SD Public Utilities

Biennial Receiving Waters Monitoring and Assessment Report for the Point Loma and South Bay Ocean Outfalls

2018–2019

Addenda 1–9
Visual Observations & Raw Data

Point Loma Wastewater Treatment Plant
(Order No. R9-2017-0007; NPDES No. CA0107409)

South Bay Water Reclamation Plant
(Order No. R9-2013-0006 as amended; NPDES No. CA0109045)

South Bay International Wastewater Treatment Plant
(Order No. R9-2014-0009 as amended; NPDES No. CA0108928)

Environmental Monitoring and Technical Services
2392 Kincaid Road • Mail Station 45A • San Diego, CA 92101

Addendum 1

Visual Observations

2018 – 2019

Benthic, Trawl, and Rig Fishing Stations

Addendum 1-1A

Visual observations from PLOO benthic stations sampled during 2019.

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	E1	31-Jan-19	BENTHIC	STN LONG DEG	117		
PLOO	E1	31-Jan-19	BENTHIC	STN LONG MIN	18.341		
PLOO	E1	31-Jan-19	BENTHIC	STN LAT DEG	32		
PLOO	E1	31-Jan-19	BENTHIC	STN LAT MIN	37.538		
PLOO	E1	31-Jan-19	BENTHIC	DEPTH METER	89		m
PLOO	E1	31-Jan-19	BENTHIC	ARRIVE TIME	756		
PLOO	E1	31-Jan-19	BENTHIC	AIR TEMP	15		C
PLOO	E1	31-Jan-19	BENTHIC	WIND SPEED	10		kts
PLOO	E1	31-Jan-19	BENTHIC	WIND DIR		S	
PLOO	E1	31-Jan-19	BENTHIC	SED_TEMP(1)	12		
PLOO	E1	31-Jan-19	BENTHIC	SED_DEPTH(1)	8		cm
PLOO	E1	31-Jan-19	BENTHIC	SED_TYPE(1)		Silt with Fine sand	
PLOO	E1	31-Jan-19	BENTHIC	VISIBILITY	9		mi
PLOO	E1	31-Jan-19	BENTHIC	WEATHER DESC		Partly cloudy	
PLOO	E1	31-Jan-19	BENTHIC	SEA STATE		Choppy	
PLOO	E1	31-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E1	31-Jan-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E1	31-Jan-19	BENTHIC	WAVE PER		9-10	sec
PLOO	E1	31-Jan-19	BENTHIC	DEPART TIME	808		
PLOO	E1	31-Jan-19	BENTHIC	COMMENTS			
PLOO	E11	31-Jan-19	BENTHIC	AIR TEMP	16		C
PLOO	E11	31-Jan-19	BENTHIC	WIND SPEED	14		kts
PLOO	E11	31-Jan-19	BENTHIC	WIND DIR		SE	
PLOO	E11	31-Jan-19	BENTHIC	SED_TEMP(1)	12		
PLOO	E11	31-Jan-19	BENTHIC	SED_DEPTH(1)	7		cm
PLOO	E11	31-Jan-19	BENTHIC	SED_TYPE(1)		Silt	
PLOO	E11	31-Jan-19	BENTHIC	VISIBILITY	9		mi
PLOO	E11	31-Jan-19	BENTHIC	WEATHER DESC		Overcast	
PLOO	E11	31-Jan-19	BENTHIC	SEA STATE		Choppy	
PLOO	E11	31-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E11	31-Jan-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E11	31-Jan-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E11	31-Jan-19	BENTHIC	DEPART TIME	1044		
PLOO	E11	31-Jan-19	BENTHIC	COMMENTS			
PLOO	E11	31-Jan-19	BENTHIC	STN LONG DEG	117		
PLOO	E11	31-Jan-19	BENTHIC	STN LONG MIN	19.407		
PLOO	E11	31-Jan-19	BENTHIC	STN LAT DEG	32		
PLOO	E11	31-Jan-19	BENTHIC	STN LAT MIN	39.361		
PLOO	E11	31-Jan-19	BENTHIC	DEPTH METER	97		m
PLOO	E11	31-Jan-19	BENTHIC	ARRIVE TIME	1033		
PLOO	E14	31-Jan-19	BENTHIC	STN LONG DEG	117		
PLOO	E14	31-Jan-19	BENTHIC	STN LONG MIN	19.473		
PLOO	E14	31-Jan-19	BENTHIC	STN LAT DEG	32		
PLOO	E14	31-Jan-19	BENTHIC	STN LAT MIN	39.931		

Addendum 1-1A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	E14	31-Jan-19	BENTHIC	DEPTH METER	98		m
PLOO	E14	31-Jan-19	BENTHIC	ARRIVE TIME	1052		
PLOO	E14	31-Jan-19	BENTHIC	AIR TEMP	16		C
PLOO	E14	31-Jan-19	BENTHIC	WIND SPEED	14		kts
PLOO	E14	31-Jan-19	BENTHIC	WIND DIR		SE	
PLOO	E14	31-Jan-19	BENTHIC	SED_TEMP(1)	12		
PLOO	E14	31-Jan-19	BENTHIC	SED_DEPTH(1)	9		cm
PLOO	E14	31-Jan-19	BENTHIC	SED_TYPE(1)		Silt	
PLOO	E14	31-Jan-19	BENTHIC	VISIBILITY	9		mi
PLOO	E14	31-Jan-19	BENTHIC	WEATHER DESC		Overcast	
PLOO	E14	31-Jan-19	BENTHIC	SEA STATE		Choppy	
PLOO	E14	31-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E14	31-Jan-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E14	31-Jan-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E14	31-Jan-19	BENTHIC	DEPART TIME	1103		
PLOO	E14	31-Jan-19	BENTHIC	COMMENTS			
PLOO	E17	31-Jan-19	BENTHIC	STN LONG DEG	117		
PLOO	E17	31-Jan-19	BENTHIC	STN LONG MIN	19.552		
PLOO	E17	31-Jan-19	BENTHIC	STN LAT DEG	32		
PLOO	E17	31-Jan-19	BENTHIC	STN LAT MIN	40.448		
PLOO	E17	31-Jan-19	BENTHIC	DEPTH METER	98		m
PLOO	E17	31-Jan-19	BENTHIC	ARRIVE TIME	1115		
PLOO	E17	31-Jan-19	BENTHIC	AIR TEMP	16		C
PLOO	E17	31-Jan-19	BENTHIC	WIND SPEED	15		kts
PLOO	E17	31-Jan-19	BENTHIC	WIND DIR		SE	
PLOO	E17	31-Jan-19	BENTHIC	SED_TEMP(1)	12		
PLOO	E17	31-Jan-19	BENTHIC	SED_DEPTH(1)	8		cm
PLOO	E17	31-Jan-19	BENTHIC	SED_TYPE(1)		Silt with Clay	
PLOO	E17	31-Jan-19	BENTHIC	VISIBILITY	9		mi
PLOO	E17	31-Jan-19	BENTHIC	WEATHER DESC		Overcast	
PLOO	E17	31-Jan-19	BENTHIC	SEA STATE		Choppy	
PLOO	E17	31-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E17	31-Jan-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E17	31-Jan-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E17	31-Jan-19	BENTHIC	DEPART TIME	1127		
PLOO	E17	31-Jan-19	BENTHIC	COMMENTS			
PLOO	E2	31-Jan-19	BENTHIC	STN LONG DEG	117		
PLOO	E2	31-Jan-19	BENTHIC	STN LONG MIN	19.149		
PLOO	E2	31-Jan-19	BENTHIC	STN LAT DEG	32		
PLOO	E2	31-Jan-19	BENTHIC	STN LAT MIN	37.408		
PLOO	E2	31-Jan-19	BENTHIC	DEPTH METER	99		m
PLOO	E2	31-Jan-19	BENTHIC	ARRIVE TIME	817		
PLOO	E2	31-Jan-19	BENTHIC	AIR TEMP	16		C
PLOO	E2	31-Jan-19	BENTHIC	WIND SPEED	8		kts
PLOO	E2	31-Jan-19	BENTHIC	WIND DIR		SE	

Addendum 1-1A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	E2	31-Jan-19	BENTHIC	SED_TEMP(1)	11		
PLOO	E2	31-Jan-19	BENTHIC	SED_DEPTH(1)	8		cm
PLOO	E2	31-Jan-19	BENTHIC	SED_TYPE(1)		Silt	
PLOO	E2	31-Jan-19	BENTHIC	VISIBILITY	9		mi
PLOO	E2	31-Jan-19	BENTHIC	WEATHER DESC		Partly cloudy	
PLOO	E2	31-Jan-19	BENTHIC	SEA STATE		Choppy	
PLOO	E2	31-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E2	31-Jan-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E2	31-Jan-19	BENTHIC	WAVE PER		9-10	sec
PLOO	E2	31-Jan-19	BENTHIC	DEPART TIME	837		
PLOO	E2	31-Jan-19	BENTHIC	COMMENTS			
PLOO	E3	31-Jan-19	BENTHIC	STN LONG DEG	117		
PLOO	E3	31-Jan-19	BENTHIC	STN LONG MIN	20.044		
PLOO	E3	31-Jan-19	BENTHIC	STN LAT DEG	32		
PLOO	E3	31-Jan-19	BENTHIC	STN LAT MIN	37.267		
PLOO	E3	31-Jan-19	BENTHIC	DEPTH METER	112		m
PLOO	E3	31-Jan-19	BENTHIC	ARRIVE TIME	850		
PLOO	E3	31-Jan-19	BENTHIC	AIR TEMP	15		C
PLOO	E3	31-Jan-19	BENTHIC	WIND SPEED	9		kts
PLOO	E3	31-Jan-19	BENTHIC	WIND DIR		SE	
PLOO	E3	31-Jan-19	BENTHIC	SED_TEMP(1)	12		
PLOO	E3	31-Jan-19	BENTHIC	SED_DEPTH(1)	6		cm
PLOO	E3	31-Jan-19	BENTHIC	SED_TYPE(1)		Silt and Fine sand with Sand	
PLOO	E3	31-Jan-19	BENTHIC	VISIBILITY	9		mi
PLOO	E3	31-Jan-19	BENTHIC	WEATHER DESC		Partly cloudy	
PLOO	E3	31-Jan-19	BENTHIC	SEA STATE		Choppy	
PLOO	E3	31-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E3	31-Jan-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E3	31-Jan-19	BENTHIC	WAVE PER		9-10	sec
PLOO	E3	31-Jan-19	BENTHIC	DEPART TIME	903		
PLOO	E3	31-Jan-19	BENTHIC	COMMENTS			
PLOO	E5	31-Jan-19	BENTHIC	STN LONG DEG	117		
PLOO	E5	31-Jan-19	BENTHIC	STN LONG MIN	19.254		
PLOO	E5	31-Jan-19	BENTHIC	STN LAT DEG	32		
PLOO	E5	31-Jan-19	BENTHIC	STN LAT MIN	38.347		
PLOO	E5	31-Jan-19	BENTHIC	DEPTH METER	98		m
PLOO	E5	31-Jan-19	BENTHIC	ARRIVE TIME	913		
PLOO	E5	31-Jan-19	BENTHIC	AIR TEMP	15		C
PLOO	E5	31-Jan-19	BENTHIC	WIND SPEED	11		kts
PLOO	E5	31-Jan-19	BENTHIC	WIND DIR		SE	
PLOO	E5	31-Jan-19	BENTHIC	SED_TEMP(1)	12		
PLOO	E5	31-Jan-19	BENTHIC	SED_DEPTH(1)	8		cm
PLOO	E5	31-Jan-19	BENTHIC	SED_TYPE(1)		Silt	
PLOO	E5	31-Jan-19	BENTHIC	VISIBILITY	9		mi

Addendum 1-1A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	E5	31-Jan-19	BENTHIC	WEATHER DESC		Partly cloudy	
PLOO	E5	31-Jan-19	BENTHIC	SEA STATE		Choppy	
PLOO	E5	31-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E5	31-Jan-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E5	31-Jan-19	BENTHIC	WAVE PER		9-10	sec
PLOO	E5	31-Jan-19	BENTHIC	DEPART TIME	923		
PLOO	E5	31-Jan-19	BENTHIC	COMMENTS			
PLOO	E7	31-Jan-19	BENTHIC	STN LONG DEG	117		
PLOO	E7	31-Jan-19	BENTHIC	STN LONG MIN	18.615		
PLOO	E7	31-Jan-19	BENTHIC	STN LAT DEG	32		
PLOO	E7	31-Jan-19	BENTHIC	STN LAT MIN	38.972		
PLOO	E7	31-Jan-19	BENTHIC	DEPTH METER	90		m
PLOO	E7	31-Jan-19	BENTHIC	ARRIVE TIME	1011		
PLOO	E7	31-Jan-19	BENTHIC	AIR TEMP	15		C
PLOO	E7	31-Jan-19	BENTHIC	WIND SPEED	12		kts
PLOO	E7	31-Jan-19	BENTHIC	WIND DIR		SE	
PLOO	E7	31-Jan-19	BENTHIC	SED_TEMP(1)	12		
PLOO	E7	31-Jan-19	BENTHIC	SED_DEPTH(1)	8		cm
PLOO	E7	31-Jan-19	BENTHIC	SED_TYPE(1)		Silt with Fine sand	
PLOO	E7	31-Jan-19	BENTHIC	VISIBILITY	9		mi
PLOO	E7	31-Jan-19	BENTHIC	WEATHER DESC		Partly cloudy	
PLOO	E7	31-Jan-19	BENTHIC	SEA STATE		Choppy	
PLOO	E7	31-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E7	31-Jan-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E7	31-Jan-19	BENTHIC	WAVE PER		9-10	sec
PLOO	E7	31-Jan-19	BENTHIC	DEPART TIME	1024		
PLOO	E7	31-Jan-19	BENTHIC	COMMENTS			
PLOO	E8	31-Jan-19	BENTHIC	STN LONG DEG	117		
PLOO	E8	31-Jan-19	BENTHIC	STN LONG MIN	19.3		
PLOO	E8	31-Jan-19	BENTHIC	STN LAT DEG	32		
PLOO	E8	31-Jan-19	BENTHIC	STN LAT MIN	38.879		
PLOO	E8	31-Jan-19	BENTHIC	DEPTH METER	97		m
PLOO	E8	31-Jan-19	BENTHIC	ARRIVE TIME	951		
PLOO	E8	31-Jan-19	BENTHIC	AIR TEMP	15		C
PLOO	E8	31-Jan-19	BENTHIC	WIND SPEED	11		kts
PLOO	E8	31-Jan-19	BENTHIC	WIND DIR		SE	
PLOO	E8	31-Jan-19	BENTHIC	SED_TEMP(1)	11		
PLOO	E8	31-Jan-19	BENTHIC	SED_DEPTH(1)	7		cm
PLOO	E8	31-Jan-19	BENTHIC	SED_TYPE(1)		Silt with Clay	
PLOO	E8	31-Jan-19	BENTHIC	VISIBILITY	9		mi
PLOO	E8	31-Jan-19	BENTHIC	WEATHER DESC		Partly cloudy	
PLOO	E8	31-Jan-19	BENTHIC	SEA STATE		Choppy	
PLOO	E8	31-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E8	31-Jan-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E8	31-Jan-19	BENTHIC	WAVE PER		9-10	sec

Addendum 1-1A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	E8	31-Jan-19	BENTHIC	DEPART TIME	1002		
PLOO	E8	31-Jan-19	BENTHIC	COMMENTS			
PLOO	E9	31-Jan-19	BENTHIC	STN LONG DEG	117		
PLOO	E9	31-Jan-19	BENTHIC	STN LONG MIN	20.071		
PLOO	E9	31-Jan-19	BENTHIC	STN LAT DEG	32		
PLOO	E9	31-Jan-19	BENTHIC	STN LAT MIN	38.721		
PLOO	E9	31-Jan-19	BENTHIC	DEPTH METER	114		m
PLOO	E9	31-Jan-19	BENTHIC	ARRIVE TIME	932		
PLOO	E9	31-Jan-19	BENTHIC	AIR TEMP	15		C
PLOO	E9	31-Jan-19	BENTHIC	WIND SPEED	11		kts
PLOO	E9	31-Jan-19	BENTHIC	WIND DIR		SE	
PLOO	E9	31-Jan-19	BENTHIC	SED_TEMP(1)	11		
PLOO	E9	31-Jan-19	BENTHIC	SED_DEPTH(1)	7		cm
PLOO	E9	31-Jan-19	BENTHIC	SED_TYPE(1)		Clay and Coarse sand	
PLOO	E9	31-Jan-19	BENTHIC	VISIBILITY	9		mi
PLOO	E9	31-Jan-19	BENTHIC	WEATHER DESC		Partly cloudy	
PLOO	E9	31-Jan-19	BENTHIC	SEA STATE		Choppy	
PLOO	E9	31-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E9	31-Jan-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E9	31-Jan-19	BENTHIC	WAVE PER		9-10	sec
PLOO	E9	31-Jan-19	BENTHIC	DEPART TIME	942		
PLOO	E9	31-Jan-19	BENTHIC	COMMENTS			
PLOO	B10	1-Feb-19	BENTHIC	STN LONG DEG	117		
PLOO	B10	1-Feb-19	BENTHIC	STN LONG MIN	22.16		
PLOO	B10	1-Feb-19	BENTHIC	STN LAT DEG	32		
PLOO	B10	1-Feb-19	BENTHIC	STN LAT MIN	45.229		
PLOO	B10	1-Feb-19	BENTHIC	DEPTH METER	120		m
PLOO	B10	1-Feb-19	BENTHIC	ARRIVE TIME	817		
PLOO	B10	1-Feb-19	BENTHIC	AIR TEMP	13		C
PLOO	B10	1-Feb-19	BENTHIC	WIND SPEED	9		kts
PLOO	B10	1-Feb-19	BENTHIC	WIND DIR		E	
PLOO	B10	1-Feb-19	BENTHIC	SED_TEMP(1)	12		
PLOO	B10	1-Feb-19	BENTHIC	SED_DEPTH(1)	9		cm
PLOO	B10	1-Feb-19	BENTHIC	SED_TYPE(1)		Fine sand with Silt with Shell hash	
PLOO	B10	1-Feb-19	BENTHIC	VISIBILITY	9		mi
PLOO	B10	1-Feb-19	BENTHIC	WEATHER DESC		Partly cloudy	
PLOO	B10	1-Feb-19	BENTHIC	SEA STATE		Calm	
PLOO	B10	1-Feb-19	BENTHIC	WAVE HEIGHT LOW	4		ft
PLOO	B10	1-Feb-19	BENTHIC	WATER COLOR CODE		Greenish-blue	
PLOO	B10	1-Feb-19	BENTHIC	WAVE PER		13-15	sec
PLOO	B10	1-Feb-19	BENTHIC	DEPART TIME	841		
PLOO	B10	1-Feb-19	BENTHIC	COMMENTS			
PLOO	B11	1-Feb-19	BENTHIC	STN LONG DEG	117		

Addendum 1-1A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	B11	1-Feb-19	BENTHIC	STN LONG MIN	21.354		
PLOO	B11	1-Feb-19	BENTHIC	STN LAT DEG	32		
PLOO	B11	1-Feb-19	BENTHIC	STN LAT MIN	46.549		
PLOO	B11	1-Feb-19	BENTHIC	DEPTH METER	88		m
PLOO	B11	1-Feb-19	BENTHIC	ARRIVE TIME	902		
PLOO	B11	1-Feb-19	BENTHIC	AIR TEMP	13		C
PLOO	B11	1-Feb-19	BENTHIC	WIND SPEED	6		kts
PLOO	B11	1-Feb-19	BENTHIC	WIND DIR		E	
PLOO	B11	1-Feb-19	BENTHIC	SED_TEMP(1)	13		
PLOO	B11	1-Feb-19	BENTHIC	SED_DEPTH(1)	11		cm
PLOO	B11	1-Feb-19	BENTHIC	SED_TYPE(1)		Silt with Sand with Gravel	
PLOO	B11	1-Feb-19	BENTHIC	VISIBILITY	9		mi
PLOO	B11	1-Feb-19	BENTHIC	WEATHER DESC		Partly cloudy	
PLOO	B11	1-Feb-19	BENTHIC	SEA STATE		Calm	
PLOO	B11	1-Feb-19	BENTHIC	WAVE HEIGHT LOW	4		ft
PLOO	B11	1-Feb-19	BENTHIC	WATER COLOR CODE		Greenish-blue	
PLOO	B11	1-Feb-19	BENTHIC	WAVE PER		13-15	sec
PLOO	B11	1-Feb-19	BENTHIC	DEPART TIME	917		
PLOO	B11	1-Feb-19	BENTHIC	COMMENTS			
PLOO	B12	1-Feb-19	BENTHIC	STN LONG DEG	117		
PLOO	B12	1-Feb-19	BENTHIC	STN LONG MIN	22.315		
PLOO	B12	1-Feb-19	BENTHIC	STN LAT DEG	32		
PLOO	B12	1-Feb-19	BENTHIC	STN LAT MIN	46.355		
PLOO	B12	1-Feb-19	BENTHIC	DEPTH METER	99		m
PLOO	B12	1-Feb-19	BENTHIC	ARRIVE TIME	846		
PLOO	B12	1-Feb-19	BENTHIC	AIR TEMP	13		C
PLOO	B12	1-Feb-19	BENTHIC	WIND SPEED	7		kts
PLOO	B12	1-Feb-19	BENTHIC	WIND DIR		E	
PLOO	B12	1-Feb-19	BENTHIC	SED_TEMP(1)	12		
PLOO	B12	1-Feb-19	BENTHIC	SED_DEPTH(1)	9		cm
PLOO	B12	1-Feb-19	BENTHIC	SED_TYPE(1)		Silt and Sand with Shell hash	
PLOO	B12	1-Feb-19	BENTHIC	VISIBILITY	9		mi
PLOO	B12	1-Feb-19	BENTHIC	WEATHER DESC		Partly cloudy	
PLOO	B12	1-Feb-19	BENTHIC	SEA STATE		Calm	
PLOO	B12	1-Feb-19	BENTHIC	WAVE HEIGHT LOW	4		ft
PLOO	B12	1-Feb-19	BENTHIC	WATER COLOR CODE		Greenish-blue	
PLOO	B12	1-Feb-19	BENTHIC	WAVE PER		13-15	sec
PLOO	B12	1-Feb-19	BENTHIC	DEPART TIME	854		
PLOO	B12	1-Feb-19	BENTHIC	COMMENTS		Debris electrical tape in sample	
PLOO	B8	1-Feb-19	BENTHIC	STN LONG DEG	117		
PLOO	B8	1-Feb-19	BENTHIC	STN LONG MIN	20.751		
PLOO	B8	1-Feb-19	BENTHIC	STN LAT DEG	32		
PLOO	B8	1-Feb-19	BENTHIC	STN LAT MIN	45.504		
PLOO	B8	1-Feb-19	BENTHIC	DEPTH METER	90		m

Addendum 1-1A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	B8	1-Feb-19	BENTHIC	ARRIVE TIME	959		
PLOO	B8	1-Feb-19	BENTHIC	AIR TEMP	14		C
PLOO	B8	1-Feb-19	BENTHIC	WIND SPEED	5		kts
PLOO	B8	1-Feb-19	BENTHIC	WIND DIR		SE	
PLOO	B8	1-Feb-19	BENTHIC	SED_TEMP(1)	12		
PLOO	B8	1-Feb-19	BENTHIC	SED_DEPTH(1)	13		cm
PLOO	B8	1-Feb-19	BENTHIC	SED_TYPE(1)		Silt and Fine sand	
PLOO	B8	1-Feb-19	BENTHIC	VISIBILITY	9		mi
PLOO	B8	1-Feb-19	BENTHIC	WEATHER DESC		Partly cloudy	
PLOO	B8	1-Feb-19	BENTHIC	SEA STATE		Calm	
PLOO	B8	1-Feb-19	BENTHIC	WAVE HEIGHT LOW	4		ft
PLOO	B8	1-Feb-19	BENTHIC	WATER COLOR CODE		Greenish-blue	
PLOO	B8	1-Feb-19	BENTHIC	WAVE PER		13-15	sec
PLOO	B8	1-Feb-19	BENTHIC	DEPART TIME	1008		
PLOO	B8	1-Feb-19	BENTHIC	COMMENTS			
PLOO	B9	1-Feb-19	BENTHIC	STN LONG DEG	117		
PLOO	B9	1-Feb-19	BENTHIC	STN LONG MIN	21.649		
PLOO	B9	1-Feb-19	BENTHIC	STN LAT DEG	32		
PLOO	B9	1-Feb-19	BENTHIC	STN LAT MIN	45.313		
PLOO	B9	1-Feb-19	BENTHIC	DEPTH METER	101		m
PLOO	B9	1-Feb-19	BENTHIC	ARRIVE TIME	941		
PLOO	B9	1-Feb-19	BENTHIC	AIR TEMP	14		C
PLOO	B9	1-Feb-19	BENTHIC	WIND SPEED	5		kts
PLOO	B9	1-Feb-19	BENTHIC	WIND DIR		SE	
PLOO	B9	1-Feb-19	BENTHIC	SED_TEMP(1)	11		
PLOO	B9	1-Feb-19	BENTHIC	SED_DEPTH(1)	12		cm
PLOO	B9	1-Feb-19	BENTHIC	SED_TYPE(1)		Fine sand with Silt	
PLOO	B9	1-Feb-19	BENTHIC	VISIBILITY	9		mi
PLOO	B9	1-Feb-19	BENTHIC	WEATHER DESC		Partly cloudy	
PLOO	B9	1-Feb-19	BENTHIC	SEA STATE		Calm	
PLOO	B9	1-Feb-19	BENTHIC	WAVE HEIGHT LOW	4		ft
PLOO	B9	1-Feb-19	BENTHIC	WATER COLOR CODE		Greenish-blue	
PLOO	B9	1-Feb-19	BENTHIC	WAVE PER		13-15	sec
PLOO	B9	1-Feb-19	BENTHIC	DEPART TIME	949		
PLOO	B9	1-Feb-19	BENTHIC	COMMENTS			
PLOO	E15	1-Feb-19	BENTHIC	STN LONG DEG	117		
PLOO	E15	1-Feb-19	BENTHIC	STN LONG MIN	19.912		
PLOO	E15	1-Feb-19	BENTHIC	STN LAT DEG	32		
PLOO	E15	1-Feb-19	BENTHIC	STN LAT MIN	39.862		
PLOO	E15	1-Feb-19	BENTHIC	DEPTH METER	113		m
PLOO	E15	1-Feb-19	BENTHIC	ARRIVE TIME	1207		
PLOO	E15	1-Feb-19	BENTHIC	AIR TEMP	15		C
PLOO	E15	1-Feb-19	BENTHIC	WIND SPEED	6		kts
PLOO	E15	1-Feb-19	BENTHIC	WIND DIR		S	
PLOO	E15	1-Feb-19	BENTHIC	SED_TEMP(1)	12		

Addendum 1-1A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	E15	1-Feb-19	BENTHIC	SED_DEPTH(1)	10		cm
PLOO	E15	1-Feb-19	BENTHIC	SED_TYPE(1)		Silt with Fine sand with Coarse dark sand	
PLOO	E15	1-Feb-19	BENTHIC	VISIBILITY	9		mi
PLOO	E15	1-Feb-19	BENTHIC	WEATHER DESC		Partly cloudy	
PLOO	E15	1-Feb-19	BENTHIC	SEA STATE		Calm	
PLOO	E15	1-Feb-19	BENTHIC	WAVE HEIGHT LOW	4		ft
PLOO	E15	1-Feb-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E15	1-Feb-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E15	1-Feb-19	BENTHIC	DEPART TIME	1225		
PLOO	E15	1-Feb-19	BENTHIC	COMMENTS		1 Lytechinus pictus removed and released	
PLOO	E19	1-Feb-19	BENTHIC	STN LONG DEG	117		
PLOO	E19	1-Feb-19	BENTHIC	STN LONG MIN	19.184		
PLOO	E19	1-Feb-19	BENTHIC	STN LAT DEG	32		
PLOO	E19	1-Feb-19	BENTHIC	STN LAT MIN	41.033		
PLOO	E19	1-Feb-19	BENTHIC	DEPTH METER	90		m
PLOO	E19	1-Feb-19	BENTHIC	ARRIVE TIME	1125		
PLOO	E19	1-Feb-19	BENTHIC	AIR TEMP	15		C
PLOO	E19	1-Feb-19	BENTHIC	WIND SPEED	8		kts
PLOO	E19	1-Feb-19	BENTHIC	WIND DIR		S	
PLOO	E19	1-Feb-19	BENTHIC	SED_TEMP(1)	12		
PLOO	E19	1-Feb-19	BENTHIC	SED_DEPTH(1)	9		cm
PLOO	E19	1-Feb-19	BENTHIC	SED_TYPE(1)		Silt with Fine sand	
PLOO	E19	1-Feb-19	BENTHIC	VISIBILITY	9		mi
PLOO	E19	1-Feb-19	BENTHIC	WEATHER DESC		Partly cloudy	
PLOO	E19	1-Feb-19	BENTHIC	SEA STATE		Calm	
PLOO	E19	1-Feb-19	BENTHIC	WAVE HEIGHT LOW	4		ft
PLOO	E19	1-Feb-19	BENTHIC	WATER COLOR CODE		Greenish-blue	
PLOO	E19	1-Feb-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E19	1-Feb-19	BENTHIC	DEPART TIME	1135		
PLOO	E19	1-Feb-19	BENTHIC	COMMENTS			
PLOO	E20	1-Feb-19	BENTHIC	STN LONG DEG	117		
PLOO	E20	1-Feb-19	BENTHIC	STN LONG MIN	19.664		
PLOO	E20	1-Feb-19	BENTHIC	STN LAT DEG	32		
PLOO	E20	1-Feb-19	BENTHIC	STN LAT MIN	40.965		
PLOO	E20	1-Feb-19	BENTHIC	DEPTH METER	99		m
PLOO	E20	1-Feb-19	BENTHIC	ARRIVE TIME	1139		
PLOO	E20	1-Feb-19	BENTHIC	AIR TEMP	15		C
PLOO	E20	1-Feb-19	BENTHIC	WIND SPEED	8		kts
PLOO	E20	1-Feb-19	BENTHIC	WIND DIR		S	
PLOO	E20	1-Feb-19	BENTHIC	SED_TEMP(1)	12		
PLOO	E20	1-Feb-19	BENTHIC	SED_DEPTH(1)	9		cm
PLOO	E20	1-Feb-19	BENTHIC	SED_TYPE(1)		Silt with Fine sand	
PLOO	E20	1-Feb-19	BENTHIC	VISIBILITY	9		mi

Addendum 1-1A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	E20	1-Feb-19	BENTHIC	WEATHER DESC		Partly cloudy	
PLOO	E20	1-Feb-19	BENTHIC	SEA STATE		Calm	
PLOO	E20	1-Feb-19	BENTHIC	WAVE HEIGHT LOW	4		ft
PLOO	E20	1-Feb-19	BENTHIC	WATER COLOR CODE		Greenish-blue	
PLOO	E20	1-Feb-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E20	1-Feb-19	BENTHIC	DEPART TIME	1147		
PLOO	E20	1-Feb-19	BENTHIC	COMMENTS			
PLOO	E21	1-Feb-19	BENTHIC	STN LONG DEG	117		
PLOO	E21	1-Feb-19	BENTHIC	STN LONG MIN	19.986		
PLOO	E21	1-Feb-19	BENTHIC	STN LAT DEG	32		
PLOO	E21	1-Feb-19	BENTHIC	STN LAT MIN	40.867		
PLOO	E21	1-Feb-19	BENTHIC	DEPTH METER	116		m
PLOO	E21	1-Feb-19	BENTHIC	ARRIVE TIME	1149		
PLOO	E21	1-Feb-19	BENTHIC	AIR TEMP	15		C
PLOO	E21	1-Feb-19	BENTHIC	WIND SPEED	7		kts
PLOO	E21	1-Feb-19	BENTHIC	WIND DIR		S	
PLOO	E21	1-Feb-19	BENTHIC	SED_TEMP(1)	12		
PLOO	E21	1-Feb-19	BENTHIC	SED_DEPTH(1)	10		cm
PLOO	E21	1-Feb-19	BENTHIC	SED_TYPE(1)		Silt with Fine sand	
PLOO	E21	1-Feb-19	BENTHIC	VISIBILITY	9		mi
PLOO	E21	1-Feb-19	BENTHIC	WEATHER DESC		Partly cloudy	
PLOO	E21	1-Feb-19	BENTHIC	SEA STATE		Calm	
PLOO	E21	1-Feb-19	BENTHIC	WAVE HEIGHT LOW	4		ft
PLOO	E21	1-Feb-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E21	1-Feb-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E21	1-Feb-19	BENTHIC	DEPART TIME	1205		
PLOO	E21	1-Feb-19	BENTHIC	COMMENTS			
PLOO	E23	1-Feb-19	BENTHIC	STN LONG DEG	117		
PLOO	E23	1-Feb-19	BENTHIC	STN LONG MIN	19.742		
PLOO	E23	1-Feb-19	BENTHIC	STN LAT DEG	32		
PLOO	E23	1-Feb-19	BENTHIC	STN LAT MIN	41.469		
PLOO	E23	1-Feb-19	BENTHIC	DEPTH METER	98		m
PLOO	E23	1-Feb-19	BENTHIC	ARRIVE TIME	1110		
PLOO	E23	1-Feb-19	BENTHIC	AIR TEMP	15		C
PLOO	E23	1-Feb-19	BENTHIC	WIND SPEED	6		kts
PLOO	E23	1-Feb-19	BENTHIC	WIND DIR		S	
PLOO	E23	1-Feb-19	BENTHIC	SED_TEMP(1)	12		
PLOO	E23	1-Feb-19	BENTHIC	SED_DEPTH(1)	12		cm
PLOO	E23	1-Feb-19	BENTHIC	SED_TYPE(1)		Silt with Fine sand	
PLOO	E23	1-Feb-19	BENTHIC	VISIBILITY	9		mi
PLOO	E23	1-Feb-19	BENTHIC	WEATHER DESC		Partly cloudy	
PLOO	E23	1-Feb-19	BENTHIC	SEA STATE		Calm	
PLOO	E23	1-Feb-19	BENTHIC	WAVE HEIGHT LOW	4		ft
PLOO	E23	1-Feb-19	BENTHIC	WATER COLOR CODE		Greenish-blue	
PLOO	E23	1-Feb-19	BENTHIC	WAVE PER		13-15	sec

Addendum 1-1A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	E23	1-Feb-19	BENTHIC	DEPART TIME	1121		
PLOO	E23	1-Feb-19	BENTHIC	COMMENTS			
PLOO	E25	1-Feb-19	BENTHIC	STN LONG DEG	117		
PLOO	E25	1-Feb-19	BENTHIC	STN LONG MIN	20.077		
PLOO	E25	1-Feb-19	BENTHIC	STN LAT DEG	32		
PLOO	E25	1-Feb-19	BENTHIC	STN LAT MIN	42.393		
PLOO	E25	1-Feb-19	BENTHIC	DEPTH METER	99		m
PLOO	E25	1-Feb-19	BENTHIC	ARRIVE TIME	1053		
PLOO	E25	1-Feb-19	BENTHIC	AIR TEMP	15		C
PLOO	E25	1-Feb-19	BENTHIC	WIND SPEED	6		kts
PLOO	E25	1-Feb-19	BENTHIC	WIND DIR		S	
PLOO	E25	1-Feb-19	BENTHIC	SED_TEMP(1)	12		
PLOO	E25	1-Feb-19	BENTHIC	SED_DEPTH(1)	11		cm
PLOO	E25	1-Feb-19	BENTHIC	SED_TYPE(1)		Silt with Fine sand	
PLOO	E25	1-Feb-19	BENTHIC	VISIBILITY	9		mi
PLOO	E25	1-Feb-19	BENTHIC	WEATHER DESC		Partly cloudy	
PLOO	E25	1-Feb-19	BENTHIC	SEA STATE		Calm	
PLOO	E25	1-Feb-19	BENTHIC	WAVE HEIGHT LOW	4		ft
PLOO	E25	1-Feb-19	BENTHIC	WATER COLOR CODE		Greenish-blue	
PLOO	E25	1-Feb-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E25	1-Feb-19	BENTHIC	DEPART TIME	1103		
PLOO	E25	1-Feb-19	BENTHIC	COMMENTS		Warship on station	
PLOO	E26	1-Feb-19	BENTHIC	STN LONG DEG	117		
PLOO	E26	1-Feb-19	BENTHIC	STN LONG MIN	20.564		
PLOO	E26	1-Feb-19	BENTHIC	STN LAT DEG	32		
PLOO	E26	1-Feb-19	BENTHIC	STN LAT MIN	43.799		
PLOO	E26	1-Feb-19	BENTHIC	DEPTH METER	99		m
PLOO	E26	1-Feb-19	BENTHIC	ARRIVE TIME	1021		
PLOO	E26	1-Feb-19	BENTHIC	AIR TEMP	14		C
PLOO	E26	1-Feb-19	BENTHIC	WIND SPEED	4		kts
PLOO	E26	1-Feb-19	BENTHIC	WIND DIR		S	
PLOO	E26	1-Feb-19	BENTHIC	SED_TEMP(1)	11		
PLOO	E26	1-Feb-19	BENTHIC	SED_DEPTH(1)	12		cm
PLOO	E26	1-Feb-19	BENTHIC	SED_TYPE(1)		Silt with Fine sand	
PLOO	E26	1-Feb-19	BENTHIC	VISIBILITY	9		mi
PLOO	E26	1-Feb-19	BENTHIC	WEATHER DESC		Partly cloudy	
PLOO	E26	1-Feb-19	BENTHIC	SEA STATE		Calm	
PLOO	E26	1-Feb-19	BENTHIC	WAVE HEIGHT LOW	4		ft
PLOO	E26	1-Feb-19	BENTHIC	WATER COLOR CODE		Greenish-blue	
PLOO	E26	1-Feb-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E26	1-Feb-19	BENTHIC	DEPART TIME	1030		
PLOO	E26	1-Feb-19	BENTHIC	COMMENTS			
PLOO	B10	19-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	B10	19-Jul-19	BENTHIC	STN LONG MIN	22.205		

