Appendix D

Field Documentation

Pre-Sampling Water Levels, Sampling Logs, Calibration Logs, and Tailgate Safety Meeting Forms

Pre-Sampling Water Levels

WELL GAUGING DATA

Project # 240308-HH1 Date 03/09/24 Client Tidewater

Site JPL Pasadena CA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-5	0925	4					64.91	135.48		
MW-6	1105	4					204.75	237.52		
MW-7	0746	4					221.71	275.48		
MW-8	0815	4					144.16	202.25		
MW-9	1255	4					18.60	66.82		
MW-10	0919	4					95.51	153.94		
MW-13	0805	4					196.50	238.31		
MW-15	1054	4					29.60	74.73		
MW-16	0800	4					247.77	289.61	↓	

WESTBAY™ GROUNDWATER MONITORING WELL
WATER LEVEL MEASUREMENT LOG SHEET

WELL ID: MW-3
DATE: 03/08/24
LOCATION: JPL
ELEV. TOP OF WASTBAY CASING
WEATHER: Clear
PTW - 183.51'

PROBE TYPE Westbay
SERIAL NO. EMS2502
PROJECT JPL
OPERATOR(S) T. Hoang
ATM. PRESSURE (Patm): (start) 14.19 (finish) 14.20
24.90°C 20.08°C

Port No.	Depth to Meas. Port Valve (ft)		Pressure Readings (psi)				Pressure Head Outside Port (ft) P(ft)=(P2-Patm)*2.307 ft/psi)	Depth to Water Outside Port (ft) DTW = Dp-P(ft)	True Port Depth (Dp) (ft)	Time
	From Log (Dp)	From Cable	psi Inside Casing	kg/cm² Outside Casing P2	mH²O Inside Casing	Trans. Temp. (oC)				
5	653	651	218.93	243.20	218.93	23.49				1232
4	558	556	177.72	202.31	177.72	23.09				1234
3	346	345	85.54	110.60	85.54	21.76				1236
2	252	251	44.71	69.88	44.71	20.98				1238
1	172	171	14.29	43.52	14.29	20.20				1240

Comments: Gulf of detect is 2' above sample Port

WESTBAY™ GROUNDWATER MONITORING WELL
WATER LEVEL MEASUREMENT LOG SHEET

WELL ID: MW-4
DATE: 03/08/24
LOCATION: JPC
ELEV. TOP OF WASTBAY CASING
WEATHER: Clear

PROBE TYPE
SERIAL NO. FMS2502
PROJECT JPC
OPERATOR(S) T. Hall
ATM. PRESSURE (Patm): (start) 14.22 (finish) 14.21

DTW - 171.11

20.54°C 19.35°C

Port No.	Depth to Meas. Port Valve (ft)		Pressure Readings (psi)				Pressure Head Outside Port (ft) P(ft)=(P2-Patm)*2.307 ft/psi)	Depth to Water Outside Port (ft) DTW = Dp-P(ft)	True Port Depth (Dp) (ft)	Time
	From Log (Dp)	From Cable	psi Inside Casing	kg/cm² Outside Casing P2	mH²O Inside Casing	Trans. Temp. (oC)				
5	513	511	163.45	190.64	163.45	20.93				1018
4	392	389	110.52	138.40	110.52	21.22				1020
3	322	319	80.42	108.41	80.42	21.22				1022
2	240	237	44.69	74.24	44.69	21.05				1024
1	150	147	14.31	46.65	14.31	20.07				1026

Comments: Collar defect is 2' above sample port

WESTBAY™ GROUNDWATER MONITORING WELL
WATER LEVEL MEASUREMENT LOG SHEET

WELL ID: MW-11
DATE: 03/08/24
LOCATION: JPL
ELEV. TOP OF WASTBAY CASING
WEATHER: Clear

PROBE TYPE
SERIAL NO. EMS 2502
PROJECT JPL
OPERATOR(S) T. Hoang
ATM. PRESSURE (Patm): (start) 14.19 (finish) 14.20

DTW - 158.79'

20.17°C 19.62

Port No.	Depth to Meas. Port Valve (ft)		Pressure Readings (psi)				Pressure Head Outside Port (ft) P(ft)=(P2-Patm)*2.307 ft/psi)	Depth to Water Outside Port (ft) DTW = Dp-P(ft)	True Port Depth (Dp) (ft)	Time
	From Log (Dp)	From Cable	psi Inside Casing	kg/cm² Outside Casing 20.94 P2	mH²O Inside Casing	Trans. Temp. (oC)				
5	639	635	221.95	~~202.16~~	221.95	21.00				0949
4	524	521	172.44	170.75	172.44	21.23				0951
3	429	425	131.49	130.59	131.49	21.11				0953
2	259	256	57.93	61.97	57.93	20.50				0955
1	149	146	14.28	28.13	14.28	19.90				0957

Comments: Collar detect is 6" above sample Port

WESTBAY™ GROUNDWATER MONITORING WELL
WATER LEVEL MEASUREMENT LOG SHEET

WELL ID: MW-12
DATE: 05/08/24
LOCATION: JPL
ELEV. TOP OF WASTBAY CASING
WEATHER: Clear
DTW-141.58'

PROBE TYPE
SERIAL NO. EMS 2502
PROJECT JPL
OPERATOR(S) L. Horng
ATM. PRESSURE (Patm): (start) 14.20 (finish) 14.18
18.39°C 17.77°C

Port No.	Depth to Meas. Port Valve (ft)		Pressure Readings (psi)				Pressure Head Outside Port (ft) P(ft)=(P2-Patm)*2.307 ft/psi)	Depth to Water Outside Port (ft) DTW = Dp-P(ft)	True Port Depth (Dp) (ft)	Time
	From Log (Dp)	From Cable	psi Inside Casing	kg/cm² Outside Casing P2	mH²O Inside Casing	Trans. Temp. (oC)				
5	548	546	191.74	178.90	191.74	17.51				1039
4	436	434	142.90	146.40	142.90	18.37				1041
3	323	321	93.85	101.06	93.85	18.54				1043
2	243	242	59.05	67.98	59.05	18.43				1045
1	140	139	14.27	35.30	14.27	18.18				1047

Comments: Collar detect is 6" above sample Port

WESTBAY™ GROUNDWATER MONITORING WELL
WATER LEVEL MEASUREMENT LOG SHEET

WELL ID: MW-14
DATE: 03/08/24
LOCATION: JPL
ELEV. TOP OF WASTBAY CASING
WEATHER: Clear

PROBE TYPE Westbay
SERIAL NO. EMS2502
PROJECT JPL
OPERATOR(S) T. Hoang
ATM. PRESSURE (Patm): (start) 14.17 (finish) 14.18

DTW - 20.51'
24.14°C 21.90°C

Port No.	Depth to Meas. Port Valve (ft)		Pressure Readings (psi)				Pressure Head Outside Port (ft) P(ft)=(P2-Patm)*2.307 ft/psi)	Depth to Water Outside Port (ft) DTW = Dp-P(ft)	True Port Depth (Dp) (ft)	Time
	From Log (Dp)	From Cable	psi Inside Casing	kg/cm² Outside Casing P2	mH²O Inside Casing	Trans. Temp. (oC)				
5	540	537	162.22	166.75	162.22	23.20				1126
4	456	454	125.74	130.47	125.74	22.79				1128
3	382	380	93.49	98.39	93.49	22.42				1130
2	277	275	47.82	52.64	47.82	21.96				1132
1	207	205	17.25	21.48	17.25	21.56				1134

Comments: Collar detect is 6" above Sample Port

WESTBAY™ GROUNDWATER MONITORING WELL
WATER LEVEL MEASUREMENT LOG SHEET

WELL ID: MW-17
DATE: 03/15/24
LOCATION: JPL
ELEV. TOP OF WASTBAY CASING
WEATHER: Clear
DTW-212.87

PROBE TYPE WesHov
SERIAL NO. DMS 2508
PROJECT JPL
OPERATOR(S) T. Hoang
ATM. PRESSURE (Patm): (start) 14.08 (finish) 14.11

