psi3.xyp
08/30/99	09:19p	13,505	clst2_psi4.xyp
08/30/99	09:19p	13,505	clst2_psi5.xyp
08/30/99	09:54p	9,972	clst2_psi6.xyp
08/30/99	09:18p	39,893	clst2_sec1.xyp
08/30/99	09:19p	39,893	clst2_sec2.xyp
08/30/99	09:19p	39,893	clst2_sec3.xyp
08/30/99	09:19p	39,893	clst2_sec4.xyp
08/30/99	09:19p	39,893	clst2_sec5.xyp
08/30/99	09:19p	39,893	clst2_sec6.xyp
08/30/99	09:18p	8,241	clst2_vol1.xyp
08/30/99	09:19p	8,241	clst2_vol2.xyp
08/30/99	09:19p	8,241	clst2_vol3.xyp
08/30/99	09:19p	8,241	clst2_vol4.xyp
08/30/99	09:19p	8,241	clst2_vol5.xyp
08/30/99	09:19p	8,241	clst2_vol6.xyp
08/30/99	10:03p	33,280	clsttime.grf

98 File(s) 5,452,233 bytes

Directory of R:\tests\coreldraw figs

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
07/14/99	05:35p		0 New CorelDRAW 8.0 Graphic (2).cdr
07/14/99	05:34p		0 New CorelDRAW 8.0 Graphic.cdr

4 File(s) 0 bytes

Directory of R:\tests\disbond

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
02/02/01	05:27p		23,552 DISBOND1.GRF
04/28/01	01:56p		6,753 DISBOND3.INP
04/28/01	02:06p		6,560 disbond.inp
04/28/01	02:07p		619,850 disbond.out
04/28/01	02:07p		23,108 disbond.scr
04/08/01	09:14p		6,748 disbond2.inp
04/08/01	09:14p		1,013,673 disbond2.out

04/08/01	09:14p	110,960	disbond2.scr
04/08/01	09:14p	22,876	disbond2_aq1.dat
04/08/01	09:14p	22,876	disbond2_aq2.dat
04/08/01	09:14p	22,876	disbond2_aq3.dat
04/08/01	09:14p	22,876	disbond2_aq4.dat
04/08/01	09:14p	22,876	disbond2_aq5.dat
04/08/01	09:14p	83,940	disbond2_brk.dat
04/08/01	09:14p	5,600	disbond2_ele1.dat
04/08/01	09:14p	5,600	disbond2_ele2.dat
04/08/01	09:14p	5,600	disbond2_ele3.dat
04/08/01	09:14p	5,600	disbond2_ele4.dat
04/08/01	09:14p	5,600	disbond2_ele5.dat
04/08/01	09:14p	7,324	disbond2_gas1.dat
04/08/01	09:14p	7,324	disbond2_gas2.dat
04/08/01	09:14p	7,324	disbond2_gas3.dat
04/08/01	09:14p	7,324	disbond2_gas4.dat
04/08/01	09:14p	7,324	disbond2_gas5.dat
04/08/01	09:14p	6,925	disbond2_min1.dat
04/08/01	09:14p	6,925	disbond2_min2.dat
04/08/01	09:14p	6,925	disbond2_min3.dat
04/08/01	09:14p	6,925	disbond2_min4.dat
04/08/01	09:14p	6,925	disbond2_min5.dat
04/08/01	09:14p	14,821	disbond2_psi1.dat
04/08/01	09:14p	14,821	disbond2_psi2.dat
04/08/01	09:14p	14,821	disbond2_psi3.dat
04/08/01	09:14p	14,821	disbond2_psi4.dat
04/08/01	09:14p	14,821	disbond2_psi5.dat
04/08/01	09:14p	27,149	disbond2_sec1.dat
04/08/01	09:14p	27,149	disbond2_sec2.dat
04/08/01	09:14p	27,149	disbond2_sec3.dat
04/08/01	09:14p	27,149	disbond2_sec4.dat
04/08/01	09:14p	27,149	disbond2_sec5.dat
04/08/01	09:14p	5,609	disbond2_vol1.dat
04/08/01	09:14p	5,609	disbond2_vol2.dat
04/08/01	09:14p	5,609	disbond2_vol3.dat
04/08/01	09:14p	5,609	disbond2_vol4.dat
04/08/01	09:14p	5,609	disbond2_vol5.dat
04/28/01	01:58p	1,004,957	disbond3.out
04/28/01	01:58p	110,948	disbond3.scr
04/28/01	01:58p	22,876	disbond3_aq1.dat
04/28/01	01:58p	22,876	disbond3_aq2.dat
04/28/01	01:58p	22,876	disbond3_aq3.dat
04/28/01	01:58p	22,876	disbond3_aq4.dat
04/28/01	01:58p	22,876	disbond3_aq5.dat
04/28/01	01:58p	83,940	disbond3_brk.dat
04/28/01	01:58p	5,600	disbond3_ele1.dat
04/28/01	01:58p	5,600	disbond3_ele2.dat
04/28/01	01:58p	5,600	disbond3_ele3.dat
04/28/01	01:58p	5,600	disbond3_ele4.dat
04/28/01	01:58p	5,600	disbond3_ele5.dat
04/28/01	01:58p	7,324	disbond3_gas1.dat
04/28/01	01:58p	7,324	disbond3_gas2.dat
04/28/01	01:58p	7,324	disbond3_gas3.dat
04/28/01	01:58p	7,324	disbond3_gas4.dat
04/28/01	01:58p	7,324	disbond3_gas5.dat
04/28/01	01:58p	6,925	disbond3_min1.dat
04/28/01	01:58p	6,925	disbond3_min2.dat

04/28/01	01:58p	6,925	disbond3_min3.dat
04/28/01	01:58p	6,925	disbond3_min4.dat
04/28/01	01:58p	6,925	disbond3_min5.dat
04/28/01	01:58p	14,821	disbond3_psi1.dat
04/28/01	01:58p	14,821	disbond3_psi2.dat
04/28/01	01:58p	14,821	disbond3_psi3.dat
04/28/01	01:58p	14,821	disbond3_psi4.dat
04/28/01	01:58p	14,821	disbond3_psi5.dat
04/28/01	01:58p	27,149	disbond3_sec1.dat
04/28/01	01:58p	27,149	disbond3_sec2.dat
04/28/01	01:58p	27,149	disbond3_sec3.dat
04/28/01	01:58p	27,149	disbond3_sec4.dat
04/28/01	01:58p	27,149	disbond3_sec5.dat
04/28/01	01:58p	5,609	disbond3_vol1.dat
04/28/01	01:58p	5,609	disbond3_vol2.dat
04/28/01	01:58p	5,609	disbond3_vol3.dat
04/28/01	01:58p	5,609	disbond3_vol4.dat
04/28/01	01:58p	5,609	disbond3_vol5.dat
04/28/01	02:07p	22,876	disbond_aq1.dat
04/28/01	02:07p	22,876	disbond_aq2.dat
04/08/01	09:47p	22,876	disbond_aq3.dat
04/08/01	09:47p	22,876	disbond_aq4.dat
04/08/01	09:47p	22,876	disbond_aq5.dat
04/28/01	02:07p	17,145	disbond_brk.dat
04/28/01	02:07p	5,600	disbond_ele1.dat
04/28/01	02:07p	5,600	disbond_ele2.dat
04/08/01	09:47p	5,600	disbond_ele3.dat
04/08/01	09:47p	5,600	disbond_ele4.dat
04/08/01	09:47p	5,600	disbond_ele5.dat
04/28/01	02:07p	7,324	disbond_gas1.dat
04/28/01	02:07p	7,324	disbond_gas2.dat
04/08/01	09:47p	7,324	disbond_gas3.dat
04/08/01	09:47p	7,324	disbond_gas4.dat
04/08/01	09:47p	7,324	disbond_gas5.dat
04/28/01	02:07p	6,925	disbond_min1.dat
04/28/01	02:07p	6,925	disbond_min2.dat
04/08/01	09:47p	6,925	disbond_min3.dat
04/08/01	09:47p	6,925	disbond_min4.dat
04/08/01	09:47p	6,925	disbond_min5.dat
04/28/01	02:07p	14,821	disbond_psi1.dat
04/28/01	02:07p	14,821	disbond_psi2.dat
04/08/01	09:47p	14,821	disbond_psi3.dat
04/08/01	09:47p	14,821	disbond_psi4.dat
04/08/01	09:47p	14,821	disbond_psi5.dat
04/28/01	02:07p	27,149	disbond_sec1.dat
04/28/01	02:07p	27,149	disbond_sec2.dat
04/08/01	09:47p	27,149	disbond_sec3.dat
04/08/01	09:47p	27,149	disbond_sec4.dat
04/08/01	09:47p	27,149	disbond_sec5.dat
04/28/01	02:07p	5,609	disbond_vol1.dat
04/28/01	02:07p	5,609	disbond_vol2.dat
04/08/01	09:47p	5,609	disbond_vol3.dat
04/08/01	09:47p	5,609	disbond_vol4.dat
04/08/01	09:47p	5,609	disbond_vol5.dat
01/22/01	05:23p	7,680	disbonded QL test 2.GRF
04/09/01	02:13p	33,792	potgrad.grf
04/09/01	02:07p	4,096	potgrad.xls

04/28/01 02:38p 17,408 potgrad2.grf
124 File(s) 4,529,670 bytes

Directory of R:\tests\disbond coupon

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
01/22/01	06:23p	14,441,984	QLTEST1x.xls
04/09/01	02:11p	1,194,882	QLTEST2B.xls
01/22/01	06:20p	40,960	QLtest1.grf
01/22/01	06:23p	7,680	disbonded QL test 2.GRF
01/22/01	06:23p	73,728	pipecl.GRF
		7 File(s)	15,759,234 bytes

Directory of R:\tests\dunn

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
10/09/99	01:18p	5,056	DUNN2DHI_AQ1.GRD
10/09/99	01:19p	5,056	DUNN2DHI_AQ2.GRD
10/09/99	01:25p	5,056	DUNN2DHI_AQ3.GRD
10/09/99	01:36p	6,256	DUNN2DHI_AQ4.GRD
10/07/99	07:23p	8,461	DUNN3DHI.INP
04/07/00	08:46a	7,088	DUNNCO2.INP
02/01/01	03:38p	7,095	DUNNGRI2.INP
10/04/99	08:09a	5,056	DUNNHI2_AQ3.GRD
12/06/99	09:40a	90,038	brief1.JPG
10/07/99	07:30a	636,139	dunn.zip
10/08/99	12:27a	39,936	dunn1.grf
10/09/99	12:46p	7,696	dunn2dhi.inp
10/09/99	01:20p	7,357,854	dunn2dhi.out
10/09/99	01:20p	380,537	dunn2dhi.scr
10/09/99	12:47p	294,343	dunn2dhi_aq1.dat
10/09/99	12:51p	294,343	dunn2dhi_aq2.dat
10/09/99	01:09p	294,343	dunn2dhi_aq3.dat
10/09/99	01:20p	294,343	dunn2dhi_aq4.dat
10/09/99	01:20p	247,268	dunn2dhi_brk.dat
10/09/99	12:47p	126,208	dunn2dhi_gas1.dat
10/09/99	12:51p	126,208	dunn2dhi_gas2.dat
10/09/99	01:09p	126,208	dunn2dhi_gas3.dat
10/09/99	01:20p	126,208	dunn2dhi_gas4.dat
10/09/99	12:47p	79,678	dunn2dhi_min1.dat
10/09/99	12:51p	79,678	dunn2dhi_min2.dat
10/09/99	01:09p	79,678	dunn2dhi_min3.dat
10/09/99	01:20p	79,678	dunn2dhi_min4.dat
10/09/99	12:47p	196,768	dunn2dhi_psi1.dat
10/09/99	12:51p	196,768	dunn2dhi_psi2.dat
10/09/99	01:09p	196,768	dunn2dhi_psi3.dat
10/09/99	01:20p	196,768	dunn2dhi_psi4.dat
10/09/99	12:47p	525,494	dunn2dhi_sec1.dat
10/09/99	12:51p	525,494	dunn2dhi_sec2.dat
10/09/99	01:09p	525,494	dunn2dhi_sec3.dat
10/09/99	01:20p	525,494	dunn2dhi_sec4.dat
10/09/99	12:47p	99,193	dunn2dhi_vol1.dat
10/09/99	12:51p	99,193	dunn2dhi_vol2.dat
10/09/99	01:09p	99,193	dunn2dhi_vol3.dat
10/09/99	01:20p	99,193	dunn2dhi_vol4.dat

11/22/99	11:02p	36,774	dunn2dph.SRF
02/01/01	04:11p	21,504	dunn2ph.grf
02/01/01	04:58p	46,080	dunn2pot.grf
10/07/99	07:23p	1,416,142	dunn3dhi.out
10/07/99	07:19p	0	dunn3dhi.scr
02/01/01	05:53p	73,216	dunnco.grf
10/12/99	08:32p	7,092	dunnco1.inp
01/31/01	11:00p	1,227,288	dunnco1.out
10/12/99	09:40p	1,651,019	dunnco1.scr
01/31/01	10:48p	20,044	dunnco1_aq1.dat
01/31/01	10:48p	20,044	dunnco1_aq2.dat
01/31/01	10:49p	20,044	dunnco1_aq3.dat
01/31/01	10:54p	20,044	dunnco1_aq4.dat
01/31/01	10:55p	20,044	dunnco1_aq5.dat
01/31/01	11:01p	20,044	dunnco1_aq6.dat
01/31/01	11:00p	1,205,987	dunnco1_brk.dat
01/31/01	10:48p	5,600	dunnco1_ele1.dat
01/31/01	10:48p	5,600	dunnco1_ele2.dat
01/31/01	10:49p	5,600	dunnco1_ele3.dat
01/31/01	10:54p	5,600	dunnco1_ele4.dat
01/31/01	10:55p	5,600	dunnco1_ele5.dat
01/31/01	11:01p	5,600	dunnco1_ele6.dat
01/31/01	10:48p	7,324	dunnco1_gas1.dat
01/31/01	10:48p	7,324	dunnco1_gas2.dat
01/31/01	10:49p	7,324	dunnco1_gas3.dat
01/31/01	10:54p	7,324	dunnco1_gas4.dat
01/31/01	10:55p	7,324	dunnco1_gas5.dat
01/31/01	11:01p	7,324	dunnco1_gas6.dat
01/31/01	10:48p	8,241	dunnco1_min1.dat
01/31/01	10:48p	8,241	dunnco1_min2.dat
01/31/01	10:49p	8,241	dunnco1_min3.dat
01/31/01	10:54p	8,241	dunnco1_min4.dat
01/31/01	10:55p	8,241	dunnco1_min5.dat
01/31/01	11:01p	8,241	dunnco1_min6.dat
01/31/01	10:48p	12,189	dunnco1_psi1.dat
01/31/01	10:48p	12,189	dunnco1_psi2.dat
01/31/01	10:49p	12,189	dunnco1_psi3.dat
01/31/01	10:54p	12,189	dunnco1_psi4.dat
01/31/01	10:55p	12,189	dunnco1_psi5.dat
01/31/01	11:01p	12,189	dunnco1_psi6.dat
01/31/01	10:48p	34,229	dunnco1_sec1.dat
01/31/01	10:48p	34,229	dunnco1_sec2.dat
01/31/01	10:49p	34,229	dunnco1_sec3.dat
01/31/01	10:54p	34,229	dunnco1_sec4.dat
01/31/01	10:55p	34,229	dunnco1_sec5.dat
01/31/01	11:01p	34,229	dunnco1_sec6.dat
01/31/01	10:48p	6,925	dunnco1_vol1.dat
01/31/01	10:48p	6,925	dunnco1_vol2.dat
01/31/01	10:49p	6,925	dunnco1_vol3.dat
01/31/01	10:54p	6,925	dunnco1_vol4.dat
01/31/01	10:55p	6,925	dunnco1_vol5.dat
01/31/01	11:01p	6,925	dunnco1_vol6.dat
04/07/00	08:55a	922,732	dunnco2.out
04/07/00	08:55a	1,651,015	dunnco2.scr
04/07/00	08:47a	20,044	dunnco2_aq1.dat
04/07/00	08:48a	20,044	dunnco2_aq2.dat
04/07/00	08:52a	20,044	dunnco2_aq3.dat

04/07/00	08:55a	20,044	dunnco2_aq4.dat
04/07/00	08:55a	1,072,962	dunnco2_b
04/07/00	08:47a	5,600	dunnco2_ele1.dat
04/07/00	08:48a	5,600	dunnco2_ele2.dat
04/07/00	08:52a	5,600	dunnco2_ele3.dat
04/07/00	08:55a	5,600	dunnco2_ele4.dat
04/07/00	08:47a	7,324	dunnco2_gas1.dat
04/07/00	08:48a	7,324	dunnco2_gas2.dat
04/07/00	08:52a	7,324	dunnco2_gas3.dat
04/07/00	08:55a	7,324	dunnco2_gas4.dat
04/07/00	08:47a	8,241	dunnco2_min1.dat
04/07/00	08:48a	8,241	dunnco2_min2.dat
04/07/00	08:52a	8,241	dunnco2_min3.dat
04/07/00	08:55a	8,241	dunnco2_min4.dat
04/07/00	08:47a	12,189	dunnco2_psi1.dat
04/07/00	08:48a	12,189	dunnco2_psi2.dat
04/07/00	08:52a	12,189	dunnco2_psi3.dat
04/07/00	08:55a	12,189	dunnco2_psi4.dat
04/07/00	08:47a	34,229	dunnco2_sec1.dat
04/07/00	08:48a	34,229	dunnco2_sec2.dat
04/07/00	08:52a	34,229	dunnco2_sec3.dat
04/07/00	08:55a	34,229	dunnco2_sec4.dat
04/07/00	08:47a	6,925	dunnco2_vol1.dat
04/07/00	08:48a	6,925	dunnco2_vol2.dat
04/07/00	08:52a	6,925	dunnco2_vol3.dat
04/07/00	08:55a	6,925	dunnco2_vol4.dat
02/01/01	02:42p	20,044	dunngril_aq1.dat
02/01/01	02:42p	20,044	dunngril_aq2.dat
02/01/01	02:42p	20,044	dunngril_aq3.dat
02/01/01	02:42p	20,044	dunngril_aq4.dat
02/01/01	02:42p	20,044	dunngril_aq5.dat
02/01/01	02:43p	20,044	dunngril_aq6.dat
02/01/01	02:51p	21,282	dunngril_brk.dat
02/01/01	02:42p	5,600	dunngril_ele1.dat
02/01/01	02:42p	5,600	dunngril_ele2.dat
02/01/01	02:42p	5,600	dunngril_ele3.dat
02/01/01	02:42p	5,600	dunngril_ele4.dat
02/01/01	02:42p	5,600	dunngril_ele5.dat
02/01/01	02:43p	5,600	dunngril_ele6.dat
02/01/01	02:42p	7,324	dunngril_gas1.dat
02/01/01	02:42p	7,324	dunngril_gas2.dat
02/01/01	02:42p	7,324	dunngril_gas3.dat
02/01/01	02:42p	7,324	dunngril_gas4.dat
02/01/01	02:42p	7,324	dunngril_gas5.dat
02/01/01	02:43p	7,324	dunngril_gas6.dat
02/01/01	02:42p	6,925	dunngril_min1.dat
02/01/01	02:42p	6,925	dunngril_min2.dat
02/01/01	02:42p	6,925	dunngril_min3.dat
02/01/01	02:42p	6,925	dunngril_min4.dat
02/01/01	02:42p	6,925	dunngril_min5.dat
02/01/01	02:43p	6,925	dunngril_min6.dat
02/01/01	02:42p	12,189	dunngril_psi1.dat
02/01/01	02:42p	12,189	dunngril_psi2.dat
02/01/01	02:42p	12,189	dunngril_psi3.dat
02/01/01	02:42p	12,189	dunngril_psi4.dat
02/01/01	02:42p	12,189	dunngril_psi5.dat
02/01/01	02:43p	12,189	dunngril_psi6.dat

02/01/01	02:42p	34,229	dunngr11_sec1.dat
02/01/01	02:42p	34,229	dunngr11_sec2.dat
02/01/01	02:42p	34,229	dunngr11_sec3.dat
02/01/01	02:42p	34,229	dunngr11_sec4.dat
02/01/01	02:42p	34,229	dunngr11_sec5.dat
02/01/01	02:43p	34,229	dunngr11_sec6.dat
02/01/01	02:42p	5,609	dunngr11_vol1.dat
02/01/01	02:42p	5,609	dunngr11_vol2.dat
02/01/01	02:42p	5,609	dunngr11_vol3.dat
02/01/01	02:42p	5,609	dunngr11_vol4.dat
02/01/01	02:42p	5,609	dunngr11_vol5.dat
02/01/01	02:43p	5,609	dunngr11_vol6.dat
02/01/01	03:39p	1,189,254	dunngr12.out
02/01/01	03:39p	128,501	dunngr12.scr
02/01/01	03:38p	20,044	dunngr12_aq1.dat
02/01/01	03:38p	20,044	dunngr12_aq2.dat
02/01/01	03:38p	20,044	dunngr12_aq3.dat
02/01/01	03:39p	20,044	dunngr12_aq4.dat
02/01/01	03:39p	20,044	dunngr12_aq5.dat
02/01/01	03:39p	20,044	dunngr12_aq6.dat
02/01/01	03:39p	83,256	dunngr12_brk.dat
02/01/01	03:38p	5,600	dunngr12_ele1.dat
02/01/01	03:38p	5,600	dunngr12_ele2.dat
02/01/01	03:38p	5,600	dunngr12_ele3.dat
02/01/01	03:39p	5,600	dunngr12_ele4.dat
02/01/01	03:39p	5,600	dunngr12_ele5.dat
02/01/01	03:39p	5,600	dunngr12_ele6.dat
02/01/01	03:38p	7,324	dunngr12_gas1.dat
02/01/01	03:38p	7,324	dunngr12_gas2.dat
02/01/01	03:38p	7,324	dunngr12_gas3.dat
02/01/01	03:39p	7,324	dunngr12_gas4.dat
02/01/01	03:39p	7,324	dunngr12_gas5.dat
02/01/01	03:39p	7,324	dunngr12_gas6.dat
02/01/01	03:38p	6,925	dunngr12_min1.dat
02/01/01	03:38p	6,925	dunngr12_min2.dat
02/01/01	03:38p	6,925	dunngr12_min3.dat
02/01/01	03:39p	6,925	dunngr12_min4.dat
02/01/01	03:39p	6,925	dunngr12_min5.dat
02/01/01	03:39p	6,925	dunngr12_min6.dat
02/01/01	03:38p	12,189	dunngr12_psi1.dat
02/01/01	03:38p	12,189	dunngr12_psi2.dat
02/01/01	03:38p	12,189	dunngr12_psi3.dat
02/01/01	03:39p	12,189	dunngr12_psi4.dat
02/01/01	03:39p	12,189	dunngr12_psi5.dat
02/01/01	03:39p	12,189	dunngr12_psi6.dat
02/01/01	03:38p	34,229	dunngr12_sec1.dat
02/01/01	03:38p	34,229	dunngr12_sec2.dat
02/01/01	03:38p	34,229	dunngr12_sec3.dat
02/01/01	03:39p	34,229	dunngr12_sec4.dat
02/01/01	03:39p	34,229	dunngr12_sec5.dat
02/01/01	03:39p	34,229	dunngr12_sec6.dat
02/01/01	03:38p	5,609	dunngr12_vol1.dat
02/01/01	03:38p	5,609	dunngr12_vol2.dat
02/01/01	03:38p	5,609	dunngr12_vol3.dat
02/01/01	03:39p	5,609	dunngr12_vol4.dat
02/01/01	03:39p	5,609	dunngr12_vol5.dat
02/01/01	03:39p	5,609	dunngr12_vol6.dat

02/01/01	04:18p	3,584	dunnagri2pot.xls
10/12/99	07:48a	7,091	dunnhi.inp
01/31/01	10:27p	915,631	dunnhi.out
10/12/99	07:59a	1,806,456	dunnhi.scr
10/02/99	10:53p	7,081	dunnhi2.inp
10/02/99	10:59p	896,946	dunnhi2.out
10/02/99	10:59p	1,457,137	dunnhi2.scr
10/02/99	10:53p	20,044	dunnhi2_aq1.dat
10/02/99	10:54p	20,044	dunnhi2_aq2.dat
10/02/99	10:58p	20,044	dunnhi2_aq3.dat
10/02/99	10:59p	20,044	dunnhi2_aq4.dat
10/02/99	10:59p	947,136	dunnhi2_brk.dat
10/02/99	10:53p	5,600	dunnhi2_ele1.dat
10/02/99	10:54p	5,600	dunnhi2_ele2.dat
10/02/99	10:58p	5,600	dunnhi2_ele3.dat
10/02/99	10:59p	5,600	dunnhi2_ele4.dat
10/02/99	10:53p	7,324	dunnhi2_gas1.dat
10/02/99	10:54p	7,324	dunnhi2_gas2.dat
10/02/99	10:58p	7,324	dunnhi2_gas3.dat
10/02/99	10:59p	7,324	dunnhi2_gas4.dat
10/02/99	10:53p	6,925	dunnhi2_min1.dat
10/02/99	10:54p	6,925	dunnhi2_min2.dat
10/02/99	10:58p	6,925	dunnhi2_min3.dat
10/02/99	10:59p	6,925	dunnhi2_min4.dat
10/02/99	10:53p	12,189	dunnhi2_psi1.dat
10/02/99	10:54p	12,189	dunnhi2_psi2.dat
10/02/99	10:58p	12,189	dunnhi2_psi3.dat
10/02/99	10:59p	12,189	dunnhi2_psi4.dat
10/02/99	10:53p	34,229	dunnhi2_sec1.dat
10/02/99	10:54p	34,229	dunnhi2_sec2.dat
10/02/99	10:58p	34,229	dunnhi2_sec3.dat
10/02/99	10:59p	34,229	dunnhi2_sec4.dat
10/02/99	10:53p	5,609	dunnhi2_vol1.dat
10/02/99	10:54p	5,609	dunnhi2_vol2.dat
10/02/99	10:58p	5,609	dunnhi2_vol3.dat
10/02/99	10:59p	5,609	dunnhi2_vol4.dat
01/31/01	10:17p	20,044	dunnhi_aq1.dat
01/31/01	10:24p	20,044	dunnhi_aq2.dat
01/31/01	10:26p	20,044	dunnhi_aq3.dat
01/31/01	10:27p	20,044	dunnhi_aq4.dat
01/31/01	10:27p	1,290,184	dunnhi_brk.dat
01/31/01	10:17p	5,600	dunnhi_ele1.dat
01/31/01	10:24p	5,600	dunnhi_ele2.dat
01/31/01	10:26p	5,600	dunnhi_ele3.dat
01/31/01	10:27p	5,600	dunnhi_ele4.dat
01/31/01	10:17p	7,324	dunnhi_gas1.dat
01/31/01	10:24p	7,324	dunnhi_gas2.dat
01/31/01	10:26p	7,324	dunnhi_gas3.dat
01/31/01	10:27p	7,324	dunnhi_gas4.dat
01/31/01	10:17p	6,925	dunnhi_min1.dat
01/31/01	10:24p	6,925	dunnhi_min2.dat
01/31/01	10:26p	6,925	dunnhi_min3.dat
01/31/01	10:27p	6,925	dunnhi_min4.dat
01/31/01	10:17p	12,189	dunnhi_psi1.dat
01/31/01	10:24p	12,189	dunnhi_psi2.dat
01/31/01	10:26p	12,189	dunnhi_psi3.dat
01/31/01	10:27p	12,189	dunnhi_psi4.dat

01/31/01	10:17p	34,229	dunnhi_sec1.dat
01/31/01	10:24p	34,229	dunnhi_sec2.dat
01/31/01	10:26p	34,229	dunnhi_sec3.dat
01/31/01	10:27p	34,229	dunnhi_sec4.dat
01/31/01	10:17p	5,609	dunnhi_vol1.dat
01/31/01	10:24p	5,609	dunnhi_vol2.dat
01/31/01	10:26p	5,609	dunnhi_vol3.dat
01/31/01	10:27p	5,609	dunnhi_vol4.dat
10/12/99	08:53p	7,091	dunnhico.inp
01/31/01	10:43p	1,227,288	dunnhico.out
10/12/99	10:00p	1,509,224	dunnhico.scr
01/31/01	10:30p	20,044	dunnhico_aq1.dat
01/31/01	10:30p	20,044	dunnhico_aq2.dat
01/31/01	10:31p	20,044	dunnhico_aq3.dat
01/31/01	10:36p	20,044	dunnhico_aq4.dat
01/31/01	10:37p	20,044	dunnhico_aq5.dat
01/31/01	10:43p	20,044	dunnhico_aq6.dat
01/31/01	10:43p	1,208,491	dunnhico_brk.dat
01/31/01	10:30p	5,600	dunnhico_ele1.dat
01/31/01	10:30p	5,600	dunnhico_ele2.dat
01/31/01	10:31p	5,600	dunnhico_ele3.dat
01/31/01	10:36p	5,600	dunnhico_ele4.dat
01/31/01	10:37p	5,600	dunnhico_ele5.dat
01/31/01	10:43p	5,600	dunnhico_ele6.dat
01/31/01	10:30p	7,324	dunnhico_gas1.dat
01/31/01	10:30p	7,324	dunnhico_gas2.dat
01/31/01	10:31p	7,324	dunnhico_gas3.dat
01/31/01	10:36p	7,324	dunnhico_gas4.dat
01/31/01	10:37p	7,324	dunnhico_gas5.dat
01/31/01	10:43p	7,324	dunnhico_gas6.dat
01/31/01	10:30p	8,241	dunnhico_min1.dat
01/31/01	10:30p	8,241	dunnhico_min2.dat
01/31/01	10:31p	8,241	dunnhico_min3.dat
01/31/01	10:36p	8,241	dunnhico_min4.dat
01/31/01	10:37p	8,241	dunnhico_min5.dat
01/31/01	10:43p	8,241	dunnhico_min6.dat
01/31/01	10:30p	12,189	dunnhico_psi1.dat
01/31/01	10:30p	12,189	dunnhico_psi2.dat
01/31/01	10:31p	12,189	dunnhico_psi3.dat
01/31/01	10:36p	12,189	dunnhico_psi4.dat
01/31/01	10:37p	12,189	dunnhico_psi5.dat
01/31/01	10:43p	12,189	dunnhico_psi6.dat
01/31/01	10:30p	34,229	dunnhico_sec1.dat
01/31/01	10:30p	34,229	dunnhico_sec2.dat
01/31/01	10:31p	34,229	dunnhico_sec3.dat
01/31/01	10:36p	34,229	dunnhico_sec4.dat
01/31/01	10:37p	34,229	dunnhico_sec5.dat
01/31/01	10:43p	34,229	dunnhico_sec6.dat
01/31/01	10:30p	6,925	dunnhico_vol1.dat
01/31/01	10:30p	6,925	dunnhico_vol2.dat
01/31/01	10:31p	6,925	dunnhico_vol3.dat
01/31/01	10:36p	6,925	dunnhico_vol4.dat
01/31/01	10:37p	6,925	dunnhico_vol5.dat
01/31/01	10:43p	6,925	dunnhico_vol6.dat
10/02/99	10:31p	136	dunnhiexp.dat
10/03/99	05:58p	20,044	dunnhim_aq1.dat
10/03/99	05:58p	14,083	dunnhim_brk.dat

10/03/99	05:58p	5,600	dunnhim_ele1.dat
10/03/99	05:58p	7,324	dunnhim_gas1.dat
10/03/99	05:58p	6,925	dunnhim_min1.dat
10/03/99	05:58p	12,189	dunnhim_psi1.dat
10/03/99	05:58p	34,229	dunnhim_sec1.dat
10/03/99	05:58p	5,609	dunnhim_vol1.dat
03/22/00	09:08p	37,376	dunnhipsi.grf
10/02/99	07:39p	7,042	dunnlo.inp
10/02/99	07:46p	896,946	dunnlo.out
10/02/99	07:46p	1,456,165	dunnlo.scr
10/02/99	07:40p	20,044	dunnlo_aq1.dat
10/02/99	07:41p	20,044	dunnlo_aq2.dat
10/02/99	07:45p	20,044	dunnlo_aq3.dat
10/02/99	07:46p	20,044	dunnlo_aq4.dat
10/02/99	07:46p	947,136	dunnlo_brk.dat
10/02/99	07:40p	5,600	dunnlo_ele1.dat
10/02/99	07:41p	5,600	dunnlo_ele2.dat
10/02/99	07:45p	5,600	dunnlo_ele3.dat
10/02/99	07:46p	5,600	dunnlo_ele4.dat
10/02/99	07:40p	7,324	dunnlo_gas1.dat
10/02/99	07:41p	7,324	dunnlo_gas2.dat
10/02/99	07:45p	7,324	dunnlo_gas3.dat
10/02/99	07:46p	7,324	dunnlo_gas4.dat
10/02/99	07:40p	6,925	dunnlo_min1.dat
10/02/99	07:41p	6,925	dunnlo_min2.dat
10/02/99	07:45p	6,925	dunnlo_min3.dat
10/02/99	07:46p	6,925	dunnlo_min4.dat
10/02/99	07:40p	12,189	dunnlo_psi1.dat
10/02/99	07:41p	12,189	dunnlo_psi2.dat
10/02/99	07:45p	12,189	dunnlo_psi3.dat
10/02/99	07:46p	12,189	dunnlo_psi4.dat
10/02/99	07:40p	34,229	dunnlo_sec1.dat
10/02/99	07:41p	34,229	dunnlo_sec2.dat
10/02/99	07:45p	34,229	dunnlo_sec3.dat
10/02/99	07:46p	34,229	dunnlo_sec4.dat
10/02/99	07:40p	5,609	dunnlo_vol1.dat
10/02/99	07:41p	5,609	dunnlo_vol2.dat
10/02/99	07:45p	5,609	dunnlo_vol3.dat
10/02/99	07:46p	5,609	dunnlo_vol4.dat
03/20/00	08:49p	7,091	dunnloo2.inp
03/20/00	08:59p	892,147	dunnloo2.out
03/20/00	08:59p	1,821,595	dunnloo2.scr
03/20/00	08:51p	20,044	dunnloo2_aq1.dat
03/20/00	08:56p	20,044	dunnloo2_aq2.dat
03/20/00	08:58p	20,044	dunnloo2_aq3.dat
03/20/00	08:59p	1,180,634	dunnloo2_brk.dat
03/20/00	08:51p	5,600	dunnloo2_ele1.dat
03/20/00	08:56p	5,600	dunnloo2_ele2.dat
03/20/00	08:58p	5,600	dunnloo2_ele3.dat
03/20/00	08:51p	7,324	dunnloo2_gas1.dat
03/20/00	08:56p	7,324	dunnloo2_gas2.dat
03/20/00	08:58p	7,324	dunnloo2_gas3.dat
03/20/00	08:51p	6,925	dunnloo2_min1.dat
03/20/00	08:56p	6,925	dunnloo2_min2.dat
03/20/00	08:58p	6,925	dunnloo2_min3.dat
03/20/00	08:51p	12,189	dunnloo2_psi1.dat
03/20/00	08:56p	12,189	dunnloo2_psi2.dat

