*** RMIS View/Print Document Cover Sheet ***

This document was retrieved from the Boeing ISEARCH System.

Accession #: D196071727

Document #: SD-WM-DP-131

Title/Desc:
LOW LEVEL WASTE VITRIFICATION PHASE 1 VENDOR TEST SAMPLE ANALYSES DATA

Oct 4, 1995
Station 35 22

ENGINEERING DATA TRANSMITTAL

1. EDT № 611882

2. To: (Receiving Organization)	3. From: (Originating Organization)	4. Related EDT No.:
Distribution	Waste Product Technology	N/A
5. Proj./Prog./Dept./Div.:	6. Cog. Engr.:	7. Purchase Order No.:
TWRS LLW Program	E. S. Mast (509) 372-3941	N/A
8. Originator Remarks: Phase 1 LLW melter demonstration testing sample analyses data report		9. Equip./Component No.: N/A
		10. System/Bldg./Facility: N/A
11. Receiver Remarks:		12. Major Assm. Dwg. No.: N/A
		13. Permit/Permit Application No.: N/A
		14. Required Response Date: N/A

15. DATA TRANSMITTED

(A) Item No.	(B) Document/Drawing No.	(C) Sheet No.	(D) Rev. No.	(E) Title or Description of Data Transmitted	(F) Approval Designator	(G) Reason for Transmittal	(H) Originator Disposition	(I) Receiver Disposition
1	WHC-SD-WM-DP-131		0	LLW Vitrification Phase 1 Vendor Test Sample Analyses Data	Q	1,2	1	

16. KEY

Approval Designator (F)	Reason for Transmittal (G)	Disposition (H) & (I)
E, S, Q, D or N/A (see WHC-CM-3-5, Sec.12.7)	1. Approval 2. Release 3. Information 4. Review 5. Post-Review 6. Dist. (Receipt Acknow. Required)	1. Approved 2. Approved w/comment 3. Disapproved w/comment 4. Reviewed no/comment 5. Reviewed w/comment 6. Receipt acknowledged

17. SIGNATURE/DISTRIBUTION (See Approval Designator for required signatures)

(G) Reason	(H) Disp.	(J) Name	(K) Signature	(L) Date	(M) MSIN	(J) Name	(K) Signature	(L) Date	(M) MSIN	(G) Reason	(H) Disp.
1		Cog.Eng. E.S. Mast	E Mast		S3-90	C.N. Wilson	C N Wilson	9/29/95	H5-27	1	1
1		Cog. Mgr. D.J. Washenfelder			H5-27						
3		QA: D.W Duncan		10/3/95	B4-55						
		Safety									
		Env.									

18.	19.	20.	21. DOE APPROVAL (if required) Ctrl. No.
E.S. Mast E Mast 9/29/95 Signature of EDT Originator Date	Authorized Representative for Receiving Organization Date	D.J. Washenfelder 9/29/95 Cognizant Manager Date	[] Approved [] Approved w/comments [] Disapproved w/comments

BD-7400-172-2 (04/94) GEF097

THIS PAGE INTENTIONALLY
LEFT BLANK

RELEASE AUTHORIZATION

Document Number: WHC-SD-WM-DP-131, Rev. 0

Document Title: Low-Level Waste Vitrification Phase 1 Vendor Test Sample Analyses Data.

Release Date: 10/4/95

This document was reviewed following the procedures described in WHC-CM-3-4 and is:

APPROVED FOR PUBLIC RELEASE

WHC Information Release Administration Specialist:

Chris Willingham 10/4/95

C. Willingham

TRADEMARK DISCLAIMER. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof or its contractors or subcontractors.

This report has been reproduced from the best available copy. Available in paper copy. Printed in the United States of America. To obtain copies of this report, contact:

Westinghouse Hanford Company - Document Control Services
P.O. Box 1970, Mailstop H6-08, Richland, WA 99352
Telephone: (509) 372-2420; Fax: (509) 376-4989

THIS PAGE INTENTIONALLY
LEFT BLANK

SUPPORTING DOCUMENT

1. Total Pages 165

2. Title	3. Number	4. Rev No.
Low-Level Waste Vitrification Phase 1 Vendor Test Sample Analyses Data	WHC-SD-WM-DP-131	0

5. Key Words	6. Author
Low-level waste, vitrification, melter testing, sample analyses.	Name: E. S. Mast Signature: Eric S. Mast Organization/Charge Code 0M631/D42AR

7. Abstract

A multi-phase program was initiated in 1994 to test commercially available melter technologies for the vitrification of the low-level waste (LLW) stream from defense wastes stored in underground tanks at the Hanford Site in southeastern Washington State. Phase 1 of the melter demonstration tests was performed in vendor test facilities using simulated LLW and was completed during FY-1995. Test samples taken during Phase 1 testing were analyzed by independent laboratories who reported the analyses results to Westinghouse Hanford Company for integration and evaluation. The reported analytical results were integrated into an electronic data base using Microsoft Excel* 5.0. This report documents this data base as of the end of FY-1995, and is supplemental to the Phase 1 LLW melter testing summary report, WHC-SD-WM-ER-498, revision 0.

*Excel is a trademark of the Microsoft Corporation.

8. RELEASE STAMP

OFFICIAL RELEASE BY WHC
DATE Oct. 4, 1995
Station 35

THIS PAGE INTENTIONALLY
LEFT BLANK

LOW-LEVEL WASTE VITRIFICATION PHASE 1 VENDOR TEST SAMPLE ANALYSES DATA

1.0 BACKGROUND

The most recent amendment to the Tri-Party Agreement[1] (TPA) specifies vitrification as the treatment method for the low-level waste (LLW) streams derived from retrieval and pretreatment of both double shell tank (DST) and single shell tank (SST) wastes. Two major TPA milestones established for LLW vitrification are as follows.

Begin LLW melter testing with simulants (September 1994).

Complete melter feasibility and systems operability tests, select reference melter(s), and establish reference LLW glass formulation that meets complete systems requirements (June 1996).

To satisfy these milestones, a multiphase program was initiated to test and evaluate commercially available promising melter technologies using nonradioactive LLW simulants. Seven vendors were selected to participate in Phase 1 testing. A detailed discussion of all Phase 1 testing activities and summary results are provided in WHC-SD-WM-ER-498[2]. The seven Phase 1 vendors and their respective vitrification technologies are as follows.

Babcock & Wilcox, Alliance Research Center, Alliance, Ohio -- Cyclone combustion melter, slurry feed.

Envitco, Incorporated, Toledo, Ohio -- High temperature Joule-heated melter, molybdenum electrodes, feed to be determined.

GTS Duratek, Incorporated, Columbia, Maryland -- Low temperature Joule heated melter, Inconel electrodes, slurry feed.

Penberthy Electromelt International, Incorporated, Seattle, Washington -- High temperature Joule-heated melter, sidewall molybdenum electrodes, moist mix-in-the-charger feed.

U. S. Bureau of Mines, Albany Research Center, Albany Oregon -- Carbon electrode melter, prereacted dry feed.

Vectra Technologies, Incorporated, Richland, Washington -- High temperature Joule-heated melter, top entry molybdenum electrodes, calcined dry or slurry feed.

Westinghouse Science and Technology Center, Pittsburgh, Pennsylvania -- Plasma torch fired cupola furnace, slurry feed.

Phase 1 LLW melter demonstration tests were completed by six of these vendors (testing at Penberthy Electromelt was terminated) during the period of September 1994 through May 1995. A variety of samples were taken during testing by each vendor to address issues defined in the Statement of Work[3]. Sample types included: feed materials, batched melter feed, glass samples, offgas scrub and blowdown solutions, and miscellaneous deposits and residues. Sample analyses were performed by contracted independent and government laboratories as follows:

Quanterra Laboratories, St Louis, MO. -- liquid samples including LLW simulant, offgas scurb solutions and blowdown solutions; chemical analyses, specific gravity, settled solids

Corning*Laboratory Services, Corning, N.Y. -- solid samples, feed materials, glass, miscellaneous deposits and residues; chemical analyses, microstructural analyses, phase characterization, glass redox

U. S. Geological Survey, Denver, CO -- solid samples, feed materials, glass, miscellaneous deposits and residues; chemical analyses, microstructural analyses, phase characterization, glass redox

WHC 222-S Laboratory -- liquid/slurry samples; specific gravity, settled and centrifuged solids content

Pacific Northwest Laboratory -- radioactive samples (from Duratek DM-100 test), duplicate analyses of selected samples analyzed at other laboratories, sepecial and/or expedited analyses.

2.0 SCOPE

Data contained in this document represent the most complete version of all files as of the release date. Data created in conjunction with this project changed frequently according to a number of variables including cognizant engineer test requests (routine and non-routine) and laboratory backlog. The data represented in this document is intended to be used as a convenient reference for personnel performing critical work regarding this project. The data contained in this document should not be used for critical decision making without verifying that it is the most current version of data available. This can be accomplished by contacting the document authors.

*Corning is a trademark of Corning, Inc.

3.0 ORGANIZATION

This document contains all of the raw, converted, and summarized data from the project. Data from each individual vendor's test is contained in a separate section. Organization is as follows:

- Short description of the vendor's process
- Sample method descripton for each sample point
- Melter sample point schematic
- Sample numbering scheme
- Summarized analytical data
- Raw and converted data by analytical laboratory
  - Westinghouse 222-S Laboratory
  - Battelle Pacific Northwest Laboratory
  - Quanterra
- Summarized glass data
- Raw and converted data by glass laboratory
  - Corning
  - Battelle Pacific Northwest Laboratory
  - United States Geological Survey
- Archive inventory list

The cognizant engineer was responsible for determining which samples were to be analyzed and to which laboratory the samples were to be sent. Typically the choices were determined based on the specific expertise of the individual laboratories. Westinghouse 222-S Laboratory, Battelle Pacific Northwest Laboratory, and Quanterra performed analytical analyses on solutions. Corning, Battelle Pacific Northwest Laboratory, and the United States Geological Survey performed analyses on glass, feed, and slurry samples. The method of analysis for a particular analyte were often developed by the laboratory specifically for this project. This was the case particularly for the feed analyses. The accuracy was verified by checking against a known concentration in the feed mixture containing simulant.

Data was entered as received into the respective spreadsheets. This is termed the raw data. Due to the variability in the analyte units reported, it was necessary to convert the reported units to a set of standard units. Prior to initiation of testing it was agreed upon by all parties to convert units to mole per liter for liquids and weight percent for glasses. Oxidation states were chosen for the elements in the glass based on laboratory reporting not on actual measurements. The redox state of iron in the glass was measured on certain samples as reported in the results. Feed analyses were typically reported in both the analytical and the glass spreadsheets. This way a comparison could be made to the glass for retention of material in the oxide or to the loss of material to the off gas systems. By maintaining consistent units a direct comparison could be made quickly between vendors, to predicted values or to known concentrations. The converted data was then organized into summary spreadsheets.

Optical petrography and Scanning Electron Microscopy (SEM) provided an in situ look at the glass product. Inhomogeneities such as inclusions of unmelted batch, melter refractory materials

or devitrified crystals could be identified by these methods. A list of petrographic abbreviations used in the spreadsheets is included in the Apendix.

Product Consistency Test (PCT) was performed on selected samples of glass. This test was used to help evaluate glass product quality based on the leaching of particular glass components such as sodium and boron.

4.0 SAMPLE NUMBERING

To facilitate data evaluation and sample identification by Westinghouse Hanford Company (WHC), a sample identification scheme was developed. Vendors were requested to follow the scheme in order to make sample tracking easier for us as well as the laboratories and anyone else using the data. The numbering scheme was designed to be flexible enough to allow for variations that occurred in each vendor process while maintaining consistency in labeling across all tests. The scheme uses seven separate identifiers consisting of nine characters, as described below:

- **First Character:** Vendor identifier (first letter of vendor's name, except USBM=M).
- **Second Character:** Phase identifier (e.g., "1" for Phase I testing).
- **Third Character:** Sample type identifier. The vendor was free to supplement this with additional sample types specific to their process. WHC identified seven basic types of samples:
    - S = LLW Simulant
    - A = Additives
    - F = Feed, Mixed
    - I = Intermediate (e.g., samples between feed and glass product)
    - G = Glass
    - O = Offgas
    - W = Waste (e.g., secondary by-products)
- **Fourth Character:** Sample point identifier. Used to designate specific sample points for a vendor's process/system.
- **Fifth through Seventh Characters:** Serial sample number. Corresponds to the sampling chronology (e.g., assuming a four hour sampling schedule, 10:00 AM on the first day of testing, all samples taken have an -001 extension, 2:00 PM on the first day of testing, all samples taken have an -002 extension, 10:00 AM on the second day of testing, all samples have an -007 extension, etc.)
- **Eighth Character:** Laboratory identifier.
- **Ninth Character:** Complete sample set identifier. This is used to designate simultaneous samplings when samples were taken from all applicable sample points for mass balance analysis.

Sample type identifiers used by each vendor are located on the sample nmbering scheme for that specific vendor. Duplication of letters for different types of samples was minimized between vendors.

5.0 DATA VERIFICATION

Data was entered by a technician and subsequently checked by two engineers prior to release. The engineers checked the data in the spreadsheets against the original data from the laboratory. Data which appeared inconsistent in any way was reverified by the analytical laboratory. Sometimes this required performing a second analysis on the same or additional samples. It was for this purpose that archive samples were kept by both the vendor and WHC. The vendor's sample was analyzed before a WHC archive to maintain the greatest possible integrity of the WHC sample archive inventory.

Results from all analyses were sent to WHC for review, distribution and integrgation into a LLW melter testing database. Results from chemical compositional analyses were entered into an electronic database[1]. This report contains hard copies of data in the LLW melter testing electronic database.

6.0 REFERENCES

1. Ecology et. al. 1994, Hanford Federal Facility Agreement and Consent Order, Fourth Amendment, dated January 1994.

2. Wilson, C. N. editor. Low-Level Waste Vitrification Phase 1 Melter Vendor Demonstration Testing Summary Report. WHC-SD-WM-ER-498, September 1995.

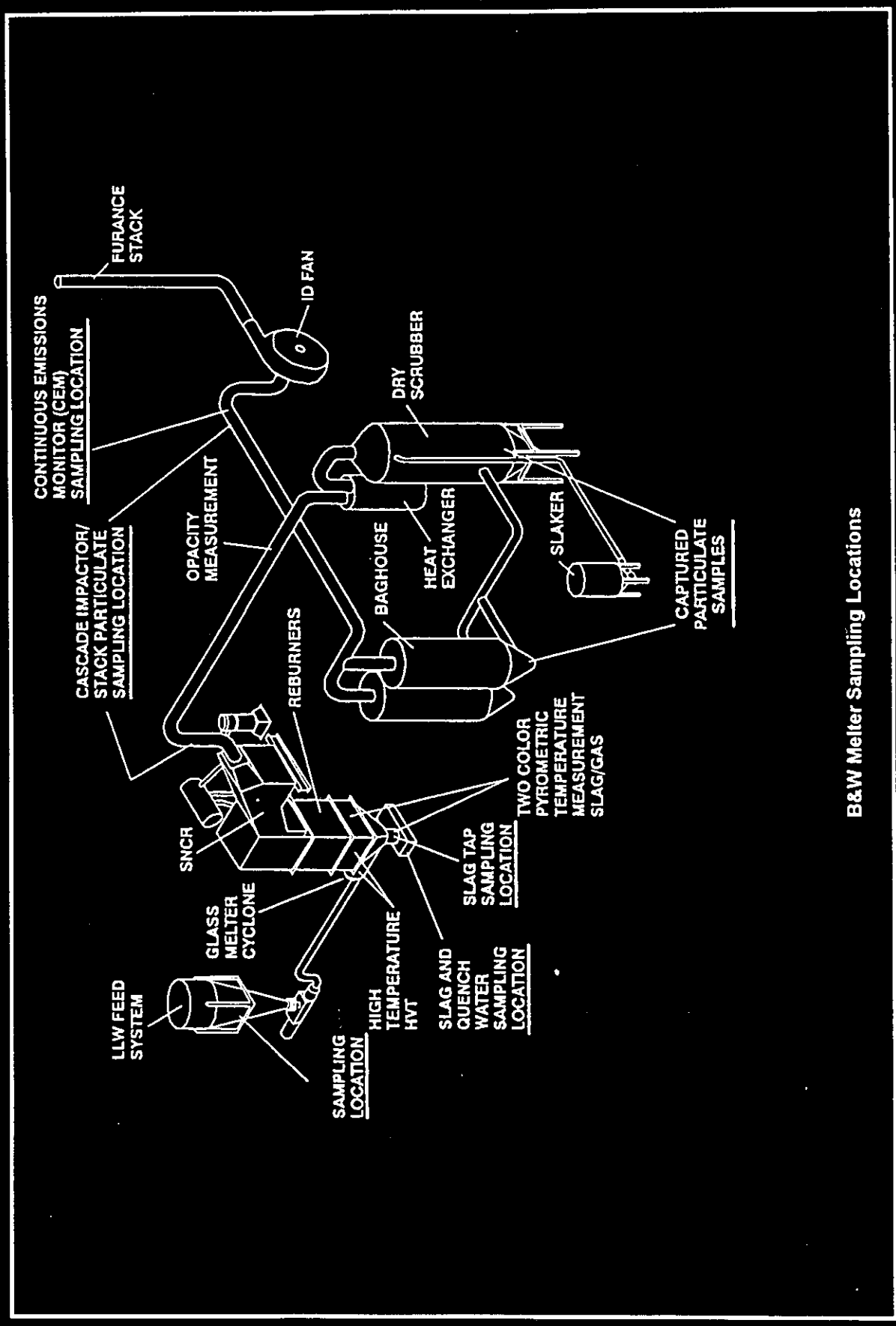
3. Wilson, C. N. 1994. Statement of Work for Evaluation of Melter System Technologies for Vitrification of High-Sodium Content Low-Level Radioactive Wastes. WHC-SD-WM-RD-044.

[1] Microsoft Excel 5.0 was used for the electronic database.

Petrographic Abbreviations for Glass Analysis

Petrographic Mineral Abbreviation and Chemistry Table			
Abbreviation	Mineral / Material Name	Chemical Formula of Pure	Other Name(s)
Q	Quartz	SiO2	Silica
Ty	Tridymite	SiO2	Silica
Cr	Cristobalite	SiO2	Silica
C	Corundum	Al2O3	Alumina
Z	Zircon	ZrO2*SiO2	
Ky	Kyanite	Al2O3*SiO2	
Ab	Albite	Na2O*Al2O3*6SiO2	Sodium Feldspar
Ne	Nepheline	Na2O*Al2O3*2SiO2	
An	Anorthite	CaO*Al2O3*2SiO2	Calcium Feldspar
Na-An	Sodium Anorthite	(Ca,Na2)O*Al2O3*2SiO2	" w/ sodium substitution
Nc	Sodium Carbonate	Na2O*CO2	
Cm	Chromite	FeO*Cr2O3	
Sp	Spinel	(Mg,Fe)O*Al2O3	
AlBa	Aluminous Batch	Al2O3 + ?	Unmelted Batch containing Alumina
AlRf	Aluminous Refractory	Al2O3 + SiO2 + ?	Alumino-silicate type material
RfFib	Refractory Fibers	?	Typically fused Quartz
ZC	Zircar	?	Tradename
Opq	Opaques	?	Unidentifiable Dark Material

Babcock & Wilcox Melter Sampling Point Schematic



Melter Project: Sample Numbering Scheme
Babcock Wilcox

B	1	G	9	-	0	0	1	C	1
Vendor Identification	**Phase Identifier**	**Sample Type**	**Sample Point Number**	**Hyphen**	**Serial**	**Sample**	**Number**	**Lab ID**	**Snapshot Set ID**
B & W	*Phase 1*	*Glass*	*Sample Point 9*		*Sample*	*Number*	*1*	*Corning*	*1 = 1st Mass Balance Set*

Vendor
B = B & W

Sample Type	Sample Pts.
S = Simulant	1 = Simulant
A = Additives	2 = Alumina
F = Feed, Mixed	3 = Boric Acid
I = Intermediate	4 = Fine Sand
G = Glass	5 = Micro Si
O = Off-gas	6 = Limestone
W = Waste	7 = Feed Slurry
H = Quench	8 = Quench W.
D = Dry Scrub. Slurry	9 = Glass
M = Method 5 Probe Sample	10 = Baghouse
	11 = Dry Scrub. Solids
	12 = Dry Scrub. Slurry
	13 = Iron Oxide
	14 = Method 5 Probe Sample

Lab ID	Sample Set ID
C = Corning	1 = 1st Mass Balance Set
G = Archive (GEL)	2 = 2nd Mass Balance Set
P = PNL	
Q = Quanterra	Blank = Individual Pts.
U = USGS	
W = 222-S	

B&W Analytical Data

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(vol %)	(vol %)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
Data Sources: [B-Q-1, B-Q-2]																			
B1D12-002Q1	10/13/94	14:15:00							1.27E-3	-4.63E-5		9.43E-1	-3.85E-5	-3.76E-5	1.93E-3	-6.39E-4		1.21E-2	1.25E-4
B1D12-002Q1D																			
B1D12-003Q3	10/14/94	2:04:00							1.31E-3	-4.63E-5		9.58E-1	-3.85E-5	-3.76E-5	1.97E-3	-6.39E-4		1.28E-2	1.31E-4
B1D12-004Q4	10/14/94	11:45:00							5.63E-4	-4.63E-5		4.19E-1	-3.85E-5	-3.76E-5	8.78E-4	-6.39E-4		5.72E-3	5.72E-5

B&W Analytical Data

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl^-	F^-	I^-	NO_3^-	NO_2^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
Data Sources: [B-																			
B1D12-002Q1	(9.01E-7)	5.61E-4	5.69E-6			3.77E-3	1.89E-4		1.43E-6	2.36E+0	1.28E+0	1.05E-3	-5.26E-5	-1.97E-5	8.87E-7	5.43E-7	-8.06E-7	-1.05E-5	5.89E-4
B1D12-002Q1D										2.61E+0	1.41E+0	1.03E-3	-5.26E-5	-1.97E-5	8.22E-7	-4.35E-7	-8.06E-7	-1.05E-5	5.87E-4
B1D12-003Q3	(3.75E-7)	6.0 E-4	4.92E-6			3.77E-3	1.97E-4		(7.14E-7)	2.14E+0	1.43E+0	1.02E-3	-5.26E-5	-1.75E-5	8.06E-7	-4.35E-7	-8.06E-7	-1.05E-5	5.64E-4
B1D12-004Q4	-1.04E-5	(1.7 E-4)	(2.1 E-6)			1.69E-3	8.49E-5		(6.16E-7)	2.3 E+0	4.32E+0	1.02E-3	-5.26E-5	-1.92E-5	8.39E-7	-2.17E-6	-8.06E-7	-1.05E-5	5.63E-4

B&W Analytical Raw Data - Quanterra

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(vol %)	(vol %)	()	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
Conver. factor			1						3.71E-08	9.25E-08	7.28E-09	2.50E-08	1.92E-08	7.52E-09	1.79E-08	2.56E-08	1.44E-04	4.11E-08	1.82E-08
B1D12-002Q1	10/13/94	14:15:00							34400	-500		37800000	-2000	-5000	108000	-25000		295000	6840
B1D12-002Q1D																			
B1D12-003Q3	10/14/94	2:04:00							35400	-500		38400000	-2000	-5000	110000	-25000		310000	7190
B1D12-004Q4	10/14/94	11:45:00							15200	-500		16800000	-2000	-5000	49000	-25000		139000	3140

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(vol %)	(vol %)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
B1D12-002Q1	10/13/94	14:15:00							1.27E-3	-4.63E-5		9.43E-1	-3.85E-5	-3.76E-5	1.93E-3	-6.39E-4		1.21E-2	1.25E-4
B1D12-002Q1D																			
B1D12-003Q3	10/14/94	2:04:00							1.31E-3	-4.63E-5		9.58E-1	-3.85E-5	-3.76E-5	1.97E-3	-6.39E-4		1.28E-2	1.31E-4
B1D12-004Q4	10/14/94	11:45:00							5.63E-4	-4.63E-5		4.19E-1	-3.85E-5	-3.76E-5	8.78E-4	-6.39E-4		5.72E-3	5.72E-5

B&W Analytical Raw Data - Quanterra

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl⁻	F⁻	Br⁻	NO_3^-	NO_2^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(ug/l)	(mg/l)	(mg/l)
Conver. factor	1.04E-08	4.35E-08	1.70E-08	3.23E-08	3.12E-08	3.56E-08	1.14E-08	2.09E-08	1.10E-08	1	1	2.82E-05	5.26E-05	7.88E-06	1.61E-05	2.17E-05	1.6129E-08	1.05E-05	1.04E-05
B1D12-002Q1	(86.4)	12900	334			106000	16600		130	2.36	1.28	37.2	-1.0	-2.50	0.055	0.025	-50.0	-1.0	56.6
B1D12-002Q1D										2.61	1.41	36.5	-1.0	-2.50	0.051	-0.020	-50.0	-1.0	56.4
B1D12-003Q3	(36.0)	13800	289			106000	17300		(65.1)	2.14	1.43	36.3	-1.0	-2.22	0.05	-0.020	-50.0	-1.0	54.2
B1D12-004Q4	-1000	(3910)	(123)			47400	7440		(56.2)	2.30	4.32	36.2	-1.0	-2.44	0.052	-0.10	-50.0	-1.0	54.1

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl⁻	F⁻	Br⁻	NO_3^-	NO_2^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
B1D12-002Q1	(9.01E-7)	5.61E-4	5.69E-6			3.77E-3	1.89E-4		1.43E-6	2.36E+0	1.28E+0	1.05E-3	-5.26E-5	-1.97E-5	8.87E-7	5.43E-7	-8.06E-7	-1.05E-5	5.89E-4
B1D12-002Q1D										2.61E+0	1.41E+0	1.03E-3	-5.26E-5	-1.97E-5	8.22E-7	-4.35E-7	-8.06E-7	-1.05E-5	5.87E-4
B1D12-003Q3	(3.75E-7)	6.0 E-4	4.92E-6			3.77E-3	1.97E-4		(7.14E-7)	2.14E+0	1.43E+0	1.02E-3	-5.26E-5	-1.75E-5	8.06E-7	-4.35E-7	-8.06E-7	-1.05E-5	5.64E-4
B1D12-004Q4	-1.04E-5	(1.7 E-4)	(2.1 E-6)			1.69E-3	8.49E-5		(6.16E-7)	2.3 E+0	4.32E+0	1.02E-3	-5.26E-5	-1.92E-5	8.39E-7	-2.17E-6	-8.06E-7	-1.05E-5	5.63E-4

B&W Glass Data

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values							10.00	5.00	0.00	5.00	0.00	0.00	0.00	1.46	0.00	0.00	0.00
Data Sources: B-C-1, B-C-2, B-C-3, B-U-1, B-U-2																	
B1F7-002C1(d)	10/13/94	13:30:00				0.0	7.59	4.08	0.005	3.66	0.034	0.130	0.22	1.56		0.11	0.013
B1F7-002C1(s)	10/13/94	13:30:00				29.0	5.39	2.90	0.003	2.60	0.024	0.092	0.15	1.11		0.07	0.009
B1F7-002U1	10/13/94	13:30:00			24.5		8.12	2.89	0.007	3.85	0.038	0.104	0.23	1.29		0.13	-0.012
B1F7-005C2(d)	10/13/94	20:10:00				0.0	7.81	3.99	0.005	3.78	0.033	0.120	0.22	1.45		0.11	0.013
B1F7-005C2(s)	10/13/94	20:10:00				28.9	5.55	2.84	0.003	2.68	0.023	0.085	0.15	1.03		0.08	0.009
B1F7-005U2	10/13/94	20:10:00			25.3		7.87	2.99	0.006	3.68	0.039	0.107	0.28	1.33		0.12	0.012
B1F7-008C3(d)	10/14/94	1:20:00				0.0	7.80	4.04	0.005	3.72	0.033	0.120	0.22	1.45		0.11	0.015
B1F7-008C3(s)	10/14/94	1:20:00				28.4	5.58	2.89	0.003	2.66	0.023	0.086	0.16	1.04		0.08	0.010
B1F7-008U3	10/14/94	1:20:00			25.0		7.92	2.97	0.006	3.79	0.039	0.108	0.30	1.34		0.12	0.012
B1F7-013C(d)	10/14/94	11:30:00				0.0	7.92	3.84	0.005	3.78	0.032	0.120	0.43	1.44		0.11	0.013
B1F7-013C(s)	10/14/94	11:30:00				28.5	5.66	2.74	0.003	2.70	0.023	0.086	0.31	1.03		0.08	0.009
B1F7-013U	10/14/94	11:30:00			25.3		7.85	2.95	0.006	3.74	0.037	0.107	0.46	1.32		0.10	-0.012
B1G9-002C1	10/13/94	13:30:00					19.2	1.92	0.008	5.30	0.070	0.032	0.69	1.04		0.20	0.021
B1G9-002U1	10/13/94	13:30:00			0.11		13.2	2.80	0.018	5.35	0.063	0.053	0.49	1.28		0.16	0.025
B1G9-005C2	10/13/94	19:50:00					11.3	2.19	0.008	5.40	0.036	0.030	0.37	1.05		0.17	0.017
B1G9-005G2 (P)*	10/13/94	19:50:00															
B1G9-005U2	10/13/94	13:30:00			0.06		12.0	2.34	0.011	5.20	0.048	0.040	0.50	1.16		0.16	0.025
B1G9-006C	10/13/94	21:30:00					12.7	2.10	0.008	5.50	0.042	0.028	0.44	1.04		0.17	0.018
B1G9-006G (P)*	10/13/94	21:30:00															
B1G9-006U	10/13/94	13:30:00			0.07		14.5	1.76	0.011	5.72	0.056	0.027	0.57	1.02		0.19	0.025
B1G9-008C3	10/14/94	1:25:00					23.2	0.61	0.009	6.73	0.093	0.013	0.90	0.72		0.24	0.024
B1G9-008G3 (P)*	10/14/94	1:25:00															
B1G9-008U3	10/13/94	13:30:00			-0.01		15.1	0.88	0.012	5.57	0.248	0.016	0.94	0.84		0.33	0.025
B1G9-011C4	10/14/94	8:13:00					10.2	1.89	0.011	5.02	0.036	0.022	0.41	0.97		0.16	0.016
B1G9-011G4 (P)*	10/14/94	8:13:00					12.2	1.41	0.010	5.18	0.050		0.44	3.72	0.00	0.25	0.025
B1G9-013C5	10/14/94	11:55:00					11.9	2.43	0.009	5.70	0.042	0.029	0.63	1.06		0.17	0.017
B1G9-013G5 (P)*	10/14/94	11:55:00					12.6	1.62	0.010	5.23	0.050		0.58	2.84	0.00	0.24	0.025
B1G9-013U5	10/14/94	11:55:00			0.06		13.1	1.79	0.010	5.61	0.056	0.026	0.74	0.99		0.17	0.025
B1G9-014C	10/14/94	14:30:00					17.2	1.12	0.040	6.69	0.044	0.018	0.80	0.84		0.20	0.021
B1G9-014G (P)*	10/14/94	14:30:00					12.9	1.39	0.010	5.14	0.050		0.66	3.15	0.00	0.24	0.025
B1M14-001C	10/14/94	11:30:00															
B1W10-002C1	10/13/94	14:00:00					1.90	3.85		31.9	0.028	0.160	0.67	1.20		0.55	0.015
B1W10-003C3	10/13/94	19:28:00					2.75	4.96		2.68	0.033	0.200	0.86	1.55		0.47	0.015
B1W10-004C3	10/14/94	1:40:00					4.76	6.42		22.0	0.040	0.230	1.35	1.96		0.46	0.017
B1W10-006C5	10/14/94	11:45:00					6.70	6.43		22.4	0.036	0.208	0.40	1.91		0.49	0.013
B1W11-001C	10/18/94	16:10:00					2.43	2.64		29.1	0.016	0.082	1.39	0.83		0.84	0.018
* Samples reprocessed for homogeneity for PCT and chemistry comparison purposes																	

B&W Glass Data

Sample No.	MoO_3 (wt%)	Na_2O (wt%)	NiO (wt%)	P_2O_5 (wt%)	SO_3 (wt%)	SiO_2 (wt%)	SrO_2 (wt%)	TiO_2 (wt%)	ZrO_2 (wt%)	TOC (wt%)	TIC (wt%)	Total C (wt%)	Cl (wt%)	F (wt%)	I (wt%)	NO_3^- (wt%)	NO_2^- (wt%)	Total N_2 (wt%)	
Target Values	0.00	20.00	0.00	0.00	0.00	56.91	0.00	0.00	0.00										
Data Sources: B-C-1																			
B1F7-002C1(d)	0.130	15.4	-0.001	0.084		41.3	0.078	0.113	0.042										
B1F7-002C1(s)	0.092	11.0	-0.001	0.059		29.3	0.055	0.080	0.030			2.19	0.23	0.04	0.028	6.82	2.90		
B1F7-002U1	0.110	13.1	-0.001	0.090	0.175	43.8	0.086	0.120	0.042	0.94	1.31	2.25	0.29	0.03	0.0904				
B1F7-005C2(d)	0.128	15.0	-0.001	0.064		41.1	0.081	0.123	0.042										
B1F7-005C2(s)	0.091	10.6	-0.001	0.046		29.2	0.057	0.087	0.030			2.23	0.23	0.05	0.032	6.56	2.79		
B1F7-005U2	0.113	13.8	-0.001	0.080	0.175	42.5	0.083	0.110	0.042	0.97	1.31	2.28	0.31	0.03	0.1082				
B1F7-008C3(d)	0.118	14.9	-0.001	0.076		42.9	0.080	0.138	0.050										
B1F7-008C3(s)	0.084	10.7	0.001	0.054		30.7	0.057	0.098	0.036			2.21	0.27	0.05	0.036	7.58	3.23		
B1F7-008U3	0.114	13.8	-0.001	0.090	0.175	42.4	0.083	0.120	0.039	0.93	1.37	2.30	0.32	0.05	0.0941				
B1F7-013C(d)	0.118	14.6	-0.001	0.095		42.0	0.082	0.100	0.036										
B1F7-013C(s)	0.084	10.4	-0.001	0.068		30.0	0.059	0.072	0.025			2.17	0.31	0.04	0.032	8.33	3.65		
B1F7-013U	0.111	13.7	-0.001	0.090	0.175	42.3	0.082	0.090	0.027	0.91	1.34	2.25	0.30	0.03	0.1082				
B1G9-002C1	0.069	14.0	0.013			53.4	0.099	0.263	0.061				0.11	-0.005					
B1G9-002U1	0.104	15.7	0.008	0.155	-0.125	59.2	0.106	0.210	0.065				0.11	0.04	0.0156				
B1G9-005C2	0.078	12.9	0.004			62.6	0.097	0.183	0.068				0.07	-0.005					
B1G9-005G2 (P)*																			
B1G9-005U2	0.086	13.9	0.003	0.120	-0.125	63.2	0.098	0.210	0.072				0.07	0.02	0.0105				
B1G9-006C	0.076	13.6	0.006			60.0	0.097	0.165	0.061				0.06	-0.005					
B1G9-006G (P)*																			
B1G9-006U	0.068	13.9	0.004	0.160	-0.125	60.8	0.105	0.230	0.075				0.05	0.01	0.0095				
B1G9-008C3	0.026	14.2	0.017			48.3	0.115	0.340	0.055				0.01	-0.005					
B1G9-008G3 (P)*																			
B1G9-008U3	0.038	10.6	0.008	0.315	-0.125	64.1	0.091	0.310	0.078				0.02	0.02	0.0025				
B1G9-011C4	0.072	11.7	0.005			65.5	0.089	0.208	0.092				0.01	-0.005					
B1G9-011G4 (P)*	0.060	12.1	0.040	-0.180	-0.200	64.0	0.100	0.190	0.080										
B1G9-013C5	0.091	14.8	0.006			59.1	0.105	0.145	0.052				0.04	-0.005					
B1G9-013G5 (P)*	0.070	13.4	0.040	-0.200	-0.200	62.7	0.100	0.170	0.060										
B1G9-013U5	0.071	13.4	0.003	0.160	-0.125	63.0	0.101	0.185	0.059				0.05	0.02	0.0075				
B1G9-014C	0.046	14.9	0.012			54.0	0.110	0.205	0.093				0.01	-0.005					
B1G9-014G (P)*	0.060	12.5	0.040	-0.180	-0.200	63.0	0.100	0.170	0.060										
B1M14-001C													0.13		0.021	0.0019	0.0044		
B1W10-002C1	0.103	7.20	-0.008			5.62	0.036		-0.005				0.51	0.08	0.105	0.0068	0.55		
B1W10-003C3	0.138	10.3	-0.008			8.36	0.046		-0.005				0.52	0.08	0.120	0.0039	0.54		
B1W10-004C3	0.178	14.1	-0.008			12.8	0.168		-0.005				0.49	0.09	0.087	0.0041	0.56		
B1W10-006C5	0.178	14.6	-0.008			10.0	1.258		-0.005				0.49	0.07	0.076	0.0030	0.52		
B1W11-001C	0.067	6.13	-0.008			6.54	0.044		-0.005				0.32	0.06	0.074	0.0047	0.35		
* Samples reproces																			

B&W Glass Data

Sample No.	PO_4^{3-}	SO_4^{2-}	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	Leach. pH	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)			(vol%)	I.D.	Enriched / Depleted		(g/m^2-day)	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)
Target Values			98.37		Petrographic	Petrographic	SEM / EDX				0.102	
Data Sources: B-C-1												
B1F7-002C1(d)			74.54									
B1F7-002C1(s)	0.045	0.17	94.32									
B1F7-002U1			76.84									
B1F7-005C2(d)			73.98									
B1F7-005C2(s)	0.032	0.15	93.56									
B1F7-005U2			76.07									
B1F7-008C3(d)			75.74									
B1F7-008C3(s)	0.048	0.15	96.19									
B1F7-008U3			76.19									
B1F7-013C(d)			74.66									
B1F7-013C(s)	0.038	0.15	96.59									
B1F7-013U			75.83									
B1G9-002C1			96.43		<<1	Q, Z, Cm, Al Rf(C, Ky, Na-An, Sp)	N.A.	11.0	0.010	0.013	0.018	0.012
B1G9-002U1			99.01	0.484				10.9	0.009	0.018	0.044	0.013
B1G9-005C2			96.57		1-2	Q, Z, Al Rf (C, Ky, Na-An)	Fe / Si, Ca, Al, Na	10.8	0.007	0.008	0.025	0.006
B1G9-005G2 (P)*								10.5	0.007	0.010	0.022	
B1G9-005U2			99.19	0.546				10.6	0.006	0.010	0.025	-0.008
B1G9-006C			96.05		1-2	Q, Ty, Cri, Cm, Al Rf (few)	Zr / Si, Ca, Al, Na, K	10.8	0.007	0.010	0.027	0.007
B1G9-006G (P)*								10.6	0.007	0.010	0.023	
B1G9-006U			99.22	0.588				10.6	0.006	0.008	0.025	-0.008
B1G9-008C3			95.59		5-7	Q, Ty, Cri, Z, Cm, Al Rf (C, Ky, Sp, Na-An)	Zr / Si, Ca, Al, Na, K	10.3	0.007	0.006	0.017	0.003
B1G9-008G3 (P)*								10.2	0.006	0.005	0.015	
B1G9-008U3			99.52	0.468				9.5	0.004	0.005	0.016	-0.008
B1G9-011C4			96.45		~1	Q, Ty, Cri, ZC, Cm, Al Rf (C, Sp, Na-An)	N.A.	10.3	0.008	0.008	0.020	0.004
B1G9-011G4 (P)*								10.4	0.007	0.008	0.019	
B1G9-013C5			96.28	0.620	<1	Q, Ty, Cri, Cm, ZC, Al Rf (C, Sp, Sp, Na-An)	Zr / Si, Ca, Al, Na, K	10.6	0.008	0.013	0.014	0.009
B1G9-013G5 (P)*								10.6	0.007	0.010	0.024	
B1G9-013U5			99.40	0.541				10.6	0.006	0.009	0.024	-0.008
B1G9-014C			96.34	0.620	~10	Q, Ty, Cri, Al Rf (C, Ky, Na-An, Sp), Cm, ZC	Zr / Si, Ca, Al, Na, K	10.3	0.008	0.008	0.010	0.005
B1G9-014G (P)*								10.4	0.007	0.007	0.019	
B1M14-001C	-0.020	0.12	0.28									
B1W10-002C1	-0.020	0.97	55.39									
B1W10-003C3	-0.020	0.94	34.54									
B1W10-004C3	-0.020	1.03	66.73									
B1W10-006C5	-0.020	0.57	66.28									
B1W11-001C	-0.020	1.71	52.66									
* Samples reproces												

B&W Glass Raw Data - Corning

Sample No.	Date	Time	Density	Settled Sol.	LOI 600°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3	Na_2O
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor						1	1	1	1	1	1	1	1	1		1	1	1	1
B1G9-002C1							19.3	1.94	0.007	5.31	0.069	0.032	0.68	1.03		0.19	0.0210	0.067	14.0
B1G9-002C1							19.3	1.91	0.008	5.27	0.073	0.032	0.69	1.03		0.20	0.0200	0.068	14.0
B1G9-002C1							19.1	1.89	0.008	5.30	0.068	0.032	0.69	1.04		0.20	0.0200	0.071	14.0
B1G9-002C1							19.1	1.94	0.008	5.31	0.070	0.032	0.70	1.05		0.20	0.0210	0.069	14.0
Average	10/13/94	13:30:00					19.2	1.92	0.008	5.30	0.070	0.032	0.69	1.04		0.20	0.021	0.069	14.0
B1G9-005C2							11.3	2.21	0.008	5.40	0.035	0.030	0.37	1.05		0.17	0.0170	0.079	12.9
B1G9-005C2							11.5	2.16	0.008	5.37	0.036	0.030	0.37	1.05		0.16	0.0160	0.077	12.9
B1G9-005C2							11.4	2.16	0.009	5.41	0.035	0.029	0.38	1.05		0.17	0.0170	0.078	12.9
B1G9-005C2							11.0	2.21	0.007	5.43	0.037	0.029	0.37	1.05		0.16	0.0170	0.078	12.9
Average	10/13/94	19:50:00					11.3	2.19	0.008	5.40	0.036	0.030	0.37	1.05		0.17	0.017	0.078	12.9
B1G9-006C							12.7	2.12	0.008	5.49	0.044	0.028	0.45	1.04		0.17	0.0180	0.078	13.7
B1G9-006C							12.6	2.10	0.008	5.48	0.042	0.028	0.44	1.04		0.17	0.0180	0.075	13.6
B1G9-006C							12.8	2.09	0.007	5.54	0.038	0.028	0.45	1.03		0.17	0.0170	0.075	13.6
B1G9-006C							12.6	2.07	0.008	5.48	0.045	0.028	0.43	1.03		0.16	0.0170	0.075	13.6
Average	10/13/94	21:30:00					12.7	2.10	0.008	5.50	0.042	0.028	0.44	1.04		0.17	0.018	0.076	13.6
B1G9-008C3							23.0	0.62	0.009	6.68	0.089	0.013	0.91	0.72		0.25	0.0230	0.026	14.2
B1G9-008C3							23.1	0.61	0.009	6.73	0.089	0.013	0.88	0.73		0.24	0.0240	0.027	14.2
B1G9-008C3							23.3	0.61	0.010	6.75	0.096	0.013	0.90	0.72		0.24	0.0230	0.026	14.2
B1G9-008C3							23.4	0.60	0.009	6.74	0.097	0.013	0.90	0.72		0.24	0.0240	0.025	14.2
Average	10/14/94	1:25:00					23.2	0.61	0.009	6.73	0.093	0.013	0.90	0.72		0.24	0.024	0.026	14.2
B1G9-011C4							10.2	1.89	0.011	5.09	0.040	0.022	0.40	0.97		0.16	0.0160	0.072	11.7
B1G9-011C4							10.2	1.89	0.011	5.03	0.037	0.022	0.41	0.96		0.16	0.0160	0.070	11.7
B1G9-011C4							10.1	1.91	0.010	4.95	0.036	0.022	0.40	0.97		0.16	0.0160	0.074	11.7
B1G9-011C4							10.4	1.88	0.011	5.00	0.032	0.022	0.41	0.97		0.16	0.0160	0.070	11.7
Average	10/14/94	8:13:00					10.2	1.89	0.011	5.02	0.036	0.022	0.41	0.97		0.16	0.016	0.072	11.7
B1G9-013C5							11.8	2.42	0.009	5.70	0.041	0.029	0.62	1.06		0.17	0.0160	0.091	14.8
B1G9-013C5							12.0	2.42	0.009	5.72	0.044	0.029	0.65	1.06		0.18	0.0170	0.093	14.8
B1G9-013C5							11.9	2.45	0.009	5.72	0.043	0.029	0.63	1.06		0.17	0.0170	0.089	14.8
B1G9-013C5							11.7	2.44	0.010	5.66	0.041	0.029	0.61	1.06		0.17	0.0160	0.089	14.8
Average	10/14/94	11:55:00					11.9	2.43	0.009	5.70	0.042	0.029	0.63	1.06		0.17	0.017	0.091	14.8
B1G9-014C							17.4	1.11	0.042	6.71	0.045	0.017	0.81	0.84		0.20	0.020	0.044	14.9
B1G9-014C							17.1	1.13	0.040	6.72	0.044	0.017	0.80	0.84		0.20	0.020	0.044	14.9
B1G9-014C							17.2	1.12	0.038	6.68	0.042	0.018	0.80	0.83		0.20	0.021	0.050	15.0
B1G9-014C							17.1	1.13	0.040	6.65	0.045	0.018	0.78	0.83		0.19	0.021	0.047	14.9
Average	10/14/94	14:30:00					17.2	1.12	0.040	6.69	0.044	0.018	0.80	0.84		0.20	0.021	0.046	14.9
B1M14-001C																			
B1M14-001C																			
B1M14-001C																			
B1M14-001C																			
Average	10/14/94	11:30:00																	
B1F7-002C1							7.48	4.06	0.005	3.62	0.034	0.130	0.21	1.57		0.100	0.0120	0.130	15.4
B1F7-002C1							7.52	4.07	0.004	3.63	0.033	0.130	0.21	1.57		0.100	0.0130	0.130	15.5
B1F7-002C1							7.65	4.11	0.005	3.68	0.032	0.130	0.22	1.55		0.110	0.0130	0.130	15.4
B1F7-002C1							7.71	4.08	0.005	3.71	0.035	0.130	0.23	1.54		0.110	0.0120	0.130	15.4
Dried Avg	10/13/94	13:30:00				0.0	7.59	4.08	0.005	3.66	0.034	0.130	0.22	1.56		0.105	0.0125	0.130	15.4
Slurry Avg	10/13/94	13:30:00				29.0	5.39	2.90	0.003	2.60	0.024	0.092	0.15	1.11		0.075	0.0089	0.092	11.0
B1F7-005C2							7.70	4.00	0.005	3.74	0.035	0.120	0.22	1.44		0.110	0.0120	0.130	14.9
B1F7-005C2							7.66	3.99	0.004	3.78	0.032	0.120	0.22	1.44		0.110	0.0110	0.130	14.9
B1F7-005C2							7.82	4.00	0.005	3.76	0.033	0.120	0.21	1.46		0.110	0.0140	0.120	15.0
B1F7-005C2							8.05	3.98	0.004	3.82	0.032	0.120	0.22	1.46		0.110	0.0140	0.130	15.0
Dried Avg	10/13/94	20:10:00				0.0	7.81	3.99	0.005	3.78	0.033	0.120	0.22	1.45		0.110	0.0128	0.128	15.0
Slurry Avg	10/13/94	20:10:00				28.9	5.55	2.84	0.003	2.68	0.023	0.085	0.15	1.03		0.078	0.0091	0.091	10.6
B1F7-008C3							7.58	4.05	0.005	3.68	0.031	0.120	0.22	1.46		0.110	0.0150	0.120	14.9

Revision 0

B&W Glass Raw Data - Corning

Sample No.	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl^-	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}	SO_4^{2-}	FeO
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	
Conver. factor	1	1		1	1	1	1			1	1	1	1	1	1		1	1	
B1G9-002C1	0.015			53.4	0.097	0.25	0.059				0.105	-0.01							
B1G9-002C1	0.011			53.2	0.100	0.26	0.060					0.00							
B1G9-002C1	0.013			53.1	0.100	0.27	0.061					-0.01							
B1G9-002C1	0.014			53.7	0.100	0.27	0.063					0.00							
Average	0.013			53.4	0.099	0.26	0.061				0.105	-0.01							
B1G9-005C2	0.003			62.7	0.098	0.18	0.069				0.074	-0.01							
B1G9-005C2	0.004			62.5	0.096	0.18	0.068					0.00							
B1G9-005C2	0.002			62.4	0.099	0.19	0.071					-0.01							
B1G9-005C2	0.008			62.8	0.093	0.18	0.064					0.00							
Average	0.004			62.6	0.097	0.18	0.068				0.074	-0.01							
B1G9-006C	0.005			59.9	0.100	0.18	0.067				0.062	-0.01							
B1G9-006C	0.008			59.8	0.099	0.17	0.061					0.00							
B1G9-006C	0.003			60.3	0.100	0.17	0.058					-0.01							
B1G9-006C	0.009			59.8	0.088	0.14	0.059					0.00							
Average	0.006			60.0	0.097	0.17	0.061				0.062	-0.01							
B1G9-008C3	0.017			48.0	0.120	0.34	0.056				0.006	-0.01							
B1G9-008C3	0.017			48.5	0.110	0.34	0.052					0.00							
B1G9-008C3	0.016			48.5	0.120	0.34	0.059					-0.01							
B1G9-008C3	0.016			48.2	0.110	0.34	0.054					0.00							
Average	0.017			48.3	0.115	0.34	0.055				0.006	-0.01							
B1G9-011C4	0.004			65.8	0.088	0.21	0.091				0.006	-0.01							
B1G9-011C4	0.006			65.3	0.090	0.20	0.090					0.00							
B1G9-011C4	0.004			65.7	0.088	0.20	0.091					-0.01							
B1G9-011C4	0.006			65.3	0.090	0.22	0.095					0.00							
Average	0.005			65.5	0.089	0.21	0.092				0.006	-0.01							
B1G9-013C5	0.007			59.0	0.100	0.14	0.054				0.041	-0.01							
B1G9-013C5	0.005			59.1	0.110	0.16	0.050					0.00							0.34
B1G9-013C5	0.002			59.3	0.110	0.15	0.053					-0.01							
B1G9-013C5	0.008			59.0	0.100	0.13	0.050					0.00							0.36
Average	0.006			59.1	0.105	0.15	0.052				0.041	-0.01							0.35
B1G9-014C	0.011			53.9	0.110	0.190	0.092				0.013	-0.01							
B1G9-014C	0.014			54.3	0.110	0.210	0.087					0.00							0.45
B1G9-014C	0.008			53.8	0.110	0.220	0.099					-0.01							
B1G9-014C	0.015			53.9	0.110	0.200	0.095					0.00							0.44
Average	0.012			54.0	0.110	0.21	0.093				0.013	-0.01							0.45
B1M14-001C											0.13		0.021	0.0019	0.0045		-0.020	0.11	
B1M14-001C											0.13		0.020	0.0019	0.0043		-0.020	0.13	
B1M14-001C																			
B1M14-001C																			
Average											0.13		0.021	0.0019	0.0044		-0.020	0.12	
B1F7-002C1	-0.001	0.078		40.6	0.077	0.110	0.047				0.23	0.04	0.022	6.83	2.92		0.043	0.17	
B1F7-002C1		0.092		40.8	0.077	0.110	0.046			2.21	0.22	0.04	0.034	6.80	2.87		0.047	0.16	
B1F7-002C1	-0.001	0.077		41.7	0.078	0.110	0.039					0.04							
B1F7-002C1		0.087		42.0	0.079	0.120	0.037			2.16		0.04							
Dried Avg	-0.001	0.084		41.3	0.078	0.113	0.042												
Slurry Avg	-0.001	0.059		29.3	0.055	0.080	0.030			2.19	0.23	0.04	0.028	6.82	2.90		0.045	0.17	
B1F7-005C2	-0.001	0.073		40.2	0.079	0.110	0.043				0.23	0.05	0.032	6.54	2.78		0.026	0.15	
B1F7-005C2		0.067		40.4	0.079	0.120	0.039			2.25	0.23	0.05	0.031	6.58	2.79		0.037	0.14	
B1F7-005C2	-0.001	0.068		41.6	0.081	0.130	0.043					0.05							
B1F7-005C2		0.048		42.1	0.083	0.130	0.043			2.21		0.05							
Dried Avg	-0.001	0.064		41.1	0.081	0.123	0.042												
Slurry Avg	-0.001	0.046		29.2	0.057	0.087	0.030			2.23	0.23	0.05	0.032	6.56	2.79		0.032	0.15	
B1F7-008C3	0.002	0.077		43.0	0.080	0.130	0.050				0.27	0.05	0.035	7.57	3.22		0.043	0.14	

B&W Glass Raw Data - Corning

Sample No.	Fe(II)/Total Fe	Solid Inclusions (vol%)	Solid Inclusions I.D.	Cord Composition Enriched / Depleted	Leach. pH	Si (PCT) (ppm)	B (PCT) (ppm)	Na (PCT) (ppm)	K (PCT) (ppm)
Conver. factor	1	Petrographic	Petrographic	SEM ; EDX	1	2.67E-04	1.32E-02	7.07E-04	1.03E-02
B1G9-002C1						36	0.97	25	1.20
B1G9-002C1					11.0	36	0.96	25	1.20
B1G9-002C1						36	0.96	27	1.20
B1G9-002C1					11.0	35	1.00	26	1.20
Average		<<1	Q, Z, Cm, Al Rf(C, Ky, Na-An, Sp)	N.A.	11.0	36	0.97	26	1
B1G9-005C2						25	0.57	35	0.56
B1G9-005C2					10.7	25	0.58	36	0.58
B1G9-005C2						25	0.57	35	0.56
B1G9-005C2					10.8	25	0.56	35	0.56
Average		1-2	Q, Z, Al Rf (C, Ky, Na-An)	Fe / Si, Ca, Al, Na	10.8	25	0.57	35	0.57
B1G9-006C						28	0.77	39	0.65
B1G9-006C					10.8	28	0.78	39	0.65
B1G9-006C						27	0.74	35	0.62
B1G9-006C					10.7	27	0.75	37	0.63
Average		1-2	Q, Ty, Cri, Cm, Al Rf (few)	Zr / Si, Ca, Al, Na, K	10.8	28	0.76	38	0.64
B1G9-008C3						24	0.42	24	0.25
B1G9-008C3					10.3	25	0.42	24	0.26
B1G9-008C3						25	0.44	25	0.26
B1G9-008C3					10.2	25	0.44	25	0.25
Average		5-7	Q, Ty, Cri, Z, Cm, Al Rf (C, Ky, Sp, Na-An)	Zr / Si, Ca, Al, Na, K	10.3	25	0.43	25	0.26
B1G9-011C4						31	0.58	29	0.41
B1G9-011C4					10.3	30	0.59	29	0.42
B1G9-011C4						29	0.58	27	0.40
B1G9-011C4					10.2	29	0.58	27	0.39
Average		~1	Q, Ty, Cri, ZC, Cm, Al Rf (C, Sp, Na-An)	N.A.	10.3	30	0.58	28	0.41
B1G9-013C5						31	0.98	19	0.90
B1G9-013C5					10.6	32	0.99	20	0.90
B1G9-013C5						31	0.97	20	0.90
B1G9-013C5					10.5	32	0.99	20	0.90
Average	0.62	<1	Q, Ty, Cri, Cm, ZC, Al Rf (C, Sp, Sp, Na-An)	Zr / Si, Ca, Al, Na, K	10.6	32	0.98	20	0.90
B1G9-014C						32	0.60	14	0.50
B1G9-014C					10.3	32	0.60	14	0.50
B1G9-014C						31	0.58	14	0.50
B1G9-014C					10.2	31	0.57	14	0.50
Average	0.62	~10	Q, Ty, Cri, Al Rf (C, Ky, Na-An, Sp), Cm, ZC	Zr / Si, Ca, Al, Na, K	10.3	32	0.59	14	0.50
B1M14-001C									
B1M14-001C									
B1M14-001C									
B1M14-001C									
Average									
B1F7-002C1									
B1F7-002C1									
B1F7-002C1									
B1F7-002C1									
Dried Avg									
Slurry Avg									
B1F7-005C2									
B1F7-005C2									
B1F7-005C2									
B1F7-005C2									
Dried Avg									
Slurry Avg									
B1F7-008C3									

B&W Glass Raw Data - Corning

Sample No.	Date	Time	Density	Settled Sol.	LOI 600°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3	Na_2O
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
B1F7-008C3							7.62	4.01	0.005	3.63	0.032	0.120	0.21	1.45		0.110	0.0150	0.110	14.9
B1F7-008C3							8.01	4.03	0.005	3.82	0.036	0.120	0.22	1.45		0.110	0.0140	0.120	14.9
B1F7-008C3							7.99	4.07	0.004	3.73	0.031	0.120	0.22	1.45		0.110	0.0140	0.120	14.8
Dried Avg	10/14/94	1:20:00				0.0	7.80	4.04	0.005	3.72	0.033	0.120	0.22	1.45		0.110	0.015	0.118	14.9
Slurry Avg	10/14/94	1:20:00				28.4	5.58	2.89	0.003	2.66	0.023	0.086	0.16	1.04		0.079	0.010	0.084	10.7
B1F7-013C							7.88	3.84	0.006	3.83	0.030	0.120	0.44	1.44		0.110	0.0150	0.120	14.6
B1F7-013C							7.88	3.84	0.005	3.80	0.032	0.120	0.44	1.43		0.110	0.0140	0.120	14.6
B1F7-013C							7.89	3.81	0.004	3.77	0.032	0.120	0.41	1.44		0.110	0.0110	0.110	14.6
B1F7-013C							8.02	3.86	0.004	3.73	0.034	0.120	0.43	1.44		0.110	0.0100	0.120	14.6
Dried Avg	10/14/94	11:30:00				0.0	7.92	3.84	0.005	3.78	0.032	0.120	0.43	1.44		0.110	0.0125	0.118	14.6
Slurry Avg	10/14/94	11:30:00				28.5	5.66	2.74	0.003	2.70	0.023	0.086	0.31	1.03		0.079	0.0089	0.084	10.4
B1W10-002C1							1.94	3.83		31.8	0.029	0.160	0.67	1.20		0.56	0.015	0.11	7.17
B1W10-002C1							1.92	3.83		31.9	0.028	0.160	0.66	1.20		0.55	0.015	0.10	7.17
B1W10-002C1							1.90	3.87		31.8	0.027	0.160	0.69	1.20		0.55	0.015	0.10	7.22
B1W10-002C1							1.84	3.86		31.9	0.026	0.160	0.66	1.20		0.53	0.014	0.10	7.22
Average	10/13/94	14:00:00					1.90	3.85		31.9	0.028	0.160	0.67	1.20		0.55	0.015	0.103	7.20
B1W10-003C2							2.78	4.94		2.66	0.034	0.200	0.88	1.54		0.47	0.015	0.14	10.3
B1W10-003C2							2.69	4.99		2.66	0.031	0.200	0.84	1.55		0.45	0.014	0.13	10.3
B1W10-003C2							2.77	4.97		2.69	0.034	0.200	0.85	1.55		0.47	0.015	0.14	10.3
B1W10-003C2							2.77	4.95		2.70	0.033	0.200	0.85	1.55		0.47	0.015	0.14	10.3
Average	10/13/94	19:28:00					2.75	4.96		2.68	0.033	0.200	0.86	1.55		0.47	0.015	0.14	10.3
B1W10-004C3							6.03	6.54		22.2	0.039	0.230	1.97	1.96		0.52	0.019	0.17	14.1
B1W10-004C3							6.04	6.46		21.8	0.039	0.230	1.99	1.96		0.53	0.019	0.17	14.1
B1W10-004C3							3.49	6.29		22.0	0.039	0.230	0.72	1.96		0.39	0.014	0.18	14.1
B1W10-004C3							3.49	6.37		22.1	0.041	0.230	0.73	1.96		0.41	0.015	0.19	14.1
Average	10/14/94	1:40:00					4.76	6.42		22.0	0.040	0.230	1.35	1.96		0.46	0.017	0.18	14.1
B1W10-006C5							10.30	6.36		22.3	0.036	0.210	0.40	1.90		0.60	0.013	0.18	14.6
B1W10-006C5							10.50	6.43		22.5	0.040	0.210	0.42	1.91		0.65	0.013	0.19	14.6
B1W10-006C5							2.98	6.46		22.5	0.029	0.210	0.35	1.90		0.33	0.011	0.15	14.5
B1W10-006C5							3.00	6.47		22.4	0.040	0.200	0.43	1.93		0.39	0.013	0.19	14.5
Average	10/14/94	11:45:00					6.70	6.43		22.4	0.036	0.208	0.40	1.91		0.49	0.013	0.18	14.6
B1W11-001C							2.35	2.65		29.3	0.016	0.082	1.43	0.83		0.86	0.018	0.068	6.16
B1W11-001C							2.45	2.65		29.1	0.015	0.082	1.40	0.83		0.84	0.018	0.067	6.13
B1W11-001C							2.48	2.66		29.0	0.017	0.081	1.43	0.84		0.85	0.018	0.070	6.13
B1W11-001C							2.44	2.59		29.1	0.015	0.081	1.31	0.83		0.79	0.017	0.064	6.09
Average	10/18/94	16:10:00					2.43	2.64		29.1	0.016	0.082	1.39	0.83		0.84	0.018	0.067	6.13

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOI 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3	Na_2O
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values							10.00	5.00	0.00	5.00	0.00	0.00	0.00	1.46	0.00	0.00	0.00	0.00	20.00
B1G9-002C1	10/13/94	13:30:00					19.2	1.92	0.008	5.30	0.070	0.032	0.69	1.04		0.20	0.021	0.069	14.0
B1G9-005C2	10/13/94	19:50:00					11.3	2.19	0.008	5.40	0.036	0.030	0.37	1.05		0.17	0.017	0.078	12.9
B1G9-006C	10/13/94	21:30:00					12.7	2.10	0.008	5.50	0.042	0.028	0.44	1.04		0.17	0.018	0.076	13.6
B1G9-008C3	10/14/94	1:25:00					23.2	0.61	0.009	6.73	0.093	0.013	0.90	0.72		0.24	0.024	0.026	14.2
B1G9-011C4	10/14/94	8:13:00					10.2	1.89	0.011	5.02	0.036	0.022	0.41	0.97		0.16	0.016	0.072	11.7
B1G9-013C5	10/14/94	11:55:00					11.9	2.43	0.009	5.70	0.042	0.029	0.63	1.06		0.17	0.017	0.091	14.8
B1G9-014C	10/14/94	14:30:00					17.2	1.12	0.040	6.69	0.044	0.018	0.80	0.84		0.20	0.021	0.046	14.9
B1M14-001C	10/14/94	11:30:00																	
B1F7-002C1(d)	10/13/94	13:30:00				0.0	7.6	4.08	0.005	3.66	0.034	0.130	0.22	1.56		0.11	0.013	0.130	15.4
B1F7-002C1(s)	10/13/94	13:30:00				29.0	5.4	2.90	0.003	2.60	0.024	0.092	0.15	1.11		0.07	0.009	0.092	11.0
B1F7-005C2(d)	10/13/94	20:10:00				0.0	7.8	3.99	0.005	3.78	0.033	0.120	0.22	1.45		0.11	0.013	0.128	15.0

MSC-SD-NV-SC-[illegible]
Revision 0

B&W Glass Raw Data - Corning

Sample No.	NiO (wt%)	P_2O_5 (wt%)	SO_3 (wt%)	SiO_2 (wt%)	SrO (wt%)	TiO_2 (wt%)	ZrO_2 (wt%)	TOC (wt%)	TIC (wt%)	Total C (wt%)	Cl^- (wt%)	F^- (wt%)	Br^- (wt%)	NO_3^- (wt%)	NO_2^- (wt%)	Total N_2 (wt%)	PO_4^{3-} (wt%)	SO_4^{2-} (wt%)	FeO
B1F7-008C3	0.002	0.078		42.6	0.078	0.140	0.054			2.19	0.27	0.05	0.036	7.58	3.24		0.053	0.15	
B1F7-008C3	-0.001	0.070		43.4	0.082	0.140	0.047					0.05							
B1F7-008C3		0.078		42.6	0.080	0.140	0.048			2.22		0.05							
Dried Avg	-0.001	0.076		42.9	0.080	0.138	0.050												
Slurry Avg	0.001	0.054		30.7	0.057	0.098	0.036			2.21	0.27	0.05	0.036	7.58	3.23		0.048	0.15	
B1F7-013C	-0.001	0.099		42.7	0.082	0.100	0.040				0.30	0.04	0.033	8.35	3.52		0.043	0.15	
B1F7-013C		0.090		42.5	0.082	0.100	0.035			2.17	0.31	0.04	0.030	8.30	3.78		0.033	0.15	
B1F7-013C	-0.001	0.080		41.4	0.080	0.100	0.033					0.04							
B1F7-013C		0.110		41.2	0.085	0.100	0.034			2.17		0.04							
Dried Avg	-0.001	0.095		42.0	0.082	0.100	0.036												
Slurry Avg	-0.001	0.068		30.0	0.059	0.072	0.025			2.17	0.31	0.04	0.032	8.33	3.65		0.038	0.15	
B1W10-002C1	-0.008			5.73	0.039		-0.005				0.50	0.08	0.100	0.0066	0.54		-0.020	0.94	
B1W10-002C1	-0.008			5.74	0.038		-0.005				0.51	0.08	0.110	0.0069	0.56		-0.020	1.00	
B1W10-002C1	-0.008			5.52	0.035		-0.005					0.08							
B1W10-002C1	-0.008			5.50	0.033		-0.005					0.08							
Average	-0.008			5.62	0.036		-0.005				0.51	0.08	0.105	0.0068	0.55		-0.020	0.97	
B1W10-003C2	-0.008			8.41	0.045		-0.005				0.52	0.08	0.120	0.0039	0.55		-0.020	0.93	
B1W10-003C2	-0.008			8.32	0.043		-0.005				0.51	0.08	0.120	0.0039	0.53		-0.020	0.94	
B1W10-003C2	-0.008			8.33	0.048		-0.005					0.08							
B1W10-003C2	-0.008			8.37	0.048		-0.005					0.08							
Average	-0.008			8.36	0.046		-0.005				0.52	0.08	0.120	0.0039	0.54		-0.020	0.94	
B1W10-004C3	-0.008			14.1	0.280		-0.005				0.49	0.09	0.087	0.0038	0.55		-0.020	1.00	
B1W10-004C3	-0.008			14.3	0.280		-0.005				0.48	0.09	0.086	0.0043	0.56		-0.020	1.05	
B1W10-004C3	-0.008			11.2	0.055		-0.005					0.09							
B1W10-004C3	-0.008			11.5	0.057		-0.005					0.09							
Average	-0.008			12.8	0.168		-0.005				0.49	0.09	0.087	0.0041	0.56		-0.020	1.03	
B1W10-006C5	-0.008			9.76	2.490		-0.005				0.50	0.07	0.075	0.0028	0.52		-0.020	0.56	
B1W10-006C5	-0.008			9.70	2.430		-0.005				0.47	0.07	0.077	0.0031	0.52		-0.020	0.57	
B1W10-006C5	-0.008			10.1	0.055		-0.005					0.07							
B1W10-006C5	-0.008			10.3	0.058		-0.005					0.07							
Average	-0.008			9.97	1.258		-0.005				0.49	0.07	0.076	0.0030	0.52		-0.020	0.57	
B1W11-001C	-0.008			6.52	0.034		-0.005				0.32	0.06	0.070	0.0046	0.35		-0.020	1.71	
B1W11-001C	-0.008			6.47	0.033		-0.005				0.31	0.06	0.077	0.0047	0.35		-0.020	1.71	
B1W11-001C	-0.008			6.58	0.057		-0.005					0.06							
B1W11-001C	-0.008			6.59	0.051		-0.005					0.06							
Average	-0.008			6.54	0.044		-0.005				0.32	0.06	0.074	0.0047	0.35		-0.020	1.71	

Sample No.	NiO (wt%)	P_2O_5 (wt%)	SO_3 (wt%)	SiO_2 (wt%)	SrO (wt%)	TiO_2 (wt%)	ZrO_2 (wt%)	TOC (wt%)	TIC (wt%)	Total C (wt%)	Cl^- (wt%)	F^- (wt%)	Br^- (wt%)	NO_3^- (wt%)	NO_2^- (wt%)	Total N_2 (wt%)	PO_4^{3-} (wt%)	SO_4^{2-} (wt%)	Total
Target Values	0.00	0.00	0.00	56.91	0.00	0.00	0.00				0.00	0.00	0.00	0.00	0.00		0.00	0.00	98.37
B1G9-002C1	0.013			53.4	0.099	0.263	0.061				0.11	-0.005							96.43
B1G9-005C2	0.004			62.6	0.097	0.183	0.068				0.07	-0.005							96.57
B1G9-006C	0.006			60.0	0.097	0.165	0.061				0.06	-0.005							96.05
B1G9-008C3	0.017			48.3	0.115	0.340	0.055				0.01	-0.005							95.59
B1G9-011C4	0.005			65.5	0.089	0.208	0.092				0.01	-0.005							96.45
B1G9-013C5	0.006			59.1	0.105	0.145	0.052				0.04	-0.005							96.28
B1G9-014C	0.012			54.0	0.110	0.205	0.093				0.01	-0.005							96.34
B1M14-001C											0.13		0.021	0.0019	0.0044		-0.020	0.12	0.28
B1F7-002C1(d)	-0.001	0.084		41.3	0.078	0.113	0.042												74.54
B1F7-002C1(s)	-0.001	0.059		29.3	0.055	0.080	0.030			2.19	0.23	0.04	0.028	6.82	2.90		0.045	0.17	94.32
B1F7-005C2(d)	-0.001	0.064		41.1	0.081	0.123	0.042												73.98

B&W Glass Raw Data - Corning

Sample No.	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	Leach. pH	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
		(vol%)	I.D.	Enriched / Depleted		(ppm)	(ppm)	(ppm)	(ppm)
B1F7-008C3									
B1F7-008C3									
B1F7-008C3									
Dried Avg									
Slurry Avg									
B1F7-013C									
B1F7-013C									
B1F7-013C									
B1F7-013C									
Dried Avg									
Slurry Avg									
B1W10-002C1									
B1W10-002C1									
B1W10-002C1									
B1W10-002C1									
Average									
B1W10-003C2									
B1W10-003C2									
B1W10-003C2									
B1W10-003C2									
Average									
B1W10-004C3									
B1W10-004C3									
B1W10-004C3									
B1W10-004C3									
Average									
B1W10-006C5									
B1W10-006C5									
B1W10-006C5									
B1W10-006C5									
Average									
B1W11-001C									
B1W11-001C									
B1W11-001C									
B1W11-001C									
Average									

Sample No.	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	Leach. pH	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
		(vol%)	I.D.	Enriched / Depleted		(g/m^2-d)	(g/m^2-d)	(g/m^2-d)	(g/m^2-d)
Target Values		Petrographic	Petrographic	SEM / EDX				0.102	
B1G9-002C1		<<1	Q, Z, Cm, Al Rf(C, Ky, Na-An, Sp)	N.A.	11.0	0.010	0.013	0.018	0.012
B1G9-005C2		1-2	Q, Z, Al Rf (C, Ky, Na-An)	Fe / Si, Ca, Al, Na	10.8	0.007	0.008	0.025	0.006
B1G9-006C		1-2	Q, Ty, Cri, Cm, Al Rf (few)	Zr / Si, Ca, Al, Na, K	10.8	0.007	0.010	0.027	0.007
B1G9-008C3		5-7	Q, Ty, Cri, Z, Cm, Al Rf (C, Ky, Sp, Na-An)	Zr / Si, Ca, Al, Na, K	10.3	0.007	0.006	0.017	0.003
B1G9-011C4		~1	Q, Ty, Cri, ZC, Cm, Al Rf (C, Sp, Na-An)	N.A.	10.3	0.008	0.008	0.020	0.004
B1G9-013C5	0.62	<1	Q, Ty, Cri, Cm, ZC, Al Rf (C, Sp, Sp, Na-An)	Zr / Si, Ca, Al, Na, K	10.6	0.008	0.013	0.014	0.009
B1G9-014C	0.62	~10	Q, Ty, Cri, Al Rf (C, Ky, Na-An, Sp), Cm, ZC	Zr / Si, Ca, Al, Na, K	10.3	0.008	0.008	0.010	0.005
B1M14-001C									
B1F7-002C1(d)									
B1F7-002C1(s)									
B1F7-005C2(d)									

B&W Glass Raw Data - Corning

Sample No.	Date	Time	Density	Settled Sol.	LOI 600°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3	Na_2O
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
B1F7-005C2(s)	10/13/94	20:10:00				28.9	5.6	2.84	0.003	2.68	0.023	0.085	0.15	1.03		0.08	0.009	0.091	10.6
B1F7-008C3(d)	10/14/94	1:20:00				0.0	7.8	4.04	0.005	3.72	0.033	0.120	0.22	1.45		0.11	0.015	0.118	14.9
B1F7-008C3(s)	10/14/94	1:20:00				28.4	5.6	2.89	0.003	2.66	0.023	0.086	0.16	1.04		0.08	0.010	0.084	10.7
B1F7-013C(d)	10/14/94	11:30:00				0.0	7.9	3.84	0.005	3.78	0.032	0.120	0.43	1.44		0.11	0.013	0.118	14.6
B1F7-013C(s)	10/14/94	11:30:00				28.5	5.7	2.74	0.003	2.70	0.023	0.086	0.31	1.03		0.08	0.009	0.084	10.4
B1W10-002C1	10/13/94	14:00:00					1.9	3.85		31.9	0.028	0.160	0.67	1.20		0.55	0.015	0.103	7.20
B1W10-003C3	10/13/94	19:28:00					2.8	4.96		2.68	0.033	0.200	0.86	1.55		0.47	0.015	0.138	10.3
B1W10-004C3	10/14/94	1:40:00					4.8	6.42		22.0	0.040	0.230	1.35	1.96		0.46	0.017	0.178	14.1
B1W10-006C5	10/14/94	11:45:00					6.7	6.43		22.4	0.036	0.208	0.40	1.91		0.49	0.013	0.178	14.6
B1W11-001C	10/18/94	16:10:00					2.4	2.64		29.1	0.016	0.082	1.39	0.83		0.84	0.018	0.067	6.13

