

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-9, 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 for the first quarter 2022 sampling event was conducted by Blaine Tech Services, Inc.

Note: During the first quarter 2022 the relatively shallow standpipe wells MW-5, MW-6, MW-7, MW-8, MW-10, MW-13, and MW-16 and the uppermost sampling ports (i.e., Screen 1) in the multi-port monitoring wells MW-14, MW-20, MW-21, MW-23, and MW-26 were dry and no samples were collected.

WELL MONITORING DATA SHEET

Project #: 22012845-1	Site: Tidewater
Sampler: WS	Date: 2-10-22
Well I.D.: MW-6	Well Diameter: 2 3 (4) 6 8
Total Well Depth (TD): 238.23	Depth to Water (DTW): DRY
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	Flow Cell Type: YSI 556
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer Waterra Sampling Method: Bailer
 Disposable Bailer 2" Rediflo pump Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other _____ Dedicated Tubing
 Other: _____

	(Gals.) X _____ = _____ Gals.	
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP(mV)	Gals. Removed	Observations
								Well Is Dry
								NO Sample Taken

Did well dewater? Yes No		Gallons actually evacuated: _____	
Sampling Date: _____		Sampling Time: _____	
Sample I.D.: _____		Depth to Water: _____	
Laboratory: _____		Other: _____	
Analyzed for: _____		Other: _____	
EB I.D. (if applicable): _____ @ _____ Time		Duplicate I.D. (if applicable): _____	
FB I.D. (if applicable): _____ @ _____ Time		Analyzed for: _____	
D.O. (if req'd):	Pre-purge: _____ mg/L	Post-purge: _____	mg/L
O.R.P. (if req'd):	Pre-purge: _____ mV	Post-purge: _____	mV

LOW FLOW WELL MONITORING DATA SHEET

Project #: 22012845-1	Client: Tidewater @ JPC
Sampler: MS	Gauging Date: 2.10.22
Well I.D.: MW-7	Well Diameter (in.): 2 3 <u>4</u> 6 8
Total Well Depth (ft.): 268.02	Depth to Water (ft.): DRY
Depth to Free Product: _____	Thickness of Free Product (feet): _____
Referenced to: <u>PVC</u> Grade	Flow Cell Type: _____

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other _____
 Start Purge Time: _____ Flow Rate: _____ Pump Depth: _____

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
<u>well</u> <u>Is</u> <u>DRY</u> <u>-</u>								
<u>NO sample taken</u>								

Did well dewater? Yes No	Amount actually evacuated: _____
Sampling Time: _____	Sampling Date: _____
Sample I.D.: _____	Laboratory: _____
Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____	
Equipment Blank I.D.: _____ @ _____ Time	Duplicate I.D.: _____

WELL MONITORING DATA SHEET

Project #: <u>22012845-1</u>	Site: <u>Tidewater @ JPL</u>
Sampler: <u>MS</u>	Date: <u>2-10-22</u>
Well I.D.: <u>MW-0</u>	Well Diameter: 2 3 <u>4</u> 6 8 <u> </u>
Total Well Depth (TD): <u>202.10</u>	Depth to Water (DTW): <u>DRY</u>
Depth to Free Product: <u> </u>	Thickness of Free Product (feet): <u> </u>
Referenced to: <u>PVC</u> Grade	Flow Cell Type YSI 556
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer Waterra Sampling Method: Bailer

 Disposable Bailer 2" Rediflo pump Disposable Bailer

 Positive Air Displacement Extraction Pump Extraction Port

 Electric Submersible Other _____ Dedicated Tubing

Other: _____

	(Gals.) X		=	Gals.
1 Case Volume	Specified Volumes	Calculated Volume		

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP(mV)	Gals. Removed	Observations
<u>- Well IS DRY -</u>								
<u>- NO SAMPLE TAKEN -</u>								