03/20/00	08:58p	12,189	dunnloo2_psi3.dat
03/20/00	08:59p	12,189	dunnloo2_psi4.dat
03/20/00	08:51p	34,229	dunnloo2_sec1.dat
03/20/00	08:56p	34,229	dunnloo2_sec2.dat
03/20/00	08:58p	34,229	dunnloo2_sec3.dat
03/20/00	08:59p	34,229	dunnloo2_sec4.dat
03/20/00	08:51p	5,609	dunnloo2_vol1.dat
03/20/00	08:56p	5,609	dunnloo2_vol2.dat
03/20/00	08:58p	5,609	dunnloo2_vol3.dat
03/20/00	08:59p	5,609	dunnloo2_vol4.dat
393 File(s)		47,531,742	bytes

Directory of R:\tests\gri44to492d

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
08/03/99	09:51p	6,877	gri452d.inp
08/03/99	09:56p	862,872	gri452d.out
08/03/99	09:56p	1,227,437	gri452d.scr
08/03/99	09:52p	18,628	gri452d_aq1.xyp
08/03/99	09:52p	18,628	gri452d_aq2.xyp
08/03/99	09:53p	18,628	gri452d_aq3.xyp
08/03/99	09:54p	18,628	gri452d_aq4.xyp
08/03/99	09:55p	18,628	gri452d_aq5.xyp
08/03/99	09:56p	729,556	gri452d_brk.xyp
08/03/99	09:52p	5,600	gri452d_ele1.xyp
08/03/99	09:52p	5,600	gri452d_ele2.xyp
08/03/99	09:53p	5,600	gri452d_ele3.xyp
08/03/99	09:54p	5,600	gri452d_ele4.xyp
08/03/99	09:55p	5,600	gri452d_ele5.xyp
08/03/99	09:52p	7,324	gri452d_gas1.xyp
08/03/99	09:52p	7,324	gri452d_gas2.xyp
08/03/99	09:53p	7,324	gri452d_gas3.xyp
08/03/99	09:54p	7,324	gri452d_gas4.xyp
08/03/99	09:55p	7,324	gri452d_gas5.xyp
08/03/99	09:52p	6,925	gri452d_min1.xyp
08/03/99	09:52p	6,925	gri452d_min2.xyp
08/03/99	09:53p	6,925	gri452d_min3.xyp
08/03/99	09:54p	6,925	gri452d_min4.xyp
08/03/99	09:55p	6,925	gri452d_min5.xyp
08/03/99	09:52p	10,873	gri452d_psi1.xyp
08/03/99	09:52p	10,873	gri452d_psi2.xyp
08/03/99	09:53p	10,873	gri452d_psi3.xyp
08/03/99	09:54p	10,873	gri452d_psi4.xyp
08/03/99	09:55p	10,873	gri452d_psi5.xyp
08/03/99	09:52p	27,149	gri452d_sec1.xyp
08/03/99	09:52p	27,149	gri452d_sec2.xyp
08/03/99	09:53p	27,149	gri452d_sec3.xyp
08/03/99	09:54p	27,149	gri452d_sec4.xyp
08/03/99	09:55p	27,149	gri452d_sec5.xyp
08/03/99	09:52p	5,609	gri452d_vol1.xyp
08/03/99	09:52p	5,609	gri452d_vol2.xyp
08/03/99	09:53p	5,609	gri452d_vol3.xyp
08/03/99	09:54p	5,609	gri452d_vol4.xyp
08/03/99	09:55p	5,609	gri452d_vol5.xyp
08/03/99	10:12p	862,872	gri462d.out
08/03/99	10:12p	1,323,856	gri462d.scr

08/03/99	09:59p	18,628	gri462d_aq1.xyp
08/03/99	09:59p	18,628	gri462d_aq2.xyp
08/03/99	10:03p	18,628	gri462d_aq3.xyp
08/03/99	10:06p	18,628	gri462d_aq4.xyp
08/03/99	10:10p	18,628	gri462d_aq5.xyp
08/03/99	10:12p	787,817	gri462d_brk.xyp
08/03/99	09:59p	5,600	gri462d_ele1.xyp
08/03/99	09:59p	5,600	gri462d_ele2.xyp
08/03/99	10:03p	5,600	gri462d_ele3.xyp
08/03/99	10:06p	5,600	gri462d_ele4.xyp
08/03/99	10:10p	5,600	gri462d_ele5.xyp
08/03/99	09:59p	7,324	gri462d_gas1.xyp
08/03/99	09:59p	7,324	gri462d_gas2.xyp
08/03/99	10:03p	7,324	gri462d_gas3.xyp
08/03/99	10:06p	7,324	gri462d_gas4.xyp
08/03/99	10:10p	7,324	gri462d_gas5.xyp
08/03/99	09:59p	6,925	gri462d_min1.xyp
08/03/99	09:59p	6,925	gri462d_min2.xyp
08/03/99	10:03p	6,925	gri462d_min3.xyp
08/03/99	10:06p	6,925	gri462d_min4.xyp
08/03/99	10:10p	6,925	gri462d_min5.xyp
08/03/99	09:59p	10,873	gri462d_psi1.xyp
08/03/99	09:59p	10,873	gri462d_psi2.xyp
08/03/99	10:03p	10,873	gri462d_psi3.xyp
08/03/99	10:06p	10,873	gri462d_psi4.xyp
08/03/99	10:10p	10,873	gri462d_psi5.xyp
08/03/99	09:59p	27,149	gri462d_sec1.xyp
08/03/99	09:59p	27,149	gri462d_sec2.xyp
08/03/99	10:03p	27,149	gri462d_sec3.xyp
08/03/99	10:06p	27,149	gri462d_sec4.xyp
08/03/99	10:10p	27,149	gri462d_sec5.xyp
08/03/99	09:59p	5,609	gri462d_vol1.xyp
08/03/99	09:59p	5,609	gri462d_vol2.xyp
08/03/99	10:03p	5,609	gri462d_vol3.xyp
08/03/99	10:06p	5,609	gri462d_vol4.xyp
08/03/99	10:10p	5,609	gri462d_vol5.xyp
08/04/99	06:05a	6,887	gri472d.inp
08/04/99	06:06a	862,953	gri472d.out
08/04/99	06:06a	49,728	gri472d.scr
08/04/99	06:05a	18,628	gri472d_aq1.xyp
08/04/99	06:05a	18,628	gri472d_aq2.xyp
08/04/99	06:05a	18,628	gri472d_aq3.xyp
08/04/99	06:05a	18,628	gri472d_aq4.xyp
08/04/99	06:05a	18,628	gri472d_aq5.xyp
08/04/99	06:06a	28,989	gri472d_brk.xyp
08/04/99	06:05a	5,600	gri472d_ele1.xyp
08/04/99	06:05a	5,600	gri472d_ele2.xyp
08/04/99	06:05a	5,600	gri472d_ele3.xyp
08/04/99	06:05a	5,600	gri472d_ele4.xyp
08/04/99	06:05a	5,600	gri472d_ele5.xyp
08/04/99	06:05a	7,324	gri472d_gas1.xyp
08/04/99	06:05a	7,324	gri472d_gas2.xyp
08/04/99	06:05a	7,324	gri472d_gas3.xyp
08/04/99	06:05a	7,324	gri472d_gas4.xyp
08/04/99	06:05a	7,324	gri472d_gas5.xyp
08/04/99	06:05a	6,925	gri472d_min1.xyp
08/04/99	06:05a	6,925	gri472d_min2.xyp

08/04/99	06:05a	6,925	gri472d_min3.xyp
08/04/99	06:05a	6,925	gri472d_min4.xyp
08/04/99	06:05a	6,925	gri472d_min5.xyp
08/04/99	06:05a	10,873	gri472d_psi1.xyp
08/04/99	06:05a	10,873	gri472d_psi2.xyp
08/04/99	06:05a	10,873	gri472d_psi3.xyp
08/04/99	06:05a	10,873	gri472d_psi4.xyp
08/04/99	06:05a	10,873	gri472d_psi5.xyp
08/04/99	06:05a	27,149	gri472d_sec1.xyp
08/04/99	06:05a	27,149	gri472d_sec2.xyp
08/04/99	06:05a	27,149	gri472d_sec3.xyp
08/04/99	06:05a	27,149	gri472d_sec4.xyp
08/04/99	06:05a	27,149	gri472d_sec5.xyp
08/04/99	06:05a	5,609	gri472d_vol1.xyp
08/04/99	06:05a	5,609	gri472d_vol2.xyp
08/04/99	06:05a	5,609	gri472d_vol3.xyp
08/04/99	06:05a	5,609	gri472d_vol4.xyp
08/04/99	06:05a	5,609	gri472d_vol5.xyp
08/04/99	06:15a	6,892	gri482d.inp
08/04/99	06:17a	976,878	gri482d.out
08/04/99	06:17a	300,756	gri482d.scr
08/04/99	06:16a	18,628	gri482d_aq1.xyp
08/04/99	06:16a	18,628	gri482d_aq2.xyp
08/04/99	06:16a	18,628	gri482d_aq3.xyp
08/04/99	06:16a	18,628	gri482d_aq4.xyp
08/04/99	06:16a	18,628	gri482d_aq5.xyp
08/04/99	06:17a	18,628	gri482d_aq6.xyp
08/04/99	06:17a	178,229	gri482d_brk.xyp
08/04/99	06:16a	5,600	gri482d_ele1.xyp
08/04/99	06:16a	5,600	gri482d_ele2.xyp
08/04/99	06:16a	5,600	gri482d_ele3.xyp
08/04/99	06:16a	5,600	gri482d_ele4.xyp
08/04/99	06:16a	5,600	gri482d_ele5.xyp
08/04/99	06:17a	5,600	gri482d_ele6.xyp
08/04/99	06:16a	7,324	gri482d_gas1.xyp
08/04/99	06:16a	7,324	gri482d_gas2.xyp
08/04/99	06:16a	7,324	gri482d_gas3.xyp
08/04/99	06:16a	7,324	gri482d_gas4.xyp
08/04/99	06:16a	7,324	gri482d_gas5.xyp
08/04/99	06:17a	7,324	gri482d_gas6.xyp
08/04/99	06:16a	6,925	gri482d_min1.xyp
08/04/99	06:16a	6,925	gri482d_min2.xyp
08/04/99	06:16a	6,925	gri482d_min3.xyp
08/04/99	06:16a	6,925	gri482d_min4.xyp
08/04/99	06:16a	6,925	gri482d_min5.xyp
08/04/99	06:17a	6,925	gri482d_min6.xyp
08/04/99	06:16a	10,873	gri482d_psi1.xyp
08/04/99	06:16a	10,873	gri482d_psi2.xyp
08/04/99	06:16a	10,873	gri482d_psi3.xyp
08/04/99	06:16a	10,873	gri482d_psi4.xyp
08/04/99	06:16a	10,873	gri482d_psi5.xyp
08/04/99	06:17a	10,873	gri482d_psi6.xyp
08/04/99	06:16a	27,149	gri482d_sec1.xyp
08/04/99	06:16a	27,149	gri482d_sec2.xyp
08/04/99	06:16a	27,149	gri482d_sec3.xyp
08/04/99	06:16a	27,149	gri482d_sec4.xyp
08/04/99	06:16a	27,149	gri482d_sec5.xyp

08/04/99	06:17a	27,149	gri482d_sec6.xyp
08/04/99	06:16a	5,609	gri482d_vol1.xyp
08/04/99	06:16a	5,609	gri482d_vol2.xyp
08/04/99	06:16a	5,609	gri482d_vol3.xyp
08/04/99	06:16a	5,609	gri482d_vol4.xyp
08/04/99	06:16a	5,609	gri482d_vol5.xyp
08/04/99	06:17a	5,609	gri482d_vol6.xyp
164 File(s)		9,936,867	bytes

Directory of R:\tests\gri44to493d

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
09/19/99	07:18a	54,784	gri433d-493d.grf
08/19/99	06:13a	39,936	gri433d.grf
09/17/99	05:56a	7,132	gri433d.inp
09/17/99	08:37a	1,009,267	gri433d.out
09/17/99	08:37a	5,984,984	gri433d.scr
09/17/99	05:56a	18,628	gri433d_aq1.xyp
09/17/99	05:57a	18,628	gri433d_aq2.xyp
09/17/99	05:57a	18,628	gri433d_aq3.xyp
09/17/99	05:58a	18,628	gri433d_aq4.xyp
09/17/99	06:51a	18,628	gri433d_aq5.xyp
09/17/99	08:37a	18,628	gri433d_aq6.xyp
09/17/99	08:37a	3,302,511	gri433d_brk.xyp
09/17/99	05:56a	5,600	gri433d_ele1.xyp
09/17/99	05:57a	5,600	gri433d_ele2.xyp
09/17/99	05:57a	5,600	gri433d_ele3.xyp
09/17/99	05:58a	5,600	gri433d_ele4.xyp
09/17/99	06:51a	5,600	gri433d_ele5.xyp
09/17/99	08:37a	5,600	gri433d_ele6.xyp
09/17/99	05:56a	7,324	gri433d_gas1.xyp
09/17/99	05:57a	7,324	gri433d_gas2.xyp
09/17/99	05:57a	7,324	gri433d_gas3.xyp
09/17/99	05:58a	7,324	gri433d_gas4.xyp
09/17/99	06:51a	7,324	gri433d_gas5.xyp
09/17/99	08:37a	7,324	gri433d_gas6.xyp
09/17/99	05:56a	6,925	gri433d_min1.xyp
09/17/99	05:57a	6,925	gri433d_min2.xyp
09/17/99	05:57a	6,925	gri433d_min3.xyp
09/17/99	05:58a	6,925	gri433d_min4.xyp
09/17/99	06:51a	6,925	gri433d_min5.xyp
09/17/99	08:37a	6,925	gri433d_min6.xyp
09/17/99	05:56a	10,873	gri433d_psi1.xyp
09/17/99	05:57a	10,873	gri433d_psi2.xyp
09/17/99	05:57a	10,873	gri433d_psi3.xyp
09/17/99	05:58a	10,873	gri433d_psi4.xyp
09/17/99	06:51a	10,873	gri433d_psi5.xyp
09/17/99	08:37a	10,873	gri433d_psi6.xyp
09/17/99	05:56a	27,149	gri433d_sec1.xyp
09/17/99	05:57a	27,149	gri433d_sec2.xyp
09/17/99	05:57a	27,149	gri433d_sec3.xyp
09/17/99	05:58a	27,149	gri433d_sec4.xyp
09/17/99	06:51a	27,149	gri433d_sec5.xyp
09/17/99	08:37a	27,149	gri433d_sec6.xyp
09/17/99	05:56a	5,609	gri433d_vol1.xyp
09/17/99	05:57a	5,609	gri433d_vol2.xyp

09/17/99	05:57a	5,609	gri433d_vol3.xyp
09/17/99	05:58a	5,609	gri433d_vol4.xyp
09/17/99	06:51a	5,609	gri433d_vol5.xyp
09/17/99	08:37a	5,609	gri433d_vol6.xyp
08/20/99	10:20p	6,901	gri433dm.inp
08/20/99	10:21p	13,563	gri433dm.out
08/20/99	08:36p	0	gri433dm.scr
08/15/99	12:01p	20,992	gri443d.grf
09/16/99	06:30a	7,132	gri443d.inp
09/15/99	10:46p	1,009,267	gri443d.out
09/15/99	10:46p	5,534,168	gri443d.scr
09/15/99	08:09p	18,628	gri443d_aq1.xyp
09/15/99	08:09p	18,628	gri443d_aq2.xyp
09/15/99	08:09p	18,628	gri443d_aq3.xyp
09/15/99	08:10p	18,628	gri443d_aq4.xyp
09/15/99	09:11p	18,628	gri443d_aq5.xyp
09/15/99	10:46p	18,628	gri443d_aq6.xyp
09/15/99	10:46p	3,084,104	gri443d_brk.xyp
09/15/99	08:09p	5,600	gri443d_ele1.xyp
09/15/99	08:09p	5,600	gri443d_ele2.xyp
09/15/99	08:09p	5,600	gri443d_ele3.xyp
09/15/99	08:10p	5,600	gri443d_ele4.xyp
09/15/99	09:11p	5,600	gri443d_ele5.xyp
09/15/99	10:46p	5,600	gri443d_ele6.xyp
09/15/99	08:09p	7,324	gri443d_gas1.xyp
09/15/99	08:09p	7,324	gri443d_gas2.xyp
09/15/99	08:09p	7,324	gri443d_gas3.xyp
09/15/99	08:10p	7,324	gri443d_gas4.xyp
09/15/99	09:11p	7,324	gri443d_gas5.xyp
09/15/99	10:46p	7,324	gri443d_gas6.xyp
09/15/99	08:09p	6,925	gri443d_min1.xyp
09/15/99	08:09p	6,925	gri443d_min2.xyp
09/15/99	08:09p	6,925	gri443d_min3.xyp
09/15/99	08:10p	6,925	gri443d_min4.xyp
09/15/99	09:11p	6,925	gri443d_min5.xyp
09/15/99	10:46p	6,925	gri443d_min6.xyp
09/15/99	08:09p	10,873	gri443d_psi1.xyp
09/15/99	08:09p	10,873	gri443d_psi2.xyp
09/15/99	08:09p	10,873	gri443d_psi3.xyp
09/15/99	08:10p	10,873	gri443d_psi4.xyp
09/15/99	09:11p	10,873	gri443d_psi5.xyp
09/15/99	10:46p	10,873	gri443d_psi6.xyp
09/15/99	08:09p	27,149	gri443d_sec1.xyp
09/15/99	08:09p	27,149	gri443d_sec2.xyp
09/15/99	08:09p	27,149	gri443d_sec3.xyp
09/15/99	08:10p	27,149	gri443d_sec4.xyp
09/15/99	09:11p	27,149	gri443d_sec5.xyp
09/15/99	10:46p	27,149	gri443d_sec6.xyp
09/15/99	08:09p	5,609	gri443d_vol1.xyp
09/15/99	08:09p	5,609	gri443d_vol2.xyp
09/15/99	08:09p	5,609	gri443d_vol3.xyp
09/15/99	08:10p	5,609	gri443d_vol4.xyp
09/15/99	09:11p	5,609	gri443d_vol5.xyp
09/15/99	10:46p	5,609	gri443d_vol6.xyp
09/16/99	05:56a	7,144	gri44m3d.inp
09/16/99	06:29a	309,665	gri44m3d.out
09/16/99	06:29a	1,988,412	gri44m3d.scr

09/16/99	06:29a	1,189,043	gri44m3d_brk.xyp
08/19/99	06:13a	39,424	gri453d.grf
09/16/99	10:41p	7,132	gri453d.inp
09/16/99	11:12p	1,009,267	gri453d.out
09/16/99	11:12p	2,061,596	gri453d.scr
09/16/99	10:41p	18,628	gri453d_aq1.xyp
09/16/99	10:41p	18,628	gri453d_aq2.xyp
09/16/99	10:41p	18,628	gri453d_aq3.xyp
09/16/99	10:41p	18,628	gri453d_aq4.xyp
09/16/99	10:42p	18,628	gri453d_aq5.xyp
09/16/99	11:12p	18,628	gri453d_aq6.xyp
09/16/99	11:12p	1,224,631	gri453d_brk.xyp
09/16/99	10:41p	5,600	gri453d_ele1.xyp
09/16/99	10:41p	5,600	gri453d_ele2.xyp
09/16/99	10:41p	5,600	gri453d_ele3.xyp
09/16/99	10:41p	5,600	gri453d_ele4.xyp
09/16/99	10:42p	5,600	gri453d_ele5.xyp
09/16/99	11:12p	5,600	gri453d_ele6.xyp
09/16/99	10:41p	7,324	gri453d_gas1.xyp
09/16/99	10:41p	7,324	gri453d_gas2.xyp
09/16/99	10:41p	7,324	gri453d_gas3.xyp
09/16/99	10:41p	7,324	gri453d_gas4.xyp
09/16/99	10:42p	7,324	gri453d_gas5.xyp
09/16/99	11:12p	7,324	gri453d_gas6.xyp
09/16/99	10:41p	6,925	gri453d_min1.xyp
09/16/99	10:41p	6,925	gri453d_min2.xyp
09/16/99	10:41p	6,925	gri453d_min3.xyp
09/16/99	10:41p	6,925	gri453d_min4.xyp
09/16/99	10:42p	6,925	gri453d_min5.xyp
09/16/99	11:12p	6,925	gri453d_min6.xyp
09/16/99	10:41p	10,873	gri453d_psi1.xyp
09/16/99	10:41p	10,873	gri453d_psi2.xyp
09/16/99	10:41p	10,873	gri453d_psi3.xyp
09/16/99	10:41p	10,873	gri453d_psi4.xyp
09/16/99	10:42p	10,873	gri453d_psi5.xyp
09/16/99	11:12p	10,873	gri453d_psi6.xyp
09/16/99	10:41p	27,149	gri453d_sec1.xyp
09/16/99	10:41p	27,149	gri453d_sec2.xyp
09/16/99	10:41p	27,149	gri453d_sec3.xyp
09/16/99	10:41p	27,149	gri453d_sec4.xyp
09/16/99	10:42p	27,149	gri453d_sec5.xyp
09/16/99	11:12p	27,149	gri453d_sec6.xyp
09/16/99	10:41p	5,609	gri453d_vol1.xyp
09/16/99	10:41p	5,609	gri453d_vol2.xyp
09/16/99	10:41p	5,609	gri453d_vol3.xyp
09/16/99	10:41p	5,609	gri453d_vol4.xyp
09/16/99	10:42p	5,609	gri453d_vol5.xyp
09/16/99	11:12p	5,609	gri453d_vol6.xyp
09/16/99	08:46a	1,009,267	gri463d.out
09/16/99	08:46a	4,148,088	gri463d.scr
09/16/99	06:31a	18,628	gri463d_aq1.xyp
09/16/99	06:31a	18,628	gri463d_aq2.xyp
09/16/99	06:31a	18,628	gri463d_aq3.xyp
09/16/99	06:32a	18,628	gri463d_aq4.xyp
09/16/99	07:20a	18,628	gri463d_aq5.xyp
09/16/99	08:46a	18,628	gri463d_aq6.xyp
09/19/99	09:33a	1,680,324	gri463d_brk.xyp

09/16/99	06:31a	5,600	gri463d_ele1.xyp
09/16/99	06:31a	5,600	gri463d_ele2.xyp
09/16/99	06:31a	5,600	gri463d_ele3.xyp
09/16/99	06:32a	5,600	gri463d_ele4.xyp
09/16/99	07:20a	5,600	gri463d_ele5.xyp
09/16/99	08:46a	5,600	gri463d_ele6.xyp
09/16/99	06:31a	7,324	gri463d_gas1.xyp
09/16/99	06:31a	7,324	gri463d_gas2.xyp
09/16/99	06:31a	7,324	gri463d_gas3.xyp
09/16/99	06:32a	7,324	gri463d_gas4.xyp
09/16/99	07:20a	7,324	gri463d_gas5.xyp
09/16/99	08:46a	7,324	gri463d_gas6.xyp
09/16/99	06:31a	6,925	gri463d_min1.xyp
09/16/99	06:31a	6,925	gri463d_min2.xyp
09/16/99	06:31a	6,925	gri463d_min3.xyp
09/16/99	06:32a	6,925	gri463d_min4.xyp
09/16/99	07:20a	6,925	gri463d_min5.xyp
09/16/99	08:46a	6,925	gri463d_min6.xyp
09/16/99	06:31a	10,873	gri463d_psi1.xyp
09/16/99	06:31a	10,873	gri463d_psi2.xyp
09/16/99	06:31a	10,873	gri463d_psi3.xyp
09/16/99	06:32a	10,873	gri463d_psi4.xyp
09/16/99	07:20a	10,873	gri463d_psi5.xyp
09/16/99	08:46a	10,873	gri463d_psi6.xyp
09/16/99	06:31a	27,149	gri463d_sec1.xyp
09/16/99	06:31a	27,149	gri463d_sec2.xyp
09/16/99	06:31a	27,149	gri463d_sec3.xyp
09/16/99	06:32a	27,149	gri463d_sec4.xyp
09/16/99	07:20a	27,149	gri463d_sec5.xyp
09/16/99	08:46a	27,149	gri463d_sec6.xyp
09/16/99	06:31a	5,609	gri463d_vol1.xyp
09/16/99	06:31a	5,609	gri463d_vol2.xyp
09/16/99	06:31a	5,609	gri463d_vol3.xyp
09/16/99	06:32a	5,609	gri463d_vol4.xyp
09/16/99	07:20a	5,609	gri463d_vol5.xyp
09/16/99	08:46a	5,609	gri463d_vol6.xyp
09/17/99	11:40p	1,009,267	gri463dl.out
09/17/99	11:40p	4,343,880	gri463dl.scr
09/20/99	06:10a	359,239	gri463dl.zip
09/17/99	09:16p	18,628	gri463dl_aq1.xyp
09/17/99	09:16p	18,628	gri463dl_aq2.xyp
09/17/99	09:16p	18,628	gri463dl_aq3.xyp
09/17/99	09:17p	18,628	gri463dl_aq4.xyp
09/17/99	10:22p	18,628	gri463dl_aq5.xyp
09/17/99	11:40p	18,628	gri463dl_aq6.xyp
09/17/99	11:40p	2,364,021	gri463dl_brk.xyp
09/17/99	09:16p	5,600	gri463dl_ele1.xyp
09/17/99	09:16p	5,600	gri463dl_ele2.xyp
09/17/99	09:16p	5,600	gri463dl_ele3.xyp
09/17/99	09:17p	5,600	gri463dl_ele4.xyp
09/17/99	10:22p	5,600	gri463dl_ele5.xyp
09/17/99	11:40p	5,600	gri463dl_ele6.xyp
09/17/99	09:16p	7,324	gri463dl_gas1.xyp
09/17/99	09:16p	7,324	gri463dl_gas2.xyp
09/17/99	09:16p	7,324	gri463dl_gas3.xyp
09/17/99	09:17p	7,324	gri463dl_gas4.xyp
09/17/99	10:22p	7,324	gri463dl_gas5.xyp

09/17/99	11:40p	7,324	gri463dl_gas6.xyp
09/17/99	09:16p	6,925	gri463dl_min1.xyp
09/17/99	09:16p	6,925	gri463dl_min2.xyp
09/17/99	09:16p	6,925	gri463dl_min3.xyp
09/17/99	09:17p	6,925	gri463dl_min4.xyp
09/17/99	10:22p	6,925	gri463dl_min5.xyp
09/17/99	11:40p	6,925	gri463dl_min6.xyp
09/17/99	09:16p	10,873	gri463dl_psi1.xyp
09/17/99	09:16p	10,873	gri463dl_psi2.xyp
09/17/99	09:16p	10,873	gri463dl_psi3.xyp
09/17/99	09:17p	10,873	gri463dl_psi4.xyp
09/17/99	10:22p	10,873	gri463dl_psi5.xyp
09/17/99	11:40p	10,873	gri463dl_psi6.xyp
09/17/99	09:16p	27,149	gri463dl_sec1.xyp
09/17/99	09:16p	27,149	gri463dl_sec2.xyp
09/17/99	09:16p	27,149	gri463dl_sec3.xyp
09/17/99	09:17p	27,149	gri463dl_sec4.xyp
09/17/99	10:22p	27,149	gri463dl_sec5.xyp
09/17/99	11:40p	27,149	gri463dl_sec6.xyp
09/17/99	09:16p	5,609	gri463dl_vol1.xyp
09/17/99	09:16p	5,609	gri463dl_vol2.xyp
09/17/99	09:16p	5,609	gri463dl_vol3.xyp
09/17/99	09:17p	5,609	gri463dl_vol4.xyp
09/17/99	10:22p	5,609	gri463dl_vol5.xyp
09/17/99	11:40p	5,609	gri463dl_vol6.xyp
08/16/99	06:22a	7,132	gri473d.inp
08/16/99	06:39a	986,398	gri473d.out
08/16/99	06:39a	3,208,861	gri473d.scr
08/16/99	06:23a	18,628	gri473d_aq1.xyp
08/16/99	06:23a	18,628	gri473d_aq2.xyp
08/16/99	06:23a	18,628	gri473d_aq3.xyp
08/16/99	06:23a	18,628	gri473d_aq4.xyp
08/16/99	06:23a	18,628	gri473d_aq5.xyp
08/16/99	06:39a	18,628	gri473d_aq6.xyp
08/16/99	06:39a	1,907,404	gri473d_brk.xyp
08/16/99	06:23a	5,600	gri473d_ele1.xyp
08/16/99	06:23a	5,600	gri473d_ele2.xyp
08/16/99	06:23a	5,600	gri473d_ele3.xyp
08/16/99	06:23a	5,600	gri473d_ele4.xyp
08/16/99	06:23a	5,600	gri473d_ele5.xyp
08/16/99	06:39a	5,600	gri473d_ele6.xyp
08/16/99	06:23a	7,324	gri473d_gas1.xyp
08/16/99	06:23a	7,324	gri473d_gas2.xyp
08/16/99	06:23a	7,324	gri473d_gas3.xyp
08/16/99	06:23a	7,324	gri473d_gas4.xyp
08/16/99	06:23a	7,324	gri473d_gas5.xyp
08/16/99	06:39a	7,324	gri473d_gas6.xyp
08/16/99	06:23a	6,925	gri473d_min1.xyp
08/16/99	06:23a	6,925	gri473d_min2.xyp
08/16/99	06:23a	6,925	gri473d_min3.xyp
08/16/99	06:23a	6,925	gri473d_min4.xyp
08/16/99	06:23a	6,925	gri473d_min5.xyp
08/16/99	06:39a	6,925	gri473d_min6.xyp
08/16/99	06:23a	10,873	gri473d_psi1.xyp
08/16/99	06:23a	10,873	gri473d_psi2.xyp
08/16/99	06:23a	10,873	gri473d_psi3.xyp
08/16/99	06:23a	10,873	gri473d_psi4.xyp