B&W Glass Raw Data - Corning

Sample No.	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl^-	F^-	Br^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}	SO_4^{2-}	FeO
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	
B1F7-005C2(s)	-0.001	0.046		29.2	0.057	0.087	0.030			2.23	0.23	0.05	0.032	6.56	2.79		0.032	0.15	93.56
B1F7-008C3(d)	-0.001	0.076		42.9	0.080	0.138	0.050												75.74
B1F7-008C3(s)	0.001	0.054		30.7	0.057	0.098	0.036			2.21	0.27	0.05	0.036	7.58	3.23		0.048	0.15	96.19
B1F7-013C(d)	-0.001	0.095		42.0	0.082	0.100	0.036												74.66
B1F7-013C(s)	-0.001	0.068		30.0	0.059	0.072	0.025			2.17	0.31	0.04	0.032	8.33	3.65		0.038	0.15	96.59
B1W10-002C1	-0.008			5.62	0.036		-0.005				0.51	0.08	0.105	0.0068	0.55		-0.020	0.97	55.39
B1W10-003C3	-0.008			8.36	0.046		-0.005				0.52	0.08	0.120	0.0039	0.54		-0.020	0.94	34.54
B1W10-004C3	-0.008			12.8	0.168		-0.005				0.49	0.09	0.087	0.0041	0.56		-0.020	1.03	66.73
B1W10-006C5	-0.008			9.97	1.258		-0.005				0.49	0.07	0.076	0.0030	0.52		-0.020	0.57	66.28
B1W11-001C	-0.008			6.54	0.044		-0.005				0.32	0.06	0.074	0.0047	0.35		-0.020	1.71	52.66

B&W Glass Raw Data - Corning

Sample No.	Fe(II)/Total Fe	Solid Inclusions (vol%)	Solid Inclusions I.D.	Cord Composition Enriched / Depleted	Leach. pH	Si (PCT) (ppm)	B (PCT) (ppm)	Na (PCT) (ppm)	K (PCT) (ppm)
B1F7-005C2(s)									
B1F7-008C3(d)									
B1F7-008C3(s)									
B1F7-013C(d)									
B1F7-013C(s)									
B1W10-002C1									
B1W10-003C3									
B1W10-004C3									
B1W10-006C5									
B1W11-001C									

B&W Glass Raw Data - PNL

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor						1	1	1	1	1	1		1	1	1	1
B1G9-014G (P)*	10/14/94	14:30:00					12.94	1.39	0.01	5.14	0.05		0.66	3.15	0.00	0.24
B1G9-011G4 (P)*	10/14/94	8:13:00					12.18	1.41	0.01	5.18	0.05		0.44	3.72	0.00	0.25
B1G9-013G5 (P)*	10/14/94	11:55:00					12.63	1.62	0.01	5.23	0.05		0.58	2.84	0.00	0.24
B1G9-005G2 (P)*	10/13/94	19:50:00														
B1G9-006G (P)*	10/13/94	21:30:00														
B1G9-008G3 (P)*	10/14/94	1:25:00														
* Samples reprocessed for homogeneity for PCT and chemistry comparison purposes																
Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
B1G9-014G (P)*	10/14/94	14:30:00					12.94	1.39	0.01	5.14	0.05		0.66	3.15	0.00	0.24
B1G9-011G4 (P)*	10/14/94	8:13:00					12.18	1.41	0.01	5.18	0.05		0.44	3.72	0.00	0.25
B1G9-013G5 (P)*	10/14/94	11:55:00					12.63	1.62	0.01	5.23	0.05		0.58	2.84	0.00	0.24
B1G9-005G2 (P)*	10/13/94	19:50:00														
B1G9-006G (P)*	10/13/94	21:30:00														
B1G9-008G3 (P)*	10/14/94	1:25:00														

B&W Glass Raw Data - PNL

Sample No.	MnO	MoO_3	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl	F	I	NO_3
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor	1.225	1	1	1	1	1	1	1	1	1							
B1G9-014G (P)*	0.02	0.06	12.5	0.04	-0.18	-0.20	63.02	0.10	0.17	0.06							
B1G9-011G4 (P)*	0.02	0.06	12.07	0.04	-0.18	-0.20	64.01	0.10	0.19	0.08							
B1G9-013G5 (P)*	0.02	0.07	13.4	0.04	-0.18	-0.20	62.71	0.10	0.17	0.06							
B1G9-005G2 (P)*																	
B1G9-006G (P)*																	
B1G9-008G3 (P)*																	
* Samples reproc																	

Sample No.	MnO_2	MoO_3	Na_2O	NiO	P_2O_5	S	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl	F	I	NO_3
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
B1G9-014G (P)*	0.0245	0.06	12.5	0.04	-0.18	-0.20	63.02	0.10	0.17	0.06							
B1G9-011G4 (P)*	0.0245	0.06	12.07	0.04	-0.18	-0.20	64.01	0.10	0.19	0.08							
B1G9-013G5 (P)*	0.0245	0.07	13.4	0.04	-0.20	-0.20	62.71	0.10	0.17	0.06							
B1G9-005G2 (P)*																	
B1G9-006G (P)*																	
B1G9-008G3 (P)*																	

B&W Glass Raw Data - PNL

Sample No.	NO_2^-	Total N_2	PO_4^{3-}	SO_4^{2-}	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	Leach. pH	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted		(ppm)	(ppm)	(ppm)	(ppm)
Conver. factor							Petrographic	Petrographic	SEM ; EDX	1	2.43E-04	1.57E-02	7.65E-04	2.67E-03
B1G9-014G (P)*										10.45	28.58	0.45	24.64	
B1G9-011G4 (P)*										10.37	29.36	0.49	24.80	
B1G9-013G5 (P)*										10.62	30.17	0.65	31.27	
B1G9-005G2 (P)*										10.54	28.18	0.66	28.57	
B1G9-006G (P)*										10.59	27.53	0.65	30.25	
B1G9-008G3 (P)*										10.22	23.44	0.31	19.00	
* Samples reproc														

Sample No.	NO_2^-	Total N_2	PO_4^{3-}	SO_4^{2-}	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	Leach. pH	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)	(wt%)	(wt%)			(vol%)	I.D.	Enriched / Depleted		(g/m^2-d)	(g/m^2-d)	(g/m^2-d)	(g/m^2-d)
B1G9-014G (P)*										10.4	0.007	0.007	0.019	
B1G9-011G4 (P)*										10.4	0.007	0.008	0.019	
B1G9-013G5 (P)*										10.6	0.007	0.010	0.024	
B1G9-005G2 (P)*										10.5	0.007	0.010	0.022	
B1G9-006G (P)*										10.6	0.007	0.010	0.023	
B1G9-008G3 (P)*										10.2	0.006	0.005	0.015	

B&W Glass Raw Data - USGS

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B	Ba	CaO	Cr	Cs	Fe_2O_3	K_2O	Li	MgO	MnO
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(ppm)	(ppm)	(wt%)	(ppm)	(ppm)	(wt%)	(wt%)	(ppm)	(wt%)	(wt%)
Conver. factor					1	1	1	3.22E-04	1.12E-04	1	1.46E-04	1.06E-04	1	1	2.15E-04	1	1.225
B1G9-002U1					0.11		13.1	8670	160	5.35	420	495	0.48	1.28		0.15	0.02
B1G9-002U1					0.10		13.2	8740	170	5.34	440	496	0.49	1.27		0.16	0.02
Average	10/13/94	13:30:00			0.11		13.2	8705	165	5.35	430	496	0.49	1.28		0.16	0.02
B1G9-005U2					0.07		11.9	7280	100	5.18	330	376	0.50	1.15		0.16	0.02
B1G9-005U2					0.05		12.0	7260	100	5.21	330	379	0.49	1.16		0.16	0.02
Average	10/13/94	19:50:00			0.06		12.0	7270	100	5.20	330	378	0.50	1.16		0.16	0.02
B1G9-006U					0.05		14.5	5460	96	5.72	380	259	0.57	1.01		0.19	0.02
B1G9-006U					0.09		14.4	5480	97	5.71	390	257	0.57	1.02		0.19	0.02
Average	10/13/94	21:30:00			0.07		14.5	5470	97	5.72	385	258	0.57	1.02		0.19	0.02
B1G9-008U3					-0.01		15.1	2730	110	5.57	1700	155	0.93	0.83		0.32	0.02
B1G9-008U3					-0.01		15.1	2720	110	5.57	1700	152	0.95	0.84		0.33	0.02
Average	10/14/94	1:25:00			-0.01		15.1	2725	110	5.57	1700	154	0.94	0.84		0.33	0.02
B1G9-013U5					0.04		13.1	5520	92	5.61	400	250	0.74	0.99		0.16	0.02
B1G9-013U5					0.08		13.0	5580	90	5.61	370	249	0.74	0.99		0.17	0.02
Average	10/14/94	11:55:00			0.06		13.1	5550	91	5.61	385	250	0.74	0.99		0.17	0.02
B1F7-002U1	10/13/94	13:30:00			24.5		8.12	8960	60	3.85	260	978	0.23	1.29		0.13	-0.01
B1F7-005U2	10/13/94	20:10:00			25.3		7.87	9300	56	3.68	270	1010	0.28	1.33		0.12	0.01
B1F7-008U3	10/14/94	1:20:00			25.0		7.92	9230	54	3.79	270	1020	0.30	1.34		0.12	0.01
B1F7-013U	10/14/94	11:30:00			25.3		7.85	9160	53	3.74	250	1010	0.46	1.32		0.10	-0.01

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values							10.00	5.00	0.00	5.00	0.00	0.00	0.00	1.46	0.00	0.00	0.00
B1G9-002U1	10/13/94	13:30:00			0.11		13.2	2.80	0.018	5.35	0.063	0.053	0.49	1.28		0.16	0.02
B1G9-005U2	10/13/94	19:50:00			0.06		12.0	2.34	0.011	5.20	0.048	0.040	0.50	1.16		0.16	0.02
B1G9-006U	10/13/94	21:30:00			0.07		14.5	1.76	0.011	5.72	0.056	0.027	0.57	1.02		0.19	0.02
B1G9-008U3	10/14/94	1:25:00			-0.01		15.1	0.88	0.012	5.57	0.248	0.016	0.94	0.84		0.33	0.02
B1G9-013U5	10/14/94	11:55:00			0.06		13.05	1.79	0.010	5.61	0.056	0.026	0.74	0.99		0.17	0.02
B1F7-002U1	10/13/94	13:30:00			24.5		8.12	2.89	0.007	3.85	0.038	0.104	0.23	1.29		0.13	-0.01
B1F7-005U2	10/13/94	20:10:00			25.3		7.87	2.99	0.006	3.68	0.039	0.107	0.28	1.33		0.12	0.01
B1F7-008U3	10/14/94	1:20:00			25.0		7.92	2.97	0.006	3.79	0.039	0.108	0.30	1.34		0.12	0.01
B1F7-013U	10/14/94	11:30:00			25.3		7.85	2.95	0.006	3.74	0.037	0.107	0.46	1.32		0.10	-0.01

B&W Glass Raw Data - USGS

Sample No.	Mo	Na_2O	Ni	P_2O_5	S	SiO_2	Sr	TiO_2	Zr	TOC	TIC (CO_3)	Total C	Cl	F	I	NO_3	NO_2	Total N_2
	(ppm)	(wt%)	(ppm)	(wt%)	(wt%)	(wt%)	(ppm)	(wt%)	(ppm)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor	1.50E-04	1	1.27E-04	1	2.497	1	1.18E-04	1	1.35E-04	1	1	1	1	1	1			
B1G9-002U1	700	15.7	58	0.16	-0.05	59.2	900	0.21	490				0.10	0.05				
B1G9-002U1	690	15.6	61	0.15	-0.05	59.2	900	0.21	480				0.11	0.02				
Average	695	15.7	60	0.16	-0.05	59.2	900	0.21	485				0.11	0.04	0.0156			
B1G9-005U2	570	13.9	21	0.12	-0.05	63.1	830	0.21	530				0.07	0.01				
B1G9-005U2	570	13.9	21	0.12	-0.05	63.3	830	0.21	530				0.07	0.02				
Average	570	13.9	21	0.12	-0.05	63.2	830	0.21	530				0.07	0.02	0.0105			
B1G9-006U	450	13.9	35	0.16	-0.05	60.8	880	0.23	550				0.05	0.01				
B1G9-006U	460	13.9	34	0.16	-0.05	60.8	890	0.23	560				0.05	0.01				
Average	455	13.9	35	0.16	-0.05	60.8	885	0.23	555				0.05	0.01	0.0095			
B1G9-008U3	250	10.6	62	0.32	-0.05	64.2	770	0.31	560				0.02	0.02				
B1G9-008U3	260	10.6	60	0.31	-0.05	64.0	770	0.31	590				0.02	0.01				
Average	255	10.6	61	0.32	-0.05	64.1	770	0.31	575				0.02	0.02	0.0025			
B1G9-013U5	470	13.4	24	0.16	-0.05	62.9	850	0.19	440				0.05	0.02				
B1G9-013U5	470	13.3	24	0.16	-0.05	63.0	850	0.18	430				0.05	0.01				
Average	470	13.4	24	0.16	-0.1	63.0	850	0.19	435				0.05	0.02	0.0075			
B1F7-002U1	730	13.1	-8	0.09	0.07	43.8	730	0.12	310	0.94	1.31	2.25	0.29	0.03	0.0904	7.3	3.3	
B1F7-005U2	750	13.8	-8	0.08	0.07	42.5	700	0.11	310	0.97	1.31	2.28	0.31	0.03	0.1082	7.7	3.5	
B1F7-008U3	760	13.8	-8	0.09	0.07	42.4	700	0.12	290	0.93	1.37	2.30	0.32	0.05	0.0941	7.8	3.6	
B1F7-013U	740	13.7	-8	0.09	0.07	42.3	690	0.09	200	0.91	1.34	2.25	0.30	0.03	0.1082	7.7	3.5	

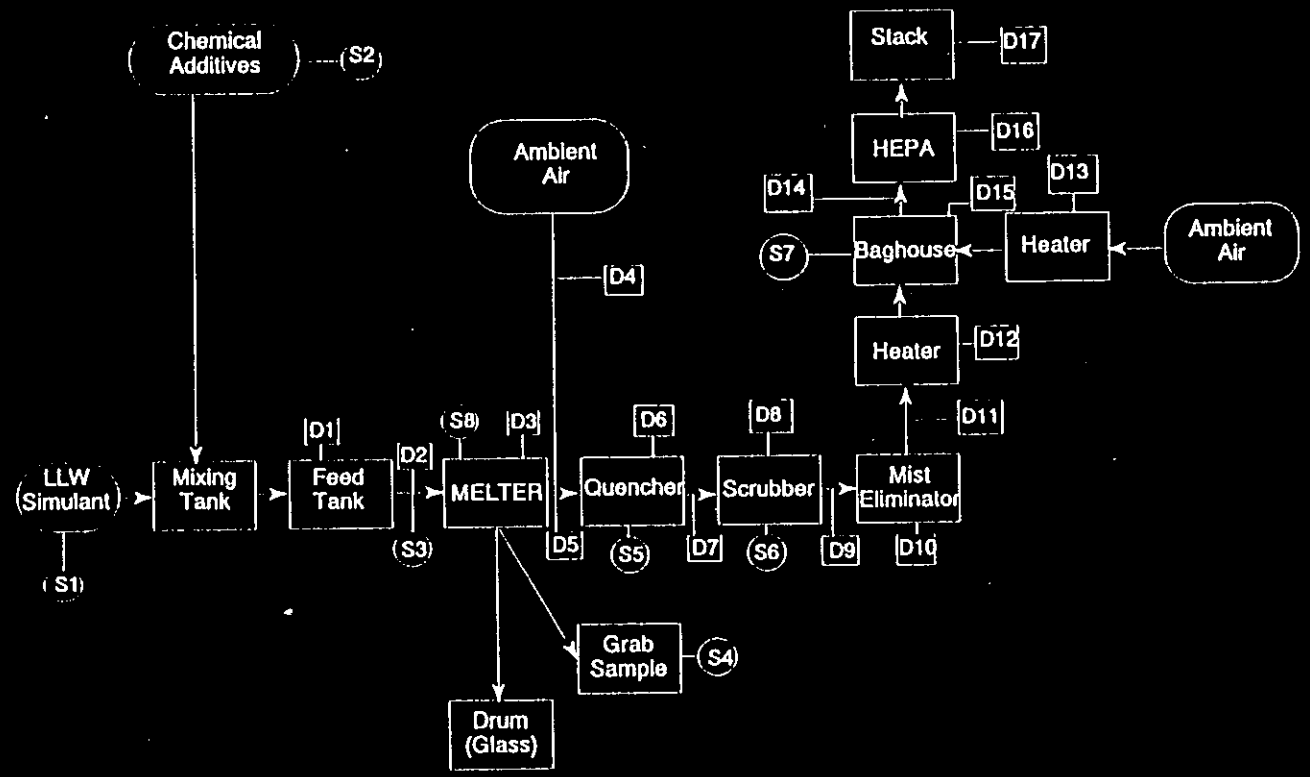
Sample No.	MoO_3	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC (CO_3)	Total C	Cl	F	I	NO_3	NO_2	Total N_2
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values	0.00	20.00	0.00	0.00	0.00	56.91	0.00	0.00	0.00				0.00	0.00	0.00	0.00	0.00	
B1G9-002U1	0.104	15.7	0.008	0.16	-0.125	59.2	0.106	0.21	0.065				0.11	0.04	0.0156			
B1G9-005U2	0.086	13.9	0.003	0.12	-0.125	63.2	0.098	0.21	0.072				0.07	0.02	0.0105			
B1G9-006U	0.068	13.9	0.004	0.16	-0.125	60.8	0.105	0.23	0.075				0.05	0.01	0.0095			
B1G9-008U3	0.038	10.6	0.008	0.32	-0.125	64.1	0.091	0.31	0.078				0.02	0.02	0.0025			
B1G9-013U5	0.071	13.4	0.003	0.16	-0.125	63.0	0.101	0.19	0.059				0.05	0.02	0.0075			
B1F7-002U1	0.110	13.1	-0.001	0.09	0.175	43.8	0.086	0.12	0.042	0.940	1.310	2.250	0.29	0.03	0.0904			
B1F7-005U2	0.113	13.8	-0.001	0.08	0.175	42.5	0.083	0.11	0.042	0.970	1.310	2.280	0.31	0.03	0.1082			
B1F7-008U3	0.114	13.8	-0.001	0.09	0.175	42.4	0.083	0.12	0.039	0.930	1.370	2.300	0.32	0.05	0.0941			
B1F7-013U	0.111	13.7	-0.001	0.09	0.175	42.3	0.082	0.09	0.027	0.910	1.340	2.250	0.30	0.03	0.1082			

B&W Glass Raw Data - USGS

Sample No.	PO_4^{3-}	SO_4^{2-}	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	Leach. pH	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted		(ppm)	(ppm)	(ppm)	(ppm)
Conver. factor				1	Petrographic	Petrographic	SEM ; EDX	1	2.47E-04	1.21E-02	7.17E-04	8.16E-03
B1G9-002U1			0.23	0.479				10.89	36.2	1.50	59.4	1.77
B1G9-002U1			0.24	0.490				10.95	38.1	1.41	63.2	1.45
Average			0.24	0.484				10.92	37.2	1.46	61.3	1.61
B1G9-005U2			0.27	0.540				10.60	25.2	0.807	33.8	-1.00
B1G9-005U2			0.27	0.551				10.63	26.4	0.829	34.9	-1.00
Average			0.27	0.546				10.62	25.8	0.818	34.4	-1.00
B1G9-006U			0.34	0.596				10.58	24.3	0.650	33.3	-1.00
B1G9-006U			0.33	0.579				10.59	26.7	0.703	36.3	-1.00
Average			0.34	0.588				10.59	25.5	0.677	34.8	-1.00
B1G9-008U3			0.44	0.473				9.30	16.1	0.450	22.2	-1.00
B1G9-008U3			0.44	0.463				9.71	16.2	0.429	21.5	-1.00
Average			0.44	0.468				9.51	16.2	0.440	21.9	-1.00
B1G9-013U5			0.40	0.541				10.56	23.7	0.694	32.6	-1.00
B1G9-013U5			0.40	0.541				10.61	25.7	0.737	34.9	-1.00
Average			0.40	0.541				10.59	24.7	0.716	33.8	-1.00
B1F7-002U1			-0.01									
B1F7-005U2			-0.01									
B1F7-008U3			-0.01									
B1F7-013U			-0.01									

Sample No.	PO_4^{3-}	SO_4^{2-}	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	Leach. pH	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted		(g/m^2-day)	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)
Target Values	0.00	0.00	98.37		Petrographic	Petrographic	SEM / EDX				0.102	
B1G9-002U1			99.03	0.484				10.9	0.009	0.018	0.044	0.013
B1G9-005U2			99.20	0.546				10.6	0.006	0.010	0.025	-0.008
B1G9-006U			99.23	0.588				10.6	0.006	0.008	0.025	-0.008
B1G9-008U3			99.53	0.468				9.5	0.004	0.005	0.016	-0.008
B1G9-013U5			99.41	0.541				10.6	0.006	0.009	0.024	-0.008
B1F7-002U1			76.84									
B1F7-005U2			76.07									
B1F7-008U3			76.19									
B1F7-013U			75.83									

Duratek DuraMelter™*100 Sampling Point Schematic



Duratek DuraMelter™ 100 Sampling Locations

*DuraMelter is a trademark of GTS Duratek, Inc.

Melter Project: Sample Numbering Scheme
Duratek

D	1	G	4	-	0	0	1	C	1
Vendor Identification	**Phase Identifier**	**Sample Type**	**Sample Point Number**	**Hyphen**	**Serial**	**Sample**	**Number**	**Lab ID**	**Snapshot Set ID**
Duratek	*Phase 1*	*Glass*	*Sample Point 4*		*Sample*	*Number*	*1*	*Corning*	*1 = 1st Mass Balance Set*

0-99 Duramelter 100
100+ Duramelter 1000

Vendor
D = Duratek

Sample Type
S1 = Simulant
S2 = Additives
F3 = Feed, Mixed
G4 = Glass
G8 = Glass, pool
C8 = Coupons
O5 = Off-gas, Quencher
O6 = Off-gas, Scrubber
O7 = Off-gas, Baghouse
O9 = Off-gas, Backwash
O10 = Off-gas, Filtercake

Coupon Numbering (XYZ)

Material Type
X = 0 is K3
X = 1 is Zirmul
X = 2 is Inconel 690
X = 3 is Inconel 601

Material History
YZ = 00 is un-used material
YZ = 01 is air contact in melter
YZ = 02 is air/glass interface
YZ = 03 is glass contact in melter

Lab ID
C = Corning
G = Archive (GEL)
P = PNL
Q = Quanterra
U = USGS
W = 222-S

Sample Set ID
1 = 1st Mass Balance Set
2 = 2nd Mass Balance Set

Blank = Individual Pts.

Duratek DuraMelter™ 100 Analytical Data

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(Vol %)	(Vol %)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
Data Sources:	[D-Q-1, D-P-1, D-W-1]																		
D1F3-022W2	09/26/94	23:15:00		1.78		-95.0	82.1	8.35E-2											
D1F3-022W2	09/26/94	23:15:00		1.85				8.41E-2											
D1F3-022P2	09/26/94	23:15:00	13.6	1.78					1.09E+0	1.54E+0	5.13E-4	1.31E+0	5.75E-3	8.21E-3	8.41E-1	8.54E-1	-5.07E-3	2.32E-2	1.28E-3
D1F3-023P3	09/27/94	1:45:00	13.7	1.77					1.04E+0	1.33E+0	3.84E-4	1.24E+0	4.4 E-3	3.78E-3	8.24E-1	6.72E-1	-2.54E-3	-1.3 E-2	9.61E-4
D1F3-026P4	09/27/94	13:15:00	13.6	1.75					1.03E+0	1.64E+0	3.84E-4	1.34E+0	5.42E-3	3.66E-3	8.29E-1	9.73E-1	-5.07E-3	2.68E-2	9.61E-4
D1O5-001Q	09/21/94	21:00:00	5.3						-7.41E-4	1.05E-3		-1.25E-2	-3.85E-5		3.69E-4	-1.28E-2		-2.06E-2	-2.73E-5
D1O5-022P2	09/26/94	23:15:00	9.6		Pink				6.48E-4	5.67E-3	1.38E-6	1.1 E-3	6.35E-5	2.03E-6	7.97E-4	2.73E-3		8.76E-5	1.09E-6
D1O5-022Q2	09/26/94	23:15:00	9.7						-7.41E-4	6.01E-3		-1.25E-2	6.81E-5	2.09E-4	4.14E-4	-1.28E-2		-2.06E-2	-2.73E-5
D1O5-023P3	09/27/94	1:45:00	9.5		Pink				8.76E-4	7.74E-3	1.53E-6	1.26E-3	8.08E-5	2.63E-6	1.04E-3	4.68E-3		1.25E-4	3.28E-6
D1O5-023Q3	09/27/94	1:45:00	9.6						-7.41E-4	8.29E-3		-1.25E-2	7.25E-5	2.89E-4	5.34E-4	-1.28E-2		-2.06E-2	-2.73E-5
D1O5-026P4	09/27/94	13:15:00	9.5		Pink				7.07E-4	4.74E-3	1.97E-6	1.55E-3	4.83E-5	5.12E-6	9.47E-4	4.97E-3		1.82E-4	2.37E-6
D1O6-001Q	09/21/94	21:00:00	13.4						-7.41E-4	-9.25E-4		-1.25E-2	-3.85E-5		-1.79E-4	-1.28E-2		-2.06E-2	-2.73E-5
D1O6-022P2	09/26/94	23:15:00	11.2		Clear				3.74E-5	2.88E-4	2.91E-7	3.04E-5	6.92E-6	2.03E-6	1.79E-6	9.41E-4		3.91E-5	-5.46E-7
D1O6-022Q2	09/26/94	23:15:00	11.5						-7.41E-4	-9.25E-4		-1.25E-2	-3.85E-5	1.59E-5	-1.79E-4	-1.28E-2		-2.06E-2	-2.73E-5
D1O6-023P3	09/27/94	1:45:00	12.1		Clear				1.35E-4	3.64E-4	1.02E-6	4.89E-5	1.48E-5	2.63E-6	7.16E-6	3.15E-3		1.59E-4	1.27E-6
D1O6-023Q3	09/27/94	1:45:00	12.4						-7.41E-4	-9.25E-4		-1.25E-2	-3.85E-5	2.08E-5	-1.79E-4	-1.28E-2		-2.06E-2	-2.73E-5
D1O6-026P4	09/27/94	13:15:00	10.6		Clear				1.68E-4	5.89E-4	1.24E-6	7.98E-5	1.9 E-5	5.12E-6	1.4 E-5	4.15E-3		2.06E-4	1.46E-6
D1S1-001Q	09/22/94	15:35:00	13.8						9.78E-1	-1.3 E-3		-1.78E-2	7.85E-3		6.08E-4	4.45E-1		-2.94E-2	4.91E-4
D1S2-014Q	09/29/94	10:00:00	11.5						-7.41E-6	-9.25E-6		-1.25E-4	-3.85E-7		-1.79E-6	-1.28E-4		-2.06E-4	-2.73E-7
D1S2-014QD			11.5																

Duratek DuraMelter™ 100 Analytical Data

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl⁻	F⁻	I⁻	NO_3^-	NO_2^-	NO_2^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(ug/ml)	(ug/ml)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
Data Sources:																			
D1F3-022W2																			
D1F3-022W2																			
D1F3-022P2	9.36E-3	4.75E+0	-2.1 E-3	2.55E-1	2.2 E-2	6.07E+0	8.84E-3	1.13E-1	9.07E-3	5.8 E+1	1.62E+1	1.16E+0			1.65E+0	8.9 E-1		1.5 E-2	2.22E-2
D1F3-023P3	8.99E-3	4.83E+0	-1.8 E-3	2.44E-1	2.2 E-2	5.88E+0	8.64E-3	1.18E-1	1.16E-2	6.48E+1	8.5 E+0	1.18E+0			1.65E+0	9.12E-1		-1.13E-2	2.42E-2
D1F3-026P4	9.36E-3	5.15E+0	-2.4 E-3	2.51E-1	2.42E-2	5.75E+0	9.04E-3	8.86E-2	2.3 E-2	4.87E+1	9.45E+0	1.19E+0			1.65E+0	9.15E-1		-1.22E-2	2.99E-2
D1O5-001Q	-2.08E-4	1.66E-2	-6.81E-5	9.3 E-6		9.08E-4	-5.71E-5		-1.1 E-4	1.59E+1	-1.0 E+0	8.1 E-5	1.75E-2	-6.3 E-5	5.48E-6	2.61E-5	4.35E-5	-1.05E-5	1.08E-4
D1O5-022P2	2.58E-5	9.28E-3	-3.41E-6	8.37E-3	-2.53E-5	2.42E-5	5.82E-6	2.92E-6	-1.1 E-6	1.44E+2	5.25E+2	2.63E-3	2.83E-3		2.76E-4	6.22E-4		-5.26E-5	4.51E-4
D1O5-022Q2	2.22E-5	9.05E-3	-6.81E-5	6.59E-5		5.55E-4	-5.71E-5		-1.1 E-4	1.64E+2	3.23E+2	2.99E-3	2.84E-3	1.54E-3	7.11E-5	2.43E-4	3.1 E-4	2.6 E-5	4.47E-4
D1O5-023P3	4.04E-5	1.30E-2	9.54E-6	1.04E-2	2.71E-5	2.85E-5	5.25E-6	8.35E-7	-1.1 E-6	1.92E+2	5.74E+2	3.93E-3	3.47E-3		4.11E-4	9.47E-4		8.21E-5	6.46E-4
D1O5-023Q3	3.8 E-5	1.33E-2	-6.81E-5	6.39E-5		6.16E-4	-5.71E-5		-1.1 E-4	2.22E+2	5.25E+2	4.29E-3	3.17E-3	2.34E-3	9.61E-5	3.43E-4	4.1 E-4	2.76E-5	8.52E-4
D1O5-026P4	3.1 E-5	1.02E-2	8.52E-6	3.79E-3	-2.53E-5	3.06E-5	8.45E-6	2.09E-6	-1.1 E-6	2.28E+2	5.46E+2	6.66E-3	6.64E-3		9.23E-4	1.24E-3		-1.05E-4	9.79E-4
D1O6-001Q	-2.08E-4	4.21E-1	-6.81E-5	4.78E-5		-7.12E-4	-5.71E-5		-1.1 E-4	5.7 E+0	1.11E+2	5.87E-3	4.93E-4	-6.3 E-5	-1.61E-6		5.19E-4	-1.05E-5	-1.04E-5
D1O6-022P2	2.71E-6	1.76E-1	-3.41E-6	1.34E-3	8.11E-5	6.48E-5	3.42E-7	6.26E-7	-1.1 E-6	2.37E+1	1.29E+3	2.39E-3	-1.32E-4		1.3 E-4	1.26E-3		-5.26E-5	6.07E-5
D1O6-022Q2	-2.08E-4	1.93E-1	-6.81E-5	1.04E-5		-7.12E-4	-5.71E-5		-1.1 E-4	1.11E+2	9.59E+2	3.24E-3	-2.63E-4	9.85E-4	3.87E-6		7.16E-4	-5.26E-5	-5.21E-5
D1O6-023P3	6.36E-6	2.26E-1	1.01E-5	1.75E-3	1.21E-4	1.4 E-4	7.99E-7	3.34E-6	3.29E-6	2.88E+1	1.59E+3	3.39E-3	-1.32E-4		1.81E-4	2.01E-3		-5.26E-5	8.37E-5
D1O6-023Q3	-2.08E-4	2.65E-1	-6.81E-5	9.75E-6		-7.12E-4	-5.71E-5		-1.1 E-4	2.96E+1	1.29E+3	4.06E-3	-1.05E-4	1.65E-3	-1.61E-6	5.56E-4	1.03E-3	-1.05E-5	-1.04E-5
D1O6-026P4	8.96E-6	2.33E-1	1.41E-5	4.16E-3	1.89E-4	1.53E-4	1.03E-6	4.18E-6	4.06E-6	3.82E+1	2.37E+3	3.88E-3	-1.32E-4		1.81E-4	2.88E-3		-5.26E-5	1.22E-4
D1S1-001Q	1.67E-2	9.06E+0	-1.02E-4	1.66E-5		-1.02E-1	1.47E-2		-1.53E-4	8.08E+3	2.74E+3	1.49E-1	4.08E-2	-1.58E-2	6.5 E-1	4.83E-1	1.65E+0	6.86E-3	3.36E-2
D1S2-014Q	-2.08E-6	-4.35E-5	-6.81E-7	-1.61E-6		-7.12E-6	-5.71E-7		-1.1 E-6	1.59E+0	1.3 E+0	1.66E-5	-5.26E-6	-6.3 E-5	1.52E-6	-4.35E-7	1.46E-6	-1.05E-5	-1.04E-5
D1S2-014QD				-1.61E-6						1.9 E+0	-1.0 E+0	1.66E-5	-5.26E-6	-6.3 E-5	1.56E-6	-4.35E-7	1.29E-6	-1.05E-5	-1.04E-5

Duratek DuraMelter™ 100 Analytical Raw Data - 222S

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH
	mm/dd/yy	hh:mm:ss		(g/ml)		(Vol %)	(Vol %)	(ug/ml)
Conver. factor				1		1	1	5.88E-05
D1F3-022W2	09/26/94	23:15:00		1.78		-95.0	82.1	1.42E+3
D1F3-022W2	09/26/94	23:15:00		1.85				1.43E+3
Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH-
	mm/dd/yy	hh:mm:ss		(g/ml)		(Vol %)	(Vol %)	(mole/l)
D1F3-022W2	09/26/94	23:15:00		1.78		-95.0	82.1	8.35E-2
D1F3-022W2	09/26/94	23:15:00		1.85				8.41E-2

Duratek DuraMelter™ 100 Analytical Raw Data - PNL

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/ml)		(Vol%)	(Vol%)	()	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/g)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)
Conver. factor			1						3.71E-05	9.25E-05	7.28E-06	2.5E-05	1.92E-05	7.52E-06	1.79E-05	2.56E-05	1.44E-04	4.11E-05	1.82E-05
D1F3-022P2	09/26/94	23:15:00	13.6	1.78															
D1F3-023P3	09/27/94	1:45:00	13.7	1.77															
D1F3-026P4	09/27/94	13:15:00	13.6	1.75															
D1O5-022P2	09/26/94	23:15:00	9.6		Pink				17.48	61.33	0.19	44.03	3.3	0.27	44.52	106.93		2.13	0.06
D1O5-023P3	09/27/94	1:45:00	9.5		Pink				23.64	83.63	0.21	50.52	4.2	0.35	57.99	183.14		3.04	0.18
D1O5-026P4	09/27/94	13:15:00	9.5		Pink				19.07	51.27	0.27	62.1	2.51	0.68	52.88	194.2		4.42	0.13
D1O6-022P2	09/26/94	23:15:00	11.2		Clear				1.01	3.11	0.04	1.22	0.36	0.27	0.1	36.8		0.95	-0.03
D1O6-023P3	09/27/94	1:45:00	12.1		Clear				3.63	3.94	0.14	1.96	0.77	0.35	0.4	123.06		3.86	0.07
D1O6-026P4	09/27/94	13:15:00	10.6		Clear				4.52	6.37	0.17	3.2	0.99	0.68	0.78	162.26		5.01	0.08

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(Vol%)	(Vol%)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
D1F3-022P2	09/26/94	23:15:00	13.6	1.78					1.09E+0	1.54E+0	5.13E-4	1.31E+0	5.75E-3	8.21E-3	8.41E-1	8.54E-1	-5.07E-3	2.32E-2	1.28E-3
D1F3-023P3	09/27/94	1:45:00	13.7	1.77					1.04E+0	1.33E+0	3.84E-4	1.24E+0	4.4 E-3	3.78E-3	8.24E-1	6.72E-1	-2.54E-3	-1.3 E-2	9.61E-4
D1F3-026P4	09/27/94	13:15:00	13.6	1.75					1.03E+0	1.64E+0	3.84E-4	1.34E+0	5.42E-3	3.66E-3	8.29E-1	9.73E-1	-5.07E-3	2.68E-2	9.61E-4
D1O5-022P2	09/26/94	23:15:00	9.6		Pink				6.48E-4	5.67E-3	1.38E-6	1.1 E-3	6.35E-5	2.03E-6	7.97E-4	2.73E-3		8.76E-5	1.09E-6
D1O5-023P3	09/27/94	1:45:00	9.5		Pink				8.76E-4	7.74E-3	1.53E-6	1.26E-3	8.08E-5	2.63E-6	1.04E-3	4.68E-3		1.25E-4	3.28E-6
D1O5-026P4	09/27/94	13:15:00	9.5		Pink				7.07E-4	4.74E-3	1.97E-6	1.55E-3	4.83E-5	5.12E-6	9.47E-4	4.97E-3		1.82E-4	2.37E-6
D1O6-022P2	09/26/94	23:15:00	11.2		Clear				3.74E-5	2.88E-4	2.91E-7	3.04E-5	6.92E-6	2.03E-6	1.79E-6	9.41E-4		3.91E-5	-5.46E-7
D1O6-023P3	09/27/94	1:45:00	12.1		Clear				1.35E-4	3.64E-4	1.02E-6	4.89E-5	1.48E-5	2.63E-6	7.16E-6	3.15E-3		1.59E-4	1.27E-6
D1O6-026P4	09/27/94	13:15:00	10.6		Clear				1.68E-4	5.89E-4	1.24E-6	7.98E-5	1.9 E-5	5.12E-6	1.4 E-5	4.15E-3		2.06E-4	1.46E-6

Duratek DuraMelter™ 100 Analytical Raw Data - PNL

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl^-	F^-	I^-	NO_3^-	NO_2^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)
Conver. factor	1.04E-05	4.35E-05	1.7E-05	3.23E-05	3.12E-05	3.56E-05	1.14E-05	2.09E-05	1.1E-05	1	1	2.82E-05	5.26E-05	7.88E-06	1.61E-05	2.17E-05	1.61E-05	1.05E-05	1.04E-05
D1F3-022P2										58.03	16.20	2882.66			1.03E+05	4.10E+04		1425.3	2133.28
D1F3-023P3										64.78	8.50	3006.09			1.02E+05	4.20E+04		-1075.14	2325.52
D1F3-026P4										48.65	9.45	2910.95			1.02E+05	4.21E+04		-1157.44	2870.44
D1O5-022P2	2.48	213.24	-0.2	259.31	-0.81	0.68	0.51	0.14	-0.1	144.	525.	93.37	53.78		17.11	28.6		-5.	43.31
D1O5-023P3	3.88	298.82	0.56	321.04	0.87	0.8	0.46	0.04	-0.1	192.	574.	139.4	65.93		25.5	43.55		7.8	62.1
D1O5-026P4	2.97	233.86	0.5	117.36	-0.81	0.86	0.74	0.1	-0.1	228.	546.	236.	126.2		57.21	56.83		-10.	94.
D1O6-022P2	0.26	4054.56	-0.2	41.47	2.6	1.82	0.03	0.03	-0.1	23.7	1286.	84.8	-2.5		8.05	57.91		-5.	5.83
D1O6-023P3	0.61	5195.77	0.59	54.34	3.88	3.92	0.07	0.16	0.3	28.8	1591.	120.2	-2.5		11.23	92.32		-5.	8.04
D1O6-026P4	0.86	5364.25	0.83	128.73	6.07	4.29	0.09	0.2	0.37	38.2	2372.	137.6	-2.5		11.23	132.5		-5.	11.73

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl^-	F^-	I^-	NO_3^-	NO_2^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(ug/ml)	(ug/ml)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
D1F3-022P2	9.36E-3	4.75E+0	-2.1 E-3	2.55E-1	2.2 E-2	6.07E+0	8.84E-3	1.13E-1	9.07E-3	58.03	16.2	1.16E+00			1.65E+00	8.90E-01		1.50E-02	2.22E-02
D1F3-023P3	8.99E-3	4.83E+0	-1.8 E-3	2.44E-1	2.2 E-2	5.88E+0	8.64E-3	1.18E-1	1.16E-2	64.78	8.5	1.18E+00			1.65E+00	9.12E-01		-1.13E-02	2.42E-02
D1F3-026P4	9.36E-3	5.15E+0	-2.4 E-3	2.51E-1	2.42E-2	5.75E+0	9.04E-3	8.86E-2	2.3 E-2	48.65	9.45	1.19E+00			1.65E+00	9.15E-01		-1.22E-02	2.99E-02
D1O5-022P2	2.58E-5	9.28E-3	-3.41E-6	8.37E-3	-2.53E-5	2.42E-5	5.82E-6	2.92E-6	-1.1 E-6	144	525	2.63E-03	2.83E-03		2.76E-04	6.22E-04		-5.26E-05	4.51E-04
D1O5-023P3	4.04E-5	1.3 E-2	9.54E-6	1.04E-2	2.71E-5	2.85E-5	5.25E-6	8.35E-7	-1.1 E-6	192	574	3.93E-03	3.47E-03		4.11E-04	9.47E-04		8.21E-05	6.46E-04
D1O5-026P4	3.1 E-5	1.02E-2	8.52E-6	3.79E-3	-2.53E-5	3.06E-5	8.45E-6	2.09E-6	-1.1 E-6	228	546	6.66E-03	6.64E-03		9.23E-04	1.24E-03		-1.05E-04	9.79E-04
D1O6-022P2	2.71E-6	1.76E-1	-3.41E-6	1.34E-3	8.11E-5	6.48E-5	3.42E-7	6.26E-7	-1.1 E-6	23.7	1286	2.39E-03	-1.32E-04		1.30E-04	1.26E-03		-5.26E-05	6.07E-05
D1O6-023P3	6.36E-6	2.26E-1	1.01E-5	1.75E-3	1.21E-4	1.4 E-4	7.99E-7	3.34E-6	3.29E-6	28.8	1591	3.39E-03	-1.32E-04		1.81E-04	2.01E-03		-5.26E-05	8.37E-05
D1O6-026P4	8.96E-6	2.33E-1	1.41E-5	4.16E-3	1.89E-4	1.53E-4	1.03E-6	4.18E-6	4.06E-6	38.2	2372	3.88E-03	-1.32E-04		1.81E-04	2.88E-03		-5.26E-05	1.22E-04

Duratek DuraMelter™ 100 Analytical Raw Data - Quanterra

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(Vol%)	(Vol%)	()	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
Conver. factor			1						3.71E-08	9.25E-08	7.28E-09	2.50E-08	1.92E-08	7.52E-09	1.79E-08	2.56E-08	1.44E-07	4.11E-08	1.82E-08
D1O5-001Q	09/21/94	21:00:00	5.26						2.7 E+3	1.13 E+6		1.18 E+4	1.78 E+3	(1.36 E+2)	2.28 E+4	(4.74 E+3)		7.65 E+3	2.39 E+2
D1O6-001Q	09/21/94	21:00:00	13.4						6.86 E+2	1.39 E+3		(3.71 E+3)	1.41 E+2	(7.9 E+1)	6.8 E+2	7.28 E+3		(8.2 E+2)	1.35E+1
D1O6-022Q2	09/26/94	23:15:00	11.5						3.4 E+2	3.21 E+3		(3.52 E+3)	2.68 E+2	2.11 E+3	7.54 E+2	1.58 E+4		(5.66 E+2)	-8.6 E+0
D1O5-022Q2	09/26/94	23:15:00	9.71						1.78 E+4	6.5 E+6		4.21 E+4	3.4 E+3	2.78 E+4	2.51 E+4	1.18 E+5		(2.19 E+3)	5.21 E+1
D1O6-023Q3	09/27/94	1:45:00	12.4						4.78 E+2	3.97 E+3		(3.65 E+3)	3.01 E+2	2.77 E+3	7.24 E+2	2.12 E+4		(5.98 E+2)	(8.9 E+0)
D1O5-023Q3	09/27/94	1:45:00	9.62						2.41 E+4	8.96 E+6		4.93E+4	3.96 E+3	3.84 E+4	3.19 E+4	1.67 E+5		(2.14 E+3)	6.42E+1
D1S1-001Q	09/22/94	15:35:00	13.8						2.64 E+7	(2.14 E+3)		(1.12 E+5)	4.08 E+5	2.48 E+7	3.4 E+4	1.74 E+7		(4.95 E+4)	2.7 E+4
D1S2-014Q	09/29/94	10:00:00	11.5						-2.0 E+2	(2.32 E+1)		(6.49 E+2)	-2.0 E+1	-1.0 E+3	-1.0 E+2	-5.0 E+3		(1.66 E+2)	-1.0 E+1
D1S2-014QD			11.5																

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(Vol%)	(Vol%)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
D1O5-001Q	09/21/94	21:00:00	5.26						1.0 E-4	1.05E-1		2.94E-4	3.42E-5	-1.02E-6	4.08E-4	-1.21E-4		3.15E-4	2.46E-7
D1O6-001Q	09/21/94	21:00:00	13.4						2.54E-5	1.29E-4		-9.26E-5	2.71E-6	-5.94E-7	1.22E-5	1.86E-4		-3.37E-5	-1.57E-7
D1O6-022Q2	09/26/94	23:15:00	11.5						1.26E-5	2.97E-4		-8.78E-5	5.15E-6	1.59E-5	1.35E-5	4.04E-4		-2.33E-5	-1.57E-7
D1O5-022Q2	09/26/94	23:15:00	9.71						6.6 E-4	6.01E-1		1.05E-3	6.54E-5	2.09E-4	4.5 E-4	3.02E-3		-9.01E-5	9.46E-7
D1O6-023Q3	09/27/94	1:45:00	12.4						1.77E-5	3.67E-4		-9.11E-5	5.79E-6	2.08E-5	1.3 E-5	5.42E-4		-2.46E-5	-1.62E-7
D1O5-023Q3	09/27/94	1:45:00	9.62						8.93E-4	8.29E-1		1.23E-3	7.62E-5	2.89E-4	5.71E-4	4.27E-3		-8.8 E-5	1.17E-6
D1S1-001Q	09/22/94	15:35:00	13.8						9.78E-1	-1.98E-4		-2.81E-3	7.85E-3	1.87E-1	6.08E-4	4.45E-1		-2.04E-3	4.91E-4
D1S2-014Q	09/29/94	10:00:00	11.5						-7.41E-6	-2.15E-6		-1.62E-5	-3.85E-7	-7.52E-6	-1.79E-6	-1.28E-4		-6.83E-6	-1.82E-7
D1S2-014QD			11.5																
Simulant Targ.									1.02E+0			1.1 E-3	8.7 E-3	1.7 E-2	7.7 E-4	5.0 E-1		1.0 E-3	4.2 E-4

Revision 0

Duratek DuraMelter™ 100 Analytical Raw Data - Quanterra

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl⁻	F⁻	I⁻	NO_3^-	NO_2^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(ug/l)	(mg/l)	(mg/l)
Conver. factor	1.04E-08	4.35E-08	1.70E-08	3.23E-08	3.12E-08	3.56E-08	1.14E-08	2.09E-08	1.10E-08	1.00E+00	1.00E+00	2.82E-05	5.26E-05	7.88E-06	1.61E-05	2.17E-05	1.61E-08	1.05E-05	1.04E-05
D1O5-001Q	1.36 E+2	3.81 E+5	9.77 E+2	2.88 E+2		2.79E+4	5.14E+1		1.05E+2	1.59E+1	-1.0 E+0	2.87E+0	3.33E+2	-8.0 E+0	3.4 E-1	1.2 E+0	2.7 E+3	-1.0 E+0	1.04E+1
D1O6-001Q	-2.0 E+1	9.68 E+6	(2.59 E+1)	1.48 E+3		5.7 E+3	(2.77 E+1)		-2.0 E+1	5.7 E+0	1.11E+2	2.08E+2	9.37E+0	-8.0 E+0	-1.0 E-1		3.22E+4	-1.0 E+0	-1.0 E+0
D1O6-022Q2	1.6 E+2	4.44 E+6	(1.86 E+1)	3.22 E+2		1.54E+3	(2.97 E+1)		-2.0 E+1	1.11E+2	9.59E+2	1.15E+2	-5.0 E+0	1.25E+2	2.4 E-1		4.44E+4	-5.0 E+0	-5.0 E+0
D1O5-022Q2	2.6 E+3	2.08 E+5	1.02 E+2	2.04 E+3		1.84E+4	6.68E+2		(1.97 E+1)	1.64E+2	3.23E+2	1.06E+2	5.4 E+1	1.95E+2	4.41E+0	1.12E+1	1.92E+4	2.47E+0	4.29E+1
D1O6-023Q3	2.32 E+2	6.1 E+6	(1.66 E+1)	3.02 E+2		2.26E+3	(3.58 E+1)		-1.0 E+4	2.96E+1	1.29E+3	1.44E+2	-2.0 E+0	2.09E+2	-1.0 E-1	2.56E+1	6.39E+4	-1.0 E+0	-1.0 E+0
D1O5-023Q3	3.96 E+3	3.06 E+5	1.2 E+2	1.98 E+3		2.04E+4	7.92E+2		3.52E+1	2.22E+2	5.25E+2	1.52E+2	6.02E+1	2.97E+2	5.96E+0	1.58E+1	2.54E+4	2.62E+0	8.18E+1
D1S1-001Q	1.6 E+6	2.08 E+8	(1.43 E+3)	5.13 E+2		4.12E+4	1.3 E+6		(1.57 E+3)	8.08E+3	2.74E+3	5.28E+3	7.76E+2	-2.0 E+3	4.03E+4	2.22E+4	1.02E+8	6.52E+2	3.23E+3
D1S2-014Q	-2.0 E+1	(8.55 E+2)	-4.0 E+1	-5.0 E+1		(5.41 E+1)	(2.6 E+0)		-2.0 E+1	1.59E+0	1.3 E+0	5.9 E-1	-1.0 E-1	-8.0 E+0	9.4 E-2	-2.0 E-2	9.04E+1	-1.0 E+0	-1.0 E+0
D1S2-014QD				-5.0 E+1						1.9 E+0	-1.0 E+0	5.9 E-1	-1.0 E-1	-8.0 E+0	9.7 E-2	-2.0 E-2	8.01E+1	-1.0 E+0	-1.0 E+0

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl⁻	F⁻	I⁻	NO_3^-	NO_2^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mg/l)	(mg/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
D1O5-001Q	1.42E-6	1.66E-2	1.66E-5	9.3 E-6		9.93E-4	5.87E-7		1.15E-6	1.59E+1	-1.0 E+0	8.1 E-5	1.75E-2	-6.3 E-5	5.48E-6	2.61E-5	4.35E-5	-1.05E-5	1.08E-4
D1O6-001Q	-2.08E-7	4.21E-1	-4.41E-7	4.78E-5		2.03E-4	-3.16E-7		-2.19E-7	5.7 E+0	1.11E+2	5.87E-3	4.93E-4	-6.3 E-5	-1.61E-6		5.19E-4	-1.05E-5	-1.04E-5
D1O6-022Q2	1.67E-6	1.93E-1	-3.17E-7	1.04E-5		5.48E-5	-3.39E-7		-2.19E-7	1.11E+2	9.59E+2	3.24E-3	-2.63E-4	9.85E-4	3.87E-6		7.16E-4	-5.26E-5	-5.21E-5
D1O5-022Q2	2.71E-5	9.05E-3	1.74E-6	6.59E-5		6.55E-4	7.62E-6		-2.16E-7	1.64E+2	3.23E+2	2.99E-3	2.84E-3	1.54E-3	7.11E-5	2.43E-4	3.1 E-4	2.6 E-5	4.47E-4
D1O6-023Q3	2.42E-6	2.65E-1	-2.83E-7	9.75E-6		8.05E-5	-4.09E-7		-1.1 E-4	2.96E+1	1.29E+3	4.06E-3	-1.05E-4	1.65E-3	-1.61E-6	5.56E-4	1.03E-3	-1.05E-5	-1.04E-5
D1O5-023Q3	4.13E-5	1.33E-2	2.04E-6	6.39E-5		7.26E-4	9.04E-6		3.86E-7	2.22E+2	5.25E+2	4.29E-3	3.17E-3	2.34E-3	9.61E-5	3.43E-4	4.1 E-4	2.76E-5	8.52E-4
D1S1-001Q	1.67E-2	9.06E+0	-2.43E-5	1.66E-5		1.47E-3	1.48E-2		-1.72E-5	8.08E+3	2.74E+3	1.49E-1	4.08E-2	-1.58E-2	6.5 E-1	4.83E-1	1.65E+0	6.86E-3	3.36E-2
D1S2-014Q	-2.08E-7	-3.72E-5	-6.81E-7	-1.61E-6		-1.93E-6	-2.97E-8		-2.19E-7	1.59E+0	1.3 E+0	1.66E-5	-5.26E-6	-6.3 E-5	1.52E-6	-4.35E-7	1.46E-6	-1.05E-5	-1.04E-5
D1S2-014QD				-1.61E-6						1.9 E+0	-1.0 E+0	1.66E-5	-5.26E-6	-6.3 E-5	1.56E-6	-4.35E-7	1.29E-6	-1.05E-5	-1.04E-5
Simulant Targ	1.7 E-2	9.97E+0					1.7 E-2					1.6 E-1	2.5 E-1	1.23E-2	3.11E+0	1.67E+0	3.11E+0	4.3 E-2	4.3 E-2

Duratek DuraMelter™ 100 Glass Data

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values							6.14	6.15	0.00	7.80	0.00	0.00	7.50	3.68	0.00	0.00	0.00	0.00
Data Sources:	D-P-1, D-U-1, D-U-2																	
D1F3-022P2	09/26/94	23:15:00	1.78			33.40	3.15	3.05	0.00	4.18	0.03	0.13	3.82	2.29	-0.004	0.05	0.01	0.08
D1F3-023P3	09/27/94	1:45:00	1.77			32.86	3.03	2.62	0.00	3.95	0.02	0.13	3.74	1.80	-0.003	-0.03	0.01	0.07
D1F3-026P4	09/27/94	13:15:00	1.75			33.71	2.99	3.24	0.00	4.27	0.02	0.13	3.76	2.61	-0.004	0.06	0.01	0.08
D1G4-002P	09/21/94	22:00:00					4.74	18.5	0.31	6.93	0.31		4.62	4.41	0.04	3.93	0.07	0.03
D1G4-009P	09/23/94	4:00:00					5.17	11.8	0.15	7.84	0.24		6.43	6.10	0.02	1.99	0.04	0.10
D1G4-017P	09/24/94	14:30:00					6.34	7.82	0.06	8.34	0.19		7.37	6.48	0.01	0.82	0.02	0.14
D1G4-022P2	09/26/94	23:15:00					6.71	7.37	0.04	8.70	0.21	0.17	7.78	2.47	-0.01	0.61	0.02	0.15
D1G4-022U2	09/26/94	23:15:00			0.02		6.39	6.46	0.04	8.36	0.20	0.10	7.40	3.36		0.58	0.05	0.13
D1G4-023P3	09/27/94	1:45:00					6.36	7.05	0.04	8.50	0.19	0.16	7.70	3.00	-0.01	0.53	0.02	0.14
D1G4-023U3	09/27/94	1:45:00			-0.01		6.45	6.28	0.04	8.36	0.19	0.11	7.46	3.37		0.51	0.05	0.13
D1G4-026P4	09/27/94	13:15:00					6.36	6.53	0.03	8.33	0.14	0.18	7.66	3.75	0.00	0.41	0.02	0.15
D1O7-000P	09/29/94	11:00:00					4.11	0.05	0.02	0.48	-0.03		1.69	-0.30	-0.01	0.25	0.01	-0.01
D1O7-000U	09/29/94	11:00:00			0.06		4.32	0.01	0.03	0.46	0.00	0.00	1.75	0.34		0.22	0.01	0.00
D1O7-002P	10/04/94	16:30:00					3.35	1.10	0.02	0.42	0.09		1.52	1.88	-0.01	0.19	0.02	0.03
D1O7-002U	10/04/94	16:30:00			4.80		3.96	0.85	0.02	0.43	0.08	0.28	1.60	1.84		0.20	0.01	0.02

Duratek DuraMelter™ 100 Glass Data

Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO_2	TiO_2	ZrO_2	TOC	TIC	Total C	Cl^-	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values	18.82	0.00	0.00	0.00	42.23	0.00	1.00	5.09				0.00	0.00	0.00	0.00	0.00		0.00
Data Sources:																		
D1F3-022P2	8.36	-0.01	1.03	0.10	20.7	0.05	0.51	0.06	3.29E-05	9.17E-06		0.16			5.81	2.32		0.08
D1F3-023P3	8.51	-0.01	0.98	0.10	20.1	0.05	0.54	0.08	3.67E-05	4.81E-06		0.17			5.78	2.38		-0.06
D1F3-026P4	9.06	-0.01	1.01	0.11	19.6	0.05	0.40	0.16	2.75E-05	5.35E-06		0.16			5.79	2.38		-0.07
D1G4-002P	11.6	0.18	-0.14	0.20	39.5	0.03	0.21	1.44										
D1G4-009P	15.5	0.12	-0.12	0.22	40.1	0.07	0.61	1.30										
D1G4-017P	17.6	0.08	-0.10	0.22	40.7	0.09	0.82	3.05										
D1G4-022P2	18.0	0.06	0.06	0.21	42.5	0.10	0.89	3.62										
D1G4-022U2	17.4	0.06	0.20	0.16	42.9	0.10	0.89	3.65				0.11	0.08	0.015				
D1G4-023P3	18.1	0.07	0.04	0.21	42.0	0.10	0.90	3.79										
D1G4-023U3	17.5	0.05	0.21	0.15	43.0	0.10	0.91	3.84				0.12	0.07	0.020				
D1G4-026P4	17.9	0.04	0.05	0.22	41.0	0.10	0.88	3.93										
D1O7-000P	4.38	-0.02	-0.18	-0.19	84.1	0.01	0.21	0.02										
D1O7-000U	3.87	-0.001	0.08	-0.12	87.9	0.01	0.24	0.01				0.02	0.02	-0.004				
D1O7-002P	5.69	-0.03	0.02	0.60	66.1	0.01	0.19	0.10										
D1O7-002U	5.05	0.0003	0.09	0.42	78.8	0.01	0.21	0.01				1.73	0.54	0.006				

Duratek DuraMelter™ 100 Glass Data

Sample No.	SO_4^{2-}	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)
Target Values	0.00	98.41		Petrographic	Petrographic	SEM / EDX				0.102	
Data Sources:											
D1F3-022P2	0.12	89.51									
D1F3-023P3	0.13	87.03									
D1F3-026P4	0.16	89.79									
D1G4-002P		97.05	0.0027								
D1G4-009P		97.82	0.0026								
D1G4-017P		100.15	0.0874								
D1G4-022P2		99.70	0.0770					0.029	0.083	0.104	0.056
D1G4-022U2		98.57	0.09	<1	Z (dissociating), Al Rf	none observed	11.5	0.022	0.065	0.120	0.054
D1G4-023P3		98.85	0.1044					0.031	0.090	0.102	0.061
D1G4-023U3		98.78	0.11	<1	Z (dissociating), Al Rf, Q	none observed	11.5	0.023	0.067	0.106	0.051
D1G4-026P4		97.62	0.0744								
D1O7-000P		95.33									
D1O7-000U		99.26	0.04								
D1O7-002P		81.34									
D1O7-002U		96.09	0.01								

Duratek DuraMelter™ 100 Glass Raw Data - PNL

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs	Fe_2O_3	K_2O	Li_2O	MgO	MnO	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor			1			1	1	1	1	1	1	2.12	1	1	1	1	1.225	1
D1F3-022P2	09/26/94	23:15:00	1.78			33.4	3.15	3.05	0.00	4.18	0.03	0.062	3.82	2.29	0.00	0.05	0.006	0.08
D1F3-023P3	09/27/94	1:45:00	1.77			32.86	3.03	2.62	0.00	3.95	0.02	0.061	3.74	1.80	0.00	-0.03	0.005	0.07
D1F3-026P4	09/27/94	13:15:00	1.75			33.71	2.99	3.24	0.00	4.27	0.02	0.060	3.76	2.61	0.00	0.06	0.005	0.08
D1G4-002P	09/21/94	22:00:00					4.74	18.47	0.31	6.93	0.31		4.62	4.41	0.04	3.93	0.060	0.03
D1G4-009P	09/23/94	4:00:00					5.17	11.84	0.15	7.84	0.24		6.43	6.10	0.02	1.99	0.030	0.10
D1G4-017P	09/24/94	14:30:00					6.34	7.82	0.06	8.34	0.19		7.37	6.48	0.01	0.82	0.020	0.14
D1G4-022P2	09/26/94	23:15:00					6.71	7.37	0.04	8.70	0.21	0.080	7.78	2.47	-0.01	0.61	0.020	0.15
D1G4-023P3	09/27/94	1:45:00					6.36	7.05	0.04	8.50	0.19	0.075	7.70	3.00	-0.01	0.53	0.020	0.14
D1G4-026P4	09/27/94	13:15:00					6.36	6.53	0.03	8.33	0.14	0.085	7.66	3.75	0.00	0.41	0.020	0.15
D1O7-000P	09/29/94	11:00:00					4.11	0.05	0.02	0.48	-0.03		1.69	-0.30	-0.01	0.25	0.010	-0.01
D1O7-002P	10/04/94	16:30:00					3.35	1.1	0.02	0.42	0.09		1.52	1.88	-0.01	0.19	0.020	0.03

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values							6.14	6.15	0.00	7.80	0.00	0.00	7.50	3.68	0.00	0.00	0.00	0.00
D1F3-022P2	09/26/94	23:15:00	1.78			33.40	3.15	3.05	0.00	4.18	0.03	0.13	3.82	2.29	0.00	0.05	0.01	0.08
D1F3-023P3	09/27/94	1:45:00	1.77			32.86	3.03	2.62	0.00	3.95	0.02	0.13	3.74	1.80	0.00	-0.03	0.01	0.07
D1F3-026P4	09/27/94	13:15:00	1.75			33.71	2.99	3.24	0.00	4.27	0.02	0.13	3.76	2.61	0.00	0.06	0.01	0.08
D1G4-002P	09/21/94	22:00:00					4.74	18.47	0.31	6.93	0.31		4.62	4.41	0.04	3.93	0.07	0.03
D1G4-009P	09/23/94	4:00:00					5.17	11.84	0.15	7.84	0.24		6.43	6.10	0.02	1.99	0.04	0.10
D1G4-017P	09/24/94	14:30:00					6.34	7.82	0.06	8.34	0.19		7.37	6.48	0.01	0.82	0.02	0.14
D1G4-022P2	09/26/94	23:15:00					6.71	7.37	0.04	8.70	0.21	0.17	7.78	2.47	-0.01	0.61	0.02	0.15
D1G4-023P3	09/27/94	1:45:00					6.36	7.05	0.04	8.50	0.19	0.16	7.70	3.00	-0.01	0.53	0.02	0.14
D1G4-026P4	09/27/94	13:15:00					6.36	6.53	0.03	8.33	0.14	0.18	7.66	3.75	0.00	0.41	0.02	0.15
D1O7-000P	09/29/94	11:00:00					4.11	0.05	0.02	0.48	-0.03		1.69	-0.30	-0.01	0.25	0.01	-0.01
D1O7-002P	10/04/94	16:30:00					3.35	1.10	0.02	0.42	0.09		1.52	1.88	-0.01	0.19	0.02	0.03

Duratek DuraMelter™ 100 Glass Raw Data - PNL

Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl^-	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(ug/ml)	(ug/ml)	(Wt %)	(ug/g)	(ug/g)	(ug/g)	(ug/g)	(ug/g)	(wt%)	(ug/g)
Conver. factor	1	1	1	1	1	1	1	1	5.66E-07	5.66E-07		1.00E-04	1.00E-04	1.00E-04	1.00E-04	1.00E-04		1.00E-04
D1F3-022P2	8.36	-0.01	1.03	0.10	20.72	0.05	0.51	0.06	58.03	16.20		1632.31			58080.0	23190.5		807.1
D1F3-023P3	8.51	-0.01	0.98	0.10	20.08	0.05	0.54	0.08	64.78	8.50		1702.2			57848.2	23771.8		-608.8
D1F3-026P4	9.06	-0.01	1.01	0.11	19.62	0.05	0.40	0.16	48.65	9.45		1648.33			57911.8	23847.4		-655.4
D1G4-002P	11.64	0.18	-0.14	0.20	39.49	0.03	0.21	1.44										
D1G4-009P	15.53	0.12	-0.12	0.22	40.05	0.07	0.61	1.30										
D1G4-017P	17.64	0.08	-0.10	0.22	40.66	0.09	0.82	3.05										
D1G4-022P2	18.02	0.06	0.06	0.21	42.51	0.10	0.89	3.62										
D1G4-023P3	18.10	0.07	0.04	0.21	41.95	0.10	0.90	3.79										
D1G4-026P4	17.85	0.04	0.05	0.22	40.99	0.10	0.88	3.93										
D1O7-000P	4.38	-0.02	-0.18	-0.19	84.10	0.01	0.21	0.02										
D1O7-002P	5.69	-0.03	0.02	0.6	66.11	0.01	0.19	0.1										

Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl^-	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(Wt %)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values	18.82	0.00	0.00	0.00	42.23	0.00	1.00	5.09				0.00	0.00	0.00	0.00	0.00		0.00
D1F3-022P2	8.36	-0.01	1.03	0.10	20.72	0.05	0.51	0.06	3.29E-05	9.17E-06		0.16			5.81	2.32		0.08
D1F3-023P3	8.51	-0.01	0.98	0.10	20.08	0.05	0.54	0.08	3.67E-05	4.81E-06		0.17			5.78	2.38		-0.06
D1F3-026P4	9.06	-0.01	1.01	0.11	19.62	0.05	0.40	0.16	2.75E-05	5.35E-06		0.16			5.79	2.38		-0.07
D1G4-002P	11.64	0.18	-0.14	0.20	39.49	0.03	0.21	1.44										
D1G4-009P	15.53	0.12	-0.12	0.22	40.05	0.07	0.61	1.30										
D1G4-017P	17.64	0.08	-0.10	0.22	40.66	0.09	0.82	3.05										
D1G4-022P2	18.02	0.06	0.06	0.21	42.51	0.10	0.89	3.62										
D1G4-023P3	18.10	0.07	0.04	0.21	41.95	0.10	0.90	3.79										
D1G4-026P4	17.85	0.04	0.05	0.22	40.99	0.10	0.88	3.93										
D1O7-000P	4.38	-0.02	-0.18	-0.19	84.10	0.01	0.21	0.02										
D1O7-002P	5.69	-0.03	0.02	0.60	66.11	0.01	0.19	0.10										

Duratek DuraMelter™ 100 Glass Raw Data - PNL

Sample No.	SO_4^{2-}	Fe(II)	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(ug/g)	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ppm)	(ppm)	(ppm)	(ppm)
Conver. factor	1.00E-04	1	1	Petrographic	Petrographic	SEM ; EDX	1	3.64E-04	3.76E-03	5.15E-04	2.35E-03
D1F3-022P2	1208.0										
D1F3-023P3	1316.8										
D1F3-026P4	1625.4										
D1G4-002P		0.0088	0.0027								
D1G4-009P		0.0126	0.0026								
D1G4-017P		0.4751	0.0874								
D1G4-022P2		0.4238	0.0770					80	22	202	24
D1G4-023P3		0.5730	0.1044					85	24	198	26
D1G4-026P4		0.4157	0.0744								
D1O7-000P											
D1O7-002P											

Sample No.	SO_4^{2-}	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)
Target Values	0.00	98.41		Petrographic	Petrographic	SEM / EDX				0.102	
D1F3-022P2	0.12	89.51									
D1F3-023P3	0.13	87.03									
D1F3-026P4	0.16	89.79									
D1G4-002P		97.05	0.0027								
D1G4-009P		97.82	0.0026								
D1G4-017P		100.15	0.0874								
D1G4-022P2		99.70	0.0770					0.029	0.083	0.104	0.056
D1G4-023P3		98.85	0.1044					0.031	0.090	0.102	0.061
D1G4-026P4		97.62	0.0744								
D1O7-000P		95.33									
D1O7-002P		81.34									

Duratek DuraMelter™ 100 Glass Raw Data - USGS

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B	Ba	CaO	Cr	Cs	Fe_2O_3	K_2O	Li	MgO	MnO	Mo
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(ppm)	(ppm)	(wt%)	(ppm)	(ppm)	(wt%)	(wt%)	(ppm)	(wt%)	(wt%)	(ppm)
Conver. factor					1	1	1	3.22E-04	1.12E-04	1	1.46E-04	1.06E-04	1	1	2.15E-04	1	1.225	1.50E-04
D1G4-022U2					-0.01		6.39	20200	400	8.36	1400	954.	7.4	3.38		0.56	0.04	890
D1G4-022U2					0.04		6.39	19900	390	8.35	1400	962.	7.4	3.34		0.6	0.04	890
Average	09/26/94	23:15:00			0.02		6.39	20050	395	8.36	1400	958.	7.4	3.36		0.58	0.04	890
D1G4-023U3					-0.01		6.44	19500	350	8.37	1300	992.	7.46	3.37		0.51	0.04	890
D1G4-023U3					-0.01		6.45	19500	350	8.35	1300	992.	7.45	3.36		0.51	0.04	890
Average	09/27/94	1:45:00			-0.01		6.45	19500	350	8.36	1300	992.	7.46	3.37		0.51	0.04	890
D1O7-000U					0.06		4.31	55	230	0.46	11	10.7	1.74	0.34		0.22	0.01	15
D1O7-000U					0.05		4.32	28	230	0.45	8	10.6	1.76	0.33		0.21	0.01	14
Average	09/29/94	11:00:00			0.06		4.32	42	230	0.46	10	10.65	1.75	0.34		0.22	0.01	15
D1O7-002U					4.83		3.94	2600	200	0.42	470	2590.	1.61	1.85		0.2	0.01	110
D1O7-002U					4.76		3.98	2670	200	0.43	590	2770.	1.58	1.83		0.2	0.01	110
Average	10/04/94	16:30:00			4.80		3.96	2635	200	0.43	530	2680.	1.6	1.84		0.2	0.01	110
Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values							6.14	6.15	0.00	7.80	0.00	0.00	7.50	3.68	0.00	0.00	0.00	0.00
D1G4-022U2	09/26/94	23:15:00			0.02		6.39	6.46	0.04	8.36	0.2	0.1	7.4	3.36		0.58	0.05	0.13
D1G4-023U3	09/27/94	1:45:00			-0.01		6.45	6.28	0.04	8.36	0.19	0.11	7.46	3.37		0.51	0.05	0.13
D1O7-000U	09/29/94	11:00:00			0.06		4.32	0.01	0.03	0.46	0.	0.	1.75	0.34		0.22	0.01	0.00
D1O7-002U	10/04/94	16:30:00			4.80		3.96	0.85	0.02	0.43	0.08	0.28	1.6	1.84		0.2	0.01	0.02