Did well dewater? Yes No	Gallons actually evacuated:
Sampling Date:	Sampling Time: Depth to Water:
Sample I.D.:	Laboratory:
Analyzed for:	Other:
EB I.D. (if applicable): @ Time	Duplicate I.D. (if applicable):
FB I.D. (if applicable): @ Time	Analyzed for:
D.O. (if req'd): Pre-purge:	mg/L Post-purge: mg/L
O.R.P. (if req'd): Pre-purge:	mV Post-purge: mV

LOW FLOW WELL MONITORING DATA SHEET

Project #: 220128HS-1	Client: Tidewater @ JPL
Sampler: HS	Gauging Date: 2-10-22
Well I.D.: MW-10	Well Diameter (in.): 2 3 <u>4</u> 6 8
Total Well Depth (ft.): 153.29	Depth to Water (ft.): DRY
Depth to Free Product: _____	Thickness of Free Product (feet): _____
Referenced to: <u>PVC</u> Grade	Flow Cell Type: _____

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other _____
 Start Purge Time: _____ Flow Rate: _____ Pump Depth: _____

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
- Well Is Dry -								
- NO Sample Taken -								

Did well dewater? Yes No	Amount actually evacuated: _____
Sampling Time: _____	Sampling Date: _____
Sample I.D.: _____	Laboratory: _____
Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____	
Equipment Blank I.D.: _____ @ _____ Time	Duplicate I.D.: _____

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MU-11
 SAMPLING DATE(S): 2/7/22
 LOCATION: SPL Pasadena
 WATER LEVEL INSIDE CASING:
 ATM. PRESSURE (PSI): (Start) 14.19 (Finish) 14.20
18.46 27.15

PROBE TYPE: Westbay
 SERIAL NO.: EMS 2508
 PROJECT: SPL
 OPERATOR(S): L.H. Anderson
 WEATHER: clear/sunny

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)						Sample Collection Checks (probe at sampling port in MP casing)					Field Parameters					Sample	
		Arm out / Land Probe	Shoe Out/ Close Valve/ Check Vacuum	Open Valve/ Apply Vacuum (5 psi)	Close Valve/ Shoe In/ Arm In	Locate Port/ Arm Out/ Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve/ Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	Sample Time	Sample ID
4	1	✓	✓	✓	✓	✓	153.30	✓	152.00	✓	151.94	✓	153.27	26.8	262	8.13	2	5.43	1330	MU-11-4
3	1	✓	✓	✓	✓	✓	113.22	✓	110.01	✓	109.83	✓	113.24	28.4	295	8.02	2	3.75	1400	MU-11-3
2	1	✓	✓	✓	✓	✓	39.94	✓	40.92	✓	40.86	✓	39.81	29.6	398	7.76	1	3.70	1425	MU-11-2
2	2	✓	✓	✓	✓	✓	38.83	✓	40.94	✓	40.84	✓	38.75	-	-	-	-	-	-	-
1	1	✓	✓	✓	✓	✓	14.23	✓	17.36	✓	17.35	✓	14.25	30.9	589	7.27	1	3.28	1500	MU-11-1
1	2	✓	✓	✓	✓	✓	14.22	✓	17.34	✓	17.34	✓	14.25	-	-	-	-	-	-	-

Comments:

SB-2-020722 @ 1445

EB-6-020722 @ 1455

**WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET**

WELL ID: MW-12
 SAMPLING DATE(S): 2/7/22
 LOCATION: _____
 WATER LEVEL INSIDE CASING: 52.52
 ATM. PRESSURE (PSI): (Start) 14.22 (Finish) _____

PROBE TYPE: Westbay
 SERIAL NO.: EMS 2908
 PROJECT: SPL
 OPERATOR(S): L. Henderson
 WEATHER: clear, sunny

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)				Sample Collection Checks (probe at sampling port in MP casing)						Field Parameters					Sample	
		Arm out / Land Probe	Shoe Out / Close Valve / Check Vacuum	Open Valve / Apply Vacuum (5 psi)	Close Valve / Shoe In / Arm In	Locate Port / Arm Out / Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve / Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	Sample Time
5	1	✓	✓	✓	✓													1145	MW-12-5
4	1																		MW-12-4
3	1																		MW-12-3
2	1																		MW-12-2
2	2																		
1	1																		