08/16/99	06:23a	10,873	gri473d_psi5.xyp
08/16/99	06:39a	10,873	gri473d_psi6.xyp
08/16/99	06:23a	27,149	gri473d_sec1.xyp
08/16/99	06:23a	27,149	gri473d_sec2.xyp
08/16/99	06:23a	27,149	gri473d_sec3.xyp
08/16/99	06:23a	27,149	gri473d_sec4.xyp
08/16/99	06:23a	27,149	gri473d_sec5.xyp
08/16/99	06:39a	27,149	gri473d_sec6.xyp
08/16/99	06:23a	5,609	gri473d_vol1.xyp
08/16/99	06:23a	5,609	gri473d_vol2.xyp
08/16/99	06:23a	5,609	gri473d_vol3.xyp
08/16/99	06:23a	5,609	gri473d_vol4.xyp
08/16/99	06:23a	5,609	gri473d_vol5.xyp
08/16/99	06:39a	5,609	gri473d_vol6.xyp
09/15/99	02:39p	7,132	gri483d.inp
09/15/99	04:01p	1,009,267	gri483d.out
09/15/99	04:01p	3,050,992	gri483d.scr
09/15/99	02:39p	18,628	gri483d_aq1.xyp
09/15/99	02:39p	18,628	gri483d_aq2.xyp
09/15/99	02:40p	18,628	gri483d_aq3.xyp
09/15/99	02:40p	18,628	gri483d_aq4.xyp
09/15/99	03:11p	18,628	gri483d_aq5.xyp
09/15/99	04:01p	18,628	gri483d_aq6.xyp
09/15/99	04:01p	1,715,688	gri483d_brk.xyp
09/15/99	02:39p	5,600	gri483d_ele1.xyp
09/15/99	02:39p	5,600	gri483d_ele2.xyp
09/15/99	02:40p	5,600	gri483d_ele3.xyp
09/15/99	02:40p	5,600	gri483d_ele4.xyp
09/15/99	03:11p	5,600	gri483d_ele5.xyp
09/15/99	04:01p	5,600	gri483d_ele6.xyp
09/15/99	02:39p	7,324	gri483d_gas1.xyp
09/15/99	02:39p	7,324	gri483d_gas2.xyp
09/15/99	02:40p	7,324	gri483d_gas3.xyp
09/15/99	02:40p	7,324	gri483d_gas4.xyp
09/15/99	03:11p	7,324	gri483d_gas5.xyp
09/15/99	04:01p	7,324	gri483d_gas6.xyp
09/15/99	02:39p	6,925	gri483d_min1.xyp
09/15/99	02:39p	6,925	gri483d_min2.xyp
09/15/99	02:40p	6,925	gri483d_min3.xyp
09/15/99	02:40p	6,925	gri483d_min4.xyp
09/15/99	03:11p	6,925	gri483d_min5.xyp
09/15/99	04:01p	6,925	gri483d_min6.xyp
09/15/99	02:39p	10,873	gri483d_psi1.xyp
09/15/99	02:39p	10,873	gri483d_psi2.xyp
09/15/99	02:40p	10,873	gri483d_psi3.xyp
09/15/99	02:40p	10,873	gri483d_psi4.xyp
09/15/99	03:11p	10,873	gri483d_psi5.xyp
09/15/99	04:01p	10,873	gri483d_psi6.xyp
09/15/99	02:39p	27,149	gri483d_sec1.xyp
09/15/99	02:39p	27,149	gri483d_sec2.xyp
09/15/99	02:40p	27,149	gri483d_sec3.xyp
09/15/99	02:40p	27,149	gri483d_sec4.xyp
09/15/99	03:11p	27,149	gri483d_sec5.xyp
09/15/99	04:01p	27,149	gri483d_sec6.xyp
09/15/99	02:39p	5,609	gri483d_vol1.xyp
09/15/99	02:39p	5,609	gri483d_vol2.xyp
09/15/99	02:40p	5,609	gri483d_vol3.xyp

09/15/99	02:40p	5,609	gri483d_vol4.xyp
09/15/99	03:11p	5,609	gri483d_vol5.xyp
09/15/99	04:01p	5,609	gri483d_vol6.xyp
09/16/99	10:40p	7,132	gri493d.inp
09/16/99	09:54p	1,009,267	gri493d.out
09/16/99	09:54p	2,865,760	gri493d.scr
09/16/99	08:57p	18,628	gri493d_aq1.xyp
09/16/99	08:57p	18,628	gri493d_aq2.xyp
09/16/99	08:57p	18,628	gri493d_aq3.xyp
09/16/99	08:57p	18,628	gri493d_aq4.xyp
09/16/99	09:17p	18,628	gri493d_aq5.xyp
09/16/99	09:54p	18,628	gri493d_aq6.xyp
09/16/99	09:54p	1,681,248	gri493d_brk.xyp
09/16/99	08:57p	5,600	gri493d_ele1.xyp
09/16/99	08:57p	5,600	gri493d_ele2.xyp
09/16/99	08:57p	5,600	gri493d_ele3.xyp
09/16/99	08:57p	5,600	gri493d_ele4.xyp
09/16/99	09:17p	5,600	gri493d_ele5.xyp
09/16/99	09:54p	5,600	gri493d_ele6.xyp
09/16/99	08:57p	7,324	gri493d_gas1.xyp
09/16/99	08:57p	7,324	gri493d_gas2.xyp
09/16/99	08:57p	7,324	gri493d_gas3.xyp
09/16/99	08:57p	7,324	gri493d_gas4.xyp
09/16/99	09:17p	7,324	gri493d_gas5.xyp
09/16/99	09:54p	7,324	gri493d_gas6.xyp
09/16/99	08:57p	6,925	gri493d_min1.xyp
09/16/99	08:57p	6,925	gri493d_min2.xyp
09/16/99	08:57p	6,925	gri493d_min3.xyp
09/16/99	08:57p	6,925	gri493d_min4.xyp
09/16/99	09:17p	6,925	gri493d_min5.xyp
09/16/99	09:54p	6,925	gri493d_min6.xyp
09/16/99	08:57p	10,873	gri493d_psi1.xyp
09/16/99	08:57p	10,873	gri493d_psi2.xyp
09/16/99	08:57p	10,873	gri493d_psi3.xyp
09/16/99	08:57p	10,873	gri493d_psi4.xyp
09/16/99	09:17p	10,873	gri493d_psi5.xyp
09/16/99	09:54p	10,873	gri493d_psi6.xyp
09/16/99	08:57p	27,149	gri493d_sec1.xyp
09/16/99	08:57p	27,149	gri493d_sec2.xyp
09/16/99	08:57p	27,149	gri493d_sec3.xyp
09/16/99	08:57p	27,149	gri493d_sec4.xyp
09/16/99	09:17p	27,149	gri493d_sec5.xyp
09/16/99	09:54p	27,149	gri493d_sec6.xyp
09/16/99	08:57p	5,609	gri493d_vol1.xyp
09/16/99	08:57p	5,609	gri493d_vol2.xyp
09/16/99	08:57p	5,609	gri493d_vol3.xyp
09/16/99	08:57p	5,609	gri493d_vol4.xyp
09/16/99	09:17p	5,609	gri493d_vol5.xyp
09/16/99	09:54p	5,609	gri493d_vol6.xyp
380 File(s)		64,222,606	bytes

Directory of R:\tests\gri45

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
07/03/99	03:20p	6,854	gri45.inp
07/03/99	03:33p	847,476	gri45.out

07/03/99	03:33p	686,906	gri45.scr
07/04/99	04:52p	289,865	gri45.zip
07/03/99	03:21p	18,628	gri45_aq1.xyp
07/03/99	03:21p	18,628	gri45_aq2.xyp
07/03/99	03:21p	18,628	gri45_aq3.xyp
07/03/99	03:21p	18,628	gri45_aq4.xyp
07/03/99	03:28p	18,628	gri45_aq5.xyp
07/03/99	03:33p	402,663	gri45_br
04/13/99	08:19a	156,417	gri45_brk.xy
07/03/99	03:21p	5,600	gri45_ele1.xyp
07/03/99	03:21p	5,600	gri45_ele2.xyp
07/03/99	03:21p	5,600	gri45_ele3.xyp
07/03/99	03:21p	5,600	gri45_ele4.xyp
07/03/99	03:28p	5,600	gri45_ele5.xyp
07/03/99	03:21p	7,324	gri45_gas1.xyp
07/03/99	03:21p	7,324	gri45_gas2.xyp
07/03/99	03:21p	7,324	gri45_gas3.xyp
07/03/99	03:21p	7,324	gri45_gas4.xyp
07/03/99	03:28p	7,324	gri45_gas5.xyp
07/03/99	03:21p	6,925	gri45_min1.xyp
07/03/99	03:21p	6,925	gri45_min2.xyp
07/03/99	03:21p	6,925	gri45_min3.xyp
07/03/99	03:21p	6,925	gri45_min4.xyp
07/03/99	03:28p	6,925	gri45_min5.xyp
07/03/99	03:21p	10,873	gri45_psi1.xyp
07/03/99	03:21p	10,873	gri45_psi2.xyp
07/03/99	03:21p	10,873	gri45_psi3.xyp
07/03/99	03:21p	10,873	gri45_psi4.xyp
07/03/99	03:28p	10,873	gri45_psi5.xyp
07/03/99	03:21p	27,149	gri45_sec1.xyp
07/03/99	03:21p	27,149	gri45_sec2.xyp
07/03/99	03:21p	27,149	gri45_sec3.xyp
07/03/99	03:21p	27,149	gri45_sec4.xyp
07/03/99	03:28p	27,149	gri45_sec5.xyp
07/03/99	03:21p	5,609	gri45_vol1.xyp
07/03/99	03:21p	5,609	gri45_vol2.xyp
07/03/99	03:21p	5,609	gri45_vol3.xyp
07/03/99	03:21p	5,609	gri45_vol4.xyp
07/03/99	03:28p	5,609	gri45_vol5.xyp
43 File(s)		2,800,721	bytes

Directory of R:\tests\gri452d

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
07/24/99	03:58p	843,864	gri452d.out
07/24/99	03:58p	2,136,108	gri452d.scr
07/20/99	07:47a	15,213	gri452d_
07/24/99	03:17p	18,628	gri452d_aq1.xyp
07/24/99	03:17p	18,628	gri452d_aq2.xyp
07/24/99	03:25p	18,628	gri452d_aq3.xyp
07/24/99	03:34p	18,628	gri452d_aq4.xyp
07/24/99	03:50p	18,628	gri452d_aq5.xyp
07/24/99	03:58p	1,183,877	gri452d_brk
07/24/99	03:17p	5,600	gri452d_ele1.xyp
07/24/99	03:17p	5,600	gri452d_ele2.xyp
07/24/99	03:25p	5,600	gri452d_ele3.xyp

07/24/99	03:34p	5,600	gri452d_ele4.xyp
07/24/99	03:50p	5,600	gri452d_ele5.xyp
07/24/99	03:17p	7,324	gri452d_gas1.xyp
07/24/99	03:17p	7,324	gri452d_gas2.xyp
07/24/99	03:25p	7,324	gri452d_gas3.xyp
07/24/99	03:34p	7,324	gri452d_gas4.xyp
07/24/99	03:50p	7,324	gri452d_gas5.xyp
07/24/99	03:17p	6,925	gri452d_min1.xyp
07/24/99	03:17p	6,925	gri452d_min2.xyp
07/24/99	03:25p	6,925	gri452d_min3.xyp
07/24/99	03:34p	6,925	gri452d_min4.xyp
07/24/99	03:50p	6,925	gri452d_min5.xyp
07/24/99	03:17p	10,873	gri452d_psi1.xyp
07/24/99	03:17p	10,873	gri452d_psi2.xyp
07/24/99	03:25p	10,873	gri452d_psi3.xyp
07/24/99	03:34p	10,873	gri452d_psi4.xyp
07/24/99	03:50p	10,873	gri452d_psi5.xyp
07/24/99	03:17p	27,149	gri452d_sec1.xyp
07/24/99	03:17p	27,149	gri452d_sec2.xyp
07/24/99	03:25p	27,149	gri452d_sec3.xyp
07/24/99	03:34p	27,149	gri452d_sec4.xyp
07/24/99	03:50p	27,149	gri452d_sec5.xyp
07/24/99	03:17p	5,609	gri452d_vol1.xyp
07/24/99	03:17p	5,609	gri452d_vol2.xyp
07/24/99	03:25p	5,609	gri452d_vol3.xyp
07/24/99	03:34p	5,609	gri452d_vol4.xyp
07/24/99	03:50p	5,609	gri452d_vol5.xyp
41 File(s)		4,589,602 bytes	

Directory of R:\tests\gri46

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
07/04/99	04:52p	396,734	gri46.zip
3 File(s)		396,734 bytes	

Directory of R:\tests\gri47

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
07/03/99	04:15p	6,854	gri47.inp
07/03/99	04:38p	847,476	gri47.out
07/03/99	04:38p	3,628,585	gri47.scr
07/04/99	04:52p	909,318	gri47.zip
07/03/99	04:15p	18,628	gri47_aq1.xyp
07/03/99	04:15p	18,628	gri47_aq2.xyp
07/03/99	04:15p	18,628	gri47_aq3.xyp
07/03/99	04:15p	18,628	gri47_aq4.xyp
07/03/99	04:16p	18,628	gri47_aq5.xyp
07/03/99	04:38p	2,147,336	gri47_br
04/16/99	04:29a	7,764,787	gri47_brk.xy
07/03/99	04:15p	5,600	gri47_ele1.xyp
07/03/99	04:15p	5,600	gri47_ele2.xyp
07/03/99	04:15p	5,600	gri47_ele3.xyp
07/03/99	04:15p	5,600	gri47_ele4.xyp
07/03/99	04:16p	5,600	gri47_ele5.xyp
07/03/99	04:15p	7,324	gri47_gas1.xyp

07/03/99	04:15p	7,324	gri47_gas2.xyp
07/03/99	04:15p	7,324	gri47_gas3.xyp
07/03/99	04:15p	7,324	gri47_gas4.xyp
07/03/99	04:16p	7,324	gri47_gas5.xyp
07/03/99	04:15p	6,925	gri47_min1.xyp
07/03/99	04:15p	6,925	gri47_min2.xyp
07/03/99	04:15p	6,925	gri47_min3.xyp
07/03/99	04:15p	6,925	gri47_min4.xyp
07/03/99	04:16p	6,925	gri47_min5.xyp
07/03/99	04:15p	10,873	gri47_psi1.xyp
07/03/99	04:15p	10,873	gri47_psi2.xyp
07/03/99	04:15p	10,873	gri47_psi3.xyp
07/03/99	04:15p	10,873	gri47_psi4.xyp
07/03/99	04:16p	10,873	gri47_psi5.xyp
07/03/99	04:15p	27,149	gri47_sec1.xyp
07/03/99	04:15p	27,149	gri47_sec2.xyp
07/03/99	04:15p	27,149	gri47_sec3.xyp
07/03/99	04:15p	27,149	gri47_sec4.xyp
07/03/99	04:16p	27,149	gri47_sec5.xyp
07/03/99	04:15p	5,609	gri47_vol1.xyp
07/03/99	04:15p	5,609	gri47_vol2.xyp
07/03/99	04:15p	5,609	gri47_vol3.xyp
07/03/99	04:15p	5,609	gri47_vol4.xyp
07/03/99	04:16p	5,609	gri47_vol5.xyp
43 File(s)		15,714,896 bytes	

Directory of R:\tests\gri50-51

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
08/19/99	05:40a	6,914	gri50.inp
08/19/99	05:47a	1,300,262	gri50.out
08/19/99	05:47a	905,155	gri50.scr
08/19/99	05:41a	20,044	gri50_aq1.xyp
08/19/99	05:41a	20,044	gri50_aq2.xyp
08/19/99	05:41a	20,044	gri50_aq3.xyp
08/19/99	05:41a	20,044	gri50_aq4.xyp
08/19/99	05:41a	20,044	gri50_aq5.xyp
08/19/99	05:42a	20,044	gri50_aq6.xyp
08/19/99	05:47a	20,044	gri50_aq7.xyp
08/19/99	05:47a	585,934	gri50_brk.xyp
08/19/99	05:41a	5,600	gri50_ele1.xyp
08/19/99	05:41a	5,600	gri50_ele2.xyp
08/19/99	05:41a	5,600	gri50_ele3.xyp
08/19/99	05:41a	5,600	gri50_ele4.xyp
08/19/99	05:41a	5,600	gri50_ele5.xyp
08/19/99	05:42a	5,600	gri50_ele6.xyp
08/19/99	05:47a	5,600	gri50_ele7.xyp
08/19/99	05:41a	7,324	gri50_gas1.xyp
08/19/99	05:41a	7,324	gri50_gas2.xyp
08/19/99	05:41a	7,324	gri50_gas3.xyp
08/19/99	05:41a	7,324	gri50_gas4.xyp
08/19/99	05:41a	7,324	gri50_gas5.xyp
08/19/99	05:42a	7,324	gri50_gas6.xyp
08/19/99	05:47a	7,324	gri50_gas7.xyp
08/19/99	05:41a	6,925	gri50_min1.xyp
08/19/99	05:41a	6,925	gri50_min2.xyp

08/19/99	05:41a	6,925	gri50_min3.xyp
08/19/99	05:41a	6,925	gri50_min4.xyp
08/19/99	05:41a	6,925	gri50_min5.xyp
08/19/99	05:42a	6,925	gri50_min6.xyp
08/19/99	05:47a	6,925	gri50_min7.xyp
08/19/99	05:41a	12,189	gri50_psi1.xyp
08/19/99	05:41a	12,189	gri50_psi2.xyp
08/19/99	05:41a	12,189	gri50_psi3.xyp
08/19/99	05:41a	12,189	gri50_psi4.xyp
08/19/99	05:41a	12,189	gri50_psi5.xyp
08/19/99	05:42a	12,189	gri50_psi6.xyp
08/19/99	05:47a	12,189	gri50_psi7.xyp
08/19/99	05:41a	34,229	gri50_sec1.xyp
08/19/99	05:41a	34,229	gri50_sec2.xyp
08/19/99	05:41a	34,229	gri50_sec3.xyp
08/19/99	05:41a	34,229	gri50_sec4.xyp
08/19/99	05:41a	34,229	gri50_sec5.xyp
08/19/99	05:42a	34,229	gri50_sec6.xyp
08/19/99	05:47a	34,229	gri50_sec7.xyp
08/19/99	05:41a	5,609	gri50_vol1.xyp
08/19/99	05:41a	5,609	gri50_vol2.xyp
08/19/99	05:41a	5,609	gri50_vol3.xyp
08/19/99	05:41a	5,609	gri50_vol4.xyp
08/19/99	05:41a	5,609	gri50_vol5.xyp
08/19/99	05:42a	5,609	gri50_vol6.xyp
08/19/99	05:47a	5,609	gri50_vol7.xyp
08/22/99	08:18p	446,702	gri50tim.dat
08/22/99	08:43p	16,896	gri50to51btim.grf
08/18/99	10:09p	6,914	gri51.inp
08/18/99	10:16p	1,300,262	gri51.out
08/18/99	10:16p	920,833	gri51.scr
07/04/99	04:50p	275,967	gri51.zip
08/18/99	10:09p	20,044	gri51_aq1.xyp
08/18/99	10:09p	20,044	gri51_aq2.xyp
08/18/99	10:10p	20,044	gri51_aq3.xyp
08/18/99	10:10p	20,044	gri51_aq4.xyp
08/18/99	10:10p	20,044	gri51_aq5.xyp
08/18/99	10:11p	20,044	gri51_aq6.xyp
08/18/99	10:16p	20,044	gri51_aq7.xyp
07/03/99	09:53p	937	gri51_br
08/18/99	10:16p	596,576	gri51_brk.xyp
08/18/99	10:09p	5,600	gri51_ele1.xyp
08/18/99	10:09p	5,600	gri51_ele2.xyp
08/18/99	10:10p	5,600	gri51_ele3.xyp
08/18/99	10:10p	5,600	gri51_ele4.xyp
08/18/99	10:10p	5,600	gri51_ele5.xyp
08/18/99	10:11p	5,600	gri51_ele6.xyp
08/18/99	10:16p	5,600	gri51_ele7.xyp
08/18/99	10:09p	7,324	gri51_gas1.xyp
08/18/99	10:09p	7,324	gri51_gas2.xyp
08/18/99	10:10p	7,324	gri51_gas3.xyp
08/18/99	10:10p	7,324	gri51_gas4.xyp
08/18/99	10:10p	7,324	gri51_gas5.xyp
08/18/99	10:11p	7,324	gri51_gas6.xyp
08/18/99	10:16p	7,324	gri51_gas7.xyp
08/18/99	10:09p	6,925	gri51_min1.xyp
08/18/99	10:09p	6,925	gri51_min2.xyp

08/18/99	10:10p	6,925	gri51_min3.xyp
08/18/99	10:10p	6,925	gri51_min4.xyp
08/18/99	10:10p	6,925	gri51_min5.xyp
08/18/99	10:11p	6,925	gri51_min6.xyp
08/18/99	10:16p	6,925	gri51_min7.xyp
08/18/99	10:09p	12,189	gri51_psi1.xyp
08/18/99	10:09p	12,189	gri51_psi2.xyp
08/18/99	10:10p	12,189	gri51_psi3.xyp
08/18/99	10:10p	12,189	gri51_psi4.xyp
08/18/99	10:10p	12,189	gri51_psi5.xyp
08/18/99	10:11p	12,189	gri51_psi6.xyp
08/18/99	10:16p	12,189	gri51_psi7.xyp
08/18/99	10:09p	34,229	gri51_sec1.xyp
08/18/99	10:09p	34,229	gri51_sec2.xyp
08/18/99	10:10p	34,229	gri51_sec3.xyp
08/18/99	10:10p	34,229	gri51_sec4.xyp
08/18/99	10:10p	34,229	gri51_sec5.xyp
08/18/99	10:11p	34,229	gri51_sec6.xyp
08/18/99	10:16p	34,229	gri51_sec7.xyp
08/18/99	10:09p	5,609	gri51_vol1.xyp
08/18/99	10:09p	5,609	gri51_vol2.xyp
08/18/99	10:10p	5,609	gri51_vol3.xyp
08/18/99	10:10p	5,609	gri51_vol4.xyp
08/18/99	10:10p	5,609	gri51_vol5.xyp
08/18/99	10:11p	5,609	gri51_vol6.xyp
08/18/99	10:16p	5,609	gri51_vol7.xyp
112 File(s)		7,650,232 bytes	

Directory of R:\tests\gri513d

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
08/08/99	03:24p	12,497	GRI513D500.SRF
08/08/99	02:24p	3,856	GRI513DAQ6.GRD
08/10/99	07:03p	3,656	GRI513DAQ7M.GRD
08/18/99	09:57p	4,056	GRI513DM_AQ7.GRD
08/18/99	08:41p	4,056	GRI513D_AQ7.GRD
08/18/99	10:05p	8,631	GRI513dm.SRF
08/18/99	08:51p	8,321	gri513d.inp
08/18/99	08:34p	7,947,717	gri513d.out
08/18/99	08:34p	252,110	gri513d.scr
08/18/99	08:20p	196,343	gri513d_aq1.xyp
08/18/99	08:21p	196,343	gri513d_aq2.xyp
08/18/99	08:21p	196,343	gri513d_aq3.xyp
08/18/99	08:22p	196,343	gri513d_aq4.xyp
08/18/99	08:23p	196,343	gri513d_aq5.xyp
08/18/99	08:27p	196,343	gri513d_aq6.xyp
08/18/99	08:40p	137,197	gri513d_aq7.dat
08/18/99	08:34p	196,343	gri513d_aq7.xyp
08/18/99	08:34p	163,697	gri513d_brk.xyp
08/18/99	08:21p	84,208	gri513d_gas1.xyp
08/18/99	08:21p	84,208	gri513d_gas2.xyp
08/18/99	08:21p	84,208	gri513d_gas3.xyp
08/18/99	08:22p	84,208	gri513d_gas4.xyp
08/18/99	08:23p	84,208	gri513d_gas5.xyp
08/18/99	08:27p	84,208	gri513d_gas6.xyp
08/18/99	08:34p	84,208	gri513d_gas7.xyp

08/18/99	08:21p	53,178	gri513d_min1.xyp
08/18/99	08:21p	53,178	gri513d_min2.xyp
08/18/99	08:21p	53,178	gri513d_min3.xyp
08/18/99	08:22p	53,178	gri513d_min4.xyp
08/18/99	08:23p	53,178	gri513d_min5.xyp
08/18/99	08:27p	53,178	gri513d_min6.xyp
08/18/99	08:34p	53,178	gri513d_min7.xyp
08/18/99	08:21p	131,268	gri513d_psi1.xyp
08/18/99	08:21p	131,268	gri513d_psi2.xyp
08/18/99	08:21p	131,268	gri513d_psi3.xyp
08/18/99	08:22p	131,268	gri513d_psi4.xyp
08/18/99	08:23p	131,268	gri513d_psi5.xyp
08/18/99	08:27p	131,268	gri513d_psi6.xyp
08/18/99	08:34p	131,268	gri513d_psi7.xyp
08/18/99	08:21p	350,494	gri513d_sec1.xyp
08/18/99	08:21p	350,494	gri513d_sec2.xyp
08/18/99	08:21p	350,494	gri513d_sec3.xyp
08/18/99	08:22p	350,494	gri513d_sec4.xyp
08/18/99	08:23p	350,494	gri513d_sec5.xyp
08/18/99	08:27p	350,494	gri513d_sec6.xyp
08/18/99	08:34p	350,494	gri513d_sec7.xyp
08/18/99	08:21p	66,193	gri513d_vol1.xyp
08/18/99	08:21p	66,193	gri513d_vol2.xyp
08/18/99	08:21p	66,193	gri513d_vol3.xyp
08/18/99	08:22p	66,193	gri513d_vol4.xyp
08/18/99	08:23p	66,193	gri513d_vol5.xyp
08/18/99	08:27p	66,193	gri513d_vol6.xyp
08/18/99	08:34p	66,193	gri513d_vol7.xyp
08/08/99	02:18p	137,197	gri513daq1.dat
08/08/99	02:19p	137,197	gri513daq6.dat
08/10/99	07:33a	137,197	gri513daq7m.dat
08/18/99	09:39p	8,321	gri513dm.inp
08/18/99	09:54p	7,930,013	gri513dm.out
08/18/99	09:54p	252,110	gri513dm.scr
08/18/99	09:39p	8,321	gri513dm2.inp
08/18/99	09:40p	196,343	gri513dm_aq1.xyp
08/18/99	09:40p	196,343	gri513dm_aq2.xyp
08/18/99	09:40p	196,343	gri513dm_aq3.xyp
08/18/99	09:41p	196,343	gri513dm_aq4.xyp
08/18/99	09:43p	196,343	gri513dm_aq5.xyp
08/18/99	09:47p	196,343	gri513dm_aq6.xyp
08/18/99	09:56p	137,197	gri513dm_aq7.dat
08/18/99	09:54p	196,343	gri513dm_aq7.xyp
08/18/99	09:54p	163,697	gri513dm_brk.xyp
08/18/99	09:40p	84,208	gri513dm_gas1.xyp
08/18/99	09:40p	84,208	gri513dm_gas2.xyp
08/18/99	09:40p	84,208	gri513dm_gas3.xyp
08/18/99	09:41p	84,208	gri513dm_gas4.xyp
08/18/99	09:43p	84,208	gri513dm_gas5.xyp
08/18/99	09:47p	84,208	gri513dm_gas6.xyp
08/18/99	09:54p	84,208	gri513dm_gas7.xyp
08/18/99	09:40p	53,178	gri513dm_min1.xyp
08/18/99	09:40p	53,178	gri513dm_min2.xyp
08/18/99	09:40p	53,178	gri513dm_min3.xyp
08/18/99	09:41p	53,178	gri513dm_min4.xyp
08/18/99	09:43p	53,178	gri513dm_min5.xyp
08/18/99	09:47p	53,178	gri513dm_min6.xyp

08/18/99	09:54p	53,178	gri513dm_min7.xyp
08/18/99	09:40p	131,268	gri513dm_psi1.xyp
08/18/99	09:40p	131,268	gri513dm_psi2.xyp
08/18/99	09:40p	131,268	gri513dm_psi3.xyp
08/18/99	09:41p	131,268	gri513dm_psi4.xyp
08/18/99	09:43p	131,268	gri513dm_psi5.xyp
08/18/99	09:47p	131,268	gri513dm_psi6.xyp
08/18/99	09:54p	131,268	gri513dm_psi7.xyp
08/18/99	09:40p	350,494	gri513dm_sec1.xyp
08/18/99	09:40p	350,494	gri513dm_sec2.xyp
08/18/99	09:40p	350,494	gri513dm_sec3.xyp
08/18/99	09:41p	350,494	gri513dm_sec4.xyp
08/18/99	09:43p	350,494	gri513dm_sec5.xyp
08/18/99	09:47p	350,494	gri513dm_sec6.xyp
08/18/99	09:54p	350,494	gri513dm_sec7.xyp
08/18/99	09:40p	66,193	gri513dm_vol1.xyp
08/18/99	09:40p	66,193	gri513dm_vol2.xyp
08/18/99	09:40p	66,193	gri513dm_vol3.xyp
08/18/99	09:41p	66,193	gri513dm_vol4.xyp
08/18/99	09:43p	66,193	gri513dm_vol5.xyp
08/18/99	09:47p	66,193	gri513dm_vol6.xyp
08/18/99	09:54p	66,193	gri513dm_vol7.xyp
106 File(s)		29,800,620 bytes	

Directory of R:\tests\gri51a

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
07/05/99	01:36p	6,852	gri51a.inp
07/05/99	01:43p	1,228,150	gri51a.out
07/05/99	01:43p	1,990	gri51a.scr
07/04/99	04:50p	549,377	gri51a.zip
07/05/99	01:36p	20,044	gri51a_aq1.xyp
07/05/99	01:36p	20,044	gri51a_aq2.xyp
07/05/99	01:37p	20,044	gri51a_aq3.xyp
07/05/99	01:37p	20,044	gri51a_aq4.xyp
07/05/99	01:38p	20,044	gri51a_aq5.xyp
07/05/99	01:40p	20,044	gri51a_aq6.xyp
07/05/99	01:43p	20,044	gri51a_aq7.xyp
07/05/99	01:43p	937	gri51a_b
07/05/99	01:36p	5,600	gri51a_ele1.xyp
07/05/99	01:36p	5,600	gri51a_ele2.xyp
07/05/99	01:37p	5,600	gri51a_ele3.xyp
07/05/99	01:37p	5,600	gri51a_ele4.xyp
07/05/99	01:38p	5,600	gri51a_ele5.xyp
07/05/99	01:40p	5,600	gri51a_ele6.xyp
07/05/99	01:43p	5,600	gri51a_ele7.xyp
07/05/99	01:36p	7,324	gri51a_gas1.xyp
07/05/99	01:36p	7,324	gri51a_gas2.xyp
07/05/99	01:37p	7,324	gri51a_gas3.xyp
07/05/99	01:37p	7,324	gri51a_gas4.xyp
07/05/99	01:38p	7,324	gri51a_gas5.xyp
07/05/99	01:40p	7,324	gri51a_gas6.xyp
07/05/99	01:43p	7,324	gri51a_gas7.xyp
07/05/99	01:36p	6,925	gri51a_min1.xyp
07/05/99	01:36p	6,925	gri51a_min2.xyp
07/05/99	01:37p	6,925	gri51a_min3.xyp

07/05/99	01:37p	6,925	gri51a_min4.xyp
07/05/99	01:38p	6,925	gri51a_min5.xyp
07/05/99	01:40p	6,925	gri51a_min6.xyp
07/05/99	01:43p	6,925	gri51a_min7.xyp
07/05/99	01:36p	12,189	gri51a_psi1.xyp
07/05/99	01:36p	12,189	gri51a_psi2.xyp
07/05/99	01:37p	12,189	gri51a_psi3.xyp
07/05/99	01:37p	12,189	gri51a_psi4.xyp
07/05/99	01:38p	12,189	gri51a_psi5.xyp
07/05/99	01:40p	12,189	gri51a_psi6.xyp
07/05/99	01:43p	12,189	gri51a_psi7.xyp
07/05/99	01:36p	34,229	gri51a_sec1.xyp
07/05/99	01:36p	34,229	gri51a_sec2.xyp
07/05/99	01:37p	34,229	gri51a_sec3.xyp
07/05/99	01:37p	34,229	gri51a_sec4.xyp
07/05/99	01:38p	34,229	gri51a_sec5.xyp
07/05/99	01:40p	34,229	gri51a_sec6.xyp
07/05/99	01:43p	34,229	gri51a_sec7.xyp
07/05/99	01:36p	5,609	gri51a_vol1.xyp
07/05/99	01:36p	5,609	gri51a_vol2.xyp
07/05/99	01:37p	5,609	gri51a_vol3.xyp
07/05/99	01:37p	5,609	gri51a_vol4.xyp
07/05/99	01:38p	5,609	gri51a_vol5.xyp
07/05/99	01:40p	5,609	gri51a_vol6.xyp
07/05/99	01:43p	5,609	gri51a_vol7.xyp
56 File(s)		2,430,746 bytes	

Directory of R:\tests\gri51b

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
08/22/99	09:37a	6,869	gri51b.inp
08/22/99	09:39a	1,286,661	gri51b.out
08/22/99	09:39a	294,140	gri51b.scr
08/22/99	09:37a	20,044	gri51b_aq1.xyp
08/22/99	09:37a	20,044	gri51b_aq2.xyp
08/22/99	09:37a	20,044	gri51b_aq3.xyp
08/22/99	09:37a	20,044	gri51b_aq4.xyp
08/22/99	09:38a	20,044	gri51b_aq5.xyp
08/22/99	09:39a	20,044	gri51b_aq6.xyp
08/22/99	09:39a	20,044	gri51b_aq7.xyp
07/05/99	02:55p	160,880	gri51b_b
08/22/99	09:39a	189,363	gri51b_brk.xyp
08/22/99	09:37a	5,600	gri51b_ele1.xyp
08/22/99	09:37a	5,600	gri51b_ele2.xyp
08/22/99	09:37a	5,600	gri51b_ele3.xyp
08/22/99	09:37a	5,600	gri51b_ele4.xyp
08/22/99	09:38a	5,600	gri51b_ele5.xyp
08/22/99	09:39a	5,600	gri51b_ele6.xyp
08/22/99	09:39a	5,600	gri51b_ele7.xyp
08/22/99	09:37a	5,908	gri51b_gas1.xyp
08/22/99	09:37a	5,908	gri51b_gas2.xyp
08/22/99	09:37a	5,908	gri51b_gas3.xyp
08/22/99	09:37a	5,908	gri51b_gas4.xyp
08/22/99	09:38a	5,908	gri51b_gas5.xyp
08/22/99	09:39a	5,908	gri51b_gas6.xyp
08/22/99	09:39a	5,908	gri51b_gas7.xyp