Addendum 1-1A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	B10	19-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	B10	19-Jul-19	BENTHIC	STN LAT MIN	45.236		
PLOO	B10	19-Jul-19	BENTHIC	DEPTH METER	125		m
PLOO	B10	19-Jul-19	BENTHIC	ARRIVE TIME	1139		
PLOO	B10	19-Jul-19	BENTHIC	AIR TEMP	17		C
PLOO	B10	19-Jul-19	BENTHIC	WIND SPEED	8		kts
PLOO	B10	19-Jul-19	BENTHIC	WIND DIR		W	
PLOO	B10	19-Jul-19	BENTHIC	SED_TEMP(1)	10		
PLOO	B10	19-Jul-19	BENTHIC	SED_DEPTH(1)	8		cm
PLOO	B10	19-Jul-19	BENTHIC	SED_TYPE(1)		Silt with Fine sand	
PLOO	B10	19-Jul-19	BENTHIC	VISIBILITY	10		mi
PLOO	B10	19-Jul-19	BENTHIC	WEATHER DESC		Overcast	
PLOO	B10	19-Jul-19	BENTHIC	SEA STATE		Choppy	
PLOO	B10	19-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	B10	19-Jul-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	B10	19-Jul-19	BENTHIC	WAVE PER		9-10	sec
PLOO	B10	19-Jul-19	BENTHIC	DEPART TIME	1159		
PLOO	B10	19-Jul-19	BENTHIC	COMMENTS		Grab failure due to poor Closure	
PLOO	B11	19-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	B11	19-Jul-19	BENTHIC	STN LONG MIN	21.387		
PLOO	B11	19-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	B11	19-Jul-19	BENTHIC	STN LAT MIN	46.571		
PLOO	B11	19-Jul-19	BENTHIC	DEPTH METER	90		m
PLOO	B11	19-Jul-19	BENTHIC	ARRIVE TIME	915		
PLOO	B11	19-Jul-19	BENTHIC	AIR TEMP	17		C
PLOO	B11	19-Jul-19	BENTHIC	WIND SPEED	5		kts
PLOO	B11	19-Jul-19	BENTHIC	WIND DIR		W	
PLOO	B11	19-Jul-19	BENTHIC	SED_TEMP(1)	10		
PLOO	B11	19-Jul-19	BENTHIC	SED_DEPTH(1)	9		cm
PLOO	B11	19-Jul-19	BENTHIC	SED_TYPE(1)		Silt with Fine sand with Shell hash	
PLOO	B11	19-Jul-19	BENTHIC	VISIBILITY	10		mi
PLOO	B11	19-Jul-19	BENTHIC	WEATHER DESC		Overcast	
PLOO	B11	19-Jul-19	BENTHIC	SEA STATE		Choppy	
PLOO	B11	19-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	B11	19-Jul-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	B11	19-Jul-19	BENTHIC	WAVE PER		9-10	sec
PLOO	B11	19-Jul-19	BENTHIC	DEPART TIME	1008		
PLOO	B11	19-Jul-19	BENTHIC	COMMENTS		Grab failure due to poor Closure	
PLOO	E11	22-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	E11	22-Jul-19	BENTHIC	STN LONG MIN	19.424		
PLOO	E11	22-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	E11	22-Jul-19	BENTHIC	STN LAT MIN	39.425		
PLOO	E11	22-Jul-19	BENTHIC	DEPTH METER	98		m
PLOO	E11	22-Jul-19	BENTHIC	ARRIVE TIME	1339		
PLOO	E11	22-Jul-19	BENTHIC	AIR TEMP	19		C

Addendum 1-1A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	E11	22-Jul-19	BENTHIC	WIND SPEED	11		kts
PLOO	E11	22-Jul-19	BENTHIC	WIND DIR		W	
PLOO	E11	22-Jul-19	BENTHIC	SED_TEMP(1)	11		
PLOO	E11	22-Jul-19	BENTHIC	SED_DEPTH(1)	8		cm
PLOO	E11	22-Jul-19	BENTHIC	SED_TYPE(1)		Clay and Silt	
PLOO	E11	22-Jul-19	BENTHIC	VISIBILITY	14		mi
PLOO	E11	22-Jul-19	BENTHIC	WEATHER DESC		Haze	
PLOO	E11	22-Jul-19	BENTHIC	SEA STATE		Confused Swell	
PLOO	E11	22-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E11	22-Jul-19	BENTHIC	WATER COLOR CODE		Bluish-Green	
PLOO	E11	22-Jul-19	BENTHIC	WAVE PER		12-Nov	sec
PLOO	E11	22-Jul-19	BENTHIC	DEPART TIME	1403		
PLOO	E11	22-Jul-19	BENTHIC	COMMENTS		SedTox sample taken	
PLOO	E14	22-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	E14	22-Jul-19	BENTHIC	STN LONG MIN	19.514		
PLOO	E14	22-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	E14	22-Jul-19	BENTHIC	STN LAT MIN	39.967		
PLOO	E14	22-Jul-19	BENTHIC	DEPTH METER	100		m
PLOO	E14	22-Jul-19	BENTHIC	ARRIVE TIME	1244		
PLOO	E14	22-Jul-19	BENTHIC	AIR TEMP	19		C
PLOO	E14	22-Jul-19	BENTHIC	WIND SPEED	9		kts
PLOO	E14	22-Jul-19	BENTHIC	WIND DIR		W	
PLOO	E14	22-Jul-19	BENTHIC	SED_TEMP(1)	11		
PLOO	E14	22-Jul-19	BENTHIC	SED_DEPTH(1)	7		cm
PLOO	E14	22-Jul-19	BENTHIC	SED_TYPE(1)		Clay and Silt	
PLOO	E14	22-Jul-19	BENTHIC	VISIBILITY	14		mi
PLOO	E14	22-Jul-19	BENTHIC	WEATHER DESC		Haze	
PLOO	E14	22-Jul-19	BENTHIC	SEA STATE		Confused Swell	
PLOO	E14	22-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E14	22-Jul-19	BENTHIC	WATER COLOR CODE		Bluish-Green	
PLOO	E14	22-Jul-19	BENTHIC	WAVE PER		12-Nov	sec
PLOO	E14	22-Jul-19	BENTHIC	DEPART TIME	1334		
PLOO	E14	22-Jul-19	BENTHIC	COMMENTS		SedTox sample taken; Grab failure due to no contact w/ bottom; Grab failure due to poor closure	
PLOO	E15	22-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	E15	22-Jul-19	BENTHIC	STN LONG MIN	19.924		
PLOO	E15	22-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	E15	22-Jul-19	BENTHIC	STN LAT MIN	39.906		
PLOO	E15	22-Jul-19	BENTHIC	DEPTH METER	115		m
PLOO	E15	22-Jul-19	BENTHIC	ARRIVE TIME	1201		
PLOO	E15	22-Jul-19	BENTHIC	AIR TEMP	19		C
PLOO	E15	22-Jul-19	BENTHIC	WIND SPEED	8		kts

Addendum 1-1A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	E15	22-Jul-19	BENTHIC	WIND DIR		NW	
PLOO	E15	22-Jul-19	BENTHIC	SED_TEMP(1)	11		
PLOO	E15	22-Jul-19	BENTHIC	SED_DEPTH(1)	6		cm
PLOO	E15	22-Jul-19	BENTHIC	SED_TYPE(1)		Clay and Silt	
PLOO	E15	22-Jul-19	BENTHIC	VISIBILITY	14		mi
PLOO	E15	22-Jul-19	BENTHIC	WEATHER DESC		Haze	
PLOO	E15	22-Jul-19	BENTHIC	SEA STATE		Confused Swell	
PLOO	E15	22-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E15	22-Jul-19	BENTHIC	WATER COLOR CODE		Bluish-Green	
PLOO	E15	22-Jul-19	BENTHIC	WAVE PER		12-Nov	sec
PLOO	E15	22-Jul-19	BENTHIC	DEPART TIME	1259		
PLOO	E15	22-Jul-19	BENTHIC	COMMENTS		SedTox sample taken; Grab failure due to < 5 cm Penetration	
PLOO	E17	22-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	E17	22-Jul-19	BENTHIC	STN LONG MIN	19.565		
PLOO	E17	22-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	E17	22-Jul-19	BENTHIC	STN LAT MIN	40.482		
PLOO	E17	22-Jul-19	BENTHIC	DEPTH METER	99		m
PLOO	E17	22-Jul-19	BENTHIC	ARRIVE TIME	1126		
PLOO	E17	22-Jul-19	BENTHIC	AIR TEMP	19		C
PLOO	E17	22-Jul-19	BENTHIC	WIND SPEED	10		kts
PLOO	E17	22-Jul-19	BENTHIC	WIND DIR		NW	
PLOO	E17	22-Jul-19	BENTHIC	SED_TEMP(1)	11		
PLOO	E17	22-Jul-19	BENTHIC	SED_DEPTH(1)	8		cm
PLOO	E17	22-Jul-19	BENTHIC	SED_TYPE(1)		Silt and Clay	
PLOO	E17	22-Jul-19	BENTHIC	VISIBILITY	12		mi
PLOO	E17	22-Jul-19	BENTHIC	WEATHER DESC		Overcast	
PLOO	E17	22-Jul-19	BENTHIC	SEA STATE		Confused Swell	
PLOO	E17	22-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E17	22-Jul-19	BENTHIC	WATER COLOR CODE		Bluish-Green	
PLOO	E17	22-Jul-19	BENTHIC	WAVE PER		12-Nov	sec
PLOO	E17	22-Jul-19	BENTHIC	DEPART TIME	1144		
PLOO	E17	22-Jul-19	BENTHIC	COMMENTS		SedTox sample taken	
PLOO	B12	23-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	B12	23-Jul-19	BENTHIC	STN LONG MIN	22.29		
PLOO	B12	23-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	B12	23-Jul-19	BENTHIC	STN LAT MIN	46.397		
PLOO	B12	23-Jul-19	BENTHIC	DEPTH METER	98		m
PLOO	B12	23-Jul-19	BENTHIC	ARRIVE TIME	904		
PLOO	B12	23-Jul-19	BENTHIC	AIR TEMP	21		C
PLOO	B12	23-Jul-19	BENTHIC	WIND SPEED	8		kts
PLOO	B12	23-Jul-19	BENTHIC	WIND DIR		N	
PLOO	B12	23-Jul-19	BENTHIC	SED_TEMP(1)	11		
PLOO	B12	23-Jul-19	BENTHIC	SED_DEPTH(1)	11		cm

Addendum 1-1A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	B12	23-Jul-19	BENTHIC	SED_TYPE(1)		Sand and Silt with Shell hash	
PLOO	B12	23-Jul-19	BENTHIC	VISIBILITY	9		mi
PLOO	B12	23-Jul-19	BENTHIC	WEATHER DESC		Partly Cloudy	
PLOO	B12	23-Jul-19	BENTHIC	SEA STATE		Choppy	
PLOO	B12	23-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	B12	23-Jul-19	BENTHIC	WATER COLOR CODE		Bluish-Green	
PLOO	B12	23-Jul-19	BENTHIC	WAVE PER		13-15	sec
PLOO	B12	23-Jul-19	BENTHIC	DEPART TIME	912		
PLOO	B12	23-Jul-19	BENTHIC	COMMENTS			
PLOO	B8	23-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	B8	23-Jul-19	BENTHIC	STN LONG MIN	20.784		
PLOO	B8	23-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	B8	23-Jul-19	BENTHIC	STN LAT MIN	45.521		
PLOO	B8	23-Jul-19	BENTHIC	DEPTH METER	90		m
PLOO	B8	23-Jul-19	BENTHIC	ARRIVE TIME	840		
PLOO	B8	23-Jul-19	BENTHIC	AIR TEMP	21		C
PLOO	B8	23-Jul-19	BENTHIC	WIND SPEED	9		kts
PLOO	B8	23-Jul-19	BENTHIC	WIND DIR		NW	
PLOO	B8	23-Jul-19	BENTHIC	SED_TEMP(1)	12		
PLOO	B8	23-Jul-19	BENTHIC	SED_DEPTH(1)	10		cm
PLOO	B8	23-Jul-19	BENTHIC	SED_TYPE(1)		Clay and Silt	
PLOO	B8	23-Jul-19	BENTHIC	VISIBILITY	9		mi
PLOO	B8	23-Jul-19	BENTHIC	WEATHER DESC		Partly Cloudy	
PLOO	B8	23-Jul-19	BENTHIC	SEA STATE		Choppy	
PLOO	B8	23-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	B8	23-Jul-19	BENTHIC	WATER COLOR CODE		Bluish-Green	
PLOO	B8	23-Jul-19	BENTHIC	WAVE PER		13-15	sec
PLOO	B8	23-Jul-19	BENTHIC	DEPART TIME	845		
PLOO	B8	23-Jul-19	BENTHIC	COMMENTS		Resampled due to label error	
PLOO	B9	23-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	B9	23-Jul-19	BENTHIC	STN LONG MIN	21.713		
PLOO	B9	23-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	B9	23-Jul-19	BENTHIC	STN LAT MIN	45.344		
PLOO	B9	23-Jul-19	BENTHIC	DEPTH METER	101		m
PLOO	B9	23-Jul-19	BENTHIC	ARRIVE TIME	934		
PLOO	B9	23-Jul-19	BENTHIC	AIR TEMP	20		C
PLOO	B9	23-Jul-19	BENTHIC	WIND SPEED	9		kts
PLOO	B9	23-Jul-19	BENTHIC	WIND DIR		NW	
PLOO	B9	23-Jul-19	BENTHIC	SED_TEMP(1)	11		
PLOO	B9	23-Jul-19	BENTHIC	SED_DEPTH(1)	11		cm
PLOO	B9	23-Jul-19	BENTHIC	SED_TYPE(1)		Fine sand and Silt	
PLOO	B9	23-Jul-19	BENTHIC	VISIBILITY	9		mi
PLOO	B9	23-Jul-19	BENTHIC	WEATHER DESC		Partly Cloudy	
PLOO	B9	23-Jul-19	BENTHIC	SEA STATE		Choppy	

Addendum 1-1A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	B9	23-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	B9	23-Jul-19	BENTHIC	WATER COLOR CODE		Bluish-Green	
PLOO	B9	23-Jul-19	BENTHIC	WAVE PER		13-15	sec
PLOO	B9	23-Jul-19	BENTHIC	DEPART TIME	952		
PLOO	B9	23-Jul-19	BENTHIC	COMMENTS		Grab failure due to canted	
PLOO	E1	24-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	E1	24-Jul-19	BENTHIC	STN LONG MIN	18.362		
PLOO	E1	24-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	E1	24-Jul-19	BENTHIC	STN LAT MIN	37.537		
PLOO	E1	24-Jul-19	BENTHIC	DEPTH METER	89		m
PLOO	E1	24-Jul-19	BENTHIC	ARRIVE TIME	1232		
PLOO	E1	24-Jul-19	BENTHIC	AIR TEMP	21		C
PLOO	E1	24-Jul-19	BENTHIC	WIND SPEED	9		kts
PLOO	E1	24-Jul-19	BENTHIC	WIND DIR		W	
PLOO	E1	24-Jul-19	BENTHIC	SED_TEMP(1)	11		
PLOO	E1	24-Jul-19	BENTHIC	SED_DEPTH(1)	7		cm
PLOO	E1	24-Jul-19	BENTHIC	SED_TYPE(1)		Fine sand and Silt	
PLOO	E1	24-Jul-19	BENTHIC	VISIBILITY	10		mi
PLOO	E1	24-Jul-19	BENTHIC	WEATHER DESC		Clear	
PLOO	E1	24-Jul-19	BENTHIC	SEA STATE		Choppy	
PLOO	E1	24-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E1	24-Jul-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E1	24-Jul-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E1	24-Jul-19	BENTHIC	DEPART TIME	1245		
PLOO	E1	24-Jul-19	BENTHIC	COMMENTS			
PLOO	E19	24-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	E19	24-Jul-19	BENTHIC	STN LONG MIN	19.189		
PLOO	E19	24-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	E19	24-Jul-19	BENTHIC	STN LAT MIN	41.039		
PLOO	E19	24-Jul-19	BENTHIC	DEPTH METER	90		m
PLOO	E19	24-Jul-19	BENTHIC	ARRIVE TIME	953		
PLOO	E19	24-Jul-19	BENTHIC	AIR TEMP	22		C
PLOO	E19	24-Jul-19	BENTHIC	WIND SPEED	3		kts
PLOO	E19	24-Jul-19	BENTHIC	WIND DIR		NW	
PLOO	E19	24-Jul-19	BENTHIC	SED_TEMP(1)	11		
PLOO	E19	24-Jul-19	BENTHIC	SED_DEPTH(1)	7		cm
PLOO	E19	24-Jul-19	BENTHIC	SED_TYPE(1)		Silt	
PLOO	E19	24-Jul-19	BENTHIC	VISIBILITY	10		mi
PLOO	E19	24-Jul-19	BENTHIC	WEATHER DESC		Clear	
PLOO	E19	24-Jul-19	BENTHIC	SEA STATE		Calm	
PLOO	E19	24-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E19	24-Jul-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E19	24-Jul-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E19	24-Jul-19	BENTHIC	DEPART TIME	1006		

Addendum 1-1A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	E19	24-Jul-19	BENTHIC	COMMENTS			
PLOO	E2	24-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	E2	24-Jul-19	BENTHIC	STN LONG MIN	19.074		
PLOO	E2	24-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	E2	24-Jul-19	BENTHIC	STN LAT MIN	37.46		
PLOO	E2	24-Jul-19	BENTHIC	DEPTH METER	98		m
PLOO	E2	24-Jul-19	BENTHIC	ARRIVE TIME	1137		
PLOO	E2	24-Jul-19	BENTHIC	AIR TEMP	21		C
PLOO	E2	24-Jul-19	BENTHIC	WIND SPEED	8		kts
PLOO	E2	24-Jul-19	BENTHIC	WIND DIR		NW	
PLOO	E2	24-Jul-19	BENTHIC	SED_TEMP(1)	10		
PLOO	E2	24-Jul-19	BENTHIC	SED_DEPTH(1)	11		cm
PLOO	E2	24-Jul-19	BENTHIC	SED_TYPE(1)		Silt and Fine sand	
PLOO	E2	24-Jul-19	BENTHIC	VISIBILITY	10		mi
PLOO	E2	24-Jul-19	BENTHIC	WEATHER DESC		Clear	
PLOO	E2	24-Jul-19	BENTHIC	SEA STATE		Calm	
PLOO	E2	24-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E2	24-Jul-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E2	24-Jul-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E2	24-Jul-19	BENTHIC	DEPART TIME	1149		
PLOO	E2	24-Jul-19	BENTHIC	COMMENTS			
PLOO	E20	24-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	E20	24-Jul-19	BENTHIC	STN LONG MIN	19.669		
PLOO	E20	24-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	E20	24-Jul-19	BENTHIC	STN LAT MIN	40.956		
PLOO	E20	24-Jul-19	BENTHIC	DEPTH METER	99		m
PLOO	E20	24-Jul-19	BENTHIC	ARRIVE TIME	936		
PLOO	E20	24-Jul-19	BENTHIC	AIR TEMP	21		C
PLOO	E20	24-Jul-19	BENTHIC	WIND SPEED	4		kts
PLOO	E20	24-Jul-19	BENTHIC	WIND DIR		NW	
PLOO	E20	24-Jul-19	BENTHIC	SED_TEMP(1)	10		
PLOO	E20	24-Jul-19	BENTHIC	SED_DEPTH(1)	6		cm
PLOO	E20	24-Jul-19	BENTHIC	SED_TYPE(1)		Silt	
PLOO	E20	24-Jul-19	BENTHIC	VISIBILITY	10		mi
PLOO	E20	24-Jul-19	BENTHIC	WEATHER DESC		Clear	
PLOO	E20	24-Jul-19	BENTHIC	SEA STATE		Calm	
PLOO	E20	24-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E20	24-Jul-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E20	24-Jul-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E20	24-Jul-19	BENTHIC	DEPART TIME	949		
PLOO	E20	24-Jul-19	BENTHIC	COMMENTS			
PLOO	E21	24-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	E21	24-Jul-19	BENTHIC	STN LONG MIN	19.985		
PLOO	E21	24-Jul-19	BENTHIC	STN LAT DEG	32		

Addendum 1-1A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	E21	24-Jul-19	BENTHIC	STN LAT MIN	40.888		
PLOO	E21	24-Jul-19	BENTHIC	DEPTH METER	116		m
PLOO	E21	24-Jul-19	BENTHIC	ARRIVE TIME	912		
PLOO	E21	24-Jul-19	BENTHIC	AIR TEMP	22		C
PLOO	E21	24-Jul-19	BENTHIC	WIND SPEED	3		kts
PLOO	E21	24-Jul-19	BENTHIC	WIND DIR		N	
PLOO	E21	24-Jul-19	BENTHIC	SED_TEMP(1)	10		
PLOO	E21	24-Jul-19	BENTHIC	SED_DEPTH(1)	7		cm
PLOO	E21	24-Jul-19	BENTHIC	SED_TYPE(1)		Silt	
PLOO	E21	24-Jul-19	BENTHIC	VISIBILITY	10		mi
PLOO	E21	24-Jul-19	BENTHIC	WEATHER DESC		Clear	
PLOO	E21	24-Jul-19	BENTHIC	SEA STATE		Calm	
PLOO	E21	24-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E21	24-Jul-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E21	24-Jul-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E21	24-Jul-19	BENTHIC	DEPART TIME	932		
PLOO	E21	24-Jul-19	BENTHIC	COMMENTS		Grab failure due to canted	
PLOO	E23	24-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	E23	24-Jul-19	BENTHIC	STN LONG MIN	19.793		
PLOO	E23	24-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	E23	24-Jul-19	BENTHIC	STN LAT MIN	41.477		
PLOO	E23	24-Jul-19	BENTHIC	DEPTH METER	99		m
PLOO	E23	24-Jul-19	BENTHIC	ARRIVE TIME	855		
PLOO	E23	24-Jul-19	BENTHIC	AIR TEMP	21		C
PLOO	E23	24-Jul-19	BENTHIC	WIND SPEED	6		kts
PLOO	E23	24-Jul-19	BENTHIC	WIND DIR		NW	
PLOO	E23	24-Jul-19	BENTHIC	SED_TEMP(1)	10		
PLOO	E23	24-Jul-19	BENTHIC	SED_DEPTH(1)	8		cm
PLOO	E23	24-Jul-19	BENTHIC	SED_TYPE(1)		Silt	
PLOO	E23	24-Jul-19	BENTHIC	VISIBILITY	10		mi
PLOO	E23	24-Jul-19	BENTHIC	WEATHER DESC		Clear	
PLOO	E23	24-Jul-19	BENTHIC	SEA STATE		Calm	
PLOO	E23	24-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E23	24-Jul-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E23	24-Jul-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E23	24-Jul-19	BENTHIC	DEPART TIME	905		
PLOO	E23	24-Jul-19	BENTHIC	COMMENTS			
PLOO	E25	24-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	E25	24-Jul-19	BENTHIC	STN LONG MIN	20.056		
PLOO	E25	24-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	E25	24-Jul-19	BENTHIC	STN LAT MIN	42.369		
PLOO	E25	24-Jul-19	BENTHIC	DEPTH METER	99		m
PLOO	E25	24-Jul-19	BENTHIC	ARRIVE TIME	834		
PLOO	E25	24-Jul-19	BENTHIC	AIR TEMP	21		C

Addendum 1-1A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	E25	24-Jul-19	BENTHIC	WIND SPEED	4		kts
PLOO	E25	24-Jul-19	BENTHIC	WIND DIR		N	
PLOO	E25	24-Jul-19	BENTHIC	SED_TEMP(1)	10		
PLOO	E25	24-Jul-19	BENTHIC	SED_DEPTH(1)	10		cm
PLOO	E25	24-Jul-19	BENTHIC	SED_TYPE(1)		Clay	
PLOO	E25	24-Jul-19	BENTHIC	VISIBILITY	10		mi
PLOO	E25	24-Jul-19	BENTHIC	WEATHER DESC		Clear	
PLOO	E25	24-Jul-19	BENTHIC	SEA STATE		Calm	
PLOO	E25	24-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E25	24-Jul-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E25	24-Jul-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E25	24-Jul-19	BENTHIC	DEPART TIME	847		
PLOO	E25	24-Jul-19	BENTHIC	COMMENTS			
PLOO	E26	24-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	E26	24-Jul-19	BENTHIC	STN LONG MIN	20.577		
PLOO	E26	24-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	E26	24-Jul-19	BENTHIC	STN LAT MIN	43.829		
PLOO	E26	24-Jul-19	BENTHIC	DEPTH METER	99		m
PLOO	E26	24-Jul-19	BENTHIC	ARRIVE TIME	814		
PLOO	E26	24-Jul-19	BENTHIC	AIR TEMP	21		C
PLOO	E26	24-Jul-19	BENTHIC	WIND SPEED	5		kts
PLOO	E26	24-Jul-19	BENTHIC	WIND DIR		W	
PLOO	E26	24-Jul-19	BENTHIC	SED_TEMP(1)	10		
PLOO	E26	24-Jul-19	BENTHIC	SED_DEPTH(1)	9		cm
PLOO	E26	24-Jul-19	BENTHIC	SED_TYPE(1)		Silt	
PLOO	E26	24-Jul-19	BENTHIC	VISIBILITY	10		mi
PLOO	E26	24-Jul-19	BENTHIC	WEATHER DESC		Clear	
PLOO	E26	24-Jul-19	BENTHIC	SEA STATE		Calm	
PLOO	E26	24-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E26	24-Jul-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E26	24-Jul-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E26	24-Jul-19	BENTHIC	DEPART TIME	829		
PLOO	E26	24-Jul-19	BENTHIC	COMMENTS			
PLOO	E3	24-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	E3	24-Jul-19	BENTHIC	STN LONG MIN	20.091		
PLOO	E3	24-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	E3	24-Jul-19	BENTHIC	STN LAT MIN	37.291		
PLOO	E3	24-Jul-19	BENTHIC	DEPTH METER	113		m
PLOO	E3	24-Jul-19	BENTHIC	ARRIVE TIME	1157		
PLOO	E3	24-Jul-19	BENTHIC	AIR TEMP	21		C
PLOO	E3	24-Jul-19	BENTHIC	WIND SPEED	9		kts
PLOO	E3	24-Jul-19	BENTHIC	WIND DIR		W	
PLOO	E3	24-Jul-19	BENTHIC	SED_TEMP(1)	11		

Addendum 1-1A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	E3	24-Jul-19	BENTHIC	SED_DEPTH(1)	6		cm
PLOO	E3	24-Jul-19	BENTHIC	SED_TYPE(1)		Silt and Sand with Coarse sand	
PLOO	E3	24-Jul-19	BENTHIC	VISIBILITY	10		mi
PLOO	E3	24-Jul-19	BENTHIC	WEATHER DESC		Clear	
PLOO	E3	24-Jul-19	BENTHIC	SEA STATE		Calm	
PLOO	E3	24-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E3	24-Jul-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E3	24-Jul-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E3	24-Jul-19	BENTHIC	DEPART TIME	1208		
PLOO	E3	24-Jul-19	BENTHIC	COMMENTS			
PLOO	E5	24-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	E5	24-Jul-19	BENTHIC	STN LONG MIN	19.274		
PLOO	E5	24-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	E5	24-Jul-19	BENTHIC	STN LAT MIN	38.388		
PLOO	E5	24-Jul-19	BENTHIC	DEPTH METER	99		m
PLOO	E5	24-Jul-19	BENTHIC	ARRIVE TIME	1116		
PLOO	E5	24-Jul-19	BENTHIC	AIR TEMP	22		C
PLOO	E5	24-Jul-19	BENTHIC	WIND SPEED	5		kts
PLOO	E5	24-Jul-19	BENTHIC	WIND DIR		NW	
PLOO	E5	24-Jul-19	BENTHIC	SED_TEMP(1)	10		
PLOO	E5	24-Jul-19	BENTHIC	SED_DEPTH(1)	6		cm
PLOO	E5	24-Jul-19	BENTHIC	SED_TYPE(1)		Silt and Fine sand	
PLOO	E5	24-Jul-19	BENTHIC	VISIBILITY	10		mi
PLOO	E5	24-Jul-19	BENTHIC	WEATHER DESC		Clear	
PLOO	E5	24-Jul-19	BENTHIC	SEA STATE		Calm	
PLOO	E5	24-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E5	24-Jul-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E5	24-Jul-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E5	24-Jul-19	BENTHIC	DEPART TIME	1133		
PLOO	E5	24-Jul-19	BENTHIC	COMMENTS			
PLOO	E7	24-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	E7	24-Jul-19	BENTHIC	STN LONG MIN	18.681		
PLOO	E7	24-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	E7	24-Jul-19	BENTHIC	STN LAT MIN	39.016		
PLOO	E7	24-Jul-19	BENTHIC	DEPTH METER	90		m
PLOO	E7	24-Jul-19	BENTHIC	ARRIVE TIME	1259		
PLOO	E7	24-Jul-19	BENTHIC	AIR TEMP	21		C
PLOO	E7	24-Jul-19	BENTHIC	WIND SPEED	6		kts
PLOO	E7	24-Jul-19	BENTHIC	WIND DIR		SW	
PLOO	E7	24-Jul-19	BENTHIC	SED_TEMP(1)	11		
PLOO	E7	24-Jul-19	BENTHIC	SED_DEPTH(1)	10		cm
PLOO	E7	24-Jul-19	BENTHIC	SED_TYPE(1)		Fine sand and Silt	
PLOO	E7	24-Jul-19	BENTHIC	VISIBILITY	10		mi

Addendum 1-1A *continued*

Project	Station	date	Type	Parmcode	Value	Text Field	Units
PLOO	E7	24-Jul-19	BENTHIC	WEATHER DESC		Clear	
PLOO	E7	24-Jul-19	BENTHIC	SEA STATE		Choppy	
PLOO	E7	24-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E7	24-Jul-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E7	24-Jul-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E7	24-Jul-19	BENTHIC	DEPART TIME	1311		
PLOO	E7	24-Jul-19	BENTHIC	COMMENTS			
PLOO	E8	24-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	E8	24-Jul-19	BENTHIC	STN LONG MIN	19.347		
PLOO	E8	24-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	E8	24-Jul-19	BENTHIC	STN LAT MIN	38.928		
PLOO	E8	24-Jul-19	BENTHIC	DEPTH METER	98		m
PLOO	E8	24-Jul-19	BENTHIC	ARRIVE TIME	1053		
PLOO	E8	24-Jul-19	BENTHIC	AIR TEMP	21		C
PLOO	E8	24-Jul-19	BENTHIC	WIND SPEED	10		kts
PLOO	E8	24-Jul-19	BENTHIC	WIND DIR		NW	
PLOO	E8	24-Jul-19	BENTHIC	SED_TEMP(1)	10		
PLOO	E8	24-Jul-19	BENTHIC	SED_DEPTH(1)	9		cm
PLOO	E8	24-Jul-19	BENTHIC	SED_TYPE(1)		Silt with Fine sand	
PLOO	E8	24-Jul-19	BENTHIC	VISIBILITY	10		mi
PLOO	E8	24-Jul-19	BENTHIC	WEATHER DESC		Clear	
PLOO	E8	24-Jul-19	BENTHIC	SEA STATE		Calm	
PLOO	E8	24-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E8	24-Jul-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E8	24-Jul-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E8	24-Jul-19	BENTHIC	DEPART TIME	1115		
PLOO	E8	24-Jul-19	BENTHIC	COMMENTS		Grab failure due to poor closure; Astropecten californica x1	
PLOO	E9	24-Jul-19	BENTHIC	STN LONG DEG	117		
PLOO	E9	24-Jul-19	BENTHIC	STN LONG MIN	20.077		
PLOO	E9	24-Jul-19	BENTHIC	STN LAT DEG	32		
PLOO	E9	24-Jul-19	BENTHIC	STN LAT MIN	38.767		
PLOO	E9	24-Jul-19	BENTHIC	DEPTH METER	115		m
PLOO	E9	24-Jul-19	BENTHIC	ARRIVE TIME	1020		
PLOO	E9	24-Jul-19	BENTHIC	AIR TEMP	22		C
PLOO	E9	24-Jul-19	BENTHIC	WIND SPEED	7		kts
PLOO	E9	24-Jul-19	BENTHIC	WIND DIR		NW	
PLOO	E9	24-Jul-19	BENTHIC	SED_TEMP(1)	11		
PLOO	E9	24-Jul-19	BENTHIC	SED_DEPTH(1)	8		cm
PLOO	E9	24-Jul-19	BENTHIC	SED_TYPE(1)		Silt and Fine sand with Sand	
PLOO	E9	24-Jul-19	BENTHIC	VISIBILITY	10		mi
PLOO	E9	24-Jul-19	BENTHIC	WEATHER DESC		Clear	

Addendum 1-1A *continued*

Project	Station	date	Type	Parmcode	Value	Text Field	Units
PLOO	E9	24-Jul-19	BENTHIC	SEA STATE		Calm	
PLOO	E9	24-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
PLOO	E9	24-Jul-19	BENTHIC	WATER COLOR CODE		Blue	
PLOO	E9	24-Jul-19	BENTHIC	WAVE PER		13-15	sec
PLOO	E9	24-Jul-19	BENTHIC	DEPART TIME	1033		
PLOO	E9	24-Jul-19	BENTHIC	COMMENTS			

Addendum 1-1B

Visual observations from SBOO benthic stations sampled during 2019.

Project	Station	Date	Type	Parmcode	Value	Text Field	Untis
SBOO	I1	29-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I1	29-Jan-19	BENTHIC	STN LONG MIN	16.619		
SBOO	I1	29-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I1	29-Jan-19	BENTHIC	STN LAT MIN	28.41		
SBOO	I1	29-Jan-19	BENTHIC	DEPTH METER	61		m
SBOO	I1	29-Jan-19	BENTHIC	ARRIVE TIME	941		
SBOO	I1	29-Jan-19	BENTHIC	AIR TEMP	14		C
SBOO	I1	29-Jan-19	BENTHIC	WIND SPEED	3		kts
SBOO	I1	29-Jan-19	BENTHIC	WIND DIR		SW	
SBOO	I1	29-Jan-19	BENTHIC	SED_TEMP(1)	13		
SBOO	I1	29-Jan-19	BENTHIC	SED_DEPTH(1)	6		cm
SBOO	I1	29-Jan-19	BENTHIC	SED_TYPE(1)		Fine sand and Sand	
SBOO	I1	29-Jan-19	BENTHIC	VISIBILITY	3		mi
SBOO	I1	29-Jan-19	BENTHIC	WEATHER DESC		Fog	
SBOO	I1	29-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I1	29-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I1	29-Jan-19	BENTHIC	WATER COLOR CODE		Blue	
SBOO	I1	29-Jan-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I1	29-Jan-19	BENTHIC	DEPART TIME	954		
SBOO	I1	29-Jan-19	BENTHIC	COMMENTS		Grab failure due to < 5 cm penetration	
SBOO	I10	29-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I10	29-Jan-19	BENTHIC	STN LONG MIN	9.362		
SBOO	I10	29-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I10	29-Jan-19	BENTHIC	STN LAT MIN	31.018		
SBOO	I10	29-Jan-19	BENTHIC	DEPTH METER	21		m
SBOO	I10	29-Jan-19	BENTHIC	ARRIVE TIME	1145		
SBOO	I10	29-Jan-19	BENTHIC	AIR TEMP	14		C
SBOO	I10	29-Jan-19	BENTHIC	WIND SPEED	5		kts
SBOO	I10	29-Jan-19	BENTHIC	WIND DIR		S	
SBOO	I10	29-Jan-19	BENTHIC	SED_TEMP(1)	15		
SBOO	I10	29-Jan-19	BENTHIC	SED_DEPTH(1)	6		cm
SBOO	I10	29-Jan-19	BENTHIC	SED_TYPE(1)		Fine sand with Silt	
SBOO	I10	29-Jan-19	BENTHIC	VISIBILITY	2		mi
SBOO	I10	29-Jan-19	BENTHIC	WEATHER DESC		Fog	
SBOO	I10	29-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I10	29-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I10	29-Jan-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I10	29-Jan-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I10	29-Jan-19	BENTHIC	DEPART TIME	1153		
SBOO	I10	29-Jan-19	BENTHIC	COMMENTS			
SBOO	I13	29-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I13	29-Jan-19	BENTHIC	STN LONG MIN	12.72		
SBOO	I13	29-Jan-19	BENTHIC	STN LAT DEG	32		

Addendum 1-1B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	I13	29-Jan-19	BENTHIC	STN LAT MIN	32.256		
SBOO	I13	29-Jan-19	BENTHIC	DEPTH METER	38		m
SBOO	I13	29-Jan-19	BENTHIC	AIR TEMP	15		C
SBOO	I13	29-Jan-19	BENTHIC	WIND SPEED	2		kts
SBOO	I13	29-Jan-19	BENTHIC	WIND DIR		S	
SBOO	I13	29-Jan-19	BENTHIC	SED_TEMP(1)	14		
SBOO	I13	29-Jan-19	BENTHIC	SED_DEPTH(1)	11		cm
SBOO	I13	29-Jan-19	BENTHIC	SED_TYPE(1)		Relict red sand and Sand	
SBOO	I13	29-Jan-19	BENTHIC	VISIBILITY	2		mi
SBOO	I13	29-Jan-19	BENTHIC	WEATHER DESC		Fog	
SBOO	I13	29-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I13	29-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I13	29-Jan-19	BENTHIC	WATER COLOR CODE		Blue	
SBOO	I13	29-Jan-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I13	29-Jan-19	BENTHIC	DEPART TIME	1247		
SBOO	I13	29-Jan-19	BENTHIC	COMMENTS		Grab failure due to poor closure	
SBOO	I2	29-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I2	29-Jan-19	BENTHIC	STN LONG MIN	11.934		
SBOO	I2	29-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I2	29-Jan-19	BENTHIC	STN LAT MIN	28.397		
SBOO	I2	29-Jan-19	BENTHIC	DEPTH METER	34		m
SBOO	I2	29-Jan-19	BENTHIC	ARRIVE TIME	1025		
SBOO	I2	29-Jan-19	BENTHIC	AIR TEMP	13		C
SBOO	I2	29-Jan-19	BENTHIC	WIND SPEED	4		kts
SBOO	I2	29-Jan-19	BENTHIC	WIND DIR		SE	
SBOO	I2	29-Jan-19	BENTHIC	SED_TEMP(1)	14		
SBOO	I2	29-Jan-19	BENTHIC	SED_DEPTH(1)	9		cm
SBOO	I2	29-Jan-19	BENTHIC	SED_TYPE(1)		Sand and Fine sand	
SBOO	I2	29-Jan-19	BENTHIC	VISIBILITY	1		mi
SBOO	I2	29-Jan-19	BENTHIC	WEATHER DESC		Fog	
SBOO	I2	29-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I2	29-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I2	29-Jan-19	BENTHIC	WATER COLOR CODE		Blue	
SBOO	I2	29-Jan-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I2	29-Jan-19	BENTHIC	DEPART TIME	1032		
SBOO	I2	29-Jan-19	BENTHIC	COMMENTS			
SBOO	I20	29-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I20	29-Jan-19	BENTHIC	STN LONG MIN	15.429		
SBOO	I20	29-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I20	29-Jan-19	BENTHIC	STN LAT MIN	33.432		
SBOO	I20	29-Jan-19	BENTHIC	DEPTH METER	56		m
SBOO	I20	29-Jan-19	BENTHIC	ARRIVE TIME	1322		
SBOO	I20	29-Jan-19	BENTHIC	AIR TEMP	14		C
SBOO	I20	29-Jan-19	BENTHIC	WIND SPEED	3		kts

