ATTACHMENT 4: FIELD LOGS

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 3rd Quarter 2015 sampling event was conducted by Blaine Tech Services, Inc.

Note: the uppermost sampling port (i.e., Screen 1) in multi-port monitoring wells MW-12, MW-14, MW-20 and MW-21 were dry and could not be sampled during the third quarter.

WELL MONITORING DATA SHEET

Project #: 150724-TK1	Site: JPL, Pasadena
Sampler: TK	Gauging Date: 8-6-15
Well I.D.: MW-5	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 140'	Depth to Water (DTW): 118.55
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]: 122.84	

Purge Method: 21.45
Disposable Bailer
Positive Air Displacement
Electric Submersible
Waterra
Del 2" Rediflo pump
Extraction Pump
Other_____

Sampling Method:
Disposable Bailer
Extraction Port
Dedicated Tubing
Other:_____

Flow Rate= 1gpm
Start Purge Date= 8-6-15 @ 1004 pump ~125'

13.94 (Gals.) X 3 = 41.83 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	radius² * 0.163

Time	Temp (°C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	DTW
1011	18.0	6.91	641	9	2.35	109.8	7	118.71
1018	18.0	6.95	668	8	2.47	109.4	14	118.72
1025	17.7	6.99	698	6	2.99	109.7	21	118.74
1032	17.7	7.01	738	4	3.88	112.7	28	118.74
1039	17.7	7.03	744	4	4.01	114.3	35	118.74
1046	17.7	7.01	750	4	4.04	112.9	42	118.74

Did well dewater? Yes (No) Gallons actually evacuated: 42

Sampling Date: 8-6-15 Sampling Time: 1047 Depth to Water: 118.74

Sample I.D.: MW-5 Laboratory: BC

Analyzed for: see COC Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable): DUP-5-3015 @ 1057

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

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 #: 150724-TF1	Site: JPL, Pasadena
Sampler: TF	Gauging Date: 8-6-15
Well I.D.: MW-6	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 245'	Depth to Water (DTW): 225.48
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type 451 556
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 229.38	

Purge Method: 19.52

Disposable Bailer
Positive Air Displacement
Electric Submersible
Waterra
Peri 2" Redi-flo pump
Extraction Pump
Other_____

Sampling Method:
Disposable Bailer
Extraction Port
Dedicated Tubing
Other:_____

Flow Rate= 1.5 gpm
Start Purge Date= 8-6-15 @ 1128 pump @ 230'

12.69 (Gals.) X 3 = 38.06 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	radius² * 0.163

Time	Temp (°C)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	DTW
1133	21.9	6.75	1174	51	7.40	146.3	7	225.79
1137	21.9	6.76	1179	35	7.40	150.6	13	225.86
1141	22.0	6.77	1184	22	7.31	154.1	20	225.88
1145	22.0	6.77	1186	14	7.20	154.6	26	225.88
1150	22.1	6.77	1186	14	7.21	155.2	33	225.88
1154	22.2	6.76	1188	14	7.24	156.0	39	225.88

Did well dewater? Yes (No) Gallons actually evacuated: 39

Sampling Date: 8-6-15 Sampling Time: 1155 Depth to Water: 225.88

Sample I.D.: MW-6 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

Level IV validation

WELL MONITORING DATA SHEET

Project #: 150724-T1C1	Site: JPL, Pasadena
Sampler: TS	Gauging Date: 8/06/15
Well I.D.: MW-7	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 275'	Depth to Water (DTW): 255.73
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:
- Disposable Bailer
- Positive Air Displacement
- Electric Submersible
- Waterra
- 2" Rediflo pump
- Extraction Pump
- Other ___

Sampling Method:
- (Disposable Bailer)
- Extraction Port
- Dedicated Tubing
- Other: ___

Flow Rate= ___

Start Purge Date= ___ Purge @ 265'

___ (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	radius² * 0.163

Time	Temp (°)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	DTW
—	Dedicated	pump	removed	per	client	request,		
	not	functioning						
—	Grab	sample	taken	w/	Disp.	bailer	per	client request
1320	25.9	6.95	742	454	5.22	63.1	—	

