50075550 LAGO ICACOS AT DAMSITE, PR

RIO BLANCO BASIN

LOCATION.--Lat 18°15′49″, long 65°47′07″ referenced to North American Datum of 1927, Naguabo Municipio, PR, Hydrologic Unit 21010005, in Caribbean National Forest at State Road 191 at El Yunque, 5.5 mi (1.68 km) east of Cubuy School, 4.3 mi (1.31 km) west of Sonadora School in Ceiba, and 6.1 mi (1.86 km) northwest of Naguabo plaza.

DRAINAGE AREA.--2.85 mi^2 (7.47 km^2).

SURFACE-WATER RECORDS

PERIOD OF RECORD.--March 10, 2004 to September 30, 2006.

GAGE.--Water-stage recorder, satellite and radio telemetry at station. Datum of gage is mean sea level.

REMARKS.-- Lago Icacos, a small reservoir built in 1930 and owned by the Puerto Rico Electric Power Authority (PREPA), is part of the Río Blanco Hydroelectric Power System. It is located in Naguabo, within the Caribbean National Forest in eastern Puerto Rico. The reservoir's original storage capacity was 15.506 acre-ft (0.0191 hm^3). The bathymetric survey conducted in March 2004 indicates a storage capacity of 6.030 acre-ft (0.007 hm^3) or 39% of the original storage capacity, and a maximum depth of 17 ft (5.3 m). The reservoir operational function was modified in the 1970's to also meet public-supply water needs at the Río Blanco Filtration Plant (Puerto Rico Electric Power Authority (PREPA), written communication, March 2005). The Lago Icacos dam is a concrete-gravity structure 25.98 ft (7.92 m) high, 155 ft (47.24 m) long, with a spillway section of 90 ft (27.43 m) long. The spillway has an elevation of 1,860.01 ft (566.93 m) above mean sea level (Puerto Rico Electric Power Authority (PREPA), written communication, March 2005). The Lago Icacos Dam impounds the waters of the Río Icacos, and has a surface area of 0.00138 mi^2 (0.0036 km^2) at the spillway elevation. New capacity table based on US Geological Survey Water-Resources Investigation Report 07-5033, March 2004.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation 1,889.24 ft (575.84 m), September 9, 2006; minimum elevation, 1,817.43 ft (553.95 m), September 22, 2006.

EXTREMES FOR CURRENT YEAR.--FOR WATER YEAR 2004: Maximum elevation 1,867.29 ft (569.15 m), September 15; minimum elevation, 1,842.67 ft (561.65 m), September 25.

FOR WATER YEAR 2005: Maximum elevation 1,865.6 ft (568.63 m), August 20; minimum elevation, 1,842.66 ft (561.64 m), October 21.

FOR WATER YEAR 2006: Maximum elevation 1,889.24 ft (575.84 m), September 9; minimum elevation, 1,817.43 ft (553.95 m), September 22.

Capacity Table

(based on data from US Geological Survey Water-Resources Investigations Report 07-5033, March 2004)

(Elevation in ft, capacity in acre-ft)

Elevation	Contents	Elevation	Contents
1,843	0	1,854	1.95
1,848	0.148	1,857	3.72
1,851	0.732	1,860	6.03