Duratek DuraMelter™ 100 Glass Raw Data - USGS

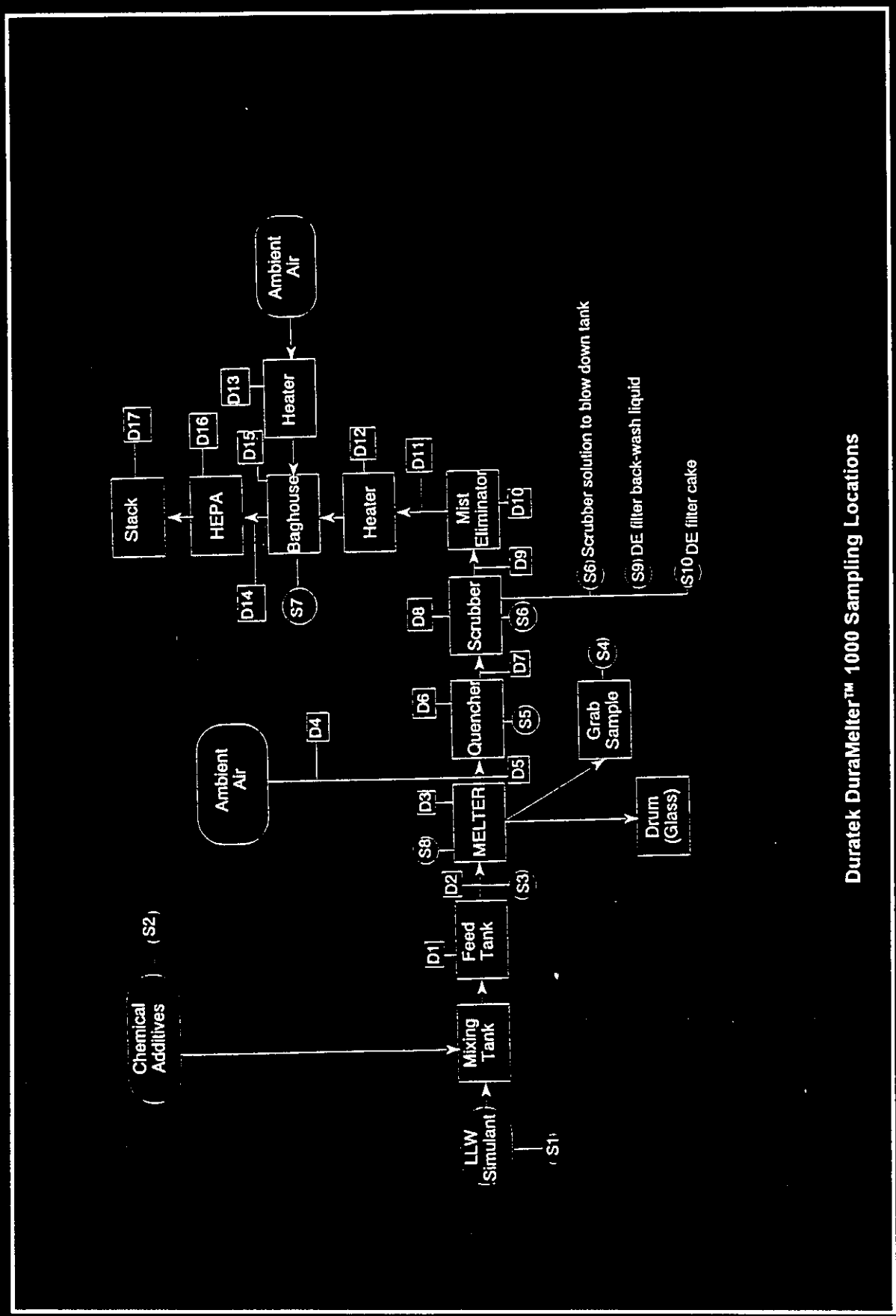
Sample No.	Na_2O	Ni	P_2O_5	S	SiO_2	Sr	TiO_2	Zr	TOC	TIC (CO_3)	Total C	Cl	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}
	(wt%)	(ppm)	(wt%)	(wt%)	(wt%)	(ppm)	(wt%)	(ppm)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor	1	1.27E-04	1	2.497	1	1.18E-04	1	1.35E-04				1	1	1				
D1G4-022U2	17.5	440	0.2	0.06	42.9	860	0.89	27200				0.11	0.09					
D1G4-022U2	17.3	430	0.2	0.07	42.8	850	0.89	26800				0.11	0.07					
Average	17.4	435	0.2	0.07	42.85	855	0.89	27000				0.11	0.08	0.0151				
D1G4-023U3	17.4	380	0.2	0.06	43.	870	0.91	28500				0.12	0.07					
D1G4-023U3	17.5	390	0.21	0.06	42.9	860	0.91	28400				0.12	0.07					
Average	17.45	385	0.21	0.06	42.95	865	0.91	28450				0.12	0.07	0.0203				
D1O7-000U	3.86	-8	0.08	-0.05	87.9	94	0.24	72				0.02	0.02					
D1O7-000U	3.87	-8	0.07	-0.05	87.9	92	0.23	79				0.02	0.02					
Average	3.87	-8	0.08	-0.05	87.9	93	0.24	76				0.02	0.02	-0.004				
D1O7-002U	5.04	13	0.09	0.18	78.7	86	0.21	100				1.75	0.62					
D1O7-002U	5.05	-8	0.09	0.16	78.8	84	0.21	94				1.7	0.46					
Average	5.05	3	0.09	0.17	78.75	85	0.21	97				1.73	0.54	0.0064				

Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC (CO_3)	Total C	Cl	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values	18.82	0.00	0.00	0.00	42.23	0.00	1.00	5.09				0.00	0.00	0.00	0.00	0.00		0.00
D1G4-022U2	17.4	0.06	0.2	0.16	42.85	0.1	0.89	3.65				0.11	0.08	0.015				
D1G4-023U3	17.45	0.05	0.21	0.15	42.95	0.1	0.91	3.84				0.12	0.07	0.020				
D1O7-000U	3.87	0.	0.08	-0.12	87.9	0.01	0.24	0.01				0.02	0.02	-0.004				
D1O7-002U	5.05	0.	0.09	0.42	78.75	0.01	0.21	0.01				1.73	0.54	0.006				

Duratek DuraMelter™ 100 Glass Raw Data - USGS

Sample No.	SO_3^{2-}	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ppm)	(ppm)	(ppm)	(ppm)
Conver. factor			1	Petrographic	Petrographic	SEM ; EDX	1	3.59E-04	3.63E-03	5.57E-04	2.57E-03
D1G4-022U2		0.55	0.08				11.51	60	18	210	21
D1G4-022U2		0.6	0.09				11.47	61	18	220	21
Average		0.58	0.09	<1	Z (dissociating), Al Rf	none observed	11.49	61	18	215	21
D1G4-023U3		0.75	0.11				11.52	66	19	200	21
D1G4-023U3		0.76	0.11				11.53	60	18	180	19
Average		0.76	0.11	<1	Z (dissociating), Al Rf, Q	none observed	11.53	63	19	190	20
D1O7-000U		0.07	0.04								
D1O7-000U		0.07	0.04								
Average		0.07	0.04								
D1O7-002U		0.02	0.01								
D1O7-002U		0.02	0.01								
Average		0.02	0.01								

Sample No.	SO_3^{2-}	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)			(vol%)	I.D.	Enriched / Depleted	pH	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)
Target Values	0.00	98.41		Petrographic	Petrographic	SEM ; EDX	1			0.102	
D1G4-022U2		98.58	0.09	<1	Z (dissociating), Al Rf	none observed	11.49	0.022	0.065	0.120	0.054
D1G4-023U3		98.80	0.11	<1	Z (dissociating), Al Rf, Q	none observed	11.53	0.023	0.067	0.106	0.051
D1O7-000U		99.26	0.04								
D1O7-002U		96.10	0.01								


Duratek DuraMelter™ 1000 Sampling Point Schematic
Chemical Additives
S2
LLW Simulant
S1
Mixing Tank
Feed Tank
D1
D2
S3
MELTER
S8
D3
Ambient Air
D4
Quencher
D6
S5
D5
Grab Sample
S4
Drum (Glass)
Scrubber
D8
S6
D7
Mist Eliminator
D9
D10
Heater
D11
D12
Baghouse
S7
D14
D15
HEPA
D16
Stack
D17
Heater
D13
Ambient Air
S6 Scrubber solution to blow down tank
S9 DE filter back-wash liquid
S10 DE filter cake
Duratek DuraMelter™ 1000 Sampling Locations

Melter Project: Sample Numbering Scheme
Duratek

D	1	G	4	-	0	0	1	C	1
Vendor Identification	**Phase Identifier**	**Sample Type**	**Sample Point Number**	**Hyphen**	**Serial**	**Sample**	**Number**	**Lab ID**	**Snapshot Set ID**
Duratek	*Phase 1*	*Glass*	*Sample Point 4*		*Sample*	*Number*	*1*	*Corning*	*1 = 1st Mass Balance Set*
					0-99	Duramelter 100			
					100+	Duramelter 1000			

Vendor

D = Duratek

Sample Type

S1 = Simulant
S2 = Additives
F3 = Feed, Mixed
G4 = Glass
G8 = Glass, pool
C8 = Coupons
O5 = Off-gas, Quencher
O6 = Off-gas, Scrubber
O7 = Off-gas, Baghouse
O9 = Off-gas, Backwash
O10 = Off-gas, Filtercake

Coupon Numbering (XYZ)

Material Type
X = 0 is K3
X = 1 is Zirmul
X = 2 is Inconel 690
X = 3 is Inconel 601

Material History
YZ = 00 is un-used material
YZ = 01 is air contact in melter
YZ = 02 is air/glass interface
YZ = 03 is glass contact in melter

Lab ID	Sample Set ID
C = Corning	1 = 1st Mass Balance Set
G = Archive (GEL)	2 = 2nd Mass Balance Set
P = PNL	
Q = Quanterra	Blank = Individual Pts.
U = USGS	
W = 222-S	

Duratek DuraMelter™ 1000 Analytical Data

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(Wt. %)	(Wt. %)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
Data Sources:	[D2-P-1]																		
D1O6-101P	01/19/95	6:37:00	12.85	1.02	Colorless				2.23E-4	3.29E-4	-1.46E-5	1.25E-4	-3.85E-7	2.37E-5	1.81E-5	-1.28E-3	-1.44E-4	2.47E-6	-2.73E-6
D1O6-106P	01/19/95	13:15:00	10.85	1.04	Cloudy yellow				8.87E-4	6.73E-3	-1.46E-4	1.56E-4	1.60E-4	2.75E-4	3.73E-5	3.56E-3	-1.44E-3	-2.06E-2	-2.73E-5
D1O6-113P	01/19/95	18:50:00	10.68	1.06	Cloudy yellow				5.89E-4	8.43E-3	-1.46E-4	5.55E-4	1.63E-4	4.42E-4	3.80E-5	4.80E-3	-1.44E-3	-2.06E-2	-2.73E-5
D1O6-119P	01/19/95	23:15:00	10.77	1.07	Cloudy yellow				6.74E-4	8.91E-3	-7.28E-4	-6.24E-2	1.65E-4	5.06E-4	5.75E-5	-6.39E-2	-7.21E-3	-1.03E-1	-1.37E-4
D1O6-125P	01/20/95	6:29:00	10.68	1.09	Cloudy yellow				3.23E-4	1.45E-2	-2.91E-4	5.44E-5	2.10E-4	7.90E-4	3.90E-5	7.75E-3	-2.88E-3	-4.11E-2	-5.46E-5
D1O6-130P	01/20/95	12:05:00	10.89	1.08	Brown opaque				3.60E-3	1.20E-2	-1.46E-3	1.35E-3	2.08E-4	6.34E-4	2.51E-3	4.76E-5	-1.44E-5	8.23E-6	-2.73E-7
D1O6-134P	01/20/95	18:50:00	11.09	1.10	Cloudy yellow				5.30E-4	1.89E-2	-2.91E-4	5.49E-5	2.75E-4	1.14E-3	3.94E-5	1.11E-2	-2.88E-3	-4.11E-2	-5.46E-5
D1O6-143P	01/21/95	4:50:00	11.05	1.11	Cloudy yellow				3.29E-4	1.75E-2	-7.28E-4	-6.24E-2	2.56E-4	1.05E-3	5.96E-5	7.32E-3	-7.21E-3	-1.03E-1	-1.37E-4
D1O6-146P	01/21/95	7:05:00	10.72	1.09	Cloudy yellow				-3.71E-3	1.76E-2	-7.28E-4	-6.24E-2	2.10E-4	1.02E-3	9.76E-5	6.55E-3	-7.21E-3	-1.03E-1	-1.37E-4
D1O6-148P	01/21/95	10:50:00	10.78	1.09	Cloudy yellow				4.04E-4	1.76E-2	-2.91E-4	4.08E-4	2.31E-4	1.03E-3	9.76E-5	1.22E-2	-2.88E-3	-4.11E-2	-5.46E-5
D1S1-102P	01/19/95	21:00:00		1.48	Dk. Brown opaque				9.45E-1	5.48E-3	2.16E-4	1.40E-2	1.37E-2	1.62E-2	2.12E-1	4.05E-1	-1.44E-2	-2.06E-1	1.08E-3
D1S1-103P	01/20/95	15:00:00		1.56	Lt. Brown opaque				1.00E+0	1.44E-3	1.14E-4	3.89E-3	7.80E-3	2.12E-2	6.71E-3	4.53E-1	-1.44E-2	-2.06E-1	5.68E-4
D1S1-103P	Supernate			1.46	Lt. Brown opaque														
D1S2-109P	12/14/94	16:00:00	6.40	1.00	Colorless				-7.41E-6	-9.25E-6	-1.46E-6	2.20E-5	-3.85E-7	0.00E+0	-1.79E-6	4.76E-5	-1.44E-5	8.23E-6	-2.73E-7

Duratek DuraMelter™ 1000 Analytical Data

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl^-	F^-	I^-	NO_3^-	NO_2^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
Data Sources:																			
D1O6-101P	2.40E-6	1.92E-1	-6.81E-6	7.70E-3	-2.50E-6	9.44E-5	9.78E-4	-4.18E-5	-1.10E-5	2.65E+0	8.57E+1	2.39E-3			2.63E-4	2.19E-3		-3.22E-5	1.02E-4
D1O6-106P	6.50E-5	6.00E-1	-6.81E-5	1.09E-1	9.08E-4	8.15E-4	-5.71E-5	-4.18E-4	-1.10E-4	1.04E+1	4.58E+3	9.68E-3			1.84E-4	1.81E-2		-3.29E-4	7.69E-4
D1O6-113P	1.10E-4	1.12E+0	-6.81E-5	2.26E-1	1.16E-3	9.44E-4	7.50E-2	-4.18E-4	-1.10E-4	2.65E+1	6.57E+3	1.32E-2			2.39E-4	1.73E-1		-3.35E-4	7.83E-4
D1O6-119P	8.92E-5	1.28E+0	-3.41E-4	3.16E-1	1.30E-3	8.00E-4	9.28E-2	-2.09E-3	-5.48E-4	2.25E+1	8.13E+3	1.60E-2	2.45E-2		4.14E-4	1.60E-1		-3.94E-4	9.58E-4
D1O6-125P	1.25E-4	1.62E+0	-1.36E-4	3.22E-1	2.14E-3	8.54E-4	1.18E-1	-8.35E-4	-2.19E-4	2.40E+1	1.04E+4	3.69E-3			8.96E-4	1.59E-2		-2.87E-4	1.59E-3
D1O6-130P	1.13E-4	1.30E+0	-6.81E-4	1.71E-2	2.69E-3	2.08E-3	9.37E-2	-4.18E-3	-1.10E-3	5.83E+1	8.21E+3	2.80E-2			1.17E-2	1.29E-1		-2.96E-3	1.57E-3
D1O6-134P	1.83E-4	1.88E+0	-1.36E-4	3.36E-1	3.16E-3	5.87E-4	1.38E-1	-8.35E-4	-2.19E-4	1.65E+1	1.21E+4	4.65E-3			1.77E-3	1.51E-2		-3.47E-4	2.40E-3
D1O6-143P	1.74E-4	1.79E+0	-3.41E-4	3.52E-1	3.05E-3	1.46E-3	-2.85E-4	-2.09E-3	-5.48E-4	2.33E+1	1.11E+4	4.07E-2			1.31E-3	1.33E-1		-3.51E-4	2.43E-3
D1O6-146P	1.70E-4	1.70E+0	-3.41E-4	4.17E-1	3.33E-3	1.01E-3	1.24E-1	-2.09E-3	-5.48E-4	2.83E+1	1.09E+4	4.30E-2			(7.03E-04)	1.42E-1		-3.44E-4	2.72E-3
D1O6-148P	1.82E-4	1.69E+0	-1.36E-4	3.65E-1	3.40E-3	9.70E-4	1.37E-1	-8.35E-4	-2.19E-4	2.73E+1	1.20E+4	4.30E-2			(7.03E-04)	1.42E-1		-3.44E-4	2.72E-3
D1S1-102P	1.59E-2	8.72E+0	-6.81E-4	4.40E-2	2.71E-1	-7.12E-3	1.79E-2	-4.18E-3	-1.10E-3	2.22E+4	6.96E+3	9.19E-2			3.10E+0	1.61E+0		8.26E-3	5.08E-2
D1S1-103P	1.64E-2	1.19E+1	-6.81E-4	7.71E-2	5.06E-2	3.89E-3	1.44E-2	-4.18E-3	-1.10E-3	2.03E+4	7.80E+3	1.10E-1			5.48E+0	1.70E+0		2.71E-2	4.30E-2
D1S1-103P										1.28E+4	5.11E+3	1.07E-1			3.06E+0	1.97E+0		(4.61E-03)	2.28E-2
D1S2-109P	-2.08E-6	3.57E-5	-6.81E-7	-2.58E-6	6.24E-6	1.78E-5	5.02E-6	-4.18E-6	-1.10E-6	5.00E-1	4.40E-1	2.82E-5			2.26E-5	-1.09E-6		-2.63E-6	5.73E-6

Duratek DuraMelter™ 1000 Analytical Raw Data - PNL

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/ml)		(vol%)	(vol%)	()	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)
Conver. factor			1	1					3.71E-05	9.25E-05	7.28E-06	2.5E-05	1.92E-05	7.52E-06	1.79E-05	2.56E-05	1.44E-04	4.11E-05	1.82E-05
D1O6-119P	01/19/95	23:15:00	10.77	1.07	Cloudy yellow				18.2	96.3	-100	-2500	8.56	67.3	3.21	-2500	-50.0	-2500	-7.50
D1O6-113P	01/19/95	18:50:00	10.68	1.06	Cloudy yellow				15.9	91.2	-20.0	22.3	8.48	58.7	2.12	188	-10.0	-500	-1.50
D1O6-146P	01/21/95	7:05:00	10.72	1.09	Cloudy yellow				-100	191	-100	-2500	10.9	136	5.45	256	-50.0	-2500	-7.50
D1O6-148P	01/21/95	10:50:00	10.78	1.09	Cloudy yellow				10.9	191	-40.0	16.4	12.0	137	5.45	476	-20.0	-1000	-3.00
D1O6-134P	01/20/95	18:50:00	11.09	1.10	Cloudy yellow				14.3	205	-40.0	2.20	14.3	152	2.20	435	-20.0	-1000	-3.00
D1O6-125P	01/20/95	6:29:00	10.68	1.09	Cloudy yellow				8.72	157	-40.0	2.18	10.9	105	2.18	303	-20.0	-1000	-3.00
D1O6-101P	01/19/95	6:37:00	12.85	1.02	Colorless				6.01	3.56	-2.00	5.00	0.39	3.15	1.01	-50.0	-1.00	0.06	-0.15
D1O6-130P	01/20/95	12:05:00	10.89	1.08	Brown opaque				97.2	130	-200	54.0	10.8	84.3	140	-5000	-100	-5000	-15.0
D1S2-109P	12/14/94	16:00:00	6.4	1.00	Colorless				-0.20	-0.10	-0.20	0.88	-0.02	0	-0.10	1.86	-0.10	0.20	-0.015
D1S1-103P	01/20/95	15:00:00		1.56	Lt. Brown opaque				27097	15.6	15.6	156	406	2820	374	17722	-100	-5000	31.2
D1S1-103P	Supernate			1.46	Lt. Brown opaque														
D1O6-106P	01/19/95	13:15:00	10.85	1.04	Cloudy yellow				23.9	72.8	-20.0	6.24	8.32	36.6	2.08	139	-10.0	-500	-1.50
D1O6-143P	01/21/95	4:50:00	11.05	1.11	Cloudy yellow				8.88	189	-100	-2500	13.3	140	3.33	286	-50.0	-2500	-7.50
D1S1-102P	01/19/95	21:00:00		1.48	Dk. Brown opaque				25486	59.2	29.6	562	710	2150	11840	15836	-100	-5000	59.2

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(vol%)	(vol%)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
D1O6-119P	01/19/95	23:15:00	10.77	1.07	Cloudy yellow				6.74E-4	8.91E-3	-7.28E-4	-6.24E-2	1.65E-4	5.06E-4	5.75E-5	-6.39E-2	-7.21E-3	-1.03E-1	-1.37E-4
D1O6-113P	01/19/95	18:50:00	10.68	1.06	Cloudy yellow				5.89E-4	8.43E-3	-1.46E-4	5.55E-4	1.63E-4	4.42E-4	3.80E-5	4.80E-3	-1.44E-3	-2.06E-2	-2.73E-5
D1O6-146P	01/21/95	7:05:00	10.72	1.09	Cloudy yellow				-3.71E-3	1.76E-2	-7.28E-4	-6.24E-2	2.10E-4	1.02E-3	9.76E-5	6.55E-3	-7.21E-3	-1.03E-1	-1.37E-4
D1O6-148P	01/21/95	10:50:00	10.78	1.09	Cloudy yellow				4.04E-4	1.76E-2	-2.91E-4	4.08E-4	2.31E-4	1.03E-3	9.76E-5	1.22E-2	-2.88E-3	-4.11E-2	-5.46E-5
D1O6-134P	01/20/95	18:50:00	11.09	1.10	Cloudy yellow				5.30E-4	1.89E-2	-2.91E-4	5.49E-5	2.75E-4	1.14E-3	3.94E-5	1.11E-2	-2.88E-3	-4.11E-2	-5.46E-5
D1O6-125P	01/20/95	6:29:00	10.68	1.09	Cloudy yellow				3.23E-4	1.45E-2	-2.91E-4	5.44E-5	2.10E-4	7.90E-4	3.90E-5	7.75E-3	-2.88E-3	-4.11E-2	-5.46E-5
D1O6-101P	01/19/95	6:37:00	12.85	1.02	Colorless				2.23E-4	3.29E-4	-1.46E-5	1.25E-4	-3.85E-7	2.37E-5	1.81E-5	-1.28E-3	-1.44E-4	2.47E-6	-2.73E-6
D1O6-130P	01/20/95	12:05:00	10.89	1.08	Brown opaque				3.60E-3	1.20E-2	-1.46E-3	1.35E-3	2.08E-4	6.34E-4	2.51E-3	4.76E-5	-1.44E-5	8.23E-6	-2.73E-7
D1S2-109P	12/14/94	16:00:00	6.40	1.00	Colorless				-7.41E-6	-9.25E-6	-1.46E-6	2.20E-5	-3.85E-7	0.00E+0	-1.79E-6	4.76E-5	-1.44E-5	8.23E-6	-2.73E-7
D1S1-103P	01/20/95	15:00:00		1.56	Lt. Brown opaque				1.00E+0	1.44E-3	1.14E-4	3.89E-3	7.80E-3	2.12E-2	6.71E-3	4.53E-1	-1.44E-2	-2.06E-1	5.68E-4
D1S1-103P	Supernate			1.46	Lt. Brown opaque														
D1O6-106P	01/19/95	13:15:00	10.85	1.04	Cloudy yellow				8.87E-4	6.73E-3	-1.46E-4	1.56E-4	1.60E-4	2.75E-4	3.73E-5	3.56E-3	-1.44E-3	-2.06E-2	-2.73E-5
D1O6-143P	01/21/95	4:50:00	11.05	1.11	Cloudy yellow				3.29E-4	1.75E-2	-7.28E-4	-6.24E-2	2.56E-4	1.05E-3	5.96E-5	7.32E-3	-7.21E-3	-1.03E-1	-1.37E-4
D1S1-102P	01/19/95	21:00:00		1.48	Dk. Brown opaque				9.45E-1	5.48E-3	2.16E-4	1.40E-2	1.37E-2	1.62E-2	2.12E-1	4.05E-1	-1.44E-2	-2.06E-1	1.08E-3

Duratek DuraMelter™ 1000 Analytical Raw Data - PNL

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl⁻	F⁻	I⁻	NO_3^-	NO_2^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)
Conver. factor	1.04E-05	4.35E-5	1.7E-05	3.23E-05	3.12E-05	3.56E-05	1.14E-05	2.09E-05	1.1E-05	1	1	2.82E-05	5.26E-05	7.88E-06	1.61E-05	2.17E-05	1.61E-05	1.05E-05	1.04E-05
D1O6-119P	8.56	29413	-20.0	9785	41.7	26.8	-25.0	-100	-50.0	22.5	8132	567			25.7	7383		-37.5	92.0
D1O6-113P	10.6	25752	-4.00	6986	37.1	18.0	-5.00	-20.0	-10.0	26.5	6572	466			14.8	7950		-31.8	75.3
D1O6-146P	16.4	39183	-20.0	12917	107	16.4	-25.0	-100	-50.0	28.3	10900	1526			(43.6)	6540		-32.7	262
D1O6-148P	17.4	38832	-8.00	11290	109	30.5	-10.0	-40.0	-20.0	27.3	11990	1526			(43.6)	6540		-32.7	262
D1O6-134P	17.6	43236	-8.00	10396	101	68.2	-10.0	-40.0	-20.0	16.5	12100	165			110	693		-33.0	231
D1O6-125P	12.0	37350	-8.00	9984	68.7	30.5	-10.0	-40.0	-20.0	24.0	10355	131			55.6	730		-27.3	153
D1O6-101P	0.23	4420	-0.40	239	4.11	13.6	0.07	-2.00	-1.00	2.65	85.7	84.7			16.3	101		-3.06	9.79
D1O6-130P	10.8	29905	-40.0	529	86.4	21.6	10.8	-200	-100	58.3	8208	994			723.6	5940		-281	151
D1S2-109P	-0.2	0.82	-0.04	-0.08	0.20	0.35	-0.05	-0.20	-0.10	0.50	0.44	1			1.40	-0.05		-0.25	0.55
D1S1-103P	1576	273125	-40.0	2387	1622	109	1264	-200	-100	20280	7800	3900			340080	78000	-	2574	4134
D1S1-103P										12848	5110	3796			189800	90520		(438)	2190
D1O6-106P	6.24	13784	-4.00	3369	29.1	22.9	-5.00	-20.0	-10.0	10.4	4576	343.2			11.44	832		-31.2	73.84
D1O6-143P	16.7	41040	-20.0	10900	97.7	41.1	-25.0	-100	-50.0	23.31	11100	1443			81.03	6105		-33.3	233.1
D1S1-102P	1524	200362	-40.0	1362	8673	-200	1569	-200	-100	22200	6956	3256			192400	74000		784.4	4884

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl⁻	F⁻	I⁻	NO_3^-	NO_2^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(ug/ml)	(ug/ml)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
D1O6-119P	8.92E-5	1.28E+0	-3.41E-4	3.16E-1	1.30E-3	8.00E-4	9.28E-2	-2.09E-3	-5.48E-4	2.25E+1	8.13E+3	1.60E-2	2.45E-2		4.14E-4	1.60E-1		-3.94E-4	9.58E-4
D1O6-113P	1.10E-4	1.12E+0	-6.81E-5	2.26E-1	1.16E-3	9.44E-4	7.50E-2	-4.18E-4	-1.10E-4	2.65E+1	6.57E+3	1.32E-2			2.39E-4	1.73E-1		-3.35E-4	7.83E-4
D1O6-146P	1.70E-4	1.70E+0	-3.41E-4	4.17E-1	3.33E-3	1.01E-3	1.24E-1	-2.09E-3	-5.48E-4	2.83E+1	1.09E+4	4.30E-2			(7.03E-04)	1.42E-1		-3.44E-4	2.72E-3
D1O6-148P	1.82E-4	1.69E+0	-1.36E-4	3.65E-1	3.40E-3	9.70E-4	1.37E-1	-8.35E-4	-2.19E-4	2.73E+1	1.20E+4	4.30E-2			(7.03E-04)	1.42E-1		-3.44E-4	2.72E-3
D1O6-134P	1.83E-4	1.88E+0	-1.36E-4	3.36E-1	3.16E-3	5.87E-4	1.38E-1	-8.35E-4	-2.19E-4	1.65E+1	1.21E+4	4.65E-3			1.77E-3	1.51E-2		-3.47E-4	2.40E-3
D1O6-125P	1.25E-4	1.62E+0	-1.36E-4	3.22E-1	2.14E-3	8.54E-4	1.18E-1	-8.35E-4	-2.19E-4	2.40E+1	1.04E+4	3.69E-3			8.96E-4	1.59E-2		-2.87E-4	1.59E-3
D1O6-101P	2.40E-6	1.92E-1	-6.81E-6	7.70E-3	-2.50E-6	9.44E-5	9.78E-4	-4.18E-5	-1.10E-5	2.65E+0	8.57E+1	2.39E-3			2.63E-4	2.19E-3		-3.22E-5	1.02E-4
D1O6-130P	1.13E-4	1.30E+0	-6.81E-4	1.71E-2	2.69E-3	2.08E-3	9.37E-2	-4.18E-3	-1.10E-3	5.83E+1	8.21E+3	2.80E-2			1.17E-2	1.29E-1		-2.96E-3	1.57E-3
D1S2-109P	-2.08E-6	3.57E-5	-6.81E-7	-2.58E-6	6.24E-6	1.78E-5	5.02E-6	-4.18E-6	-1.10E-6	5.00E-1	4.40E-1	2.82E-5			2.26E-5	-1.09E-6		-2.63E-6	5.73E-6
D1S1-103P	1.64E-2	1.19E+1	-6.81E-4	7.71E-2	5.06E-2	3.89E-3	1.44E-2	-4.18E-3	-1.10E-3	2.03E+4	7.80E+3	1.10E-1			5.48E+0	1.70E+0		2.71E-2	4.30E-2
D1S1-103P										1.28E+4	5.11E+3	1.07E-1			3.06E+0	1.97E+0		(4.61E-03)	2.28E-2
D1O6-106P	6.50E-5	6.00E-1	-6.81E-5	1.09E-1	9.08E-4	8.15E-4	-5.71E-5	-4.18E-4	-1.10E-4	1.04E+1	4.58E+3	9.68E-3			1.84E-4	1.81E-2		-3.29E-4	7.69E-4
D1O6-143P	1.74E-4	1.79E+0	-3.41E-4	3.52E-1	3.05E-3	1.46E-3	-2.85E-4	-2.09E-3	-5.48E-4	2.33E+1	1.11E+4	4.07E-2			1.31E-3	1.33E-1		-3.51E-4	2.43E-3
D1S1-102P	1.59E-2	8.72E+0	-6.81E-4	4.40E-2	2.71E-1	-7.12E-3	1.79E-2	-4.18E-3	-1.10E-3	2.22E+4	6.96E+3	9.19E-2			3.10E+0	1.61E+0		8.26E-3	5.08E-2

Duratek DuraMelter™ 1000 Glass Data

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values							6.14	6.15	0.00	7.80	0.00	0.00	7.50	3.68	0.00	0.00	0.00	0.00
Data Sources: [D2-C-2, D2-C-3, D2-U-1]																		
D1F3-111C(d)	01/19/95	6:50:00					1.03	5.59	0.012	2.51	0.045	0.10	4.73	2.70		0.21	0.096	0.095
D1F3-111C(s)	01/19/95	6:50:00				31.5	0.70	3.83	0.0084	1.72	0.031	0.069	3.24	1.85		0.14	0.065	0.065
D1F3-111U	01/19/95	6:50:00			26.1	27.9	4.87	4.64	0.0095	5.79	0.047	0.099	4.50	2.51		-0.10	0.12	0.102
D1F3-112C(d)	01/19/95	22:00:00					0.98	4.68	0.013	2.68	0.051	0.09	5.34	2.66		0.16	0.097	0.094
D1F3-112C(s)	01/19/95	22:00:00				30.2	0.69	3.27	0.0091	1.87	0.036	0.064	3.73	1.85		0.11	0.068	0.066
D1F3-112U	01/19/95	22:00:00			25.5	26.6	4.80	4.52	0.0105	5.63	0.053	0.095	4.63	2.48		-0.10	0.12	0.100
D1F3-114C(d)	01/20/95	17:25:00					0.97	4.91	0.009	2.53	0.046	0.11	4.92	2.88		0.29	0.089	0.100
D1F3-114C(s)	01/20/95	17:25:00				29.6	0.68	3.46	0.0062	1.78	0.032	0.074	3.46	2.03		0.20	0.062	0.070
D1F3-114U	01/20/95	17:15:00			26.2	27.0	4.74	4.60	0.0099	5.73	0.050	0.099	4.53	2.48		-0.10	0.12	0.101
D1G4-108C5	01/19/95	13:50:00					6.19	6.57	0.011	7.09	0.14	0.11	6.33	3.39		0.40	0.12	0.13
D1G4-109C6	01/19/95	20:00:00					6.21	6.51	0.011	7.11	0.15	0.11	6.26	3.43		0.35	0.12	0.13
D1G4-110C7	01/19/95	23:30:00					6.24	6.46	0.011	7.10	0.14	0.11	6.26	3.45		0.31	0.12	0.13
D1G4-110P7	01/19/95	23:30:00					7.60	5.97	0.013	7.72	0.166		6.05	2.77	-0.01	0.27	0.14	0.13
D1G4-110U7	01/19/95	23:30:00			0.14		6.42	6.21	0.0146	7.77	0.175	0.11	6.25	3.38		0.34	0.15	0.13
D1G4-112C8	01/20/95	11:45:00					6.26	6.42	0.011	7.02	0.13	0.11	6.25	3.45		0.25	0.12	0.13
D1G4-115C9	01/21/95	6:15:00					6.28	6.33	0.011	6.94	0.12	0.11	6.19	3.46		0.19	0.12	0.13
D1G4-115U9	01/21/95	6:15:00			0.15		6.50	6.09	0.0134	7.84	0.153	0.112	6.23	3.40		0.23	0.16	0.135
D1O10-101C(d	01/23/95	15:30:00					1.12	0.92	0.009	3.95	0.046	0.14	6.37	1.12		0.27	0.11	0.007
D1O10-101C(s)	01/23/95	15:30:00				62.1	0.42	0.35	0.003	1.50	0.017	0.051	2.41	0.42		0.10	0.04	0.003
D1O7-100C	12/19/94	16:00:00					4.29	0.04	0.021	0.48	0.0060	-0.01	1.25	0.72		0.69	0.0091	0.0025
D1O7-101C	01/20/95	4:20:00					2.55	1.09	0.14	0.60	0.18	1.37	4.90	5.17		0.20	0.030	0.072
D1O7-102C	01/20/95	17:30:00					4.41	0.22	0.060	0.47	0.027	0.46	1.97	2.15		0.60	0.013	0.021
D1O7-103C	01/21/95	10:30:00					3.61	0.62	0.017	0.59	0.11	1.09	1.87	4.16		0.22	0.012	0.049
D1O9-101C	01/21/95	10:30:00					0.0040	0.030	-0.0004	0.0005	0.00081	0.0060	0.0017	0.029		0.0006	-0.0001	0.0011

Duratek DuraMelter™ 1000 Glass Data

Sample No.	Na_2O (wt%)	NiO (wt%)	P_2O_5 (wt%)	SO_3 (wt%)	SiO_2 (wt%)	SrO (wt%)	TiO_2 (wt%)	ZrO_2 (wt%)	TOC (wt%)	TIC (wt%)	Total C (wt%)	Cl^- (wt%)	F^- (wt%)	I^- (wt%)	NO_2^- (wt%)	NO_3^- (wt%)	Total N_2 (wt%)	PO_4^{3-} (wt%)
Target Values	18.82	0.00	0.00	0.00	42.23	0.00	1.00	5.09										
Data Sources:																		
D1F3-111C(d)	15.2	0.002	0.14		32.3	0.002	0.34	2.91			3.25		0.105					
D1F3-111C(s)	10.4	0.001	0.10		22.1	0.002	0.23	1.99			2.23	0.16	0.07	0.011	6.61	2.63		0.04
D1F3-111U	12.9	0.0025	0.19	0.37	32.0	0.083	0.53	3.15	1.16	2.41	3.57	0.28	0.09	0.0869	7.50	3.85		
D1F3-112C(d)	13.3	0.003	0.16		34.9	0.003	0.63	4.16			3.34		0.08					
D1F3-112C(s)	9.27	0.002	0.11		24.3	0.002	0.44	2.90			2.33	0.16	0.06	0.018	6.42	2.60		0.04
D1F3-112U	12.5	0.0023	0.17	0.52	31.8	0.083	0.78	4.36	1.11	2.32	3.43	0.26	0.06	0.0878	7.35	3.50		
D1F3-114C(d)	13.9	0.002	0.11		33.0	0.002	0.77	4.27			3.01		0.07					
D1F3-114C(s)	9.80	0.001	0.077		23.2	0.001	0.54	3.00			2.12	0.17	0.05	0.015	6.60	2.65		0.03
D1F3-114U	12.6	0.0023	0.15	0.45	31.4	0.081	0.81	4.01	1.14	2.35	3.49	0.28	0.06	0.0894	7.15	3.75		
D1G4-108C5	17.7	0.028	0.29		41.0	0.11	0.87	4.64					0.16					
D1G4-109C6	17.7	0.025	0.29		41.2	0.11	0.83	4.55					0.15					
D1G4-110C7	17.7	0.022	0.29		40.8	0.11	0.83	4.52					0.14					
D1G4-110P7	17.3	0.051	0.26	0.56	40.7	0.115	0.77	4.33										
D1G4-110U7	17.8	0.023	0.26	0.54	42.3	0.115	0.83	4.43				0.18	0.15	0.0202				
D1G4-112C8	17.6	0.020	0.27		40.6	0.11	0.85	4.56					0.12					
D1G4-115C9	17.6	0.017	0.26		42.2	0.11	0.90	4.76					0.09					
D1G4-115U9	17.6	0.018	0.23	0.57	42.5	0.113	0.90	4.42				0.19	0.09	0.0233				
D1O10-101C(d	7.85	0.009	0.07		59.9	0.003	0.14	0.081										
D1O10-101C(s)	2.98	0.003	0.026		22.7	0.001	0.053	0.031					0.09					
D1O7-100C	4.30	0.0084	0.17		86.5	0.0075	0.21	0.0028					0.04					
D1O7-101C	9.48	0.027	0.25		41.2	0.012	0.11	0.0038					1.25					
D1O7-102C	4.78	0.0063	0.17		78.7	0.0090	0.20	0.0043					0.23					
D1O7-103C	8.30	0.0038	0.075		65.6	0.010	0.16	0.0062					0.52					
D1O9-101C	3.27	-0.0001	-0.001		0.0930	0.0001	0.0002	-0.0002					0.01					

Duratek DuraMelter™ 1000 Glass Data

Sample No.	SO_3^{2-}	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)			(vol%)	I.D.	Enriched / Depleted	pH	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)
Target Values		98.4		Petrographic	Petrographic	SEM / EDX					
Data Sources:											
D1F3-111C(d)		71.33									
D1F3-111C(s)	0.22	90.01									
D1F3-111U		115.11									
D1F3-112C(d)		73.35									
D1F3-112C(s)	0.22	90.84									
D1F3-112U		113.88									
D1F3-114C(d)		71.94									
D1F3-114C(s)	0.22	89.92									
D1F3-114U		113.76									
D1G4-108C5		95.22	-0.0004	N.A.	N.A.	N.A.					
D1G4-109C6		95.21	-0.0004	~2	Z, Q, Al b (Ne corona), many bubbles	not apparent (assoc. w/ incl.)	11.5	0.021	0.054	0.036	0.045
D1G4-110C7		94.75	-0.0004	~1	Z (rounded), many bubbles	none visible	11.5	0.021	0.051	0.036	0.045
D1G4-110P7		94.92	0.0015				11.3	0.022	0.058	0.081	0.060
D1G4-110U7		97.45									
D1G4-112C8		94.23	-0.0004	N.A.	N.A.	N.A.					
D1G4-115C9		95.70	-0.0004	N.A.	N.A.	N.A.					
D1G4-115U9		97.48									
D1O10-101C(d		82.03		N.A.	N.A.	N.A.					
D1O10-101C(s		93.28									
D1O7-100C		98.70		N.A.	N.A.	N.A.					
D1O7-101C		68.57		N.A.	N.A.	N.A.					
D1O7-102C		94.50		N.A.	N.A.	N.A.					
D1O7-103C		87.00		N.A.	N.A.	N.A.					
D1O9-101C		3.45		N.A.	N.A.	N.A.					

Duratek DuraMelter™ 1000 Glass Raw Data - Corning

Sample No.	Date	Time	Density	Settled Sol.	LOI 600°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor						1	1	1	1	1	1	1	1	1		1	1	1
D1F3-111C							1.02	5.63	0.011	2.49	0.045	0.10	4.70	2.70		0.28	0.096	0.095
D1F3-111C							1.03	5.56	0.016	2.53	0.045	0.10	4.73	2.70		0.27	0.095	0.094
D1F3-111C							1.01	5.60	0.009	2.50	0.046	0.10	4.74	2.68		0.14	0.096	0.095
D1F3-111C							1.04	5.58	0.013	2.53	0.045	0.10	4.76	2.70		0.14	0.095	0.094
Dried Avg.	01/19/95	6:50:00					1.03	5.59	0.012	2.51	0.045	0.10	4.73	2.70		0.21	0.096	0.095
Slurry Avg.	01/19/95	6:50:00				31.5	0.70	3.83	0.0084	1.72	0.031	0.069	3.24	1.85		0.14	0.065	0.065
D1F3-114C							0.96	4.85	0.011	2.51	0.046	0.11	4.90	2.91		0.29	0.088	0.100
D1F3-114C							0.97	4.86	0.009	2.48	0.047	0.11	4.88	2.87		0.29	0.088	0.100
D1F3-114C							0.98	4.98	0.009	2.58	0.045	0.10	4.95	2.87		0.29	0.089	0.100
D1F3-114C							0.98	4.96	0.006	2.53	0.046	0.10	4.93	2.87		0.29	0.090	0.100
Dried Avg.	01/20/95	17:25:00					0.97	4.91	0.009	2.53	0.046	0.11	4.92	2.88		0.29	0.089	0.100
Slurry Avg.	01/20/95	17:25:00				29.6	0.68	3.46	0.0062	1.78	0.032	0.074	3.46	2.03		0.20	0.062	0.070
D1F3-112C							0.97	4.64	0.014	2.69	0.051	0.09	5.38	2.59		0.08	0.096	0.096
D1F3-112C							0.99	4.66	0.011	2.68	0.052	0.09	5.43	2.57		0.08	0.097	0.097
D1F3-112C							0.99	4.70	0.017	2.68	0.051	0.09	5.26	2.73		0.24	0.098	0.092
D1F3-112C							0.98	4.72	0.010	2.67	0.050	0.09	5.29	2.74		0.24	0.097	0.091
Dried Avg.	01/19/95	22:00:00					0.98	4.68	0.013	2.68	0.051	0.09	5.34	2.66		0.16	0.097	0.094
Slurry Avg.	01/19/95	22:00:00				30.2	0.69	3.27	0.0091	1.87	0.036	0.064	3.73	1.85		0.11	0.068	0.066
D1G4-108C5							6.25	6.54	0.011	7.16	0.13	0.11	6.36	3.40		0.41	0.12	0.13
D1G4-108C5							6.19	6.55	0.011	7.10	0.13	0.11	6.34	3.38		0.40	0.12	0.13
D1G4-108C5							6.15	6.57	0.011	7.04	0.15	0.11	6.30	3.38		0.40	0.11	0.13
D1G4-108C5							6.18	6.61	0.011	7.05	0.15	0.11	6.33	3.38		0.40	0.11	0.13
Average	01/19/95	13:50:00					6.19	6.57	0.011	7.09	0.14	0.11	6.33	3.39		0.40	0.12	0.13
D1G4-109C6							6.14	6.52	0.011	7.09	0.16	0.11	6.24	3.43		0.34	0.12	0.13
D1G4-109C6							6.20	6.52	0.011	7.16	0.16	0.11	6.25	3.43		0.35	0.12	0.13
D1G4-109C6							6.22	6.49	0.011	7.10	0.14	0.11	6.24	3.43		0.34	0.12	0.13
D1G4-109C6							6.28	6.52	0.011	7.08	0.14	0.11	6.29	3.43		0.35	0.12	0.13
Average	01/19/95	20:00:00					6.21	6.51	0.011	7.11	0.15	0.11	6.26	3.43		0.35	0.12	0.13
D1G4-110C7							6.25	6.44	0.011	7.10	0.13	0.11	6.26	3.45		0.31	0.12	0.13
D1G4-110C7							6.24	6.45	0.011	7.12	0.13	0.11	6.29	3.45		0.31	0.12	0.13
D1G4-110C7							6.26	6.46	0.011	7.11	0.15	0.11	6.26	3.45		0.31	0.12	0.13
D1G4-110C7							6.21	6.48	0.011	7.07	0.14	0.11	6.21	3.45		0.31	0.12	0.13
Average	01/19/95	23:30:00					6.24	6.46	0.011	7.10	0.14	0.11	6.26	3.45		0.31	0.12	0.13
D1G4-112C8							6.22	6.44	0.011	7.05	0.13	0.11	6.20	3.43		0.24	0.12	0.13
D1G4-112C8							6.24	6.41	0.011	7.04	0.13	0.11	6.24	3.43		0.24	0.12	0.13
D1G4-112C8							6.27	6.42	0.011	6.99	0.13	0.11	6.25	3.47		0.25	0.12	0.13
D1G4-112C8							6.29	6.42	0.011	7.00	0.13	0.11	6.29	3.47		0.25	0.12	0.13
Average	01/20/95	11:45:00					6.26	6.42	0.011	7.02	0.13	0.11	6.25	3.45		0.25	0.12	0.13
D1G4-115C9							6.23	6.30	0.010	6.97	0.12	0.11	6.15	3.47		0.19	0.12	0.13
D1G4-115C9							6.26	6.32	0.011	6.92	0.12	0.11	6.19	3.45		0.19	0.12	0.13
D1G4-115C9							6.29	6.29	0.011	6.94	0.11	0.11	6.21	3.47		0.19	0.12	0.13
D1G4-115C9							6.32	6.39	0.011	6.93	0.11	0.11	6.22	3.45		0.19	0.12	0.13
Average	01/21/95	6:15:00					6.28	6.33	0.011	6.94	0.12	0.11	6.19	3.46		0.19	0.12	0.13
D1O10-101C							1.12	0.90	0.007	3.96	0.045	0.13	6.39	1.12		0.20	0.11	0.007
D1O10-101C							1.11	0.90	0.007	3.92	0.046	0.13	6.36	1.12		0.20	0.11	0.007
D1O10-101C							1.11	0.93	0.012	3.94	0.047	0.14	6.35	1.11		0.33	0.11	0.007
D1O10-101C							1.13	0.93	0.009	3.97	0.046	0.14	6.36	1.11		0.33	0.11	0.006
Dried Avg.	01/23/95	15:30:00					1.12	0.92	0.009	3.95	0.046	0.14	6.37	1.12		0.27	0.11	0.007

Duratek DuraMelter™ 1000 Glass Raw Data - Corning

Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl	F	I	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1		1
D1F3-111C	15.2	0.002	0.12		32.0	0.002	0.35	2.96			3.21	0.15	0.10	0.011	6.75	2.67		0.02
D1F3-111C	15.2	0.002	0.12		32.3	0.002	0.35	3.01			3.29	0.16	0.10	0.011	6.46	2.59		0.05
D1F3-111C	15.2	0.002	0.16		32.4	0.001	0.34	2.81			3.27		0.11					
D1F3-111C	15.2	0.002	0.16		32.4	0.004	0.33	2.84			3.23		0.11					
Dried Avg.	15.2	0.002	0.14		32.3	0.002	0.34	2.91			3.25		0.105					
Slurry Avg.	10.4	0.001	0.10		22.1	0.002	0.23	1.99			2.23	0.16	0.07	0.011	6.61	2.63		0.04
D1F3-114C	14.0	0.002	0.11		32.9	0.002	0.72	4.44			2.99	0.16	0.07	0.015	6.63	2.65		0.02
D1F3-114C	13.9	0.002	0.11		32.7	0.002	0.72	4.43			3.05	0.17	0.07	0.015	6.57	2.65		0.03
D1F3-114C	13.9	0.002	0.11		33.1	0.002	0.82	4.09			3.02		0.07					
D1F3-114C	13.9	0.002	0.11		33.1	0.002	0.82	4.10			2.96		0.07					
Dried Avg.	13.9	0.002	0.11		33.0	0.002	0.77	4.27			3.01		0.07					
Slurry Avg.	9.80	0.001	0.077		23.2	0.001	0.54	3.00			2.12	0.17	0.05	0.015	6.60	2.65		0.03
D1F3-112C	13.2	0.003	0.19		35.0	0.002	0.59	4.07			3.30	0.15	0.08	0.018	6.43	2.61		0.03
D1F3-112C	13.1	0.003	0.19		35.4	0.003	0.60	4.10			3.30	0.16	0.08	0.017	6.40	2.58		0.05
D1F3-112C	13.4	0.002	0.12		34.5	0.003	0.66	4.21			3.38		0.08					
D1F3-112C	13.4	0.002	0.12		34.6	0.002	0.66	4.24			3.36		0.08					
Dried Avg.	13.3	0.003	0.16		34.9	0.003	0.63	4.16			3.34		0.08					
Slurry Avg.	9.27	0.002	0.11		24.3	0.002	0.44	2.90			2.33	0.16	0.06	0.018	6.42	2.60		0.04
D1G4-108C5	17.7	0.028	0.29		40.8	0.11	0.88	4.60					0.16					
D1G4-108C5	17.7	0.028	0.29		40.8	0.11	0.87	4.63					0.16					
D1G4-108C5	17.7	0.027	0.29		41.1	0.11	0.86	4.64					0.16					
D1G4-108C5	17.7	0.028	0.29		41.1	0.11	0.87	4.68					0.16					
Average	17.7	0.028	0.29		41.0	0.11	0.87	4.64					0.16					
D1G4-109C6	17.7	0.025	0.29		40.9	0.11	0.82	4.49					0.15					
D1G4-109C6	17.7	0.025	0.29		41.2	0.11	0.83	4.53					0.15					
D1G4-109C6	17.8	0.025	0.29		41.1	0.11	0.83	4.61					0.15					
D1G4-109C6	17.7	0.025	0.29		41.4	0.11	0.84	4.56					0.15					
Average	17.7	0.025	0.29		41.2	0.11	0.83	4.55					0.15					
D1G4-110C7	17.7	0.022	0.28		41.3	0.11	0.83	4.58					0.14					
D1G4-110C7	17.7	0.023	0.29		41.5	0.11	0.83	4.60					0.14					
D1G4-110C7	17.7	0.022	0.29		40.3	0.11	0.83	4.44					0.14					
D1G4-110C7	17.7	0.022	0.29		40.2	0.11	0.82	4.45					0.14					
Average	17.7	0.022	0.29		40.8	0.11	0.83	4.52					0.14					
D1G4-112C8	17.6	0.020	0.27		40.5	0.11	0.84	4.52					0.12					
D1G4-112C8	17.6	0.020	0.27		40.6	0.11	0.84	4.58					0.12					
D1G4-112C8	17.6	0.020	0.27		40.6	0.11	0.85	4.55					0.11					
D1G4-112C8	17.6	0.020	0.27		40.6	0.11	0.85	4.57					0.11					
Average	17.6	0.020	0.27		40.6	0.11	0.85	4.56					0.12					
D1G4-115C9	17.6	0.017	0.26		42.7	0.11	0.89	4.78					0.09					
D1G4-115C9	17.6	0.017	0.26		42.6	0.11	0.89	4.80					0.09					
D1G4-115C9	17.5	0.017	0.26		41.8	0.11	0.90	4.71					0.09					
D1G4-115C9	17.5	0.017	0.26		41.5	0.11	0.90	4.74					0.09					
Average	17.6	0.017	0.26		42.2	0.11	0.90	4.76					0.09					
D1O10-101C	7.86	0.008	0.11		59.8	0.003	0.13	0.091					0.09					
D1O10-101C	7.86	0.008	0.10		60.2	0.003	0.13	0.080					0.09					
D1O10-101C	7.84	0.010	0.04		59.7	0.003	0.15	0.072					0.09					
D1O10-101C	7.84	0.009	0.03		59.7	0.003	0.15	0.080					0.09					
Dried Avg.	7.85	0.009	0.07		59.9	0.003	0.14	0.081										

Duratek DuraMelter™ 1000 Glass Raw Data - Corning

Sample No.	SO_3^2	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ppm)	(ppm)	(ppm)	(ppm)
Conver. factor	1	1	1	Petrographic	Petrographic	SEM ; EDX	1	3.73E-04	3.58E-03	5.47E-04	2.51E-03
D1F3-111C	0.21										
D1F3-111C	0.22										
D1F3-111C											
D1F3-111C											
Dried Avg.											
Slurry Avg.	0.22										
D1F3-114C	0.21										
D1F3-114C	0.22										
D1F3-114C											
D1F3-114C											
Dried Avg.											
Slurry Avg.	0.22										
D1F3-112C	0.21										
D1F3-112C	0.22										
D1F3-112C											
D1F3-112C											
Dried Avg.											
Slurry Avg.	0.22										
D1G4-108C5											
D1G4-108C5											
D1G4-108C5											
D1G4-108C5											
Average		-0.002	-0.0004	N.A.	N.A.	N.A.					
D1G4-109C6								56	15	67	18
D1G4-109C6							11.5	56	15	67	18
D1G4-109C6								55	15	66	18
D1G4-109C6							11.5	55	15	66	18
Average		-0.002	-0.0004	~2	Z, O, Al b (Ne corona), many bubbles	not apparent (assoc. w/ incl.)	11.5	56	15	67	18
D1G4-110C7								55	14	66	18
D1G4-110C7							11.5	56	15	66	18
D1G4-110C7								56	14	66	18
D1G4-110C7							11.5	56	14	66	18
Average		-0.002	-0.0004	~1	Z (rounded), many bubbles	none visible	11.5	56	14	66	18
D1G4-112C8											
D1G4-112C8											
D1G4-112C8											
D1G4-112C8											
Average		-0.002	-0.0004	N.A.	N.A.	N.A.					
D1G4-115C9											
D1G4-115C9											
D1G4-115C9											
D1G4-115C9											
Average		-0.002	-0.0004	N.A.	N.A.	N.A.					
D1O10-101C											
D1O10-101C											
D1O10-101C											
D1O10-101C											
Dried Avg.				N.A.	N.A.	N.A.					

Duratek DuraMelter™ 1000 Glass Raw Data - Corning

Sample No.	Date	Time	Density	Settled Sol.	LOI 600°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Slurry Avg.	01/23/95	15:30:00				62.1	0.42	0.35	0.003	1.50	0.017	0.051	2.41	0.423		0.10	0.04	0.003
D1O7-100C							4.39	0.042	0.021	0.48	0.0088	-0.01	1.26	0.72		0.69	0.0092	0.0026
D1O7-100C							4.32	0.042	0.021	0.48	0.0088	-0.01	1.27	0.72		0.69	0.0091	0.0026
D1O7-100C							4.24	0.042	0.021	0.48	0.0031	-0.01	1.24	0.72		0.69	0.0089	0.0023
D1O7-100C							4.22	0.041	0.021	0.48	0.0031	-0.01	1.23	0.72		0.69	0.0090	0.0023
Average	12/19/94	16:00:00					4.29	0.042	0.021	0.48	0.0060	-0.01	1.25	0.72		0.69	0.0091	0.0025
D1O7-101C							2.58	1.11	0.14	0.59	0.18	1.37	5.03	5.14		0.20	0.029	0.072
D1O7-101C							2.54	1.08	0.14	0.59	0.18	1.37	4.99	5.18		0.20	0.029	0.071
D1O7-101C							2.53	1.08	0.14	0.61	0.19	1.37	4.76	5.16		0.20	0.030	0.078
D1O7-101C							2.56	1.07	0.13	0.60	0.18	1.37	4.80	5.18		0.20	0.030	0.068
Average	01/20/95	4:20:00					2.55	1.09	0.14	0.60	0.18	1.37	4.90	5.17		0.20	0.030	0.072
D1O7-102C							4.41	0.21	0.059	0.46	0.023	0.45	1.95	2.08		0.59	0.013	0.020
D1O7-102C							4.43	0.22	0.058	0.47	0.023	0.45	1.94	2.08		0.60	0.013	0.021
D1O7-102C							4.42	0.22	0.061	0.47	0.030	0.46	2.00	2.22		0.61	0.012	0.021
D1O7-102C							4.36	0.21	0.061	0.47	0.030	0.46	1.98	2.22		0.61	0.012	0.020
Average	01/20/95	17:30:00					4.41	0.22	0.060	0.47	0.027	0.46	1.97	2.15		0.60	0.013	0.021
D1O7-103C							3.66	0.62	0.017	0.58	0.11	1.09	1.85	4.18		0.22	0.011	0.044
D1O7-103C							3.60	0.63	0.018	0.59	0.11	1.10	1.86	4.16		0.22	0.012	0.044
D1O7-103C							3.57	0.61	0.017	0.59	0.10	1.09	1.85	4.16		0.22	0.012	0.053
D1O7-103C							3.59	0.61	0.017	0.59	0.10	1.08	1.91	4.13		0.22	0.012	0.054
Average	01/21/95	10:30:00					3.61	0.62	0.017	0.59	0.11	1.09	1.87	4.16		0.22	0.012	0.049
D1O9-101C							0.0038	0.032	-0.0004	0.0005	0.00084	0.0060	0.0017	0.029		0.0006	-0.0001	0.0011
D1O9-101C							0.0042	0.029	-0.0004	0.0005	0.00084	0.0060	0.0016	0.030		0.0006	-0.0001	0.0011
D1O9-101C							0.0042	0.030	-0.0004	0.0005	0.00078	0.0060	0.0017	0.029		0.0005	-0.0001	0.0011
D1O9-101C							0.0037	0.029	-0.0004	0.0005	0.00078	0.0060	0.0017	0.029		0.0006	-0.0001	0.0012
Average	01/21/95	10:30:00					0.0040	0.030	-0.0004	0.0005	0.00081	0.0060	0.0017	0.029		0.0006	-0.0001	0.0011
Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values							12.00	9.00	0.00	0.00	0.00	0.00	0.00	1.46	0.00	0.00	0.00	0.00
D1F3-111C(d)	01/19/95	6:50:00					1.03	5.59	0.012	2.51	0.045	0.10	4.73	2.70		0.21	0.096	0.095
D1F3-111C(s)	01/19/95	6:50:00				31.5	0.70	3.83	0.0084	1.72	0.031	0.069	3.24	1.85		0.14	0.065	0.065
D1F3-114C(d)	01/20/95	17:25:00					0.97	4.91	0.009	2.53	0.046	0.11	4.92	2.88		0.29	0.089	0.100
D1F3-114C(s)	01/20/95	17:25:00				29.6	0.68	3.46	0.0062	1.78	0.032	0.074	3.46	2.03		0.20	0.062	0.070
D1F3-112C(d)	01/19/95	22:00:00					0.98	4.68	0.013	2.68	0.051	0.09	5.34	2.66		0.16	0.097	0.094
D1F3-112C(s)	01/19/95	22:00:00				30.2	0.69	3.27	0.0091	1.87	0.036	0.064	3.73	1.85		0.11	0.068	0.066
D1G4-108C5	01/19/95	13:50:00					6.19	6.57	0.011	7.09	0.14	0.11	6.33	3.39		0.40	0.12	0.13
D1G4-109C6	01/19/95	20:00:00					6.21	6.51	0.011	7.11	0.15	0.11	6.26	3.43		0.35	0.12	0.13
D1G4-110C7	01/19/95	23:30:00					6.24	6.46	0.011	7.10	0.14	0.11	6.26	3.45		0.31	0.12	0.13
D1G4-112C8	01/20/95	11:45:00					6.26	6.42	0.011	7.02	0.13	0.11	6.25	3.45		0.25	0.12	0.13
D1G4-115C9	01/21/95	6:15:00					6.28	6.33	0.011	6.94	0.12	0.11	6.19	3.46		0.19	0.12	0.13
D1O10-101C(d)	01/23/95	15:30:00					1.12	0.92	0.009	3.95	0.046	0.14	6.37	1.12		0.27	0.11	0.007
D1O10-101C(s)	01/23/95	15:30:00				62.1	0.42	0.35	0.003	1.50	0.017	0.051	2.41	0.423		0.10	0.04	0.003
D1O7-100C	12/19/94	16:00:00					4.29	0.042	0.021	0.48	0.0060	-0.01	1.25	0.72		0.69	0.0091	0.0025
D1O7-101C	01/20/95	4:20:00					2.55	1.09	0.14	0.60	0.18	1.37	4.90	5.17		0.20	0.030	0.072
D1O7-102C	01/20/95	17:30:00					4.41	0.22	0.060	0.47	0.027	0.46	1.97	2.15		0.60	0.013	0.021
D1O7-103C	01/21/95	10:30:00					3.61	0.62	0.017	0.59	0.11	1.09	1.87	4.16		0.22	0.012	0.049
D1O9-101C	01/21/95	10:30:00					0.0040	0.030	-0.0004	0.0005	0.00081	0.0060	0.0017	0.029		0.0006	-0.0001	0.0011

Duratek DuraMelter™ 1000 Glass Raw Data - Corning

Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Slurry Avg.	2.98	0.003	0.026		22.7	0.001	0.053	0.031					0.087					
D1O7-100C	4.29	0.0085	0.17		86.7	0.0075	0.21	0.0030					0.04					
D1O7-100C	4.29	0.0085	0.17		86.6	0.0075	0.21	0.0029					0.04					
D1O7-100C	4.31	0.0082	0.16		85.9	0.0074	0.21	0.0026					0.04					
D1O7-100C	4.31	0.0083	0.16		86.6	0.0075	0.21	0.0026					0.04					
Average	4.30	0.0084	0.17		86.5	0.0075	0.21	0.0028					0.04					
D1O7-101C	9.50	0.027	0.25		41.5	0.012	0.11	0.0036					1.25					
D1O7-101C	9.50	0.027	0.25		41.1	0.012	0.11	0.0036					1.25					
D1O7-101C	9.48	0.028	0.26		40.9	0.012	0.11	0.0042					1.24					
D1O7-101C	9.45	0.027	0.25		41.1	0.012	0.11	0.0036					1.24					
Average	9.48	0.027	0.25		41.2	0.012	0.11	0.0038					1.25					
D1O7-102C	4.70	0.0065	0.16		78.9	0.0089	0.20	0.0042					0.22					
D1O7-102C	4.68	0.0064	0.16		78.4	0.0090	0.20	0.0041					0.22					
D1O7-102C	4.87	0.0062	0.17		78.3	0.0090	0.20	0.0045					0.23					
D1O7-102C	4.87	0.0061	0.17		79.3	0.0090	0.20	0.0043					0.23					
Average	4.78	0.0063	0.17		78.7	0.0090	0.20	0.0043					0.23					
D1O7-103C	8.29	0.0035	0.074		66.0	0.010	0.16	0.0054					0.52					
D1O7-103C	8.29	0.0036	0.076		65.5	0.011	0.16	0.0054					0.52					
D1O7-103C	8.29	0.0041	0.075		65.3	0.010	0.16	0.0069					0.52					
D1O7-103C	8.31	0.0041	0.075		65.6	0.010	0.16	0.0070					0.52					
Average	8.30	0.0038	0.075		65.6	0.010	0.16	0.0062					0.52					
D1O9-101C	3.28	-0.0001	-0.001		0.0924	0.0001	0.0002	-0.0002					0.0084					
D1O9-101C	3.28	-0.0001	-0.001		0.0930	0.0002	0.0002	-0.0002					0.0084					
D1O9-101C	3.26	-0.0001	-0.001		0.0930	0.0001	0.0002	-0.0002					0.0084					
D1O9-101C	3.26	-0.0001	-0.001		0.0936	0.0001	0.0002	-0.0002					0.0084					
Average	3.27	-0.0001	-0.001		0.0930	0.0001	0.0002	-0.0002					0.0084					

Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values	20.00	0.00	0.00	0.00	55.91	0.00	0.00	0.00				0.00	0.00	0.00	0.00	0.00		0.00
D1F3-111C(d)	15.2	0.002	0.14		32.3	0.002	0.34	2.91			3.25		0.105					
D1F3-111C(s)	10.4	0.001	0.10		22.1	0.002	0.23	1.99			2.23	0.16	0.07	0.011	6.61	2.63		0.04
D1F3-114C(d)	13.9	0.002	0.11		33.0	0.002	0.77	4.27			3.01		0.07					
D1F3-114C(s)	9.8	0.001	0.077		23.2	0.001	0.54	3.00			2.12	0.17	0.05	0.015	6.60	2.65		0.03
D1F3-112C(d)	13.3	0.003	0.16		34.9	0.003	0.63	4.16			3.34		0.08					
D1F3-112C(s)	9.27	0.002	0.11		24.3	0.002	0.44	2.90			2.33	0.16	0.06	0.018	6.42	2.60		0.04
D1G4-108C5	17.7	0.028	0.29		41.0	0.11	0.87	4.64					0.16					
D1G4-109C6	17.7	0.025	0.29		41.2	0.11	0.83	4.55					0.15					
D1G4-110C7	17.7	0.022	0.29		40.8	0.11	0.83	4.52					0.14					
D1G4-112C8	17.6	0.020	0.27		40.6	0.11	0.85	4.56					0.12					
D1G4-115C9	17.6	0.017	0.26		42.2	0.11	0.90	4.76					0.09					
D1O10-101C(d)	7.85	0.009	0.07		59.9	0.003	0.14	0.081										
D1O10-101C(s)	2.98	0.003	0.026		22.7	0.001	0.053	0.031					0.09					
D1O7-100C	4.30	0.0084	0.17		86.5	0.0075	0.21	0.0028					0.04					
D1O7-101C	9.48	0.027	0.25		41.2	0.012	0.11	0.0038					1.25					
D1O7-102C	4.78	0.0063	0.17		78.7	0.0090	0.20	0.0043					0.23					
D1O7-103C	8.30	0.0038	0.075		65.6	0.010	0.16	0.0062					0.52					
D1O9-101C	3.27	-0.0001	-0.001		0.0930	0.0001	0.0002	-0.0002					0.01					

Duratek DuraMelter™ 1000 Glass Raw Data - Corning

Sample No.	SO_4^{2-}	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ppm)	(ppm)	(ppm)	(ppm)
Slurry Avg.											
D1O7-100C											
D1O7-100C											
D1O7-100C											
D1O7-100C											
Average				N.A.	N.A.	N.A.					
D1O7-101C											
D1O7-101C											
D1O7-101C											
D1O7-101C											
Average				N.A.	N.A.	N.A.					
D1O7-102C											
D1O7-102C											
D1O7-102C											
D1O7-102C											
Average				N.A.	N.A.	N.A.					
D1O7-103C											
D1O7-103C											
D1O7-103C											
D1O7-103C											
Average				N.A.	N.A.	N.A.					
D1O9-101C											
D1O9-101C											
D1O9-101C											
D1O9-101C											
Average				N.A.	N.A.	N.A.					

Sample No.	SO_4^{2-}	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)			(vol%)	I.D.	Enriched / Depleted	pH	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)
Target Values	0.00	98.37		Petrographic	Petrographic	SEM / EDX					
D1F3-111C(d)		71.33									
D1F3-111C(s)	0.22	90.01									
D1F3-114C(d)		71.94									
D1F3-114C(s)	0.22	89.92									
D1F3-112C(d)		73.35									
D1F3-112C(s)	0.22	90.84									
D1G4-108C5		95.22	-0.0004	N.A.	N.A.	N.A.					
D1G4-109C6		95.21	-0.0004	~2	Z, Q, Al b (Ne corona), many bubbles	not apparent (assoc. w/ incl.)	11.5	0.021	0.054	0.036	0.045
D1G4-110C7		94.75	-0.0004	~1	Z (rounded), many bubbles	none visible	11.5	0.021	0.051	0.036	0.045
D1G4-112C8		94.23	-0.0004	N.A.	N.A.	N.A.					
D1G4-115C9		95.70	-0.0004	N.A.	N.A.	N.A.					
D1O10-101C(d)		82.03		N.A.	N.A.	N.A.					
D1O10-101C(s)		93.28									
D1O7-100C		98.70		N.A.	N.A.	N.A.					
D1O7-101C		68.57		N.A.	N.A.	N.A.					
D1O7-102C		94.50		N.A.	N.A.	N.A.					
D1O7-103C		87.00		N.A.	N.A.	N.A.					
D1O9-101C		3.45		N.A.	N.A.	N.A.					