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

Sampling Date: 8/06/15 Sampling Time: 1320 Depth to Water: 255.73

Sample I.D.: MW-7 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

3 VOAs 1L NP poly
500 HNO3 500 NP poly DUP@8

WELL MONITORING DATA SHEET

Project #: 150824 - TK1	Site: JPL, Pasadena
Sampler: TS	Gauging Date: 8/06/14
Well I.D.: MW-8	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 205'	Depth to Water (DTW): 183.56
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]:	187.84

Purge Method:
- Disposable Bailer
- Positive Air Displacement
- Electric Submersible
- Waterra
- (2" Rediflo pump) dedicated
- Extraction Pump
- Other ___

Sampling Method:
- Disposable Bailer
- Extraction Port
- (Dedicated Tubing)
- Other: ___

Flow Rate= 1 GPM

Start Purge Date= 8/06/14 pump @ 195'

14 (Gals.) X 3 = 42 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	radius² * 0.163

Time	Temp (°C)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	DTW
0856	19.7	6.75	648	1	8.17	92.6	7	183.78
0903	19.8	6.74	667	1	8.03	94.4	14	183.78
0910	19.8	6.77	668	1	7.94	91.3	21	183.78
0917	19.8	6.79	677	1	7.87	87.9	28	183.78
0924	19.8	6.79	679	1	7.77	85.3	35	183.78
0931	19.8	6.79	681	1	7.74	83.7	42	183.78

Did well dewater? Yes (No) Gallons actually evacuated: 42

Sampling Date: 8/06/14 Sampling Time: 0935 Depth to Water: 183.78

Sample I.D.: MW-8 Laboratory: BC

Analyzed for: See COC Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable): DUP-6-3015 @ 0945 10 min

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 #: 150724-TK	Site: JPL, Pasadena
Sampler: TK	Gauging Date: 8-6-15
Well I.D.: MW-10	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 155'	Depth to Water (DTW): 132.92
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]: 137.34	

Purge Method:
22.08
Disposable Bailer
Positive Air Displacement
Electric Submersible
Waterra
Del 2" Rediflo pump
Extraction Pump
Other_____

Sampling Method:
Disposable Bailer
Extraction Port
Dedicated Tubing
Other:_____

Flow Rate= 1gpm

Start Purge Date= 8-6-15 @ 0855 Pump @ 140'

14.35 (Gals.) X 3 = 43.06 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	radius² * 0.163

Time	Temp (°C)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	DTW
0903	21.5	6.69	1235	3	7.77	124.2	8	133.11
0910	21.5	6.74	1239	2	7.82	138.7	15	133.11
0918	21.6	6.77	1241	1	7.78	139.6	23	133.12
0925	21.7	6.77	1240	1	7.78	141.2	30	133.12
0932	21.7	6.78	1242	1	7.82	143.6	37	133.12
0939	21.7	6.78	1242	1	7.85	145.2	44	133.12

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

Sampling Date: 8-6-15 Sampling Time: 0940 Depth to Water: 133.12

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

WELL MONITORING DATA SHEET

Project #: 150724-TF1	Site: JPL, Pasadena
Sampler: TF	Gauging Date: 8-6-15
Well I.D.: MW-13	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 234.52	Depth to Water (DTW): 226.90
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type ___
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method:
Disposable Bailer
Positive Air Displacement
Electric Submersible
Waterra
2" Rediflo pump
Extraction Pump
Other ___

Sampling Method:
(Disposable Bailer)
Extraction Port
Dedicated Tubing
Other: ___

Flow Rate= ___
Start Purge Date= —

— (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	radius² * 0.163

Time	Temp (°C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	DTW
—	Depth to water is below pump depth						—	
—	Insufficient water to use portable pump						—	
—	Sample collected w/ disp. Bailer						—	
0800	21.4	6.21	734.2	311	6.70	161	—	226.90

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

Sampling Date: 8-6-15 Sampling Time: 0800 Depth to Water: 226.90

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

Analyzed for: see COC Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable): DUP-7-3015@0810

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

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

500 HNO3
1L poly

WELL MONITORING DATA SHEET

Project #: 150724 – TK1	Site: JPL, Pasadena
Sampler: TS	Gauging Date: 8/06/15
Well I.D.: MW-15	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 74'	Depth to Water (DTW): 35.59
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]: 43.27	