Addendum 1-1B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	I20	29-Jan-19	BENTHIC	WIND DIR		SW	
SBOO	I20	29-Jan-19	BENTHIC	SED_TEMP(1)	13		
SBOO	I20	29-Jan-19	BENTHIC	SED_DEPTH(1)	7		cm
SBOO	I20	29-Jan-19	BENTHIC	SED_TYPE(1)		Relict red sand	
SBOO	I20	29-Jan-19	BENTHIC	VISIBILITY	2		mi
SBOO	I20	29-Jan-19	BENTHIC	WEATHER DESC		Fog	
SBOO	I20	29-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I20	29-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I20	29-Jan-19	BENTHIC	WATER COLOR CODE		Blue	
SBOO	I20	29-Jan-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I20	29-Jan-19	BENTHIC	DEPART TIME	1329		
SBOO	I20	29-Jan-19	BENTHIC	COMMENTS			
SBOO	I21	29-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I21	29-Jan-19	BENTHIC	STN LONG MIN	13.629		
SBOO	I21	29-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I21	29-Jan-19	BENTHIC	STN LAT MIN	33.642		
SBOO	I21	29-Jan-19	BENTHIC	DEPTH METER	42		m
SBOO	I21	29-Jan-19	BENTHIC	ARRIVE TIME	1302		
SBOO	I21	29-Jan-19	BENTHIC	AIR TEMP	14		C
SBOO	I21	29-Jan-19	BENTHIC	WIND SPEED	3		kts
SBOO	I21	29-Jan-19	BENTHIC	WIND DIR		S	
SBOO	I21	29-Jan-19	BENTHIC	SED_TEMP(1)	14		
SBOO	I21	29-Jan-19	BENTHIC	SED_DEPTH(1)	9		cm
SBOO	I21	29-Jan-19	BENTHIC	SED_TYPE(1)		Relict red sand	
SBOO	I21	29-Jan-19	BENTHIC	VISIBILITY	2		mi
SBOO	I21	29-Jan-19	BENTHIC	WEATHER DESC		Fog	
SBOO	I21	29-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I21	29-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I21	29-Jan-19	BENTHIC	WATER COLOR CODE		Blue	
SBOO	I21	29-Jan-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I21	29-Jan-19	BENTHIC	DEPART TIME	1308		
SBOO	I21	29-Jan-19	BENTHIC	COMMENTS			
SBOO	I28	29-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I28	29-Jan-19	BENTHIC	STN LONG MIN	15.848		
SBOO	I28	29-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I28	29-Jan-19	BENTHIC	STN LAT MIN	35.642		
SBOO	I28	29-Jan-19	BENTHIC	DEPTH METER	57		m
SBOO	I28	29-Jan-19	BENTHIC	ARRIVE TIME	1344		
SBOO	I28	29-Jan-19	BENTHIC	AIR TEMP	15		C
SBOO	I28	29-Jan-19	BENTHIC	WIND SPEED	2		kts
SBOO	I28	29-Jan-19	BENTHIC	WIND DIR		S	
SBOO	I28	29-Jan-19	BENTHIC	SED_TEMP(1)	14		
SBOO	I28	29-Jan-19	BENTHIC	SED_DEPTH(1)	8		cm
SBOO	I28	29-Jan-19	BENTHIC	SED_TYPE(1)		Silt and Fine sand with Coarse sand	

Addendum 1-1B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	I28	29-Jan-19	BENTHIC	VISIBILITY	2		mi
SBOO	I28	29-Jan-19	BENTHIC	WEATHER DESC		Fog	
SBOO	I28	29-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I28	29-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I28	29-Jan-19	BENTHIC	WATER COLOR CODE		Blue	
SBOO	I28	29-Jan-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I28	29-Jan-19	BENTHIC	DEPART TIME	1349		
SBOO	I28	29-Jan-19	BENTHIC	COMMENTS			
SBOO	I3	29-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I3	29-Jan-19	BENTHIC	STN LONG MIN	10.086		
SBOO	I3	29-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I3	29-Jan-19	BENTHIC	STN LAT MIN	28.024		
SBOO	I3	29-Jan-19	BENTHIC	DEPTH METER	27		m
SBOO	I3	29-Jan-19	BENTHIC	ARRIVE TIME	1044		
SBOO	I3	29-Jan-19	BENTHIC	AIR TEMP	14		C
SBOO	I3	29-Jan-19	BENTHIC	WIND SPEED	5		kts
SBOO	I3	29-Jan-19	BENTHIC	WIND DIR		SE	
SBOO	I3	29-Jan-19	BENTHIC	SED_TEMP(1)	15		
SBOO	I3	29-Jan-19	BENTHIC	SED_DEPTH(1)	11		cm
SBOO	I3	29-Jan-19	BENTHIC	SED_TYPE(1)		Coarse sand and Red relict sand	
SBOO	I3	29-Jan-19	BENTHIC	VISIBILITY	1		mi
SBOO	I3	29-Jan-19	BENTHIC	WEATHER DESC		Fog	
SBOO	I3	29-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I3	29-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I3	29-Jan-19	BENTHIC	WATER COLOR CODE		Greenish-blue	
SBOO	I3	29-Jan-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I3	29-Jan-19	BENTHIC	DEPART TIME	1052		
SBOO	I3	29-Jan-19	BENTHIC	COMMENTS			
SBOO	I33	29-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I33	29-Jan-19	BENTHIC	STN LONG MIN	14.265		
SBOO	I33	29-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I33	29-Jan-19	BENTHIC	STN LAT MIN	37.44		
SBOO	I33	29-Jan-19	BENTHIC	DEPTH METER	31		m
SBOO	I33	29-Jan-19	BENTHIC	ARRIVE TIME	821		
SBOO	I33	29-Jan-19	BENTHIC	AIR TEMP	13		C
SBOO	I33	29-Jan-19	BENTHIC	WIND SPEED	0		kts
SBOO	I33	29-Jan-19	BENTHIC	WIND DIR		XX	
SBOO	I33	29-Jan-19	BENTHIC	SED_TEMP(1)	14		
SBOO	I33	29-Jan-19	BENTHIC	SED_DEPTH(1)	7		cm
SBOO	I33	29-Jan-19	BENTHIC	SED_TYPE(1)		Fine sand	
SBOO	I33	29-Jan-19	BENTHIC	VISIBILITY	2		mi
SBOO	I33	29-Jan-19	BENTHIC	WEATHER DESC		Fog	
SBOO	I33	29-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I33	29-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft

Addendum 1-1B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	I33	29-Jan-19	BENTHIC	WATER COLOR CODE		Green	
SBOO	I33	29-Jan-19	BENTHIC	WAVE PER		10-Sep	sec
SBOO	I33	29-Jan-19	BENTHIC	DEPART TIME	828		
SBOO	I33	29-Jan-19	BENTHIC	COMMENTS			
SBOO	I34	29-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I34	29-Jan-19	BENTHIC	STN LONG MIN	12.947		
SBOO	I34	29-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I34	29-Jan-19	BENTHIC	STN LAT MIN	37.815		
SBOO	I34	29-Jan-19	BENTHIC	DEPTH METER	20		m
SBOO	I34	29-Jan-19	BENTHIC	ARRIVE TIME	1410		
SBOO	I34	29-Jan-19	BENTHIC	AIR TEMP	15		C
SBOO	I34	29-Jan-19	BENTHIC	WIND SPEED	1		kts
SBOO	I34	29-Jan-19	BENTHIC	WIND DIR		W	
SBOO	I34	29-Jan-19	BENTHIC	SED_TEMP(1)	14		
SBOO	I34	29-Jan-19	BENTHIC	SED_DEPTH(1)	10		cm
SBOO	I34	29-Jan-19	BENTHIC	SED_TYPE(1)		Coarse sand with Shell hash	
SBOO	I34	29-Jan-19	BENTHIC	VISIBILITY	3		mi
SBOO	I34	29-Jan-19	BENTHIC	WEATHER DESC		Fog	
SBOO	I34	29-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I34	29-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I34	29-Jan-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I34	29-Jan-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I34	29-Jan-19	BENTHIC	DEPART TIME	1426		
SBOO	I34	29-Jan-19	BENTHIC	COMMENTS		Marine debris: glass	
SBOO	I4	29-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I4	29-Jan-19	BENTHIC	STN LONG MIN	8.397		
SBOO	I4	29-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I4	29-Jan-19	BENTHIC	STN LAT MIN	28.297		
SBOO	I4	29-Jan-19	BENTHIC	DEPTH METER	19		m
SBOO	I4	29-Jan-19	BENTHIC	ARRIVE TIME	1103		
SBOO	I4	29-Jan-19	BENTHIC	AIR TEMP	14		C
SBOO	I4	29-Jan-19	BENTHIC	WIND SPEED	3		kts
SBOO	I4	29-Jan-19	BENTHIC	WIND DIR		S	
SBOO	I4	29-Jan-19	BENTHIC	SED_TEMP(1)	15		
SBOO	I4	29-Jan-19	BENTHIC	SED_DEPTH(1)	7		cm
SBOO	I4	29-Jan-19	BENTHIC	SED_TYPE(1)		Sand	
SBOO	I4	29-Jan-19	BENTHIC	VISIBILITY	1		mi
SBOO	I4	29-Jan-19	BENTHIC	WEATHER DESC		Fog	
SBOO	I4	29-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I4	29-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I4	29-Jan-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I4	29-Jan-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I4	29-Jan-19	BENTHIC	DEPART TIME	1114		
SBOO	I4	29-Jan-19	BENTHIC	COMMENTS			

Addendum 1-1B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	I6	29-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I6	29-Jan-19	BENTHIC	STN LONG MIN	9.772		
SBOO	I6	29-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I6	29-Jan-19	BENTHIC	STN LAT MIN	29.607		
SBOO	I6	29-Jan-19	BENTHIC	DEPTH METER	27		m
SBOO	I6	29-Jan-19	BENTHIC	ARRIVE TIME	1128		
SBOO	I6	29-Jan-19	BENTHIC	AIR TEMP	14		C
SBOO	I6	29-Jan-19	BENTHIC	WIND SPEED	4		kts
SBOO	I6	29-Jan-19	BENTHIC	WIND DIR		SW	
SBOO	I6	29-Jan-19	BENTHIC	SED_TEMP(1)	14		
SBOO	I6	29-Jan-19	BENTHIC	SED_DEPTH(1)	9		cm
SBOO	I6	29-Jan-19	BENTHIC	SED_TYPE(1)		Fine red relict sand with Fine sand	
SBOO	I6	29-Jan-19	BENTHIC	VISIBILITY	2		mi
SBOO	I6	29-Jan-19	BENTHIC	WEATHER DESC		Fog	
SBOO	I6	29-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I6	29-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I6	29-Jan-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I6	29-Jan-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I6	29-Jan-19	BENTHIC	DEPART TIME	1135		
SBOO	I6	29-Jan-19	BENTHIC	COMMENTS			
SBOO	I7	29-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I7	29-Jan-19	BENTHIC	STN LONG MIN	15.176		
SBOO	I7	29-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I7	29-Jan-19	BENTHIC	STN LAT MIN	31.013		
SBOO	I7	29-Jan-19	BENTHIC	DEPTH METER	52		m
SBOO	I7	29-Jan-19	BENTHIC	ARRIVE TIME	911		
SBOO	I7	29-Jan-19	BENTHIC	AIR TEMP	14		C
SBOO	I7	29-Jan-19	BENTHIC	WIND SPEED	5		kts
SBOO	I7	29-Jan-19	BENTHIC	WIND DIR		W	
SBOO	I7	29-Jan-19	BENTHIC	SED_TEMP(1)	13		
SBOO	I7	29-Jan-19	BENTHIC	SED_DEPTH(1)	12		cm
SBOO	I7	29-Jan-19	BENTHIC	SED_TYPE(1)		Fine red relict sand with Sand	
SBOO	I7	29-Jan-19	BENTHIC	VISIBILITY	3		mi
SBOO	I7	29-Jan-19	BENTHIC	WEATHER DESC		Fog	
SBOO	I7	29-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I7	29-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I7	29-Jan-19	BENTHIC	WATER COLOR CODE		Green	
SBOO	I7	29-Jan-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I7	29-Jan-19	BENTHIC	DEPART TIME	918		
SBOO	I7	29-Jan-19	BENTHIC	COMMENTS			
SBOO	I8	29-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I8	29-Jan-19	BENTHIC	STN LONG MIN	12.134		
SBOO	I8	29-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I8	29-Jan-19	BENTHIC	STN LAT MIN	31.006		

Addendum 1-1B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	I8	29-Jan-19	BENTHIC	DEPTH METER	36		m
SBOO	I8	29-Jan-19	BENTHIC	ARRIVE TIME	1219		
SBOO	I8	29-Jan-19	BENTHIC	AIR TEMP	14		C
SBOO	I8	29-Jan-19	BENTHIC	WIND SPEED	3		kts
SBOO	I8	29-Jan-19	BENTHIC	WIND DIR		S	
SBOO	I8	29-Jan-19	BENTHIC	SED_TEMP(1)	14		
SBOO	I8	29-Jan-19	BENTHIC	SED_DEPTH(1)	9		cm
SBOO	I8	29-Jan-19	BENTHIC	SED_TYPE(1)		Sand	
SBOO	I8	29-Jan-19	BENTHIC	VISIBILITY	2		mi
SBOO	I8	29-Jan-19	BENTHIC	WEATHER DESC		Fog	
SBOO	I8	29-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I8	29-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I8	29-Jan-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I8	29-Jan-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I8	29-Jan-19	BENTHIC	DEPART TIME	1223		
SBOO	I8	29-Jan-19	BENTHIC	COMMENTS			
SBOO	I9	29-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I9	29-Jan-19	BENTHIC	STN LONG MIN	10.725		
SBOO	I9	29-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I9	29-Jan-19	BENTHIC	STN LAT MIN	30.697		
SBOO	I9	29-Jan-19	BENTHIC	DEPTH METER	30		m
SBOO	I9	29-Jan-19	BENTHIC	ARRIVE TIME	1203		
SBOO	I9	29-Jan-19	BENTHIC	AIR TEMP	14		C
SBOO	I9	29-Jan-19	BENTHIC	WIND SPEED	3		kts
SBOO	I9	29-Jan-19	BENTHIC	WIND DIR		SW	
SBOO	I9	29-Jan-19	BENTHIC	SED_TEMP(1)	15		
SBOO	I9	29-Jan-19	BENTHIC	SED_DEPTH(1)	6		cm
SBOO	I9	29-Jan-19	BENTHIC	SED_TYPE(1)		Fine sand	
SBOO	I9	29-Jan-19	BENTHIC	VISIBILITY	2		mi
SBOO	I9	29-Jan-19	BENTHIC	WEATHER DESC		Fog	
SBOO	I9	29-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I9	29-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I9	29-Jan-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I9	29-Jan-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I9	29-Jan-19	BENTHIC	DEPART TIME	1211		
SBOO	I9	29-Jan-19	BENTHIC	COMMENTS			
SBOO	I12	30-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I12	30-Jan-19	BENTHIC	STN LONG MIN	10.996		
SBOO	I12	30-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I12	30-Jan-19	BENTHIC	STN LAT MIN	31.972		
SBOO	I12	30-Jan-19	BENTHIC	DEPTH METER	30		m
SBOO	I12	30-Jan-19	BENTHIC	ARRIVE TIME	852		
SBOO	I12	30-Jan-19	BENTHIC	AIR TEMP	15		C
SBOO	I12	30-Jan-19	BENTHIC	WIND SPEED	1		kts
SBOO	I12	30-Jan-19	BENTHIC	WIND DIR		NE	

Addendum 1-1B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	I12	30-Jan-19	BENTHIC	SED_TEMP(1)	15		
SBOO	I12	30-Jan-19	BENTHIC	SED_DEPTH(1)	6		cm
SBOO	I12	30-Jan-19	BENTHIC	SED_TYPE(1)		Sand	
SBOO	I12	30-Jan-19	BENTHIC	VISIBILITY	11		mi
SBOO	I12	30-Jan-19	BENTHIC	WEATHER DESC		Partly cloudy	
SBOO	I12	30-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I12	30-Jan-19	BENTHIC	WAVE HEIGHT LOW	5		ft
SBOO	I12	30-Jan-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I12	30-Jan-19	BENTHIC	WAVE PER		12-Nov	sec
SBOO	I12	30-Jan-19	BENTHIC	DEPART TIME	900		
SBOO	I12	30-Jan-19	BENTHIC	COMMENTS		1 x Lovenia cordiformis	
SBOO	I14	30-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I14	30-Jan-19	BENTHIC	STN LONG MIN	11.054		
SBOO	I14	30-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I14	30-Jan-19	BENTHIC	STN LAT MIN	32.579		
SBOO	I14	30-Jan-19	BENTHIC	DEPTH METER	30		m
SBOO	I14	30-Jan-19	BENTHIC	ARRIVE TIME	931		
SBOO	I14	30-Jan-19	BENTHIC	AIR TEMP	15		C
SBOO	I14	30-Jan-19	BENTHIC	WIND SPEED	2		kts
SBOO	I14	30-Jan-19	BENTHIC	WIND DIR		E	
SBOO	I14	30-Jan-19	BENTHIC	SED_TEMP(1)	15		
SBOO	I14	30-Jan-19	BENTHIC	SED_DEPTH(1)	5		cm
SBOO	I14	30-Jan-19	BENTHIC	SED_TYPE(1)		Fine sand with Silt with Silt	
SBOO	I14	30-Jan-19	BENTHIC	VISIBILITY	11		mi
SBOO	I14	30-Jan-19	BENTHIC	WEATHER DESC		Partly cloudy	
SBOO	I14	30-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I14	30-Jan-19	BENTHIC	WAVE HEIGHT LOW	5		ft
SBOO	I14	30-Jan-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I14	30-Jan-19	BENTHIC	WAVE PER		12-Nov	sec
SBOO	I14	30-Jan-19	BENTHIC	DEPART TIME	938		
SBOO	I14	30-Jan-19	BENTHIC	COMMENTS			
SBOO	I15	30-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I15	30-Jan-19	BENTHIC	STN LONG MIN	11.358		
SBOO	I15	30-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I15	30-Jan-19	BENTHIC	STN LAT MIN	32.274		
SBOO	I15	30-Jan-19	BENTHIC	DEPTH METER	32		m
SBOO	I15	30-Jan-19	BENTHIC	ARRIVE TIME	919		
SBOO	I15	30-Jan-19	BENTHIC	AIR TEMP	15		C
SBOO	I15	30-Jan-19	BENTHIC	WIND SPEED	5		kts
SBOO	I15	30-Jan-19	BENTHIC	WIND DIR		E	
SBOO	I15	30-Jan-19	BENTHIC	SED_TEMP(1)	15		
SBOO	I15	30-Jan-19	BENTHIC	SED_DEPTH(1)	8		cm
SBOO	I15	30-Jan-19	BENTHIC	SED_TYPE(1)		Sand	
SBOO	I15	30-Jan-19	BENTHIC	VISIBILITY	11		mi

Addendum 1-1B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	I15	30-Jan-19	BENTHIC	WEATHER DESC		Partly cloudy	
SBOO	I15	30-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I15	30-Jan-19	BENTHIC	WAVE HEIGHT LOW	5		ft
SBOO	I15	30-Jan-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I15	30-Jan-19	BENTHIC	WAVE PER		12-Nov	sec
SBOO	I15	30-Jan-19	BENTHIC	DEPART TIME	925		
SBOO	I15	30-Jan-19	BENTHIC	COMMENTS			
SBOO	I16	30-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I16	30-Jan-19	BENTHIC	STN LONG MIN	10.98		
SBOO	I16	30-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I16	30-Jan-19	BENTHIC	STN LAT MIN	32.265		
SBOO	I16	30-Jan-19	BENTHIC	DEPTH METER	28		m
SBOO	I16	30-Jan-19	BENTHIC	ARRIVE TIME	904		
SBOO	I16	30-Jan-19	BENTHIC	AIR TEMP	15		C
SBOO	I16	30-Jan-19	BENTHIC	WIND SPEED	4		kts
SBOO	I16	30-Jan-19	BENTHIC	WIND DIR		NE	
SBOO	I16	30-Jan-19	BENTHIC	SED_TEMP(1)	15		
SBOO	I16	30-Jan-19	BENTHIC	SED_DEPTH(1)	7		cm
SBOO	I16	30-Jan-19	BENTHIC	SED_TYPE(1)		Sand	
SBOO	I16	30-Jan-19	BENTHIC	VISIBILITY	11		mi
SBOO	I16	30-Jan-19	BENTHIC	WEATHER DESC		Partly cloudy	
SBOO	I16	30-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I16	30-Jan-19	BENTHIC	WAVE HEIGHT LOW	5		ft
SBOO	I16	30-Jan-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I16	30-Jan-19	BENTHIC	WAVE PER		12-Nov	sec
SBOO	I16	30-Jan-19	BENTHIC	DEPART TIME	914		
SBOO	I16	30-Jan-19	BENTHIC	COMMENTS		Grab failure due to poor closure; 2 x Lovenia cordiformis	
SBOO	I18	30-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I18	30-Jan-19	BENTHIC	STN LONG MIN	9.672		
SBOO	I18	30-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I18	30-Jan-19	BENTHIC	STN LAT MIN	32.178		
SBOO	I18	30-Jan-19	BENTHIC	DEPTH METER	21		m
SBOO	I18	30-Jan-19	BENTHIC	ARRIVE TIME	818		
SBOO	I18	30-Jan-19	BENTHIC	AIR TEMP	15		C
SBOO	I18	30-Jan-19	BENTHIC	WIND SPEED	2		kts
SBOO	I18	30-Jan-19	BENTHIC	WIND DIR		E	
SBOO	I18	30-Jan-19	BENTHIC	SED_TEMP(1)	14		
SBOO	I18	30-Jan-19	BENTHIC	SED_DEPTH(1)	7		cm
SBOO	I18	30-Jan-19	BENTHIC	SED_TYPE(1)		Fine sand with Silt	
SBOO	I18	30-Jan-19	BENTHIC	VISIBILITY	11		mi
SBOO	I18	30-Jan-19	BENTHIC	WEATHER DESC		Partly cloudy	
SBOO	I18	30-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I18	30-Jan-19	BENTHIC	WAVE HEIGHT LOW	5		ft

Addendum 1-1B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	I18	30-Jan-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I18	30-Jan-19	BENTHIC	WAVE PER		12-Nov	sec
SBOO	I18	30-Jan-19	BENTHIC	DEPART TIME	840		
SBOO	I18	30-Jan-19	BENTHIC	COMMENTS		Grab failure due to < 5 cm penetration; Grab failure due to poor closure	
SBOO	I22	30-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I22	30-Jan-19	BENTHIC	STN LONG MIN	11.136		
SBOO	I22	30-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I22	30-Jan-19	BENTHIC	STN LAT MIN	33.211		
SBOO	I22	30-Jan-19	BENTHIC	DEPTH METER	29		m
SBOO	I22	30-Jan-19	BENTHIC	ARRIVE TIME	1014		
SBOO	I22	30-Jan-19	BENTHIC	AIR TEMP	15		C
SBOO	I22	30-Jan-19	BENTHIC	WIND SPEED	3		kts
SBOO	I22	30-Jan-19	BENTHIC	WIND DIR		S	
SBOO	I22	30-Jan-19	BENTHIC	SED_TEMP(1)	15		
SBOO	I22	30-Jan-19	BENTHIC	SED_DEPTH(1)	7		cm
SBOO	I22	30-Jan-19	BENTHIC	SED_TYPE(1)		Fine sand	
SBOO	I22	30-Jan-19	BENTHIC	VISIBILITY	13		mi
SBOO	I22	30-Jan-19	BENTHIC	WEATHER DESC		Partly cloudy	
SBOO	I22	30-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I22	30-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I22	30-Jan-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I22	30-Jan-19	BENTHIC	WAVE PER		12-Nov	sec
SBOO	I22	30-Jan-19	BENTHIC	DEPART TIME	1037		
SBOO	I22	30-Jan-19	BENTHIC	COMMENTS		Grab failure due to poor closure; Grab failure due to < 5 cm penetration	
SBOO	I23	30-Jan-19	BENTHIC	WIND DIR		E	
SBOO	I23	30-Jan-19	BENTHIC	SED_TEMP(1)	15		
SBOO	I23	30-Jan-19	BENTHIC	SED_DEPTH(1)	5		cm
SBOO	I23	30-Jan-19	BENTHIC	SED_TYPE(1)			
SBOO	I23	30-Jan-19	BENTHIC	VISIBILITY	11		mi
SBOO	I23	30-Jan-19	BENTHIC	WEATHER DESC		Partly cloudy	
SBOO	I23	30-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I23	30-Jan-19	BENTHIC	WAVE HEIGHT LOW	5		ft
SBOO	I23	30-Jan-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I23	30-Jan-19	BENTHIC	WAVE PER		12-Nov	sec
SBOO	I23	30-Jan-19	BENTHIC	DEPART TIME	959		
SBOO	I23	30-Jan-19	BENTHIC	COMMENTS			
SBOO	I23	30-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I23	30-Jan-19	BENTHIC	STN LONG MIN	9.902		
SBOO	I23	30-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I23	30-Jan-19	BENTHIC	STN LAT MIN	33.047		

Addendum 1-1B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	I23	30-Jan-19	BENTHIC	DEPTH METER	21		m
SBOO	I23	30-Jan-19	BENTHIC	ARRIVE TIME	951		
SBOO	I23	30-Jan-19	BENTHIC	AIR TEMP	15		C
SBOO	I23	30-Jan-19	BENTHIC	WIND SPEED	2		kts
SBOO	I27	30-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I27	30-Jan-19	BENTHIC	STN LONG MIN	11.444		
SBOO	I27	30-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I27	30-Jan-19	BENTHIC	STN LAT MIN	34.464		
SBOO	I27	30-Jan-19	BENTHIC	DEPTH METER	29		m
SBOO	I27	30-Jan-19	BENTHIC	ARRIVE TIME	1046		
SBOO	I27	30-Jan-19	BENTHIC	AIR TEMP	15		C
SBOO	I27	30-Jan-19	BENTHIC	WIND SPEED	4		kts
SBOO	I27	30-Jan-19	BENTHIC	WIND DIR		S	
SBOO	I27	30-Jan-19	BENTHIC	SED_TEMP(1)	15		
SBOO	I27	30-Jan-19	BENTHIC	SED_DEPTH(1)	6		cm
SBOO	I27	30-Jan-19	BENTHIC	SED_TYPE(1)		Fine sand with Silt	
SBOO	I27	30-Jan-19	BENTHIC	VISIBILITY	13		mi
SBOO	I27	30-Jan-19	BENTHIC	WEATHER DESC		Partly cloudy	
SBOO	I27	30-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I27	30-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I27	30-Jan-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I27	30-Jan-19	BENTHIC	WAVE PER		12-Nov	sec
SBOO	I27	30-Jan-19	BENTHIC	DEPART TIME	1112		
SBOO	I27	30-Jan-19	BENTHIC	COMMENTS		Grab failure due to < 5 cm penetration; Grab failure due to poor closure; Grab failure due to poor closure	
SBOO	I29	30-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I29	30-Jan-19	BENTHIC	STN LONG MIN	13.383		
SBOO	I29	30-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I29	30-Jan-19	BENTHIC	STN LAT MIN	35.678		
SBOO	I29	30-Jan-19	BENTHIC	DEPTH METER	38		m
SBOO	I29	30-Jan-19	BENTHIC	ARRIVE TIME	1129		
SBOO	I29	30-Jan-19	BENTHIC	AIR TEMP	15		C
SBOO	I29	30-Jan-19	BENTHIC	WIND SPEED	4		kts
SBOO	I29	30-Jan-19	BENTHIC	WIND DIR		SW	
SBOO	I29	30-Jan-19	BENTHIC	SED_TEMP(1)	15		
SBOO	I29	30-Jan-19	BENTHIC	SED_DEPTH(1)	5		cm
SBOO	I29	30-Jan-19	BENTHIC	SED_TYPE(1)		Sand	
SBOO	I29	30-Jan-19	BENTHIC	VISIBILITY	13		mi
SBOO	I29	30-Jan-19	BENTHIC	WEATHER DESC		Partly cloudy	
SBOO	I29	30-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I29	30-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft

Addendum 1-1B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	I29	30-Jan-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I29	30-Jan-19	BENTHIC	WAVE PER		12-Nov	sec
SBOO	I29	30-Jan-19	BENTHIC	DEPART TIME	1136		
SBOO	I29	30-Jan-19	BENTHIC	COMMENTS			
SBOO	I30	30-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I30	30-Jan-19	BENTHIC	STN LONG MIN	11.816		
SBOO	I30	30-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I30	30-Jan-19	BENTHIC	STN LAT MIN	35.722		
SBOO	I30	30-Jan-19	BENTHIC	DEPTH METER	28		m
SBOO	I30	30-Jan-19	BENTHIC	ARRIVE TIME	1147		
SBOO	I30	30-Jan-19	BENTHIC	AIR TEMP	16		C
SBOO	I30	30-Jan-19	BENTHIC	WIND SPEED	3		kts
SBOO	I30	30-Jan-19	BENTHIC	WIND DIR		SW	
SBOO	I30	30-Jan-19	BENTHIC	SED_TEMP(1)	15		
SBOO	I30	30-Jan-19	BENTHIC	SED_DEPTH(1)	5		cm
SBOO	I30	30-Jan-19	BENTHIC	SED_TYPE(1)		Fine sand with Silt	
SBOO	I30	30-Jan-19	BENTHIC	VISIBILITY	13		mi
SBOO	I30	30-Jan-19	BENTHIC	WEATHER DESC		Partly cloudy	
SBOO	I30	30-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I30	30-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I30	30-Jan-19	BENTHIC	WATER COLOR CODE		Blue	
SBOO	I30	30-Jan-19	BENTHIC	WAVE PER		12-Nov	sec
SBOO	I30	30-Jan-19	BENTHIC	DEPART TIME	1156		
SBOO	I30	30-Jan-19	BENTHIC	COMMENTS			
SBOO	I31	30-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I31	30-Jan-19	BENTHIC	STN LONG MIN	10.313		
SBOO	I31	30-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I31	30-Jan-19	BENTHIC	STN LAT MIN	35.728		
SBOO	I31	30-Jan-19	BENTHIC	DEPTH METER	20		m
SBOO	I31	30-Jan-19	BENTHIC	ARRIVE TIME	1206		
SBOO	I31	30-Jan-19	BENTHIC	AIR TEMP	16		C
SBOO	I31	30-Jan-19	BENTHIC	WIND SPEED	6		kts
SBOO	I31	30-Jan-19	BENTHIC	WIND DIR		SW	
SBOO	I31	30-Jan-19	BENTHIC	SED_TEMP(1)	15		
SBOO	I31	30-Jan-19	BENTHIC	SED_DEPTH(1)	7		cm
SBOO	I31	30-Jan-19	BENTHIC	SED_TYPE(1)		Fine sand with Silt	
SBOO	I31	30-Jan-19	BENTHIC	VISIBILITY	13		mi
SBOO	I31	30-Jan-19	BENTHIC	WEATHER DESC		Partly cloudy	
SBOO	I31	30-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I31	30-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I31	30-Jan-19	BENTHIC	WATER COLOR CODE		Blue	
SBOO	I31	30-Jan-19	BENTHIC	WAVE PER		12-Nov	sec
SBOO	I31	30-Jan-19	BENTHIC	DEPART TIME	1214		
SBOO	I35	30-Jan-19	BENTHIC	COMMENTS		Algae present	

Addendum 1-1B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	I35	30-Jan-19	BENTHIC	STN LONG DEG	117		
SBOO	I35	30-Jan-19	BENTHIC	STN LONG MIN	10.914		
SBOO	I35	30-Jan-19	BENTHIC	STN LAT DEG	32		
SBOO	I35	30-Jan-19	BENTHIC	STN LAT MIN	38.187		
SBOO	I35	30-Jan-19	BENTHIC	DEPTH METER	19		m
SBOO	I35	30-Jan-19	BENTHIC	ARRIVE TIME	1231		
SBOO	I35	30-Jan-19	BENTHIC	AIR TEMP	15		C
SBOO	I35	30-Jan-19	BENTHIC	WIND SPEED	4		kts
SBOO	I35	30-Jan-19	BENTHIC	WIND DIR		SW	
SBOO	I35	30-Jan-19	BENTHIC	SED_TEMP(1)	15		
SBOO	I35	30-Jan-19	BENTHIC	SED_DEPTH(1)	6		cm
SBOO	I35	30-Jan-19	BENTHIC	SED_TYPE(1)		Silt with Fine sand	
SBOO	I35	30-Jan-19	BENTHIC	VISIBILITY	13		mi
SBOO	I35	30-Jan-19	BENTHIC	WEATHER DESC		Partly cloudy	
SBOO	I35	30-Jan-19	BENTHIC	SEA STATE		Calm	
SBOO	I35	30-Jan-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I35	30-Jan-19	BENTHIC	WATER COLOR CODE		Blue	
SBOO	I35	30-Jan-19	BENTHIC	WAVE PER		12-Nov	sec
SBOO	I35	30-Jan-19	BENTHIC	DEPART TIME	1242		
SBOO	I18	11-Jul-19	BENTHIC	STN LONG DEG	117		
SBOO	I18	11-Jul-19	BENTHIC	STN LONG MIN	9.666		
SBOO	I18	11-Jul-19	BENTHIC	STN LAT DEG	32		
SBOO	I18	11-Jul-19	BENTHIC	STN LAT MIN	32.165		
SBOO	I18	11-Jul-19	BENTHIC	DEPTH METER	19		m
SBOO	I18	11-Jul-19	BENTHIC	ARRIVE TIME	1006		
SBOO	I18	11-Jul-19	BENTHIC	AIR TEMP	19		C
SBOO	I18	11-Jul-19	BENTHIC	WIND SPEED	5		kts
SBOO	I18	11-Jul-19	BENTHIC	WIND DIR		SW	
SBOO	I18	11-Jul-19	BENTHIC	SED_TEMP(1)	13		
SBOO	I18	11-Jul-19	BENTHIC	SED_DEPTH(1)	5		cm
SBOO	I18	11-Jul-19	BENTHIC	SED_TYPE(1)		Fine sand and Silt	
SBOO	I18	11-Jul-19	BENTHIC	VISIBILITY	7		mi
SBOO	I18	11-Jul-19	BENTHIC	WEATHER DESC		Overcast	
SBOO	I18	11-Jul-19	BENTHIC	SEA STATE		Calm	
SBOO	I18	11-Jul-19	BENTHIC	WAVE HEIGHT LOW	4		ft
SBOO	I18	11-Jul-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I18	11-Jul-19	BENTHIC	WAVE PER		10-Sep	sec
SBOO	I18	11-Jul-19	BENTHIC	DEPART TIME	1014		
SBOO	I18	11-Jul-19	BENTHIC	COMMENTS		Grab failure due to flipped	
SBOO	I22	11-Jul-19	BENTHIC	STN LONG DEG	117		
SBOO	I22	11-Jul-19	BENTHIC	STN LONG MIN	11.096		
SBOO	I22	11-Jul-19	BENTHIC	STN LAT DEG	32		
SBOO	I22	11-Jul-19	BENTHIC	STN LAT MIN	33.196		
SBOO	I22	11-Jul-19	BENTHIC	DEPTH METER	28		m

Addendum 1-1B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	I22	11-Jul-19	BENTHIC	ARRIVE TIME	947		
SBOO	I22	11-Jul-19	BENTHIC	AIR TEMP	18		C
SBOO	I22	11-Jul-19	BENTHIC	WIND SPEED	7		kts
SBOO	I22	11-Jul-19	BENTHIC	WIND DIR		SW	
SBOO	I22	11-Jul-19	BENTHIC	SED_TEMP(1)	13		
SBOO	I22	11-Jul-19	BENTHIC	SED_DEPTH(1)	6		cm
SBOO	I22	11-Jul-19	BENTHIC	SED_TYPE(1)		Fine sand and Silt	
SBOO	I22	11-Jul-19	BENTHIC	VISIBILITY	7		mi
SBOO	I22	11-Jul-19	BENTHIC	WEATHER DESC		Overcast	
SBOO	I22	11-Jul-19	BENTHIC	SEA STATE		Calm	
SBOO	I22	11-Jul-19	BENTHIC	WAVE HEIGHT LOW	4		ft
SBOO	I22	11-Jul-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I22	11-Jul-19	BENTHIC	WAVE PER		10-Sep	sec
SBOO	I22	11-Jul-19	BENTHIC	DEPART TIME	951		
SBOO	I22	11-Jul-19	BENTHIC	COMMENTS			
SBOO	I23	11-Jul-19	BENTHIC	STN LONG DEG	117		
SBOO	I23	11-Jul-19	BENTHIC	STN LONG MIN	9.922		
SBOO	I23	11-Jul-19	BENTHIC	STN LAT DEG	32		
SBOO	I23	11-Jul-19	BENTHIC	STN LAT MIN	33.072		
SBOO	I23	11-Jul-19	BENTHIC	DEPTH METER	21		m
SBOO	I23	11-Jul-19	BENTHIC	ARRIVE TIME	1027		
SBOO	I23	11-Jul-19	BENTHIC	AIR TEMP	19		C
SBOO	I23	11-Jul-19	BENTHIC	WIND SPEED	7		kts
SBOO	I23	11-Jul-19	BENTHIC	WIND DIR		SW	
SBOO	I23	11-Jul-19	BENTHIC	SED_TEMP(1)	13		
SBOO	I23	11-Jul-19	BENTHIC	SED_DEPTH(1)	10		cm
SBOO	I23	11-Jul-19	BENTHIC	SED_TYPE(1)		Shell hash	
SBOO	I23	11-Jul-19	BENTHIC	VISIBILITY	7		mi
SBOO	I23	11-Jul-19	BENTHIC	WEATHER DESC		Overcast	
SBOO	I23	11-Jul-19	BENTHIC	SEA STATE		Calm	
SBOO	I23	11-Jul-19	BENTHIC	WAVE HEIGHT LOW	4		ft
SBOO	I23	11-Jul-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I23	11-Jul-19	BENTHIC	WAVE PER		10-Sep	sec
SBOO	I23	11-Jul-19	BENTHIC	DEPART TIME	1039		
SBOO	I23	11-Jul-19	BENTHIC	COMMENTS		Bursa ventricosa x1; Simomactra falcata x1	
SBOO	I27	11-Jul-19	BENTHIC	STN LONG DEG	117		
SBOO	I27	11-Jul-19	BENTHIC	STN LONG MIN	11.473		
SBOO	I27	11-Jul-19	BENTHIC	STN LAT DEG	32		
SBOO	I27	11-Jul-19	BENTHIC	STN LAT MIN	34.45		
SBOO	I27	11-Jul-19	BENTHIC	DEPTH METER	28		m
SBOO	I27	11-Jul-19	BENTHIC	ARRIVE TIME	909		
SBOO	I27	11-Jul-19	BENTHIC	AIR TEMP	18		C
SBOO	I27	11-Jul-19	BENTHIC	WIND SPEED	3		kts

