GSA Data Repository Item 2019245

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Data Repository

Table DR1. Bulk-rock carbon and oxygen stable isotopes at Gorgonilla, Colombia.

Table DR2. Bulk-rock mineralogy at Gorgonilla, Colombia.

Plate 1. Cretaceous and Paleocene radiolarian species from the Gorgonilla Island, Colombia.
1. *Amphisphaera macrosphaera* (Sample: GI-48; Age: Paleocene-restricted)
2. *Amphisphaera kina* (Sample: GI-48; Age: Paleocene-restricted)
3. *Amphisphaera kina* (Sample: GI-48; Age: Paleocene-restricted)
4. *Amphisphaera priva* (Sample: GI-48; Age: Late Campanian-Paleocene)
5. *Amphisphaera goruna* (Sample: GI-48; Age: Paleocene-restricted)
6. *Amphisphaera goruna* (Samples: GI-48; Age: Paleocene-restricted)
7. *Afens lirioides* (Sample: GI-48; Age: Campanian)
8. *Buryella granulata* (Sample: GI-09; Age: Paleocene-restricted)
9. *Buryella granulata* (Sample: GI-48; Age: Paleocene-restricted)
10. *Buryella granulata* (Sample: GI-48; Age: Paleocene-restricted)
11. *Lithostrobus*? cf. *longus* (Sample: GI-09; Age: Paleocene-restricted?)
12. *Lithostrobus*? cf. *longus* (Sample: GI-48; Age: Paleocene-restricted?)
13. *Amphipyndax tylotus* (Sample: GI-48; Age: Late Campanian-Maastrichtian)
14. *Dictyomitra andersoni* (Sample: GI-09; Age: Late Campanian-Paleocene)
15. *Stichomitra compsa* (Sample: GI-09; Age: Maastrichtian)
16. *Theocapsomma* sp. (Sample: GI-48; Age: ?)

Scale bar = 50 µm for 1–3, 5–6, 8–10, 16
Scale bar = 100 µm for 4, 7, 11–15

Sample	Height (m)	$\delta^{13}C$ (‰ VPDB)	$\delta^{18}O$ (‰ VPDB)
GI-78	**9.00**	-7.056	-1.862
GI-1	**9.35**	-5.616	-2.925
GI-2	**9.40**	-5.949	-2.287
GI-4	**10.07**	-6.684	-2.454
GI-5	**10.33**	-7.911	-2.237
GI-6	**10.60**	-4.215	-2.127
GI-8	**11.00**	-5.574	-1.791
GI-9	**11.08**	-6.073	-2.256
GI-10	**11.13**	-6.768	-1.578
GI-12	**11.50**	-9.062	-3.879
GI-13	**11.78**	-8.232	-3.516
GI-14	**12.00**	-11.285	-4.158
GI-24	**13.72**	-5.432	-2.458
GI-25	**13.80**	-3.786	-2.386
GI-26	**13.92**	-4.170	-3.101
GI-28	**14.20**	-8.416	-3.935
GI-30	**14.47**	-6.459	-4.008
GI-31	**14.55**	-13.670	-3.155
GI-32	**14.58**	-6.589	-2.241
GI-33	**14.70**	-5.112	-2.536
GI-34	**14.84**	-5.004	-1.871
GI-35	**15.07**	-8.446	-2.369
GI-36	**15.28**	-7.489	-3.421
GI-37	**15.34**	-8.517	-2.521

Sample	Height (m)	$\delta^{13}C$ (‰ VPDB)	$\delta^{18}O$ (‰ VPDB)
GI-37B	**15.37**	-5.786	-2.743
GI-38	**15.41**	-4.636	-2.737
GI-39	**15.46**	-12.311	-2.889
GI-40	**15.60**	-5.131	-2.649
GI-41	**15.63**	-3.557	-3.018
GI-46	**15.78**	-5.390	-2.234
GI-47	**15.82**	-4.443	-1.593
GI-48	**15.86**	-3.299	-2.210
GI-49	**15.90**	-2.977	-2.154
GI-50	**16.02**	-4.937	-2.343
GI-51	**16.10**	-7.049	-1.752
GI-52	**16.20**	-5.563	-2.232
GI-53	**16.32**	-5.821	-1.612
GI-54	**16.43**	-5.289	-1.570
GI-55	**16.48**	-5.964	-1.787
GI-58	**16.86**	-6.533	-2.512
GI-59	**17.20**	-8.817	-1.568
GI-60	**17.38**	-5.489	-1.652
GI-61	**17.53**	-4.759	-2.421
GI-42	**15.68**	-10.013	-2.811
GI-43	**15.74**	-8.132	-2.589
GI-44	**15.82**	-10.021	-3.129
GI-45	**15.90**	-6.357	-3.269

Table DR1: Bulk-rock carbon and oxygen stable isotopes at Gorgonilla, Colombia.