Port No.	Depth to Meas. Port Valve (ft)		Pressure Readings (psi)				Pressure Head Outside Port (ft) P(ft)=(P2-Patm)*2.307 ft/psi)	Depth to Water Outside Port (ft) DTW = Dp-P(ft)	True Port Depth (Dp) (ft)	Time
	From Log (Dp)	From Cable	psi Inside Casing	kg/cm^2 Outside Casing P2	mH^{2}O Inside Casing	Trans. Temp. (oC)				
5	726	726	237.32	210.42	237.32	18.32				0735
4	582	582	174.96	151.08	174.96	19.07				0737
3	468	468	125.46	117.52	125.46	18.45				0739
2	370	370	82.87	81.34	82.87	17.44				0741
1	250	250	30.72	40.93	30.72	16.40				0743

Comments: Collar detect is 6" above sample Port

WESTBAY™ GROUNDWATER MONITORING WELL
WATER LEVEL MEASUREMENT LOG SHEET

WELL ID: MW-18
DATE: 03/08/24
LOCATION: JPL
ELEV. TOP OF WASTBAY CASING
WEATHER: Clear

PROBE TYPE Westbay
SERIAL NO. EMS 2502
PROJECT JPL
OPERATOR(S) T. Haan
ATM. PRESSURE (Patm): (start) 14.05 (finish) 14.06

PTW - 296.29'
23.20 C
20.30 C

Port No.	Depth to Meas. Port Valve (ft)		Pressure Readings (psi)				Pressure Head Outside Port (ft) P(ft)=(P2-Patm)*2.307 ft/psi)	Depth to Water Outside Port (ft) DTW = Dp-P(ft)	True Port Depth (Dp) (ft)	Time
	From Log (Dp)	From Cable	psi Inside Casing	kg/cm² Outside Casing P2	mH²O Inside Casing	Trans. Temp. (oC)				
5	684	684	183.27	182.54	183.27	22.87				1316
4	564	560	131.18	136.01	131.18	22.40				1318
3	424	420	70.27	86.85	70.27	21.62				1321
2	330	326	29.41	46.27	29.41	20.82				1322
1	270	266	14.27	19.74	14.27	20.25				1324

Comments: Collar detect is 6" above sample Port

WESTBAY™ GROUNDWATER MONITORING WELL
WATER LEVEL MEASUREMENT LOG SHEET

WELL ID: MW-19
DATE: 03/12/24
LOCATION: JPL
ELEV. TOP OF WASTBAY CASING
WEATHER: Clear

PROBE TYPE Westbay
SERIAL NO. MP55 2502
PROJECT JPL
OPERATOR(S) H Hong
ATM. PRESSURE (Patm): (start) 14.10 (finish) 14.12

PTW - 145.92'

Port No.	Depth to Meas. Port Valve (ft)		Pressure Readings (psi)				Pressure Head Outside Port (ft) P(ft)=(P2-Patm)*2.307 ft/psi)	Depth to Water Outside Port (ft) DTW = Dp-P(ft)	True Port Depth (Dp) (ft)	Time
	From Log (Dp)	From Cable	psi Inside Casing	kg/cm² Outside Casing P2	mH²O Inside Casing	Trans. Temp. (oC)				
5	498	496	167.06	137.51	167.06	18.90				1036
4	444	444	143.63	114.30	143.63	19.14				1038
3	392	390	121.04	108.55	121.04	19.29				1040
2	314	313	87.16	75.66	87.16	19.37				1042
1	242	241	55.87	49.95	55.87	19.14				1044

Comments: Collar detect is 6" above sample Port

WESTBAY™ GROUNDWATER MONITORING WELL
WATER LEVEL MEASUREMENT LOG SHEET

WELL ID: MW-20
DATE: 03/08/24
LOCATION: JPL
ELEV. TOP OF WASTBAY CASING
WEATHER: Clear

PROBE TYPE Westbay
SERIAL NO. EMS 2502
PROJECT JPL
OPERATOR(S) T. Hoang
ATM. PRESSURE (Patm): (start) 14.15 (finish) 14.16

DTW - 252.33'

22.52°C 20.10°C

Port No.	Depth to Meas. Port Valve (ft)		Pressure Readings (psi)				Pressure Head Outside Port (ft) P(ft)=(P2-Patm)*2.307 ft/psi)	Depth to Water Outside Port (ft) DTW = Dp-P(ft)	True Port Depth (Dp) (ft)	Time
	From Log (Dp)	From Cable	psi Inside Casing	kg/cm² Outside Casing P2	mH²O Inside Casing	Trans. Temp. (oC)				
5	900	895	296.27	312.65	296.27	22.67				1346
4	700	695	209.41	216.77	209.41	22.80				1348
3	562	557	149.40	158.51	149.40	22.09				1351
2	392	388	75.52	89.01	75.52	21.31				1353
1	230	227	14.29	17.05	14.29	20.21				1355

Comments: Collar detect is 6" above sample Port

WESTBAY™ GROUNDWATER MONITORING WELL
WATER LEVEL MEASUREMENT LOG SHEET

WELL ID: MW-21
DATE: 05/08/24
LOCATION: SPL
ELEV. TOP OF WASTBAY CASING
WEATHER: Clear

PROBE TYPE Westbay
SERIAL NO. EMS258.2
PROJECT SPL
OPERATOR(S) T. Hoang
ATM. PRESSURE (Patm): (start) 14.21 (finish) 14.22

DTW-91.85'

23.14°C 20.90°C

Port No.	Depth to Meas. Port Valve (ft)		Pressure Readings (psi)				Pressure Head Outside Port (ft) P(ft)=(P2-Patm)*2.307 ft/psi)	Depth to Water Outside Port (ft) DTW = Dp-P(ft)	True Port Depth (Dp) (ft)	Time
	From Log (Dp)	From Cable	psi Inside Casing	kg/cm² Outside Casing P2	mH²O Inside Casing	Trans. Temp. (oC)				
5	372	368	136.97	143.98	136.97	22.63				1149
4	310	307	110.11	117.15	110.11	22.32				1151
3	240	237	80.01	87.42	80.01	21.95				1153
2	161	159	45.58	53.39	45.58	21.49				1155
1	90	87	14.28	21.00	14.28	21.12				1157

Comments: Collar detect is 2' above sample Port

WESTBAY™ GROUNDWATER MONITORING WELL
WATER LEVEL MEASUREMENT LOG SHEET

WELL ID: MW-22
DATE: 03/14/24
LOCATION: JPL
ELEV. TOP OF WASTBAY CASING
WEATHER: Clear
DTW-205.18

PROBE TYPE Westbay
SERIAL NO. EMS2502
PROJECT JPL
OPERATOR(S) T. Hoang
ATM. PRESSURE (Patm): (start) 14.00 (finish) 14.02
14.57'C 20.09'C

Port No.	Depth to Meas. Port Valve (ft)		Pressure Readings (psi)				Pressure Head Outside Port (ft) P(ft)=(P2-Patm)*2.307 ft/psi)	Depth to Water Outside Port (ft) DTW = Dp-P(ft)	True Port Depth (Dp) (ft)	Time
	From Log (Dp)	From Cable	psi Inside Casing	kg/cm² Outside Casing P2	mH²O Inside Casing	Trans. Temp. (oC)				
5	588	588	180.93	178.99	180.93	18.82				0750
4	467	467	128.50	129.32	128.50	20.15				0752
3	389	389	94.64	100.35	94.64	20.47				0754
2	329	329	68.61	74.37	68.61	20.58				0756
1	245	245	31.67	38.14	31.67	20.45				0758