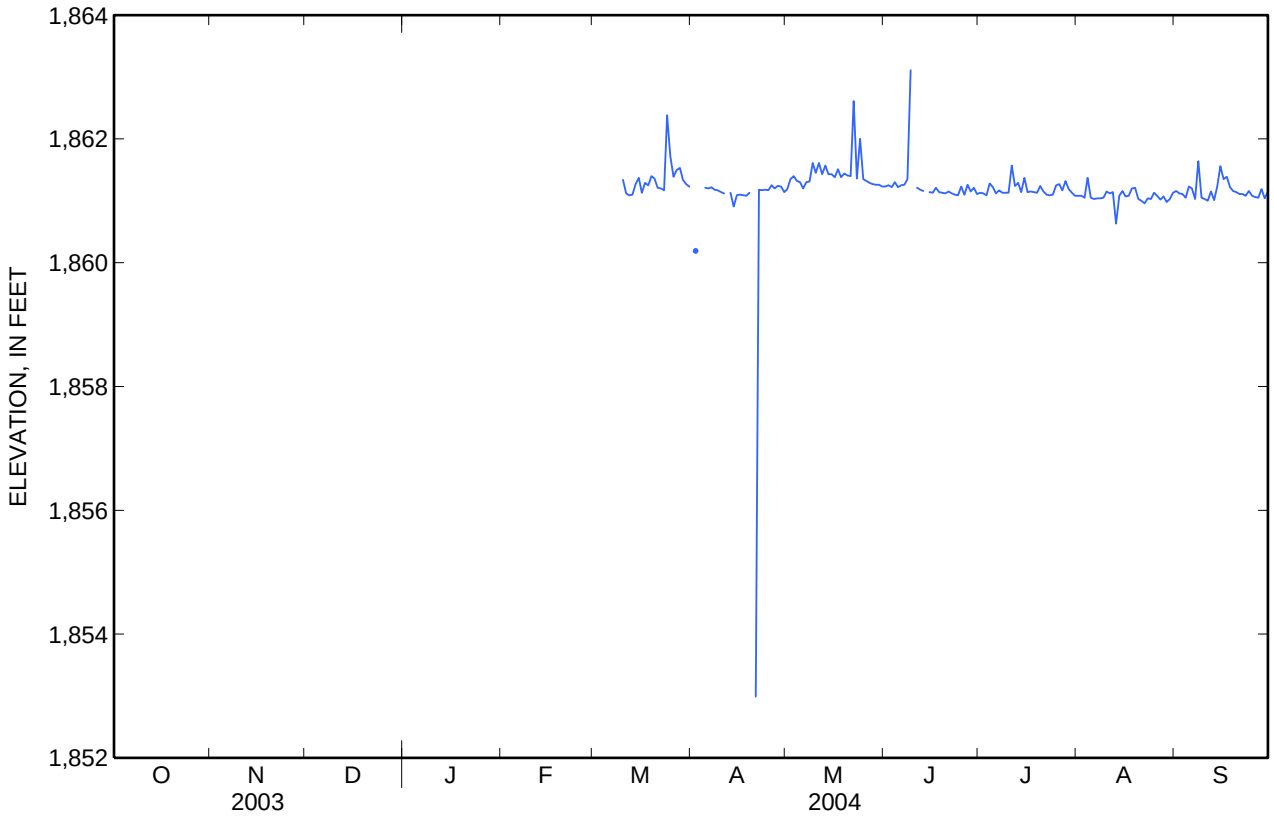
50075550 LAGO ICACOS AT DAMSITE, PR—Continued