Table DR2: Bulk-rock mineralogy at Gorgonilla, Colombia.

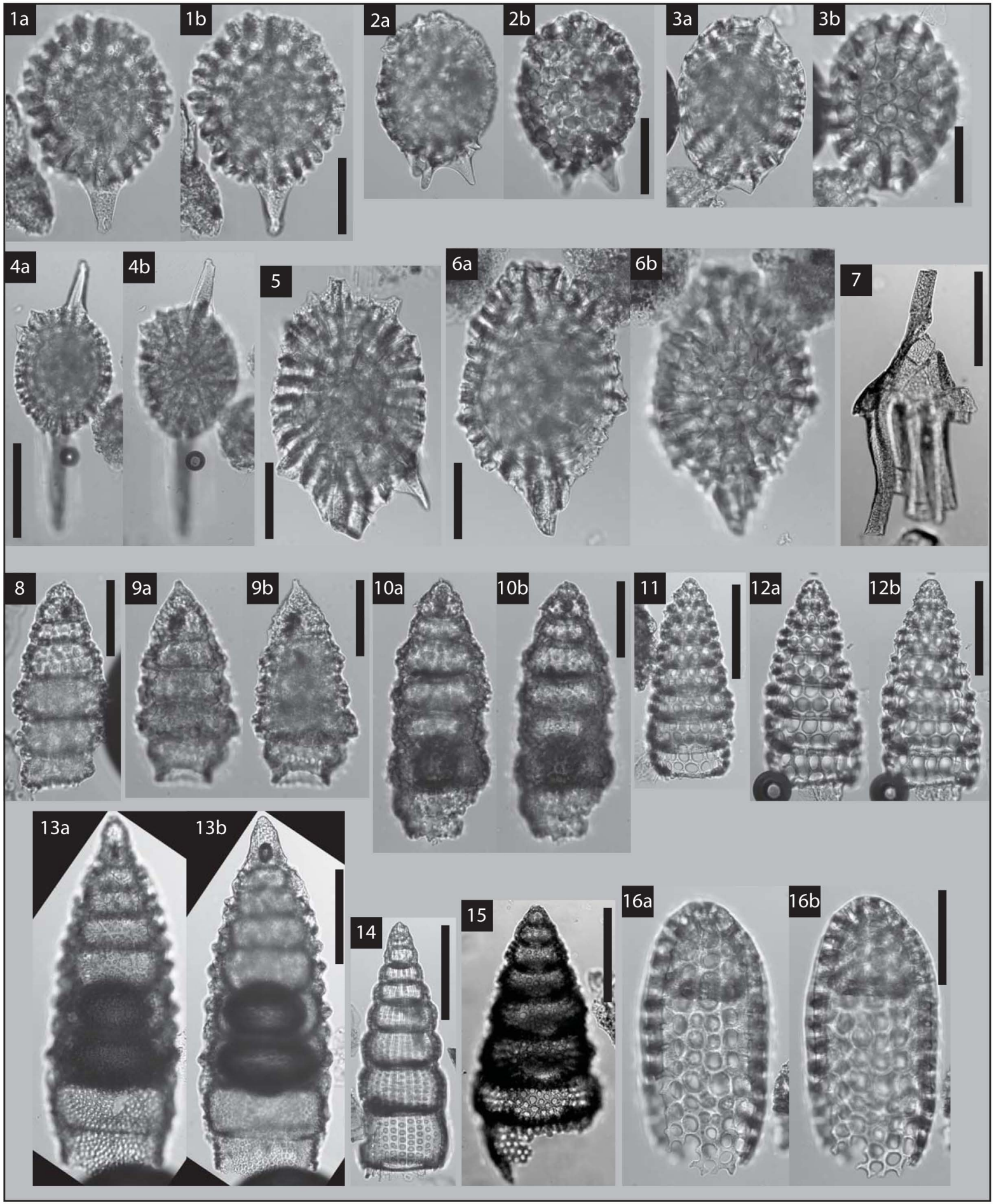
Samples	Height (m)	Phyllosilicates (%)	Quartz (%)	K-Feldspar (%)	Na-Plagioclase (%)	Calcite (%)	Dolomite (%)	Pyrite (%)	Goethite (%)	Unquantified (%)
GI-100	**0.35**	25.37	0.98	1.84	0.00	30.89	0.00	1.00	0.00	39.92
GI-99	**1.40**	22.57	1.09	0.00	44.20	5.66	0.62	1.08	3.08	21.70
GI-98	**1.85**	18.06	1.62	0.00	9.50	55.89	0.00	0.00	0.00	14.92
GI-97	**2.50**	60.34	1.13	0.00	23.89	5.21	0.00	0.99	3.07	5.37
GI-96	**3.28**	12.09	1.48	0.00	37.03	23.09	0.00	0.88	0.00	25.42
GI-95	**3.55**	21.82	2.34	3.86	27.94	2.89	0.73	0.00	4.89	35.53
GI-94	**3.95**	12.02	1.08	0.00	8.66	65.02	0.00	0.00	0.00	13.22
GI-93	**4.30**	43.29	1.08	3.64	12.88	17.03	0.00	0.00	0.00	22.08
GI-92	**4.75**	23.02	1.92	0.00	34.02	22.69	0.00	1.17	0.00	17.18
GI-91	**5.30**	19.14	1.60	0.00	8.01	51.83	0.00	1.05	0.00	18.37
GI-90	**5.50**	52.93	1.35	4.89	24.30	3.89	0.69	0.80	2.71	8.45
GI-89	**5.90**	43.03	2.53	0.00	19.38	15.99	0.73	0.90	2.28	15.16
GI-88	**6.25**	31.45	2.30	4.80	9.94	39.99	0.00	0.00	0.00	11.52
GI-87	**6.70**	54.12	2.25	1.74	21.83	4.78	1.78	2.17	0.00	11.33
GI-86B	**6.90**	59.32	1.69	2.08	2.89	1.15	1.78	1.40	3.78	25.91