Comments: EG-6-02²⁰ * * Bottom hits at 130' Ft.
SB-2-02²⁰ * * Cannot sample well

WELL MONITORING DATA SHEET

Project #: 22012EHS-1	Site: Tidewater @ JPL
Sampler: RS	Date: 2-10-22
Well I.D.: MW-13	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): 234.78	Depth to Water (DTW): 234.78 DRY
Depth to Free Product: _____	Thickness of Free Product (feet): _____
Referenced to: <u>PVC</u> Grade	Flow Cell Type YSI 556
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: <input type="checkbox"/> Bailer <input type="checkbox"/> Disposable Bailer <input type="checkbox"/> Positive Air Displacement <input type="checkbox"/> Electric Submersible	Sampling Method: <input checked="" type="checkbox"/> Bailer <input type="checkbox"/> Disposable Bailer <input type="checkbox"/> Extraction Port <input type="checkbox"/> Dedicated Tubing Other: _____
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_____ (Gals.) X	=	_____ Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP(mV)	Gals. Removed	Observations
- Well	IS	DRY	-					
- NO SAMPLE TAKEN -								

Did well dewater?	Yes	No	Gallons actually evacuated:
Sampling Date:	Sampling Time:	Depth to Water:	
Sample I.D.:	Laboratory:		
Analyzed for:	Other:		
EB I.D. (if applicable):	@ Time	Duplicate I.D. (if applicable):	
FB I.D. (if applicable):	@ Time	Analyzed for:	
D.O. (if req'd):	Pre-purge:	mg/L	Post-purge: mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge: mV

**WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET**

WELL ID: MW-14
 SAMPLING DATE(S): 2/9/22
 LOCATION: JPL Pasadena
 WATER LEVEL INSIDE CASING:
 ATM. PRESSURE (PSI): (Start) 14.20 (Finish) 14.23
16.60°C 19.91°C

PROBE TYPE: Westbay
 SERIAL NO.: EMS 2508
 PROJECT: JPL
 OPERATOR(S): L. Henderson
 WEATHER: clear, sunny

Port Number	Run Number	Probe to Top Collar (probe in top of collar) / (lower probe to port)						Sample Collection Checks (probe at sampling port in MP casing)						Field Parameters					Sample	
		Arm out / Land Probe	Shoe Out / Close Valve / Check Vacuum	Open Valve / Apply Vacuum (5 psi)	Close Valve / Shoe In / Arm In	Locate Port / Arm Out / Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve / Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	Sample Time	Sample ID
5	1	✓	✓	✓	✓	✓	165.38	✓	147.98	✓	147.98	✓	165.48	16.1	308	8.41	4	6.25	0900	MW-14-5-020422
4	1	✓	✓	✓	✓	✓	128.77 128.77	✓	111.62	✓	111.60	✓	128.63	17.4	572	8.07	3	6.88	0930	MW-14-4-020422
3	1	✓	✓	✓	✓	✓	97.40	✓	79.50	✓	79.51	✓	97.43	17.6	1021	7.74	3	5.11	1000	MW-14-3-020422
2	1	✓	✓	✓	✓	✓	52.12	✓	33.79	✓	33.79	✓	52.10	21.0	1144	7.41	1	4.80	1010	MW-14-2-020422
1	1	✓	✓	✓	✓	✓	21.57	✓	14.27	✓	14.25	✓	21.55	-PORT IS BRY - NO SAMPLE TAKEN						

Comments: TS-5-020422 @ 0800

WELL MONITORING DATA SHEET

Project #: 220128MS-1	Site: Tidewater @ JPL
Sampler: HS	Date: 2-10-22
Well I.D.: MW-15	Well Diameter: 2 3 (4) 6 8
Total Well Depth (TD): <u>ded. pump (60.00)</u>	Depth to Water (DTW): 32.25
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type YSI 556
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 38.8 38.28	