Comments: Collar detect is 1' above sample Port

WESTBAY™ GROUNDWATER MONITORING WELL
WATER LEVEL MEASUREMENT LOG SHEET

WELL ID: MW-23
DATE: 03/08/24
LOCATION: JPL
ELEV. TOP OF WASTBAY CASING
WEATHER: Clear

PROBE TYPE Westbay
SERIAL NO. EMS 2502
PROJECT JPL
OPERATOR(S) I. Hoang
ATM. PRESSURE (Patm): (start) 14.20 (finish) 14.19

DTW - 128.41'

18.66°C 20.26

Port No.	Depth to Meas. Port Valve (ft)		Pressure Readings (psi)				Pressure Head Outside Port (ft) P(ft)=(P2-Patm)*2.307 ft/psi)	Depth to Water Outside Port (ft) DTW = Dp-P(ft)	True Port Depth (Dp) (ft)	Time
	From Log (Dp)	From Cable	psi Inside Casing @ 193.83	kg/cm² Outside Casing @ P2	mH²O Inside Casing @ 193.83	Trans. Temp. (oC)				
5	542	540	~~144.70~~	188.53	~~144.70~~	20.10				0903
4	445	442	151.82	146.59	151.82	20.51				0905
3	319	315	97.24	97.77	97.24	20.63				0908
2	254	251	69.08	69.91	69.08	20.58				0910
1	173	171	34.31	36.93	34.31	20.43				0912

Comments: Collar detent is 1' above sample Port

WESTBAY™ GROUNDWATER MONITORING WELL
WATER LEVEL MEASUREMENT LOG SHEET

WELL ID: MW-24
DATE: 03/08/24
LOCATION: JPL
ELEV. TOP OF WASTBAY CASING
WEATHER: Clear
PTW-219,81'

PROBE TYPE Westbay
SERIAL NO. EMS 2502
PROJECT JPL
OPERATOR(S) T. Hoang
ATM. PRESSURE (Patm): (start) 14,14 (finish) ~~20,62~~ 14,16
12,67°C 20,62°C

Port No.	Depth to Meas. Port Valve (ft)		Pressure Readings (psi)				Pressure Head Outside Port (ft) P(ft)=(P2-Patm)*2.307 ft/psi)	Depth to Water Outside Port (ft) DTW = Dp-P(ft)	True Port Depth (Dp) (ft)	Time
	From Log (Dp)	From Cable	psi Inside Casing	kg/cm² Outside Casing P2	mH²O Inside Casing	Trans. Temp. (oC)				
5	678	677	212,88	200,11	212,88	16,85				0839
4	554	551	159,28	152,30	159,28	18,14				0841
3	435	432	107,64	107,21	107,64	18,87				0843
2	373	370	80,77	81,26	80,77	19,37				0845
1	279	307	40,05	43,90	40,05	20,02				0847

Comments: Collar detect is 1' above sample Port

Sampling Logs

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-3
SAMPLING DATE(S) 03/14/24
LOCATION: JPL
WATER LEVEL INSIDE CASING: 176.37
ATM. PRESSURE (PSI): (Start) 13.99 (Finish) 14.01

PROBE TYPE Westbay
SERIAL NO. EM3250Z
PROJECT: JPL
OPERATOR(S) T. Haag
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	✓	✓	✓	✓	✓	182.72	✓	203.30	✓	203.30	✓	182.72	14.8	467	7.10	62	7.05	85	1020	MW-3-4
3	1	✓	✓	✓	✓	✓	90.30	✓	111.62	✓	111.62	✓	90.30	14.8	460	7.23	31	8.44	79	1050	MW-3-3
2	1	✓	✓	✓	✓	✓	49.87	✓	70.87	✓	70.87	✓	49.87	16.9	453	7.54	4	9.11	102	1125	MW-3-2
	2	✓	✓	✓	✓	✓	49.68	✓	70.81	✓	70.81	✓	49.68								MS/MSD
1	1	✓	✓	✓	✓	✓	14.85	✓	44.65	✓	44.65	✓	14.85	17.2	419	7.69	3	8.01	73	1335	MW-3-1

Comments:

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-4
SAMPLING DATE(S) 03/12/24
LOCATION: JPC
WATER LEVEL INSIDE CASING: 120.49
ATM. PRESSURE (PSI): (Start) 14.09 (Finish) 14.11

PROBE TYPE Westbay
SERIAL NO. IMS2502
PROJECT: JPC
OPERATOR(S) T. Hoag
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	✓	✓	✓	✓	✓	112.78	✓	139.30	✓	139.30	✓	112.78	16.2	685	6.62	11	10.61	121	0815	MW-4-4
3	1	✓	✓	✓	✓	✓	82.25	✓	109.11	✓	109.11	✓	82.25	16.0	453	7.47	10	7.42	90	0840	MW-4-3
2	1	✓	✓	✓	✓	✓	47.44	✓	75.03	✓	75.03	✓	47.44	15.3	584	6.61	4	7.71	81	0910	MW-4-2
	2	✓	✓	✓	✓	✓	47.42	✓	75.01	✓	75.01	✓	47.42							0920	DUP-2-031224
1	1	✓	✓	✓	✓	✓	14.24	✓	47.46	✓	47.46	✓	14.24	13.0	709	6.92	3	9.48	104	0940	MW-4-1

Comments:

WELL MONITORING DATA SHEET

Project #: 240308-HH1	Site: JPL
Sampler: HH	Date: 03/19/24
Well I.D.: MW-5	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 135.48	Depth to Water (DTW): 58.40
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type **YSI**
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 73.81	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; (Electric Submersible); Waterra; 2" Rediflo pump; Extraction Pump; Other_____

Sampling Method: Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: Pump tubing

Flow Rate= 3GPM @ 1225

50.2 (Gals.) X 3 = 150.6 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	radius² *
0.163			

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
1233	15.3	7.02	352	20	8.32	90.6	24	
1241	13.2	6.90	353	13	8.20	86.3	48	
1249	13.1	6.92	354	5	7.64	83.1	72	
1257	13.2	6.91	356	2	7.55	80.9	96	
1305	13.1	6.88	356	2	7.49	95.3	120	
1316	13.2	6.86	357	2	7.45	71.9	153	

Did well dewater? Yes (No) Gallons actually evacuated: 153

Sampling Date: 03/19/24 Sampling Time: 1317 Depth to Water: 61.41

Sample I.D.: MW-5 Laboratory: See C.O.C

Analyzed for: Other: See C.O.C

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

MS / MSD

WELL MONITORING DATA SHEET

Project #: 240308-HH1	Site: JPL
Sampler: HH	Date: 03/19/24
Well I.D.: MW-6	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 237.52	Depth to Water (DTW): 201.61
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type **YSI**
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 208.79	

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

Sampling Method: Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: New tubing

Flow Rate= 26PM @ 1025

23.4	(Gals.) X	3	=	70.2 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 (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
1031	19.3	7.13	1021	54	8.17	114.1	12	
1037	20.3	7.19	1066	22	8.03	103.5	24	
1043	20.9	7.14	1079	16	8.01	101.6	36	
1049	20.9	7.10	1076	8	7.95	99.6	48	
1055	21.0	7.03	1075	8	7.93	97.5	60	
1101	21.0	7.02	1073	8	7.90	95.4	72	
								72 @

Did well dewater? Yes (No) Gallons actually evacuated: ~~203.90~~

Sampling Date: 03/19/24 Sampling Time: 1102 Depth to Water: 203.90

Sample I.D.: MW-6 Laboratory: See C.O.C

Analyzed for: Other: See C.O.C

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

MS/MSD

WELL MONITORING DATA SHEET

Project #: 240308-HH1	Site: JPL
Sampler: HH	Date: 03/21/24
Well I.D.: MW-7	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 275.48	Depth to Water (DTW): 213.41
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type **YSI**
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 225.82	

