

## **ATTACHMENT 4: FIELD LOGS**

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This attachment contains the groundwater sample collection field logs for the relatively shallow standpipe monitoring wells (MW-5 through MW-8, 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 1<sup>st</sup> Quarter 2018 sampling event was conducted by Blaine Tech Services, Inc.





## WELL MONITORING DATA SHEET

Project #: 180122-HH1	Site: JPL
Sampler: KT	Date: 2-1-18
Well I.D.: MW-5	Well Diameter: 2 3 ④ 6 8
Total Well Depth (TD): 140.00	Depth to Water (DTW): 116.32
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]: 121.05	

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

2 GPM

15.3 (Gals.) X 3 = 46.1 Gals.  
 I 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 <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS/cm or μS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP(mV)	Gals. Removed	DTW Observations
1143	65.4	7.10	499	6	0.47	131	8	116.40
1147	65.5	7.04	503	4	0.56	130	16	116.42
1151	65.5	7.01	504	3	0.58	130	24	116.42
1155	65.5	6.98	508	3	0.72	129	32	116.42
1159	65.5	6.97	508	2	0.75	129	40	116.42
1203	65.5	6.96	509	2	0.77	130	47	116.42

Did well dewater? Yes  No      Gallons actually evacuated: 47

Sampling Date: 2-1-18      Sampling Time: 1205      Depth to Water: 116.42

Sample I.D.: MW-5      Laboratory: BC

Analyzed for: SEE COC      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

## WELL MONITORING DATA SHEET

Project #: 180122-HH1	Site: JPI
Sampler: KT	Date: 2.1.18
Well I.D.: MW-6	Well Diameter: 2 3 <b>(4)</b> 6 8
Total Well Depth (TD): 245.00 (DED)	Depth to Water (DTW): 223.11
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: <b>(PVC)</b> Grade	Flow Cell Type: YSI 556
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 227.48	

Purge Method: Bailer      Waterra      Sampling Method: Bailer  
 Disposable Bailer      2" Rediflo pump DED.      Disposable Bailer  
 Positive Air Displacement      Extraction Pump      Extraction Port  
 Electric Submersible      Other: **(21.89)**      Dedicated Tubing  
 Other:

2 gpm

$$14.2 \text{ (Gals.)} \times 3 = 42.6 \text{ Gals.}$$

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 <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS/cm or $\mu\text{S/cm}$ )	Turbidity (NTUs)	D.O. (mg/L)	ORP(mV)	Gals. Removed	DTW Observations
0800	70.3	7.77	1196	33	4.43	178	7	223.81
0804	70.6	7.25	1190	21	3.99	176	14	223.85
0808	70.5	7.18	1151	16	3.76	170	21	223.85
0812	70.5	7.13	1140	10	2.42	162	28	223.85
0814	70.5	7.10	1134	9	2.29	157	35	223.85
0820	70.5	7.10	1136	8	2.25	154	43	223.85

Did well dewater?      Yes      **(NO)**      Gallons actually evacuated: 43

Sampling Date: 2.1.18      Sampling Time: 0822      Depth to Water: 223.85

Sample I.D.: MW-6      Laboratory: BC

Analyzed for: SEE COC      Other:

EB I.D. (if applicable): @ Time      Duplicate I.D. (if applicable): DUP-6-2018-0832 @ 1818

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

## WELL MONITORING DATA SHEET

Project #: <u>180122-HH1</u>	Site: <u>JPL</u>
Sampler: <u>HH</u>	Date: <u>02/01/18</u>
Well I.D.: <u>MW-7</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): <u>267.52</u>	Depth to Water (DTW): <u>256.55</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	Flow Cell Type: <u>YSI 556</u>
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>258.34</u>	

Purge Method: Bailer  Disposable Bailer  Positive Air Displacement  Electric Submersible  Del. 2" Rediflo pump  Waterra Extraction Pump  Other \_\_\_\_\_

Sampling Method: Bailer  Disposable Bailer  Extraction Port  Dedicated Tubing  Other: \_\_\_\_\_

16ppm @ 1210

7.5 (Gals.) X 3 = 22.5 Gals.