08/22/99	09:37a	6,925	gri51b_min1.xyp
08/22/99	09:37a	6,925	gri51b_min2.xyp
08/22/99	09:37a	6,925	gri51b_min3.xyp
08/22/99	09:37a	6,925	gri51b_min4.xyp
08/22/99	09:38a	6,925	gri51b_min5.xyp
08/22/99	09:39a	6,925	gri51b_min6.xyp
08/22/99	09:39a	6,925	gri51b_min7.xyp
08/22/99	09:37a	12,189	gri51b_psi1.xyp
08/22/99	09:37a	12,189	gri51b_psi2.xyp
08/22/99	09:37a	12,189	gri51b_psi3.xyp
08/22/99	09:37a	12,189	gri51b_psi4.xyp
08/22/99	09:38a	12,189	gri51b_psi5.xyp
08/22/99	09:39a	12,189	gri51b_psi6.xyp
08/22/99	09:39a	12,189	gri51b_psi7.xyp
08/22/99	09:37a	34,229	gri51b_sec1.xyp
08/22/99	09:37a	34,229	gri51b_sec2.xyp
08/22/99	09:37a	34,229	gri51b_sec3.xyp
08/22/99	09:37a	34,229	gri51b_sec4.xyp
08/22/99	09:38a	34,229	gri51b_sec5.xyp
08/22/99	09:39a	34,229	gri51b_sec6.xyp
08/22/99	09:39a	34,229	gri51b_sec7.xyp
08/22/99	09:37a	5,609	gri51b_vol1.xyp
08/22/99	09:37a	5,609	gri51b_vol2.xyp
08/22/99	09:37a	5,609	gri51b_vol3.xyp
08/22/99	09:37a	5,609	gri51b_vol4.xyp
08/22/99	09:38a	5,609	gri51b_vol5.xyp
08/22/99	09:39a	5,609	gri51b_vol6.xyp
08/22/99	09:39a	5,609	gri51b_vol7.xyp
08/22/99	08:20p	142,928	gri51btim.dat
08/22/99	08:19p	466,527	gri51tim.dat
58 File(s)		3,180,896	bytes

Directory of R:\tests\gri51c

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
07/05/99	03:45p	6,840	gri51c.inp
07/05/99	03:54p	1,233,030	gri51c.out
07/05/99	03:54p	265,190	gri51c.scr
07/05/99	03:45p	20,044	gri51c_aq1.xyp
07/05/99	03:45p	20,044	gri51c_aq2.xyp
07/05/99	03:45p	20,044	gri51c_aq3.xyp
07/05/99	03:47p	20,044	gri51c_aq4.xyp
07/05/99	03:48p	20,044	gri51c_aq5.xyp
07/05/99	03:50p	20,044	gri51c_aq6.xyp
07/05/99	03:54p	20,044	gri51c_aq7.xyp
07/05/99	03:54p	169,957	gri51c_b
07/05/99	03:45p	5,600	gri51c_ele1.xyp
07/05/99	03:45p	5,600	gri51c_ele2.xyp
07/05/99	03:45p	5,600	gri51c_ele3.xyp
07/05/99	03:47p	5,600	gri51c_ele4.xyp
07/05/99	03:48p	5,600	gri51c_ele5.xyp
07/05/99	03:50p	5,600	gri51c_ele6.xyp
07/05/99	03:54p	5,600	gri51c_ele7.xyp
07/05/99	03:45p	7,324	gri51c_gas1.xyp
07/05/99	03:45p	7,324	gri51c_gas2.xyp
07/05/99	03:45p	7,324	gri51c_gas3.xyp

07/05/99	03:47p	7,324	gri51c_gas4.xyp
07/05/99	03:48p	7,324	gri51c_gas5.xyp
07/05/99	03:50p	7,324	gri51c_gas6.xyp
07/05/99	03:54p	7,324	gri51c_gas7.xyp
07/05/99	03:45p	6,925	gri51c_min1.xyp
07/05/99	03:45p	6,925	gri51c_min2.xyp
07/05/99	03:45p	6,925	gri51c_min3.xyp
07/05/99	03:47p	6,925	gri51c_min4.xyp
07/05/99	03:48p	6,925	gri51c_min5.xyp
07/05/99	03:50p	6,925	gri51c_min6.xyp
07/05/99	03:54p	6,925	gri51c_min7.xyp
07/05/99	03:45p	12,189	gri51c_psi1.xyp
07/05/99	03:45p	12,189	gri51c_psi2.xyp
07/05/99	03:45p	12,189	gri51c_psi3.xyp
07/05/99	03:47p	12,189	gri51c_psi4.xyp
07/05/99	03:48p	12,189	gri51c_psi5.xyp
07/05/99	03:50p	12,189	gri51c_psi6.xyp
07/05/99	03:54p	12,189	gri51c_psi7.xyp
07/05/99	03:45p	34,229	gri51c_sec1.xyp
07/05/99	03:45p	34,229	gri51c_sec2.xyp
07/05/99	03:45p	34,229	gri51c_sec3.xyp
07/05/99	03:47p	34,229	gri51c_sec4.xyp
07/05/99	03:48p	34,229	gri51c_sec5.xyp
07/05/99	03:50p	34,229	gri51c_sec6.xyp
07/05/99	03:54p	34,229	gri51c_sec7.xyp
07/05/99	03:45p	5,609	gri51c_vol1.xyp
07/05/99	03:45p	5,609	gri51c_vol2.xyp
07/05/99	03:45p	5,609	gri51c_vol3.xyp
07/05/99	03:47p	5,609	gri51c_vol4.xyp
07/05/99	03:48p	5,609	gri51c_vol5.xyp
07/05/99	03:50p	5,609	gri51c_vol6.xyp
07/05/99	03:54p	5,609	gri51c_vol7.xyp
55 File(s)		2,318,457 bytes	

Directory of R:\tests\gri523d

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
08/08/99	03:28p	12,236	GRI523D500.SRF
08/08/99	03:14p	3,856	GRI523DAQ6.GRD
08/09/99	10:12p	10,070	gri523d.inp
08/09/99	10:49p	7,181,674	gri523d.out
08/09/99	10:49p	260,467	gri523d.scr
08/09/99	10:16p	196,343	gri523d_aq1.xyp
08/09/99	10:19p	196,343	gri523d_aq2.xyp
08/09/99	10:23p	196,343	gri523d_aq3.xyp
08/09/99	10:27p	196,343	gri523d_aq4.xyp
08/09/99	10:32p	196,343	gri523d_aq5.xyp
08/09/99	10:39p	196,343	gri523d_aq6.xyp
08/09/99	10:49p	196,343	gri523d_aq7.xyp
08/09/99	10:49p	169,018	gri523d_brk.xyp
08/09/99	10:16p	84,208	gri523d_gas1.xyp
08/09/99	10:19p	84,208	gri523d_gas2.xyp
08/09/99	10:23p	84,208	gri523d_gas3.xyp
08/09/99	10:27p	84,208	gri523d_gas4.xyp
08/09/99	10:32p	84,208	gri523d_gas5.xyp
08/09/99	10:39p	84,208	gri523d_gas6.xyp

08/09/99	10:49p	84,208	gri523d_gas7.xyp
08/09/99	10:16p	53,178	gri523d_min1.xyp
08/09/99	10:19p	53,178	gri523d_min2.xyp
08/09/99	10:23p	53,178	gri523d_min3.xyp
08/09/99	10:27p	53,178	gri523d_min4.xyp
08/09/99	10:32p	53,178	gri523d_min5.xyp
08/09/99	10:39p	53,178	gri523d_min6.xyp
08/09/99	10:49p	53,178	gri523d_min7.xyp
08/09/99	10:16p	131,268	gri523d_psi1.xyp
08/09/99	10:19p	131,268	gri523d_psi2.xyp
08/09/99	10:23p	131,268	gri523d_psi3.xyp
08/09/99	10:27p	131,268	gri523d_psi4.xyp
08/09/99	10:32p	131,268	gri523d_psi5.xyp
08/09/99	10:39p	131,268	gri523d_psi6.xyp
08/09/99	10:49p	131,268	gri523d_psi7.xyp
08/09/99	10:16p	350,494	gri523d_sec1.xyp
08/09/99	10:19p	350,494	gri523d_sec2.xyp
08/09/99	10:23p	350,494	gri523d_sec3.xyp
08/09/99	10:27p	350,494	gri523d_sec4.xyp
08/09/99	10:32p	350,494	gri523d_sec5.xyp
08/09/99	10:39p	350,494	gri523d_sec6.xyp
08/09/99	10:49p	350,494	gri523d_sec7.xyp
08/09/99	10:16p	66,193	gri523d_vol1.xyp
08/09/99	10:19p	66,193	gri523d_vol2.xyp
08/09/99	10:23p	66,193	gri523d_vol3.xyp
08/09/99	10:27p	66,193	gri523d_vol4.xyp
08/09/99	10:32p	66,193	gri523d_vol5.xyp
08/09/99	10:39p	66,193	gri523d_vol6.xyp
08/09/99	10:49p	66,193	gri523d_vol7.xyp
08/08/99	03:13p	137,197	gri523daq6.dat
08/09/99	07:00a	137,197	gri523daq7.dat
52 File(s)		14,083,503	bytes

Directory of R:\tests\gri53

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
07/17/99	12:38p	11,562	gri53.out
07/05/99	04:43p	159,773	gri53.scr
07/04/99	04:53p	220,313	gri53.zip
07/05/99	04:41p	21,460	gri53_aq1.xyp
07/05/99	04:41p	21,460	gri53_aq2.xyp
07/05/99	04:41p	21,460	gri53_aq3.xyp
07/05/99	04:42p	21,460	gri53_aq4.xyp
07/05/99	04:42p	21,460	gri53_aq5.xyp
07/05/99	04:43p	21,460	gri53_aq6.xyp
07/05/99	04:35p	21,460	gri53_aq7.xyp
07/05/99	04:43p	110,508	gri53_br
07/05/99	04:41p	5,600	gri53_ele1.xyp
07/05/99	04:41p	5,600	gri53_ele2.xyp
07/05/99	04:41p	5,600	gri53_ele3.xyp
07/05/99	04:42p	5,600	gri53_ele4.xyp
07/05/99	04:42p	5,600	gri53_ele5.xyp
07/05/99	04:43p	5,600	gri53_ele6.xyp
07/05/99	04:35p	5,600	gri53_ele7.xyp
07/05/99	04:41p	5,908	gri53_gas1.xyp
07/05/99	04:41p	5,908	gri53_gas2.xyp

07/05/99	04:41p	5,908	gri53_gas3.xyp
07/05/99	04:42p	5,908	gri53_gas4.xyp
07/05/99	04:42p	5,908	gri53_gas5.xyp
07/05/99	04:43p	5,908	gri53_gas6.xyp
07/05/99	04:35p	5,908	gri53_gas7.xyp
07/05/99	04:41p	6,925	gri53_min1.xyp
07/05/99	04:41p	6,925	gri53_min2.xyp
07/05/99	04:41p	6,925	gri53_min3.xyp
07/05/99	04:42p	6,925	gri53_min4.xyp
07/05/99	04:42p	6,925	gri53_min5.xyp
07/05/99	04:43p	6,925	gri53_min6.xyp
07/05/99	04:35p	6,925	gri53_min7.xyp
07/05/99	04:41p	13,505	gri53_psi1.xyp
07/05/99	04:41p	13,505	gri53_psi2.xyp
07/05/99	04:41p	13,505	gri53_psi3.xyp
07/05/99	04:42p	13,505	gri53_psi4.xyp
07/05/99	04:42p	13,505	gri53_psi5.xyp
07/05/99	04:43p	13,505	gri53_psi6.xyp
07/05/99	04:35p	13,505	gri53_psi7.xyp
07/05/99	04:41p	27,149	gri53_sec1.xyp
07/05/99	04:41p	27,149	gri53_sec2.xyp
07/05/99	04:41p	27,149	gri53_sec3.xyp
07/05/99	04:42p	27,149	gri53_sec4.xyp
07/05/99	04:42p	27,149	gri53_sec5.xyp
07/05/99	04:43p	27,149	gri53_sec6.xyp
07/05/99	04:35p	27,149	gri53_sec7.xyp
07/05/99	04:41p	5,609	gri53_vol1.xyp
07/05/99	04:41p	5,609	gri53_vol2.xyp
07/05/99	04:41p	5,609	gri53_vol3.xyp
07/05/99	04:42p	5,609	gri53_vol4.xyp
07/05/99	04:42p	5,609	gri53_vol5.xyp
07/05/99	04:43p	5,609	gri53_vol6.xyp
07/05/99	04:35p	5,609	gri53_vol7.xyp
55 File(s)		1,105,248	bytes

Directory of R:\tests\gri54

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
07/18/99	08:44p		6,944 gri54.inp
07/18/99	08:49p		11,562 gri54.out
07/18/99	08:42p		0 gri54.scr
07/04/99	04:54p		220,954 gri54.zip
6 File(s)			239,460 bytes

Directory of R:\tests\reactive

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
09/06/99	09:57a		2,815 concreact.dat
09/28/99	05:58a		3,202 potreact.dat
09/06/99	10:11a		3,570 reactcalc-pot.dat
09/06/99	10:04a		3,829 reactcalc.dat
09/06/99	10:12a		14,848 reactive-conc.grf
08/06/01	07:57a		37,888 reactive-pot.grf
09/29/99	08:15a		4,272 reactive.inp
09/29/99	08:15a		235,449 reactive.out

09/29/99	08:15a	119,320	reactive.scr
09/29/99	08:15a	5,884	reactive_aq1.dat
09/06/99	07:16a	5,884	reactive_aq1.xyp
09/29/99	08:15a	5,884	reactive_aq2.dat
09/06/99	07:17a	5,884	reactive_aq2.xyp
09/29/99	08:15a	5,884	reactive_aq3.dat
09/06/99	07:17a	5,884	reactive_aq3.xyp
09/29/99	08:15a	5,884	reactive_aq4.dat
09/06/99	07:17a	5,884	reactive_aq4.xyp
09/06/99	07:21a	5,884	reactive_aq5.xyp
09/29/99	08:15a	19,695	reactive_brk.dat
09/06/99	07:21a	790,893	reactive_brk.xyp
09/29/99	08:15a	5,600	reactive_ele1.dat
09/06/99	07:16a	5,600	reactive_ele1.xyp
09/29/99	08:15a	5,600	reactive_ele2.dat
09/06/99	07:17a	5,600	reactive_ele2.xyp
09/29/99	08:15a	5,600	reactive_ele3.dat
09/06/99	07:17a	5,600	reactive_ele3.xyp
09/29/99	08:15a	5,600	reactive_ele4.dat
09/06/99	07:17a	5,600	reactive_ele4.xyp
09/06/99	07:21a	5,600	reactive_ele5.xyp
09/29/99	08:15a	3,076	reactive_gas1.dat
09/06/99	07:16a	3,076	reactive_gas1.xyp
09/29/99	08:15a	3,076	reactive_gas2.dat
09/06/99	07:17a	3,076	reactive_gas2.xyp
09/29/99	08:15a	3,076	reactive_gas3.dat
09/06/99	07:17a	3,076	reactive_gas3.xyp
09/29/99	08:15a	3,076	reactive_gas4.dat
09/06/99	07:17a	3,076	reactive_gas4.xyp
09/06/99	07:21a	3,076	reactive_gas5.xyp
09/29/99	08:15a	2,977	reactive_min1.dat
09/06/99	07:16a	2,977	reactive_min1.xyp
09/29/99	08:15a	2,977	reactive_min2.dat
09/06/99	07:17a	2,977	reactive_min2.xyp
09/29/99	08:15a	2,977	reactive_min3.dat
09/06/99	07:17a	2,977	reactive_min3.xyp
09/29/99	08:15a	2,977	reactive_min4.dat
09/06/99	07:17a	2,977	reactive_min4.xyp
09/06/99	07:21a	2,977	reactive_min5.xyp
09/29/99	08:15a	4,293	reactive_psi1.dat
09/06/99	07:16a	4,293	reactive_psi1.xyp
09/29/99	08:15a	4,293	reactive_psi2.dat
09/06/99	07:17a	4,293	reactive_psi2.xyp
09/29/99	08:15a	4,293	reactive_psi3.dat
09/06/99	07:17a	4,293	reactive_psi3.xyp
09/29/99	08:15a	4,293	reactive_psi4.dat
09/06/99	07:17a	4,293	reactive_psi4.xyp
09/06/99	07:21a	4,293	reactive_psi5.xyp
09/29/99	08:15a	1,661	reactive_sec1.dat
09/06/99	07:16a	1,661	reactive_sec1.xyp
09/29/99	08:15a	1,661	reactive_sec2.dat
09/06/99	07:17a	1,661	reactive_sec2.xyp
09/29/99	08:15a	1,661	reactive_sec3.dat
09/06/99	07:17a	1,661	reactive_sec3.xyp
09/29/99	08:15a	1,661	reactive_sec4.dat
09/06/99	07:17a	1,661	reactive_sec4.xyp
09/06/99	07:21a	1,661	reactive_sec5.xyp

09/29/99	08:15a	4,293	reactive_vol1.dat
09/06/99	07:16a	4,293	reactive_vol1.xyp
09/29/99	08:15a	4,293	reactive_vol2.dat
09/06/99	07:17a	4,293	reactive_vol2.xyp
09/29/99	08:15a	4,293	reactive_vol3.dat
09/06/99	07:17a	4,293	reactive_vol3.xyp
09/29/99	08:15a	4,293	reactive_vol4.dat
09/06/99	07:17a	4,293	reactive_vol4.xyp
09/06/99	07:21a	4,293	reactive_vol5.xyp
76 File(s)		1,485,837	bytes

Directory of R:\tests\transcanada

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
09/22/01	10:54p	42,496	Virginia Hills water analyses.xls
02/10/01	10:47p	7,503	brusso4.inp
09/24/01	08:35a	4,096	calcratio.xls
09/24/01	08:41a	17,408	gaplength.GRF
09/22/01	02:31p	12,800	hco3distance.grf
09/23/01	09:55a	7,420	noval.inp
09/23/01	03:44p	1,220,280	noval.out
09/23/01	03:44p	8,134,280	noval.scr
09/23/01	09:56a	22,876	noval_aq1.dat
09/23/01	09:56a	22,876	noval_aq2.dat
09/23/01	09:58a	22,876	noval_aq3.dat
09/23/01	11:26a	22,876	noval_aq4.dat
09/23/01	12:46p	22,876	noval_aq5.dat
09/23/01	03:44p	22,876	noval_aq6.dat
09/23/01	03:44p	6,170,680	noval_brk.dat
09/23/01	09:56a	5,600	noval_ele1.dat
09/23/01	09:56a	5,600	noval_ele2.dat
09/23/01	09:58a	5,600	noval_ele3.dat
09/23/01	11:26a	5,600	noval_ele4.dat
09/23/01	12:46p	5,600	noval_ele5.dat
09/23/01	03:44p	5,600	noval_ele6.dat
09/23/01	09:56a	5,908	noval_gas1.dat
09/23/01	09:56a	5,908	noval_gas2.dat
09/23/01	09:58a	5,908	noval_gas3.dat
09/23/01	11:26a	5,908	noval_gas4.dat
09/23/01	12:46p	5,908	noval_gas5.dat
09/23/01	03:44p	5,908	noval_gas6.dat
09/23/01	09:56a	5,609	noval_min1.dat
09/23/01	09:56a	5,609	noval_min2.dat
09/23/01	09:58a	5,609	noval_min3.dat
09/23/01	11:26a	5,609	noval_min4.dat
09/23/01	12:46p	5,609	noval_min5.dat
09/23/01	03:44p	5,609	noval_min6.dat
09/23/01	09:56a	14,821	noval_psi1.dat
09/23/01	09:56a	14,821	noval_psi2.dat
09/23/01	09:58a	14,821	noval_psi3.dat
09/23/01	11:26a	14,821	noval_psi4.dat
09/23/01	12:46p	14,821	noval_psi5.dat
09/23/01	03:44p	14,821	noval_psi6.dat
09/23/01	09:56a	34,229	noval_sec1.dat
09/23/01	09:56a	34,229	noval_sec2.dat
09/23/01	09:58a	34,229	noval_sec3.dat

09/23/01	11:26a	34,229	nova1_sec4.dat
09/23/01	12:46p	34,229	nova1_sec5.dat
09/23/01	03:44p	34,229	nova1_sec6.dat
09/23/01	09:56a	4,293	nova1_vol1.dat
09/23/01	09:56a	4,293	nova1_vol2.dat
09/23/01	09:58a	4,293	nova1_vol3.dat
09/23/01	11:26a	4,293	nova1_vol4.dat
09/23/01	12:46p	4,293	nova1_vol5.dat
09/23/01	03:44p	4,293	nova1_vol6.dat
09/23/01	04:03p	7,421	nova2.inp
09/23/01	04:12p	1,220,280	nova2.out
09/23/01	04:12p	1,216,388	nova2.scr
09/23/01	04:03p	22,876	nova2_aq1.dat
09/23/01	04:03p	22,876	nova2_aq2.dat
09/23/01	04:04p	22,876	nova2_aq3.dat
09/23/01	04:05p	22,876	nova2_aq4.dat
09/23/01	04:08p	22,876	nova2_aq5.dat
09/23/01	04:12p	22,876	nova2_aq6.dat
09/23/01	04:12p	924,535	nova2_brk.dat
09/23/01	04:03p	5,600	nova2_ele1.dat
09/23/01	04:03p	5,600	nova2_ele2.dat
09/23/01	04:04p	5,600	nova2_ele3.dat
09/23/01	04:05p	5,600	nova2_ele4.dat
09/23/01	04:08p	5,600	nova2_ele5.dat
09/23/01	04:12p	5,600	nova2_ele6.dat
09/23/01	04:03p	5,908	nova2_gas1.dat
09/23/01	04:03p	5,908	nova2_gas2.dat
09/23/01	04:04p	5,908	nova2_gas3.dat
09/23/01	04:05p	5,908	nova2_gas4.dat
09/23/01	04:08p	5,908	nova2_gas5.dat
09/23/01	04:12p	5,908	nova2_gas6.dat
09/23/01	04:03p	5,609	nova2_min1.dat
09/23/01	04:03p	5,609	nova2_min2.dat
09/23/01	04:04p	5,609	nova2_min3.dat
09/23/01	04:05p	5,609	nova2_min4.dat
09/23/01	04:08p	5,609	nova2_min5.dat
09/23/01	04:12p	5,609	nova2_min6.dat
09/23/01	04:03p	14,821	nova2_psi1.dat
09/23/01	04:03p	14,821	nova2_psi2.dat
09/23/01	04:04p	14,821	nova2_psi3.dat
09/23/01	04:05p	14,821	nova2_psi4.dat
09/23/01	04:08p	14,821	nova2_psi5.dat
09/23/01	04:12p	14,821	nova2_psi6.dat
09/23/01	04:03p	34,229	nova2_sec1.dat
09/23/01	04:03p	34,229	nova2_sec2.dat
09/23/01	04:04p	34,229	nova2_sec3.dat
09/23/01	04:05p	34,229	nova2_sec4.dat
09/23/01	04:08p	34,229	nova2_sec5.dat
09/23/01	04:12p	34,229	nova2_sec6.dat
09/23/01	04:03p	4,293	nova2_vol1.dat
09/23/01	04:03p	4,293	nova2_vol2.dat
09/23/01	04:04p	4,293	nova2_vol3.dat
09/23/01	04:05p	4,293	nova2_vol4.dat
09/23/01	04:08p	4,293	nova2_vol5.dat
09/23/01	04:12p	4,293	nova2_vol6.dat
09/23/01	09:41p	7,420	nova3.inp
09/23/01	09:43p	1,220,280	nova3.out

09/23/01	09:43p	256,868	nova3.scr
09/23/01	09:41p	22,876	nova3_aq1.dat
09/23/01	09:41p	22,876	nova3_aq2.dat
09/23/01	09:41p	22,876	nova3_aq3.dat
09/23/01	09:42p	22,876	nova3_aq4.dat
09/23/01	09:42p	22,876	nova3_aq5.dat
09/23/01	09:43p	22,876	nova3_aq6.dat
09/23/01	09:43p	194,900	nova3_brk.dat
09/23/01	09:41p	5,600	nova3_ele1.dat
09/23/01	09:41p	5,600	nova3_ele2.dat
09/23/01	09:41p	5,600	nova3_ele3.dat
09/23/01	09:42p	5,600	nova3_ele4.dat
09/23/01	09:42p	5,600	nova3_ele5.dat
09/23/01	09:43p	5,600	nova3_ele6.dat
09/23/01	09:41p	5,908	nova3_gas1.dat
09/23/01	09:41p	5,908	nova3_gas2.dat
09/23/01	09:41p	5,908	nova3_gas3.dat
09/23/01	09:42p	5,908	nova3_gas4.dat
09/23/01	09:42p	5,908	nova3_gas5.dat
09/23/01	09:43p	5,908	nova3_gas6.dat
09/23/01	09:41p	5,609	nova3_min1.dat
09/23/01	09:41p	5,609	nova3_min2.dat
09/23/01	09:41p	5,609	nova3_min3.dat
09/23/01	09:42p	5,609	nova3_min4.dat
09/23/01	09:42p	5,609	nova3_min5.dat
09/23/01	09:43p	5,609	nova3_min6.dat
09/23/01	09:41p	14,821	nova3_psi1.dat
09/23/01	09:41p	14,821	nova3_psi2.dat
09/23/01	09:41p	14,821	nova3_psi3.dat
09/23/01	09:42p	14,821	nova3_psi4.dat
09/23/01	09:42p	14,821	nova3_psi5.dat
09/23/01	09:43p	14,821	nova3_psi6.dat
09/23/01	09:41p	34,229	nova3_sec1.dat
09/23/01	09:41p	34,229	nova3_sec2.dat
09/23/01	09:41p	34,229	nova3_sec3.dat
09/23/01	09:42p	34,229	nova3_sec4.dat
09/23/01	09:42p	34,229	nova3_sec5.dat
09/23/01	09:43p	34,229	nova3_sec6.dat
09/23/01	09:41p	4,293	nova3_vol1.dat
09/23/01	09:41p	4,293	nova3_vol2.dat
09/23/01	09:41p	4,293	nova3_vol3.dat
09/23/01	09:42p	4,293	nova3_vol4.dat
09/23/01	09:42p	4,293	nova3_vol5.dat
09/23/01	09:43p	4,293	nova3_vol6.dat
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09/23/01	08:15p	1,220,280	nova4.out
09/23/01	08:15p	1,216,388	nova4.scr
09/23/01	08:06p	22,876	nova4_aq1.dat
09/23/01	08:06p	22,876	nova4_aq2.dat
09/23/01	08:06p	22,876	nova4_aq3.dat
09/23/01	08:08p	22,876	nova4_aq4.dat
09/23/01	08:11p	22,876	nova4_aq5.dat
09/23/01	08:15p	22,876	nova4_aq6.dat
09/23/01	08:15p	924,535	nova4_brk.dat
09/23/01	08:06p	5,600	nova4_ele1.dat
09/23/01	08:06p	5,600	nova4_ele2.dat
09/23/01	08:06p	5,600	nova4_ele3.dat

09/23/01	08:08p	5,600	nova4_ele4.dat
09/23/01	08:11p	5,600	nova4_ele5.dat
09/23/01	08:15p	5,600	nova4_ele6.dat
09/23/01	08:06p	5,908	nova4_gas1.dat
09/23/01	08:06p	5,908	nova4_gas2.dat
09/23/01	08:06p	5,908	nova4_gas3.dat
09/23/01	08:08p	5,908	nova4_gas4.dat
09/23/01	08:11p	5,908	nova4_gas5.dat
09/23/01	08:15p	5,908	nova4_gas6.dat
09/23/01	08:06p	5,609	nova4_min1.dat
09/23/01	08:06p	5,609	nova4_min2.dat
09/23/01	08:06p	5,609	nova4_min3.dat
09/23/01	08:08p	5,609	nova4_min4.dat
09/23/01	08:11p	5,609	nova4_min5.dat
09/23/01	08:15p	5,609	nova4_min6.dat
09/23/01	08:06p	14,821	nova4_psi1.dat
09/23/01	08:06p	14,821	nova4_psi2.dat
09/23/01	08:06p	14,821	nova4_psi3.dat
09/23/01	08:08p	14,821	nova4_psi4.dat
09/23/01	08:11p	14,821	nova4_psi5.dat
09/23/01	08:15p	14,821	nova4_psi6.dat
09/23/01	08:06p	34,229	nova4_sec1.dat
09/23/01	08:06p	34,229	nova4_sec2.dat
09/23/01	08:06p	34,229	nova4_sec3.dat
09/23/01	08:08p	34,229	nova4_sec4.dat
09/23/01	08:11p	34,229	nova4_sec5.dat
09/23/01	08:15p	34,229	nova4_sec6.dat
09/23/01	08:06p	4,293	nova4_vol1.dat
09/23/01	08:06p	4,293	nova4_vol2.dat
09/23/01	08:06p	4,293	nova4_vol3.dat
09/23/01	08:08p	4,293	nova4_vol4.dat
09/23/01	08:11p	4,293	nova4_vol5.dat
09/23/01	08:15p	4,293	nova4_vol6.dat
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09/23/01	09:56p	256,964	nova5.scr
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09/23/01	09:54p	22,876	nova5_aq2.dat
09/23/01	09:54p	22,876	nova5_aq3.dat
09/23/01	09:55p	22,876	nova5_aq4.dat
09/23/01	09:55p	22,876	nova5_aq5.dat
09/23/01	09:56p	22,876	nova5_aq6.dat
09/23/01	09:56p	194,900	nova5_brk.dat
09/23/01	09:54p	5,600	nova5_ele1.dat
09/23/01	09:54p	5,600	nova5_ele2.dat
09/23/01	09:54p	5,600	nova5_ele3.dat
09/23/01	09:55p	5,600	nova5_ele4.dat
09/23/01	09:55p	5,600	nova5_ele5.dat
09/23/01	09:56p	5,600	nova5_ele6.dat
09/23/01	09:54p	5,908	nova5_gas1.dat
09/23/01	09:54p	5,908	nova5_gas2.dat
09/23/01	09:54p	5,908	nova5_gas3.dat
09/23/01	09:55p	5,908	nova5_gas4.dat
09/23/01	09:55p	5,908	nova5_gas5.dat
09/23/01	09:56p	5,908	nova5_gas6.dat
09/23/01	09:54p	5,609	nova5_min1.dat
09/23/01	09:54p	5,609	nova5_min2.dat

09/23/01	09:54p	5,609	nova5_min3.dat
09/23/01	09:55p	5,609	nova5_min4.dat
09/23/01	09:55p	5,609	nova5_min5.dat
09/23/01	09:56p	5,609	nova5_min6.dat
09/23/01	09:54p	14,821	nova5_psi1.dat
09/23/01	09:54p	14,821	nova5_psi2.dat
09/23/01	09:54p	14,821	nova5_psi3.dat
09/23/01	09:55p	14,821	nova5_psi4.dat
09/23/01	09:55p	14,821	nova5_psi5.dat
09/23/01	09:56p	14,821	nova5_psi6.dat
09/23/01	09:54p	34,229	nova5_sec1.dat
09/23/01	09:54p	34,229	nova5_sec2.dat
09/23/01	09:54p	34,229	nova5_sec3.dat
09/23/01	09:55p	34,229	nova5_sec4.dat
09/23/01	09:55p	34,229	nova5_sec5.dat
09/23/01	09:56p	34,229	nova5_sec6.dat
09/23/01	09:54p	4,293	nova5_vol1.dat
09/23/01	09:54p	4,293	nova5_vol2.dat
09/23/01	09:54p	4,293	nova5_vol3.dat
09/23/01	09:55p	4,293	nova5_vol4.dat
09/23/01	09:55p	4,293	nova5_vol5.dat
09/23/01	09:56p	4,293	nova5_vol6.dat
09/23/01	10:02p	7,423	nova6.inp
09/23/01	10:10p	1,220,280	nova6.out
09/23/01	10:10p	1,216,388	nova6.scr
09/23/01	10:02p	22,876	nova6_aq1.dat
09/23/01	10:02p	22,876	nova6_aq2.dat
09/23/01	10:02p	22,876	nova6_aq3.dat
09/23/01	10:04p	22,876	nova6_aq4.dat
09/23/01	10:06p	22,876	nova6_aq5.dat
09/23/01	10:10p	22,876	nova6_aq6.dat
09/23/01	10:10p	924,535	nova6_brk.dat
09/23/01	10:02p	5,600	nova6_ele1.dat
09/23/01	10:02p	5,600	nova6_ele2.dat
09/23/01	10:02p	5,600	nova6_ele3.dat
09/23/01	10:04p	5,600	nova6_ele4.dat
09/23/01	10:06p	5,600	nova6_ele5.dat
09/23/01	10:10p	5,600	nova6_ele6.dat
09/23/01	10:02p	5,908	nova6_gas1.dat
09/23/01	10:02p	5,908	nova6_gas2.dat
09/23/01	10:02p	5,908	nova6_gas3.dat
09/23/01	10:04p	5,908	nova6_gas4.dat
09/23/01	10:06p	5,908	nova6_gas5.dat
09/23/01	10:10p	5,908	nova6_gas6.dat
09/23/01	10:02p	5,609	nova6_min1.dat
09/23/01	10:02p	5,609	nova6_min2.dat
09/23/01	10:02p	5,609	nova6_min3.dat
09/23/01	10:04p	5,609	nova6_min4.dat
09/23/01	10:06p	5,609	nova6_min5.dat
09/23/01	10:10p	5,609	nova6_min6.dat
09/23/01	10:02p	14,821	nova6_psi1.dat
09/23/01	10:02p	14,821	nova6_psi2.dat
09/23/01	10:02p	14,821	nova6_psi3.dat
09/23/01	10:04p	14,821	nova6_psi4.dat
09/23/01	10:06p	14,821	nova6_psi5.dat
09/23/01	10:10p	14,821	nova6_psi6.dat
09/23/01	10:02p	34,229	nova6_sec1.dat