Purge Method: Bailer Waterra Sampling Method: Bailer
 Disposable Bailer 2" Rediflo pump Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other: RF 2 Dedicated Tubing

Start @ 0952

18	(Gals.) X	3	=	54	Gals.
1 Case Volume		Specified Volumes		Calculated Volume	

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP(mV)	Gals. Removed	DTW Observations
1001	16.4	7.94	526	5	2.75	150.5	9	34.33
1010	16.7	7.97	529	3	2.12	140.3	18	34.45
1019	16.7	8.00	531	1	1.95	136.1	27	34.48
1028	16.7	8.01	520	1	1.91	133.9	36	34.51
1037	16.7	8.03	526	1	1.89	133.0	45	34.51
1046	16.7	8.04	525	1	1.84	130.4	54	34.51

Did well dewater? Yes No Gallons actually evacuated: 54

Sampling Date: 2/10/22 Sampling Time: 1047 Depth to Water: 34.51

Sample I.D.: MW-15 Laboratory: BC/PACE

Analyzed for: See COO Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

FB I.D. (if applicable): @ Time Analyzed for:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

LOW FLOW WELL MONITORING DATA SHEET

Project #: 220129HS-1	Client: Tidewater EJOL
Sampler: HS	Gauging Date: 2-10-22
Well I.D.: MW-16	Well Diameter (in.): 2 3 <u>4</u> 6 8
Total Well Depth (ft.): 285.49	Depth to Water (ft.): 284.30
Depth to Free Product: _____	Thickness of Free Product (feet): _____
Referenced to: <u>PVC</u> Grade	Flow Cell Type: _____

Purge Method: ~~2" Grundfos Pump~~ Peristaltic Pump Bladder Pump
 Sampling Method: ~~Dedicated Tubing~~ New Tubing Other _____
 Start Purge Time: _____ Flow Rate: _____ Pump Depth: _____

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)

Did well dewater? Yes No	Amount actually evacuated:
Sampling Time:	Sampling Date:
Sample I.D.:	Laboratory:
Analyzed for: TPH-G BTEX MTBE TPH-D	Other:
Equipment Blank I.D.: @	Duplicate I.D.:

**WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET**

WELL ID: ML-18
 SAMPLING DATE(S) 2/3/22
 LOCATION: JPL Pasadena
 WATER LEVEL INSIDE CASING:
 ATM. PRESSURE (PSI): (Start) 14.10 (Finish) 27.64

PROBE TYPE Westbay
 SERIAL NO. EMS 2508
 PROJECT: JPL
 OPERATOR(S) L. Henderson
 WEATHER clear, sunny

Port Number	Run Number	Probe to Top Collar		Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)					Sample Collection Checks (probe at sampling port in MP casing)					Field Parameters					Sample	
		Arm out / Land Probe	Shoe Out / Close Valve / Check Vacuum	Open Valve / Apply Vacuum (5 psi)	Close Valve / Shoe In / Arm In	Locate Port / Arm Out / Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve / Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	Sample Time	Sample ID
5	1	✓	✓	✓	✓	✓	185.07	✓	163.72	✓	163.70	✓	185.10	20.2	270.1	9.23	10	5.91	1200	ML-18-5-020322
4	1	✓	✓	✓	✓	✓	133.74	✓	115.06	✓	115.09	✓	133.75	18.5	389.2	8.18	4	5.67	1240	ML-18-4-020322
3	1	✓	✓	✓	✓	✓	72.73	✓	64.53	✓	64.54	✓	72.90	18.2	512	7.73	1	6.33	1315	ML-18-3-020322
3	2	✓	✓	✓	✓	✓	72.74	✓	64.52	✓	64.55	✓	72.70	-	-	-	-	-	-	-
2	1	✓	✓	✓	✓	✓	41.24 32.25	✓	23.81	✓	23.77	✓	32.29	18.4	473	7.60	5	5.49	1345	ML-18-2-020322