I 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 <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS/cm or <u>µS/cm</u> )	Turbidity (NTUs)	D.O. (mg/L)	ORP(mV)	Gals. Removed	DTW Observations
1214	78.3	7.33	698	211	4.81	92	4	256.31
1218	75.1	7.20	731	139	4.75	89	8	256.45
1222	73.2	7.15	739	110	4.69	85	12	256.50
1226	73.0	7.13	735	90	4.65	83	16	256.51
1230	72.9	7.12	731	88	4.63	82	20	256.51
1233	72.8	7.10	730	86	4.61	81	23	256.51

Did well dewater? Yes  No  Gallons actually evacuated: 23

Sampling Date: 02/01/18      Sampling Time: 1234      Depth to Water: 256.51

Sample I.D.: MW-7      Laboratory: BC

Analyzed for: See C.O.C      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

## WELL MONITORING DATA SHEET

Project #: <u>180122-17H1</u>	Site: <u>JPL</u>
Sampler: <u>HH</u>	Date: <u>02/01/18</u>
Well I.D.: <u>MW-8</u>	Well Diameter: 2 3 <u>(4)</u> 6 8
Total Well Depth (TD): <u>Dec pump 205.00</u>	Depth to Water (DTW): <u>183.00</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	Flow Cell Type: <u>YSI 556</u>
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>187.40</u>	

Purge Method: Bailer      Disposable Bailer      Positive Air Displacement      Electric Submersible      Dec. 2" Rediflo pump      Waterra Extraction Pump      Other \_\_\_\_\_

Sampling Method: Bailer      Disposable Bailer      Extraction Port      Dedicated Tubing      Other: \_\_\_\_\_

26PM@0920

<u>14.3</u> (Gals.) X	<u>3</u> Specified Volumes	<u>= 42.9</u> Gals. Calculated Volume
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Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS/cm or <u>µS/cm</u> )	Turbidity (NTUs)	D.O. (mg/L)	ORP(mV)	Gals. Removed	<u>DTW</u> Observations
<u>0923</u>	<u>72.1</u>	<u>6.91</u>	<u>831</u>	<u>20</u>	<u>6.75</u>	<u>91</u>	<u>6</u>	<u>183.81</u>
<u>0924</u>	<u>73.4</u>	<u>6.85</u>	<u>825</u>	<u>16</u>	<u>6.61</u>	<u>99</u>	<u>14</u>	<u>184.05</u>
<u>0928</u>	<u>73.5</u>	<u>6.83</u>	<u>822</u>	<u>10</u>	<u>6.40</u>	<u>102</u>	<u>22</u>	<u>184.16</u>
<u>0932</u>	<u>73.7</u>	<u>6.80</u>	<u>813</u>	<u>8</u>	<u>6.35</u>	<u>100</u>	<u>30</u>	<u>184.19</u>
<u>0936</u>	<u>73.9</u>	<u>6.77</u>	<u>810</u>	<u>8</u>	<u>6.33</u>	<u>101</u>	<u>38</u>	<u>184.20</u>
<u>0940</u>	<u>73.8</u>	<u>6.75</u>	<u>808</u>	<u>8</u>	<u>6.33</u>	<u>99</u>	<u>44</u>	<u>184.20</u>

Did well dewater?      Yes      (No)      Gallons actually evacuated: 44

Sampling Date: 02/01/18      Sampling Time: 0941      Depth to Water: 184.20

Sample I.D.: MW-8      Laboratory: BC

Analyzed for: See C.O.C      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

## WELL MONITORING DATA SHEET

Project #: 100122-HH1	Site: JPL
Sampler: KT	Date: 2-1-10
Well I.D.: MW-10	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): 155 (DED)	Depth to Water (DTW): 130.44
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: P/C Grade	Flow Cell Type: YSI 556
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <del>130.44</del> 135.35	

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

2 gpm

$$15.9 \text{ (Gals.)} \times 3 = 47.8 \text{ Gals.}$$

I 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 <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS/cm or μS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP(mV)	Gals. Removed	DTW Observations
0939	68.0	6.76	856	4	0.29	144.9	8	130.71
0943	68.0	6.82	880	4	0.05	143.3	16	130.71
0947	68.0	6.84	919	3	0.04	145.4	24	130.71
0951	68.1	6.88	949	3	0.02	146.2	32	130.71
0955	68.1	6.89	942	3	0.03	146.3	40	130.71
0959	68.1	6.89	944	2	0.05	145.7	48	130.71