FROM DCP
ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 2400 HOURS

[A, No gage-height record]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	A	A	A	A	A	A	A	1,861.19	1,861.23	1,861.13	1,861.08	1,861.16
2	A	A	A	A	A	A	1,860.19	1,861.35	1,861.25	1,861.12	1,861.08	1,861.12
3	A	A	A	A	A	A	A	1,861.40	1,861.22	1,861.09	1,861.05	1,861.11
4	A	A	A	A	A	A	A	1,861.32	1,861.30	1,861.28	1,861.37	1,861.05
5	A	A	A	A	A	A	1,861.21	1,861.30	1,861.22	1,861.22	1,861.05	1,861.23
6	A	A	A	A	A	A	1,861.20	1,861.20	1,861.25	1,861.12	1,861.03	1,861.20
7	A	A	A	A	A	A	1,861.22	1,861.30	1,861.26	1,861.17	1,861.04	1,861.03
8	A	A	A	A	A	A	1,861.18	1,861.31	1,861.35	1,861.13	1,861.04	1,861.64
9	A	A	A	A	A	A	1,861.17	1,861.61	1,863.11	1,861.13	1,861.05	1,861.05
10	A	A	A	A	A	1,861.34	1,861.14	1,861.45	A	1,861.13	1,861.15	1,861.03
11	A	A	A	A	A	1,861.12	1,861.12	1,861.61	1,861.21	1,861.57	1,861.12	1,861.00
12	A	A	A	A	A	1,861.09	A	1,861.43	1,861.18	1,861.24	1,861.14	1,861.15
13	A	A	A	A	A	1,861.10	1,861.13	1,861.57	1,861.16	1,861.29	1,860.63	1,861.01
14	A	A	A	A	A	1,861.27	1,860.91	1,861.43	A	1,861.14	1,861.08	1,861.23
15	A	A	A	A	A	1,861.37	1,861.09	1,861.43	1,861.14	1,861.37	1,861.16	1,861.56
16	A	A	A	A	A	1,861.13	1,861.10	1,861.38	1,861.13	1,861.14	1,861.07	1,861.35
17	A	A	A	A	A	1,861.29	1,861.09	1,861.51	1,861.21	1,861.15	1,861.08	1,861.39