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

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other: Grundfos

Flow Rate= 2gpm @ 1025

1 Case Volume		Specified Volumes		Calculated Volume	
~~40.3~~ (Gals.) X		3	=	~~120.9~~ Gals. (EV)	121.2
40.4 (EV)					

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 (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
1035	25.2	7.47	640	1	6.40	88.7	20	
1045	25.2	(EV) ~~7.2~~ 7.29	641	1	5.21	99.1	40	
1055	24.5	7.05	825	3	5.01	84.6	60	
1105	24.1	7.16	801	3	4.35	107.1	80	
1115	24.7	7.20	787	2	4.21	98.9	100	
1126	24.9	7.21	761	1	4.18	97.8	122	

Did well dewater? Yes (No) Gallons actually evacuated: 122

Sampling Date: 03/21/24 Sampling Time: 1127 Depth to Water: 215.31

Sample I.D.: MW-7 Laboratory: See C.O.C

Analyzed for: Other: (See C.O.C)

EB I.D. (if applicable): EB-9-032124 @ 1145 Time Duplicate I.D. (if applicable): DUP-8-032124 @1137

FB I.D. (if applicable): FB-9-032124 @ 1155 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 #: 240308-HH1	Site: JPL
Sampler: HH	Date: 03/20/24
Well I.D.: MW-8	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 202.25	Depth to Water (DTW): 137.09
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type **YSI**
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 150.12	

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

Sampling Method: Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; (Other: new tubing)

Flow Rate= 36PM @ 0950

1 Case Volume		Specified Volumes		Calculated Volume
42.4 (Gals.)	X	3	=	127.2 Gals.

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 (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
0957	17.0	7.46	396	2	9.01	82.1	21	
1004	17.0	7.25	397	2	7.35	81.5	42	
1011	17.0	7.13	396	2	7.32	79.4	63	
1018	17.0	7.03	395	2	7.27	77.5	84	
1025	17.0	7.04	395	1	7.25	74.9	105	
1033	17.1	7.05	396	1	7.23	74.1	129	

Did well dewater? Yes (No) Gallons actually evacuated: 129

Sampling Date: 03/20/24 Sampling Time: 1035 Depth to Water: 140.11

Sample I.D.: MW-8 Laboratory: See C.O.C

Analyzed for: Other: See C.O.C

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

* MS/MSD

WELL MONITORING DATA SHEET

Project #: 240308-HH1	Site: JPL
Sampler: HH	Date: 03/20/24
Well I.D.: MW-9	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 66.82	Depth to Water (DTW): 19.14
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type **YSI**
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 28.67	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; Electric Submersible (circled); Waterra; 2" Rediflo pump; Extraction Pump; Other_____

Sampling Method: Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other new tubing (circled)

Flow Rate= 36pm @ 1301

1 Case Volume	(Gals.) X	Specified Volumes	=	Calculated Volume	Gals.
31		3		93	

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 (°F or (°C))	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
1306	18.8	7.51	281	1060	9.10	104.1	15	
1311	18.3	7.20	282	201	7.41	90.5	30	
1316	18.2	7.10	250	131	7.05	86.4	45	
1321	18.2	7.01	243	90	6.93	83.9	60	
1326	18.2	6.99	242	88	6.90	81.7	75	
1332	18.2	6.97	240	85	6.86	80.3	93	

Did well dewater? Yes (No) Gallons actually evacuated: 93

Sampling Date: 03/20/24 Sampling Time: 1335 Depth to Water: 23.05

Sample I.D.: MW-9 Laboratory: See C.O.C

Analyzed for: Other: See C.O.C

EB I.D. (if applicable): EB-8-032024 @ 1340 Time Duplicate I.D. (if applicable):

FB I.D. (if applicable): FB-8-032024 @ 1345 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 #: 240308-HH1	Site: JPL
Sampler: HH	Date: 03/19/24
Well I.D.: MW-10	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 153.94	Depth to Water (DTW): 87.51
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type **YSI**
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 100.79	

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

Sampling Method: Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: pump

Flow Rate= 3 GPM @ 1119

43.2 (Gals.) X 3 = 129.6 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	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
1126	19.0	6.95	690	3	9.35	88.6	21	
1133	16.9	7.10	322	1	7.85	80.4	42	
1140	16.8	6.81	311	1	6.34	77.3	63	
1147	16.9	6.81	310	1	6.19	79.1	84	
1154	17.0	6.81	308	1	6.15	76.5	105	
1203	17.0	6.80	307	1	6.13	75.3	132	

Did well dewater? Yes (No) Gallons actually evacuated: 132

Sampling Date: 03/19/24 Sampling Time: 1205 Depth to Water: 89.31

Sample I.D.: MW-10 Laboratory: See C.O.C

Analyzed for: Other: See C.O.C

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable): DUP-5-031924 @ 1215

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) 03/15/24
LOCATION: JPL
WATER LEVEL INSIDE CASING: 157.21
ATM. PRESSURE (PSI): (Start) 14.02 (Finish) 14.03

PROBE TYPE Westbay
SERIAL NO. EMS 2502
PROJECT: JPL
OPERATOR(S) J. Hong
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
3	1	✓	✓	✓	✓	✓	134.44	✓	131.50	✓	131.50	✓	134.44	18.5	379	7.31	4	9.41	91	1035	MW-11-3
2	1	✓	✓	✓	✓	✓	60.73	✓	63.13	✓	63.13	✓	60.73	18.5	435	7.37	3	7.56	80	1100	MW-11-2
	2	✓	✓	✓	✓	✓	60.70	✓	65.12	✓	65.12	✓	60.70								MS/MSD
1	1	✓	✓	✓	✓	✓	14.05	✓	98.68	✓	98.68	✓	14.05	19.3	624	7.60	3	8.05	93	1145	MW-11-1

Comments:

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-12
SAMPLING DATE(S): 08/15/24
LOCATION: JPL
WATER LEVEL INSIDE CASING: 131.01
ATM. PRESSURE (PSI): (Start) 14.15 (Finish) 14.17

PROBE TYPE: Westbay
SERIAL NO.: EMS 2508
PROJECT: JPL
OPERATOR(S): H. 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	✓	✓	✓	✓	✓	149.39	✓	147.74	✓	147.74	✓	149.39	16.5	499	7.50	2	10.15	107	0900	MW-12-4
3	1	✓	✓	✓	✓	✓	100.11	✓	102.81	✓	102.31	✓	100.11	16.4	462	7.31	3	7.41	95	0930	MW-12-3
2	1	✓	✓	✓	✓	✓	65.17	✓	69.89	✓	69.89	✓	65.17	16.3	824	6.58	2	8.16	99	0950	MW-12-2
1	1	✓	✓	✓	✓	✓	21.48	✓	37.43	✓	37.43	✓	21.48	15.6	427	7.07	3	9.44	88	1020	MW-12-1
	2	✓	✓	✓	✓	✓	21.46	✓	37.42	✓	37.42	✓	21.46							1030	DUP-4-03824

Comments:

WELL MONITORING DATA SHEET

Project #: 240308-HH1	Site: JPL
Sampler: HH	Date: 03/21/24
Well I.D.: MW-13	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 238.31	Depth to Water (DTW): 189.45
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]: 199.22	

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

Sampling Method: Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: new tubing

2 GPM @ 0720

31.8 (Gals.) X 3 = 95.4 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 (°F or (°C))	pH	Cond. (mS/cm or (µS/cm))	Turbidity (NTUs)	D.O. (mg/L)	ORP(mV)	Gals. Removed	Observations
0728	20.8	6.68	514	73	5.31	120.6	16	
0736	21.0	6.84	410	16	4.65	73.0	32	
0744	21.1	7.03	404	6	4.15	49.6	48	
0752	21.3	7.02	409	3	4.10	45.3	64	
0800	21.4	7.03	413	3	4.04	43.7	80	
0808	21.4	7.03	414	2	4.01	41.6	96	