Comments: ED-4-020322 @ 1335

**WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET**

WELL ID: MU-19
 SAMPLING DATE(S): 2/1/22
 LOCATION: JPL Pasadena
 WATER LEVEL INSIDE CASING: _____
 ATM. PRESSURE (PSI): (Start) 13.98 (Finish) 13.94

PROBE TYPE: Westbay
 SERIAL NO.: EMS 2508
 PROJECT: JPL
 OPERATOR(S): L. Henderson
 WEATHER: clear, sunny

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)				Sample Collection Checks (probe at sampling port in MP casing)					Field Parameters					Sample			
		Arm out / Land Probe	Shoe Out / Close Valve / Check Vacuum	Open Valve / Apply Vacuum (5 psi)	Close Valve / Shoe In / Arm In	Locate Port / Arm Out / Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve / Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	Sample Time	Sample ID
5	1	✓	✓	✓	✓	✓	169.23	✓	118.27	✓	118.26	✓	168.66	19.8	791	7.49	4	7.99	1245	MU-19-5-020122
4	1	✓	✓	✓	✓	✓	145.58	✓	95.10	✓	95.10	✓	145.55	20.2	854	7.32	1	6.68	1315	MU-19-7-020122
3	1	✓	✓	✓	✓	✓	123.36	✓	87.36	✓	87.36	✓	123.37	20.0	913	7.16	3	6.16	1345	MU-19-3-020122
																		13.55		DUP-2-1022
2	1	✓	✓	✓	✓	✓	89.46	✓	54.01	✓	54.00	✓	89.33	20.0	1084	6.86	11	4.59	1415	MU-19-2-020122
1	1	✓	✓	✓	✓	✓	59.17 58.24	✓	24.82	✓	24.80	✓	58.22	21.8	539	7.20	5	4.47	1445	MU-19-1-020122

Comments: EB-2-020122@1430

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-20
 SAMPLING DATE(S): 1/31/22
 LOCATION: SPL Pasadena
 WATER LEVEL INSIDE CASING:
 ATM. PRESSURE (PSI): (Start) 14.03 (Finish) 14.09
13.81 18.7°C

PROBE TYPE: Westbay
 SERIAL NO.: EMS 2502
 PROJECT: SPL
 OPERATOR(S): C. Henderson
 WEATHER: clear, sunny

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)				Sample Collection Checks (probe at sampling port in MP casing)						Field Parameters					Sample		
		Arm out / Land Probe	Shoe Out / Close Valve / Check Vacuum	Open Valve / Apply Vacuum (5 psi)	Close Valve / Shoe In / Arm In	Locate Port / Arm Out / Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve / Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	Sample Time	Sample ID
5	1	✓	✓	✓	✓	✓	303.39	✓	295.97	✓	295.99	✓	303.41	19.8	495	7.77	2	5.98	0900	MW-20-5-013122
4	1	✓	✓	✓	✓	✓	212.84	✓	200.76	✓	200.71	✓	212.78	21.2	207.5	8.58	5	6.85	1245	MW-20-4-013122
4	2	✓	✓	✓	✓	✓	213.01	✓	200.75	✓	200.72	✓	212.57	-	-	-	-	-	-	-
3	1	✓	✓	✓	✓	✓	154.92	✓	143.41	✓	143.44	✓	154.79	19.5	319	9.02	8	5.60	1336	MW-20-3-013122
2	1	✓	✓	✓	✓	✓	79.01	✓	72.14	✓	72.13	✓	79.07	26.1	565	6.92	7	3.89	1130	MW-20-2-013122
2	2	✓	✓	✓	✓	✓	81.03	✓	72.13	✓	72.14	✓	80.92	-	-	-	-	-	1200	DR-1-1022
2	3	✓	✓	✓	✓	✓	78.53	✓	72.12	✓	72.15	✓	78.97	-	-	-	-	-	-	-
4	2																			
1	1	✓	✓	✓	✓	✓	14.30	✓	14.18	✓	14.18	✓	14.23	- PORT IS DRY - NO SAMPLE TAKEN -						