Addendum 1-1B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	I27	11-Jul-19	BENTHIC	WIND DIR		SW	
SBOO	I27	11-Jul-19	BENTHIC	SED_TEMP(1)	13		
SBOO	I27	11-Jul-19	BENTHIC	SED_DEPTH(1)	6		cm
SBOO	I27	11-Jul-19	BENTHIC	SED_TYPE(1)		Fine sand and Silt	
SBOO	I27	11-Jul-19	BENTHIC	VISIBILITY	7		mi
SBOO	I27	11-Jul-19	BENTHIC	WEATHER DESC		Overcast	
SBOO	I27	11-Jul-19	BENTHIC	SEA STATE		Calm	
SBOO	I27	11-Jul-19	BENTHIC	WAVE HEIGHT LOW	4		ft
SBOO	I27	11-Jul-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I27	11-Jul-19	BENTHIC	WAVE PER		10-Sep	sec
SBOO	I27	11-Jul-19	BENTHIC	DEPART TIME	917		
SBOO	I27	11-Jul-19	BENTHIC	COMMENTS		Grab failure due to < 5 cm penetration	
SBOO	I29	11-Jul-19	BENTHIC	STN LONG DEG	117		
SBOO	I29	11-Jul-19	BENTHIC	STN LONG MIN	13.42		
SBOO	I29	11-Jul-19	BENTHIC	STN LAT DEG	32		
SBOO	I29	11-Jul-19	BENTHIC	STN LAT MIN	35.667		
SBOO	I29	11-Jul-19	BENTHIC	DEPTH METER	38		m
SBOO	I29	11-Jul-19	BENTHIC	ARRIVE TIME	804		
SBOO	I29	11-Jul-19	BENTHIC	AIR TEMP	18		C
SBOO	I29	11-Jul-19	BENTHIC	WIND SPEED	1		kts
SBOO	I29	11-Jul-19	BENTHIC	WIND DIR		W	
SBOO	I29	11-Jul-19	BENTHIC	SED_TEMP(1)	12		
SBOO	I29	11-Jul-19	BENTHIC	SED_DEPTH(1)	6		cm
SBOO	I29	11-Jul-19	BENTHIC	SED_TYPE(1)		Fine sand and Silt	
SBOO	I29	11-Jul-19	BENTHIC	VISIBILITY	7		mi
SBOO	I29	11-Jul-19	BENTHIC	WEATHER DESC		Overcast	
SBOO	I29	11-Jul-19	BENTHIC	SEA STATE		Calm	
SBOO	I29	11-Jul-19	BENTHIC	WAVE HEIGHT LOW	4		ft
SBOO	I29	11-Jul-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I29	11-Jul-19	BENTHIC	WAVE PER		10-Sep	sec
SBOO	I29	11-Jul-19	BENTHIC	DEPART TIME	810		
SBOO	I29	11-Jul-19	BENTHIC	COMMENTS			
SBOO	I30	11-Jul-19	BENTHIC	STN LONG DEG	117		
SBOO	I30	11-Jul-19	BENTHIC	STN LONG MIN	11.862		
SBOO	I30	11-Jul-19	BENTHIC	STN LAT DEG	32		
SBOO	I30	11-Jul-19	BENTHIC	STN LAT MIN	35.726		
SBOO	I30	11-Jul-19	BENTHIC	DEPTH METER	28		m
SBOO	I30	11-Jul-19	BENTHIC	ARRIVE TIME	832		
SBOO	I30	11-Jul-19	BENTHIC	AIR TEMP	18		C
SBOO	I30	11-Jul-19	BENTHIC	WIND SPEED	4		kts
SBOO	I30	11-Jul-19	BENTHIC	WIND DIR		SW	
SBOO	I30	11-Jul-19	BENTHIC	SED_TEMP(1)	12		
SBOO	I30	11-Jul-19	BENTHIC	SED_DEPTH(1)	7		cm
SBOO	I30	11-Jul-19	BENTHIC	SED_TYPE(1)		Fine sand and Silt	

Addendum 1-1B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	I30	11-Jul-19	BENTHIC	VISIBILITY	7		mi
SBOO	I30	11-Jul-19	BENTHIC	WEATHER DESC		Overcast	
SBOO	I30	11-Jul-19	BENTHIC	SEA STATE		Calm	
SBOO	I30	11-Jul-19	BENTHIC	WAVE HEIGHT LOW	4		ft
SBOO	I30	11-Jul-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I30	11-Jul-19	BENTHIC	WAVE PER		10-Sep	sec
SBOO	I30	11-Jul-19	BENTHIC	DEPART TIME	835		
SBOO	I30	11-Jul-19	BENTHIC	COMMENTS			
SBOO	I31	11-Jul-19	BENTHIC	STN LONG DEG	117		
SBOO	I31	11-Jul-19	BENTHIC	STN LONG MIN	10.337		
SBOO	I31	11-Jul-19	BENTHIC	STN LAT DEG	32		
SBOO	I31	11-Jul-19	BENTHIC	STN LAT MIN	35.729		
SBOO	I31	11-Jul-19	BENTHIC	DEPTH METER	19		m
SBOO	I31	11-Jul-19	BENTHIC	ARRIVE TIME	1101		
SBOO	I31	11-Jul-19	BENTHIC	AIR TEMP	18		C
SBOO	I31	11-Jul-19	BENTHIC	WIND SPEED	11		kts
SBOO	I31	11-Jul-19	BENTHIC	WIND DIR		SW	
SBOO	I31	11-Jul-19	BENTHIC	SED_TEMP(1)	13		
SBOO	I31	11-Jul-19	BENTHIC	SED_DEPTH(1)	6		cm
SBOO	I31	11-Jul-19	BENTHIC	SED_TYPE(1)		Fine sand and Silt	
SBOO	I31	11-Jul-19	BENTHIC	VISIBILITY	7		mi
SBOO	I31	11-Jul-19	BENTHIC	WEATHER DESC		Overcast	
SBOO	I31	11-Jul-19	BENTHIC	SEA STATE		Calm	
SBOO	I31	11-Jul-19	BENTHIC	WAVE HEIGHT LOW	4		ft
SBOO	I31	11-Jul-19	BENTHIC	WATER COLOR CODE		Bluish-green	
SBOO	I31	11-Jul-19	BENTHIC	WAVE PER		10-Sep	sec
SBOO	I31	11-Jul-19	BENTHIC	DEPART TIME	1105		
SBOO	I31	11-Jul-19	BENTHIC	COMMENTS			
SBOO	I12	22-Jul-19	BENTHIC	STN LONG DEG	117		
SBOO	I12	22-Jul-19	BENTHIC	STN LONG MIN	10.992		
SBOO	I12	22-Jul-19	BENTHIC	STN LAT DEG	32		
SBOO	I12	22-Jul-19	BENTHIC	STN LAT MIN	31.935		
SBOO	I12	22-Jul-19	BENTHIC	DEPTH METER	29		m
SBOO	I12	22-Jul-19	BENTHIC	ARRIVE TIME	918		
SBOO	I12	22-Jul-19	BENTHIC	AIR TEMP	19		C
SBOO	I12	22-Jul-19	BENTHIC	WIND SPEED	7		kts
SBOO	I12	22-Jul-19	BENTHIC	WIND DIR		W	
SBOO	I12	22-Jul-19	BENTHIC	SED_TEMP(1)	12		
SBOO	I12	22-Jul-19	BENTHIC	SED_DEPTH(1)	9		cm
SBOO	I12	22-Jul-19	BENTHIC	SED_TYPE(1)		Fine sand	
SBOO	I12	22-Jul-19	BENTHIC	VISIBILITY	11		mi
SBOO	I12	22-Jul-19	BENTHIC	WEATHER DESC		Partly Cloudy	
SBOO	I12	22-Jul-19	BENTHIC	SEA STATE		Calm	

Addendum 1-1B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	I12	22-Jul-19	BENTHIC	WAVE HEIGHT LOW	2		ft
SBOO	I12	22-Jul-19	BENTHIC	WATER COLOR CODE		Greenish-Blue	
SBOO	I12	22-Jul-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I12	22-Jul-19	BENTHIC	DEPART TIME	935		
SBOO	I12	22-Jul-19	BENTHIC	COMMENTS		SedTox sample taken	
SBOO	I14	22-Jul-19	BENTHIC	STN LONG DEG	117		
SBOO	I14	22-Jul-19	BENTHIC	STN LONG MIN	11.045		
SBOO	I14	22-Jul-19	BENTHIC	STN LAT DEG	32		
SBOO	I14	22-Jul-19	BENTHIC	STN LAT MIN	32.578		
SBOO	I14	22-Jul-19	BENTHIC	DEPTH METER	29		m
SBOO	I14	22-Jul-19	BENTHIC	ARRIVE TIME	819		
SBOO	I14	22-Jul-19	BENTHIC	AIR TEMP	19		C
SBOO	I14	22-Jul-19	BENTHIC	WIND SPEED	1		kts
SBOO	I14	22-Jul-19	BENTHIC	WIND DIR		W	
SBOO	I14	22-Jul-19	BENTHIC	SED_TEMP(1)	12		
SBOO	I14	22-Jul-19	BENTHIC	SED_DEPTH(1)	8		cm
SBOO	I14	22-Jul-19	BENTHIC	SED_TYPE(1)		Fine sand and Silt	
SBOO	I14	22-Jul-19	BENTHIC	VISIBILITY	11		mi
SBOO	I14	22-Jul-19	BENTHIC	WEATHER DESC		Partly Cloudy	
SBOO	I14	22-Jul-19	BENTHIC	SEA STATE		Calm	
SBOO	I14	22-Jul-19	BENTHIC	WAVE HEIGHT LOW	2		ft
SBOO	I14	22-Jul-19	BENTHIC	WATER COLOR CODE		Greenish-Blue	
SBOO	I14	22-Jul-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I14	22-Jul-19	BENTHIC	DEPART TIME	839		
SBOO	I14	22-Jul-19	BENTHIC	COMMENTS		SedTox sample taken	
SBOO	I15	22-Jul-19	BENTHIC	STN LONG DEG	117		
SBOO	I15	22-Jul-19	BENTHIC	STN LONG MIN	11.37		
SBOO	I15	22-Jul-19	BENTHIC	STN LAT DEG	32		
SBOO	I15	22-Jul-19	BENTHIC	STN LAT MIN	32.269		
SBOO	I15	22-Jul-19	BENTHIC	DEPTH METER	32		m
SBOO	I15	22-Jul-19	BENTHIC	ARRIVE TIME	948		
SBOO	I15	22-Jul-19	BENTHIC	AIR TEMP	19		C
SBOO	I15	22-Jul-19	BENTHIC	WIND SPEED	6		kts
SBOO	I15	22-Jul-19	BENTHIC	WIND DIR		W	
SBOO	I15	22-Jul-19	BENTHIC	SED_TEMP(1)	12		
SBOO	I15	22-Jul-19	BENTHIC	SED_DEPTH(1)	9		cm
SBOO	I15	22-Jul-19	BENTHIC	SED_TYPE(1)		Fine sand	
SBOO	I15	22-Jul-19	BENTHIC	VISIBILITY	13		mi
SBOO	I15	22-Jul-19	BENTHIC	WEATHER DESC		Partly Cloudy	
SBOO	I15	22-Jul-19	BENTHIC	SEA STATE		Calm	
SBOO	I15	22-Jul-19	BENTHIC	WAVE HEIGHT LOW	2		ft
SBOO	I15	22-Jul-19	BENTHIC	WATER COLOR CODE		Greenish-Blue	
SBOO	I15	22-Jul-19	BENTHIC	WAVE PER		13-15	sec

Addendum 1-1B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	I15	22-Jul-19	BENTHIC	DEPART TIME	1003		
SBOO	I15	22-Jul-19	BENTHIC	COMMENTS		SedTox sample taken; L. cortiformis x 1	
SBOO	I16	22-Jul-19	BENTHIC	STN LONG DEG	117		
SBOO	I16	22-Jul-19	BENTHIC	STN LONG MIN	10.982		
SBOO	I16	22-Jul-19	BENTHIC	STN LAT DEG	32		
SBOO	I16	22-Jul-19	BENTHIC	STN LAT MIN	32.283		
SBOO	I16	22-Jul-19	BENTHIC	DEPTH METER	29		m
SBOO	I16	22-Jul-19	BENTHIC	ARRIVE TIME	845		
SBOO	I16	22-Jul-19	BENTHIC	AIR TEMP	19		C
SBOO	I16	22-Jul-19	BENTHIC	WIND SPEED	6		kts
SBOO	I16	22-Jul-19	BENTHIC	WIND DIR		NW	
SBOO	I16	22-Jul-19	BENTHIC	SED_TEMP(1)	12		
SBOO	I16	22-Jul-19	BENTHIC	SED_DEPTH(1)	9		cm
SBOO	I16	22-Jul-19	BENTHIC	SED_TYPE(1)		Fine sand and Silt	
SBOO	I16	22-Jul-19	BENTHIC	VISIBILITY	11		mi
SBOO	I16	22-Jul-19	BENTHIC	WEATHER DESC		Partly Cloudy	
SBOO	I16	22-Jul-19	BENTHIC	SEA STATE		Calm	
SBOO	I16	22-Jul-19	BENTHIC	WAVE HEIGHT LOW	2		ft
SBOO	I16	22-Jul-19	BENTHIC	WATER COLOR CODE		Greenish-Blue	
SBOO	I16	22-Jul-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I16	22-Jul-19	BENTHIC	DEPART TIME	911		
SBOO	I16	22-Jul-19	BENTHIC	COMMENTS		SedTox sample taken; L. cortiformis x 2	
SBOO	I28	29-Jul-19	BENTHIC	STN LONG DEG	117		
SBOO	I28	29-Jul-19	BENTHIC	STN LONG MIN	15.874		
SBOO	I28	29-Jul-19	BENTHIC	STN LAT DEG	32		
SBOO	I28	29-Jul-19	BENTHIC	STN LAT MIN	35.636		
SBOO	I28	29-Jul-19	BENTHIC	DEPTH METER	58		m
SBOO	I28	29-Jul-19	BENTHIC	ARRIVE TIME	1034		
SBOO	I28	29-Jul-19	BENTHIC	AIR TEMP	19		C
SBOO	I28	29-Jul-19	BENTHIC	WIND SPEED	1		kts
SBOO	I28	29-Jul-19	BENTHIC	WIND DIR		NW	
SBOO	I28	29-Jul-19	BENTHIC	SED_TEMP(1)	12		
SBOO	I28	29-Jul-19	BENTHIC	SED_DEPTH(1)	6		cm
SBOO	I28	29-Jul-19	BENTHIC	SED_TYPE(1)		Silt and Fine sand with Sand	
SBOO	I28	29-Jul-19	BENTHIC	VISIBILITY	8		mi
SBOO	I28	29-Jul-19	BENTHIC	WEATHER DESC		Overcast	
SBOO	I28	29-Jul-19	BENTHIC	SEA STATE		Calm	
SBOO	I28	29-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I28	29-Jul-19	BENTHIC	WATER COLOR CODE		Greenish-blue	
SBOO	I28	29-Jul-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I28	29-Jul-19	BENTHIC	DEPART TIME	1044		
SBOO	I28	29-Jul-19	BENTHIC	COMMENTS			

Addendum 1-1B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	I33	29-Jul-19	BENTHIC	STN LONG DEG	117		
SBOO	I33	29-Jul-19	BENTHIC	STN LONG MIN	14.217		
SBOO	I33	29-Jul-19	BENTHIC	STN LAT DEG	32		
SBOO	I33	29-Jul-19	BENTHIC	STN LAT MIN	37.434		
SBOO	I33	29-Jul-19	BENTHIC	DEPTH METER	31		m
SBOO	I33	29-Jul-19	BENTHIC	ARRIVE TIME	814		
SBOO	I33	29-Jul-19	BENTHIC	AIR TEMP	0		C
SBOO	I33	29-Jul-19	BENTHIC	WIND SPEED	0		kts
SBOO	I33	29-Jul-19	BENTHIC	WIND DIR		XX	
SBOO	I33	29-Jul-19	BENTHIC	SED_TEMP(1)	12		
SBOO	I33	29-Jul-19	BENTHIC	SED_DEPTH(1)	6		cm
SBOO	I33	29-Jul-19	BENTHIC	SED_TYPE(1)		Fine sand with Silt	
SBOO	I33	29-Jul-19	BENTHIC	VISIBILITY	7		mi
SBOO	I33	29-Jul-19	BENTHIC	WEATHER DESC		Overcast	
SBOO	I33	29-Jul-19	BENTHIC	SEA STATE		Calm	
SBOO	I33	29-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I33	29-Jul-19	BENTHIC	WATER COLOR CODE		Greenish-blue	
SBOO	I33	29-Jul-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I33	29-Jul-19	BENTHIC	DEPART TIME	821		
SBOO	I33	29-Jul-19	BENTHIC	COMMENTS		Air temp and wind data not collected due to mechanical failure	
SBOO	I34	29-Jul-19	BENTHIC	STN LONG DEG	117		
SBOO	I34	29-Jul-19	BENTHIC	STN LONG MIN	12.991		
SBOO	I34	29-Jul-19	BENTHIC	STN LAT DEG	32		
SBOO	I34	29-Jul-19	BENTHIC	STN LAT MIN	37.812		
SBOO	I34	29-Jul-19	BENTHIC	DEPTH METER	19		m
SBOO	I34	29-Jul-19	BENTHIC	ARRIVE TIME	757		
SBOO	I34	29-Jul-19	BENTHIC	AIR TEMP	0		C
SBOO	I34	29-Jul-19	BENTHIC	WIND SPEED	0		kts
SBOO	I34	29-Jul-19	BENTHIC	WIND DIR		XX	
SBOO	I34	29-Jul-19	BENTHIC	SED_TEMP(1)	13		
SBOO	I34	29-Jul-19	BENTHIC	SED_DEPTH(1)	9		cm
SBOO	I34	29-Jul-19	BENTHIC	SED_TYPE(1)		Sand	
SBOO	I34	29-Jul-19	BENTHIC	VISIBILITY	7		mi
SBOO	I34	29-Jul-19	BENTHIC	WEATHER DESC		Overcast	
SBOO	I34	29-Jul-19	BENTHIC	SEA STATE		Calm	
SBOO	I34	29-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I34	29-Jul-19	BENTHIC	WATER COLOR CODE		Greenish-blue	
SBOO	I34	29-Jul-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I34	29-Jul-19	BENTHIC	DEPART TIME	807		
SBOO	I34	29-Jul-19	BENTHIC	COMMENTS		Air temp and wind data not collected due to mechanical failure	
SBOO	I35	29-Jul-19	BENTHIC	STN LONG DEG	117		

Addendum 1-1B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	I35	29-Jul-19	BENTHIC	STN LONG MIN	10.947		
SBOO	I35	29-Jul-19	BENTHIC	STN LAT DEG	32		
SBOO	I35	29-Jul-19	BENTHIC	STN LAT MIN	38.201		
SBOO	I35	29-Jul-19	BENTHIC	DEPTH METER	19		m
SBOO	I35	29-Jul-19	BENTHIC	ARRIVE TIME	1159		
SBOO	I35	29-Jul-19	BENTHIC	AIR TEMP	19		C
SBOO	I35	29-Jul-19	BENTHIC	WIND SPEED	6		kts
SBOO	I35	29-Jul-19	BENTHIC	WIND DIR		S	
SBOO	I35	29-Jul-19	BENTHIC	SED_TEMP(1)	13		
SBOO	I35	29-Jul-19	BENTHIC	SED_DEPTH(1)	9		cm
SBOO	I35	29-Jul-19	BENTHIC	SED_TYPE(1)		Silt with Fine sand	
SBOO	I35	29-Jul-19	BENTHIC	VISIBILITY	10		mi
SBOO	I35	29-Jul-19	BENTHIC	WEATHER DESC		Clear	
SBOO	I35	29-Jul-19	BENTHIC	SEA STATE		Calm	
SBOO	I35	29-Jul-19	BENTHIC	WAVE HEIGHT LOW	3		ft
SBOO	I35	29-Jul-19	BENTHIC	WATER COLOR CODE		Green	
SBOO	I35	29-Jul-19	BENTHIC	WAVE PER		13-15	sec
SBOO	I35	29-Jul-19	BENTHIC	DEPART TIME	1207		
SBOO	I35	29-Jul-19	BENTHIC	COMMENTS			

Addendum 1-1C

Visual observations from regional benthic stations sampled during 2019.

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8801	11-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8801	11-Jul-19	BENTHIC REG	STN LONG MIN	12.559		
REG 19	8801	11-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8801	11-Jul-19	BENTHIC REG	STN LAT MIN	34.166		
REG 19	8801	11-Jul-19	BENTHIC REG	DEPTH METER	36		m
REG 19	8801	11-Jul-19	BENTHIC REG	ARRIVE TIME	852		
REG 19	8801	11-Jul-19	BENTHIC REG	AIR TEMP	18		C
REG 19	8801	11-Jul-19	BENTHIC REG	WIND SPEED	3		kts
REG 19	8801	11-Jul-19	BENTHIC REG	WIND DIR		W	
REG 19	8801	11-Jul-19	BENTHIC REG	SED_TEMP(1)	12		
REG 19	8801	11-Jul-19	BENTHIC REG	SED_DEPTH(1)	9		cm
REG 19	8801	11-Jul-19	BENTHIC REG	SED_TYPE(1)		Fine sand and Silt	
REG 19	8801	11-Jul-19	BENTHIC REG	VISIBILITY	7		mi
REG 19	8801	11-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8801	11-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8801	11-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	4		ft
REG 19	8801	11-Jul-19	BENTHIC REG	WATER COLOR CODE		Bluish-green	
REG 19	8801	11-Jul-19	BENTHIC REG	WAVE PER		9-10	sec
REG 19	8801	11-Jul-19	BENTHIC REG	DEPART TIME	857		
REG 19	8801	11-Jul-19	BENTHIC REG	COMMENTS		Domoic acid collected	
REG 19	8802	11-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8802	11-Jul-19	BENTHIC REG	STN LONG MIN	10.612		
REG 19	8802	11-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8802	11-Jul-19	BENTHIC REG	STN LAT MIN	34.513		
REG 19	8802	11-Jul-19	BENTHIC REG	DEPTH METER	23		m
REG 19	8802	11-Jul-19	BENTHIC REG	ARRIVE TIME	924		
REG 19	8802	11-Jul-19	BENTHIC REG	AIR TEMP	19		C
REG 19	8802	11-Jul-19	BENTHIC REG	WIND SPEED	5		kts
REG 19	8802	11-Jul-19	BENTHIC REG	WIND DIR		SW	
REG 19	8802	11-Jul-19	BENTHIC REG	SED_TEMP(1)	13		
REG 19	8802	11-Jul-19	BENTHIC REG	SED_DEPTH(1)	6		cm
REG 19	8802	11-Jul-19	BENTHIC REG	SED_TYPE(1)		Fine sand and Silt	
REG 19	8802	11-Jul-19	BENTHIC REG	VISIBILITY	7		mi
REG 19	8802	11-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8802	11-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8802	11-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	4		ft
REG 19	8802	11-Jul-19	BENTHIC REG	WATER COLOR CODE		Bluish-green	
REG 19	8802	11-Jul-19	BENTHIC REG	WAVE PER		9-10	sec
REG 19	8802	11-Jul-19	BENTHIC REG	DEPART TIME	933		
REG 19	8802	11-Jul-19	BENTHIC REG	COMMENTS		Grab failure due to < 5 cm Penetration; Domoic acid collected	
REG 19	8805	11-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8805	11-Jul-19	BENTHIC REG	STN LONG MIN	8.487		

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8805	11-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8805	11-Jul-19	BENTHIC REG	STN LAT MIN	35.568		
REG 19	8805	11-Jul-19	BENTHIC REG	DEPTH METER	12		m
REG 19	8805	11-Jul-19	BENTHIC REG	ARRIVE TIME	1121		
REG 19	8805	11-Jul-19	BENTHIC REG	AIR TEMP	19		C
REG 19	8805	11-Jul-19	BENTHIC REG	WIND SPEED	10		kts
REG 19	8805	11-Jul-19	BENTHIC REG	WIND DIR		SW	
REG 19	8805	11-Jul-19	BENTHIC REG	SED_TEMP(1)	15		
REG 19	8805	11-Jul-19	BENTHIC REG	SED_DEPTH(1)	7		cm
REG 19	8805	11-Jul-19	BENTHIC REG	SED_TYPE(1)		Fine sand and Silt	
REG 19	8805	11-Jul-19	BENTHIC REG	VISIBILITY	9		mi
REG 19	8805	11-Jul-19	BENTHIC REG	WEATHER DESC		Haze	
REG 19	8805	11-Jul-19	BENTHIC REG	SEA STATE		Choppy	
REG 19	8805	11-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	4		ft
REG 19	8805	11-Jul-19	BENTHIC REG	WATER COLOR CODE		Bluish-green	
REG 19	8805	11-Jul-19	BENTHIC REG	WAVE PER		9-10	sec
REG 19	8805	11-Jul-19	BENTHIC REG	DEPART TIME	1136		
REG 19	8805	11-Jul-19	BENTHIC REG	COMMENTS		Grab failure due to < 5 cm Penetration	
REG 19	8807	11-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8807	11-Jul-19	BENTHIC REG	STN LONG MIN	13.966		
REG 19	8807	11-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8807	11-Jul-19	BENTHIC REG	STN LAT MIN	35.732		
REG 19	8807	11-Jul-19	BENTHIC REG	DEPTH METER	41		m
REG 19	8807	11-Jul-19	BENTHIC REG	ARRIVE TIME	745		
REG 19	8807	11-Jul-19	BENTHIC REG	AIR TEMP	18		C
REG 19	8807	11-Jul-19	BENTHIC REG	WIND SPEED	1		kts
REG 19	8807	11-Jul-19	BENTHIC REG	WIND DIR		W	
REG 19	8807	11-Jul-19	BENTHIC REG	SED_TEMP(1)	12		
REG 19	8807	11-Jul-19	BENTHIC REG	SED_DEPTH(1)	6		cm
REG 19	8807	11-Jul-19	BENTHIC REG	SED_TYPE(1)		Fine sand and Silt	
REG 19	8807	11-Jul-19	BENTHIC REG	VISIBILITY	7		mi
REG 19	8807	11-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8807	11-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8807	11-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	4		ft
REG 19	8807	11-Jul-19	BENTHIC REG	WATER COLOR CODE		Bluish-green	
REG 19	8807	11-Jul-19	BENTHIC REG	WAVE PER		9-10	sec
REG 19	8807	11-Jul-19	BENTHIC REG	DEPART TIME	757		
REG 19	8807	11-Jul-19	BENTHIC REG	COMMENTS		Grab failure due to < 5 cm Penetration	
REG 19	8808	11-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8808	11-Jul-19	BENTHIC REG	STN LONG MIN	12.294		
REG 19	8808	11-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8808	11-Jul-19	BENTHIC REG	STN LAT MIN	35.837		
REG 19	8808	11-Jul-19	BENTHIC REG	DEPTH METER	31		m
REG 19	8808	11-Jul-19	BENTHIC REG	ARRIVE TIME	820		

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8808	11-Jul-19	BENTHIC REG	AIR TEMP	18		C
REG 19	8808	11-Jul-19	BENTHIC REG	WIND SPEED	3		kts
REG 19	8808	11-Jul-19	BENTHIC REG	WIND DIR		W	
REG 19	8808	11-Jul-19	BENTHIC REG	SED_TEMP(1)	12		
REG 19	8808	11-Jul-19	BENTHIC REG	SED_DEPTH(1)	8		cm
REG 19	8808	11-Jul-19	BENTHIC REG	SED_TYPE(1)		Fine sand and Silt	
REG 19	8808	11-Jul-19	BENTHIC REG	VISIBILITY	7		mi
REG 19	8808	11-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8808	11-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8808	11-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	4		ft
REG 19	8808	11-Jul-19	BENTHIC REG	WATER COLOR CODE		Bluish-green	
REG 19	8808	11-Jul-19	BENTHIC REG	WAVE PER		9-10	sec
REG 19	8808	11-Jul-19	BENTHIC REG	DEPART TIME	825		
REG 19	8808	11-Jul-19	BENTHIC REG	COMMENTS		A. californicus x 1	
REG 19	8813	11-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8813	11-Jul-19	BENTHIC REG	STN LONG MIN	9.683		
REG 19	8813	11-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8813	11-Jul-19	BENTHIC REG	STN LAT MIN	37.716		
REG 19	8813	11-Jul-19	BENTHIC REG	DEPTH METER	16		m
REG 19	8813	11-Jul-19	BENTHIC REG	ARRIVE TIME	1155		
REG 19	8813	11-Jul-19	BENTHIC REG	AIR TEMP	19		C
REG 19	8813	11-Jul-19	BENTHIC REG	WIND SPEED	13		kts
REG 19	8813	11-Jul-19	BENTHIC REG	WIND DIR		SW	
REG 19	8813	11-Jul-19	BENTHIC REG	SED_TEMP(1)	14		
REG 19	8813	11-Jul-19	BENTHIC REG	SED_DEPTH(1)	5		cm
REG 19	8813	11-Jul-19	BENTHIC REG	SED_TYPE(1)		Fine sand and Silt	
REG 19	8813	11-Jul-19	BENTHIC REG	VISIBILITY	9		mi
REG 19	8813	11-Jul-19	BENTHIC REG	WEATHER DESC		Haze	
REG 19	8813	11-Jul-19	BENTHIC REG	SEA STATE		Choppy	
REG 19	8813	11-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	4		ft
REG 19	8813	11-Jul-19	BENTHIC REG	WATER COLOR CODE		Bluish-green	
REG 19	8813	11-Jul-19	BENTHIC REG	WAVE PER		9-10	sec
REG 19	8813	11-Jul-19	BENTHIC REG	DEPART TIME	1200		
REG 19	8813	11-Jul-19	BENTHIC REG	COMMENTS			
REG 19	8815	11-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8815	11-Jul-19	BENTHIC REG	STN LONG MIN	9.396		
REG 19	8815	11-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8815	11-Jul-19	BENTHIC REG	STN LAT MIN	38.635		
REG 19	8815	11-Jul-19	BENTHIC REG	DEPTH METER	11		m
REG 19	8815	11-Jul-19	BENTHIC REG	ARRIVE TIME	1216		
REG 19	8815	11-Jul-19	BENTHIC REG	AIR TEMP	19		C
REG 19	8815	11-Jul-19	BENTHIC REG	WIND SPEED	10		kts
REG 19	8815	11-Jul-19	BENTHIC REG	WIND DIR		SW	
REG 19	8815	11-Jul-19	BENTHIC REG	SED_TEMP(1)	14		
REG 19	8815	11-Jul-19	BENTHIC REG	SED_DEPTH(1)	5		cm

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8815	11-Jul-19	BENTHIC REG	SED_TYPE(1)		Fine sand and Silt	
REG 19	8815	11-Jul-19	BENTHIC REG	VISIBILITY	9		mi
REG 19	8815	11-Jul-19	BENTHIC REG	WEATHER DESC		Haze	
REG 19	8815	11-Jul-19	BENTHIC REG	SEA STATE		Choppy	
REG 19	8815	11-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	4		ft
REG 19	8815	11-Jul-19	BENTHIC REG	WATER COLOR CODE		Bluish-green	
REG 19	8815	11-Jul-19	BENTHIC REG	WAVE PER		9-10	sec
REG 19	8815	11-Jul-19	BENTHIC REG	DEPART TIME	1241		
REG 19	8815	11-Jul-19	BENTHIC REG	COMMENTS		Grab failure due to < 5 cm Penetration	
REG 19	8840	18-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8840	18-Jul-19	BENTHIC REG	STN LONG MIN	18.139		
REG 19	8840	18-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8840	18-Jul-19	BENTHIC REG	STN LAT MIN	55.39		
REG 19	8840	18-Jul-19	BENTHIC REG	DEPTH METER	86		m
REG 19	8840	18-Jul-19	BENTHIC REG	ARRIVE TIME	940		
REG 19	8840	18-Jul-19	BENTHIC REG	AIR TEMP	19		C
REG 19	8840	18-Jul-19	BENTHIC REG	WIND SPEED	3		kts
REG 19	8840	18-Jul-19	BENTHIC REG	WIND DIR		S	
REG 19	8840	18-Jul-19	BENTHIC REG	SED_TEMP(1)	11		
REG 19	8840	18-Jul-19	BENTHIC REG	SED_DEPTH(1)	11		cm
REG 19	8840	18-Jul-19	BENTHIC REG	SED_TYPE(1)		Clay and Silt	
REG 19	8840	18-Jul-19	BENTHIC REG	VISIBILITY	7		mi
REG 19	8840	18-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8840	18-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8840	18-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8840	18-Jul-19	BENTHIC REG	WATER COLOR CODE		Bluish-green	
REG 19	8840	18-Jul-19	BENTHIC REG	WAVE PER		9-10	sec
REG 19	8840	18-Jul-19	BENTHIC REG	DEPART TIME	955		
REG 19	8840	18-Jul-19	BENTHIC REG	COMMENTS			
REG 19	8823	19-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8823	19-Jul-19	BENTHIC REG	STN LONG MIN	20.594		
REG 19	8823	19-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8823	19-Jul-19	BENTHIC REG	STN LAT MIN	41.878		
REG 19	8823	19-Jul-19	BENTHIC REG	DEPTH METER	167		m
REG 19	8823	19-Jul-19	BENTHIC REG	ARRIVE TIME	1255		
REG 19	8823	19-Jul-19	BENTHIC REG	AIR TEMP	17		C
REG 19	8823	19-Jul-19	BENTHIC REG	WIND SPEED	7		kts
REG 19	8823	19-Jul-19	BENTHIC REG	WIND DIR		W	
REG 19	8823	19-Jul-19	BENTHIC REG	SED_TEMP(1)	10		
REG 19	8823	19-Jul-19	BENTHIC REG	SED_DEPTH(1)	12		cm
REG 19	8823	19-Jul-19	BENTHIC REG	SED_TYPE(1)		Silt	
REG 19	8823	19-Jul-19	BENTHIC REG	VISIBILITY	10		mi
REG 19	8823	19-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8823	19-Jul-19	BENTHIC REG	SEA STATE		Choppy	

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8823	19-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8823	19-Jul-19	BENTHIC REG	WATER COLOR CODE		Blue	
REG 19	8823	19-Jul-19	BENTHIC REG	WAVE PER		9-10	sec
REG 19	8823	19-Jul-19	BENTHIC REG	DEPART TIME	1308		
REG 19	8823	19-Jul-19	BENTHIC REG	COMMENTS		Domoic acid collected	
REG 19	8824	19-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8824	19-Jul-19	BENTHIC REG	STN LONG MIN	18.179		
REG 19	8824	19-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8824	19-Jul-19	BENTHIC REG	STN LAT MIN	42.297		
REG 19	8824	19-Jul-19	BENTHIC REG	DEPTH METER	72		m
REG 19	8824	19-Jul-19	BENTHIC REG	ARRIVE TIME	1321		
REG 19	8824	19-Jul-19	BENTHIC REG	AIR TEMP	17		C
REG 19	8824	19-Jul-19	BENTHIC REG	WIND SPEED	7		kts
REG 19	8824	19-Jul-19	BENTHIC REG	WIND DIR		W	
REG 19	8824	19-Jul-19	BENTHIC REG	SED_TEMP(1)	10		
REG 19	8824	19-Jul-19	BENTHIC REG	SED_DEPTH(1)	12		cm
REG 19	8824	19-Jul-19	BENTHIC REG	SED_TYPE(1)		Silt	
REG 19	8824	19-Jul-19	BENTHIC REG	VISIBILITY	10		mi
REG 19	8824	19-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8824	19-Jul-19	BENTHIC REG	SEA STATE		Choppy	
REG 19	8824	19-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8824	19-Jul-19	BENTHIC REG	WATER COLOR CODE		Blue	
REG 19	8824	19-Jul-19	BENTHIC REG	WAVE PER		9-10	sec
REG 19	8824	19-Jul-19	BENTHIC REG	DEPART TIME	1333		
REG 19	8824	19-Jul-19	BENTHIC REG	COMMENTS			
REG 19	8825	19-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8825	19-Jul-19	BENTHIC REG	STN LONG MIN	21.092		
REG 19	8825	19-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8825	19-Jul-19	BENTHIC REG	STN LAT MIN	43.37		
REG 19	8825	19-Jul-19	BENTHIC REG	DEPTH METER	180		m
REG 19	8825	19-Jul-19	BENTHIC REG	ARRIVE TIME	1228		
REG 19	8825	19-Jul-19	BENTHIC REG	AIR TEMP	17		C
REG 19	8825	19-Jul-19	BENTHIC REG	WIND SPEED	10		kts
REG 19	8825	19-Jul-19	BENTHIC REG	WIND DIR		W	
REG 19	8825	19-Jul-19	BENTHIC REG	SED_TEMP(1)	10		
REG 19	8825	19-Jul-19	BENTHIC REG	SED_DEPTH(1)	12		cm
REG 19	8825	19-Jul-19	BENTHIC REG	SED_TYPE(1)		Silt	
REG 19	8825	19-Jul-19	BENTHIC REG	VISIBILITY	10		mi
REG 19	8825	19-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8825	19-Jul-19	BENTHIC REG	SEA STATE		Choppy	
REG 19	8825	19-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8825	19-Jul-19	BENTHIC REG	WATER COLOR CODE		Blue	
REG 19	8825	19-Jul-19	BENTHIC REG	WAVE PER		9-10	sec
REG 19	8825	19-Jul-19	BENTHIC REG	DEPART TIME	1255		

