ATTACHMENT 4: FIELD LOGS

This attachment contains the groundwater sample collection field logs for the relatively shallow standpipe monitoring wells (MW-1, MW-5 through MW-10, MW-13, MW-15, and MW-16), as well as the field data sheets for the Westbay™ multiport wells (MW-3, MW-4, MW-11, MW-12, MW-14, and MW-17 through MW-26). Groundwater sample collection was conducted by Geofon Incorporated.

GROUNDWATER COLLECTION AND SAMPLE LOG

WELL ID # 1

GEOFON INCORPORATED
22632 Golden Springs Dr., Suite 270
Diamond Bar, CA 91765
Telephone: (909) 396-7662
Fax: (909) 396-1455

Project Name: Quarterly Monitoring at JPL, Pasadena, CA.

Project No: 4-73803

Navy Contract No.: Battelle

Sampled By: Marco Mendoza, Chase Brogdon

Date: 11/18/05

Weather: clear and warm

PURGE VOLUME CALCULATION (casing volume):

(120 = TD (feet) - 22.88 = WL (feet)) X 4 = D (inches) X 3 = # Vols X 0.0408 = 190.20 = Calculated Purge Volume = Gallons

PURGE METHOD

☐ Bailer – Type:

X Pump – Type: 2" Grundfos

PUMP INTAKE SETTING

Depth in feet (BTOC):

FIELD PARAMETER MEASUREMENT

Time	Depth to Water (Feet)	Total Discharge (Gallons)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (° C)	ORP (mV)	Comments
1132	22.88	0	6.68	70.7	3.5	14.6	19.7	170	Clear, no odor
1142	22.88	38	6.88	69.1	1.0	10.5	19.1	159	Clear, no odor
1152	22.88	76	6.98	68.3	0.65	12.1	19.2	157	Clear, no odor
1202	22.88	114	6.86	65.4	0.80	10.1	19.6	140	Clear, no odor
1212	22.88	152	6.97	66.1	1.3	11.4	19.3	150	Clear, no odor
1222	22.88	190	6.96	66.5	0.85	11.4	19.2	148	Clear, no odor

Total Purge Volume: 190 (Gallons)

Total Discharge: 3.00 (Casing Volumes)

Approx. Purge Rate: 3.75 (GPM)

OBSERVATIONS DURING PUMPING

NOTES: (well condition, color, clarity, odor): Purge start at: 1130 Purge time start: 1132

RECHARGE BEHAVIOR:

X Fast recharging

□ Slow recharging (80% recharge did not occur after two hours)

WATER DISPOSAL

Purge water storage: polytank

Purge water disposal: Battelle –Groundwater treatment system at JPL

WELL SAMPLING

Sample Depth in feet (BTOC):

Original	***Duplicate***	***Blank***	***Other (Trip / Source /)***
Sample ID: MW-1	Sample ID:	Type:	Type:
Sample Time: 1222	Sample Time:	Sample ID:	Sample ID:
No. of Containers: 5	No. of Containers:	Sample Time:	Sample Time:
		No. of Containers:	No. of Containers:

ORIGINAL FIELD RECORD

GROUNDWATER COLLECTION AND SAMPLE LOG
WELL ID # 5

GEOFON INCORPORATED
22632 Golden Springs Dr., Suite 270
Diamond Bar, CA 91765
Telephone: (909) 396-7662
Fax: (909) 396-1455

Project Name: Quarterly Monitoring at JPL, Pasadena, CA.
Project No: 4-73803
Navy Contract No.: Battelle
Sampled By: Marco Mendoza, Chase Brogdon
Date: 10/27/05
Weather: cloudy and cool

PURGE VOLUME CALCULATION (casing volume):

(140 = TD (feet) - 44.85 = WL (feet)) X 4 = D (inches) X 3 = # Vols X 0.0408 = 186.34 = Calculated Purge Volume = Gallons

PURGE METHOD

☐ Bailer – Type:

X Pump – Type: 2" Grundfos

PUMP INTAKE SETTING

Depth in feet (BTOC):

FIELD PARAMETER MEASUREMENT

Time	Depth to Water (Feet)	Total Discharge (Gallons)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (° C)	ORP (mV)	Comments
1106	44.85	0	5.55	36.8	40	10.1	17.2	156	Slight brownish color, no odor
1121	44.85	37	5.66	31.7	19	9.4	16.7	135	Clear, no odor
1136	44.85	74	5.77	31.4	2.3	10.4	17.3	145	Clear, no odor
1151	44.85	112	5.90	32.0	1.6	9.8	18.0	147	Clear, no odor
1206	44.85	149	6.11	31.8	1.2	11.3	18.3	148	Clear, no odor
1221	44.85	187	6.07	31.7	1.3	10.5	18.1	162	Clear, no odor

Total Purge Volume: 187 (Gallons)

Total Discharge: 3.01 (Casing Volumes)

Approx. Purge Rate: 2.5 (GPM)

OBSERVATIONS DURING PUMPING

NOTES: (well condition, color, clarity, odor): Purge start at: 1050 Purge time start: 1106

RECHARGE BEHAVIOR:

X Fast recharging

□ Slow recharging (80% recharge did not occur after two hours)

WATER DISPOSAL

Purge water storage: polytank

Purge water disposal: Battelle-Groundwater treatment system at JPL

WELL SAMPLING

Sample Depth in feet (BTOC):

Original	***Duplicate***	***Blank***	***Other (Trip / Source /)***
Sample ID: MW-5	Sample ID:	Type:	Type:
Sample Time: 1225	Sample Time:	Sample ID:	Sample ID:
No. of Containers: 5	No. of Containers:	Sample Time:	Sample Time:
		No. of Containers:	No. of Containers

ORIGINAL FIELD RECORD

GROUNDWATER COLLECTION AND SAMPLE LOG
WELL ID # 6

GEOFON INCORPORATED
22632 Golden Springs Dr., Suite 270
Diamond Bar, CA 91765
Telephone: (909) 396-7662
Fax: (909) 396-1455

Project Name: Quarterly Monitoring at JPL, Pasadena, CA.
Project No: 4-73803
Navy Contract No.: Battelle
Sampled By: Marco Mendoza, Chase Brogdon
Date: 10/28/05
Weather: partly cloudy and cool

PURGE VOLUME CALCULATION (casing volume):

(245 = TD (feet) - 153.5 = WL (feet)) X 4 = D (inches) X 3 = # Vols X 0.0408 = 179.2 = Calculated Purge Volume = Gallons

PURGE METHOD

☐ Bailer – Type:

X Pump – Type: 2" Grundfos

PUMP INTAKE SETTING

Depth in feet (BTOC):

FIELD PARAMETER MEASUREMENT

Time	Depth to Water (Feet)	Total Discharge (Gallons)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (° C)	ORP (mV)	Comments
734	153.50	0	5.09	0.097	80	11.1	18.8	307	Slight brownish color, no odor
758	153.50	36	5.39	0.094	18	9.4	19.2	250	Clear, no odor
822	153.50	72	5.71	0.096	8.8	9.5	19.5	255	Clear, no odor
846	153.50	108	5.88	0.099	3.9	9.9	19.6	254	Clear, no odor
910	153.50	144	6.03	0.100	2.4	10.1	20.0	257	Clear, no odor
934	153.50	180	6.19	0.101	1.9	10.1	20.1	257	Clear, no odor

Total Purge Volume: 180 (Gallons)

Total Discharge: 3.01 (Casing Volumes)

Approx. Purge Rate: 1.5 (GPM)

OBSERVATIONS DURING PUMPING

NOTES: (well condition, color, clarity, odor): Purge start at: 729 Purge time start: 734

RECHARGE BEHAVIOR:

X Fast recharging

□ Slow recharging (80% recharge did not occur after two hours)

WATER DISPOSAL

Purge water storage: polytank

Purge water disposal: Battelle-Groundwater treatment system at JPL

WELL SAMPLING

Sample Depth in feet (BTOC):

Original	***Duplicate***	***Blank***	***Other (Trip / Source /)***
Sample ID: MW-6	Sample ID:	Type:	Type:
Sample Time: 937	Sample Time:	Sample ID:	Sample ID:
No. of Containers: 5	No. of Containers:	Sample Time:	Sample Time:
		No. of Containers:	No. of Containers:

ORIGINAL FIELD RECORD

GROUNDWATER COLLECTION AND SAMPLE LOG
WELL ID # 7

GEOFON INCORPORATED
22632 Golden Springs Dr., Suite 270
Diamond Bar, CA 91765
Telephone: (909) 396-7662
Fax: (909) 396-1455

Project Name: Quarterly Monitoring at JPL, Pasadena, CA.
Project No: 4-73803
Navy Contract No.: Battelle
Sampled By: Marco Mendoza, Chase Brogdon
Date: 11/22/05
Weather: partly cloudy and cool

PURGE VOLUME CALCULATION (casing volume):

(275 = TD (feet) - 182.81 = WL (feet)) X 4² = D (inches) X 3 = # Vols X 0.0408 = 180.54 = Calculated Purge Volume = Gallons

PURGE METHOD

☐ Bailer – Type:

X Pump – Type: 2" Grundfos

PUMP INTAKE SETTING

Depth in feet (BTOC):

FIELD PARAMETER MEASUREMENT

Time	Depth to Water (Feet)	Total Discharge (Gallons)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (° C)	ORP (mV)	Comments
728	182.81	0	5.16	62.4	70	8.9	19.2	256	Brownish color, no odor
746	182.81	36	5.51	58.3	20	8.3	19.7	229	Clear, no odor
804	182.81	72	5.70	58.1	9.6	8.8	19.8	181	Clear, no odor
822	182.81	108	5.87	58.3	19	8.4	20.3	182	Clear, no odor
840	182.81	144	5.99	57.4	7.6	8.5	20.5	176	Clear, no odor
859	182.81	181	6.13	58.0	6.0	8.8	20.5	147	Clear, no odor

Total Purge Volume: 181 (Gallons)