Did well dewater? Yes (No) Gallons actually evacuated: 96

Sampling Date: 03/21/24 Sampling Time: 0810 Depth to Water: 191.15

Sample I.D.: MW-13 Laboratory: See C.o.C

Analyzed for: Other: See C.o.C

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable): DUP-6-032124 @ 0820

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): 03/12/24
LOCATION: JPL
WATER LEVEL INSIDE CASING: 201.42
ATM. PRESSURE (PSI): (Start) 14.09 (Finish) 14.12

PROBE TYPE: Westbay
SERIAL NO.: EMS 2502
PROJECT: JPL
OPERATOR(S): I. 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	✓	✓	✓	✓	✓	127.61	✓	131.12	✓	131.12	✓	127.61	19.6	570	7.18	3	8.92	104	1040	MW-14-4
3	1	✓	✓	✓	✓	✓	95.23	✓	99.04	✓	99.04	✓	95.23	19.3	1103	7.59	2	6.29	134	1100	MW-14-3
2	1	✓	✓	✓	✓	✓	49.36	✓	53.28	✓	53.28	✓	49.36	19.9	1181	7.60	2	8.10	105	1120	MW-14-2
1	1	✓	✓	✓	✓	✓	18.74	✓	22.12	✓	22.12	✓	18.74	19.6	905	7.40	3	8.35	99	1140	MW-14-1

Comments:

WELL MONITORING DATA SHEET

Project #: 240308-HH1	Site: JPL
Sampler: HH	Date: 03/20/24
Well I.D.: MW-15	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 74.73	Depth to Water (DTW): 30.61
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type **YSI**
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 39.43	

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

Sampling Method: Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: new tubing

Flow Rate= 36PM@0825

28.7 (Gals.) X 3 = 86.1 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 (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
0830	16.1	7.46	361	53	8.82	88.6	15	
0835	16.3	7.20	333	24	6.41	89.3	30	
0840	16.4	7.05	349	12	5.57	80.4	45	
0845	16.5	7.06	351	13	5.49	78.5	60	
0850	16.6	7.08	354	13	5.45	76.3	75	
0855	16.6	7.10	357	14	5.43	73.4	90	

Did well dewater? Yes (No) Gallons actually evacuated: 90

Sampling Date: 03/20/24 Sampling Time: 0856 Depth to Water: 33.91

Sample I.D.: MW-15 Laboratory: See C.O.C

Analyzed for: Other: See C.O.C

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

* MS/MSD

WELL MONITORING DATA SHEET

Project #: 240308-HH1	Site: JPL
Sampler: HH	Date: 03/21/24
Well I.D.: MW-16	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 284.61	Depth to Water (DTW): 240.61
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type **YSI**
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 249.41	

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

Sampling Method: Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: new tubing

Flow Rate= 2GPM @ 0853

28.6 (Gals.) X 3 = 85.8 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 (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	Observations
0900	20.9	7.14	599	3	4.73	48.8	14	
0907	23.2	7.17	585	3	4.93	48.3	28	
0914	23.4	7.15	588	3	5.16	71.5	42	
0921	23.6	7.14	585	1	4.95	92.7	56	
0928	23.5	7.13	586	1	4.91	94.1	70	
0936	23.4	7.14	589	1	4.91	95.7	86	

Did well dewater? Yes (No) Gallons actually evacuated: 86

Sampling Date: 03/21/24 Sampling Time: 0937 Depth to Water: 242.31

Sample I.D.: MW-16 Laboratory: See C.O.C

Analyzed for: Other: See C.O.C

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable): DUP-7-032124 @0934

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-17
SAMPLING DATE(S) 03/15/24
LOCATION: JPL
WATER LEVEL INSIDE CASING: 212.87
ATM. PRESSURE (PSI): (Start) 14.08 (Finish) MIL

PROBE TYPE Westbay
SERIAL NO. EMS 258
PROJECT: JPL
OPERATOR(S) T. Hong
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	✓	✓	✓	✓	✓	175.56	✓	151.08	✓	151.08	✓	175.50	15.1	845	6.93	6	9.11	107	0810	MW-17-4
3	1	✓	✓	✓	✓	✓	126.51	✓	117.52	✓	117.52	✓	126.51	15.8	442	7.35	4	8.71	93	0830	MW-17-3
	2	✓	✓	✓	✓	✓	126.48	✓	117.49	✓	117.49	✓	126.48							0840	DUP-3-031524
2	1	✓	✓	✓	✓	✓	83.57	✓	81.34	✓	81.34	✓	83.57	15.2	406	7.59	3	8.33	77	0855	MW-17-2
1	1	✓	✓	✓	✓	✓	31.57	✓	40.93	✓	40.93	✓	31.57	15.2	410	7.81	2	9.05	83	0915	MW-17-1

Comments:

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-18
SAMPLING DATE(S) 05/18/24
LOCATION: JPL
WATER LEVEL INSIDE CASING: 296.20
ATM. PRESSURE (PSI): (Start) 14.13 (Finish) 14.15

PROBE TYPE Westbay
SERIAL NO. EMS2508
PROJECT: JPL
OPERATOR(S) L. Hamm
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	✓	✓	✓	✓	✓	132.82	✓	136.66	✓	136.66	✓	132.82	18.6	415	7.57	4	8.99	106	1135	MW-18-4
3	1	✓	✓	✓	✓	✓	71.83	✓	88.40	✓	88.40	✓	71.83	18.1	552	7.69	3	7.94	85	1155	MW-18-3
2	1	✓	✓	✓	✓	✓	30.87	✓	48.17	✓	48.17	✓	30.87	19.2	467	7.51	8	7.99	93	1220	MW-18-2
1	1	✓	✓	✓	✓	✓	14.19	✓	21.90	✓	21.90	✓	14.19	20.4	355	7.70	5	7.98	82	1300	MW-18-1
	2	✓	✓	✓	✓	✓	14.17	✓	21.89	✓	21.89	✓	14.17								MS/MSD

Comments:

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-19
SAMPLING DATE(S) 03/13/24
LOCATION: JPL
WATER LEVEL INSIDE CASING: 145.92
ATM. PRESSURE (PSI): (Start) 14.10 (Finish) 14.12

PROBE TYPE Westbay
SERIAL NO. EMS2502
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
3	1	✓	✓	✓	✓	✓	121.74	✓	108.54	✓	108.54	✓	121.74	18.5	1227	6.73	3	9.93	105	1110	mw-19-3
2	1	✓	✓	✓	✓	✓	88.39	✓	75.65	✓	75.65	✓	88.39	18.2	1044	7.20	2	5.31	99	1130	MW-19-2
	2	✓	✓	✓	✓	✓	88.38	✓	75.64	✓	75.64	✓	88.39								MS/MSD
1	1	✓	✓	✓	✓	✓	56.42	✓	49.93	✓	49.93	✓	56.42	18.3	367	7.68	2	8.05	90	1210	mw-19-1

Comments:

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-20
SAMPLING DATE(S) 03/19/24
LOCATION: JPL
WATER LEVEL INSIDE CASING: 252.52
ATM. PRESSURE (PSI): (Start) 14.66 (Finish) 14.07

PROBE TYPE Waltby
SERIAL NO. DMS 2508
PROJECT: JPL
OPERATOR(S) T. Thorn
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	✓	✓	✓	✓	✓	211.13	✓	217.09	✓	217.09	✓	211.13	16.3	738	7.24	5	10.11	99	0750	MW-20-4
3	1	✓	✓	✓	✓	✓	150.98	✓	159.76	✓	159.76	✓	150.98	17.0	313	7.10	3	9.81	103	0825	MW-20-3
2	1	✓	✓	✓	✓	✓	76.96	✓	89.88	✓	89.98	✓	76.96	17.5	523	7.10	2	9.55	101	0840	MW-20-2
1	1	✓	✓	✓	✓	✓	14.20	✓	17.66	✓	17.66	✓	14.20	19.0	557	7.18	2	10.05	89	0905	MW-20-1