Duratek DuraMelter™ 1000 Glass Raw Data - PNL

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs	Fe_2O_3	K_2O	Li_2O	MgO	MnO	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor			1			1	1	1	1	1	1	2.12	1	1	1	1	1.225	1
D1G4-110P7	01/19/95	23:30:00					7.599	5.966	0.013	7.723	0.166		6.054	2.77	-0.010	0.272	0.113	0.133
Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values							6.14	6.15	0.00	7.80	0.00	0.00	7.50	3.68	0.00	0.00	0.00	0.00
D1G4-110P7	01/19/95	23:30:00					7.599	5.966	0.013	7.723	0.166		6.054	2.77	-0.01	0.272	0.1384	0.133

Duratek DuraMelter™ 1000 Glass Raw Data - PNL

Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl^-	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}	SO_4^{2-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(ug/ml)	(ug/ml)	(wt%)	(ug/g)	(ug/g)	(ug/g)	(ug/g)	(ug/g)	(wt%)	(ug/g)	(ug/g)
Conver. factor	1	1	1	1	1	1	1	1	5.66E-07	5.66E-07		1.00E-04	1.00E-04	1.00E-04	1.00E-04	1.00E-04		1.00E-04	1.00E-04
D1G4-110P7	17.34	0.051	0.255	0.559	40.665	0.115	0.772	4.33											
Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl^-	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}	SO_4^{2-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values	18.82	0.00	0.00	0.00	42.23	0.00	1.00	5.09				0.00	0.00	0.00	0.00	0.00		0.00	0.00
D1G4-110P7	17.34	0.051	0.255	0.559	40.665	0.115	0.772	4.33											

Duratek DuraMelter™ 1000 Glass Raw Data - PNL

Sample No.	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)
Conver. factor	1	1	Petrographic	Petrographic	SEM ; EDX	1	3.78E-04	3.87E-03	5.58E-04	3.12E-03
D1G4-110P7	0.0084	0.0015				11.34	59.38	14.88	145.87	19.16
						11.35	59.69	15.32	145.84	19.23

Sample No.	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)
Target Values	98.41		Petrographic	Petrographic	SEM / EDX				0.102	
D1G4-110P7	94.92	0.0015				11.34	0.022	0.058	0.081	0.060

Duratek DuraMelter™ 1000 Glass Raw Data - USGS

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B	Ba	CaO	Cr	Cs	Fe_2O_3	K_2O	Li	MgO	MnO	Mo
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(ppm)	(ppm)	(wt%)	(ppm)	(ppm)	(wt%)	(wt%)	(ppm)	(wt%)	(wt%)	(ppm)
Conver. factor					1	1	1	3.22E-04	1.12E-04	1	1.46E-04	1.06E-04	1	1	2.15E-04	1	1.225	1.50E-04
D1G4-110U7					0.12		6.40	19200	130	7.75	1200	1040	6.23	3.37		0.33	0.12	880
D1G4-110U7					0.15		6.43	19400	130	7.78	1200	1040	6.26	3.38		0.34	0.13	890
Average	01/19/95	23:30:00			0.14		6.42	19300	130	7.77	1200	1040	6.25	3.38		0.34	0.13	885
D1G4-115U9					0.14		6.49	18900	120	7.83	1100	1060	6.23	3.40		0.22	0.13	900
D1G4-115U9					0.15		6.51	18900	120	7.84	1000	1060	6.23	3.40		0.23	0.13	900
Average	01/21/95	6:15:00			0.15		6.50	18900	120	7.84	1050	1060	6.23	3.40		0.23	0.13	900
D1F3-111U					26.1	27.9	4.85	14400	85	5.79	320	931	4.50	2.51		-0.10	0.10	680
D1F3-111U					26.1	27.9	4.88	14400	85	5.79	320	932	4.50	2.51		-0.10	0.09	680
Average	01/19/95	6:50:00			26.1	27.9	4.87	14400	85	5.79	320	932	4.50	2.51		-0.10	0.10	680
D1F3-112U					25.4	26.6	4.81	14000	94	5.61	370	900	4.63	2.46		-0.10	0.10	660
D1F3-112U					25.5	26.6	4.79	14100	93	5.64	360	898	4.63	2.49		-0.10	0.10	670
Average	01/19/95	22:00:00			25.5	26.6	4.80	14050	94	5.63	365	899	4.63	2.48		-0.10	0.10	665
D1F3-114U					26.3	27.0	4.76	14300	87	5.74	340	926	4.54	2.49		-0.10	0.10	670
D1F3-114U					26.1	27.0	4.72	14300	89	5.72	340	935	4.51	2.46		-0.10	0.10	670
Average	01/20/95	17:15:00			26.2	27.0	4.74	14300	88	5.73	340	931	4.53	2.48		-0.10	0.10	670

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values																		
D1G4-110U7	1/19/95	23:30:00			0.14		6.42	6.21	0.0146	7.77	0.175	0.110	6.25	3.38		0.34	0.15	0.133
D1G4-115U9	1/21/95	6:15:00			0.15		6.50	6.09	0.0134	7.84	0.153	0.112	6.23	3.40		0.23	0.16	0.135
D1F3-111U	1/19/95	6:50:00			26.1	27.9	4.87	4.64	0.0095	5.79	0.047	0.099	4.50	2.51		-0.10	0.12	0.102
D1F3-112U	1/19/95	22:00:00			25.5	26.6	4.80	4.52	0.0105	5.63	0.053	0.095	4.63	2.48		-0.10	0.12	0.100
D1F3-114U	1/20/95	17:15:00			26.2	27.0	4.74	4.60	0.0099	5.73	0.050	0.099	4.53	2.48		-0.10	0.12	0.101

Duratek DuraMelter™ 1000 Glass Raw Data - USGS

Sample No.	Na_2O	Ni	P_2O_5	S	SiO_2	Sr	TiO_2	Zr	TOC	TIC (CO_3)	Total C	Cl^-	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}	SO_4^{2-}
	(wt%)	(ppm)	(wt%)	(wt%)	(wt%)	(ppm)	(wt%)	(ppm)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor	1	1.27E-04	1	2.497	1	1.18E-04	1	1.35E-04	1	1	1	1	1	1	1	1			
D1G4-110U7	17.8	180	0.25	0.22	42.2	970	0.83	33000				0.18	0.16	0.0193					
D1G4-110U7	17.7	180	0.26	0.21	42.3	980	0.83	32700				0.18	0.13	0.0211					
Average	17.8	180	0.26	0.22	42.3	975	0.83	32850				0.18	0.15	0.0202					
D1G4-115U9	17.6	140	0.22	0.23	42.5	960	0.90	32700				0.18	0.08	0.0224					
D1G4-115U9	17.6	140	0.23	0.23	42.5	960	0.90	32800				0.20	0.09	0.0241					
Average	17.6	140	0.23	0.23	42.5	960	0.90	32750				0.19	0.09	0.0233					
D1F3-111U	12.8	24	0.18	0.15	32.0	700	0.52	23200	1.16	2.41	3.57	0.28	0.08	0.0895	7.5	4.2			
D1F3-111U	12.9	16	0.19	0.15	32.0	700	0.53	23400	1.16	2.40	3.56	0.28	0.10	0.0843	7.5	3.5			
Average	12.9	20	0.19	0.15	32.0	700	0.53	23300	1.16	2.41	3.57	0.28	0.09	0.0869	7.5	3.9			
D1F3-112U	12.4	19	0.17	0.21	31.9	690	0.77	32300	1.12	2.31	3.43	0.24	0.06	0.0876	7.4	3.5			
D1F3-112U	12.5	17	0.17	0.21	31.7	710	0.78	32300	1.10	2.33	3.43	0.27	0.06	0.0880	7.3	3.5			
Average	12.5	18	0.17	0.21	31.8	700	0.78	32300	1.11	2.32	3.43	0.26	0.06	0.0878	7.4	3.5			
D1F3-114U	12.7	19	0.15	0.18	31.3	690	0.75	29500	1.17	2.34	3.51	0.27	0.05	0.0895	7.1	3.5			
D1F3-114U	12.5	18	0.15	0.18	31.5	690	0.86	29900	1.10	2.36	3.46	0.28	0.07	0.0893	7.2	4.0			
Average	12.6	19	0.15	0.18	31.4	690	0.81	29700	1.14	2.35	3.49	0.28	0.06	0.0894	7.2	3.8			

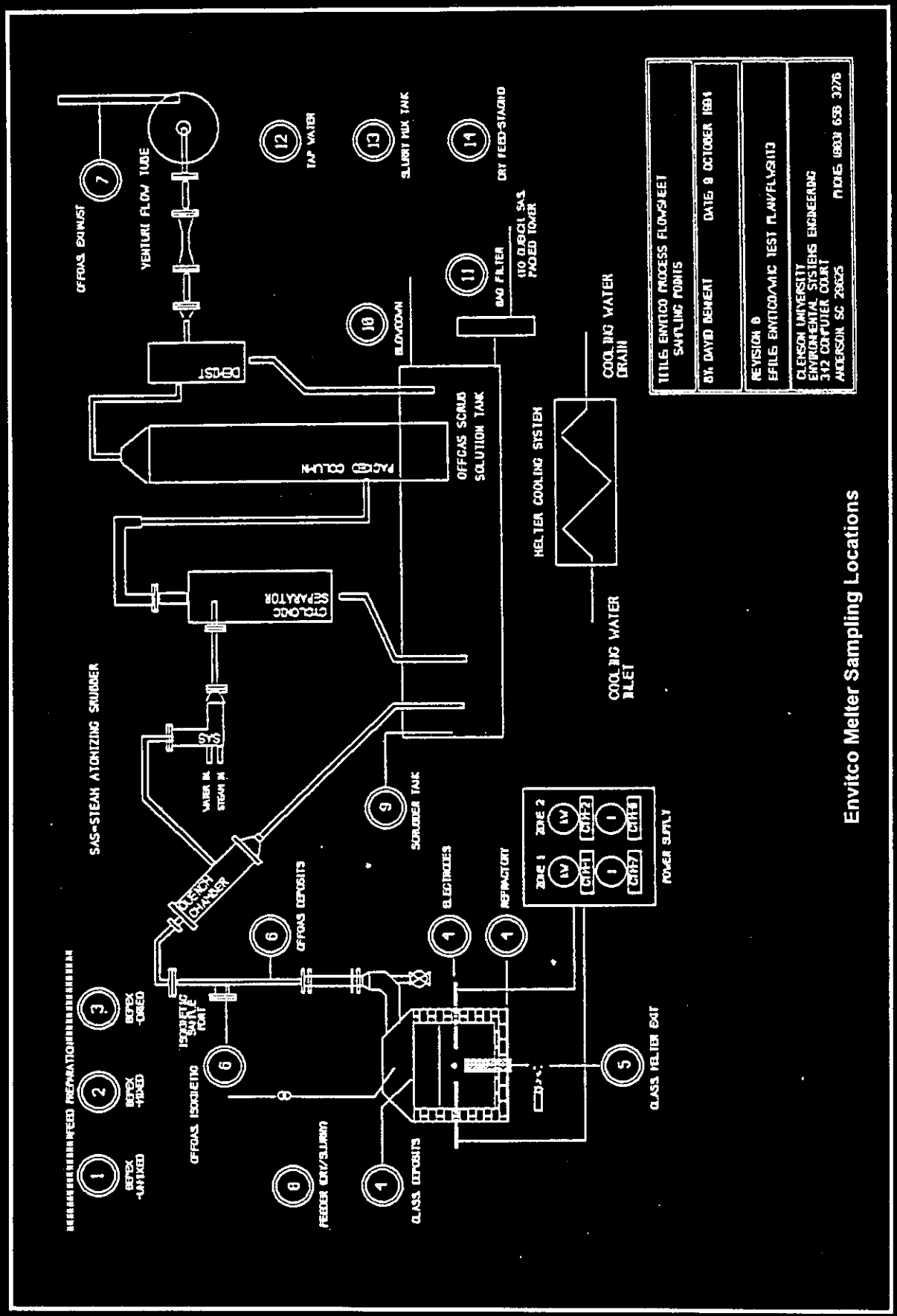
Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC (CO_3)	Total C	Cl^-	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}	SO_4^{2-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values																			
D1G4-110U7	17.8	0.0229	0.26	0.54	42.3	0.115	0.83	4.43				0.18	0.15	0.0202					
D1G4-115U9	17.6	0.0178	0.23	0.57	42.5	0.113	0.90	4.42				0.19	0.09	0.0233					
D1F3-111U	12.9	0.0025	0.19	0.37	32.0	0.083	0.53	3.15	1.16	2.41	3.57	0.28	0.09	0.0869	7.5	3.9			
D1F3-112U	12.5	0.0023	0.17	0.52	31.8	0.083	0.78	4.36	1.11	2.32	3.43	0.26	0.06	0.0878	7.4	3.5			
D1F3-114U	12.6	0.0023	0.15	0.45	31.4	0.081	0.81	4.01	1.14	2.35	3.49	0.28	0.06	0.0894	7.2	3.8			

Duratek DuraMelter™ 1000 Glass Raw Data - USGS

Sample No.	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ppm)	(ppm)	(ppm)	(ppm)
Conver. factor		1	Petrographic	Petrographic	SEM ; EDX	1	3.62E-04	3.76E-03	5.47E-04	2.55E-03
D1G4-110U7	0.01									
D1G4-110U7	-0.01									
Average	0.00									
D1G4-115U9	0.02									
D1G4-115U9	0.02									
Average	0.02									
D1F3-111U										
D1F3-111U										
Average										
D1F3-112U										
D1F3-112U										
Average										
D1F3-114U										
D1F3-114U										
Average										

Sample No.	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	Leach. pH	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)		(vol%)	I.D.	Enriched / Depleted		(g/m2-day)	(g/m2-day)	(g/m2-day)	(g/m2-day)
Target Values	0		Petrographic	Petrographic	SEM / EDX					
D1G4-110U7	97.48									
D1G4-115U9	97.50									
D1F3-111U	115.11									
D1F3-112U	113.88									
D1F3-114U	113.76									

Envitco Melter Sampling Point Schematic



Envitco Melter Sampling Locations

Melter Project: Sample Numbering Scheme
Envitco

E	1	G	5	-	0	0	1	C	1
Vendor Identification	**Phase Identifier**	**Sample Type**	**Sample Point Number**	**Hyphen**	**Serial**	**Sample**	**Number**	**Lab ID**	**Snapshot Set ID**
Envitco	*Phase 1*	*Glass*	*Sample Point 5*		*Sample*	*Number*	*1*	*Corning*	*1 = 1st Mass Balance Set*

Vendor	Sample Type
E = Envitco	S = Simulant
	A = Additives/Glass Formers
	F = Mixed Feed
	I = Starting Frit
	G = Glass
	O = Off Gas Scrubber & Blowdown Solution
	D = Deposits
	T = Tap Water
	R = Refractory
	E = Electrodes

Sample Points
1 = Pre-feed, Simulant and Additives
2 = Pre Spray-Dried Feed
3 = Spray-Dried Feed
4 = Glass Tank (interior)
5 = Glass Tank (exit port)
6 = Off-gas Riser Pipe
7 =
8 =
9 = Off-gas Scrub Tank
10 = Off-gas Scrub Tank Blowdown
11 = Inline Off-gas Particulate Filter
12 =
13 = Slurry Feed

Lab ID	Sample Set ID
C = Corning	1 = 1st Mass Balance Set
G = Archive (GEL)	2 = 2nd Mass Balance Set
E = Envitco Archive	
Q = Quanterra	Blank = Individual Pts.
U = USGS	

Envitco Analytical Data

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(vol %)	(vol %)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
Data Sources:	E-Q-1, E-Q-2																		
E1F2-001C(s)									1.94E+0	3.02E+0	-1.28E-4	9.22E-3	4.74E-3	1.1 E-2	4.1 E-3	3.3 E-1		6.5 E-3	3.2 E-4
E1F2-002C(s)									2.28E+0	3.7 E+0	-1.28E-4	7.96E-3	5.45E-3	1.3 E-2	5.67E-2	4.02E-1		5.96E-3	6.41E-4
E1F2-003C(s)									2.06E+0	3.39E+0	-1.28E-4	7.03E-3	5.75E-3	1.22E-2	4.41E-3	3.87E-1		4.25E-3	3.2 E-4
E1F2-004C(s)			10.7						1.92E+0	2.11E+0	-1.28E-4	7.82E-3	4.74E-3	1.0 E-2	4.1 E-3	2.65E-1		6.28E-3	3.2 E-4
E1F13-034C(s)									1.94E+0	2.46E+0	-1.28E-4	1.14E-2	4.74E-3	1.11E-2	4.1 E-3	3.49E-1		6.01E-3	6.41E-4
E1O9-001Q	10/10/94	11:00:00	8.7						3.33E-5	1.23E-3		1.85E-4	9.37E-6	1.14E-4	4.91E-5	2.79E-4		(5.68E-5)	3.02E-7
E1O9-028Q2	10/13/94	11:00:00	7.6						4.19E-5	9.71E-4		2.28E-4	1.03E-6	2.13E-5	1.22E-5	1.76E-4		(3.51E-5)	3.13E-6
E1O9-034Q	10/19/94	15:50:00	6.3						3.7 E-5	1.25E-4		1.25E-4	9.98E-7	(2.89E-6)	1.71E-5	(4.96E-5)		(5.76E-5)	(2.69E-7)
E1O9-040Q	10/20/94	18:00:00	8.9						6.71E-5	1.93E-3		(8.08E-5)	4.9 E-6	1.28E-4	1.63E-5	6.09E-4		(3.36E-5)	(1.6 E-7)
E1O10-002Q	10/10/94	15:45:00	8.8						9.56E-5	1.41E-3		1.88E-4	9.02E-6	1.16E-4	1.27E-5	3.2 E-4		(5.84E-5)	6.35E-7
E1O10-014Q1	10/12/94	15:00:00	4.6						2.71E-4	1.42E-3		2.27E-4	2.56E-6	2.97E-5	2.74E-5	2.26E-4		(4.65E-5)	3.77E-6
E1O10-022Q	10/12/94	23:00:00	7.2						9.04E-5	1.13E-3		2.3 E-4	1.67E-6	2.48E-5	3.47E-5	1.78E-4		(4.57E-5)	3.59E-6
E1O10-024Q	10/13/94	3:00:00	7.7						4.48E-5	1.09E-3		2.38E-4	1.25E-6	2.39E-5	1.93E-5	1.9 E-4		(4.36E-5)	3.44E-6
E1O10-028Q2	10/13/94	11:00:00	7.6						4.11E-5	1.01E-3		2.67E-4	1.06E-6	2.05E-5	1.37E-5	1.51E-4		(4.81E-5)	3.15E-6
E1O10-036Q	10/20/94	10:00:00	8.6						5.08E-5	7.08E-4		(9.03E-5)	2.81E-6	2.17E-5	2.61E-5	1.84E-4		(4.53E-5)	3.13E-7
E1O10-040Q	10/20/94	18:00:00	7.6						6.3 E-5	1.64E-3		1.27E-4	4.56E-6	1.05E-4	1.97E-5	4.83E-4		(4.9 E-5)	2.77E-7

Envitco Analytical Data

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl	F	I	NO_3^-	NO_2^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
Data Sources: [																			
E1F2-001C(s)	1.12E-2	6.76E+0	-8.99E-4	3.75E-2		6.62E+0	1.01E-2	7.35E-4	-5.79E-4										
E1F2-002C(s)	1.36E-2	8.21E+0	-8.99E-4	4.26E-2		2.13E+0	1.22E-2	7.35E-4	-5.79E-4										
E1F2-003C(s)	1.4 E-2	7.86E+0	-8.99E-4	3.74E-2		3.26E+0	1.23E-2	-7.35E-4	-5.79E-4										
E1F2-004C(s)	9.54E-3	5.21E+0	-8.99E-4	3.53E-2		8.27E+0	8.41E-3	-7.35E-4	-5.79E-4										
E1F13-034C(s)	1.21E-2	6.95E+0	-8.99E-4	4.27E-2		5.88E+0	1.16E-2	-7.35E-4	-5.79E-4										
E1O9-001Q	1.42E-5	2.28E-3	9.83E-7	8.14E-6		1.68E-4	(5.06E-7)		(7.45E-8)	6.16E+0	1.43E+1	1.45E-3	1.2 E-3	2.41E-4	2.31E-5	1.2 E-4	1.48E-4	-1.1E-05	1.96E-4
E1O9-028Q2	8.17E-6	2.34E-3	3.22E-6	3.94E-6		1.06E-4	2.69E-6		(8.55E-8)	1.17E+2	2.25E+1	4.29E-4	2.12E-4	9.3 E-3	5.14E-3	8.85E-3	1.52E-2	-1.1E-05	2.04E-3
E1O9-034Q	(1.84E-6)	4.52E-4	(5.32E-7)	3.87E-6		1.62E-4	(3.32E-7)		(6.03E-8)	2.99E+0	1.5 E+0	2.23E-4	1.07E-4	-3.15E-5	4.52E-5	3.04E-6	4.97E-5	-1.1E-05	8.89E-5
E1O9-040Q	1.1 E-5	3.48E-3	(5.95E-7)	7.1 E-6		2.08E-4	(5.46E-7)		(8.55E-8)	6.86E+1	3.88E+1	1.82E-3	1.93E-3	1.0 E-3	3.84E-4	8.37E-4	1.17E-3	-1.1E-05	3.42E-4
E1O10-002Q	1.56E-5	2.73E-3	9.69E-7	9.23E-6		1.67E-4	1.12E-6		-4.93E-8	8.94E+0	2.78E+1	1.37E-3	1.16E-3	4.48E-4	7.13E-5	3.41E-4	3.76E-4	-1.1E-05	2.28E-4
E1O10-014Q1	8.8 E-6	3.38E-3	3.12E-6	7.55E-6		1.8 E-4	4.44E-6		(2.62E-7)	8.95E+1	-1.0 E+0	5.16E-4	3.05E-4	5.9 E-3	4.93E-3	4.89E-3	9.16E-3	-1.1E-05	2.55E-3
E1O10-022Q	7.06E-6	2.57E-3	3.22E-6	3.29E-6		1.3 E-4	3.29E-6		-4.93E-8	9.56E+1	4.88E+0	4.43E-4	2.42E-4	7.31E-4	5.1 E-3	8.65E-3	1.39E-2	-1.1E-05	2.09E-3
E1O10-024Q	7.59E-6	2.54E-3	3.22E-6	3.13E-6		1.23E-4	3.13E-6		-4.93E-8	1.03E+2	7.42E+0	4.32E-4	1.95E-4	7.09E-3	5.37E-3	8.37E-3	1.35E-2	-1.1E-05	1.96E-3
E1O10-028Q2	8.17E-6	2.43E-3	3.3 E-6	3.65E-6		1.12E-4	2.81E-6		-4.93E-8	1.03E+2	2.39E+1	4.8 E-4	1.85E-4	1.08E-2	5.16E-3	8.65E-3	1.37E-2	-1.1E-05	2.0 E-3
E1O10-036Q	6.71E-6	1.32E-3	(6.44E-7)	5.62E-6		1.82E-4	(3.55E-7)		(1.07E-7)	1.81E+1	9.72E+0	6.52E-4	5.79E-4	-3.94E-4	2.21E-4	9.19E-5	3.35E-4	-1.1E-05	2.01E-4
E1O10-040Q	1.03E-5	3.09E-3	6.88E-7	2.84E-6		2.03E-4	5.87E-7		(3.95E-7)	9.95E+1	7.12E+0	1.51E-3	1.72E-3	7.19E-3	3.73E-4	7.06E-4	1.3 E-2	-1.1E-05	3.36E-4

Envitco Analytical Raw Data - Quanterra

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(vol %)	(vol %)	(mole/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
Conver. factor			1						3.71E-08	9.25E-08	7.28E-09	2.50E-08	1.92E-08	7.52E-09	1.79E-08	2.56E-08		4.11E-08	1.82E-08
E1O9-028Q2	10/13/94	11:00:00	7.55						1130	10500		9120	53.5	2830	681	6900		(853)	172
E1O9-001Q	10/10/94	11:00:00	8.71						899	13300		7400	487	15100	2740	10900		(1380)	16.6
E1O9-034Q	10/19/94	15:50:00	6.27						997	1350		5030	51.9	(384)	957	-1940		(1400)	(14.8)
E1O9-040Q	10/20/94	18:00:00	8.91						1810	20900		(3240)	255	17000	910	23800		(817)	(8.8)
E1O10-028Q2	10/13/94	11:00:00	7.59						1110	10900		10700	54.9	2720	766	5910		(1170)	173
E1O10-014Q1	10/12/94	15:00:00	4.64						7300	15300		9090	133	3950	1530	8820		(1130)	207
E1O10-040Q	10/20/94	18:00:00	7.62						1700	17700		5090	237	14000	1100	18900		(1190)	15.2
E1O10-040QD			7.62																
E1O10-036Q	10/20/94	10:00:00	8.61						1370	7650		(3620)	146	2880	1460	7190		(1100)	17.2
E1O10-022Q	10/12/94	23:00:00	7.16						2440	12200		9200	87.1	3290	1940	6960		(1110)	197
E1O10-002Q	10/10/94	15:45:00	8.79						2580	15200		7540	469	15400	708	12500		(1420)	34.9
E1O10-024Q	10/13/94	3:00:00	7.66						1210	11800		9550	65.2	3180	1080	7440		(1060)	189

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(vol %)	(vol %)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
E1O9-028Q2	10/13/94	11:00:00	7.6						4.19E-5	9.71E-4		2.28E-4	1.03E-6	2.13E-5	1.22E-5	1.76E-4		(3.51E-5)	3.13E-6
E1O9-001Q	10/10/94	11:00:00	8.7						3.33E-5	1.23E-3		1.85E-4	9.37E-6	1.14E-4	4.91E-5	2.79E-4		(5.68E-5)	3.02E-7
E1O9-034Q	10/19/94	15:50:00	6.3						3.7 E-5	1.25E-4		1.25E-4	9.98E-7	(2.89E-6)	1.71E-5	(4.96E-5)		(5.76E-5)	(2.69E-7)
E1O9-040Q	10/20/94	18:00:00	8.9						6.71E-5	1.93E-3		(8.08E-5)	4.9 E-6	1.28E-4	1.63E-5	6.09E-4		(3.36E-5)	(1.6 E-7)
E1O10-028Q2	10/13/94	11:00:00	7.6						4.11E-5	1.01E-3		2.67E-4	1.06E-6	2.05E-5	1.37E-5	1.51E-4		(4.81E-5)	3.15E-6
E1O10-014Q1	10/12/94	15:00:00	4.6						2.71E-4	1.42E-3		2.27E-4	2.56E-6	2.97E-5	2.74E-5	2.26E-4		(4.65E-5)	3.77E-6
E1O10-040Q	10/20/94	18:00:00	7.6						6.3 E-5	1.64E-3		1.27E-4	4.56E-6	1.05E-4	1.97E-5	4.83E-4		(4.9 E-5)	2.77E-7
E1O10-036Q	10/20/94	10:00:00	8.6						5.08E-5	7.08E-4		(9.03E-5)	2.81E-6	2.17E-5	2.61E-5	1.84E-4		(4.53E-5)	3.13E-7
E1O10-022Q	10/12/94	23:00:00	7.2						9.04E-5	1.13E-3		2.3 E-4	1.67E-6	2.48E-5	3.47E-5	1.78E-4		(4.57E-5)	3.59E-6
E1O10-002Q	10/10/94	15:45:00	8.8						9.56E-5	1.41E-3		1.88E-4	9.02E-6	1.16E-4	1.27E-5	3.2 E-4		(5.84E-5)	6.35E-7
E1O10-024Q	10/13/94	3:00:00	7.7						4.48E-5	1.09E-3		2.38E-4	1.25E-6	2.39E-5	1.93E-5	1.9 E-4		(4.36E-5)	3.44E-6

Envitco Analytical Raw Data - Quanterra

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl	F	I	NO_3	NO_3	NO_3 (353.1)	PO_4^{3-}	SO_4^{2-}
	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(ug/l)	(mg/l)	(mg/l)
Conver. factor	1.04E-08	4.35E-08	1.70E-08	3.23E-08	3.12E-08	3.56E-08	1.14E-08	2.09E-08	1.10E-08	1	1	2.82E-05	5.26E-05	7.88E-06	1.61E-05	2.17E-05	1.6129E-08	1.05E-05	1.04E-05
E1O9-028Q2	784	53800	189	122		2990	236		(7.8)	117	22.50	15.2	4.02	1180	319	407	944000	-1.00	196
E1O9-001Q	1360	52400	57.7	252		4720	(44.3)		(6.8)	6.16	14.3	51.3	22.8	30.6	1.43	5.50	9180	-1.00	18.8
E1O9-034Q	(177)	10400	(31.2)	120		4560	(29.1)		(5.5)	2.99	1.50	7.89	2.03	-4.0	2.80	0.14	3080	-1.00	8.54
E1O9-040Q	1060	80100	(34.9)	220		5840	(47.8)		(7.8)	68.6	38.8	64.5	36.6	127	23.8	38.5	72600	-1.00	32.9
E1O10-028Q2	784	55800	194	113		3150	246		-4.5	103	23.9	17.0	3.52	1370	320	398	849000	-1.00	192
E1O10-014Q1	844	77800	183	234		5050	389		(23.9)	89.5	-1.00	18.3	5.80	749	306	225	568000	-1.00	245
E1O10-040Q	985	71000	40.4	88.1		5690	51.4		(36.0)	99.5	7.12	53.4	32.7	912	23.1	32.5	805000	-1.00	32.3
E1O10-040QD				87.4						103	6.93	53.0	30.5	900	22.9	31.8	794000	-1.00	32.0
E1O10-036Q	644	30300	(37.8)	174		5100	(31.1)		(9.8)	18.1	9.72	23.1	11.0	-50.0	13.7	4.23	20800	-1.00	19.3
E1O10-022Q	677	59000	189	102		3650	288		-4.5	95.6	4.88	15.7	4.59	92.8	316	398	864000	-1.00	201
E1O10-002Q	1500	62800	56.9	286		4700	98.1		-4.5	8.94	27.8	48.4	22.1	56.8	4.42	15.7	23300	-1.00	21.9
E1O10-024Q	728	58400	189	97.0		3450	274		-4.5	103	7.42	15.3	3.70	900	333	385	838000	-1.00	188

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl	F	I	NO_3	NO_3	NO_3 (353.1)	PO_4^{3-}	SO_4^{2-}
	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
E1O9-028Q2	8.17E-6	2.34E-3	3.22E-6	3.94E-6		1.06E-4	2.69E-6		(8.55E-8)	1.17E+2	2.25E+1	4.29E-4	2.12E-4	9.3 E-3	5.14E-3	8.85E-3	0.01522578	-1.1E-05	2.04E-3
E1O9-001Q	1.42E-5	2.28E-3	9.83E-7	8.14E-6		1.68E-4	(5.06E-7)		(7.45E-8)	6.16E+0	1.43E+1	1.45E-3	1.2 E-3	2.41E-4	2.31E-5	1.2 E-4	0.00014806	-1.1E-05	1.96E-4
E1O9-034Q	(1.84E-6)	4.52E-4	(5.32E-7)	3.87E-6		1.62E-4	(3.32E-7)		(6.03E-8)	2.99E+0	1.5 E+0	2.23E-4	1.07E-4	-3.15E-5	4.52E-5	3.04E-6	4.9677E-05	-1.1E-05	8.89E-5
E1O9-040Q	1.1 E-5	3.48E-3	(5.95E-7)	7.1 E-6		2.08E-4	(5.46E-7)		(8.55E-8)	6.86E+1	3.88E+1	1.82E-3	1.93E-3	1.0 E-3	3.84E-4	8.37E-4	0.00117097	-1.1E-05	3.42E-4
E1O10-028Q2	8.17E-6	2.43E-3	3.3 E-6	3.65E-6		1.12E-4	2.81E-6		-4.93E-8	1.03E+2	2.39E+1	4.8 E-4	1.85E-4	1.08E-2	5.16E-3	8.65E-3	0.01369352	-1.1E-05	2.0 E-3
E1O10-014Q1	8.8 E-6	3.38E-3	3.12E-6	7.55E-6		1.8 E-4	4.44E-6		(2.62E-7)	8.95E+1	-1.0 E+0	5.16E-4	3.05E-4	5.9 E-3	4.93E-3	4.89E-3	0.00916127	-1.1E-05	2.55E-3
E1O10-040Q	1.03E-5	3.09E-3	6.88E-7	2.84E-6		2.03E-4	5.87E-7		(3.95E-7)	9.95E+1	7.12E+0	1.51E-3	1.72E-3	7.19E-3	3.73E-4	7.06E-4	0.01298385	-1.1E-05	3.36E-4
E1O10-036Q	6.71E-6	1.32E-3	(6.44E-7)	5.62E-6		1.82E-4	(3.55E-7)		(1.07E-7)	1.81E+1	9.72E+0	6.52E-4	5.79E-4	-3.94E-4	2.21E-4	9.19E-5	0.00033548	-1.1E-05	2.01E-4
E1O10-022Q	7.06E-6	2.57E-3	3.22E-6	3.29E-6		1.3 E-4	3.29E-6		-4.93E-8	9.56E+1	4.88E+0	4.43E-4	2.42E-4	7.31E-4	5.1 E-3	8.65E-3	0.01393546	-1.1E-05	2.09E-3
E1O10-002Q	1.56E-5	2.73E-3	9.69E-7	9.23E-6		1.67E-4	1.12E-6		-4.93E-8	8.94E+0	2.78E+1	1.37E-3	1.16E-3	4.48E-4	7.13E-5	3.41E-4	0.00037581	-1.1E-05	2.28E-4
E1O10-024Q	7.59E-6	2.54E-3	3.22E-6	3.13E-6		1.23E-4	3.13E-6		-4.93E-8	1.03E+2	7.42E+0	4.32E-4	1.95E-4	7.09E-3	5.37E-3	8.37E-3	0.0135161	-1.1E-05	1.96E-3

Envitco Glass Data

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values																		
Data Sources: E-U-1, E-U-2, E-U-3, E-C-1, E-C-2, E-C-3																		
E1D5-022C																		
E1D5-044C							0.074	0.63	0.008	0.040	-0.008	0.14	0.007	2.40		-0.001	-0.002	2.49
E1F13-034C(d)	10/19/94	15:50:00					8.81	7.64	-0.001	0.058	0.033	0.14	0.030	1.47		0.022	0.004	0.155
E1F13-034C(s)	10/19/94	15:50:00				36.3	5.61	4.87	-0.001	0.037	0.021	0.089	0.019	0.933		0.014	0.002	0.099
E1F2-001C(d)	09/21/94	16:45:00					8.29	8.83	-0.001	0.043	0.031	0.130	0.027	1.305		0.022	0.003	0.135
E1F2-001C(s)	09/21/94	16:45:00				32.3	5.61	5.97	-0.001	0.029	0.021	0.088	0.018	0.883		0.015	0.002	0.091
E1F2-002C(d)	09/22/94	11:00:00					11.0	12.20	-0.001	0.042	0.039	0.17	0.43	1.79		0.023	0.007	0.19
E1F2-002C(s)	09/22/94	11:00:00				40.0	6.62	7.32	-0.001	0.025	0.024	0.10	0.26	1.08		0.014	0.004	0.11
E1F2-002U	09/22/94	11:00:00			24.2		8.6	5.38	0.002	0.05	0.031	0.112	0.70	1.01		-0.10	-0.01	0.110
E1F2-003C(d)	09/23/94	9:00:00					9.82	11.00	-0.001	0.038	0.040	0.16	0.034	1.70		0.016	0.004	0.188
E1F2-003C(s)	09/23/94	9:00:00				39.1	5.98	6.70	-0.001	0.023	0.025	0.10	0.021	1.04		0.010	0.002	0.114
E1F2-004C(d)	09/20/94	16:00:00					8.33	6.23	-0.001	0.037	0.030	0.12	0.027	1.06		0.022	0.003	0.118
E1F2-004C(s)	09/20/94	16:00:00				33.1	5.57	4.17	-0.001	0.025	0.020	0.08	0.018	0.709		0.014	0.002	0.079
E1F3-004C	10/07/94	13:00:00					7.73	6.15	-0.001	0.076	0.032	0.096	0.056	0.97		0.027	0.003	0.11
E1F3-006C	10/07/94	11:00:00					8.46	6.83	0.002	0.050	0.030	0.11	0.66	1.07		0.028	0.007	0.11
E1F3-006U	10/07/94	11:00:00			19.1		7.9	4.86	0.003	0.07	0.031	0.100	0.61	0.93		-0.10	-0.01	0.101
E1F3-015U																		
E1F3-033C	10/14/94	14:00:00					12.5	10.2	0.003	0.057	0.044	0.15	0.56	1.55		0.030	0.008	0.16
E1F3-057C	10/07/94	13:00:00					8.73	7.05	0.003	0.063	0.029	0.10	0.11	1.08		0.025	0.003	0.12
E1F3-057U																		
E1G4-033C	10/14/94	14:00:00					11.8	9.42	0.065	0.120	0.046	0.15	0.48	1.57		0.034	0.009	0.21
E1G5-004C	10/10/94	19:30:00					11.3	8.77	0.007	0.059	0.046	0.27	0.18	1.35		0.025	0.005	0.20
E1G5-009C	10/11/94	15:30:00					10.7	8.45	0.005	0.089	0.045	0.15	0.12	1.35		0.037	0.005	0.14
E1G5-009U	10/11/94	16:30:00			0.10		11.1	7.50	0.006	0.06	0.042	0.177	0.16	1.31		-0.10	-0.01	0.146
E1G5-015C1	10/12/94	15:00:00					10.7	8.47	0.005	0.069	0.046	0.14	0.093	1.35		0.032	0.005	0.14
E1G5-017C	10/12/94	17:00:00					10.7	8.40	0.005	0.074	0.045	0.14	0.36	1.33		0.034	0.005	0.14
E1G5-019C	10/12/94	19:00:00					10.5	8.18	0.004	0.091	0.044	0.13	0.39	1.32		0.035	0.006	0.14
E1G5-019U	10/12/94	19:00:00			0.09		10.7	7.28	0.005	0.06	0.042	0.155	0.41	1.29		-0.10	-0.01	0.141
E1G5-021C	10/12/94	21:00:00					10.5	8.26	0.005	0.064	0.045	0.13	0.46	1.31		0.033	0.007	0.14
E1G5-024C	10/13/94	3:00:00					10.5	8.12	0.005	0.058	0.041	0.13	0.59	1.28		0.035	0.007	0.13
E1G5-028C2	10/13/94	11:00:00					10.8	8.38	0.004	0.057	0.045	0.14	0.68	1.31		0.036	0.008	0.14
E1G5-028U2	10/13/94	11:00:00			0.07		10.9	7.31	0.004	0.07	0.044	0.156	0.72	1.30		-0.10	-0.01	0.140
E1G5-033C	10/20/94	14:00:00					11.7	8.93	0.003	0.083	0.048	0.19	0.54	1.46		0.032	0.006	0.17
E1G5-035C	10/19/94	18:00:00					11.2	8.64	0.004	0.078	0.060	0.15	0.57	1.34		0.034	0.007	0.20
E1G5-040C	10/20/94	18:00:00					12.0	8.86	0.004	0.067	0.066	0.14	0.21	1.44		0.030	0.006	0.18
E1G5-041C	10/21/94	18:00:00					11.7	8.39	0.003	0.062	0.056	0.14	0.13	1.42		0.028	0.005	0.20
E1G5-043C	10/28/94						12.5	9.15	0.906	0.410	0.043	0.19	1.03	1.60		0.046	0.009	0.18
E1G5-045C	10/27/94						1.23	1.26	-0.003	0.025	0.898	0.16	0.021	2.49		0.004	-0.002	10.1
E1I1-001C	10/05/94	10:30:00					11.7	8.64	0.476	0.283	0.035	0.43	0.016	1.31		0.019	0.005	0.21
E1O11-010C							22.1	0.09	0.0031	0.32	0.25	0.009	13.0	0.17		0.085	0.069	0.100
E1O11-028C							24.6	0.19	0.0097	0.66	0.29	0.0305	11.6	0.22		0.13	0.088	0.088
E1O11-032C							20.3	0.07	-0.0003	0.08	0.07	0.0323	1.39	0.11		0.015	0.013	0.11
E1O11-040C							19.6	1.28	0.015	0.87	1.80	0.2	18.1	2.50		0.25	0.21	0.51
E1O6-044C	10/27/94						7.60	5.39	0.031	0.493	0.108	0.75	0.29	2.65		0.052	0.012	0.47
Sample E1F2-002 Results are suspect due to potentially nonrepresentative sampling. Silica analysis was re-run																		

Envitco Glass Data

Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO_2	TiO_2	ZrO_2	TOC	TIC	Total C	Cl	F	I	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}	SO_4^{2-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values																			
Data Sources: [																			
E1D5-022C																			
E1D5-044C	42.2	-0.009	0.35		0.077	0.110	-0.003	-0.006					0.30						
E1F13-034C(d)	19.2	-0.004	0.27		31.5	0.108	-0.004	-0.004			2.66								
E1F13-034C(s)	12.2	-0.003	0.17		20.1	0.068	-0.003	-0.003			1.69		0.21		8.31	3.19			
E1F2-001C(d)	17.6	-0.004	0.22	0.18	33.4	0.088	0.006	-0.004			3.49	0.38							
E1F2-001C(s)	11.9	-0.003	0.15	0.12	22.6	0.059	0.004	-0.003			2.36	0.25	0.15	0.008	11.7	4.78		0.086	0.19
E1F2-002C(d)	24.1	-0.004	0.29	0.17	38.2	0.120	0.005	-0.004			4.49	0.25							
E1F2-002C(s)	14.5	-0.002	0.17	0.10	22.9	0.072	0.003	-0.002			2.69	0.17	0.16	0.011	8.64	3.49		0.105	0.23
E1F2-002U	13.8	-0.001	0.19	0.200	43.3	0.078	-0.02	0.003	2.42	0.66	3.08	0.29	0.24	0.096	7.4	3.3			
E1F2-003C(d)	22.7	-0.004	0.25	0.21	18.3	0.118	-0.004	-0.004			4.07	0.21							
E1F2-003C(s)	13.8	-0.002	0.15	0.12	11.1	0.072	-0.002	-0.002			2.48	0.15	0.12	0.009	7.33	2.92		0.105	0.23
E1F2-004C(d)	13.7	-0.004	0.21		42.2	0.074	-0.004	-0.004			2.92								
E1F2-004C(s)	9.18	-0.003	0.14		28.2	0.050	-0.003	-0.003			1.95		0.10		8.70	3.35			
E1F3-004C	12.8	-0.003	0.12		44.9	0.070	0.015	-0.004			2.48		0.16		10.0	3.72			
E1F3-006C	14.2	-0.003	0.16	0.15	43.7	0.072	0.012	-0.004			2.70	0.16	0.27		9.49	3.48	4.30		
E1F3-006U	12.5	-0.001	0.19	0.175	51.1	0.070	-0.02	0.006	2.03	0.48	2.51	0.23	0.25	0.098	6.9	2.9			
E1F3-015U														0.107					
E1F3-033C	20.9	-0.003	0.24		14.1	0.120	-0.005	-0.004					0.28		13.2	5.13			
E1F3-057C	14.3	-0.003	0.14	0.18	43.6	0.078	-0.005	-0.004				0.23	0.21		10.4	3.80	4.50		
E1F3-057U														0.099					
E1G4-033C	20.3	-0.009	0.17		52.4	0.118	0.012	0.031					0.38						
E1G5-004C	19.7	-0.001	0.28		54.0	0.118	0.016	0.033					0.26						
E1G5-009C	17.9	-0.001	0.25		57.2	0.098	0.018	0.029					0.27						
E1G5-009U	17.7	0.001	0.25	-0.125	58.6	0.101	0.03	0.027				0.35	0.26	0.109					
E1G5-015C1	17.7	-0.001	0.22	0.10	57.6	0.094	0.018	0.040				0.31	0.27						
E1G5-017C	17.6	-0.001	0.20		57.7	0.094	0.017	0.034					0.29						
E1G5-019C	17.3	-0.001	0.21		58.9	0.092	0.019	0.031					0.30						
E1G5-019U	17.1	0.000	0.24	-0.125	59.7	0.095	0.03	0.029				0.33	0.29	0.118					
E1G5-021C	17.4	-0.001	0.21		57.9	0.092	0.015	0.025					0.31						
E1G5-024C	16.8	-0.002	0.20		60.3	0.092	0.014	0.023					0.32						
E1G5-028C2	17.5	-0.002	0.22	0.12	58.6	0.093	0.015	0.028				0.27	0.34						
E1G5-028U2	17.3	0.003	0.25	-0.125	59.0	0.095	0.03	0.026				0.35	0.33	0.112					
E1G5-033C	19.7	-0.002	0.25		53.8	0.110	0.014	0.035					0.38						
E1G5-035C	19.3	-0.002	0.26		54.9	0.100	0.013	0.067					0.33						
E1G5-040C	20.2	-0.002	0.31		54.6	0.110	0.011	0.062					0.35						
E1G5-041C	19.4	-0.002	0.32		55.7	0.105	0.006	0.058					0.33						
E1G5-043C	21.1	-0.009	0.22		49.9	0.200	0.007	0.032					0.73						
E1G5-045C	38.2	-0.009	1.09		4.84	0.066	-0.003	0.010					0.19						
E1I1-001C	20.9	-0.009	0.29		53.9	0.205	-0.003	0.009					0.31						
E1O11-010C	0.13	0.042	1.58	1.74	28.8	0.015	0.064	0.0066			9.70	0.31	0.0315		0.053	0.0030			
E1O11-028C	0.17	0.041	1.53	1.23	28.5	0.041	0.082	0.015			8.75	0.23	-0.0001		0.081	0.0022			
E1O11-032C	0.060	0.009	0.52	1.17	52.1	0.019	0.035	0.0033			8.75	0.01	0.0067		0.027	0.00025			
E1O11-040C	1.28	0.73	0.65	0.41	34.5	0.027	0.315	0.2			6.28	0.22	0.0165		0.11	0.0014			
E1O6-044C	22.2	0.027	0.14		14.4	0.088	0.013	-0.006					4.63						
Sample E1F2-0																			

Envitco Glass Data

Sample No.	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	Leach. pH	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
			(vol%)	I.D.	Enriched / Depleted		(g/m^2-day)	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)
Target Values	0.0		Petrographic	Petrographic	SEM / EDX				0.102	
Data Sources: [										
E1D5-022C	0.00		N.A.	Unknown Salt	N.A.					
E1D5-044C	48.77									
E1F13-034C(d)	72.15									
E1F13-034C(s)	93.97									
E1F2-001C(d)	74.17									
E1F2-001C(s)	99.40									
E1F2-002C(d)	93.54									
E1F2-002C(s)	108.78									
E1F2-002U	87.82									
E1F2-003C(d)	68.84									
E1F2-003C(s)	91.76									
E1F2-004C(d)	75.10									
E1F2-004C(s)	95.49									
E1F3-004C	89.54									
E1F3-006C	96.00									
E1F3-006U	91.41									
E1F3-015U										
E1F3-033C	79.10									
E1F3-057C	94.72									
E1F3-057U										
E1G4-033C	97.27									
E1G5-004C	96.49	0.46	N.A.	N.A.	N.A.					
E1G5-009C	96.86	0.67	None	Faint Cords Present	Not Detected	10.2	0.016	0.027	0.012	0.006
E1G5-009U	97.68	0.57	~0	none observed	none observed (but chem variation)	10.0	0.015	0.031	0.030	0.001
E1G5-015C1	97.31	0.66	None	Faint Cords Present	Not Detected	10.2	0.016	0.024	0.011	0.006
E1G5-017C	97.12	0.38	N.A.	N.A.	N.A.					
E1G5-019C	97.63	0.57	N.A.	N.A.	N.A.					
E1G5-019U	97.71	0.63	~0	none observed	none observed (but chem variation)	9.8	0.014	0.026	0.027	-0.007
E1G5-021C	96.77	0.59	N.A.	N.A.	N.A.					
E1G5-024C	98.55	0.46	N.A.	N.A.	N.A.					
E1G5-028C2	98.81	0.56	None	Very Faint Cords Present	Not Detected	10.2	0.016	0.023	0.010	0.006
E1G5-028U2	97.89	0.56	~0	none observed	none observed (no chem variation)	9.9	0.015	0.027	0.028	-0.007
E1G5-033C	97.37		N.A.	N.A.	N.A.					
E1G5-035C	97.22	0.49	N.A.	N.A.	N.A.					
E1G5-040C	98.65	0.39	<<1	Q, Sharp Cords Visible	Slight Mo / Slight Si	10.7	0.017	0.058	0.022	0.012
E1G5-041C	98.05	0.44	20-50	Q, Calcined Al2O3 altering to Ne	Not Detected	10.6	0.018	0.053	0.021	0.013
E1G5-043C	98.19		>50	Q, Calc Al2O3 alt to Ne, Rf Fib, Nc	Not Detected					
E1G5-045C	60.48		N.A.	Na Molybdate w/ Chromate Color	Not Detected					
E1I1-001C	98.72		N.A.	N.A.	N.A.					
E1O11-010C			N.A.	N.A.	N.A.					
E1O11-028C			N.A.	N.A.	N.A.					
E1O11-032C			N.A.	N.A.	N.A.					
E1O11-040C			N.A.	N.A.	N.A.					
E1O6-044C	59.34		N.A.	Q, Calc Al, Rf Fib, Opq, Salt	N.A.					
Sample E1F2-0										

Envitco Glass Raw Data - Corning

Sample No.	Date	Time	Density	Settled Sol.	LOI 600°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor						1	1	1	1	1	1	1	1	1		1	1	1
E1O6-044C							7.68	5.45	0.047	0.48	0.11	0.76	0.31	2.65		0.043	0.012	0.48
E1O6-044C							7.61	5.40	0.050	0.51	0.11	0.76	0.30	2.63		0.044	0.012	0.47
E1O6-044C							7.56	5.36	0.014	0.49	0.10	0.74	0.27	2.65		0.061	0.012	0.46
E1O6-044C							7.56	5.35	0.014	0.49	0.11	0.74	0.28	2.65		0.059	0.012	0.47
Average	10/27/94						7.60	5.39	0.031	0.49	0.11	0.75	0.29	2.65		0.05	0.012	0.47
E1D5-044C							0.081	0.68	0.013	0.048	-0.008	0.14	0.008	2.39		-0.001	-0.002	2.48
E1D5-044C							0.076	0.62	0.013	0.047	-0.008	0.14	0.008	2.39		-0.001	-0.002	2.51
E1D5-044C							0.069	0.61	-0.003	0.033	-0.008	0.13	0.006	2.41		-0.001	-0.002	2.49
E1D5-044C							0.071	0.62	-0.003	0.032	-0.008	0.13	0.007	2.39		-0.001	-0.002	2.49
Average							0.074	0.63	0.008	0.04	-0.008	0.14	0.007	2.40		-0.001	-0.002	2.49
E1F13-034C							8.93	7.70	-0.001	0.055	0.029	0.14	0.026	1.50		0.020	0.004	0.14
E1F13-034C							9.00	7.68	-0.001	0.057	0.036	0.14	0.028	1.48		0.022	0.004	0.16
E1F13-034C							8.67	7.64	-0.001	0.061	0.035	0.14	0.034	1.44		0.022	0.003	0.16
E1F13-034C							8.67	7.55	-0.001	0.059	0.033	0.14	0.033	1.44		0.022	0.004	0.16
Dried Avg.	10/19/94	15:50:00					8.81	7.64	-0.001	0.06	0.033	0.14	0.03	1.47		0.02	0.004	0.16
Slurry Avg.	10/19/94	15:50:00				36.3	5.61	4.87	-0.001	0.037	0.021	0.089	0.019	0.933		0.014	0.002	0.099
E1F2-001C							8.33	8.89	-0.001	0.043	0.032	0.13	0.027	1.31		0.023	0.003	0.14
E1F2-001C							8.33	8.86	-0.001	0.043	0.030	0.13	0.029	1.33		0.023	0.003	0.13
E1F2-001C							8.23	8.82	-0.001	0.041	0.029	0.13	0.026	1.29		0.021	0.004	0.13
E1F2-001C							8.28	8.73	-0.001	0.043	0.031	0.13	0.024	1.29		0.021	0.003	0.14
Dried Avg.	09/21/94	16:45:00					8.29	8.83	-0.001	0.04	0.03	0.13	0.03	1.31		0.02	0.003	0.14
Slurry Avg.	09/21/94	16:45:00				32.3	5.61	5.97	-0.001	0.029	0.021	0.09	0.018	0.88		0.015	0.002	0.09
E1F2-002C							10.9	12.2	-0.001	0.041	0.039	0.17	0.42	1.80		0.023	0.007	0.18
E1F2-002C							11.5	12.1	-0.001	0.048	0.040	0.17	0.44	1.80		0.024	0.007	0.19
E1F2-002C							11.0	12.3	-0.001	0.040	0.039	0.17	0.43	1.80		0.022	0.006	0.19
E1F2-002C							10.7	12.2	-0.001	0.040	0.039	0.18	0.41	1.77		0.022	0.006	0.18
Dried Avg.	09/22/94	11:00:00					11.0	12.20	-0.001	0.04	0.04	0.17	0.43	1.79		0.02	0.007	0.19
Slurry Avg.	09/22/94	11:00:00				40	6.62	7.32	-0.001	0.025	0.024	0.10	0.26	1.08		0.014	0.004	0.11
E1F2-003C							10.0	11.1	-0.001	0.036	0.040	0.16	0.036	1.72		0.014	0.004	0.19
E1F2-003C							9.66	10.9	-0.001	0.037	0.041	0.16	0.035	1.70		0.014	0.003	0.19
E1F2-003C							10.0	10.9	-0.001	0.040	0.040	0.16	0.034	1.70		0.018	0.003	0.19
E1F2-003C							9.60	11.1	-0.001	0.038	0.040	0.16	0.031	1.68		0.018	0.005	0.18
Dried Avg.	09/23/94	9:00:00					9.82	11.00	-0.001	0.038	0.040	0.16	0.03	1.70		0.02	0.004	0.19
Slurry Avg.	09/23/94	9:00:00				39.1	5.98	6.70	-0.001	0.023	0.025	0.10	0.021	1.04		0.010	0.002	0.11
E1F2-004C							8.40	6.40	-0.001	0.037	0.031	0.12	0.027	1.04		0.021	0.003	0.12
E1F2-004C							8.40	6.33	-0.001	0.037	0.030	0.12	0.028	1.04		0.022	0.003	0.12
E1F2-004C							8.26	6.08	-0.001	0.036	0.028	0.12	0.026	1.08		0.021	0.003	0.12
E1F2-004C							8.24	6.11	-0.001	0.039	0.030	0.12	0.027	1.08		0.022	0.003	0.11
Dried Avg.	09/20/94	16:00:00					8.33	6.23	-0.001	0.037	0.03	0.12	0.027	1.06		0.022	0.003	0.12
Slurry Avg.	09/20/94	16:00:00				33.1	5.57	4.17	-0.001	0.025	0.02	0.08	0.018	0.71		0.014	0.002	0.08
E1F3-004C							7.90	6.18	-0.001	0.076	0.031	0.098	0.056	0.97		0.027	0.003	0.11
E1F3-004C							7.87	6.16	-0.001	0.075	0.032	0.098	0.059	0.97		0.026	0.004	0.11
E1F3-004C							7.55	6.09	-0.001	0.077	0.033	0.094	0.054	0.97		0.026	0.003	0.10
E1F3-004C							7.59	6.17	-0.001	0.076	0.031	0.094	0.055	0.97		0.027	0.003	0.11
Average	10/07/94	13:00:00					7.73	6.15	-0.001	0.076	0.03	0.096	0.056	0.97		0.027	0.003	0.11
E1F3-006C							8.43	6.86	0.002	0.05	0.031	0.10	0.68	1.06		0.028	0.007	0.11
E1F3-006C							8.45	6.83	0.002	0.05	0.029	0.10	0.68	1.06		0.028	0.006	0.11
E1F3-006C							8.49	6.82	0.002	0.05	0.028	0.11	0.64	1.07		0.028	0.008	0.11
E1F3-006C							8.45	6.80	0.002	0.049	0.032	0.11	0.63	1.07		0.028	0.007	0.11
Average	10/07/94	11:00:00					8.46	6.83	0.002	0.05	0.03	0.11	0.66	1.07		0.028	0.007	0.11

Envitco Glass Raw Data - Corning

Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl^-	F^-	I^-	NO_2^-	NO_3^-	Total N_2	PO_4^{3-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor	1	1	1	1	1	1	1	1			1	1	1	1	1	1	1	1
E1O6-044C	22.2	0.027	0.14		14.7	0.090	0.013	-0.006				N.A.	4.62	N.A.	N.A.	N.A.		N.A.
E1O6-044C	22.2	0.028	0.14		14.4	0.094	0.013	-0.006				N.A.	4.63	N.A.	N.A.	N.A.		N.A.
E1O6-044C	22.3	0.028	0.15		14.2	0.085	0.013	-0.006				N.A.	4.63	N.A.	N.A.	N.A.		N.A.
E1O6-044C	22.2	0.026	0.14		14.2	0.083	0.012	-0.006				N.A.	4.64	N.A.	N.A.	N.A.		N.A.
Average	22.2	0.027	0.14		14.4	0.088	0.013	-0.006					4.63					
E1D5-044C	42.2	-0.009	0.39		0.069	0.11	-0.003	-0.006				N.A.	0.30	N.A.	N.A.	N.A.		N.A.
E1D5-044C	42.2	-0.009	0.33		0.079	0.11	-0.003	-0.006				N.A.	0.30	N.A.	N.A.	N.A.		N.A.
E1D5-044C	42.0	-0.009	0.35		0.083	0.11	-0.003	-0.006				N.A.	0.30	N.A.	N.A.	N.A.		N.A.
E1D5-044C	42.2	-0.009	0.33		0.078	0.11	-0.003	-0.006				N.A.	0.30	N.A.	N.A.	N.A.		N.A.
Average	42.2	-0.009	0.35		0.077	0.11	-0.003	-0.006					0.30					
E1F13-034C	19.3	-0.004	0.27		31.0	0.10	-0.004	-0.004			2.64	N.A.	0.21	N.A.	8.29	3.19		N.A.
E1F13-034C	19.4	-0.004	0.29		31.5	0.11	-0.004	-0.004				N.A.	0.21	N.A.	8.33	3.19		N.A.
E1F13-034C	19.1	-0.004	0.27		32.0	0.11	-0.004	-0.004			2.67	N.A.	0.21	N.A.	N.A.	N.A.		N.A.
E1F13-034C	19.1	-0.004	0.25		31.6	0.11	-0.004	-0.004				N.A.	0.21	N.A.	N.A.	N.A.		N.A.
Dried Avg.	19.2	-0.004	0.27		31.5	0.11	-0.004	-0.004			2.66							
Slurry Avg.	12.2	-0.003	0.17		20.1	0.068	-0.003	-0.003			1.69		0.21		8.31	3.19		
E1F2-001C	17.8	-0.004	0.21	0.18	34.8	0.089	0.006	-0.004			3.44	0.37	0.14	0.0071	11.67	4.76		0.09
E1F2-001C	17.8	-0.004	0.22		34.2	0.088	0.006	-0.004				0.38	0.14	0.0086	11.70	4.80		0.09
E1F2-001C	17.4	-0.004	0.20	0.18	32.0	0.086	0.005	-0.004			3.53	N.A.	0.15	N.A.	N.A.	N.A.		N.A.
E1F2-001C	17.4	-0.004	0.26		32.6	0.088	0.005	-0.004				N.A.	0.15	N.A.	N.A.	N.A.		N.A.
Dried Avg.	17.6	-0.004	0.22	0.18	33.4	0.088	0.006	-0.004			3.49	0.38						
Slurry Avg.	11.9	-0.003	0.15	0.12	22.6	0.059	0.004	-0.003			2.36	0.25	0.15	0.0079	11.69	4.78		0.09
E1F2-002C	24.1	-0.004	0.29	0.17		0.12	0.005	-0.004			4.51	0.24	0.16	0.011	8.64	3.48		0.10
E1F2-002C	24.1	-0.004	0.30			0.12	0.005	-0.004				0.27	0.16	0.010	8.64	3.50		0.11
E1F2-002C	24.1	-0.004	0.29	0.17		0.12	0.005	-0.004			4.47	N.A.	0.16	N.A.	N.A.	N.A.		N.A.
E1F2-002C	24.1	-0.004	0.27			0.12	0.005	-0.004				N.A.	0.16	N.A.	N.A.	N.A.		N.A.
Dried Avg.	24.1	-0.004	0.29	0.17	38.2	0.12	0.005	-0.004			4.49	0.25						
Slurry Avg.	14.5	-0.002	0.17	0.10	22.9	0.07	0.003	-0.002			2.69	0.17	0.16	0.011	8.64	3.49		0.10
E1F2-003C	22.7	-0.004	0.24	0.20	18.4	0.12	-0.004	-0.004			4.08	0.22	0.12	0.008	7.41	2.91		0.10
E1F2-003C	22.8	-0.004	0.23		18.1	0.12	-0.004	-0.004				0.23	0.12	0.009	7.24	2.93		0.11
E1F2-003C	22.7	-0.004	0.24	0.21	18.6	0.12	-0.004	-0.004			4.06	N.A.	0.13	N.A.	N.A.	N.A.		N.A.
E1F2-003C	22.7	-0.004	0.28		18.0	0.11	-0.004	-0.004				N.A.	0.13	N.A.	N.A.	N.A.		N.A.
Dried Avg.	22.7	-0.004	0.25	0.21	18.3	0.12	-0.004	-0.004			4.07	0.21						
Slurry Avg.	13.8	-0.002	0.15	0.12	11.1	0.07	-0.002	-0.002			2.48	0.15	0.12	0.009	7.33	2.92		0.11
E1F2-004C	13.6	-0.004	0.22		41.0	0.075	-0.004	-0.004			2.92	N.A.	0.10	N.A.	8.70	3.35		N.A.
E1F2-004C	13.6	-0.004	0.19		41.5	0.076	-0.004	-0.004				N.A.	0.10	N.A.	8.70	3.34		N.A.
E1F2-004C	13.8	-0.004	0.24		43.4	0.071	-0.004	-0.004			2.92	N.A.	0.11	N.A.	N.A.	N.A.		N.A.
E1F2-004C	13.9	-0.004	0.20		42.9	0.074	-0.004	-0.004				N.A.	0.11	N.A.	N.A.	N.A.		N.A.
Dried Avg.	13.7	-0.004	0.21		42.2	0.07	-0.004	-0.004			2.92							
Slurry Avg.	9.2	-0.003	0.14		28.2	0.05	-0.003	-0.003			1.95		0.10		8.70	3.35		
E1F3-004C	12.8	-0.003	0.15		44.7	0.071	0.016	-0.004			2.74	N.A.	0.15	N.A.	10.02	3.72		N.A.
E1F3-004C	12.8	-0.003	0.12		44.4	0.07	0.013	-0.004				N.A.	0.15	N.A.	10.00	3.72		N.A.
E1F3-004C	12.8	-0.003	0.12		45.0	0.07	0.016	-0.004			2.75	N.A.	0.16	N.A.	N.A.	N.A.		N.A.
E1F3-004C	12.8	-0.003	0.10		45.6	0.07	0.013	-0.004				N.A.	0.16	N.A.	N.A.	N.A.		N.A.
Average	12.8	-0.003	0.12		44.9	0.07	0.01	-0.004			2.48		0.16		10.01	3.72		
E1F3-006C	14.2	-0.003	0.17	0.15	42.9	0.073	0.012	-0.004			2.71	0.16	0.27	N.A.	9.49	3.48	4.40	N.A.
E1F3-006C	14.2	-0.003	0.13		42.8	0.073	0.012	-0.004				0.16	0.27	N.A.	9.49	3.48	4.20	N.A.
E1F3-006C	14.3	-0.003	0.18	0.15	44.5	0.073	0.011	-0.004			2.68	N.A.	0.27	N.A.	N.A.	N.A.		N.A.
E1F3-006C	14.2	-0.003	0.14		44.4	0.07	0.014	-0.004				N.A.	0.27	N.A.	N.A.	N.A.		N.A.
Average	14.2	-0.003	0.16	0.15	43.7	0.07	0.012	-0.004			2.70	0.16	0.27		9.49	3.48	4.30	

Envitco Glass Raw Data - Corning

Sample No.	SO_4^{2-}	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ppm)	(ppm)	(ppm)	(ppm)
Conver. factor	1	1	1	Petrographic	Petrographic	SEM ; EDX	1	2.71E-04	2.72E-03	5.23E-04	6.31E-03
E1O6-044C	N.A.										
E1O6-044C	N.A.										
E1O6-044C	N.A.										
E1O6-044C	N.A.										
Average				N.A.	Q, Calc Al, Rf Fib, Opq, Salt	N.A.					
E1D5-044C	N.A.										
E1D5-044C	N.A.										
E1D5-044C	N.A.										
E1D5-044C	N.A.										
Average				N.A.	Na Sulfate - Na Molybdate	N.A.					
E1F13-034C	N.A.										
E1F13-034C	N.A.										
E1F13-034C	N.A.										
E1F13-034C	N.A.										
Dried Avg.											
Slurry Avg.											
E1F2-001C	0.19										
E1F2-001C	0.18										
E1F2-001C	N.A.										
E1F2-001C	N.A.										
Dried Avg.											
Slurry Avg.	0.19										
E1F2-002C	0.23										
E1F2-002C	0.23										
E1F2-002C	N.A.										
E1F2-002C	N.A.										
Dried Avg.											
Slurry Avg.	0.23										
E1F2-003C	0.23										
E1F2-003C	0.23										
E1F2-003C	N.A.										
E1F2-003C	N.A.										
Dried Avg.											
Slurry Avg.	0.23										
E1F2-004C	N.A.										
E1F2-004C	N.A.										
E1F2-004C	N.A.										
E1F2-004C	N.A.										
Dried Avg.											
Slurry Avg.											
E1F3-004C	N.A.										
E1F3-004C	N.A.										
E1F3-004C	N.A.										
E1F3-004C	N.A.										
Average											
E1F3-006C	N.A.										
E1F3-006C	N.A.										
E1F3-006C	N.A.										
E1F3-006C	N.A.										
Average											

Envitco Glass Raw Data - Corning

Sample No.	Date	Time	Density	Settled Sol.	LOI 600°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor						1	1	1	1	1	1	1	1	1		1	1	1
E1F3-033C							11.8	10.2	0.003	0.055	0.043	0.15	0.56	1.54		0.029	0.008	0.16
E1F3-033C							12.6	10.2	0.003	0.055	0.044	0.15	0.56	1.54		0.029	0.008	0.16
E1F3-033C							12.6	10.1	0.002	0.056	0.044	0.15	0.56	1.55		0.03	0.008	0.16
E1F3-033C							12.8	10.3	0.002	0.061	0.045	0.15	0.57	1.55		0.03	0.009	0.16
Average	10/14/94	14:00:00					12.5	10.20	0.003	0.057	0.04	0.15	0.56	1.55		0.03	0.008	0.16
E1F3-057C							8.67	7.00	0.003	0.068	0.028	0.10	0.09	1.08		0.027	0.002	0.11
E1F3-057C							8.66	7.09	0.003	0.067	0.031	0.10	0.093	1.08		0.026	0.002	0.11
E1F3-057C							8.78	7.05	0.003	0.058	0.027	0.10	0.13	1.08		0.023	0.005	0.12
E1F3-057C							8.82	7.07	0.003	0.06	0.03	0.10	0.13	1.09		0.024	0.004	0.12
Average	10/07/94	13:00:00					8.73	7.05	0.003	0.06	0.029	0.10	0.11	1.08		0.025	0.003	0.12
E1G4-033C							11.9	9.42	0.041	0.11	0.045	0.15	0.49	1.57		0.032	0.009	0.22
E1G4-033C							12	9.39	0.046	0.11	0.047	0.15	0.48	1.57		0.035	0.009	0.21
E1G4-033C							11.7	9.44	0.088	0.13	0.047	0.15	0.48	1.57		0.034	0.009	0.21
E1G4-033C							11.5	9.43	0.086	0.13	0.046	0.15	0.48	1.57		0.034	0.009	0.21
Average	10/14/94	14:00:00					11.8	9.42	0.065	0.12	0.05	0.15	0.48	1.57		0.03	0.009	0.21
E1G5-004C							11.4	8.73	0.006	0.05	0.047	0.26	0.11	1.35		0.022	0.005	0.20
E1G5-004C							10.9	8.75	0.007	0.047	0.047	0.26	0.11	1.35		0.022	0.005	0.19
E1G5-004C							11.3	8.78	0.007	0.069	0.046	0.27	0.24	1.34		0.028	0.004	0.20
E1G5-004C							11.4	8.80	0.006	0.07	0.044	0.27	0.24	1.34		0.028	0.005	0.20
Average	10/10/94	19:30:00					11.3	8.77	0.007	0.059	0.046	0.27	0.18	1.35		0.025	0.005	0.20
E1G5-009C							10.5	8.38	0.004	0.085	0.041	0.15	0.11	1.35		0.035	0.005	0.14
E1G5-009C							10.6	8.39	0.005	0.086	0.046	0.15	0.11	1.35		0.036	0.005	0.14
E1G5-009C							10.7	8.49	0.005	0.092	0.045	0.15	0.12	1.34		0.038	0.004	0.14
E1G5-009C							10.9	8.52	0.006	0.094	0.047	0.15	0.12	1.34		0.038	0.005	0.15
Average	10/11/94	15:30:00					10.7	8.45	0.005	0.09	0.04	0.15	0.12	1.35		0.04	0.005	0.14
E1G5-015C1							10.8	8.45	0.005	0.067	0.046	0.13	0.096	1.35		0.032	0.006	0.15
E1G5-015C1							10.8	8.44	0.004	0.067	0.045	0.13	0.095	1.35		0.031	0.004	0.14
E1G5-015C1							10.7	8.49	0.005	0.07	0.049	0.14	0.095	1.35		0.032	0.004	0.14
E1G5-015C1							10.4	8.48	0.004	0.07	0.042	0.14	0.087	1.35		0.031	0.004	0.14
Average	10/12/94	15:00:00					10.7	8.47	0.005	0.07	0.05	0.14	0.09	1.35		0.03	0.005	0.14
E1G5-017C							10.9	8.44	0.005	0.073	0.044	0.13	0.35	1.33		0.034	0.005	0.14
E1G5-017C							10.7	8.42	0.005	0.072	0.044	0.13	0.35	1.33		0.033	0.005	0.14
E1G5-017C							10.6	8.39	0.005	0.074	0.046	0.14	0.34	1.32		0.034	0.006	0.14
E1G5-017C							10.6	8.34	0.004	0.076	0.045	0.14	0.38	1.33		0.035	0.005	0.14
Average	10/12/94	17:00:00					10.7	8.40	0.005	0.07	0.04	0.14	0.36	1.33		0.034	0.005	0.14
E1G5-019C							10.4	8.22	0.005	0.093	0.044	0.13	0.38	1.32		0.039	0.006	0.14
E1G5-019C							10.5	8.14	0.004	0.093	0.045	0.13	0.42	1.32		0.039	0.006	0.14
E1G5-019C							10.5	8.18	0.004	0.089	0.044	0.13	0.38	1.31		0.031	0.006	0.14
E1G5-019C							10.5	8.16	0.004	0.089	0.043	0.13	0.38	1.31		0.032	0.006	0.14
Average	10/12/94	19:00:00					10.5	8.18	0.004	0.09	0.04	0.13	0.39	1.32		0.035	0.006	0.14
E1G5-021C							10.5	8.30	0.005	0.06	0.046	0.13	0.46	1.30		0.033	0.008	0.14
E1G5-021C							10.3	8.24	0.005	0.061	0.044	0.13	0.45	1.31		0.031	0.007	0.14
E1G5-021C							10.5	8.24	0.004	0.066	0.044	0.13	0.46	1.31		0.034	0.008	0.14
E1G5-021C							10.5	8.27	0.004	0.068	0.044	0.13	0.45	1.30		0.034	0.006	0.14
Average	10/12/94	21:00:00					10.5	8.26	0.005	0.06	0.04	0.13	0.46	1.31		0.03	0.007	0.14
E1G5-024C							10.4	8.15	0.005	0.061	0.044	0.13	0.57	1.28		0.035	0.007	0.13
E1G5-024C							10.4	8.11	0.005	0.058	0.041	0.13	0.57	1.28		0.035	0.006	0.13
E1G5-024C							10.5	8.09	0.005	0.055	0.04	0.13	0.56	1.27		0.035	0.007	0.13
E1G5-024C							10.6	8.11	0.005	0.056	0.04	0.13	0.64	1.27		0.034	0.006	0.13
Average	10/13/94	3:00:00					10.5	8.12	0.005	0.06	0.04	0.13	0.59	1.28		0.03	0.007	0.13

Envitco Glass Raw Data - Corning

Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor	1	1	1	1	1	1	1	1			1	1	1	1	1	1	1	1
E1F3-033C	20.8	-0.003	0.28		13.9	0.12	-0.005	-0.004			4.91	N.A.	0.28	N.A.	13.18	5.12		N.A.
E1F3-033C	20.8	-0.003	0.25		14.0	0.12	-0.005	-0.004				N.A.	0.28	N.A.	13.18	5.13		N.A.
E1F3-033C	20.9	-0.003	0.18		14.2	0.12	-0.005	-0.004			5.03	N.A.	0.28	N.A.	N.A.	N.A.		N.A.
E1F3-033C	20.9	-0.003	0.23		14.3	0.12	-0.005	-0.004				N.A.	0.28	N.A.	N.A.	N.A.		N.A.
Average	20.9	-0.003	0.24		14.1	0.12	-0.005	-0.004			4.97		0.28		13.18	5.13		
E1F3-057C	14.3	-0.003	0.10	0.17	43.8	0.078	-0.005	-0.004			2.85	0.22	0.21	N.A.	10.43	3.80	4.60	N.A.
E1F3-057C	14.2	-0.003	0.11		43.4	0.076	-0.005	-0.004				0.24	0.21	N.A.	10.42	3.80	4.40	N.A.
E1F3-057C	14.3	-0.003	0.14	0.18	43.6	0.077	-0.005	-0.004			2.84	N.A.	0.21	N.A.	N.A.	N.A.		N.A.
E1F3-057C	14.3	-0.003	0.20		43.5	0.079	-0.005	-0.004				N.A.	0.21	N.A.	N.A.	N.A.		N.A.
Average	14.3	-0.003	0.14	0.18	43.6	0.078	-0.005	-0.004			2.85	0.23	0.21		10.43	3.80	4.50	
E1G4-033C	20.3	-0.009	0.14		52.5	0.11	0.012	0.03				N.A.	0.38	N.A.	N.A.	N.A.		N.A.
E1G4-033C	20.3	-0.009	0.19		52.4	0.12	0.013	0.032				N.A.	0.38	N.A.	N.A.	N.A.		N.A.
E1G4-033C	20.3	-0.009	0.19		52.4	0.12	0.012	0.032				N.A.	0.38	N.A.	N.A.	N.A.		N.A.
E1G4-033C	20.3	-0.009	0.16		52.2	0.12	0.012	0.031				N.A.	0.38	N.A.	N.A.	N.A.		N.A.
Average	20.3	-0.009	0.17		52.4	0.12	0.012	0.031					0.38					
E1G5-004C	19.7	-0.001	0.26		54.3	0.12	0.015	0.036				N.A.	0.26	N.A.	N.A.	N.A.		N.A.
E1G5-004C	19.7	-0.001	0.30		53.6	0.11	0.018	0.035				N.A.	0.26	N.A.	N.A.	N.A.		N.A.
E1G5-004C	19.7	-0.001	0.22		53.7	0.12	0.015	0.03				N.A.	0.26	N.A.	N.A.	N.A.		N.A.
E1G5-004C	19.7	-0.001	0.32		54.2	0.12	0.014	0.032				N.A.	0.26	N.A.	N.A.	N.A.		N.A.
Average	19.7	-0.001	0.28		54.0	0.12	0.016	0.03					0.26					
E1G5-009C	18.0	-0.001	0.25		57.3	0.098	0.02	0.026				N.A.	0.27	N.A.	N.A.	N.A.		N.A.
E1G5-009C	17.9	-0.001	0.23		56.9	0.097	0.016	0.03				N.A.	0.27	N.A.	N.A.	N.A.		N.A.
E1G5-009C	17.9	-0.001	0.23		57.0	0.097	0.014	0.03				N.A.	0.27	N.A.	N.A.	N.A.		N.A.
E1G5-009C	17.9	-0.001	0.27		57.7	0.098	0.021	0.03				N.A.	0.27	N.A.	N.A.	N.A.		N.A.
Average	17.9	-0.001	0.25		57.2	0.10	0.02	0.03					0.27					
E1G5-015C1	17.7	-0.001	0.19		57.5	0.094	0.017	0.038				0.30	0.27	N.A.	N.A.	N.A.		N.A.
E1G5-015C1	17.7	-0.001	0.23		57.7	0.094	0.018	0.043				0.32	0.27	N.A.	N.A.	N.A.		N.A.
E1G5-015C1	17.7	-0.001	0.22		57.8	0.095	0.021	0.04				N.A.	0.27	N.A.	N.A.	N.A.		N.A.
E1G5-015C1	17.7	-0.001	0.23		57.2	0.094	0.017	0.037				N.A.	0.27	N.A.	N.A.	N.A.		N.A.
Average	17.7	-0.001	0.22	0.10	57.6	0.094	0.02	0.04				0.31	0.27					
E1G5-017C	17.6	-0.001	0.19		57.9	0.094	0.014	0.032				N.A.	0.29	N.A.	N.A.	N.A.		N.A.
E1G5-017C	17.5	-0.001	0.20		58.0	0.093	0.018	0.033				N.A.	0.29	N.A.	N.A.	N.A.		N.A.
E1G5-017C	17.6	-0.001	0.19		57.3	0.093	0.015	0.033				N.A.	0.29	N.A.	N.A.	N.A.		N.A.
E1G5-017C	17.6	-0.001	0.20		57.6	0.094	-0.02	0.036				N.A.	0.29	N.A.	N.A.	N.A.		N.A.
Average	17.6	-0.001	0.20		57.7	0.09	0.017	0.034					0.29					
E1G5-019C	17.3	-0.001	0.18		58.6	0.092	0.016	0.031				N.A.	0.30	N.A.	N.A.	N.A.		N.A.
E1G5-019C	17.3	-0.001	0.23		58.6	0.092	0.016	0.032				N.A.	0.30	N.A.	N.A.	N.A.		N.A.
E1G5-019C	17.3	-0.001	0.20		59.3	0.092	0.02	0.031				N.A.	0.30	N.A.	N.A.	N.A.		N.A.
E1G5-019C	17.3	-0.001	0.24		59.0	0.093	0.022	0.03				N.A.	0.30	N.A.	N.A.	N.A.		N.A.
Average	17.3	-0.001	0.21		58.9	0.09	0.02	0.03					0.30					
E1G5-021C	17.3	-0.001	0.17		58.1	0.093	0.02	0.023				N.A.	0.31	N.A.	N.A.	N.A.		N.A.
E1G5-021C	17.4	-0.001	0.23		57.4	0.091	0.014	0.023				N.A.	0.31	N.A.	N.A.	N.A.		N.A.
E1G5-021C	17.4	-0.001	0.23		58.1	0.09	0.014	0.026				N.A.	0.31	N.A.	N.A.	N.A.		N.A.
E1G5-021C	17.4	-0.001	0.20		57.8	0.092	0.013	0.027				N.A.	0.31	N.A.	N.A.	N.A.		N.A.
Average	17.4	-0.001	0.21		57.9	0.09	0.02	0.025					0.31					
E1G5-024C	16.8	-0.002	0.21		60.0	0.092	0.015	0.023				N.A.	0.32	N.A.	N.A.	N.A.		N.A.
E1G5-024C	16.8	-0.002	0.19		59.7	0.093	0.015	0.025				N.A.	0.32	N.A.	N.A.	N.A.		N.A.
E1G5-024C	16.8	-0.002	0.19		60.9	0.091	0.013	0.021				N.A.	0.32	N.A.	N.A.	N.A.		N.A.
E1G5-024C	16.8	-0.002	0.21		60.4	0.092	0.014	0.024				N.A.	0.32	N.A.	N.A.	N.A.		N.A.
Average	16.8	-0.002	0.20		60.3	0.09	0.014	0.02					0.32					

Envitco Glass Raw Data - Corning

Sample No.	SO_4^{2-}	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ppm)	(ppm)	(ppm)	(ppm)
Conver. factor	1	1	1	Petrographic	Petrographic	SEM ; EDX	1	2.71E-04	2.72E-03	5.23E-04	6.31E-03
E1F3-033C	N.A.										
E1F3-033C	N.A.										
E1F3-033C	N.A.										
E1F3-033C	N.A.										
Average											
E1F3-057C	N.A.										
E1F3-057C	N.A.										
E1F3-057C	N.A.										
E1F3-057C	N.A.										
Average											
E1G4-033C	N.A.										
E1G4-033C	N.A.										
E1G4-033C	N.A.										
E1G4-033C	N.A.										
Average											
E1G5-004C	N.A.	0.073									
E1G5-004C	N.A.										
E1G5-004C	N.A.	0.073									
E1G5-004C	N.A.										
Average		0.073	0.46	N.A.	N.A.	N.A.					
E1G5-009C	N.A.	0.069					10.1	61	10	22	1.0
E1G5-009C	N.A.							60	9.8	22	1.0
E1G5-009C	N.A.	0.069					10.2	60	9.8	22	0.9
E1G5-009C	N.A.							60	9.7	22	0.9
Average		0.069	0.67	None	Faint Cords Present	Not Detected	10.2	60	9.8	22	0.9
E1G5-015C1	N.A.	0.055					10.2	60	9.0	20	0.9
E1G5-015C1	N.A.							59	8.8	20	0.9
E1G5-015C1	N.A.						10.2	59	9.1	21	0.9
E1G5-015C1	N.A.							59	9.1	21	0.9
Average		0.055	0.66	None	Faint Cords Present	Not Detected	10.2	59	9.0	21	0.9
E1G5-017C	N.A.	0.12									
E1G5-017C	N.A.										
E1G5-017C	N.A.										
E1G5-017C	N.A.										
Average		0.12	0.38	N.A.	N.A.	N.A.					
E1G5-019C	N.A.	0.2									
E1G5-019C	N.A.										
E1G5-019C	N.A.										
E1G5-019C	N.A.										
Average		0.2	0.57	N.A.	N.A.	N.A.					
E1G5-021C	N.A.	0.24									
E1G5-021C	N.A.										
E1G5-021C	N.A.										
E1G5-021C	N.A.										
Average		0.24	0.59	N.A.	N.A.	N.A.					
E1G5-024C	N.A.	0.24									
E1G5-024C	N.A.										
E1G5-024C	N.A.										
E1G5-024C	N.A.										
Average		0.24	0.46	N.A.	N.A.	N.A.					