09/23/01	10:02p	34,229	nova6_sec2.dat
09/23/01	10:02p	34,229	nova6_sec3.dat
09/23/01	10:04p	34,229	nova6_sec4.dat
09/23/01	10:06p	34,229	nova6_sec5.dat
09/23/01	10:10p	34,229	nova6_sec6.dat
09/23/01	10:02p	4,293	nova6_vol1.dat
09/23/01	10:02p	4,293	nova6_vol2.dat
09/23/01	10:02p	4,293	nova6_vol3.dat
09/23/01	10:04p	4,293	nova6_vol4.dat
09/23/01	10:06p	4,293	nova6_vol5.dat
09/23/01	10:10p	4,293	nova6_vol6.dat
09/22/01	01:15p	10,752	phvsdistance.grf
09/23/01	10:30p	30,720	ratiovsph.grf
09/22/01	01:50p	15,360	twclso4.grf
09/22/01	01:50p	14,848	twhco3.grf
09/22/01	02:39p	10,240	twnavspH.grf
09/24/01	08:43a	198,656	virginiahills.ppt
289 File(s)		32,722,547	bytes

Directory of R:\tests\turnbull

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01/01/01	12:00a	<DIR>	..
02/01/01	07:43a	18,628	5m958_aq1.dat
02/01/01	07:43a	18,628	5m958_aq2.dat
02/01/01	07:44a	18,628	5m958_aq3.dat
02/01/01	07:44a	18,628	5m958_aq4.dat
02/01/01	07:44a	18,628	5m958_aq5.dat
02/01/01	07:44a	66,012	5m958_brk.dat
02/01/01	07:43a	5,600	5m958_ele1.dat
02/01/01	07:43a	5,600	5m958_ele2.dat
02/01/01	07:44a	5,600	5m958_ele3.dat
05/02/01	07:18a	3,859	5m958_ele4.dat
02/01/01	07:44a	5,600	5m958_ele5.dat
02/01/01	07:43a	7,324	5m958_gas1.dat
02/01/01	07:43a	7,324	5m958_gas2.dat
02/01/01	07:44a	7,324	5m958_gas3.dat
02/01/01	07:44a	7,324	5m958_gas4.dat
02/01/01	07:44a	7,324	5m958_gas5.dat
02/01/01	07:43a	5,609	5m958_min1.dat
02/01/01	07:43a	5,609	5m958_min2.dat
02/01/01	07:44a	5,609	5m958_min3.dat
02/01/01	07:44a	5,609	5m958_min4.dat
02/01/01	07:44a	5,609	5m958_min5.dat
02/01/01	07:43a	10,873	5m958_psi1.dat
02/01/01	07:43a	10,873	5m958_psi2.dat
02/01/01	07:44a	10,873	5m958_psi3.dat
02/01/01	07:44a	10,873	5m958_psi4.dat
02/01/01	07:44a	10,873	5m958_psi5.dat
02/01/01	07:43a	27,149	5m958_sec1.dat
02/01/01	07:43a	27,149	5m958_sec2.dat
02/01/01	07:44a	27,149	5m958_sec3.dat
02/01/01	07:44a	27,149	5m958_sec4.dat
02/01/01	07:44a	27,149	5m958_sec5.dat
02/01/01	07:43a	4,293	5m958_vol1.dat
02/01/01	07:43a	4,293	5m958_vol2.dat
02/01/01	07:44a	4,293	5m958_vol3.dat

02/01/01	07:44a	4,293	5m958_vol4.dat
02/01/01	07:44a	4,293	5m958_vol5.dat
01/22/01	06:23p	73,728	PIPEC1.GRF
01/22/01	06:23p	14,441,984	QLTEST1x.xls
01/22/01	06:23p	1,289,216	QLTEST2B.XLS
01/22/01	06:20p	40,960	QLtest1.grf
10/09/99	09:13p	4,056	TB2D658_AQ4.GRD
10/01/99	03:27p	6,794	TURNBULL1.inp
10/01/99	05:47p	21,004	TURNBULL1PH3.SRF
10/01/99	05:24p	3,056	TURNBULL1_AQ1.GRD
10/01/99	05:27p	3,056	TURNBULL1_AQ2.GRD
10/01/99	03:46p	3,056	TURNBULL1_AQ3.GRD
10/01/99	05:11p	3,056	TURNBULL1_AQ4.GRD
10/01/99	12:49p	9,128	TURNBULL2.inp
10/01/99	02:33p	13,945	TURNBULL2PH4.SRF
10/01/99	03:52p	3,056	TURNBULL2_AQ4.GRD
10/01/99	08:27p	16,106	TURNBULL3.SRF
10/01/99	05:50p	6,794	TURNBULL3.inp
10/01/99	06:53p	4,256	TURNBULL3_AQ3.GRD
01/29/01	10:27p	4,608	condeffect.xls
01/29/01	11:07p	24,576	dilution.grf
01/22/01	06:23p	7,680	disbonded QL test 2.GRF
02/01/01	06:43a	18,628	higap658_aq1.dat
02/01/01	06:43a	18,628	higap658_aq2.dat
02/01/01	06:43a	18,628	higap658_aq3.dat
02/01/01	06:44a	18,628	higap658_aq4.dat
02/01/01	06:44a	18,628	higap658_aq5.dat
02/01/01	06:44a	66,012	higap658_brk.dat
02/01/01	06:43a	5,600	higap658_ele1.dat
02/01/01	06:43a	5,600	higap658_ele2.dat
02/01/01	06:43a	5,600	higap658_ele3.dat
02/01/01	06:44a	5,600	higap658_ele4.dat
02/01/01	06:44a	5,600	higap658_ele5.dat
02/01/01	06:43a	7,324	higap658_gas1.dat
02/01/01	06:43a	7,324	higap658_gas2.dat
02/01/01	06:43a	7,324	higap658_gas3.dat
02/01/01	06:44a	7,324	higap658_gas4.dat
02/01/01	06:44a	7,324	higap658_gas5.dat
02/01/01	06:43a	5,609	higap658_min1.dat
02/01/01	06:43a	5,609	higap658_min2.dat
02/01/01	06:43a	5,609	higap658_min3.dat
02/01/01	06:44a	5,609	higap658_min4.dat
02/01/01	06:44a	5,609	higap658_min5.dat
02/01/01	06:43a	10,873	higap658_psi1.dat
02/01/01	06:43a	10,873	higap658_psi2.dat
02/01/01	06:43a	10,873	higap658_psi3.dat
02/01/01	06:44a	10,873	higap658_psi4.dat
02/01/01	06:44a	10,873	higap658_psi5.dat
02/01/01	06:43a	21,485	higap658_sec1.dat
02/01/01	06:43a	21,485	higap658_sec2.dat
02/01/01	06:43a	21,485	higap658_sec3.dat
02/01/01	06:44a	21,485	higap658_sec4.dat
02/01/01	06:44a	21,485	higap658_sec5.dat
02/01/01	06:43a	4,293	higap658_vol1.dat
02/01/01	06:43a	4,293	higap658_vol2.dat
02/01/01	06:43a	4,293	higap658_vol3.dat
02/01/01	06:44a	4,293	higap658_vol4.dat

02/01/01	06:44a	4,293	higap658_vol5.dat
01/31/01	11:24p	18,628	higap958_aq1.dat
01/31/01	11:24p	18,628	higap958_aq2.dat
01/31/01	11:24p	18,628	higap958_aq3.dat
01/31/01	11:24p	18,628	higap958_aq4.dat
01/31/01	11:25p	18,628	higap958_aq5.dat
01/31/01	11:25p	66,012	higap958_brk.dat
01/31/01	11:24p	5,600	higap958_ele1.dat
01/31/01	11:24p	5,600	higap958_ele2.dat
01/31/01	11:24p	5,600	higap958_ele3.dat
01/31/01	11:24p	5,600	higap958_ele4.dat
01/31/01	11:25p	5,600	higap958_ele5.dat
01/31/01	11:24p	7,324	higap958_gas1.dat
01/31/01	11:24p	7,324	higap958_gas2.dat
01/31/01	11:24p	7,324	higap958_gas3.dat
01/31/01	11:24p	7,324	higap958_gas4.dat
01/31/01	11:25p	7,324	higap958_gas5.dat
01/31/01	11:24p	5,609	higap958_min1.dat
01/31/01	11:24p	5,609	higap958_min2.dat
01/31/01	11:24p	5,609	higap958_min3.dat
01/31/01	11:24p	5,609	higap958_min4.dat
01/31/01	11:25p	5,609	higap958_min5.dat
01/31/01	11:24p	10,873	higap958_psi1.dat
01/31/01	11:24p	10,873	higap958_psi2.dat
01/31/01	11:24p	10,873	higap958_psi3.dat
01/31/01	11:24p	10,873	higap958_psi4.dat
01/31/01	11:25p	10,873	higap958_psi5.dat
01/31/01	11:24p	21,485	higap958_sec1.dat
01/31/01	11:24p	21,485	higap958_sec2.dat
01/31/01	11:24p	21,485	higap958_sec3.dat
01/31/01	11:24p	21,485	higap958_sec4.dat
01/31/01	11:25p	21,485	higap958_sec5.dat
01/31/01	11:24p	4,293	higap958_vol1.dat
01/31/01	11:24p	4,293	higap958_vol2.dat
01/31/01	11:24p	4,293	higap958_vol3.dat
01/31/01	11:24p	4,293	higap958_vol4.dat
01/31/01	11:25p	4,293	higap958_vol5.dat
01/28/01	10:41p	800,548	lc2958.out
01/28/01	10:41p	18,628	lc2958_aq1.dat
01/28/01	10:41p	18,628	lc2958_aq2.dat
01/28/01	10:41p	18,628	lc2958_aq3.dat
01/28/01	10:41p	18,628	lc2958_aq4.dat
01/28/01	10:41p	18,628	lc2958_aq5.dat
01/28/01	10:41p	66,012	lc2958_brk.dat
01/28/01	10:41p	5,600	lc2958_ele1.dat
01/28/01	10:41p	5,600	lc2958_ele2.dat
01/28/01	10:41p	5,600	lc2958_ele3.dat
01/28/01	10:41p	5,600	lc2958_ele4.dat
01/28/01	10:41p	5,600	lc2958_ele5.dat
01/28/01	10:41p	7,324	lc2958_gas1.dat
01/28/01	10:41p	7,324	lc2958_gas2.dat
01/28/01	10:41p	7,324	lc2958_gas3.dat
01/28/01	10:41p	7,324	lc2958_gas4.dat
01/28/01	10:41p	7,324	lc2958_gas5.dat
01/28/01	10:41p	5,609	lc2958_min1.dat
01/28/01	10:41p	5,609	lc2958_min2.dat
01/28/01	10:41p	5,609	lc2958_min3.dat

01/28/01	10:41p	5,609	lc2958_min4.dat
01/28/01	10:41p	5,609	lc2958_min5.dat
01/28/01	10:41p	10,873	lc2958_psi1.dat
01/28/01	10:41p	10,873	lc2958_psi2.dat
01/28/01	10:41p	10,873	lc2958_psi3.dat
01/28/01	10:41p	10,873	lc2958_psi4.dat
01/28/01	10:41p	10,873	lc2958_psi5.dat
01/28/01	10:41p	21,485	lc2958_sec1.dat
01/28/01	10:41p	21,485	lc2958_sec2.dat
01/28/01	10:41p	21,485	lc2958_sec3.dat
01/28/01	10:41p	21,485	lc2958_sec4.dat
01/28/01	10:41p	21,485	lc2958_sec5.dat
01/28/01	10:41p	4,293	lc2958_vol1.dat
01/28/01	10:41p	4,293	lc2958_vol2.dat
01/28/01	10:41p	4,293	lc2958_vol3.dat
01/28/01	10:41p	4,293	lc2958_vol4.dat
01/28/01	10:41p	4,293	lc2958_vol5.dat
01/27/01	10:19a	305,726	lc858.out
02/01/01	12:20a	18,628	logap658_aq1.dat
02/01/01	12:28a	18,628	logap658_aq2.dat
02/01/01	12:50a	18,628	logap658_aq3.dat
02/01/01	01:25a	18,628	logap658_aq4.dat
02/01/01	01:25a	18,628	logap658_aq5.dat
02/01/01	01:25a	1,895,637	logap658_brk.dat
02/01/01	12:20a	5,600	logap658_ele1.dat
02/01/01	12:28a	5,600	logap658_ele2.dat
02/01/01	12:50a	5,600	logap658_ele3.dat
02/01/01	01:25a	5,600	logap658_ele4.dat
02/01/01	01:25a	5,600	logap658_ele5.dat
02/01/01	12:20a	7,324	logap658_gas1.dat
02/01/01	12:28a	7,324	logap658_gas2.dat
02/01/01	12:50a	7,324	logap658_gas3.dat
02/01/01	01:25a	7,324	logap658_gas4.dat
02/01/01	01:25a	7,324	logap658_gas5.dat
02/01/01	12:20a	5,609	logap658_min1.dat
02/01/01	12:28a	5,609	logap658_min2.dat
02/01/01	12:50a	5,609	logap658_min3.dat
02/01/01	01:25a	5,609	logap658_min4.dat
02/01/01	01:25a	5,609	logap658_min5.dat
02/01/01	12:20a	10,873	logap658_psi1.dat
02/01/01	12:28a	10,873	logap658_psi2.dat
02/01/01	12:50a	10,873	logap658_psi3.dat
02/01/01	01:25a	10,873	logap658_psi4.dat
02/01/01	01:25a	10,873	logap658_psi5.dat
02/01/01	12:20a	21,485	logap658_sec1.dat
02/01/01	12:28a	21,485	logap658_sec2.dat
02/01/01	12:50a	21,485	logap658_sec3.dat
02/01/01	01:25a	21,485	logap658_sec4.dat
02/01/01	01:25a	21,485	logap658_sec5.dat
02/01/01	12:20a	4,293	logap658_vol1.dat
02/01/01	12:28a	4,293	logap658_vol2.dat
02/01/01	12:50a	4,293	logap658_vol3.dat
02/01/01	01:25a	4,293	logap658_vol4.dat
02/01/01	01:25a	4,293	logap658_vol5.dat
01/28/01	11:25p	793,228	logap958.out
01/31/01	11:15p	18,628	logap958_aq1.dat
01/31/01	11:15p	18,628	logap958_aq2.dat

01/31/01	11:15p	18,628	logap958_aq3.dat
01/31/01	11:15p	18,628	logap958_aq4.dat
01/31/01	11:15p	18,628	logap958_aq5.dat
01/31/01	11:15p	66,012	logap958_brk.dat
01/31/01	11:15p	5,600	logap958_ele1.dat
01/31/01	11:15p	5,600	logap958_ele2.dat
01/31/01	11:15p	5,600	logap958_ele3.dat
01/31/01	11:15p	5,600	logap958_ele4.dat
01/31/01	11:15p	5,600	logap958_ele5.dat
01/31/01	11:15p	7,324	logap958_gas1.dat
01/31/01	11:15p	7,324	logap958_gas2.dat
01/31/01	11:15p	7,324	logap958_gas3.dat
01/31/01	11:15p	7,324	logap958_gas4.dat
01/31/01	11:15p	7,324	logap958_gas5.dat
01/31/01	11:15p	5,609	logap958_min1.dat
01/31/01	11:15p	5,609	logap958_min2.dat
01/31/01	11:15p	5,609	logap958_min3.dat
01/31/01	11:15p	5,609	logap958_min4.dat
01/31/01	11:15p	5,609	logap958_min5.dat
01/31/01	11:15p	10,873	logap958_psi1.dat
01/31/01	11:15p	10,873	logap958_psi2.dat
01/31/01	11:15p	10,873	logap958_psi3.dat
01/31/01	11:15p	10,873	logap958_psi4.dat
01/31/01	11:15p	10,873	logap958_psi5.dat
01/31/01	11:15p	21,485	logap958_sec1.dat
01/31/01	11:15p	21,485	logap958_sec2.dat
01/31/01	11:15p	21,485	logap958_sec3.dat
01/31/01	11:15p	21,485	logap958_sec4.dat
01/31/01	11:15p	21,485	logap958_sec5.dat
01/31/01	11:15p	4,293	logap958_vol1.dat
01/31/01	11:15p	4,293	logap958_vol2.dat
01/31/01	11:15p	4,293	logap958_vol3.dat
01/31/01	11:15p	4,293	logap958_vol4.dat
01/31/01	11:15p	4,293	logap958_vol5.dat
02/01/01	07:36a	18,628	long958_aq1.dat
02/01/01	07:36a	18,628	long958_aq2.dat
02/01/01	07:36a	18,628	long958_aq3.dat
02/01/01	07:36a	18,628	long958_aq4.dat
02/01/01	07:36a	18,628	long958_aq5.dat
02/01/01	07:36a	66,012	long958_brk.dat
02/01/01	07:36a	5,600	long958_ele1.dat
02/01/01	07:36a	5,600	long958_ele2.dat
02/01/01	07:36a	5,600	long958_ele3.dat
05/02/01	07:19a	3,774	long958_ele4.dat
02/01/01	07:36a	5,600	long958_ele5.dat
02/01/01	07:36a	7,324	long958_gas1.dat
02/01/01	07:36a	7,324	long958_gas2.dat
02/01/01	07:36a	7,324	long958_gas3.dat
02/01/01	07:36a	7,324	long958_gas4.dat
02/01/01	07:36a	7,324	long958_gas5.dat
02/01/01	07:36a	5,609	long958_min1.dat
02/01/01	07:36a	5,609	long958_min2.dat
02/01/01	07:36a	5,609	long958_min3.dat
02/01/01	07:36a	5,609	long958_min4.dat
02/01/01	07:36a	5,609	long958_min5.dat
02/01/01	07:36a	10,873	long958_psi1.dat
02/01/01	07:36a	10,873	long958_psi2.dat

02/01/01	07:36a	10,873	long958_psi3.dat
02/01/01	07:36a	10,873	long958_psi4.dat
02/01/01	07:36a	10,873	long958_psi5.dat
02/01/01	07:36a	27,149	long958_sec1.dat
02/01/01	07:36a	27,149	long958_sec2.dat
02/01/01	07:36a	27,149	long958_sec3.dat
02/01/01	07:36a	27,149	long958_sec4.dat
02/01/01	07:36a	27,149	long958_sec5.dat
02/01/01	07:36a	4,293	long958_vol1.dat
02/01/01	07:36a	4,293	long958_vol2.dat
02/01/01	07:36a	4,293	long958_vol3.dat
02/01/01	07:36a	4,293	long958_vol4.dat
02/01/01	07:36a	4,293	long958_vol5.dat
01/28/01	10:21p	800,548	lowcl958.out
01/28/01	10:21p	18,628	lowcl958_aq1.dat
01/28/01	10:21p	18,628	lowcl958_aq2.dat
01/28/01	10:21p	18,628	lowcl958_aq3.dat
01/28/01	10:21p	18,628	lowcl958_aq4.dat
01/28/01	10:21p	18,628	lowcl958_aq5.dat
01/28/01	10:21p	66,012	lowcl958_brk.dat
01/28/01	10:21p	5,600	lowcl958_ele1.dat
01/28/01	10:21p	5,600	lowcl958_ele2.dat
01/28/01	10:21p	5,600	lowcl958_ele3.dat
01/28/01	10:21p	5,600	lowcl958_ele4.dat
01/28/01	10:21p	5,600	lowcl958_ele5.dat
01/28/01	10:21p	7,324	lowcl958_gas1.dat
01/28/01	10:21p	7,324	lowcl958_gas2.dat
01/28/01	10:21p	7,324	lowcl958_gas3.dat
01/28/01	10:21p	7,324	lowcl958_gas4.dat
01/28/01	10:21p	7,324	lowcl958_gas5.dat
01/28/01	10:21p	5,609	lowcl958_min1.dat
01/28/01	10:21p	5,609	lowcl958_min2.dat
01/28/01	10:21p	5,609	lowcl958_min3.dat
01/28/01	10:21p	5,609	lowcl958_min4.dat
01/28/01	10:21p	5,609	lowcl958_min5.dat
01/28/01	10:21p	10,873	lowcl958_psi1.dat
01/28/01	10:21p	10,873	lowcl958_psi2.dat
01/28/01	10:21p	10,873	lowcl958_psi3.dat
01/28/01	10:21p	10,873	lowcl958_psi4.dat
01/28/01	10:21p	10,873	lowcl958_psi5.dat
01/28/01	10:21p	21,485	lowcl958_sec1.dat
01/28/01	10:21p	21,485	lowcl958_sec2.dat
01/28/01	10:21p	21,485	lowcl958_sec3.dat
01/28/01	10:21p	21,485	lowcl958_sec4.dat
01/28/01	10:21p	21,485	lowcl958_sec5.dat
01/28/01	10:21p	4,293	lowcl958_vol1.dat
01/28/01	10:21p	4,293	lowcl958_vol2.dat
01/28/01	10:21p	4,293	lowcl958_vol3.dat
01/28/01	10:21p	4,293	lowcl958_vol4.dat
01/28/01	10:21p	4,293	lowcl958_vol5.dat
01/28/01	10:48p	800,548	medcl958.out
01/28/01	10:48p	18,628	medcl958_aq1.dat
01/28/01	10:48p	18,628	medcl958_aq2.dat
01/28/01	10:48p	18,628	medcl958_aq3.dat
01/28/01	10:48p	18,628	medcl958_aq4.dat
01/28/01	10:48p	18,628	medcl958_aq5.dat
01/28/01	10:48p	66,012	medcl958_brk.dat

01/28/01	10:48p	5,600	medcl958_ele1.dat
01/28/01	10:48p	5,600	medcl958_ele2.dat
01/28/01	10:48p	5,600	medcl958_ele3.dat
01/28/01	10:48p	5,600	medcl958_ele4.dat
01/28/01	10:48p	5,600	medcl958_ele5.dat
01/28/01	10:48p	7,324	medcl958_gas1.dat
01/28/01	10:48p	7,324	medcl958_gas2.dat
01/28/01	10:48p	7,324	medcl958_gas3.dat
01/28/01	10:48p	7,324	medcl958_gas4.dat
01/28/01	10:48p	7,324	medcl958_gas5.dat
01/28/01	10:48p	5,609	medcl958_min1.dat
01/28/01	10:48p	5,609	medcl958_min2.dat
01/28/01	10:48p	5,609	medcl958_min3.dat
01/28/01	10:48p	5,609	medcl958_min4.dat
01/28/01	10:48p	5,609	medcl958_min5.dat
01/28/01	10:48p	10,873	medcl958_psi1.dat
01/28/01	10:48p	10,873	medcl958_psi2.dat
01/28/01	10:48p	10,873	medcl958_psi3.dat
01/28/01	10:48p	10,873	medcl958_psi4.dat
01/28/01	10:48p	10,873	medcl958_psi5.dat
01/28/01	10:48p	21,485	medcl958_sec1.dat
01/28/01	10:48p	21,485	medcl958_sec2.dat
01/28/01	10:48p	21,485	medcl958_sec3.dat
01/28/01	10:48p	21,485	medcl958_sec4.dat
01/28/01	10:48p	21,485	medcl958_sec5.dat
01/28/01	10:48p	4,293	medcl958_vol1.dat
01/28/01	10:48p	4,293	medcl958_vol2.dat
01/28/01	10:48p	4,293	medcl958_vol3.dat
01/28/01	10:48p	4,293	medcl958_vol4.dat
01/28/01	10:48p	4,293	medcl958_vol5.dat
10/02/99	10:40a	7,127	tbld458.inp
01/24/01	11:07p	643,997	tbld458.out
01/24/01	09:32p	18,628	tbld458_aq1.dat
01/24/01	09:37p	18,628	tbld458_aq2.dat
01/24/01	10:38p	18,628	tbld458_aq3.dat
10/06/99	09:04p	12,092	tbld458_aq4.dat
01/24/01	11:07p	2,577,549	tbld458_brk.dat
01/24/01	09:32p	5,600	tbld458_ele1.dat
01/24/01	09:37p	5,600	tbld458_ele2.dat
01/24/01	10:38p	5,600	tbld458_ele3.dat
10/02/99	10:53a	5,600	tbld458_ele4.dat
01/24/01	09:32p	7,324	tbld458_gas1.dat
01/24/01	09:37p	7,324	tbld458_gas2.dat
01/24/01	10:38p	7,324	tbld458_gas3.dat
10/02/99	10:53a	7,324	tbld458_gas4.dat
01/24/01	09:32p	5,609	tbld458_min1.dat
01/24/01	09:37p	5,609	tbld458_min2.dat
01/24/01	10:38p	5,609	tbld458_min3.dat
10/02/99	10:53a	6,925	tbld458_min4.dat
01/24/01	09:32p	10,873	tbld458_psi1.dat
01/24/01	09:37p	10,873	tbld458_psi2.dat
01/24/01	10:38p	10,873	tbld458_psi3.dat
10/02/99	10:53a	10,873	tbld458_psi4.dat
01/24/01	09:32p	27,149	tbld458_sec1.dat
01/24/01	09:37p	27,149	tbld458_sec2.dat
01/24/01	10:38p	27,149	tbld458_sec3.dat
10/02/99	10:53a	27,149	tbld458_sec4.dat

01/24/01	09:32p	4,293	tb1d458_vol1.dat
01/24/01	09:37p	4,293	tb1d458_vol2.dat
01/24/01	10:38p	4,293	tb1d458_vol3.dat
10/02/99	10:53a	5,609	tb1d458_vol4.dat
10/02/99	12:57p	7,127	tb1d508.inp
01/23/01	11:49p	870,539	tb1d508.out
01/23/01	11:46p	18,628	tb1d508_aq1.dat
01/23/01	11:48p	18,628	tb1d508_aq2.dat
01/23/01	11:48p	18,628	tb1d508_aq3.dat
01/23/01	11:48p	18,628	tb1d508_aq4.dat
01/23/01	11:49p	18,628	tb1d508_aq5.dat
01/23/01	11:49p	124,847	tb1d508_brk.dat
01/23/01	11:46p	5,600	tb1d508_ele1.dat
01/23/01	11:48p	5,600	tb1d508_ele2.dat
01/23/01	11:48p	5,600	tb1d508_ele3.dat
01/23/01	11:48p	5,600	tb1d508_ele4.dat
01/23/01	11:49p	5,600	tb1d508_ele5.dat
01/23/01	11:46p	7,324	tb1d508_gas1.dat
01/23/01	11:48p	7,324	tb1d508_gas2.dat
01/23/01	11:48p	7,324	tb1d508_gas3.dat
01/23/01	11:48p	7,324	tb1d508_gas4.dat
01/23/01	11:49p	7,324	tb1d508_gas5.dat
01/23/01	11:46p	5,609	tb1d508_min1.dat
01/23/01	11:48p	5,609	tb1d508_min2.dat
01/23/01	11:48p	5,609	tb1d508_min3.dat
01/23/01	11:48p	5,609	tb1d508_min4.dat
01/23/01	11:49p	5,609	tb1d508_min5.dat
01/23/01	11:46p	10,873	tb1d508_psi1.dat
01/23/01	11:48p	10,873	tb1d508_psi2.dat
01/23/01	11:48p	10,873	tb1d508_psi3.dat
01/23/01	11:48p	10,873	tb1d508_psi4.dat
01/23/01	11:49p	10,873	tb1d508_psi5.dat
01/23/01	11:46p	27,149	tb1d508_sec1.dat
01/23/01	11:48p	27,149	tb1d508_sec2.dat
01/23/01	11:48p	27,149	tb1d508_sec3.dat
01/23/01	11:48p	27,149	tb1d508_sec4.dat
01/23/01	11:49p	27,149	tb1d508_sec5.dat
01/23/01	11:46p	4,293	tb1d508_vol1.dat
01/23/01	11:48p	4,293	tb1d508_vol2.dat
01/23/01	11:48p	4,293	tb1d508_vol3.dat
01/23/01	11:48p	4,293	tb1d508_vol4.dat
01/23/01	11:49p	4,293	tb1d508_vol5.dat
10/02/99	10:30a	7,127	tb1d558.inp
01/23/01	11:32p	870,539	tb1d558.out
01/21/01	01:30p	1,911,700	tb1d558.scr
01/23/01	11:30p	18,628	tb1d558_aq1.dat
01/23/01	11:30p	18,628	tb1d558_aq2.dat
01/23/01	11:31p	18,628	tb1d558_aq3.dat
01/23/01	11:31p	18,628	tb1d558_aq4.dat
01/23/01	11:32p	18,628	tb1d558_aq5.dat
01/23/01	11:32p	101,600	tb1d558_brk.dat
01/23/01	11:30p	5,600	tb1d558_ele1.dat
01/23/01	11:30p	5,600	tb1d558_ele2.dat
01/23/01	11:31p	5,600	tb1d558_ele3.dat
01/23/01	11:31p	5,600	tb1d558_ele4.dat
01/23/01	11:32p	5,600	tb1d558_ele5.dat
01/23/01	11:30p	7,324	tb1d558_gas1.dat

01/23/01	11:30p	7,324	tb1d558_gas2.dat
01/23/01	11:31p	7,324	tb1d558_gas3.dat
01/23/01	11:31p	7,324	tb1d558_gas4.dat
01/23/01	11:32p	7,324	tb1d558_gas5.dat
01/23/01	11:30p	5,609	tb1d558_min1.dat
01/23/01	11:30p	5,609	tb1d558_min2.dat
01/23/01	11:31p	5,609	tb1d558_min3.dat
01/23/01	11:31p	5,609	tb1d558_min4.dat
01/23/01	11:32p	5,609	tb1d558_min5.dat
01/23/01	11:30p	10,873	tb1d558_psi1.dat
01/23/01	11:30p	10,873	tb1d558_psi2.dat
01/23/01	11:31p	10,873	tb1d558_psi3.dat
01/23/01	11:31p	10,873	tb1d558_psi4.dat
01/23/01	11:32p	10,873	tb1d558_psi5.dat
01/23/01	11:30p	27,149	tb1d558_sec1.dat
01/23/01	11:30p	27,149	tb1d558_sec2.dat
01/23/01	11:31p	27,149	tb1d558_sec3.dat
01/23/01	11:31p	27,149	tb1d558_sec4.dat
01/23/01	11:32p	27,149	tb1d558_sec5.dat
01/23/01	11:30p	4,293	tb1d558_vol1.dat
01/23/01	11:30p	4,293	tb1d558_vol2.dat
01/23/01	11:31p	4,293	tb1d558_vol3.dat
01/23/01	11:31p	4,293	tb1d558_vol4.dat
01/23/01	11:32p	4,293	tb1d558_vol5.dat
10/02/99	09:55a	7,127	tb1d608.inp
01/23/01	11:41p	870,539	tb1d608.out
01/23/01	11:40p	18,628	tb1d608_aq1.dat
01/23/01	11:40p	18,628	tb1d608_aq2.dat
01/23/01	11:41p	18,628	tb1d608_aq3.dat
01/23/01	11:41p	18,628	tb1d608_aq4.dat
01/23/01	11:41p	18,628	tb1d608_aq5.dat
01/23/01	11:41p	66,012	tb1d608_brk.dat
01/23/01	11:40p	5,600	tb1d608_ele1.dat
01/23/01	11:40p	5,600	tb1d608_ele2.dat
01/23/01	11:41p	5,600	tb1d608_ele3.dat
01/23/01	11:41p	5,600	tb1d608_ele4.dat
01/23/01	11:41p	5,600	tb1d608_ele5.dat
01/23/01	11:40p	7,324	tb1d608_gas1.dat
01/23/01	11:40p	7,324	tb1d608_gas2.dat
01/23/01	11:41p	7,324	tb1d608_gas3.dat
01/23/01	11:41p	7,324	tb1d608_gas4.dat
01/23/01	11:41p	7,324	tb1d608_gas5.dat
01/23/01	11:40p	5,609	tb1d608_min1.dat
01/23/01	11:40p	5,609	tb1d608_min2.dat
01/23/01	11:41p	5,609	tb1d608_min3.dat
01/23/01	11:41p	5,609	tb1d608_min4.dat
01/23/01	11:41p	5,609	tb1d608_min5.dat
01/23/01	11:40p	10,873	tb1d608_psi1.dat
01/23/01	11:40p	10,873	tb1d608_psi2.dat
01/23/01	11:41p	10,873	tb1d608_psi3.dat
01/23/01	11:41p	10,873	tb1d608_psi4.dat
01/23/01	11:41p	10,873	tb1d608_psi5.dat
01/23/01	11:40p	27,149	tb1d608_sec1.dat
01/23/01	11:40p	27,149	tb1d608_sec2.dat
01/23/01	11:41p	27,149	tb1d608_sec3.dat
01/23/01	11:41p	27,149	tb1d608_sec4.dat
01/23/01	11:41p	27,149	tb1d608_sec5.dat

