2000109

FLUID MIGRATION AND ASSOCIATED DIAGENESIS IN THE GREATER REELFOOT RIFT REGION, MIDCONTINENT, U.S.A.

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MATERIAL FOR

GSA DATA REPOSITORY

DATA FILE 1

Distribution of Dolomite and Calcite Cements

Amoco Spence Trust # 1

Cement Type	Sample Number	Depth (Feet)	Unit (Age)	Cement Zones Present
RR-I				
	94-31	3210-20	Knox (Middle Ordovician)	1,2,3,4,5
	94-34	3550-60	Knox (Middle Ordovician)	1,2,3,4,5
	94-39	5130-40	Knox (Middle Ordovician)	2,3,4
	94-51	7330-40	Derby Doe-Run (Cambrian)	1,2,3,4
	94-52	7700-05	Bonneterre (Cambrian)	1,2,3,4
	94-60	8980-90	Bonneterre (Cambrian)	3,4
	94-62	9800-10	Bonneterre (Cambrian)	1,2,3
	94-50	7220-30	Derby Doe-Run (Cambrian)	1,2,3
	94-53	7770-80	Bonneterre (Cambrian)	2,3,4
	94-58	8830-40	Bonneterre (Cambrian)	1,2,3,4,5
	1842	1842	Mascot Dolomite (L. Ord.)	1,2,3,4,5
	94-39	5130-40	Knox (Mid. Ordovician)	1,2,3,4
	94-50	7220-30	Derby Doe-Run (Cambrian)	1,2
	94-51	7230-40	Derby Doe-Run (Cambrian)	2,3,4
	94-63	9890-00	Bonneterre (Cambrian)	2,3,4
RR-II				
	94-30	3100-10	Knox (Middle Ordovician)	1,2
	94-33	3460-70	Knox (Middle Ordovician)	1,2
	94-35	3840-50	Knox (Middle Ordovician)	1,2
	94-36	4000-10	Knox (Middle Ordovician)	1,2
	94-37	4470-80	Knox (Middle Ordovician)	1,2, calcite
	94-40	5230-40	Knox (Middle Ordovician)	1, calcite
	94-41	5300-10	Knox (Middle Ordovician)	1,2
	94-42	5660-70	Knox (Lower Ordovician)	1,2, calcite
	94-45	6280-90	Knox (Lower Ordovician)	1,2, calcite
	94-46	6380-90	Knox (Lower Ordovician)	1,2, calcite
	94-49	6960-70	Derby Doe-Run (Cambrian)	1,2, calcite
	94-52	7700-05	Bonneterre (Cambrian)	1,2
	94-55	8160-70	Bonneterre (Cambrian)	1,2, calcite
	94-57	8560-70	Bonneterre (Cambrian)	1,2, calcite
	94-60	8980-90	Bonneterre (Cambrian)	1,2, calcite

Distribution of Dolomite and Calcite Cements (Continued)

Strake Co. Russell #1

RR-II (?) or possibly WP-III, samples were too small for confirmation by isotope analysis.

	92-473-S	2074	Eminence (L. Ordovician)	All
	92-474-S	2333	Eminence (L. Ordovician)	All