Envitco Glass Raw Data - Corning

Sample No.	Date	Time	Density	Settled Sol.	LOI 600°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor						1	1	1	1	1	1	1	1	1		1	1	1
E1G5-028C2							10.9	8.41	0.005	0.054	0.044	0.14	0.67	1.31		0.035	0.007	0.14
E1G5-028C2							10.6	8.40	0.004	0.054	0.045	0.14	0.68	1.31		0.035	0.007	0.14
E1G5-028C2							10.8	8.32	0.003	0.06	0.044	0.13	0.67	1.30		0.036	0.008	0.13
E1G5-028C2							11.0	8.40	0.004	0.061	0.047	0.13	0.68	1.30		0.036	0.008	0.13
Average	10/13/94	11:00:00					10.8	8.38	0.004	0.06	0.045	0.14	0.68	1.31		0.036	0.008	0.14
E1G5-033C							11.7	8.88	0.003	0.078	0.045	0.19	0.53	1.46		0.031	0.006	0.17
E1G5-033C							11.8	8.83	0.004	0.077	0.05	0.19	0.60	1.45		0.032	0.006	0.17
E1G5-033C							11.6	9.00	0.003	0.089	0.049	0.19	0.52	1.45		0.032	0.005	0.17
E1G5-033C							11.6	8.99	0.003	0.086	0.047	0.19	0.52	1.46		0.032	0.006	0.17
Average	10/20/94	14:00:00					11.7	8.93	0.003	0.08	0.05	0.19	0.54	1.46		0.03	0.006	0.17
E1G5-035C							11.2	8.64	0.004	0.081	0.058	0.15	0.63	1.34		0.035	0.006	0.20
E1G5-035C							11.2	8.64	0.003	0.079	0.058	0.15	0.62	1.35		0.034	0.007	0.20
E1G5-035C							11.1	8.62	0.004	0.079	0.063	0.15	0.52	1.34		0.034	0.007	0.20
E1G5-035C							11.2	8.64	0.004	0.074	0.061	0.15	0.51	1.34		0.033	0.007	0.20
Average	10/19/94	18:00:00					11.2	8.64	0.004	0.08	0.06	0.15	0.57	1.34		0.034	0.007	0.20
E1G5-040C							12.0	8.86	0.004	0.07	0.067	0.14	0.24	1.44		0.031	0.005	0.19
E1G5-040C							12.1	8.86	0.003	0.07	0.069	0.14	0.21	1.44		0.031	0.006	0.15
E1G5-040C							12.0	8.85	0.004	0.06	0.064	0.14	0.19	1.44		0.029	0.006	0.19
E1G5-040C							12.0	8.88	0.005	0.068	0.064	0.14	0.20	1.44		0.03	0.006	0.20
Average	10/20/94	18:00:00					12.0	8.86	0.004	0.07	0.07	0.14	0.21	1.44		0.03	0.006	0.18
E1G5-041C							11.7	8.42	0.003	0.061	0.058	0.14	0.13	1.42		0.028	0.004	0.20
E1G5-041C							11.6	8.34	0.002	0.063	0.054	0.14	0.13	1.42		0.028	0.005	0.20
E1G5-041C							11.7	8.37	0.003	0.061	0.054	0.14	0.13	1.42		0.028	0.005	0.20
E1G5-041C							11.9	8.41	0.002	0.064	0.058	0.14	0.14	1.42		0.029	0.005	0.21
Average	10/21/94	18:00:00					11.7	8.39	0.003	0.06	0.06	0.14	0.13	1.42		0.03	0.005	0.20
E1G5-043C							12.7	9.16	1.83	0.73	0.043	0.19	0.99	1.60		0.065	0.009	0.18
E1G5-043C							12.5	9.12	1.8	0.72	0.043	0.19	1.01	1.60		0.065	0.009	0.18
E1G5-043C							12.4	9.17	-0.003	0.095	0.043	0.18	1.06	1.60		0.027	0.009	0.18
E1G5-043C							12.4	9.13	-0.003	0.096	0.043	0.18	1.06	1.60		0.028	0.009	0.18
Average	10/28/94						12.5	9.15	0.91	0.41	0.04	0.19	1.03	1.60		0.05	0.009	0.18
E1G5-045C							1.22	1.28	-0.003	0.024	0.89	0.15	0.02	2.47		0.003	-0.002	10
E1G5-045C							1.20	1.24	-0.003	0.025	0.91	0.15	0.02	2.49		0.004	-0.002	10.2
E1G5-045C							1.24	1.26	-0.003	0.025	0.90	0.17	0.021	2.49		0.005	-0.002	10.0
E1G5-045C							1.26	1.27	-0.003	0.025	0.89	0.17	0.021	2.49		0.005	-0.002	10.0
Average	10/27/94						1.23	1.26	-0.003	0.02	0.90	0.16	0.02	2.49		0.004	-0.002	10.05
E1I1-001C							11.8	8.60	0.94	0.35	0.034	0.43	0.018	1.31		0.021	0.004	0.20
E1I1-001C							11.6	8.66	0.97	0.36	0.033	0.43	0.017	1.31		0.021	0.005	0.21
E1I1-001C							11.5	8.62	-0.003	0.21	0.036	0.42	0.015	1.31		0.017	0.005	0.20
E1I1-001C							11.8	8.68	-0.003	0.21	0.035	0.42	0.015	1.31		0.017	0.005	0.21
Average	10/05/94	10:30:00					11.7	8.64	0.48	0.28	0.03	0.43	0.02	1.31		0.02	0.005	0.21
E1D5-022C																		
E1O11-010C							22.0	0.097	0.0032	0.32	0.25	0.009	12.9	0.17		0.086	0.069	0.10
E1O11-010C							22.0	0.095	0.0032	0.32	0.25		12.9	0.17		0.085	0.069	0.10
E1O11-010C							22.4	0.082	0.0029	0.32	0.25	0.009	13.2	0.16		0.085	0.069	0.10
E1O11-010C							22.1	0.085	0.0029	0.32	0.25		13.0	0.16		0.084	0.069	0.10
Average							22.1	0.090	0.0031	0.32	0.25	0.009	13.0	0.17		0.085	0.069	0.10
E1O11-028C							24.7	0.17	0.0097	0.66	0.29	0.031	11.5	0.23		0.13	0.088	0.089
E1O11-028C							24.8	0.17	0.0096	0.66	0.29	0.030	11.5	0.23		0.13	0.088	0.089
E1O11-028C							24.4	0.20	0.0096	0.66	0.29	0.031	11.6	0.21		0.13	0.088	0.086
E1O11-028C							24.5	0.20	0.0098	0.67	0.30	0.030	11.7	0.21		0.13	0.089	0.086
Average							24.6	0.19	0.0097	0.66	0.29	0.031	11.6	0.22		0.13	0.088	0.088

Envitco Glass Raw Data - Corning

Sample No.	Na_2O (wt%)	NiO (wt%)	P_2O_5 (wt%)	SO_3 (wt%)	SiO_2 (wt%)	SrO (wt%)	TiO_2 (wt%)	ZrO_2 (wt%)	TOC (wt%)	TIC (wt%)	Total C (wt%)	Cl^- (wt%)	F^- (wt%)	I^- (wt%)	NO_3^- (wt%)	NO_2^- (wt%)	Total N_2 (wt%)	PO_4^{3-} (wt%)
Conver. factor	1	1	1	1	1	1	1	1			1	1	1	1	1	1	1	1
E1G5-028C2	17.5	-0.002	0.21		58.6	0.092	0.014	0.026				0.27	0.34	N.A.	N.A.	N.A.		N.A.
E1G5-028C2	17.5	-0.002	0.22		58.9	0.093	0.015	0.028				0.27	0.34	N.A.	N.A.	N.A.		N.A.
E1G5-028C2	17.5	-0.002	0.22		58.0	0.094	0.014	0.029				N.A.	0.34	N.A.	N.A.	N.A.		N.A.
E1G5-028C2	17.5	-0.002	0.22		59.0	0.094	0.015	0.027				N.A.	0.34	N.A.	N.A.	N.A.		N.A.
Average	17.5	-0.002	0.22	0.12	58.6	0.09	0.015	0.028				0.27	0.34					
E1G5-033C	19.7	-0.002	0.26		54.3	0.11	0.011	0.034				N.A.	0.38	N.A.	N.A.	N.A.		N.A.
E1G5-033C	19.7	-0.002	0.27		54.0	0.11	0.011	0.04				N.A.	0.38	N.A.	N.A.	N.A.		N.A.
E1G5-033C	19.7	-0.002	0.22		53.7	0.11	0.018	0.034				N.A.	0.38	N.A.	N.A.	N.A.		N.A.
E1G5-033C	19.7	-0.002	0.25		53.0	0.11	0.015	0.032				N.A.	0.38	N.A.	N.A.	N.A.		N.A.
Average	19.7	-0.002	0.25		53.8	0.11	0.014	0.035					0.38					
E1G5-035C	19.3	-0.002	0.22		53.9	0.10	0.013	0.065				N.A.	0.33	N.A.	N.A.	N.A.		N.A.
E1G5-035C	19.2	-0.002	0.25		55.6	0.10	0.01	0.07				N.A.	0.33	N.A.	N.A.	N.A.		N.A.
E1G5-035C	19.3	-0.002	0.30		54.3	0.10	0.012	0.068				N.A.	0.32	N.A.	N.A.	N.A.		N.A.
E1G5-035C	19.3	-0.002	0.26		55.9	0.10	0.015	0.064				N.A.	0.32	N.A.	N.A.	N.A.		N.A.
Average	19.3	-0.002	0.26		54.9	0.10	0.013	0.067					0.33					
E1G5-040C	20.2	-0.002	0.33		54.9	0.11	0.011	0.064				N.A.	0.35	N.A.	N.A.	N.A.		N.A.
E1G5-040C	20.2	-0.002	0.31		54.6	0.11	0.01	0.063				N.A.	0.35	N.A.	N.A.	N.A.		N.A.
E1G5-040C	20.2	-0.002	0.31		54.5	0.11	0.012	0.054				N.A.	0.35	N.A.	N.A.	N.A.		N.A.
E1G5-040C	20.2	-0.002	0.27		54.3	0.11	0.01	0.066				N.A.	0.35	N.A.	N.A.	N.A.		N.A.
Average	20.2	-0.002	0.31		54.6	0.11	0.011	0.06					0.35					
E1G5-041C	19.5	-0.002	0.31		55.7	0.10	0.007	0.058				N.A.	0.33	N.A.	N.A.	N.A.		N.A.
E1G5-041C	19.4	-0.002	0.33		55.7	0.11	0.005	0.057				N.A.	0.33	N.A.	N.A.	N.A.		N.A.
E1G5-041C	19.4	-0.002	0.34		55.7	0.10	0.004	0.056				N.A.	0.33	N.A.	N.A.	N.A.		N.A.
E1G5-041C	19.4	-0.002	0.31		55.5	0.11	0.007	0.059				N.A.	0.33	N.A.	N.A.	N.A.		N.A.
Average	19.4	-0.002	0.32		55.7	0.11	0.006	0.058					0.33					
E1G5-043C	21.0	-0.009	0.20		50.1	0.29	0.007	0.032				N.A.	0.73	N.A.	N.A.	N.A.		N.A.
E1G5-043C	21.0	-0.009	0.23		49.9	0.29	0.006	0.031				N.A.	0.73	N.A.	N.A.	N.A.		N.A.
E1G5-043C	21.1	-0.009	0.20		49.9	0.11	0.007	0.032				N.A.	0.73	N.A.	N.A.	N.A.		N.A.
E1G5-043C	21.1	-0.009	0.24		49.7	0.11	0.006	0.032				N.A.	0.73	N.A.	N.A.	N.A.		N.A.
Average	21.1	-0.009	0.22		49.9	0.20	0.007	0.03					0.73					
E1G5-045C	38.2	-0.009	1.08		4.8	0.066	-0.003	0.01				N.A.	0.19	N.A.	N.A.	N.A.		N.A.
E1G5-045C	38.2	-0.009	1.07		4.9	0.067	-0.003	0.01				N.A.	0.19	N.A.	N.A.	N.A.		N.A.
E1G5-045C	38.0	-0.009	1.10		4.9	0.065	-0.003	0.009				N.A.	0.19	N.A.	N.A.	N.A.		N.A.
E1G5-045C	38.2	-0.009	1.09		4.8	0.065	-0.003	0.01				N.A.	0.19	N.A.	N.A.	N.A.		N.A.
Average	38.2	-0.009	1.09		4.8	0.066	-0.003	0.01					0.19					
E1I1-001C	20.9	-0.009	0.29		53.6	0.27	-0.003	0.009				N.A.	0.31	N.A.	N.A.	N.A.		N.A.
E1I1-001C	20.9	-0.009	0.29		53.7	0.27	-0.003	0.009				N.A.	0.31	N.A.	N.A.	N.A.		N.A.
E1I1-001C	20.9	-0.009	0.27		53.9	0.14	-0.003	0.01				N.A.	0.31	N.A.	N.A.	N.A.		N.A.
E1I1-001C	20.9	-0.009	0.30		54.5	0.14	-0.003	0.009				N.A.	0.31	N.A.	N.A.	N.A.		N.A.
Average	20.9	-0.009	0.29		53.9	0.21	-0.003	0.009					0.31					
E1D5-022C																		
E1O11-010C	0.13	0.041	1.57	1.76	28.5	0.015	0.063	0.006			9.5	0.31	0.030		0.053	0.0030		
E1O11-010C	0.13	0.041	1.57	1.74	28.6	0.015	0.063	0.0061			9.6	0.31	0.033					
E1O11-010C	0.13	0.042	1.58	1.76	29.2	0.015	0.065	0.0071			10.0							
E1O11-010C	0.13	0.042	1.59	1.71	28.8	0.015	0.064	0.007			9.7							
Average	0.13	0.042	1.58	1.74	28.8	0.015	0.064	0.0066			9.7	0.31	0.032		0.053	0.003		
E1O11-028C	0.17	0.039	1.51	1.12	28.8	0.041	0.080	0.013			8.5	0.23	-0.0001		0.081	0.0022		
E1O11-028C	0.17	0.039	1.52	1.32	28.8	0.041	0.079	0.013			8.8	0.22						
E1O11-028C	0.17	0.043	1.53	1.17	28.2	0.041	0.083	0.017			9.1							
E1O11-028C	0.17	0.043	1.54	1.31	28.3	0.042	0.084	0.017			8.6							
Average	0.17	0.041	1.53	1.23	28.5	0.041	0.082	0.015			8.8	0.23	-0.0001		0.081	0.0022		

Envitco Glass Raw Data - Corning

Sample No.	SO_3^2	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ppm)	(ppm)	(ppm)	(ppm)
Conver. factor	1	1	1	Petrographic	Petrographic	SEM ; EDX	1	2.71E-04	2.72E-03	5.23E-04	6.31E-03
E1G5-028C2	N.A.	0.34					10.2	59	8.5	20	0.9
E1G5-028C2	N.A.							60	8.8	20	0.9
E1G5-028C2	N.A.						10.2	59	8.7	20	0.9
E1G5-028C2	N.A.							59	8.6	20	0.9
Average		0.34	0.56	None	Very Faint Cords Present	Not Detected	10.2	59	8.7	20	0.9
E1G5-033C	N.A.										
E1G5-033C	N.A.										
E1G5-033C	N.A.										
E1G5-033C	N.A.										
Average				N.A.	N.A.	N.A.					
E1G5-035C	N.A.	0.25									
E1G5-035C	N.A.										
E1G5-035C	N.A.										
E1G5-035C	N.A.										
Average		0.25	0.49	N.A.	N.A.	N.A.					
E1G5-040C	N.A.	0.074					10.7	65	22	42	1.8
E1G5-040C	N.A.							64	21	42	2.0
E1G5-040C	N.A.						10.7	64	21	42	2.0
E1G5-040C	N.A.							65	21	42	2.0
Average		0.074	0.39	<<1	Q, Sharp Cords Visible	Slight Mo / Slight Si	10.7	65	21	42	2.0
E1G5-041C	N.A.	0.053					10.6	69	20	40	2.1
E1G5-041C	N.A.							69	20	40	2.1
E1G5-041C	N.A.						10.6	67	19	38	2.1
E1G5-041C	N.A.							67	19	39	2.1
Average		0.053	0.44	20-50	Q, Calcined Al_2O_3 altering to Ne	Not Detected	10.6	68	20	39	2.1
E1G5-043C	N.A.										
E1G5-043C	N.A.										
E1G5-043C	N.A.										
E1G5-043C	N.A.										
Average				>50	Q, Calc Al_2O_3 alt to Ne, Rf Fib, Nc	Not Detected					
E1G5-045C	N.A.										
E1G5-045C	N.A.										
E1G5-045C	N.A.										
E1G5-045C	N.A.										
Average				N.A.	Na Molybdate w/ Chromate Color	Not Detected					
E1I1-001C	N.A.										
E1I1-001C	N.A.										
E1I1-001C	N.A.										
E1I1-001C	N.A.										
Average				N.A.	N.A.	N.A.					
E1D5-022C				N.A.	Unknown Salt	N.A.					
E1O11-010C											
E1O11-010C											
E1O11-010C											
E1O11-010C											
Average				N.A.	N.A.	N.A.					
E1O11-028C											
E1O11-028C											
E1O11-028C											
E1O11-028C											
Average				N.A.	N.A.	N.A.					

Envitco Glass Raw Data - Corning

Sample No.	Date	Time	Density	Settled Sol.	LOI 600°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor						1	1	1	1	1	1	1	1	1		1	1	1
E1O11-032C							20.3	0.084	-0.0003	0.082	0.073	0.032	1.40	0.10		0.015	0.013	0.11
E1O11-032C							20.1	0.085	-0.0003	0.082	0.073	0.032	1.38	0.10		0.015	0.014	0.11
E1O11-032C							20.5	0.064	-0.0003	0.084	0.072	0.032	1.40	0.12		0.014	0.013	0.11
E1O11-032C							20.3	0.065	-0.0003	0.084	0.072	0.033	1.38	0.12		0.015	0.013	0.11
Average							20.3	0.075	-0.0003	0.083	0.073	0.032	1.39	0.11		0.015	0.013	0.11
E1O11-040C							18.9	1.35	0.015	0.88	1.83	0.20	18.4	2.48		0.24	0.21	0.51
E1O11-040C							19.3	1.40	0.015	0.88	1.82	0.20	18.8	2.49		0.24	0.21	0.51
E1O11-040C							19.7	1.18	0.015	0.87	1.79	0.20	17.3	2.51		0.26	0.21	0.50
E1O11-040C							20.6	1.17	0.015	0.86	1.77	0.20	18.0	2.53		0.25	0.21	0.50
Average							19.6	1.28	0.015	0.87	1.80	0.20	18.1	2.50		0.25	0.21	0.51

Envitco Glass Raw Data - Corning

Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl^-	F^-	Γ	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor	1	1	1	1	1	1	1	1			1	1	1	1	1	1	1	1
E1O11-032C	0.056	0.0092	0.52	1.22	51.8	0.019	0.035	0.0031			8.8	0.011	0.0067		0.026	0.0002		
E1O11-032C	0.056	0.0097	0.52	1.14	51.2	0.019	0.035	0.0033			8.8	0.011	0.0067		0.027	0.0003		
E1O11-032C	0.063	0.0088	0.52	1.11	53.0	0.019	0.035	0.0036			8.8							
E1O11-032C	0.063	0.0087	0.51	1.20	52.3	0.019	0.035	0.0033			8.6							
Average	0.060	0.0091	0.52	1.17	52.1	0.019	0.035	0.0033			8.8	0.011	0.0067		0.027	0.0003		
E1O11-040C	1.27	0.77	0.65	0.40	33.6	0.027	0.32	0.19			6.5	0.20	0.018		0.11	0.0014		
E1O11-040C	1.27	0.76	0.67	0.41	34.3	0.027	0.32	0.19			6.7	0.23	0.015		0.11			
E1O11-040C	1.28	0.69	0.64	0.41	34.4	0.027	0.31	0.21			6.0							
E1O11-040C	1.28	0.69	0.65	0.42	35.7	0.027	0.31	0.21			5.9							
Average	1.28	0.73	0.65	0.41	34.5	0.027	0.32	0.20			6.3	0.22	0.017		0.11	0.0014		

Envitco Glass Raw Data - Corning

Sample No.	SO_4^{2-}	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ppm)	(ppm)	(ppm)	(ppm)
Conver. factor	1	1	1	Petrographic	Petrographic	SEM ; EDX	1	2.71E-04	2.72E-03	5.23E-04	6.31E-03
E1O11-032C											
E1O11-032C											
E1O11-032C											
E1O11-032C											
Average				N.A.	N.A.	N.A.					
E1O11-040C											
E1O11-040C											
E1O11-040C											
E1O11-040C											
Average				N.A.	N.A.	N.A.					

Envitco Glass Raw Data - Corning

Sample No.	Date	Time	Density	Settled Sol.	LOI 600°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor						1	1	1	1	1	1	1	1	1		1	1	1
Sample No.	Date	Time	Density	Settled Sol.	LOI 600°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values							12.00	9.00	0.00	0.00	0.00	0.00	0.00	1.46	0.00	0.00	0.00	0.00
E1O6-044C	10/27/94						7.60	5.39	0.031	0.493	0.108	0.75	0.29	2.65		0.052	0.012	0.47
E1D5-044C							0.074	0.63	0.008	0.040	-0.008	0.14	0.007	2.40		-0.001	-0.002	2.49
E1F13-034C(d)	10/19/94	15:50:00					8.81	7.64	-0.001	0.058	0.033	0.14	0.030	1.47		0.022	0.004	0.155
E1F13-034C(s)	10/19/94	15:50:00				36.3	5.61	4.87	-0.001	0.037	0.021	0.089	0.019	0.933		0.014	0.002	0.099
E1F2-001C(d)	09/21/94	16:45:00					8.29	8.83	-0.001	0.043	0.031	0.130	0.027	1.305		0.022	0.003	0.135
E1F2-001C(s)	09/21/94	16:45:00				32.3	5.61	5.97	-0.001	0.029	0.021	0.088	0.018	0.883		0.015	0.002	0.091
E1F2-002C(d)	09/22/94	11:00:00					11.0	12.20	-0.001	0.042	0.039	0.17	0.43	1.79		0.023	0.007	0.19
E1F2-002C(s)	09/22/94	11:00:00				40.0	6.62	7.32	-0.001	0.025	0.024	0.10	0.26	1.08		0.014	0.004	0.11
E1F2-003C(d)	09/23/94	9:00:00					9.82	11.00	-0.001	0.038	0.040	0.16	0.034	1.70		0.016	0.004	0.188
E1F2-003C(s)	09/23/94	9:00:00				39.1	5.98	6.70	-0.001	0.023	0.025	0.10	0.021	1.04		0.010	0.002	0.114
E1F2-004C(d)	09/20/94	16:00:00					8.33	6.23	-0.001	0.037	0.030	0.12	0.027	1.06		0.022	0.003	0.118
E1F2-004C(s)	09/20/94	16:00:00				33.1	5.57	4.17	-0.001	0.025	0.020	0.08	0.018	0.709		0.014	0.002	0.079
E1F3-004C	10/07/94	13:00:00					7.73	6.15	-0.001	0.076	0.032	0.096	0.056	0.97		0.027	0.003	0.11
E1F3-006C	10/07/94	11:00:00					8.46	6.83	0.002	0.050	0.030	0.11	0.66	1.07		0.028	0.007	0.11
E1F3-033C	10/14/94	14:00:00					12.5	10.2	0.003	0.057	0.044	0.15	0.56	1.55		0.030	0.008	0.16
E1F3-057C	10/07/94	13:00:00					8.73	7.05	0.003	0.063	0.029	0.10	0.11	1.08		0.025	0.003	0.12
E1G4-033C	10/14/94	14:00:00					11.8	9.42	0.065	0.120	0.046	0.15	0.48	1.57		0.034	0.009	0.21
E1G5-004C	10/10/94	19:30:00					11.3	8.77	0.007	0.059	0.046	0.27	0.18	1.35		0.025	0.005	0.20
E1G5-009C	10/11/94	15:30:00					10.7	8.45	0.005	0.089	0.045	0.15	0.12	1.35		0.037	0.005	0.14
E1G5-015C1	10/12/94	15:00:00					10.7	8.47	0.005	0.069	0.046	0.14	0.093	1.35		0.032	0.005	0.14
E1G5-017C	10/12/94	17:00:00					10.7	8.40	0.005	0.074	0.045	0.14	0.36	1.33		0.034	0.005	0.14
E1G5-019C	10/12/94	19:00:00					10.5	8.18	0.004	0.091	0.044	0.13	0.39	1.32		0.035	0.006	0.14
E1G5-021C	10/12/94	21:00:00					10.5	8.26	0.005	0.064	0.045	0.13	0.46	1.31		0.033	0.007	0.14
E1G5-024C	10/13/94	3:00:00					10.5	8.12	0.005	0.058	0.041	0.13	0.59	1.28		0.035	0.007	0.13
E1G5-028C2	10/13/94	11:00:00					10.8	8.38	0.004	0.057	0.045	0.14	0.68	1.31		0.036	0.008	0.14
E1G5-033C	10/20/94	14:00:00					11.7	8.93	0.003	0.083	0.048	0.19	0.54	1.46		0.032	0.006	0.17
E1G5-035C	10/19/94	18:00:00					11.2	8.64	0.004	0.078	0.060	0.15	0.57	1.34		0.034	0.007	0.20
E1G5-040C	10/20/94	18:00:00					12.0	8.86	0.004	0.067	0.066	0.14	0.21	1.44		0.030	0.006	0.18
E1G5-041C	10/21/94	18:00:00					11.7	8.39	0.003	0.062	0.056	0.14	0.13	1.42		0.028	0.005	0.20
E1G5-043C	10/28/94						12.5	9.15	0.906	0.410	0.043	0.19	1.03	1.60		0.046	0.009	0.18
E1G5-045C	10/27/94						1.23	1.26	-0.003	0.025	0.898	0.16	0.021	2.49		0.004	-0.002	10.1
E1I1-001C	10/05/94	10:30:00					11.7	8.64	0.476	0.283	0.035	0.43	0.016	1.31		0.019	0.005	0.21
E1D5-022C																		
E1O11-010C							22.1	0.09	0.0031	0.32	0.25	0.009	13.0	0.17		0.085	0.069	0.100
E1O11-028C							24.6	0.19	0.0097	0.66	0.29	0.0305	11.6	0.22		0.13	0.088	0.088
E1O11-032C							20.3	0.07	-0.0003	0.08	0.07	0.0323	1.39	0.11		0.015	0.013	0.11
E1O11-040C							19.6	1.28	0.015	0.87	1.80	0.2	18.1	2.50		0.25	0.21	0.51
Sample E1F2-002 Results are suspect due to potentially nonrepresentative sampling Silica analysis was re-run																		

Envitco Glass Raw Data - Corning

Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor	1	1	1	1	1	1	1	1			1	1	1	1	1	1	1	1
Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values	20.00	0.00	0.00	0.00	55.91	0.00	0.00	0.00				0.00	0.00	0.00	0.00	0.00		0.00
E1O6-044C	22.2	0.027	0.14		14.4	0.088	0.013	-0.006					4.63					
E1D5-044C	42.2	-0.009	0.35		0.077	0.110	-0.003	-0.006					0.30					
E1F13-034C(d)	19.2	-0.004	0.27		31.5	0.108	-0.004	-0.004			2.66							
E1F13-034C(s)	12.2	-0.003	0.17		20.1	0.068	-0.003	-0.003			1.69		0.21		8.31	3.19		
E1F2-001C(d)	17.6	-0.004	0.22	0.18	33.4	0.088	0.006	-0.004			3.49	0.38						
E1F2-001C(s)	11.9	-0.003	0.15	0.12	22.6	0.059	0.004	-0.003			2.36	0.25	0.15	0.0079	11.7	4.78		0.086
E1F2-002C(d)	24.1	-0.004	0.29	0.17	38.2	0.120	0.005	-0.004			4.49	0.25						
E1F2-002C(s)	14.5	-0.002	0.17	0.10	22.9	0.072	0.003	-0.002			2.69	0.17	0.16	0.0108	8.64	3.49		0.105
E1F2-003C(d)	22.7	-0.004	0.25	0.21	18.3	0.118	-0.004	-0.004			4.07	0.21						
E1F2-003C(s)	13.8	-0.002	0.15	0.12	11.1	0.072	-0.002	-0.002			2.48	0.15	0.12	0.0086	7.33	2.92		0.105
E1F2-004C(d)	13.7	-0.004	0.21		42.2	0.074	-0.004	-0.004			2.92							
E1F2-004C(s)	9.18	-0.003	0.14		28.2	0.050	-0.003	-0.003			1.95		0.10		8.70	3.35		
E1F3-004C	12.8	-0.003	0.12		44.9	0.070	0.015	-0.004			2.48		0.16		10.0	3.72		
E1F3-006C	14.2	-0.003	0.16	0.15	43.7	0.072	0.012	-0.004			2.70	0.16	0.27		9.49	3.48	4.30	
E1F3-033C	20.9	-0.003	0.24		14.1	0.120	-0.005	-0.004					0.28		13.2	5.13		
E1F3-057C	14.3	-0.003	0.14	0.18	43.6	0.078	-0.005	-0.004				0.23	0.21		10.4	3.80	4.50	
E1G4-033C	20.3	-0.009	0.17		52.4	0.118	0.012	0.031					0.38					
E1G5-004C	19.7	-0.001	0.28		54.0	0.118	0.016	0.033					0.26					
E1G5-009C	17.9	-0.001	0.25		57.2	0.098	0.018	0.029					0.27					
E1G5-015C1	17.7	-0.001	0.22	0.10	57.6	0.094	0.018	0.040				0.31	0.27					
E1G5-017C	17.6	-0.001	0.20		57.7	0.094	0.017	0.034					0.29					
E1G5-019C	17.3	-0.001	0.21		58.9	0.092	0.019	0.031					0.30					
E1G5-021C	17.4	-0.001	0.21		57.9	0.092	0.015	0.025					0.31					
E1G5-024C	16.8	-0.002	0.20		60.3	0.092	0.014	0.023					0.32					
E1G5-028C2	17.5	-0.002	0.22	0.12	58.6	0.093	0.015	0.028				0.27	0.34					
E1G5-033C	19.7	-0.002	0.25		53.8	0.110	0.014	0.035					0.38					
E1G5-035C	19.3	-0.002	0.26		54.9	0.100	0.013	0.067					0.33					
E1G5-040C	20.2	-0.002	0.31		54.6	0.110	0.011	0.062					0.35					
E1G5-041C	19.4	-0.002	0.32		55.7	0.105	0.006	0.058					0.33					
E1G5-043C	21.1	-0.009	0.22		49.9	0.200	0.007	0.032					0.73					
E1G5-045C	38.2	-0.009	1.09		4.84	0.066	-0.003	0.010					0.19					
E1I1-001C	20.9	-0.009	0.29		53.9	0.205	-0.003	0.009					0.31					
E1D5-022C																		
E1O11-010C	0.13	0.042	1.58	1.74	28.8	0.015	0.064	0.0066			9.70	0.31	0.0315		0.053	0.0030		
E1O11-028C	0.17	0.041	1.53	1.23	28.5	0.041	0.082	0.015			8.75	0.23	-0.0001		0.081	0.0022		
E1O11-032C	0.060	0.009	0.52	1.17	52.1	0.019	0.035	0.0033			8.75	0.01	0.0067		0.027	0.0003		
E1O11-040C	1.28	0.73	0.65	0.41	34.5	0.027	0.315	0.2			6.28	0.22	0.0165		0.11	0.0014		
Sample E1F2-0																		

Envitco Glass Raw Data - Corning

Sample No.	SO_4^{2-}	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ppm)	(ppm)	(ppm)	(ppm)
Conver. factor	1	1	1	Petrographic	Petrographic	SEM ; EDX	1	2.71E-04	2.72E-03	5.23E-04	6.31E-03
Sample No.	SO_4^{2-}	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)			(vol%)	I.D.	Enriched / Depleted	pH	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)
Target Values	0.00	98.37		Petrographic	Petrographic	SEM / EDX				0.102	
E1O6-044C		59.34		N.A.	Q, Calc Al, Rf Fib, Opq, Salt	N.A.					
E1D5-044C		48.77									
E1F13-034C(d)		72.15									
E1F13-034C(s)		93.97									
E1F2-001C(d)		74.17									
E1F2-001C(s)	0.19	99.40									
E1F2-002C(d)		93.54									
E1F2-002C(s)	0.23	108.78									
E1F2-003C(d)		68.84									
E1F2-003C(s)	0.23	91.76									
E1F2-004C(d)		75.10									
E1F2-004C(s)		95.49									
E1F3-004C		89.54									
E1F3-006C		96.00									
E1F3-033C		79.10									
E1F3-057C		94.72									
E1G4-033C		97.27									
E1G5-004C		96.49	0.46	N.A.	N.A.	N.A.					
E1G5-009C		96.86	0.67	None	Faint Cords Present	Not Detected	10.2	0.016	0.027	0.012	0.006
E1G5-015C1		97.31	0.66	None	Faint Cords Present	Not Detected	10.2	0.016	0.024	0.011	0.006
E1G5-017C		97.12	0.38	N.A.	N.A.	N.A.					
E1G5-019C		97.63	0.57	N.A.	N.A.	N.A.					
E1G5-021C		96.77	0.59	N.A.	N.A.	N.A.					
E1G5-024C		98.55	0.46	N.A.	N.A.	N.A.					
E1G5-028C2		98.81	0.56	None	Very Faint Cords Present	Not Detected	10.2	0.016	0.023	0.010	0.006
E1G5-033C		97.37		N.A.	N.A.	N.A.					
E1G5-035C		97.22	0.49	N.A.	N.A.	N.A.					
E1G5-040C		98.65	0.39	<<1	Q, Sharp Cords Visible	Slight Mo / Slight Si	10.7	0.017	0.058	0.022	0.012
E1G5-041C		98.05	0.44	20-50	Q, Calcined Al2O3 altering to Ne	Not Detected	10.6	0.018	0.053	0.021	0.013
E1G5-043C		98.19		>50	Q, Calc Al2O3 alt to Ne, Rf Fib, Nc	Not Detected					
E1G5-045C		60.48		N.A.	Na Molybdate w/ Chromate Color	Not Detected					
E1I1-001C		98.72		N.A.	N.A.	N.A.					
E1D5-022C		0.00		N.A.	Unknown Salt	N.A.					
E1O11-010C				N.A.	N.A.	N.A.					
E1O11-028C				N.A.	N.A.	N.A.					
E1O11-032C				N.A.	N.A.	N.A.					
E1O11-040C				N.A.	N.A.	N.A.					
Sample E1F2-0											

Envitco Glass Raw Data - USGS

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B	Ba	CaO	Cr	Cs	Fe_2O_3	K_2O	Li	MgO	MnO	Mo
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(ppm)	(ppm)	(wt%)	(ppm)	(ppm)	(wt%)	(wt%)	(ppm)	(wt%)	(wt%)	(ppm)
Conver. factor					1	1	1	3.22E-04	1.12E-04	1	1.46E-04	1.06E-04	1	1	2.15E-04	1	1.225	1.50E-04
E1G5-009U					0.11		11.1	23200	56	0.06	290	1670	0.15	1.31		-0.10	-0.01	970
E1G5-009U					0.09		11.1	23400	55	0.06	290	1670	0.16	1.30		-0.10	-0.01	980
Average	10/11/94	16:30:00			0.10		11.1	23300	55.5	0.06	290	1670	0.16	1.31		-0.10	-0.01	975
E1G5-019U					0.07		10.7	22600	46	0.06	290	1460	0.42	1.28		-0.10	-0.01	940
E1G5-019U					0.10		10.7	22600	46	0.06	290	1460	0.39	1.30		-0.10	-0.01	940
Average	10/12/94	19:00:00			0.09		10.7	22600	46	0.06	290	1460	0.41	1.29		-0.10	-0.01	940
E1G5-028U2					0.09		10.9	22600	36	0.07	300	1470	0.71	1.30		-0.10	-0.01	930
E1G5-028U2					0.05		10.9	22800	37	0.07	300	1470	0.73	1.30		-0.10	-0.01	940
Average	10/13/94	11:00:00			0.07		10.9	22700	36.5	0.07	300	1470	0.72	1.30		-0.10	-0.01	935
E1F2-002U	09/22/94	11:00:00			24.2		8.58	16700	15	0.05	210	1060	0.70	1.01		-0.10	-0.01	730
E1F3-006U	10/07/94	11:00:00			19.1		7.91	15100	27	0.07	210	941	0.61	0.93		-0.10	-0.01	670
E1F3-057U																		
E1F3-015U																		
Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values							12.00	9.00	0.00	0.00	0.00	0.00	0.00	1.46	0.00	0.00	0.00	0.00
E1G5-009U	10/11/94	16:30:00			0.10		11.1	7.50	0.006	0.06	0.042	0.177	0.16	1.31		-0.10	-0.01	0.146
E1G5-019U	10/12/94	19:00:00			0.09		10.7	7.28	0.005	0.06	0.042	0.155	0.41	1.29		-0.10	-0.01	0.141
E1G5-028U2	10/13/94	11:00:00			0.07		10.9	7.31	0.004	0.07	0.044	0.156	0.72	1.30		-0.10	-0.01	0.140
E1F2-002U	09/22/94	11:00:00			24.2		8.6	5.38	0.002	0.05	0.031	0.112	0.70	1.01		-0.10	-0.01	0.110
E1F3-006U	10/07/94	11:00:00			19.1		7.9	4.86	0.003	0.07	0.031	0.100	0.61	0.93		-0.10	-0.01	0.101
E1F3-057U																		
E1F3-015U																		

Envitco Glass Raw Data - USGS

Sample No.	Na_2O	Ni	P_2O_5	S	SiO_2	Sr	TiO_2	Zr	TOC	TIC (CO_3)	Total C	Cl^-	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}
	(wt%)	(ppm)	(wt%)	(wt%)	(wt%)	(ppm)	(wt%)	(ppm)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor	1	1.27E-04	1	2.497	1	1.18E-04	1	1.35E-04	1	1		1	1	1	1	1		
E1G5-009U	17.7	13	0.25	-0.05	58.6	850	0.03	190				0.35	0.27					
E1G5-009U	17.7	10	0.25	-0.05	58.6	860	0.02	210				0.35	0.25					
Average	17.7	11.5	0.25	-0.05	58.6	855	0.025	200				0.35	0.26	0.1093				
E1G5-019U	17.1	-8	0.24	-0.05	59.6	800	0.02	210				0.32	0.29					
E1G5-019U	17.1	9	0.24	-0.05	59.7	810	0.03	220				0.33	0.28					
Average	17.1	0.5	0.24	-0.05	59.65	805	0.025	215				0.325	0.285	0.118				
E1G5-028U2	17.3	17	0.25	-0.05	59.0	800	0.02	190				0.35	0.34					
E1G5-028U2	17.3	24	0.24	-0.05	59.0	810	0.03	200				0.34	0.32					
Average	17.3	20.5	0.25	-0.05	59.0	805	0.025	195				0.345	0.33	0.1117				
E1F2-002U	13.8	-8	0.19	0.08	43.3	660	-0.02	25	2.42	0.66	3.08	0.29	0.24	0.0957	7.4	3.3		
E1F3-006U	12.5	-8	0.19	0.07	51.1	590	-0.02	42	2.03	0.48	2.51	0.23	0.25	0.0977	6.9	2.9		
E1F3-057U														0.0988				
E1F3-015U														0.1074				

Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC (CO_3)	Total C	Cl^-	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values	20.00	0.00	0.00	0.00	55.91	0.00	0.00	0.00				0.00	0.00	0.00	0.00	0.00		0.00
E1G5-009U	17.7	0.001	0.25	-0.125	58.6	0.101	0.03	0.027				0.35	0.26	0.1093				
E1G5-019U	17.1	0.000	0.24	-0.125	59.7	0.095	0.03	0.029				0.33	0.29	0.118				
E1G5-028U2	17.3	0.003	0.25	-0.125	59.0	0.095	0.03	0.026				0.35	0.33	0.1117				
E1F2-002U	13.8	-0.001	0.19	0.200	43.3	0.078	-0.02	0.003	2.42	0.66	3.08	0.29	0.24	0.0957	7.4	3.3		
E1F3-006U	12.5	-0.001	0.19	0.175	51.1	0.070	-0.02	0.006	2.03	0.48	2.51	0.23	0.25	0.0977	6.9	2.9		
E1F3-057U														0.0988				
E1F3-015U														0.1074				

Envitco Glass Raw Data - USGS

Sample No.	SO_4^{2-}	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	Leach. pH	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted		(ppm)	(ppm)	(ppm)	(ppm)
Conver. factor			1	Petrographic	Petrographic	SEM ; EDX	1	2.60E-04	3.14E-03	5.57E-04	6.65E-03
E1G5-009U		0.08	0.59				10.06	58.6	9.89	54.8	1.2
E1G5-009U		0.08	0.56				10.01	57.1	9.54	53.3	-1.0
Average		0.08	0.57	~0	none observed	none observed (but chem variation)	10.04	57.9	9.72	54.1	0.1
E1G5-019U		0.23	0.61				9.75	52.8	7.99	47.4	-1.0
E1G5-019U		0.23	0.66				9.79	58.3	8.45	49.8	-1.0
Average		0.23	0.63	~0	none observed	none observed (but chem variation)	9.77	55.6	8.22	48.6	-1.0
E1G5-028U2		0.36	0.56				9.96	59.4	8.53	50.0	-1.0
E1G5-028U2		0.37	0.56				9.89	58.4	8.56	50.3	-1.0
Average		0.37	0.56	~0	none observed	none observed (no chem variation)	9.93	58.9	8.55	50.2	-1.0
E1F2-002U		0.07									
E1F3-006U		-0.01									
E1F3-057U											
E1F3-015U											

Sample No.	SO_4^{2-}	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	Leach. pH	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted		(g/m^2-day)	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)
Target Values	0.00	98.37		Petrographic	Petrographic	SEM / EDX				0.102	
E1G5-009U		97.68	0.57	~0	none observed	none observed (but chem variation)	10.0	0.015	0.031	0.030	0.001
E1G5-019U		97.71	0.63	~0	none observed	none observed (but chem variation)	9.8	0.014	0.026	0.027	-0.007
E1G5-028U2		97.89	0.56	~0	none observed	none observed (no chem variation)	9.9	0.015	0.027	0.028	-0.007
E1F2-002U		87.82									
E1F3-006U		91.41									
E1F3-057U											
E1F3-015U											

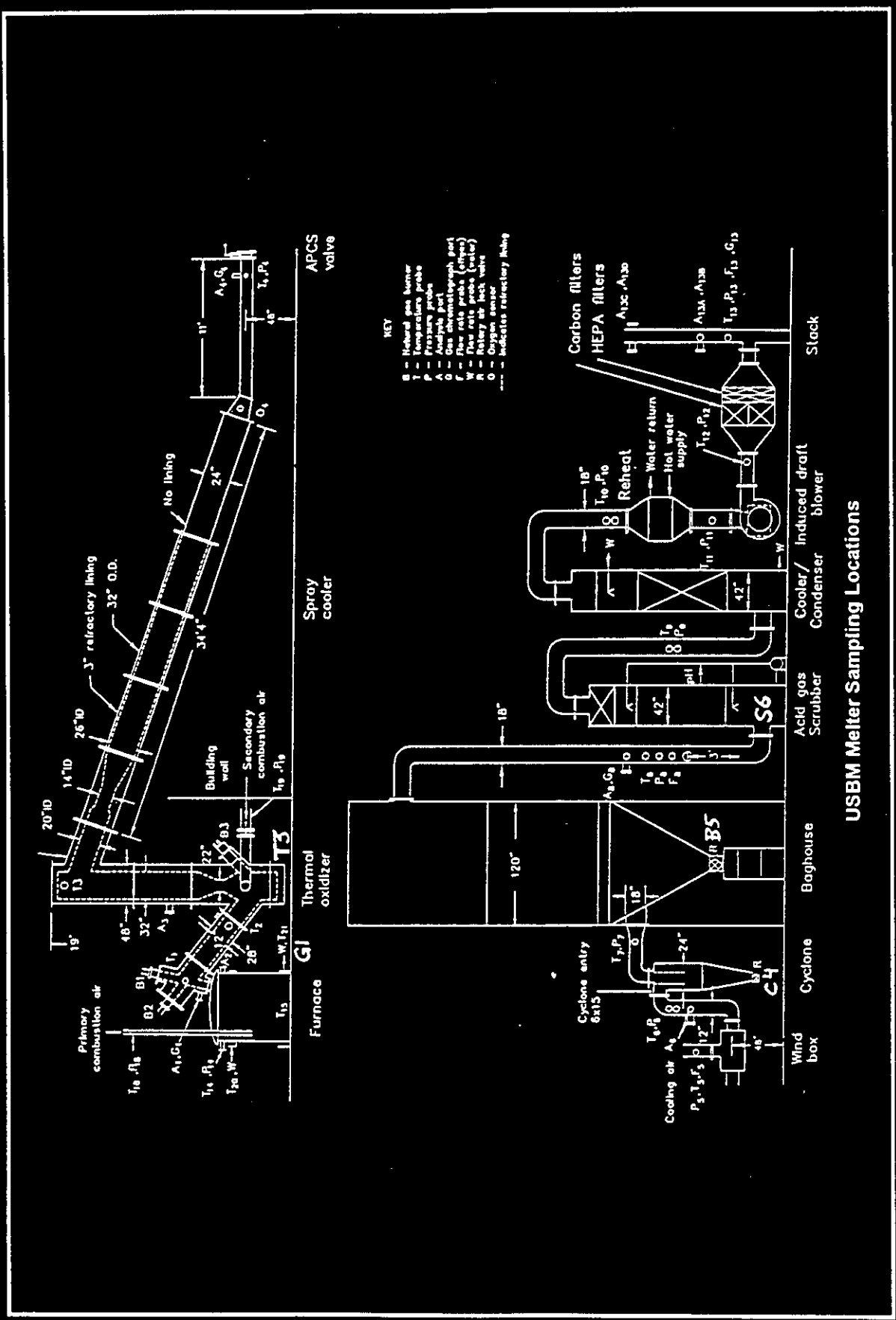
Melter Project: Sample Numbering Scheme
USBM

M	1	G	1	-	0	0	1	C	1
Vendor Identification	**Phase Identifier**	**Sample Type**	**Sample Point Number**	**Hyphen**	**Serial**	**Sample**	**Number**	**Lab ID**	**Snapshot Set ID**
USBM	*Phase 1*	*Glass*	*Sample Point 1*		*Sample*	*Number*	*1*	*Corning*	*1 = 1st Mass Balance Set*

Vendor
M = USBM

Sample Type
F = Feed Additive
A PW= A Pellets Wet
APD=A Pellets Dry
APLW=A Pellets w/LLW
APR=A Pellets Reacted
BPW=B Pellets w/LLW
BPR=B Pellets Reacted
G1 = Glass
MT2=Metal Tap
T3=Thermal Oxidizer Base
C4=Cyclone
B5=Baghouse
S6=Scrubber Solution

Lab ID	Sample Set ID
C = Corning	1 = 1st Mass Balance Set
G = Archive (GEL)	2 = 2nd Mass Balance Set
P = PNL	
Q = Quanterra	Blank = Individual Pts.
U = USGS	
W = 222-S	


US Bureau of Mines Melter Sampling Point Schematic
USBM Melter Sampling Locations
KEY
Furnace
Thermal oxidizer
Spray cooler
APCS valve
Primary combustion air
Secondary combustion air
Building wall
No lining
3" refractory lining
32" O.D.
Cyclone
Baghouse
Cooler/ Condenser
Induced draft blower
Stack
Carbon filters
HEPA filters
Reheat
Water return
Hot water supply
Acid gas Scrubber
Wind box
Cyclone entry
Cooling air

USBM Analytical Data

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(Vol %)	(Vol %)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
Data Sources: [M-P-1]																			
M1S6-006P	03/09/95	2:05:00	9.2																
M1S6-008P	03/09/95	6:00:00	8.8																
M1S6-010P	03/09/95	13:30:00	8.8																
M1S6-011P	03/09/95	12:00:00	9.0																
M1S6-013P	03/09/95	15:50:00	9.1																
M1S6-016P	03/09/95	21:50:00	9.1																
M1S6-017P	03/10/95	0:45:00	8.8																
M1S6-018P	03/10/95	13:00:00	8.4						6.82E-5	3.88E-4	-7.28E-5	8.41E-5	-1.92E-5		4.08E-5	7.29E-4	-7.21E-4	1.82E-4	-1.37E-5
IND = Indicated but unable to quantify due to poor peak resolution																			

USBM Analytical Data

Sample No.	Mo (mole/l)	Na (mole/l)	Ni (mole/l)	P (mole/l)	S (mole/l)	Si (mole/l)	Sr (mole/l)	Ti (mole/l)	Zr (mole/l)	TOC (mole/l)	TIC (mole/l)	Cl^- (mole/l)	F^- (mole/l)	I^- (mole/l)	NO_2^- (mole/l)	NO_3^- (mole/l)	NO_3^- (353.1) (mole/l)	PO_4^{3-} (mole/l)	SO_4^{2-} (mole/l)
Data Sources:																			
M1S6-006P												9.7 E-4	IND		6.63E-5	5.3 E-5		-5.3E-05	3.89E-04
M1S6-008P												1.5 E-3	IND		7.55E-5	-1.09E-4		2.35E-05	4.41E-04
M1S6-010P												2.23E-3	IND		1.24E-4	6.33E-5		5.62E-5	6.77E-4
M1S6-011P												2.41E-3	IND		9.72E-5	-1.09E-4		-5.26E-5	IND
M1S6-013P												2.1 E-3	IND		8.95E-5	-1.09E-4		-5.26E-5	IND
M1S6-016P												1.63E-3	IND		7.76E-5	-1.09E-4		2.76E-05	1.25E-03
M1S6-017P												1.67E-3	IND		7.21E-5	-1.09E-4		2.23E-05	IND
M1S6-018P	-1.04E-4	1.07E-1	-3.41E-5	2.67E-1	7.34E-3	4.73E-4	-2.85E-5	-2.09E-4	-5.48E-5			1.5 E-3	IND		7.11E-5	4.06E-5		-5.3E-05	8.13E-04
IND = Indicate																			

USBM Analytical Raw Data - PNL

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/ml)		(vol%)	(vol%)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/g)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)
Conver. factor			1	1	1				3.71E-05	9.25E-05	7.28E-06	2.5E-05	1.92E-05	7.52E-06	1.79E-05	2.56E-05	1.44E-04	4.11E-05	1.82E-05
M1S6-018P	03/10/95	13:00:00	9.2						1.84	4.19	-10.0	3.37	-1.00		2.28	28.52	-5.00	4.42	-0.75
M1S6-017P	03/10/95	0:45:00	8.8																
M1S6-016P	03/09/95	21:50:00	8.8																
M1S6-013P	03/09/95	15:50:00	9.0																
M1S6-011P	03/09/95	12:00:00	9.1																
M1S6-010P	03/09/95	13:30:00	9.1																
M1S6-008P	03/09/95	6:00:00	8.8																
M1S6-006P	03/09/95	2:05:00	8.4																

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(Wt. %)	(Wt. %)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
M1S6-018P	03/10/95	13:00:00	9.2						6.82E-5	3.88E-4	-7.28E-5	8.41E-5	-1.92E-5		4.08E-5	7.29E-4	-7.21E-4	1.82E-4	-1.37E-5
M1S6-017P	03/10/95	0:45:00	8.8																
M1S6-016P	03/09/95	21:50:00	8.8																
M1S6-013P	03/09/95	15:50:00	9.0																
M1S6-011P	03/09/95	12:00:00	9.1																
M1S6-010P	03/09/95	13:30:00	9.1																
M1S6-008P	03/09/95	6:00:00	8.8																
M1S6-006P	03/09/95	2:05:00	8.4																

USBM Analytical Raw Data - PNL

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl^-	F^-	I^-	NO_3^-	NO_2^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)
Conver. factor	1.04E-05	4.35E-5	1.7E-05	3.23E-05	3.12E-05	3.56E-05	1.14E-05	2.09E-05	1.1E-05	1	1	2.82E-05	5.26E-05	7.88E-06	1.61E-05	2.17E-05	1.61E-05	1.05E-05	1.04E-05
M1S6-018P	-10.0	2458	-2.00	8259	235	13.28	-2.50	-10.0	-5.00			53.1	IND		4.41	1.87		-5.00	78.1
M1S6-017P												59.2	IND		4.47	-5.00		2.12	IND
M1S6-016P												57.9	IND		4.81	-5.00		2.62	120
M1S6-013P												74.5	IND		5.55	-5.00		-5.00	IND
M1S6-011P												85.4	IND		6.03	-5.00		-5.00	IND
M1S6-010P												79.2	IND		7.70	2.91		5.34	65.0
M1S6-008P												53.0	IND		4.68	-5.00		2.23	42.4
M1S6-006P												34.4	IND		4.11	2.44		-5.00	37.4

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl^-	F^-	I^-	NO_3^-	NO_2^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(ug/ml)	(ug/ml)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
M1S6-018P	-1.04E-4	1.07E-1	-3.41E-5	2.67E-1	7.34E-3	4.73E-4	-2.85E-5	-2.09E-4	-5.48E-5			1.5 E-3	IND		7.11E-5	4.06E-5		-5.3E-05	8.13E-04
M1S6-017P												1.67E-3	IND		7.21E-5	-1.09E-4		2.23E-05	IND
M1S6-016P												1.63E-3	IND		7.76E-5	-1.09E-4		2.76E-05	1.25E-03
M1S6-013P												2.1 E-3	IND		8.95E-5	-1.09E-4		-5.26E-5	IND
M1S6-011P												2.41E-3	IND		9.72E-5	-1.09E-4		-5.26E-5	IND
M1S6-010P												2.23E-3	IND		1.24E-4	6.33E-5		5.62E-5	6.77E-4
M1S6-008P												1.5 E-3	IND		7.55E-5	-1.09E-4		2.35E-05	4.41E-04
M1S6-006P												9.7 E-4	IND		6.63E-5	5.3 E-5		-5.3E-05	3.89E-04

USBM Glass Data

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values																		
Data Sources:	M-C-1, M-C-2, M-C-3, M-U-1, M-U-2, M-P-1, M-P-2]																	
M1APR-001C	02/10/95	8:30:00				0.58	8.08	4.53	0.006	4.40	0.009	0.10	0.97	1.15		0.24	0.008	0.110
M1APR-001U	02/10/95	8:30:00			15.2		8.56	4.35	0.0073	4.31	0.014	0.112	1.02	1.18		0.23	-0.012	0.125
M1APR-002U	02/16/95	10:00:00			8.75		9.15	4.51	0.0073	4.48	0.016	0.127	1.09	1.32		0.24	-0.012	0.143
M1B5-001C	03/13/95	16:00:00					0.35	22.7	-0.003	0.47	0.013	0.99	0.11	5.51		0.03	-0.003	0.458
M1B5-001U	03/13/95	16:00:00			12.3		0.37	22.5	-0.0004	0.54	0.016	1.053	0.11	4.85		-0.10	-0.012	0.495
M1BPR-022C	01/27/95	8:48:00				0.08	8.81	4.56	0.006	4.38	0.008	0.12	0.83	1.28		0.20	0.005	0.130
M1BPR-022P	01/27/95	8:48:00			11.61	0.03	8.02	3.98	0.02	3.86	-0.005	0.23	0.79	1.10	0.02	0.15	0.031	0.12
M1BPR-022U	01/27/95	8:48:00			10.7		8.97	4.51	0.0060	4.30	0.011	0.121	0.86	1.21		0.20	-0.012	0.134
M1BPR-026U	01/27/95	16:00:00			7.78		9.19	4.51	0.0062	4.40	0.012	0.127	0.85	1.28		0.19	-0.012	0.140
M1BPR-043U	01/31/95	11:20:00			10.7		8.94	4.51	0.0063	4.07	0.012	0.120	0.85	1.20		0.21	-0.012	0.133
M1BPR-050U	02/01/95	0:15:00			10.9		8.97	4.51	0.0060	4.15	0.012	0.121	0.84	1.20		0.22	-0.012	0.132
M1C4-001C	03/14/95	10:00:00					0.69	24.0	-0.003	2.34	0.013	0.83	0.26	4.70		0.10	0.004	0.415
M1C4-001U	03/14/95	10:00:00			12.7		0.67	24.2	0.0007	2.16	0.015	0.935	0.27	4.14		0.11	-0.012	0.450
M1G1-002C	03/09/95	2:15:00					11.0	3.23	0.007	5.78	0.027	0.064	1.40	1.04		0.30	0.013	0.090
M1G1-002U	03/09/95	2:15:00			-0.01		11.1	2.93	0.0085	5.82	0.034	0.064	1.40	1.03		0.30	0.018	0.089
M1G1-004C	03/09/95	10:30:00					11.7	3.13	0.006	6.43	0.033	0.054	1.03	1.03		0.33	0.008	0.079
M1G1-004U	03/09/95	10:30:00			0.01		11.7	2.90	0.0076	6.38	0.040	0.055	1.04	1.01		0.31	0.012	0.080
M1G1-005C	03/09/95	13:05:00					12.1	2.59	0.006	6.86	0.036	0.049	1.05	0.98		0.34	0.008	0.082
M1G1-005U	03/09/95	13:05:00			0.11		12.1	2.40	0.0077	6.85	0.044	0.050	1.07	0.97		0.33	0.012	0.083
M1G1-008C	03/09/95	18:50:00					15.0	2.11	0.005	10.3	0.054	0.035	1.06	0.80		0.43	0.010	0.065
M1G1-008P	03/09/95	18:50:00			0.37		15.20	1.84	0.05	9.57	0.09	0.06	1.03	0.22	-0.01	0.39	0.02	0.06
M1G1-008U	03/09/95	18:50:00			-0.01		15.1	1.95	0.0074	10.4	0.117	0.034	1.07	0.79		0.39	0.012	0.065
M1G1-010C	03/09/95	21:15:00					12.9	3.17	0.006	8.04	0.058	0.056	1.18	1.03		0.34	0.010	0.091
M1G1-010U	03/09/95	21:15:00			-0.01		13.1	2.90	0.0081	8.15	0.070	0.058	1.20	0.99		0.31	0.012	0.097
M1G1-011C	03/09/95	22:15:00					12.5	2.84	0.005	7.30	0.044	0.044	1.21	0.98		0.34	0.009	0.090
M1G1-011P	03/09/95	22:15:00			0.24		13.26	2.53	0.01	6.73	0.01	0.09	1.13	-0.31	-0.01	0.28	0.018	0.09
M1G1-011U	03/09/95	22:15:00			0.03		12.6	2.67	0.0086	7.34	0.055	0.046	1.21	0.98		0.31	0.012	0.092
M1G1-012C	03/09/95	23:35:00					11.9	2.66	0.005	6.35	0.027	0.045	1.23	1.00		0.32	0.009	0.088
M1G1-012U	03/09/95	23:35:00			-0.01		11.9	2.50	0.0090	6.33	0.036	0.049	1.24	1.00		0.30	0.012	0.092
M1T3-001U	03/15/95	15:00:00			0.03		37.2	15.9	0.0080	7.67	0.026	0.008	0.78	0.61		0.12	-0.012	0.097
MIT3-001C	03/15/95	15:00:00					38.0	16.0	0.007	8.11	0.017	0.003	0.76	0.50		0.14	-0.003	0.097

USBM Glass Data

Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO_2	TiO_2	ZrO_2	TOC	TIC	Total C	Cl	F	I	NO_2	NO_3	Total N_2	PO_4^{3-}	SO_4^{2-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt %)	(wt %)	(wt %)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values																			
Data Sources:																			
M1APR-001C	15.3	0.005	0.095	1.38	45.9	0.076	0.120	0.006			3.31	0.195	0.030				2.1		
M1APR-001U	15.5	0.0014	0.13	1.26	47.1	0.082	0.13	0.005	2.12	1.07	3.19	0.35	0.05	0.1093	5.48	1.23			
M1APR-002U	17.6	0.0012	0.19	1.49	49.7	0.090	0.14	0.005	0.76	1.06	1.82	0.36	0.06	0.1206	2.17	0.05			
M1B5-001C	34.2	-0.003	0.488	13.2	9.50	-0.003	-0.005	-0.004				0.270	0.195						
M1B5-001U	-30	0.0011	0.53	12.9	9.74	0.002	-0.02	-0.001	0.045	1.51	1.56	3.71	0.19	1.035	0.50	-0.02			
M1BPR-022C	17.4	-0.003	0.086	1.64	50.4	0.081	0.100	-0.004			2.71	0.265	0.030				0.7		
M1BPR-022P	15.70	-0.02	0.54	1.35	44.15	0.085	0.10	0.019				0.162	IND		2.81	0.72		0.0798	0.98
M1BPR-022U	16.5	-0.0010	0.11	1.37	50.1	0.082	0.12	0.004	1.30	1.61	2.91	0.30	0.03	0.1139	1.77	0.36			
M1BPR-026U	17.4	-0.0010	0.12	1.46	51.3	0.084	0.12	0.004	0.99	1.36	2.34	0.32	0.04	0.1247	0.51	0.04			
M1BPR-043U	16.4	-0.0010	0.12	1.37	50.3	0.083	0.12	0.004	1.26	1.62	2.88	0.32	0.04	0.1095	1.87	0.42			
M1BPR-050U	16.4	-0.0010	0.11	1.37	50.2	0.083	0.11	0.004	1.30	1.65	2.94	0.30	0.04	0.1117	2.21	0.35			
M1C4-001C	33.4	-0.003	0.485	10.6	9.33	0.006	0.015	-0.004				0.035	0.180						
M1C4-001U	-30	0.0010	0.51	10.1	9.52	0.006	-0.02	0.001	0.08	1.65	1.73	2.96	0.18	0.7201	0.50	-0.02			
M1G1-002C	14.5	-0.003	0.065	0.56	60.1	0.100	0.208	0.013			0.004	0.080	0.030						
M1G1-002U	16.6	0.0011	0.10	0.36	59.4	0.100	0.22	0.011	-0.05	-0.01	-0.05	0.10	0.04	0.012					
M1G1-004C	17.1	-0.003	0.067	0.48	59.4	0.096	0.268	0.007			0.004	0.077	0.030						
M1G1-004U	16.5	-0.0010	0.09	0.31	58.5	0.096	0.28	0.006	-0.05	-0.01	-0.05	0.08	0.03	0.008					
M1G1-005C	16.6	-0.003	0.068	0.21	60.0	0.097	0.328	0.007			0.004	0.061	0.020						
M1G1-005U	16.1	0.0010	0.10	-0.12	58.8	0.096	0.34	0.006	-0.05	-0.01	-0.05	0.07	0.03	0.006					
M1G1-008C	14.7	-0.003	0.078	0.18	55.9	0.088	0.755	0.010			0.006	0.039	0.020						
M1G1-008P	13.55	-0.02	-0.05	0.09	47.78	0.10	0.63	0.01			0.02								
M1G1-008U	14.1	0.0010	0.10	0.12	54.6	0.088	0.77	0.009	-0.05	-0.01	-0.05	0.04	0.03	0.003					
M1G1-010C	16.5	-0.003	0.078	0.17	56.9	0.096	0.493	0.008			0.003	0.082	0.030						
M1G1-010U	15.9	0.0011	0.11	-0.12	55.7	0.095	0.51	0.007	-0.05	-0.01	-0.05	0.09	0.03	0.008					
M1G1-011C	16.8	0.004	0.070	0.05	58.9	0.100	0.385	0.009			0.006	0.048	0.030						
M1G1-011P	15.36	-0.02	0.015	-0.19	50.21	0.10	0.30	-0.01			0.111								
M1G1-011U	16.2	0.0013	0.12	-0.12	57.2	0.100	0.40	0.008	-0.05	-0.01	-0.05	0.06	0.04	-0.001					
M1G1-012C	17.3	0.005	0.081	0.03	60.7	0.103	0.270	0.008			0.004	0.051	0.030						
M1G1-012U	16.9	0.0016	0.11	-0.12	58.4	0.104	0.29	0.007	-0.05	-0.01	-0.05	0.06	0.04	0.005					
M1T3-001U	21.1	0.0013	0.33	-0.12	12.0	0.030	1.19	0.116	-0.05	-0.01	-0.05	-0.01	0.02	-0.002					
MIT3-001C	21.7	-0.003	0.385	0.004	12.2	0.031	1.215	0.105				0.010	-0.010						

USBM Glass Data

Sample No.	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
			(vol%)	I.D.	Enriched / Depleted	pH	(g/m²-day)	(g/m²-day)	(g/m²-day)	(g/m²-day)
Target Values	0.0		Petrographic	Petrographic	SEM / EDX				0.102	
Data Sources:										
M1APR-001C	88.64									
M1APR-001U	94.45									
M1APR-002U	94.81									
M1B5-001C	88.45									
M1B5-001U	60.15									
M1BPR-022C	93.74									
M1BPR-022P	87.11									
M1BPR-022U	94.02									
M1BPR-026U	94.49									
M1BPR-043U	94.07									
M1BPR-050U	94.33									
M1C4-001C	87.34									
M1C4-001U	59.09									
M1G1-002C	98.63	1.03								
M1G1-002U	99.68	1.10								
M1G1-004C	101.35	1.10	<1%	opaques (<3um) / no stones perse (Mo rich)	multilamellar color cords	11.3	0.010	0.014	0.019	0.011
M1G1-004U	99.43	1.19				11.09	0.0117	0.0150	0.0520	0.0110
M1G1-005C	101.47	1.08	<1%	opaques (<3um) / no stones perse (Mo rich)	multilamellar K,Na,Mo,Cl,Fe / Si,Ca,Al,Ti	11.3	0.010	0.011	0.018	0.010
M1G1-005U	99.45	1.05				11.09	0.0108	0.0118	0.0470	0.0101
M1G1-008C	101.65	1.09	<1%	opaques (<3um) / no stones perse (Mo rich)	multilamellar K,Na,Mo,Cl, / Si,Ca,Al,Ti,Fe	11.1	0.007	0.009	0.011	0.008
M1G1-008P	91.23	1.05	< 1%	Mo		10.8	0.009	0.009	0.029	0.00
M1G1-008U	99.76	1.15				10.74	0.0070	0.0074	0.0260	-0.0092
M1G1-010C	101.22									
M1G1-010U	99.39	1.18								
M1G1-011C	101.80	1.13	<1%	opaques (<3um) / no stones perse (Mo rich)	multilamellar K,Na,Mo,Cl, / Si,Ca,Al,Fe	11.3	0.009	0.013	0.018	0.011
M1G1-011P	91.09	0.96	< 1%	Mo		11.1	0.012	0.016	0.049	0.00
M1G1-011U	99.44	1.18				11.08	0.0103	0.0132	0.0464	0.0106
M1G1-012C	102.11									
M1G1-012U	99.37	1.07								
M1T3-001U	97.22	0.11								
M1T3-001C	99.14									

USBM Glass Raw Data - Corning

Sample No.	Date	Time	Density	Settled Sol.	LOI 600°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor						1	1	1	1	1	1	1	1	1		1	1	1
M1APR-001C						0.57	8.16	4.52	0.006	4.45	0.009	0.10	0.98	1.15		0.24	0.008	0.11
M1APR-001C							8.12	4.56	0.006	4.41	0.009	0.11	0.96	1.15		0.24	0.008	0.11
M1APR-001C						0.58	8.05	4.52	0.006	4.36	0.009	0.10	0.98	1.15		0.24	0.007	0.11
M1APR-001C							7.98	4.52	0.006	4.37	0.009	0.10	0.97	1.15		0.24	0.007	0.11
Average	02/10/95	8:30:00				0.58	8.08	4.53	0.006	4.40	0.009	0.10	0.97	1.15		0.24	0.008	0.11
M1BPR-022C						0.08	8.71	4.60	0.006	4.44	0.008	0.11	0.83	1.28		0.20	0.006	0.13
M1BPR-022C							8.70	4.54	0.006	4.45	0.008	0.11	0.83	1.28		0.20	0.005	0.13
M1BPR-022C						0.08	8.93	4.53	0.005	4.34	0.007	0.12	0.82	1.28		0.19	0.005	0.13
M1BPR-022C							8.88	4.55	0.005	4.30	0.007	0.12	0.82	1.28		0.19	0.005	0.13
Average	01/27/95	8:48:00				0.08	8.81	4.56	0.006	4.38	0.008	0.12	0.83	1.28		0.20	0.005	0.13
M1B5-001C							0.34	22.8	-0.003	0.46	0.013	1.00	0.10	5.50		0.032	-0.003	0.45
M1B5-001C							0.36	22.6	-0.003	0.47	0.014	1.00	0.11	5.50		0.033	-0.003	0.47
M1B5-001C							0.36	22.7	-0.003	0.48	0.013	0.99	0.11	5.50		0.033	-0.003	0.46
M1B5-001C							0.35	22.7	-0.003	0.47	0.013	0.98	0.11	5.52		0.033	-0.003	0.45
Average	03/13/95	16:00:00					0.35	22.7	-0.003	0.47	0.013	0.99	0.11	5.51		0.033	-0.003	0.46
M1C4-001C							0.69	24.1	-0.003	2.35	0.012	0.82	0.26	4.70		0.100	0.004	0.42
M1C4-001C							0.68	23.8	-0.003	2.31	0.012	0.82	0.26	4.70		0.100	0.004	0.41
M1C4-001C							0.71	24.2	-0.003	2.37	0.013	0.83	0.26	4.70		0.093	0.004	0.42
M1C4-001C							0.69	23.9	-0.003	2.32	0.013	0.84	0.25	4.70		0.091	0.004	0.41
Average	03/14/95	10:00:00					0.69	24.0	-0.003	2.34	0.013	0.83	0.26	4.70		0.096	0.004	0.42
MIT3-001C							37.8	16.1	0.007	8.04	0.018	0.004	0.75	0.50		0.14	-0.003	0.096
MIT3-001C							37.6	16.0	0.007	8.04	0.017	0.003	0.76	0.50		0.14	-0.003	0.096
MIT3-001C							38.1	16.0	0.006	8.17	0.017	0.003	0.76	0.50		0.14	-0.003	0.097
MIT3-001C							38.3	15.9	0.006	8.20	0.017	0.003	0.77	0.50		0.14	-0.003	0.097
Average	03/15/95	15:00:00					38.0	16.0	0.007	8.11	0.017	0.003	0.76	0.50		0.14	-0.003	0.097
M1G1-002C							11.0	3.23	0.006	5.75	0.026	0.063	1.39	1.04		0.30	0.013	0.089
M1G1-002C							11.1	3.19	0.007	5.83	0.027	0.063	1.42	1.04		0.30	0.013	0.090
M1G1-002C							10.8	3.26	0.006	5.75	0.026	0.064	1.38	1.04		0.29	0.013	0.089
M1G1-002C							11.1	3.25	0.007	5.79	0.027	0.064	1.41	1.04		0.30	0.013	0.090
Average	03/09/95	2:15:00					11.0	3.23	0.007	5.78	0.027	0.064	1.40	1.04		0.30	0.013	0.090
M1G1-004C							11.5	3.15	0.006	6.43	0.032	0.055	1.01	1.03		0.32	0.008	0.077
M1G1-004C							11.7	3.12	0.006	6.40	0.033	0.055	1.03	1.03		0.33	0.008	0.079
M1G1-004C							11.8	3.10	0.006	6.43	0.033	0.053	1.04	1.03		0.33	0.008	0.079
M1G1-004C							11.7	3.15	0.006	6.44	0.033	0.053	1.04	1.03		0.33	0.008	0.079
Average	03/09/95	10:30:00					11.7	3.13	0.006	6.43	0.033	0.054	1.03	1.03		0.33	0.008	0.079
M1G1-005C							12.2	2.55	0.006	6.79	0.037	0.049	1.06	0.98		0.34	0.008	0.083
M1G1-005C							11.9	2.61	0.006	6.82	0.036	0.048	1.03	0.98		0.33	0.008	0.081
M1G1-005C							12.0	2.62	0.006	6.89	0.036	0.049	1.05	0.98		0.34	0.008	0.082
M1G1-005C							12.2	2.59	0.006	6.94	0.036	0.049	1.06	0.98		0.34	0.008	0.083
Average	03/09/95	13:05:00					12.1	2.59	0.006	6.86	0.036	0.049	1.05	0.98		0.34	0.008	0.082
M1G1-008C							15.2	2.13	0.005	10.3	0.100	0.035	1.06	0.80		0.43	0.010	0.065
M1G1-008C							15.0	2.14	0.005	9.99	0.097	0.035	1.02	0.80		0.42	0.010	0.062
M1G1-008C							14.9	2.05	0.006	10.5	0.010	0.035	1.07	0.81		0.44	0.010	0.066
M1G1-008C							14.8	2.12	0.005	10.4	0.010	0.035	1.09	0.80		0.44	0.010	0.066
Average	03/09/95	18:50:00					15.0	2.11	0.005	10.3	0.054	0.035	1.06	0.80		0.43	0.010	0.065
M1G1-010C							12.9	3.13	0.006	8.06	0.058	0.056	1.17	1.02		0.34	0.010	0.091
M1G1-010C							13.0	3.15	0.006	8.08	0.058	0.056	1.18	1.02		0.34	0.010	0.091
M1G1-010C							12.7	3.24	0.005	7.98	0.057	0.056	1.16	1.03		0.33	0.009	0.088
M1G1-010C							13.1	3.16	0.006	8.02	0.059	0.056	1.19	1.03		0.34	0.010	0.092
Average	03/09/95	21:15:00					12.9	3.17	0.006	8.04	0.058	0.056	1.18	1.03		0.34	0.010	0.091