01/23/01	11:40p	4,293	tb1d608_vol1.dat
01/23/01	11:40p	4,293	tb1d608_vol2.dat
01/23/01	11:41p	4,293	tb1d608_vol3.dat
01/23/01	11:41p	4,293	tb1d608_vol4.dat
01/23/01	11:41p	4,293	tb1d608_vol5.dat
10/02/99	10:04a	7,127	tb1d658.inp
01/23/01	11:34p	870,539	tb1d658.out
01/23/01	11:34p	18,628	tb1d658_aq1.dat
01/23/01	11:34p	18,628	tb1d658_aq2.dat
01/23/01	11:34p	18,628	tb1d658_aq3.dat
01/23/01	11:34p	18,628	tb1d658_aq4.dat
01/23/01	11:34p	18,628	tb1d658_aq5.dat
01/23/01	11:34p	66,012	tb1d658_brk.dat
01/23/01	11:34p	5,600	tb1d658_ele1.dat
01/23/01	11:34p	5,600	tb1d658_ele2.dat
01/23/01	11:34p	5,600	tb1d658_ele3.dat
01/23/01	11:34p	5,600	tb1d658_ele4.dat
01/23/01	11:34p	5,600	tb1d658_ele5.dat
01/23/01	11:34p	7,324	tb1d658_gas1.dat
01/23/01	11:34p	7,324	tb1d658_gas2.dat
01/23/01	11:34p	7,324	tb1d658_gas3.dat
01/23/01	11:34p	7,324	tb1d658_gas4.dat
01/23/01	11:34p	7,324	tb1d658_gas5.dat
01/23/01	11:34p	5,609	tb1d658_min1.dat
01/23/01	11:34p	5,609	tb1d658_min2.dat
01/23/01	11:34p	5,609	tb1d658_min3.dat
01/23/01	11:34p	5,609	tb1d658_min4.dat
01/23/01	11:34p	5,609	tb1d658_min5.dat
01/23/01	11:34p	10,873	tb1d658_psi1.dat
01/23/01	11:34p	10,873	tb1d658_psi2.dat
01/23/01	11:34p	10,873	tb1d658_psi3.dat
01/23/01	11:34p	10,873	tb1d658_psi4.dat
01/23/01	11:34p	10,873	tb1d658_psi5.dat
01/23/01	11:34p	27,149	tb1d658_sec1.dat
01/23/01	11:34p	27,149	tb1d658_sec2.dat
01/23/01	11:34p	27,149	tb1d658_sec3.dat
01/23/01	11:34p	27,149	tb1d658_sec4.dat
01/23/01	11:34p	27,149	tb1d658_sec5.dat
01/23/01	11:34p	4,293	tb1d658_vol1.dat
01/23/01	11:34p	4,293	tb1d658_vol2.dat
01/23/01	11:34p	4,293	tb1d658_vol3.dat
01/23/01	11:34p	4,293	tb1d658_vol4.dat
01/23/01	11:34p	4,293	tb1d658_vol5.dat
01/22/01	12:08a	874,981	tb1d758.out
01/24/01	11:37p	18,628	tb1d758_aq1.dat
01/24/01	11:37p	18,628	tb1d758_aq2.dat
01/24/01	11:37p	18,628	tb1d758_aq3.dat
01/24/01	11:37p	18,628	tb1d758_aq4.dat
01/24/01	11:37p	18,628	tb1d758_aq5.dat
01/24/01	11:37p	66,012	tb1d758_brk
01/22/01	12:08a	66,012	tb1d758_brk.dat
01/24/01	11:37p	5,600	tb1d758_ele1.dat
01/24/01	11:37p	5,600	tb1d758_ele2.dat
01/24/01	11:37p	5,600	tb1d758_ele3.dat
01/24/01	11:37p	5,600	tb1d758_ele4.dat
01/24/01	11:37p	5,600	tb1d758_ele5.dat
01/24/01	11:37p	7,324	tb1d758_gas1.dat

01/24/01	11:37p	7,324	tb1d758_gas2.dat
01/24/01	11:37p	7,324	tb1d758_gas3.dat
01/24/01	11:37p	7,324	tb1d758_gas4.dat
01/24/01	11:37p	7,324	tb1d758_gas5.dat
01/24/01	11:37p	5,609	tb1d758_min1.dat
01/24/01	11:37p	5,609	tb1d758_min2.dat
01/24/01	11:37p	5,609	tb1d758_min3.dat
01/24/01	11:37p	5,609	tb1d758_min4.dat
01/24/01	11:37p	5,609	tb1d758_min5.dat
01/24/01	11:37p	10,873	tb1d758_psi1.dat
01/24/01	11:37p	10,873	tb1d758_psi2.dat
01/24/01	11:37p	10,873	tb1d758_psi3.dat
01/24/01	11:37p	10,873	tb1d758_psi4.dat
01/24/01	11:37p	10,873	tb1d758_psi5.dat
01/24/01	11:37p	27,149	tb1d758_sec1.dat
01/24/01	11:37p	27,149	tb1d758_sec2.dat
01/24/01	11:37p	27,149	tb1d758_sec3.dat
01/24/01	11:37p	27,149	tb1d758_sec4.dat
01/24/01	11:37p	27,149	tb1d758_sec5.dat
01/24/01	11:37p	4,293	tb1d758_vol1.dat
01/24/01	11:37p	4,293	tb1d758_vol2.dat
01/24/01	11:37p	4,293	tb1d758_vol3.dat
01/24/01	11:37p	4,293	tb1d758_vol4.dat
01/24/01	11:37p	4,293	tb1d758_vol5.dat
10/02/99	10:12a	7,127	tb1d858.inp
01/22/01	12:06a	874,981	tb1d858.out
01/24/01	11:32p	18,628	tb1d858_aq1.dat
01/24/01	11:32p	18,628	tb1d858_aq2.dat
01/24/01	11:32p	18,628	tb1d858_aq3.dat
01/24/01	11:32p	18,628	tb1d858_aq4.dat
01/24/01	11:33p	18,628	tb1d858_aq5.dat
01/24/01	11:33p	66,012	tb1d858_brk
01/22/01	12:06a	66,012	tb1d858_brk.dat
01/24/01	11:32p	5,600	tb1d858_ele1.dat
01/24/01	11:32p	5,600	tb1d858_ele2.dat
01/24/01	11:32p	5,600	tb1d858_ele3.dat
01/24/01	11:32p	5,600	tb1d858_ele4.dat
01/24/01	11:33p	5,600	tb1d858_ele5.dat
01/24/01	11:32p	7,324	tb1d858_gas1.dat
01/24/01	11:32p	7,324	tb1d858_gas2.dat
01/24/01	11:32p	7,324	tb1d858_gas3.dat
01/24/01	11:32p	7,324	tb1d858_gas4.dat
01/24/01	11:33p	7,324	tb1d858_gas5.dat
01/24/01	11:32p	5,609	tb1d858_min1.dat
01/24/01	11:32p	5,609	tb1d858_min2.dat
01/24/01	11:32p	5,609	tb1d858_min3.dat
01/24/01	11:32p	5,609	tb1d858_min4.dat
01/24/01	11:33p	5,609	tb1d858_min5.dat
01/24/01	11:32p	10,873	tb1d858_psi1.dat
01/24/01	11:32p	10,873	tb1d858_psi2.dat
01/24/01	11:32p	10,873	tb1d858_psi3.dat
01/24/01	11:32p	10,873	tb1d858_psi4.dat
01/24/01	11:33p	10,873	tb1d858_psi5.dat
01/24/01	11:32p	27,149	tb1d858_sec1.dat
01/24/01	11:32p	27,149	tb1d858_sec2.dat
01/24/01	11:32p	27,149	tb1d858_sec3.dat
01/24/01	11:32p	27,149	tb1d858_sec4.dat

01/24/01	11:33p	27,149	tb1d858_sec5.dat
01/24/01	11:32p	4,293	tb1d858_vol1.dat
01/24/01	11:32p	4,293	tb1d858_vol2.dat
01/24/01	11:32p	4,293	tb1d858_vol3.dat
01/24/01	11:32p	4,293	tb1d858_vol4.dat
01/24/01	11:33p	4,293	tb1d858_vol5.dat
10/02/99	03:18p	7,127	tb1d958.inp
01/25/01	10:14p	870,814	tb1d958.out
01/21/01	10:32a	111,696	tb1d958.scr
01/23/01	11:36p	18,628	tb1d958_aq1.dat
01/23/01	11:36p	18,628	tb1d958_aq2.dat
01/23/01	11:36p	18,628	tb1d958_aq3.dat
01/23/01	11:36p	18,628	tb1d958_aq4.dat
01/23/01	11:36p	18,628	tb1d958_aq5.dat
01/23/01	11:36p	66,012	tb1d958_brk.dat
01/23/01	11:36p	5,600	tb1d958_ele1.dat
01/23/01	11:36p	5,600	tb1d958_ele2.dat
01/23/01	11:36p	5,600	tb1d958_ele3.dat
05/02/01	07:19a	3,873	tb1d958_ele4.dat
01/23/01	11:36p	5,600	tb1d958_ele5.dat
01/23/01	11:36p	7,324	tb1d958_gas1.dat
01/23/01	11:36p	7,324	tb1d958_gas2.dat
01/23/01	11:36p	7,324	tb1d958_gas3.dat
01/23/01	11:36p	7,324	tb1d958_gas4.dat
01/23/01	11:36p	7,324	tb1d958_gas5.dat
01/23/01	11:36p	5,609	tb1d958_min1.dat
01/23/01	11:36p	5,609	tb1d958_min2.dat
01/23/01	11:36p	5,609	tb1d958_min3.dat
01/23/01	11:36p	5,609	tb1d958_min4.dat
01/23/01	11:36p	5,609	tb1d958_min5.dat
01/23/01	11:36p	10,873	tb1d958_psi1.dat
01/23/01	11:36p	10,873	tb1d958_psi2.dat
01/23/01	11:36p	10,873	tb1d958_psi3.dat
01/23/01	11:36p	10,873	tb1d958_psi4.dat
01/23/01	11:36p	10,873	tb1d958_psi5.dat
01/23/01	11:36p	27,149	tb1d958_sec1.dat
01/23/01	11:36p	27,149	tb1d958_sec2.dat
01/23/01	11:36p	27,149	tb1d958_sec3.dat
01/23/01	11:36p	27,149	tb1d958_sec4.dat
01/23/01	11:36p	27,149	tb1d958_sec5.dat
01/23/01	11:36p	4,293	tb1d958_vol1.dat
01/23/01	11:36p	4,293	tb1d958_vol2.dat
01/23/01	11:36p	4,293	tb1d958_vol3.dat
01/23/01	11:36p	4,293	tb1d958_vol4.dat
01/23/01	11:36p	4,293	tb1d958_vol5.dat
10/02/99	03:33p	37,376	tb1dph.grf
10/09/99	09:19p	10,437	tb2d658.SRF
10/09/99	07:17p	6,837	tb2d658.inp
10/09/99	08:28p	4,306,024	tb2d658.out
10/09/99	07:18p	183,328	tb2d658_aq1.dat
10/09/99	07:31p	183,328	tb2d658_aq2.dat
10/09/99	08:27p	183,328	tb2d658_aq3.dat
10/09/99	08:28p	183,328	tb2d658_aq4.dat
10/09/99	08:28p	740,175	tb2d658_brk.dat
10/09/99	07:18p	84,208	tb2d658_gas1.dat
10/09/99	07:31p	84,208	tb2d658_gas2.dat
10/09/99	08:27p	84,208	tb2d658_gas3.dat

10/09/99	08:28p	84,208	tb2d658_gas4.dat
10/09/99	07:18p	53,178	tb2d658_min1.dat
10/09/99	07:31p	53,178	tb2d658_min2.dat
10/09/99	08:27p	53,178	tb2d658_min3.dat
10/09/99	08:28p	53,178	tb2d658_min4.dat
10/09/99	07:18p	118,253	tb2d658_psi1.dat
10/09/99	07:31p	118,253	tb2d658_psi2.dat
10/09/99	08:27p	118,253	tb2d658_psi3.dat
10/09/99	08:28p	118,253	tb2d658_psi4.dat
10/09/99	07:18p	280,419	tb2d658_sec1.dat
10/09/99	07:31p	280,419	tb2d658_sec2.dat
10/09/99	08:27p	280,419	tb2d658_sec3.dat
10/09/99	08:28p	280,419	tb2d658_sec4.dat
10/09/99	07:18p	66,193	tb2d658_vol1.dat
10/09/99	07:31p	66,193	tb2d658_vol2.dat
10/09/99	08:27p	66,193	tb2d658_vol3.dat
10/09/99	08:28p	66,193	tb2d658_vol4.dat
10/09/99	09:23p	6,837	tb2d658m.inp
10/09/99	09:32p	4,306,024	tb2d658m.out
10/09/99	09:24p	183,328	tb2d658m_aq1.dat
10/09/99	09:37p	183,328	tb2d658m_aq2.dat
10/09/99	09:30p	183,328	tb2d658m_aq3.dat
10/09/99	09:32p	183,328	tb2d658m_aq4.dat
10/09/99	09:32p	740,175	tb2d658m_brk.dat
10/09/99	09:24p	84,208	tb2d658m_gas1.dat
10/09/99	09:37p	84,208	tb2d658m_gas2.dat
10/09/99	10:30p	84,208	tb2d658m_gas3.dat
10/09/99	09:32p	84,208	tb2d658m_gas4.dat
10/09/99	09:24p	53,178	tb2d658m_min1.dat
10/09/99	09:37p	53,178	tb2d658m_min2.dat
10/09/99	10:30p	53,178	tb2d658m_min3.dat
10/09/99	09:32p	53,178	tb2d658m_min4.dat
10/09/99	09:24p	118,253	tb2d658m_psi1.dat
10/09/99	09:37p	118,253	tb2d658m_psi2.dat
10/09/99	10:30p	118,253	tb2d658m_psi3.dat
10/09/99	09:32p	118,253	tb2d658m_psi4.dat
10/09/99	09:24p	280,419	tb2d658m_sec1.dat
10/09/99	09:37p	280,419	tb2d658m_sec2.dat
10/09/99	10:30p	280,419	tb2d658m_sec3.dat
10/09/99	09:32p	280,419	tb2d658m_sec4.dat
10/09/99	09:24p	66,193	tb2d658m_vol1.dat
10/09/99	09:37p	66,193	tb2d658m_vol2.dat
10/09/99	10:30p	66,193	tb2d658m_vol3.dat
10/09/99	09:32p	66,193	tb2d658m_vol4.dat
10/10/99	09:30a	7,097	tb458hc.inp
10/10/99	09:32a	776,297	tb458hc.out
10/10/99	09:30a	18,628	tb458hc_aq1.dat
10/10/99	09:32a	18,628	tb458hc_aq2.dat
10/10/99	09:32a	18,628	tb458hc_aq3.dat
10/10/99	09:32a	18,628	tb458hc_aq4.dat
10/10/99	09:32a	119,394	tb458hc_brk.dat
10/10/99	09:30a	5,600	tb458hc_ele1.dat
10/10/99	09:32a	5,600	tb458hc_ele2.dat
10/10/99	09:32a	5,600	tb458hc_ele3.dat
10/10/99	09:32a	5,600	tb458hc_ele4.dat
10/10/99	09:30a	7,324	tb458hc_gas1.dat
10/10/99	09:32a	7,324	tb458hc_gas2.dat

10/10/99	09:32a	7,324	tb458hc_gas3.dat
10/10/99	09:32a	7,324	tb458hc_gas4.dat
10/10/99	09:30a	6,925	tb458hc_min1.dat
10/10/99	09:32a	6,925	tb458hc_min2.dat
10/10/99	09:32a	6,925	tb458hc_min3.dat
10/10/99	09:32a	6,925	tb458hc_min4.dat
10/10/99	09:30a	10,873	tb458hc_psi1.dat
10/10/99	09:32a	10,873	tb458hc_psi2.dat
10/10/99	09:32a	10,873	tb458hc_psi3.dat
10/10/99	09:32a	10,873	tb458hc_psi4.dat
10/10/99	09:30a	27,149	tb458hc_sec1.dat
10/10/99	09:32a	27,149	tb458hc_sec2.dat
10/10/99	09:32a	27,149	tb458hc_sec3.dat
10/10/99	09:32a	27,149	tb458hc_sec4.dat
10/10/99	09:30a	5,609	tb458hc_vol1.dat
10/10/99	09:32a	5,609	tb458hc_vol2.dat
10/10/99	09:32a	5,609	tb458hc_vol3.dat
10/10/99	09:32a	5,609	tb458hc_vol4.dat
10/10/99	08:25a	7,089	tb458lc.inp
10/10/99	08:31a	426,103	tb458lc.out
10/10/99	08:26a	18,628	tb458lc_aq1.dat
10/10/99	09:31a	250,553	tb458lc_brk.dat
10/10/99	08:26a	5,600	tb458lc_ele1.dat
10/10/99	08:26a	7,324	tb458lc_gas1.dat
10/10/99	08:26a	6,925	tb458lc_min1.dat
10/10/99	08:26a	10,873	tb458lc_psi1.dat
10/10/99	08:26a	27,149	tb458lc_sec1.dat
10/10/99	08:26a	5,609	tb458lc_vol1.dat
10/10/99	07:54a	7,093	tb508hc.inp
10/10/99	07:56a	776,297	tb508hc.out
10/10/99	07:54a	18,628	tb508hc_aq1.dat
10/10/99	07:54a	18,628	tb508hc_aq2.dat
10/10/99	07:55a	18,628	tb508hc_aq3.dat
10/10/99	07:56a	18,628	tb508hc_aq4.dat
10/10/99	07:56a	139,197	tb508hc_brk.dat
10/10/99	07:54a	5,600	tb508hc_ele1.dat
10/10/99	07:54a	5,600	tb508hc_ele2.dat
10/10/99	07:55a	5,600	tb508hc_ele3.dat
10/10/99	07:56a	5,600	tb508hc_ele4.dat
10/10/99	07:54a	7,324	tb508hc_gas1.dat
10/10/99	07:54a	7,324	tb508hc_gas2.dat
10/10/99	07:55a	7,324	tb508hc_gas3.dat
10/10/99	07:56a	7,324	tb508hc_gas4.dat
10/10/99	07:54a	6,925	tb508hc_min1.dat
10/10/99	07:54a	6,925	tb508hc_min2.dat
10/10/99	07:55a	6,925	tb508hc_min3.dat
10/10/99	07:56a	6,925	tb508hc_min4.dat
10/10/99	07:54a	10,873	tb508hc_psi1.dat
10/10/99	07:54a	10,873	tb508hc_psi2.dat
10/10/99	07:55a	10,873	tb508hc_psi3.dat
10/10/99	07:56a	10,873	tb508hc_psi4.dat
10/10/99	07:54a	27,149	tb508hc_sec1.dat
10/10/99	07:54a	27,149	tb508hc_sec2.dat
10/10/99	07:55a	27,149	tb508hc_sec3.dat
10/10/99	07:56a	27,149	tb508hc_sec4.dat
10/10/99	07:54a	5,609	tb508hc_vol1.dat
10/10/99	07:54a	5,609	tb508hc_vol2.dat

10/10/99	07:55a	5,609	tb508hc_vol3.dat
10/10/99	07:56a	5,609	tb508hc_vol4.dat
10/10/99	08:16a	7,089	tb508lc.inp
10/10/99	08:18a	867,041	tb508lc.out
10/10/99	08:17a	18,628	tb508lc_aq1.dat
10/10/99	08:18a	18,628	tb508lc_aq2.dat
10/10/99	08:18a	18,628	tb508lc_aq3.dat
10/10/99	08:18a	18,628	tb508lc_aq4.dat
10/10/99	08:18a	96,147	tb508lc_brk.dat
10/10/99	08:17a	5,600	tb508lc_ele1.dat
10/10/99	08:18a	5,600	tb508lc_ele2.dat
10/10/99	08:18a	5,600	tb508lc_ele3.dat
10/10/99	08:18a	5,600	tb508lc_ele4.dat
10/10/99	08:17a	7,324	tb508lc_gas1.dat
10/10/99	08:18a	7,324	tb508lc_gas2.dat
10/10/99	08:18a	7,324	tb508lc_gas3.dat
10/10/99	08:18a	7,324	tb508lc_gas4.dat
10/10/99	08:17a	6,925	tb508lc_min1.dat
10/10/99	08:18a	6,925	tb508lc_min2.dat
10/10/99	08:18a	6,925	tb508lc_min3.dat
10/10/99	08:18a	6,925	tb508lc_min4.dat
10/10/99	08:17a	10,873	tb508lc_psi1.dat
10/10/99	08:18a	10,873	tb508lc_psi2.dat
10/10/99	08:18a	10,873	tb508lc_psi3.dat
10/10/99	08:18a	10,873	tb508lc_psi4.dat
10/10/99	08:17a	27,149	tb508lc_sec1.dat
10/10/99	08:18a	27,149	tb508lc_sec2.dat
10/10/99	08:18a	27,149	tb508lc_sec3.dat
10/10/99	08:18a	27,149	tb508lc_sec4.dat
10/10/99	08:17a	5,609	tb508lc_vol1.dat
10/10/99	08:18a	5,609	tb508lc_vol2.dat
10/10/99	08:18a	5,609	tb508lc_vol3.dat
10/10/99	08:18a	5,609	tb508lc_vol4.dat
01/29/01	09:31p	34,816	tb558ph.grf
10/09/99	06:40p	7,137	tb658L0.inp
10/10/99	07:42a	7,132	tb658hc.inp
10/10/99	07:43a	776,297	tb658hc.out
10/10/99	07:43a	18,628	tb658hc_aq1.dat
10/10/99	07:43a	18,628	tb658hc_aq2.dat
10/10/99	07:43a	18,628	tb658hc_aq3.dat
10/10/99	07:43a	18,628	tb658hc_aq4.dat
10/10/99	07:43a	65,151	tb658hc_brk.dat
10/10/99	07:43a	5,600	tb658hc_ele1.dat
10/10/99	07:43a	5,600	tb658hc_ele2.dat
10/10/99	07:43a	5,600	tb658hc_ele3.dat
10/10/99	07:43a	5,600	tb658hc_ele4.dat
10/10/99	07:43a	7,324	tb658hc_gas1.dat
10/10/99	07:43a	7,324	tb658hc_gas2.dat
10/10/99	07:43a	7,324	tb658hc_gas3.dat
10/10/99	07:43a	7,324	tb658hc_gas4.dat
10/10/99	07:43a	6,925	tb658hc_min1.dat
10/10/99	07:43a	6,925	tb658hc_min2.dat
10/10/99	07:43a	6,925	tb658hc_min3.dat
10/10/99	07:43a	6,925	tb658hc_min4.dat
10/10/99	07:43a	10,873	tb658hc_psi1.dat
10/10/99	07:43a	10,873	tb658hc_psi2.dat
10/10/99	07:43a	10,873	tb658hc_psi3.dat

10/10/99	07:43a	10,873	tb658hc_psi4.dat
10/10/99	07:43a	27,149	tb658hc_sec1.dat
10/10/99	07:43a	27,149	tb658hc_sec2.dat
10/10/99	07:43a	27,149	tb658hc_sec3.dat
10/10/99	07:43a	27,149	tb658hc_sec4.dat
10/10/99	07:43a	5,609	tb658hc_vol1.dat
10/10/99	07:43a	5,609	tb658hc_vol2.dat
10/10/99	07:43a	5,609	tb658hc_vol3.dat
10/10/99	07:43a	5,609	tb658hc_vol4.dat
10/09/99	07:12p	7,132	tb658lc.inp
10/09/99	07:13p	542,532	tb658lc.out
10/09/99	07:13p	18,628	tb658lc_aq1.dat
10/09/99	07:13p	18,628	tb658lc_aq2.dat
10/09/99	07:13p	41,904	tb658lc_brk.dat
10/09/99	07:13p	5,600	tb658lc_ele1.dat
10/09/99	07:13p	5,600	tb658lc_ele2.dat
10/09/99	07:13p	7,324	tb658lc_gas1.dat
10/09/99	07:13p	7,324	tb658lc_gas2.dat
10/09/99	07:13p	6,925	tb658lc_min1.dat
10/09/99	07:13p	6,925	tb658lc_min2.dat
10/09/99	07:13p	10,873	tb658lc_psi1.dat
10/09/99	07:13p	10,873	tb658lc_psi2.dat
10/09/99	07:13p	27,149	tb658lc_sec1.dat
10/09/99	07:13p	27,149	tb658lc_sec2.dat
10/09/99	07:13p	5,609	tb658lc_vol1.dat
10/09/99	07:13p	5,609	tb658lc_vol2.dat
02/01/01	05:22p	44,544	tbgap.grf
10/10/99	10:38a	30,208	tbgap458.grf
10/10/99	09:27a	16,896	tbgap508.grf
10/10/99	10:42a	96	tbgapot.dat
10/10/99	12:22p	20,480	tbgapot.grf
05/02/01	07:27a	69,120	tblength.grf
01/29/01	10:04p	53,248	tbpot.grf
01/22/01	06:20p	164,537	test 2 graph.wpd
02/01/01	06:51p	243	turnbull1.dat
02/01/01	06:53p	26,624	turnbull1.grf
10/01/99	05:38p	2,081	turnbull1.lvl
10/01/99	05:10p	4,502,822	turnbull1.out
10/01/99	03:29p	183,328	turnbull1_aq1.dat
10/01/99	03:32p	183,328	turnbull1_aq2.dat
10/01/99	03:41p	183,328	turnbull1_aq3.dat
10/01/99	05:10p	183,328	turnbull1_aq4.dat
10/01/99	05:10p	743,906	turnbull1_brk.dat
10/01/99	03:29p	84,208	turnbull1_gas1.dat
10/01/99	03:32p	84,208	turnbull1_gas2.dat
10/01/99	03:41p	84,208	turnbull1_gas3.dat
10/01/99	05:10p	84,208	turnbull1_gas4.dat
10/01/99	03:29p	53,178	turnbull1_min1.dat
10/01/99	03:32p	53,178	turnbull1_min2.dat
10/01/99	03:41p	53,178	turnbull1_min3.dat
10/01/99	05:10p	53,178	turnbull1_min4.dat
10/01/99	03:29p	118,253	turnbull1_psi1.dat
10/01/99	03:32p	118,253	turnbull1_psi2.dat
10/01/99	03:41p	118,253	turnbull1_psi3.dat
10/01/99	05:10p	118,253	turnbull1_psi4.dat
10/01/99	03:29p	280,419	turnbull1_sec1.dat
10/01/99	03:32p	280,419	turnbull1_sec2.dat

10/01/99	03:41p	280,419	turnbull1_sec3.dat
10/01/99	05:10p	280,419	turnbull1_sec4.dat
10/01/99	03:29p	66,193	turnbull1_vol1.dat
10/01/99	03:32p	66,193	turnbull1_vol2.dat
10/01/99	03:41p	66,193	turnbull1_vol3.dat
10/01/99	05:10p	66,193	turnbull1_vol4.dat
10/01/99	02:23p	8,362,143	turnbull2.out
10/01/99	12:58p	366,328	turnbull2_aq1.dat
10/01/99	01:05p	366,328	turnbull2_aq2.dat
10/01/99	01:22p	366,328	turnbull2_aq3.dat
10/01/99	02:23p	366,328	turnbull2_aq4.dat
10/01/99	02:23p	355,308	turnbull2_brk.dat
10/01/99	12:58p	168,208	turnbull2_gas1.dat
10/01/99	01:05p	168,208	turnbull2_gas2.dat
10/01/99	01:22p	168,208	turnbull2_gas3.dat
10/01/99	02:23p	168,208	turnbull2_gas4.dat
10/01/99	12:58p	106,178	turnbull2_min1.dat
10/01/99	01:05p	106,178	turnbull2_min2.dat
10/01/99	01:22p	106,178	turnbull2_min3.dat
10/01/99	02:23p	106,178	turnbull2_min4.dat
10/01/99	12:58p	236,253	turnbull2_psi1.dat
10/01/99	01:05p	236,253	turnbull2_psi2.dat
10/01/99	01:22p	236,253	turnbull2_psi3.dat
10/01/99	02:23p	236,253	turnbull2_psi4.dat
10/01/99	12:58p	560,419	turnbull2_sec1.dat
10/01/99	01:05p	560,419	turnbull2_sec2.dat
10/01/99	01:22p	560,419	turnbull2_sec3.dat
10/01/99	02:23p	560,419	turnbull2_sec4.dat
10/01/99	12:58p	132,193	turnbull2_vol1.dat
10/01/99	01:05p	132,193	turnbull2_vol2.dat
10/01/99	01:22p	132,193	turnbull2_vol3.dat
10/01/99	02:23p	132,193	turnbull2_vol4.dat
10/01/99	06:57p	3,547,270	turnbull3.out
10/01/99	05:51p	183,328	turnbull3_aq1.dat
10/01/99	05:54p	183,328	turnbull3_aq2.dat
10/01/99	06:03p	183,328	turnbull3_aq3.dat
10/01/99	06:57p	474,700	turnbull3_brk.dat
10/01/99	05:51p	84,208	turnbull3_gas1.dat
10/01/99	05:54p	84,208	turnbull3_gas2.dat
10/01/99	06:03p	84,208	turnbull3_gas3.dat
10/01/99	05:51p	53,178	turnbull3_min1.dat
10/01/99	05:54p	53,178	turnbull3_min2.dat
10/01/99	06:03p	53,178	turnbull3_min3.dat
10/01/99	05:51p	118,253	turnbull3_psi1.dat
10/01/99	05:54p	118,253	turnbull3_psi2.dat
10/01/99	06:03p	118,253	turnbull3_psi3.dat
10/01/99	05:51p	280,419	turnbull3_sec1.dat
10/01/99	05:54p	280,419	turnbull3_sec2.dat
10/01/99	06:03p	280,419	turnbull3_sec3.dat
10/01/99	05:51p	66,193	turnbull3_vol1.dat
10/01/99	05:54p	66,193	turnbull3_vol2.dat
10/01/99	06:03p	66,193	turnbull3_vol3.dat
09/30/99	07:09a	1,702,331	turnbullgraph.zip
	944 File(s)	95,313,279	bytes

Total Files Listed:
4187 File(s) 493,812,854 bytes

0 bytes free

This file was created on: Mon Sep 23 13:40:49 2002

TECTRAN

Developed for GTI

Version 1.0 Beta

TRANSIENT ELECTROCHEMICAL REACTIVE TRANSPORT MODEL

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Run45: Test453d Corrosion under crevice, Turnbull data. Sep 15, 1999
V0=-0.658, Gap=0.04 cm, pCO₂=-3.5, equilibrium fe(ii) to fe(iii)

*GRID—> Co-ordinate Geometry : XYZ

Number of Elements in I-direction..... NX = 100
Number of Elements in J-direction..... NY = 1
Number of Elements in K-direction..... NZ = 1
Total Number of Elements..... NB = 100
Index for Amount of Output IPRINT = 2
Frequency of Screen Printout..... IFRQSCRN = 1
Index for Warning Messages IWARN = 0
Index for Debugging IDEBUG = 0
Range for Debugging Nodes..... IBG1-IBG2 = 0 0
Increment Debug print Nodes IDBGINC = 1

*DBASE idbn = 0 database = c:\temp\database.gri

*OPTS Indicators for Options Invoked

Index for Mineral Surf. area..ISURF = 1
Index for Activity Coefs..... IACT = 1
Stationary state..... ISST = -1
Maximum Newtonian Iterations..ITMAX = 32
Maximum Time-Step Cuts..... IHALMAX = 16
Index for time-size Calc..... IAUTODT = 2
No of fixed steps after cuts NDTCMX = 5
Index for rate deriv. numer..IDERVN = -1
Index for method of solnMETHOD = 1

*TOLR Convergence Tolerances

Solution Convergence....TOL = 1.000E-10
Time Step Accelerator..TTOL = 1.000E-02
Max Negative Min Vol.TOLNEG = 1.000E-07
Max Positive Min Vol TOLPOS = 1.000E-04
Max Conc-Change.....DCMAX = 3.000E-02
DELT Reduction Fac...DTCUTF = 5.000E-01

```
c*file main.f
```

C DISCLAIMER/NOTICE

c The developer(s) of the code nor any of their sponsors
c make any warranty, expressed or implied, or assume any legal
c liability or responsibility for the accuracy, completeness, or
c usefulness of any information, apparatus, product or process
c disclosed, or represent that its use would not infringe on
c privately-owned rights.