18	A	A	A	A	A	1,861.25	1,861.08	1,861.38	1,861.14	1,861.14	1,861.20	1,861.22
19	A	A	A	A	A	1,861.40	1,861.13	1,861.44	1,861.13	1,861.13	1,861.21	1,861.16
20	A	A	A	A	A	1,861.36	A	1,861.41	1,861.12	1,861.24	1,861.03	1,861.14
21	A	A	A	A	A	1,861.21	1,852.99	1,861.40	1,861.15	1,861.15	1,861.00	1,861.11
22	A	A	A	A	A	1,861.20	1,861.18	1,862.61	1,861.12	1,861.10	1,860.96	1,861.11
23	A	A	A	A	A	1,861.17	1,861.17	1,861.36	1,861.10	1,861.09	1,861.04	1,861.08
24	A	A	A	A	A	1,862.38	1,861.18	1,862.00	1,861.09	1,861.10	1,861.03	1,861.16
25	A	A	A	A	A	1,861.72	1,861.17	1,861.35	1,861.23	1,861.25	1,861.13	1,861.08
26	A	A	A	A	A	1,861.39	1,861.25	1,861.32	1,861.10	1,861.27	1,861.08	1,861.06
27	A	A	A	A	A	1,861.50	1,861.20	1,861.29	1,861.26	1,861.17	1,861.02	1,861.05
28	A	A	A	A	A	1,861.53	1,861.24	1,861.27	1,861.15	1,861.32	1,861.07	1,861.19
29	A	A	A	A	---	1,861.34	1,861.23	1,861.26	1,861.21	1,861.19	1,860.98	1,861.04
30	A	A	A	A	---	1,861.27	1,861.14	1,861.26	1,861.11	1,861.13	1,861.03	1,861.15
31	A	---	A	A	---	1,861.23	---	1,861.23	---	1,861.08	1,861.13	---
Mean	---	---	---	---	---	---	---	1,861.43	---	1,861.19	1,861.07	1,861.16

50075550 LAGO ICACOS AT DAMSITE, PR—Continued



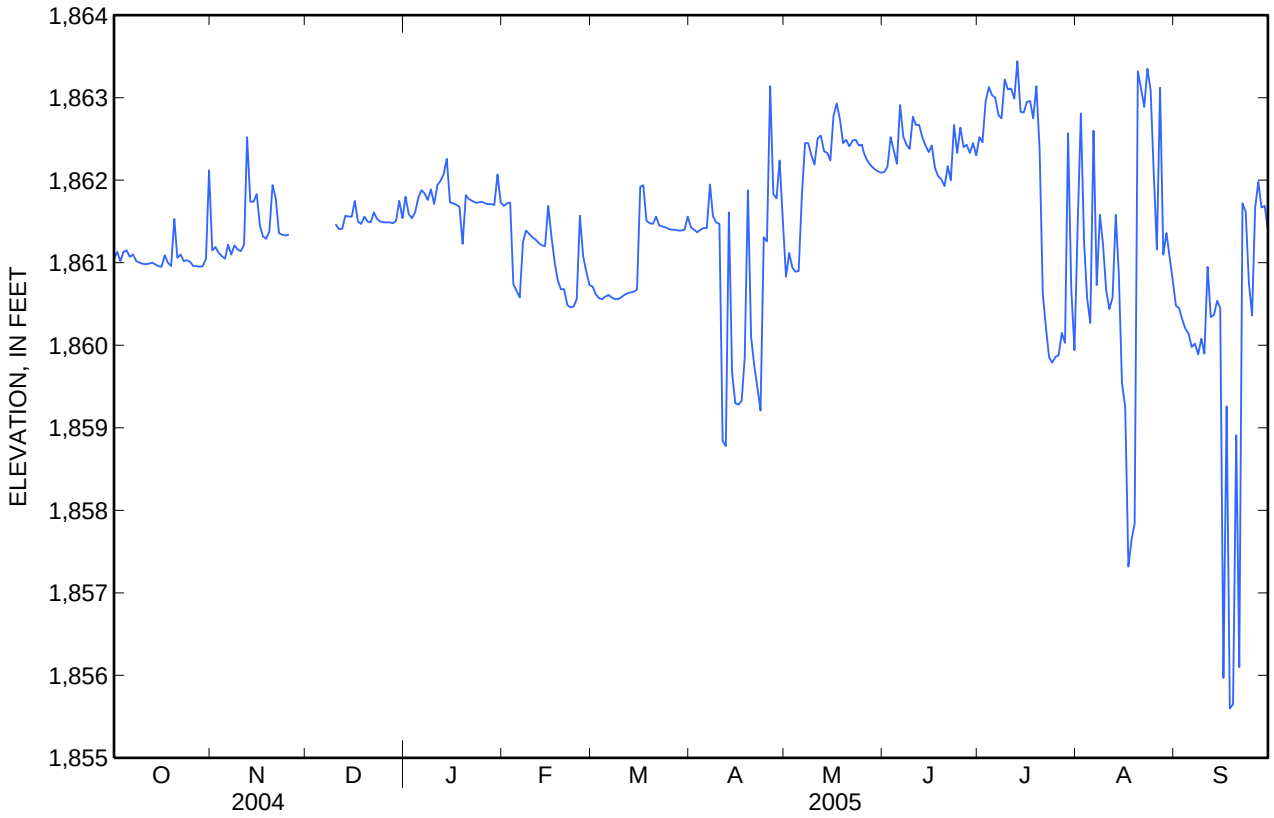
50075550 LAGO ICACOS AT DAMSITE, PR—Continued