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8825	19-Jul-19	BENTHIC REG	COMMENTS			
REG 19	8826	19-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8826	19-Jul-19	BENTHIC REG	STN LONG MIN	21.425		
REG 19	8826	19-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8826	19-Jul-19	BENTHIC REG	STN LAT MIN	44.486		
REG 19	8826	19-Jul-19	BENTHIC REG	DEPTH METER	115		m
REG 19	8826	19-Jul-19	BENTHIC REG	ARRIVE TIME	1208		
REG 19	8826	19-Jul-19	BENTHIC REG	AIR TEMP	17		C
REG 19	8826	19-Jul-19	BENTHIC REG	WIND SPEED	8		kts
REG 19	8826	19-Jul-19	BENTHIC REG	WIND DIR		W	
REG 19	8826	19-Jul-19	BENTHIC REG	SED_TEMP(1)	10		
REG 19	8826	19-Jul-19	BENTHIC REG	SED_DEPTH(1)	8		cm
REG 19	8826	19-Jul-19	BENTHIC REG	SED_TYPE(1)		Silt with Shell hash	
REG 19	8826	19-Jul-19	BENTHIC REG	VISIBILITY	10		mi
REG 19	8826	19-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8826	19-Jul-19	BENTHIC REG	SEA STATE		Choppy	
REG 19	8826	19-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8826	19-Jul-19	BENTHIC REG	WATER COLOR CODE		Blue	
REG 19	8826	19-Jul-19	BENTHIC REG	WAVE PER		9-10	sec
REG 19	8826	19-Jul-19	BENTHIC REG	DEPART TIME	1215		
REG 19	8826	19-Jul-19	BENTHIC REG	COMMENTS		Domoic acid collected	
REG 19	8828	19-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8828	19-Jul-19	BENTHIC REG	STN LONG MIN	18.073		
REG 19	8828	19-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8828	19-Jul-19	BENTHIC REG	STN LAT MIN	46.236		
REG 19	8828	19-Jul-19	BENTHIC REG	DEPTH METER	58		m
REG 19	8828	19-Jul-19	BENTHIC REG	ARRIVE TIME	1030		
REG 19	8828	19-Jul-19	BENTHIC REG	AIR TEMP	17		C
REG 19	8828	19-Jul-19	BENTHIC REG	WIND SPEED	10		kts
REG 19	8828	19-Jul-19	BENTHIC REG	WIND DIR		W	
REG 19	8828	19-Jul-19	BENTHIC REG	SED_TEMP(1)	11		
REG 19	8828	19-Jul-19	BENTHIC REG	SED_DEPTH(1)	10		cm
REG 19	8828	19-Jul-19	BENTHIC REG	SED_TYPE(1)		Silt	
REG 19	8828	19-Jul-19	BENTHIC REG	VISIBILITY	10		mi
REG 19	8828	19-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8828	19-Jul-19	BENTHIC REG	SEA STATE		Choppy	
REG 19	8828	19-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8828	19-Jul-19	BENTHIC REG	WATER COLOR CODE		Blue	
REG 19	8828	19-Jul-19	BENTHIC REG	WAVE PER		9-10	sec
REG 19	8828	19-Jul-19	BENTHIC REG	DEPART TIME	1042		
REG 19	8828	19-Jul-19	BENTHIC REG	COMMENTS			
REG 19	8829	19-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8829	19-Jul-19	BENTHIC REG	STN LONG MIN	22.918		

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8829	19-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8829	19-Jul-19	BENTHIC REG	STN LAT MIN	46.771		
REG 19	8829	19-Jul-19	BENTHIC REG	DEPTH METER	178		m
REG 19	8829	19-Jul-19	BENTHIC REG	ARRIVE TIME	836		
REG 19	8829	19-Jul-19	BENTHIC REG	AIR TEMP	17		C
REG 19	8829	19-Jul-19	BENTHIC REG	WIND SPEED	6		kts
REG 19	8829	19-Jul-19	BENTHIC REG	WIND DIR		W	
REG 19	8829	19-Jul-19	BENTHIC REG	SED_TEMP(1)	10		
REG 19	8829	19-Jul-19	BENTHIC REG	SED_DEPTH(1)	8		cm
REG 19	8829	19-Jul-19	BENTHIC REG	SED_TYPE(1)		Silt with Fine sand with Shell hash	
REG 19	8829	19-Jul-19	BENTHIC REG	VISIBILITY	10		mi
REG 19	8829	19-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8829	19-Jul-19	BENTHIC REG	SEA STATE		Choppy	
REG 19	8829	19-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8829	19-Jul-19	BENTHIC REG	WATER COLOR CODE		Blue	
REG 19	8829	19-Jul-19	BENTHIC REG	WAVE PER		9-10	sec
REG 19	8829	19-Jul-19	BENTHIC REG	DEPART TIME	905		
REG 19	8829	19-Jul-19	BENTHIC REG	COMMENTS		Grab failure due to poor closure; Domoic acid collected	
REG 19	8827	23-Jul-19	BENTHIC REG	STN LAT MIN	45.959		
REG 19	8827	23-Jul-19	BENTHIC REG	DEPTH METER	57		m
REG 19	8827	23-Jul-19	BENTHIC REG	ARRIVE TIME	815		
REG 19	8827	23-Jul-19	BENTHIC REG	AIR TEMP	21		C
REG 19	8827	23-Jul-19	BENTHIC REG	WIND SPEED	5		kts
REG 19	8827	23-Jul-19	BENTHIC REG	WIND DIR		N	
REG 19	8827	23-Jul-19	BENTHIC REG	SED_TEMP(1)	13		
REG 19	8827	23-Jul-19	BENTHIC REG	SED_DEPTH(1)	6		cm
REG 19	8827	23-Jul-19	BENTHIC REG	SED_TYPE(1)		Silt and Clay	
REG 19	8827	23-Jul-19	BENTHIC REG	VISIBILITY	9		mi
REG 19	8827	23-Jul-19	BENTHIC REG	WEATHER DESC		Partly Cloudy	
REG 19	8827	23-Jul-19	BENTHIC REG	SEA STATE		Choppy	
REG 19	8827	23-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8827	23-Jul-19	BENTHIC REG	WATER COLOR CODE		Blue	
REG 19	8827	23-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8827	23-Jul-19	BENTHIC REG	DEPART TIME	820		
REG 19	8827	23-Jul-19	BENTHIC REG	COMMENTS		Resampled due to label error	
REG 19	8827	23-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8827	23-Jul-19	BENTHIC REG	STN LONG MIN	18.082		
REG 19	8827	23-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8811	24-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8811	24-Jul-19	BENTHIC REG	STN LONG MIN	19.889		
REG 19	8811	24-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8811	24-Jul-19	BENTHIC REG	STN LAT MIN	37.182		

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8811	24-Jul-19	BENTHIC REG	DEPTH METER	107		m
REG 19	8811	24-Jul-19	BENTHIC REG	ARRIVE TIME	1212		
REG 19	8811	24-Jul-19	BENTHIC REG	AIR TEMP	21		C
REG 19	8811	24-Jul-19	BENTHIC REG	WIND SPEED	11		kts
REG 19	8811	24-Jul-19	BENTHIC REG	WIND DIR		W	
REG 19	8811	24-Jul-19	BENTHIC REG	SED_TEMP(1)	11		
REG 19	8811	24-Jul-19	BENTHIC REG	SED_DEPTH(1)	7		cm
REG 19	8811	24-Jul-19	BENTHIC REG	SED_TYPE(1)		Sand and Silt with Coarse sand	
REG 19	8811	24-Jul-19	BENTHIC REG	VISIBILITY	10		mi
REG 19	8811	24-Jul-19	BENTHIC REG	WEATHER DESC		Clear	
REG 19	8811	24-Jul-19	BENTHIC REG	SEA STATE		Choppy	
REG 19	8811	24-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8811	24-Jul-19	BENTHIC REG	WATER COLOR CODE		Blue	
REG 19	8811	24-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8811	24-Jul-19	BENTHIC REG	DEPART TIME	1227		
REG 19	8811	24-Jul-19	BENTHIC REG	COMMENTS			
REG 19	8816	24-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8816	24-Jul-19	BENTHIC REG	STN LONG MIN	19.939		
REG 19	8816	24-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8816	24-Jul-19	BENTHIC REG	STN LAT MIN	38.785		
REG 19	8816	24-Jul-19	BENTHIC REG	DEPTH METER	110		m
REG 19	8816	24-Jul-19	BENTHIC REG	ARRIVE TIME	1036		
REG 19	8816	24-Jul-19	BENTHIC REG	AIR TEMP	21		C
REG 19	8816	24-Jul-19	BENTHIC REG	WIND SPEED	9		kts
REG 19	8816	24-Jul-19	BENTHIC REG	WIND DIR		NW	
REG 19	8816	24-Jul-19	BENTHIC REG	SED_TEMP(1)	11		
REG 19	8816	24-Jul-19	BENTHIC REG	SED_DEPTH(1)	8		cm
REG 19	8816	24-Jul-19	BENTHIC REG	SED_TYPE(1)		Silt with Fine sand	
REG 19	8816	24-Jul-19	BENTHIC REG	VISIBILITY	10		mi
REG 19	8816	24-Jul-19	BENTHIC REG	WEATHER DESC		Clear	
REG 19	8816	24-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8816	24-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8816	24-Jul-19	BENTHIC REG	WATER COLOR CODE		Blue	
REG 19	8816	24-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8816	24-Jul-19	BENTHIC REG	DEPART TIME	1049		
REG 19	8816	24-Jul-19	BENTHIC REG	COMMENTS			
REG 19	8830	25-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8830	25-Jul-19	BENTHIC REG	STN LONG MIN	17.587		
REG 19	8830	25-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8830	25-Jul-19	BENTHIC REG	STN LAT MIN	48.448		
REG 19	8830	25-Jul-19	BENTHIC REG	DEPTH METER	6		m
REG 19	8830	25-Jul-19	BENTHIC REG	ARRIVE TIME	832		
REG 19	8830	25-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8830	25-Jul-19	BENTHIC REG	WIND SPEED	0		kts

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8830	25-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8830	25-Jul-19	BENTHIC REG	VISIBILITY	9		mi
REG 19	8830	25-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8830	25-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8830	25-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8830	25-Jul-19	BENTHIC REG	WATER COLOR CODE		Blue	
REG 19	8830	25-Jul-19	BENTHIC REG	WAVE PER		9-10	sec
REG 19	8830	25-Jul-19	BENTHIC REG	DEPART TIME	859		
REG 19	8830	25-Jul-19	BENTHIC REG	COMMENTS		Air temp and wind data not collected due to mechanical failure; Station abandoned due to hard bottom	
REG 19	8831	25-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8831	25-Jul-19	BENTHIC REG	STN LONG MIN	22.198		
REG 19	8831	25-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8831	25-Jul-19	BENTHIC REG	STN LAT MIN	49.465		
REG 19	8831	25-Jul-19	BENTHIC REG	DEPTH METER	218		m
REG 19	8831	25-Jul-19	BENTHIC REG	ARRIVE TIME	1311		
REG 19	8831	25-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8831	25-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8831	25-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8831	25-Jul-19	BENTHIC REG	SED_TEMP(1)	10		
REG 19	8831	25-Jul-19	BENTHIC REG	SED_DEPTH(1)	7		cm
REG 19	8831	25-Jul-19	BENTHIC REG	SED_TYPE(1)		Clay and Silt	
REG 19	8831	25-Jul-19	BENTHIC REG	VISIBILITY	12		mi
REG 19	8831	25-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8831	25-Jul-19	BENTHIC REG	SEA STATE		Choppy	
REG 19	8831	25-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	2		ft
REG 19	8831	25-Jul-19	BENTHIC REG	WATER COLOR CODE		Bluish-green	
REG 19	8831	25-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8831	25-Jul-19	BENTHIC REG	DEPART TIME	1322		
REG 19	8831	25-Jul-19	BENTHIC REG	COMMENTS		Air temp and wind data not collected due to mechanical failure	
REG 19	8832	25-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8832	25-Jul-19	BENTHIC REG	STN LONG MIN	21.584		
REG 19	8832	25-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8832	25-Jul-19	BENTHIC REG	STN LAT MIN	50.223		
REG 19	8832	25-Jul-19	BENTHIC REG	DEPTH METER	176		m
REG 19	8832	25-Jul-19	BENTHIC REG	ARRIVE TIME	1250		
REG 19	8832	25-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8832	25-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8832	25-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8832	25-Jul-19	BENTHIC REG	SED_TEMP(1)	9		

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8832	25-Jul-19	BENTHIC REG	SED_DEPTH(1)	6		cm
REG 19	8832	25-Jul-19	BENTHIC REG	SED_TYPE(1)		Clay and Silt	
REG 19	8832	25-Jul-19	BENTHIC REG	VISIBILITY	11		mi
REG 19	8832	25-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8832	25-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8832	25-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	2		ft
REG 19	8832	25-Jul-19	BENTHIC REG	WATER COLOR CODE		Bluish-green	
REG 19	8832	25-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8832	25-Jul-19	BENTHIC REG	DEPART TIME	1259		
REG 19	8832	25-Jul-19	BENTHIC REG	COMMENTS		Air temp and wind data not collected due to mechanical failure	
REG 19	8833	25-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8833	25-Jul-19	BENTHIC REG	STN LONG MIN	20.151		
REG 19	8833	25-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8833	25-Jul-19	BENTHIC REG	STN LAT MIN	50.626		
REG 19	8833	25-Jul-19	BENTHIC REG	DEPTH METER	85		m
REG 19	8833	25-Jul-19	BENTHIC REG	ARRIVE TIME	1229		
REG 19	8833	25-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8833	25-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8833	25-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8833	25-Jul-19	BENTHIC REG	SED_TEMP(1)	11		
REG 19	8833	25-Jul-19	BENTHIC REG	SED_DEPTH(1)	11		cm
REG 19	8833	25-Jul-19	BENTHIC REG	SED_TYPE(1)		Clay and Silt with Shell hash	
REG 19	8833	25-Jul-19	BENTHIC REG	VISIBILITY	11		mi
REG 19	8833	25-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8833	25-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8833	25-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	2		ft
REG 19	8833	25-Jul-19	BENTHIC REG	WATER COLOR CODE		Bluish-green	
REG 19	8833	25-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8833	25-Jul-19	BENTHIC REG	DEPART TIME	1237		
REG 19	8833	25-Jul-19	BENTHIC REG	COMMENTS		Domoic acid collected; Air temp and wind data not collected due to mechanical failure	
REG 19	8834	25-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8834	25-Jul-19	BENTHIC REG	STN LONG MIN	21.759		
REG 19	8834	25-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8834	25-Jul-19	BENTHIC REG	STN LAT MIN	50.992		
REG 19	8834	25-Jul-19	BENTHIC REG	DEPTH METER	246		m
REG 19	8834	25-Jul-19	BENTHIC REG	ARRIVE TIME	1201		
REG 19	8834	25-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8834	25-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8834	25-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8834	25-Jul-19	BENTHIC REG	SED_TEMP(1)	9		

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8834	25-Jul-19	BENTHIC REG	SED_DEPTH(1)	13		cm
REG 19	8834	25-Jul-19	BENTHIC REG	SED_TYPE(1)		Clay and Silt	
REG 19	8834	25-Jul-19	BENTHIC REG	VISIBILITY	11		mi
REG 19	8834	25-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8834	25-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8834	25-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	2		ft
REG 19	8834	25-Jul-19	BENTHIC REG	WATER COLOR CODE		Bluish-green	
REG 19	8834	25-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8834	25-Jul-19	BENTHIC REG	DEPART TIME	1214		
REG 19	8834	25-Jul-19	BENTHIC REG	COMMENTS		B. pacificus x2; Air temp and wind data not collected due to mechanical failure	
REG 19	8835	25-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8835	25-Jul-19	BENTHIC REG	STN LONG MIN	20.837		
REG 19	8835	25-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8835	25-Jul-19	BENTHIC REG	STN LAT MIN	51.527		
REG 19	8835	25-Jul-19	BENTHIC REG	DEPTH METER	192		m
REG 19	8835	25-Jul-19	BENTHIC REG	ARRIVE TIME	1137		
REG 19	8835	25-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8835	25-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8835	25-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8835	25-Jul-19	BENTHIC REG	SED_TEMP(1)	10		
REG 19	8835	25-Jul-19	BENTHIC REG	SED_DEPTH(1)	10		cm
REG 19	8835	25-Jul-19	BENTHIC REG	SED_TYPE(1)		Clay and Silt	
REG 19	8835	25-Jul-19	BENTHIC REG	VISIBILITY	11		mi
REG 19	8835	25-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8835	25-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8835	25-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	2		ft
REG 19	8835	25-Jul-19	BENTHIC REG	WATER COLOR CODE		Bluish-green	
REG 19	8835	25-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8835	25-Jul-19	BENTHIC REG	DEPART TIME	1148		
REG 19	8835	25-Jul-19	BENTHIC REG	COMMENTS		Air temp and wind data not collected due to mechanical failure	
REG 19	8836	25-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8836	25-Jul-19	BENTHIC REG	STN LONG MIN	19.966		
REG 19	8836	25-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8836	25-Jul-19	BENTHIC REG	STN LAT MIN	52.445		
REG 19	8836	25-Jul-19	BENTHIC REG	DEPTH METER	190		m
REG 19	8836	25-Jul-19	BENTHIC REG	ARRIVE TIME	1110		
REG 19	8836	25-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8836	25-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8836	25-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8836	25-Jul-19	BENTHIC REG	SED_TEMP(1)	10		

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8836	25-Jul-19	BENTHIC REG	SED_DEPTH(1)	9		cm
REG 19	8836	25-Jul-19	BENTHIC REG	SED_TYPE(1)		Clay and Silt	
REG 19	8836	25-Jul-19	BENTHIC REG	VISIBILITY	11		mi
REG 19	8836	25-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8836	25-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8836	25-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	2		ft
REG 19	8836	25-Jul-19	BENTHIC REG	WATER COLOR CODE		Bluish-green	
REG 19	8836	25-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8836	25-Jul-19	BENTHIC REG	DEPART TIME	1121		
REG 19	8836	25-Jul-19	BENTHIC REG	COMMENTS		Air temp and wind data not collected due to mechanical failure	
REG 19	8837	25-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8837	25-Jul-19	BENTHIC REG	STN LONG MIN	15.859		
REG 19	8837	25-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8837	25-Jul-19	BENTHIC REG	STN LAT MIN	52.843		
REG 19	8837	25-Jul-19	BENTHIC REG	DEPTH METER	22		m
REG 19	8835	25-Jul-19	BENTHIC REG	DEPART TIME	1148		
REG 19	8837	25-Jul-19	BENTHIC REG	ARRIVE TIME	934		
REG 19	8837	25-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8837	25-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8837	25-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8837	25-Jul-19	BENTHIC REG	SED_TEMP(1)	13		
REG 19	8837	25-Jul-19	BENTHIC REG	SED_DEPTH(1)	10		cm
REG 19	8837	25-Jul-19	BENTHIC REG	SED_TYPE(1)		Fine sand with Silt	
REG 19	8837	25-Jul-19	BENTHIC REG	VISIBILITY	11		mi
REG 19	8837	25-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8837	25-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8837	25-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	2		ft
REG 19	8837	25-Jul-19	BENTHIC REG	WATER COLOR CODE		Bluish-green	
REG 19	8837	25-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8837	25-Jul-19	BENTHIC REG	DEPART TIME	943		
REG 19	8837	25-Jul-19	BENTHIC REG	COMMENTS		Domoic acid collected; Air temp and wind data not collected due to mechanical failure	
REG 19	8838	25-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8838	25-Jul-19	BENTHIC REG	STN LONG MIN	19.456		
REG 19	8838	25-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8838	25-Jul-19	BENTHIC REG	STN LAT MIN	52.827		
REG 19	8838	25-Jul-19	BENTHIC REG	DEPTH METER	198		m
REG 19	8838	25-Jul-19	BENTHIC REG	ARRIVE TIME	1050		
REG 19	8838	25-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8838	25-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8838	25-Jul-19	BENTHIC REG	WIND DIR		XX	

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8838	25-Jul-19	BENTHIC REG	SED_TEMP(1)	10		
REG 19	8838	25-Jul-19	BENTHIC REG	SED_DEPTH(1)	10		cm
REG 19	8838	25-Jul-19	BENTHIC REG	SED_TYPE(1)		Clay and Silt	
REG 19	8838	25-Jul-19	BENTHIC REG	VISIBILITY	11		mi
REG 19	8835	25-Jul-19	BENTHIC REG	DEPART TIME	1148		
REG 19	8838	25-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8838	25-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8838	25-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	2		ft
REG 19	8838	25-Jul-19	BENTHIC REG	WATER COLOR CODE		Bluish-green	
REG 19	8838	25-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8838	25-Jul-19	BENTHIC REG	DEPART TIME	1100		
REG 19	8838	25-Jul-19	BENTHIC REG	COMMENTS		Domoic acid collected; Air temp and wind data not collected due to mechanical failure	
REG 19	8839	25-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8839	25-Jul-19	BENTHIC REG	STN LONG MIN	18.996		
REG 19	8839	25-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8839	25-Jul-19	BENTHIC REG	STN LAT MIN	54.634		
REG 19	8839	25-Jul-19	BENTHIC REG	DEPTH METER	307		m
REG 19	8839	25-Jul-19	BENTHIC REG	ARRIVE TIME	1011		
REG 19	8839	25-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8839	25-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8839	25-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8839	25-Jul-19	BENTHIC REG	SED_TEMP(1)	9		
REG 19	8839	25-Jul-19	BENTHIC REG	SED_DEPTH(1)	17		cm
REG 19	8839	25-Jul-19	BENTHIC REG	SED_TYPE(1)		Clay and Silt	
REG 19	8839	25-Jul-19	BENTHIC REG	VISIBILITY	11		mi
REG 19	8839	25-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8839	25-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8839	25-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	2		ft
REG 19	8839	25-Jul-19	BENTHIC REG	WATER COLOR CODE		Bluish-green	
REG 19	8839	25-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8839	25-Jul-19	BENTHIC REG	DEPART TIME	1029		
REG 19	8839	25-Jul-19	BENTHIC REG	DEPART TIME	1148		
REG 19	8839	25-Jul-19	BENTHIC REG	COMMENTS		Domoic acid collected; Brissopsis pacifa x1; Air temp and wind data not collected due to mechanical failure	
REG 19	8841	25-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8841	25-Jul-19	BENTHIC REG	STN LONG MIN	17.133		
REG 19	8841	25-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8841	25-Jul-19	BENTHIC REG	STN LAT MIN	48.417		

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8841	25-Jul-19	BENTHIC REG	DEPTH METER	6		m
REG 19	8841	25-Jul-19	BENTHIC REG	ARRIVE TIME	906		
REG 19	8841	25-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8841	25-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8841	25-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8841	25-Jul-19	BENTHIC REG	VISIBILITY	9		mi
REG 19	8841	25-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8841	25-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8841	25-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8841	25-Jul-19	BENTHIC REG	WATER COLOR CODE		Blue	
REG 19	8841	25-Jul-19	BENTHIC REG	WAVE PER		9-10	sec
REG 19	8841	25-Jul-19	BENTHIC REG	DEPART TIME	907		
REG 19	8841	25-Jul-19	BENTHIC REG	COMMENTS		Station abandoned due to hard bottom; Air temp and wind data not collected due to mechanical failure	
REG 19	8803	26-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8803	26-Jul-19	BENTHIC REG	STN LONG MIN	19.697		
REG 19	8803	26-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8803	26-Jul-19	BENTHIC REG	STN LAT MIN	34.935		
REG 19	8803	26-Jul-19	BENTHIC REG	DEPTH METER	151		m
REG 19	8803	26-Jul-19	BENTHIC REG	ARRIVE TIME	1151		
REG 19	8803	26-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8803	26-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8803	26-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8803	26-Jul-19	BENTHIC REG	SED_TEMP(1)	10		
REG 19	8803	26-Jul-19	BENTHIC REG	SED_DEPTH(1)	13		cm
REG 19	8803	26-Jul-19	BENTHIC REG	SED_TYPE(1)		Clay with Silt	
REG 19	8803	26-Jul-19	BENTHIC REG	VISIBILITY	10		mi
REG 19	8803	26-Jul-19	BENTHIC REG	WEATHER DESC		Clear	
REG 19	8803	26-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8803	26-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8803	26-Jul-19	BENTHIC REG	WATER COLOR CODE		Blue	
REG 19	8803	26-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8803	26-Jul-19	BENTHIC REG	DEPART TIME	1204		
REG 19	8803	26-Jul-19	BENTHIC REG	COMMENTS		Domoic acid collected; Air temp and wind data not collected due to mechanical failure	
REG 19	8804	26-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8804	26-Jul-19	BENTHIC REG	STN LONG MIN	20.419		
REG 19	8804	26-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8804	26-Jul-19	BENTHIC REG	STN LAT MIN	35.347		
REG 19	8804	26-Jul-19	BENTHIC REG	DEPTH METER	168		m

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8804	26-Jul-19	BENTHIC REG	ARRIVE TIME	1129		
REG 19	8804	26-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8804	26-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8804	26-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8804	26-Jul-19	BENTHIC REG	SED_TEMP(1)	10		
REG 19	8804	26-Jul-19	BENTHIC REG	SED_DEPTH(1)	13		cm
REG 19	8804	26-Jul-19	BENTHIC REG	SED_TYPE(1)		Clay with Silt with Sand	
REG 19	8804	26-Jul-19	BENTHIC REG	VISIBILITY	10		mi
REG 19	8804	26-Jul-19	BENTHIC REG	WEATHER DESC		Clear	
REG 19	8804	26-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8804	26-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8804	26-Jul-19	BENTHIC REG	WATER COLOR CODE		Blue	
REG 19	8804	26-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8804	26-Jul-19	BENTHIC REG	DEPART TIME	1146		
REG 19	8804	26-Jul-19	BENTHIC REG	COMMENTS		Shell hash in infauna sample; Air temp and wind data not collected due to mechanical failure	
REG 19	8806	26-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8806	26-Jul-19	BENTHIC REG	STN LONG MIN	19.564		
REG 19	8806	26-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8806	26-Jul-19	BENTHIC REG	STN LAT MIN	35.596		
REG 19	8806	26-Jul-19	BENTHIC REG	DEPTH METER	135		m
REG 19	8806	26-Jul-19	BENTHIC REG	ARRIVE TIME	1218		
REG 19	8806	26-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8806	26-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8806	26-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8806	26-Jul-19	BENTHIC REG	SED_TEMP(1)	10		
REG 19	8806	26-Jul-19	BENTHIC REG	SED_DEPTH(1)	11		cm
REG 19	8806	26-Jul-19	BENTHIC REG	SED_TYPE(1)		Clay and Silt	
REG 19	8806	26-Jul-19	BENTHIC REG	VISIBILITY	10		mi
REG 19	8806	26-Jul-19	BENTHIC REG	WEATHER DESC		Clear	
REG 19	8806	26-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8806	26-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8806	26-Jul-19	BENTHIC REG	WATER COLOR CODE		Blue	
REG 19	8806	26-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8806	26-Jul-19	BENTHIC REG	DEPART TIME	1230		
REG 19	8809	26-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8809	26-Jul-19	BENTHIC REG	STN LONG MIN	22.952		
REG 19	8809	26-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8809	26-Jul-19	BENTHIC REG	STN LAT MIN	36.386		
REG 19	8809	26-Jul-19	BENTHIC REG	DEPTH METER	271		m
REG 19	8809	26-Jul-19	BENTHIC REG	ARRIVE TIME	1033		

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8809	26-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8809	26-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8809	26-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8809	26-Jul-19	BENTHIC REG	SED_TEMP(1)	9		
REG 19	8809	26-Jul-19	BENTHIC REG	SED_DEPTH(1)	12		cm
REG 19	8809	26-Jul-19	BENTHIC REG	SED_TYPE(1)		Silt and Sand with Shell hash	
REG 19	8809	26-Jul-19	BENTHIC REG	VISIBILITY	10		mi
REG 19	8809	26-Jul-19	BENTHIC REG	WEATHER DESC		Clear	
REG 19	8809	26-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8809	26-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8809	26-Jul-19	BENTHIC REG	WATER COLOR CODE		Blue	
REG 19	8809	26-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8809	26-Jul-19	BENTHIC REG	DEPART TIME	1051		
REG 19	8809	26-Jul-19	BENTHIC REG	COMMENTS		Air temp and wind data not collected due to mechanical failure	
REG 19	8810	26-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8810	26-Jul-19	BENTHIC REG	STN LONG MIN	21.292		
REG 19	8810	26-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8810	26-Jul-19	BENTHIC REG	STN LAT MIN	37.024		
REG 19	8810	26-Jul-19	BENTHIC REG	DEPTH METER	189		m
REG 19	8810	26-Jul-19	BENTHIC REG	ARRIVE TIME	1104		
REG 19	8810	26-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8810	26-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8810	26-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8810	26-Jul-19	BENTHIC REG	SED_TEMP(1)	10		
REG 19	8810	26-Jul-19	BENTHIC REG	SED_DEPTH(1)	14		cm
REG 19	8810	26-Jul-19	BENTHIC REG	SED_TYPE(1)		Silt and Clay with Sand	
REG 19	8810	26-Jul-19	BENTHIC REG	VISIBILITY	10		mi
REG 19	8810	26-Jul-19	BENTHIC REG	WEATHER DESC		Clear	
REG 19	8810	26-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8810	26-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8810	26-Jul-19	BENTHIC REG	WATER COLOR CODE		Blue	
REG 19	8810	26-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8810	26-Jul-19	BENTHIC REG	DEPART TIME	1119		
REG 19	8810	26-Jul-19	BENTHIC REG	COMMENTS		Air temp and wind data not collected due to mechanical failure	
REG 19	8817	26-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8817	26-Jul-19	BENTHIC REG	STN LONG MIN	24.186		
REG 19	8817	26-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8817	26-Jul-19	BENTHIC REG	STN LAT MIN	38.877		
REG 19	8817	26-Jul-19	BENTHIC REG	DEPTH METER	314		m
REG 19	8817	26-Jul-19	BENTHIC REG	ARRIVE TIME	948		

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8817	26-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8817	26-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8817	26-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8817	26-Jul-19	BENTHIC REG	SED_TEMP(1)	8		
REG 19	8817	26-Jul-19	BENTHIC REG	SED_DEPTH(1)	14		cm
REG 19	8817	26-Jul-19	BENTHIC REG	SED_TYPE(1)		Clay with Silt	
REG 19	8817	26-Jul-19	BENTHIC REG	VISIBILITY	10		mi
REG 19	8817	26-Jul-19	BENTHIC REG	WEATHER DESC		Clear	
REG 19	8817	26-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8817	26-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8817	26-Jul-19	BENTHIC REG	WATER COLOR CODE		Blue	
REG 19	8817	26-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8817	26-Jul-19	BENTHIC REG	DEPART TIME	1007		
REG 19	8817	26-Jul-19	BENTHIC REG	COMMENTS		Brisopsis pacifica x1; Air temp and wind data not collected due to mechanical failure	
REG 19	8818	26-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8818	26-Jul-19	BENTHIC REG	STN LONG MIN	21.065		
REG 19	8818	26-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8818	26-Jul-19	BENTHIC REG	STN LAT MIN	38.957		
REG 19	8818	26-Jul-19	BENTHIC REG	DEPTH METER	172		m
REG 19	8818	26-Jul-19	BENTHIC REG	ARRIVE TIME	850		
REG 19	8818	26-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8818	26-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8818	26-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8818	26-Jul-19	BENTHIC REG	SED_TEMP(1)	10		
REG 19	8818	26-Jul-19	BENTHIC REG	SED_DEPTH(1)	9		cm
REG 19	8818	26-Jul-19	BENTHIC REG	SED_TYPE(1)		Clay with Silt	
REG 19	8818	26-Jul-19	BENTHIC REG	VISIBILITY	1		mi
REG 19	8818	26-Jul-19	BENTHIC REG	WEATHER DESC		Fog	
REG 19	8818	26-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8818	26-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8818	26-Jul-19	BENTHIC REG	WATER COLOR CODE		Blue	
REG 19	8818	26-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8818	26-Jul-19	BENTHIC REG	DEPART TIME	904		
REG 19	8818	26-Jul-19	BENTHIC REG	COMMENTS		Air temp and wind data not collected due to mechanical failure	
REG 19	8820	26-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8820	26-Jul-19	BENTHIC REG	STN LONG MIN	22.009		
REG 19	8820	26-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8820	26-Jul-19	BENTHIC REG	STN LAT MIN	39.036		
REG 19	8820	26-Jul-19	BENTHIC REG	DEPTH METER	218		m
REG 19	8820	26-Jul-19	BENTHIC REG	ARRIVE TIME	912		

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8820	26-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8820	26-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8820	26-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8820	26-Jul-19	BENTHIC REG	SED_TEMP(1)	10		
REG 19	8820	26-Jul-19	BENTHIC REG	SED_DEPTH(1)	15		cm
REG 19	8820	26-Jul-19	BENTHIC REG	SED_TYPE(1)		Clay with Silt	
REG 19	8820	26-Jul-19	BENTHIC REG	VISIBILITY	2		mi
REG 19	8820	26-Jul-19	BENTHIC REG	WEATHER DESC		Fog	
REG 19	8820	26-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8820	26-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8820	26-Jul-19	BENTHIC REG	WATER COLOR CODE		Blue	
REG 19	8820	26-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8820	26-Jul-19	BENTHIC REG	DEPART TIME	929		
REG 19	8820	26-Jul-19	BENTHIC REG	COMMENTS		Air temp and wind data not collected due to mechanical failure	
REG 19	8822	26-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8822	26-Jul-19	BENTHIC REG	STN LONG MIN	20.266		
REG 19	8822	26-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8822	26-Jul-19	BENTHIC REG	STN LAT MIN	40.043		
REG 19	8822	26-Jul-19	BENTHIC REG	DEPTH METER	137		m
REG 19	8822	26-Jul-19	BENTHIC REG	ARRIVE TIME	822		
REG 19	8822	26-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8822	26-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8822	26-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8822	26-Jul-19	BENTHIC REG	SED_TEMP(1)	10		
REG 19	8822	26-Jul-19	BENTHIC REG	SED_DEPTH(1)	8		cm
REG 19	8822	26-Jul-19	BENTHIC REG	SED_TYPE(1)		Silt	
REG 19	8822	26-Jul-19	BENTHIC REG	VISIBILITY	1		mi
REG 19	8822	26-Jul-19	BENTHIC REG	WEATHER DESC		Fog	
REG 19	8822	26-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8822	26-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8822	26-Jul-19	BENTHIC REG	WATER COLOR CODE		Blue	
REG 19	8822	26-Jul-19	BENTHIC REG	WAVE PER		9-10	sec
REG 19	8822	26-Jul-19	BENTHIC REG	DEPART TIME	839		
REG 19	8822	26-Jul-19	BENTHIC REG	COMMENTS		Air temp and wind data not collected due to mechanical failure	
REG 19	8812	29-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8812	29-Jul-19	BENTHIC REG	STN LONG MIN	16.112		
REG 19	8812	29-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8812	29-Jul-19	BENTHIC REG	STN LAT MIN	37.227		
REG 19	8812	29-Jul-19	BENTHIC REG	DEPTH METER	58		m
REG 19	8812	29-Jul-19	BENTHIC REG	ARRIVE TIME	831		
REG 19	8812	29-Jul-19	BENTHIC REG	AIR TEMP	0		C

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8812	29-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8812	29-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8812	29-Jul-19	BENTHIC REG	SED_TEMP(1)	11		
REG 19	8812	29-Jul-19	BENTHIC REG	SED_DEPTH(1)	9		cm
REG 19	8812	29-Jul-19	BENTHIC REG	SED_TYPE(1)		Fine sand and Silt	
REG 19	8812	29-Jul-19	BENTHIC REG	VISIBILITY	7		mi
REG 19	8812	29-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8812	29-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8812	29-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8812	29-Jul-19	BENTHIC REG	WATER COLOR CODE		Greenish-blue	
REG 19	8812	29-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8812	29-Jul-19	BENTHIC REG	DEPART TIME	841		
REG 19	8812	29-Jul-19	BENTHIC REG	COMMENTS		Air temp and wind data not collected due to mechanical failure	
REG 19	8814	29-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8814	29-Jul-19	BENTHIC REG	STN LONG MIN	18.264		
REG 19	8814	29-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8814	29-Jul-19	BENTHIC REG	STN LAT MIN	38.007		
REG 19	8814	29-Jul-19	BENTHIC REG	DEPTH METER	87		m
REG 19	8814	29-Jul-19	BENTHIC REG	ARRIVE TIME	1001		
REG 19	8814	29-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8814	29-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8814	29-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8814	29-Jul-19	BENTHIC REG	SED_TEMP(1)	11		
REG 19	8814	29-Jul-19	BENTHIC REG	SED_DEPTH(1)	8		cm
REG 19	8814	29-Jul-19	BENTHIC REG	SED_TYPE(1)		Silt with Fine sand	
REG 19	8814	29-Jul-19	BENTHIC REG	VISIBILITY	7		mi
REG 19	8814	29-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8814	29-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8814	29-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8814	29-Jul-19	BENTHIC REG	WATER COLOR CODE		Greenish-blue	
REG 19	8814	29-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8814	29-Jul-19	BENTHIC REG	DEPART TIME	1020		
REG 19	8814	29-Jul-19	BENTHIC REG	COMMENTS		Grab failure due to heavily canted; Air temp and wind data not collected due to mechanical failure	
REG 19	8819	29-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8819	29-Jul-19	BENTHIC REG	STN LONG MIN	14.189		
REG 19	8819	29-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8819	29-Jul-19	BENTHIC REG	STN LAT MIN	38.983		
REG 19	8819	29-Jul-19	BENTHIC REG	DEPTH METER	16		m
REG 19	8819	29-Jul-19	BENTHIC REG	ARRIVE TIME	723		
REG 19	8819	29-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8819	29-Jul-19	BENTHIC REG	WIND SPEED	0		kts

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8819	29-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8819	29-Jul-19	BENTHIC REG	VISIBILITY	7		mi
REG 19	8819	29-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8819	29-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8819	29-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8819	29-Jul-19	BENTHIC REG	WATER COLOR CODE		Greenish-blue	
REG 19	8819	29-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8819	29-Jul-19	BENTHIC REG	DEPART TIME	745		
REG 19	8819	29-Jul-19	BENTHIC REG	COMMENTS		Station abandoned due to rocky bottom; Air temp and wind data not collected due to mechanical failure	
REG 19	8821	29-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8821	29-Jul-19	BENTHIC REG	STN LONG MIN	16.016		
REG 19	8821	29-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8821	29-Jul-19	BENTHIC REG	STN LAT MIN	39.096		
REG 19	8821	29-Jul-19	BENTHIC REG	DEPTH METER	43		m
REG 19	8821	29-Jul-19	BENTHIC REG	ARRIVE TIME	850		
REG 19	8821	29-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8821	29-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8821	29-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8821	29-Jul-19	BENTHIC REG	SED_TEMP(1)	11		
REG 19	8821	29-Jul-19	BENTHIC REG	SED_DEPTH(1)	7		cm
REG 19	8821	29-Jul-19	BENTHIC REG	SED_TYPE(1)		Sand and Fine sand with Sand	
REG 19	8821	29-Jul-19	BENTHIC REG	VISIBILITY	7		mi
REG 19	8821	29-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8821	29-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8821	29-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8821	29-Jul-19	BENTHIC REG	WATER COLOR CODE		Greenish-blue	
REG 19	8821	29-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8821	29-Jul-19	BENTHIC REG	DEPART TIME	859		
REG 19	8821	29-Jul-19	BENTHIC REG	COMMENTS		Air temp and wind data not collected due to mechanical failure	
REG 19	8842	29-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8842	29-Jul-19	BENTHIC REG	STN LONG MIN	8.433		
REG 19	8842	29-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8842	29-Jul-19	BENTHIC REG	STN LAT MIN	32.251		
REG 19	8842	29-Jul-19	BENTHIC REG	DEPTH METER	17		m
REG 19	8842	29-Jul-19	BENTHIC REG	ARRIVE TIME	1117		
REG 19	8842	29-Jul-19	BENTHIC REG	AIR TEMP	19		C
REG 19	8842	29-Jul-19	BENTHIC REG	WIND SPEED	4		kts
REG 19	8842	29-Jul-19	BENTHIC REG	WIND DIR		W	
REG 19	8842	29-Jul-19	BENTHIC REG	SED_TEMP(1)	14		

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8842	29-Jul-19	BENTHIC REG	SED_DEPTH(1)	6		cm
REG 19	8842	29-Jul-19	BENTHIC REG	SED_TYPE(1)		Silt and Fine sand	
REG 19	8842	29-Jul-19	BENTHIC REG	VISIBILITY	10		mi
REG 19	8842	29-Jul-19	BENTHIC REG	WEATHER DESC		Clear	
REG 19	8842	29-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8842	29-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8842	29-Jul-19	BENTHIC REG	WATER COLOR CODE		Green	
REG 19	8842	29-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8842	29-Jul-19	BENTHIC REG	DEPART TIME	1133		
REG 19	8842	29-Jul-19	BENTHIC REG	COMMENTS		Grab failure due to < 5 cm Penetration	
REG 19	8843	29-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8843	29-Jul-19	BENTHIC REG	STN LONG MIN	16.054		
REG 19	8843	29-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8843	29-Jul-19	BENTHIC REG	STN LAT MIN	43.358		
REG 19	8843	29-Jul-19	BENTHIC REG	DEPTH METER	13		m
REG 19	8843	29-Jul-19	BENTHIC REG	ARRIVE TIME	924		
REG 19	8843	29-Jul-19	BENTHIC REG	AIR TEMP	0		C
REG 19	8843	29-Jul-19	BENTHIC REG	WIND SPEED	0		kts
REG 19	8843	29-Jul-19	BENTHIC REG	WIND DIR		XX	
REG 19	8843	29-Jul-19	BENTHIC REG	VISIBILITY	7		mi
REG 19	8843	29-Jul-19	BENTHIC REG	WEATHER DESC		Overcast	
REG 19	8843	29-Jul-19	BENTHIC REG	SEA STATE		Calm	
REG 19	8843	29-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8843	29-Jul-19	BENTHIC REG	WATER COLOR CODE		Greenish-blue	
REG 19	8843	29-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8843	29-Jul-19	BENTHIC REG	DEPART TIME	932		
REG 19	8843	29-Jul-19	BENTHIC REG	COMMENTS		Abandoned due to kelp bed; Air temp and wind data not collected due to mechanical failure	
REG 19	8844	29-Jul-19	BENTHIC REG	STN LONG DEG	117		
REG 19	8844	29-Jul-19	BENTHIC REG	STN LONG MIN	10.24		
REG 19	8844	29-Jul-19	BENTHIC REG	STN LAT DEG	32		
REG 19	8844	29-Jul-19	BENTHIC REG	STN LAT MIN	38.579		
REG 19	8844	29-Jul-19	BENTHIC REG	DEPTH METER	16		m
REG 19	8844	29-Jul-19	BENTHIC REG	ARRIVE TIME	1210		
REG 19	8844	29-Jul-19	BENTHIC REG	AIR TEMP	20		C
REG 19	8844	29-Jul-19	BENTHIC REG	WIND SPEED	4		kts
REG 19	8844	29-Jul-19	BENTHIC REG	WIND DIR		S	
REG 19	8844	29-Jul-19	BENTHIC REG	SED_TEMP(1)	14		
REG 19	8844	29-Jul-19	BENTHIC REG	SED_DEPTH(1)	7		cm
REG 19	8844	29-Jul-19	BENTHIC REG	SED_TYPE(1)		Silt with Fine sand	
REG 19	8844	29-Jul-19	BENTHIC REG	VISIBILITY	10		mi
REG 19	8844	29-Jul-19	BENTHIC REG	WEATHER DESC		Clear	
REG 19	8844	29-Jul-19	BENTHIC REG	SEA STATE		Calm	

Addendum 1-1C *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
REG 19	8844	29-Jul-19	BENTHIC REG	WAVE HEIGHT LOW	3		ft
REG 19	8844	29-Jul-19	BENTHIC REG	WATER COLOR CODE		Green	
REG 19	8844	29-Jul-19	BENTHIC REG	WAVE PER		13-15	sec
REG 19	8844	29-Jul-19	BENTHIC REG	DEPART TIME	1228		
REG 19	8844	29-Jul-19	BENTHIC REG	COMMENTS		Grab failure due to < 5 cm penetration; Grab failure due to rocks/gravel	

Addendum 1-2A

Visual observations from PLOO Trawl stations sampled during 2019.