Comments:

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-21
SAMPLING DATE(S) 03/12/24
LOCATION: JPL
WATER LEVEL INSIDE CASING: 91.10
ATM. PRESSURE (PSI): (Start) 14.06 (Finish) 14.08

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 (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
3	1	✓	✓	✓	✓	✓	81.93	✓	88.26	✓	88.26	✓	81.93	17.6	1748	6.68	2	8.41	98	0810	MW-21-3
2	1	✓	✓	✓	✓	✓	47.41	✓	54.33	✓	54.33	✓	47.41	17.4	1176	6.98	2	8.09	103	0835	MW-21-2
1	1	✓	✓	✓	✓	✓	15.93	✓	22.17	✓	22.17	✓	15.93	17.3	1010	6.90	2	7.94	87	0900	MW-21-1

Comments:

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-22
SAMPLING DATE(S) 03/14/24
LOCATION: JPC
WATER LEVEL INSIDE CASING: 205.18
ATM. PRESSURE (PSI): (Start) 14.100 (Finish) 14.102

PROBE TYPE WesHyd
SERIAL NO. WMS 2502
PROJECT: JPC
OPERATOR(S) T. Hung
WEATHER Clear / Windy

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
3	1	✓	✓	✓	✓	✓	95.35	✓	100.32	✓	100.32	✓	95.35	16.8	307	7.81	3	5.05	81	0830	MW-22-3
2	1	✓	✓	✓	✓	✓	69.23	✓	74.35	✓	74.35	✓	69.23	17.5	653	8.19	2	7.51	93	0845	MW-22-2
1	1	✓	✓	✓	✓	✓	32.51	✓	35.14	✓	35.14	✓	32.51	17.1	747	9.44	2	7.60	104	0915	MW-22-1

Comments:

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-23
SAMPLING DATE(S): 03/11/24
LOCATION: SPL
WATER LEVEL INSIDE CASING: 108.21
ATM. PRESSURE (PSI): (Start) 14.12 (Finish) 14.10

PROBE TYPE: WestBay
SERIAL NO.: EMS 2802
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) mg/L	ORP (mv)	Sample Time	Sample ID
3	1	✓	✓	✓	✓	✓	98.02	✓	98.36	✓	98.36	✓	98.02	19.8	688	7.94	3	5.91	69	1040	MW-23-3
2	1	✓	✓	✓	✓	✓	69.74	✓	70.50	✓	70.50	✓	69.74	20.0	1376	6.60	2	7.84	145	1105	MW-23-2
1	1	✓	✓	✓	✓	✓	35.00	✓	37.69	✓	37.69	✓	35.00	20.1	488	7.17	2	6.63	49	1130	MW-23-1

Comments:

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-24
SAMPLING DATE(S) 03/11/24
LOCATION: JPL
WATER LEVEL INSIDE CASING: 217.35
ATM. PRESSURE (PSI): (Start) 14.05 (Finish) 14.07

PROBE TYPE Westbay
SERIAL NO. EMS 250h
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
3	1	✓	✓	✓	✓	✓	109.47	✓	107.76	✓	107.76	✓	109.47	19.6	858	7.51	11	7.06	62.1	0830	MW-24-3
2	1	✓	✓	✓	✓	✓	82.51	✓	81.90	✓	81.90	✓	82.51	20.1	597	7.71	4	5.42	40.7	0855	MW-24-2
	2	✓	✓	✓	✓	✓	82.47	✓	81.92	✓	81.92	✓	82.47							0915	DUP-1-031124
1	1	✓	✓	✓	✓	✓	41.79	✓	44.166	✓	44.166	✓	41.79	20.7	740	7.63	3	7.90	121	0935	MW-24-1

Comments:

Calibration Logs

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME 24 Tidewater @ JPL				PROJECT NUMBER 240308-HH1			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
YSI Pro Quatro	22C103070	03/21/24 0700	4.0 7.0 pH 10.0	3.90 7.15 10.14	4.0 7.0 10.0	13.9°C	HH
↓	↓	↓	Cond 3900	3973	3900	↓	HH
↓	↓	↓	ORP 240	255	240	↓	HH
↓	↓	↓	D.O. 100%	118.6%	100.3%	↓	HH

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME	Tidewater @ JPL			PROJECT NUMBER	240308-HH1		
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
YSI ProQuatro	22C103070	03/14/24 0700	4.0 7.0 10.0 pH	4.15 7.08 10.06	4.0 7.0 10.0	17.9°C	HH
↓	↓	↓	Cond 3900	3973	3900	↓	HH
↓	↓	↓	ORP 240	249	240	↓	HH
↓	↓	↓	D.O. 100%	109.6%	100.5%	↓	HH
YSI ProQuatro	22C103070	03/15/24 0700	4.0 7.0 10.0 pH	4.10 6.91 10.09	4.0 7.0 10.0	16.5°C	HH
↓	↓	↓	Cond 3900	3805	3900	↓	HH
↓	↓	↓	ORP 240	260	240	↓	HH
↓	↓	↓	D.O. 100%	115.7%	100.8%	↓	HH

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME	Tidewater @ JPL			PROJECT NUMBER	240308-HH1		
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
YSI ProQuatro	22C103070	03/11/24 0705	4.0 7.0 10.0 pH	4.10 6.93 10.08	4.0 7.0 10.0	13.9°C	HH
↓	↓	↓	Cond 3900	3973	3900	↓	HH
↓	↓	↓	ORP 240	251	240	↓	HH
↓	↓	↓	D.O. 100%	115%	100.6%	↓	HH
YSI ProQuatro	22C103070	03/12/24 0702	4.0 7.0 10.0 pH	4.03 7.11 9.93	4.0 7.0 10.0	12.1°C	HH
↓	↓	↓	Cond 3900	3965	3900	↓	HH
↓	↓	↓	ORP 240	230	240	↓	HH
↓	↓	↓	D.O. 100%	118.3%	100.9%	↓	HH
YSI ProQuatro	22C103070	03/13/24 0700	4.0 7.0 10.0 pH	3.93 7.05 10.07	4.0 7.0 10.0	15.1°C	HH
↓	↓	↓	Cond 3900 ORP 240	3839 244	3900 240	↓	HH
↓	↓	↓	D.O. 100%	117.4%	100.9%	↓	HH

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME Tidewater JPL				PROJECT NUMBER 240308-HH1			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
YSI ProQuatro	22C103070	03/18/24 0735	4.0 7.0 10.0 pH	4.15 7.10 10.09	4.0 7.0 10.0	12.1°C	HA
↓	↓	↓	Cond 3900	3977	3900	↓	HH
↓	↓	↓	ORP 240	266	240	↓	HH
↓	↓	↓	D.O. 100%	119.3%	100.7%	↓	HA
YSI ProQuatro	22C103070	03/19/24 0700	4.0 7.0 10.0 pH	3.83 7.10 10.09	4.0 7.0 10.0	11.9°C	HH
↓	↓	↓	Cond 3900	3914	3900	↓	HH
↓	↓	↓	ORP 240	270	240	↓	HH
↓	↓	↓	D.O. 100%	115.6%	100.5%	↓	HH
YSI ProQuatro	22C103070	03/20/24	4.0 7.0 10.0 pH	4.15 7.10 10.09	4.0 7.0 10.0	13.4°C	HH
↓	↓	↓	Cond 3900	3835	3900	↓	HA
↓	↓	↓	ORP 240	255	240	↓	HA
↓	↓	↓	D.O. 100%	116.3%	100.4%	↓	HA

Tailgate Safety Meeting Forms

TAILGATE SAFETY MEETING FORM

Date: 03/09/24 Time: 0700 Job Number: 240309-H141

Site Location: NASA – Jet Propulsion Laboratory 4800 Oak Grove Drive, Pasadena, CA 91009

Scope of Work: Quarterly Groundwater Monitoring

SAFETY TOPICS PRESENTED

Protective Clothing/Equipment: Standard work clothing, safety-toed boots, work gloves, traffic vest, sunscreen, etc.
Chemical Hazards: None
Physical Hazards: Slips, trips, and falls; traffic, heavy equipment, rehab chemicals, etc.