C PURPOSE:

```
program tectran
```

```

c      model for fluids reacting with minerals.

c      description ... tectran simulates solute transport for one-
c                      dimensional mass transport by advection,
c                      electrochemical and diffusion in a saturated
c                      porous medium.
c                      chemical reactions incorporated in the code
c                      include aqueous complexation, redox reactions,
c                      precipitation/dissolution of minerals and ion
c                      exchange. provision is included for both
c                      reversible and irreversible reactions of minerals.
c
c
c*****
c
      parameter (maxaa = 3000000)

      include 'impl.h'
      include 'paramtrs.h'
      include 'address.h'
      include 'iounits.h'
      include 'ofiles.h'
      include 'scalars.h'
      include 'com.h'
      include 'comall.h'

      dimension aa(maxaa)

      real tyme(2)
      character fdate*24

      external coefs,coefimp

      isolve = 0
      cpu = etime(tyme)
      call openunts

c      stamp time and date of run
      write(iunit2,*) 'This file was created on: ',fdate()

c=====

      include 'title.h'          ! print title, solution method etc.

c=====
c
      call cpu time at run-start

      call cputim (-1)
c=====

c      read input data
c*****

      call cputim (0)
      last = maxaa

```



```

c      print *, 'main-last ', last

      call input1 (aa)

      ibgn = 1                      ! this is an arg in coupled mode
      iprmr = 1
      il = nconmx+1
      i2 = il+nb
      if(igeom.ne.-1) call preproc (aa(ibgn),nerow)

      call allot (aa,maxaa,1)
      call setconn (aa(iarex),aa(incdiag),aa(imaxnc),aa(indcon),nerow)
      call allot (aa,maxaa,2)

c=====
c      initialize field variables
c=====
      nstep = 1

      delt = dt(nstep)
      dtold = delt
      dttec = delt

      call init (ncomp,nkin,nkinrxn,ncxkinrx,nex,nmonod,lkin,ngas,
      .aa(idpril),aa(idsecl),aa(ipsi),aa(ippsi),aa(ipsig),aa(ippsig),
      .aa(ipgas),aa(ippgas),aa(icellmd),aa(icadlnk),aa(iccadlnk),
      .aa(ixex0),aa(ixex),aa(ixxex),aa(idk),aa(irkin),aa(irrkin),
      .aa(iphik0),aa(iphik),aa(ipphik),aa(isurf0),aa(isurfl),
      .aa(irkinaq),aa(irrkinaq),aa(ipot),aa(ipotk),aa(icurr),aa,maxaa)

      if(nblkbc+nsources.gt.0)
      .call setbcon (ncomp,ncmplx,aa(idpril),aa(idsecl),aa)

      call cputim (11)

c-----dtstep is auxillary time step for coupling to any flow model
      dtstep = dt(nstpmax+1)

c-----

      t = zero
      dtsolid = zero
      mcyc = 0

c=====
c-----print initial conditions
      call output (ncomp,nkin,nkinrxn,ncxkinrx,ncmplx,nex,nmonod,lkin,
      .      ngas,dtsolid,aa(iphik),aa(irkin),aa(irkinaq),aa(ixex),
      .      aa(ipsig),aa(ipgas),aa(irmonod),aa(idk),aa(icellmd),
      .      aa(icadlnk),aa(igam),aa(igamx),aa(icx),aa(ic),
      .      aa(ipsi),aa(ir),aa(isurfl),aa(iprmr),aa(ipot),
      .      aa(icurr),aa(icurr0),aa(iarex),aa(itrdifl),aa(itrdifx),aa)

c      note: aa(ir) overlayed with zelec!
c=====

```



```
.  aa(iccadlnk),aa(irmonod),aa(igam),aa(igamx),  
.  aa(irkinaq),aa(irrkinaq),aa,coefimp)  
endif
```

```
c=====
```

```
c-----end-of-run
```

```
c-----
```

```
c          call cpu time at run-end
```

```
    call cputim (30)
```

```
c-----
```

```
stop
```

```
end
```

```
c*file coefs.f
cccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccc
```

```
c PURPOSE:
```

```
c This routine sets residual and jacobian coef for advective and
c diffusive transport for gas and liquid phases.
```

```
cccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccc
```

```
subroutine coefs (nc,ncp,ncsq,ncsqp,ncx,nelmrow,psi,ppsi,cc,cx,
. areas,dpsi,dpsig,psig,ppsig,r,cjac,cdl,trdifl,trdifg,trdifx,
. dpril,dsecl,cxm,cxp,ndcon,maxnc,ncdiag,nrow,ncc,
. potk,current,current0,sshom,llshom)
```

```
include 'impl.h'
include 'paramtrs.h'
include 'comall.h'
include 'fields.h'
include 'debye.h'
include 'iounits.h'
include 'scalars.h'
include 'com.h'
include 'comprs.h'
```

```
dimension psi(nc,*),ppsi(nc,*),cc(nc,*),cx(ncx,*),areas(*),
. dpsi(ncsq,*),dpsig(ncsq,*),psig(nc,*),ppsig(nc,*),r(ncp,*),
. cjac(nelmrow,*),cdl(ncsqp,*),ndcon(nrow,*),maxnc(*),ncdiag(*),
. trdifl(ncc,*),trdifg(*),trdifx(ncx,*),cxm(ncsq,*),cxp(ncsq,*),
. dpril(ncc,*),dsecl(ncx,*),current(*),current0(*),
. llshom(ncx,nc,nc),sshom(ncx,nc,nc)
```

```
dimension dq1(ncmx*ncmx),dq2(ncmx*ncmx),qk(ncmx),psiz(ncmx),
. dprilav(ncmx),dseclav(ncxmx),dpsiz1(ncmx*ncmx),
. dpsiz2(ncmx*ncmx),dq10(ncmx),dq20(ncmx)
```

```
dimension jcmp(ncmx),icmp(ncxmx),icdpsi(ncmx*ncmx)
save icall,dprilav,dseclav,jcmp,icmp,nccmp,ncxcmp,icdpsi,ncsqc
```

```
data icall/0/
```

```
c=====
c compute accumulation coefficients and residuals -
c=====
```

```
if(icall.eq.0) then
  icall = 1
  jj = 0
  do j = 1,nc
    dprilav(j) = zero
    if(z(j).ne.zero) then
      jj = jj+1
      jcmp(jj) = j
    end if
  end do
  nccmp = jj
  ii = 0
  do i = 1,ncx
    dseclav(i) = zero
    if(zx(i).ne.zero) then
      ii = ii+1
      icmp(ii) = i
    end if
  end do
  ncxcmp = ii
  ncsqc = 0
```

```

if(isat.lt.0) then
  do j = 1,ncsq
    icdpsi(j) = 0
    if(dpsi(j,1).ne.zero) then
      ncsqc = ncsqc+1
      icdpsi(ncsqc) = j
    end if
  end do
else
  do j = 1,ncsq
    icdpsi(j) = 0
    if(dpsi(j,1)+dpsig(j,i).ne.zero) then
      ncsqc = ncsqc+1
      icdpsi(ncsqc) = j
    end if
  end do
end if
endif

udelr = one/delt

if(isat.lt.0) then          ! all liquid system
  do n = 1,nmax
    u2 = por(n)*voln(n)*sat(n)*udelr
    do j = 1, ncomp
      r(j,n) = u2*(ppsi(j,n)-psi(j,n))
    end do
    do j = 1, ncsqc
      jj = icdpsi(j)
      cdl(jj,n) = u2*dpsi(jj,n)
    enddo
  enddo
else                          ! 2-phase case
  do n = 1,nmax
    porvol = por(n)*voln(n)*udelr
    u1 = porvol*sat(n)
    u3 = porvol-u1
    do j = 1, ncomp
      r(j,n) = u1*(ppsi(j,n)-psi(j,n))
      +u3*(ppsig(j,n)-psig(j,n))
    end do
    do j = 1, ncsqc
      jj = icdpsi(j)
      cdl(jj,n) = u1*dpsi(jj,n) + u3*dpsig(jj,n)
    enddo
  end do
endif

```

```

=====
c Compute flux across each face and set-up jacobian coefs & residuals
=====

```

```

  wtdn = one-wtup
  ncp1 = nc+1
c-----
  do 500 nnc = 1,nconn

```

```

    m1 = nd1(nnc)
    m2 = nd2(nnc)
    area = areas(nnc)

```

```

    do jj = 1,ncsq
      dq1(jj) = zero
      dq2(jj) = zero
    end do

```

```

c-----
c calc diffusive flux derivatives and residuals
c-----

      if(idif.gt.0) go to 300

c species-independent diffusion coeffs
c =====

      trdl = -trdifl(1,nnc)
      u2 = trdl
      do j = 1,nc
         qk(j) = u2*(ppsi(j,m2)-ppsi(j,m1))
      end do

      do j = 1, ncsqc
         jj = icdpsi(j)
         dq1(jj) = -u2*dpsi(jj,m1)
         dq2(jj) = u2*dpsi(jj,m2)
      end do
      go to 250

300 continue

c =====
c species-dependent diffusion coeffs
c =====

c idif = 1 species-dependent diffusion
c       = 2 include current density - iterate
c       = 3 include current density - lag time step behind

c compute residual for diffusive flux

      dtrho = (rho(m1)+rho(m2))*half

      do j = 1,nc
         sum = (cc(j,m2)-cc(j,m1))*trdifl(j,nnc)
         do ii = 1,njshom(j)
            i = jjshom(ii,j)
            sum = sum+(cx(i,m2)-cx(i,m1))*trdifx(i,nnc)*shom(j,i)
         end do
         qk(j) = -sum*dtrho
      end do

c compute jacobian coeffs for diffusive flux: tau.phi.grad(psid)
      if (ncx.gt.0) then
         jj = 0
         do j = 1,nc
            do k = 1,nc
               sum1 = zero
               sum2 = zero
               do ii = 1,nlshom(k,j)
                  i = llshom(ii,k,j)
                  u1 = trdifx(i,nnc)*sshom(i,k,j)
                  sum1 = sum1+u1*cx(i,m1)
                  sum2 = sum2+u1*cx(i,m2)
               end do
               jj = jj+1
               dq1(jj) = sum1*dtrho ! derv wrt ln
               dq2(jj) = -sum2*dtrho
            end do
         end do
      endif

c diagonal terms (j=k)

```

```

      jj = -nc
      do j = 1,nc
        jj = jj+ncp1
        dq1(jj) = trdiff(j,nnc)*cc(j,m1)*dtrho+dq1(jj) ! deriv wrt ln
        dq2(jj) = -trdiff(j,nnc)*cc(j,m2)*dtrho+dq2(jj)
      end do

      if(idif.eq.1) go to 250

c compute harmonic avg diffusion coefs times z(j) (zx(i))

      dist = dist1(nnc)+dist2(nnc)
      do jj = 1,nccmp
        j = jcmp(jj)
        u1 = dpril(j,m1)*dist2(nnc)+dpril(j,m2)*dist1(nnc)
        if(u1.gt.zero)
          dprilav(j) = dpril(j,m1)*dpril(j,m2)*dist*z(j)/u1
        end do

      do ii = 1,ncxcmp
        i = icmp(ii)
        u1 = dsecl(i,m1)*dist2(nnc)+dsecl(i,m2)*dist1(nnc)
        if(u1.gt.zero)
          dseclav(i) = dsecl(i,m1)*dsecl(i,m2)*dist*zx(i)/u1
        end do

c compute psiz and sum(z.psiz) = (szpsiz)
      szpsiz = zero
      sumzqk = zero
ctst
      if(current(nnc)-current0(nnc).gt.zero) then
        w1 = wtup
        w2 = wtdn
      else
        w2 = wtup
        w1 = wtdn
      endif
ctst
      do j = 1,nc
        upsiz = dprilav(j)*(cc(j,m2)*w2+cc(j,m1)*w1)
        do ii = 1,njshom(j)
          i = jjshom(ii,j)
          upsiz = upsiz+shom(j,i)*dseclav(i)
          *(cx(i,m2)*w2+cx(i,m1)*w1)
        end do
        psiz(j) = upsiz
        szpsiz = szpsiz + z(j)*psiz(j)
        sumzqk = sumzqk + z(j)*qk(j)
      end do

      if(szpsiz.ne.zero) szpsiz = one/szpsiz

c-----
c add current density (note: current density includes faraday
c constant factor)

      uu1 = area/faraday
      current0(nnc) = sumzqk/uu1

      if (idif.ge.2) then
        sumzqk = sumzqk-current(nnc)*uu1
      endif

c compute electrochemical flux: tau.phi.w.sum{z.grad(psid)} and
c add to residuals and the jacobian coefs
c-----

```

c computes $\text{sum}(z.dq_diff)$, and store in dq10 and dq20. Note that
 c these terms are independent of species.

```

do k = 1,nc
  sum1 = zero
  sum2 = zero
  j = 0
  do jj = k,ncsq,nc      ! add column-wise
    j = j+1
    sum1 = sum1+dq1(jj)*z(j)
    sum2 = sum2+dq2(jj)*z(j)
  enddo
ctst  do jj = 1,nccmp      ! add column-wise
ctst  j = jcmp(jj)
ctst  jj = (j-1)*nc+1
ctst  sum1 = sum1+dq1(jj)*z(j)
ctst  sum2 = sum2+dq2(jj)*z(j)
ctst  enddo
      dq10(k) = sum1
      dq20(k) = sum2
end do

```

c add $w_j.\text{sum}(z.dq_diff)$ to dq1 and dq2

```

jj = 0
do j = 1,nc
  wj = psiz(j)*szpsiz
  qk(j) = qk(j)-sumzqk*wj
  do k = 1,nc
    jj = jj+1
    dq1(jj) = dq1(jj)-wj*dq10(k)
    dq2(jj) = dq2(jj)-wj*dq20(k)
  end do
end do

```

c add $w_j.\text{del}(\text{current})*uu1$ for implicit current calc. here.
 c ignore $\text{del}(\text{current})$ right now...come back later

```

c  del(w_j) = - fac.[del(psiz) - w_j.sum(z.del(psiz))]
c              j
c  fac  = sum(z.qk)/sum(z.psiz)
c        j      j
c
c  include first term [=fac.del(psiz)] in the jacobian

```

```

rhow1 = rho(m1)*w1
rhow2 = rho(m2)*w2

```

```

jj = 0
do j = 1,nc
  do k = 1,nc
    sum1 = zero
    sum2 = zero
    do ii = 1,nlshom(k,j)
      i = llshom(ii,k,j)
      u1 = dseclav(i)*sshom(i,k,j)
      sum1 = sum1+u1*cx(i,m1)
      sum2 = sum2+u1*cx(i,m2)
    end do
    jj = jj+1
    dpsiz1(jj) = sum1*rhow1
    dpsiz2(jj) = sum2*rhow2
  end do
end do

```



```

      jj = -nc
      do j = 1,nc
        jj = jj+ncp1
        dpsiz1(jj) = dprlav(j)*cc(j,m1)*rhow1 + dpsiz1(jj)
        dpsiz2(jj) = dprlav(j)*cc(j,m2)*rhow2 + dpsiz2(jj)
      end do

      u1 = -sumzqk*szpsiz
      do jj = 1,ncsq
        dq1(jj) = dq1(jj) + dpsiz1(jj)*u1
        dq2(jj) = dq2(jj) + dpsiz2(jj)*u1
      end do

c include the 2nd term in the jacobian

      do k = 1,nc
        sum1 = zero
        sum2 = zero
        j = 0
        do jj = k,ncsq,nc      ! add column-wise
          j = j+1
          sum1 = sum1+dpsiz1(jj)*z(j)
          sum2 = sum2+dpsiz2(jj)*z(j)
        enddo
        dq10(k) = sum1
        dq20(k) = sum2
      end do

c add wj.sum(z.dq_diff) to dq1 and dq2

      u2 = u1*szpsiz
      jj = 0
      do j = 1,nc
        wjspsiz = psiz(j)*u2
        do k = 1,nc
          jj = jj+1
          dq1(jj) = dq1(jj)-wjspsiz*dq10(k)
          dq2(jj) = dq2(jj)-wjspsiz*dq20(k)
        end do
      end do

c=====
c   Gas Phase
c=====

250  if(isat.eq.-1) go to 400
      trdg = -trdifg(nnc)
c           case of pure diffusion
      if(trdg.eq.zero) go to 400

      u2 = trdg
      do j = 1,nc
        qk(j) = u2*(ppsig(j,m2)-ppsig(j,m1))+qk(j)
      end do

      do j = 1, ncsqc
        jj = icdpsi(j)
        dq1(jj) = -u2*dpsig(jj,m1)+dq1(jj)
        dq2(jj) = u2*dpsig(jj,m2)+dq2(jj)
      end do

c-----
c  augment residuals and set jacobian matrix for x-direc coefs

400  do j = 1,ncp

```

```

      r(j,m2) = r(j,m2)-qk(j)
      r(j,m1) = r(j,m1)+qk(j)
    end do

    if(isolv.eq.1) then                ! 1d-problems
      do jj = 1,ncsqp
        cxm(jj,m2) = -dq1(jj)
        cxp(jj,m1) = dq2(jj)
        cdl(jj,m2) = -dq2(jj)+cdl(jj,m2)
        cdl(jj,m1) = dq1(jj)+cdl(jj,m1)
      end do

    else                               ! general unstr. grid

      ir1 = (m1-1)*ncp
      ir2 = (m2-1)*ncp

      do mm2 = 1,ncdiag(m2)-1
        if(ndcon(mm2,m2).eq.m1) go to 22
      end do
      go to 24

22    ic1m = (mm2-1)*ncp
      kk = 0
      do ii = 1,ncp
        do jj = 1,ncp
          kk = kk+1
        end do
        ctst    cjac(ic1m+ii,ir2+ii) = -dq1(kk) ! cxm
                cjac(ic1m+ii,ir2+ii) = -dq1(kk) ! cxm
      end do

24    do mm1 = ncdiag(m1)+1,maxnc(m1)
        if(ndcon(mm1,m1).eq.m2) go to 26
      end do
      go to 28

26    ic1p = (mm1-1)*ncp
      kk = 0
      do ii = 1,ncp
        do jj = 1,ncp
          kk = kk+1
        end do
        ctst    cjac(ic1p+ii,ir1+ii) = dq2(kk) ! cxp
                cjac(ic1p+ii,ir1+ii) = dq2(kk) ! cxp
      end do

28    continue

      do jj = 1,ncsqp
        cdl(jj,m2) = -dq2(jj)+cdl(jj,m2) ! store in diag right now
        cdl(jj,m1) = dq1(jj)+cdl(jj,m1)
      end do
    endif

500 continue                ! end of master loop on all interfaces

    if (idebug.gt. 0.and.isolv.eq.1) then
      call prmcoef(nc,r,cdl,cxm,cxp,'COEFS: liq+gas coef at')
    endif

    return
  end
CEND

```

```
c*file masstran.f
```

C PURPOSE:

[illegible]

```
include 'impl.h'
include 'paramtrs.h'
include 'comall.h'
include 'address.h'
include 'iounits.h'
include 'scalars.h'
include 'com.h'
```

```
c*****  
c                                take new time step  
c*****  
120 continue
```

```

        ihalve = 0
c      if (abs(iftlgtmp).gt.0 .and. mcyc.gt.1) then
c          itmax = itmaxsav
c          ihalmax = ihalmxsa
c      endif

```

```

if(t .gt. tstep(nstep)) then
  nstep = nstep + 1
  tstpmax = dt(nstep)
  if(nstep .gt. nstpmax) then
    nstep = nstpmax
    tstep(nstep) = 1.d25
  endif
endif
endif

```

```

        t      = time(nprint)
        lplt = kplot
        ihalcnt = 0
    else if (t .gt. time(nprint)) then
        t      = t - delt
        delt = time(nprint) - t
        t      = time(nprint)
        lplt = kplot
        ihalcnt = 0
    endif

    deltlam=delt*wlam

10 continue

c=====
c      solve solute transport equations for one time step
c=====

        call iters (ncomp,ndfp,nkinrxn,ncxkinrx,ndfp*nerow,nerow,
        . aa(indcon),aa(imaxnc),aa(incdiag),c,cc,delc,r,dsol,cdl,
        . cjac,psi,psig,cx,areas,ppsi,ppsig,ppgas,dpsi,
        . dpsig,dpril,dsecl,aa(itrdifl),aa(itrdifg),
        . aa(irrkin),aa(irrkinaq),aa(ipotk),aa(coefx)

c=====
c      compute electrochemical current
c=====
ctst  if (idif.eq.3 .or. idif.eq.1 .or. idif.eq.-1) then
        if (idif.eq.3.and.method.gt.0) then

            call cputim(0)

            call elechem(ncomp,ncmplx,nkinrxn,ncxkinrx,cc,cx,aa(ipot),
            . aa(ippot),aa(icurr),aa(icurr0),aa(idebyel),aa(irrkin),
            . aa(irrkinaq),aa(igam),aa(igamx),areas,aa)

            call cputim(15)

        endif
c=====
c      update mineral volume fractions
c=====

        call cputim (0)

        call stdyst (nkin,nkinrxn,nmonod,dtsolid,dtfac,phik,pphik,rkin,
        . rrkin,permr,c,cc,rmonod,cellmd)

        call cputim (18)

        dtfacmn = dtfac

cms   if (dtfac .lt. one) goto 270
        if (dtfac .lt. half) goto 270

c=====

```

```

c      compute the mass balances  and moles in place at this time
c=====

      if (lplt.gt.0 .or. mcyc.ge.1)
      .call massbal (ncomp,nkin,nex,psi,psig,phik,xex,ppsi,ppsig,
      .               pphik,xxex)

c=====
c      compute next time step size
c=====

      call calcdt (ncomp,cc,c,aa(icprev))

c=====
c      update the variables
c=====

      call cputim (0)

      call update (ncomp,nkin,nkinrxn,ncxkinrx,ncmplx,nex,lkin,ngas,
      . surf,surf0,pphik,phik0,phik,rkin,rrkin,rkinaq,rrkinaq,
      . xex,xxex,psig,ppsig,pgas,ppgas,cadlink,
      . ccadlink,cx,c,cc,psi,ppsi,aa(icprev),aa(ipot),aa(ipotk),aa)

      call cputim (19)

c=====
c      print out the results, write graphics info.
c=====

      call cputim (0)

      call output (ncomp,nkin,nkinrxn,ncxkinrx,ncmplx,nex,nmonod,lkin,
      . ngas,dtsolid,phik,rkin,rkinaq,xex,psig,pgas,rmonod,aa(idk),
      . cellmd,cadlink,gam,gamx,cx,c,psi,r,surf,permr,aa(ipot),
      . aa(icurr),aa(icurr0),areas,aa(itrdifl),aa(itrdifx),aa)

c
c                                     r for zelec and pgas

      call cputim (20)

c=====

c-----stop if last time step reached
      if(t .ge. time(nprint)) then
        nprint = nprint + 1
        if (nprint .gt. nprin) goto 190
      endif

c-----reset plotting counter
      if (t .ge. tplot(kplot)) then
        kplot = kplot + 1
        if (kplot .gt. kpltmax) kplot = kpltmax
      endif
      delt = dttec
      goto 120

```



```

1000 format('REDUCEDT: mcyc= ',i5,' at time t =',
+lp10.3,' delt =',lp10.3,' dtnew =',lp10.3)

c-----reset time
      t      = t-delt
      delt   = dtnew
      deltlam = delt*wlam
      t      = t+delt

c      write(iunit2,1010) mcyc,iter,ier,ihalf,ivar,t/tconv,delt/tconv
1010 format(' mcyc =',i6,' iter =',i2,' ier =',i2,
+ ' ihalf =',i2,' ivar =',i2,' t =',lp12.4,' delt =',lp12.4)

      iter=0
      ivar=0

c-----reset concentration to beginning of time step
      do n=1,nmax*ncomp
        cc(n)=c(n)
      enddo

      do n = 1,nb
        aa(ipotk+n-1) = aa(ipot+n-1)
      end do

      if (t .lt. time(nprint)) lplt = 0

      return

c*****
c      maximum number of tries exceeded - stop
c*****

330 continue
      write(iunit2,1030) mcyc,iter,ihalf,ivar,t/tconv,delt/tconv
      write(*,1030) mcyc,iter,ihalf,ivar,t/tconv,delt/tconv
      write(iunit2,1020)
      write(*,1020)
1020 format(' maximum number of tries exceeded: STOP!')
1030 format(' mcyc =',i6,' iter =',i2,
+ ' ihalf =',i2,' ivar =',i2,' t =',lp12.4,' delt =',lp12.4)

      stop
      end

c=====
      subroutine prn (pphik,phik,nkin,nmax,mcyc,heading)

      include 'impl.h'
      include 'iounits.h'
      character*10 heading
      dimension phik(nkin,*),pphik(nkin,*)

      write (iunit2,10) heading,mcyc
10      format (/ '*** in prn: mcyc = ',a10,i4/)

      do n = 1,10

```

```
        write (iunit2,20) n, (phik(nr,n),nr=1,nkin)
        write (iunit2,30) (pphik(nr,n),nr=1,nkin)
end do
20  format(1x,'phik n',i3,6e10.3)
30  format(1x,'pphik ',3x,6e10.3)
return
end
```


c*file setbcon.f

```
subroutine setbcon (nc,ncx,dpril,dsecl,aa)

include 'impl.h'
include 'paramtrs.h'
include 'address.h'
include 'gas.h'
include 'fields.h'
include 'debye.h'
include 'iounits.h'
include 'scalars.h'
include 'com.h'
include 'comall.h'
include 'gmfwth.h'

dimension dpril(nc,*),dsecl(ncx,*),aa(*)

dimension cloctot(ncmx),gamloc(ncmx),pgasloc(ngmx),cloc(ncmx),
.cxloc(ncxmx),gamxloc(ncxmx)

character psinam*7

do mmbc = 1,nblkbc
  m2 = iblkbc(mmbc)
  ibc = iregn(mmbc)
  dwbc(IBC) = rho(m2)
  if(porslbc(IBC).eq.zero) porslbc(IBC) = por(m2)*sat(m2)
  if(porsgbc(IBC).eq.zero) porsgbc(IBC) = por(m2)*(one-sat(m2))
end do

do ibc = 1,nregbc
  psibnd(1,IBC) = zero
  psigbnd(1,IBC) = zero
end do

iflag = 0
IBC = 0
if(IBCreg(3).eq.0) go to 110

do 100 Ireg = IBCreg(3),IBCreg(4)

  IBC = IBC+1

  if(IBCndtyp(IBC).eq.zero) goto 100

  tk = tmpbc(Ireg)+tkelvin
  rho1 = dwbc(IBC)

  do j = 1, ncomp
    gamloc(j) = one
  enddo
  do i = 1, ncmlpx
    gamxloc(i) = one
  enddo

  kndx = 1
```

```

write (iunit2,1015) ibndtyp(IBC),tmpbc(ireg

iireg = ireg
call speciate (kndx,iireg,alogfo2,ph,pe,en,
. cxloc,gamloc,gamxloc,cloctot,cloc,pgasloc,aa,iflag)

write (*,1010) ibndtyp(IBC),tmpbc(ireg),iter

do mmbc = 1,nblkbc
  if(IBC.EQ.IREGN(MMBC)) go to 10
end do
mmbc = 1
10 n = iblkbc(mmbc)

psinam = 'psibnd'
do j = 1, ncomp
  psibnd(j,IBC) = cloctot(j)*rhol
  ccbnd(j,IBC) = cloc(j)
  write(iunit2,1020) nam(j),psinam,j,IBC,psibnd(j,IBC)
enddo

if(idif.NE.0) then
  if (isothrm .EQ. 1) then
    do i = 1,ncmplx
      eqhom(i) = -(coef(i,1)*log(tk)
.               + coef(i,2)
.               + coef(i,3)*tk
.               + coef(i,4)/tk
.               + coef(i,5)/(tk*tk))
    end do
  endif
  do i=1,ncmplx
    prod=eqhom(i)*aln10-log(gamxloc(i))
    do j=1,ncomp
      if(shom(j,i).NE.ZERO) then
        ccjn=ccbnd(j,IBC)*gamloc(j)
        prod=prod+log(ccjn)*shom(j,i)
      endif
    enddo
    if (abs(prod) .GT. 1.d-99) then
      cxbnd(i,IBC)=exp(prod)
    else
      cxbnd(i,IBC)=1.d-99
    endif
  enddo
endif

if (isat .GE. 0) then                                !      conc for the gas phase
  ul = one/(rgasjj*tk)
  psinam = 'psigbnd'
  do j = 1, ncomp
    sum=zero
    do l = 1, ngas
      sum = sum + sgas(j,l)*pgasloc(l)
    enddo
    psigbnd(j,IBC)=sum*ul

```

```

        write(iunit2,1020) nam(j),psinam,j,ibc,psigbnd(j,ibc)
    enddo
    do i = 1, ngas
        pgasbnd(i,ibc) = pgasloc(i)*u1
    enddo
endif
100 continue

110 if(ibcreg(5).eq.0) go to 120
    isrc = 0
    do ireg = ibcreg(5),ibcreg(6)
        tk = tmpbc(ireg)+tkelvin
        do j = 1, ncomp
            gamloc(j) = one
        enddo
        do i = 1, ncmlpx
            gamxloc(i) = one
        enddo

        kndx = 1
        isrc = isrc+1
        iireg = ireg
        write(iunit2,1000) isrc,tmpbc(ireg)
        call speciate (kndx,iireg,alogfo2,ph,pe,eh,
        . cxloc,gamloc,gamxloc,cloctot,cloc,pgasloc,aa,iflag)

        write(*,1005) isrc,tmpbc(ireg),iter

        psinam = ' psisrc'
        n = is1(isrc)+j1(jsl(isrc))+kl(ksl(isrc))
        do j = 1, ncomp
            psisrc(j,isrc) = cloctot(j)*rho(n)
            write(iunit2,1020) nam(j),psinam,j,isrc,psisrc(j,isrc)
        enddo
    end do
120 continue

1000 format (/, ' --> compute composition for source:',i3,
    . ' temp = ',lpg10.3)
1005 format (/, ' --> compute composition for source:',i3,
    . ' temp = ',lpg10.3, ' iter = ',i4)
1010 format (8x, '--> boundary condition: type',i2,
    . ' temp = ',lpg10.3, ' iter = ',i4)
1015 format (/,70('=')/5x, ' boundary condition: type',i2,
    . ' temp = ',lpg10.3/,70('=')/)
1020 format(10x, 'component = ',a12,3x,a7, '(' ,i2,i3, ') ' = ',lpe12.4)

return
end

```

Software Validation Test Plan

TECTRAN VERSION 1.0—SOFTWARE VALIDATION TEST PLAN AND RESULTS


SwRI® Project 20-01136

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Date

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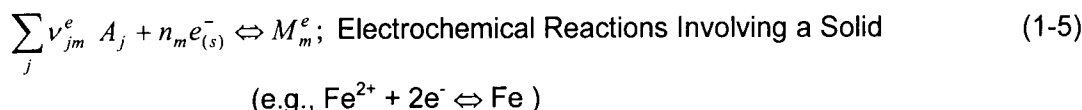
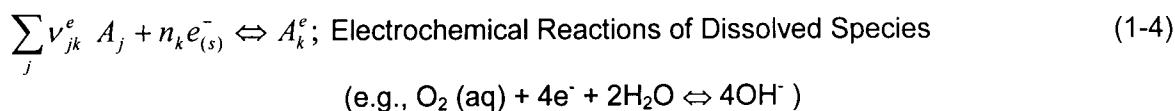
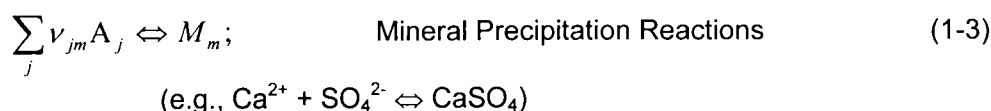
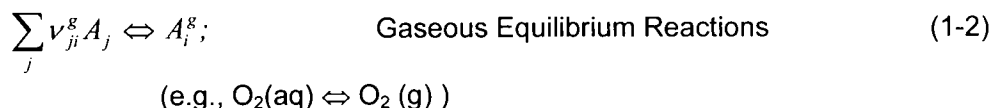
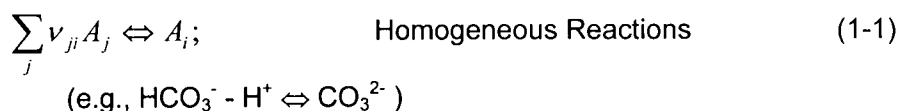
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1.0. BACKGROUND

In order to calculate the distribution of potential and chemical changes in disbonded coating, a model that couples reaction kinetics with transport processes was developed. The model, embodied in the computer code, Transient Electrochemical Coupled TRANsport (TECTRAN), enables the solution of the full problem, including the time dependent evolution of dissolved and solid species in the solution under the disbonded coating. The code was developed by the Center for Nuclear Waste Regulatory Analyses (CNWRA), Southwest Research Institute (SwRI) as part of a research project funded by the Gas Technology Institute under Contract No. 5097-260-3784. The code is primarily developed to address corrosion problems in the pipeline industry. However, it may be used to solve other localized corrosion problems. It is not intended as a Nuclear Regulatory Commission (NRC) license review tool. The technical basis for the software was described (Lichtner, 1998) in the Software Requirements Description (SRD). A description of the model is provided in Sections 1.2 and 1.3 for completeness.

1.1. Mathematical Model

The basis for the reactive transport modeling described in this section has been described in detail elsewhere (Lichtner, 1996). In any system of N_c chemical components, the reactions can be represented in the forms given below:



In Eqs. (1-1) through (1-5), ν is a stoichiometric coefficient, the species with subscript j are primary or basis species, and the others are secondary species. The choice of primary and secondary species is a matter of convenience although primary species are generally chosen such that they may be present throughout the spatial domain. In the TECTRAN model, the reactions represented by Eqs. (1-1) and (1-2) are considered to be in equilibrium, and the secondary species are calculated from the primary species through a thermodynamic model and using an appropriate database. The database is provided with the TECTRAN code as a text file and can be modified by the user.