Total Discharge: 3.01 (Casing Volumes)

Approx. Purge Rate: 2 (GPM)

OBSERVATIONS DURING PUMPING

NOTES: (well condition, color, clarity, odor): Purge start at: 722 Purge time start: 728

RECHARGE BEHAVIOR:

X Fast recharging

□ Slow recharging (80% recharge did not occur after two hours)

WATER DISPOSAL

Purge water storage: polytank

Purge water disposal: Battelle-Groundwater treatment system at JPL

WELL SAMPLING

Sample Depth in feet (BTOC):

Original	***Duplicate***	***Blank***	***Other (Trip / Source /)***
Sample ID: MW-7	Sample ID: DUPE-8-4Q05	Type:	Type:
Sample Time: 904	Sample Time: ----------	Sample ID:	Sample ID:
No. of Containers: 5	No. of Containers: 5	Sample Time:	Sample Time:
		No. of Containers:	No. of Containers:

ORIGINAL FIELD RECORD

GROUNDWATER COLLECTION AND SAMPLE LOG
WELL ID # 8

GEOFON INCORPORATED
22632 Golden Springs Dr., Suite 270
Diamond Bar, CA 91765
Telephone: (909) 396-7662
Fax: (909) 396-1455

Project Name: Quarterly Monitoring at JPL, Pasadena, CA.
Project No: 4-73803
Navy Contract No.: Battelle
Sampled By: Marco Mendoza, Chase Brogdon
Date: 11/21/05
Weather: clear and warm

PURGE VOLUME CALCULATION (casing volume):

(205 = TD (feet) - 109.65 = WL (feet)) X 4 = D (inches) X 3 = # Vols X 0.0408 = 186.73 = Calculated Purge Volume = Gallons

PURGE METHOD

☐ Bailer – Type:

X Pump – Type: 2" Grundfos

PUMP INTAKE SETTING

Depth in feet (BTOC):

FIELD PARAMETER MEASUREMENT

Time	Depth to Water (Feet)	Total Discharge (Gallons)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (° C)	ORP (mV)	Comments
1129	109.65	0	6.48	43.9	5.6	10.2	19.2	209	Clear, no odor
1144	109.65	37	6.55	43.6	2.6	8.5	18.9	208	Clear, no odor
1159	109.65	75	6.56	44.9	1.0	9.4	18.7	152	Clear, no odor
1214	109.65	112	6.63	44.6	0.40	9.3	18.8	126	Clear, no odor
1229	109.65	150	6.79	44.4	0.35	8.1	18.5	187	Clear, no odor
1244	109.65	187	6.71	44.9	0.25	9.2	18.7	133	Clear, no odor

Total Purge Volume: 187 (Gallons)

Total Discharge: 3.0 (Casing Volumes)

Approx. Purge Rate: 2.5 (GPM)

OBSERVATIONS DURING PUMPING

NOTES: (well condition, color, clarity, odor): Purge start at: 1127 Purge time start: 1129

RECHARGE BEHAVIOR:

X Fast recharging

□ Slow recharging (80% recharge did not occur after two hours)

WATER DISPOSAL

Purge water storage: polytank

Purge water disposal: Battelle-Groundwater treatment system at JPL

WELL SAMPLING

Sample Depth in feet (BTOC):

Original	***Duplicate***	***Blank***	***Other (Trip / Source /)***
Sample ID: MW-8	Sample ID:	Type:	Type:
Sample Time: 1246	Sample Time:	Sample ID:	Sample ID:
No. of Containers: 5	No. of Containers:	Sample Time:	Sample Time:
		No. of Containers:	No. of Containers:

ORIGINAL FIELD RECORD

GROUNDWATER COLLECTION AND SAMPLE LOG
WELL ID # 9

GEOFON INCORPORATED
22632 Golden Springs Dr., Suite 270
Diamond Bar, CA 91765
Telephone: (909) 396-7662
Fax: (909) 396-1455

Project Name: Quarterly Monitoring at JPL, Pasadena, CA.
Project No: 4-73803
Navy Contract No.: Battelle
Sampled By: Marco Mendoza, Chase Brogdon
Date: 10/20/05
Weather: clear and warm

PURGE VOLUME CALCULATION (casing volume):

(68 = TD (feet) - 19.61 = WL (feet)) X 4 = D (inches) X 3 = # Vols X 0.0408 = 94.77 = Calculated Purge Volume = Gallons

PURGE METHOD

☐ Bailer – Type:

X Pump – Type: 2" Grundfos

PUMP INTAKE SETTING

Depth in feet (BTOC):

FIELD PARAMETER MEASUREMENT

Time	Depth to Water (Feet)	Total Discharge (Gallons)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (° C)	ORP (mV)	Comments
1227	19.61	0	5.75	38.0	11	11.3	22.2	64	Clear, no odor
1233	19.61	19	5.92	34.3	4.9	9.7	22.1	29	Clear, no odor
1240	19.61	38	5.86	33.9	9.2	10.1	21.1	21	Clear, no odor
1246	19.61	57	5.91	34.5	13	8.9	22.4	19	Clear, no odor
1252	19.61	76	6.14	35.7	18	9.2	21.3	16	Clear, no odor
1259	19.61	95	6.24	35.9	12	7.6	22.7	42	Clear, no odor

Total Purge Volume: 95 (Gallons)

Total Discharge: 3.01 (Casing Volumes)

Approx. Purge Rate: 3 (GPM)

OBSERVATIONS DURING PUMPING

NOTES: (well condition, color, clarity, odor): Purge start at: 1226 Purge time start: 1227

RECHARGE BEHAVIOR:

X Fast recharging

□ Slow recharging (80% recharge did not occur after two hours)

WATER DISPOSAL

Purge water storage: polytank

Purge water disposal: Battelle-Groundwater treatment system at JPL

WELL SAMPLING

Sample Depth in feet (BTOC):

Original	***Duplicate***	***Blank***	***Other (Trip / Source /)***
Sample ID: MW-9	Sample ID:	Type:	Type:
Sample Time: 1304	Sample Time:	Sample ID:	Sample ID:
No. of Containers: 5	No. of Containers:	Sample Time:	Sample Time:
		No. of Containers:	No. of Containers:

GROUNDWATER COLLECTION AND SAMPLE LOG
WELL ID # 10

GEOFON INCORPORATED
22632 Golden Springs Dr., Suite 270
Diamond Bar, CA 91765
Telephone: (909) 396-7662
Fax: (909) 396-1455

Project Name: Quarterly Monitoring at JPL, Pasadena, CA.
Project No: 4-73803
Navy Contract No.: Battelle
Sampled By: Marco Mendoza, Chase Brogdon
Date: 11/21/05
Weather: clear and cool

PURGE VOLUME CALCULATION (casing volume):

(155 = TD (feet) - 59.63 = WL (feet)) X 4 = D (inches) X 3 = # Vols X 0.0408 = 186.77 = Calculated Purge Volume = Gallons

PURGE METHOD / PUMP INTAKE SETTING

☐ Bailer – Type: **X** Pump – Type: 2" Grundfos

Depth in feet (BTOC):

FIELD PARAMETER MEASUREMENT

Time	Depth to Water (Feet)	Total Discharge (Gallons)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (° C)	ORP (mV)	Comments
745	59.63	0	5.13	97.2	4.0	10.0	16.7	245	Clear, no odor
755	59.63	37	5.58	95.2	1.9	10.0	17.2	185	Clear, no odor
806	59.63	75	5.87	96.4	1.0	10.1	17.5	96	Clear, no odor
816	59.63	112	6.05	95.6	0.85	9.8	17.5	111	Clear, no odor
827	59.63	150	6.17	96.3	0.65	10.2	17.6	89	Clear, no odor
837	59.63	187	6.29	96.6	0.30	9.9	17.1	88	Clear, no odor

Total Purge Volume: 187 (Gallons)

Total Discharge: 3.01 (Casing Volumes)

Approx. Purge Rate: 3.5 (GPM)

OBSERVATIONS DURING PUMPING

NOTES: (well condition, color, clarity, odor): Purge start at: 742 Purge time start: 745

RECHARGE BEHAVIOR: **X** Fast recharging
□ Slow recharging (80% recharge did not occur after two hours)

WATER DISPOSAL

Purge water storage: polytank

Purge water disposal: Battelle-Groundwater treatment system at JPL

WELL SAMPLING

Sample Depth in feet (BTOC):

Original	***Duplicate***	***Blank***	***Other (Trip / Source /)***
Sample ID: MW-10	Sample ID:	Type:	Type:
Sample Time: 845	Sample Time:	Sample ID:	Sample ID:
No. of Containers: 10 (MS/MSD)	No. of Containers:	Sample Time:	Sample Time:
		No. of Containers:	No. of Containers:

ORIGINAL FIELD RECORD

GROUNDWATER COLLECTION AND SAMPLE LOG
WELL ID # 13

GEOFON INCORPORATED
22632 Golden Springs Dr., Suite 270
Diamond Bar, CA 91765
Telephone: (909) 396-7662
Fax: (909) 396-1455

Project Name: Quarterly Monitoring at JPL, Pasadena, CA.
Project No: 4-73803
Navy Contract No.: Battelle
Sampled By: Marco Mendoza, Chase Brogdon
Date: 11/22/05
Weather: clear and warm

PURGE VOLUME CALCULATION (casing volume):

(235 = TD (feet) - 153.07 = WL (feet)) X 4² = D (inches) X 3 = # Vols X 0.0408 = 160.45 = Calculated Purge Volume Gallons

PURGE METHOD

☐ Bailer – Type: =

X Pump – Type: 2" Grundfos

PUMP INTAKE SETTING

Depth in feet (BTOC): =

FIELD PARAMETER MEASUREMENT

Time	Depth to Water (Feet)	Total Discharge (Gallons)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (° C)	ORP (mV)	Comments
952	153.07	0	6.15	63.3	70	9.8	22.4	170	Slight brownish color, no odor
1013	153.07	32	6.25	63.2	34	9.7	22.9	131	Clear, no odor
1034	153.07	64	6.33	63.1	20	9.5	23.5	155	Clear, no odor
1055	153.07	96	6.40	64.7	16	9.6	24.7	138	Clear, no odor
1116	153.07	128	6.51	60.2	11	7.2	26.2	220	Clear, no odor
1138	153.07	161	6.59	65.8	7.3	11.5	26.4	202	Clear, no odor

