

Contractor: SOTA ENV

117

Notes: NO NOTICABLE COLOR OR ODOOR

Well ID: MW-6

Equipment: 2" SUB PUMP

Contractor: SOTA ENV

Contractor: SOTA ENV

245'

48

58.47

Casing Volumes Purged

116

Notes: NO NOTICABLE COLOR OR ODOR.

WELL DEVELOPMENT AND SAMPLING LOGProject Name: JPL PasadenaWell ID: MW-7Project No: 00HW019Equipment: 3 1/2" GROUNDFOGDate: 5/1/02SUBM. PUMPPersonnel: MES/JNTContractor: SOTA

	Before	Ref. Point	After
Depth to Water (ft.)			
Depth to Sediment (ft.)			
Thickness of Sediment (ft.)			

NOT MEASURED
- SEE NOTE

Depth of Well (ft.)

275'

Diameter of Casing (ft.)

4"

Water Column Height (ft.)

~50'Casing Volume (gal.) = $\pi(\text{Casing Diam. [ft.]/2})^2 (\text{Water Column Ht. [ft.]}) 7.48 \text{ gal./ft}^3 =$ 33 gal

Casing Volumes Purged

3

Total Volume Purged (gal.)

99

Time	Pump Rate (gpm)	Volume Purged (gal.)	pH	Turbidity (NTU)	Temperature (°C)	Conductivity (mS/cm)	Comments
1130	2.78	2	8.17	340-464	19.3	0.448	WATER IS CLEAR NO ODOR
1133	3.44	10	8.25	5	19.1	0.448	
1136	3.44	20	8.13	2	19.2	0.451	
1139	3.46	30	8.08	1	19.5	0.442	
1142	3.44	40	8.08	0	19.8	0.442	
1145	3.44	50	8.07	0	19.7	0.441	
1148	3.44	60	8.09	0	19.9	0.442	
1151	3.44	70	8.09	2	19.8	0.441	
1154	3.44	80	8.10	0	19.8	0.443	
1157	3.44	90	8.09	0	19.9	0.443	
1200	3.44	99	8.07	0	20.0	0.443	

Notes: UNABLE TO MEASURE WATER LEVEL DUE TO PILOT SYSTEM SETUP

Contractor: SOTA ENV

116

NO NOTICABLE COLOR OR ODOR

Well ID: MW-10

Equipment: 2" SUB PUMP

Contractor: SOTA ENV

Personnel: MT Team

155'

4 12

59.26

$$0.66(\text{HEIGHT OF WATER COLUMN}) = CV$$

$$\text{Casing Volume (gal.)} = \pi(\text{Casing Diam. [ft.]} / 2)^2 (\text{Water Column Ht. [ft.]}) 7.48 \text{ gal./ft}^3 = 39.11$$

Casing Volumes Purged

117

1/0 NOTICABLE COLOR OR ODOR

Well ID: MW-13

Equipment: 2" SUR PUMP

Contractor: SOTA ENV

Personnel: JNT / TAM

235.00

4''

$$0.66 (\text{HEIGHT OF WATER COLUMN}) = CV$$

45.32

$$\text{Casing Volume (gal.)} = \pi(\text{Casing Diam. [ft.]} / 2)^2 (\text{Water Column Ht. [ft.]}) 7.48 \text{ gal./ft}^3 =$$

29.91

Casing Volumes Purged

2

90

Notes: NO NOTICABLE COLOR OR ODOR

Well ID: MW-16

Equipment: 2" SUB PUMP

Date: 4/26/02

Personnel: JNT/TAM

Contractor: SOTR ENV

285

414

42.02

$$\text{Casing Volume (gal.)} = \pi(\text{Casing Diam. [ft.]/2})^2 (\text{Water Column Ht. [ft.]}) 7.48 \text{ gal./ft}^3 = 27.73$$

Casing Volumes Purged	3
-----------------------	---

84

Notes: NO NOTICABLE COLOR OR ODOR.

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/24/02

252'

Depth (ft.): 172 JMT

Well ID: MW-3

Project Name: JPL Pasadena

Project No: 00HW019

Personnel: JMT JPM

Sampling Zone No.: 2

Starting Time: 1430

Finishing Time: 1450

Water Pressure Inside MP Casing -

Beginning of Session: 14.23

End of Session: 14.31

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe in	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	14.23	✓	73.44	✓	73.44	✓	✓	14.31	1448	9.46	118	16.7	0.363
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICABLE CHANGE OR OBS.

Total Volume: 1.5L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling Field Data Sheet for Multi-Port Well

Date: 4/24/02

Project Name: JPL Pasadena
Project No: 00HW019
Personnel: JNT/TAM

Well ID: MW-3 Depth (ft.): 346'
Sampling Zone No.: 3
Starting Time: 1220 Finishing Time: 1412

Water Pressure Inside MP Casing -
Beginning of Session: 45.47
End of Session: 45.50

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe in	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	45.47	✓	114.04	✓	114.24	✓	✓	45.50	1419	9.60	227	17.7	0.388
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICEABLE CHANGE OR ODOOR. SLIGHT FERRUGINOUS.