Dupont GHS #1 Well

EP-III				
	4717	4717	Copper Ridge Dolo.(Camb.)	1,2,3,4,5,6
	4811	4811	Copper Ridge Dolo. (Camb.)	1,3,4,5,6
	5006	5006	Copper Ridge Dolo. (Camb.)	1,2,3,4,5,6
	5115	5115	Copper Ridge Dolo. (Camb.)	1,2,3,4.5
	5212	5212	Copper Ridge Dolo. (Camb.)	2,3,4,5,6
	5260	5260	Copper Ridge Dolo. (Camb.)	1,2,3,4,
	5321	5321	Copper Ridge Dolo. (Camb.)	1,2,3,4,5,6
	5360	5360	Copper Ridge Dolo. (Camb.)	1,2,3,4,5
	5413	5413	Copper Ridge Dolo. (Camb.)	1,2,3,4,5
	5464	5464	Copper Ridge Dolo. (Camb.)	1,2,3,4
	5507	5507	Copper Ridge Dolo. (Camb.)	1,3,4,5,6
	5554	5554	Copper Ridge Dolo. (Camb.)	1,2,3,4,5
	5608	5608	Conasauga Fm. (Camb.)	1,2,4,5,6
	5659	5659	Conasauga Fm. (Camb.)	1,2,3,4,5
	5751	5751	Conasauga Fm. (Camb.)	2,3,4,5
	5806	5806	Conasauga Fm. (Camb.)	2,3,4,5,6
	5818	5818	Conasauga Fm. (Camb.)	1,2,3,4,5
EP-II				
	2400	2400	Mascot Dolomite (L. Ord.)	1,2
	2840	2840	Mascot Dolomite (L. Ord.)	1,2,3
	3165	3165	Mascot Dolomite (L. Ord.)	1,2,3,4
	3357	3357	Kingsport Fm. (L. Ord.)	1,2
	3845	3845	Chepultepec Dolo. (L. Ord.)	1,2,3,4
	3900	3900	Chepultepec Dolo. (L. Ord.)	1,2,3
	4015	4015	Chepultepec Dolo. (L. Ord.)	1,2,3,4
	4521	4521	Copper Ridge Dolo. (Camb.)	1,2
EP-III				
	1471	1471	Ridley Limestone (M. Ord.)	1,2,3,4
	2061	2067	Mascot Dolomite (L. Ord.)	1,2,3,4,5
	2114	2114	Mascot Dolomite (L. Ord.)	1,2,3,4,5

Distribution of Dolomite and Calcite Cements (Continued)

M = Marr Inc. Barnett #1; St = Strake Co. Russell #1; O = U.S.B.M. Oliver # 1

WP-I				
	92-507-M	4000	Bonneterre (M.Camb.)	All
	92-512-M	4555	Bonneterre (M. Camb.)	All
	92-479-S	2813	Potosi (L. Ordovician)	All
	92-513-O	1520	Jefferson City (U. Ord.)	All
	92-514-O	1760	Roubidoux (U. Ord.)	All
	92-516-O	2420	Eminence (L. Ordovician)	All
WP-II				
	92-501-M	1400	Roubidoux (U. Ord.)	All
	92-503-M	1750	Lower Gasconade (M. Ord.)	All
	92-504-M	2250	Eminence (L. Ordovician)	All
	92-505-M	2700	Potosi (L. Ordovician)	All
	92-480-M	3355	Derby (U. Camb.)	All
	92-476-S	3002	Derby (U. Camb.)	All
	92-498-S	3500	Bonneterre (M. Camb.)	All
	92-516-O	2420	Eminence (L. Ordovician)	All
	92-520-O	2840	Doe-Run (U. Camb.)	All
	92-482-O	2900	Doe-Run (U. Camb.)	All
	92-521-O	2940	Doe-Run (U. Camb.)	All
	92-483-O	2952	Derby (U. Camb.)	All
	92-485-O	3090	Derby (U. Camb.)	All
	92-524-O	3360	Davis (U. Camb.)	All
	92-525-O	3560	Bonneterre (M. Camb.)	All
	92-487-O	3630	Bonneterre (M. Camb.)	All
	92-527-O	3690	Bonneterre (M. Camb.)	All
WP-III				
	92-503-M	1750	Lower Gasconade (M. Ord.)	All
	92-509-M	4500	Bonneterre (M. Camb.)	All
	92-516-O	2420	Eminence (L. Ordovician)	All
	92-518-O	2540	Potosi (L. Ordovician)	All
	92-519-O	2640	Potosi (L. Ordovician)	All
	92-522-O	3025	Derby (U. Camb.)	All
	92-485-O	3090	Derby (U. Camb.)	All
	92-524-O	3360	Davis (U. Camb.)	All
	92-525-O	3560	Bonneterre (M. Camb.)	All

Distribution of Dolomite and Calcite Cements (Continued)

WP-IV

92-501-M	1400	Roubidoux (U. Ord.)	All
92-504-M	2250	Eminence (L. Ordovician)	All
92-494-S	2935	Derby (U. Camb.)	All
92-476-S	3002	Derby (U. Camb.)	All
92-498-S	3500	Bonneterre (M. Camb.)	All
92-499-S	3550	Bonneterre (M. Camb.)	All
92-500-S	3600	Bonneterre (M. Camb.)	All
92-481-O	2717	Potosi (L. Ordovician)	All