FROM DCP
ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY OBSERVATION AT 2400 HOURS

[A, No gage-height record]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,861.05	1,861.15	A	1,861.80	1,861.69	1,860.71	1,861.43	1,860.83	1,862.10	1,862.52	1,861.45	1,860.48
2	1,861.13	1,861.19	A	1,861.59	1,861.72	1,860.62	1,861.40	1,861.12	1,862.16	1,862.46	1,862.81	1,860.45
3	1,861.02	1,861.12	A	1,861.54	1,861.73	1,860.57	1,861.37	1,860.94	1,862.52	1,862.96	1,861.25	1,860.31
4	1,861.13	1,861.08	A	1,861.61	1,860.74	1,860.56	1,861.40	1,860.89	1,862.36	1,863.13	1,860.57	1,860.20
5	1,861.15	1,861.05	A	1,861.79	1,860.66	1,860.59	1,861.42	1,860.90	1,862.20	1,863.03	1,860.27	1,860.14
6	1,861.07	1,861.22	A	1,861.88	1,860.58	1,860.61	1,861.42	1,861.80	1,862.91	1,863.00	1,862.60	1,859.98
7	1,861.10	1,861.10	A	1,861.84	1,861.25	1,860.58	1,861.95	1,862.45	1,862.53	1,862.79	1,860.73	1,860.02
8	1,861.02	1,861.21	A	1,861.76	1,861.39	1,860.56	1,861.56	1,862.45	1,862.43	1,862.75	1,861.58	1,859.89
9	1,861.00	1,861.16	A	1,861.89	1,861.35	1,860.56	1,861.49	1,862.30	1,862.38	1,863.22	1,861.23	1,860.08
10	1,860.99	1,861.14	1,861.46	1,861.71	1,861.31	1,860.58	1,861.47	1,862.19	1,862.77	1,863.10	1,860.67	1,859.90
11	1,860.98	1,861.22	1,861.41	1,861.94	1,861.28	1,860.61	1,858.84	1,862.51	1,862.67	1,863.11	1,860.44	1,860.95
12	1,860.99	1,862.52	1,861.41	1,861.99	1,861.24	1,860.63	1,858.78	1,862.54	1,862.67	1,862.99	1,860.58	1,860.34
13	1,861.00	1,861.74	1,861.57	1,862.07	1,861.21	1,860.64	1,861.61	1,862.35	1,862.52	1,863.44	1,861.58	1,860.37
14	1,860.98	1,861.74	1,861.56	1,862.26	1,861.20	1,860.65	1,859.67	1,862.33	1,862.42	1,862.83	1,860.87	1,860.54
15	1,860.96	1,861.83	1,861.56	1,861.73	1,861.69	1,860.68	1,859.30	1,862.24	1,862.34	1,862.82	1,859.54	1,860.45
16	1,860.95	1,861.45	1,861.75	1,861.72	1,861.32	1,861.92	1,859.28	1,862.78	1,862.42	1,862.95	1,859.25	1,855.97
17	1,861.09	1,861.32	1,861.50	1,861.70	1,861.01	1,861.94	1,859.33	1,862.93	1,862.15	1,862.96	1,857.32	1,859.26
18	1,861.00	1,861.29	1,861.47	1,861.68	1,860.79	1,861.51	1,859.85	1,862.74	1,862.05	1,862.75	1,857.65	1,855.60
19	1,860.96	1,861.38	1,861.56	1,861.23	1,860.68	1,861.48	1,861.88	1,862.45	1,862.01	1,863.14	1,857.84	1,855.65
20	1,861.53	1,861.94	1,861.50	1,861.82	1,860.68	1,861.47	1,860.10	1,862.49	1,861.93	1,862.38	1,863.32	1,858.91
21	1,861.06	1,861.78	1,861.49	1,861.77	1,860.49	1,861.56	1,859.75	1,862.41	1,862.17	1,860.62	1,863.11	1,856.10
22	1,861.10	1,861.36	1,861.61	1,861.75	1,860.46	1,861.45	1,859.48	1,862.48	1,862.00	1,860.21	1,862.89	1,861.72
23	1,861.02	1,861.34	1,861.53	1,861.73	1,860.47	1,861.44	1,859.21	1,862.49	1,862.67	1,859.86	1,863.35	1,861.62
24	1,861.03	1,861.33	1,861.50	1,861.73	1,860.56	1,861.43	1,861.31	1,862.42	1,862.33	1,859.79	1,863.09	1,860.76
25	1,861.01	1,861.34	1,861.49	1,861.74	1,861.57	1,861.41	1,861.26	1,862.43	1,862.64	1,859.86	1,862.11	1,860.36
26	1,860.96	A	1,861.49	1,861.72	1,861.08	1,861.40	1,863.14	1,862.29	1,862.40	1,859.88	1,861.16	1,861.66
27	1,860.96	A	1,861.49	1,861.71	1,860.89	1,861.40	1,861.83	1,862.22	1,862.43	1,860.15	1,863.12	1,861.98
28	1,860.95	A	1,861.48	1,861.71	1,860.73	1,861.39	1,861.78	1,862.17	1,862.33	1,860.03	1,861.10	1,861.67
29	1,860.96	A	1,861.51	1,861.70	---	1,861.39	1,862.24	1,862.13	1,862.45	1,862.57	1,861.36	1,861.69
30	1,861.05	A	1,861.75	1,862.07	---	1,861.40	1,861.52	1,862.11	1,862.30	1,860.68	1,861.08	1,861.40
31	1,862.12	---	1,861.54	1,861.73	---	1,861.56	---	1,862.09	---	1,859.94	1,860.79	---
Mean	1,861.08	---	---	1,861.77	1,861.06	1,861.07	1,860.84	1,862.14	1,862.38	1,862.00	1,861.12	1,859.95