Did well dewater?      Yes      No      Gallons actually evacuated: 48

Sampling Date: 2-1-10      Sampling Time: 1002      Depth to Water: 130.71

Sample I.D.: MW-10      Laboratory: BC

Analyzed for: SEE COC      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-11  
 SAMPLING DATE(S) 01/31/18  
 LOCATION: SPL  
 WATER LEVEL INSIDE CASING: 173.83  
 ATM. PRESSURE (PSI): (Start) 14.05 (Finish) 14.08

PROBE TYPE Westbay  
 SERIAL NO. EMS2502  
 PROJECT: JPL  
 OPERATOR(S) T. Hoagy  
 WEATHER Clear

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 (8 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) mg/L	ORP (mv)	Sample Time	Sample ID
4	1	✓	✓	✓	✓	✓	189.02	✓	165.19	✓	165.19	✓	169.02	21.9	278	8.37	3	6.81	-71	1150	MW-11-4
3	1	✓	✓	✓	✓	✓	129.07	✓	121.02	✓	121.02	✓	129.07	21.1	413	8.27	2	5.83	124	1220	MW-11-3
2	1	✓	✓	✓	✓	✓	55.14	✓	49.39	✓	49.39	✓	55.14	21.0	412	8.62	3	5.02	-59	1345	MW-11-2
1	1	✓	✓	✓	✓	✓	14.06	✓	20.23	✓	20.23	✓	14.06	21.3	588	8.32	3	4.81	101	1400	MW-11-1
		✓	✓	✓	✓	✓	14.05	✓	20.23	✓	20.23	✓	14.05								

Comments: Port 3 - slow filler

EB-7-013118 @ 1415

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

WELL ID: MW-12  
 SAMPLING DATE(S): 01/30/18  
 LOCATION: JPL  
 WATER LEVEL INSIDE CASING: 139.75  
 ATM. PRESSURE (PSI): (Start) 14.17 (Finish) 14.18

PROBE TYPE: Westbay  
 SERIAL NO.: FMS 2502  
 PROJECT: JPL  
 OPERATOR(S): T. Hoane  
 WEATHER: Clear

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) mg/L	ORP (mv)	Sample Time	Sample ID
5	1	✓	✓	✓	✓	✓	198.06	✓	178.49	✓	178.49	✓	198.06	19.1	457	8.10	2	6.44	126	1115	MW-12-5
4	1	✓	✓	✓	✓	✓	149.11	✓	136.84	✓	136.84	✓	149.11	18.9	499	8.24	5	6.36	139	1140	MW-12-4
	2	✓	✓	✓	✓	✓	149.10	✓	136.82	✓	136.82	✓	149.10								
3	1	✓	✓	✓	✓	✓	101.11	✓	88.15	✓	88.15	✓	101.11	18.7	446	8.37	3	5.81	155	1230	MW-12-3
2	1	✓	✓	✓	✓	✓	66.11	✓	53.89	✓	53.89	✓	66.11	18.7	523	8.05	3	6.01	150	1305	MW-12-2
1	1	✓	✓	✓	✓	✓	21.07	✓	14.33	✓	14.33	✓	21.07	- ports Dry - No Sample Taken -							

Comments: ems/msd @ MW-12-4  
FB-6-013018 @ 1335

## WELL MONITORING DATA SHEET

Project #: <u>180122-HH1</u>	Site: <u>JPL</u>
Sampler: <u>HH</u>	Date: <u>02/01/18</u>
Well I.D.: <u>MW-13</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): <u>234.65</u>	Depth to Water (DTW): <u>225.23</u>
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]: <u>227.11</u>	

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 HH  
 Other: Recirculation

16PM @ 1029

(Gals.) X _____	=	Gals.
I 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 <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS/cm or <u>µS/cm</u> )	Turbidity (NTUs)	D.O. (mg/L)	ORP(mV)	Gals. Removed	DTW Observations
1032	70.9	7.35	669	160	5.75	129	3	225.75
1035	71.3	7.25	663	140	5.60	125	6	225.81
1038	71.5	7.22	661	131	5.58	123	9	225.83
1041	71.8	7.20	660	127	5.56	121	12	225.85
1044	71.9	7.21	659	126	5.53	119	15	225.86
1049	71.9	7.19	657	125	5.52	118	19	225.86