DATA FILE 2

Fluid Inclusion Data

E. I. Dupont GHS #1

Cc = Calcite Cement; Rc = Replacement Calcite; Rd = Replacement Dolomitr. Cd = Dolomite Cement: I, II, III = Three Eastern Platform cement stratigraphies, Cd-IIs = RR-2 dolomite cement in the Spence Trusts well. * = Salinity data based on freezing point depression in the system H_2O-NaCl (Potter et. al., 1978). All data listed are from primary inclusions.

Sample (depth in m)	Fluid Inclusion Host	T_{fm} °C first ice melt	T_m °C last ice melt	T_h°C Homog. Temp.	Salinity (eq. wt. % NaCl*)
2067	Rd	---	-13.4	141	17.3
(626)	Rd	---	-15.6	140	19.2
	Rd	---	-11.3	145	15.3
	Rd	---	-14.4	135	18.2
	Rd	---	-13.9	136	17.8
	Cc	-26.2	-2.1	112	3.5
	Cc	-27.5	-2.6	97	4.3
	Cc	-21.4	-3.1	91	5.1
	Cc	-24.2	-2.8	99	4.6
	Cc	-25.6	-2.5	104	4.2
2114	Rd	---	-15.6	124	19.2
(641)	Rd	---	-14.5	144	18.3
	Rd	---	-16.4	147	19.8
	Rd	---	-14.1	141	17.9
	Rd	---	-17.4	148	20.6
	Rd	---	-15.1	145	18.8
	Rd	---	-8.9	123	12.7
	Cc	-35.7	-1.2	103	2.1
	Cc	-36.7	-2.0	100	3.4
	Cc	-35.9	-1.7	109	2.9
	Cc	-35.1	-1.3	99	2.2
	Cc	-31.4	-2.1	108	3.5
	Cc	-29.7	-1.8	111	3.1
	Cc	-34.3	-1.6	106	2.7
2900	Rd	-30.5	-21.2	138	23.2
(879)	Rd	-28.6	-14.7	134	18.4
	Rd	-29.4	-11.6	141	15.6
	Rd	-31.5	-15.6	144	19.2
	Rd	-33.1	-16.1	135	19.6
	Cc	-21.5	-6.2	110	9.5
	Cc	-18.4	-2.1	115	3.5
	Cc	-25.9	-4.3	101	6.9
	Cc	-23.9	-1.1	100	1.9
	Cc	-20.4	-5.2	107	8.1
3049	Rd	-38.1	-21.6	150	23.5
(924)	Rd	-40.3	-23.4	145	24.6
	Rd	-36.6	-24.1	157	25.0
	Rd	-41.1	-27.6	165	27.1
	Rd	-35.1	-22.2	153	23.9

Fluid Inclusion Data (Continued)