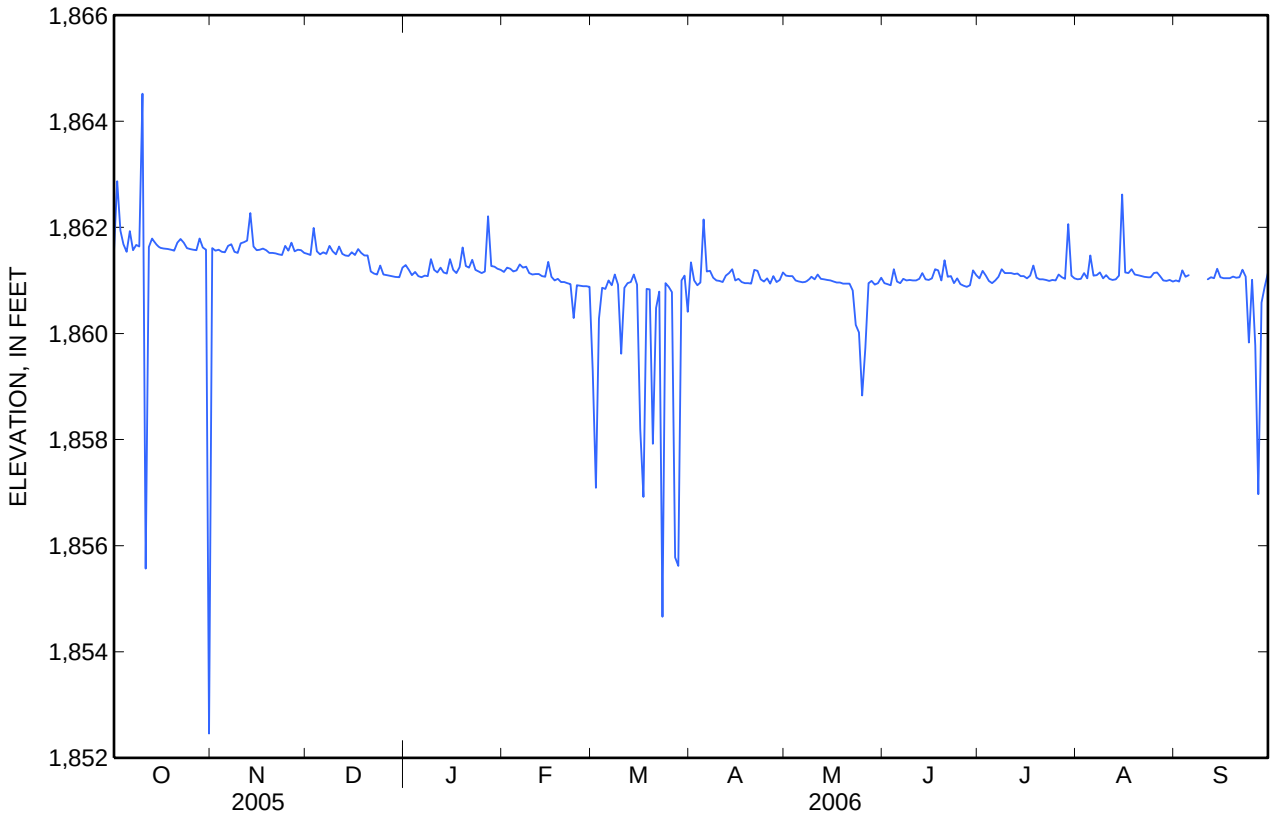
50075550 LAGO ICACOS AT DAMSITE, PR—Continued



50075550 LAGO ICACOS AT DAMSITE, PR—Continued

FROM DCP
ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
DAILY OBSERVATION AT 2400 HOURS