Did well dewater?      Yes      No      Gallons actually evacuated: 19

Sampling Date: 02/01/18      Sampling Time: 1050      Depth to Water: 225.86

Sample I.D.: MW-13      Laboratory: BC

Analyzed for: SecC.O.C      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): 01/24/18  
 LOCATION: JPL  
 WATER LEVEL INSIDE CASING: 193.24  
 ATM. PRESSURE (PSI): (Start) 14.19 (Finish) 14.20

PROBE TYPE: Westbay  
 SERIAL NO.: EM54700  
 PROJECT: JPL  
 OPERATOR(S): T. Horus  
 WEATHER: Clear

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)	ORP (mv)	Sample Time	Sample ID
5	1	✓	✓	✓	✓	✓	169.96	✓	159.07	✓	159.07	✓	169.96	2.7	339	7.75	2	6.05	169	1010	MW-14-5
4	1	✓	✓	✓	✓	✓	133.01	✓	123.61	✓	123.61	✓	133.01	19.6	679	7.85	3	5.81	177	1035	MW-14-4
3	1	✓	✓	✓	✓	✓	101.45	✓	90.51	✓	90.51	✓	101.45	20.0	1137	7.67	3	6.29	180	1100	MW-14-3
	2	✓	✓	✓	✓	✓	101.50	✓	90.52	✓	90.52	✓	101.50								
2	1	✓	✓	✓	✓	✓	56.12	✓	44.85	✓	44.85	✓	56.12	20.4	1194	7.54	3	6.33	131	1135	MW-14-2
1	1	✓	✓	✓	✓	✓	22.02	✓	14.53	✓	14.53	✓	22.02	20.3	1241	7.57	2	6.01	139	1215	MW-14-1
	2	✓	✓	✓	✓	✓	22.13	✓	14.52	✓	14.52	✓	22.13								

Comments: MS/MSD @ MW-14-3

## WELL MONITORING DATA SHEET

Project #: 180122-HH1	Site: JPI
Sampler: K+	Date: 2-1-10
Well I.D.: MW-15	Well Diameter: 2 3 (4) 6 8
Total Well Depth (TD): 74	Depth to Water (DTW): 36.32
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]: 36.32	

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

37.80

Other:

3 GPM

$$\frac{24.6 \text{ (Gals.)} \times 3 \text{ Specified Volumes}}{1 \text{ Case Volume}} = 73.8 \text{ Gals. Calculated Volume}$$

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

Time	Temp (°F)	pH	Cond. (mS/cm or μS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP(mV)	Gals. Removed	DTW Observations
1220	65.8	7.58	559	7	1.32	150	12.5	36.32
1224	65.9	7.50	563	5	1.21	143	25	36.32
1228	65.9	7.49	576	4	1.16	123	37.5	36.32
<del>1232</del> 1232	66.0	7.45	589	4	1.09	125	50	36.32
1234	66.1	7.45	593	4	1.11	122	62.5	36.32
1239	66.1	7.45	599	3	1.13	120	74	36.32

Did well dewater? Yes  No  Gallons actually evacuated: 74

Sampling Date: 2-1-10      Sampling Time: 1242      Depth to Water: 36.32

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

Analyzed for: SEE COC      Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable): DUP-7-10-10 @ 1252

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

## WELL MONITORING DATA SHEET

Project #: 180122-HH1	Site: JPL
Sampler: HH	Date: 02/01/18
Well I.D.: MW-16	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): 284.75	Depth to Water (DTW): 276.90
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]: 278.47	

Purge Method: Bailer      Disposable Bailer      Positive Air Displacement      Electric Submersible      ~~Water~~      ~~2" Rediflo pump~~      Extraction Pump      Other \_\_\_\_\_

Sampling Method: Bailer      Disposable Bailer      Extraction Port      Dedicated Tubing      Other: \_\_\_\_\_

16PM @ 1305

5.2 (Gals.) X 3 = 15.6 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 <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS/cm or <u>µS/cm</u> )	Turbidity (NTUs)	D.O. (mg/L)	ORP(mV)	Gals. Removed	PTW Observations
1308	77.6	7.49	731	131	6.11	113	3	277.15
1311	75.3	7.35	720	104	6.05	105	6	277.30
1314	74.9	7.33	716	92	5.73	102	9	277.36
1317	74.8	7.32	714	90	5.70	101	12	277.37
1319	74.8	7.32	711	88	5.65	99	14	277.39
1321	74.6	7.30	710	87	5.62	96	16	277.39

Did well dewater? Yes  No  Gallons actually evacuated: 16

Sampling Date: 02/01/18      Sampling Time: 1325      Depth to Water: 277.39

Sample I.D.: MW-16      Laboratory: BC

Analyzed for: See C.O.C      Other: \_\_\_\_\_

EB I.D. (if applicable): EB-8-02018 @ 1355      Duplicate I.D. (if applicable):

FB I.D. (if applicable): @      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-17  
 SAMPLING DATE(S): 01/25/18  
 LOCATION: JR2  
 WATER LEVEL INSIDE CASING: 209.26  
 ATM. PRESSURE (PSI): (Start) 14.19 (Finish) 14.22

PROBE TYPE: Westbay  
 SERIAL NO.: FMS 4760  
 PROJECT: JPL  
 OPERATOR(S): T. Hoary  
 WEATHER: Clear

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)	ORP (mv)	Sample Time	Sample ID
<del>4</del>	<del>1</del>	<del>✓</del>	<del>✓</del>	<del>✓</del>	<del>✓</del>	<del>✓</del>	<del>211.16</del>	<del>✓</del>	<del>215.20</del>	<del>✓</del>	<del>215.20</del>	<del>✓</del>	<del>211.16</del>							<del>0715</del>	<del>MW-17-4</del>
<del>4</del>	<del>2</del>	<del>✓</del>	<del>✓</del>	<del>✓</del>	<del>✓</del>	<del>✓</del>															
4	1	✓	✓	✓	✓	✓	178.62	✓	157.58	✓	157.68	✓	178.62	15.7	823	7.43	3	5.75	135	0745	MW-17-4
	2	✓	✓	✓	✓	✓	178.59	✓	157.45	✓	157.45	✓	178.59								
3	1	✓	✓	✓	✓	✓	129.37	✓	107.79	✓	107.79	✓	129.37	15.3	864	7.70	2	6.41	159	0900	MW-17-3
2	1	✓	✓	✓	✓	✓	86.61	✓	62.16	✓	62.16	✓	86.61	14.9	655	7.84	2	6.25	180	0930	MW-17-2

Comments: DVD-3-1818 @ MW-17-4 @ 0755

WESTBAY™ GROUNDWATER MONITORING WELL  
FIELD DATA LOG SHEET

WELL ID: MW-18  
 SAMPLING DATE(S): 6/25/18  
 LOCATION: JPL  
 WATER LEVEL INSIDE CASING: 244.91  
 ATM. PRESSURE (PSI): (Start) 14.16 (Finish) 14.18

PROBE TYPE: Westbay  
 SERIAL NO.: EMS 4700  
 PROJECT: JPL  
 OPERATOR(S): T. Hoang  
 WEATHER: Overcast

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) mg/L	ORP (mv)	Sample Time	Sample ID
5	1	✓	✓	✓	✓	✓	188.38	✓	183.68	✓	183.68	✓	188.38	17.8	288	8.66	3	4.83	-62	1240	MW-18-5
4	1	✓	✓	✓	✓	✓	136.18	✓	133.32	✓	133.32	✓	136.18	17.1	419	8.62	2	5.63	105	1305	MW-18-4
3	1	✓	✓	✓	✓	✓	75.16	✓	74.58	✓	74.58	✓	75.16	17.7	527	8.40	3	5.77	144	1335	MW-18-3
	2	✓	✓	✓	✓	✓	75.18	✓	74.84	✓	74.54	✓	75.18								
2	1	✓	✓	✓	✓	✓	34.24	✓	34.10	✓	34.10	✓	34.24	17.8	502	8.29	4	6.10	156	1415	MW-18-2

Comments: MS/MSP @ MW-18-3

FB-3-062518 @ 1430



WESTBAY™ GROUNDWATER MONITORING WELL  
FIELD DATA LOG SHEET

WELL ID: MW-19  
 SAMPLING DATE(S): 01/23/18 + 01/24/18  
 LOCATION: JPL  
 WATER LEVEL INSIDE CASING: 138.66  
 ATM. PRESSURE (PSI): (Start) 1409 (Finish) 1425

PROBE TYPE: Westbay  
 SERIAL NO.: EMS 2502  
 PROJECT: SPL  
 OPERATOR(S): T. Hoang  
 WEATHER: Clear

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)	ORP (mv)	Sample Time	Sample ID					
5	1	✓	✓	✓	✓	✓	171.94	✓	139.55	✓	139.58	✓	171.94	22.3	598	8.51	4	6.11	185	1250	MW-19-5					
4	1	✓	✓	✓	✓	✓	148.19	✓	116.24	✓	116.24	✓	148.19	21.9	650	8.38	3	5.75	201	1320	MW-19-4					
	2	✓	✓	✓	✓	✓	148.16	✓	116.23	✓	116.23	✓	148.16													
3	1	✓	✓	✓	✓	✓	124.81	✓	98.04	✓	98.04	✓	124.81	21.4	759	8.02	3	5.90	150	1420	MW-19-3					
2	1	✓	✓	✓	✓	✓	91.14	✓	65.01	✓	65.01	✓	91.14	21.5	1121	7.76	3	6.15	169	1320	<del>MW-20</del> MW-19-2					
1	1	✓	✓	✓	✓	✓	59.94	✓	33.78	✓	33.78	✓	59.94	20.4	616	8.26	2	6.39	173	1345	MW-19-1					

Comments: MS/MSP @ MW-19-4

EB-1-012318 @ 1438

EB-1-012318 @ 1435

WESTBAY™ GROUNDWATER MONITORING WELL  
FIELD DATA LOG SHEET

WELL ID: MW-20  
 SAMPLING DATE(S): 01/23/18  
 LOCATION: JPL  
 WATER LEVEL INSIDE CASING: 239.81  
 ATM. PRESSURE (PSI): (Start) 14.57 (Finish) 14.58

PROBE TYPE: Clus H<sub>2</sub>O  
 SERIAL NO.: FMS 25081  
 PROJECT: JPL  
 OPERATOR(S): T. Hoang  
 WEATHER: Clear

W<sup>at</sup> DTW-239.81

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				
			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) mg/L	ORP (mv)	Sample Time	Sample ID	
5	1	✓	✓	✓	✓	✓	306.04	✓	305.76	✓	305.76	✓	306.04	19.6	508	7.82	4	4.05	-96	0830	MW-20-5	
	2	✓	✓	✓	✓	✓	305.19	✓	305.77	✓	305.77	✓	305.19									
4	1	✓	✓	✓	✓	✓	219.12	✓	213.58	✓	213.58	✓	219.12	20.9	307	8.31	3	5.02	-107	0945	MW-20-4	
3	1	✓	✓	✓	✓	✓	158.93	✓	155.34	✓	155.34	✓	158.93	21.0	313	8.40	3	5.35	-57	1015	MW-20-3	
2	1	✓	✓	✓	✓	✓	85.04	✓	82.24	✓	82.24	✓	85.04	20.3	619	8.35	2	5.40	23	1050	MW-20-2	
1	1	✓	✓	✓	✓	✓	14.28	✓	14.27	✓	14.27	✓	14.28	port is dry - No Sample Taken								

Comments: pup-1-1Q18 @ MW-20-5 @ 0840

WESTBAY™ GROUNDWATER MONITORING WELL  
FIELD DATA LOG SHEET

WELL ID: MW-21  
 SAMPLING DATE(S): 01/29/18  
 LOCATION: JPL  
 WATER LEVEL INSIDE CASING: 116.07  
 ATM. PRESSURE (PSI): (Start) 14.22 (Finish) 14.24

PROBE TYPE: Westbay  
 SERIAL NO.: EMS 2502  
 PROJECT: JPL  
 OPERATOR(S): T. Hoang  
 WEATHER: Clear

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 (6 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)	ORP (mv)	Sample Time	Sample ID
5	1	✓	✓	✓	✓	✓	130.11	✓	106.1338	✓	133.80	✓	130.11	18.1	840	8.34	2	5.83	165	0845	MW-21-5
4	1	✓	✓	✓	✓	✓	103.58	✓	106.94	✓	106.94	✓	103.58	18.3	908	7.81	3	6.29	101	0815	MW-21-4
3	1	✓	✓	✓	✓	✓	73.38	✓	77.00	✓	77.00	✓	73.38	18.4	1225	7.99	2	6.04	136	0905	MW-21-3
2	1	✓	✓	✓	✓	✓	39.06	✓	42.70	✓	42.70	✓	39.06	18.5	1368	7.77	2	6.03	124	0930	MW-21-2
1	1	✓	✓	✓	✓	✓	14.17	✓	14.15	✓	14.15	✓	14.17	port is dry - no sample taken						<del>MW-21-1</del>	

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

WESTBAY™ GROUNDWATER MONITORING WELL  
FIELD DATA LOG SHEET

WELL ID: MW-22  
 SAMPLING DATE(S): 01/26/18  
 LOCATION: JPL  
 WATER LEVEL INSIDE CASING: 178.23  
 ATM. PRESSURE (PSI): (Start) 14.10 (Finish) 14.13

PROBE TYPE: Westbay  
 SERIAL NO.: EMS 2502  
 PROJECT: JPL  
 OPERATOR(S): J. Harris  
 WEATHER: Clear

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)	ORP (mv)	Sample Time	Sample ID
3	1	✓	✓	✓	✓	✓	105.21	✓	90.15	✓	90.15	✓	105.21	16.1	504	7.44	3	61.77	105	0730	MW-22-3
2	1	✓	✓	✓	✓	✓	79.11	✓	64.00	✓	64.00	✓	79.11	16.5	651	7.70	2	62.0	169	0830	MW-22-2
	2	✓	✓	✓	✓	✓	79.09	✓	63.99	✓	63.99	✓	79.09								
1	1	✓	✓	✓	✓	✓	42.01	✓	26.77	✓	26.77	✓	42.01	15.2	1233	7.67	2	5.75	196	0900	MW-22-1
	2	✓	✓	✓	✓	✓	41.96	✓	26.75	✓	26.75	✓	41.96								

Comments: MS/MSD @ MW-22-2

DP-4/18 @ MW-22-1 @ 0910

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

WELL ID: MW-23  
 SAMPLING DATE(S) 01/31/18  
 LOCATION: JPL  
 WATER LEVEL INSIDE CASING: 127.75  
 ATM. PRESSURE (PSI): (Start) 14.11 (Finish) 14.13

PROBE TYPE Westbay  
 SERIAL NO. EWS 2502  
 PROJECT: JPL  
 OPERATOR(S) T. Hoang  
 WEATHER Clear

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) mg/L	ORP (mv)	Sample Time	Sample ID		
4	1	✓	✓	✓	✓	✓	153.79	✓	138.73	✓	138.73	✓	153.79	19.0	374	7.07	3	5.72	110	0810	MW-23-4		
	2	✓	✓	✓	✓	✓	153.42	✓	138.70	✓	138.70	✓	153.42										
3	1	✓	✓	✓	✓	✓	99.25	✓	86.88	✓	86.88	✓	99.25	19.6	520	7.28	2	6.03	136	0905	MW-23-3		
2	1	✓	✓	✓	✓	✓	71.03	✓	58.64	✓	58.64	✓	71.03	20.2	1092	7.15	3	5.83	154	0935	MW-23-2		
1	1	✓	✓	✓	✓	✓	36.19	✓	24.69	✓	24.69	✓	36.19	21.7	1174	7.37	4	5.95	162	1005	MW-23-1		

Comments: PUP-5-1&18 @ MW-24-3 @ 0820

WESTBAY™ GROUNDWATER MONITORING WELL  
FIELD DATA LOG SHEET

WELL ID: MW-24  
 SAMPLING DATE(S): 01/26/18  
 LOCATION: JPL  
 WATER LEVEL INSIDE CASING: 219.65  
 ATM. PRESSURE (PSI): (Start) 14.10 (Finish) 14.12