USBM Glass Raw Data - Corning

Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl^-	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt %)	(wt %)	(wt %)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt %)	(wt%)
Conver. factor	1	1	1	1	1	1	1	1			1	1	1	1	1	1	1	1
M1APR-001C	15.3	0.005	0.093	1.39	46.3	0.077	0.12	0.005			3.29	0.19	0.03					
M1APR-001C	15.3	0.005	0.099	1.37	46.0	0.075	0.12	0.005			3.32		0.03					
M1APR-001C	15.2	0.005	0.091	1.36	45.6	0.076	0.12	0.006			3.32	0.20	0.03					
M1APR-001C	15.2	0.005	0.095	1.38	45.7	0.075	0.12	0.006			3.31		0.03					
Average	15.3	0.005	0.095	1.38	45.9	0.076	0.12	0.006			3.31	0.20	0.03				2.1	
M1BPR-022C	17.3	-0.003	0.086	1.64	50.3	0.081	0.10	-0.004			2.74	0.26	0.03					
M1BPR-022C	17.3	-0.003	0.087	1.65	50.4	0.081	0.10	-0.004			2.68		0.03					
M1BPR-022C	17.4	-0.003	0.086	1.62	50.6	0.082	0.10	-0.004			2.73	0.27	0.03					
M1BPR-022C	17.4	-0.003	0.084	1.63	50.4	0.081	0.10	-0.004			2.69		0.03					
Average	17.4	-0.003	0.086	1.64	50.4	0.081	0.10	-0.004			2.71	0.27	0.03				0.67	
M1B5-001C	34.1	-0.003	0.48	13.2	9.34	-0.003	-0.005	-0.004				0.27	0.19					
M1B5-001C	34.1	-0.003	0.50	13.1	9.39	-0.003	-0.005	-0.004					0.19					
M1B5-001C	34.3	-0.003	0.49	13.0	9.65	-0.003	-0.005	-0.004				0.27	0.20					
M1B5-001C	34.3	-0.003	0.48	13.4	9.60	-0.003	-0.005	-0.004					0.20					
Average	34.2	-0.003	0.49	13.2	9.50	-0.003	-0.005	-0.004				0.27	0.20					
M1C4-001C	33.2	-0.003	0.49	10.6	9.39	0.006	0.013	-0.004				0.03	0.18					
M1C4-001C	33.5	-0.003	0.48	10.3	9.43	0.006	0.012	-0.004					0.18					
M1C4-001C	33.5	-0.003	0.49	10.8	9.25	0.007	0.017	-0.004				0.04	0.18					
M1C4-001C	33.2	-0.003	0.48	10.7	9.23	0.006	0.017	-0.004					0.18					
Average	33.4	-0.003	0.49	10.6	9.33	0.006	0.015	-0.004				0.04	0.18					
MIT3-001C	21.7	-0.003	0.39	0.004	12.2	0.030	1.21	0.10				0.01	-0.01					
MIT3-001C	21.7	-0.003	0.38	0.003	12.0	0.031	1.20	0.10					-0.01					
MIT3-001C	21.6	-0.003	0.38	0.005	12.2	0.031	1.22	0.11				0.01	-0.01					
MIT3-001C	21.6	-0.003	0.39	0.004	12.2	0.031	1.23	0.11					-0.01					
Average	21.7	-0.003	0.39	0.004	12.2	0.031	1.22	0.11				0.01	-0.01					
M1G1-002C	14.5	-0.003	0.059	0.57	59.8	0.10	0.21	0.013			0.004	0.080	0.03					
M1G1-002C	14.5	-0.003	0.064	0.56	60.5	0.10	0.21	0.013			0.004		0.03					
M1G1-002C	14.5	-0.003	0.068	0.55	59.9	0.10	0.21	0.013			0.005	0.079	0.03					
M1G1-002C	14.5	-0.003	0.070	0.56	60.3	0.10	0.20	0.013			0.004		0.03					
Average	14.5	-0.003	0.065	0.56	60.1	0.10	0.21	0.013			0.004	0.080	0.03					
M1G1-004C	17.1	-0.003	0.066	0.48	59.0	0.094	0.26	0.007			0.004	0.076	0.03					
M1G1-004C	17.0	-0.003	0.072	0.49	59.5	0.097	0.27	0.007			0.004		0.03					
M1G1-004C	17.2	-0.003	0.064	0.48	59.6	0.097	0.27	0.007			0.003	0.077	0.03					
M1G1-004C	17.2	-0.003	0.065	0.47	59.5	0.097	0.27	0.006			0.004		0.03					
Average	17.1	-0.003	0.067	0.48	59.4	0.096	0.27	0.007			0.004	0.077	0.03					
M1G1-005C	16.6	-0.003	0.067	0.22	60.3	0.097	0.33	0.007			0.004	0.061	0.02					
M1G1-005C	16.6	-0.003	0.072	0.21	59.7	0.096	0.32	0.007			0.004		0.02					
M1G1-005C	16.6	-0.003	0.066	0.21	59.5	0.096	0.33	0.007			0.004	0.061	0.02					
M1G1-005C	16.6	-0.003	0.066	0.21	60.5	0.097	0.33	0.007			0.005		0.02					
Average	16.6	-0.003	0.068	0.21	60.0	0.097	0.33	0.007			0.004	0.061	0.02					
M1G1-008C	14.7	-0.003	0.078	0.18	55.3	0.088	0.76	0.010			0.005	0.039	0.02					
M1G1-008C	14.6	-0.003	0.075	0.19	55.8	0.085	0.73	0.009			0.006		0.02					
M1G1-008C	14.7	-0.003	0.080	0.18	56.4	0.091	0.77	0.010			0.006	0.039	0.02					
M1G1-008C	14.8	-0.003	0.078	0.18	56.2	0.089	0.76	0.010			0.005		0.02					
Average	14.7	-0.003	0.078	0.18	55.9	0.088	0.76	0.010			0.006	0.039	0.02					
M1G1-010C	16.4	-0.003	0.082	0.18	56.8	0.096	0.49	0.008			0.003	0.082	0.03					
M1G1-010C	16.4	-0.003	0.081	0.16	57.0	0.097	0.50	0.009			0.003		0.03					
M1G1-010C	16.5	-0.003	0.073	0.15	57.4	0.094	0.48	0.008			0.003	0.082	0.03					
M1G1-010C	16.5	-0.003	0.074	0.17	56.5	0.095	0.50	0.008			0.003		0.03					
Average	16.5	-0.003	0.078	0.17	56.9	0.096	0.49	0.008			0.003	0.082	0.03					

USBM Glass Raw Data - Corning

Sample No.	SO_3^{2-}	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ppm)	(ppm)	(ppm)	(ppm)
Conver. factor	1	1	1	Petrographic	Petrographic	SEM ; EDX	1	2.62E-04	8.66E-03	5.76E-04	9.13E-03
M1APR-001C											
M1APR-001C											
M1APR-001C											
M1APR-001C											
Average											
M1BPR-022C											
M1BPR-022C											
M1BPR-022C											
M1BPR-022C											
Average											
M1B5-001C											
M1B5-001C											
M1B5-001C											
M1B5-001C											
Average											
M1C4-001C											
M1C4-001C											
M1C4-001C											
M1C4-001C											
Average											
MIT3-001C											
MIT3-001C											
MIT3-001C											
MIT3-001C											
Average											
M1G1-002C		1.30	1.04								
M1G1-002C											
M1G1-002C		1.30	1.05								
M1G1-002C											
Average		1.30	1.03								
M1G1-004C		1.03	1.13				11.3	38.0	1.60	33.0	1.20
M1G1-004C								38.0	1.60	33.0	1.20
M1G1-004C		1.01	1.08				11.3	40.0	1.60	34.0	1.30
M1G1-004C								40.0	1.70	34.0	1.30
Average		1.02	1.10	<1%	opaques (<3um) / no stones perse (Mo rich)	multilamellar color cords	11.3	39.0	1.63	33.5	1.25
M1G1-005C		1.03	1.08				11.3	38.0	1.30	32.0	1.10
M1G1-005C								38.0	1.30	32.0	1.10
M1G1-005C		1.02	1.08				11.3	38.0	1.30	32.0	1.10
M1G1-005C								38.0	1.30	32.0	1.10
Average		1.03	1.08	<1%	opaques (<3um) / no stones perse (Mo rich)	multilamellar K,Na,Mo,Cl,Fe / Si,Ca,Al,Ti	11.3	38.0	1.30	32.0	1.10
M1G1-008C		1.04	1.09				11.1	26.0	1.00	19.0	0.90
M1G1-008C								26.0	1.00	19.0	0.90
M1G1-008C		1.04	1.08				11.1	27.0	1.00	20.0	0.94
M1G1-008C								27.0	1.10	20.0	0.94
Average		1.04	1.09	<1%	opaques (<3um) / no stones perse (Mo rich)	multilamellar K,Na,Mo,Cl, / Si,Ca,Al,Ti,Fe	11.1	26.5	1.03	19.5	0.92
M1G1-010C											
M1G1-010C											
M1G1-010C											
M1G1-010C											
Average											

USBM Glass Raw Data - Corning

Sample No.	Date	Time	Density	Settled Sol.	LOI 600°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor						1	1	1	1	1	1	1	1	1		1	1	1
M1G1-011C							12.4	2.82	0.005	7.25	0.043	0.044	1.24	0.98		0.33	0.009	0.089
M1G1-011C							12.7	2.86	0.005	7.20	0.044	0.044	1.20	0.98		0.34	0.009	0.091
M1G1-011C							12.4	2.86	0.005	7.37	0.043	0.044	1.17	0.98		0.33	0.009	0.088
M1G1-011C							12.6	2.81	0.005	7.37	0.044	0.044	1.22	0.98		0.34	0.009	0.090
Average	03/09/95	22:15:00					12.5	2.84	0.005	7.30	0.044	0.044	1.21	0.98		0.34	0.009	0.090
M1G1-012C							11.8	2.65	0.005	6.33	0.027	0.045	1.22	1.00		0.32	0.009	0.088
M1G1-012C							12.0	2.63	0.005	6.40	0.027	0.045	1.27	1.00		0.32	0.009	0.089
M1G1-012C							11.8	2.64	0.005	6.33	0.027	0.045	1.21	1.00		0.32	0.009	0.088
M1G1-012C							11.8	2.70	0.005	6.35	0.027	0.045	1.22	0.99		0.32	0.009	0.088
Average	03/09/95	23:35:00					11.9	2.66	0.005	6.35	0.027	0.045	1.23	1.00		0.32	0.009	0.088
Sample No.	Date	Time	Density	Settled Sol.	LOI 600°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values							12.00	9.00	0.00	0.00	0.00	0.00	0.00	1.46	0.00	0.00	0.00	0.00
M1APR-001C	02/10/95	8:30:00				0.58	8.08	4.53	0.006	4.40	0.009	0.10	0.97	1.15		0.24	0.008	0.110
M1BPR-022C	01/27/95	8:48:00				0.08	8.81	4.56	0.006	4.38	0.008	0.12	0.83	1.28		0.20	0.005	0.130
M1B5-001C	03/13/95	16:00:00					0.35	22.7	-0.003	0.47	0.013	0.99	0.11	5.51		0.03	-0.003	0.458
M1C4-001C	03/14/95	10:00:00					0.69	24.0	-0.003	2.34	0.013	0.83	0.26	4.70		0.10	0.004	0.415
MIT3-001C	03/15/95	15:00:00					38.0	16.0	0.007	8.11	0.017	0.003	0.76	0.50		0.14	-0.003	0.097
M1G1-002C	03/09/95	2:15:00					11.0	3.23	0.007	5.78	0.027	0.064	1.40	1.04		0.30	0.013	0.090
M1G1-004C	03/09/95	10:30:00					11.7	3.13	0.006	6.43	0.033	0.054	1.03	1.03		0.33	0.008	0.079
M1G1-005C	03/09/95	13:05:00					12.1	2.59	0.006	6.86	0.036	0.049	1.05	0.98		0.34	0.008	0.082
M1G1-008C	03/09/95	18:50:00					15.0	2.11	0.005	10.3	0.054	0.035	1.06	0.80		0.43	0.010	0.065
M1G1-010C	03/09/95	21:15:00					12.9	3.17	0.006	8.04	0.058	0.056	1.18	1.03		0.34	0.010	0.091
M1G1-011C	03/09/95	22:15:00					12.5	2.84	0.005	7.30	0.044	0.044	1.21	0.98		0.34	0.009	0.090
M1G1-012C	03/09/95	23:35:00					11.9	2.66	0.005	6.35	0.027	0.045	1.23	1.00		0.32	0.009	0.088

USBM Glass Raw Data - Corning

Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl^-	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt %)	(wt %)	(wt %)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt %)	(wt%)
Conver. factor	1	1	1	1	1	1	1	1			1	1	1	1	1	1	1	1
M1G1-011C	16.8	0.004	0.075	0.04	58.2	0.099	0.38	0.009			0.006	0.047	0.03					
M1G1-011C	16.8	0.004	0.072	0.05	58.3	0.100	0.39	0.009			0.006		0.03					
M1G1-011C	16.8	0.004	0.068	0.06	59.6	0.099	0.38	0.008			0.006	0.048	0.03					
M1G1-011C	16.8	0.005	0.063	0.05	59.6	0.100	0.39	0.008			0.005		0.03					
Average	16.8	0.004	0.070	0.05	58.9	0.100	0.39	0.009			0.006	0.048	0.03					
M1G1-012C	17.3	0.005	0.082	0.03	60.4	0.100	0.27	0.008			0.004	0.050	0.03					
M1G1-012C	17.3	0.005	0.082	0.03	60.8	0.110	0.27	0.008			0.004		0.03					
M1G1-012C	17.3	0.005	0.078	0.03	61.3	0.100	0.27	0.008			0.003	0.052	0.03					
M1G1-012C	17.3	0.004	0.083	0.03	60.1	0.100	0.27	0.008			0.003		0.03					
Average	17.3	0.005	0.081	0.03	60.7	0.103	0.27	0.008			0.004	0.051	0.03					
Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl^-	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt %)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values	20.00	0.00	0.00	0.00	55.91	0.00	0.00	0.00				0.00	0.00	0.00	0.00	0.00	0.00	0.00
M1APR-001C	15.3	0.005	0.095	1.38	45.9	0.076	0.120	0.006			3.31	0.195	0.030				2.1	
M1BPR-022C	17.4	-0.003	0.086	1.64	50.4	0.081	0.100	-0.004			2.71	0.265	0.030				0.7	
M1B5-001C	34.2	-0.003	0.488	13.2	9.50	-0.003	-0.005	-0.004				0.270	0.195					
M1C4-001C	33.4	-0.003	0.485	10.6	9.33	0.006	0.015	-0.004				0.035	0.180					
MT3-001C	21.7	-0.003	0.385	0.004	12.2	0.031	1.215	0.105				0.010	-0.010					
M1G1-002C	14.5	-0.003	0.065	0.56	60.1	0.100	0.208	0.013			0.004	0.080	0.030					
M1G1-004C	17.1	-0.003	0.067	0.48	59.4	0.096	0.268	0.007			0.004	0.077	0.030					
M1G1-005C	16.6	-0.003	0.068	0.21	60.0	0.097	0.328	0.007			0.004	0.061	0.020					
M1G1-008C	14.7	-0.003	0.078	0.18	55.9	0.088	0.755	0.010			0.006	0.039	0.020					
M1G1-010C	16.5	-0.003	0.078	0.17	56.9	0.096	0.493	0.008			0.003	0.082	0.030					
M1G1-011C	16.8	0.004	0.070	0.05	58.9	0.100	0.385	0.009			0.006	0.048	0.030					
M1G1-012C	17.3	0.005	0.081	0.03	60.7	0.103	0.270	0.008			0.004	0.051	0.030					

USBM Glass Raw Data - Corning

Sample No.	SO_4^{2-}	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ppm)	(ppm)	(ppm)	(ppm)
Conver. factor	1	1	1	Petrographic	Petrographic	SEM ; EDX	1	2.62E-04	8.66E-03	5.76E-04	9.13E-03
M1G1-011C		1.23	1.10				11.30	35.0	1.50	30.0	1.20
M1G1-011C								36.0	1.50	30.0	1.20
M1G1-011C		1.22	1.16				11.3	36.0	1.50	31.0	1.20
M1G1-011C								36.0	1.50	31.0	1.20
Average		1.23	1.13	<1%	opaques (<3um) / no stones perse (Mo rich)	multilamellar K,Na,Mo,Cl, / Si,Ca,Al,Fe	11.3	35.8	1.50	30.5	1.20
M1G1-012C											
M1G1-012C											
M1G1-012C											
M1G1-012C											
Average											

Sample No.	SO_4^{2-}	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)			(vol%)	I.D.	Enriched / Depleted	pH	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)
Target Values	0.00	98.37		Petrographic	Petrographic	SEM / EDX				0.102	
M1APR-001C		88.64									
M1BPR-022C		93.74									
M1B5-001C		88.45									
M1C4-001C		87.34									
M1T3-001C		99.14									
M1G1-002C		98.63	1.03								
M1G1-004C		101.35	1.10	<1%	opaques (<3um) / no stones perse (Mo rich)	multilamellar color cords	11.3	0.010	0.014	0.019	0.011
M1G1-005C		101.47	1.08	<1%	opaques (<3um) / no stones perse (Mo rich)	multilamellar K,Na,Mo,Cl,Fe / Si,Ca,Al,Ti	11.3	0.010	0.011	0.018	0.010
M1G1-008C		101.65	1.09	<1%	opaques (<3um) / no stones perse (Mo rich)	multilamellar K,Na,Mo,Cl, / Si,Ca,Al,Ti,Fe	11.1	0.007	0.009	0.011	0.008
M1G1-010C		101.22									
M1G1-011C		101.80	1.13	<1%	opaques (<3um) / no stones perse (Mo rich)	multilamellar K,Na,Mo,Cl, / Si,Ca,Al,Fe	11.3	0.009	0.013	0.018	0.011
M1G1-012C		102.11									

USBM Glass Raw Data - PNL

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs	Fe_2O_3	K_2O	Li_2O	MgO	MnO	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(mg/g)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor			1	1	1	1	1	1	1	1	1	0.212	1	1	1	1	1.225	1
M1G1-011P					0.24		13.35	2.53	0.01	6.75	0.05	0.45	1.16	-0.31	-0.01	0.30	0.02	0.09
M1G1-011P							13.17	2.53	0.01	6.71	-0.03		1.10	-0.31	-0.01	0.26	0.01	0.09
Average	03/09/95	22:15:00			0.24		13.26	2.53	0.01	6.73	0.01	0.45	1.13	-0.31	-0.01	0.28	0.02	0.09
M1G1-008P					0.37		14.78	1.77	0.05	9.50	0.11	0.27	1.02	-0.31	0.00	0.39	0.02	0.07
M1G1-008P							15.36	1.86	0.05	9.68	0.10		1.05	1.31	-0.01	0.41	0.02	0.05
M1G1-008P							15.45	1.88	0.06	9.53	0.06		1.02	-0.34	-0.01	0.36	0.02	0.06
Average	03/09/95	18:50:00			0.37		15.20	1.84	0.05	9.57	0.09	0.27	1.03	0.22	-0.01	0.39	0.02	0.06
M1BPR-022P					11.61	0.03	8.03	3.91	0.01	3.86	0.02	1.10	0.80	1.10	0.03	0.18	0.02	0.12
M1BPR-022P							8.01	4.04	0.02	3.85	-0.03		0.77		0.01	0.11	0.03	0.12
Average	01/27/95	8:48:00			11.61	0.03	8.02	3.98	0.02	3.86	-0.01	1.10	0.79	1.10	0.02	0.15	0.03	0.12

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values																		
M1G1-011P	03/09/95	22:15:00			0.24		13.26	2.53	0.01	6.73	0.01	0.09	1.13	-0.31	-0.01	0.28	0.018	0.09
M1G1-008P	03/09/95	18:50:00			0.37		15.20	1.84	0.05	9.57	0.09	0.06	1.03	0.22	-0.01	0.39	0.02	0.06
M1BPR-022P	01/27/95	8:48:00			11.61	0.03	8.02	3.98	0.02	3.86	-0.005	0.23	0.79	1.10	0.02	0.15	0.031	0.12

USBM Glass Raw Data - PNL

Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl	F	I	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}	SO_4^{2-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt %)	(ug/g)	(ug/g)	(ug/g)	(ug/g)	(ug/g)	(wt%)	(ug/g)	(ug/g)
Conver. factor	1	1	1	1	1	1	1	1	1	1	1	1.00E-04	1.00E-04	1.00E-04	1.00E-04	1.00E-04		1.00E-04	1.00E-04
M1G1-011P	15.24	-0.02	0.20	-0.19	50.53	0.10	0.35	-0.01			0.111								
M1G1-011P	15.48	-0.02	-0.17	-0.19	49.88	0.10	0.25	-0.01			0.006								
Average	15.36	-0.02	0.02	-0.19	50.21	0.10	0.30	-0.01											
M1G1-008P	13.21	-0.02	0.20	0.25	46.44	0.09	0.66	0.02			0.029								
M1G1-008P	13.96	-0.02	-0.18	0.22	48.33	0.10	0.65	-0.01			0.013								
M1G1-008P	13.49	-0.02	-0.18	-0.19	48.57	0.10	0.59	0.02											
Average	13.55	-0.02	-0.05	0.09	47.78	0.10	0.63	0.01			0.021								
M1BPR-022P	15.46	-0.02	0.39	1.43	44.26	0.08	0.10	0.02				1620	IND		28100	7200		798	9800
M1BPR-022P	15.93	-0.02	0.68	1.27	44.03	0.09		0.02											
Average	15.70	-0.02	0.54	1.35	44.15	0.085	0.10	0.019				1620	IND		28100	7200		798	9800
Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO_2	TiO_2	ZrO_2	TOC	TIC	Total C	Cl	F	I	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}	SO_4^{2-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt %)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values																			
M1G1-011P	15.36	-0.02	0.015	-0.19	50.21	0.10	0.30	-0.01			0.111								
M1G1-008P	13.55	-0.02	-0.05	0.09	47.78	0.10	0.63	0.01			0.02								
M1BPR-022P	15.70	-0.02	0.54	1.35	44.15	0.085	0.10	0.019				0.162	IND		2.81	0.72		0.0798	0.98

USBM Glass Raw Data - PNL

Sample No.	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ppm)	(ppm)	(ppm)	(ppm)
Conver. factor	1	1	1	1		1	3.14E-04	1.06E-02	6.72E-04	-2.16E-01
M1G1-011P	0.98	0.96				11.1	38.50	1.53	72.79	0.00
M1G1-011P						11.1	38.84	1.54	72.92	0.00
Average	0.98	0.96	< 1%	Mo		11.1	38.67	1.54	72.86	0.00
M1G1-008P	0.98	1.05				10.8	27.55	0.84	42.25	0.00
M1G1-008P						10.8	27.71	0.86	42.63	0.00
M1G1-008P										
Average	0.98	1.05	< 1%	Mo		10.8	27.63	0.85	42.44	0.00
M1BPR-022P										
M1BPR-022P										
Average										

Sample No.	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)
Target Values										
M1G1-011P	90.24	0.96	< 1%	Mo		11.1	0.012	0.016	0.049	0.00
M1G1-008P	90.71	1.05	< 1%	Mo		10.8	0.009	0.009	0.029	0.00
M1BPR-022P	85.01									

USBM Glass Raw Data - USGS

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B	Ba	CaO	Cr	Cs	Fe_2O_3	K_2O	Li	MgO	MnO	Mo
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(ppm)	(ppm)	(wt%)	(ppm)	(ppm)	(wt%)	(wt%)	(ppm)	(wt%)	(wt%)	(ppm)
Conver. factor			1	1	1	1	1	3.22E-04	1.12E-04	1	1.46E-04	1.06E-04	1	1	2.15E-04	1	1.225	1.50E-04
M1G1-002U					-0.01		11.1	9200	77	5.81	230	614	1.40	1.02		0.29	0.02	600
M1G1-002U					-0.01		11.1	9000	74	5.82	230	602	1.39	1.03		0.30	0.01	590
Average	03/09/95	2:15:00			-0.01		11.1	9100	76	5.82	230	608	1.40	1.03		0.30	0.02	595
M1G1-004U					-0.01		11.7	8800	66	6.37	270	528	1.03	1.00		0.31	-0.01	520
M1G1-004U					0.01		11.7	9200	70	6.39	280	519	1.04	1.01		0.30	0.01	540
Average	03/09/95	10:30:00			0.01		11.7	9000	68	6.38	275	524	1.04	1.01		0.31	0.01	530
M1G1-005U					0.20		12.1	7500	69	6.85	300	476	1.06	0.96		0.32	0.01	550
M1G1-005U					0.02		12.1	7400	69	6.85	300	476	1.07	0.97		0.33	0.01	560
Average	03/09/95	13:05:00			0.11		12.1	7450	69	6.85	300	476	1.07	0.97		0.33	0.01	555
M1G1-008U					-0.01		15.1	6100	67	10.4	800	315	1.07	0.79		0.39	0.01	440
M1G1-008U					-0.01		15.1	6000	66	10.4	800	318	1.07	0.78		0.38	0.01	430
Average	03/09/95	18:50:00			-0.01		15.1	6050	67	10.4	800	317	1.07	0.79		0.39	0.01	435
M1G1-010U					-0.01		13.1	9200	73	8.15	490	548	1.20	0.99		0.31	0.01	660
M1G1-010U					-0.01		13.1	8800	71	8.14	470	544	1.20	0.99		0.30	0.01	630
Average	03/09/95	21:15:00			-0.01		13.1	9000	72	8.15	480	546	1.20	0.99		0.31	0.01	645
M1G1-011U					0.01		12.6	8400	78	7.34	380	437	1.20	0.97		0.31	0.01	620
M1G1-011U					0.04		12.6	8200	76	7.34	370	439	1.21	0.98		0.31	0.01	600
Average	03/09/95	22:15:00			0.03		12.6	8300	77	7.34	375	438	1.21	0.98		0.31	0.01	610
M1G1-012U					-0.01		11.9	7900	82	6.33	250	464	1.24	1.00		0.30	0.01	630
M1G1-012U					-0.01		11.9	7600	78	6.32	240	460	1.24	1.00		0.29	0.01	600
Average	03/09/95	23:35:00			-0.01		11.9	7750	80	6.33	245	462	1.24	1.00		0.30	0.01	615
M1T3-001U					0.02		37.2	49000	71	7.67	180	74	0.77	0.61		0.13	-0.01	640
M1T3-001U					0.03		37.1	49800	72	7.66	180	73	0.79	0.61		0.11	-0.01	650
Average	03/15/95	15:00:00			0.03		37.2	49400	72	7.67	180	74	0.78	0.61		0.12	-0.01	645
M1APR-001U					15.2		8.55	14000	68	4.31	92	1070	1.01	1.18		0.24	-0.01	850
M1APR-001U					15.2		8.57	13000	62	4.31	95	1050	1.02	1.18		0.21	-0.01	820
Average	02/10/95	8:30:00			15.2		8.56	13500	65	4.31	93.5	1060	1.02	1.18		0.23	-0.01	835
M1APR-002U					8.73		9.13	14000	65	4.47	110	1200	1.11	1.32		0.24	-0.01	970
M1APR-002U					8.77		9.16	14000	65	4.48	110	1200	1.07	1.32		0.24	-0.01	940
Average	02/16/95	10:00:00			8.75		9.15	14000	65	4.48	110	1200	1.09	1.32		0.24	-0.01	955
M1BPR-022U					10.7		8.99	14000	54	4.30	76	1140	0.85	1.21		0.21	-0.01	890
M1BPR-022U					10.7		8.94	14000	53	4.30	77	1150	0.86	1.21		0.19	-0.01	890
Average	01/27/95	8:48:00			10.7		8.97	14000	54	4.30	76.5	1145	0.86	1.21		0.20	-0.01	890
M1BPR-026U					7.75		9.22	14000	56	4.39	79	1190	0.86	1.28		0.18	-0.01	940
M1BPR-026U					7.80		9.16	14000	55	4.40	80	1200	0.84	1.28		0.20	-0.01	930
Average	01/27/95	16:00:00			7.78		9.19	14000	56	4.40	79.5	1195	0.85	1.28		0.19	-0.01	935
M1BPR-043U					10.7		8.93	14000	57	4.07	81	1120	0.85	1.20		0.22	-0.01	880
M1BPR-043U					10.7		8.94	14000	55	4.07	81	1140	0.85	1.20		0.20	-0.01	890
Average	01/31/95	11:20:00			10.7		8.94	14000	56	4.07	81	1130	0.85	1.20		0.21	-0.01	885
M1BPR-050U					10.9		8.94	14000	53	4.14	81	1140	0.85	1.20		0.21	-0.01	890
M1BPR-050U					10.9		9.00	14000	54	4.16	77	1140	0.83	1.20		0.23	-0.01	870
Average	02/01/95	0:15:00			10.9		8.97	14000	54	4.15	79	1140	0.84	1.20		0.22	-0.01	880
M1C4-001U					12.6		0.67	75000	6.00	2.15	100	8770	0.27	4.15		0.10	-0.01	3000
M1C4-001U					12.8		0.66	75000	7.00	2.16	100	8870	0.26	4.12		0.11	-0.01	3000
Average	03/14/95	10:00:00			12.7		0.67	75000	6.50	2.16	100	8820	0.27	4.14		0.11	-0.01	3000
M1B5-001U					12.3		0.37	70000	-4.00	0.54	110	9870	0.11	4.85		-0.10	-0.01	3300
M1B5-001U					12.3		0.37	70000	-4.00	0.54	110	10000	0.11	4.85		-0.10	-0.01	3300
Average	03/13/95	16:00:00			12.3		0.37	70000	-4.00	0.54	110	9935	0.11	4.85		-0.10	-0.01	3300

USBM Glass Raw Data - USGS

Sample No.	Na_2O (wt%)	Ni (ppm)	P_2O_5 (wt%)	S (wt%)	SiO_2 (wt%)	Sr (ppm)	TiO_2 (wt%)	Zr (ppm)	TOC (wt %)	TIC (CO_3) (wt %)	Total C (wt %)	Cl (wt%)	F (wt%)	I (ppm)	NO_3^- (wt%)	NO_2^- (wt%)	Total N_2 (wt%)	PO_4^{3-} (wt%)	SO_4^{2-} (wt%)
Conver. factor	1	1.27E-04	1	2.497	1	1.18E-04	1	1.35E-04	1	1	1	1	1	1.00E-04	1	1			
M1G1-002U	16.6	9.00	0.10	0.15	59.3	860	0.22	84	-0.05	-0.01	-0.05	0.11	0.04	118					
M1G1-002U	16.5	-8.00	0.10	0.14	59.4	840	0.22	82	-0.05	-0.01	-0.05	0.09	0.04						
Average	16.6	8.50	0.10	0.15	59.4	850	0.22	83	-0.05	-0.01	-0.05	0.10	0.04	118					
M1G1-004U	16.4	-8.00	0.09	0.13	58.4	790	0.28	45.0	-0.05	-0.01	-0.05	0.08	0.03	81					
M1G1-004U	16.5	-8.00	0.09	0.12	58.6	830	0.27	47.0	-0.05	-0.01	-0.05	0.08	0.03						
Average	16.5	-8.00	0.09	0.13	58.5	810	0.28	46.0	-0.05	-0.01	-0.05	0.08	0.03	81					
M1G1-005U	16.0	8.00	0.10	-0.05	58.8	810	0.34	45.0	-0.05	-0.01	-0.05	0.06	0.02	61					
M1G1-005U	16.1	-8.00	0.09	-0.05	58.8	810	0.34	46.0	-0.05	-0.01	-0.05	0.07	0.03						
Average	16.1	8.00	0.10	-0.05	58.8	810	0.34	45.5	-0.05	-0.01	-0.05	0.07	0.03	61					
M1G1-008U	14.1	8.00	0.10	0.05	54.6	750	0.76	63	-0.05	-0.01	-0.05	0.04	0.02	32					
M1G1-008U	14.0	8.00	0.09	0.05	54.5	740	0.77	63	-0.05	-0.01	-0.05	0.04	0.03						
Average	14.1	8.00	0.10	0.05	54.6	745	0.77	63	-0.05	-0.01	-0.05	0.04	0.03	32					
M1G1-010U	15.9	9.00	0.11	-0.05	55.7	820	0.51	55	-0.05	-0.01	-0.05	0.09	0.03	76					
M1G1-010U	15.9	8.00	0.11	-0.05	55.7	790	0.51	50	-0.05	-0.01	-0.05	0.08	0.03						
Average	15.9	8.50	0.11	-0.05	55.7	805	0.51	53	-0.05	-0.01	-0.05	0.09	0.03	76					
M1G1-011U	16.2	10.0	0.12	-0.05	57.1	860	0.39	57	-0.05	-0.01	-0.05	0.05	0.04	-14					
M1G1-011U	16.2	11.0	0.11	-0.05	57.2	840	0.40	56	-0.05	-0.01	-0.05	0.06	0.04						
Average	16.2	10.5	0.12	-0.05	57.2	850	0.40	57	-0.05	-0.01	-0.05	0.06	0.04	-14					
M1G1-012U	16.9	13.0	0.11	-0.05	58.4	900	0.29	53	-0.05	-0.01	-0.05	0.07	0.03	53					
M1G1-012U	16.8	12.0	0.11	-0.05	58.4	860	0.28	53	-0.05	-0.01	-0.05	0.05	0.04						
Average	16.9	12.5	0.11	-0.05	58.4	880	0.29	53	-0.05	-0.01	-0.05	0.06	0.04	53					
M1T3-001U	21.1	9.00	0.33	-0.05	12.0	250	1.19	850	-0.05	-0.01	-0.05	-0.01	0.02	-18					
M1T3-001U	21.1	11.0	0.33	-0.05	12.0	260	1.19	870	-0.05	-0.01	-0.05	-0.01	0.02						
Average	21.1	10.0	0.33	-0.05	12.0	255	1.19	860	-0.05	-0.01	-0.05	-0.01	0.02	-18					
M1APR-001U	15.4	11.0	0.12	0.51	47.1	710	0.13	41	2.10	1.09	3.19	0.35	0.04	1093	5.46	1.23	1.608		
M1APR-001U	15.5	11.0	0.13	0.50	47.1	680	0.13	38	2.13	1.05	3.18	0.35	0.05		5.50	1.23	1.617		
Average	15.5	11.0	0.13	0.51	47.1	695	0.13	39.5	2.12	1.07	3.19	0.35	0.05	1093	5.48	1.23	1.613		
M1APR-002U	17.5	11.0	0.19	0.60	49.7	770	0.14	42	0.77	1.05	1.82	0.38	0.05	1206	2.19	0.05	0.510		
M1APR-002U	17.6	8.00	0.19	0.59	49.7	760	0.14	35	0.75	1.07	1.82	0.34	0.06		2.15	0.05	0.501		
Average	17.6	9.50	0.19	0.60	49.7	765	0.14	38.5	0.76	1.06	1.82	0.36	0.06	1206	2.17	0.05	0.506		
M1BPR-022U	16.5	-8.00	0.11	0.55	50.0	700	0.12	28	1.29	1.62	2.91	0.30	0.03	1139	1.78	0.36	0.512		
M1BPR-022U	16.5	-8.00	0.11	0.55	50.1	690	0.11	28	1.31	1.60	2.91	0.30	0.03		1.76	0.35	0.504		
Average	16.5	-8.00	0.11	0.55	50.1	695	0.12	28	1.30	1.61	2.91	0.30	0.03	1139	1.77	0.36	0.508		
M1BPR-026U	17.4	-8.00	0.11	0.59	51.3	720	0.12	28	0.88	1.45	2.33	0.33	0.03	1247	0.52	0.04	0.130		
M1BPR-026U	17.4	-8.00	0.12	0.58	51.2	710	0.11	29	1.09	1.26	2.35	0.30	0.04		0.50	0.03	0.122		
Average	17.4	-8.00	0.12	0.59	51.3	715	0.12	28.5	0.99	1.36	2.34	0.32	0.04	1247	0.51	0.04	0.126		
M1BPR-043U	16.4	-8.00	0.11	0.55	50.3	700	0.12	37	1.26	1.61	2.87	0.31	0.04	1095	1.87	0.42	0.550		
M1BPR-043U	16.4	-8.00	0.12	0.55	50.3	710	0.12	29	1.26	1.62	2.88	0.33	0.04		1.87	0.42	0.550		
Average	16.4	-8.00	0.12	0.55	50.3	705	0.12	33	1.26	1.62	2.88	0.32	0.04	1095	1.87	0.42	0.550		
M1BPR-050U	16.4	-8.00	0.11	0.55	50.1	700	0.11	29	1.31	1.63	2.94	0.29	0.04	1117	2.25	0.35	0.615		
M1BPR-050U	16.4	-8.00	0.11	0.55	50.2	700	0.11	26	1.28	1.66	2.94	0.31	0.04		2.17	0.34	0.594		
Average	16.4	-8.00	0.11	0.55	50.2	700	0.11	27.5	1.30	1.65	2.94	0.30	0.04	1117	2.21	0.35	0.605		
M1C4-001U	-30.0	8.00	0.50	4.04	9.53	54	-0.02	8.00	0.12	1.61	1.73	3.01	0.17	7201	0.50	-0.02	0.119		
M1C4-001U	-30.0	-8.00	0.51	4.04	9.51	53	-0.02	-8.00	0.04	1.69	1.73	2.91	0.19		0.50	-0.02	0.119		
Average	-30.0	8.00	0.51	4.04	9.52	54	-0.02	8.00	0.08	1.65	1.73	2.96	0.18	7201	0.50	-0.02	0.119		
M1B5-001U	-30.0	8.00	0.53	5.18	9.75	19.0	-0.02	-8.00	0.02	1.53	1.55	3.72	0.19	10350	0.50	-0.02	0.119		
M1B5-001U	-30.0	9.00	0.52	5.17	9.73	18.0	-0.02	-8.00	0.07	1.49	1.56	3.70	0.19		0.50	-0.02	0.119		
Average	-30.0	8.50	0.53	5.18	9.74	18.5	-0.02	-8.00	0.05	1.51	1.56	3.71	0.19	10350	0.50	-0.02	0.119		

USBM Glass Raw Data - USGS

Sample No.	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ppm)	(ppm)	(ppm)	(ppm)
Conver. factor		1	Petrographic	Petrographic	SEM ; EDX	1	2.70E-04	9.10E-03	6.19E-04	9.20E-03
M1G1-002U	1.37	1.09								
M1G1-002U	1.39	1.11								
Average	1.38	1.10								
M1G1-004U	1.12	1.21				11.08	45	1.7	87	1.3
M1G1-004U	1.10	1.18				11.09	42	1.6	81	1.1
Average	1.11	1.19				11.09	43.5	1.65	84	1.2
M1G1-005U	1.02	1.07				11.09	41	1.3	77	1.2
M1G1-005U	1.00	1.04				11.09	39	1.3	75	1.0
Average	1.01	1.05				11.09	40	1.3	76	1.1
M1G1-008U	1.05	1.09				10.73	26	0.81	42	-1.0
M1G1-008U	1.17	1.22				10.74	26	0.81	42	-1.0
Average	1.11	1.15				10.74	26	0.81	42	-1.0
M1G1-010U	1.27	1.18								
M1G1-010U	1.28	1.19								
Average	1.28	1.18								
M1G1-011U	1.27	1.18				11.07	38	1.4	75	1.1
M1G1-011U	1.28	1.18				11.08	38	1.5	75	1.2
Average	1.28	1.18				11.08	38	1.45	75	1.15
M1G1-012U	1.20	1.08								
M1G1-012U	1.19	1.07								
Average	1.20	1.07								
M1T3-001U	0.08	0.12								
M1T3-001U	0.08	0.11								
Average	0.08	0.11								
M1APR-001U										
M1APR-001U										
Average										
M1APR-002U										
M1APR-002U										
Average										
M1BPR-022U										
M1BPR-022U										
Average										
M1BPR-026U										
M1BPR-026U										
Average										
M1BPR-043U										
M1BPR-043U										
Average										
M1BPR-050U										
M1BPR-050U										
Average										
M1C4-001U										
M1C4-001U										
Average										
M1B5-001U										
M1B5-001U										
Average										

USBM Glass Raw Data - USGS

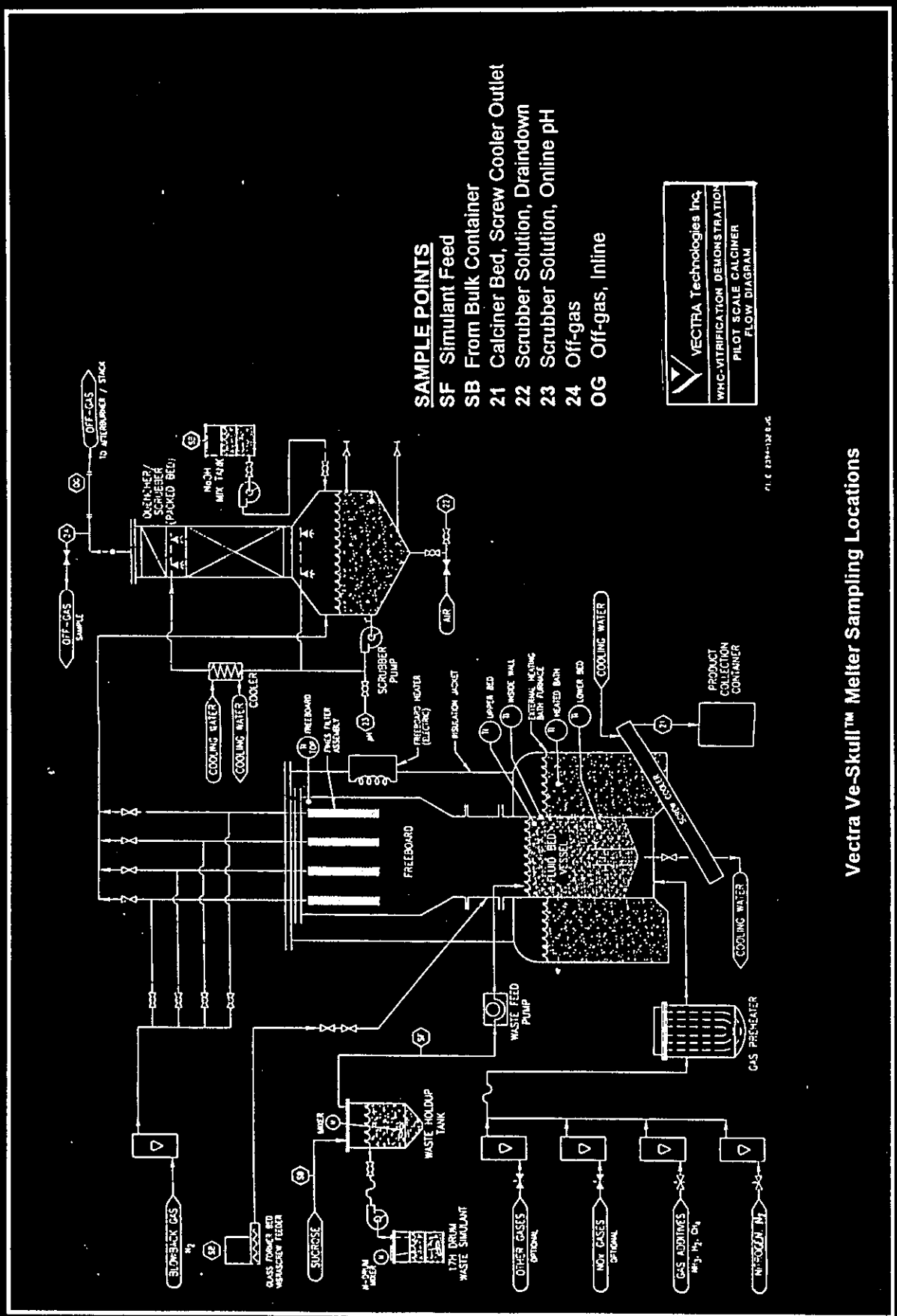
Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values																		
M1G1-002U	03/09/95	2:15:00			-0.01		11.1	2.93	0.0085	5.82	0.034	0.064	1.40	1.03		0.30	0.018	0.089
M1G1-004U	03/09/95	10:30:00			0.01		11.7	2.90	0.0076	6.38	0.040	0.055	1.04	1.01		0.31	0.012	0.080
M1G1-005U	03/09/95	13:05:00			0.11		12.1	2.40	0.0077	6.85	0.044	0.050	1.07	0.97		0.33	0.012	0.083
M1G1-008U	03/09/95	18:50:00			-0.01		15.1	1.95	0.0074	10.4	0.117	0.034	1.07	0.79		0.39	0.012	0.065
M1G1-010U	03/09/95	21:15:00			-0.01		13.1	2.90	0.0081	8.15	0.070	0.058	1.20	0.99		0.31	0.012	0.097
M1G1-011U	03/09/95	22:15:00			0.03		12.6	2.67	0.0086	7.34	0.055	0.046	1.21	0.98		0.31	0.012	0.092
M1G1-012U	03/09/95	23:35:00			-0.01		11.9	2.50	0.0090	6.33	0.036	0.049	1.24	1.00		0.30	0.012	0.092
M1T3-001U	03/15/95	15:00:00			0.03		37.2	15.9	0.0080	7.67	0.026	0.008	0.78	0.61		0.12	-0.012	0.097
M1APR-001U	02/10/95	8:30:00			15.2		8.56	4.35	0.0073	4.31	0.014	0.112	1.02	1.18		0.23	-0.012	0.125
M1APR-002U	02/16/95	10:00:00			8.75		9.15	4.51	0.0073	4.48	0.016	0.127	1.09	1.32		0.24	-0.012	0.143
M1BPR-022U	01/27/95	8:48:00			10.7		8.97	4.51	0.0060	4.30	0.011	0.121	0.86	1.21		0.20	-0.012	0.134
M1BPR-026U	01/27/95	16:00:00			7.78		9.19	4.51	0.0062	4.40	0.012	0.127	0.85	1.28		0.19	-0.012	0.140
M1BPR-043U	01/31/95	11:20:00			10.7		8.94	4.51	0.0063	4.07	0.012	0.120	0.85	1.20		0.21	-0.012	0.133
M1BPR-050U	02/01/95	0:15:00			10.9		8.97	4.51	0.0060	4.15	0.012	0.121	0.84	1.20		0.22	-0.012	0.132
M1C4-001U	03/14/95	10:00:00			12.7		0.67	24.2	0.0007	2.16	0.015	0.935	0.27	4.14		0.11	-0.012	0.450
M1B5-001U	03/13/95	16:00:00			12.3		0.37	22.5	-0.0004	0.54	0.016	1.053	0.11	4.85		-0.10	-0.012	0.495

USBM Glass Raw Data - USGS

Sample No.	Na_2O (wt%)	NiO (wt%)	P_2O_5 (wt%)	SO_3 (wt%)	SiO_2 (wt%)	SrO (wt%)	TiO_2 (wt%)	ZrO_2 (wt%)	TOC (wt%)	TIC (wt%)	Total C (wt %)	Cl (wt%)	F (wt%)	I (wt%)	NO_3^- (wt%)	NO_2^- (wt%)	Total N_2 (wt%)	PO_4^{3-} (wt%)	SO_4^{2-} (wt%)
Target Values																			
M1G1-002U	16.6	0.0011	0.10	0.36	59.4	0.100	0.22	0.011	-0.05	-0.01	-0.05	0.10	0.04	0.012					
M1G1-004U	16.5	-0.0010	0.09	0.31	58.5	0.096	0.28	0.006	-0.05	-0.01	-0.05	0.08	0.03	0.008					
M1G1-005U	16.1	0.0010	0.10	-0.12	58.8	0.096	0.34	0.006	-0.05	-0.01	-0.05	0.07	0.03	0.006					
M1G1-008U	14.1	0.0010	0.10	0.12	54.6	0.088	0.77	0.009	-0.05	-0.01	-0.05	0.04	0.03	0.003					
M1G1-010U	15.9	0.0011	0.11	-0.12	55.7	0.095	0.51	0.007	-0.05	-0.01	-0.05	0.09	0.03	0.008					
M1G1-011U	16.2	0.0013	0.12	-0.12	57.2	0.100	0.40	0.008	-0.05	-0.01	-0.05	0.06	0.04	-0.001					
M1G1-012U	16.9	0.0016	0.11	-0.12	58.4	0.104	0.29	0.007	-0.05	-0.01	-0.05	0.06	0.04	0.005					
M1T3-001U	21.1	0.0013	0.33	-0.12	12.0	0.030	1.19	0.116	-0.05	-0.01	-0.05	-0.01	0.02	-0.002					
M1APR-001U	15.5	0.0014	0.13	1.26	47.1	0.082	0.13	0.005	2.12	1.07	3.19	0.35	0.05	0.1093	5.48	1.23			
M1APR-002U	17.6	0.0012	0.19	1.49	49.7	0.090	0.14	0.005	0.76	1.06	1.82	0.36	0.06	0.1206	2.17	0.05			
M1BPR-022U	16.5	-0.0010	0.11	1.37	50.1	0.082	0.12	0.004	1.30	1.61	2.91	0.30	0.03	0.1139	1.77	0.36			
M1BPR-026U	17.4	-0.0010	0.12	1.46	51.3	0.084	0.12	0.004	0.99	1.36	2.34	0.32	0.04	0.1247	0.51	0.04			
M1BPR-043U	16.4	-0.0010	0.12	1.37	50.3	0.083	0.12	0.004	1.26	1.62	2.88	0.32	0.04	0.1095	1.87	0.42			
M1BPR-050U	16.4	-0.0010	0.11	1.37	50.2	0.083	0.11	0.004	1.30	1.65	2.94	0.30	0.04	0.1117	2.21	0.35			
M1C4-001U	-30	0.0010	0.51	10.1	9.52	0.006	-0.02	0.001	0.08	1.65	1.73	2.96	0.18	0.7201	0.50	-0.02			
M1B5-001U	-30	0.0011	0.53	12.9	9.74	0.002	-0.02	-0.001	0.045	1.51	1.56	3.71	0.19	1.035	0.50	-0.02			

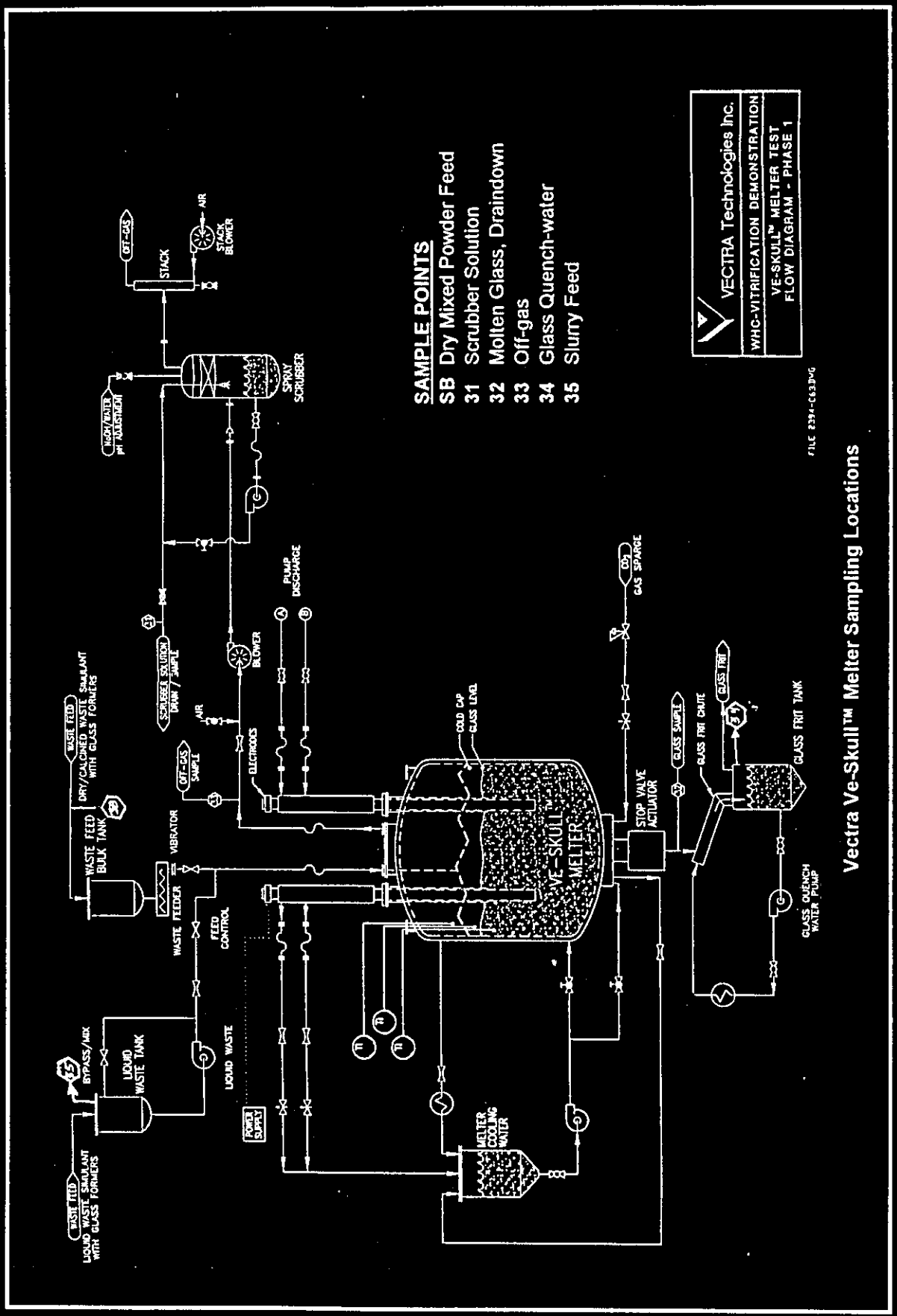
USBM Glass Raw Data - USGS

Sample No.	Total (wt%)	Fe(II)/Total Fe	Solid Inclusions (vol%)	Solid Inclusions I.D.	Cord Composition Enriched / Depleted	Leach. pH	Si (PCT) (g/m^2-day)	B (PCT) (g/m^2-day)	Na (PCT) (g/m^2-day)	K (PCT) (g/m^2-day)
Target Values	0		Petrographic	Petrographic	SEM / EDX				0.102	
M1G1-002U	99.68	1.10								
M1G1-004U	99.43	1.19				11.09	0.0117	0.0150	0.0520	0.0110
M1G1-005U	99.45	1.05				11.09	0.0108	0.0118	0.0470	0.0101
M1G1-008U	99.76	1.15				10.74	0.0070	0.0074	0.0260	-0.0092
M1G1-010U	99.39	1.18								
M1G1-011U	99.44	1.18				11.08	0.0103	0.0132	0.0464	0.0106
M1G1-012U	99.37	1.07								
M1T3-001U	97.22	0.11								
M1APR-001U	94.45									
M1APR-002U	94.81									
M1BPR-022U	94.02									
M1BPR-026U	94.49									
M1BPR-043U	94.07									
M1BPR-050U	94.33									
M1C4-001U	59.09									
M1B5-001U	60.15									



*VE-Skull is a trademark of Vectra Technologies, Inc.

Vectra Ve-Skul™ Melter Sampling Point Schematic



Vectra Ve-Skull™ Melter Sampling Locations

Melter Project: Sample Numbering Scheme
Vectra

V1	M1	G	32	-	0	0	1	C	1
Vendor Id. Phase Id.	**Process Test Sequence**	**Sample Type**	**Sample Point Number**	**Hyphen**	**Serial**	**Sample**	**Number**	**Lab ID**	**Snapshot Set ID**
Vectra Phase 1	*Melter, Test Stage #1*	*Glass*	*Sample Point 32*		*Sample*	*Number*	*1*	*Corning*	*1 = 1st Mass Balance Set*

Vendor	Process Test Sequence
V = Vectra	FS1= Fluid-Bed Calciner Scoping Test #1
	FP1=Fluid-Bed Calciner Pilot Scale Test #1
	RS1=RVR Dryer Scoping Test #1
	RP1=RVR Dryer Scoping Test #1
	M1=Melter Test Stage 1

Sample Type	Sample Point
S = Simulant	SF = Simulant Feed
A = Additives	OG = Off-gas, Inline
F = Feed, Mixed	21 = Calciner Bed Screw Cooler Outlet
I = Intermediate	22 = Scrubber Solution, Draindown
G = Glass	23 = Scrubber Solution, Online pH
O = Off-gas	24 = Off-gas
W = Waste	31 = Scrubber Solution Drain
	32 = Melter Drain (Pre-quench)
	33 = Off-gas , Pre-blower and Pre-scrubber
	34 = Glass Quench Tank (Water)
	35 = Feed Slurry Tank
	SB = Dry Mixed Powder Feed Container

Lab ID	Sample Set ID
C = Corning	1 = 1st Mass Balance Set
G = Archive (GEL)	2 = 2nd Mass Balance Set
P = PNL	Blank = Individual Pts.
Q = Quanterra	
U = USGS	
W = 222-S	

Vectra Analytical Data

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(Wt. %)	(Wt. %)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
Data Sources: [V-P-1]																			
V1FP1/W23-018P	03/10/95	16:00:00							-1.11E-05	2.15E-03	-2.18E-07	2.69E-05	-3.85E-06		4.01E-05	-7.67E-05		6.91E-05	3.09E-06
V1FP1/W23-019P2	03/10/95	16:00:00							-1.11E-05	2.66E-03	-2.18E-07	4.84E-05	-3.85E-06		3.64E-05	-7.67E-05		7.74E-05	2.55E-06
V1FP1/W23-020P1	03/10/95	12:00:00							-1.11E-05	3.53E-03	-2.18E-07	2.67E-05	-3.85E-06		3.13E-05	-7.67E-05		9.67E-05	2.37E-06
V1M2/W31-004P1	04/21/95	20:00:00		0.93					8.56E-04	3.86E-02	3.64E-07	3.34E-04	2.56E-05		4.80E-05	3.65E-03		8.27E-04	6.92E-06
V1M2/W31-032P2	04/22/95	11:45:00		0.94					5.16E-04	6.84E-02	3.64E-07	2.64E-04	3.81E-05		2.76E-05	6.72E-03		8.58E-04	6.55E-06
V1M2/W34-009P1	04/21/95	20:00:00		0.98					1.56E-05	1.08E-04	9.47E-07	5.54E-04	-3.85E-06		1.43E-06	-7.67E-05		2.08E-04	-5.46E-07
V1M2/W34-028P2	04/22/95	11:00:00		0.93					1.33E-05	1.94E-04	1.24E-06	5.69E-04	-3.85E-06		1.43E-06	8.01E-05		2.14E-04	-5.46E-07
V1M3/W31-048P1	04/22/95	19:40:00		0.94					7.15E-04	7.68E-02	4.37E-07	2.91E-04	5.00E-05		4.39E-05	7.43E-03		9.00E-04	6.73E-06
V1M3/W31-067P2	04/22/95	21:55:00		0.99					7.06E-04	7.81E-02	2.91E-07	2.80E-04	4.98E-05		4.17E-05	7.38E-03		8.95E-04	6.73E-06
V1M3/W34-044P1	04/22/95	19:35:00		0.97					1.37E-05	1.91E-04	1.31E-06	5.66E-04	-3.85E-06		1.79E-06	-7.67E-05		2.10E-04	-5.46E-07
V1M3/W34-063P2	04/22/95	21:50:00		0.97					-1.11E-05	1.86E-04	1.24E-06	5.60E-04	-3.85E-06		1.79E-06	-7.67E-05		2.04E-04	-5.46E-07
V1M4/W31-084P1	04/23/95	10:45:00		0.99					6.75E-04	8.18E-02	3.64E-07	2.96E-04	5.29E-05		4.48E-05	7.42E-03		8.98E-04	6.73E-06
V1M4/W31-104P2	04/23/95	16:00:00		0.94					6.63E-04	8.36E-02	2.91E-07	2.86E-04	5.52E-05		4.19E-05	7.76E-03		9.24E-04	6.73E-06
V1M4/W34-092P1	04/23/95	13:00:00		0.99					1.19E-05	1.99E-04	1.46E-06	5.65E-04	-3.85E-06		2.69E-06	-7.67E-05		2.08E-04	-5.46E-07
V1M4/W34-100P2	04/23/95	16:00:00		0.99					-1.11E-05	1.92E-04	1.46E-06	5.74E-04	-3.85E-06		3.04E-06	-7.67E-05		2.11E-04	-5.46E-07

Vectra Analytical Data

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl	F	I	NO_2^-	NO_3^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
Data Sources: V-P-1																			
V1FP1/W23-018P	2.40E-06	9.03E-02	3.73E-05	3.39E-04	5.61E-04	4.49E-05	-3.42E-07	-6.26E-07	-1.10E-06	9.99E-02	2.75E-01	-7.05E-05	3.32E-04		-8.06E-05	-1.09E-04		-5.26E-05	4.77E-04
V1FP1/W23-019P2	2.29E-06	1.15E-01	3.65E-05	3.32E-04	6.12E-04	3.99E-05	-3.42E-07	-6.26E-07	-1.10E-06	9.16E-02	2.83E-01	-7.05E-05	2.95E-04		-8.06E-05	-1.09E-04		8.25E-05	5.23E-04
V1FP1/W23-020P1	2.29E-06	1.56E-01	3.88E-05	3.85E-04	7.20E-04	4.84E-05	-3.42E-07	-6.26E-07	-1.10E-06	7.49E-02	2.66E-01	-7.05E-05	2.63E-04		-8.06E-05	-1.09E-04		1.11E-04	5.85E-04
V1M2/W31-004P1	5.51E-03	8.61E-02	7.50E-06	3.54E-03	9.67E-03	5.20E-05	5.93E-06	6.26E-07	-1.10E-06			3.50E-03	1.32E-03		7.40E-03	7.69E-03			7.67E-03
V1M2/W31-032P2	6.22E-03	1.14E-01	1.02E-05	1.03E-02	1.18E-02	6.27E-05	3.77E-06	6.26E-07	-1.10E-06			8.41E-03	3.62E-03		7.50E-03	9.91E-03			8.90E-03
V1M2/W34-009P1	5.52E-06	4.33E-04	-3.41E-06	-2.58E-05	2.02E-04	1.22E-04	1.37E-06	-6.26E-07	-1.10E-06			3.64E-04			2.40E-04				1.44E-04
V1M2/W34-028P2	9.80E-06	4.88E-04	-3.41E-06	7.39E-04	1.73E-04	1.30E-04	1.48E-06	-6.26E-07	-1.10E-06			3.53E-04							1.43E-04
V1M3/W31-048P1	6.84E-03	1.25E-01	1.04E-05	1.80E-02	1.25E-02	7.16E-05	5.14E-06	-6.26E-07	-1.10E-06			1.01E-02	5.68E-03		7.45E-03				9.30E-03
V1M3/W31-067P2	6.90E-03	1.29E-01	8.52E-06	1.64E-02	1.26E-02	7.05E-05	4.91E-06	-6.26E-07	-1.10E-06			9.59E-03	5.63E-03		7.27E-03	1.53E-02			9.18E-03
V1M3/W34-044P1	8.23E-06	4.98E-04	-3.41E-06	3.26E-04	1.77E-04	1.29E-04	1.48E-06	-6.26E-07	-1.10E-06			3.47E-04							2.19E-04
V1M3/W34-063P2	7.50E-06	5.09E-04	-3.41E-06	1.21E-04	1.76E-04	1.27E-04	1.48E-06	-6.26E-07	-1.10E-06			3.53E-04			2.39E-04				1.49E-04
V1M4/W31-084P1	6.91E-03	1.33E-01	7.84E-06	2.12E-02	1.28E-02	6.66E-05	5.14E-06	-6.26E-07	-1.10E-06			1.07E-02	5.90E-03		7.56E-03	1.10E-02			9.34E-03
V1M4/W31-104P2	7.10E-03	1.35E-01	8.35E-06	2.14E-02	1.33E-02	6.80E-05	5.14E-06	-6.26E-07	-1.10E-06			1.09E-02	4.42E-03		6.93E-03	1.08E-02			9.50E-03
V1M4/W34-092P1	7.50E-06	5.32E-04	-3.41E-06	-2.58E-05	1.75E-04	1.35E-04	1.60E-06	-6.26E-07	-1.10E-06			3.55E-04			2.37E-04				1.48E-04
V1M4/W34-100P2	6.88E-06	5.35E-04	-3.41E-06	-2.58E-05	1.74E-04	1.32E-04	1.48E-06	-6.26E-07	-1.10E-06			3.44E-04			2.42E-04				1.49E-04

Vectra Analytical Raw Data - PNL

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/ml)		(Vol %)	(Vol %)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/g)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)
Conver. factor			1	1	1				3.71E-05	9.25E-05	7.28E-06	2.5E-05	1.92E-05	7.52E-06	1.79E-05	2.56E-05	1.44E-04	4.11E-05	1.82E-05
V1FP1/W23-018P	03/10/95	16:00:00							-0.30	23.19	-0.03	1.08	-0.20		2.24	-3.00	-0.05	1.68	0.17
V1FP1/W23-019P2	03/10/95	16:00:00							-0.30	28.77	-0.03	1.94	-0.20		2.03	-3.00	-0.05	1.88	0.14
V1FP1/W23-020P1	03/10/95	12:00:00							-0.30	38.18	-0.03	1.07	-0.20		1.75	-3.00	-0.05	2.35	0.13
V1M2/W31-004P1	04/21/95	20:00:00		0.93					23.1	418	0.05	13.4	1.33		2.68	143	0.06	20.1	0.38
V1M2/W31-032P2	04/22/95	11:45:00		0.94					13.9	739	0.05	10.6	1.98		1.54	263	0.07	20.9	0.36
V1M3/W31-048P1	04/22/95	19:40:00		0.94					19.3	830	0.06	11.7	2.60		2.45	290	0.06	21.9	0.37
V1M3/W31-067P2	04/22/95	21:55:00		0.99					19.0	844	0.04	11.2	2.59		2.33	288	-0.05	21.8	0.37
V1M4/W31-084P1	04/23/95	10:45:00		0.99					18.2	884	0.05	11.9	2.75		2.50	290	-0.05	21.8	0.37
V1M4/W31-104P2	04/23/95	16:00:00		0.94					17.9	903	0.04	11.5	2.87		2.34	303	-0.05	22.5	0.37
V1M2/W34-028P2	04/22/95	11:00:00		0.93					0.36	2.10	0.17	22.8	-0.20		0.08	3.13	-0.05	5.20	-0.03
V1M3/W34-044P1	04/22/95	19:35:00		0.97					0.37	2.06	0.18	22.7	-0.20		0.10	-3.00	-0.05	5.10	-0.03
V1M3/W34-063P2	04/22/95	21:50:00		0.97					-0.30	2.01	0.17	22.5	-0.20		0.10	-3.00	-0.05	4.97	-0.03
V1M4/W34-092P1	04/23/95	13:00:00		0.99					0.32	2.15	0.20	22.6	-0.20		0.15	-3.00	-0.05	5.05	-0.03
V1M4/W34-100P2	04/23/95	16:00:00		0.99					-0.30	2.08	0.20	23.0	-0.20		0.17	-3.00	-0.05	5.12	-0.03
V1M2/W34-009P1	04/21/95	20:00:00		0.98					0.42	1.17	0.13	22.2	-0.20		0.08	-3.00	-0.05	5.05	-0.03
V1M2/F35-010P	04/21/95	23:00:00		1.64					2.62	1.36	0.004	0.922	0.016		0.371	2.36	0.004	0.602	0.005

Sample No.	Date	Time	pH	Density	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(Wt. %)	(Wt. %)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
V1FP1/W23-018P	03/10/95	16:00:00							-1.11E-05	2.15E-03	-2.18E-07	2.69E-05	-3.85E-06		4.01E-05	-7.67E-05		6.91E-05	3.09E-06
V1FP1/W23-019P2	03/10/95	16:00:00							-1.11E-05	2.66E-03	-2.18E-07	4.84E-05	-3.85E-06		3.64E-05	-7.67E-05		7.74E-05	2.55E-06
V1FP1/W23-020P1	03/10/95	12:00:00							-1.11E-05	3.53E-03	-2.18E-07	2.67E-05	-3.85E-06		3.13E-05	-7.67E-05		9.67E-05	2.37E-06
V1M2/W31-004P1	04/21/95	20:00:00		0.93					8.56E-04	3.86E-02	3.64E-07	3.34E-04	2.56E-05		4.80E-05	3.65E-03		8.27E-04	6.92E-06
V1M2/W31-032P2	04/22/95	11:45:00		0.94					5.16E-04	6.84E-02	3.64E-07	2.64E-04	3.81E-05		2.76E-05	6.72E-03		8.58E-04	6.55E-06
V1M3/W31-048P1	04/22/95	19:40:00		0.94					7.15E-04	7.68E-02	4.37E-07	2.91E-04	5.00E-05		4.39E-05	7.43E-03		9.00E-04	6.73E-06
V1M3/W31-067P2	04/22/95	21:55:00		0.99					7.06E-04	7.81E-02	2.91E-07	2.80E-04	4.98E-05		4.17E-05	7.38E-03		8.95E-04	6.73E-06
V1M4/W31-084P1	04/23/95	10:45:00		0.99					6.75E-04	8.18E-02	3.64E-07	2.96E-04	5.29E-05		4.48E-05	7.42E-03		8.98E-04	6.73E-06
V1M4/W31-104P2	04/23/95	16:00:00		0.94					6.63E-04	8.36E-02	2.91E-07	2.86E-04	5.52E-05		4.19E-05	7.76E-03		9.24E-04	6.73E-06
V1M2/W34-028P2	04/22/95	11:00:00		0.93					1.33E-05	1.94E-04	1.24E-06	5.69E-04	-3.85E-06		1.43E-06	8.01E-05		2.14E-04	-5.46E-07
V1M3/W34-044P1	04/22/95	19:35:00		0.97					1.37E-05	1.91E-04	1.31E-06	5.66E-04	-3.85E-06		1.79E-06	-7.67E-05		2.10E-04	-5.46E-07
V1M3/W34-063P2	04/22/95	21:50:00		0.97					-1.11E-05	1.86E-04	1.24E-06	5.60E-04	-3.85E-06		1.79E-06	-7.67E-05		2.04E-04	-5.46E-07
V1M4/W34-092P1	04/23/95	13:00:00		0.99					1.19E-05	1.99E-04	1.46E-06	5.65E-04	-3.85E-06		2.69E-06	-7.67E-05		2.08E-04	-5.46E-07
V1M4/W34-100P2	04/23/95	16:00:00		0.99					-1.11E-05	1.92E-04	1.46E-06	5.74E-04	-3.85E-06		3.04E-06	-7.67E-05		2.11E-04	-5.46E-07
V1M2/W34-009P1	04/21/95	20:00:00		0.98					1.56E-05	1.08E-04	9.47E-07	5.54E-04	-3.85E-06		1.43E-06	-7.67E-05		2.08E-04	-5.46E-07