[A, No gage-height record]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,861.56	1,861.61	1,861.50	1,861.29	1,861.16	1,859.30	1,861.34	1,861.09	1,860.95	1,861.04	1,861.02	1,861.00
2	1,862.87	1,861.56	1,861.48	1,861.20	1,861.24	1,857.09	1,861.00	1,861.08	1,860.93	1,861.18	1,861.03	1,860.98
3	1,861.94	1,861.58	1,861.99	1,861.10	1,861.22	1,860.28	1,860.91	1,861.08	1,860.91	1,861.09	1,861.14	1,861.19
4	1,861.68	1,861.54	1,861.55	1,861.16	1,861.17	1,860.86	1,860.96	1,861.00	1,861.21	1,860.99	1,861.04	1,861.07
5	1,861.54	1,861.53	1,861.49	1,861.08	1,861.19	1,860.84	1,862.15	1,860.98	1,860.98	1,860.95	1,861.47	1,861.10
6	1,861.93	1,861.65	1,861.53	1,861.06	1,861.30	1,861.00	1,861.17	1,860.97	1,860.95	1,861.00	1,861.09	A
7	1,861.57	1,861.68	1,861.50	1,861.09	1,861.24	1,860.91	1,861.18	1,860.97	1,861.03	1,861.07	1,861.10	A
8	1,861.67	1,861.54	1,861.65	1,861.08	1,861.26	1,861.11	1,861.05	1,861.01	1,861.00	1,861.21	1,861.15	A
9	1,861.64	1,861.52	1,861.55	1,861.40	1,861.14	1,860.92	1,861.00	1,861.07	1,861.01	1,861.14	1,861.04	A
10	1,864.52	1,861.70	1,861.49	1,861.20	1,861.11	1,859.62	1,860.99	1,861.02	1,861.00	1,861.14	1,861.10	A
11	1,855.57	1,861.72	1,861.64	1,861.15	1,861.12	1,860.86	1,860.97	1,861.11	1,861.00	1,861.14	1,861.03	1,861.02
12	1,861.63	1,861.75	1,861.50	1,861.24	1,861.12	1,860.95	1,861.09	1,861.03	1,861.03	1,861.12	1,861.01	1,861.06
13	1,861.79	1,862.27	1,861.47	1,861.15	1,861.08	1,860.97	1,861.14	1,861.02	1,861.14	1,861.13	1,861.02	1,861.04
14	1,861.71	1,861.64	1,861.46	1,861.13	1,861.07	1,861.11	1,861.21	1,861.01	1,861.02	1,861.08	1,861.09	1,861.22
15	1,861.64	1,861.57	1,861.53	1,861.40	1,861.35	1,860.92	1,861.00	1,861.00	1,861.01	1,861.08	1,862.62	1,861.06
16	1,861.61	1,861.58	1,861.48	1,861.20	1,861.07	1,858.20	1,861.03	1,860.98	1,861.04	1,861.04	1,861.15	1,861.04
17	1,861.60	1,861.60	1,861.59	1,861.14	1,861.00	1,856.92	1,860.97	1,860.96	1,861.21	1,861.09	1,861.14	1,861.04
18	1,861.59	1,861.57	1,861.52	1,861.25	1,861.03	1,860.84	1,860.95	1,860.96	1,861.19	1,861.28	1,861.21	1,861.04
19	1,861.58	1,861.52	1,861.47	1,861.62	1,860.97	1,860.83	1,860.95	1,860.94	1,861.00	1,861.05	1,861.11	1,861.07
20	1,861.56	1,861.52	1,861.47	1,861.27	1,860.97	1,857.92	1,860.94	1,860.94	1,861.38	1,861.02	1,861.10	1,861.05
21	1,861.71	1,861.51	1,861.17	1,861.24	1,860.95	1,860.48	1,861.20	1,860.94	1,861.07	1,861.02	1,861.08	1,861.06
22	1,861.78	1,861.49	1,861.13	1,861.39	1,860.93	1,860.79	1,861.18	1,860.81	1,861.08	1,861.01	1,861.07	1,861.20
23	1,861.71	1,861.48	1,861.11	1,861.20	1,860.29	1,854.66	1,861.02	1,860.16	1,860.95	1,860.99	1,861.06	1,861.07
24	1,861.61	1,861.65	1,861.28	1,861.17	1,860.91	1,860.95	1,860.98	1,860.02	1,861.04	1,861.01	1,861.06	1,859.83
25	1,861.59	1,861.56	1,861.11	1,861.14	1,860.90	1,860.88	1,861.04	1,858.83	1,860.93	1,861.00	1,861.14	1,861.01
26	1,861.58	1,861.71	1,861.10	1,861.17	1,860.89	1,860.78	1,860.94	1,859.73	1,860.90	1,861.11	1,861.15	1,859.77
27	1,861.57	1,861.55	1,861.09	1,862.21	1,860.89	1,855.78	1,861.08	1,860.95	1,860.88	1,861.06	1,861.08	1,856.97
28	1,861.79	1,861.58	1,861.07	1,861.27	1,860.88	1,855.62	1,860.97	1,860.99	1,860.91	1,861.03	1,861.00	1,860.58
29	1,861.62	1,861.57	1,861.07	1,861.26	---	1,861.00	1,861.01	1,860.92	1,861.19	1,862.06	1,860.99	1,860.88
30	1,861.58	1,861.52	1,861.06	1,861.22	---	1,861.09	1,861.15	1,860.95	1,861.10	1,861.09	1,861.01	1,861.14
31	1,852.46	---	1,861.24	1,861.20	---	1,860.41	---	1,861.05	---	1,861.04	1,860.98	---
Mean	1,861.30	1,861.61	1,861.40	1,861.25	1,861.05	1,859.80	1,861.09	1,860.83	1,861.04	1,861.11	1,861.14	---

50075550 LAGO ICACOS AT DAMSITE, PR—Continued