Equipment Used: Westlay
Emergency Procedures: **JPL Emergency: 818-393-3333**; JPL Dispatch: 818-354-3530
Hospital: Huntington Hospital Phone: 626-397-5000 Ambulance Phone: 911
Hospital Address and Route: **Huntington Hospital** 100 West California Blvd., Pasadena, CA 91105; Directions: Take the Foothill (210) Freeway east to the California Boulevard exit. Turn left (east) on California Blvd. Turn right into the hospital's main gate.

Noise Impacts and Mitigation:
Odor Impacts and Mitigation:

Permits Required: None

ATTENDEES

NAME PRINTED	SIGNATURE
Thinh Hoang	
Carter White	

Meeting Conducted by: Thinh Hoang
Site Safety Officer: Thinh Hoang

Signed by:
Construction Manager:

TAILGATE SAFETY MEETING FORM

Date: 03/11/24 Time: 0700 Job Number: 240309-HH-1

Site Location: NASA – Jet Propulsion Laboratory 4800 Oak Grove Drive, Pasadena, CA 91009

Scope of Work: Quarterly Groundwater Monitoring

SAFETY TOPICS PRESENTED

Protective Clothing/Equipment: Standard work clothing, safety-toed boots, work gloves, traffic vest, sunscreen, etc.

Chemical Hazards: B Surfer → None

Physical Hazards: Slips, trips, and falls; traffic, heavy equipment, rehab chemicals, etc.

Equipment Used:

Emergency Procedures: **JPL Emergency: 818-393-3333**; JPL Dispatch: 818-354-3530

Hospital: Huntington Hospital Phone: 626-397-5000 Ambulance Phone: 911

Hospital Address and Route: **Huntington Hospital** 100 West California Blvd., Pasadena, CA 91105; Directions: Take the Foothill (210) Freeway east to the California Boulevard exit. Turn left (east) on California Blvd. Turn right into the hospital's main gate.

Noise Impacts and Mitigation: —

Odor Impacts and Mitigation: —

Permits Required: None.

ATTENDEES

NAME PRINTED	SIGNATURE
Thinh Hoang	[signature]
Carter White	Carter

Meeting Conducted by: Thinh Hoang

Site Safety Officer: Thinh Hoang

Signed by: [signature]

Construction Manager:

TAILGATE SAFETY MEETING FORM

Date: ~~03~~ 04 03/12/24 Time: 0700 Job Number: 240305-1141

Site Location: NASA – Jet Propulsion Laboratory 4800 Oak Grove Drive, Pasadena, CA 91009

Scope of Work: Quarterly Groundwater Monitoring

SAFETY TOPICS PRESENTED

Protective Clothing/Equipment: Standard work clothing, safety-toed boots, work gloves, traffic vest, sunscreen, etc.
Chemical Hazards: None
Physical Hazards: Slips, trips, and falls; traffic, heavy equipment, rehab chemicals, etc.

Equipment Used: Westbay
Emergency Procedures: **JPL Emergency: 818-393-3333**; JPL Dispatch: 818-354-3530
Hospital: Huntington Hospital Phone: 626-397-5000 Ambulance Phone: 911
Hospital Address and Route: **Huntington Hospital** 100 West California Blvd., Pasadena, CA 91105; Directions: Take the Foothill (210) Freeway east to the California Boulevard exit. Turn left (east) on California Blvd. Turn right into the hospital's main gate.

Noise Impacts and Mitigation: /
Odor Impacts and Mitigation: /

Permits Required: None

ATTENDEES

NAME PRINTED	SIGNATURE
Thinh Hoang	
Carter White	Carter W

Meeting Conducted by: Thinh Hoang
Site Safety Officer: Thinh Hoang

Signed by:
Construction Manager:

TAILGATE SAFETY MEETING FORM

Date: 03/13/24 Time: 0700 Job Number: 240308-HH1

Site Location: NASA – Jet Propulsion Laboratory 4800 Oak Grove Drive, Pasadena, CA 91009

Scope of Work: Quarterly Groundwater Monitoring

SAFETY TOPICS PRESENTED

Protective Clothing/Equipment: Standard work clothing, safety-toed boots, work gloves, traffic vest, sunscreen, etc.

Chemical Hazards: None

Physical Hazards: Slips, trips, and falls; traffic, heavy equipment, rehab chemicals, etc.

Equipment Used: Westbay

Emergency Procedures: **JPL Emergency: 818-393-3333**; JPL Dispatch: 818-354-3530

Hospital: Huntington Hospital Phone: 626-397-5000 Ambulance Phone: 911

Hospital Address and Route: **Huntington Hospital** 100 West California Blvd., Pasadena, CA 91105; Directions: Take the Foothill (210) Freeway east to the California Boulevard exit. Turn left (east) on California Blvd. Turn right into the hospital's main gate.

Noise Impacts and Mitigation: None

Odor Impacts and Mitigation: None

Permits Required: None.

ATTENDEES

NAME PRINTED	SIGNATURE
Thinh Hoang	[signature]
Carter White	Carter [signature]

Meeting Conducted by: Thinh Hoang

Site Safety Officer: Thinh Hoang

Signed by: [signature]

Construction Manager:

TAILGATE SAFETY MEETING FORM

Date: 03/14/24 Time: 0700 Job Number: 240308-1111

Site Location: NASA – Jet Propulsion Laboratory 4800 Oak Grove Drive, Pasadena, CA 91009

Scope of Work: Quarterly Groundwater Monitoring

SAFETY TOPICS PRESENTED

Protective Clothing/Equipment: Standard work clothing, safety-toed boots, work gloves, traffic vest, sunscreen, etc.
Chemical Hazards: None
Physical Hazards: Slips, trips, and falls; traffic, heavy equipment, rehab chemicals, etc.

Equipment Used: Water Truck
Emergency Procedures: **JPL Emergency: 818-393-3333**; JPL Dispatch: 818-354-3530
Hospital: Huntington Hospital Phone: 626-397-5000 Ambulance Phone: 911
Hospital Address and Route: **Huntington Hospital** 100 West California Blvd., Pasadena, CA 91105; Directions: Take the Foothill (210) Freeway east to the California Boulevard exit. Turn left (east) on California Blvd. Turn right into the hospital's main gate.

Noise Impacts and Mitigation: /
Odor Impacts and Mitigation: /

Permits Required: None

ATTENDEES

NAME PRINTED	SIGNATURE
Thinh Hoang	
Carter White	

Meeting Conducted by: Thinh Hoang
Site Safety Officer: Thinh Hoang

Signed by:
Construction Manager:

TAILGATE SAFETY MEETING FORM

Date: 03/15/24 Time: 0700 Job Number: 240308-HH1

Site Location: NASA – Jet Propulsion Laboratory 4800 Oak Grove Drive, Pasadena, CA 91009

Scope of Work: Quarterly Groundwater Monitoring

SAFETY TOPICS PRESENTED

Protective Clothing/Equipment: Standard work clothing, safety-toed boots, work gloves, traffic vest, sunscreen, etc.
Chemical Hazards: None
Physical Hazards: Slips, trips, and falls; traffic, heavy equipment, rehab chemicals, etc.