GI-86	**7.00**	60.02	0.80	17.02	7.98	2.87	0.95	0.00	3.05	7.30
GI-85	**7.35**	23.99	1.30	1.79	9.30	30.88	0.94	1.26	0.00	30.55
GI-84	**7.55**	15.30	1.03	0.00	10.14	29.77	0.99	1.54	8.71	32.53
GI-83	**7.70**	39.09	0.44	14.88	8.38	0.00	0.68	0.00	2.83	33.70
GI-82	**7.95**	40.03	2.81	0.00	7.90	34.99	1.14	1.92	2.99	8.22
GI-81	**8.40**	19.99	1.60	0.00	25.82	31.44	0.00	1.91	6.28	12.97
GI-80	**8.43**	43.55	0.99	0.00	10.88	27.54	0.00	1.17	2.17	13.70
GI-79	**8.60**	9.78	2.26	2.56	6.89	54.10	0.00	1.65	0.00	22.77
GI-78	**9.00**	19.55	2.67	2.91	17.00	41.77	0.00	1.69	4.34	10.06
GI-1	**9.35**	17.55	2.75	10.67	4.67	37.90	1.58	1.73	5.67	17.48
GI-2	**9.40**	43.67	0.61	1.28	12.67	20.84	0.00	2.22	3.06	15.64
GI-3	**9.97**	54.34	0.67	0.00	33.67	6.56	0.00	0.00	0.00	4.76
GI-4	**10.07**	14.23	1.03	0.00	7.74	62.55	0.00	0.00	0.00	14.45
GI-5	**10.33**	18.70	3.06	4.01	10.45	43.76	3.52	0.00	2.45	14.04
GI-6	**10.60**	16.85	1.42	0.00	39.46	25.86	0.00	1.04	0.00	15.37
GI-7	**10.85**	51.56	0.76	14.66	10.90	5.78	0.00	0.00	2.62	13.71
GI-8	**11.00**	23.67	1.48	3.32	16.95	40.56	0.00	0.00	0.00	14.02
GI-9	**11.08**	23.26	0.65	2.48	54.23	11.08	0.00	0.67	1.54	6.11
GI-10	**11.13**	23.12	3.00	5.10	21.54	34.89	0.00	0.00	0.00	12.35

Table DR2: (Continued).