Comments: TB -1- 013122 @ 0800

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-21
 SAMPLING DATE(S): 2/19/22
 LOCATION: JPL Pasadena
 WATER LEVEL INSIDE CASING:
 ATM. PRESSURE (PSI): (Start) 14.15 (Finish) 14.14

PROBE TYPE: Westbay
 SERIAL NO.: EMS 2508
 PROJECT: JPL
 OPERATOR(S): L. Henderson
 WEATHER: Clear, Sunny

19.06 23.66

Port Number	Run Number	Probe to Top Collar					Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)					Sample Collection Checks (probe at sampling port in MP casing)					Field Parameters					Sample	
		Arm out / Land Probe	Shoe Out / Close Valve / Check Vacuum	Open Valve / Apply Vacuum (5 psi)	Close Valve / Shoe In / Arm In	Locate Port / Arm Out / Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve / Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	Sample Time	Sample ID			
5	1	✓	✓	✓	✓	✓	125.07 127.98	✓	124.05	✓	124.06	✓	127.86	20.1	936	7.91	4	6.06	1130	MW-21-5			
4	1	✓	✓	✓	✓	✓	100.75	✓	97.16	✓	97.18	✓	100.76	21.0	999	7.93	5	7.12	1200	MW-21-4			
3	1	✓	✓	✓	✓	✓	70.61	✓	67.31	✓	67.35	✓	70.64	22.2	1238	7.77	3	5.98	1240	MW-21-3			
3	2	✓	✓	✓	✓	✓	70.71	✓	67.31	✓	67.36	✓	70.60	-	-	-	-	-	1300	DUR-7-2102 1222			
2	1	✓	✓	✓	✓	✓	36.67	✓	33.30	✓	33.29	✓	36.68	24.5	1430	7.71	3	6.92	1330	MW-21-2			
1	1	✓	✓	✓	✓	✓	14.20	✓	14.23	✓	14.21	✓	14.20	-PORT	-	-	-	-	-	-	NO SAMPLE TAKEN		

Comments: TB-8-020922 @ 1030
EB-8-020922 @ 1400

**WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET**

WELL ID: MD-23
 SAMPLING DATE(S): 2/8/22
 LOCATION: SPL Pasadena
 WATER LEVEL INSIDE CASING:
 ATM. PRESSURE (PSI): (Start) 14.17 (Finish) 14.18
22.71 19.67

PROBE TYPE: Westbay
 SERIAL NO.: GMS 2508
 PROJECT: SPL
 OPERATOR(S): L. Hernandez
 WEATHER: clear, sunny

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)				Sample Collection Checks (probe at sampling port in MP casing)					Field Parameters					Sample			
		Arm out / Land Probe	Shoe Out / Close Valve / Check Vacuum	Open Valve / Apply Vacuum (5 psi)	Close Valve / Shoe In / Arm In	Locate Port / Arm Out / Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve / Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	Sample Time	Sample ID
4	1	✓	✓	✓	✓	✓	146.41	✓	125.38	✓	125.40	✓	146.34	23.9	468	6.73	3	4.20	0900	MD-23-4
3	1	✓	✓	✓	✓	✓	92.20	✓	76.63	✓	76.62	✓	92.13	25.3	636	7.47	3	4.80	0945	MD-23-3
2	1	✓	✓	✓	✓	✓	64.22	✓	48.46	✓	48.47	✓	64.12	24.9	130	7.49	2	5.55	1015	MD-23-2
2	2	✓	✓	✓	✓	✓	61.61 63.69	✓	48.46	✓	48.46	✓	63.70	-	-	-	-	-	1030	DUP-S-1Q22
1	1	✓	✓	✓	✓	✓	28.33	✓	14.32	✓	14.24	✓	28.35	-	-	-	-	-	-	PORT IS DRY - NO SAMPLE TAKEN