38.41

Purge Method:
- Disposable Bailer
- Positive Air Displacement
- Electric Submersible
- Waterra
- 2" Rediflo pump dedicated
- Extraction Pump
- Other_____

Sampling Method:
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other:_____

Flow Rate= 2 LPM

Start Purge Date= 8/06/15 pump @ 59'

25 (Gals.) X 3 = 75 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	radius² * 0.163

Time	Temp (°C)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	DTW
0958	17.4	6.93	630	1	1.10	38.7	13	35.92
1005	17.4	6.97	629	1	1.05	29.8	26	35.95
1011	17.4	7.01	631	1	0.99	34.5	39	35.95
1018	17.4	7.02	631	1	0.95	38.7	52	35.95
1024	17.4	7.05	631	1	0.94	39.0	65	35.95
1031	17.4	7.09	631	1	0.93	45.1	78	35.95

Did well dewater? Yes (No) Gallons actually evacuated: 78

Sampling Date: 8/06/15 Sampling Time: 1035 Depth to Water: 35.95

Sample I.D.: MW-15 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

Level II Validation

3 VOCs Perchlorate 1 1L poly

WELL MONITORING DATA SHEET

Project #: 150124-TK1	Site: JPL, Pasadena
Sampler: TJ	Gauging Date: 8/06/15
Well I.D.: MW-16	Well Diameter: 2 3 (4) 6 8
Total Well Depth (TD): 284.55	Depth to Water (DTW): 278.23
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:
- Disposable Bailer
- Positive Air Displacement
- Electric Submersible
- Waterra
- 2" Rediflo pump
- Extraction Pump
- Other

Sampling Method:
- (Disposable Bailer)
- Extraction Port
- Dedicated Tubing
- Other:

Flow Rate=

Start Purge Date=

_____(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	radius² * 0.163

Time	Temp (°C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	DTW
-	Depth to	water	is	below	set	pump depth		
-	Insufficient	water to	purge	well	w/ pump			
-	Sample collected	w/	disp	bailer				
1100	28.1	7.42	753	103	4.79	615	—	

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

Sampling Date: 8/06/15 Sampling Time: 1100 Depth to Water: 278.23

Sample I.D.: MW-16 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-3
SAMPLING DATE(S) 8-5-15
LOCATION: JPL
WATER LEVEL INSIDE CASING: ~~182.54~~ (TD) 170.51
ATM. PRESSURE (PSI): (Start) 14.05 (Finish) 14.01
Temp °C : 27.39 22.24

PROBE TYPE Sampler 0-500 psi
SERIAL NO. EM 2502
PROJECT: JPL, Pasadena
OPERATOR(S) TC
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
4	1	✓	✓	✓	✓	✓	186.95	✓	186.65	✓	186.65	✓	186.95	24.4	543.2	7.93	35	7.72	106	1950	MW-3-4
3	1	✓	✓	✓	✓	✓	95.09	✓	95.02	✓	95.02	✓	95.09	24.1	534.4	8.11	19	7.76	90	1120	MW-3-3
2	1	✓	✓	✓	✓	✓	54.10	✓	54.36	✓	54.35	✓	54.10	23.9	567.7	8.23	3	7.32	89	1200	MW-3-2

Comments:
Sample 2-4

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-4
SAMPLING DATE(S): 8-3-15
LOCATION: JPL
WATER LEVEL INSIDE CASING: 136.16
ATM. PRESSURE (PSI): (Start) 14.05 (Finish) 14.02
Temp °C: 23.52 16.34

PROBE TYPE: Sampler 0-500 psi
SERIAL NO.: EM 2502
PROJECT: JPL, Pasadena
OPERATOR(S): TK
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
3	1	✓	✓	✓	✓	✓	98.78	✓	95.03	✓	94.94	✓	97.71	—	Pressure	is off.	Purge/sample.	Redox	—	0745	MW-4-3
	2	✓	✓	✓	✓	✓	97.40	✓	94.92	✓	94.92	✓	97.39	19.8	744.8	6.60	4⅓	6.12	163	0750	
2	1	✓	✓	✓	✓	✓	61.38	✓	59.35	✓	59.35	✓	61.38	19.2	1215	7.20	5	7.78	150	0830	MW-4-2
1	1	✓	✓	✓	✓	✓	22.46	✓	22.98	✓	22.98	✓	22.46	18.5	787.7	7.50	2	8.54	134	0900	MW-4-1
	2	✓	✓	✓	✓	✓	19.41	✓	22.98	✓	22.98	✓	19.43								