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	SD7	15-Jan-19	FISH: TRAWL	AIR TEMP	15		C
PLOO	SD7	15-Jan-19	FISH: TRAWL	WIND SPEED	8		kts
PLOO	SD7	15-Jan-19	FISH: TRAWL	WIND DIR		E	
PLOO	SD7	15-Jan-19	FISH: TRAWL	START LONG DEG	117		
PLOO	SD7	15-Jan-19	FISH: TRAWL	START LONG MIN	18.369		
PLOO	SD7	15-Jan-19	FISH: TRAWL	START LAT DEG	32		
PLOO	SD7	15-Jan-19	FISH: TRAWL	START LAT MIN	34.979		
PLOO	SD7	15-Jan-19	FISH: TRAWL	START DEPTH METER	97		m
PLOO	SD7	15-Jan-19	FISH: TRAWL	END LONG DEG	117		
PLOO	SD7	15-Jan-19	FISH: TRAWL	END LONG MIN	18.554		
PLOO	SD7	15-Jan-19	FISH: TRAWL	END LAT DEG	32		
PLOO	SD7	15-Jan-19	FISH: TRAWL	END LAT MIN	35.2		
PLOO	SD7	15-Jan-19	FISH: TRAWL	END DEPTH METER	99		m
PLOO	SD7	15-Jan-19	FISH: TRAWL	DEPTH METER	98		m
PLOO	SD7	15-Jan-19	FISH: TRAWL	COMMENTS			
PLOO	SD7	15-Jan-19	FISH: TRAWL	VISIBILITY	10		mi
PLOO	SD7	15-Jan-19	FISH: TRAWL	WEATHER DESC		Partly Cloudy	
PLOO	SD7	15-Jan-19	FISH: TRAWL	SEA STATE		Choppy	
PLOO	SD7	15-Jan-19	FISH: TRAWL	WAVE HEIGHT LOW	5		ft
PLOO	SD7	15-Jan-19	FISH: TRAWL	WATER COLOR CODE		Blue-Green	
PLOO	SD7	15-Jan-19	FISH: TRAWL	WAVE PER		13-15	sec
PLOO	SD7	15-Jan-19	FISH: TRAWL	AIR TEMP	15		C
PLOO	SD7	15-Jan-19	FISH: TRAWL	WIND SPEED	8		kts
PLOO	SD7	15-Jan-19	FISH: TRAWL	WIND DIR		E	
PLOO	SD7	15-Jan-19	FISH: TRAWL	START LONG DEG	117		
PLOO	SD7	15-Jan-19	FISH: TRAWL	START LONG MIN	18.369		
PLOO	SD7	15-Jan-19	FISH: TRAWL	START LAT DEG	32		
PLOO	SD7	15-Jan-19	FISH: TRAWL	START LAT MIN	34.979		
PLOO	SD7	15-Jan-19	FISH: TRAWL	START DEPTH METER	97		m
PLOO	SD7	15-Jan-19	FISH: TRAWL	END LONG DEG	117		
PLOO	SD7	15-Jan-19	FISH: TRAWL	END LONG MIN	18.554		
PLOO	SD7	15-Jan-19	FISH: TRAWL	END LAT DEG	32		
PLOO	SD7	15-Jan-19	FISH: TRAWL	END LAT MIN	35.2		
PLOO	SD7	15-Jan-19	FISH: TRAWL	END DEPTH METER	99		m
PLOO	SD7	15-Jan-19	FISH: TRAWL	DEPTH METER	98		m
PLOO	SD7	15-Jan-19	FISH: TRAWL	COMMENTS		SBOO plume visible at surface	
PLOO	SD7	15-Jan-19	FISH: TRAWL	VISIBILITY	10		mi
PLOO	SD7	15-Jan-19	FISH: TRAWL	WEATHER DESC		Partly Cloudy	
PLOO	SD7	15-Jan-19	FISH: TRAWL	SEA STATE		Choppy	
PLOO	SD7	15-Jan-19	FISH: TRAWL	WAVE HEIGHT LOW	5		ft
PLOO	SD7	15-Jan-19	FISH: TRAWL	WATER COLOR CODE		Blue-Green	
PLOO	SD7	15-Jan-19	FISH: TRAWL	WAVE PER		13-15	sec
PLOO	SD14	16-Jan-19	FISH: TRAWL	AIR TEMP	16		C
PLOO	SD14	16-Jan-19	FISH: TRAWL	WIND SPEED	11		kts
PLOO	SD14	16-Jan-19	FISH: TRAWL	WIND DIR		E	

Addendum 1-2A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	SD14	16-Jan-19	FISH: TRAWL	START LONG DEG	117		
PLOO	SD14	16-Jan-19	FISH: TRAWL	START LONG MIN	20.843		
PLOO	SD14	16-Jan-19	FISH: TRAWL	START LAT DEG	32		
PLOO	SD14	16-Jan-19	FISH: TRAWL	START LAT MIN	44.128		
PLOO	SD14	16-Jan-19	FISH: TRAWL	START DEPTH METER	101		m
PLOO	SD14	16-Jan-19	FISH: TRAWL	END LONG DEG	117		
PLOO	SD14	16-Jan-19	FISH: TRAWL	END LONG MIN	21.027		
PLOO	SD14	16-Jan-19	FISH: TRAWL	END LAT DEG	32		
PLOO	SD14	16-Jan-19	FISH: TRAWL	END LAT MIN	44.368		
PLOO	SD14	16-Jan-19	FISH: TRAWL	END DEPTH METER	102		m
PLOO	SD14	16-Jan-19	FISH: TRAWL	DEPTH METER	102		m
PLOO	SD14	16-Jan-19	FISH: TRAWL	COMMENTS			
PLOO	SD14	16-Jan-19	FISH: TRAWL	VISIBILITY	9		mi
PLOO	SD14	16-Jan-19	FISH: TRAWL	WEATHER DESC		Overcast	
PLOO	SD14	16-Jan-19	FISH: TRAWL	SEA STATE		Rough	
PLOO	SD14	16-Jan-19	FISH: TRAWL	WAVE HEIGHT LOW	5		ft
PLOO	SD14	16-Jan-19	FISH: TRAWL	WATER COLOR CODE		Blue-Green	
PLOO	SD14	16-Jan-19	FISH: TRAWL	WAVE PER		11-12	sec
PLOO	SD14	16-Jan-19	FISH: TRAWL	AIR TEMP	16		C
PLOO	SD14	16-Jan-19	FISH: TRAWL	WIND SPEED	11		kts
PLOO	SD14	16-Jan-19	FISH: TRAWL	WIND DIR		E	
PLOO	SD14	16-Jan-19	FISH: TRAWL	START LONG DEG	117		
PLOO	SD14	16-Jan-19	FISH: TRAWL	START LONG MIN	20.843		
PLOO	SD14	16-Jan-19	FISH: TRAWL	START LAT DEG	32		
PLOO	SD14	16-Jan-19	FISH: TRAWL	START LAT MIN	44.128		
PLOO	SD14	16-Jan-19	FISH: TRAWL	START DEPTH METER	101		m
PLOO	SD14	16-Jan-19	FISH: TRAWL	END LONG DEG	117		
PLOO	SD14	16-Jan-19	FISH: TRAWL	END LONG MIN	21.027		
PLOO	SD14	16-Jan-19	FISH: TRAWL	END LAT DEG	32		
PLOO	SD14	16-Jan-19	FISH: TRAWL	END LAT MIN	44.368		
PLOO	SD14	16-Jan-19	FISH: TRAWL	END DEPTH METER	102		m
PLOO	SD14	16-Jan-19	FISH: TRAWL	DEPTH METER	102		m
PLOO	SD14	16-Jan-19	FISH: TRAWL	COMMENTS			
PLOO	SD14	16-Jan-19	FISH: TRAWL	VISIBILITY	9		mi
PLOO	SD14	16-Jan-19	FISH: TRAWL	WEATHER DESC		Overcast	
PLOO	SD14	16-Jan-19	FISH: TRAWL	SEA STATE		Rough	
PLOO	SD14	16-Jan-19	FISH: TRAWL	WAVE HEIGHT LOW	5		ft
PLOO	SD14	16-Jan-19	FISH: TRAWL	WATER COLOR CODE		Blue-Green	
PLOO	SD14	16-Jan-19	FISH: TRAWL	WAVE PER		11-12	sec
PLOO	SD10	24-Jan-19	FISH: TRAWL	AIR TEMP	15		C
PLOO	SD10	24-Jan-19	FISH: TRAWL	WIND SPEED	12		kts
PLOO	SD10	24-Jan-19	FISH: TRAWL	WIND DIR		NW	
PLOO	SD10	24-Jan-19	FISH: TRAWL	START LONG DEG	117		
PLOO	SD10	24-Jan-19	FISH: TRAWL	START LONG MIN	19.367		
PLOO	SD10	24-Jan-19	FISH: TRAWL	START LAT DEG	32		
PLOO	SD10	24-Jan-19	FISH: TRAWL	START LAT MIN	38.973		

Addendum 1-2A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	SD10	24-Jan-19	FISH: TRAWL	START DEPTH METER	99		m
PLOO	SD10	24-Jan-19	FISH: TRAWL	END LONG DEG	117		
PLOO	SD10	24-Jan-19	FISH: TRAWL	END LONG MIN	19.533		
PLOO	SD10	24-Jan-19	FISH: TRAWL	END LAT DEG	32		
PLOO	SD10	24-Jan-19	FISH: TRAWL	END LAT MIN	39.205		
PLOO	SD10	24-Jan-19	FISH: TRAWL	END DEPTH METER	99		m
PLOO	SD10	24-Jan-19	FISH: TRAWL	DEPTH METER	99		m
PLOO	SD10	24-Jan-19	FISH: TRAWL	COMMENTS			
PLOO	SD10	24-Jan-19	FISH: TRAWL	VISIBILITY	9		mi
PLOO	SD10	24-Jan-19	FISH: TRAWL	WEATHER DESC		Partly Cloudy	
PLOO	SD10	24-Jan-19	FISH: TRAWL	SEA STATE		Calm	
PLOO	SD10	24-Jan-19	FISH: TRAWL	WAVE HEIGHT LOW	3		ft
PLOO	SD10	24-Jan-19	FISH: TRAWL	WATER COLOR CODE		Greenish-Blue	
PLOO	SD10	24-Jan-19	FISH: TRAWL	WAVE PER		11-12	sec
PLOO	SD12	24-Jan-19	FISH: TRAWL	AIR TEMP	15		C
PLOO	SD12	24-Jan-19	FISH: TRAWL	WIND SPEED	6		kts
PLOO	SD12	24-Jan-19	FISH: TRAWL	WIND DIR		W	
PLOO	SD12	24-Jan-19	FISH: TRAWL	START LONG DEG	117		
PLOO	SD12	24-Jan-19	FISH: TRAWL	START LONG MIN	19.812		
PLOO	SD12	24-Jan-19	FISH: TRAWL	START LAT DEG	32		
PLOO	SD12	24-Jan-19	FISH: TRAWL	START LAT MIN	40.597		
PLOO	SD12	24-Jan-19	FISH: TRAWL	START DEPTH METER	107		m
PLOO	SD12	24-Jan-19	FISH: TRAWL	END LONG DEG	117		
PLOO	SD12	24-Jan-19	FISH: TRAWL	END LONG MIN	19.832		
PLOO	SD12	24-Jan-19	FISH: TRAWL	END LAT DEG	32		
PLOO	SD12	24-Jan-19	FISH: TRAWL	END LAT MIN	40.847		
PLOO	SD12	24-Jan-19	FISH: TRAWL	END DEPTH METER	107		m
PLOO	SD12	24-Jan-19	FISH: TRAWL	DEPTH METER	107		m
PLOO	SD12	24-Jan-19	FISH: TRAWL	COMMENTS			
PLOO	SD12	24-Jan-19	FISH: TRAWL	VISIBILITY	9		mi
PLOO	SD12	24-Jan-19	FISH: TRAWL	WEATHER DESC		Partly Cloudy	
PLOO	SD12	24-Jan-19	FISH: TRAWL	SEA STATE		Calm	
PLOO	SD12	24-Jan-19	FISH: TRAWL	WAVE HEIGHT LOW	3		ft
PLOO	SD12	24-Jan-19	FISH: TRAWL	WATER COLOR CODE		Greenish-Blue	
PLOO	SD12	24-Jan-19	FISH: TRAWL	WAVE PER		11-12	sec
PLOO	SD13	24-Jan-19	FISH: TRAWL	AIR TEMP	14		C
PLOO	SD13	24-Jan-19	FISH: TRAWL	WIND SPEED	3		kts
PLOO	SD13	24-Jan-19	FISH: TRAWL	WIND DIR		N	
PLOO	SD13	24-Jan-19	FISH: TRAWL	START LONG DEG	117		
PLOO	SD13	24-Jan-19	FISH: TRAWL	START LONG MIN	20.074		
PLOO	SD13	24-Jan-19	FISH: TRAWL	START LAT DEG	32		
PLOO	SD13	24-Jan-19	FISH: TRAWL	START LAT MIN	42.553		
PLOO	SD13	24-Jan-19	FISH: TRAWL	START DEPTH METER	96		m
PLOO	SD13	24-Jan-19	FISH: TRAWL	END LONG DEG	117		
PLOO	SD13	24-Jan-19	FISH: TRAWL	END LONG MIN	20.233		

Addendum 1-2A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	SD13	24-Jan-19	FISH: TRAWL	END LAT DEG	32		
PLOO	SD13	24-Jan-19	FISH: TRAWL	END LAT MIN	42.801		
PLOO	SD13	24-Jan-19	FISH: TRAWL	END DEPTH METER	99		m
PLOO	SD13	24-Jan-19	FISH: TRAWL	DEPTH METER	98		m
PLOO	SD13	24-Jan-19	FISH: TRAWL	COMMENTS			
PLOO	SD13	24-Jan-19	FISH: TRAWL	VISIBILITY	9		mi
PLOO	SD13	24-Jan-19	FISH: TRAWL	WEATHER DESC		Partly Cloudy	
PLOO	SD13	24-Jan-19	FISH: TRAWL	SEA STATE		Calm	
PLOO	SD13	24-Jan-19	FISH: TRAWL	WAVE HEIGHT LOW	3		ft
PLOO	SD13	24-Jan-19	FISH: TRAWL	WATER COLOR CODE		Greenish-Blue	
PLOO	SD13	24-Jan-19	FISH: TRAWL	WAVE PER		11-12	sec
PLOO	SD8	24-Jan-19	FISH: TRAWL	AIR TEMP	16		C
PLOO	SD8	24-Jan-19	FISH: TRAWL	WIND SPEED	9		kts
PLOO	SD8	24-Jan-19	FISH: TRAWL	WIND DIR		NW	
PLOO	SD8	24-Jan-19	FISH: TRAWL	START LONG DEG	117		
PLOO	SD8	24-Jan-19	FISH: TRAWL	START LONG MIN	19.215		
PLOO	SD8	24-Jan-19	FISH: TRAWL	START LAT DEG	32		
PLOO	SD8	24-Jan-19	FISH: TRAWL	START LAT MIN	37.335		
PLOO	SD8	24-Jan-19	FISH: TRAWL	START DEPTH METER	99		m
PLOO	SD8	24-Jan-19	FISH: TRAWL	END LONG DEG	117		
PLOO	SD8	24-Jan-19	FISH: TRAWL	END LONG MIN	19.392		
PLOO	SD8	24-Jan-19	FISH: TRAWL	END LAT DEG	32		
PLOO	SD8	24-Jan-19	FISH: TRAWL	END LAT MIN	37.558		
PLOO	SD8	24-Jan-19	FISH: TRAWL	END DEPTH METER	99		m
PLOO	SD8	24-Jan-19	FISH: TRAWL	DEPTH METER	99		m
PLOO	SD8	24-Jan-19	FISH: TRAWL	COMMENTS			
PLOO	SD8	24-Jan-19	FISH: TRAWL	VISIBILITY	0		mi
PLOO	SD8	24-Jan-19	FISH: TRAWL	WEATHER DESC		Clear	
PLOO	SD8	24-Jan-19	FISH: TRAWL	SEA STATE		Calm	
PLOO	SD8	24-Jan-19	FISH: TRAWL	WAVE HEIGHT LOW	3		ft
PLOO	SD8	24-Jan-19	FISH: TRAWL	WATER COLOR CODE		Greenish-Blue	
PLOO	SD8	24-Jan-19	FISH: TRAWL	WAVE PER		11-12	sec
PLOO	SD10	10-Jul-19	FISH: TRAWL	AIR TEMP	19		C
PLOO	SD10	10-Jul-19	FISH: TRAWL	WIND SPEED	9		kts
PLOO	SD10	10-Jul-19	FISH: TRAWL	WIND DIR		W	
PLOO	SD10	10-Jul-19	FISH: TRAWL	START LONG DEG	117		
PLOO	SD10	10-Jul-19	FISH: TRAWL	START LONG MIN	19.265		
PLOO	SD10	10-Jul-19	FISH: TRAWL	START LAT DEG	32		
PLOO	SD10	10-Jul-19	FISH: TRAWL	START LAT MIN	38.843		
PLOO	SD10	10-Jul-19	FISH: TRAWL	START DEPTH METER	96		m
PLOO	SD10	10-Jul-19	FISH: TRAWL	END LONG DEG	117		
PLOO	SD10	10-Jul-19	FISH: TRAWL	END LONG MIN	19.456		
PLOO	SD10	10-Jul-19	FISH: TRAWL	END LAT DEG	32		
PLOO	SD10	10-Jul-19	FISH: TRAWL	END LAT MIN	39.13		
PLOO	SD10	10-Jul-19	FISH: TRAWL	END DEPTH METER	99		m

Addendum 1-2A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	SD10	10-Jul-19	FISH: TRAWL	DEPTH METER	98		m
PLOO	SD10	10-Jul-19	FISH: TRAWL	COMMENTS			
PLOO	SD10	10-Jul-19	FISH: TRAWL	VISIBILITY	10		mi
PLOO	SD10	10-Jul-19	FISH: TRAWL	WEATHER DESC		Overcast	
PLOO	SD10	10-Jul-19	FISH: TRAWL	SEA STATE		Calm	
PLOO	SD10	10-Jul-19	FISH: TRAWL	WAVE HEIGHT LOW	4		ft
PLOO	SD10	10-Jul-19	FISH: TRAWL	WATER COLOR CODE		Blue	
PLOO	SD10	10-Jul-19	FISH: TRAWL	WAVE PER		13-15	sec
PLOO	SD10	10-Jul-19	FISH: TRAWL	AIR TEMP	19		
PLOO	SD10	10-Jul-19	FISH: TRAWL	WIND SPEED	9		
PLOO	SD10	10-Jul-19	FISH: TRAWL	WIND DIR		W	
PLOO	SD10	10-Jul-19	FISH: TRAWL	START LONG DEG	117		
PLOO	SD10	10-Jul-19	FISH: TRAWL	START LONG MIN	19.265		
PLOO	SD10	10-Jul-19	FISH: TRAWL	START LAT DEG	32		
PLOO	SD10	10-Jul-19	FISH: TRAWL	START LAT MIN	38.843		
PLOO	SD10	10-Jul-19	FISH: TRAWL	START DEPTH METER	96		
PLOO	SD10	10-Jul-19	FISH: TRAWL	END LONG DEG	117		
PLOO	SD10	10-Jul-19	FISH: TRAWL	END LONG MIN	19.456		
PLOO	SD10	10-Jul-19	FISH: TRAWL	END LAT DEG	32		
PLOO	SD10	10-Jul-19	FISH: TRAWL	END LAT MIN	39.13		
PLOO	SD10	10-Jul-19	FISH: TRAWL	END DEPTH METER	99		
PLOO	SD10	10-Jul-19	FISH: TRAWL	DEPTH METER	98		
PLOO	SD10	10-Jul-19	FISH: TRAWL	COMMENTS			
PLOO	SD10	10-Jul-19	FISH: TRAWL	VISIBILITY	10		
PLOO	SD10	10-Jul-19	FISH: TRAWL	WEATHER DESC		Overcast	
PLOO	SD10	10-Jul-19	FISH: TRAWL	SEA STATE		Calm	
PLOO	SD10	10-Jul-19	FISH: TRAWL	WAVE HEIGHT LOW	4		
PLOO	SD10	10-Jul-19	FISH: TRAWL	WATER COLOR CODE		Blue	
PLOO	SD10	10-Jul-19	FISH: TRAWL	WAVE PER		13-15	
PLOO	SD7	10-Jul-19	FISH: TRAWL	AIR TEMP	19		C
PLOO	SD7	10-Jul-19	FISH: TRAWL	WIND SPEED	7		kts
PLOO	SD7	10-Jul-19	FISH: TRAWL	WIND DIR		W	
PLOO	SD7	10-Jul-19	FISH: TRAWL	START LONG DEG	117		
PLOO	SD7	10-Jul-19	FISH: TRAWL	START LONG MIN	18.361		
PLOO	SD7	10-Jul-19	FISH: TRAWL	START LAT DEG	32		
PLOO	SD7	10-Jul-19	FISH: TRAWL	START LAT MIN	34.954		
PLOO	SD7	10-Jul-19	FISH: TRAWL	START DEPTH METER	99		m
PLOO	SD7	10-Jul-19	FISH: TRAWL	END LONG DEG	117		
PLOO	SD7	10-Jul-19	FISH: TRAWL	END LONG MIN	18.417		
PLOO	SD7	10-Jul-19	FISH: TRAWL	END LAT DEG	32		
PLOO	SD7	10-Jul-19	FISH: TRAWL	END LAT MIN	35.164		
PLOO	SD7	10-Jul-19	FISH: TRAWL	END DEPTH METER	97		m
PLOO	SD7	10-Jul-19	FISH: TRAWL	DEPTH METER	98		m
PLOO	SD7	10-Jul-19	FISH: TRAWL	COMMENTS			
PLOO	SD7	10-Jul-19	FISH: TRAWL	VISIBILITY	10		mi
PLOO	SD7	10-Jul-19	FISH: TRAWL	WEATHER DESC		Overcast	

Addendum 1-2A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	SD7	10-Jul-19	FISH: TRAWL	SEA STATE		Calm	
PLOO	SD7	10-Jul-19	FISH: TRAWL	WAVE HEIGHT LOW	4		ft
PLOO	SD7	10-Jul-19	FISH: TRAWL	WATER COLOR CODE		Blue	
PLOO	SD7	10-Jul-19	FISH: TRAWL	WAVE PER		13-15	sec
PLOO	SD7	10-Jul-19	FISH: TRAWL	AIR TEMP	19		
PLOO	SD7	10-Jul-19	FISH: TRAWL	WIND SPEED	7		
PLOO	SD7	10-Jul-19	FISH: TRAWL	WIND DIR		W	
PLOO	SD7	10-Jul-19	FISH: TRAWL	START LONG DEG	117		
PLOO	SD7	10-Jul-19	FISH: TRAWL	START LONG MIN	18.361		
PLOO	SD7	10-Jul-19	FISH: TRAWL	START LAT DEG	32		
PLOO	SD7	10-Jul-19	FISH: TRAWL	START LAT MIN	34.954		
PLOO	SD7	10-Jul-19	FISH: TRAWL	START DEPTH METER	99		
PLOO	SD7	10-Jul-19	FISH: TRAWL	END LONG DEG	117		
PLOO	SD7	10-Jul-19	FISH: TRAWL	END LONG MIN	18.417		
PLOO	SD7	10-Jul-19	FISH: TRAWL	END LAT DEG	32		
PLOO	SD7	10-Jul-19	FISH: TRAWL	END LAT MIN	35.164		
PLOO	SD7	10-Jul-19	FISH: TRAWL	END DEPTH METER	97		
PLOO	SD7	10-Jul-19	FISH: TRAWL	DEPTH METER	98		
PLOO	SD7	10-Jul-19	FISH: TRAWL	COMMENTS			
PLOO	SD7	10-Jul-19	FISH: TRAWL	VISIBILITY	10		
PLOO	SD7	10-Jul-19	FISH: TRAWL	WEATHER DESC		Overcast	
PLOO	SD7	10-Jul-19	FISH: TRAWL	SEA STATE		Calm	
PLOO	SD7	10-Jul-19	FISH: TRAWL	WAVE HEIGHT LOW	4		
PLOO	SD7	10-Jul-19	FISH: TRAWL	WATER COLOR CODE		Blue	
PLOO	SD7	10-Jul-19	FISH: TRAWL	WAVE PER		13-15	
PLOO	SD8	10-Jul-19	FISH: TRAWL	AIR TEMP	19		C
PLOO	SD8	10-Jul-19	FISH: TRAWL	WIND SPEED	6		kts
PLOO	SD8	10-Jul-19	FISH: TRAWL	WIND DIR		W	
PLOO	SD8	10-Jul-19	FISH: TRAWL	START LONG DEG	117		
PLOO	SD8	10-Jul-19	FISH: TRAWL	START LONG MIN	19.277		
PLOO	SD8	10-Jul-19	FISH: TRAWL	START LAT DEG	32		
PLOO	SD8	10-Jul-19	FISH: TRAWL	START LAT MIN	37.424		
PLOO	SD8	10-Jul-19	FISH: TRAWL	START DEPTH METER	100		m
PLOO	SD8	10-Jul-19	FISH: TRAWL	END LONG DEG	117		
PLOO	SD8	10-Jul-19	FISH: TRAWL	END LONG MIN	19.428		
PLOO	SD8	10-Jul-19	FISH: TRAWL	END LAT DEG	32		
PLOO	SD8	10-Jul-19	FISH: TRAWL	END LAT MIN	37.62		
PLOO	SD8	10-Jul-19	FISH: TRAWL	END DEPTH METER	100		m
PLOO	SD8	10-Jul-19	FISH: TRAWL	DEPTH METER	100		m
PLOO	SD8	10-Jul-19	FISH: TRAWL	COMMENTS			
PLOO	SD8	10-Jul-19	FISH: TRAWL	VISIBILITY	10		mi
PLOO	SD8	10-Jul-19	FISH: TRAWL	WEATHER DESC		Overcast	
PLOO	SD8	10-Jul-19	FISH: TRAWL	SEA STATE		Calm	
PLOO	SD8	10-Jul-19	FISH: TRAWL	WAVE HEIGHT LOW	4		ft
PLOO	SD8	10-Jul-19	FISH: TRAWL	WATER COLOR CODE		Blue	
PLOO	SD8	10-Jul-19	FISH: TRAWL	WAVE PER		13-15	sec

Addendum 1-2A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	SD8	10-Jul-19	FISH: TRAWL	AIR TEMP	19		
PLOO	SD8	10-Jul-19	FISH: TRAWL	WIND SPEED	6		
PLOO	SD8	10-Jul-19	FISH: TRAWL	WIND DIR		W	
PLOO	SD8	10-Jul-19	FISH: TRAWL	START LONG DEG	117		
PLOO	SD8	10-Jul-19	FISH: TRAWL	START LONG MIN	19.277		
PLOO	SD8	10-Jul-19	FISH: TRAWL	START LAT DEG	32		
PLOO	SD8	10-Jul-19	FISH: TRAWL	START LAT MIN	37.424		
PLOO	SD8	10-Jul-19	FISH: TRAWL	START DEPTH METER	100		
PLOO	SD8	10-Jul-19	FISH: TRAWL	END LONG DEG	117		
PLOO	SD8	10-Jul-19	FISH: TRAWL	END LONG MIN	19.428		
PLOO	SD8	10-Jul-19	FISH: TRAWL	END LAT DEG	32		
PLOO	SD8	10-Jul-19	FISH: TRAWL	END LAT MIN	37.62		
PLOO	SD8	10-Jul-19	FISH: TRAWL	END DEPTH METER	100		
PLOO	SD8	10-Jul-19	FISH: TRAWL	DEPTH METER	100		
PLOO	SD8	10-Jul-19	FISH: TRAWL	COMMENTS			
PLOO	SD8	10-Jul-19	FISH: TRAWL	VISIBILITY	10		
PLOO	SD8	10-Jul-19	FISH: TRAWL	WEATHER DESC		Overcast	
PLOO	SD8	10-Jul-19	FISH: TRAWL	SEA STATE		Calm	
PLOO	SD8	10-Jul-19	FISH: TRAWL	WAVE HEIGHT LOW	4		
PLOO	SD8	10-Jul-19	FISH: TRAWL	WATER COLOR CODE		Blue	
PLOO	SD8	10-Jul-19	FISH: TRAWL	WAVE PER		13-15	
PLOO	SD12	11-Jul-19	FISH: TRAWL	AIR TEMP	18		C
PLOO	SD12	11-Jul-19	FISH: TRAWL	WIND SPEED	7		kts
PLOO	SD12	11-Jul-19	FISH: TRAWL	WIND DIR		NW	
PLOO	SD12	11-Jul-19	FISH: TRAWL	START LONG DEG	117		
PLOO	SD12	11-Jul-19	FISH: TRAWL	START LONG MIN	19.799		
PLOO	SD12	11-Jul-19	FISH: TRAWL	START LAT DEG	32		
PLOO	SD12	11-Jul-19	FISH: TRAWL	START LAT MIN	40.565		
PLOO	SD12	11-Jul-19	FISH: TRAWL	START DEPTH METER	107		m
PLOO	SD12	11-Jul-19	FISH: TRAWL	END LONG DEG	117		
PLOO	SD12	11-Jul-19	FISH: TRAWL	END LONG MIN	19.795		
PLOO	SD12	11-Jul-19	FISH: TRAWL	END LAT DEG	32		
PLOO	SD12	11-Jul-19	FISH: TRAWL	END LAT MIN	40.753		
PLOO	SD12	11-Jul-19	FISH: TRAWL	END DEPTH METER	105		m
PLOO	SD12	11-Jul-19	FISH: TRAWL	DEPTH METER	106		m
PLOO	SD12	11-Jul-19	FISH: TRAWL	COMMENTS			
PLOO	SD12	11-Jul-19	FISH: TRAWL	VISIBILITY	7		mi
PLOO	SD12	11-Jul-19	FISH: TRAWL	WEATHER DESC		Overcast	
PLOO	SD12	11-Jul-19	FISH: TRAWL	SEA STATE		Calm	
PLOO	SD12	11-Jul-19	FISH: TRAWL	WAVE HEIGHT LOW	4		ft
PLOO	SD12	11-Jul-19	FISH: TRAWL	WATER COLOR CODE		Blue	
PLOO	SD12	11-Jul-19	FISH: TRAWL	WAVE PER		13-15	sec
PLOO	SD12	11-Jul-19	FISH: TRAWL	AIR TEMP	18		
PLOO	SD12	11-Jul-19	FISH: TRAWL	WIND SPEED	7		
PLOO	SD12	11-Jul-19	FISH: TRAWL	WIND DIR		NW	
PLOO	SD12	11-Jul-19	FISH: TRAWL	START LONG DEG	117		

Addendum 1-2A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	SD12	11-Jul-19	FISH: TRAWL	START LONG MIN	19.799		
PLOO	SD12	11-Jul-19	FISH: TRAWL	START LAT DEG	32		
PLOO	SD12	11-Jul-19	FISH: TRAWL	START LAT MIN	40.565		
PLOO	SD12	11-Jul-19	FISH: TRAWL	START DEPTH METER	107		
PLOO	SD12	11-Jul-19	FISH: TRAWL	END LONG DEG	117		
PLOO	SD12	11-Jul-19	FISH: TRAWL	END LONG MIN	19.795		
PLOO	SD12	11-Jul-19	FISH: TRAWL	END LAT DEG	32		
PLOO	SD12	11-Jul-19	FISH: TRAWL	END LAT MIN	40.753		
PLOO	SD12	11-Jul-19	FISH: TRAWL	END DEPTH METER	105		
PLOO	SD12	11-Jul-19	FISH: TRAWL	DEPTH METER	106		
PLOO	SD12	11-Jul-19	FISH: TRAWL	COMMENTS			
PLOO	SD12	11-Jul-19	FISH: TRAWL	VISIBILITY	7		
PLOO	SD12	11-Jul-19	FISH: TRAWL	WEATHER DESC		Overcast	
PLOO	SD12	11-Jul-19	FISH: TRAWL	SEA STATE		Calm	
PLOO	SD12	11-Jul-19	FISH: TRAWL	WAVE HEIGHT LOW	4		
PLOO	SD12	11-Jul-19	FISH: TRAWL	WATER COLOR CODE		Blue	
PLOO	SD12	11-Jul-19	FISH: TRAWL	WAVE PER		13-15	
PLOO	SD13	11-Jul-19	FISH: TRAWL	AIR TEMP	18		C
PLOO	SD13	11-Jul-19	FISH: TRAWL	WIND SPEED	8		kts
PLOO	SD13	11-Jul-19	FISH: TRAWL	WIND DIR		W	
PLOO	SD13	11-Jul-19	FISH: TRAWL	START LONG DEG	117		
PLOO	SD13	11-Jul-19	FISH: TRAWL	START LONG MIN	20.148		
PLOO	SD13	11-Jul-19	FISH: TRAWL	START LAT DEG	32		
PLOO	SD13	11-Jul-19	FISH: TRAWL	START LAT MIN	42.659		
PLOO	SD13	11-Jul-19	FISH: TRAWL	START DEPTH METER	98		m
PLOO	SD13	11-Jul-19	FISH: TRAWL	END LONG DEG	117		
PLOO	SD13	11-Jul-19	FISH: TRAWL	END LONG MIN	20.24		
PLOO	SD13	11-Jul-19	FISH: TRAWL	END LAT DEG	32		
PLOO	SD13	11-Jul-19	FISH: TRAWL	END LAT MIN	42.86		
PLOO	SD13	11-Jul-19	FISH: TRAWL	END DEPTH METER	100		m
PLOO	SD13	11-Jul-19	FISH: TRAWL	DEPTH METER	99		m
PLOO	SD13	11-Jul-19	FISH: TRAWL	COMMENTS			
PLOO	SD13	11-Jul-19	FISH: TRAWL	VISIBILITY	7		mi
PLOO	SD13	11-Jul-19	FISH: TRAWL	WEATHER DESC		Overcast	
PLOO	SD13	11-Jul-19	FISH: TRAWL	SEA STATE		Calm	
PLOO	SD13	11-Jul-19	FISH: TRAWL	WAVE HEIGHT LOW	4		ft
PLOO	SD13	11-Jul-19	FISH: TRAWL	WATER COLOR CODE		Blue	
PLOO	SD13	11-Jul-19	FISH: TRAWL	WAVE PER		13-15	sec
PLOO	SD13	11-Jul-19	FISH: TRAWL	AIR TEMP	18		
PLOO	SD13	11-Jul-19	FISH: TRAWL	WIND SPEED	8		
PLOO	SD13	11-Jul-19	FISH: TRAWL	WIND DIR		W	
PLOO	SD13	11-Jul-19	FISH: TRAWL	START LONG DEG	117		
PLOO	SD13	11-Jul-19	FISH: TRAWL	START LONG MIN	20.148		
PLOO	SD13	11-Jul-19	FISH: TRAWL	START LAT DEG	32		
PLOO	SD13	11-Jul-19	FISH: TRAWL	START LAT MIN	42.659		
PLOO	SD13	11-Jul-19	FISH: TRAWL	START DEPTH METER	98		

Addendum 1-2A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	SD13	11-Jul-19	FISH: TRAWL	END LONG DEG	117		
PLOO	SD13	11-Jul-19	FISH: TRAWL	END LONG MIN	20.24		
PLOO	SD13	11-Jul-19	FISH: TRAWL	END LAT DEG	32		
PLOO	SD13	11-Jul-19	FISH: TRAWL	END LAT MIN	42.86		
PLOO	SD13	11-Jul-19	FISH: TRAWL	END DEPTH METER	100		
PLOO	SD13	11-Jul-19	FISH: TRAWL	DEPTH METER	99		
PLOO	SD13	11-Jul-19	FISH: TRAWL	COMMENTS			
PLOO	SD13	11-Jul-19	FISH: TRAWL	VISIBILITY	7		
PLOO	SD13	11-Jul-19	FISH: TRAWL	WEATHER DESC		Overcast	
PLOO	SD13	11-Jul-19	FISH: TRAWL	SEA STATE		Calm	
PLOO	SD13	11-Jul-19	FISH: TRAWL	WAVE HEIGHT LOW	4		
PLOO	SD13	11-Jul-19	FISH: TRAWL	WATER COLOR CODE		Blue	
PLOO	SD13	11-Jul-19	FISH: TRAWL	WAVE PER		13-15	
PLOO	SD14	11-Jul-19	FISH: TRAWL	AIR TEMP	18		C
PLOO	SD14	11-Jul-19	FISH: TRAWL	WIND SPEED	6		kts
PLOO	SD14	11-Jul-19	FISH: TRAWL	WIND DIR		NW	
PLOO	SD14	11-Jul-19	FISH: TRAWL	START LONG DEG	117		
PLOO	SD14	11-Jul-19	FISH: TRAWL	START LONG MIN	20.875		
PLOO	SD14	11-Jul-19	FISH: TRAWL	START LAT DEG	32		
PLOO	SD14	11-Jul-19	FISH: TRAWL	START LAT MIN	44.135		
PLOO	SD14	11-Jul-19	FISH: TRAWL	START DEPTH METER	102		m
PLOO	SD14	11-Jul-19	FISH: TRAWL	END LONG DEG	117		
PLOO	SD14	11-Jul-19	FISH: TRAWL	END LONG MIN	20.974		
PLOO	SD14	11-Jul-19	FISH: TRAWL	END LAT DEG	32		
PLOO	SD14	11-Jul-19	FISH: TRAWL	END LAT MIN	44.382		
PLOO	SD14	11-Jul-19	FISH: TRAWL	END DEPTH METER	101		m
PLOO	SD14	11-Jul-19	FISH: TRAWL	DEPTH METER	102		m
PLOO	SD14	11-Jul-19	FISH: TRAWL	COMMENTS			
PLOO	SD14	11-Jul-19	FISH: TRAWL	VISIBILITY	7		mi
PLOO	SD14	11-Jul-19	FISH: TRAWL	WEATHER DESC		Overcast	
PLOO	SD14	11-Jul-19	FISH: TRAWL	SEA STATE		Calm	
PLOO	SD14	11-Jul-19	FISH: TRAWL	WAVE HEIGHT LOW	4		ft
PLOO	SD14	11-Jul-19	FISH: TRAWL	WATER COLOR CODE		Blue	
PLOO	SD14	11-Jul-19	FISH: TRAWL	WAVE PER		13-15	sec
PLOO	SD14	11-Jul-19	FISH: TRAWL	AIR TEMP	18		
PLOO	SD14	11-Jul-19	FISH: TRAWL	WIND SPEED	6		
PLOO	SD14	11-Jul-19	FISH: TRAWL	WIND DIR		NW	
PLOO	SD14	11-Jul-19	FISH: TRAWL	START LONG DEG	117		
PLOO	SD14	11-Jul-19	FISH: TRAWL	START LONG MIN	20.875		
PLOO	SD14	11-Jul-19	FISH: TRAWL	START LAT DEG	32		
PLOO	SD14	11-Jul-19	FISH: TRAWL	START LAT MIN	44.135		
PLOO	SD14	11-Jul-19	FISH: TRAWL	START DEPTH METER	102		
PLOO	SD14	11-Jul-19	FISH: TRAWL	END LONG DEG	117		
PLOO	SD14	11-Jul-19	FISH: TRAWL	END LONG MIN	20.974		
PLOO	SD14	11-Jul-19	FISH: TRAWL	END LAT DEG	32		
PLOO	SD14	11-Jul-19	FISH: TRAWL	END LAT MIN	44.382		

Addendum 1-2A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	SD14	11-Jul-19	FISH: TRAWL	END DEPTH METER	101		
PLOO	SD14	11-Jul-19	FISH: TRAWL	DEPTH METER	102		
PLOO	SD14	11-Jul-19	FISH: TRAWL	COMMENTS			
PLOO	SD14	11-Jul-19	FISH: TRAWL	VISIBILITY	7		
PLOO	SD14	11-Jul-19	FISH: TRAWL	WEATHER DESC		Overcast	
PLOO	SD14	11-Jul-19	FISH: TRAWL	SEA STATE		Calm	
PLOO	SD14	11-Jul-19	FISH: TRAWL	WAVE HEIGHT LOW	4		
PLOO	SD14	11-Jul-19	FISH: TRAWL	WATER COLOR CODE		Blue	
PLOO	SD14	11-Jul-19	FISH: TRAWL	WAVE PER		13-15	

Addendum 1-2B

Visual observations from SBOO trawl stations sampled during 2019.

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	AIR TEMP	18		C
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	WIND SPEED	2		kts
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	WIND DIR		SE	
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	START LONG DEG	117		
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	START LONG MIN	11.329		
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	START LAT DEG	32		
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	START LAT MIN	32.5		
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	START DEPTH METER	33		m
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	END LONG DEG	117		
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	END LONG MIN	11.42		
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	END LAT DEG	32		
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	END LAT MIN	32.758		
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	END DEPTH METER	33		m
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	DEPTH METER	33		m
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	COMMENTS			
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	VISIBILITY	12		mi
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	WEATHER DESC		Clear	
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	SEA STATE		Choppy	
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	WAVE HEIGHT LOW	4		ft
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	WATER COLOR CODE		Green	
SBOO	SD18	8-Jan-19	FISH: TRAWL ITP	WAVE PER		13-15	sec
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	AIR TEMP	16		C
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	WIND SPEED	5		kts
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	WIND DIR		SW	
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	START LONG DEG	117		
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	START LONG MIN	11.021		
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	START LAT DEG	32		
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	START LAT MIN	33.432		
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	START DEPTH METER	28		m
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	END LONG DEG	117		
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	END LONG MIN	11.206		
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	END LAT DEG	32		
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	END LAT MIN	33.632		
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	END DEPTH METER	28		m
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	DEPTH METER	28		m
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	COMMENTS		Rep. 1 - fail - zipper open	
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	VISIBILITY	12		mi
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	WEATHER DESC		Clear	
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	SEA STATE		Choppy	
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	WAVE HEIGHT LOW	4		ft
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	WATER COLOR CODE		Green	
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	WAVE PER		13-15	sec
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	AIR TEMP	16		C
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	WIND SPEED	5		kts
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	WIND DIR		SW	

Addendum 1-2B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	START LONG DEG	117		
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	START LONG MIN	11.056		
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	START LAT DEG	32		
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	START LAT MIN	33.453		
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	START DEPTH METER	28		m
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	END LONG DEG	117		
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	END LONG MIN	11.21		
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	END LAT DEG	32		
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	END LAT MIN	33.668		
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	END DEPTH METER	28		m
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	DEPTH METER	28		m
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	COMMENTS			
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	VISIBILITY	12		mi
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	WEATHER DESC		Clear	
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	SEA STATE		Choppy	
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	WAVE HEIGHT LOW	4		ft
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	WATER COLOR CODE		Green	
SBOO	SD19	8-Jan-19	FISH: TRAWL ITP	WAVE PER		13-15	sec
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	AIR TEMP	16		C
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	WIND SPEED	7		kts
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	WIND DIR		W	
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	START LONG DEG	117		
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	START LONG MIN	11.386		
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	START LAT DEG	32		
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	START LAT MIN	34.643		
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	START DEPTH METER	28		m
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	END LONG DEG	117		
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	END LONG MIN	11.525		
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	END LAT DEG	32		
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	END LAT MIN	34.854		
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	END DEPTH METER	28		m
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	DEPTH METER	28		m
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	COMMENTS			
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	VISIBILITY	12		mi
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	WEATHER DESC		Clear	
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	SEA STATE		Choppy	
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	WAVE HEIGHT LOW	4		ft
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	WATER COLOR CODE		Green	
SBOO	SD20	8-Jan-19	FISH: TRAWL ITP	WAVE PER		13-15	sec
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	AIR TEMP	16		C
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	WIND SPEED	12		kts
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	WIND DIR		W	
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	START LONG DEG	117		
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	START LONG MIN	12.663		
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	START LAT DEG	32		

Addendum 1-2B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	START LAT MIN	36.935		
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	START DEPTH METER	28		m
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	END LONG DEG	117		
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	END LONG MIN	12.775		
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	END LAT DEG	32		
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	END LAT MIN	37.141		
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	END DEPTH METER	30		m
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	DEPTH METER	29		m
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	COMMENTS			
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	VISIBILITY	12		mi
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	WEATHER DESC		Clear	
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	SEA STATE		Choppy	
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	WAVE HEIGHT LOW	4		ft
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	WATER COLOR CODE		Green	
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	WAVE PER		11-12	sec
SBOO	SD21	8-Jan-19	FISH: TRAWL ITP	WAVE PER		sec	
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	AIR TEMP	18		C
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	WIND SPEED	7		kts
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	WIND DIR		SW	
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	START LONG DEG	117		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	START LONG MIN	10.395		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	START LAT DEG	32		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	START LAT MIN	28.218		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	START DEPTH METER	29		m
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	END LONG DEG	117		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	END LONG MIN	10.516		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	END LAT DEG	32		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	END LAT MIN	28.434		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	END DEPTH METER	28		m
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	DEPTH METER	28		m
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	COMMENTS		Trawl net on bottom for 13 min 20 sec.	
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	VISIBILITY	4		mi
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	WEATHER DESC		Clear	
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	SEA STATE		Calm	
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	WAVE HEIGHT LOW	3		ft
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	WATER COLOR CODE		Green	
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	WAVE PER		9-10	sec
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	AIR TEMP	18		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	WIND SPEED	7		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	WIND DIR		SW	
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	START LONG DEG	117		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	START LONG MIN	10.395		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	START LAT DEG	32		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	START LAT MIN	28.218		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	START DEPTH METER	29		

Addendum 1-2B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	END LONG DEG	117		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	END LONG MIN	10.516		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	END LAT DEG	32		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	END LAT MIN	28.434		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	END DEPTH METER	28		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	DEPTH METER	28		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	COMMENTS		Trawl net on bottom for 13 min 20 sec.	
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	VISIBILITY	4		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	WEATHER DESC		Clear	
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	SEA STATE		Calm	
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	WAVE HEIGHT LOW	3		
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	WATER COLOR CODE		Green	
SBOO	SD15	9-Jul-19	FISH: TRAWL ITP	WAVE PER		9-10	
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	AIR TEMP	18		C
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	WIND SPEED	9		kts
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	WIND DIR		W	
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	START LONG DEG	117		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	START LONG MIN	10.602		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	START LAT DEG	32		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	START LAT MIN	30.899		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	START DEPTH METER	28		m
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	END LONG DEG	117		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	END LONG MIN	10.802		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	END LAT DEG	32		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	END LAT MIN	31.139		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	END DEPTH METER	29		m
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	DEPTH METER	28		m
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	COMMENTS		12minutes 20 sec on bottom	
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	VISIBILITY	4		mi
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	WEATHER DESC		Clear	
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	SEA STATE		Calm	
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	WAVE HEIGHT LOW	3		ft
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	WATER COLOR CODE		Green	
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	WAVE PER		9-10	sec
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	AIR TEMP	18		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	WIND SPEED	9		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	WIND DIR		W	
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	START LONG DEG	117		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	START LONG MIN	10.602		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	START LAT DEG	32		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	START LAT MIN	30.899		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	START DEPTH METER	28		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	END LONG DEG	117		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	END LONG MIN	10.802		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	END LAT DEG	32		

Addendum 1-2B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	END LAT MIN	31.139		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	END DEPTH METER	29		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	DEPTH METER	28		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	COMMENTS		12minutes 20 sec on bottom	
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	VISIBILITY	4		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	WEATHER DESC		Clear	
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	SEA STATE		Calm	
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	WAVE HEIGHT LOW	3		
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	WATER COLOR CODE		Green	
SBOO	SD16	9-Jul-19	FISH: TRAWL ITP	WAVE PER		9-10	
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	AIR TEMP	18		C
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	WIND SPEED	8		kts
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	WIND DIR		W	
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	START LONG DEG	117		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	START LONG MIN	11.243		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	START LAT DEG	32		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	START LAT MIN	31.782		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	START DEPTH METER	32		m
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	END LONG DEG	117		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	END LONG MIN	11.287		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	END LAT DEG	32		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	END LAT MIN	32.015		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	END DEPTH METER	32		m
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	DEPTH METER	32		m
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	COMMENTS			
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	VISIBILITY	4		mi
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	WEATHER DESC		Clear	
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	SEA STATE		Calm	
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	WAVE HEIGHT LOW	3		ft
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	WATER COLOR CODE		Green	
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	WAVE PER		9-10	sec
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	AIR TEMP	18		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	WIND SPEED	8		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	WIND DIR		W	
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	START LONG DEG	117		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	START LONG MIN	11.243		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	START LAT DEG	32		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	START LAT MIN	31.782		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	START DEPTH METER	32		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	END LONG DEG	117		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	END LONG MIN	11.287		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	END LAT DEG	32		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	END LAT MIN	32.015		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	END DEPTH METER	32		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	DEPTH METER	32		

Addendum 1-2B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	COMMENTS			
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	VISIBILITY	4		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	WEATHER DESC		Clear	
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	SEA STATE		Calm	
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	WAVE HEIGHT LOW	3		
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	WATER COLOR CODE		Green	
SBOO	SD17	9-Jul-19	FISH: TRAWL ITP	WAVE PER		9-10	
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	AIR TEMP	18		C
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	WIND SPEED	11		kts
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	WIND DIR		W	
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	START LONG DEG	117		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	START LONG MIN	11.338		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	START LAT DEG	32		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	START LAT MIN	32.489		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	START DEPTH METER	32		m
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	END LONG DEG	117		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	END LONG MIN	11.376		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	END LAT DEG	32		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	END LAT MIN	32.7		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	END DEPTH METER	32		m
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	DEPTH METER	32		m
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	COMMENTS			
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	VISIBILITY	4		mi
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	WEATHER DESC		Clear	
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	SEA STATE		Calm	
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	WAVE HEIGHT LOW	3		ft
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	WATER COLOR CODE		Green	
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	WAVE PER		9-10	sec
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	AIR TEMP	18		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	WIND SPEED	11		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	WIND DIR		W	
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	START LONG DEG	117		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	START LONG MIN	11.338		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	START LAT DEG	32		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	START LAT MIN	32.489		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	START DEPTH METER	32		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	END LONG DEG	117		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	END LONG MIN	11.376		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	END LAT DEG	32		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	END LAT MIN	32.7		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	END DEPTH METER	32		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	DEPTH METER	32		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	COMMENTS			
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	VISIBILITY	4		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	WEATHER DESC		Clear	
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	SEA STATE		Calm	

Addendum 1-2B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	WAVE HEIGHT LOW	3		
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	WATER COLOR CODE		Green	
SBOO	SD18	9-Jul-19	FISH: TRAWL ITP	WAVE PER		9-10	
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	AIR TEMP	19		C
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	WIND SPEED	12		kts
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	WIND DIR		W	
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	START LONG DEG	117		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	START LONG MIN	11.051		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	START LAT DEG	32		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	START LAT MIN	33.449		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	START DEPTH METER	29		m
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	END LONG DEG	117		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	END LONG MIN	11.244		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	END LAT DEG	32		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	END LAT MIN	33.675		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	END DEPTH METER	29		m
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	DEPTH METER	29		m
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	COMMENTS		pressure probe: Net on bottom 11 minutes.	
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	VISIBILITY	4		mi
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	WEATHER DESC		Clear	
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	SEA STATE		Calm	
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	WAVE HEIGHT LOW	3		ft
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	WATER COLOR CODE		Green	
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	WAVE PER		9-10	sec
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	AIR TEMP	19		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	WIND SPEED	12		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	WIND DIR		W	
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	START LONG DEG	117		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	START LONG MIN	11.051		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	START LAT DEG	32		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	START LAT MIN	33.449		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	START DEPTH METER	29		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	END LONG DEG	117		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	END LONG MIN	11.244		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	END LAT DEG	32		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	END LAT MIN	33.675		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	END DEPTH METER	29		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	DEPTH METER	29		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	COMMENTS		pressure probe: Net on bottom 11 minutes.	
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	VISIBILITY	4		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	WEATHER DESC		Clear	
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	SEA STATE		Calm	
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	WAVE HEIGHT LOW	3		
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	WATER COLOR CODE		Green	

Addendum 1-2B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	SD19	9-Jul-19	FISH: TRAWL ITP	WAVE PER		10-Sep	
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	AIR TEMP	18		C
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	WIND SPEED	6		kts
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	WIND DIR		NW	
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	START LONG DEG	117		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	START LONG MIN	11.37		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	START LAT DEG	32		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	START LAT MIN	34.606		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	START DEPTH METER	28		m
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	END LONG DEG	117		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	END LONG MIN	11.54		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	END LAT DEG	32		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	END LAT MIN	34.848		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	END DEPTH METER	29		m
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	DEPTH METER	28		m
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	COMMENTS			
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	VISIBILITY	8		mi
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	WEATHER DESC		Overcast	
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	SEA STATE		Calm	
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	WAVE HEIGHT LOW	4		ft
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	WATER COLOR CODE		Blue	
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	WAVE PER		13-15	sec
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	AIR TEMP	18		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	WIND SPEED	6		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	WIND DIR		NW	
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	START LONG DEG	117		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	START LONG MIN	11.37		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	START LAT DEG	32		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	START LAT MIN	34.606		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	START DEPTH METER	28		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	END LONG DEG	117		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	END LONG MIN	11.54		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	END LAT DEG	32		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	END LAT MIN	34.848		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	END DEPTH METER	29		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	DEPTH METER	28		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	COMMENTS			
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	VISIBILITY	8		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	WEATHER DESC		Overcast	
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	SEA STATE		Calm	
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	WAVE HEIGHT LOW	4		
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	WATER COLOR CODE		Blue	
SBOO	SD20	10-Jul-19	FISH: TRAWL ITP	WAVE PER		13-15	
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	AIR TEMP	19		C
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	WIND SPEED	7		kts

Addendum 1-2B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	WIND DIR		W	
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	START LONG DEG	117		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	START LONG MIN	12.693		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	START LAT DEG	32		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	START LAT MIN	36.979		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	START DEPTH METER	29		m
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	END LONG DEG	117		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	END LONG MIN	12.851		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	END LAT DEG	32		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	END LAT MIN	37.201		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	END DEPTH METER	28		m
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	DEPTH METER	28		m
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	COMMENTS			
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	VISIBILITY	5		mi
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	WEATHER DESC		Overcast	
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	SEA STATE		Calm	
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	WAVE HEIGHT LOW	4		ft
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	WATER COLOR CODE		Green	
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	WAVE PER		13-15	sec
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	AIR TEMP	19		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	WIND SPEED	7		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	WIND DIR		W	
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	START LONG DEG	117		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	START LONG MIN	12.693		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	START LAT DEG	32		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	START LAT MIN	36.979		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	START DEPTH METER	29		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	END LONG DEG	117		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	END LONG MIN	12.851		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	END LAT DEG	32		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	END LAT MIN	37.201		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	END DEPTH METER	28		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	DEPTH METER	28		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	COMMENTS			
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	VISIBILITY	5		
SBOO	SD21	10-Jul-19	FISH: TRAWL ITP	WEATHER DESC		Overcast	

Addendum 1-3A

Visual observations from PLOO trawl zones and rig fish stations sampled during 2019. This data was not collected do to oversigth of MBOO staff. However, parameter data presented here are the nomal longitude and latitude for each location, and weather and seastate conditions reported for the date **sampled.**

Project	Station	Date	Type	Parameters	Value	Text Field	Units
PLOO	RFI	14-Oct-19	TB MUSCLE	AIR TEMP			
PLOO	RFI	14-Oct-19	TB MUSCLE	WIND SPEED	10		kts
PLOO	RFI	14-Oct-19	TB MUSCLE	WIND DIR		NW	
PLOO	RFI	14-Oct-19	TB MUSCLE	START LONG DEG	117		
PLOO	RFI	14-Oct-19	TB MUSCLE	START LONG MIN	19.46		
PLOO	RFI	14-Oct-19	TB MUSCLE	START LAT DEG	32		
PLOO	RFI	14-Oct-19	TB MUSCLE	START LAT MIN	40.192		
PLOO	RFI	14-Oct-19	TB MUSCLE	DEPTH METER	107		m
PLOO	RFI	14-Oct-19	TB MUSCLE	COMMENTS			
PLOO	RFI	14-Oct-19	TB MUSCLE	VISIBILITY			
PLOO	RFI	14-Oct-19	TB MUSCLE	WEATHER DESC		clear	
PLOO	RFI	14-Oct-19	TB MUSCLE	SEA STATE		calm	
PLOO	RFI	14-Oct-19	TB MUSCLE	WAVE HEIGHT LOW	2	NW	ft
PLOO	RFI	14-Oct-19	TB MUSCLE	WATER COLOR CODE		blue	
PLOO	RFI	14-Oct-19	TB MUSCLE	WAVE PER	11		sec
PLOO	RF2	14-Oct-19	TB MUSCLE	AIR TEMP			
PLOO	RF2	14-Oct-19	TB MUSCLE	WIND SPEED	10		kts
PLOO	RF2	14-Oct-19	TB MUSCLE	WIND DIR		NW	
PLOO	RF2	14-Oct-19	TB MUSCLE	START LONG DEG	117		
PLOO	RF2	14-Oct-19	TB MUSCLE	START LONG MIN	22.1		
PLOO	RF2	14-Oct-19	TB MUSCLE	START LAT DEG	32		
PLOO	RF2	14-Oct-19	TB MUSCLE	START LAT MIN	45.4		
PLOO	RF2	14-Oct-19	TB MUSCLE	DEPTH METER	96		m
PLOO	RF2	14-Oct-19	TB MUSCLE	COMMENTS			
PLOO	RF2	14-Oct-19	TB MUSCLE	VISIBILITY			
PLOO	RF2	14-Oct-19	TB MUSCLE	WEATHER DESC		clear	
PLOO	RF2	14-Oct-19	TB MUSCLE	SEA STATE		calm	
PLOO	RF2	14-Oct-19	TB MUSCLE	WAVE HEIGHT LOW	2	nw	ft
PLOO	RF2	14-Oct-19	TB MUSCLE	WATER COLOR CODE		blue	
PLOO	RF2	14-Oct-19	TB MUSCLE	WAVE PER	11		sec
PLOO	TFZONE1	16-Oct-19	TB LIVER	AIR TEMP			
PLOO	TFZONE1	16-Oct-19	TB LIVER	WIND SPEED	10		kts
PLOO	TFZONE1	16-Oct-19	TB LIVER	WIND DIR		NW	
PLOO	TFZONE1	16-Oct-19	TB LIVER	START LONG DEG	117		
PLOO	TFZONE1	16-Oct-19	TB LIVER	START LONG MIN	19.3		
PLOO	TFZONE1	16-Oct-19	TB LIVER	START LAT DEG	32		
PLOO	TFZONE1	16-Oct-19	TB LIVER	START LAT MIN	39.9		
PLOO	TFZONE1	16-Oct-19	TB LIVER	DEPTH METER	100		m
PLOO	TFZONE1	16-Oct-19	TB LIVER	COMMENTS			
PLOO	TFZONE1	16-Oct-19	TB LIVER	VISIBILITY			
PLOO	TFZONE1	16-Oct-19	TB LIVER	WEATHER DESC		clear	
PLOO	TFZONE1	16-Oct-19	TB LIVER	SEA STATE			

Addendum 1-3A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	TFZONE1	16-Oct-19	TB LIVER	WAVE HEIGHT LOW	2		ft
PLOO	TFZONE1	16-Oct-19	TB LIVER	WATER COLOR CODE		BLUE	
PLOO	TFZONE1	16-Oct-19	TB LIVER	WAVE PER	11		sec
PLOO	TFZONE1	16-Oct-19	TB LIVER	AIR TEMP			
PLOO	TFZONE1	16-Oct-19	TB LIVER	WIND SPEED	10		kts
PLOO	TFZONE1	16-Oct-19	TB LIVER	WIND DIR		NW	
PLOO	TFZONE1	16-Oct-19	TB LIVER	START LONG DEG	117		
PLOO	TFZONE1	16-Oct-19	TB LIVER	START LONG MIN	19.49		
PLOO	TFZONE1	16-Oct-19	TB LIVER	START LAT DEG	32		
PLOO	TFZONE1	16-Oct-19	TB LIVER	START LAT MIN	40.39		
PLOO	TFZONE1	16-Oct-19	TB LIVER	DEPTH METER	100		m
PLOO	TFZONE1	16-Oct-19	TB LIVER	COMMENTS			
PLOO	TFZONE1	16-Oct-19	TB LIVER	VISIBILITY			
PLOO	TFZONE1	16-Oct-19	TB LIVER	WEATHER DESC		clear	
PLOO	TFZONE1	16-Oct-19	TB LIVER	SEA STATE			
PLOO	TFZONE1	16-Oct-19	TB LIVER	WAVE HEIGHT LOW	2		ft
PLOO	TFZONE1	16-Oct-19	TB LIVER	WATER COLOR CODE		BLUE	
PLOO	TFZONE1	16-Oct-19	TB LIVER	WAVE PER	11		sec
PLOO	TFZONE2	16-Oct-19	TB LIVER	AIR TEMP			
PLOO	TFZONE2	16-Oct-19	TB LIVER	WIND SPEED	12		kts
PLOO	TFZONE2	16-Oct-19	TB LIVER	WIND DIR		NW	
PLOO	TFZONE2	16-Oct-19	TB LIVER	START LONG DEG	117		
PLOO	TFZONE2	16-Oct-19	TB LIVER	START LONG MIN	20.15		
PLOO	TFZONE2	16-Oct-19	TB LIVER	START LAT DEG	32		
PLOO	TFZONE2	16-Oct-19	TB LIVER	START LAT MIN	42.5		
PLOO	TFZONE2	16-Oct-19	TB LIVER	DEPTH METER	100		m
PLOO	TFZONE2	16-Oct-19	TB LIVER	COMMENTS			
PLOO	TFZONE2	16-Oct-19	TB LIVER	VISIBILITY			
PLOO	TFZONE2	16-Oct-19	TB LIVER	WEATHER DESC		clear	
PLOO	TFZONE2	16-Oct-19	TB LIVER	SEA STATE			
PLOO	TFZONE2	16-Oct-19	TB LIVER	WAVE HEIGHT LOW	4-5		ft
PLOO	TFZONE2	16-Oct-19	TB LIVER	WATER COLOR CODE		Greenish- blue	
PLOO	TFZONE2	16-Oct-19	TB LIVER	WAVE PER	14		sec
PLOO	TFZONE2	16-Oct-19	TB LIVER	AIR TEMP			
PLOO	TFZONE2	16-Oct-19	TB LIVER	WIND SPEED	12		kts
PLOO	TFZONE2	16-Oct-19	TB LIVER	WIND DIR		NW	
PLOO	TFZONE2	16-Oct-19	TB LIVER	START LONG DEG	117		
PLOO	TFZONE2	16-Oct-19	TB LIVER	START LONG MIN	20.58		
PLOO	TFZONE2	16-Oct-19	TB LIVER	START LAT DEG	32		
PLOO	TFZONE2	16-Oct-19	TB LIVER	START LAT MIN	44.2		
PLOO	TFZONE2	16-Oct-19	TB LIVER	DEPTH METER	100		m
PLOO	TFZONE2	16-Oct-19	TB LIVER	COMMENTS			
PLOO	TFZONE2	16-Oct-19	TB LIVER	VISIBILITY			
PLOO	TFZONE2	16-Oct-19	TB LIVER	WEATHER DESC		Clear	

Addendum 1-3A *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
PLOO	TFZONE2	16-Oct-19	TB LIVER	SEA STATE			
PLOO	TFZONE2	16-Oct-19	TB LIVER	WAVE HEIGHT LOW	4-5		ft
PLOO	TFZONE2	16-Oct-19	TB LIVER	WATER COLOR CODE		Greenish- blue	
PLOO	TFZONE2	16-Oct-19	TB LIVER	WAVE PER	14		sec
PLOO	TFZONE3	16-Oct-19	TB LIVER	AIR TEMP			
PLOO	TFZONE3	16-Oct-19	TB LIVER	WIND SPEED	12		kts
PLOO	TFZONE3	16-Oct-19	TB LIVER	WIND DIR		NW	
PLOO	TFZONE3	16-Oct-19	TB LIVER	START LONG DEG	117		
PLOO	TFZONE3	16-Oct-19	TB LIVER	START LONG MIN	19.22		
PLOO	TFZONE3	16-Oct-19	TB LIVER	START LAT DEG	32		
PLOO	TFZONE3	16-Oct-19	TB LIVER	START LAT MIN	37.32		
PLOO	TFZONE3	16-Oct-19	TB LIVER	DEPTH METER	100		m
PLOO	TFZONE3	16-Oct-19	TB LIVER	COMMENTS			
PLOO	TFZONE3	16-Oct-19	TB LIVER	VISIBILITY			
PLOO	TFZONE3	16-Oct-19	TB LIVER	WEATHER DESC		clear	
PLOO	TFZONE3	16-Oct-19	TB LIVER	SEA STATE			
PLOO	TFZONE3	16-Oct-19	TB LIVER	WAVE HEIGHT LOW	4-5		ft
PLOO	TFZONE3	16-Oct-19	TB LIVER	WATER COLOR CODE		Greenish- blue	
PLOO	TFZONE3	16-Oct-19	TB LIVER	WAVE PER	14		sec
PLOO	TFZONE4	18-Oct-19	TB LIVER	AIR TEMP			
PLOO	TFZONE4	18-Oct-19	TB LIVER	WIND SPEED	14		kts
PLOO	TFZONE4	18-Oct-19	TB LIVER	WIND DIR		NW	
PLOO	TFZONE4	18-Oct-19	TB LIVER	START LONG DEG	117		
PLOO	TFZONE4	18-Oct-19	TB LIVER	START LONG MIN	18.23		
PLOO	TFZONE4	18-Oct-19	TB LIVER	START LAT DEG	32		
PLOO	TFZONE4	18-Oct-19	TB LIVER	START LAT MIN	35.4		
PLOO	TFZONE4	18-Oct-19	TB LIVER	DEPTH METER	100		m
PLOO	TFZONE4	18-Oct-19	TB LIVER	COMMENTS			
PLOO	TFZONE4	18-Oct-19	TB LIVER	VISIBILITY			
PLOO	TFZONE4	18-Oct-19	TB LIVER	WEATHER DESC		clear	
PLOO	TFZONE4	18-Oct-19	TB LIVER	SEA STATE			
PLOO	TFZONE4	18-Oct-19	TB LIVER	WAVE HEIGHT LOW	9		ft
PLOO	TFZONE4	18-Oct-19	TB LIVER	WATER COLOR CODE		Greenish- blue	
PLOO	TFZONE4	18-Oct-19	TB LIVER	WAVE PER	14		sec

Addendum 1-3B

Visual observations from SBOO trawl zones and rig fish stations sampled during 2019. Data was not collected do to oversigth of MBOO staff. However, parameter data presented here for the RF stations are the nomal longitude and latitude, and weather and seastate conditions reported for the date sampled.