The reactions represented by Eqs. (1-3) through (1-5) are treated as kinetically controlled reactions. The relationship between the primary and secondary species in these reactions are represented in terms of various kinetic rate laws appropriate for the species. For non-electrochemical reactions, a transition-state rate law is used

$$I_m = -k_m s_m [I - (K_m Q_m)^{\sigma_m}] \quad (1-6)$$

where I_m is the molar rate of formation or dissolution ($\text{moles.cm}^{-3}.\text{s}^{-1}$), k_m is the reaction rate constant in $\text{moles.cm}^{-2}.\text{s}^{-1}$, s_m is the specific surface area (cm^{-1}), K_m is the equilibrium constant for the reaction written in Eq. (1-3), Q_m is the product of ion activities, and σ_m is a constant for a given reaction. Note that when the reaction is at equilibrium, the product $K_m Q_m$ is equal to 1 and, the reaction rate vanishes. The value of I_m is positive if mineral precipitation occurs and negative if dissolution occurs. For a homogeneous reaction Eq. (1-1), a similar formulation without the specific surface area is used. For an electrochemical reaction, a generalized Butler-Volmer formulation is used:

$$I_m^e = s_m \sum_l P_{ml} k_{ml} \left[\frac{e^{-\alpha_m \eta_m} - e^{\beta_m \eta_m}}{1 + \frac{s_m P_{ml} k_{ml}}{r_{\text{lim}}} (e^{-\alpha_m \eta_m} + e^{\beta_m \eta_m})} \right] \quad (1-7)$$

where P_{ml} is the prefactor consisting of concentrations of species considered to affect the kinetics (user defined), r_{lim} is the limiting rate of reaction, α_m and β_m are transfer coefficients, and the dimensionless overpotential is defined as

$$\eta_m = \frac{n_m F}{RT} (E - E_m^{\text{eq}}) \quad (1-8)$$

where n_m is the number of electrons involved in the reaction, F is the Faradays constant, R is the gas constant, T is the absolute temperature, E is the potential at any spatiotemporal point, and E_m^{eq} is the equilibrium potential that is dependent on the concentrations of species involved in the electrochemical reaction. It can be shown that,

$$E_m^{\text{eq}} = \frac{RT}{n_m F} \ln [K_m Q_m] \quad (1-9)$$

For the disbonded coating application, where the reactions occur generally far from equilibrium, however, a rate limiting Tafel relationship is more appropriate as in Eq. (1-10).

$$I_m^e = s_m \sum_l P_{ml} k_{ml} \left[\frac{\pm e^{\mp \frac{\eta_m}{0.43 b_{a,c}}}}{1 + \frac{s_m P_{ml} k_{ml}}{r_{\text{lim}}} (e^{\pm \frac{\eta_m}{0.43 b_{a,c}}})} \right] \quad (1-10)$$

where $b_{a,c}$ represents the Tafel slope in volts per decade. In addition to these reaction laws, the code allows input of a constant reaction rate as well as an experimental polarization curve in the form of tabular data. Note that the polarization curve represented by Eq. 1-10 exhibits dependence on solution chemistry both from the prefactor and the equilibrium potential. The prefactor is the product of concentrations of species involved in the electrochemical reactions raised to a power that depends on the order of the reaction with respect to that species. The species for the prefactor can be chosen by the user.

An example of the electrochemical reaction kinetics represented by Eq. (1-10) is the reduction of oxygen. The oxygen reduction kinetics can be written as

$$I_{O_2} = \left[\frac{s_{O_2} [O_2]^{1.0} [OH^-]^{0.6} i_0^{O_2} e^{-\left(\frac{\Phi - E_{eq}^{O_2}}{0.43b_c}\right)}}{\left\{ 1 + \frac{[O_2]^{1.0} [OH^-]^{0.6} i_0^{O_2} e^{+\left(\frac{\Phi - E_{eq}^{O_2}}{0.43b_c}\right)}}{i_{lim}} \right\}} \right] \quad (1-11)$$

where, I_{O_2} is the total current from oxygen reduction reaction, s_{O_2} is the specific surface area for this reaction, $i_0^{O_2}$ is the exchange current density for oxygen reduction reaction, i_{lim} is the limiting current density, b_c is the tafel slope, and $E_{eq}^{O_2}$ is the equilibrium potential determined by the pH and concentration of dissolved oxygen. The surface area per unit volume, s_{O_2} , can be specified for different reactions at different locations. In the one-dimensional (1D) simulation, the species arising from a heterogeneous reaction within an element is averaged over the volume of that element. Hence, the specific surface area, s_{O_2} , is equivalent to the inverse of the crevice gap.

The overall transport equations at any point can be written as

$$\frac{\partial}{\partial t}(\phi \Psi_j) + \nabla \cdot (\Omega_j^d + \Omega_j^e) = -\sum_i \nu_{ji}^e I_i^e - \sum_m \nu_{jm}^e I_m^e - \sum_m \nu_{jm} I_j \quad (1-12)$$

where ϕ is the porosity, $\nu_{ji}^e, \nu_{jm}^e, \nu_{jm}$ are stoichiometric coefficients of various species in the reactions, I^e is an electrochemical reaction rate and I_j is the non-electrochemical reaction rate. The generalized concentration, Ψ_j is given in terms of the concentration of primary species, C_j and secondary species, C_i , by

$$\Psi_j = C_j + \sum_i \nu_{ji} C_i \quad (1-13)$$

The diffusive flux, Ω_j^d , is given by

$$\Omega_j^d = -\phi \left[\nabla \cdot \left(D_j C_j + \sum_i \nu_{ji} D_i C_i \right) \right] \quad (1-14)$$

where, D_j, D_i are the diffusivities of the primary and secondary species, respectively. The electromigration flux, Ω_j^e , is given by

$$\Omega_j^e = -\phi \left(D_j C_j z_j + \sum_i \nu_{ji} D_i C_i z_i \right) \frac{F}{RT} \nabla \cdot \Phi \quad (1-15)$$

where, z_j, z_i are the charges of the primary and secondary species, respectively. Note that the Φ in Eq. (1-15) is the potential in solution, whereas the E in Eq. (1-8) is the potential difference between the metal and solution. If the two sides of Eq. (1-12) are multiplied by z_j and electroneutrality is considered

$$\sum_j z_j \Psi_j = 0 \quad (1-16)$$

then, an independent equation results

$$\sum_j z_j \nabla \cdot (\Omega_j^d + \Omega_j^e) = -\sum_i z_i^e I_i^e - \sum_m z_m^e I_m^e \quad (1-17)$$

Note that in Eq. (1-17), the right-hand side involves only electrochemical reaction rates multiplied by the net charge, z_i^e, z_m^e , involved in each reaction. One method of solving the reactive transport problem is to solve Eqs. (1-12) and (1-17) simultaneously to yield concentrations of primary species and potential. Once the primary concentrations are known, the secondary species concentrations can be solved using appropriate equilibrium or kinetic expressions. The total current in the solution is given by

$$i = F \sum_l z_l (\Omega_l^d + \Omega_l^e) \quad (1-18)$$

From Eqs. (1-14), (1-15), and (1-18), a relationship between the potential and the total solution current can be obtained

$$\nabla \cdot \Phi = -\frac{(i - i_0)}{k} \quad (1-19)$$

where k is the conductivity defined by

$$\kappa = \phi \frac{F^2}{RT} \sum_j z_j \left(z_j D_j C_j + \sum_i \nu_{ji} z_i D_i C_i \right) \quad (1-20)$$

The term i_0 in Eq. (1-19) can be considered as a diffusion current given by

$$i_0 = F \sum_j z_j \Omega_j^d \quad (1-21)$$

where Ω_j^d is defined by Eq. (1-14). Note that Eq. (1-19) is a modified form of Ohm's law. Finally, from Eqs. (1-17) and (1-18), the divergence of the total current is related to the net reaction

$$\nabla \cdot i = F \cdot \sum_j z_j \nabla \cdot (\Omega_j^d + \Omega_j^e) = -F \cdot \left(\sum_i z_i^e I_i^e - \sum_m z_m^e I_m^e \right) \quad (1-22)$$

Hence, another method to solve the reactive transport problem is by solving Eq. (1-23) first, assuming an initial potential, then solving Eq. (1-19) by iteration until the potential converges, and finally solving Eq. (1-12) iteratively to obtain new concentrations for the next time step. Because current is a vector quantity, this method is suitable mainly for 1D problems. The TECTRAN code allows the user to choose either method.

1.2. Electrochemical Reaction Rates

The four most important reactions for modeling the behavior of steel under disbonded coating are the iron dissolution, oxygen reduction, hydrogen ion reduction, and water reduction reactions. The range of parameters for these reactions, obtained from the literature, is shown in Table 1-1. The highlighted values are used in TECTRAN calculations of disbonded coating environment. The equilibrium potential is assumed to be explicitly dependent on the concentration of dissolved species appropriate for the reaction under consideration. However, for iron dissolution, the equilibrium potential is considered to be fixed at -0.458 V (SHE). This is consistent with the experimental polarization curves (Nesic et al., 1996; Turnbull and Gardner, 1982). The rationalization provided by Nesic et al. (1996) for this assumption is that, the

Table 1-1. Selected values of electrochemical reaction parameters from the literature. The references are shown at the end of this chapter

Species	N	$i_0, \text{A/m}^2$	$i_{\text{lim}}, \text{A/m}^2$	Tafel, V/decade	Species Order	Reference
O ₂	4	1.24×10^{-20}	—	0.120	None	Yan et al., 1993
O ₂	4	1×10^{-6}	—	0.140	$[\text{O}_2]^{0.5}; [\text{OH}^-]^{0.1}$	Calvo and Schiffrin, 1988
O ₂	4	—	1.5×10^{-1}	0.060	$[\text{O}_2]^{1.0}; [\text{OH}^-]^{0.6}$	Okuyama and Haruyama, 1990
H ₂ O	1	8.9×10^{-7}	No limit*	0.118	None	Turnbull and Gardner, 1982
H ₂ O	1	3×10^{-5}	No limit	0.120	None	Nesic et al., 1996
H ⁺	1	5.0×10^{-2}	3×10^{-1}	0.120	$[\text{H}^+]^{0.5}$	Nesic et al., 1996
Fe	2	0.1–1.0	No limit	0.040	None	Nesic et al., 1996
Fe	2	2.6×10^{-4}	No limit	—	None	Turnbull and Gardner, 1982
Fe	2	3.8×10^{-3}	No limit	0.040	$[\text{Fe}^{2+}]^{0.7}; [\text{OH}^-]^{0.5}$	Pillay and Narayan, 1982

Highlighted values are used in the code calculations.
 *No limit indicates that the limiting current was either not measured or was very high. A default value of 1×10^{-6} A/m² was used to prevent calculated current from becoming singular.

exchange current density also depends on the dissolved ferrous ion concentration and hence the assumption of a fixed equilibrium potential compensates for the lack of assumed dependence of exchange current density on ferrous ion concentration (Table 1-1). For the cases of steels covered with corrosion products arising from being maintained for extended time periods at open-circuit potential, an approach that is used in the current version of TECTRAN is to fix the equilibrium potential of iron dissolution reaction at -0.358 V (SHE).

2.0. SCOPE OF VALIDATION

The validation will focus only on 1-D case for a Cartesian coordinate system. The validation of the code will consist of two steps:

1. Benchmarking the code against two cases where analytical solutions exist. These are by necessity simple problems and therefore does not completely validate the code. They are however used to increase the confidence in the correctness of the algorithms.
2. Comparing the code calculations against experimental results published in the literature. Two experimental sets are chosen because they represent the range in solution conductivity. They also possess different degree of complexity in the boundary conditions.
3. In future validation studies of 1-D radial and 2-D cases, results from experiments being conducted for the new PRCI program will be used.

3.0. REFERENCES

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4.0. ENVIRONMENT

4.1. Software

TECTRAN, Version 1.0 is written in Fortran 77 and compiled using Digital Visual Studio compiler. The executable (tec.exe) can be launched using the MS-Dos window.

4.2. Hardware

The software can operate on any system that has a Microsoft DOS-compatible operating system. A 586 or above system with a minimum of 32 MB RAM is necessary to conduct one of the validation studies.

5.0. PREREQUISITES

To launch the software, the user first creates an input file, which must have the extension ".inp". The user must specify the path to the database file, which stores the equilibrium data as well as the stoichiometric coefficients of all reactions. The name of the equilibrium file typically used is "database.gri". The output files are stored in the same directory as the input file. The output files, depending on the user's choice, include the ".out" file, which has all the input and output parameters, the ".dat" files which are the plot files in the form of comma separated ASCII text files, and the ".scr" screen dump, which has the run information. The ".dat" files can be imported to any graphics program (e.g., MS-EXCEL) for plotting or analysis.

The input file for one of the validation test cases is shown in Appendix A. The other input files are stored in Laboratory Scientific Notebook No. 290. The thermodynamic data are stored in a data file that has to be formatted as a text file. This data file can be modified by the user for new chemical species and reactions. The data file, "database.gri" is shown in Appendix B.

6.0. ASSUMPTIONS AND CONSTRAINTS

An assumption that is made in the current version of the program is that the potential is constant as a boundary condition. The code is also constrained to have either no flux or fixed concentration boundary condition. The potential can be applied only in the case of a fixed concentration boundary. A constant flux boundary is not included in Version 1.0. Advective flow is not considered in the current version. The software can consider any number of species, if these and their associated reactions are in the database. The database can be augmented for modeling any number of species, limited only by the size of the available storage. The software can also model 2- and 3-D systems, but is constrained to Cartesian coordinates at present. In the 1-D case, radial geometry can be modeled. Alloy dissolution can be modeled in terms of individual dissolution of alloying elements. However, such an approach is not strictly valid for alloy dissolution, since a true equilibrium potential for a solid solution alloy is difficult to determine. The software provides a number of options for reaction types. Acceptance criteria for

validation are difficult to establish on a generalized basis since each problem needs to be considered separately within its practical constraints. For the problems considered here, potential deviations above approximately 100 mV can be considered significant. For concentration of species and pH deviations beyond 1 log unit or 1 pH unit can be considered significant.

7.0. TEST CASES

7.1. Benchmark Problem 1—Nonreacting, 1D, Binary System

This system consists of two species with different diffusivities that do not react chemically. Under these constraints, the transport equations may be written as

$$\frac{\partial C_1}{\partial t} - D_1 \frac{\partial^2 C_1}{\partial x^2} - F \frac{z_1 D_1}{RT} \frac{\partial}{\partial x} \left[C_1 \frac{\partial \Phi}{\partial x} \right] = 0 \quad (7-1)$$

$$\frac{\partial C_2}{\partial t} - D_2 \frac{\partial^2 C_2}{\partial x^2} - F \frac{z_2 D_2}{RT} \frac{\partial}{\partial x} \left[C_2 \frac{\partial \Phi}{\partial x} \right] = 0 \quad (7-2)$$

The concentrations of species 1 and 2 are given by

$$C_{1,2}(x,t) = C_{1,2}^i - (C_{1,2}^i - C_{1,2}^0) \operatorname{Erfc} \left[\frac{x}{2\sqrt{D_{\text{eff}}t}} \right] \quad (7-3)$$

where $C_{1,2}^i$ are the initial concentrations of species 1 and 2, and $C_{1,2}^0$ are the bulk concentrations. The effective diffusivity is given by

$$D_{\text{eff}} = \frac{(z_1 - z_2)D_1D_2}{z_1D_1 - z_2D_2} \quad (7-4)$$

$$z_1C_1 + z_2C_2 = 0 \quad (7-5)$$

The potential is given by

$$\Phi(x) = \Phi_0 - \frac{RT}{F} \frac{D_1 - D_2}{z_1D_1 - z_2D_2} \left[\ln \left(\frac{C_1(x)}{C_1^0} \right) \right] \quad (7-6)$$

The diffusive current density is given by

$$i_0 = -Fz_1(D_1 - D_2) \frac{\partial C_1}{\partial x} \quad (7-7)$$

These results are applied to a binary system consisting of Na^+ and Cl^- with equal initial concentration of 10^{-4} M and bulk concentration of 0.1 M. The applied potential is fixed at zero. The diffusivities of Na^+ and Cl^- are 1.334×10^{-9} and 2.032×10^{-9} m²/s respectively. The analytical solutions for the concentration and potential after 0.5 hours are compared in Figures 7-1 and 7-2.

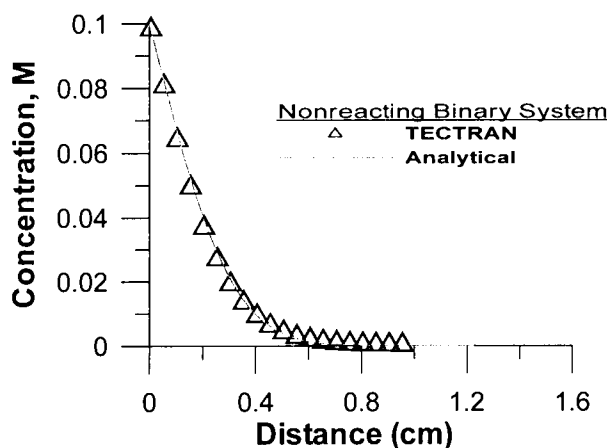


Figure 7-1. Analytical versus numerical solution of concentration in a binary system

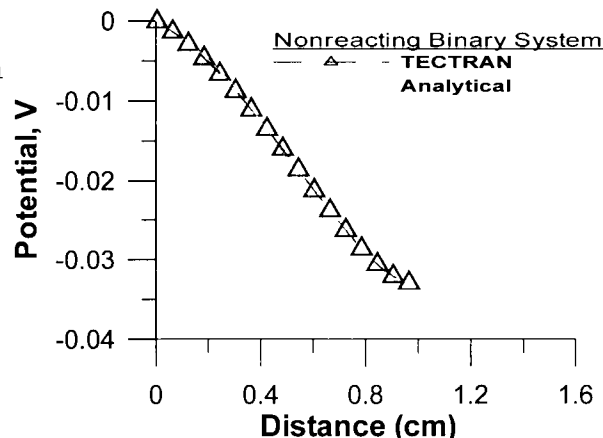


Figure 7-2. Analytical versus numerical solution of potential

Generally, there is good agreement between numerical and analytical results. In the case of potential (Figure 7-2), the numerical results deviate slightly from analytical results, but this deviation is within 10 millivolts and not considered significant.

7.2. Benchmark Problem 2—Reacting Binary System

In this case, a binary system with one of the species undergoing a reaction is considered. A single, potential-independent, electrochemical reaction rate is considered. The transport equations in this case can be written as

$$\frac{\partial C_1}{\partial t} - D_1 \frac{\partial^2 C_1}{\partial x^2} - F \frac{z_1 D_1}{RT} \frac{\partial}{\partial x} \left[C_1 \frac{\partial \Phi}{\partial x} \right] = -I_e \quad (7-8)$$

$$\frac{\partial C_2}{\partial t} - D_2 \frac{\partial^2 C_2}{\partial x^2} - F \frac{z_2 D_2}{RT} \frac{\partial}{\partial x} \left[C_2 \frac{\partial \Phi}{\partial x} \right] = 0 \quad (7-9)$$

where the reaction rate is given by

$$I_e = -ks \quad (7-10)$$

where k is the reaction rate constant and s is the specific surface area (surface area per unit volume). The two transport equations are coupled through the potential-dependent term. By assuming charge balance at all points, the potential can be eliminated. Detailed derivation is not given here for the sake of brevity. The steady-state concentrations of the two species are given by

$$C_2(x) = C_2^l - \frac{1}{2} a_2 (x-l)(x+l) \quad (7-11)$$

where

$$a_2 = \frac{ks}{D_{\text{eff}}} n_e \omega_2 \quad (7-12)$$

$$\omega_2 = \frac{1}{z_2} (1 - z_1 \omega_1) \quad (7-13)$$

and

$$\omega_1 = \frac{z_1 D_1 C_1}{z_1^2 D_1 C_1 + z_2^2 D_2 C_2} \quad (7-14)$$

$$a_1 = \frac{k_s}{D_{\text{eff}}} (1 - n_e \omega_1) \quad (7-15)$$

These calculations are applied to a binary system of Fe^{2+} and Cl^- . The concentrations at the right-hand side of a 1D column at a distance of one are assumed to be 0.1 M for Fe^{2+} and 0.2 M for Cl^- . The diffusivities are 0.8×10^{-9} and $2.032 \times 10^{-9} \text{ m}^2/\text{s}$ for Fe^{2+} and Cl^- respectively. The dissolution rate constant of Fe is fixed at $10^{-9} \text{ moles}/\text{cm}^2\text{s}$. A zero-flux boundary is assumed at $x = 0$. The potential is fixed equal to 0 at $x = 1$. The analytical and numerical solutions are compared in Figures 7-3 and 7-4. Since these two solutions agree exactly, it is hard to distinguish them in the figures.

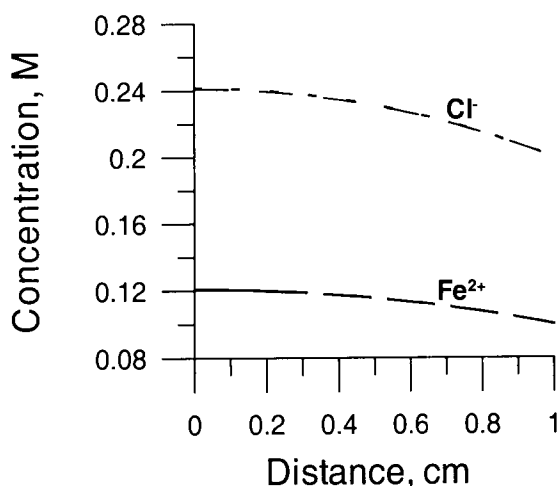


Figure 7-3. Numerical and analytical calculations of steady-state

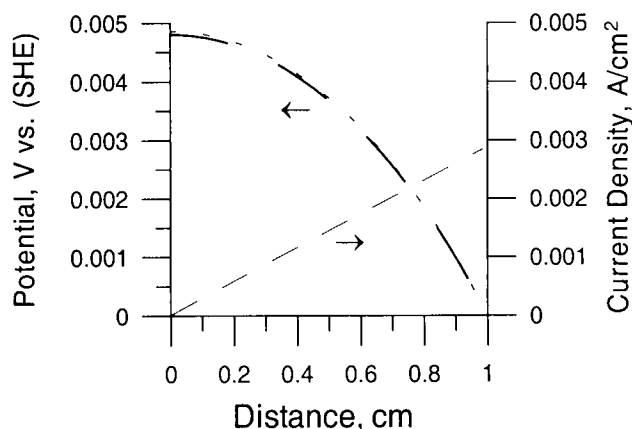


Figure 7-4. Numerical and analytical calculations of potential and current density

As an alternative, a transport limited Tafel relationship was assumed with a large Tafel constant of 10. This relationship is unrealistic from a mechanistic point of view, but it yields a potential-independent reaction rate similar to Eq. (7-10). Again, the numerical and analytical solutions matched exactly.

7.3. Comparison with Experimental Data: Turnbull and May (1983) and Parkins And Liu (1986)

The Turnbull and May (1983) experiments were performed in either artificial seawater or a 3.5 percent NaCl solution. The experiments performed in 3.5 percent NaCl solution are simulated here for simplicity. The crevice was created by abutting two steel plates with polytetrafluoroethylene (PTFE) spacers and ensuring that solution penetrates through only two ends and not the sides. The crevice assembly was completely immersed in 14 liters of solution which was replenished midway through the test. Cathodic potentials, ranging from -0.7 V vs. Saturated Calomel Electrode (SCE) to -1.1 V were applied. Typically, the experiments started by applying a potential at the high end of this range for up to 10 days and stepping down the

potential every two days. The potential just outside the crevice was controlled and the pH and potential at two locations were monitored. The total crevice length was 240 mm and gaps ranged from about 0.75 mm to about 0.002 mm. In the Parkins and Liu experiment (1986), a segmented crevice was used with a gap of 0.25mm and a length of 70 mm.

These experiments were simulated using a 1D geometry. Because of the symmetry, the simulation assumes a crevice length of 120 mm (with one closed end) and a gap of about 0.4 mm. It was assumed that the end open to bulk solution was maintained at a constant potential and concentration for each simulation. The pH of the bulk solution was determined by charge balance and therefore is not constant. The temperature was assumed to be 25 °C, although the experiments were performed at temperatures of 18 and 5 °C. Equilibrium of the bulk solution with atmosphere (0.21 atmosphere O₂ and 10^{-3.5} atmosphere CO₂) was assumed. The end opposite to the open end was assumed to be a zero-flux boundary. As expected, the predicted pH inside the crevice after 1,000 hours increases as the externally applied potential becomes more negative (Figure 7-5). It can be seen that at more positive potentials, the agreement between experiments and calculation is quite good. At externally applied potentials more negative than about -0.9V (SCE), the calculated pH reaches a maximum value of about 11.2, whereas Turnbull and May observed that the pH in the crevice attain a constant value at lower potentials (-1.1V SCE) and the value is higher (about 12.5). The calculated pH at more negative potentials is determined by the exchange current density of water reduction because the anodic current density is negligible and the oxygen is consumed rapidly thus reducing its limiting current density. As the water is reduced and the pH rises, the equilibrium potential for water reduction becomes more negative, resulting in the water reduction rate to be close to the exchange current density. It is possible that the exchange current density has a dependence on OH⁻ concentration at high pH values that are not considered in the model.

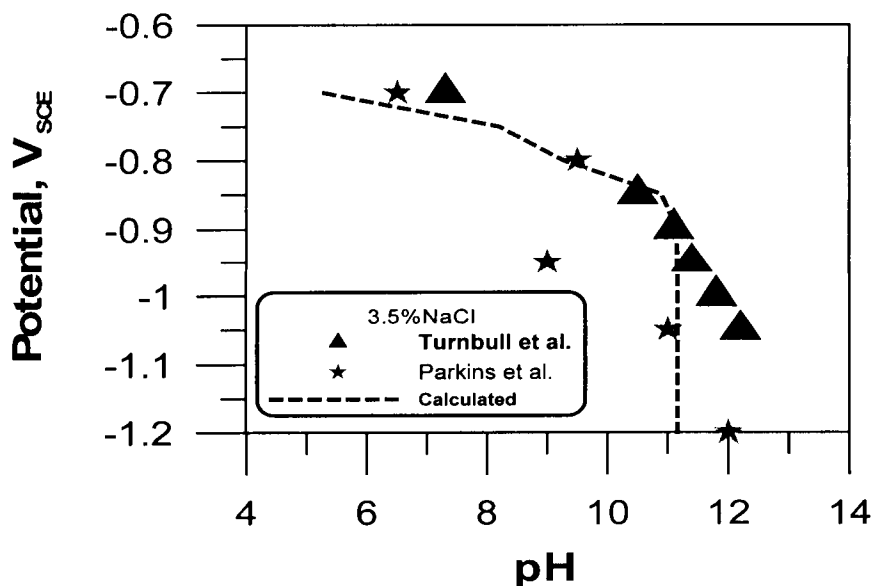


Figure 7-5. Comparison between calculated and measured pH at the deepest point in the crevice. Experiments were performed by Turnbull and May (1983) and Parkins and Liu (1986).

7.4. Comparison with Experimental Data: Brousseau And Qian (1994)

Their experiments involved a crevice between plexiglas and steel such that one end of the crevice was closed and the other end had a single hole through which the crevice region communicated with an external reservoir that was approximately 1.6 liters in volume (Figure 7-6). The dimension of the hole was not provided by the authors, but was assumed to be approximately 2 cm long. The crevice gap varied from 8 mm to a few microns over a length of about 480 mm (the crevice gap at the tip of the crevice is unknown, but is assumed to be very small perhaps determined by the surface finish of the substrate). The bulk solution contained 5×10^{-4} M sodium bicarbonate (NaHCO_3), 5×10^{-4} M calcium chloride (CaCl_2), and 5×10^{-4} M tricalcium orthophosphate [$\text{Ca}_3(\text{PO}_4)_3$]. A constant external potential, ranging from -1.06 to $-1.5 \text{ V}_{\text{SCE}}$ was applied with the reference electrode placed at the hole near the mouth of the crevice. The initial resistivity of the solution was calculated to be approximately 17,000 ohm.cm. This experiment was simulated using a 1D simulation. Two different crevice profiles were assumed and the potential and solution concentration at the mouth of crevice was held constant. To model the crevice in Figure 7-6, a stepwise decrease in crevice gap was assumed as shown by curves (a) and (b) in Figure 7-7. The initial composition of the solution was assumed to consist of: 5×10^{-4} M Na^+ , 1×10^{-3} M Cl^- , 4.1×10^{-4} M HCO_3^- , 1.15×10^{-3} M Ca^{2+} , and 1.49×10^{-4} M HPO_4^{2-} in equilibrium with atmospheric oxygen and carbon dioxide. The concentration of ionic species in the above solution was first determined through an equilibrium calculation using OLI Systems ESP code (Version 6.2). The ionic composition was then used as the initial concentration in further calculations. A constant external potential of -0.818 V (SHE) was assumed at the mouth of the crevice.

The predicted potential gradient in the crevice is compared to the experimental values in Figure 7-7 for an applied external potential of -0.818 V (SHE). The predicted gradient depended on the assumed crevice profile. For the profile (b) the predicted gradient approached the measured gradient more closely than for the assumed profile (a). Note that the experimental

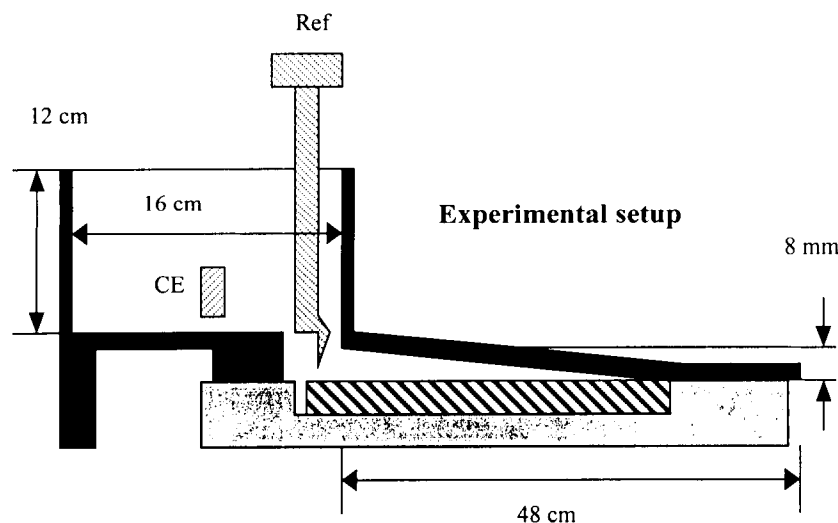


Figure 7-6. Illustration of the experimental arrangement used by Brousseau and Qian (1994)

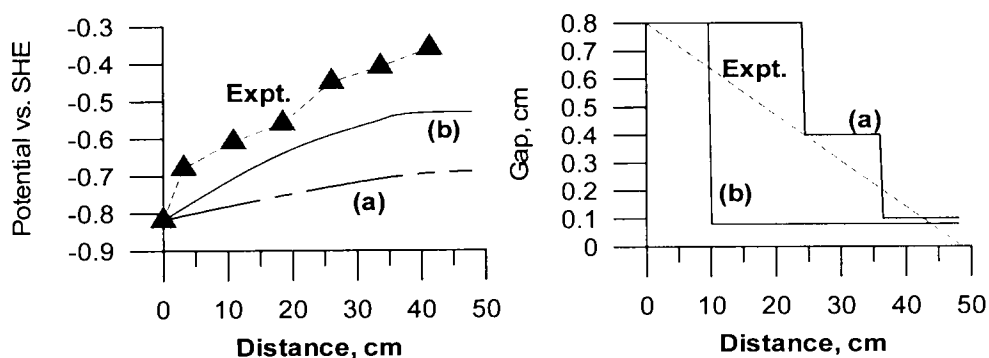


Figure 7-7. Potential distribution inside the disbonded region in the Brousseau and Qian (1994) experiment. Also shown is the crevice gap profile used in the experiment and the two profiles used in the simulations.

profile involves a very narrow crevice gap of unknown dimension at the tip. Further reductions in the assumed crevice gap resulted in larger potential gradient, but also increased the computation time considerably. The use of variable grid spacing, with closer spacing near the mouth, will increase the computational speed, but was not tried here.

The pH (Figure 7-8) was calculated by performing a two-step calculation (this did not affect the potential distribution):

Step 1: Consider a small volume of solution just outside the mouth of the disbondment where a cathodic potential is applied. Calculate the pH and potential evolution in this region, assuming

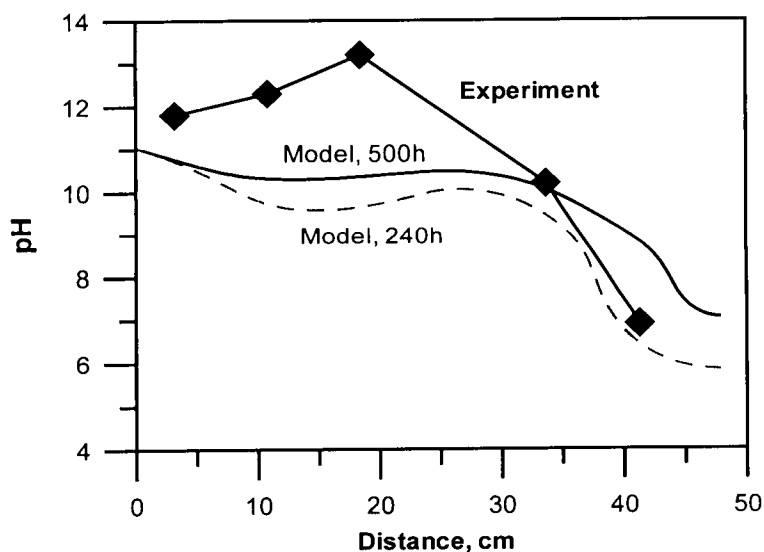


Figure 7-8. Predicted pH in a disbonded coating at an external potential of -0.818V SHE after 240 and 500 hours compared to experimental results of Brousseau and Qian (1994). The crevice profile assumed is shown in Figure 7-7b.

that the concentration of the solution remote from the mouth of the disbondment is fixed at the bulk value.

Step 2: Use the solution composition (total concentrations of primary species) and potential as input to the calculation of pH in the disbonded region as before. The gap profile shown in Figure 3-6b was used for the calculations.

8.0. NOTES

All the test results are documented in Laboratory Scientific Notebook No. 290.