Total Volume: 1.5L

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/24/02

Well ID: MW-3 Depth (ft): 558

Project Name: JPL Pasadena

Project No: 00HW019

Sampling Zone No: 4

Personnel: JNT/TAM

Starting Time: 1115

Finishing Time: 1202

Water Pressure Inside MP Casing -

Beginning of Session:

137.80

End of Session:

137.27

Run No.	Surface Function Checks						Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Deactivate Set Arm Locate Port		Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe in	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)	Conductivity (mmhos)
1	✓	✓	✓	✓	✓	✓	137.80	✓	199.50	✓	199.54	✓	✓	137.80	1145	9.72	55	17.9	0.237	
2	✓	✓	✓	✓	✓	✓	137.28	✓	199.79	✓	199.80	✓	✓	137.27						
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

Notes: NO NOTICE COLOR OR ODOOR STRONG EFFERESCENCE

Total Volume: 2.75L

Groundwater Sampling
Field Data Sheet for Multi-Port Well

Date: 4/24/02

Project Name: JPL Pasadena Well ID: MW-3 Depth (ft.): 653
Project No: 00HW019 Sampling Zone No: 5
Personnel: JRT Adam Starting Time: 0930 Finishing Time: 1100

Water Pressure Inside MP Casing - Beginning of Session: 117.69
End of Session: 117.68

Run No	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	177.69	✓	240.21	✓	240.24	✓	✓	177.68	1108	11.33	45	18.0 ^m	0.271
2																		18.0	
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICEABLE ODS, GAS IN Casing.

Total Volume: .75L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/25/02

Well ID: MW-4 Depth (ft): 150

Project Name: JPL Pasadena
Project No: 00HW019

Personnel: JNT/TAM

Sampling Zone No: 1
Starting Time: 1215 Finishing Time: 1230

Water Pressure Inside MP Casing: 14.13
Beginning of Session: 14.13
End of Session: 14.16

Run No.	Surface Function Checks					Position Sampler					Sample Collection Checks							Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Deactivate Set Arm	Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)	Conductivity (mhos)		
1	✓	✓	✓	✓	✓	✓		14.13	✓	39.18	✓	39.19	✓	✓	14.16	1226	8.67	47	19.1	0.331		
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

Notes: Yellow tint, no odor

Total Volume: 1.5L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/25/02

Project Name: JPL Pasadena
Project No: 00HW019
Personnel: JST/DAW

Well ID: MW-4 Depth (ft.): 240
Sampling Zone No.: 2
Starting Time: 1145 Finishing Time: 1210

Water Pressure Inside MP Casing -
Beginning of Session: 19.53
End of Session: 19.56

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	19.53	✓	77.43	✓	77.41	✓	✓	19.56	1159	9.02	41	20.2	0.745
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: Yellow tint to water, no noticeable odor

Total Volume: 1.5L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/25/02

Project Name: JPL Pasadena
Project No: 00HW019
Personnel: JMT/TAM

Well ID: MW-4
Sampling Zone No: 3
Starting Time: 1105
Depth (ft): 322
Finishing Time: 1140

Water Pressure Inside MP Casing -
Beginning of Session: 55.36
End of Session: 55.39

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe in	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)	Conductivity (mmhos)
1	✓	✓	✓	✓	✓	✓	55.36	✓	113.05	✓	113.06	✓	✓	55.39	1125	8.18	68	20.9	0.413
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICEABLE COLOR OR ODOOR

Total Volume: 1.5L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/25/02

Project Name: JPL Pasadena
Project No.: 00HW019
Personnel: JST/TAM

Well ID: MW-4 Depth (ft): 392
Sampling Zone No.: 4
Starting Time: 1025 Finishing Time: 1100

Water Pressure Inside MP Casing -
Beginning of Session: 85.44
End of Session: 85.45

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	85.44	✓	143.05	✓	143.07	✓	✓	85.45	1059	9.15	43	21.2	0.415
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICEABLE COLOR OR ODOR.

Total Volume: 1.25L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/25/02

Depth (ft.): 513

Project Name: JPL Pasadena

Project No: 00HW019

Personnel: JET/THM

Well ID: MW-4
Sampling Zone No.: 5

Starting Time: 0930

Finishing Time: 1025

Water Pressure Inside MP Casing -

Beginning of Session: 138.23
End of Session: 138.25

Run No.	Surface Function Checks					Position Sampler					Sample Collection Checks						Water Quality Parameters			
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Deactivate Set Arm	Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe in	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)	Conductivity (mmhos)
1	✓	✓	✓	✓	✓	✓		138.23	✓	195.39	✓	195.41	✓	✓	138.25	1020	8.93	43	21.0	0.385
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

Notes: DRUG TINT TO THE WATER, NO NOTICEABLE ODOR.