Comments: IB-7-010822 @ OBCO

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MU-24
 SAMPLING DATE(S): 2/2/22
 LOCATION: JPL Pasadena
 WATER LEVEL INSIDE CASING: 751.04
 ATM. PRESSURE (PSI): (Start) 14.02 (Finish) 14.07
23.01 23.10

PROBE TYPE: Westbay
 SERIAL NO.: MS 2018
 PROJECT: JPL
 OPERATOR(S): L. Henderson
 WEATHER: clear / sunny

Port Number	Run Number	Probe to Top Collar						Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)						Sample Collection Checks (probe at sampling port in MP casing)						Field Parameters					Sample	
		Arm out / Land Probe	Shoe Out / Close Valve / Check Vacuum	Open Valve / Apply Vacuum (5 psi)	Close Valve / Shoe In / Arm In	Locate Port / Arm Out / Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve / Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	Sample Time	Sample ID						
4	1	✓	✓	✓	✓	✓	145.99	✓	130.56	✓	130.56	✓	146.00	25.2	183	9.20	2	4.14	1220	MU-24-4-020222						
3	1	✓	✓	✓	✓	✓	95.14	✓	85.16	✓	85.16	✓	95.20	26.3	464	8.33	2	3.39	1250	MU-24-3-020222						
3	2	✓	✓	✓	✓	✓	94.79	✓	85.18	✓	85.19	✓	94.51	-	-	-	-	-	1300	DUP-3-1022						
2	1	✓	✓	✓	✓	✓	68.22	✓	58.40	✓	58.40	✓	68.19	29.0	684	7.27	1	4.26	1340	MU-24-2-020222						
1	1	✓	✓	✓	✓	✓	27.40	✓	17.57	✓	17.56	✓	27.41	29.2	731	7.53	3	4.30	1420	MU-24-1-020222						
i	2	✓	✓	✓	✓	✓	26.77	✓	17.57	✓	17.61	✓	24.76	-	-	-	-	-	-	-						

Comments: EB-3-020222 @ 1350

**WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET**

WELL ID: MU-25
 SAMPLING DATE(S): 2/1/22
 LOCATION: JPL Pasadena
 WATER LEVEL INSIDE CASING: _____
 ATM. PRESSURE (PSI): (Start) 14.16 (Finish) 15.12

PROBE TYPE: Westbay
 SERIAL NO.: EMS 2508
 PROJECT: JPL
 OPERATOR(S): L. Henderson
 WEATHER: clear, sunny

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)					Sample Collection Checks (probe at sampling port in MP casing)					Field Parameters					Sample		
		Arm out / Land Probe	Shoe Out / Close Valve / Check Vacuum	Open Valve / Apply Vacuum (5 psi)	Close Valve / Shoe In / Arm In	Locate Port / Arm Out / Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve / Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	Sample Time	Sample ID
5	1	✓	✓	✓	✓	✓	219.90	✓	216.54	✓	216.52	✓	219.88	16.8	808	8.01	7	6.88	0900	MU-25-5-020122
4	1	✓	✓	✓	✓	✓	185.75	✓	182.52	✓	182.50	✓	185.77	17.3	761	7.88	7	6.91	0945	MU-25-4-020122
3	1	✓	✓	✓	✓	✓	129.54	✓	126.80	✓	126.81	✓	129.49	18.5	726	7.92	2	6.42	1015	MU-25-3-020122
2	1	✓	✓	✓	✓	✓	94.56	✓	92.26	✓	92.23	✓	94.69	21.0	725	7.90	3	4.48	1045	MU-25-2-020122
2	2	✓	✓	✓	✓	✓	91.13	✓	92.22	✓	92.24	✓	91.21	-	-	-	-	-	-	-
1	1	✓	✓	✓	✓	✓	65.41	✓	63.95	✓	63.90	✓	65.41	19.8	824	7.39	8	6.49	1130	MU-25-1-020122

Comments: TB-2-020122 @ 6800