Vectra Analytical Raw Data - PNL

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl⁻	F⁻	I⁻	NO_2^-	NO_3^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(mg/l)	(mg/l)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)
Conver. factor	1.04E-05	4.35E-05	1.7E-05	3.23E-05	3.12E-05	3.56E-05	1.14E-05	2.09E-05	1.1E-05	8.33E-05	8.33E-05	2.82E-05	5.26E-05	7.88E-06	1.61E-05	2.17E-05	1.61E-05	1.05E-05	1.04E-05
V1FP1/W23-018P	0.23	2077	2.19	10.5	18.0	1.26	-0.03	-0.03	-0.10	1200	3300	-2.50	6.3		-5.00	-5.00		-5.00	45.9
V1FP1/W23-019P2	0.22	2635	2.14	10.3	19.6	1.12	-0.03	-0.03	-0.10	1100	3400	-2.50	5.6		-5.00	-5.00		7.84	50.3
V1FP1/W23-020P1	0.22	3576	2.28	11.9	23.1	1.36	-0.03	-0.03	-0.10	900	3200	-2.50	5.0		-5.00	-5.00		10.5	56.2
V1M2/W31-004P1	529	1979	0.44	110	310	1.46	0.52	0.03	-0.10			124	25.1		459	354			737
V1M2/W31-032P2	597	2626	0.60	319	377	1.76	0.33	0.03	-0.10			298	68.8		465	456			855
V1M3/W31-048P1	657	2871	0.61	557	399	2.01	0.45	-0.03	-0.10			357	108		462				893
V1M3/W31-067P2	662	2955	0.50	508	403	1.98	0.43	-0.03	-0.10			340	107		451	703			882
V1M4/W31-084P1	663	3067	0.46	656	410	1.87	0.45	-0.03	-0.10			379	112		469	506			897
V1M4/W31-104P2	681	3108	0.49	663	425	1.91	0.45	-0.03	-0.10			385	84.0		430	496			913
V1M2/W34-028P2	0.94	11.2	-0.20	22.9	5.54	3.66	0.13	-0.03	-0.10			12.5							13.7
V1M3/W34-044P1	0.79	11.5	-0.20	10.1	5.68	3.61	0.13	-0.03	-0.10			12.3							21.0
V1M3/W34-063P2	0.72	11.7	-0.20	3.75	5.64	3.57	0.13	-0.03	-0.10			12.5			14.8				14.3
V1M4/W34-092P1	0.72	12.2	-0.20	-0.80	5.62	3.78	0.14	-0.03	-0.10			12.6			14.7				14.2
V1M4/W34-100P2	0.66	12.3	-0.20	-0.80	5.59	3.70	0.13	-0.03	-0.10			12.2			15.0				14.3
V1M2/W34-009P1	0.53	9.95	-0.20	-0.80	6.49	3.44	0.12	-0.03	-0.10			12.9			14.9				13.8
V1M2/F35-010P	0.04	5.527	0.035	0.071	0.069	9.472	0.033	0.01	0.009			1.412	1.103		56.446	21.025			1.258

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl⁻	F⁻	I⁻	NO_2^-	NO_3^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
V1FP1/W23-018P	2.40E-06	9.03E-02	3.73E-05	3.39E-04	5.61E-04	4.49E-05	-3.42E-07	-6.26E-07	-1.10E-06	9.99E-02	2.75E-01	-7.05E-05	3.32E-04		-8.06E-05	-1.09E-04		-5.26E-05	4.77E-04
V1FP1/W23-019P2	2.29E-06	1.15E-01	3.65E-05	3.32E-04	6.12E-04	3.99E-05	-3.42E-07	-6.26E-07	-1.10E-06	9.16E-02	2.83E-01	-7.05E-05	2.95E-04		-8.06E-05	-1.09E-04		8.25E-05	5.23E-04
V1FP1/W23-020P1	2.29E-06	1.56E-01	3.88E-05	3.85E-04	7.20E-04	4.84E-05	-3.42E-07	-6.26E-07	-1.10E-06	7.49E-02	2.66E-01	-7.05E-05	2.63E-04		-8.06E-05	-1.09E-04		1.11E-04	5.85E-04
V1M2/W31-004P1	5.51E-03	8.61E-02	7.50E-06	3.54E-03	9.67E-03	5.20E-05	5.93E-06	6.26E-07	-1.10E-06			3.50E-03	1.32E-03		7.40E-03	7.69E-03			7.67E-03
V1M2/W31-032P2	6.22E-03	1.14E-01	1.02E-05	1.03E-02	1.18E-02	6.27E-05	3.77E-06	6.26E-07	-1.10E-06			8.41E-03	3.62E-03		7.50E-03	9.91E-03			8.90E-03
V1M3/W31-048P1	6.84E-03	1.25E-01	1.04E-05	1.80E-02	1.25E-02	7.16E-05	5.14E-06	-6.26E-07	-1.10E-06			1.01E-02	5.68E-03		7.45E-03				9.30E-03
V1M3/W31-067P2	6.90E-03	1.29E-01	8.52E-06	1.64E-02	1.26E-02	7.05E-05	4.91E-06	-6.26E-07	-1.10E-06			9.59E-03	5.63E-03		7.27E-03	1.53E-02			9.18E-03
V1M4/W31-084P1	6.91E-03	1.33E-01	7.84E-06	2.12E-02	1.28E-02	6.66E-05	5.14E-06	-6.26E-07	-1.10E-06			1.07E-02	5.90E-03		7.56E-03	1.10E-02			9.34E-03
V1M4/W31-104P2	7.10E-03	1.35E-01	8.35E-06	2.14E-02	1.33E-02	6.80E-05	5.14E-06	-6.26E-07	-1.10E-06			1.09E-02	4.42E-03		6.93E-03	1.08E-02			9.50E-03
V1M2/W34-028P2	9.80E-06	4.88E-04	-3.41E-06	7.39E-04	1.73E-04	1.30E-04	1.48E-06	-6.26E-07	-1.10E-06			3.53E-04							1.43E-04
V1M3/W34-044P1	8.23E-06	4.98E-04	-3.41E-06	3.26E-04	1.77E-04	1.29E-04	1.48E-06	-6.26E-07	-1.10E-06			3.47E-04							2.19E-04
V1M3/W34-063P2	7.50E-06	5.09E-04	-3.41E-06	1.21E-04	1.76E-04	1.27E-04	1.48E-06	-6.26E-07	-1.10E-06			3.53E-04			2.39E-04				1.49E-04
V1M4/W34-092P1	7.50E-06	5.32E-04	-3.41E-06	-2.58E-05	1.75E-04	1.35E-04	1.60E-06	-6.26E-07	-1.10E-06			3.55E-04			2.37E-04				1.48E-04
V1M4/W34-100P2	6.88E-06	5.35E-04	-3.41E-06	-2.58E-05	1.74E-04	1.32E-04	1.48E-06	-6.26E-07	-1.10E-06			3.44E-04			2.42E-04				1.49E-04
V1M2/W34-009P1	5.52E-06	4.33E-04	-3.41E-06	-2.58E-05	2.02E-04	1.22E-04	1.37E-06	-6.26E-07	-1.10E-06			3.64E-04			2.40E-04				1.44E-04

Vectra Glass Data

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values																	
Data Sources: [V-P-1, V-C-1, V-U-1]																	
V1FP1/I21-014P2	03/10/95	16:00:00	1.44				7.10	0.54	-0.003	3.95	0.04		0.79	0.50	-0.01	2.67	0.010
V1FP1/I21-015U	03/10/95	16:00:00			11.8		8.50	0.42	0.0009	3.16	0.03	0.080	0.65	0.94		2.43	-0.012
V1FP1/I21-016U	03/10/95	12:00:00			11.2		9.01	0.42	0.0010	3.01	0.04	0.085	0.66	0.97		2.31	-0.012
V1FP1/I21-017P1	03/10/95	12:00:00	1.43				6.74	0.77	0.003	6.12	0.06		0.86	0.79	0.01	4.05	0.016
V1M2/F35-108PA					57.62	38.98	6.78	6.15	-0.001	1.69	0.02		0.69	0.81	-0.01	1.28	0.010
V1M2/G32-011P1	04/21/95	22:30:00					9.75	6.65	0.000	2.84	0.29	0.078	0.99	1.16	-0.01	2.03	0.012
V1M2/G32-012U1	04/21/95	22:30:00			-0.01		9.55	6.87	0.0014	2.89	0.31	0.036	1.04	0.57		2.22	0.012
V1M2/G32-013C1	04/21/95	22:30:00					9.47	7.28	-0.01	2.90	0.29	0.034	1.01	0.59		2.22	0.0092
V1M2/G32-025U	04/22/95	8:00:00			0.01		8.19	6.96	0.0012	2.94	0.29	0.048	1.04	0.63		2.25	0.012
V1M2/G32-038U	04/22/95	11:00:00			-0.01		9.59	6.84	0.0024	2.95	0.29	0.050	1.13	0.67		2.28	0.031
V1M2/G32-040P2	04/22/95	14:00:00					10.27	7.08	0.000	3.02	0.29	0.112	1.00	2.22	-0.01	2.18	0.012
V1M2/G32-041C2	04/22/95	14:00:00					9.55	7.61	-0.01	2.96	0.28	0.042	1.00	0.68		2.28	0.0092
V1M2/G32-042U2	04/22/95	14:00:00			-0.01		9.63	7.31	0.0012	2.98	0.31	0.046	1.03	0.68		2.30	0.012
V1M2/G34-015P	04/22/95	5:00:00					9.77	6.58	0.000	2.75	0.28	0.079	0.94	1.24	-0.01	2.01	0.012
V1M2/G34-016U	04/22/95	5:00:00			-0.01		9.72	7.12	0.0012	2.92	0.31	0.040	1.02	0.61		2.24	-0.012
V1M3/G32-059P1	04/22/95	20:35:00					9.75	6.69	0.004	3.05	0.25	0.133	0.96	1.83	-0.01	2.03	0.015
V1M3/G32-060U1	04/22/95	20:35:00			-0.01		9.69	7.28	0.0017	2.97	0.27	0.060	1.04	0.79		2.25	0.012
V1M3/G32-061C	04/22/95	20:35:00					9.59	7.68	-0.01	2.92	0.25	0.054	0.98	0.81		2.22	0.0092
V1M3/G32-075P2	04/22/95	22:40:00					10.14	7.03	0.005	3.24	0.27	0.132	1.05	1.67	0.01	2.11	0.021
V1M3/G32-076U2	04/22/95	22:40:00			0.02		9.72	7.41	0.0016	2.96	0.29	0.062	1.02	0.81		2.24	0.012
V1M3/G32-077C	04/22/95	22:40:00					9.50	7.68	-0.01	2.90	0.27	0.056	0.97	0.84		2.21	0.0096
V1M3/G34-071P	04/22/95	22:00:00					16.66	6.73	0.004	2.97	0.25	0.123	0.95	1.69	-0.01	2.05	0.015
V1M3/G34-072U	04/22/95	22:00:00			0.03		9.71	7.31	0.0015	2.97	0.27	0.058	1.02	0.79		2.24	0.012
V1M4/G32-088P1	04/23/95	10:15:00					10.28	7.12	0.005	3.26	0.30	0.165	1.16	1.97	0.03	2.07	0.031
V1M4/G32-090U1	04/23/95	10:15:00			0.05		9.74	7.49	0.0022	2.94	0.31	0.074	1.03	0.90		2.18	0.012
V1M4/G32-096P2	04/23/95	13:15:00					10.45	7.22	0.000	2.88	0.29	0.158	0.95	2.04	-0.01	2.07	0.012
V1M4/G32-098U2	04/23/95	13:15:00			-0.01		9.73	7.41	0.0022	2.94	0.29	0.076	1.00	0.90		2.19	0.012

Vectra Glass Data

Sample No.	MoO_3	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO_2	TiO_2	ZrO_2	TOC	TIC	Total C	Cl	F	I	NO_3	NO_2	Total N_2
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt %)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt %)
Target Values																		
Data Sources: V-P																		
V1FP1/I21-014P2	0.13	18.7	-0.02	0.50	0.32	43.9	0.11	0.01	-0.01	0.188	2.59	2.70	0.21	0.04		-0.02	-0.02	
V1FP1/I21-015U	0.10	13.2	0.001	0.18	0.15	58.0	0.074	0.020	0.025	0.045	3.05	3.095	0.21	0.15	0.0797	-0.001	-0.001	
V1FP1/I21-016U	0.11	13.4	0.005	0.17	0.15	57.9	0.073	0.020	0.028	0.02	2.93	2.94	0.27	0.14	0.0866	-0.001	-0.001	
V1FP1/I21-017P1	0.15	25.8	-0.02	1.19	0.48	25.1	0.15	0.01	0.03	0.135	3.06	2.89	0.20	0.06		-0.02	-0.02	
V1M2/F35-108PA	0.08	10.1	0.01	0.23	0.14	4.90	0.05	0.00	0.00									
V1M2/G32-011P1	0.21	15.4	0.04	-0.16	-0.17	55.1	0.05	0.01	0.06			0.0089			0.010			
V1M2/G32-012U1	0.23	15.5	0.021	0.15	-0.12	58.9	0.051	0.030	0.041	-0.05	-0.01	-0.05	0.05	0.12	0.0085			
V1M2/G32-013C1	0.23	16.2	0.019	0.090	0.006	58.8	0.05	0.02	0.05			0.0025	0.05	0.13	-0.01			
V1M2/G32-025U	0.20	15.5	0.023	0.16	-0.12	58.5	0.055	0.030	0.039	-0.05	-0.01	-0.05	0.07	0.14	0.0118			
V1M2/G32-038U	0.19	15.1	0.037	0.16	-0.12	58.5	0.055	0.035	0.040	-0.05	-0.01	-0.05	0.07	0.14	0.0131			
V1M2/G32-040P2	0.18	15.3	0.04	-0.17	-0.18	56.5	0.06	0.01	0.04			0.0057			0.015			
V1M2/G32-041C2	0.19	15.4	0.013	0.092	0.029	58.3	0.06	0.02	0.05			0.0025	0.07	0.15	0.01			
V1M2/G32-042U2	0.20	15.0	0.020	0.16	-0.12	58.7	0.059	0.025	0.041	-0.05	-0.01	-0.05	0.07	0.14	0.0118			
V1M2/G34-015P	0.19	14.8	0.04	-0.16	-0.17	52.0	0.05	0.02	0.04			0.0063			0.010			
V1M2/G34-016U	0.21	15.7	0.020	0.16	-0.12	58.2	0.053	0.030	0.041	-0.05	-0.01	-0.05	0.06	0.13	0.0115			
V1M3/G32-059P1	0.14	14.7	0.04	-0.17	-0.19	52.0	0.07	0.01	0.04			0.0208			0.020			
V1M3/G32-060U1	0.17	15.7	0.017	0.18	-0.12	58.0	0.070	0.030	0.039	-0.05	-0.01	-0.05	0.12	0.16	0.0176			
V1M3/G32-061C	0.16	16.3	0.010	0.135	0.061	57.1	0.07	0.02	0.04			0.0030	0.09	0.16	0.01			
V1M3/G32-075P2	0.15	11.7	0.04	-0.15	-0.16	54.5	0.07	0.02	0.03			0.0033			0.020			
V1M3/G32-076U2	0.17	15.8	0.013	0.19	-0.12	57.8	0.070	0.030	0.038	-0.05	-0.01	-0.05	0.11	0.16	0.0202			
V1M3/G32-077C	0.15	16.4	0.014	0.130	0.048	56.9	0.07	0.02	0.04			0.0040	0.09	0.16	0.01			
V1M3/G34-071P	0.14	14.6	0.03	-0.16	-0.17	52.2	0.06	0.03	0.04			0.0028						
V1M3/G34-072U	0.17	15.7	0.014	0.18	-0.12	58.0	0.067	0.030	0.038	-0.05	-0.01	-0.05	0.10	0.15	0.0197			
V1M4/G32-088P1	0.12	16.3	0.04	-0.15	-0.16	54.0	0.09	0.02	0.04			0.0061			0.024			
V1M4/G32-090U1	0.14	16.2	0.012	0.19	-0.12	57.1	0.076	0.030	0.037	-0.05	-0.01	-0.05	0.14	0.17	0.0189			
V1M4/G32-096P2	0.12	15.9	0.03	-0.15	-0.17	53.8	0.08	0.01	0.04			0.0081			0.027			
V1M4/G32-098U2	0.13	16.1	0.012	0.19	-0.12	57.2	0.078	0.020	0.037	-0.05	-0.01	-0.05	0.15	0.16	0.0255			

Vectra Glass Data

Sample No.	PO_4^{3-}	SO_4^{2-}	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)			(vol%)	I.D.	Enriched / Depleted	pH	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)
Target Values			0.00		Petrographic	Petrographic	SEM / EDX					
Data Sources: [V-P												
V1FP1/I21-014P2	0.05	0.23	82.49									
V1FP1/I21-015U			91.41									
V1FP1/I21-016U			91.70									
V1FP1/I21-017P1	0.05	0.19	75.69									
V1M2/F35-108PA			71.89									
V1M2/G32-011P1			94.67									
V1M2/G32-012U1			98.36									
V1M2/G32-013C1			99.42					10.50	0.0133	0.0192	0.0136	0.0093
V1M2/G32-025U			96.84									
V1M2/G32-038U			97.93									
V1M2/G32-040P2			98.32									
V1M2/G32-041C2			98.71					10.40	0.0125	0.0197	0.0124	0.0106
V1M2/G32-042U2			98.47		~0%	none observed	N.A.	10.03	0.0109	0.0151	0.0252	-0.0105
V1M2/G34-015P			90.79									
V1M2/G34-016U			98.29									
V1M3/G32-059P1			91.77									
V1M3/G32-060U1			98.56									
V1M3/G32-061C			98.60					10.50	0.0133	0.0218	0.0142	0.0130
V1M3/G32-075P2			92.25									
V1M3/G32-076U2			98.67		<<1%	High Mo w/ Ni by EDXRF	many well dispersed cords	10.11	0.0115	0.0174	0.0298	0.0105
V1M3/G32-077C			98.36					10.50	0.0133	0.0220	0.0142	0.0142
V1M3/G34-071P			98.51									
V1M3/G34-072U			98.66									
V1M4/G32-088P1			97.07									
V1M4/G32-090U1			98.55					10.28	0.0127	0.0199	0.0326	0.0126
V1M4/G32-096P2			96.08									
V1M4/G32-098U2			98.43		~0%	none observed	N.A.	10.30	0.0117	0.0193	0.0307	0.0132

Vectra Glass Raw Data - Corning

Sample No.	Date	Time	Density	Settled Sol.	LOI 600°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor						1.00	1.00	1.00	1.000	1.00	1.00	1.00	1.00	1.00		1.00	1.00
V1M2/G32-013C1							9.49	7.26	-0.005	2.93	0.29	0.034	1.01	0.59		2.24	0.0093
V1M2/G32-013C1							9.44	7.32	-0.005	2.91	0.29	0.034	1.00	0.59		2.23	0.0090
V1M2/G32-013C1							9.39	7.26	-0.005	2.87	0.29	0.034	1.00	0.59		2.21	0.0099
V1M2/G32-013C1							9.44	7.29	-0.005	2.86	0.29	0.034	1.00	0.59		2.20	0.0090
Average	4/21/95	22:30:00					9.47	7.28	-0.005	2.90	0.29	0.034	1.01	0.59		2.22	0.0092
V1M2/G32-041C2							9.54	7.59	-0.005	2.98	0.28	0.041	1.01	0.67		2.29	0.0094
V1M2/G32-041C2							9.53	7.66	-0.005	2.99	0.28	0.041	1.01	0.68		2.29	0.0090
V1M2/G32-041C2							9.61	7.62	-0.005	2.99	0.28	0.042	1.00	0.68		2.29	0.0100
V1M2/G32-041C2							9.55	7.63	-0.005	2.93	0.28	0.042	0.99	0.68		2.26	0.0090
Average	4/22/95	14:00:00					9.55	7.61	-0.005	2.96	0.28	0.042	1.00	0.68		2.28	0.0092
V1M3/G32-061C							9.62	7.63	-0.005	2.91	0.25	0.054	0.98	0.81		2.21	0.0094
V1M3/G32-061C							9.56	7.67	-0.005	2.93	0.26	0.054	0.99	0.81		2.23	0.0080
V1M3/G32-061C							9.62	7.69	-0.005	2.94	0.25	0.053	0.98	0.81		2.24	0.0085
V1M3/G32-061C							9.55	7.72	-0.005	2.92	0.25	0.054	0.98	0.81		2.22	0.0090
Average	4/22/95	20:35:00					9.59	7.68	-0.005	2.92	0.25	0.054	0.98	0.81		2.22	0.0092
V1M3/G32-077C							9.52	7.63	-0.005	2.90	0.27	0.056	0.97	0.84		2.21	0.0102
V1M3/G32-077C							9.51	7.71	-0.005	2.92	0.26	0.056	0.97	0.84		2.22	0.0090
V1M3/G32-077C							9.53	7.67	-0.005	2.97	0.27	0.055	0.98	0.83		2.25	0.0094
V1M3/G32-077C							9.48	7.73	-0.005	2.90	0.26	0.056	0.97	0.83		2.21	0.0090
Average	4/22/95	22:40:00					9.50	7.68	-0.005	2.90	0.27	0.056	0.97	0.84		2.21	0.0096

Sample No.	Date	Time	Density	Settled Sol.	LOI 600°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values							12.00	9.00	0.000	0.00	0.00	0.00	0.00	1.46	0.00	0.00	0.00
V1M2/G32-013C1	04/21/95	22:30:00					9.47	7.28	-0.01	2.90	0.29	0.034	1.01	0.59		2.22	0.0092
V1M2/G32-041C2	04/22/95	14:00:00					9.55	7.61	-0.01	2.96	0.28	0.042	1.00	0.68		2.28	0.0092
V1M3/G32-061C	04/22/95	20:35:00					9.59	7.68	-0.01	2.92	0.25	0.054	0.98	0.81		2.22	0.0092
V1M3/G32-077C	04/22/95	22:40:00					9.50	7.68	-0.01	2.90	0.27	0.056	0.97	0.84		2.21	0.0096

Vectra Glass Raw Data - Corning

Sample No.	MoO_3	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl	F	I	NO_3	NO_2	Total N_2
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(ug/ml)	(ug/ml)	(wt %)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00	
V1M2/G32-013C1	0.23	16.2	0.020	0.100	0.006	59.4	0.049	0.017	0.049			0.002	0.05	0.12	-0.010			
V1M2/G32-013C1	0.22	16.2	0.017	0.093	0.008	58.9	0.049	0.014	0.049			0.002		0.12	-0.010			
V1M2/G32-013C1	0.22	16.2	0.022	0.084	0.007	58.4	0.048	0.017	0.046			0.002	0.05	0.13	-0.010			
V1M2/G32-013C1	0.22	16.2	0.018	0.080	0.006	58.2	0.048	0.018	0.048			0.003		0.13	-0.010			
Average	0.23	16.2	0.019	0.090	0.006	58.8	0.049	0.018	0.049			0.003	0.05	0.13	-0.010			
V1M2/G32-041C2	0.19	15.4	0.014	0.092	0.028	58.7	0.057	0.017	0.047			0.003	0.07	0.15	0.010			
V1M2/G32-041C2	0.19	15.4	0.013	0.096	0.028	58.6	0.057	0.015	0.045			0.002		0.15	0.012			
V1M2/G32-041C2	0.19	15.4	0.017	0.120	0.024	58.7	0.057	0.017	0.045			0.003	0.07	0.14	0.012			
V1M2/G32-041C2	0.19	15.4	0.012	0.092	0.030	57.8	0.056	0.014	0.044			0.002		0.14	0.012			
Average	0.19	15.4	0.013	0.092	0.029	58.3	0.057	0.016	0.046			0.003	0.07	0.15	0.011			
V1M3/G32-061C	0.16	16.2	0.010	0.170	0.057	57.0	0.065	0.018	0.038			0.003	0.09	0.16	0.015			
V1M3/G32-061C	0.16	16.2	0.015	0.120	0.053	57.4	0.066	0.013	0.039			0.003		0.16	0.015			
V1M3/G32-061C	0.16	16.2	0.009	0.110	0.061	57.5	0.065	0.015	0.041			0.003	0.09	0.16	0.011			
V1M3/G32-061C	0.16	16.3	0.009	0.100	0.064	57.2	0.065	0.016	0.040			0.003		0.16	0.014			
Average	0.16	16.3	0.010	0.135	0.061	57.1	0.065	0.017	0.039			0.003	0.09	0.16	0.015			
V1M3/G32-077C	0.15	16.4	0.014	0.130	0.043	56.8	0.067	0.017	0.042			0.003	0.09	0.16	0.012			
V1M3/G32-077C	0.16	16.4	0.013	0.190	0.050	57.2	0.067	0.018	0.041			0.003		0.16	0.013			
V1M3/G32-077C	0.16	16.3	0.009	0.140	0.043	57.9	0.068	0.015	0.041			0.003	0.09	0.16	0.013			
V1M3/G32-077C	0.15	16.3	0.014	0.130	0.053	56.9	0.066	0.017	0.041			0.005		0.16	0.012			
Average	0.15	16.4	0.014	0.130	0.048	56.9	0.067	0.017	0.042			0.004	0.09	0.16	0.012			

Sample No.	MoO_3	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC	Total C	Cl	F	I	NO_3	NO_2	Total N_2
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt %)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values	0.00	20.00	0.00	0.00	0.00	55.91	0.00	0.00	0.00				0.00	0.00	0.00	0.00	0.00	
V1M2/G32-013C1	0.23	16.2	0.019	0.090	0.006	58.8	0.05	0.02	0.05			0.0025	0.05	0.13	-0.01			
V1M2/G32-041C2	0.19	15.4	0.013	0.092	0.029	58.3	0.06	0.02	0.05			0.0025	0.07	0.15	0.01			
V1M3/G32-061C	0.16	16.3	0.010	0.135	0.061	57.1	0.07	0.02	0.04			0.0030	0.09	0.16	0.01			
V1M3/G32-077C	0.15	16.4	0.014	0.130	0.048	56.9	0.07	0.02	0.04			0.0040	0.09	0.16	0.01			

Vectra Glass Raw Data - Corning

Sample No.	PO_4^{3-}	SO_4^{2-}	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ppm)	(ppm)	(ppm)	(ppm)
Conver. factor	1.00	1.00	1.00	1.00	Petrographic	Petrographic	SEM ; EDX	1.00	2.65E-04	3.05E-03	6.03E-04	1.18E-02
V1M2/G32-013C1								10.5	51	6.4	23	0.79
V1M2/G32-013C1									51	6.4	23	0.79
V1M2/G32-013C1								10.5	50	6.3	23	0.78
V1M2/G32-013C1									49	6.2	22	0.78
Average								10.5	50	6.3	23	0.79
V1M2/G32-041C2								10.4	47	6.4	20	0.89
V1M2/G32-041C2									47	6.4	20	0.89
V1M2/G32-041C2								10.4	47	6.4	20	0.90
V1M2/G32-041C2									47	6.5	21	0.90
Average								10.4	47	6.5	21	0.90
V1M3/G32-061C								10.5	49	7.0	23	1.1
V1M3/G32-061C									49	6.9	23	1.1
V1M3/G32-061C								10.5	51	7.3	24	1.1
V1M3/G32-061C									51	7.3	24	1.1
Average								10.5	50	7.2	24	1.1
V1M3/G32-077C								10.5	50	7.1	23	1.2
V1M3/G32-077C									50	7.2	24	1.2
V1M3/G32-077C								10.5	50	7.2	23	1.2
V1M3/G32-077C									50	7.3	24	1.2
Average								10.5	50	7.2	24	1.2

Sample No.	PO_4^{3-}	SO_4^{2-}	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)			(vol%)	I.D.	Enriched / Depleted	pH	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)
Target Values	0.00	0.00	98.37		Petrographic	Petrographic	SEM / EDX				0.102	
V1M2/G32-013C1			99.42					10.50	0.0133	0.0192	0.0136	0.0093
V1M2/G32-041C2			98.71					10.40	0.0125	0.0197	0.0124	0.0106
V1M3/G32-061C			98.60					10.50	0.0133	0.0218	0.0142	0.0130
V1M3/G32-077C			98.36					10.50	0.0133	0.0220	0.0142	0.0142

Vectra Glass Raw Data - PNL

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs	Fe_2O_3	K_2O	Li_2O	MgO	MnO
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(ppm)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor			1		1	1	1	1	1	1	1	2.12E-04	1	1	1	1	1.225
V1FP1/I21-017P1	03/10/95	12:00:00	1.43				6.74	0.77	0.003	6.12	0.06		0.86	0.79	0.01	4.05	0.013
V1FP1/I21-014P2	03/10/95	16:00:00	1.44				7.10	0.54	-0.003	3.95	0.04		0.79	0.50	-0.01	2.67	0.008
V1M2/G32-011P1	04/21/95	22:30:00					9.75	6.65	0.000	2.84	0.29	367	0.99	1.16	-0.01	2.03	0.010
V1M2/G32-040P2	04/22/95	14:00:00					10.27	7.08	0.000	3.02	0.29	527	1.00	2.22	-0.01	2.18	0.010
V1M3/G32-059P1	04/22/95	20:35:00					9.75	6.69	0.004	3.05	0.25	626	0.96	1.83	-0.01	2.03	0.012
V1M3/G32-075P2	04/22/95	22:40:00					10.14	7.03	0.005	3.24	0.27	621	1.05	1.67	0.01	2.11	0.017
V1M4/G32-088P1	04/23/95	10:15:00					10.28	7.12	0.005	3.26	0.30	779	1.16	1.97	0.03	2.07	0.025
V1M4/G32-096P2	04/23/95	13:15:00					10.45	7.22	0.000	2.88	0.29	746	0.95	2.04	-0.01	2.07	0.010
V1M2/G34-015P	04/22/95	5:00:00					9.77	6.58	0.000	2.75	0.28	371	0.94	1.24	-0.01	2.01	0.010
V1M3/G34-071P	04/22/95	22:00:00					16.66	6.73	0.004	2.97	0.25	578	0.95	1.69	-0.01	2.05	0.012
V1M2/F35-108P*					57.29	37.86	6.99	6.41	-0.002	1.86	0.02		0.73	-0.20	-0.01	1.31	0.005
V1M2/F35-108P**					56.69	39.71	6.85	6.12	0.000	1.58	0.02		0.69	1.31	-0.01	1.29	0.010
V1M2/F35-108P***					58.88	39.37	6.49	5.91	0.000	1.63	0.02		0.66	1.33	-0.01	1.25	0.010
Average (of 3 analyses)					57.62	38.98	6.78	6.15	-0.001	1.69	0.02		0.69	0.81	-0.01	1.28	0.008
V1M2/F35-010P	04/21/95	23:00:00	1.64		54.19	39.09	4.95	4.36	0.004	1.29	0.02		0.53	2.84	0.01	1.00	0.008

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values																	
V1FP1/I21-017P1	03/10/95	12:00:00	1.43				6.74	0.77	0.003	6.12	0.06		0.86	0.79	0.01	4.05	0.016
V1FP1/I21-014P2	03/10/95	16:00:00	1.44				7.10	0.54	-0.003	3.95	0.04		0.79	0.50	-0.01	2.67	0.010
V1M2/G32-011P1	04/21/95	22:30:00					9.75	6.65	0.000	2.84	0.29	0.078	0.99	1.16	-0.01	2.03	0.012
V1M2/G32-040P2	04/22/95	14:00:00					10.27	7.08	0.000	3.02	0.29	0.112	1.00	2.22	-0.01	2.18	0.012
V1M3/G32-059P1	04/22/95	20:35:00					9.75	6.69	0.004	3.05	0.25	0.133	0.96	1.83	-0.01	2.03	0.015
V1M3/G32-075P2	04/22/95	22:40:00					10.14	7.03	0.005	3.24	0.27	0.132	1.05	1.67	0.01	2.11	0.021
V1M4/G32-088P1	04/23/95	10:15:00					10.28	7.12	0.005	3.26	0.30	0.165	1.16	1.97	0.03	2.07	0.031
V1M4/G32-096P2	04/23/95	13:15:00					10.45	7.22	0.000	2.88	0.29	0.158	0.95	2.04	-0.01	2.07	0.012
V1M2/G34-015P	04/22/95	5:00:00					9.77	6.58	0.000	2.75	0.28	0.079	0.94	1.24	-0.01	2.01	0.012
V1M3/G34-071P	04/22/95	22:00:00					16.66	6.73	0.004	2.97	0.25	0.123	0.95	1.69	-0.01	2.05	0.015
V1M2/F35-108PA					57.62	38.98	6.78	6.15	-0.001	1.69	0.02		0.69	0.81	-0.01	1.28	0.010

Vectra Glass Raw Data - PNL

Sample No.	MoO_3 (wt%)	Na_2O (wt%)	NiO (wt%)	P_2O_5 (wt%)	SO_3 (wt%)	SiO_2 (wt%)	SrO (wt%)	TiO_2 (wt%)	ZrO_2 (wt%)	TOC (wt%)	TIC (wt%)	Total C (wt%)	Cl^- (ug/g)	F^- (ug/g)	I^- (ppm)	NO_3^- (ug/g)	NO_2^- (ug/g)	Total N_2 (wt%)
Conver. factor	1	1	1	1	1	1	1	1	1	1	1	1	1.00E-04	1.00E-04	1.00E-04	1.00E-04	1.00E-04	
V1FP1/I21-017P1	0.15	25.8	-0.02	1.19	0.48	25.1	0.15	0.01	0.03	0.14	3.06	2.89	2039	553		-218	-218	
V1FP1/I21-014P2	0.13	18.7	-0.02	0.50	0.32	43.9	0.11	0.01	-0.01	0.19	2.59	2.70	2117	392		-217	-217	
V1M2/G32-011P1	0.21	15.4	0.04	-0.16	-0.17	55.1	0.05	0.01	0.06			0.009			97			
V1M2/G32-040P2	0.18	15.3	0.04	-0.17	-0.18	56.5	0.06	0.01	0.04			0.006			150			
V1M3/G32-059P1	0.14	14.7	0.04	-0.17	-0.19	52.0	0.07	0.01	0.04			0.021			196			
V1M3/G32-075P2	0.15	11.7	0.04	-0.15	-0.16	54.5	0.07	0.02	0.03			0.003			200			
V1M4/G32-088P1	0.12	16.3	0.04	-0.15	-0.16	54.0	0.09	0.02	0.04			0.006			243			
V1M4/G32-096P2	0.12	15.9	0.03	-0.15	-0.17	53.8	0.08	0.01	0.04			0.008			273			
V1M2/G34-015P	0.19	14.8	0.04	-0.16	-0.17	52.0	0.05	0.02	0.04			0.006			99			
V1M3/G34-071P	0.14	14.6	0.03	-0.16	-0.17	52.2	0.06	0.03	0.04			0.003						
V1M2/F35-108P*	0.08	10.2	-0.01	0.30	0.11	5.28	0.06	0.00	-0.01									
V1M2/F35-108P**	0.08	10.1	0.02	0.27	0.17	4.73	0.05	0.01	-0.01									
V1M2/F35-108P***	0.07	9.86	0.02	0.13	0.14	4.70	0.05	0.00	0.01									
Average (of 3 analyses	0.08	10.05	0.01	0.23	0.14	4.90	0.05	0.00	0.00									
V1M2/F35-010P	0.06	7.45	0.05	0.16	0.17	20.26	0.04	0.02	0.01				1.34E+03	1.05E+03		5.36E+04	1.99E+04	

Sample No.	MoO_3 (wt%)	Na_2O (wt%)	NiO (wt%)	P_2O_5 (wt%)	SO_3 (wt%)	SiO_2 (wt%)	SrO (wt%)	TiO_2 (wt%)	ZrO_2 (wt%)	TOC (wt%)	TIC (wt%)	Total C (wt%)	Cl^- (wt%)	F^- (wt%)	I^- (wt%)	NO_3^- (wt%)	NO_2^- (wt%)	Total N_2 (wt%)
Target Values																		
V1FP1/I21-017P1	0.15	25.8	-0.02	1.19	0.48	25.1	0.15	0.01	0.03	0.135	3.06	2.89	0.20	0.06		-0.02	-0.02	
V1FP1/I21-014P2	0.13	18.7	-0.02	0.50	0.32	43.9	0.11	0.01	-0.01	0.188	2.59	2.70	0.21	0.04		-0.02	-0.02	
V1M2/G32-011P1	0.21	15.4	0.04	-0.16	-0.17	55.1	0.05	0.01	0.06			0.0089			0.010			
V1M2/G32-040P2	0.18	15.3	0.04	-0.17	-0.18	56.5	0.06	0.01	0.04			0.0057			0.015			
V1M3/G32-059P1	0.14	14.7	0.04	-0.17	-0.19	52.0	0.07	0.01	0.04			0.0208			0.020			
V1M3/G32-075P2	0.15	11.7	0.04	-0.15	-0.16	54.5	0.07	0.02	0.03			0.0033			0.020			
V1M4/G32-088P1	0.12	16.3	0.04	-0.15	-0.16	54.0	0.09	0.02	0.04			0.0061			0.024			
V1M4/G32-096P2	0.12	15.9	0.03	-0.15	-0.17	53.8	0.08	0.01	0.04			0.0081			0.027			
V1M2/G34-015P	0.19	14.8	0.04	-0.16	-0.17	52.0	0.05	0.02	0.04			0.0063			0.010			
V1M3/G34-071P	0.14	14.6	0.03	-0.16	-0.17	52.2	0.06	0.03	0.04			0.0028						
V1M2/F35-108PA	0.08	10.1	0.01	0.23	0.14	4.90	0.05	0.00	0.00									

Vectra Glass Raw Data - PNL

Sample No.	PO_4^{3-}	SO_4^{2-}	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(ug/g)	(ug/g)	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)
Conver. factor	1.00E-04	1.00E-04	1	1	Petrographic	Petrographic	SEM ; EDX	1	3.78E-04	3.87E-03	5.58E-04	3.12E-03
V1FP1/I21-017P1	531	1890										
V1FP1/I21-014P2	466	2349										
V1M2/G32-011P1												
V1M2/G32-040P2												
V1M3/G32-059P1												
V1M3/G32-075P2												
V1M4/G32-088P1												
V1M4/G32-096P2												
V1M2/G34-015P												
V1M3/G34-071P												
V1M2/F35-108P*												
V1M2/F35-108P**												
V1M2/F35-108P***												
Average (of 3 analyses												
V1M2/F35-010P		1.19E+03										

Sample No.	PO_4^{3-}	SO_4^{2-}	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)
Target Values					Petrographic	Petrographic	SEM / EDX				0.102	
V1FP1/I21-017P1	0.05	0.19	75.69									
V1FP1/I21-014P2	0.05	0.23	82.49									
V1M2/G32-011P1			94.67									
V1M2/G32-040P2			98.32									
V1M3/G32-059P1			91.77									
V1M3/G32-075P2			92.25									
V1M4/G32-088P1			97.07									
V1M4/G32-096P2			96.08									
V1M2/G34-015P			90.79									
V1M3/G34-071P			98.51									
V1M2/F35-108PA			71.89									

Vectra Glass Raw Data - USGS

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B	Ba	CaO	Cr	Cs	Fe_2O_3	K_2O	Li	MgO	MnO
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(ppm)	(ppm)	(wt%)	(ppm)	(ppm)	(wt%)	(wt%)	(ppm)	(wt%)	(wt%)
Conver. factor					1	1	1	3.22E-04	1.12E-04	1	1.46E-04	1.06E-04	1	1	2.15E-04	1	1.225
V1M2/G32-012U1					-0.01		9.55	21100	13.0	2.89	2100	335	1.05	0.57		2.21	0.01
V1M2/G32-012U1					-0.01		9.55	21600	12.0	2.89	2100	340	1.02	0.57		2.22	0.01
Average	04/21/95	22:30:00			-0.01		9.55	21350	12.5	2.89	2100	338	1.04	0.57		2.22	0.01
V1M2/G34-016U					-0.01		9.73	22100	11.0	2.92	2100	378	1.02	0.61		2.23	-0.01
V1M2/G34-016U					-0.01		9.71	22100	11.0	2.92	2100	381	1.02	0.61		2.24	-0.01
Average	04/22/95	5:00:00			-0.01		9.72	22100	11.0	2.92	2100	380	1.02	0.61		2.24	-0.01
V1M2/G32-042U2					-0.01		9.63	22800	11.0	2.97	2100	439	1.02	0.68		2.31	0.01
V1M2/G32-042U2					-0.01		9.62	22600	11.0	2.99	2100	430	1.04	0.67		2.28	0.01
Average	04/22/95	14:00:00			-0.01		9.63	22700	11.0	2.98	2100	435	1.03	0.68		2.30	0.01
V1M3/G34-072U					0.03		9.71	22400	14.0	2.97	1800	545	1.03	0.79		2.22	0.01
V1M3/G34-072U					0.03		9.70	23000	13.0	2.96	1900	558	1.00	0.79		2.26	-0.01
Average	04/22/95	22:00:00			0.03		9.71	22700	13.5	2.97	1850	552	1.02	0.79		2.24	0.01
V1M3/G32-076U2					-0.01		9.71	22900	15.0	2.96	2000	582	1.00	0.81		2.24	0.01
V1M3/G32-076U2					0.05		9.72	23100	14.0	2.95	2000	586	1.03	0.81		2.24	0.01
Average	04/22/95	22:40:00			0.02		9.72	23000	14.5	2.96	2000	584	1.02	0.81		2.24	0.01
V1M4/G32-090U1					0.05		9.72	23400	20.0	2.94	2200	708	1.05	0.90		2.18	0.01
V1M4/G32-090U1					0.05		9.76	23100	20.0	2.93	2100	694	1.01	0.90		2.17	0.01
Average	04/23/95	10:15:00			0.05		9.74	23250	20.0	2.94	2150	701	1.03	0.90		2.18	0.01
V1M4/G32-098U2					-0.01		9.75	22900	20.0	2.93	2000	709	0.99	0.90		2.18	0.01
V1M4/G32-098U2					-0.01		9.70	23100	20.0	2.95	2000	719	1.01	0.90		2.20	0.01
Average	04/23/95	13:15:00			-0.01		9.73	23000	20.0	2.94	2000	714	1.00	0.90		2.19	0.01
V1M3/G32-060U1					-0.01		9.68	22600	15.0	2.96	1900	567	1.02	0.79		2.25	0.01
V1M3/G32-060U1					-0.01		9.70	22600	16.0	2.97	1800	557	1.05	0.79		2.24	0.01
Average	04/22/95	20:35:00			-0.01		9.69	22600	15.5	2.97	1850	562	1.04	0.79		2.25	0.01
V1M2/G32-038U					-0.01		9.55	21200	30.0	2.94	2000	469	1.23	0.68		2.26	0.04
V1M2/G32-038U					-0.01		9.62	21300	13.0	2.95	2000	480	1.03	0.65		2.30	0.01
Average	04/22/95	11:00:00			-0.01		9.59	21250	21.5	2.95	2000	475	1.13	0.67		2.28	0.03
V1M2/G32-025U					-0.01		6.69	21500	10.0	2.94	2000	455	1.04	0.63		2.25	0.01
V1M2/G32-025U					0.01		9.68	21700	11.0	2.93	2000	458	1.04	0.63		2.24	0.01
Average	04/22/95	8:00:00			0.01		8.19	21600	10.5	2.94	2000	457	1.04	0.63		2.25	0.01
V1FP1/I21-015U					11.8		8.48	1300	8.0	3.16	210	750	0.65	0.93		2.44	-0.01
V1FP1/I21-015U					11.8		8.51	1300	8.0	3.16	210	763	0.65	0.94		2.41	-0.01
Average	03/10/95	16:00:00			11.8		8.50	1300	8.0	3.16	210	757	0.65	0.94		2.43	-0.01
V1FP1/I21-016U					11.2		9.08	1300	9.0	3.01	250	806	0.65	0.97		2.32	-0.01
V1FP1/I21-016U					11.2		8.94	1300	9.0	3.01	230	806	0.66	0.97		2.30	-0.01
Average	03/10/95	12:00:00			11.2		9.01	1300	9.0	3.01	240	806	0.66	0.97		2.31	-0.01

Vectra Glass Raw Data - USGS

Sample No.	Mo	Na_2O	Ni	P_2O_5	S	SiO_2	Sr	TiO_2	Zr	TOC	TIC (CO_2)	Total C	Cl^-	F^-	I^-	NO_3^-	NO_2^-	Total N_2
	(ppm)	(wt%)	(ppm)	(wt%)	(wt%)	(wt%)	(ppm)	(wt%)	(ppm)	(wt %)	(wt %)	(wt %)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor	1.50E-04	1	1.27E-04	1	2.497	1	1.18E-04	1	1.35E-04	1	1	1	1	1	1	1	1	1
V1M2/G32-012U1	1500	15.5	160	0.15	-0.05	58.9	430	0.03	300	-0.05	-0.01	-0.05	0.05	0.11				
V1M2/G32-012U1	1500	15.5	170	0.15	-0.05	58.8	430	0.03	310	-0.05	-0.01	-0.05	0.04	0.13				
Average	1500	15.5	165	0.15	-0.05	58.9	430	0.03	305	-0.05	-0.01	-0.05	0.05	0.12	0.0085			
V1M2/G34-016U	1400	15.7	160	0.16	-0.05	58.2	450	0.03	300	-0.05	-0.01	-0.05	0.06	0.12				
V1M2/G34-016U	1400	15.6	160	0.16	-0.05	58.1	450	0.03	300	-0.05	-0.01	-0.05	0.05	0.13				
Average	1400	15.7	160	0.16	-0.05	58.2	450	0.03	300	-0.05	-0.01	-0.05	0.06	0.13	0.0115			
V1M2/G32-042U2	1300	14.9	130	0.16	-0.05	58.7	500	0.03	300	-0.05	-0.01	-0.05	0.07	0.14				
V1M2/G32-042U2	1300	15.0	180	0.16	-0.05	58.7	500	0.02	300	-0.05	-0.01	-0.05	0.07	0.13				
Average	1300	15.0	155	0.16	-0.05	58.7	500	0.03	300	-0.05	-0.01	-0.05	0.07	0.14	0.0118			
V1M3/G34-072U	1100	15.7	110	0.18	-0.05	58.0	560	0.03	280	-0.05	-0.01	-0.05	0.10	0.15				
V1M3/G34-072U	1100	15.7	110	0.18	-0.05	58.0	580	0.03	290	-0.05	-0.01	-0.05	0.10	0.15				
Average	1100	15.7	110	0.18	-0.05	58.0	570	0.03	285	-0.05	-0.01	-0.05	0.10	0.15	0.0197			
V1M3/G32-076U2	1100	15.8	100	0.19	-0.05	57.7	590	0.03	280	-0.05	-0.01	-0.05	0.11	0.15				
V1M3/G32-076U2	1100	15.8	100	0.18	-0.05	57.8	590	0.03	290	-0.05	-0.01	-0.05	0.11	0.17				
Average	1100	15.8	100	0.19	-0.05	57.8	590	0.03	285	-0.05	-0.01	-0.05	0.11	0.16	0.0202			
V1M4/G32-090U1	910	16.2	93	0.18	-0.05	57.0	650	0.03	280	-0.05	-0.01	-0.05	0.14	0.17				
V1M4/G32-090U1	900	16.2	95	0.19	-0.05	57.1	640	0.03	270	-0.05	-0.01	-0.05	0.14	0.17				
Average	905	16.2	94	0.19	-0.05	57.1	645	0.03	275	-0.05	-0.01	-0.05	0.14	0.17	0.0189			
V1M4/G32-098U2	890	16.1	91	0.19	-0.05	57.1	660	0.02	270	-0.05	-0.01	-0.05	0.15	0.16				
V1M4/G32-098U2	900	16.1	94	0.19	-0.05	57.2	670	0.02	280	-0.05	-0.01	-0.05	0.15	0.16				
Average	895	16.1	93	0.19	-0.05	57.2	665	0.02	275	-0.05	-0.01	-0.05	0.15	0.16	0.0255			
V1M3/G32-060U1	1100	15.6	140	0.18	-0.05	57.9	590	0.03	290	-0.05	-0.01	-0.05	0.12	0.15				
V1M3/G32-060U1	1100	15.7	120	0.18	-0.05	58.0	590	0.03	290	-0.05	-0.01	-0.05	0.12	0.16				
Average	1100	15.7	130	0.18	-0.05	58.0	590	0.03	290	-0.05	-0.01	-0.05	0.12	0.16	0.0176			
V1M2/G32-038U	1200	15.1	370	0.16	-0.05	58.4	460	0.04	300	-0.05	-0.01	-0.05	0.07	0.13				
V1M2/G32-038U	1300	15.1	220	0.16	-0.05	58.5	470	0.03	290	-0.05	-0.01	-0.05	0.07	0.14				
Average	1250	15.1	295	0.16	-0.05	58.5	465	0.04	295	-0.05	-0.01	-0.05	0.07	0.14	0.0131			
V1M2/G32-025U	1400	15.5	180	0.16	-0.05	58.5	460	0.03	290	-0.05	-0.01	-0.05	0.07	0.14				
V1M2/G32-025U	1300	15.4	180	0.15	-0.05	58.5	470	0.03	290	-0.05	-0.01	-0.05	0.07	0.13				
Average	1350	15.5	180	0.16	-0.05	58.5	465	0.03	290	-0.05	-0.01	-0.05	0.07	0.14	0.0118			
V1FP1/I21-015U	660	13.2	15	0.17	0.06	58.0	620	0.02	160	0.02	3.08	3.10	0.24	0.14		-0.001	-0.001	-0.01
V1FP1/I21-015U	670	13.2	-8.0	0.19	0.06	57.9	630	0.02	210	0.07	3.02	3.09	0.18	0.15		-0.001	-0.001	-0.01
Average	665	13.2	11.5	0.18	0.06	58.0	625	0.02	185	0.045	3.05	3.10	0.21	0.15	0.0797	-0.001	-0.001	-0.01
V1FP1/I21-016U	700	13.3	44	0.16	0.06	57.9	620	0.02	220	-0.01	2.94	2.93	0.26	0.13		-0.001	-0.001	-0.01
V1FP1/I21-016U	700	13.4	29	0.17	0.06	57.9	620	0.02	190	0.03	2.92	2.95	0.27	0.14		-0.001	-0.001	-0.01
Average	700	13.4	36.5	0.17	0.06	57.9	620	0.02	205	0.02	2.93	2.94	0.27	0.14	0.0866	-0.001	-0.001	-0.01

Vectra Glass Raw Data - USGS

Sample No.	PO_4^{3-}	SO_4^{2-}	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ppm)	(ppm)	(ppm)	(ppm)
Conver. factor				1	Petrographic	Petrographic	SEM ; EDX	1	2.66E-04	3.12E-03	6.14E-04	1.05E-02
V1M2/G32-012U1			0.92									
V1M2/G32-012U1			0.90									
Average			0.91									
V1M2/G34-016U			0.94									
V1M2/G34-016U			0.92									
Average			0.93									
V1M2/G32-042U2			1.00					9.99	40	4.69	41	-1.0
V1M2/G32-042U2			1.03					10.07	42	4.98	41	-1.0
Average			1.02		~0%	none observed	N.A.	10.03	41	4.84	41	-1.0
V1M3/G34-072U			1.02									
V1M3/G34-072U			1.03									
Average			1.03									
V1M3/G32-076U2			1.06					10.14	44	5.62	49	1.0
V1M3/G32-076U2			1.05					10.08	42	5.53	48	1.0
Average			1.06		<<1%	High Mo w/ Ni by EDXRF	many well dispersed cords	10.11	43	5.58	49	1.0
V1M4/G32-090U1			1.07					10.28	46	6.18	52	1.2
V1M4/G32-090U1			1.09					10.33	49	6.54	54	1.2
Average			1.08					10.31	48	6.36	53	1.2
V1M4/G32-098U2			1.13					10.29	45	6.31	51	1.3
V1M4/G32-098U2			1.09					10.31	43	6.02	49	1.2
Average			1.11		~0%	none observed	N.A.	10.30	44	6.17	50	1.3
V1M3/G32-060U1			1.07									
V1M3/G32-060U1			1.10									
Average			1.09									
V1M2/G32-038U												
V1M2/G32-038U												
Average												
V1M2/G32-025U												
V1M2/G32-025U												
Average												
V1FP1/I21-015U												
V1FP1/I21-015U												
Average												
V1FP1/I21-016U												
V1FP1/I21-016U												
Average												

Vectra Glass Raw Data - USGS

Sample No.	Date	Time	Density	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values																	
V1M2/G32-012U1	04/21/95	22:30:00			-0.01		9.55	6.87	0.0014	2.89	0.31	0.036	1.04	0.57		2.22	0.012
V1M2/G34-016U	04/22/95	5:00:00			-0.01		9.72	7.12	0.0012	2.92	0.31	0.040	1.02	0.61		2.24	-0.012
V1M2/G32-042U2	04/22/95	14:00:00			-0.01		9.63	7.31	0.0012	2.98	0.31	0.046	1.03	0.68		2.30	0.012
V1M3/G34-072U	04/22/95	22:00:00			0.03		9.71	7.31	0.0015	2.97	0.27	0.058	1.02	0.79		2.24	0.012
V1M3/G32-076U2	04/22/95	22:40:00			0.02		9.72	7.41	0.0016	2.96	0.29	0.062	1.02	0.81		2.24	0.012
V1M4/G32-090U1	04/23/95	10:15:00			0.05		9.74	7.49	0.0022	2.94	0.31	0.074	1.03	0.90		2.18	0.012
V1M4/G32-098U2	04/23/95	13:15:00			-0.01		9.73	7.41	0.0022	2.94	0.29	0.076	1.00	0.90		2.19	0.012
V1M3/G32-060U1	04/22/95	20:35:00			-0.01		9.69	7.28	0.0017	2.97	0.27	0.060	1.04	0.79		2.25	0.012
V1M2/G32-038U	04/22/95	11:00:00			-0.01		9.59	6.84	0.0024	2.95	0.29	0.050	1.13	0.67		2.28	0.031
V1M2/G32-025U	04/22/95	8:00:00			0.01		8.19	6.96	0.0012	2.94	0.29	0.048	1.04	0.63		2.25	0.012
V1FP1/I21-015U	03/10/95	16:00:00			11.8		8.50	0.42	0.0009	3.16	0.03	0.080	0.65	0.94		2.43	-0.012
V1FP1/I21-016U	03/10/95	12:00:00			11.2		9.01	0.42	0.0010	3.01	0.04	0.085	0.66	0.97		2.31	-0.012

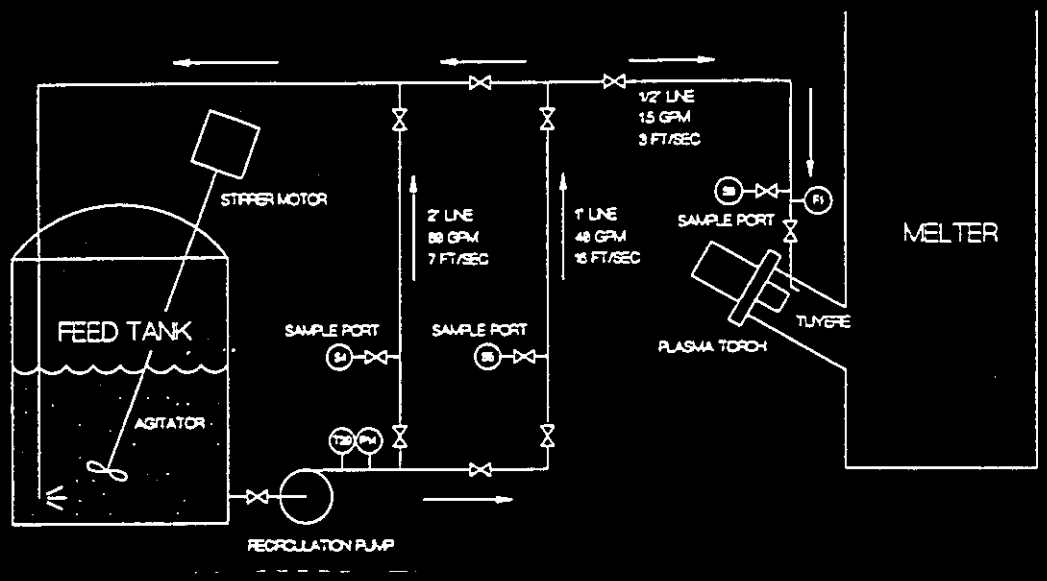
Vectra Glass Raw Data - USGS

Sample No.	MoO_3	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC (CO_3)	Total C	Cl^-	F^-	I^-	NO_3^-	NO_2^-	Total N_2
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt %)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values																		
V1M2/G32-012U1	0.23	15.5	0.021	0.15	-0.12	58.9	0.051	0.030	0.041	-0.05	-0.01	-0.05	0.05	0.12	0.0085			
V1M2/G34-016U	0.21	15.7	0.020	0.16	-0.12	58.2	0.053	0.030	0.041	-0.05	-0.01	-0.05	0.06	0.13	0.0115			
V1M2/G32-042U2	0.20	15.0	0.020	0.16	-0.12	58.7	0.059	0.025	0.041	-0.05	-0.01	-0.05	0.07	0.14	0.0118			
V1M3/G34-072U	0.17	15.7	0.014	0.18	-0.12	58.0	0.067	0.030	0.038	-0.05	-0.01	-0.05	0.10	0.15	0.0197			
V1M3/G32-076U2	0.17	15.8	0.013	0.19	-0.12	57.8	0.070	0.030	0.038	-0.05	-0.01	-0.05	0.11	0.16	0.0202			
V1M4/G32-090U1	0.14	16.2	0.012	0.19	-0.12	57.1	0.076	0.030	0.037	-0.05	-0.01	-0.05	0.14	0.17	0.0189			
V1M4/G32-098U2	0.13	16.1	0.012	0.19	-0.12	57.2	0.078	0.020	0.037	-0.05	-0.01	-0.05	0.15	0.16	0.0255			
V1M3/G32-060U1	0.17	15.7	0.017	0.18	-0.12	58.0	0.070	0.030	0.039	-0.05	-0.01	-0.05	0.12	0.16	0.0176			
V1M2/G32-038U	0.19	15.1	0.037	0.16	-0.12	58.5	0.055	0.035	0.040	-0.05	-0.01	-0.05	0.07	0.14	0.0131			
V1M2/G32-025U	0.20	15.5	0.023	0.16	-0.12	58.5	0.055	0.030	0.039	-0.05	-0.01	-0.05	0.07	0.14	0.0118			
V1FP1/I21-015U	0.10	13.2	0.001	0.18	0.15	58.0	0.074	0.020	0.025	0.045	3.05	3.095	0.21	0.15	0.0797	-0.001	-0.001	
V1FP1/I21-016U	0.11	13.4	0.005	0.17	0.15	57.9	0.073	0.020	0.028	0.02	2.93	2.94	0.27	0.14	0.0866	-0.001	-0.001	

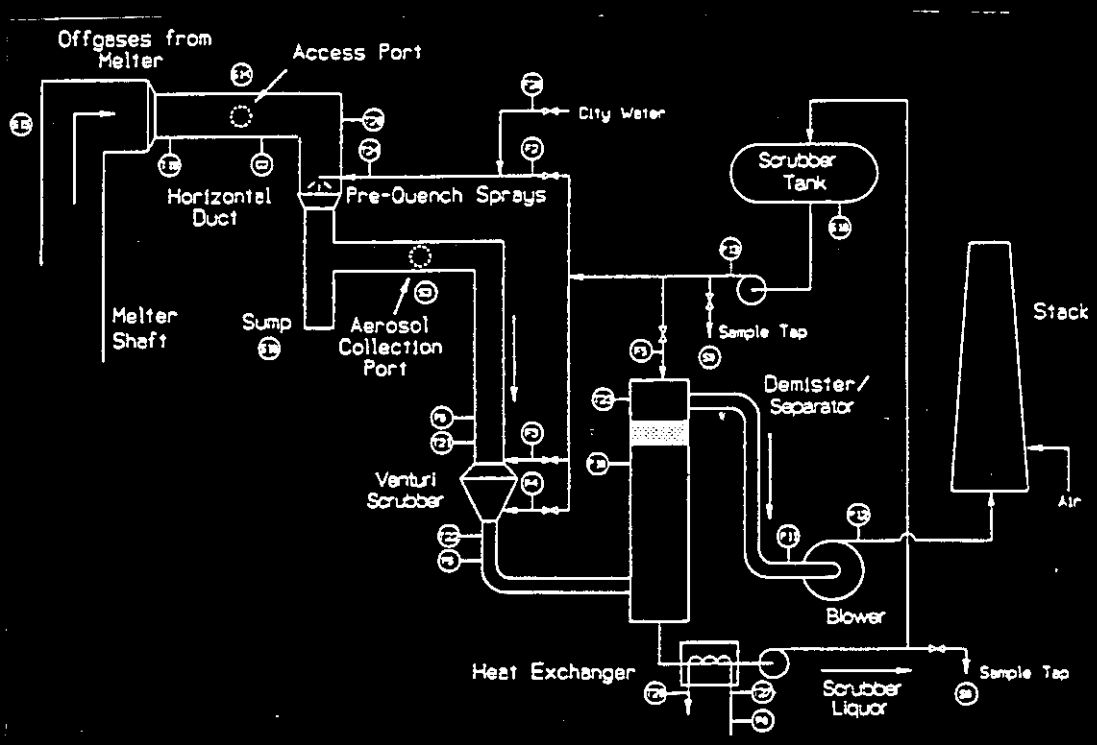
Vectra Glass Raw Data - USGS

Sample No.	PO_4^{3-}	SO_4^{2-}	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	Leach. pH	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted		(g/m2-day)	(g/m2-day)	(g/m2-day)	(g/m2-day)
Target Values			0.00		Petrographic	Petrographic	SEM / EDX				0.102	
V1M2/G32-012U1			98.36									
V1M2/G34-016U			98.29									
V1M2/G32-042U2			98.47		~0%	none observed	N.A.	10.03	0.0109	0.0151	0.0252	-0.0105
V1M3/G34-072U			98.66									
V1M3/G32-076U2			98.67		<<1%	High Mo w/ Ni by EDXRF	many well dispersed cords	10.11	0.0115	0.0174	0.0298	0.0105
V1M4/G32-090U1			98.55					10.28	0.0127	0.0199	0.0326	0.0126
V1M4/G32-098U2			98.43		~0%	none observed	N.A.	10.30	0.0117	0.0193	0.0307	0.0132
V1M3/G32-060U1			98.56									
V1M2/G32-038U			97.93									
V1M2/G32-025U			96.84									
V1FP1/I21-015U			91.41									
V1FP1/I21-016U			91.70									

Westinghouse Science and Technology Center Melter Sampling Point Schematic

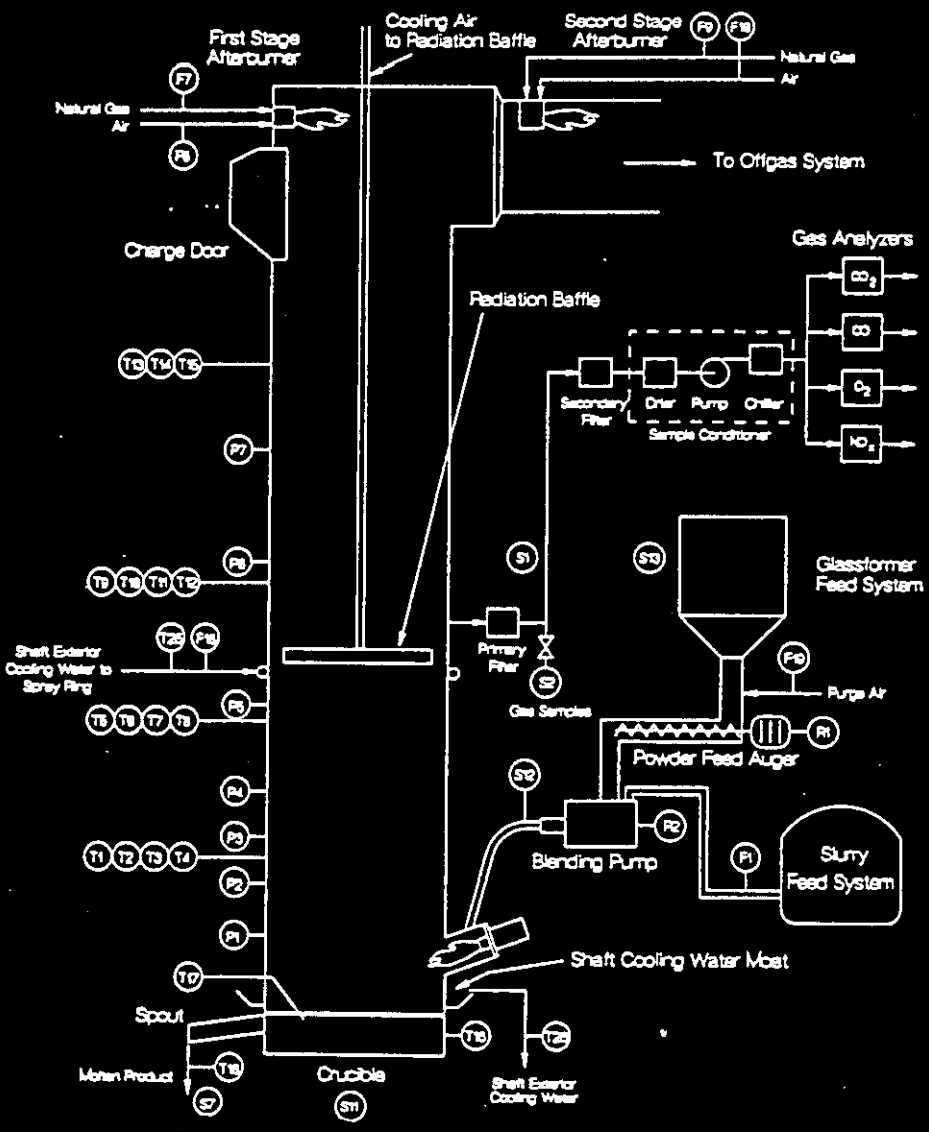


WSTC Feed System Sampling and Instrumentation Locations



WSTC Offgas System Sampling and Instrumentation Locations

Westinghouse Science and Technology Center Melter Sampling Point Schematic



WSTC Melter Sampling and Instrumentation Locations

Melter Project: Sample Numbering Scheme
WSTC

W	1	G	7	-	0	0	1	C	1
Vendor Identification	**Phase Identifier**	**Sample Type**	**Sample Point Number**	**Hyphen**	**Serial**	**Sample**	**Number**	**Lab ID**	**Snapshot Set ID**
WSTC	*Phase 1*	*Glass*	*Sample Point 7*		*Sample*	*Number*	*1*	*Corning*	*1 = 1st Mass Balance Set*

101-199 Trial #1 thru
401-499 Trial #4

Vendor	Sample Type	Sample Point
W = WSTC	S = Simulant	1 = Gas Analyzers
	A = Glass Former Frit	2 = Relocated to Point S14 for Test #4
	F = Mixed Feed	3 = Off-gas Sump
	I = Intermediate	4 = Simulant Tank Recirculation Line 2" Line
	G = Glass	5 = Simulant Tank Recirculation Line 1" Line
	C = Coke	6 = Post Simulant Tank Recirculation System
	O = Off-gas	7 = Glass Product Exit Port
	L = Scrubber Liquor	8 = Scrubber Liquor Tank Inlet
	X = Scrubber Sediment	9 = Scrubber Liquor Tank Outlet
	E = Entrained Solids/Aeroso	10 = Scrubber Liquor Tank
	N = Separated Product Salts	11 = Glass Accumulation Crucible
	R = Refractory	12 = Blended Simulant and Slurry
	Z = Melter Crucible Residue	13 = Frit/Glassformer Hopper
		14 = Off-gas Sample Port
		15 = Off-gas Melter Shaft
		16 = Off-gas Sump, after pre-quench and before scrubber

Lab ID	Sample Set ID
C = Corning	1 = 1st Mass Balance Set
G = Archive (GEL)	2 = 2nd Mass Balance Set
P = PNL	
Q = Quanterra	Blank = Individual Pts.
U = USGS	
W = 222-S	
M = Westinghouse Waltz Mill Site Analytical Lab	
T = Savannah River Technology Center	
S = Westinghouse Science and Technology Center	

WSTC Analytical Data

Sample No.	Date	Time	pH	SpG	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(vol %)	(vol %)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
Data Sources: [W-Q-1, W-Q-2, W-W-1, W-P-1, W-P-2]																			
W1L09-401Q	12/07/94	9:30:00	10.44		Colorless				3.29E-4	2.41E-3		4.47E-4	1.86E-5	1.53E-4	1.75E-5	1.78E-3	3.23E-4	-1.97E-4	1.95E-6
W1L09-402Q1	12/07/94	17:00:00	10.89		Yellow				1.79E-3	4.11E-2		3.32E-4	2.54E-4	1.53E-4	4.62E-6	1.68E-2	1.74E-3	-3.92E-5	6.08E-7
W1L09-402W1	12/07/94	17:00:00		0.995		-3.	-3.	-7.35E-3											
W1L09-403Q	12/07/94	21:00:00	11.31		Pale Yellow				2.51E-3	6.46E-2		3.72E-4	3.63E-4	2.46E-3	6.81E-6	2.55E-2	1.81E-3	-3.05E-5	8.32E-7
W1L09-404Q2	12/08/94	1:00:00	11.37		Yellow				3.82E-3	8.86E-2		2.94E-4	5.25E-4	3.54E-4	6.11E-6	3.96E-2	2.32E-3	-4.4E-05	4.77E-7
W1L09-404W2	12/08/94	1:00:00		0.986		-3.	-3.	-7.35E-3											
W1L09-405Q	12/08/94	5:00:00	11.48		Yellow				4.0 E-3	1.22E-1		3.34E-4	6.73E-4	5.33E-3	4.19E-6	5.4 E-2	2.45E-3	-1.26E-5	4.19E-7
W1L09-406Q3	12/08/94	9:00:00	11.44		Yellow				5.3 E-3	1.18E-1		2.82E-4	6.98E-4	5.49E-4	5.21E-6	5.58E-2	3.2 E-3	-4.6E-05	4.06E-7
W1L09-406W3	12/08/94	9:00:00		0.995		-3.	-3.	-7.35E-3											
W1L09-407Q	12/08/94	13:00:00	11.57		Yellow				5.15E-3	1.44E-1		2.79E-4	7.88E-4	6.83E-3	3.06E-6	6.91E-2	2.74E-3	-7.78E-6	3.82E-7
W1L09-408Q4	12/08/94	15:00:00	11.49		Yellow				4.37E-3	1.45E-1		1.74E-4	8.54E-4	6.85E-4	2.58E-6	6.91E-2	2.55E-3	-3.6E-05	-1.4E-07
W1L09-408W4	12/08/94	15:00:00		1.02		-3.	-3.	-7.35E-3											
W1S04-401W	12/07/94	12:30:00		1.38		30.	13.3	3.63E+0											
W1S04-402G1 (Q)	12/07/94	17:00:00	13.8	1.45	Brownish-yellow				1.14E+0	-1.74E-4		-7.63E-3	7.89E-3	1.1 E+0	1.39E-3	5.3 E-1	-1.02E-4	-2.3 E-3	3.72E-4
W1S05-401W	12/07/94	12:30:00		1.37		30.	11.7	3.45E+0											
W1S05-404G2 (P)																			
W1S05-404Q2	12/08/94	1:00:00	13.5		Brown				1.17E+0	-2.22E-4		-8.66E-3	9.68E-3	1.45E-2	1.17E-3	5.07E-1	-2.81E-4	-3.98E-3	5.61E-4
W1S05-404W2	12/08/94	1:00:00		1.42		23.3	11.7	3.45E+0											
W1S05-406Q3	12/08/94	9:00:00	13.5		Brown				1.25E+0	-9.8E-05		-9.76E-3	9.29E-3	3.43E-2	9.81E-4	5.81E-1	-8.18E-5	-3.09E-3	4.68E-4
W1S05-408Q4	12/08/94	15:05:00	13.7		Brown				1.2 E+0	-3.09E-4		-8.56E-3	9.22E-3	1.54E-2	2.51E-3	5.24E-1	-4.37E-4	-4.27E-3	5.17E-4
W1S05-408W4	12/08/94	15:05:00		1.41		25.	10.	3.65E+0											
W1S06-401W	12/07/94	12:30:00		1.39		33.3	11.7	3.27E+0											

WSTC Analytical Data

Sample No.	Mo (mole/l)	Na (mole/l)	Ni (mole/l)	P (mole/l)	S (mole/l)	Si (mole/l)	Sr (mole/l)	Ti (mole/l)	Zr (mole/l)	TOC (mole/l)	TIC (mole/l)	Cl (mole/l)	F (mole/l)	I (mole/l)	NO_3^- (mole/l)	NO_2^- (mole/l)	NO_3^- (353.1) (mole/l)	PO_4^{3-} (mole/l)	SO_4^{2-} (mole/l)
Data Sources: [W-																			
W1L09-401Q	2.87E-5	1.24E-2	-6.81E-7	1.76E-5		1.28E-4	8.37E-6		-1.2E-06	2.31E-4	4.71E-3	1.33E-3	1.51E-4	1.32E-4	1.61E-4	3.89E-4		1.44E-5	6.45E-4
W1L09-402Q1	3.52E-4	1.18E-1	-6.81E-7	5.23E-5		1.81E-4	2.19E-5		2.72E-6	1.9 E-4	3.51E-2	1.02E-2	1.27E-3	1.38E-3	1.24E-3	2.9 E-3		5.35E-5	1.5 E-3
W1L09-402W1																			
W1L09-403Q	5.28E-4	1.83E-1	-6.81E-7	5.68E-5		2.63E-4	3.18E-5		4.52E-6	2.36E-4	4.97E-2	1.43E-2	2.01E-3	2.07E-3	1.94E-3	4.2 E-3		-2.11E-5	2.2 E-3
W1L09-404Q2	7.53E-4	2.78E-1	-6.81E-7	4.16E-5		2.11E-4	3.4 E-5		4.91E-6	4.4 E-4	7.62E-2	2.15E-2	3.21E-3	2.95E-3	3.18E-3	7.41E-3		-2.11E-5	3.01E-3
W1L09-404W2																			
W1L09-405Q	9.9 E-4	3.75E-1	-6.81E-7	5.04E-5		1.62E-4	3.04E-5		5.21E-6	1.58E-3	1.01E-1	3.05E-2	5.13E-3	4.52E-3	4.58E-3	1.05E-2		-1.05E-4	4.03E-3
W1L09-406Q3	9.67E-4	3.78E-1	-6.81E-7	5.42E-5		2.08E-4	2.53E-5		5.39E-6	2.41E-3	1.03E-1	3.39E-2	4.83E-3	4.3 E-3	5.05E-3	1.24E-2		-1.05E-4	3.58E-3
W1L09-406W3																			
W1L09-407Q	1.21E-3	4.48E-1	-6.81E-7	3.75E-5		1.46E-4	1.97E-5		4.57E-6	2.51E-4	1.15E-1	3.67E-2	5.47E-3	1.78E-2	5.81E-3	1.46E-2		-1.05E-4	4.47E-3
W1L09-408Q4	1.26E-3	4.65E-1	-6.81E-7	7.55E-5		6.48E-5	1.1 E-5		-2E-06	7.49E-4	1.25E-1	4.03E-2	6.0 E-3	5.2 E-3	6.39E-3	1.65E-2		-5.26E-4	4.73E-3
W1L09-408W4																			
W1S04-401W																			
W1S04-402G1 (Q)	1.84E-2	9.78E+0	-9.88E-5	5.88E-3		1.51E-3	1.13E-2		-2.23E-5	1.14E+0	3.05E-1	1.72E-1	4.51E-2	4.75E-1	5.43E-1	5.59E-1		5.85E-3	2.68E-2
W1S05-401W																			
W1S05-404G2 (P)												1.51E-1			2.56E+0	2.11E+0		5.26E-4	4.11E-2
W1S05-404Q2	1.9 E-2	1.03E+1	-1.02E-4	1.82E-3		2.23E-3	1.57E-2		-2.31E-5	1.14E+0	2.84E-1	1.69E-1	3.4 E-2	3.81E-1	6.07E-1	5.97E-1		2.92E-3	2.22E-2
W1S05-404W2																			
W1S05-406Q3	2.01E-2	1.15E+1	-1.08E-4	2.76E-3		1.32E-3	1.29E-2		-2.2E-05	1.12E+0	2.64E-1	1.82E-1	2.47E-2	4.71E-1	5.69E-1	8.06E-1		2.56E-3	1.92E-2
W1S05-408Q4	1.93E-2	1.05E+1	-1.03E-4	2.07E-3		2.0 E-3	1.32E-2		-2.7E-05	1.17E+0	2.62E-1	2.08E-1	2.33E-2	1.75E-2	5.56E-1	6.96E-1		2.76E-3	1.85E-2
W1S05-408W4																			
W1S06-401W																			

WSTC Analytical Raw Data - 222S

Sample No.	Date	Time	pH	SpG	Color	Settled Sol.	Cent. Sol.	OH Equiv.
	mm/dd/yy	hh:mm:ss		(g/cc)		(vol %)	(vol %)	(ug/ml)
Conver. factor				1		1	1	5.88E-05
W1L09-402W1	12/07/94	17:00:00		0.995		-3.0	-3.	-1.25E+02
W1L09-404W2	12/08/94	1:00:00		0.986		-3.0	-3.	-1.25E+02
W1L09-406W3	12/08/94	9:00:00		0.995		-3.0	-3.	-1.25E+02
W1L09-408W4	12/08/94	15:00:00		1.02		-3.0	-3.	-1.25E+02
W1S04-401W	12/07/94	12:30:00		1.38		30.0	13.3	6.18E+04
W1S05-401W	12/07/94	12:30:00		1.37		30.0	11.7	5.86E+04
W1S05-404W2	12/08/94	1:00:00		1.42		23.3	11.7	5.86E+04
W1S05-408W4	12/08/94	15:05:00		1.41		25.0	10.	6.21E+04
W1S06-401W	12/07/94	12:30:00		1.39		33.3	11.7	5.56E+04
Sample No.	Date	Time	pH	SpG	Color	Settled Sol.	Cent. Sol.	OH Equiv.
	mm/dd/yy	hh:mm:ss		(g/cc)		(vol %)	(vol %)	(mole/l)
W1L09-402W1	12/7/94	17:00:00		0.995		-3.	-3.	-7.35E-3
W1L09-404W2	12/8/94	1:00:00		0.986		-3.	-3.	-7.35E-3
W1L09-406W3	12/8/94	9:00:00		0.995		-3.	-3.	-7.35E-3
W1L09-408W4	12/8/94	15:00:00		1.02		-3.	-3.	-7.35E-3
W1S04-401W	12/7/94	12:30:00		1.38		30.	13.3	3.63E+0
W1S05-401W	12/7/94	12:30:00		1.37		30.	11.7	3.45E+0
W1S05-404W2	12/8/94	1:00:00		1.42		23.3	11.7	3.45E+0
W1S05-408W4	12/8/94	15:05:00		1.41		25.	10.	3.65E+0
W1S06-401W	12/7/94	12:30:00		1.39		33.3	11.7	3.27E+0

WSTC Analytical Raw Data - PNL

Sample No.	Date	Time	pH	SpG	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/ml)		(vol%)	(vol%)	()	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)
Conver. factor			1	1					3.71E-05	9.25E-05	7.28E-06	2.5E-05	1.92E-05	7.52E-06	1.79E-05	2.56E-05	1.44E-04	4.11E-05	1.82E-05
W1S05-404G2 (P)																			
Sample No.	Date	Time	pH	SpG	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(vol%)	(vol%)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
W1S05-404G2 (P)																			

WSTC Analytical Raw Data - PNL

Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl	F	I	NO_3^-	NO_2^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)	(ug/ml)
1.04E-05	4.35E-5	1.7E-05	3.23E-05	3.12E-06	3.56E-05	1.14E-05	2.09E-05	1.1E-05	1	1	2.82E-05	5.26E-05	7.88E-06	1.61E-05	2.17E-05	1.61E-05	1.05E-05	1.04E-05
											5338	25		158478	97286		50	3946
Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl	F	I	NO_3^-	NO_2^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(ug/ml)	(ug/ml)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
											1.51E-1			2.56E+0	2.11E+0		5.26E-4	4.11E-2

WSTC Analytical Raw Data - Quanterra

Sample No.	Date	Time	pH	SpG	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(vol %)	(vol %)	()	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
Conver. factor			1	1					3.71E-08	9.25E-08	7.3E-09	2.50E-08	1.92E-08	7.52E-09	1.79E-08	2.56E-08	1.44E-07	4.11E-08	1.82E-08
W1L09-402Q1			10.87		Yellow				48200	444000		13300	13200	20400	258	656000	12100	(952)	33.4
W1L09-402Q1D			10.90																
Average	12/07/94	17:00:00	10.89		Yellow				48200	444000		13300	13200	20400	258	656000	12100	(952)	33.4
W1L09-404Q2	12/08/94	1:00:00	11.37		Yellow				103000	958000		11800	27300	47000	341	1550000	16100	(1060)	26.2
W1L09-406Q3	12/08/94	9:00:00	11.44		Yellow				143000	1280000		11300	36300	72900	291	2180000	22200	(1130)	22.3
W1L09-408Q4	12/08/94	15:00:00	11.49		Yellow				118000	1570000		6980	44400	91100	144	2700000	17700	(872)	(7.8)
W1L09-401Q	12/07/94	9:30:00	10.44		Colorless				8890	26000		17900	965	20300	979	69700	2240	(4790)	107
W1L09-403Q	12/07/94	21:00:00	11.31		Pale Yellow				67700	698000		14900	18900	327000	380	996000	12600	(741)	45.7
W1L09-405Q	12/08/94	5:00:00	11.48		Yellow				108000	1320000		13400	35000	708000	234	2110000	17000	(307)	23.0
W1L09-407Q	12/08/94	13:00:00	11.57		Yellow				139000	1560000		11200	41000	908000	171	2700000	19000	(189)	21.0
W1S05-404Q2			13.5		Brown				31563000	(2405)		(347193)	503505	1923840	65531	19839600	(1954)	(96643)	30812
W1S05-404Q2D			13.5																
Average	12/08/94	1:00:00	13.5		Brown				31563000	(2405)		(347193)	503505	1923840	65531	19839600	(1954)	(96643)	30812
W1S05-408Q4	12/08/94	15:05:00	13.7		Brown				32333400	(3340)		(343068)	479688	2049300	139960	20493000	(3036)	(103679)	28387
W1S05-406Q3	12/08/94	9:00:00	13.5		Brown				33611400	(1057)		(391344)	482868	4560420	54757	22723200	(568)	(75113)	25721
W1S04-402G1 (Q)			13.8	1.45	Brownish-yellow				30740000	(1885)		(305950)	410350	1.46E+08	77720	20735000	(710.5)	(55825.0)	20445
W1S04-402G1D			13.8																
Average	12/07/94	17:00:00	13.8	1.45	Brownish-yellow				30740000	(1885)		(305950)	410350	1.46E+08	77720	20735000	(711)	(55825)	20445

	Date	Time	pH	SpG	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(vol %)	(vol %)	()	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
W1S00-400Q			12.9						3410	655		(178)	118	365	70.6	2860		(47.2)	10.5
W1S00-400QD			12.9																
Average	12/06/94	13:00:00	12.9						3410	655		(178)	118	365	71	2860		(47.2)	10.5
W1E14-401G (Q)																			
W1E14-401GD																			
Average	12/13/94	11:00:00																	
W1W16-403Q	12/09/94	16:00:00							23500	1550		10200	362	609	6250	2850	1640	1070	1190

Sample No.	Date	Time	pH	SpG	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(Wt. %)	(Wt. %)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(ug/l)	(mole/l)	(mole/l)
W1L09-402Q1	12/07/94	17:00:00	10.89		Yellow				1.79E-3	4.11E-2		3.32E-4	2.54E-4	1.53E-4	4.62E-6	1.68E-2	1.74E-3	-3.92E-5	6.08E-7
W1L09-404Q2	12/08/94	1:00:00	11.37		Yellow				3.82E-3	8.86E-2		2.94E-4	5.25E-4	3.54E-4	6.11E-6	3.96E-2	2.32E-3	-4.36E-05	4.77E-7
W1L09-406Q3	12/08/94	9:00:00	11.44		Yellow				5.3 E-3	1.18E-1		2.82E-4	6.98E-4	5.49E-4	5.21E-6	5.58E-2	3.2 E-3	-4.65E-05	4.06E-7
W1L09-408Q4	12/08/94	15:00:00	11.49		Yellow				4.37E-3	1.45E-1		1.74E-4	8.54E-4	6.85E-4	2.58E-6	6.91E-2	2.55E-3	-3.59E-05	-1.42E-07
W1L09-401Q	12/07/94	9:30:00	10.44		Colorless				3.29E-4	2.41E-3		4.47E-4	1.86E-5	1.53E-4	1.75E-5	1.78E-3	3.23E-4	-1.97E-4	1.95E-6
W1L09-403Q	12/07/94	21:00:00	11.31		Pale Yellow				2.51E-3	6.46E-2		3.72E-4	3.63E-4	2.46E-3	6.81E-6	2.55E-2	1.81E-3	-3.05E-5	8.32E-7
W1L09-405Q	12/08/94	5:00:00	11.48		Yellow				4.0 E-3	1.22E-1		3.34E-4	6.73E-4	5.33E-3	4.19E-6	5.4 E-2	2.45E-3	-1.26E-5	4.19E-7
W1L09-407Q	12/08/94	13:00:00	11.57		Yellow				5.15E-3	1.44E-1		2.79E-4	7.88E-4	6.83E-3	3.06E-6	6.91E-2	2.74E-3	-7.78E-6	3.82E-7
W1S05-404Q2	12/08/94	1:00:00	13.5		Brown				1.17E+0	-2.22E-4		-8.66E-3	9.68E-3	1.45E-2	1.17E-3	5.07E-1	-2.81E-4	-3.98E-3	5.61E-4
W1S05-408Q4	12/08/94	15:05:00	13.7		Brown				1.2 E+0	-3.09E-4		-8.56E-3	9.22E-3	1.54E-2	2.51E-3	5.24E-1	-4.37E-4	-4.27E-3	5.17E-4
W1S05-406Q3	12/08/94	9:00:00	13.5		Brown				1.25E+0	-9.78E-05		-9.76E-3	9.29E-3	3.43E-2	9.81E-4	5.81E-1	-8.18E-5	-3.09E-3	4.68E-4
W1S04-402G1(Q)	12/07/94	17:00:00	13.8	1.45	Brownish-yellow				1.14E+0	-1.74E-4		-7.63E-3	7.89E-3	1.1 E+0	1.39E-3	5.3 E-1	-1.02E-4	-2.3 E-3	3.72E-4

	Date	Time	pH	SpG	Color	Settled Sol.	Cent. Sol.	OH Equiv.	Al	B	Ba	Ca	Cr	Cs	Fe	K	Li	Mg	Mn
	mm/dd/yy	hh:mm:ss		(g/cc)		(vol %)	(vol %)	()	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
W1S00-400Q	12/06/94	13:00:00	12.9						3.41E+3	6.55E+2		(1.78E+2)	1.18E+2	3.65E+2	7.06E+1	2.86E+3		(4.72E+1)	1.05E+1
W1E14-401G (Q)	12/13/94	11:00:00																	
W1W16-403Q	12/09/94	16:00:00							2.35E+4	1.55E+3		1.02E+4	3.62E+2	6.09E+2	6.25E+3	2.85E+3	1.64E+3	1.07E+3	1.19E+3

WSTC Analytical Raw Data - Quanterra

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl⁻	F⁻	I⁻	NO_3^-	NO_2^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(ug/l)	(mg/l)	(mg/l)
Conver. factor	1.04E-08	4.35E-08	1.70E-08	3.23E-08	3.12E-08	3.56E-08	1.14E-08	2.09E-08	1.10E-08	8.33E-05	8.33E-05	2.82E-05	5.26E-05	7.88E-06	1.613E-05	2.17E-05	1.61E-08	1.05E-05	1.04E-05
W1L09-402Q1	33800	2.71E+6	-40	1620		5090	1920		248	2.10	421	367	26.1	178	77.0	132		5.14	157
W1L09-402Q1D				1620						2.47	423	357	22.0	171	77.3	135		5.02	132
Average	33800	2.71E+6	-40	1620		5090	1920		248	2.29	422	362	24.1	175	77.2	134		5.08	145
W1L09-404Q2	72200	6.4 E+6	-40	1290		5940	2980		448	5.29	915	762	60.9	374	197.0	341		-2.00	289
W1L09-406Q3	92800	8.7 E+6	-40	1680		5840	2220		492	29.0	1240	1200	91.7	546	313	569		-10.0	344
W1L09-408Q4	121000	1.07E+7	-40	2340		1820	966		(180)	9.00	1500	1430	114	660	396	758		-50.0	454
W1L09-401Q	2750	2.84E+5	-40	545		3600	733		(112)	2.78	56.6	47.1	2.87	16.8	10.0	17.9		1.37	62.0
W1L09-403Q	50700	4.21E+6	-40	1760		7380	2790		412	2.83	597	507	38.2	263	120	193		-2.00	211
W1L09-405Q	95000	8.61E+6	-40	1560		4560	2660		475	19.0	1210	1080	97.5	573	284	485		-10.0	387
W1L09-407Q	116000	1.03E+7	-40	1160		4090	1730		417	3.02	1380	1300	104	2260	360	672		-10.0	429
W1S05-404Q2	1818630	2.36E+8	-6012	55600		62525	1378251		(2104)	13800	3380	5990	642	44300	37600	27400		281	2130
W1S05-404Q2D				57400						13700	3440	6020	651	52300	37700	27500		273	2130
Average	1818630	2.36E+8	(6012)	56500		62525	1378251		(2104)	13750	3410	6005	646.5	48300	37650	27450		277	2130
W1S05-408Q4	1851960	2.41E+8	-6072	64100		56081	1157297		(2426)	14100	3150	7380	442	2220	34500	32000		262	1780
W1S05-406Q3	1925160	2.65E+8	-6312	85400		37083	1134582		(2051)	13500	3170	6460	469	59800	35300	37100		243	1840
W1S04-402G1 (Q)	1769000	2.25E+08	-5800	180000		42485	990350		(2030)	13700	3620	6460	910	59500	33900	25900		559	2560
W1S04-402G1D				184000						13700	3710	5740	804	61100	33500	25500		552	2590
Average	1769000	2.25E+08	(5800)	182000		42485	990350		(2030)	13700	3665	6100	857	60300	33700	25700		556	2575

	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl⁻	F⁻	I⁻	NO_3^-	NO_2^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(mg/kg)	(mg/kg)	(mg/kg)	(ug/g)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(ug/g)	(ug/g)	(ug/g)	(ug/g)	(ug/g)	(ug/g)	(ug/g)	(ug/g)	(ug/g)	(ug/g)
W1S00-400Q	185	260000	(0.80)	659		220	431		(8.5)	6860	1840	1130	10800	11260	119000	4450	4620	1540	1860
W1S00-400QD				696						6360	1260	1030	15300	11120	121000	4010	4700	1650	3810
Average	185	260000	(0.80)	678		220	431		(8.5)	6610	1550	1080	13050	11190	120000	4230	4660	1595	2835
W1E14-401G (Q)												16200			9400	4330		1840	12200
W1E14-401GD												15700			9130	4160		1800	11900
Average												15950			9265	4245		1820	12050
W1W16-403Q	99.1	13600	6.4			462	1780		244	7650	15700y	706	59.4	1306	190	344		10.1	276

Sample No.	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl⁻	F⁻	I⁻	NO_3^-	NO_2^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)	(mole/l)
W1L09-402Q1	3.52E-4	1.18E-1	-6.81E-7	5.23E-5		1.81E-4	2.19E-5		2.72E-6	1.9 E-4	3.51E-2	1.02E-2	1.27E-3	1.38E-3	1.24E-3	2.9 E-3		5.35E-5	1.5 E-3
W1L09-404Q2	7.53E-4	2.78E-1	-6.81E-7	4.16E-5		2.11E-4	3.4 E-5		4.91E-6	4.4 E-4	7.62E-2	2.15E-2	3.21E-3	2.95E-3	3.18E-3	7.41E-3		-2.11E-5	3.01E-3
W1L09-406Q3	9.67E-4	3.78E-1	-6.81E-7	5.42E-5		2.08E-4	2.53E-5		5.39E-6	2.41E-3	1.03E-1	3.39E-2	4.83E-3	4.3 E-3	5.05E-3	1.24E-2		-1.05E-4	3.58E-3
W1L09-408Q4	1.26E-3	4.65E-1	-6.81E-7	7.55E-5		6.48E-5	1.1 E-5		-1.97E-06	7.49E-4	1.25E-1	4.03E-2	6.0 E-3	5.2 E-3	6.39E-3	1.65E-2		-5.26E-4	4.73E-3
W1L09-401Q	2.87E-5	1.24E-2	-6.81E-7	1.76E-5		1.28E-4	8.37E-6		-1.23E-06	2.31E-4	4.71E-3	1.33E-3	1.51E-4	1.32E-4	1.61E-4	3.89E-4		1.44E-5	6.45E-4
W1L09-403Q	5.28E-4	1.83E-1	-6.81E-7	5.68E-5		2.63E-4	3.18E-5		4.52E-6	2.36E-4	4.97E-2	1.43E-2	2.01E-3	2.07E-3	1.94E-3	4.2 E-3		-2.11E-5	2.2 E-3
W1L09-405Q	9.9 E-4	3.75E-1	-6.81E-7	5.04E-5		1.62E-4	3.04E-5		5.21E-6	1.58E-3	1.01E-1	3.05E-2	5.13E-3	4.52E-3	4.58E-3	1.05E-2		-1.05E-4	4.03E-3
W1L09-407Q	1.21E-3	4.48E-1	-6.81E-7	3.75E-5		1.46E-4	1.97E-5		4.57E-6	2.51E-4	1.15E-1	3.67E-2	5.47E-3	1.78E-2	5.81E-3	1.46E-2		-1.05E-4	4.47E-3
W1S05-404Q2	1.9 E-2	1.03E+1	-1.02E-4	1.82E-3		2.23E-3	1.57E-2		-2.31E-5	1.14E+0	2.84E-1	1.69E-1	3.4 E-2	3.81E-1	6.07E-1	5.97E-1		2.92E-3	2.22E-2
W1S05-408Q4	1.93E-2	1.05E+1	-1.03E-4	2.07E-3		2.0 E-3	1.32E-2		-2.66E-05	1.17E+0	2.62E-1	2.08E-1	2.33E-2	1.75E-2	5.56E-1	6.96E-1		2.76E-3	1.85E-2
W1S05-406Q3	2.01E-2	1.15E+1	-1.08E-4	2.76E-3		1.32E-3	1.29E-2		-2.25E-05	1.12E+0	2.64E-1	1.82E-1	2.47E-2	4.71E-1	5.69E-1	8.06E-1		2.56E-3	1.92E-2
W1S04-402G1(Q)	1.84E-2	9.78E+0	-9.88E-5	5.88E-3		1.51E-3	1.13E-2		-2.23E-5	1.14E+0	3.05E-1	1.72E-1	4.51E-2	4.75E-1	5.43E-1	5.59E-1		5.85E-3	2.68E-2

	Mo	Na	Ni	P	S	Si	Sr	Ti	Zr	TOC	TIC	Cl⁻	F⁻	I⁻	NO_3^-	NO_2^-	NO_3^- (353.1)	PO_4^{3-}	SO_4^{2-}
	(mg/kg)	(mg/kg)	(mg/kg)	(ug/g)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(ug/g)	(ug/g)	(ug/g)	(ug/g)	(ug/g)	(ug/g)	(ug/g)	(ug/g)	(ug/g)	(ug/g)
W1S00-400Q	1.85E+2	2.6 E+5	-8.0 E-1	6.78E+2		2.2 E+2	4.31E+2		(8.5 E+0)	6.61E+3	1.55E+3	1.08E+3	1.31E+4	1.12E+4	1.2 E+5	4.23E+3	4.66E+3	1.6 E+3	2.84E+3
W1E14-401G (Q)												1.6 E+4			9.27E+3	4.25E+3		1.82E+3	1.21E+4
W1W16-403Q	9.91E+1	1.36E+4	6.4 E+0			4.62E+2	1.78E+3		2.44E+2	7.65E+3	15700y	7.06E+2	5.94E+1	1.31E+3	1.9 E+2	3.44E+2		1.01E+1	2.76E+2

WSTC Glass Data

Sample No.	Date	Time	SpG	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values							18.22	9.45	0.00	4.65	0.00	0.00	0.00	1.44	0.83	0.00	0.00	0.00
Data Sources: [W-C-1, W-C-2, W-U-1]																		
W1A13-301C							18.4	12.0	1.77	5.73	-0.001	0.002	0.74	0.06	1.09	0.084	0.011	-0.001
W1A13-403C2	12/08/94	1:50:00					16.8	11.8	3.73	5.30	-0.004	0.002	0.52	0.13	1.05	0.086	-0.004	-0.004
W1A13-406C4	12/08/94	15:15:00					18.7	11.9	1.52	5.80	-0.004	0.002	0.79	0.062	1.09	0.090	-0.004	-0.004
W1A13-406U4	12/08/94	15:15:00			0.42		18.2	11.4	1.79	5.60	-0.0006	0.003	0.70	0.05		0.005	0.031	-0.001
W1E14-401C	12/13/94	11:00:00					8.16	16.9	0.14	0.81	0.208	0.35	0.58	4.16	0.60	0.037	0.023	0.33
W1F12-401C1(d)	12/07/94	17:00:00					14.5	7.58	1.19	3.56	0.033	0.13	0.44	1.35	0.67	0.058	0.009	0.13
W1F12-401C1(s)	12/07/94	17:00:00				25.8	10.8	5.62	0.88	2.64	0.024	0.10	0.32	1.00	0.50	0.043	0.007	0.10
W1F12-403C2(d)	12/08/94	1:00:00					14.6	7.28	1.02	3.37	0.037	0.15	0.43	1.46	0.67	0.055	0.010	0.13
W1F12-403C2(s)	12/08/94	1:00:00				28.3	10.4	5.22	0.73	2.41	0.027	0.11	0.31	1.04	0.48	0.040	0.007	0.10
W1F12-405C3(d)	12/08/94	9:05:00					13.1	7.41	1.76	3.20	0.036	0.14	0.33	1.46	0.61	0.044	0.009	0.15
W1F12-405C3(s)	12/08/94	9:05:00				27.9	9.43	5.34	1.27	2.31	0.026	0.10	0.24	1.05	0.44	0.032	0.006	0.11
W1F12-407C4(d)	12/08/94	15:00:00					12.5	5.93	1.08	2.68	0.043	0.17	0.31	1.73	0.53	0.044	0.009	0.18
W1F12-407C4(s)	12/08/94	15:00:00				29.4	8.83	4.18	0.76	1.89	0.030	0.12	0.22	1.22	0.37	0.031	0.006	0.12
W1F12-407U	12/08/94	15:00:00			14.9		14.9	8.05	1.68	3.76	0.038	0.13	0.44	1.01		-0.10	0.025	0.10
W1G07-404C	12/07/94	17:00:00	2.58				19.4	6.67	1.05	4.32	0.037	0.028	0.71	0.97	0.84	0.084	0.008	0.14
W1G07-412C2	12/08/94	1:09:00	2.57				18.4	7.95	1.29	4.34	0.036	0.032	0.62	0.97	0.81	0.073	0.007	0.13
W1G07-419C3	12/08/94	9:00:00	2.60				17.8	7.46	2.53	3.92	0.046	0.034	0.52	1.07	0.73	0.063	0.009	0.16
W1G07-425C4	12/08/94	15:00:00	2.58				18.7	7.17	1.55	3.99	0.058	0.031	0.77	1.06	0.81	0.080	0.014	0.16
W1G07-425U4	12/08/94	15:00:00			-0.01		19.1	6.92	1.68	4.06	0.057	0.034	0.75	1.01		0.12	0.037	0.17
W1G7-304C							18.7	6.57	0.76	4.24	0.038	0.022	0.65	0.90	1.05	0.093	0.019	0.14
W1G7-310C							18.5	7.17	1.07	4.24	0.044	0.032	0.68	1.07	0.78	0.039	0.018	0.16
W1G7-317C							18.8	6.88	1.24	4.28	0.044	0.029	0.90	0.96	0.77	0.030	0.022	0.15
W1G7-322C							18.3	8.10	1.66	4.42	0.035	0.029	0.69	0.93	0.80	0.017	0.015	0.14
W1R15-401C	12/13/94	11:00:00					50.9	6.00	0.13	0.35	5.53	0.23	0.24	3.85	0.18	0.33	-0.004	0.23
W1Z11-401C	12/09/94	16:50:00	2.57				33.7	4.69	0.84	2.26	0.19	0.009	2.53	0.81	0.51	0.055	0.032	0.28

WSTC Glass Data

Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO_2	TiO_2	ZrO_2	TOC	TIC	Total C	Cl	F	I	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values	18.82	0.00	0.00	0.00	42.90	0.00	0.00	2.10				0.00	0.00	0.00	0.00	0.00		0.00
Data Sources: W																		
W1A13-301C	0.46	-0.001	0.11		54.1	0.047	0.060	2.89					0.03					
W1A13-403C2	1.10	-0.004	0.030		55.4	0.045	0.071	2.57					0.08					
W1A13-406C4	0.42	-0.004	0.066		56.8	0.053	0.055	3.13					0.03					
W1A13-406U4	0.30	-0.001	0.08	-0.125	54.1	0.052	0.080	2.59				-0.01	0.04	-0.003				
W1E14-401C	41.2	0.009	0.23		4.92	0.17	0.053	0.23					0.21					
W1F12-401C1(d)	15.9	-0.010	-0.20		34.2	0.113	-0.010	1.72			0.90							
W1F12-401C1(s)	11.8	-0.007	-0.15		25.4	0.083	-0.007	1.28				0.26	0.04	0.0071	5.92	3.18		-0.05
W1F12-403C2(d)	17.2	-0.010	-0.20		32.4	0.113	-0.010	1.65			0.93							
W1F12-403C2(s)	12.3	-0.007	-0.14		23.2	0.081	-0.007	1.18				0.23	0.04	0.0047	6.26	3.37		-0.05
W1F12-405C3(d)	17.9	-0.010	-0.20		31.1	0.098	-0.010	1.52			1.08							
W1F12-405C3(s)	12.9	-0.007	-0.14		22.4	0.071	-0.007	1.09				0.26	0.04	0.0057	6.07	3.34		-0.05
W1F12-407C4(d)	20.5	-0.010	-0.20		26.0	0.12	-0.010	1.29			1.25							
W1F12-407C4(s)	14.5	-0.007	-0.14		18.3	0.085	-0.007	0.91				0.29	0.04	0.0041	7.29	3.84		-0.05
W1F12-407U	12.8	-0.001	0.14	0.150	37.2	0.117	0.060	1.79	0.495	0.5	1.00	0.25	0.07	0.0978				
W1G07-404C	19.7	-0.004	0.16	0.15	37.4	0.16	0.028	2.18				0.052	0.04					
W1G07-412C2	18.2	-0.004	0.11	0.15	37.5	0.14	0.032	2.13				0.054	0.04					
W1G07-419C3	20.8	-0.004	0.15	0.19	35.5	0.14	0.057	1.92				0.069	0.03					
W1G07-425C4	21.0	-0.004	0.19	0.19	35.2	0.15	0.045	2.00				0.061	0.03					
W1G07-425U4	20.3	0.002	0.21	0.15	39.8	0.15	0.075	1.92				0.060	0.04	-0.003				
W1G7-304C	20.1	0.002	0.17		40.7	0.096	0.054	2.39					0.02					
W1G7-310C	21.9	0.005	0.14		39.3	0.089	0.052	2.08					0.03					
W1G7-317C	20.8	0.004	0.14		39.7	0.082	0.057	2.07					0.02					
W1G7-322C	18.5	0.004	0.11		41.4	0.075	0.060	2.09					0.02					
W1R15-401C	21.6	-0.004	1.97		3.78	0.043	0.023	0.11					0.15					
W1Z11-401C	33.1	-0.004	0.44		17.9	0.115	0.048	0.76				0.06	0.04	-0.003	0.04	0.061		-0.05

WSTC Glass Data

Sample No.	SO_4^{2-}	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)			(vol%)	I.D.	Enriched / Depleted	pH	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)
Target Values	0.00	98.41		Petrographic	Petrographic	SEM / EDX					
Data Sources: [W											
W1A13-301C		97.58		N.A.	N.A.	N.A.					
W1A13-403C2		98.72	0.513	N.A.	N.A.	N.A.					
W1A13-406C4		100.46	0.467	N.A.	N.A.	N.A.					
W1A13-406U4		94.88									
W1E14-401C		79.22		N.A.	Nc & "salt" / water soluble	Na, K, Zn, Cl, Al, Si w/ S, Ca, Fe, Cr, Cu					
W1F12-401C1(d)		82.47		N.A.	N.A.	N.A.					
W1F12-401C1(s)	0.17	95.90		N.A.	N.A.	N.A.					
W1F12-403C2(d)		81.33		N.A.	N.A.	N.A.					
W1F12-403C2(s)	0.18	96.03		N.A.	N.A.	N.A.					
W1F12-405C3(d)		79.91		N.A.	N.A.	N.A.					
W1F12-405C3(s)	0.09	94.54		N.A.	N.A.	N.A.					
W1F12-407C4(d)		74.33		N.A.	N.A.	N.A.					
W1F12-407C4(s)	0.14	92.58		N.A.	N.A.	N.A.					
W1F12-407U		83.70									
W1G07-404C		94.09	0.042	<<1	red-tinged Opq (Cr w/ Fe) , Z	Na, Al, Si / K, Ca, Fe (assoc. w/ incl.)	11.2	0.016	0.020	0.022	0.015
W1G07-412C2		92.96	0.075	<<1	red-tinged Opq (Cr w/ Fe) , Z, AlRf	Al, Zr, Ca, Fe / Si, Pb, Cl (multi-lamellar)	10.5	0.012	0.017	0.013	0.011
W1G07-419C3		93.17	-0.011	<<<1	red-tinged Opq (Cr w/ Fe) , Z	Al, Si, Zr, Ba, Fe / Na, Pb, Cl, K (m-lamellar)	10.8	0.017	0.028	0.027	0.022
W1G07-425C4		93.19	-0.007	<<1	red-tinged Opq, devit, AlRf, Z, Cm, Fel	Al, Zr, Ca, Ba, Fe / Pb, Cl, K, Si (m-lamellar)	10.8	0.010	0.049	0.044	0.029
W1G07-425U4		96.57					11.3	0.012	0.020	0.050	0.017
W1G7-304C		96.71		N.A.	N.A.	N.A.					
W1G7-310C		97.40		N.A.	N.A.	N.A.					
W1G7-317C		96.98		N.A.	N.A.	N.A.					
W1G7-322C		97.39		N.A.	N.A.	N.A.					
W1R15-401C		95.51		N.A.	N.A.	N.A.					
W1Z11-401C	0.80	99.27	0.002	N.A.	Carnegieite, Ne, Cr, w/ Nb (possible)	(Gen Comp.) Al, Si, Na, Ca, Fe, K, Zn					

WSTC Glass Raw Data - Corning

Sample No.	Date	Time	SpG	Settled Sol.	LOI 600°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor			1			1	1	1	1	1	1	1	1	1	1	1	1
W1A13-301C							18.4	12.0	1.77	5.73	-0.001	0.002	0.74	0.06	1.09	0.084	0.011
W1G7-304C							18.7	6.57	0.76	4.24	0.038	0.022	0.65	0.90	1.05	0.093	0.019
W1G7-310C							18.5	7.17	1.07	4.24	0.044	0.032	0.68	1.07	0.78	0.039	0.018
W1G7-317C							18.8	6.88	1.24	4.28	0.044	0.029	0.90	0.96	0.77	0.030	0.022
W1G7-322C							18.3	8.10	1.66	4.42	0.035	0.029	0.69	0.93	0.80	0.017	0.015
W1A13-403C2							16.6	11.8	3.67	5.19	-0.004	0.002	0.51	0.13	1.05	0.083	-0.004
W1A13-403C2							16.8	11.8	3.73	5.26	-0.004	0.002	0.51	0.13	1.05	0.085	-0.004
W1A13-403C2							16.9	11.8	3.75	5.38	-0.004	0.002	0.53	0.12	1.05	0.088	-0.004
W1A13-403C2							17.0	11.8	3.75	5.35	-0.004	0.002	0.53	0.12	1.05	0.088	-0.004
Average	12/08/94	1:50:00					16.8	11.8	3.73	5.30	-0.004	0.002	0.52	0.13	1.05	0.086	-0.004
W1A13-406C4							18.7	11.9	1.53	5.86	-0.004	0.002	0.79	0.062	1.08	0.090	-0.004
W1A13-406C4							19.1	11.9	1.57	5.82	-0.004	0.002	0.80	0.062	1.08	0.091	-0.004
W1A13-406C4							18.3	12.0	1.49	5.73	-0.004	0.002	0.77	0.061	1.09	0.088	-0.004
W1A13-406C4							18.5	11.9	1.50	5.78	-0.004	0.002	0.78	0.061	1.09	0.089	-0.004
Average	12/08/94	15:15:00					18.7	11.9	1.52	5.80	-0.004	0.002	0.79	0.062	1.09	0.090	-0.004
W1E14-401C							8.05	16.9	0.14	0.80	0.20	0.35	0.58	4.19	0.60	0.036	0.023
W1E14-401C							8.08	17.0	0.14	0.80	0.21	0.35	0.59	4.17	0.60	0.036	0.023
W1E14-401C							8.26	16.8	0.14	0.82	0.21	0.36	0.58	4.14	0.60	0.037	0.024
W1E14-401C							8.25	16.7	0.14	0.81	0.21	0.35	0.58	4.14	0.59	0.037	0.023
Average	12/13/94	11:00:00					8.16	16.9	0.14	0.81	0.21	0.35	0.58	4.16	0.60	0.037	0.023
W1F12-401C1							14.4	7.59	1.18	3.57	0.033	0.13	0.44	1.35	0.67	0.057	0.009
W1F12-401C1							14.3	7.57	1.17	3.55	0.033	0.13	0.43	1.35	0.67	0.057	0.009
W1F12-401C1							14.6	7.56	1.17	3.56	0.034	0.13	0.43	1.34	0.67	0.058	0.010
W1F12-401C1							14.8	7.59	1.22	3.57	0.032	0.13	0.44	1.34	0.67	0.060	0.009
Dried Avg.	12/07/94	17:00:00					14.5	7.58	1.19	3.56	0.033	0.13	0.44	1.35	0.67	0.058	0.009
Slurry Avg.	12/07/94	17:00:00				25.8	10.8	5.62	0.88	2.64	0.024	0.10	0.32	1.00	0.50	0.043	0.007
W1F12-403C2							14.4	7.28	1.00	3.35	0.039	0.15	0.43	1.46	0.67	0.054	0.01
W1F12-403C2							14.6	7.28	1.05	3.36	0.035	0.15	0.45	1.46	0.67	0.057	0.01
W1F12-403C2							14.7	7.29	1.01	3.38	0.035	0.14	0.42	1.45	0.66	0.055	0.009
W1F12-403C2							14.5	7.27	1.00	3.37	0.039	0.15	0.42	1.45	0.66	0.055	0.01
Dried Avg.	12/08/94	1:00:00					14.6	7.28	1.02	3.37	0.037	0.15	0.43	1.46	0.67	0.055	0.01
Slurry Avg.	12/08/94	1:00:00				28.3	10.4	5.22	0.73	2.41	0.027	0.11	0.31	1.04	0.48	0.040	0.007
W1F12-405C3							13.0	7.40	1.78	3.19	0.035	0.14	0.34	1.45	0.61	0.045	0.009
W1F12-405C3							12.7	7.42	1.68	3.18	0.034	0.14	0.32	1.45	0.61	0.042	0.008
W1F12-405C3							13.4	7.40	1.82	3.26	0.037	0.14	0.34	1.46	0.61	0.045	0.009
W1F12-405C3							13.2	7.41	1.76	3.16	0.036	0.14	0.33	1.47	0.61	0.044	0.009
Dried Avg.	12/08/94	9:05:00					13.1	7.41	1.76	3.20	0.036	0.14	0.33	1.46	0.61	0.044	0.009
Slurry Avg.	12/08/94	9:05:00				27.9	9.43	5.34	1.27	2.31	0.026	0.10	0.24	1.05	0.44	0.032	0.006
W1F12-407C4							12.3	5.96	1.07	2.65	0.042	0.17	0.31	1.73	0.53	0.043	0.008
W1F12-407C4							12.4	5.93	1.07	2.65	0.044	0.17	0.31	1.74	0.53	0.043	0.009
W1F12-407C4							12.7	5.91	1.09	2.71	0.041	0.17	0.31	1.73	0.53	0.044	0.009
W1F12-407C4							12.6	5.91	1.09	2.70	0.045	0.17	0.31	1.73	0.53	0.044	0.009
Dried Avg.	12/08/94	15:00:00					12.5	5.93	1.08	2.68	0.043	0.17	0.31	1.73	0.53	0.044	0.009
Slurry Avg.	12/08/94	15:00:00				29.4	8.83	4.18	0.76	1.89	0.030	0.12	0.22	1.22	0.37	0.031	0.006
W1G07-404C							19.3	6.60	1.05	4.30	0.040	0.028	0.70	0.97	0.84	0.084	0.009
W1G07-404C							19.6	6.64	1.06	4.36	0.034	0.028	0.71	0.97	0.83	0.084	0.007
W1G07-404C							19.4	6.72	1.05	4.31	0.038	0.027	0.71	0.97	0.84	0.085	0.009
W1G07-404C							19.4	6.70	1.05	4.31	0.034	0.027	0.71	0.97	0.84	0.084	0.008
Average	12/07/94	17:00:00	2.58				19.4	6.67	1.05	4.32	0.037	0.028	0.71	0.97	0.84	0.084	0.008

WSTC Glass Raw Data - Corning

Sample No.	MoO_3 (wt%)	Na_2O (wt%)	NiO (wt%)	P_2O_5 (wt%)	SO_3 (wt%)	SiO_2 (wt%)	SrO (wt%)	TiO_2 (wt%)	ZrO_2 (wt%)	TOC (wt%)	TIC (wt%)	Total C (wt%)	Cl^- (wt%)	F^- (wt%)	I^- (wt%)	NO_3^- (wt%)	NO_2^- (wt%)	Total N_2 (wt%)
Conver. factor	1	1	1	1	1	1	1	1	1			1	1	1	1	1	1	
W1A13-301C	-0.001	0.46	-0.001	0.11		54.1	0.047	0.060	2.89					0.03				
W1G7-304C	0.14	20.1	0.002	0.17		40.7	0.096	0.054	2.39					0.02				
W1G7-310C	0.16	21.9	0.005	0.14		39.3	0.089	0.052	2.08					0.03				
W1G7-317C	0.15	20.8	0.004	0.14		39.7	0.082	0.057	2.07					0.02				
W1G7-322C	0.14	18.5	0.004	0.11		41.4	0.075	0.060	2.09					0.02				
W1A13-403C2	-0.004	1.09	-0.004	0.024		55.6	0.043	0.066	2.49					0.08				
W1A13-403C2	-0.004	1.09	-0.004	0.020		55.6	0.044	0.070	2.54									
W1A13-403C2	-0.004	1.11	-0.004	0.037		55.5	0.045	0.072	2.61									
W1A13-403C2	-0.004	1.10	-0.004	0.039		54.9	0.047	0.075	2.63									
Average	-0.004	1.10	-0.004	0.030		55.4	0.045	0.071	2.57					0.08				
W1A13-406C4	-0.004	0.42	-0.004	0.053		56.7	0.053	0.049	3.10					0.03				
W1A13-406C4	-0.004	0.42	-0.004	0.051		56.9	0.054	0.046	3.18									
W1A13-406C4	-0.004	0.41	-0.004	0.078		56.7	0.051	0.062	3.08									
W1A13-406C4	-0.004	0.41	-0.004	0.080		56.9	0.053	0.063	3.14									
Average	-0.004	0.42	-0.004	0.066		56.8	0.053	0.055	3.13					0.03				
W1E14-401C	0.33	41.2	0.009	0.23		4.88	0.17	0.052	0.22					0.21				
W1E14-401C	0.34	41.2	0.009	0.23		4.90	0.17	0.053	0.23									
W1E14-401C	0.33	41.2	0.008	0.23		4.98	0.17	0.054	0.23									
W1E14-401C	0.33	41.0	0.009	0.23		4.92	0.17	0.053	0.23									
Average	0.33	41.2	0.009	0.23		4.92	0.17	0.053	0.23					0.21				
W1F12-401C1	0.13	15.9	-0.01	-0.2		34.3	0.11	-0.01	1.71			0.89	0.26	0.04	0.0069	5.96	3.20	
W1F12-401C1	0.13	15.9	-0.01	-0.2		34.0	0.11	-0.01	1.70				0.25	0.04	0.0073	5.88	3.16	
W1F12-401C1	0.13	15.9	-0.01	-0.2		34.2	0.11	-0.01	1.70			0.90		0.04				
W1F12-401C1	0.14	15.9	-0.01	-0.2		34.2	0.12	-0.01	1.77					0.04				
Dried Avg.	0.13	15.9	-0.01	-0.2		34.2	0.11	-0.01	1.72			0.90						
Slurry Avg.	0.098	11.8	-0.007	-0.1484		25.4	0.08	-0.007	1.28				0.26	0.04	0.0071	5.92	3.18	
W1F12-403C2	0.13	17.1	-0.01	-0.2		32.3	0.11	-0.01	1.62			0.93	0.24	0.04	0.0051	6.40	3.45	
W1F12-403C2	0.14	17.2	-0.01	-0.2		32.2	0.12	-0.01	1.72				0.22	0.04	0.0042	6.12	3.28	
W1F12-403C2	0.13	17.1	-0.01	-0.2		32.5	0.11	-0.01	1.64			0.92		0.04				
W1F12-403C2	0.13	17.2	-0.01	-0.2		32.4	0.11	-0.01	1.63					0.04				
Dried Avg.	0.13	17.2	-0.01	-0.2		32.4	0.11	-0.01	1.65			0.93						
Slurry Avg.	0.095	12.3	-0.007	-0.1434		23.2	0.08	-0.007	1.18				0.23	0.04	0.0047	6.26	3.37	
W1F12-405C3	0.15	17.9	-0.01	-0.2		31.2	0.099	-0.01	1.53			1.10	0.28	0.04	0.0065	6.08	3.37	
W1F12-405C3	0.14	17.9	-0.01	-0.2		31.2	0.094	-0.01	1.45				0.24	0.04	0.0049	6.05	3.31	
W1F12-405C3	0.15	17.9	-0.01	-0.2		31.1	0.100	-0.01	1.57			1.06		0.04				
W1F12-405C3	0.15	17.9	-0.01	-0.2		30.9	0.099	-0.01	1.52					0.04				
Dried Avg.	0.15	17.9	-0.01	-0.2		31.1	0.098	-0.01	1.52			1.08						
Slurry Avg.	0.11	12.9	-0.007	-0.1442		22.4	0.071	-0.007	1.09				0.26	0.04	0.0057	6.07	3.34	
W1F12-407C4	0.17	20.5	-0.01	-0.2		25.8	0.12	-0.01	1.28			1.25	0.29	0.04	0.0039	7.45	3.93	
W1F12-407C4	0.17	20.5	-0.01	-0.2		25.7	0.12	-0.01	1.28				0.28	0.04	0.0043	7.12	3.74	
W1F12-407C4	0.18	20.5	-0.01	-0.2		26.2	0.12	-0.01	1.30			1.24		0.04				
W1F12-407C4	0.18	20.5	-0.01	-0.2		26.2	0.12	-0.01	1.30					0.04				
Dried Avg.	0.18	20.5	-0.01	-0.2		26.0	0.12	-0.01	1.29			1.25						
Slurry Avg.	0.12	14.5	-0.007	-0.1412		18.3	0.08	-0.007	0.91				0.29	0.04	0.0041	7.29	3.84	
W1G07-404C	0.15	19.7	-0.004	0.13	0.16	37.1	0.16	0.030	2.16				0.052	0.04				
W1G07-404C	0.14	19.7	-0.004	0.16	0.15	37.5	0.16	0.027	2.19				0.051	0.04				
W1G07-404C	0.14	19.7	-0.004	0.17	0.15	37.3	0.16	0.027	2.18					0.04				
W1G07-404C	0.14	19.7	-0.004	0.17	0.15	37.5	0.16	0.028	2.18					0.04				
Average	0.14	19.7	-0.004	0.16	0.15	37.4	0.16	0.028	2.18				0.052	0.04				

WSTC Glass Raw Data - Corning

Sample No.	PO_4^{2}	SO_4^{2}	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ppm)	(ppm)	(ppm)	(ppm)
Conver. factor	1	1	1	1	Petrographic	Petrographic	SEM / EDX	1	4.22E-04	3.16E-03	4.87E-04	8.48E-03
W1A13-301C												
W1G7-304C												
W1G7-310C												
W1G7-317C												
W1G7-322C												
W1A13-403C2			0.24									
W1A13-403C2												
W1A13-403C2			0.24									
W1A13-403C2												
Average			0.240	0.51								
W1A13-406C4			0.33									
W1A13-406C4												
W1A13-406C4			0.33									
W1A13-406C4												
Average			0.330	0.47								
W1E14-401C												
W1E14-401C												
W1E14-401C												
W1E14-401C							General Composition					
Average					N.A.	Nc & "salt" / water soluble	Na, K, Zn, Cl, Al, Si w/ S, Ca, Fe, Cr, Cu					
W1F12-401C1	-0.05	0.17										
W1F12-401C1	-0.05	0.17										
W1F12-401C1												
W1F12-401C1												
Dried Avg.												
Slurry Avg.	-0.05	0.17										
W1F12-403C2	-0.05	0.17										
W1F12-403C2	-0.05	0.19										
W1F12-403C2												
W1F12-403C2												
Dried Avg.												
Slurry Avg.	-0.05	0.18										
W1F12-405C3	-0.05	0.082										
W1F12-405C3	-0.05	0.099										
W1F12-405C3												
W1F12-405C3												
Dried Avg.												
Slurry Avg.	-0.05	0.091										
W1F12-407C4	-0.05	0.19										
W1F12-407C4	-0.05	0.084										
W1F12-407C4												
W1F12-407C4												
Dried Avg.												
Slurry Avg.	-0.05	0.14										
W1G07-404C			0.027					11.2	36	6.2	43	1.8
W1G07-404C									36	6.2	43	1.8
W1G07-404C			0.027					11.1	39	6.7	48	1.8
W1G07-404C									38	6.7	48	1.8
Average			0.027	0.04	<<1	red-tinged Opq (Cr w/ Fe) . Z	Na, Al, Si / K, Ca, Fe (assoc. w/ incl.)	11.2	37	6.5	46	1.8

WSTC Glass Raw Data - Corning

Sample No.	Date	Time	SpG	Settled Sol.	LOI 600°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
W1G07-412C2							18.3	7.95	1.29	4.32	0.036	0.032	0.59	0.97	0.81	0.070	0.007
W1G07-412C2							18.6	7.94	1.30	4.38	0.034	0.032	0.63	0.97	0.81	0.074	0.007
W1G07-412C2							18.4	7.99	1.28	4.34	0.038	0.032	0.63	0.97	0.81	0.075	0.008
W1G07-412C2							18.2	7.93	1.27	4.30	0.035	0.032	0.63	0.97	0.81	0.074	0.007
Average	12/08/94	1:09:00	2.57				18.4	7.95	1.29	4.34	0.036	0.032	0.62	0.97	0.81	0.073	0.007
W1G07-419C3							17.6	7.42	2.50	3.88	0.046	0.034	0.51	1.07	0.73	0.062	0.009
W1G07-419C3							17.9	7.46	2.55	3.95	0.043	0.034	0.52	1.07	0.73	0.063	0.008
W1G07-419C3							17.7	7.48	2.52	3.90	0.048	0.034	0.51	1.07	0.73	0.062	0.009
W1G07-419C3							17.9	7.47	2.56	3.95	0.048	0.034	0.52	1.08	0.73	0.063	0.008
Average	12/08/94	9:00:00	2.60				17.8	7.46	2.53	3.92	0.046	0.034	0.52	1.07	0.73	0.063	0.009
W1G07-425C4							18.6	7.17	1.56	3.99	0.057	0.030	0.77	1.06	0.81	0.081	0.013
W1G07-425C4							18.5	7.16	1.54	3.96	0.060	0.030	0.76	1.06	0.81	0.079	0.014
W1G07-425C4							18.9	7.16	1.56	4.01	0.058	0.031	0.77	1.06	0.81	0.081	0.014
W1G07-425C4							18.7	7.18	1.55	3.98	0.056	0.031	0.77	1.06	0.80	0.080	0.015
Average	12/08/94	15:00:00	2.58				18.7	7.17	1.55	3.99	0.058	0.031	0.77	1.06	0.81	0.080	0.014
W1R15-401C							51.2	6.03	0.13	0.35	5.48	0.22	0.24	3.87	0.18	0.33	-0.004
W1R15-401C							51.0	5.95	0.13	0.33	5.43	0.22	0.23	3.89	0.18	0.32	-0.004
W1R15-401C							50.7	6.00	0.13	0.35	5.62	0.23	0.24	3.81	0.18	0.33	-0.004
W1R15-401C							50.5	6.01	0.13	0.35	5.58	0.23	0.24	3.83	0.18	0.33	-0.004
Average	12/13/94	11:00:00					50.9	6.00	0.13	0.35	5.53	0.23	0.24	3.85	0.18	0.33	-0.004
W1Z11-401C							34.0	4.74	0.85	2.29	0.19	0.009	2.54	0.81	0.50	0.055	0.032
W1Z11-401C							34.2	4.67	0.83	2.24	0.19	0.009	2.50	0.81	0.51	0.054	0.032
W1Z11-401C							33.4	4.69	0.84	2.29	0.19	0.009	2.56	0.81	0.51	0.055	0.032
W1Z11-401C							33.2	4.66	0.82	2.23	0.19	0.009	2.50	0.81	0.51	0.054	0.031
Average	12/09/94	16:50:00	2.57				33.7	4.69	0.84	2.26	0.19	0.009	2.53	0.81	0.51	0.055	0.032

Sample No.	Date	Time	SpG	Settled Sol.	LOI 600°C	LOD	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values							18.22	9.45	0.00	4.65	0.00	0.00	0.00	1.44	0.83	0.00	0.00
W1A13-301C							18.4	12.0	1.77	5.73	-0.001	0.002	0.74	0.06	1.09	0.084	0.011
W1G7-304C							18.7	6.57	0.76	4.24	0.038	0.022	0.65	0.90	1.05	0.093	0.019
W1G7-310C							18.5	7.17	1.07	4.24	0.044	0.032	0.68	1.07	0.78	0.039	0.018
W1G7-317C							18.8	6.88	1.24	4.28	0.044	0.029	0.90	0.96	0.77	0.030	0.022
W1G7-322C							18.3	8.10	1.66	4.42	0.035	0.029	0.69	0.93	0.80	0.017	0.015
W1A13-403C2	12/08/94	1:50:00					16.8	11.8	3.73	5.30	-0.004	0.002	0.52	0.13	1.05	0.086	-0.004
W1A13-406C4	12/08/94	15:15:00					18.7	11.9	1.52	5.80	-0.004	0.002	0.79	0.062	1.09	0.090	-0.004
W1E14-401C	12/13/94	11:00:00					8.16	16.9	0.14	0.81	0.208	0.35	0.58	4.16	0.60	0.037	0.023
W1F12-401C1(d)	12/07/94	17:00:00					14.5	7.58	1.19	3.56	0.033	0.13	0.44	1.35	0.67	0.058	0.009
W1F12-401C1(s)	12/07/94	17:00:00				25.8	10.8	5.62	0.88	2.64	0.024	0.10	0.32	1.00	0.50	0.043	0.007
W1F12-403C2(d)	12/08/94	1:00:00					14.6	7.28	1.02	3.37	0.037	0.15	0.43	1.46	0.67	0.055	0.010
W1F12-403C2(s)	12/08/94	1:00:00				28.3	10.4	5.22	0.73	2.41	0.027	0.11	0.31	1.04	0.48	0.040	0.007
W1F12-405C3(d)	12/08/94	9:05:00					13.1	7.41	1.76	3.20	0.036	0.14	0.33	1.46	0.61	0.044	0.009
W1F12-405C3(s)	12/08/94	9:05:00				27.9	9.43	5.34	1.27	2.31	0.026	0.10	0.24	1.05	0.44	0.032	0.006
W1F12-407C4(d)	12/08/94	15:00:00					12.5	5.93	1.08	2.68	0.043	0.17	0.31	1.73	0.53	0.044	0.009
W1F12-407C4(s)	12/08/94	15:00:00				29.4	8.83	4.18	0.76	1.89	0.030	0.12	0.22	1.22	0.37	0.031	0.006
W1G07-404C	12/07/94	17:00:00	2.58				19.4	6.67	1.05	4.32	0.037	0.028	0.71	0.97	0.84	0.084	0.008
W1G07-412C2	12/08/94	1:09:00	2.57				18.4	7.95	1.29	4.34	0.036	0.032	0.62	0.97	0.81	0.073	0.007
W1G07-419C3	12/08/94	9:00:00	2.60				17.8	7.46	2.53	3.92	0.046	0.034	0.52	1.07	0.73	0.063	0.009
W1G07-425C4	12/08/94	15:00:00	2.58				18.7	7.17	1.55	3.99	0.058	0.031	0.77	1.06	0.81	0.080	0.014
W1R15-401C	12/13/94	11:00:00					50.9	6.00	0.13	0.35	5.53	0.23	0.24	3.85	0.18	0.33	-0.004
W1Z11-401C	12/09/94	16:50:00	2.57				33.7	4.69	0.84	2.26	0.19	0.009	2.53	0.81	0.51	0.055	0.032

WSTC Glass Raw Data - Corning

Sample No.	MoO_3 (wt%)	Na_2O (wt%)	NiO (wt%)	P_2O_5 (wt%)	SO_3 (wt%)	SiO_2 (wt%)	SrO (wt%)	TiO_2 (wt%)	ZrO_2 (wt%)	TOC (wt%)	TIC (wt%)	Total C (wt%)	Cl (wt%)	F (wt%)	I (wt%)	NO_3 (wt%)	NO_2 (wt%)	Total N_2 (wt%)
W1G07-412C2	0.13	18.2	-0.004	0.098	0.16	37.3	0.13	0.029	2.12				0.055	0.04				
W1G07-412C2	0.13	18.2	-0.004	0.099	0.15	37.7	0.14	0.033	2.14				0.053	0.04				
W1G07-412C2	0.14	18.2	-0.004	0.11	0.15	37.5	0.14	0.033	2.13					0.04				
W1G07-412C2	0.13	18.2	-0.004	0.14	0.15	37.4	0.14	0.033	2.11					0.04				
Average	0.13	18.2	-0.004	0.11	0.15	37.5	0.14	0.032	2.13				0.054	0.04				
W1G07-419C3	0.15	20.8	-0.004	0.16	0.19	35.2	0.13	0.056	1.90				0.068	0.03				
W1G07-419C3	0.16	20.8	-0.004	0.17	0.19	35.9	0.14	0.057	1.93				0.069	0.03				
W1G07-419C3	0.15	20.8	-0.004	0.13	0.19	35.2	0.14	0.057	1.92					0.03				
W1G07-419C3	0.16	20.9	-0.004	0.15	0.19	35.6	0.14	0.058	1.94					0.03				
Average	0.16	20.8	-0.004	0.15	0.19	35.5	0.14	0.057	1.92				0.07	0.03				
W1G07-425C4	0.16	21.0	-0.004	0.18	0.19	35.3	0.15	0.045	2.00				0.061	0.03				
W1G07-425C4	0.16	21.0	-0.004	0.20	0.20	35.0	0.15	0.044	1.98				0.061	0.03				
W1G07-425C4	0.16	21.0	-0.004	0.16	0.19	35.2	0.15	0.045	2.01					0.03				
W1G07-425C4	0.16	20.9	-0.004	0.20	0.19	35.3	0.15	0.045	1.99					0.03				
Average	0.16	21.0	-0.004	0.19	0.19	35.2	0.15	0.045	2.00				0.061	0.03				
W1R15-401C	0.23	21.6	-0.004	1.99		3.78	0.043	0.024	0.13					0.15				
W1R15-401C	0.22	21.6	-0.004	1.96		3.77	0.041	0.025	0.13					0.15				
W1R15-401C	0.22	21.5	-0.004	1.94		3.77	0.043	0.022	0.10					0.15				
W1R15-401C	0.23	21.5	-0.004	1.97		3.78	0.043	0.020	0.09					0.15				
Average	0.23	21.6	-0.004	1.97		3.78	0.043	0.023	0.11					0.15				
W1Z11-401C	0.28	33.1	-0.004	0.46		17.8	0.12	0.051	0.77				0.055	0.03	-0.003	0.03	0.054	
W1Z11-401C	0.28	33.1	-0.004	0.41		18.1	0.11	0.051	0.71				0.065	0.03	-0.003	0.04	0.067	
W1Z11-401C	0.28	33.1	-0.004	0.45		17.8	0.12	0.045	0.78					0.04				
W1Z11-401C	0.27	33.1	-0.004	0.44		18.0	0.11	0.045	0.78					0.04				
Average	0.28	33.1	-0.004	0.44		17.9	0.12	0.048	0.76				0.060	0.04	-0.003	0.04	0.061	

Sample No.	MoO_3 (wt%)	Na_2O (wt%)	NiO (wt%)	P_2O_5 (wt%)	SO_3 (wt%)	SiO_2 (wt%)	SrO (wt%)	TiO_2 (wt%)	ZrO_2 (wt%)	TOC (wt%)	TIC (wt%)	Total C (wt%)	Cl (wt%)	F (wt%)	I (wt%)	NO_3 (wt%)	NO_2 (wt%)	Total N_2 (wt%)
Target Values	0.00	18.82	0.00	0.00	0.00	42.90	0.00	0.00	2.10				0.00	0.00	0.00	0.00	0.00	
W1A13-301C	-0.001	0.46	-0.001	0.11		54.1	0.047	0.060	2.89					0.03				
W1G7-304C	0.14	20.1	0.002	0.17		40.7	0.096	0.054	2.39					0.02				
W1G7-310C	0.16	21.9	0.005	0.14		39.3	0.089	0.052	2.08					0.03				
W1G7-317C	0.15	20.8	0.004	0.14		39.7	0.082	0.057	2.07					0.02				
W1G7-322C	0.14	18.5	0.004	0.11		41.4	0.075	0.060	2.09					0.02				
W1A13-403C2	-0.004	1.10	-0.004	0.030		55.4	0.045	0.071	2.57					0.08				
W1A13-406C4	-0.004	0.42	-0.004	0.066		56.8	0.053	0.055	3.13					0.03				
W1E14-401C	0.33	41.2	0.009	0.23		4.92	0.17	0.053	0.23					0.21				
W1F12-401C1(d)	0.13	15.9	-0.010	-0.20		34.2	0.113	-0.010	1.72			0.90						
W1F12-401C1(s)	0.10	11.8	-0.007	-0.15		25.4	0.083	-0.007	1.28				0.26	0.04	0.0071	5.92	3.18	
W1F12-403C2(d)	0.13	17.2	-0.010	-0.20		32.4	0.113	-0.010	1.65			0.93						
W1F12-403C2(s)	0.10	12.3	-0.007	-0.14		23.2	0.081	-0.007	1.18				0.23	0.04	0.0047	6.26	3.37	
W1F12-405C3(d)	0.15	17.9	-0.010	-0.20		31.1	0.098	-0.010	1.52			1.08						
W1F12-405C3(s)	0.11	12.9	-0.007	-0.14		22.4	0.071	-0.007	1.09				0.26	0.04	0.0057	6.07	3.34	
W1F12-407C4(d)	0.18	20.5	-0.010	-0.20		26.0	0.12	-0.010	1.29			1.25						
W1F12-407C4(s)	0.12	14.5	-0.007	-0.14		18.3	0.085	-0.007	0.91				0.29	0.04	0.0041	7.29	3.84	
W1G07-404C	0.14	19.7	-0.004	0.16	0.15	37.4	0.16	0.028	2.18				0.052	0.04				
W1G07-412C2	0.13	18.2	-0.004	0.11	0.15	37.5	0.14	0.032	2.13				0.054	0.04				
W1G07-419C3	0.16	20.8	-0.004	0.15	0.19	35.5	0.14	0.057	1.92				0.07	0.03				
W1G07-425C4	0.16	21.0	-0.004	0.19	0.19	35.2	0.15	0.045	2.00				0.061	0.03				
W1R15-401C	0.23	21.6	-0.004	1.97		3.78	0.043	0.023	0.11					0.15				
W1Z11-401C	0.28	33.1	-0.004	0.44		17.9	0.12	0.048	0.76				0.06	0.04	-0.003	0.04	0.061	

WSTC Glass Raw Data - Corning

Sample No.	PO_4^{3-}	SO_4^{2-}	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ppm)	(ppm)	(ppm)	(ppm)
W1G07-412C2			0.042					10.7	28	5.6	27	1.3
W1G07-412C2									27	5.4	26	1.3
W1G07-412C2			0.042					10.2	28	5.5	27	1.3
W1G07-412C2									28	5.5	27	1.3
Average			0.042	0.08	<<1	red-tinged Opq (Cr w/ Fe) , Z, AlRf	Al, Zr, Ca, Fe / Si, Pb, Cl (multi-lamellar)	10.5	28	5.5	27	1.3
W1G07-419C3			-0.005					10.6	39	8.4	51	2.5
W1G07-419C3									39	8.3	50	2.5
W1G07-419C3			-0.005					10.9	44	9.6	59	2.7
W1G07-419C3									43	9.4	58	2.7
Average			-0.005	-0.01	<<<1	red-tinged Opq (Cr w/ Fe) , Z	Al, Si, Zr, Ba, Fe / Na, Pb, Cl, K (m-lamellar)	10.8	41	8.9	55	2.6
W1G07-425C4			-0.005					10.7	24	16	91	3.4
W1G07-425C4									23	16	89	3.4
W1G07-425C4			-0.005					10.8	24	15	91	3.4
W1G07-425C4									24	15	91	3.4
Average			-0.005	-0.01	<<1	red-tinged Opq, devit, AlRf, Z, Cm, Fel	Al, Zr, Ca, Ba, Fe / Pb, Cl, K, Si (m-lamellar)	10.8	24	16	91	3.4
W1R15-401C												
W1R15-401C												
W1R15-401C												
W1R15-401C												
Average												
W1Z11-401C	-0.05	0.79	0.005									
W1Z11-401C	-0.05	0.80										
W1Z11-401C			0.005									
W1Z11-401C												
Average	-0.05	0.80	0.005	0.002	N.A.	Carnegieite, Ne, Cr, w/ Nb (possible)	(Gen Comp.) Al, Si, Na, Ca, Fe, K, Zn					

Sample No.	PO_4^{3-}	SO_4^{2-}	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)			(vol%)	I.D.	Enriched / Depleted	pH	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)
Target Values	0.00	0.00	98.41		Petrographic	Petrographic	SEM / EDX				0.102	
W1A13-301C			97.6		N.A.	N.A.	N.A.					
W1G7-304C			96.7		N.A.	N.A.	N.A.					
W1G7-310C			97.4		N.A.	N.A.	N.A.					
W1G7-317C			97.0		N.A.	N.A.	N.A.					
W1G7-322C			97.4		N.A.	N.A.	N.A.					
W1A13-403C2			98.7	0.51	N.A.	N.A.	N.A.					
W1A13-406C4			100.5	0.47	N.A.	N.A.	N.A.					
W1E14-401C			79.2		N.A.	Nc & "salt" / water soluble	Na, K, Zn, Cl, Al, Si w/ S, Ca, Fe, Cr, Cu					
W1F12-401C1(d)			82.5		N.A.	N.A.	N.A.					
W1F12-401C1(s)	-0.05	0.17	95.9		N.A.	N.A.	N.A.					
W1F12-403C2(d)			81.3		N.A.	N.A.	N.A.					
W1F12-403C2(s)	-0.05	0.18	96.0		N.A.	N.A.	N.A.					
W1F12-405C3(d)			79.9		N.A.	N.A.	N.A.					
W1F12-405C3(s)	-0.05	0.091	94.5		N.A.	N.A.	N.A.					
W1F12-407C4(d)			74.3		N.A.	N.A.	N.A.					
W1F12-407C4(s)	-0.05	0.14	92.6		N.A.	N.A.	N.A.					
W1G07-404C			94.1	0.042	<<1	red-tinged Opq (Cr w/ Fe) , Z	Na, Al, Si / K, Ca, Fe (assoc. w/ incl.)	11.15	0.016	0.020	0.022	0.015
W1G07-412C2			93.0	0.075	<<1	red-tinged Opq (Cr w/ Fe) , Z, AlRf	Al, Zr, Ca, Fe / Si, Pb, Cl (multi-lamellar)	10.45	0.012	0.017	0.013	0.011
W1G07-419C3			93.2	-0.011	<<<1	red-tinged Opq (Cr w/ Fe) , Z	Al, Si, Zr, Ba, Fe / Na, Pb, Cl, K (m-lamellar)	10.75	0.017	0.028	0.027	0.022
W1G07-425C4			93.2	-0.007	<<1	red-tinged Opq, devit, AlRf, Z, Cm, Fel	Al, Zr, Ca, Ba, Fe / Pb, Cl, K, Si (m-lamellar)	10.75	0.010	0.049	0.044	0.029
W1R15-401C			95.5		N.A.	N.A.	N.A.					
W1Z11-401C	-0.05	0.80	99.3	0.002	N.A.	Carnegieite, Ne, Cr, w/ Nb (possible)	(Gen Comp.) Al, Si, Na, Ca, Fe, K, Zn					

WSTC Glass Raw Data - USGS

Sample No.	Date	Time	SpG	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B	Ba	CaO	Cr	Cs	Fe_2O_3	K_2O	Li	MgO	MnO	Mo
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(ppm)	(ppm)	(wt%)	(ppm)	(ppm)	(wt%)	(wt%)	(ppm)	(wt%)	(wt%)	(ppm)
Conver. factor					1	1	1	3.22E-04	1.12E-04	1	1.46E-04	1.06E-04	1	1	2.15E-04	1	1.225	1.50E-04
W1G07-425U4					-0.01		19.0	21700	15000	4.05	390	327	0.74	1.01		0.11	0.03	1100
W1G07-425U4					-0.01		19.1	21300	15000	4.06	390	323	0.75	1.01		0.12	0.03	1100
Average	12/08/94	15:00:00			-0.01		19.1	21500	15000	4.06	390	325	0.745	1.01		0.115	0.03	1100
W1A13-406U4					0.08		18.2	35100	16000	5.61	-4.00	24.2	0.69	0.05		0.11	0.02	-8
W1A13-406U4					0.75		18.2	35700	16000	5.59	-4.00	24.6	0.70	0.05		-0.10	0.03	-8
Average	12/08/94	15:15:00			0.415		18.2	35400	16000	5.60	-4.00	24.4	0.695	0.05		0.005	0.025	-8
W1F12-407U					14.9		14.9	24900	15000	3.76	260	1260	0.44	1.01		-0.1	0.02	680
W1F12-407U					14.9		14.9	25100	15000	3.76	260	1270	0.44	1.01		-0.1	0.02	670
Average	12/08/94	15:00:00			14.9		14.9	25000	15000	3.76	260	1265	0.44	1.01		-0.1	0.02	675

Sample No.	Date	Time	SpG	Settled Sol.	LOI 925°C	LOD 110°C	Al_2O_3	B_2O_3	BaO	CaO	Cr_2O_3	Cs_2O	Fe_2O_3	K_2O	Li_2O	MgO	MnO_2	MoO_3
	mm/dd/yy	hh:mm:ss	(g/cc)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values							18.22	9.45	0.00	4.65	0.00	0.00	0.00	1.44	0.83	0.00	0.00	0.00
W1G07-425U4	12/08/94	15:00:00			-0.01		19.1	6.92	1.68	4.06	0.06	0.034	0.75	1.01		0.1	0.04	0.17
W1A13-406U4	12/08/94	15:15:00			0.42		18.2	11.4	1.79	5.60	-0.001	0.003	0.70	0.05		0.0	0.03	-0.001
W1F12-407U	12/08/94	15:00:00			14.9		14.9	8.05	1.68	3.76	0.038	0.134	0.44	1.01		-0.1	0.02	0.101

WSTC Glass Raw Data - USGS

Sample No.	Na_2O	Ni	P_2O_5	S	SiO_2	Sr	TiO_2	Zr	TOC	TIC (CO_3)	Total C	Cl^-	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}
	(wt%)	(ppm)	(wt%)	(wt%)	(wt%)	(ppm)	(wt%)	(ppm)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Conver. factor	1	1.27E-04	1	2.497	1	1.18E-04	1	1.35E-04	1	1	1	1	1	1				
W1G07-425U4	20.3	13	0.21	0.06	39.8	1300	0.07	14300				0.06	0.04					
W1G07-425U4	20.3	13	0.21	0.06	39.8	1300	0.08	14100				0.06	0.03					
Average	20.3	13	0.21	0.06	39.8	1300	0.075	14200				0.06	0.035	-0.0025				
W1A13-406U4	0.30	-8	0.08	-0.05	54.2	440	0.08	19100				-0.01	0.04					
W1A13-406U4	0.30	-8	0.08	-0.05	54.0	440	0.08	19300				-0.01	0.04					
Average	0.3	-8	0.08	-0.05	54.1	440	0.08	19200				-0.01	0.04	-0.003				
W1F12-407U	12.8	-8	0.14	0.06	37.2	990	0.06	13200	0.50	0.49	0.99	0.25	0.06	0.0960				
W1F12-407U	12.8	-8	0.14	0.06	37.2	990	0.06	13300	0.49	0.51	1.00	0.25	0.07	0.0996				
Average	12.8	-8	0.14	0.06	37.2	990	0.06	13250	0.50	0.50	0.995	0.25	0.065	0.0978				

Sample No.	Na_2O	NiO	P_2O_5	SO_3	SiO_2	SrO	TiO_2	ZrO_2	TOC	TIC (CO_3)	Total C	Cl^-	F^-	I^-	NO_3^-	NO_2^-	Total N_2	PO_4^{3-}
	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)	(wt%)
Target Values	18.82	0.00	0.00	0.00	42.90	0.00	0.00	2.10				0.00	0.00	0.00	0.00	0.00		0.00
W1G07-425U4	20.3	0.002	0.21	0.15	39.8	0.15	0.08	1.92				0.06	0.04	-0.003				
W1A13-406U4	0.30	-0.001	0.08	-0.12	54.1	0.05	0.08	2.59				-0.01	0.04	-0.003				
W1F12-407U	12.8	-0.00102	0.14	0.150	37.2	0.117	0.06	1.79	0.50	0.50	0.995	0.25	0.065	0.0978				

WSTC Glass Raw Data - USGS

Sample No.	SO_4^{2-}	FeO	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	PCT Leachate	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted	pH	(ppm)	(ppm)	(ppm)	(ppm)
Conver. factor			1	Petrographic	Petrographic	SEM ; EDX	1	3.86E-04	3.35E-03	4.77E-04	8.56E-03
W1G07-425U4		0.03					11.26	32	5.9	110	2.0
W1G07-425U4		0.04					11.27	32	6.0	100	2.0
Average		0.035					11.27	32	6.0	105	2.0
W1A13-406U4		0.33									
W1A13-406U4		0.36									
Average		0.345									
W1F12-407U		0.02									
W1F12-407U		-0.01									
Average		0.005									

Sample No.	SO_4^{2-}	Total	Fe(II)/Total Fe	Solid Inclusions	Solid Inclusions	Cord Composition	Leach. pH	Si (PCT)	B (PCT)	Na (PCT)	K (PCT)
	(wt%)	(wt%)		(vol%)	I.D.	Enriched / Depleted		(g/m^2-day)	(g/m^2-day)	(g/m^2-day)	(g/m^2-day)
Target Values	0.00	98.41		Petrographic	Petrographic	SEM / EDX				0.102	
W1G07-425U4		96.57					11.3	0.012	0.020	0.050	0.017
W1A13-406U4		94.88									
W1F12-407U		83.70									