Equipment Used: Westbay
Emergency Procedures: **JPL Emergency: 818-393-3333**; JPL Dispatch: 818-354-3530
Hospital: Huntington Hospital Phone: 626-397-5000 Ambulance Phone: 911
Hospital Address and Route: **Huntington Hospital** 100 West California Blvd., Pasadena, CA 91105; Directions: Take the Foothill (210) Freeway east to the California Boulevard exit. Turn left (east) on California Blvd. Turn right into the hospital's main gate.

Noise Impacts and Mitigation: /
Odor Impacts and Mitigation: /

Permits Required: None

ATTENDEES

NAME PRINTED	SIGNATURE
Hugh Hong	
Carter White	

Meeting Conducted by: Hugh Hong
Site Safety Officer: Hugh Hong

Signed by:
Construction Manager:

TAILGATE SAFETY MEETING FORM

Date: 03/19/24 Time: 0700 Job Number: 240308-1111

Site Location: NASA – Jet Propulsion Laboratory 4800 Oak Grove Drive, Pasadena, CA 91009

Scope of Work: Quarterly Groundwater Monitoring

SAFETY TOPICS PRESENTED

Protective Clothing/Equipment: Standard work clothing, safety-toed boots, work gloves, traffic vest, sunscreen, etc.
Chemical Hazards: None
Physical Hazards: Slips, trips, and falls; traffic, heavy equipment, rehab chemicals, etc.

Equipment Used: Westbay
Emergency Procedures: **JPL Emergency: 818-393-3333**; JPL Dispatch: 818-354-3530
Hospital: Huntington Hospital Phone: 626-397-5000 Ambulance Phone: 911
Hospital Address and Route: **Huntington Hospital** 100 West California Blvd., Pasadena, CA 91105; Directions: Take the Foothill (210) Freeway east to the California Boulevard exit. Turn left (east) on California Blvd. Turn right into the hospital's main gate.

Noise Impacts and Mitigation: /
Odor Impacts and Mitigation: /

Permits Required: None

ATTENDEES

NAME PRINTED	SIGNATURE
Thinh Hoang Earthwise	

Meeting Conducted by: Thinh Hoang
Site Safety Officer: Thinh Hoang

Signed by:
Construction Manager:

TAILGATE SAFETY MEETING FORM

Date: 03/19/24 Time: 0700 Job Number: 240308-HH1

Site Location: NASA – Jet Propulsion Laboratory 4800 Oak Grove Drive, Pasadena, CA 91009

Scope of Work: Quarterly Groundwater Monitoring

SAFETY TOPICS PRESENTED

Protective Clothing/Equipment: Standard work clothing, safety-toed boots, work gloves, traffic vest, sunscreen, etc.

Chemical Hazards: None

Physical Hazards: Slips, trips, and falls; traffic, heavy equipment, rehab chemicals, etc.

Equipment Used: Westbay

Emergency Procedures: **JPL Emergency: 818-393-3333**; JPL Dispatch: 818-354-3530

Hospital: Huntington Hospital Phone: 626-397-5000 Ambulance Phone: 911

Hospital Address and Route: **Huntington Hospital** 100 West California Blvd., Pasadena, CA 91105; Directions: Take the Foothill (210) Freeway east to the California Boulevard exit. Turn left (east) on California Blvd. Turn right into the hospital's main gate.

Noise Impacts and Mitigation: /

Odor Impacts and Mitigation: /

Permits Required: None

ATTENDEES

NAME PRINTED	SIGNATURE
Thinh Hoang	[signature]
Carver [illegible]	[signature]

Meeting Conducted by: Thinh Hoang

Site Safety Officer: Thinh Hoang

Signed by: [signature]

Construction Manager:

TAILGATE SAFETY MEETING FORM

Date: 03/20/24 Time: 0700 Job Number: 240308-HH1

Site Location: NASA – Jet Propulsion Laboratory 4800 Oak Grove Drive, Pasadena, CA 91009

Scope of Work: Quarterly Groundwater Monitoring

SAFETY TOPICS PRESENTED

Protective Clothing/Equipment: Standard work clothing, safety-toed boots, work gloves, traffic vest, sunscreen, etc.
Chemical Hazards: None
Physical Hazards: Slips, trips, and falls; traffic, heavy equipment, rehab chemicals, etc.

Equipment Used: Electric Submersible
Emergency Procedures: **JPL Emergency: 818-393-3333**; JPL Dispatch: 818-354-3530
Hospital: Huntington Hospital Phone: 626-397-5000 Ambulance Phone: 911
Hospital Address and Route: **Huntington Hospital** 100 West California Blvd., Pasadena, CA 91105; Directions: Take the Foothill (210) Freeway east to the California Boulevard exit. Turn left (east) on California Blvd. Turn right into the hospital's main gate.

Noise Impacts and Mitigation: /
Odor Impacts and Mitigation: /

Permits Required: None

ATTENDEES

NAME PRINTED	SIGNATURE
Thinh Hoang Carter Wire	

Meeting Conducted by: Thinh Hoang
Site Safety Officer: Thinh Hoang

Signed by:
Construction Manager:

TAILGATE SAFETY MEETING FORM

Date: 03/21/24 Time: 0700 Job Number: 240308-H141

Site Location: NASA – Jet Propulsion Laboratory 4800 Oak Grove Drive, Pasadena, CA 91009

Scope of Work: Quarterly Groundwater Monitoring

SAFETY TOPICS PRESENTED

Protective Clothing/Equipment: Standard work clothing, safety-toed boots, work gloves, traffic vest, sunscreen, etc.
Chemical Hazards: None
Physical Hazards: Slips, trips, and falls; traffic, heavy equipment, rehab chemicals, etc.

Equipment Used: ~~tbl~~ Electric Submersible
Emergency Procedures: **JPL Emergency: 818-393-3333**; JPL Dispatch: 818-354-3530
Hospital: Huntington Hospital Phone: 626-397-5000 Ambulance Phone: 911
Hospital Address and Route: **Huntington Hospital** 100 West California Blvd., Pasadena, CA 91105; Directions: Take the Foothill (210) Freeway east to the California Boulevard exit. Turn left (east) on California Blvd. Turn right into the hospital's main gate.

Noise Impacts and Mitigation: /
Odor Impacts and Mitigation: /

Permits Required: None

ATTENDEES

NAME PRINTED	SIGNATURE
Think Hoa carter white	

Meeting Conducted by: Think Hoa
Site Safety Officer: Think Hoa

Signed by:
Construction Manager:

TAILGATE SAFETY MEETING FORM

Date: 03/22/24 Time: 0700 Job Number: 240308-H17

Site Location: NASA – Jet Propulsion Laboratory 4800 Oak Grove Drive, Pasadena, CA 91009

Scope of Work: Quarterly Groundwater Monitoring

SAFETY TOPICS PRESENTED

Protective Clothing/Equipment: Standard work clothing, safety-toed boots, work gloves, traffic vest, sunscreen, etc.
Chemical Hazards: None
Physical Hazards: Slips, trips, and falls; traffic, heavy equipment, rehab chemicals, etc.

Equipment Used: Electric Sub
Emergency Procedures: **JPL Emergency: 818-393-3333**; JPL Dispatch: 818-354-3530
Hospital: Huntington Hospital Phone: 626-397-5000 Ambulance Phone: 911
Hospital Address and Route: **Huntington Hospital** 100 West California Blvd., Pasadena, CA 91105; Directions: Take the Foothill (210) Freeway east to the California Boulevard exit. Turn left (east) on California Blvd. Turn right into the hospital's main gate.

Noise Impacts and Mitigation: /
Odor Impacts and Mitigation: /

Permits Required: None

ATTENDEES

NAME PRINTED	SIGNATURE
Thinh Hoa	
Caleb White	Caleb

Meeting Conducted by: Thinh Hoa
Site Safety Officer: Thinh Hoa

Signed by:
Construction Manager: