Ms 193SR-209, Table T2. Results of XRD analysis.

Core, section, interval (cm)	Depth (mbsf)	Sample	Powder	X-Ray analysis number	Alteration	Quartz	Cristobalite	Tridymite	K-feldspar*	Plagioclase†	Anhydrite	Pyrite	Chlorite	Illite	Pyrophyllite	Paragonite	Mixed-layer phyllosilicates	Others	Comments
193-1188A-																			
5R-1, 38–40	33.97	PM002	Drilled separate	40	Weak													Glass	Cores of perlite
5R-1, 38–40	33.97	PM002	Drilled separate	41	Weak													Glass	Margins of perlite
5R-1, 38–40	33.97	PM002	Drilled separate	42	Weak												+	Glass	Pseudomatrix between perlite kernels
7R-1, 114–119	49.34	PM005	P003	102	Chlorite-pyrite		++	(+)			+	+	(+)	+?					Broad peaks, basal spacing >10 Å, dioctahedral component
7R-1, 114–119	49.34	PM005	P004	103	Pyrite-anhydrite		++	(+)			++	++					+		Broad peaks, basal spacing >10 Å, disordered mixed-layer, dioctahedral component
8R-1, 13–17	58.03	PM006	P005	3	Pyrite-anhydrite		++	+			(+)	+					+		Broad band between 7 and 10 Å, muscovite?, pyrophylite?
8R-1, 13–17	58.03	PM006	P006	4	Pyrite-anhydrite		++	+			(+)	++					+		Broad band between 7 and 9 Å, muscovite?, pyrophylite?
8R-1, 13–17	58.03	PM006	P071	147	Pyrite-anhydrite		++	+			(+)	+				+?	+		Phyllosilicate problematic: bulge between 5°2δ and 10°2δ
8R-1, 66–70	58.56	PM007	P007	109	Chlorite-pyrite		++					(+)	+	(+)				(+) Anatase	Muscovite is M1 polytype
9R-1, 130–135	68.90	PM008	P008	2	Anhydrite-pyrite-pyrophyllite	+	++				++	+			+	+		(+) Halite; + gypsum; (+) anatase	2 phyllosilicate!
11R-1, 20–26	87.10	PM010	P009	6	Pyrite-anhydrite	++	++	+			++			+	?(+)			+ Gypsum	Broad muscovite peak, potentially mixed layer?
11R-1, 20–26	87.10	PM010	P010	7	Chlorite-pyrite	+	++			++	+	++	?(+)				(+)	+ Rutile	Broad band between 6 and 7 Å
12R-2, 48–51	98.55	PM011	P011	107	Weak	+	++	(+)		++		(+)	(+)						
12R-2, 48–51	98.55	PM011	P069	108	Weak	+	++			++			(+)						
14R-1, 86–89	116.86	PM014	P012	100	Anhydrite-pyrite-pyrophyllite	+					++	+		+?	+?		+?	+ Gypsum	Dioctahedral phyllosilicate with broad peaks
14R-1, 86–89	116.86	PM014	P070	101	Anhydrite-pyrite-pyrophyllite	++					+	(+)			+?	+?		+ Anatase (+) halite	One dioctahedral phyllosilicate with broad peaks (muscovite excluded)
14R-1, 105–108	117.27	PM015	P013	09	Anhydrite-pyrite-pyrophyllite	++		(+)			++					+?	?+	Gypsum; (+) halite	Broad peak between 8 and 10 Å
14R-1, 105–108	117.27	PM015	P014	08	Anhydrite-pyrite-pyrophyllite	++		(+)			++			?(+)		+?	?+	+ Gypsum; (+) halite	Separate of white clasts, broad peak between 8 and 10 Å
16R-1, 139–143	136.79	PM016	Drilled separate	10	Anhydrite-pyrite-pyrophyllite	++					++		(+)	+				(+) Gypsum; (+) Rutile	Sharp muscovite peaks
16R-1, 139–143	136.79	PM016	Drilled separate	11	Chlorite-pyrite	++				++		+	(+)						
17R-1, 24–28	145.34	PM018	P015	12	Anhydrite-pyrite-pyrophyllite	++					++	+	(+)	?+			+	+ Gypsum	Broad peak: 8 to 9 Å
19R-1, 41–46	164.71	PM020	P016	104	Chlorite-pyrite	++	+	(+)		+		(+)	+?				+?		One trioctahedral phyllosilicate, smectite?
19R-1, 86–90	165.16	PM021	P017	110	Weak		++			++	(+)		(+)						
20R-1, 95–102	174.85	PM023	P018	105	Chlorite-pyrite	++				+		+							
20R-1, 95–102	174.85	PM023	P019	106	Chlorite-pyrite	++				++	(+)	+					(+)		Smectite? Very broad peak at ~14 Å
193-1188F-																			
6Z-1, 46–47	233.56	PM026	P020	47	Weak		+			+			+						Spheroids, trace quartz
6Z-1, 46–47	233.56	PM026	P020	48	Weak	+	+				(+)	+	+						Groundmass, trace plagioclase
8Z-1, 26	236.46	PM027	P021	14	Pyrite-anhydrite	++					+	+	(+)	?(+)					
8Z-1, 26	236.46	PM027	Drilled separate	15	Anhydrite-pyrite-pyrophyllite	++					++			?+	?+	+	+	(+) Rutile; (+) gypsum	Broad peak: 9 to 10 Å
9Z-1, 9–12	237.80	PM028	Drilled separate	45	Anhydrite-pyrite-pyrophyllite	+					++			+		+		(+) Gypsum; (+) halite	
9Z-1, 9–12	237.80	PM028	Drilled separate	46	Illite	++					+			++					Gray groundmass
13Z-1, 0–23	241.40	PM029	P022	123	Anhydrite-pyrite-pyrophyllite	++					++	+		+				(+) Halite	
13Z-1, 0–23	241.40	PM029	P023	124	Pyrite-anhydrite	++					(+)	+		+					
19Z-1, 0–41	268.67	PM033	P024	111	Pyrite-anhydrite	++					+	+		+?			+?		Dioctahedral phyllosilicate with broad peaks
23Z-2, 56–63	288.66	PM035	P026	19	Anhydrite-pyrite-pyrophyllite	++					++	+		+				(+) Rutile	
23Z-2, 56–63	288.66	PM035	P025	18	Chlorite-pyrite	++					+	(+)	++	+				(+) Rutile; (+) gypsum	
30Z-1, 13–20	318.23	PM036	P027	112	K-feldspar-illite	++				+ Ab			(+)	+				(+) Magnetite	
34Z-1, 122–130	337.63	PM037	P028	20	K-feldspar-illite	++				++		+	+	++				(+) Halite; (+) rutile	
39Z-1, 83–87	354.32	PM040	P029	113	Chlorite-pyrite	++				++	(+)	+	(+)						
43Z-1, 21	371.71	PM042	P030	21	K-feldspar-illite	++				++	+	+	+	+				(+) Halite; (+) rutile	
43Z-1, 21	371.71	PM042	P031	22	Pyrite-anhydrite	++					+	+		++				(+) Rutile	
193-1189A-																			
1R-1, 12–17	0.12	PM044	P032	114	Unaltered					++								Glass; + augite	
2R-1, 0–6	9.70	PM045	P033	115	K-feldspar-illite		+			++									
2R-1, 126–137	10.97	PM046	Drilled separate	23	Anhydrite-pyrite-pyrophyllite		++			+	++		+	+			(+)	(+) Halite; (+) rutile	Gray-green clast
2R-1, 126–137	10.97	PM046	Drilled separate	24	Weak		++		++	++	+	+	?(+)						White clast
2R-1, 126–137	11.00	PM047	P034	25	Chlorite-pyrite		++		+			(+)	+	+				(+) Halite	
2R-1, 126–137	11.00	PM048	P035	26	K-feldspar-illite		++		(+)	++		+	+						
3R-1, 84–89	20.24	PM049	P036	116	Pyrite-anhydrite	++			+			+							Pyrite in vesicles
5R-1, 41–50	39.24	PM050	P037	117	Chlorite-pyrite	++				(+)	+		+	+					
5R-1, 41–50	39.24	PM050	P038	119	K-feldspar-illite	++			+	++		(+)	+	+					
7R-1, 4–12	58.41	PM051	P039	118	K-feldspar-illite	++			+	++		+							
8R-1, 3–10	68.04	PM052	P040	121	K-feldspar-illite	(+)	++		+	++		(+)		(+)					
9R-1, 17–28	77.91	PM053	P041	120	Chlorite-pyrite	++				+	+	(+)	(+)						
10R-1, 38–51	87.69	PM054	P042	122	K-feldspar-illite	++			++	++		+							
10R-1, 38–51	87.69	PM054	P043	125	Pyrite-anhydrite	++			+		+	+		+					
10R-1, 38–51	87.69	PM054	Drilled separate	27	K-feldspar-illite	+			+		(+)	+	+	+				+ Halite; (+) gypsum	Green groundmass, one large peak unassigned
10R-1, 38–51	87.69	PM054	Drilled separate	28	K-feldspar-illite	++			+	++		+	+					(+) Halite	Light gray groundmass
12R-1, 83–86	107.33	PM056	P044	128	Chlorite-pyrite	++						(+)	+	+				(+) Halite	Sharp chlorite and muscovite peaks; muscovite is disordered (mixed-layer component)
12R-1, 120–128	107.70	PM057	P072	29	Illite	++					(+)	(+)		++					Pumice clasts
13R-1, 51–53	116.61	PM058	P045	129	Chlorite-pyrite	++				+ Ab		+	+	(+)					
13R-1, 51–53	116.61	PM058	Drilled separate	30	Chlorite-pyrite	++						+	++	+				(+) Halite	Light green clast
13R-1, 51–53	116.61	PM058	Drilled separate	31	Chlorite-pyrite	++						+	+	+				(+) Halite	Light gray clast
193-1189B-																			
5R-1, 45–55	69.75	PM059	Drilled separate	32	K-feldspar-illite	+			+				+	+				(+) Halite	Gray-green fragments; in sulfide stockwork matrix
6R-1, 0–12	79.00	PM060	P073	33	Chlorite-pyrite	+			(+)			(+)	++	+				(+) Halite	Gray-green fragments; in jasper stockwork matrix
10R-1, 57–60	118.47	PM061	Drilled separate	43	Chlorite-pyrite	+			(+)			+	++	+				(+) Halite	White bands of flow-banded dacite
10R-1, 57–60	118.47	PM061	Drilled separate	44	Chlorite-pyrite	+			(+)			(+)	++	(+)				(+) Halite	Green bands of flow-banded dacite
11R-1, 22–27	127.82	PM063	P046	130	K-feldspar-illite	++			+		(+)	(+)							
11R-3, 0–29	129.72	PM064	P047	126	Unaltered		++		+	++									
13R-1, 48	147.48	PM068	P048	127	K-feldspar-illite	++			+	+			(+)?				(+)?		Traces of dioctahedral and trioctahedral phyllosilicate
14R-1, 87	157.37	PM071	P049	131	Anhydrite-pyrite-pyrophyllite	++			+	+	++	(+)	+	+					
15R-1, 25	166.35	PM073	P050	133	Weak		++		+	++			(+)	(+)					
15R-1, 25	166.35	PM073	P051	134	K-feldspar-illite	++	++		+	++		+	+	+					
15R-1, 124	167.34	PM075	P053	35	Weak		++		(+)	+		+	+	(+)				(+) Halite	Light green clasts; extremely minor muscovite
15R-1, 124	167.34	PM075	P052	34	Weak	+	++		+	+		(+)	+	+				(+) Halite	Gray clasts
16R-1, 74–81	176.45	PM079	P054	132	Weak	++			+	+		(+)							
17R-1, 56–60	185.87	PM082	P055	135	K-feldspar-illite	++			+	++		+							
18R-1, 4–12	195.05	PM085	P056	136	K-feldspar-illite	++	++		+	++		(+)							
18R-1, 4–12	195.05	PM085	P057	137	K-feldspar-illite	++			+	++		(+)							
18R-1, 45–50	195.45	PM086	P058	139	K-feldspar-illite		+		++	+			(+)						
18R-1, 45–50	195.45	PM086	P059	141	K-feldspar-illite	++	+		+	+		(+)							
18R-1, 124–131	196.25	PM088	P060	138	Weak		++		+	++			(+)						
18R-1, 124–131	196.25	PM088	Drilled separate	39	Weak		++	(+)	(+)	+			+	(+)					Light gray-green clast
18R-2, 0–4	196.42	PM089	P061	140	K-feldspar-illite	+	++		+	++			(+)	(+)					
18R-2, 48–59	196.91	PM090	P062	36	K-feldspar-illite		++	(+)	+	+		(+)	+	+				(+) Halite	
18R-2, 48–59	196.91	PM090	P063	38	K-feldspar-illite	+			+	++		(+)	+	+				(+) Halite	Gray, flow-banded clast
18R-2, 48–59	196.91	PM090	P064	142	K-feldspar-illite	++			+	++		(+)							
18R-2, 48–59	196.91	PM090	Drilled separate	37	K-feldspar-illite	++			+	+			+	+				(+) Halite	Green clast
193-1190C-																			
3R-1, 3–7	13.23	PM092	P065	146	Unaltered					++								Glass	
193-1191A-																			
1R-1, 59–65	0.64	PM093	P066	143	Unaltered		++		+	++								(+) Halite (+) titanomagnetite	
1R-1, 75–80	0.75	PM094	P067	144	Unaltered					++								Glass	
3R-1, 80–87	15.50	PM095	P068	145	Weak		++		+?	++									

Notes: * = alkali-feldspar (usually diffraction pattern consistent with sanidine or orthoclase), † = usually diffraction pattern consistent with labradorite or andesine; some patterns indicate albite (Ab). Estimate of mineral abundance based on relative peak heights: ++ = dominant, + = common, (+) = rare.

Table T2. Results of XRD analysis. (**See table notes.** Continued on next five pages.)

Core, section, interval (cm)	Depth (mbsf)	Sample	Powder	X-Ray analysis number	Alteration	Quartz	Cristobalite	Tridymite	K-feldspar*
193-1188A-									
5R-1, 38–40	33.97	PM002	Drilled separate	40	Weak				
5R-1, 38–40	33.97	PM002	Drilled separate	41	Weak				
5R-1, 38–40	33.97	PM002	Drilled separate	42	Weak				
7R-1, 114–119	49.34	PM005	P003	102	Chlorite-pyrite		++	(+)	
7R-1, 114–119	49.34	PM005	P004	103	Pyrite-anhydrite		++	(+)	
8R-1, 13–17	58.03	PM006	P005	3	Pyrite-anhydrite		++	+	
8R-1, 13–17	58.03	PM006	P006	4	Pyrite-anhydrite		++	+	
8R-1, 13–17	58.03	PM006	P071	147	Pyrite-anhydrite		++	+	
8R-1, 66–70	58.56	PM007	P007	109	Chlorite-pyrite		++		
9R-1, 130–135	68.90	PM008	P008	2	Anhydrite-pyrite-pyrophyllite	+	++		
11R-1, 20–26	87.10	PM010	P009	6	Pyrite-anhydrite	++	++	+	
11R-1, 20–26	87.10	PM010	P010	7	Chlorite-pyrite	+	++		
12R-2, 48–51	98.55	PM011	P011	107	Weak	+	++	(+)	
12R-2, 48–51	98.55	PM011	P069	108	Weak	+	++		
14R-1, 86–89	116.86	PM014	P012	100	Anhydrite-pyrite-pyrophyllite	+			
14R-1, 86–89	116.86	PM014	P070	101	Anhydrite-pyrite-pyrophyllite	++			
14R-1, 105–108	117.27	PM015	P013	09	Anhydrite-pyrite-pyrophyllite	++		(+)	
14R-1, 105–108	117.27	PM015	P014	08	Anhydrite-pyrite-pyrophyllite	++		(+)	
16R-1, 139–143	136.79	PM016	Drilled separate	10	Anhydrite-pyrite-pyrophyllite	++			
16R-1, 139–143	136.79	PM016	Drilled separate	11	Chlorite-pyrite	++			
17R-1, 24–28	145.34	PM018	P015	12	Anhydrite-pyrite-pyrophyllite	++			
19R-1, 41–46	164.71	PM020	P016	104	Chlorite-pyrite	++	+	(+)	
19R-1, 86–90	165.16	PM021	P017	110	Weak		++		
20R-1, 95–102	174.85	PM023	P018	105	Chlorite-pyrite	++			
20R-1, 95–102	174.85	PM023	P019	106	Chlorite-pyrite	++			
193-1188F-									
6Z-1, 46–47	233.56	PM026	P020	47	Weak		+		
6Z-1, 46–47	233.56	PM026	P020	48	Weak	+	+		
8Z-1, 26	236.46	PM027	P021	14	Pyrite-anhydrite	++			
8Z-1, 26	236.46	PM027	Drilled separate	15	Anhydrite-pyrite-pyrophyllite	++			
9Z-1, 9–12	237.80	PM028	Drilled separate	45	Anhydrite-pyrite-pyrophyllite	+			
9Z-1, 9–12	237.80	PM028	Drilled separate	46	Illite	++			
13Z-1, 0–23	241.40	PM029	P022	123	Anhydrite-pyrite-pyrophyllite	++			
13Z-1, 0–23	241.40	PM029	P023	124	Pyrite-anhydrite	++			
19Z-1, 0–41	268.67	PM033	P024	111	Pyrite-anhydrite	++			
23Z-2, 56–63	288.66	PM035	P026	19	Anhydrite-pyrite-pyrophyllite	++			
23Z-2, 56–63	288.66	PM035	P025	18	Chlorite-pyrite	++			
30Z-1, 13–20	318.23	PM036	P027	112	K-feldspar-illite	++			
34Z-1, 122–130	337.63	PM037	P028	20	K-feldspar-illite	++			
39Z-1, 83–87	354.32	PM040	P029	113	Chlorite-pyrite	++			
43Z-1, 21	371.71	PM042	P030	21	K-feldspar-illite	++			
43Z-1, 21	371.71	PM042	P031	22	Pyrite-anhydrite	++			
193-1189A-									
1R-1, 12–17	0.12	PM044	P032	114	Unaltered				
2R-1, 0–6	9.70	PM045	P033	115	K-feldspar-illite		+		
2R-1, 126–137	10.97	PM046	Drilled separate	23	Anhydrite-pyrite-pyrophyllite		++		+
2R-1, 126–137	10.97	PM046	Drilled separate	24	Weak		++		++
2R-1, 126–137	11.00	PM047	P034	25	Chlorite-pyrite		++		+
2R-1, 126–137	11.00	PM048	P035	26	K-feldspar-illite		++		(+)
3R-1, 84–89	20.24	PM049	P036	116	Pyrite-anhydrite	++			+
5R-1, 41–50	39.24	PM050	P037	117	Chlorite-pyrite	++			
5R-1, 41–50	39.24	PM050	P038	119	K-feldspar-illite	++			+
7R-1, 4–12	58.41	PM051	P039	118	K-feldspar-illite	++			+
8R-1, 3–10	68.04	PM052	P040	121	K-feldspar-illite	(+)	++		+
9R-1, 17–28	77.91	PM053	P041	120	Chlorite-pyrite	++			
10R-1, 38–51	87.69	PM054	P042	122	K-feldspar-illite	++			++
10R-1, 38–51	87.69	PM054	P043	125	Pyrite-anhydrite	++			+
10R-1, 38–51	87.69	PM054	Drilled separate	27	K-feldspar-illite	+			+
10R-1, 38–51	87.69	PM054	Drilled separate	28	K-feldspar-illite	++			+
12R-1, 83–86	107.33	PM056	P044	128	Chlorite-pyrite	++			
12R-1, 120–128	107.70	PM057	P072	29	Illite	++			
13R-1, 51–53	116.61	PM058	P045	129	Chlorite-pyrite	++			
13R-1, 51–53	116.61	PM058	Drilled separate	30	Chlorite-pyrite	++			
13R-1, 51–53	116.61	PM058	Drilled separate	31	Chlorite-pyrite	++			

Table T2 (continued).

Core, section, interval (cm)	Depth (mbsf)	Sample	Plagioclase†	Anhydrite	Pyrite	Chlorite	Illite	Pyrophyllite	Paragonite	Mixed-layer phyllosilicates
193-1188A-										
5R-1, 38–40	33.97	PM002								
5R-1, 38–40	33.97	PM002								
5R-1, 38–40	33.97	PM002								+
7R-1, 114–119	49.34	PM005		+	+	(+)	+?			
7R-1, 114–119	49.34	PM005		++	++					+
8R-1, 13–17	58.03	PM006		(+)	+					+
8R-1, 13–17	58.03	PM006		(+)	++					+
8R-1, 13–17	58.03	PM006		(+)	+				+?	+
8R-1, 66–70	58.56	PM007			(+)	+	(+)			
9R-1, 130–135	68.90	PM008		++	+			+	+	
11R-1, 20–26	87.10	PM010		++			+	?(+)		
11R-1, 20–26	87.10	PM010	++	+	++	?(+)				(+)
12R-2, 48–51	98.55	PM011	++		(+)	(+)				
12R-2, 48–51	98.55	PM011	++			(+)				
14R-1, 86–89	116.86	PM014		++	+		+?	+?		+?
14R-1, 86–89	116.86	PM014		+	(+)			+?	+?	
14R-1, 105–108	117.27	PM015		++					+?	?+
14R-1, 105–108	117.27	PM015		++			?(+)		+?	?+
16R-1, 139–143	136.79	PM016		++		(+)	+			
16R-1, 139–143	136.79	PM016	++		+	(+)				
17R-1, 24–28	145.34	PM018		++	+	(+)	?+			+
19R-1, 41–46	164.71	PM020	+		(+)	+?				+?
19R-1, 86–90	165.16	PM021	++	(+)		(+)				
20R-1, 95–102	174.85	PM023	+		+					
20R-1, 95–102	174.85	PM023	++	(+)	+					(+)
193-1188F-										
6Z-1, 46–47	233.56	PM026	+			+				
6Z-1, 46–47	233.56	PM026		(+)	+	+				
8Z-1, 26	236.46	PM027		+	+	(+)	?(+)			
8Z-1, 26	236.46	PM027		++			?+	?+	+	+
9Z-1, 9–12	237.80	PM028		++			+		+	
9Z-1, 9–12	237.80	PM028		+			++			
13Z-1, 0–23	241.40	PM029		++	+		+			
13Z-1, 0–23	241.40	PM029		(+)	+		+			
19Z-1, 0–41	268.67	PM033		+	+		+?			+?
23Z-2, 56–63	288.66	PM035		++	+		+			
23Z-2, 56–63	288.66	PM035		+	(+)	++	+			
30Z-1, 13–20	318.23	PM036	+ Ab			(+)	+			
34Z-1, 122–130	337.63	PM037	++		+	+	++			
39Z-1, 83–87	354.32	PM040	++	(+)	+	(+)				
43Z-1, 21	371.71	PM042	++	+	+	+	+			
43Z-1, 21	371.71	PM042		+	+		++			
193-1189A-										
1R-1, 12–17	0.12	PM044	++							
2R-1, 0–6	9.70	PM045	++							
2R-1, 126–137	10.97	PM046		++		+	+			(+)
2R-1, 126–137	10.97	PM046	++	+	+	?(+)				
2R-1, 126–137	11.00	PM047			(+)	+	+			
2R-1, 126–137	11.00	PM048	++		+	+				
3R-1, 84–89	20.24	PM049			+					
5R-1, 41–50	39.24	PM050	(+)	+		+	+			
5R-1, 41–50	39.24	PM050	++		(+)	+	+			
7R-1, 4–12	58.41	PM051	++		+					
8R-1, 3–10	68.04	PM052	++		(+)		(+)			
9R-1, 17–28	77.91	PM053	+	+	(+)	(+)				
10R-1, 38–51	87.69	PM054	++		+					
10R-1, 38–51	87.69	PM054		+	+		+			
10R-1, 38–51	87.69	PM054		(+)	+	+	+			
10R-1, 38–51	87.69	PM054	++		+	+				
12R-1, 83–86	107.33	PM056			(+)	+	+			
12R-1, 120–128	107.70	PM057		(+)	(+)		++			
13R-1, 51–53	116.61	PM058	+ Ab		+	+	(+)			
13R-1, 51–53	116.61	PM058			+	++	+			
13R-1, 51–53	116.61	PM058			+	+	+			

Table T2 (continued).

Core, section, interval (cm)	Depth (mbsf)	Sample	Others	Comments
193-1188A-				
5R-1, 38–40	33.97	PM002	Glass	Cores of perlite
5R-1, 38–40	33.97	PM002	Glass	Margins of perlite
5R-1, 38–40	33.97	PM002	Glass	Pseudomatrix between perlite kernels
7R-1, 114–119	49.34	PM005		Broad peaks, basal spacing >10 Å, dioctahedral component
7R-1, 114–119	49.34	PM005		Broad peaks, basal spacing >10 Å, disordered mixed-layer, dioctahedral component
8R-1, 13–17	58.03	PM006		Broad band between 7 and 10 Å, muscovite?, pyrophylite?
8R-1, 13–17	58.03	PM006		Broad band between 7 and 9 Å, muscovite?, pyrophylite?
8R-1, 13–17	58.03	PM006		Phyllosilicate problematic: bulge between 5°2δ and 10°2δ
8R-1, 66–70	58.56	PM007	(+) Anatase	Muscovite is M1 polytype
9R-1, 130–135	68.90	PM008	(+) Halite; + gypsum; (+) anatase	2 phyllosilicate!
11R-1, 20–26	87.10	PM010	+ Gypsum	Broad muscovite peak, potentially mixed layer?
11R-1, 20–26	87.10	PM010	+ Rutile	Broad band between 6 and 7 Å
12R-2, 48–51	98.55	PM011		
12R-2, 48–51	98.55	PM011		
14R-1, 86–89	116.86	PM014	+ Gypsum	Dioctahedral phyllosilicate with broad peaks
14R-1, 86–89	116.86	PM014	+ Anatase (+) halite	One dioctahedral phyllosilicate with broad peaks (muscovite excluded)
14R-1, 105–108	117.27	PM015	Gypsum; (+) halite	Broad peak between 8 and 10 Å
14R-1, 105–108	117.27	PM015	+ Gypsum; (+) halite	Separate of white clasts, broad peak between 8 and 10 Å
16R-1, 139–143	136.79	PM016	(+) Gypsum; (+) Rutile	Sharp muscovite peaks
16R-1, 139–143	136.79	PM016		
17R-1, 24–28	145.34	PM018	+ Gypsum	Broad peak: 8 to 9 Å
19R-1, 41–46	164.71	PM020		One trioctahedral phyllosilicate, smectite?
19R-1, 86–90	165.16	PM021		
20R-1, 95–102	174.85	PM023		
20R-1, 95–102	174.85	PM023		Smectite? Very broad peak at ~14 Å
193-1188F-				
6Z-1, 46–47	233.56	PM026		Spheroids, trace quartz
6Z-1, 46–47	233.56	PM026		Groundmass, trace plagioclase
8Z-1, 26	236.46	PM027		
8Z-1, 26	236.46	PM027	(+) Rutile; (+) gypsum	Broad peak: 9 to 10 Å
9Z-1, 9–12	237.80	PM028	(+) Gypsum; (+) halite	
9Z-1, 9–12	237.80	PM028		Gray groundmass
13Z-1, 0–23	241.40	PM029	(+) Halite	
13Z-1, 0–23	241.40	PM029		
19Z-1, 0–41	268.67	PM033		Dioctahedral phyllosilicate with broad peaks
23Z-2, 56–63	288.66	PM035	(+) Rutile	
23Z-2, 56–63	288.66	PM035	(+) Rutile; (+) gypsum	
30Z-1, 13–20	318.23	PM036	(+) Magnetite	
34Z-1, 122–130	337.63	PM037	(+) Halite; (+) rutile	
39Z-1, 83–87	354.32	PM040		
43Z-1, 21	371.71	PM042	(+) Halite; (+) rutile	
43Z-1, 21	371.71	PM042	(+) Rutile	
193-1189A-				
1R-1, 12–17	0.12	PM044	Glass; + augite	
2R-1, 0–6	9.70	PM045		
2R-1, 126–137	10.97	PM046	(+) Halite; (+) rutile	Gray-green clast
2R-1, 126–137	10.97	PM046		White clast
2R-1, 126–137	11.00	PM047	(+) Halite	
2R-1, 126–137	11.00	PM048		
3R-1, 84–89	20.24	PM049		Pyrite in vesicles
5R-1, 41–50	39.24	PM050		
5R-1, 41–50	39.24	PM050		
7R-1, 4–12	58.41	PM051		
8R-1, 3–10	68.04	PM052		
9R-1, 17–28	77.91	PM053		
10R-1, 38–51	87.69	PM054		
10R-1, 38–51	87.69	PM054		
10R-1, 38–51	87.69	PM054	+ Halite; (+) gypsum	Green groundmass, one large peak unassigned
10R-1, 38–51	87.69	PM054	(+) Halite	Light gray groundmass
12R-1, 83–86	107.33	PM056	(+) Halite	Sharp chlorite and muscovite peaks; muscovite is disordered (mixed-layer component)
12R-1, 120–128	107.70	PM057		Pumice clasts
13R-1, 51–53	116.61	PM058		
13R-1, 51–53	116.61	PM058	(+) Halite	Light green clast
13R-1, 51–53	116.61	PM058	(+) Halite	Light gray clast

Table T2 (continued).

Core, section, interval (cm)	Depth (mbsf)	Sample	Powder	X-Ray analysis number	Alteration	Quartz	Cristobalite	Tridymite	K-feldspar*
193-1189B-									
5R-1, 45–55	69.75	PM059	Drilled separate	32	K-feldspar-illite	+			+
6R-1, 0–12	79.00	PM060	P073	33	Chlorite-pyrite	+			(+)
10R-1, 57–60	118.47	PM061	Drilled separate	43	Chlorite-pyrite	+			(+)
10R-1, 57–60	118.47	PM061	Drilled separate	44	Chlorite-pyrite	+			(+)
11R-1, 22–27	127.82	PM063	P046	130	K-feldspar-illite	++			+
11R-3, 0–29	129.72	PM064	P047	126	Unaltered		++		+
13R-1, 48	147.48	PM068	P048	127	K-feldspar-illite	++			+
14R-1, 87	157.37	PM071	P049	131	Anhydrite-pyrite-pyrophyllite	++			+
15R-1, 25	166.35	PM073	P050	133	Weak		++		+
15R-1, 25	166.35	PM073	P051	134	K-feldspar-illite	++	++		+
15R-1, 124	167.34	PM075	P053	35	Weak		++		(+)
15R-1, 124	167.34	PM075	P052	34	Weak	+	++		+
16R-1, 74–81	176.45	PM079	P054	132	Weak	++			+
17R-1, 56–60	185.87	PM082	P055	135	K-feldspar-illite	++			+
18R-1, 4–12	195.05	PM085	P056	136	K-feldspar-illite	++	++		+
18R-1, 4–12	195.05	PM085	P057	137	K-feldspar-illite	++			+
18R-1, 45–50	195.45	PM086	P058	139	K-feldspar-illite		+		++
18R-1, 45–50	195.45	PM086	P059	141	K-feldspar-illite	++	+		+
18R-1, 124–131	196.25	PM088	P060	138	Weak		++		+
18R-1, 124–131	196.25	PM088	Drilled separate	39	Weak		++	(+)	(+)
18R-2, 0–4	196.42	PM089	P061	140	K-feldspar-illite	+	++		+
18R-2, 48–59	196.91	PM090	P062	36	K-feldspar-illite		++	(+)	+
18R-2, 48–59	196.91	PM090	P063	38	K-feldspar-illite	+			+
18R-2, 48–59	196.91	PM090	P064	142	K-feldspar-illite	++			+
18R-2, 48–59	196.91	PM090	Drilled separate	37	K-feldspar-illite	++			+
193-1190C-									
3R-1, 3–7	13.23	PM092	P065	146	Unaltered				
193-1191A-									
1R-1, 59–65	0.64	PM093	P066	143	Unaltered		++		+
1R-1, 75–80	0.75	PM094	P067	144	Unaltered				
3R-1, 80–87	15.50	PM095	P068	145	Weak		++		+?

Notes: * = alkali-feldspar (usually diffraction pattern consistent with sanidine or orthoclase), † = usually diffraction pattern consistent with labradorite or andesine; some patterns indicate albite (Ab). Estimate of mineral abundance based on relative peak heights: ++ = dominant, + = common, (+) = rare.

Table T2 (continued).

Core, section, interval (cm)	Depth (mbsf)	Sample	Plagioclase†	Anhydrite	Pyrite	Chlorite	Illite	Pyrophyllite	Paragonite	Mixed-layer phyllosilicates
193-1189B-										
5R-1, 45–55	69.75	PM059				+	+			
6R-1, 0–12	79.00	PM060			(+)	++	+			
10R-1, 57–60	118.47	PM061			+	++	+			
10R-1, 57–60	118.47	PM061			(+)	++	(+)			
11R-1, 22–27	127.82	PM063		(+)	(+)					
11R-3, 0–29	129.72	PM064	++							
13R-1, 48	147.48	PM068	+			(+)?				(+)?
14R-1, 87	157.37	PM071	+	++	(+)	+	+			
15R-1, 25	166.35	PM073	++			(+)	(+)			
15R-1, 25	166.35	PM073	++		+	+	+			
15R-1, 124	167.34	PM075	+		+	+	(+)			
15R-1, 124	167.34	PM075	+		(+)	+	+			
16R-1, 74–81	176.45	PM079	+		(+)					
17R-1, 56–60	185.87	PM082	++		+					
18R-1, 4–12	195.05	PM085	++		(+)					
18R-1, 4–12	195.05	PM085	++		(+)					
18R-1, 45–50	195.45	PM086	+			(+)				
18R-1, 45–50	195.45	PM086	+		(+)					
18R-1, 124–131	196.25	PM088	++			(+)				
18R-1, 124–131	196.25	PM088	+			+	(+)			
18R-2, 0–4	196.42	PM089	++			(+)	(+)			
18R-2, 48–59	196.91	PM090	+		(+)	+	+			
18R-2, 48–59	196.91	PM090	++		(+)	+	+			
18R-2, 48–59	196.91	PM090	++		(+)					
18R-2, 48–59	196.91	PM090	+			+	+			
193-1190C-										
3R-1, 3–7	13.23	PM092	++							
193-1191A-										
1R-1, 59–65	0.64	PM093	++							
1R-1, 75–80	0.75	PM094	++							
3R-1, 80–87	15.50	PM095	++							

Table T2 (continued).

Core, section, interval (cm)	Depth (mbsf)	Sample	Others	Comments
193-1189B-				
5R-1, 45–55	69.75	PM059	(+) Halite	Gray-green fragments; in sulfide stockwork matrix
6R-1, 0–12	79.00	PM060	(+) Halite	Gray-green fragments; in jasper stockwork matrix
10R-1, 57–60	118.47	PM061	(+) Halite	White bands of flow-banded dacite
10R-1, 57–60	118.47	PM061	(+) Halite	Green bands of flow-banded dacite
11R-1, 22–27	127.82	PM063		
11R-3, 0–29	129.72	PM064		
13R-1, 48	147.48	PM068		Traces of dioctahedral and trioctahedral phyllosilicate
14R-1, 87	157.37	PM071		
15R-1, 25	166.35	PM073		
15R-1, 25	166.35	PM073		
15R-1, 124	167.34	PM075	(+) Halite	Light green clasts; extremely minor muscovite
15R-1, 124	167.34	PM075	(+) Halite	Gray clasts
16R-1, 74–81	176.45	PM079		
17R-1, 56–60	185.87	PM082		
18R-1, 4–12	195.05	PM085		
18R-1, 4–12	195.05	PM085		
18R-1, 45–50	195.45	PM086		
18R-1, 45–50	195.45	PM086		
18R-1, 124–131	196.25	PM088		
18R-1, 124–131	196.25	PM088		Light gray-green clast
18R-2, 0–4	196.42	PM089		
18R-2, 48–59	196.91	PM090	(+) Halite	
18R-2, 48–59	196.91	PM090	(+) Halite	Gray, flow-banded clast
18R-2, 48–59	196.91	PM090		
18R-2, 48–59	196.91	PM090	(+) Halite	Green clast
193-1190C-				
3R-1, 3–7	13.23	PM092	Glass	
193-1191A-				
1R-1, 59–65	0.64	PM093	(+) Halite (+) titanomagnetite	
1R-1, 75–80	0.75	PM094	Glass	
3R-1, 80–87	15.50	PM095		