Total Purge Volume: 161 (Gallons)

Total Discharge: 3.01 (Casing Volumes)

Approx. Purge Rate: 1.5 (GPM)

OBSERVATIONS DURING PUMPING

NOTES: (well condition, color, clarity, odor): Purge start at: 945 Purge time start: 952

RECHARGE BEHAVIOR:
X Fast recharging
□ Slow recharging (80% recharge did not occur after two hours)

WATER DISPOSAL

Purge water storage: polytank

Purge water disposal: Battelle-Groundwater treatment system at JPL

WELL SAMPLING

Sample Depth in feet (BTOC):

Original	***Duplicate***	***Blank***	***Other (Trip / Source /)***
Sample ID: MW-13	Sample ID:	Type:	Type:
Sample Time: 1142	Sample Time:	Sample ID:	Sample ID:
No. of Containers: 5	No. of Containers:	Sample Time:	Sample Time:
		No. of Containers:	No. of Containers:

ORIGINAL FIELD RECORD

GROUNDWATER COLLECTION AND SAMPLE LOG
WELL ID # 15

GEOFON INCORPORATED
22632 Golden Springs Dr., Suite 270
Diamond Bar, CA 91765
Telephone: (909) 396-7662
Fax: (909) 396-1455

Project Name: Quarterly Monitoring at JPL, Pasadena, CA.
Project No: 4-73803
Navy Contract No.: Battelle
Sampled By: Marco Mendoza, Chase Brogdon
Date: 10/27/05
Weather: cloudy and cool

PURGE VOLUME CALCULATION (casing volume):

(74 = TD (feet) - 29.50 = WL (feet)) X 4² = D (inches) X 3 = # Vols X 0.0408 = 87.15 = Calculated Purge Volume = Gallons

PURGE METHOD

☐ Bailer – Type:

X Pump – Type: 2" Grundfos

PUMP INTAKE SETTING

Depth in feet (BTOC):

FIELD PARAMETER MEASUREMENT

Time	Depth to Water (Feet)	Total Discharge (Gallons)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (° C)	ORP (mV)	Comments
1311	29.5	0	6.06	52.5	2.3	8.5	17.6	156	Clear, no odor
1320	29.5	17	6.23	51.9	0.45	9.0	17.6	144	Clear, no odor
1329	29.5	35	6.43	52.4	0.60	8.6	18.1	137	Clear, no odor
1339	29.5	52	6.59	52.4	0.70	8.4	18.5	134	Clear, no odor
1348	29.5	70	6.66	51.8	4.8	10.2	18.6	144	Clear, no odor
1358	29.5	88	6.70	52.1	2.9	8.8	19.0	144	Clear, no odor

Total Purge Volume: 88 (Gallons)

Total Discharge: 3.03 (Casing Volumes)

Approx. Purge Rate: 2 (GPM)

OBSERVATIONS DURING PUMPING

NOTES: (well condition, color, clarity, odor): Purge start at: 1305 Purge time start: 1311

RECHARGE BEHAVIOR:

X Fast recharging

□ Slow recharging (80% recharge did not occur after two hours)

WATER DISPOSAL

Purge water storage: polytank

Purge water disposal: Battelle-Groundwater treatment system at JPL

WELL SAMPLING

Sample Depth in feet (BTOC):

Original	***Duplicate***	***Blank***	***Other (Trip / Source /)***
Sample ID: MW-15	Sample ID:	Type:	Type:
Sample Time: 1359	Sample Time:	Sample ID:	Sample ID:
No. of Containers: 5	No. of Containers:	Sample Time:	Sample Time:
		No. of Containers:	No. of Containers:

GROUNDWATER COLLECTION AND SAMPLE LOG
WELL ID # 16

GEOFON INCORPORATED
22632 Golden Springs Dr., Suite 270
Diamond Bar, CA 91765
Telephone: (909) 396-7662
Fax: (909) 396-1455

Project Name: Quarterly Monitoring at JPL, Pasadena, CA.
Project No: 4-73803
Navy Contract No.: Battelle
Sampled By: Marco Mendoza, Chase Brogdon
Date: 10/28/05
Weather: partly cloudy and cool

PURGE VOLUME CALCULATION (casing volume):

(285 = TD (feet) - 207.29 = WL (feet)) X 4² = D (inches) X 3 = # Vols X 0.0408 = 152.19 = Calculated Purge Volume = Gallons

PURGE METHOD

☐ Bailer – Type:

X Pump – Type: 2" Grundfos

PUMP INTAKE SETTING

Depth in feet (BTOC):

FIELD PARAMETER MEASUREMENT

Time	Depth to Water (Feet)	Total Discharge (Gallons)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (° C)	ORP (mV)	Comments
1104	207.29	0	6.41	52.2	10	13.2	23.9	167	Clear, no odor
1124	207.29	30	6.51	50.2	1.7	12.9	22.3	159	Clear, no odor
1144	207.29	61	6.60	49.7	0.70	12.1	23.2	150	Clear, no odor
1204	207.29	91	6.72	49.4	0.55	12.5	23.2	151	Clear, no odor
1224	207.29	122	6.66	49.3	0.95	9.6	22.4	161	Clear, no odor
1244	207.29	153	6.69	48.9	0.25	12.1	23.1	147	Clear, no odor

Total Purge Volume: 153 (Gallons)

Total Discharge: 3.02 (Casing Volumes)

Approx. Purge Rate: 15 (GPM)

OBSERVATIONS DURING PUMPING

NOTES: (well condition, color, clarity, odor): Purge start at: 1058 Purge time start: 1104

RECHARGE BEHAVIOR:

X Fast recharging

□ Slow recharging (80% recharge did not occur after two hours)

WATER DISPOSAL

Purge water storage: polytank

Purge water disposal: Battelle-Groundwater treatment system at JPL

WELL SAMPLING

Sample Depth in feet (BTOC):

Original	***Duplicate***	***Blank***	***Other (Trip / Source /)***
Sample ID: MW-16	Sample ID:	Type:	Type:
Sample Time: 1245	Sample Time:	Sample ID:	Sample ID:
No. of Containers: 5	No. of Containers:	Sample Time:	Sample Time:
		No. of Containers:	No. of Containers:

ORIGINAL FIELD RECORD

GEOFON INCORPORATED

Groundwater Sampling

Multi-Port Well Field Data Sheet

JPL Pasadena
Contract #:Battelle

Well ID: MW-3
Sampling Zone No.: 5 to 1
Depth (ft): 653, 558, 346, 252, 172
Beginning of Session: 14.15 psia
End of Session: 14.15 psia

Start Time: 805
Finish Time: 1136

Date: 11/4/25
Page: 1 of 1

Water Pressure Inside Casing: —

Port #	Run #	Surface Function Checks: Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Shoe in	Arm In	Position Sampler: Deactivate Set Arm Locate Port	Arm out	Sample Collection Checks: Pressure in MP	Shoe Out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Water Quality Parameters: Time	PH	Turb. (NTU)	Cond (mmhos)	Dissolved Oxygen	Temp. (oC)	ORP	
5	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	252.25	✓	259.89	✓	259.89	✓	✓	252.32	838	5.67	3.4	42.2	11.3	18.8	218	
4	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	210.93	✓	218.82	✓	218.81	✓	✓	210.89	910	5.86	2.9	45.0	11.9	19.6	111	>4
4	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	210.89	✓	218.83	✓	218.83	✓	✓	210.87	—	—	—	—	—	—	—	
3	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	118.65	✓	129.57	✓	129.56	✓	✓	118.67	1089	6.06	0.40	51.0	12.4	18.4	160	>3
3	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	118.72	✓	129.54	✓	129.55	✓	✓	118.74	—	—	—	—	—	—	—	
2	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	78.24	✓	88.60	✓	88.60	✓	✓	78.27	1059	6.37	2.3	50.2	11.9	19.1	179	
1	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	43.41	✓	54.91	✓	54.91	✓	✓	43.45	1132	6.60	3.6	46.5	11.4	18.4	169	

Notes:

port 5: CLEAR, STRONG ODOR port 4: CLEAR, SLIGHT ODOR port 3: CLEAR, NO ODOR

port 2: CLEAR, NO ODOR port 1: CLEAR, NO ODOR

Total Volume: —

GEOFON INCORPORATED

Groundwater Sampling

Multi-Port Well Field Data Sheet

JPL Pasadena
Contract #:Battelle

Well ID: MW-4
Sampling Zone No.: 5+1
Depth (ft): 513, 392, 322, 240, 150
Beginning of Session: 14.17 psia
End of Session: 14.14 psia

Start Time: 740
Finish Time: 1100

Date: 11/14/05
Page: 1 of 1

Water Pressure Inside Casing: —

Port #	Run #	Surface Function Checks: Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Shoe in	Arm In	Position Sampler: Deactivate Set Arm Locate Port	Arm out	Sample Collection Checks: Pressure in MP	Shoe Out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Water Quality Parameters: Time	PH	Turb. (NTU)	Cond (mmhos)	Dissolved Oxygen	Temp. (oC)	ORP
5	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	142.66	✓	210.31	✓	210.31	✓	✓	142.62	804	5.51	19	39.9	9.0	19.3	224
4	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	89.86	✓	157.91	✓	157.91	✓	✓	89.89	839	5.80	4.8	41.1	8.3	20.7	178
DUPE 4	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	89.84	✓	157.88	✓	157.85	✓	✓	89.87	—	—	—	—	—	—	—
3	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	59.32	✓	127.92	✓	127.91	✓	✓	59.36	930	6.19	14	47.2	9.7	22.9	185
2	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	24.05	✓	92.31	✓	92.33	✓	✓	24.08	958	6.22	19	.100	12.2	26.1	226
ms/msd 1	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	14.22	✓	55.29	✓	55.25	✓	✓	14.21	1044	7.15	4.0	37.8	13.3	23.5	123
1	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	14.21	✓	55.27	✓	55.23	✓	✓	14.20	—	—	—	—	—	—	—

> 4

> 1

Notes:

port 5: CLEAR, NO ODOR port 4: CLEAR, NO ODOR port 3: YELLOWISH COLOR, NO ODOR

port 2: CLEAR, NO ODOR port 1: CLEAR, NO ODOR

Total Volume: —

GEOFON INCORPORATED

Groundwater Sampling

Multi-Port Well Field Data Sheet

JPL Pasadena
Contract #:Battelle

Well ID: MW-11
Sampling Zone No.: 5 to 1
Depth (ft): 639, 524, 429, 259, 149
Beginning of Session: 14.14 psia
End of Session: 14.19 psia

Start Time: 807
Finish Time: 1145

Date: 11/15/05
Page: 1 of 1

Water Pressure Inside Casing: —

	Port #	Run #	Surface Function Checks: Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Shoe in	Arm In	Position Sampler: Deactivate Set Arm Locate Port	Arm out	Sample Collection Checks: Pressure in MP	Shoe Out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Water Quality Parameters: Time	PH	Turb. (NTU)	Cond (mmhos)	Dissolved Oxygen	Temp. (oC)	ORP	
DUP	5	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	244.17	✓	236.39	✓	236.28	✓	✓	244.14	843	5.70	7.0	38.7	10.9	21.2	206	>5
	5	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	244.12	✓	236.34	✓	236.24	✓	✓	244.10	—	—	—	—	—	—	—	
	4	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	194.38	✓	193.32	✓	193.26	✓	✓	194.40	936	5.97	1.5	25.6	10.7	21.7	117	
MS/MSD	3	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	153.36	✓	151.11	✓	151.09	✓	✓	153.41	1010	5.98	7.9	45.2	10.2	23.3	60	
	3	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	153.34	✓	151.10	✓	151.06	✓	✓	153.35	—	—	—	—	—	—	—	>3
	2	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	80.04	✓	78.61	✓	78.58	✓	✓	80.05	1058	6.44	2.7	50.0	10.2	23.0	201	
	1	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	32.63	✓	36.94	✓	36.99	✓	✓	32.66	1187	6.30	1.1	60.9	10.9	23.1	179	

Notes:

port 5: CLEAR, SLIGHT ODOR port 4: CLEAR, SLIGHT ODOR port 3: CLEAR, NO ODOR

port 2: CLEAR, NO ODOR port 1: CLEAR, NO ODOR

Total Volume: —

GEOFON INCORPORATED

Groundwater Sampling

Multi-Port Well Field Data Sheet

JPL Pasadena
Contract #:Battelle

Well ID: MW-12
Sampling Zone No.: 5 to 1
Depth (ft): 548, 436, 323, 243, 140
Beginning of Session: 14.15 psia
End of Session: 14.18 psia

Start Time: 730
Finish Time: 1025

Date: 11/17/05
Page: 1 of 1

Water Pressure Inside Casing: —

Port #	Run #	Surface Function Checks: Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Shoe in	Arm In	Position Sampler: Deactivate Set Arm Locate Port	Arm out	Sample Collection Checks: Pressure in MP	Shoe Out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Water Quality Parameters: Time	PH	Turb. (NTU)	Cond (mmhos)	Dissolved Oxygen	Temp. (oC)	ORP
5	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	200.79	✓	215.43	✓	215.41	✓	✓	200.78	756	5.40	1.5	52.3	10.3	17.8	214
4	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	151.98	✓	169.44	✓	169.34	✓	✓	151.97	824	5.59	0.40	55.8	9.9	18.5	140
4	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	151.94	✓	169.41	✓	169.32	✓	✓	151.94	—	—	—	—	—	—	—
3	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	102.65	✓	120.84	✓	120.84	✓	✓	102.65	911	6.11	0.85	44.6	11.2	21.4	104
2	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	68.22	✓	86.37	✓	86.38	✓	✓	68.21	938	6.29	1.7	61.5	11.1	23.0	146
1	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	23.21	✓	43.93	✓	43.94	✓	✓	23.23	1015	6.45	10.0	49.6	14.5	22.3	167

ms/msd < 4 > 4

Notes:

port 5: STRONG H_2S ODOR, CLEAR port 4: CLEAR, SLIGHT ODOR port 3: CLEAR, SLIGHT ODOR

port 2: CLEAR, SLIGHT ODOR port 1: CLEAR, NO ODOR

Total Volume: —

GEOFON INCORPORATED

Groundwater Sampling
Multi-Port Well Field Data Sheet

JPL Pasadena
Contract #:Battelle

Well ID: MW-14
Sampling Zone No.: 5 to 1
Depth (ft): 540, 456, 382, 277, 207
Beginning of Session: 14.07 psia
End of Session: 14.09 psia

Start Time: 820
Finish Time: 1215

Date: 11/7/05
Page: 1 of 1

Water Pressure Inside Casing: —

	Port #	Run #	Surface Function Checks: Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Shoe in	Arm In	Position Sampler: Deactivate Set Arm Locate Port	Arm out	Sample Collection Checks: Pressure in MP	Shoe Out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Water Quality Parameters: Time	PH	Turb. (NTU)	Cond (mmhos)	Dissolved Oxygen	Temp. (oC)	ORP	
ms/msd <	5	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	195.58	✓	189.70	✓	189.69	✓	✓	195.63	858	5.62	2.5	39.4	10.8	19.8	246	>5
	5	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	195.57	✓	189.70	✓	189.68	✓	✓	195.59	—	—	—	—	—	—	—	
	4	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	158.87	✓	153.16	✓	153.18	✓	✓	158.85	954	5.59	0.55	64.8	11.0	20.6	211	
	3	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	126.55	✓	121.05	✓	121.06	✓	✓	126.59	1025	5.73	0.90	0.113	10.5	20.9	291	
	2	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	80.76	✓	75.36	✓	75.38	✓	✓	80.76	1057	5.99	3.1	.125	10.2	21.2	268	
DUPE <	1	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	50.65	✓	45.15	✓	45.15	✓	✓	50.68	1136	6.21	3.3	.131	10.8	22.0	328	>1
	1	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	50.16	✓	45.13	✓	45.16	✓	✓	50.14	—	—	—	—	—	—	—	

Notes:
port 5: CLEAR; STRONG ODOR port 4: CLEAR, NO ODOR port 3: CLEAR, NO ODOR
port 2: CLEAR, NO ODOR port 1: CLEAR, NO ODOR

Total Volume: —

GEOFON INCORPORATED

Groundwater Sampling

Multi-Port Well Field Data Sheet

JPL Pasadena
Contract #:Battelle

Well ID: MW-17
Sampling Zone No.: 5+01
Depth (ft): 726, 582, 468, 370, 250
Beginning of Session: 14.15 psia
End of Session: 14.14 psia

Start Time: 735
Finish Time: 1045

Date: 11/1/05
Page: 1 of 1

Water Pressure Inside Casing: —

Port #	Run #	Surface Function Checks: Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Shoe in	Arm In	Position Sampler: Deactivate Set Arm Locate Port	Arm out	Sample Collection Checks: Pressure in MP	Shoe Out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Water Quality Parameters: Time	PH	Turb. (NTU)	Cond (mmhos)	Dissolved Oxygen	Temp. (oC)	ORP
5	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	247.85	✓	250.36	✓	250.26	✓	✓	247.92	807	5.55	110	36.1	11.6	17.8	233
4	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	185.42	✓	187.01	✓	186.99	✓	✓	185.36	840	5.85	1.5	34.4	11.2	20.2	178
3	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	135.86	✓	134.88	✓	134.84	✓	✓	135.92	911	5.74	4.8	72.1	10.6	20.5	172
3	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	135.81	✓	134.60	✓	134.54	✓	✓	135.83	—	—	—	—	—	—	—
2	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	93.22	✓	95.65	✓	95.65	✓	✓	93.26	1007	6.08	2.7	90.5	12.1	21.4	210
1	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	41.25	✓	46.58	✓	46.61	✓	✓	41.26	1039	6.50	0.4	35.1	11.2	21.1	204

DUPE < >3

Notes:

port 5: SLIGHTLY CLOUDY, NO ODOR port 4: CLEAR, NO ODOR port 3: CLEAR, NO ODOR

port 2: CLEAR, NO ODOR port 1: CLEAR, NO ODOR

Total Volume: —

GEOFON INCORPORATED

Groundwater Sampling

Multi-Port Well Field Data Sheet

JPL Pasadena
Contract #:Battelle

Well ID: MW-18
Sampling Zone No.: 5+1
Depth (ft): 684, 564, 424, 330, 270
Beginning of Session: 14.12 psia
End of Session: 14.08 psia

Start Time: 810
Finish Time: 1100

Date: 11/3/05
Page: 1 of 1

Water Pressure Inside Casing: —

Port #	Run #	Surface Function Checks: Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Shoe in	Arm In	Position Sampler: Deactivate Set Arm Locate Port	Arm out	Sample Collection Checks: Pressure in MP	Shoe Out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Water Quality Parameters: Time	PH	Turb. (NTU)	Cond (mmhos)	Dissolved Oxygen	Temp. (oC)	ORP
5	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	159.12	✓	21442	✓	214.37	✓	✓	159.08	847	5.60	2.1	36.1	10.1	18.0	241
4	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	106.86	✓	163.83	✓	163.85	✓	✓	106.85	921	5.66	2.6	45.7	10.9	19.8	210
3	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	46.82	✓	105.51	✓	105.51	✓	✓	45.85	950	5.83	1.2	60.2	11.0	19.1	194
2	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	14.30	✓	64.89	✓	64.87	✓	✓	14.30	1021	6.51	7.1	55.0	12.0	20.5	162
1	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	14.28	✓	39.27	✓	39.24	✓	✓	14.30	1055	6.72	2.8	37.9	12.7	20.8	195

Notes:

port 5: CLEAR, NO ODOR port 4: CLEAR, SLIGHT ODOR port 3: CLEAR, NO ODOR

port 2: CLEAR, NO ODOR port 1: CLEAR, NO ODOR

Total Volume: —

GEOFON INCORPORATED

Groundwater Sampling

Multi-Port Well Field Data Sheet

JPL Pasadena
Contract #:Battelle

Well ID: MW-19
Sampling Zone No.: 5+1
Depth (ft): 498, 444, 392, 314, 242
Beginning of Session: 14.13 psia
End of Session: 14.14 psia

Start Time: 725
Finish Time: 1025

Date: 11/2/25
Page: 1 of 1

Water Pressure Inside Casing: —

	Port #	Run #	Surface Function Checks: Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Shoe in	Arm In	Position Sampler: Deactivate Set Arm Locate Port	Arm out	Sample Collection Checks: Pressure in MP	Shoe Out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Water Quality Parameters: Time	PH	Turb. (NTU)	Cond (mmhos)	Dissolved Oxygen	Temp. (oC)	ORP
DUPE	5	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	176.25	✓	172.98	✓	172.97	✓	✓	176.27	758	5.27	0.65	78.4	10.3	15.8	227
	5	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	176.25	✓	172.97	✓	172.99	✓	✓	176.31	—	—	—	—	—	—	—
	4	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	152.75	✓	149.60	✓	149.61	✓	✓	152.73	848	5.77	0.30	72.3	9.3	18.1	164
	3	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	130.17	✓	127.39	✓	127.37	✓	✓	130.17	918	6.14	2.2	65.5	9.1	18.2	145
	2	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	96.29	✓	93.12	✓	93.12	✓	✓	96.27	949	6.19	50	0.104	8.6	19.3	276
	1	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	65.17	✓	61.68	✓	61.69	✓	✓	65.20	1021	6.53	34	40.2	8.5	18.7	166

> 5

Notes:

port 5: CLEAR, NO ODOR port 4: CLEAR, NO ODOR port 3: CLEAR, NO ODOR

port 2: SLIGHTLY BROWNISH, NO ODOR port 1: SLIGHTLY YELLOWISH BROWN, NO ODOR

Total Volume: —

GEOFON INCORPORATED

Groundwater Sampling
Multi-Port Well Field Data Sheet

JPL Pasadena
Contract #:Battelle

Well ID: MW-20
Sampling Zone No.: 5 to 1
Depth (ft): 900, 700, 562, 392, 230
Beginning of Session: 14.13 psia
End of Session: 14.11 psia

Start Time: 755
Finish Time: 1052

Date: 11/8/05
Page: 1 of 1

Water Pressure Inside Casing: —

Port #	Run #	Surface Function Checks							Position Sampler		Sample Collection Checks								Water Quality Parameters						
		Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Shoe in	Arm In	Deactivate Set Arm Locate Port	Arm out	Pressure in MP	Shoe Out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	PH	Turb. (NTU)	Cond (mmhos)	Dissolved Oxygen	Temp. (oC)	ORP
5	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	307.41	✓	331.79	✓	331.79	✓	✓	307.41	829	5.86	1.8	37.0	11.1	17.7	-39
4	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	220.25	✓	244.30	✓	244.27	✓	✓	220.27	907	6.27	3.7	36.8	10.3	17.4	-35
3	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	160.10	✓	184.59	✓	184.54	✓	✓	160.14	944	6.13	.65	61.8	10.9	17.9	113
2	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	96.03	✓	111.16	✓	111.15	✓	✓	86.06	1014	6.13	.60	46.9	10.7	18.3	92
1	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	15.85	✓	40.72	✓	40.73	✓	✓	15.88	1047	6.12	1.5	72.5	11.1	18.5	126

Notes:
port 5: CLEAR, STRONG H_2S ODOR port 4: CLEAR, STRONG ODOR port 3: CLEAR, SLIGHT ODOR
port 2: CLEAR, SLIGHT ODOR port 1: CLEAR, NO ODOR

Total Volume: —

GEOFON INCORPORATED

Groundwater Sampling

Multi-Port Well Field Data Sheet

JPL Pasadena
Contract #:Battelle

Well ID: MW-21
Sampling Zone No.: 5 to 1
Depth (ft): 372, 310, 240, 161, 90
Beginning of Session: 14.14 psia
End of Session: 14.17 psia

Start Time: 724
Finish Time: 1017

Date: 10/21/05
Page: 1 of 1

Water Pressure Inside Casing: —

Port #	Run #	Surface Function Checks							Position Sampler		Sample Collection Checks								Water Quality Parameters						
		Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Shoe in	Arm In	Deactivate Set Arm Locate Port	Arm out	Pressure in MP	Shoe Out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	PH	Turb. (NTU)	Cond (mmhos)	Dissolved Oxygen	Temp. (oC)	ORP
5	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	128.37	✓	162.10	✓	162.06	✓	✓	128.34	813	5.41	1.8	.093	12.1	18.1	200
4	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	101.39	✓	135.21	✓	135.20	✓	✓	101.42	842	5.57	3.4	82.3	10.9	17.1	59
3	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	71.82	✓	105.27	✓	105.26	✓	✓	71.85	910	5.86	3.4	.124	9.8	16.8	171
2	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	37.43	✓	70.99	✓	71.02	✓	✓	37.41	946	6.10	4.3	.134	11.6	17.4	161
1	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	14.22	✓	39.59	✓	39.60	✓	✓	14.27	1015	6.41	7.6	.114	9.9	17.4	156

Notes:

port 5: CLEAR, NO ODOR port 4: CLEAR, NO ODOR port 3: CLEAR, NO ODOR

port 2: CLEAR, NO ODOR port 1: CLEAR, NO ODOR

Total Volume: —

GEOFON INCORPORATED

Groundwater Sampling

Multi-Port Well Field Data Sheet

JPL Pasadena
Contract #:Battelle

Well ID: MW-22
Sampling Zone No.: 5 to 1
Depth (ft): 588, 467, 389, 329, 245
Beginning of Session: 14.08 psia
End of Session: 14.13 psia

Start Time: 748
Finish Time: 1115

Date: 11/9/05
Page: 1 of 1

Water Pressure Inside Casing: ———

Port #	Run #	Surface Function Checks: Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Shoe in	Arm In	Position Sampler: Deactivate Set Arm Locate Port	Arm out	Sample Collection Checks: Pressure in MP	Shoe Out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Water Quality Parameters: Time	PH	Turb. (NTU)	Cond (mmhos)	Dissolved Oxygen	Temp. (oC)	ORP
5	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	201.70	✓	203.66	✓	203.65	✓	✓	201.66	817	5.87	0.70	44.2	8.7	19.0	24
4	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	149.23	✓	152.62	✓	152.61	✓	✓	149.22	847	6.02	2.7	40.5	8.9	19.2	91
3	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	115.42	✓	120.37	✓	120.35	✓	✓	115.42	917	5.79	.15	68.6	10.0	18.4	85
3	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	115.40	✓	120.36	✓	120.36	✓	✓	115.41	—	—	—	—	—	—	—
2	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	89.35	✓	94.24	✓	94.23	✓	✓	89.33	1023	6.31	1.2	57.8	9.2	18.2	51
1	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	52.71	✓	57.18	✓	57.16	✓	✓	52.69	1108	6.40	11	.110	9.3	18.0	170

ms/msd < 3 >

Notes:
port 5: CLEAR, STRONG ODOR port 4: CLEAR, STRONG ODOR port 3: CLEAR, NO ODOR
port 2: CLEAR, NO ODOR port 1: CLEAR, NO ODOR

Total Volume: ———

GEOFON INCORPORATED

Groundwater Sampling

Multi-Port Well Field Data Sheet

JPL Pasadena
Contract #:Battelle

Well ID: MW-23
Sampling Zone No.: 5+1
Depth (ft): 542, 445, 319, 254, 174
Beginning of Session: 14.13 psia
End of Session: 14.11 psia

Start Time: 700
Finish Time: 1030

Date: 11/11/05 ~~11/10/05~~
Page: 1 of 1

Water Pressure Inside Casing: —

Port #	Run #	Surface Function Checks: Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Shoe in	Arm In	Position Sampler: Deactivate Set Arm Locate Port	Arm out	Sample Collection Checks: Pressure in MP	Shoe Out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Water Quality Parameters: Time	PH	Turb. (NTU)	Cond (mmhos)	Dissolved Oxygen	Temp. (oC)	ORP
5	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	206.99	✓	212.86	✓	212.65	✓	✓	206.97	730	6.78	2.7	48.0	9.0	16.3	89
5	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	206.96	✓	212.81	✓	212.58	✓	✓	206.91	—	—	—	—	—	—	—
4	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	164.91	✓	170.97	✓	170.97	✓	✓	164.89	834	6.86	1.7	42.0	8.5	17.9	171
3	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	110.26	✓	117.87	✓	117.85	✓	✓	110.31	919	6.35	1.9	44.1	11.3	18.9	132
2	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	82.26	✓	89.61	✓	89.61	✓	✓	82.27	947	6.52	2.5	98.6	11.9	19.9	108
1	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	47.50	✓	55.25	✓	55.25	✓	✓	47.51	1024	6.52	5.9	.128	11.9	20.3	310

ms/msd < 5 >5

Notes:
port 5: CLEAR, STRONG ODOR port 4: CLEAR, NO ODOR port 3: CLEAR, NO ODOR
port 2: CLEAR, SLIGHT ODOR port 1: CLEAR, NO ODOR

Total Volume: —

GEOFON INCORPORATED

Groundwater Sampling

Multi-Port Well Field Data Sheet

JPL Pasadena
Contract #:Battelle

Well ID: MW-24
Sampling Zone No.: 5to1
Depth (ft): 678, 554, 435, 373, 279
Beginning of Session: 14.18 psia
End of Session: 14.22 psia

Start Time: 737
Finish Time: 1037

Date: 10/31/05
Page: 1 of 1

Water Pressure Inside Casing: —

Port #	Run #	Surface Function Checks: Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Shoe in	Arm In	Position Sampler: Deactivate Set Arm Locate Port	Arm out	Sample Collection Checks: Pressure in MP	Shoe Out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Water Quality Parameters: Time	PH	Turb. (NTU)	Cond (mmhos)	Dissolved Oxygen	Temp. (oC)	ORP
5	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	237.45	✓	229.51	✓	229.48	✓	✓	237.41	810	5.56	0.70	44.8	10.1	21.1	203
4	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	183.70	✓	177.11	✓	177.10	✓	✓	183.74	845	6.14	1.0	32.6	10.0	21.7	82
3	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	132.08	✓	126.89	✓	126.88	✓	✓	132.06	921	6.80	2.0	39.0	9.2	21.4	125
2	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	105.19	✓	100.12	✓	100.14	✓	✓	105.18	958	6.40	2.2	50.8	8.8	22.7	145
1	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	64.58	✓	60.29	✓	60.31	✓	✓	64.59	1035	6.66	4.0	53.2	9.5	22.3	170

Notes:

port 5: CLEAR, SLIGHT ODOR port 4: CLEAR, SLIGHT ODOR port 3: CLEAR, STRONG ODOR

port 2: CLEAR, NO ODOR port 1: CLEAR, NO ODOR

Total Volume: —

GEOFON INCORPORATED

Groundwater Sampling

Multi-Port Well Field Data Sheet

JPL Pasadena
Contract #:Battelle

Well ID: MW-25
Sampling Zone No.: 5 to 1
Depth (ft): 713, 633, 503, 423, 358
Beginning of Session: 14.26 psia
End of Session: 14.28 psia

Start Time: 740
Finish Time: 1140

Date: 11/16/05
Page: 1 of 1

Water Pressure Inside Casing: —

Port #	Run #	Surface Function Checks							Position Sampler		Sample Collection Checks								Water Quality Parameters						
		Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Shoe in	Arm In	Deactivate Set Arm Locate Port	Arm out	Pressure in MP	Shoe Out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	PH	Turb. (NTU)	Cond (mmhos)	Dissolved Oxygen	Temp. (oC)	ORP
5	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	209.84	✓	206.72	✓	206.71	✓	✓	209.84	814	5.46	1.1	52.6	8.8	19.4	237
5	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	209.82	✓	206.74	✓	206.73	✓	✓	209.81	—	—	—	—	—	—	—
4	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	177.17	✓	173.05	✓	173.01	✓	✓	177.16	916	5.64	21	73.3	7.8	21.9	154
3	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	120.71	✓	116.30	✓	116.10	✓	✓	120.72	1000	6.03	7.8	70.2	6.3	22.6	187
2	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	85.82	✓	83.13	✓	83.13	✓	✓	85.88	1044	6.38	1.7	64.6	9.0	24.6	179
1	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	57.45	✓	54.98	✓	55.00	✓	✓	57.48	1128	6.50	9.8	99.1	9.7	24.8	210

Notes:

port 5: CLEAR, SLIGHT ODOR port 4: CLEAR, NO ODOR port 3: CLEAR, NO ODOR

port 2: CLEAR, NO ODOR port 1: CLEAR, NO ODOR

Total Volume: —

GEOFON INCORPORATED

Groundwater Sampling

Multi-Port Well Field Data Sheet

JPL Pasadena
Contract #:Battelle

Well ID: MW-26
Sampling Zone No.: 2+1
Depth (ft): 215, 135
Beginning of Session: 14.23 psia
End of Session: 14.23 psia

Start Time: 825
Finish Time: 1020

Date: 11/18/05
Page: 1 of 1

Water Pressure Inside Casing: —

Port #	Run #	Function Checks							Position Sampler	Sample Collection Checks									Water Quality Parameters								
		Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Shoe in	Arm In	Deactivate Set Arm Locate Port	Arm out	Pressure in MP	Shoe Out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	PH	Turb. (NTU)	Cond (mmhos)	Dissolved Oxygen	Temp. (oC)	ORP
DUPE	2	1	✓	✓	✓	✓	✓	✓	✓	✓	80.04	✓	80.06	✓	80.17	✓	✓	80.16	848	5.32	6.1	86.5	13.7	22.4	232	DUPE
	2	2	✓	✓	✓	✓	✓	✓	✓	✓	80.15	✓	80.16	✓	80.14	✓	✓	80.14	—	—	—	—	—	—	—	
	2	3	✓	✓	✓	✓	✓	✓	✓	✓	80.16	✓	80.18	✓	80.17	✓	✓	80.16	—	—	—	—	—	—	—	
	1	1	✓	✓	✓	✓	✓	✓	✓	✓	45.56	✓	42.69	✓	42.74	✓	✓	45.57	1010	6.39	.65	97.4	12.9	24.2	238	

Notes:

Total Volume: —

port 2: CLEAR, NO ODOR port 1: CLEAR, NO ODOR

ATTACHMENT 5: WATER LEVEL MEASUREMENTS

This attachment contains water level measurements for the Westbay™ multiport JPL monitoring wells obtained during the fourth quarter 2005. Water level measurements were recorded before the sampling event on October 19, 2005 and after the sampling event on November 23, 2005. Water levels in the shallow wells were measured using a Solinst™ water level meter and the results are provided in the field logs (Attachment 4). In the deep multiport wells, the hydraulic head at each sampling port was measured with a Westbay™ pressure-transducer probe. Water level measurements were taken by Geofon Incorporated.

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Pre- SHALLOW WELL SOUNDING LOG

Project Name: JPL GW Monitoring 4Q05 | **Project No.: 4-73803**

WELL #	*DATE*	*TIME*	*DEPTH (FT.)*
MW-1	10/19/2005	1425	23.55
MW-5	10/19/2005	1333	45.48
MW-6	10/19/2005	1353	154.2
MW-7	10/19/2005	1404	184.21
MW-8	10/19/2005	1412	111.11
MW-9	10/19/2005	1420	19.92
MW-10	10/19/2005	1346	61.17
MW-13	10/19/2005	1408	154.86
MW-15	10/19/2005	1428	30.25
MW-16	10/19/2005	1400	207.76

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Telephone (909)396-7662 Fax (909)396-1455
Internet: www.geofon.com

Post- SHALLOW WELL SOUNDING LOG

Project Name: JPL GW Monitoring 4Q05 | **Project No.: 4-73803**

WELL #	*DATE*	*TIME*	*DEPTH (FT.)*
MW-1	11/23/2005	1257	22.54
MW-5	11/23/2005	1244	44.45
MW-6	11/23/2005	1313	150.83
MW-7	11/23/2005	1323	182.87
MW-8	11/23/2005	1330	109.54
MW-9	11/23/2005	1254	18.47
MW-10	11/23/2005	1306	59.50
MW-13	11/23/2005	1327	152.95
MW-15	11/23/2005	1301	29.28
MW-16	11/23/2005	1319	205.95

GEOFON, Inc.
Piezometric Pressures/Levels

Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 10/19/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Weather: cloudy and cool

Well ID: MW-3
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay
Elevation of Datum (ft. + MSL): 1,100.34

Ambient Readings		
Time	903	922
Pressure (psia)	14.20	14.20
Temperature (°C)	16.95	16.95

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	653	249.45	259.46	249.43	21.86	910		
							87.19	1013.15
4	558	208.20	218.39	208.20	22.33	914		
							86.93	1013.41
3	346	116.04	129.12	116.00	20.49	919		
							80.88	1019.46
2	252	75.19	88.24	75.16	19.87	920		
							81.19	1019.15
1	172	40.42	54.47	40.40	18.44	921		
							79.10	1021.24

GEOFON, Inc.
Piezometric Pressures/Levels
Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 10/19/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Elevation of Datum (ft. +MSL): 1,082.84
Weather: cloudy and mild

Well ID: MW-4
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay

Ambient Readings	Start	Finish
Time	1301	1312
Pressure (psia)	14.26	14.26
Temperature (°C)	17.13	18.34

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	513	139.89	209.62	139.87	19.31	1304		
							62.30	1020.54
4	392	87.26	157.27	87.25	20.41	1305		
							62.08	1020.76
3	322	56.71	127.18	56.78	20.54	1307		
							61.49	1021.35
2	240	21.09	91.66	21.12	20.30	1308		
							61.44	1021.40
1	150	14.31	54.72	14.31	18.92	1310		
							56.66	1026.18

GEOFON, Inc.

Piezometric Pressures/Levels

Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 10/19/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Weather: cloudy and cool

Well ID: MW-11
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay
Elevation of Datum (Ft. + MSL): 1,139.30

Ambient Readings	Start	Finish
Time	845	854
Pressure (psia)	14.17	14.21
Temperature (°C)	18.71	17.73

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	639	241.22	235.96	241.25	19.29	848		
							127.33	1011.97
4	524	191.75	192.78	191.74	20.12	850		
							111.95	1027.35
3	429	150.88	150.47	150.85	20.02	851		
							114.56	1024.74
2	259	77.23	77.94	77.23	19.31	852		
							111.88	1027.42
1	149	29.95	36.61	29.94	18.34	853		
							97.23	1042.07

GEOFON, Inc.
Piezometric Pressures/Levels
Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 10/19/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Weather: cloudy and mild

Well ID: MW-12
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay
Elevation of Datum (Ft. + MSL): 1,102.14

Ambient Readings	Start	Finish
Time	1245	1254
Pressure (psia)	14.24	14.26
Temperature (°C)	19.71	17.36

Screen No.	Depth (Ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	548	197.93	214.05	197.99	20.12	1248		
							87.04	1015.10
4	436	149.33	168.13	149.35	20.67	1250		
							80.98	1021.16
3	323	100.14	119.48	100.15	19.93	1251		
							80.21	1021.93
2	243	65.35	85.09	65.33	19.16	1252		
							79.55	1022.59
1	140	20.38	43.15	20.46	18.18	1253		
							73.30	1028.84

GEOFON, Inc.
Piezometric Pressures/Levels
Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 10/19/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Weather: cloudy and cool

Well ID: MW-14
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay
Elevation of Datum (Ft. + MSL): 1,173.47

Ambient Readings	Start	Finish
Time	737	751
Pressure (psia)	14.16	14.17
Temperature (°C)	18.65	19.32

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	540	195.84	195.88	195.87	21.04	745		
							120.77	1052.70
4	456	156.27	152.15	156.25	21.00	747		
							137.66	1035.81
3	382	124.08	120.06	124.06	20.63	748		
							137.69	1035.78
2	277	78.34	74.50	78.39	20.10	749		
							137.80	1035.67
1	207	47.88	44.44	47.89	19.70	750		
							137.14	1036.33

GEOFON, Inc.
Piezometric Pressures/Levels
Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 10/19/050
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Weather: partly cloudy and cool

Well ID: MW-17
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay
Elevation of Datum (Ft. + MSL): 1,191.21

Ambient Readings	Start	Finish
Time	1017	1030
Pressure (psia)	14.19	14.19
Temperature (°C)	17.28	15.14

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	726	246.62	250.19	246.66	18.14	1020		
							181.55	1009.66
4	582	184.27	186.88	184.28	18.34	1024		
							183.60	1007.61
3	468	134.79	134.30	134.83	17.73	1026		
							190.91	1000.30
2	370	92.29	95.49	92.28	16.97	1027		
							182.44	1008.77
1	250	40.13	46.04	40.13	16.07	1028		
							176.52	1014.69

GEOFON, Inc.

Piezometric Pressures/Levels

Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 10/19/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Well ID: MW-18
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay
Elevation of Datum (Ft. + MSL): 1,225.41
Note: partly cloudy and cool

Ambient Readings	Start	Finish
Time	1040	1050
Pressure (psia)	14.16	14.16
Temperature (°C)	15.59	16.66

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	684	156.45	214.19	156.46	18.57	1044		
							222.53	1002.88
4	564	104.31	163.66	104.32	19.55	1046		
							219.10	1006.31
3	424	43.44	105.19	43.43	19.09	1047		
							213.99	1011.42
2	330	14.36	64.57	14.34	18.03	1048		
							213.70	1011.71
1	270	14.32	38.88	14.33	17.19	1049		
							212.97	1012.44

GEOFON, Inc.
Piezometric Pressures/Levels
Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 10/19/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Elevation of Datum (ft. +MSL): 1,142.94
Weather: partly cloudy and cool

Well ID: MW-19
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay

Ambient Readings	Start	Finish
Time	957	1004
Pressure (psia)	14.26	14.24
Temperature (°C)	16.09	16.73

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	498	175.16	172.68	175.15	17.13	959		
							132.53	1010.41
4	444	151.66	149.29	151.70	17.65	1000		
							132.49	1010.45
3	392	129.12	127.13	129.15	17.80	1001		
							131.61	1011.33
2	314	95.35	92.89	95.33	17.82	1002		
							132.60	1010.34
1	242	64.01	61.62	64.05	17.59	1003		
							132.74	1010.20

GEOFON, Inc.
Piezometric Pressures/Levels
Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 10/19/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Elevation of Datum (Ft. + MSL): 1,165.05
Weather: partly cloudy and cool

Well ID: MW-20
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay

Ambient Readings	Start	Finish
Time	1100	1125
Pressure (psia)	14.19	14.22
Temperature (°C)	16.79	15.78

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	900	304.52	331.94	304.56	19.71	1104		
							166.95	998.10
4	700	217.54	243.86	217.64	21.50	1107		
							170.15	994.90
3	562	157.64	176.97	157.64	20.73	1109		
							186.47	978.58
2	392		Unable to locate port					
							#DIV/0!	#DIV/0!
1	230	14.33	16.31	14.29	16.08	1118		
							225.11	939.94

GEOFON, Inc.
Piezometric Pressures/Levels
Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 10/19/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Elevation of Datum (Ft. + MSL): 1,059.10
Weather: Cloudy and cool

Well ID: MW-21
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay

Ambient Readings	Start	Finish
Time	803	810
Pressure (psia)	14.22	14.24
Temperature (°C)	18.13	18.48

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	372	125.97	162.03	125.95	18.51	805		
							31.00	1028.10
4	310	99.03	135.16	99.02	18.99	806		
							30.99	1028.11
3	240	69.02	105.22	69.04	19.03	807		
							30.06	1029.04
2	161	34.63	70.98	34.65	18.80	808		
							30.05	1029.05
1	90	14.30	39.55	14.29	18.59	809		
							31.56	1027.54

GEOFON, Inc.
Piezometric Pressures/Levels
Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 10/19/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Elevation of Datum (Ft. + MSL): 1,176.98
Weather: cloudy and cool

Well ID: MW-22
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay

Ambient Readings	Start	Finish
Time	716	728
Pressure (psia)	14.14	14.18
Temperature (°C)	18.78	19.77

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	588	200.51	203.10	200.49	20.40	719		
							152.07	1024.91
4	467	148.10	151.92	148.10	21.05	722		
							149.14	1027.84
3	389	114.29	119.60	114.32	21.03	723		
							145.70	1031.28
2	329	88.32	93.50	88.29	20.77	724		
							145.92	1031.06
1	245	51.41	56.60	51.40	19.97	726		
							147.04	1029.94

GEOFON, Inc.
Piezometric Pressures/Levels
Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 10/19/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Elevation of Datum (Ft. + MSL): 1,108.84
Weather: cloudy and cool

Well ID: MW-23
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay

Ambient Readings	Start	Finish
Time	656	705
Pressure (psia)	14.17	14.20
Temperature (°C)	16.48	19.41

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	542	205.74	212.24	205.79	18.91	658		
							85.05	1023.79
4	445	163.86	170.36	163.79	19.85	700		
							84.67	1024.17
3	319	109.21	117.19	109.20	20.09	701		
							81.33	1027.51
2	254	81.03	88.96	81.03	19.86	702		
							81.46	1027.38
1	174	46.32	54.68	46.29	19.59	704		
							80.54	1028.30

GEOFON, Inc.
Piezometric Pressures/Levels

Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 10/19/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Elevation of Datum (Ft. + MSL): 1,200.94
Weather: cloudy and cool

Well ID: MW-24
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay

Ambient Readings	Start	Finish
Time	823	835
Pressure (psia)	14.15	14.15
Temperature (°C)	17.60	20.06

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	678	236.20	229.42	236.22	19.71	826		
							181.37	1019.57
4	554	182.47	177.11	182.50	20.57	828		
							178.05	1022.89
3	435	130.97	126.84	130.93	20.78	829		
							175.02	1025.92
2	373	104.08	99.96	104.07	20.86	831		
							175.04	1025.90
1	279	63.29	60.07	63.34	20.51	834		
							173.06	1027.88

GEOFON, Inc.

Piezometric Pressures/Levels

Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 10/19/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Elevation of Datum (ft. + MSL): 934.52
Weather: cloudy and cool

Well ID: MW-25
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay

Ambient Readings	Start	Finish
Time	1142	1212
Pressure (psia)	14.33	14.35
Temperature (°C)	16.97	19.73

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	713	207.60	205.26	207.61	20.78	1205		
							272.52	662.00
4	633	173.17	171.31	173.20	21.24	1206		
							270.85	663.67
3	503	116.85	116.53	116.87	20.99	1208		
							267.22	667.30
2	423	82.16	82.74	82.15	20.65	1209		
							265.18	669.34
1	358	53.86	54.52	53.86	20.29	1210		
							265.28	669.24

GEOFON, Inc.

Piezometric Pressure/Levels

Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 10/19/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Weather: cloudy and cool

Well ID: MW-26
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay
Elevation of Datum (ft. + MSL): 1,059.08

Ambient Readings	Start	Finish
Time	1224	1228
Pressure (psia)	14.26	14.28
Temperature (°C)	19.82	18.99

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
2	215	79.73	79.80	79.84	19.61	1226		
							63.80	995.28
1	135	45.41	42.95	45.42	19.40	1227		
							68.81	990.27

GEOFON, Inc.
Piezometric Pressures/Levels

Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 11/23/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Weather: partly cloudy and cool

Well ID: MW-3
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay
Elevation of Datum (ft. + MSL): 1,100.34

Ambient Readings		
Time	843	855
Pressure (psia)	14.17	14.17
Temperature (°C)	16.84	16.51

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	653	249.40	260.30	249.38	19.76	846		
							85.18	1015.16
4	558	208.16	219.27	208.15	21.67	849		
							84.83	1015.51
3	346	116.06	129.87	116.02	21.43	851		
							79.08	1021.26
2	252	75.20	88.91	75.23	20.52	852		
							79.57	1020.77
1	172	40.47	55.02	40.45	17.47	854		
							77.76	1022.58

GEOFON, Inc.
Piezometric Pressures/Levels
Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 11/23/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Elevation of Datum (ft. +MSL): 1,082.84
Weather: partly cloudy and cool

Well ID: MW-4
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay

Ambient Readings	Start	Finish
Time	1217	1225
Pressure (psia)	14.16	14.17
Temperature (°C)	17.25	19.18

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	513	139.88	210.55	139.90	19.39	1220		
							59.93	1022.91
4	392	87.27	158.18	87.23	20.32	1221		
							59.75	1023.09
3	322	56.81	128.09	56.89	20.47	1222		
							59.16	1023.68
2	240	21.13	92.49	21.14	20.19	1223		
							59.29	1023.55
1	150	14.26	55.21	14.25	19.66	1224		
							55.30	1027.54

GEOFON, Inc.

Piezometric Pressures/Levels

Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Well ID: MW-11
Project No: 4-73803
Probe Type: Westbay
Date: 11/23/05
Serial No.: 2508
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Casing Size/Type: 1.5" Westbay
Elevation of Datum (Ft. + MSL): 1,139.30
Weather: partly cloudy and cool

Ambient Readings	Start	Finish
Time	824	835
Pressure (psia)	14.16	14.15
Temperature (°C)	19.19	17.57

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	639	240.82	236.87	240.87	19.50	827		
							125.21	1014.09
4	524	191.33	193.59	191.27	20.48	829		
							110.05	1029.25
3	429	150.42	151.31	150.40	19.90	831		
							112.59	1026.71
2	259	76.82	78.76	76.81	19.33	832		
							109.97	1029.33
1	149	29.51	37.09	29.52	18.13	834		
							96.10	1043.20

GEOFON, Inc.
Piezometric Pressures/Levels
Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 11/23/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Elevation of Datum (Ft. + MSL): 1,102.14
Weather: partly cloudy and cool

Well ID: MW-12
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay

Ambient Readings	Start	Finish
Time	1201	1211
Pressure (psia)	14.19	14.15
Temperature (°C)	20.02	17.64

Screen No.	Depth (Ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	548	197.76	215.00	197.65	20.48	1206		
							84.73	1017.41
4	436	148.96	169.01	148.95	20.94	1207		
							78.83	1023.31
3	323	99.73	120.31	99.78	20.18	1208		
							78.18	1023.96
2	243	64.90	85.93	64.93	19.23	1210		
							77.50	1024.64
1	140	20.03	43.69	20.06	18.34	1211		
							71.94	1030.20

GEOFON, Inc.
Piezometric Pressures/Levels
Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 11/23/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Weather: partly cloudy and cool

Well ID: MW-14
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay
Elevation of Datum (Ft. + MSL): 1,173.47

Ambient Readings	Start	Finish
Time	726	737
Pressure (psia)	14.13	14.17
Temperature (°C)	19.12	18.96

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	540	192.43	190.20	192.44	19.55	729		
							133.81	1039.66
4	456	155.88	153.70	155.85	20.15	731		
							134.01	1039.46
3	382	123.68	121.60	123.67	20.05	732		
							134.07	1039.40
2	277	77.97	75.92	78.04	19.72	733		
							134.45	1039.02
1	207	47.55	45.74	47.52	19.16	735		
							134.08	1039.39

GEOFON, Inc.
Piezometric Pressures/Levels
Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 11/23/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Weather: partly cloudy and warm

Well ID: MW-17
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay
Elevation of Datum (Ft. + MSL): 1,191.21

Ambient Readings	Start	Finish
Time	943	953
Pressure (psia)	14.13	14.15
Temperature (°C)	16.85	15.17

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	726	246.35	251.04	246.35	17.92	946		
							179.45	1011.76
4	582	183.95	188.01	183.96	19.10	948		
							180.86	1010.35
3	468	134.48	135.08	134.49	18.07	950		
							188.97	1002.24
2	370	91.93	96.12	91.96	17.24	951		
							180.85	1010.36
1	250	39.81	46.59	39.81	16.06	952		
							175.11	1016.10

GEOFON, Inc.

Piezometric Pressures/Levels

Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 11/23/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Well ID: MW-18
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay
Elevation of Datum (Ft. + MSL): 1,225.41
Note: partly cloudy and cool

Ambient Readings	Start	Finish
Time	1003	1012
Pressure (psia)	14.10	14.13
Temperature (°C)	16.10	16.72

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	684	156.20	215.55	156.24	18.57	1006		
							219.25	1006.16
4	564	104.13	164.53	104.14	19.60	1007		
							216.96	1008.45
3	424	43.26	105.81	43.26	18.97	1009		
							212.43	1012.98
2	330	14.28	65.05	14.27	18.05	1010		
							212.46	1012.95
1	270	14.27	39.34	14.24	17.26	1011		
							211.77	1013.64

GEOFON, Inc.
Piezometric Pressures/Levels
Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 11/23/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Elevation of Datum (ft. +MSL): 1,142.94
Weather: partly cloudy and cool

Well ID: MW-19
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay

Ambient Readings	Start	Finish
Time	925	932
Pressure (psia)	14.16	14.16
Temperature (°C)	16.29	16.62

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	498	174.98	173.43	174.98	17.08	927		
							130.56	1012.38
4	444	151.55	150.05	151.53	17.57	928		
							130.50	1012.44
3	392	128.94	127.67	128.97	17.74	929		
							130.13	1012.81
2	314	95.17	93.38	95.13	17.77	930		
							131.24	1011.70
1	242	63.88	61.84	63.88	17.48	931		
							132.00	1010.94

GEOFON, Inc.
Piezometric Pressures/Levels
Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 11/23/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Weather: partly cloudy and cool

Well ID: MW-20
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay
Elevation of Datum (Ft. + MSL): 1,165.05

Ambient Readings	Start	Finish
Time	1031	1044
Pressure (psia)	14.15	14.18
Temperature (°C)	17.66	16.60

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	900	304.26	332.43	304.28	20.32	1034		
							165.73	999.32
4	700	217.37	246.77	217.33	21.58	1036		
							163.35	1001.70
3	562	157.28	184.81	157.31	20.97	1038		
							168.29	996.76
2	392	83.44	111.71	83.41	18.18	1041		
							166.93	998.12
1	230	14.26	41.53	14.23	17.16	1043		
							166.83	998.22

GEOFON, Inc.
Piezometric Pressures/Levels
Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 11/23/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Weather: partly cloudy and cool

Well ID: MW-21
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay
Elevation of Datum (Ft. + MSL): 1,059.10

Ambient Readings	Start	Finish
Time	747	754
Pressure (psia)	14.21	14.21
Temperature (°C)	18.02	18.52

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	372	125.84	162.97	125.82	18.74	749		
							28.81	1030.29
4	310	98.87	136.12	98.90	19.19	750		
							28.75	1030.35
3	240	69.71	106.16	69.77	17.17	751		
							27.87	1031.23
2	161	34.39	71.82	34.42	18.88	752		
							28.09	1031.01
1	90	14.27	40.27	14.25	18.67	753		
							29.88	1029.22

GEOFON, Inc.
Piezometric Pressures/Levels
Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 11/23/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Weather: partly cloudy and cool

Well ID: MW-22
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay
Elevation of Datum (Ft. + MSL): 1,176.98

Ambient Readings	Start	Finish
Time	709	718
Pressure (psia)	14.11	14.16
Temperature (°C)	18.78	19.95

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	588	200.86	204.07	200.86	19.93	712		
							149.76	1027.22
4	467	148.51	153.00	148.47	20.79	714		
							146.58	1030.40
3	389	114.64	120.76	114.67	20.83	715		
							142.96	1034.02
2	329	88.68	94.63	88.64	20.66	716		
							143.24	1033.74
1	245	51.75	57.51	51.77	20.29	717		
							144.88	1032.10

GEOFON, Inc.
Piezometric Pressures/Levels
Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 11/23/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Weather: partly cloudy and cool

Well ID: MW-23
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay
Elevation of Datum (Ft. + MSL): 1,108.84

Ambient Readings	Start	Finish
Time	649	700
Pressure (psia)	14.14	14.19
Temperature (°C)	17.57	19.74

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	542	205.62	213.19	205.61	20.88	655		
							82.79	1026.05
4	445	163.59	171.34	163.59	21.12	656		
							82.34	1026.50
3	319	109.03	118.16	109.00	20.91	657		
							79.03	1029.81
2	254	80.88	89.92	80.81	20.63	658		
							79.18	1029.66
1	174	46.11	55.48	46.09	20.14	659		
							78.63	1030.21

GEOFON, Inc.
Piezometric Pressures/Levels

Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 11/23/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Weather: partly cloudy and cool

Well ID: MW-24
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay
Elevation of Datum (Ft. + MSL): 1,200.94

Ambient Readings	Start	Finish
Time	804	816
Pressure (psia)	14.12	14.12
Temperature (°C)	17.79	20.14

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	678	236.02	230.35	236.06	20.72	807		
							179.16	1021.78
4	554	182.33	178.09	182.33	21.21	810		
							175.72	1025.22
3	435	130.73	127.80	130.75	21.23	812		
							172.74	1028.20
2	373	103.88	100.89	103.91	21.22	813		
							172.82	1028.12
1	279	63.21	60.71	63.14	20.72	815		
							171.52	1029.42

Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 11/23/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Weather: partly cloudy and cool

Well ID: MW-25
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay
Elevation of Datum (ft. + MSL): 934.52

Ambient Readings	Start	Finish
Time	1100	1129
Pressure (psia)	14.27	14.26
Temperature (°C)	18.21	19.76

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
5	713	207.12	206.81	207.12	21.45	1121		
							268.81	665.71
4	633	172.59	173.13	172.61	21.62	1122		
							266.51	668.01
3	503	116.35	118.03	116.35	21.25	1124		
							263.63	670.89
2	423	81.59	83.72	81.62	20.68	1126		
							262.78	671.74
1	358	53.40	55.19	53.37	20.29	1127		
							263.60	670.92

Field Data Sheet for Multi-Port Monitoring Wells

Project Name: JPL Pasadena
Project No: 4-73803
Date: 11/23/05
Personnel: Marco Mendoza, Chase Brogdon
Datum: TOC
Weather: partly cloudy and cool

Well ID: MW-26
Probe Type: Westbay
Serial No.: 2508
Casing Size/Type: 1.5" Westbay
Elevation of Datum (ft. + MSL): 1,059.08

Ambient Readings	Start	Finish
Time	1145	1148
Pressure (psia)	14.19	14.17
Temperature (°C)	20.64	19.21

Screen No.	Depth (ft. BTOC)	Fluid Pressure Readings			Temp. (°C)	Time	Piezometric Level Outside Port (ft.)	Water Level Elevation (ft.)
		Inside Casing (psia)	Outside Casing (psia)	Inside Casing (psia)				
2	215	80.20	80.22	80.21	20.13	1146		
							62.67	996.41
1	135	45.72	42.77	45.77	19.58	1148		
							69.07	990.01