Comments: TB-6-080315 @ 0615
EB-6-080315 @ 0630

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-11
SAMPLING DATE(S): 8-5-15
LOCATION: JPL
WATER LEVEL INSIDE CASING: ~~170.51~~ (TD) 182.5
ATM. PRESSURE (PSI): (Start) 14.02 (Finish) 14.02
Temp °C: 24.12 19.82

PROBE TYPE: Sampler 0-500 psi
SERIAL NO.: EM2502
PROJECT: JPL, Pasadena
OPERATOR(S): TF
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
4	1	✓	✓	✓	✓	✓	165.71	✓	163.76	✓	163.76	✓	165.72	18.7	279.4	7.41	2	11.49	-2	0645	MW-11-4
	2	✓	✓	✓	✓	✓	164.27	✓	163.77	✓	163.76	✓	164.27								
3	1	✓	✓	✓	✓	✓	124.81	✓	119.70	✓	119.70	✓	124.81	19.6	403.9	7.52	16	~~40~~ 7.87	100	0740	MW-11-3
2	1	✓	✓	✓	✓	✓	51.55	✓	48.75	✓	48.75	✓	51.55	19.6	468.2	7.86	3	8.18	52	0820	MW-11-2
1	1	✓	✓	✓	✓	✓	14.09	✓	24.48	✓	24.48	✓	14.10	20.9	539.6	8.09	4	7.77	66	0900	MW-11-1
	2	✓	✓	✓	✓	✓	14.10	✓	24.50	✓	24.50	✓	14.10								

Comments: TB-8-080515 @ 0550
EB-8-080515 @ 0610
SB-2-080515 @ 0600
Sample 1-4 ~~Lowered on~~ (TD)
Level IV validation @ Port 4
MS MSD @ Port 4

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-12
SAMPLING DATE(S) 8-3-15
LOCATION: JPL
WATER LEVEL INSIDE CASING: 151.49
ATM. PRESSURE (PSI): (Start) 14.01 (Finish) 14.03
Temp °C: 21.55 21.21

PROBE TYPE Sampler 0-500psi
SERIAL NO. EM2502
PROJECT: JPL Pasadena
OPERATOR(S) TC
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
5	1	✓	✓	✓	✓	✓	190.56	✓	176.69	✓	176.69	✓	190.56	20.4	465.0	8.04	3	9.18	104	1050	MW-12-5
4	1	✓	✓	✓	✓	✓	141.76	✓	135.03	✓	135.02	✓	141.76	20.8	492.1	8.09	2	5.34	44	1125	MW-12-4
3	1	✓	✓	✓	✓	✓	92.96	✓	86.75	✓	86.74	✓	92.96	20.6	391.9	8.28	5	10.98	102	1155	MW-12-3
2	1	✓	✓	✓	✓	✓	58.53	✓	52.65	✓	52.66	✓	58.53	21.2	542.8	8.08	5	7.22	14	1230	MW-12-2
1	1	✓	✓	✓	✓	✓	14.06	✓	14.02	✓	14.02	✓	14.06	— Port 3 Dry. No sample taken —							

Comments: Level IV @ port 4

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-14
SAMPLING DATE(S): 8-4-15
LOCATION: JPL
WATER LEVEL INSIDE CASING: 188.75
ATM. PRESSURE (PSI): (Start) 13.99 (Finish) 14.06
Temp °C: 22.68 21.39

PROBE TYPE: Sampler 0-5000 psi
SERIAL NO.: EM2502
PROJECT: JPL Pasadena
OPERATOR(S): TK
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
5	1	✓	✓	✓	✓	✓	170.98	✓	157.60	✓	157.62	✓	170.98	19.9	337.9	6.83	5	10.13	348	0720	MW-14-5
4	1	✓	✓	✓	✓	✓	133.80	✓	121.28	✓	121.28	✓	133.80	20.4	723.1	7.19	2	7.89	173	0800	MW-14-4
3	1	✓	✓	✓	✓	✓	102.55	✓	89.19	✓	89.19	✓	102.55	20.9	1151	7.45	3	7.56	172	0840	MW-14-3
2	1	✓	✓	✓	✓	✓	56.72	✓	43.61	✓	43.62	✓	56.74	22.3	1246	7.49	4	9.06	149	0920	MW-14-2
~~1~~	2	✓	✓	✓	✓	✓	56.71	✓	43.61	✓	43.61	✓	56.72								
~~1~~	1	✓	✓	✓	✓	✓	53.69	✓	43.62	✓	43.62	✓	53.69								
1	1	✓	✓	✓	✓	✓	23.63	✓	14.08	✓	14.03	✓	23.63	— Port 3 Dry. No sample taken						—	—

Comments: TB-7-0804-15 @ 0620
EB-7-0804-15 @ 0640
Sample 5-1
DUP-4-~~080115~~ @ 0930 @ Port 2
Level IV validation @ Port 4
Port Pressure @ Port 1 wouldn't return to original ~~Port 3~~ Port 3 Dr

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-17
SAMPLING DATE(S): 7-29-15
LOCATION: JPL
WATER LEVEL INSIDE CASING: 207.41
ATM. PRESSURE (PSI): (Start) 14.01 (Finish) 14.07
Temp °C: 23.93 27.59

PROBE TYPE: Sampler 0-500 psi
SERIAL NO.: EM2502
PROJECT: JPL, Pasadena
OPERATOR(S): TK
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
4	1	✓	✓	✓	✓	✓	178.86	✓	149.92	✓	149.92	✓	178.86	19.3	365.8	6.96	3	~~87.7~~ (TH)	191	0800	~~TB~~ MW-17-
	2	✓	✓	✓	✓	✓	178.86	✓	149.92	✓	149.92	✓	178.86					6.02			
	3	✓	✓	✓	✓	✓	178.86	✓	149.91	✓	149.91	✓	178.86					7.17			
3	1	✓	✓	✓	✓	✓	129.37	✓	102.29	✓	102.29	✓	129.37	22.3	884.6	7.16	5	~~10.7~~ (TH)	179	0945	MW-17-3
2	1	✓	✓	✓	✓	✓	86.80	✓	63.63	✓	63.63	✓	86.80	22.2	832.1	7.50	3	~~5.81~~ (TH)	162	1020	MW-17-2

Comments: EB-3-072915 @ 0615
TB-3-072915 @ 0630
DUP-3-3Q15 @ 0815 @ port 4

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-18
SAMPLING DATE(S) 7-29-15
LOCATION: TPL
WATER LEVEL INSIDE CASING: 294.24
ATM. PRESSURE (PSI): (Start) 14.05 (Finish) 14.01
Temp °C: 28.10 28.16

PROBE TYPE Sampler 0-500 psi
SERIAL NO. EM2502
PROJECT: TPL Pasadena
OPERATOR(S) TK
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	✓	✓	✓	✓	✓	186.84	✓	180.68	✓	180.68	✓	186.84	22.8	313.1	8.37	4	6.42	106	1140	MW-18-5
4	1	✓	✓	✓	✓	✓	135.55	✓	128.57	✓	128.57	✓	135.55	23.0	393.3	7.89	4	6.63	79	1215	MW-18-4
3	1	✓	✓	✓	✓	✓	74.54	✓	72.77	✓	72.77	✓	74.54	23.6	519.6	7.81	4	5.19	30	1245	MW-18-3
2	1	✓	✓	✓	✓	✓	34.03	✓	32.35	✓	32.35	✓	34.03	24.3	470.0	7.93	3	5.55	75	1320	MW-18-2
1	1	✓	✓	✓	✓	✓	14.20	✓	14.28	✓	14.28	✓	14.20	— Port is Dry. No Sample taken							

Comments:

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-19
SAMPLING DATE(S) 7-28-15
LOCATION: JPL
WATER LEVEL INSIDE CASING: 136.75
ATM. PRESSURE (PSI): (Start) 14.07 (Finish) 14.01
Temp°C 28.82 20.97

PROBE TYPE Sampler 0-500psi
SERIAL NO. EM2502
PROJECT: JPL, Pasadena
OPERATOR(S) TK
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	Samp
5	1	✓	✓	✓	✓	✓	171.97	✓	138.41	✓	138.43	✓	171.97	26.6	608.9	8.09	1	4.25	78	1155	MW-19-5
4	1	✓	✓	✓	✓	✓	148.61	✓	115.04	✓	115.04	✓	148.49	28.3	593.8	8.49	1	6.98	73	1240	MW-19-4
	2	✓	✓	✓	✓	✓	148.47	✓	115.02	✓	115.02	✓	148.47								
3	1	✓	✓	✓	✓	✓	125.87	✓	96.45	✓	96.45	✓	125.87	23.4	746.4	8.48	3	6.28	73	1330	MW-19-3
2	1	✓	✓	✓	✓	✓	91.98	✓	62.36	✓	62.36	✓	91.98	23.3	1108	8.16	7	5.22	68	1400	MW-19-2
1	1	✓	✓	✓	✓	✓	60.87	✓	31.82	✓	31.82	✓	60.87	25.9	669.3	8.71	8	4.60	85	1440	MW-19-1

Comments: Level IV Validation @ Port 1 (MW-19-1)
(1) ~~Dup-2-012015~~ @ Port 4 @ 1300
Dup-2-3015

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-20
SAMPLING DATE(S): 7.27.15
LOCATION: JPL
WATER LEVEL INSIDE CASING: 194.33
ATM. PRESSURE (PSI): (Start) 14.06 (Finish)
Temp °C 22.99

PROBE TYPE: Sampler 0-500psi
SERIAL NO.: EM5202
PROJECT: JPL, Pasadena
OPERATOR(S): TK
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
5	1	✓	✓	✓	✓	✓	322.21	✓	304.87	✓	304.87	✓	322.11	25.8	303.9	6.18	18	6.43	79	1030	MW-20-5
4	1	✓	✓	✓	✓	✓	235.12	✓	213.56	✓	213.51	✓	235.17	24.8	324.0	7.72	4	4.12	-48	1120	MW-20-4
3	1	✓	✓	✓	✓	✓	175.35	✓	149.46	✓	149.53	✓	175.34	25.0	346.5	7.95	5	3.67	-65	1210	MW-20-3
	2	✓	✓	✓	✓	✓	175.33	✓	150.14	✓	150.27	✓	175.35								
2	1	✓	✓	✓	✓	✓	101.57	✓	80.18	✓	80.21	✓	101.55	26.5	495.9	7.29	2	4.53	67	1320	MW-20-2
1	1	✓	✓	✓	✓	✓	31.11	✓	14.21	✓	14.21	✓	31.11	Port is Dry. No Sample collected							

Comments: TB-1-7/27/15 @0800 EB-1-7/27/15 @0830 DUP@ MW-20-3 All analys. DUP-1-3915 @ Port 3 @ 1250

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-21
SAMPLING DATE(S): 8-4-15
LOCATION: JPL
WATER LEVEL INSIDE CASING: 119.68
ATM. PRESSURE (PSI): (Start) 14.11 (Finish) 14.07
Temp°C: 31.86 25.24

PROBE TYPE: Sampler 0-500psi
SERIAL NO.: EM2502
PROJECT: JPL, Pasadena
OPERATOR(S): TK
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
5	1	✓	✓	✓	✓	✓	128.38	✓	132.20	✓	132.21	✓	128.39	25.0	837.9	7.97	2	8.23	143	1145	MW-21-5
4	1	✓	✓	✓	✓	✓	101.84	✓	105.33	✓	105.34	✓	101.84	25.7	815.8	7.53	6	11.71	146	1220	MW-21-4
3	1	✓	✓	✓	✓	✓	71.76	✓	75.50	✓	75.51	✓	71.76	25.5	1191	7.61	2	6.75	144	1250	MW-21-3
2	1	✓	✓	✓	✓	✓	37.27	✓	41.31	✓	41.31	✓	37.29	27.6	1405	7.46	2	8.55	130	1330	MW-21-2
	2	✓	✓	✓	✓	✓	37.24	✓	41.32	✓	41.32	✓	37.27								
1	1	✓	✓	✓	✓	✓	14.09	✓	14.06	✓	14.06	✓	14.09	—	Port is Dry. No sample taken					—	—

Comments: MS/MSD @ Port 2 Level IV validation @ Port 3

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-22
SAMPLING DATE(S): 7-30-15
LOCATION: SPL
WATER LEVEL INSIDE CASING: 164.70
ATM. PRESSURE (PSI): (Start) 14.06 (Finish) 14.08
Temp°C 26.75 21.64

PROBE TYPE: Sampler 0-500 psi
SERIAL NO.: EM2502
PROJECT: SPL Pasadena
OPERATOR(S): TF
WEATHER: Partly cloudy

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
3	1	✓	✓	✓	✓	✓	113.79	✓	88.62	✓	88.61	✓	113.79	22.0	477.3	6.59	2	9.46	165	0740	MW-22-3
	2	✓	✓	✓	✓	✓	113.78	✓	88.62	✓	88.62	✓	113.78								
2	1	✓	✓	✓	✓	✓	87.67	✓	62.46	✓	62.46	✓	87.67	21.6	634.1	7.51	2	6.82	135	0845	MW-22-2
(2)	2	✓	✓	✓	✓	✓	87.67	✓	62.45	✓	62.45	✓	87.67								
1	1	✓	✓	✓	✓	✓	50.91	✓	26.05	✓	26.05	✓	50.91	22.1	1198	7.51	9	6.42	132	0920	MW-22-1
	2	✓	✓	✓	✓	✓	50.89	✓	26.01	✓	26.01	✓	50.89								

Comments: TB-4-073015 @ 0600 MS/MSD @ port 3
EB-4-073015 @ 0640
Sample ports 1-3

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-23
SAMPLING DATE(S): 7-31
LOCATION: JPL
WATER LEVEL INSIDE CASING: 110.07
ATM. PRESSURE (PSI): (Start) 14.05 (Finish) 14.09
Temp °C: 25.99 25.37

PROBE TYPE: Sampler 0-500psi
SERIAL NO.: EM2502
PROJECT: JPL, Pasadena
OPERATOR(S): TK
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)	ORP (mV)	Sample Time	Sample
4	1	✓	✓	✓	✓	✓	161.28	✓	137.80	✓	137.80	✓	161.28	20.7	356.1	6.27	2	5.60	111	0700	MW-23-4
	2	✓	✓	✓	✓	✓	161.27	✓	137.81	✓	137.80	✓	161.27								
3	1	✓	✓	✓	✓	✓	106.64	✓	85.90	✓	85.90	✓	106.64	20.8	547.1	7.10	2	12.71	128	0735	MW-23-3
	2	✓	✓	✓	✓	✓	106.62	✓	85.92	✓	85.91	✓	106.63								
2	1	✓	✓	✓	✓	✓	78.64	✓	57.70	✓	57.70	✓	78.64	21.1	1165	7.40	2	6.46	133	0800	MW-23-2
	2	✓	✓	✓	✓	✓	78.61	✓	57.73	✓	57.72	✓	78.61								
	3	✓	✓	✓	✓	✓	78.63	✓	57.71	✓	57.71	✓	78.62								
1	1	✓	✓	✓	✓	✓	43.83	✓	23.92	✓	23.92	✓	43.85							0905	MW-23-1
		✓	✓	✓	✓	✓	43.81	✓	23.90	✓	23.90	✓	43.82	22.7	1247	6.98	2	8.70	97		

Comments: TB-5-073115 @ 0610 MS/MSD @ Port 2
EB-5-073115 @ 0630

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-24
SAMPLING DATE(S) 7
LOCATION: SPL
WATER LEVEL INSIDE CASING: 207.08
ATM. PRESSURE (PSI): (Start) 14.00 (Finish) 14.08
Temp °C: 24.40 26.97

PROBE TYPE Sampler 0-500psi
SERIAL NO. SM2502
PROJECT: JPL, Pasadena
OPERATOR(S) TK
WEATHER Partly cloudy

Port Number	Run Number	Probe to Top Collar: Arm out / Land Probe	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port): Shoe Out/ Close Valve/ Check Vacuum	Open Valve/ Apply Vacuum (5 psi)	Close Valve/ Shoe In/ Arm In	Locate Port/ Arm Out/ Land Probe	Sample Collection Checks (probe at sampling port in MP casing): Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve/ Shoe In	Pressure in MP Casing (psi)	Field Parameters: Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	ORP (mV)	Sample: Sample Time	Sample
4	1	✓	✓	✓	✓	✓	166.24	✓	144.09	✓	144.09	✓	166.24	24.5	227.9	9.29	3	6.44	-62	1040	MW-24-4
	2	✓	✓	✓	✓	✓	166.23	✓	144.10	✓	144.10	✓	166.24								
3	1	✓	✓	✓	✓	✓	114.63	✓	95.09	✓	95.09	✓	114.64	24.7	358.4	8.27	3	5.98	-76	1115	MW-24-3
	2	✓	✓	✓	✓	✓	114.64	✓	95.11	✓	95.11	✓	114.63								
2	1	✓	✓	✓	✓	✓	87.84	✓	68.33	✓	68.33	✓	87.84	25.3	570.4	7.67	2	5.62	68	1150	MW-24-2
	2	✓	✓	✓	✓	✓	87.83	✓	68.31	✓	68.31	✓	87.83								
	3	✓	✓	✓	✓	✓	87.67	✓	68.32	✓	68.32	✓	87.68								
1	1	✓	✓	✓	✓	✓	47.01	✓	29.09	✓	29.09	✓	47.01	25.6	778.9	7.20	1	6.57	118	1250	MW-24-1
	2	✓	✓	✓	✓	✓	47.03	✓	29.07	✓	29.07	✓	47.02								

Comments: MSMSD @ port 2

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-25
SAMPLING DATE(S): 7-28-15
LOCATION: JPL
WATER LEVEL INSIDE CASING: 261.50
ATM. PRESSURE (PSI): (Start) 14.09 (Finish) 14.11
Temp°C: 23.80 29.42

PROBE TYPE ~~EM25~~ Sampler 0-500psi
SERIAL NO. EM2502
PROJECT: JPL, Pasadena
OPERATOR(S) TC
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)	ORP (mV)	Sample Time	Sample
5	1	✓	✓	✓	✓	✓	214.24	✓	213.96	✓	213.95	✓	214.25	20.6	418.0	5.78	3	5.53	-38	0725	MW-25-5
4	1	✓	✓	✓	✓	✓	179.66	✓	180.74	✓	180.74	✓	179.66	20.6	864.2	6.38	6	9.32	103	0810	MW-25-4
	2	✓	✓	✓	✓	✓	179.64	✓	180.73	✓	180.73	✓	179.65	~~21.3~~		~~4.51~~	~~3~~	~~7.01~~			(TC)
3	1	✓	✓	✓	✓	✓	123.26	✓	126.[illegible]	✓	126.29	✓	123.24	21.3	719.2	7.51	3	7.01	91	0915	MW-25-3
2	1	✓	✓	✓	✓	✓	88.43	✓	92.84	✓	92.84	✓	88.45	21.6	783.4	7.91	2	9.54	76	0950	MW-25-2
1	1	✓	✓	✓	✓	✓	60.10	✓	65.33	✓	65.32	✓	60.11	22.3	900.5	7.88	6	9.20	77	1020	MW-25-1

Comments: MS/MSD @ Port 4 EB-2-072815 @ 0630
TB-2-072815 @ 0610

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-26
SAMPLING DATE(S): 7-31-15
LOCATION: JPL
WATER LEVEL INSIDE CASING: 65.95
ATM. PRESSURE (PSI): (Start) 14.09 (Finish) 14.11
Temp °C: 27.81 23.41

PROBE TYPE: Sampler 0-500psi
SERIAL NO.: EM2502
PROJECT: JPL, Pasadena
OPERATOR(S): TK
WEATHER: 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)	ORP (mV)	Sample Time	Sample
2	1	✓	✓	✓	✓	✓	[illegible]	✓	54.91	✓	54.91	✓	80.58	24.0	679.6	7.99	11	5.44	126	1058	MW-26-2
	2	✓	✓	✓	✓	✓	80.54	✓	54.89	✓	54.88	✓	80.54								
1	1	✓	✓	✓	✓	✓	47.53	✓	20.10	✓	20.09	✓	47.53	24.2	856.8	7.18	95	7.55	44	1200	MW-26-1
	2	✓	✓	✓	✓	✓	47.51	✓	20.08	✓	20.08	✓	47.52								
	3	✓	✓	✓	✓	✓	45.44	✓	20.08	✓	20.08	✓	45.49								

Comments: MS/MSD @ Port 1