3049	Rd	-38.7	-25.6	161	25.9
(924)	Cd-II	-39.1	-20.4	160	22.7
	Cd-II	-36.3	-24.2	155	25.1
	Cd-II	-38.4	-25.1	151	25.6
	Cd-II	-37.3	-23.6	147	24.7
	Cd-II	-33.3	-26.7	158	26.5
	Cd-II	-35.7	-28.4	155	27.5
	Cc	----	-4.9	117	7.7
	Cc	----	-1.5	109	2.6
	Cc	-22.4	-3.0	102	4.9
	Cc	-19.7	-5.8	112	8.9
	Cc	-20.3	-2.7	106	4.5
3357	Rd	-35.3	-23.7	162	24.8
(1017)	Rd	----	-21.5	167	23.4
	Rd	-40.1	-25.1	155	25.6
	Rd	-46.4	-22.6	161	24.1
	Rd	----	-23.1	160	24.4
	Cd-II	-38.7	-25.1	147	25.6
	Cd-II	----	-19.1	154	21.8
	Cd-II	-45.1	-21.6	149	23.5
	Cd-II	-41.3	-23.7	152	24.8
	Cd-II	----	-24.2	150	25.1
3900	Rd	----	-22.1	145	23.8
(1182)	Rd	----	-24.3	150	25.1
	Rd	----	-21.7	142	23.6
	Rd	----	-19.8	140	22.3
	Rd	----	-20.4	144	22.7
	Rd	----	-23.2	146	24.5
	Cd-II	-30.9	-14.5	130	18.3
	Cd-II	-33.1	-17.6	137	20.7
	Cd-II	-32.2	-15.3	131	18.9
	Cd-II	-34.7	-18.0	138	21.0
	Cd-II	-31.9	-16.7	136	20.1
	Cd-II	-36.8	-17.1	129	20.4
4015	Rd	----	-20.5	141	22.8
(1217)	Rd	----	-22.3	147	23.9
	Rd	----	-21.7	145	23.6
	Rd	----	-23.1	139	24.4
	Rd	----	-21.1	144	23.2
	Cd-II	-37.6	-17.6	131	20.7
	Cd-II	-35.3	-18.1	128	21.1
	Cd-II	-35.4	-19.4	135	22.0
	Cd-II	----	-18.5	136	21.4
	Cd-II	----	-16.6	127	20.0
4717	Rd	-41.6	-18.2	138	21.2
(1429)	Rd	-43.1	-22.8	134	24.3
	Rd	-40.7	-21.7	145	23.6
	Rd	-41.4	-19.6	148	22.2
	Rd	-43.5	-22.7	139	24.2
	Rd	----	-23.8	141	24.8
	Rd	----	-21.4	136	23.4
	Rd	----	-20.1	144	22.5

Fluid Inclusion Data (Continued)

4717	Cd-III	-48.8	-21.1	119	23.2
(1429)	Cd-III	-41.3	-20.4	142	22.7
	Cd-III	-45.6	-19.1	121	21.8
	Cd-III	-46.5	-17.0	126	20.3
	Cd-III	-46.4	-18.1	122	21.1
	Cd-III	-42.8	-19.9	129	22.4
	Cd-III	-44.3	-18.9	127	21.7
	Cd-III	-47.6	-20.9	132	23.0
5115	Rd	----	-19.6	144	22.2
(1550)	Rd	----	-22.2	146	23.9
	Rd	----	-21.8	150	23.6
	Rd	----	-23.6	145	24.7
	Rd	----	-20.4	141	22.7
	Rd	----	-20.9	148	23.0
	Cd-III	-38.2	-18.5	118	21.4
	Cd-III	-40.5	-18.3	116	21.3
	Cd-III	-44.4	-22.2	130	23.9
	Cd-III	-41.4	-19.7	121	22.2
	Cd-III	-40.3	-18.1	123	21.1
	Cd-III	-35.4	-21.6	119	23.5
5321	Rd	----	-23.1	142	24.4
(1612)	Rd	----	-21.1	150	23.2
	Rd	----	-20.8	146	23.0
	Rd	----	-22.4	148	24.0
	Rd	----	-21.9	144	23.7
	Cd-III	-36.1	-18.4	136	21.3
	Cd-III	-32.7	-18.5	125	21.4
	Cd-III	-35.8	-19.6	129	22.2
	Cd-III	-31.8	-21.1	121	23.2
	Cd-III	-33.6	-22.4	123	24.0
5507	Rd	----	-23.7	159	24.8
(1669)	Rd	----	-22.1	160	23.8
	Rd	----	-24.3	155	25.1
	Rd	----	-21.4	157	23.4
	Rd	----	-22.9	158	24.3
	Rd	----	-23.1	161	24.4
	Cd-III	-38.7	-18.1	125	21.1
	Cd-III	-30.4	-20.7	122	22.9
	Cd-III	-38.5	-21.5	132	23.4
	Cd-III	-32.5	-22.6	127	24.1
	Cd-III	-37.1	-19.7	125	22.2
	Cd-III	-35.4	-21.7	136	23.6
5608	Rd	-46.4	-22.3	162	23.9
(1699)	Rd	-44.1	-21.9	157	23.7
	Rd	-43.7	-23.6	165	24.7
	Rd	-45.5	-22.7	168	24.2
	Rd	-42.1	-24.7	165	25.4
	Rd	-45.3	-21.3	159	23.3
	Cd-III	-35.1	-18.9	128	21.7
	Cd-III	-38.4	-19.1	132	21.8
	Cd-III	-36.7	-18.2	115	21.2
	Cd-III	-35.6	-18.0	121	21.0
	Cd-III	-36.4	-19.5	118	22.1
	Cd-III	-40.5	-17.6	111	20.7

Fluid Inclusion Data (Continued)

5818	Rd	----	-21.7	151	23.6
(1763)	Rd	----	-22.4	160	24.0
	Rd	----	-20.9	158	23.0
	Rd	----	-19.5	155	22.1
	Rd	----	-23.6	159	24.7
	Rd	----	-18.6	153	21.5
	Rd	----	-22.7	161	24.2
	Cd-III	-32.5	-16.3	107	19.7
	Cd-III	-30.0	-15.5	119	19.1
	Cd-III	-32.1	-19.5	110	22.1
	Cd-III	-35.1	-18.0	115	21.0
	Cd-III	-28.6	-18.2	117	21.2
	Cd-III	-27.4	-17.8	119	20.9
	Cd-III	-29.9	-16.4	113	19.8
Amoco Spence Trust # 1					
7690/7736					
(2330 to	Rd	----	-4.5	135	7.2
2344)	Rd	----	-6.0	145	9.2
	Rd	----	-6.5	144	9.8
	Cd-IIs	----	-12.1	98	16.1
	Cd-IIs	----	-8.1	99	11.8
	Cd-IIs	----	-7.1	111	10.6
	Cd-IIs	----	-9.2	120	13.1
	Cd-IIs	----	-5.5	138	8.5
	Cd-IIs	----	-14.1	141	17.9
	Cd-IIs	----	-3.8	146	6.1
	Cd-IIs	----	-5.8	149	8.9
	Cd-IIs	----	-7.1	150	10.6
	Cd-IIs	----	-12.6	168	16.6
	Cd-IIs	----	-13.9	175	17.8
	Cd-IIs	----	-14.0	179	17.8
	Cd-IIs	----	-9.4	208	13.3
	Cd-IIs	----	-11.7	210	15.7
	Cc	----	-11.2	225	15.2
	Cc	----	-12.3	225	16.3
	Cc	----	-16.5	227	19.9
	Cc	----	-16.6	229	20.0
	Cc	----	-22.8	229	24.2
	Cc	----	-17.2	230	20.4
	Cc	----	-17.5	238	20.7
	Cc	----	-22.7	253	24.2
	Cc	----	-16.6	283	20.0

DATA FILE 3

Isotope Data

Rc = Replacement Calcite (limestone); Rd = Replacement Dolomite; Cc = Calcite Cement; Cd = Dolomite Cement; WP-I, WP-II, WP-III, WP-IV= Western Platform Cements; RR-I = Reelfoot Rift Cement (Spence Trust); EP-I, EP-II = Eastern Platform Cements; M = Marr well; St = Strake well; Sp = Amoco Spence Trust # 1; O = U.S.B.M. Oliver # 1; D = E. I. Dupont GHS #1; b = bulk cement; i = inner cement zones; o = outer cement zones; m = middle cement zones; ** = Values calculated using equation of O'Neil et al. (1969).

Sample (Depth m)	Material Sampled	$\delta^{13}C$ (‰ PDB)	$\delta^{18}O$ (‰ PDB)	$\delta^{18}O$ (‰ SMOW**)	$\delta^{18}O_{H_2O}$ (SMOW)
92-478-M					
(1000)	Rd	-1.2	-4.3	26.5	----
	Cd WP-II	-2.0	-8.4	22.2	----
	Cd WP-II,IV	-0.8	-7.6	23.1	----
	Cc	0.5	-3.5	27.2	----
92-479-M					
(1015)	Rd	-0.5	-8.5	22.1	----
	Cd WP-I	-1.7	-8.8	21.8	----
92-480-M					
(1017)	Rd	0.5	-4.7	26.1	----
	Cd WP-I	0.1	-5.7	25.0	----
92-474-St					
(707)	Rd	0.6	-9.5	21.1	----
	Cd WP-IV	-0.8	-7.4	23.3	----
92-476-St					
(1000)	Rd	2.7	-6.9	23.8	----
	Cd WP-II,III*	4.4	-12.0	18.5	----
92-481-O					
(823)	Rd	0.1	-7.7	23.0	----
	Cd WP-II,III	-0.3	-6.9	23.7	----
92-482-O					
(879)	Rd	-0.8	-7.6	23.1	----
	Cd WP-III	-1.4	-8.2	22.5	----
	Cd WP-IV	-0.6	-8.7	22.0	----
	Cc	-2.3	-10.3	20.2	----
92-484-O					
(895)	Rd	0.3	-7.6	23.0	----
	Cd WP-III,IV	-0.1	-7.2	23.5	----
	Cc	-4.0	-10.4	20.1	----
92-485-O					
(936)	Rd	0.1	-7.1	23.6	----
	Cd WP-II,III	0.2	-7.2	23.4	----
92-487-O					
(1101)	Rd	4.6	-5.4	25.3	----
92-488-O					
(1102)	Rd	3.9	-7.2	23.4	----
92-489-O					
(1127)	Rd	3.6	-7.6	23.0	----
92-490-O					
(1128)	Rd	4.0	-7.8	22.9	----

Isotope Data (Continued)

92-491-O					
(1130)	Rd	5.7	-4.0	26.7	----
7690/7736-Sp					
(2330/	Rd	0.2	-12.6	17.9	----
2344)	Rd	1.0	-12.6	17.9	----
	Rd	1.1	-12.5	18.0	----
	Rd	1.0	-12.0	18.5	----
	Rd	0.6	-11.8	18.8	----
	Rd	0.7	-11.5	19.0	----
	Rd	1.1	-11.5	19.0	----
	Rd	1.0	-11.3	19.3	----
	Rd	1.5	-11.3	19.3	----
	Cd RR-II(i)	-6.1	-14.4	16.0	0.5
	Cd RR-II(i)	0.3	-14.3	16.2	0.7
	Cd RR-II(i)	-1.8	-12.0	18.5	3.0
	Cd RR-II(i)	1.0	-12.0	18.5	3.0
	Cd RR-II(i)	1.1	-8.1	22.5	7.0
	Cd RR-II(o)	-0.3	-13.3	17.2	1.7
	Cd RR-II(o)	-0.8	-11.5	19.0	3.5
	Cd RR-II(o)	-1.0	-13.0	17.5	2.0
	Cd RR-II(o)	-3.5	-11.9	18.6	3.1
	Cd RR-II(o)	-8.5	-13.1	17.4	1.9
	Cd RR-II(o)	-8.9	-12.5	18.0	2.5
	Cd RR-II(o)	-13.1	-13.3	17.2	1.7
	Cc-b	-1.5	-13.3	17.2	9.4
	Cc-b	-4.5	-13.8	16.7	8.9
	Cc-b	-5.5	-11.8	18.7	10.9
	Cc-b	-5.8	-13.9	16.5	8.7
	Cc-b	-14.2	-13.7	16.8	9.0
1471-D					
(446)	Cc-b	-0.7	-4.6	26.2	9.0
2067-D					
(2067')	Rd	-2.1	-5.1	25.6	----
	Cc-b	-4.1	-10.7	19.8	2.9
	Cc-i	-3.8	-9.3	21.3	4.4
	Cc-o	-4.3	-10.7	19.9	3.0
2114-D					
(641)	Rd	-1.4	-7.2	23.4	----
	Cc-i	-4.8	-10.8	19.8	2.9
	Cc-o	-5.1	-11.6	18.9	2.1
2400-D					
(727)	Rd	-1.4	-6.9	23.8	----
	Cc-i	-1.0	-8.4	22.2	5.6
	Cc-o	-2.1	-10.8	19.7	3.2
2840-D					
(861)	Rd	-1.3	-3.7	27.0	----
	Cc-b	-1.0	-4.3	26.4	9.9
2900-D					
(879)	Cc-b	-5.0	-10.6	19.9	3.4
	Cc-i	-3.2	-10.3	20.3	3.8
	Cc-m	-3.1	-10.1	20.4	3.9
	Cc-o	-2.7	-10.8	19.7	3.2

Isotope Data (Continued)

3049-D (924)	Rc	-1.6	-5.5	25.2	----
	Cc-b	-3.3	-10.8	19.7	3.2
	Cc-i	-3.4	-10.8	19.7	3.2
	Cc-m	-3.5	-11.0	19.6	3.1
	Cc-o	-3.5	-11.1	19.4	2.9
3165-D (959)	Rd	-1.8	-6.9	23.7	----
	Cd EP-II	1.3	-2.7	28.1	12.3
3357- (1017)	Cd EP-II	-1.4	-7.5	23.1	7.4
3845-D (3845')	Cd EP-II	-1.8	-6.7	24.0	8.2
	Cc-b	-2.2	-8.7	21.9	5.4
3900-D (1182)	Rd	-1.7	-2.8	28.0	----
	Cd EP-II	-1.6	-4.6	26.1	10.3
4015-D (1217)	Rd	-1.9	-7.1	23.6	----
	Cd EP-II	-1.1	-7.7	22.9	7.2
	Cc-b	-5.1	-11.3	19.2	2.7
	Cc-i	-3.8	-9.7	20.9	4.4
	Cc-o	-4.1	-10.5	20.1	3.6
4521-D (1370)	Cd EP-II	-2.9	-4.1	26.7	10.9
4717-D (1429)	Rd	-0.9	-3.1	27.6	----
	Cd EP-I(i)	-0.1	-1.6	29.2	12.0
	Cd EP-I(o)	-1.2	-5.2	25.5	8.3
	Cc-b	-5.5	-11.8	18.7	2.2
4811-D (1458)	Rd	-0.9	-2.5	28.3	----
	Cd EP-I	-0.9	-5.0	25.7	8.4
4911-D (1488)	Rd	-0.9	-3.9	26.9	----
	Cd EP-I(i)	-1.0	-2.7	28.1	10.9
	Cd EP-I(o)	-1.0	-5.9	24.8	7.5
4914-D (1489)	Rd	-0.5	-6.2	24.5	----
	Cd EP-I(i)	-1.1	-7.6	23.0	5.8
	Cd EP-I(o)	-5.6	-7.3	23.3	6.1
5115-D (1550)	Rd	0.4	-4.3	26.5	----
	Cd EP-I(i)	-2.1	-4.1	26.6	9.4
	Cd EP-I(o)	-0.6	-7.8	22.8	5.6
5212-D (1579)	Rd	0.3	-3.7	27.1	----
	Cd EP-I	-0.4	-4.6	26.2	8.9
5260-D (1594)	Rd	0.5	-2.8	28.0	----
	Cd EP-I	-0.6	-4.8	26.0	8.7
5321-D (1612)	Rd	-0.8	-4.5	26.2	----
	Cd EP-I	-0.7	-3.9	26.9	9.6
5360-D (1624)	Rd	-0.9	-4.4	26.3	----
	Cd EP-I	-0.4	-3.7	27.0	9.8

Isotope Data (Continued)

5413-D (1640)	Rd	-0.8	-4.5	26.2	----
	Cd EP-I(i)	-0.9	-4.7	26.0	8.8
	Cd EP-I(o)	-0.9	-7.6	23.0	5.8
5464-D (1656)	Rd	0.7	-2.5	28.3	----
	Cd EP-I	-0.7	-4.7	26.0	8.8
5507-D (1669)	Rd	-0.9	-4.7	26.0	----
	Cd EP-I	-0.9	-7.9	22.7	5.5
5554-D (1683)	Rd	-0.4	-4.3	26.4	----
	Cd EP-I	-1.0	-6.0	24.7	7.4
5608-D (1699)	Rd	0.1	-4.0	26.7	----
5659-D (1715)	Rd	0.1	-4.2	26.5	----
	Cd EP-I	-0.3	-5.1	25.5	8.3
5751-D (1742)	Rd	1.0	-1.2	29.6	----
	Cd EP-I	-1.4	-7.8	22.8	5.6
5806-D (1759)	Rd	-0.1	-3.9	26.9	----
	Cd EP-I	-0.5	-8.3	22.3	5.0
5818-D (1763)	Rd	0.3	-3.5	27.6	----
	Cd EP-I	-0.9	-6.9	23.8	6.5