PROBE TYPE: Westbay  
 SERIAL NO.: EMS2502  
 PROJECT: JPL  
 OPERATOR(S): L. Hering  
 WEATHER: Clear

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)	ORP (mv)	Sample Time	Sample ID
4	1	✓	✓	✓	✓	✓	165.06	✓	147.82	✓	147.82	✓	165.06	21.9	270	8.74	3	3.96	-99	1050	MW-24-4
	2	✓	✓	✓	✓	✓	165.03	✓	147.81	✓	147.81	✓	165.03								
3	1	✓	✓	✓	✓	✓	113.30	✓	97.41	✓	97.41	✓	113.30	20.7	356	8.35	2	4.35	-101	1145	MW-24-3
2	1	✓	✓	✓	✓	✓	86.34	✓	70.24	✓	70.24	✓	86.34	20.3	767	8.36	3	5.05	105	1220	MW-24-2
1	1	✓	✓	✓	✓	✓	45.62 <sup>m</sup> 46.17	✓	29.34	✓	29.34	✓	45.62	20.9	733	8.11	2	5.62	32	1250	MW-24-1
	2	✓	✓	✓	✓	✓	45.61	✓	29.34	✓	29.34	✓	45.61								

Comments: MS/MSD @ MW-24-4  
FB-4-012618 @ 1310

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

WELL ID: MW-25  
 SAMPLING DATE(S) 01/29/18  
 LOCATION: JR  
 WATER LEVEL INSIDE CASING: 244.98  
 ATM. PRESSURE (PSI): (Start) 14.25 (Finish) 14.27

PROBE TYPE Westbay  
 SERIAL NO. EM52802  
 PROJECT: JPI  
 OPERATOR(S) T. Hoang  
 WEATHER Clear

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 (p 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) mg/L	ORP (mv)	Sample Time	Sample ID
5	1	✓	✓	✓	✓	✓	222.24	✓	215.76	✓	215.76	✓	222.24	22.6	389	8.55	3	5.80	-91	1100	MW-25-5
4	1	✓	✓	✓	✓	✓	187.77	✓	181.79	✓	181.79	✓	187.77	22.8	706	8.44	2	6.03	103	1130	MW-25-4
	2	✓	✓	✓	✓	✓	187.73	✓	181.80	✓	181.80	✓	187.73								
3	1	✓	✓	✓	✓	✓	131.34	✓	126.01	✓	126.01	✓	131.34	22.9	764	8.35	2	6.49	159	1220	MW-25-3
2	1	✓	✓	✓	✓	✓	96.52	✓	91.28	✓	91.28	✓	96.52	23.7	701	8.25	2	6.55	165	1250	MW-25-2
1	1	✓	✓	✓	✓	✓	68.44	✓	62.86	✓	62.86	✓	68.44	22.9	896	8.23	3	6.75	173	1315	MW-25-1

Comments: MS/MSD@MW-25-4

EB-5-0129/18@1330      SB-2-0129/18@1340

WESTBAY™ GROUNDWATER MONITORING WELL  
FIELD DATA LOG SHEET

WELL ID: MW-26  
 SAMPLING DATE(S): 01/24/18  
 LOCATION: JPL  
 WATER LEVEL INSIDE CASING: 66.20  
 ATM. PRESSURE (PSI): (Start) 14.20 (Finish) 14.21

PROBE TYPE: Westbay  
 SERIAL NO.: EM5 4700  
 PROJECT: JPL  
 OPERATOR(S): J. Hoan  
 WEATHER: Clear

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)	ORP (mv)	Sample Time	Sample ID
2	1	✓	✓	✓	✓	✓	81.42	✓	56.26	✓	56.26	✓	81.42	20.4	789	8.33	2	5.73	131	1440	MW-26-2
	2	✓	✓	✓	✓	✓	81.44	✓	56.24	✓	56.24	✓	81.44								
1	1	✓	✓	✓	✓	✓	47.51	✓	21.53	✓	21.53	✓	47.51	20.5	843	8.00	4	6.05	124	1515	MW-26-1

Comments: PUP-2-10/18 @ MW-26-2 @ 1450

FB-2-0124/18 @ 1530