Total Volume: 1.25L

Groundwater Sampling
Field Data Sheet for Multi-Port Well

Date: 4/19/02

Project Name: JPL Pasadena
Project No: 00HW019
Personnel: JAT/TAMWell ID: MW-11 Depth (ft.): 149
Sampling Zone No: 1
Starting Time: 1140 Finishing Time: 1155Water Pressure Inside MP Casing -
Beginning of Session: 14.07
End of Session: 14.09

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Sol Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	14.07	✓	28.23	✓	28.20	✓	✓	14.09	1155	9.07	1	20.4	0.450
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes:

NO ATTACHABLE COLAR OR ADOL. SLIGHT EFFERESCENCE

Total Volume: 1.5L

Groundwater Sampling
Field Data Sheet for Multi-Port WellDate: 4/19/02Depth (ft.): 259Project Name: JPL PasadenaProject No: 00HW019Well ID: MW-11Sampling Zone No: 2Personnel: WJ/TAMStarting Time: 11/14Finishing Time: 1135

Water Pressure Inside MP Casing -

Beginning of Session: 14.10End of Session: 14.18

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	14.10	✓	64.43	✓	64.36	✓	✓	14.18	1128	9.24	61	19.3	0.355
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes:

NO NOTICEABLE COLOR OR ODOR. SLIGHT EFFERVESCENCETotal Volume: 1.5L

Groundwater Sampling
Field Data Sheet for Multi-Port Well

Date: 4/19/02

Project Name: JPL Pasadena
Project No: 00HW019
Personnel: JST/TAMWell ID: MW-11
Sampling Zone No: 3
Depth (ft): 429
Starting Time: 1013
Finishing Time: 1100
Beginning of Session: 83.18
End of Session: 83.19
Water Pressure Inside MP Casing -

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe in	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	83.18	✓	136.55	✓	136.40	✓	✓	83.22					
2	✓	✓	✓	✓	✓	✓	83.20	✓	136.55	✓	136.35	✓	✓	83.19	1100	9.24	2	18.8	0.340
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICE COLOR OR ODOR, STRONG EFFLUESCENCE

Total Volume: 3.0L

Groundwater Sampling
Field Data Sheet for Multi-Port Well

Date: 4/9/02

Project Name: JPL Pasadena
Project No: 00HW019
Personnel: JNT/Tam

Well ID: MW-11 Depth (ft): 524
Sampling Zone No.: 4
Starting Time: 0940 Finishing Time: 1005

Water Pressure Inside MP Casing - 123.20
Beginning of Session: 123.20
End of Session: 123.23

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	123.20	✓	179.80	✓	179.73	✓	✓	123.23	1001	4.97	8	17.3	0.189
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICEABLE COLOR, SULFUR SMELL AND STRONG EFFERESCENCE

Total Volume: 1.0L

SOTA Environmental Technology, Inc.

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/11/02

Project Name: JPL Pasadena

Project No: 00HW019

Personnel: MES/TAM

Well ID: HW-12

Depth (ft): 140

Sampling Zone No.: 1

Starting Time: 1405

Finishing Time: 1427

Water Pressure Inside MP Casing

Beginning of Session:

14.09

End of Session:

14.14

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe in	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	14.09	27.88	27.87	✓	27.88	✓	✓	14.14	1427	9.00	-10	23.3	0.340
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: WATER IS CLEAR - NO COLORED OR ODDER

Total Volume: 6.5L

SOTA Environmental Technology, Inc.

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/11/02

Project Name: JPL Pasadena
Project No: 00HWO19
Personnel: MES/TAM

Well ID: MW-12 Depth (ft.): 243
Sampling Zone No.: 2
Starting Time: 1330 Finishing Time: 1355

Water Pressure Inside MP Casing -
Beginning of Session: 14.16
End of Session: 14.19

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Sol Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	14.16	✓	70.32	✓	70.32	✓	✓	14.19	1353	8.95	-10	21.9	0.391
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: WATER IS CLEAR - NO ODOR

Total Volume: 1.5L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/11/02

Project Name: JPL Pasadena

Project No: 00HW019

Personnel: MCS/TAM

Well ID: MW-12

Depth (ft): 323

Sampling Zone No.: 3

Starting Time: 1130

Finishing Time: 1230

Water Pressure Inside MP Casing -

Beginning of Session: 43.55

End of Session: 43.01

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe in	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	43.55	✓	104.90	✓	104.91	✓	✓	43.56	1157	9.09	-10	19.4	0.393
2	✓	✓	✓	✓	✓	✓	42.99	✓	104.88	✓	104.90	✓	✓	43.01					
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: WATER IS CLEAR - NO NOTICEABLE COLOR OR ODOR.

Total Volume: 2.75 L

SOTA Environmental Technology, Inc.

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/14/02

Project Name: JPL Pasadena
Project No: 00HW019
Personnel: ME5/TAM

Well ID: MW-12
Sampling Zone No: 4
Starting Time: 1105
Finishing Time: 1125

Water Pressure Inside MP Casing -
Beginning of Session: 91.88
End of Session: 91.89

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Sol Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	91.88	✓	153.96	✓	153.90	✓	✓	91.89	1125	8.83	-10	19.4	0.401
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: WATER IS CLEAR - NO ODOR OR COLOR.

Total Volume: 1.0 L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena

Project No: 00HW019

Personnel: MES/TAM

Well ID: MW-12

Depth (ft.): 548

Sampling Zone No.: 5

Starting Time: 1000

Finishing Time: 1057

Water Pressure Inside MP Casing -

Beginning of Session:

End of Session:

140.63

140.65

Run No	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe in	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	136.61	✓	200.35	✓	193.71	✓	✓	140.24	---	---	NOT USED	---	---
2	✓	✓	✓	✓	✓	✓	140.63	✓	200.34	✓	200.33	✓	✓	140.65	1057	8.98	10	19.8	0.332
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: WATER IS CLEAR - NO ODOOR

Total Volume: 1.0L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/18/02

Project Name: JPL Pasadena

Project No: 00HWA019

Personnel: JST/Man

Well ID: MW-14

Sampling Zone No: 1

Starting Time: 1355

Finishing Time: 1410

Depth (ft): 207

Water Pressure Inside MP Casing - Beginning of Session: 14.12

End of Session: 14.19

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	14.12	✓	29.87	✓	29.86	✓	✓	14.19	1410	8.10	50	21.0	1.28
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICE COLOR OR ODOOR, SLIGHT EFFERVESCING

Total Volume: 1.5L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/18/02

Well ID: MW-14 Depth (ft.): 277

Project Name: JPL Pasadena

Project No: 00HW019

Sampling Zone No.: 2

Personnel: JST/TAM

Starting Time: 1217 Finishing Time: 1345

Water Pressure Inside MP Casing -

Beginning of Session: 23.23
End of Session: 27.27

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe in	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)	Conductivity (mmhos)
1	✓	✓	✓	✓	✓	✓	27.23	✓	60.33	✓	60.33	✓	✓	27.27	1340	8.81	0	19.4	1.16
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICABLE COLOR OR ODOOR. SLIGHT EFFERVESCENCE

Total Volume: 1.5L

SOTA environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/8/02

Project Name: JPL Pasadena
Project No: 00HW019
Personnel: JMT/AM

Well ID: MW-14 Depth (ft.): 382
Sampling Zone No.: 3
Starting Time: 1148 Finishing Time: 1207

Water Pressure Inside MP Casing: 73.11
Beginning of Session: 73.11
End of Session: 73.11

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	73.11	✓	106.11	✓	106.12	✓	✓	73.11	1202	8.87	90	19.8	1.04
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICE COLOR OR ODOR. STRONG EFFERESCENCE

Total Volume: 1.5L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/18/02

Depth (ft.): 456

Well ID: MW-14

Project Name: JPL Pasadena

Sampling Zone No.: 4

Project No: 00HW019

Starting Time: 1044

Personnel: MT from

Finishing Time: 1140

Water Pressure Inside MP Casing -

Beginning of Session: 105.40

End of Session: 104.89

Run No.	Surface Function Checks					Position					Sample Collection Checks						Water Quality Parameters			
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Deactivate Set Arm	Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe in	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)	Conductivity (mmhos)
1	✓	✓	✓	✓	✓	✓	✓	105.40	✓	138.23	✓	138.23	✓	✓	105.46	1104	8.66	0	19.7	0.482
2	✓	✓	✓	✓	✓	✓	✓	104.89	✓	138.21	✓	138.22	✓	✓	104.89					
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

Notes: AD NOTICE COLOR OF ADOR, SIGHT STRENGTHENING

Total Volume: 2.75L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/18/02

Project Name: JPL Pasadena
Project No: 00HW019
Personnel: JMT/TDM

Well ID: MW-14 Depth (ft): 540
Sampling Zone No.: 5
Starting Time: 0800 Finishing Time: 1010

Water Pressure Inside MP Casing -
Beginning of Session: 141.10
End of Session: 141.13

Run No.	Surface Function Checks					Position Sampler					Sample Collection Checks						Water Quality Parameters			
	Shoe Out	Vacuum Check	Valve Open	Evacuate Container	Valve Closed	Deactivate Set Arm	Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)	Conductivity (mhos)
1	✓	✓	✓	✓	✓	✓	✓	141.10	✓	174.69	✓	174.70	✓	✓	141.13	1008	4.36	1	19.6	0.257
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

Notes: NO NOTICABLE COLOR OR ODOOR. SLIGHT SESSERVESCING

Total Volume: 1.0L

SOTA Environmental Technology, Inc.

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/10/02

Project Name: JPL Pasadena

Project No: 00HWO19

Personnel: MT/Jan

Well ID: MW-17

Depth (ft.): 370'

Sampling Zone No.: 2

Starting Time: 1508

Finishing Time: _____

Water Pressure Inside MP Casing -

Beginning of Session: _____

End of Session: 15.00

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	15.00	✓	82.40	✓	82.40	✓	✓	15.05	1320	9.27	10	18.9	0.324
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICE COLOR OR ODOOR, WATER IS EFFERESCING

Total Volume: 1.5L

SOTA Environmental Technology, Inc.

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena

Project No: 00HWM019

Personnel: JST/Tam

Well ID: MW-17

Depth (ft.): 468'

Sampling Zone No.: 3

Starting Time: 1400

Finishing Time: 1445

Water Pressure Inside MP Casing -

Beginning of Session: 56.88

End of Session: 56.88

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Sol Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe in	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	56.88	✓	123.89	✓	123.88	✓	✓	56.89	141.6	9.30	10	18.6	0.332
2	✓	✓	✓	✓	✓	✓	56.85	✓	123.88	✓	123.77	✓	✓	56.88					
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: No CO2 at OBS, WATER IS REFRESHING

Total Volume: 2.0L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/10/02

Well ID: MW-17

Depth (ft.): 582

Project Name: JPL Pasadena

Sampling Zone No.: 4

Finishing Time: 1220

Project No: 00HW019

Starting Time: 1100

Finishing Time: 1220

Personnel: JMT/TPM

Water Pressure Inside MP Casing -

Beginning of Session:

106.71

End of Session:

106.64

Run No.	Surface Function Checks						Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Deactivate Set Arm Locate Port		Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)	Conductivity (mmhos)
1	✓	✓	✓	✓	✓	✓		106.71	✓	174.40	✓	174.37	✓	✓	106.72	1123	8.83	10	18.3	.329
2	✓	✓	✓	✓	✓	✓		106.65	✓	174.39	✓	174.36	✓	✓	106.69					
3	✓	✓	✓	✓	✓	✓		106.67	✓	174.40	✓	174.34	✓	✓	106.64					
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

Notes: NO NOTICABLE COLOR OR ODOOR. WATER IS EFFERESCENT

Total Volume: 3.0L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/10/02

Project Name: JPL Pasadena

Project No: 00HWO19

Personnel: JST/PTM

Well ID: MW-17 Depth (ft.): 726'

Sampling Zone No.: 5

Starting Time: 0958 Finishing Time: 1040

Beginning of Session:

Water Pressure Inside MP Casing -

169.43
169.45

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	169.43	✓	236.31	✓	235.98 238.2	✓	✓	169.45	1040	5.51	23.5 10	17.3	.387
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: WATER IS FREEFRESSING, NO ABTICABLE COLOR OR ODR

Total Volume: 1.0L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/15/02

Well ID: MW-18 Depth (ft.): 330'

Project Name: JPL Pasadena

Project No: 00HW019

Sampling Zone No.: 2

Personnel: JST/TDM

Starting Time: 1230 Finishing Time: 1450

Water Pressure Inside MP Casing -

Beginning of Session: 1405
End of Session: 1410

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe in	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	14:05	✓	48.78	✓	48.78	✓	✓	14:10	14:05 1429	8.98	1	16.5	0.378
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes:

NO NOTICABLE COLOR OR OOR

Total Volume: 1.5L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/15/02

Well ID: MW-18 Depth (ft): 424'

Project Name: JPL Pasadena

Project No: 00HW019

Sampling Zone No.: 3

Personnel: JM/Tam

Starting Time: 1205

Finishing Time: 1225

Water Pressure Inside MP Casing -

Beginning of Session:

37.86

End of Session:

37.87

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	37.86	✓	9.09	✓	9.09	✓	✓	37.87	1221	9.12	0	16.8	0.432
2																			0.432
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICEABLE COLOR OR ODOOR, SLIGHT EFFERVESCENCE

Total Volume: 1.5L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/15/02

Well ID: MW-18 Depth (ft.): 564'

Project Name: JPL Pasadena

Project No: 00HW019

Sampling Zone No: 4

Personnel: JST/AM

Starting Time: 1127

Finishing Time: 1200

Water Pressure Inside MP Casing -

Beginning of Session:

98.83

End of Session:

98.87

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	98.83	✓	150.52	✓	150.52	✓	✓	98.87	1150	9.18	0	17.4	0.330
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: No NOTICABLE COLOR OR ODO

Total Volume: 1.5L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/15/02

Project Name: JPL Pasadena
Project No: 00HWM019
Personnel: JMT / TDM

Well ID: MW-18 Depth (ft.): 684'
Sampling Zone No.: 5
Starting Time: 1000 Finishing Time: 1120

Water Pressure Inside MP Casing -
Beginning of Session: 148.48
End of Session: 149.11

Run No.	Surface Function Checks						Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Deactivate Set Arm Locate Port		Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe in	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)	Conductivity (mmhos)
1	✓	✓	✓	✓	✓	✓	148.48	✓	200.17	✓	149.88	✓	✓	150.47	1048	9.54	0	18.5	0.248	
2	✓	✓	✓	✓	✓	✓	149.00	✓	201.44	✓	201.41	✓	✓	149.11						
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

Notes: NO NOTICE CALOR OR ODOOR

Total Volume: 2.0 L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/17/02

Well ID: MW-19 Depth (ft.): 242

Project Name: JPL Pasadena

Project No: 00HW019

Sampling Zone No.: 1

Personnel: JST/TAM

Starting Time: 1448 Finishing Time: 1513

Water Pressure Inside MP Casing - Beginning of Session: 14.17
End of Session: 14.23

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	14.17	✓	46.98	✓	46.98	✓	✓	14.23	1501	9.00	46	18.8	0.286
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICEABLE COLOR OR ODOOR, STRONG EFFERVESCING.

Total Volume: 1.02

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/17/02

Project Name: JPL Pasadena
Project No.: 00HW019
Personnel: JST/TMM

Well ID: MW-19 Depth (ft.): 314
Sampling Zone No.: 2
Starting Time: 1250 Finishing Time: 1440

Water Pressure Inside MP Casing - Beginning of Session: 14.22
End of Session: 14.29

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe in	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)	Conductivity (µmhos)
1	✓	✓	✓	✓	✓	✓	14.22	✓	78.92	✓	78.93	✓	✓	14.29	1423	7.86	15	18.1	0.666
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: AB NOTICE OR OR ADOIR

STROUG REFRESHING

Total Volume: 1.02

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/17/02

Project Name: JPL Pasadena
Project No: 00HW019
Personnel: JST/TTM

Well ID: MW-19
Sampling Zone No: 3
Starting Time: 1217
Depth (ft): 392

Finishing Time: 1245

Water Pressure Inside MP Casing -
Beginning of Session: 31.96
End of Session: 31.95

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	31.96	✓	113.25	✓	113.26	✓	✓	31.95	1234	8.34	42	18.4	1.04
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes:

No NOTICABLE COLOR OR ODOOR.
STRONG EFFERVESCENCE

Total Volume: 1.5L

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/17/02

Well ID: MWJ-19

Depth (ft): 444

Project Name: JPL Pasadena

Project No: 00HW019

Sampling Zone No.: 4

Personnel: JST/TAM

Starting Time: 1141

Finishing Time: 1210

Water Pressure Inside MP Casing -

Beginning of Session:

55.68

55.69

End of Session:

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	55.68	✓	135.63	✓	135.64	✓	✓	55.69	1156	4.69	42	17.4	0.288
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: - NO NOTICE COLOR OR ODOR

STRONG PRECIPITATING

Total Volume: 1.5L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/17/02

Project Name: JPL Pasadena
Project No: 00HW019
Personnel: JST/TAM

Well ID: MW-19
Sampling Zone No.: 5
Starting Time: 0935
Finishing Time: 1120

Water Pressure Inside MP Casing -
Beginning of Session: 78.29
End of Session: 78.29

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe in	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	78.29	✓	159.02	✓	159.04	✓	✓	78.29	1120	9.14	378	18.3	0.526
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICE COLOR OR ODOOR STRONG REVERSING

Total Volume: 1.5L

Groundwater Sampling
Field Data Sheet for Multi-Port WellDate: 4/16/02Depth (ft.): 230'Project Name: JPL Pasadena
Project No: 00HW019Well ID: MW-20
Sampling Zone No: 1Personnel: JLT/AMStarting Time: 1355Finishing Time: 1428Water Pressure Inside MP Casing -
Beginning of Session: 15.84
End of Session: 15.90

Run No	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	15.84	✓	25.55	✓	25.62	✓	✓	15.90	1428	8.93	44	16.9	0.589
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes:

No NOTICABLE COLOR OR ODOTotal Volume: 1.5L

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/16/02

Depth (ft.): 392'

Well ID: MW-20

Project Name: JPL Pasadena

Sampling Zone No.: 2

Project No.: 00HW019

Starting Time: 1126

Personnel: JST/TAM

Finishing Time: 1350

Beginning of Session: 86.60

Water Pressure Inside MP Casing - End of Session: 86.66

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	86.60	✓	96.27	✓	96.60	✓	✓	86.66	1335	9.65	0	16.5	0.279
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICEABLE CHANGE OR ADJUSTMENTS BEING OBSERVED

Total Volume: 1.5L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/16/02

Well ID: MW-20 Depth (ft.): 562'

Project Name: JPL Pasadena
Project No: 00HW019
Personnel: JFT/AM

Sampling Zone No.: 3
Starting Time: 1649 Finishing Time: 1120

Water Pressure Inside MP Casing -
Beginning of Session: 160.65
End of Session: 160.65

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe in	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	160.65	✓	166.00	✓	166.01	✓	✓	160.65	1110	9.19	0	16.3	0.489
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes:

NO NOTICABLE COLOR OR ODOR, STRONG EFFERVESCENCE

Total Volume: 1.5L

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/14/02

Project Name: JPL Pasadena

Project No: 00HW019

Personnel: JST/DM

Well ID: MW-20 Depth (ft.): 700'

Sampling Zone No: 4

Starting Time: 0942 Finishing Time: 1035

Water Pressure Inside MP Casing -

Beginning of Session: 220.79
End of Session: 220.24

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Local Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	220.79	✓	230.80	✓	230.75	✓	✓	220.75	1005	10.12	3	16.5	0.273
2	✓	✓	✓	✓	✓	✓	220.24	✓	230.78	✓	230.74	✓	✓	220.24					
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes:

STRONG SULFUR ODOR TO THE WATER
WATER IS PEEPPRESSING. NO ODOOR TO THE WATER

Total Volume: 2.75L

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/16/02Depth (ft.): 900'Project Name: JPL PasadenaProject No: 00HW019Well ID: MW-20Sampling Zone No: 5Personnel: JST/TranStarting Time: 0857Finishing Time: 0930Water Pressure Inside MP Casing -
Beginning of Session: 307.85
End of Session: 307.85

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	307.85	✓	308.41	✓	308.41	✓	✓	307.85	0925	10.46	27	16.2	0.290
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes:

NO NOTICABLE COLOR OR ODO
SLIGHT EFFERVESCINGTotal Volume: 1.5L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling Field Data Sheet for Multi-Port Well

Date: 4/9/02

Project Name: JPL Pasadena
Project No: 00HW019
Personnel: MWS/DOT/Hary

Well ID: MW-21 Depth (ft): 90'
Sampling Zone No.: 1
Starting Time: 1348 Finishing Time: 1400

Water Pressure Inside MP Casing -
Beginning of Session: 14.17
End of Session: 14.17

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	14.17	✓	24.56	✓	24.55	✓	✓	14.17	1300	6.17	3	20.0	0.96
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: No NOTICE COLOR OR odor

Total Volume: 1.25L

SOTA Environmental Technology, Inc.

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/9/02

Depth (ft.): 161

Well ID: MW-21

Project Name: JPL Pasadena

Sampling Zone No.: 2

Project No: 00HW019

Personnel: JMT/mss/Han

Starting Time: 1245

Finishing Time: 1255

Water Pressure Inside MP Casing

Beginning of Session:

40.37

End of Session:

40.38

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Oil	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Pod	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	40.37	✓	56.32	✓	56.32	✓	✓	40.38	1255	6.13	3	18.1	1.26
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes:

NO NOTICABLE CHANGE OR ADAR

Total Volume: 1.25L

SOTA Environmental Technology, Inc.

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/9/02

Well ID: MW-21 Depth (ft.): 240'

Project Name: JPL Pasadena
Project No: 00HW019

Sampling Zone No.: 3

Personnel: JLT/TAN/MS

Starting Time: 12/4 Finishing Time: 1228

Water Pressure Inside MP Casing - Beginning of Session: 74.90
End of Session: 74.91

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	74.90	✓	90.71	✓	90.71	✓	✓	74.91	1228	6.12	3	18.5	1.06
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICE COLOR OR AOR

Total Volume: 1.25L

SOTA Environmental Technology, Inc.

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/9/02

Project Name: JPL Pasadena
Project No: 00HW019
Personnel: JNT/raa/mcs

Well ID: MW-21
Sampling Zone No.: 4
Starting Time: 11 31
Beginning of Session: 105.04
End of Session: 105.02

Depth (ft.): 310
Finishing Time: 1154

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Deactivate Sol Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)	Conductivity (mmhos)
1	✓	✓	✓	✓	✓	✓	105.04	✓	120.70	✓	120.70	✓	✓	105.02	1154	6.05	1	18.07	0.646
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICEABLE COLOR OR ODOOR

Total Volume: 1.25 L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/4/02

Project Name: JPL Pasadena
 Project No: 00HW019
 Personnel: JET/TAM/MCS
 Well ID: MW-21
 Sampling Zone No.: 5
 Depth (ft): 372
 Starting Time: 1100
 Finishing Time: 1125

Water Pressure Inside MP Casing -
 Beginning of Session: 131.63
 End of Session: 131.63

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe in	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	131.63	✓	147.54	✓	147.55	✓	✓	131.63	1126	5.84	2	19.1	0.845
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: Water is clear - no odor

Total Volume: 2.05

1.05

ga

SOTA Environmental Technology, Inc.

Project Name: JPL Pasadena Well ID: MW-22 Depth (ft.): 245'
 Project No: 00HW019 Sampling Zone No: 1
 Personnel: JST / JST TAN Starting Time: 1122 Finishing Time: 1140
 Water Pressure Inside MP Casing: 14.14
 Beginning of Session: 14.14
 End of Session: 14.19

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	14.14	✓	41.22	✓	41.22	✓	✓	14.19	1249	8.31	7	21.3	0.981
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICABLE CHANGE AT OBS

Total Volume: 1.5L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/12/02

Well ID: MW-ZZ Depth (ft.): 329'

Sampling Zone No.: 2

Starting Time: 1048 Finishing Time: 1120

Project Name: JPL Pasadena
Project No: 00HW019
Personnel: JST/Tam

Water Pressure Inside MP Casing -
Beginning of Session: 22.58
End of Session: 21.73

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	22.58	✓	78.86	✓	78.87	✓	✓	21.73	1210	9.18	45	19.7	0.471
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICABLE COLOR OR ODOOR

Total Volume: 1.5L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/12/02

Depth (ft.): 389

Project Name: JPL Pasadena

Well ID: MW-22

Sampling Zone No.: 3

Project No.: 00HWA019

Starting Time: 1021

Finishing Time: 1047

Personnel: JT/PAW

Water Pressure Inside MP Casing -

Beginning of Session: 47.89

End of Session: 47.96

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	47.89	✓	105.01	✓	105.02	✓	✓	47.90	1139	9.09	78	20.0	0.416
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: AB NOTICE COLOR OR ODO

Total Volume: 1.5L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/12/02

Project Name: JPL Pasadena

Project No: 00HW019

Personnel: SM/Tom

Well ID: MW-22 Depth (ft): 467'

Sampling Zone No.: 4

Starting Time: 0924

Finishing Time: 1019

Water Pressure Inside MP Casing -

Beginning of Session:
End of Session:

8094
8093

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	80.94	✓	157.60	✓	157.60	✓	✓	80.93	1107	8.66	0	19.9	0.287
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: No color, sulphur odor

Total Volume: 1.0L

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/23/02

Project Name: JPL Pasadena
Project No: 00HW019
Personnel: JMT/Tram

Well ID: MW-23
Sampling Zone No.: 1
Starting Time: 1440
Finishing Time: 1515

Water Pressure Inside MP Casing -
Beginning of Session: 14.12
End of Session: 14.16

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Oper	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	14.12	✓	39.61	✓	39.60	✓	✓	14.16	1457	8.52	27	24.2	1.20
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICABLE COLOR OR ODOOR

Total Volume: 1.5L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/23/02

Well ID: MW-23 Depth (ft): 254

Project Name: JPL Pasadena
Project No: 00HW019

Sampling Zone No: 2

Personnel: JWT/TAM

Starting Time: 1220 Finishing Time: 1420

Water Pressure Inside MP Casing -

Beginning of Session: 35.49
End of Session: 35.54

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Sol Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	35.49	✓	74.54	✓	74.57	✓	✓	35.54	1414	8.80	1	22.4	1.03
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: AB NOTICE COLOR AE ODOE

Total Volume: 1.5L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/23/02

Well ID: MW-23 Depth (ft.): 319

Project Name: JPL Pasadena
Project No: 00HW019

Personnel: JRT/TAM

Sampling Zone No: 3
Starting Time: 1145 Finishing Time: 1215

Water Pressure Inside MP Casing -
Beginning of Session: 63.93
End of Session: 63.95

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	63.93	✓	102.89	✓	102.91	✓	✓	63.95	1203	9.15	37	22.5	0.411
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: N/A NO THERMAL CAGE OR ODS.

Total Volume: 1.5L

SOTA Environmental Technology, Inc.

Page 6 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/23/02

Project Name: JPL Pasadena
Project No: 00HW019
Personnel: JWT/Tam

Well ID: MW-Z3 Depth (ft): 445'
Sampling Zone No.: 4
Starting Time: 1055 Finishing Time: 1140

Water Pressure Inside MP Casing -
Beginning of Session: 118.85
End of Session: 117.80

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	156.39	✓	156.39	✓	156.39	✓	✓	118.89	1108	9.40	37	22.5	0.321
2							118.85												
3	✓	✓	✓	✓	✓	✓	117.81	✓	156.40	✓	156.39	✓	✓	117.80					
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: AB NOTICE CAUSE OF PROBS.

Total Volume: 2.75L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling Field Data Sheet for Multi-Port Well

Date: 4/23/02

Project Name: JPL Pasadena
Project No: 00HW019
Personnel: JMT/TAM
Well ID: MW-23
Sampling Zone No: 5
Depth (ft): 542'
Starting Time: 0930
Finishing Time: 1050

Water Pressure Inside MP Casing -
Beginning of Session: 159.60
End of Session: 159.60

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	159.60	✓	198.24	✓	198.00	✓	✓	159.60	1045	10.99	38	22.3	0.387
2																			
3	✓	✓	✓	✓	✓	✓													
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO ABNORMAL COLOR OR ODOOR. STRONG EFFERVESCENCE.
Total Volume: 75L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/22/02

Project Name: JPL Pasadena
Project No: 00HW019
Personnel: JWT/ram

Well ID: MWD-24 Depth (ft.): 279
Sampling Zone No: 1
Starting Time: 1408 Finishing Time: 1430

Water Pressure Inside MP Casing - 14.11
Beginning of Session: 14.11
End of Session: 14.12

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	14.11	✓	44.76	✓	44.73	✓	✓	14.12	1429	9.30	47	23.0	0.399
2									44.76										
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO NOTICEABLE COLOR OR ODOOR. SLIGHT EFF EFFLUENCE.

Total Volume: 1.5L

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/22/02

Well ID: MW24

Depth (ft.): 373

Project Name: JPL Pasadena

Project No: 00HW019

Sampling Zone No: 2

Personnel: JF Tam

Starting Time: 1207

Finishing Time: 1354

Water Pressure Inside MP Casing -

Beginning of Session: 36.90

End of Session: 36.89

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	36.90	✓	85.47	✓	85.48	✓	✓	36.89	1354	9.58	6	22.5	0.339
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO VISIBLE COLOR OR ODOOR SLIGHT FERRUGINOUS

Total Volume: 1.5L

SOTA Environmental Technology, Inc.

Page 1 of 1

Groundwater Sampling Field Data Sheet for Multi-Port Well

Date: 4/23/02

Project Name: JPL Pasadena Well ID: MW-24 Depth (ft): 435
 Project No: 00HW019 Sampling Zone No: 3
 Personnel: JWT/Tam Starting Time: 1100 Finishing Time: 1147

Water Pressure Inside MP Casing - Beginning of Session: 63.89
 End of Session: 63.49

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	63.89	✓	112.50	✓	112.50	✓	✓	63.90	1120	9.96	47	22.8	0.281
2	✓	✓	✓	✓	✓	✓	63.45	✓	112.52	✓	112.51	✓	✓	63.44					
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes: NO ATTILABLE COLOR OR ODO, STRONG EFFERVESING

Total Volume: 2.75L

Groundwater Sampling

Field Data Sheet for Multi-Port Well

Date: 4/22/02

Project Name: JPL Pasadena

Project No: 00HW019

Personnel: JPL Team

Well ID: MW-24

Sampling Zone No.: 4

Starting Time: 0920

Depth (ft.): 554

Finishing Time: 1050

Water Pressure Inside MP Casing -

Beginning of Session:

115.25

End of Session:

115.29

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe in	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	115.25	✓	163.13	✓	163.15	✓	✓	115.29	1042	10.32	48	22.2	0.249
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Notes:

No NOTICE CAJOR 080008

Total Volume: 1.25L