Samples	Height (m)	Phyllosilicates (%)	Quartz (%)	K-Feldspar (%)	Na-Plagioclase (%)	Calcite (%)	Dolomite (%)	Pyrite (%)	Goethite (%)	Unquantified (%)
GI-11	**11.32**	21.79	2.67	0.00	26.89	31.82	0.00	1.46	2.78	12.59
GI-12	**11.50**	20.84	1.34	0.00	43.24	16.13	0.00	1.03	0.00	17.41
GI-13	**11.78**	14.85	1.33	2.36	45.25	15.69	0.00	0.63	0.00	19.89
GI-14	**12.00**	15.47	1.65	3.25	30.12	36.18	0.00	0.00	0.00	13.33
GI-15	**12.28**	34.23	1.69	0.00	28.67	5.89	0.75	0.79	0.00	27.98
GI-16	**12.35**	53.22	0.94	0.00	19.82	4.89	0.00	0.86	3.89	16.39
GI-17	**12.45**	32.56	0.98	4.18	22.67	3.78	0.87	1.18	3.89	29.88
GI-18	**12.65**	22.54	2.51	0.00	38.09	1.76	0.83	0.00	3.02	31.25
GI-19	**12.90**	15.00	3.63	4.89	21.78	18.89	0.00	1.49	2.94	31.38
GI-20	**13.07**	35.90	1.56	0.00	26.94	3.37	0.00	0.96	5.10	26.17
GI-21	**13.30**	25.03	2.74	6.87	32.67	0.00	0.00	0.89	0.00	31.80
GI-22	**13.50**	37.04	2.18	0.00	25.00	6.90	0.00	0.00	0.00	28.88
GI-23	**13.65**	19.75	5.36	0.00	34.22	3.93	0.00	1.77	3.83	31.15
GI-24	**13.72**	16.43	1.76	0.00	20.74	32.09	0.00	1.03	0.00	27.94
GI-25	**13.80**	20.94	2.12	0.00	29.03	39.02	0.00	0.84	2.44	5.61
GI-26	**13.92**	30.56	2.31	0.00	9.38	25.33	0.80	1.26	0.00	30.36
GI-27	**14.08**	35.96	1.14	3.90	23.93	1.73	1.41	0.70	2.01	29.23
GI-28	**14.20**	21.67	3.25	2.72	25.92	19.99	0.00	1.01	2.93	22.51
GI-29	**14.35**	28.05	3.03	0.00	19.55	32.56	0.63	0.98	0.00	15.19
GI-30	**14.47**	20.44	4.35	0.00	12.45	31.43	1.09	1.63	0.00	28.62
GI-31	**14.55**	39.45	1.05	0.00	23.44	12.55	0.00	2.44	2.38	18.68
GI-32	**14.58**	24.94	2.49	0.00	4.33	55.90	0.00	0.00	4.91	7.43
GI-33	**14.70**	15.03	2.78	2.62	5.03	62.44	0.00	1.86	0.00	10.24
GI-34	**14.84**	13.00	10.94	2.67	3.90	59.05	0.00	1.73	3.02	5.69
GI-35	**15.07**	19.04	2.31	0.00	8.94	60.02	1.12	1.40	2.77	4.40
GI-36	**15.28**	2.71	0.53	0.00	0.00	86.02	0.00	0.00	2.17	5.43
GI-37	**15.34**	34.93	2.56	0.00	32.55	17.05	0.00	0.00	2.09	10.82
GI-37B	**15.37**	42.04	1.54	0.00	23.05	26.03	0.00	0.00	1.56	5.78
GI-38	**15.41**	23.56	2.71	3.07	17.43	23.55	0.69	1.45	0.00	27.54
GI-39	**15.46**	8.54	0.67	3.14	0.00	74.30	0.00	0.00	0.00	13.35
GI-40	**15.60**	35.99	0.88	0.00	1.88	57.30	0.00	1.44	1.43	1.07
GI-41	**15.63**	50.33	0.77	2.61	2.49	34.04	0.98	0.98	2.12	5.68
GI-46	**15.78**	22.12	1.93	0.00	29.73	38.02	0.00	1.30	0.00	6.89
GI-47	**15.82**	23.93	2.59	0.00	34.95	34.95	0.00	1.46	0.56	1.56

Table DR2: (Continued).

Samples	Height (m)	Phyllosilicates (%)	Quartz (%)	K-Feldspar (%)	Na-Plagioclase (%)	Calcite (%)	Dolomite (%)	Pyrite (%)	Goethite (%)	Unquantified (%)
GI-48	**15.86**	27.03	2.20	2.80	38.20	27.04	0.00	0.00	0.00	2.73
GI-49	**15.90**	39.02	1.17	0.00	15.94	20.85	0.00	1.21	2.47	19.35
GI-50	**16.02**	37.84	1.92	0.00	22.20	25.54	0.89	0.94	3.13	7.54
GI-51	**16.10**	22.04	2.21	0.00	33.82	39.03	0.00	1.16	0.00	1.74
GI-52	**16.20**	31.45	1.15	0.00	32.67	30.05	0.00	0.95	2.26	1.46
GI-53	**16.32**	31.56	2.22	0.00	26.04	33.85	0.00	1.32	1.56	3.46
GI-54	**16.43**	32.10	1.17	4.88	26.90	29.03	1.00	0.00	1.65	3.27
GI-55	**16.48**	28.45	0.88	0.00	39.04	18.44	0.00	0.87	2.94	9.39
GI-56	**16.52**	9.18	0.91	0.80	7.23	78.98	0.00	0.00	0.00	2.91
GI-57	**16.60**	65.02	3.20	0.00	22.56	5.40	0.00	0.00	0.00	3.81
GI-58	**16.86**	27.03	3.27	3.56	28.04	32.94	0.00	0.00	0.00	5.16
GI-59	**17.20**	25.89	1.68	3.69	23.66	34.03	0.00	2.45	2.55	6.05
GI-60	**17.38**	9.03	3.47	3.58	6.44	42.67	0.00	2.33	5.33	27.16
GI-61	**17.53**	27.56	1.82	0.00	29.56	14.94	0.00	0.00	0.00	26.12
GI-62	**17.68**	35.99	0.49	3.00	34.94	7.90	0.00	0.00	2.28	15.40
GI-63	**17.75**	24.95	1.18	5.93	21.54	25.04	0.68	1.33	0.00	19.35
GI-64	**18.00**	47.03	1.38	0.00	27.33	7.04	0.00	0.00	0.00	17.22
GI-65	**18.15**	42.56	1.33	0.00	32.55	2.19	0.00	0.88	2.03	18.46
GI-66	**18.45**	57.02	0.61	0.00	14.94	5.03	1.02	1.17	4.95	15.26
GI-67	**18.75**	30.02	3.66	0.00	46.03	1.03	0.80	0.89	3.97	13.61
GI-68	**19.05**	50.20	2.31	4.25	19.43	0.00	0.00	0.09	0.00	23.73
GI-69	**19.20**	50.23	0.64	4.67	15.30	0.96	0.00	1.04	0.00	27.15
GI-70	**19.43**	52.94	1.36	0.00	25.48	1.45	0.00	0.00	0.00	18.77
GI-71	**19.70**	55.93	0.78	0.00	10.89	3.45	0.00	1.15	0.00	27.80
GI-72	**19.97**	48.04	0.86	0.00	41.56	0.00	0.00	0.68	0.00	8.86
GI-73	**20.24**	54.02	1.17	3.00	10.93	16.44	1.13	0.00	0.00	13.31
GI-74	**20.52**	58.02	0.99	0.00	15.95	4.93	0.00	0.76	2.12	17.24
GI-75	**20.80**	34.23	1.48	6.07	36.04	1.53	0.00	0.00	0.00	20.65
GI-76	**21.42**	53.94	1.53	9.25	19.03	2.39	0.00	0.00	0.00	13.85
GI-77	**21.90**	40.46	1.21	0.00	32.03	2.09	0.72	0.77	2.18	20.53
GI-42	**15.68**	20.89	2.87	0.00	9.93	35.05	0.74	1.08	0.00	29.44
GI-43	**15.74**	49.04	0.65	2.67	5.90	32.37	0.00	1.02	2.78	5.57
GI-44	**15.82**	19.04	1.55	0.00	11.56	51.03	0.00	1.52	1.89	13.41
GI-45	**15.90**	39.83	0.97	2.93	3.89	43.04	0.92	1.10	2.86	4.45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