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	RF3	10-Oct-19	TB MUSCLE	AIR TEMP			
SBOO	RF3	10-Oct-19	TB MUSCLE	WIND SPEED	10-12		kts
SBOO	RF3	10-Oct-19	TB MUSCLE	WIND DIR		N	
SBOO	RF3	10-Oct-19	TB MUSCLE	START LONG DEG	117		
SBOO	RF3	10-Oct-19	TB MUSCLE	START LONG MIN	11.00		
SBOO	RF3	10-Oct-19	TB MUSCLE	START LAT DEG	32		
SBOO	RF3	10-Oct-19	TB MUSCLE	START LAT MIN	32.27		
SBOO	RF3	10-Oct-19	TB MUSCLE	DEPTH METER	27		m
SBOO	RF3	10-Oct-19	TB MUSCLE	COMMENTS			
SBOO	RF3	10-Oct-19	TB MUSCLE	VISIBILITY			
SBOO	RF3	10-Oct-19	TB MUSCLE	WEATHER DESC		clear	
SBOO	RF3	10-Oct-19	TB MUSCLE	SEA STATE		Light chop	
SBOO	RF3	10-Oct-19	TB MUSCLE	WAVE HEIGHT LOW	4-5	SW	
SBOO	RF3	10-Oct-19	TB MUSCLE	WATER COLOR CODE		green	
SBOO	RF3	10-Oct-19	TB MUSCLE	WAVE PER	10		sec
SBOO	RF4	30-Oct-19	TB MUSCLE	AIR TEMP			
SBOO	RF4	30-Oct-19	TB MUSCLE	WIND SPEED	3-5		kts
SBOO	RF4	30-Oct-19	TB MUSCLE	WIND DIR		N	
SBOO	RF4	30-Oct-19	TB MUSCLE	START LONG DEG	117		
SBOO	RF4	30-Oct-19	TB MUSCLE	START LONG MIN	17.65		
SBOO	RF4	30-Oct-19	TB MUSCLE	START LAT DEG	32		
SBOO	RF4	30-Oct-19	TB MUSCLE	START LAT MIN	25.91		
SBOO	RF4	30-Oct-19	TB MUSCLE	DEPTH METER	27		m
SBOO	RF4	30-Oct-19	TB MUSCLE	COMMENTS		Boarded by Mexican Navy	
SBOO	RF4	30-Oct-19	TB MUSCLE	VISIBILITY			
SBOO	RF4	30-Oct-19	TB MUSCLE	WEATHER DESC		clear	
SBOO	RF4	30-Oct-19	TB MUSCLE	SEA STATE		calm	
SBOO	RF4	30-Oct-19	TB MUSCLE	WAVE HEIGHT LOW	3		ft
SBOO	RF4	30-Oct-19	TB MUSCLE	WATER COLOR CODE		Greenish-blue	
SBOO	RF4	30-Oct-19	TB MUSCLE	WAVE PER	15		sec
SBOO	TFZONE5	23-Oct-19	TB LIVER	AIR TEMP	19		C
SBOO	TFZONE5	23-Oct-19	TB LIVER	WIND SPEED	4		kts
SBOO	TFZONE5	23-Oct-19	TB LIVER	WIND DIR		NW	
SBOO	TFZONE5	23-Oct-19	TB LIVER	START LONG DEG	117		
SBOO	TFZONE5	23-Oct-19	TB LIVER	START LONG MIN	11.314		
SBOO	TFZONE5	23-Oct-19	TB LIVER	START LAT DEG	32		
SBOO	TFZONE5	23-Oct-19	TB LIVER	START LAT MIN	31.908		
SBOO	TFZONE5	23-Oct-19	TB LIVER	START DEPTH METER	32		m
SBOO	TFZONE5	23-Oct-19	TB LIVER	END LONG DEG	117		
SBOO	TFZONE5	23-Oct-19	TB LIVER	END LONG MIN	11.344		
SBOO	TFZONE5	23-Oct-19	TB LIVER	END LAT DEG	32		
SBOO	TFZONE5	23-Oct-19	TB LIVER	END LAT MIN	32.277		

Addendum 1-3B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	TFZONE5	23-Oct-19	TB LIVER	END DEPTH METER	26		m
SBOO	TFZONE5	23-Oct-19	TB LIVER	DEPTH METER	28		m
SBOO	TFZONE5	23-Oct-19	TB LIVER	COMMENTS			
SBOO	TFZONE5	23-Oct-19	TB LIVER	VISIBILITY	12		mi
SBOO	TFZONE5	23-Oct-19	TB LIVER	WEATHER DESC		Haze	
SBOO	TFZONE5	23-Oct-19	TB LIVER	SEA STATE		Calm	
SBOO	TFZONE5	23-Oct-19	TB LIVER	WAVE HEIGHT LOW	2		ft
SBOO	TFZONE5	23-Oct-19	TB LIVER	WATER COLOR CODE		Greenish-Brown	
SBOO	TFZONE5	23-Oct-19	TB LIVER	WAVE PER	13-15		sec
SBOO	TFZONE5	23-Oct-19	TB LIVER	AIR TEMP	20		C
SBOO	TFZONE5	23-Oct-19	TB LIVER	WIND SPEED	2		kts
SBOO	TFZONE5	23-Oct-19	TB LIVER	WIND DIR		N	
SBOO	TFZONE5	23-Oct-19	TB LIVER	START LONG DEG	117		
SBOO	TFZONE5	23-Oct-19	TB LIVER	START LONG MIN	11.277		
SBOO	TFZONE5	23-Oct-19	TB LIVER	START LAT DEG	32		
SBOO	TFZONE5	23-Oct-19	TB LIVER	START LAT MIN	31.823		
SBOO	TFZONE5	23-Oct-19	TB LIVER	START DEPTH METER	32		m
SBOO	TFZONE5	23-Oct-19	TB LIVER	END LONG DEG	117		
SBOO	TFZONE5	23-Oct-19	TB LIVER	END LONG MIN	11.389		
SBOO	TFZONE5	23-Oct-19	TB LIVER	END LAT DEG	32		
SBOO	TFZONE5	23-Oct-19	TB LIVER	END LAT MIN	32.435		
SBOO	TFZONE5	23-Oct-19	TB LIVER	END DEPTH METER	32		m
SBOO	TFZONE5	23-Oct-19	TB LIVER	DEPTH METER	32		m
SBOO	TFZONE5	23-Oct-19	TB LIVER	COMMENTS			
SBOO	TFZONE5	23-Oct-19	TB LIVER	VISIBILITY	12		mi
SBOO	TFZONE5	23-Oct-19	TB LIVER	WEATHER DESC		Haze	
SBOO	TFZONE5	23-Oct-19	TB LIVER	SEA STATE		Calm	
SBOO	TFZONE5	23-Oct-19	TB LIVER	WAVE HEIGHT LOW	2		ft
SBOO	TFZONE5	23-Oct-19	TB LIVER	WATER COLOR CODE		Greenish-Brown	
SBOO	TFZONE5	23-Oct-19	TB LIVER	WAVE PER		13-15	sec
SBOO	TFZONE5	23-Oct-19	TB LIVER	AIR TEMP	20		C
SBOO	TFZONE5	23-Oct-19	TB LIVER	WIND SPEED	3		kts
SBOO	TFZONE5	23-Oct-19	TB LIVER	WIND DIR		E	
SBOO	TFZONE5	23-Oct-19	TB LIVER	START LONG DEG	117		
SBOO	TFZONE5	23-Oct-19	TB LIVER	START LONG MIN	11.233		
SBOO	TFZONE5	23-Oct-19	TB LIVER	START LAT DEG	32		
SBOO	TFZONE5	23-Oct-19	TB LIVER	START LAT MIN	31.822		
SBOO	TFZONE5	23-Oct-19	TB LIVER	START DEPTH METER	31		m
SBOO	TFZONE5	23-Oct-19	TB LIVER	END LONG DEG	117		
SBOO	TFZONE5	23-Oct-19	TB LIVER	END LONG MIN	10.857		
SBOO	TFZONE5	23-Oct-19	TB LIVER	END LAT DEG	32		
SBOO	TFZONE5	23-Oct-19	TB LIVER	END LAT MIN	33.236		
SBOO	TFZONE5	23-Oct-19	TB LIVER	END DEPTH METER	26		m
SBOO	TFZONE5	23-Oct-19	TB LIVER	DEPTH METER	28		m
SBOO	TFZONE5	23-Oct-19	TB LIVER	COMMENTS			
SBOO	TFZONE5	23-Oct-19	TB LIVER	VISIBILITY	12		mi
SBOO	TFZONE5	23-Oct-19	TB LIVER	WEATHER DESC		Haze	

Addendum 1-3B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	TFZONE5	23-Oct-19	TB LIVER	SEA STATE		Calm	
SBOO	TFZONE5	23-Oct-19	TB LIVER	WAVE HEIGHT LOW	2		ft
SBOO	TFZONE5	23-Oct-19	TB LIVER	WATER COLOR CODE		Greenish-Brown	
SBOO	TFZONE5	23-Oct-19	TB LIVER	WAVE PER		13-15	sec
SBOO	TFZONE6	23-Oct-19	TB LIVER	AIR TEMP	20		C
SBOO	TFZONE6	23-Oct-19	TB LIVER	WIND SPEED	2		kts
SBOO	TFZONE6	23-Oct-19	TB LIVER	WIND DIR		S	
SBOO	TFZONE6	23-Oct-19	TB LIVER	START LONG DEG	117		
SBOO	TFZONE6	23-Oct-19	TB LIVER	START LONG MIN	11.071		
SBOO	TFZONE6	23-Oct-19	TB LIVER	START LAT DEG	32		
SBOO	TFZONE6	23-Oct-19	TB LIVER	START LAT MIN	33.528		
SBOO	TFZONE6	23-Oct-19	TB LIVER	START DEPTH METER	27		m
SBOO	TFZONE6	23-Oct-19	TB LIVER	END LONG DEG	117		
SBOO	TFZONE6	23-Oct-19	TB LIVER	END LONG MIN	11.041		
SBOO	TFZONE6	23-Oct-19	TB LIVER	END LAT DEG	32		
SBOO	TFZONE6	23-Oct-19	TB LIVER	END LAT MIN	34.003		
SBOO	TFZONE6	23-Oct-19	TB LIVER	END DEPTH METER	32		m
SBOO	TFZONE6	23-Oct-19	TB LIVER	DEPTH METER	30		m
SBOO	TFZONE6	23-Oct-19	TB LIVER	COMMENTS			
SBOO	TFZONE6	23-Oct-19	TB LIVER	VISIBILITY	12		mi
SBOO	TFZONE6	23-Oct-19	TB LIVER	WEATHER DESC		Haze	
SBOO	TFZONE6	23-Oct-19	TB LIVER	SEA STATE		Calm	
SBOO	TFZONE6	23-Oct-19	TB LIVER	WAVE HEIGHT LOW	2		ft
SBOO	TFZONE6	23-Oct-19	TB LIVER	WATER COLOR CODE		Greenish-Brown	
SBOO	TFZONE6	23-Oct-19	TB LIVER	WAVE PER	13-15		sec
SBOO	TFZONE6	23-Oct-19	TB LIVER	AIR TEMP	20		C
SBOO	TFZONE6	23-Oct-19	TB LIVER	WIND SPEED	3		kts
SBOO	TFZONE6	23-Oct-19	TB LIVER	WIND DIR		S	
SBOO	TFZONE6	23-Oct-19	TB LIVER	START LONG DEG	117		
SBOO	TFZONE6	23-Oct-19	TB LIVER	START LONG MIN	11.044		
SBOO	TFZONE6	23-Oct-19	TB LIVER	START LAT DEG	32		
SBOO	TFZONE6	23-Oct-19	TB LIVER	START LAT MIN	33.552		
SBOO	TFZONE6	23-Oct-19	TB LIVER	START DEPTH METER	27		m
SBOO	TFZONE6	23-Oct-19	TB LIVER	END LONG DEG	117		
SBOO	TFZONE6	23-Oct-19	TB LIVER	END LONG MIN	11.099		
SBOO	TFZONE6	23-Oct-19	TB LIVER	END LAT DEG	32		
SBOO	TFZONE6	23-Oct-19	TB LIVER	END LAT MIN	34.129		
SBOO	TFZONE6	23-Oct-19	TB LIVER	END DEPTH METER	27		m
SBOO	TFZONE6	23-Oct-19	TB LIVER	DEPTH METER	27		m
SBOO	TFZONE6	23-Oct-19	TB LIVER	COMMENTS			
SBOO	TFZONE6	23-Oct-19	TB LIVER	VISIBILITY	12		mi
SBOO	TFZONE6	23-Oct-19	TB LIVER	WEATHER DESC		Haze	
SBOO	TFZONE6	23-Oct-19	TB LIVER	SEA STATE		Calm	
SBOO	TFZONE6	23-Oct-19	TB LIVER	WAVE HEIGHT LOW	2		ft
SBOO	TFZONE6	23-Oct-19	TB LIVER	WATER COLOR CODE		Greenish-Brown	
SBOO	TFZONE6	23-Oct-19	TB LIVER	WAVE PER	13-15		sec

Addendum 1-3B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	TFZONE7	25-Oct-19	TB LIVER	AIR TEMP	19		
SBOO	TFZONE7	25-Oct-19	TB LIVER	WIND SPEED	9		kts
SBOO	TFZONE7	25-Oct-19	TB LIVER	WIND DIR		NW	
SBOO	TFZONE7	25-Oct-19	TB LIVER	START LONG DEG	117		
SBOO	TFZONE7	25-Oct-19	TB LIVER	START LONG MIN	12.67		
SBOO	TFZONE7	25-Oct-19	TB LIVER	START LAT DEG	32		
SBOO	TFZONE7	25-Oct-19	TB LIVER	START LAT MIN	36.28		
SBOO	TFZONE7	25-Oct-19	TB LIVER	START DEPTH METER	30		
SBOO	TFZONE7	25-Oct-19	TB LIVER	END LONG DEG	117		
SBOO	TFZONE7	25-Oct-19	TB LIVER	END LONG MIN	12.995		
SBOO	TFZONE7	25-Oct-19	TB LIVER	END LAT DEG	32		
SBOO	TFZONE7	25-Oct-19	TB LIVER	END LAT MIN	37.468		
SBOO	TFZONE7	25-Oct-19	TB LIVER	END DEPTH METER	26		
SBOO	TFZONE7	25-Oct-19	TB LIVER	DEPTH METER	28		m
SBOO	TFZONE7	25-Oct-19	TB LIVER	COMMENTS		Tissue (liver only)	
SBOO	TFZONE7	25-Oct-19	TB LIVER	VISIBILITY	9		mi
SBOO	TFZONE7	25-Oct-19	TB LIVER	WEATHER DESC		Clear	
SBOO	TFZONE7	25-Oct-19	TB LIVER	SEA STATE			
SBOO	TFZONE7	25-Oct-19	TB LIVER	WAVE HEIGHT LOW	2		ft
SBOO	TFZONE7	25-Oct-19	TB LIVER	WATER COLOR CODE		Green	
SBOO	TFZONE7	25-Oct-19	TB LIVER	WAVE PER	9-10		sec
SBOO	TFZONE7	25-Oct-19	TB LIVER	AIR TEMP	19		
SBOO	TFZONE7	25-Oct-19	TB LIVER	WIND SPEED	9		kts
SBOO	TFZONE7	25-Oct-19	TB LIVER	WIND DIR		NW	
SBOO	TFZONE7	25-Oct-19	TB LIVER	START LONG DEG	117		
SBOO	TFZONE7	25-Oct-19	TB LIVER	START LONG MIN	12.67		
SBOO	TFZONE7	25-Oct-19	TB LIVER	START LAT DEG	32		
SBOO	TFZONE7	25-Oct-19	TB LIVER	START LAT MIN	36.28		
SBOO	TFZONE7	25-Oct-19	TB LIVER	START DEPTH METER	30		
SBOO	TFZONE7	25-Oct-19	TB LIVER	END LONG DEG	117		
SBOO	TFZONE7	25-Oct-19	TB LIVER	END LONG MIN	12.995		
SBOO	TFZONE7	25-Oct-19	TB LIVER	END LAT DEG	32		
SBOO	TFZONE7	25-Oct-19	TB LIVER	END LAT MIN	37.468		
SBOO	TFZONE7	25-Oct-19	TB LIVER	END DEPTH METER	26		
SBOO	TFZONE7	25-Oct-19	TB LIVER	DEPTH METER	28		m
SBOO	TFZONE7	25-Oct-19	TB LIVER	COMMENTS		Tissue (liver only)	
SBOO	TFZONE7	25-Oct-19	TB LIVER	VISIBILITY	9		mi
SBOO	TFZONE7	25-Oct-19	TB LIVER	WEATHER DESC		Clear	
SBOO	TFZONE7	25-Oct-19	TB LIVER	SEA STATE			
SBOO	TFZONE7	25-Oct-19	TB LIVER	WAVE HEIGHT LOW	2		ft
SBOO	TFZONE7	25-Oct-19	TB LIVER	WATER COLOR CODE		Green	
SBOO	TFZONE7	25-Oct-19	TB LIVER	WAVE PER	9-10		sec
SBOO	TFZONE7	25-Oct-19	TB LIVER	AIR TEMP	19		
SBOO	TFZONE7	25-Oct-19	TB LIVER	WIND SPEED	9		kts
SBOO	TFZONE7	25-Oct-19	TB LIVER	WIND DIR		NW	
SBOO	TFZONE7	25-Oct-19	TB LIVER	START LONG DEG	117		

Addendum 1-3B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	TFZONE7	25-Oct-19	TB LIVER	START LONG MIN	12.67		
SBOO	TFZONE7	25-Oct-19	TB LIVER	START LAT DEG	32		
SBOO	TFZONE7	25-Oct-19	TB LIVER	START LAT MIN	36.28		
SBOO	TFZONE7	25-Oct-19	TB LIVER	START DEPTH METER	30		
SBOO	TFZONE7	25-Oct-19	TB LIVER	END LONG DEG	117		
SBOO	TFZONE7	25-Oct-19	TB LIVER	END LONG MIN	12.995		
SBOO	TFZONE7	25-Oct-19	TB LIVER	END LAT DEG	32		
SBOO	TFZONE7	25-Oct-19	TB LIVER	END LAT MIN	37.468		
SBOO	TFZONE7	25-Oct-19	TB LIVER	END DEPTH METER	26		
SBOO	TFZONE7	25-Oct-19	TB LIVER	DEPTH METER	28		m
SBOO	TFZONE7	25-Oct-19	TB LIVER	COMMENTS		Tissue (liver only)	
SBOO	TFZONE7	25-Oct-19	TB LIVER	VISIBILITY	9		mi
SBOO	TFZONE7	25-Oct-19	TB LIVER	WEATHER DESC		Clear	
SBOO	TFZONE7	25-Oct-19	TB LIVER	SEA STATE			
SBOO	TFZONE7	25-Oct-19	TB LIVER	WAVE HEIGHT LOW	2		ft
SBOO	TFZONE7	25-Oct-19	TB LIVER	WATER COLOR CODE		Green	
SBOO	TFZONE7	25-Oct-19	TB LIVER	WAVE PER	9-10		sec
SBOO	TFZONE8	21-Oct-19	TB LIVER	AIR TEMP	21		C
SBOO	TFZONE8	21-Oct-19	TB LIVER	WIND SPEED	10		kts
SBOO	TFZONE8	21-Oct-19	TB LIVER	WIND DIR		W	
SBOO	TFZONE8	21-Oct-19	TB LIVER	START LONG DEG	117		
SBOO	TFZONE8	21-Oct-19	TB LIVER	START LONG MIN	10.483		
SBOO	TFZONE8	21-Oct-19	TB LIVER	START LAT DEG	32		
SBOO	TFZONE8	21-Oct-19	TB LIVER	START LAT MIN	30.758		
SBOO	TFZONE8	21-Oct-19	TB LIVER	START DEPTH METER	28		m
SBOO	TFZONE8	21-Oct-19	TB LIVER	END LONG DEG	117		
SBOO	TFZONE8	21-Oct-19	TB LIVER	END LONG MIN	10.58		
SBOO	TFZONE8	21-Oct-19	TB LIVER	END LAT DEG	32		
SBOO	TFZONE8	21-Oct-19	TB LIVER	END LAT MIN	30.951		
SBOO	TFZONE8	21-Oct-19	TB LIVER	END DEPTH METER	29		m
SBOO	TFZONE8	21-Oct-19	TB LIVER	DEPTH METER	28		m
SBOO	TFZONE8	21-Oct-19	TB LIVER	COMMENTS			
SBOO	TFZONE8	21-Oct-19	TB LIVER	VISIBILITY	9		mi
SBOO	TFZONE8	21-Oct-19	TB LIVER	WEATHER DESC		Clear	
SBOO	TFZONE8	21-Oct-19	TB LIVER	SEA STATE		Calm	
SBOO	TFZONE8	21-Oct-19	TB LIVER	WAVE HEIGHT LOW	5		ft
SBOO	TFZONE8	21-Oct-19	TB LIVER	WATER COLOR CODE		Green	
SBOO	TFZONE8	21-Oct-19	TB LIVER	WAVE PER	7-8		sec
SBOO	TFZONE8	21-Oct-19	TB LIVER	AIR TEMP	21		C
SBOO	TFZONE8	21-Oct-19	TB LIVER	WIND SPEED	12		kts
SBOO	TFZONE8	21-Oct-19	TB LIVER	WIND DIR		W	
SBOO	TFZONE8	21-Oct-19	TB LIVER	START LONG DEG	117		
SBOO	TFZONE8	21-Oct-19	TB LIVER	START LONG MIN	10.417		
SBOO	TFZONE8	21-Oct-19	TB LIVER	START LAT DEG	32		
SBOO	TFZONE8	21-Oct-19	TB LIVER	START LAT MIN	30.641		
SBOO	TFZONE8	21-Oct-19	TB LIVER	START DEPTH METER	28		m

Addendum 1-3B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	TFZONE8	21-Oct-19	TB LIVER	END LONG DEG	117		
SBOO	TFZONE8	21-Oct-19	TB LIVER	END LONG MIN	10.826		
SBOO	TFZONE8	21-Oct-19	TB LIVER	END LAT DEG	32		
SBOO	TFZONE8	21-Oct-19	TB LIVER	END LAT MIN	31.094		
SBOO	TFZONE8	21-Oct-19	TB LIVER	END DEPTH METER	29		m
SBOO	TFZONE8	21-Oct-19	TB LIVER	DEPTH METER	28		m
SBOO	TFZONE8	21-Oct-19	TB LIVER	COMMENTS			
SBOO	TFZONE8	21-Oct-19	TB LIVER	VISIBILITY	9		mi
SBOO	TFZONE8	21-Oct-19	TB LIVER	WEATHER DESC		Clear	
SBOO	TFZONE8	21-Oct-19	TB LIVER	SEA STATE		Calm	
SBOO	TFZONE8	21-Oct-19	TB LIVER	WAVE HEIGHT LOW	5		ft
SBOO	TFZONE8	21-Oct-19	TB LIVER	WATER COLOR CODE		Green	
SBOO	TFZONE8	21-Oct-19	TB LIVER	WAVE PER	7-8		sec
SBOO	TFZONE8	21-Oct-19	TB LIVER	AIR TEMP	21		C
SBOO	TFZONE8	21-Oct-19	TB LIVER	WIND SPEED	12		kts
SBOO	TFZONE8	21-Oct-19	TB LIVER	WIND DIR		W	
SBOO	TFZONE8	21-Oct-19	TB LIVER	START LONG DEG	117		
SBOO	TFZONE8	21-Oct-19	TB LIVER	START LONG MIN	10.481		
SBOO	TFZONE8	21-Oct-19	TB LIVER	START LAT DEG	32		
SBOO	TFZONE8	21-Oct-19	TB LIVER	START LAT MIN	30.68		
SBOO	TFZONE8	21-Oct-19	TB LIVER	START DEPTH METER	28		m
SBOO	TFZONE8	21-Oct-19	TB LIVER	END LONG DEG	117		
SBOO	TFZONE8	21-Oct-19	TB LIVER	END LONG MIN	10.825		
SBOO	TFZONE8	21-Oct-19	TB LIVER	END LAT DEG	32		
SBOO	TFZONE8	21-Oct-19	TB LIVER	END LAT MIN	31.138		
SBOO	TFZONE8	21-Oct-19	TB LIVER	END DEPTH METER	30		m
SBOO	TFZONE8	21-Oct-19	TB LIVER	DEPTH METER	29		m
SBOO	TFZONE8	21-Oct-19	TB LIVER	COMMENTS			
SBOO	TFZONE8	21-Oct-19	TB LIVER	VISIBILITY	9		mi
SBOO	TFZONE8	21-Oct-19	TB LIVER	WEATHER DESC		Clear	
SBOO	TFZONE8	21-Oct-19	TB LIVER	SEA STATE		Calm	
SBOO	TFZONE8	21-Oct-19	TB LIVER	WAVE HEIGHT LOW	5		ft
SBOO	TFZONE8	21-Oct-19	TB LIVER	WATER COLOR CODE		Green	
SBOO	TFZONE8	21-Oct-19	TB LIVER	WAVE PER	7-8		sec
SBOO	TFZONE9	21-Oct-19	TB LIVER	AIR TEMP	21		C
SBOO	TFZONE9	21-Oct-19	TB LIVER	WIND SPEED	3		kts
SBOO	TFZONE9	21-Oct-19	TB LIVER	WIND DIR		W	
SBOO	TFZONE9	21-Oct-19	TB LIVER	START LONG DEG	117		
SBOO	TFZONE9	21-Oct-19	TB LIVER	START LONG MIN	10.436		
SBOO	TFZONE9	21-Oct-19	TB LIVER	START LAT DEG	32		
SBOO	TFZONE9	21-Oct-19	TB LIVER	START LAT MIN	28.216		
SBOO	TFZONE9	21-Oct-19	TB LIVER	START DEPTH METER	28		m
SBOO	TFZONE9	21-Oct-19	TB LIVER	END LONG DEG	117		
SBOO	TFZONE9	21-Oct-19	TB LIVER	END LONG MIN	10.585		
SBOO	TFZONE9	21-Oct-19	TB LIVER	END LAT DEG	32		
SBOO	TFZONE9	21-Oct-19	TB LIVER	END LAT MIN	28.471		

Addendum 1-3B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	TFZONE9	21-Oct-19	TB LIVER	END DEPTH METER	29		m
SBOO	TFZONE9	21-Oct-19	TB LIVER	DEPTH METER	28		m
SBOO	TFZONE9	21-Oct-19	TB LIVER	COMMENTS			
SBOO	TFZONE9	21-Oct-19	TB LIVER	VISIBILITY	9		mi
SBOO	TFZONE9	21-Oct-19	TB LIVER	WEATHER DESC		Clear	
SBOO	TFZONE9	21-Oct-19	TB LIVER	SEA STATE		Calm	
SBOO	TFZONE9	21-Oct-19	TB LIVER	WAVE HEIGHT LOW	5		ft
SBOO	TFZONE9	21-Oct-19	TB LIVER	WATER COLOR CODE		Green	
SBOO	TFZONE9	21-Oct-19	TB LIVER	WAVE PER	7-8		sec
SBOO	TFZONE9	21-Oct-19	TB LIVER	AIR TEMP	20		C
SBOO	TFZONE9	21-Oct-19	TB LIVER	WIND SPEED	8		kts
SBOO	TFZONE9	21-Oct-19	TB LIVER	WIND DIR		W	
SBOO	TFZONE9	21-Oct-19	TB LIVER	START LONG DEG	117		
SBOO	TFZONE9	21-Oct-19	TB LIVER	START LONG MIN	10.347		
SBOO	TFZONE9	21-Oct-19	TB LIVER	START LAT DEG	32		
SBOO	TFZONE9	21-Oct-19	TB LIVER	START LAT MIN	28.098		
SBOO	TFZONE9	21-Oct-19	TB LIVER	START DEPTH METER	27		m
SBOO	TFZONE9	21-Oct-19	TB LIVER	END LONG DEG	117		
SBOO	TFZONE9	21-Oct-19	TB LIVER	END LONG MIN	10.655		
SBOO	TFZONE9	21-Oct-19	TB LIVER	END LAT DEG	32		
SBOO	TFZONE9	21-Oct-19	TB LIVER	END LAT MIN	28.509		
SBOO	TFZONE9	21-Oct-19	TB LIVER	END DEPTH METER	28		m
SBOO	TFZONE9	21-Oct-19	TB LIVER	DEPTH METER	28		m
SBOO	TFZONE9	21-Oct-19	TB LIVER	COMMENTS		One fantail sole	
SBOO	TFZONE9	21-Oct-19	TB LIVER	VISIBILITY	9		mi
SBOO	TFZONE9	21-Oct-19	TB LIVER	WEATHER DESC		Clear	
SBOO	TFZONE9	21-Oct-19	TB LIVER	SEA STATE		Calm	
SBOO	TFZONE9	21-Oct-19	TB LIVER	WAVE HEIGHT LOW	5		ft
SBOO	TFZONE9	21-Oct-19	TB LIVER	WATER COLOR CODE		Green	
SBOO	TFZONE9	21-Oct-19	TB LIVER	WAVE PER	7-8		sec
SBOO	TFZONE9	21-Oct-19	TB LIVER	AIR TEMP	20		C
SBOO	TFZONE9	21-Oct-19	TB LIVER	WIND SPEED	12		kts
SBOO	TFZONE9	21-Oct-19	TB LIVER	WIND DIR		W	
SBOO	TFZONE9	21-Oct-19	TB LIVER	START LONG DEG	117		
SBOO	TFZONE9	21-Oct-19	TB LIVER	START LONG MIN	10.38		
SBOO	TFZONE9	21-Oct-19	TB LIVER	START LAT DEG	32		
SBOO	TFZONE9	21-Oct-19	TB LIVER	START LAT MIN	28.154		
SBOO	TFZONE9	21-Oct-19	TB LIVER	START DEPTH METER	28		m
SBOO	TFZONE9	21-Oct-19	TB LIVER	END LONG DEG	117		
SBOO	TFZONE9	21-Oct-19	TB LIVER	END LONG MIN	10.569		
SBOO	TFZONE9	21-Oct-19	TB LIVER	END LAT DEG	32		
SBOO	TFZONE9	21-Oct-19	TB LIVER	END LAT MIN	28.737		
SBOO	TFZONE9	21-Oct-19	TB LIVER	END DEPTH METER	29		m
SBOO	TFZONE9	21-Oct-19	TB LIVER	DEPTH METER	28		m
SBOO	TFZONE9	21-Oct-19	TB LIVER	COMMENTS			
SBOO	TFZONE9	21-Oct-19	TB LIVER	VISIBILITY	9		mi
SBOO	TFZONE9	21-Oct-19	TB LIVER	WEATHER DESC		Clear	

Addendum 1-3B *continued*

Project	Station	Date	Type	Parmcode	Value	Text Field	Units
SBOO	TFZONE9	21-Oct-19	TB LIVER	SEA STATE		Calm	
SBOO	TFZONE9	21-Oct-19	TB LIVER	WAVE HEIGHT LOW	5		ft
SBOO	TFZONE9	21-Oct-19	TB LIVER	WATER COLOR CODE		Green	
SBOO	TFZONE9	21-Oct-19	TB LIVER	WAVE PER	7-8		sec

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Addendum 2

Coastal Oceanographic Conditions

2019 Raw Data

Addendum 2-1

Summary of temperature, salinity, DO, pH, transmissivity, and chlorophyll *a* for various depth layers as well as the entire water column for all PLOO stations sampled during 2019. For each quarter: n≥837 (1–20 m), n≥1320 (21–60 m), n≥457 (61–80 m), n≥245 (81–98 m). Sample sizes differed due to variations in bottom depth at individual stations.

		Depth (m)				
Temperature (°C)		**1–20**	**21–60**	**61–80**	**81–98**	**1–98**
Winter	min	11.5	10.6	10.3	10.1	10.1
	max	15.2	14.3	11.8	10.8	15.2
	mean	14.1	11.9	10.8	10.4	12.2
Spring	min	10.9	9.8	9.7	9.5	9.5
	max	18.5	13.9	11.0	10.2	18.5
	mean	14.2	10.9	10.1	9.8	11.6
Summer	min	11.7	10.8	10.6	10.3	10.3
	max	21.4	14.0	11.4	11.1	21.4
	mean	14.7	11.7	11.0	10.7	12.4
Fall	min	15.2	12.3	11.9	11.6	11.6
	max	19.1	17.5	13.9	12.8	19.1
	mean	17.3	14.6	12.7	12.0	14.9
Annual	min	10.9	9.8	9.7	9.5	9.5
	max	21.4	17.5	13.9	12.8	21.4
	mean	15.1	12.3	11.1	10.7	12.8
Salinity (ppt)						
Winter	min	33.40	33.53	33.64	33.75	33.40
	max	33.72	33.80	33.89	33.97	33.97
	mean	33.56	33.66	33.77	33.86	33.67
Spring	min	33.53	33.56	33.70	33.79	33.53
	max	33.78	33.86	33.93	34.06	34.06
	mean	33.64	33.71	33.82	33.93	33.73
Summer	min	33.47	33.47	33.66	33.70	33.47
	max	33.80	33.73	33.79	33.87	33.87
	mean	33.61	33.66	33.73	33.78	33.67
Fall	min	33.46	33.38	33.59	33.61	33.38
	max	33.68	33.70	33.73	33.76	33.76
	mean	33.62	33.60	33.65	33.71	33.62
Annual	min	33.40	33.38	33.59	33.61	33.38
	max	33.80	33.86	33.93	34.06	34.06
	mean	33.61	33.66	33.74	33.82	33.67

Addendum 2-1 *continued*

		Depth (m)				
DO (mg/L)		**1–20**	**21–60**	**61–80**	**81–98**	**1–98**
Winter	min	5.0	3.9	3.4	3.2	3.2
	max	9.5	9.5	5.5	4.6	9.5
	mean	8.4	5.7	4.3	3.9	6.1
Spring	min	4.9	3.5	3.5	3.0	3.0
	max	10.3	8.2	4.9	4.4	10.3
	mean	7.2	4.9	4.1	3.6	5.3
Summer	min	3.5	4.3	4.2	3.9	3.5
	max	12.0	8.6	5.1	4.7	12.0
	mean	8.0	5.5	4.6	4.4	6.0
Fall	min	5.3	5.2	4.8	4.7	4.7
	max	8.8	8.7	6.6	5.7	8.8
	mean	8.3	7.0	5.7	5.0	7.0
Annual	min	3.5	3.5	3.4	3.0	3.0
	max	12.0	9.5	6.6	5.7	12.0
	mean	8.0	5.8	4.7	4.2	6.1
pH						
Winter	min	7.9	7.8	7.8	7.8	7.8
	max	8.3	8.3	8.0	7.9	8.3
	mean	8.2	8.0	7.9	7.8	8.0
Spring	min	7.9	7.7	7.7	7.7	7.7
	max	8.3	8.1	7.9	7.8	8.3
	mean	8.1	7.9	7.8	7.7	7.9
Summer	min	7.9	7.8	7.8	7.8	7.8
	max	8.4	8.3	8.1	8.1	8.4
	mean	8.2	8.0	7.9	8.0	8.1
Fall	min	7.9	7.9	7.8	7.8	7.8
	max	8.2	8.2	8.0	7.9	8.2
	mean	8.2	8.0	7.9	7.8	8.0
Annual	min	7.9	7.7	7.7	7.7	7.7
	max	8.4	8.3	8.1	8.1	8.4
	mean	8.2	8.0	7.9	7.8	8.0

Addendum 2-1 *continued*

		Depth (m)				
Transmissivity (%)		**1–20**	**21–60**	**61–80**	**81–98**	**1–98**
Winter	min	66	78	61	71	61
	max	87	89	88	88	89
	mean	84	86	86	86	86
Spring	min	60	56	53	79	53
	max	88	89	89	89	89
	mean	82	87	87	87	85
Summer	min	55	74	80	80	55
	max	88	88	88	88	88
	mean	77	87	86	86	84
Fall	min	77	80	80	84	77
	max	87	88	88	88	88
	mean	82	85	87	86	85
Annual	min	55	56	53	71	53
	max	88	89	89	89	89
	mean	81	86	86	86	85
Chlorophyll *a* (µg/L)						
Winter	min	0.1	0.3	0.2	0.2	0.1
	max	3.4	5.4	1.8	0.4	5.4
	mean	0.8	0.6	0.4	0.3	0.6
Spring	min	0.2	0.2	0.1	0.1	0.1
	max	6.7	4.4	0.5	0.4	6.7
	mean	1.9	0.6	0.2	0.2	0.9
Summer	min	0.6	0.3	0.2	0.3	0.2
	max	14.7	5.9	0.6	0.5	14.7
	mean	3.6	0.9	0.4	0.4	1.6
Fall	min	0.3	0.3	0.2	0.3	0.2
	max	3.8	3.5	0.7	0.5	3.8
	mean	1.8	1.1	0.4	0.3	1.1
Annual	min	0.1	0.2	0.1	0.1	0.1
	max	14.7	5.9	1.8	0.5	14.7
	mean	2.0	0.8	0.4	0.3	1.0

Addendum 2-2

Summary of temperature, salinity, DO, pH, transmissivity, and chlorophyll *a* for various depth layers as well as the entire water column for all SBOO stations sampled during 2019. For each quarter: n ≥ 351 (1–9 m), n ≥ 305 (10–19 m), n ≥ 184 (20–28 m), n ≥ 88 (29–38 m), n ≥ 73 (39–55 m). Sample sizes differed due to slight variations in bottom depth at individual stations.

		Depth (m)					
Temperature (°C)		**1–9**	**10–19**	**20–28**	**29–38**	**39–55**	**1–55**
Winter	min	14.6	13.8	13.5	13.5	13.3	13.3
	max	15.5	15.5	15.5	15.5	15.4	15.5
	mean	15.0	14.9	14.6	14.7	14.5	14.8
Spring	min	12.8	12.0	11.6	11.5	10.9	10.9
	max	18.5	16.9	14.6	13.1	12.4	18.5
	mean	16.8	13.9	12.7	12.1	11.5	14.4
Summer	min	13.4	12.6	12.2	11.6	11.3	11.3
	max	20.2	16.8	13.3	13.0	12.1	20.2
	mean	16.4	13.5	12.7	12.3	11.6	14.1
Fall	min	15.4	14.9	14.4	14.1	12.7	12.7
	max	18.3	18.2	17.4	15.7	14.8	18.3
	mean	17.5	16.8	15.6	14.9	14.1	16.5
Annual	min	12.8	12.0	11.6	11.5	10.9	10.9
	max	20.2	18.2	17.4	15.7	15.4	20.2
	mean	16.4	14.8	13.9	13.5	12.9	15.0
Salinity (ppt)							
Winter	min	31.74	33.49	33.56	33.56	33.59	31.74
	max	33.66	33.66	33.66	33.66	33.66	33.66
	mean	33.57	33.60	33.61	33.62	33.62	33.60
Spring	min	33.53	33.50	33.56	33.58	33.60	33.50
	max	33.88	33.74	33.66	33.66	33.72	33.88
	mean	33.63	33.59	33.60	33.61	33.64	33.61
Summer	min	33.49	33.41	33.52	33.55	33.62	33.41
	max	33.70	33.62	33.64	33.68	33.70	33.70
	mean	33.60	33.57	33.60	33.62	33.68	33.60
Fall	min	33.53	33.48	33.48	33.56	33.58	33.48
	max	33.64	33.67	33.63	33.62	33.69	33.69
	mean	33.60	33.60	33.59	33.59	33.61	33.60
Annual	min	31.74	33.41	33.48	33.55	33.58	31.74
	max	33.88	33.74	33.66	33.68	33.72	33.88
	mean	33.60	33.59	33.60	33.61	33.64	33.60

Addendum 2-2 *continued*

		Depth (m)					
DO (mg/L)		**1–9**	**10–19**	**20–28**	**29–38**	**39–55**	**1–55**
Winter	min	7.5	6.5	6.3	6.5	6.4	6.3
	max	8.4	8.4	8.0	7.9	7.9	8.4
	mean	8.0	7.7	7.3	7.4	7.2	7.7
Spring	min	6.7	5.2	5.3	5.2	4.8	4.8
	max	10.3	8.9	8.6	7.4	6.2	10.3
	mean	8.5	8.0	7.0	6.1	5.5	7.6
Summer	min	5.5	4.3	4.1	4.7	4.9	4.1
	max	11.3	10.9	8.4	7.4	6.1	11.3
	mean	8.9	6.9	5.5	5.9	5.2	7.1
Fall	min	7.0	6.9	6.6	6.5	5.3	5.3
	max	8.7	8.6	8.3	7.8	7.6	8.7
	mean	8.1	7.9	7.5	7.2	6.7	7.8
Annual	min	5.5	4.3	4.1	4.7	4.8	4.1
	max	11.3	10.9	8.6	7.9	7.9	11.3
	mean	8.4	7.6	6.8	6.6	6.2	7.6
pH							
Winter	min	8.1	8.0	8.0	8.0	8.0	8.0
	max	8.2	8.2	8.2	8.2	8.2	8.2
	mean	8.1	8.1	8.1	8.1	8.1	8.1
Spring	min	8.0	7.9	7.9	7.9	7.8	7.8
	max	8.3	8.2	8.2	8.1	8.0	8.3
	mean	8.2	8.1	8.1	8.0	7.9	8.1
Summer	min	8.0	7.9	7.9	7.8	7.9	7.8
	max	8.3	8.2	8.2	8.1	8.0	8.3
	mean	8.2	8.1	8.0	8.0	7.9	8.1
Fall	min	8.1	8.0	8.0	8.0	7.9	7.9
	max	8.2	8.2	8.2	8.1	8.0	8.2
	mean	8.1	8.1	8.1	8.0	8.0	8.1
Annual	min	8.0	7.9	7.9	7.8	7.8	7.8
	max	8.3	8.2	8.2	8.2	8.2	8.3
	mean	8.2	8.1	8.0	8.0	8.0	8.1

Addendum 2-2 *continued*

		Depth (m)					
Transmissivity (%)		**1–9**	**10–19**	**20–28**	**29–38**	**39–55**	**1–55**
Winter	min	19	37	77	81	87	19
	max	88	88	88	88	88	88
	mean	77	83	86	87	88	82
Spring	min	58	41	74	78	85	41
	max	87	88	87	88	88	88
	mean	81	82	83	85	88	82
Summer	min	47	54	76	80	86	47
	max	82	83	87	88	88	88
	mean	70	75	80	86	88	76
Fall	min	68	55	82	84	86	55
	max	87	87	87	87	87	87
	mean	80	83	85	86	87	83
Annual	min	19	37	74	78	85	19
	max	88	88	88	88	88	88
	mean	77	81	84	86	88	81
Chlorophyll *a* (µg/L)							
Winter	min	0.3	0.4	0.6	0.6	0.4	0.3
	max	3.4	2.2	1.6	1.6	1.0	3.4
	mean	1.2	1.2	0.9	0.8	0.7	1.1
Spring	min	0.3	0.4	0.6	1.1	0.5	0.3
	max	7.7	8.3	8.2	3.6	1.8	8.3
	mean	1.4	2.3	3.3	2.0	1.0	2.0
Summer	min	0.9	1.4	1.0	0.6	0.4	0.4
	max	12.1	8.6	4.6	2.9	1.1	12.1
	mean	4.0	4.1	2.4	1.2	0.6	3.3
Fall	min	0.3	0.4	0.6	0.5	0.4	0.3
	max	6.2	4.5	2.6	2.1	1.1	6.2
	mean	1.7	1.7	1.6	1.0	0.7	1.6
Annual	min	0.3	0.4	0.6	0.5	0.4	0.3
	max	12.1	8.6	8.2	3.6	1.8	12.1
	mean	2.1	2.3	2.1	1.3	0.7	2.0

Addendum 3

Water Quality Compliance and Plume Dispersion

2019 Raw Data

Addendum 3-1

Summary of elevated bacteria densities in samples collected from PLOO shore, kelp, and offshore stations during 2019. Bold values exceed benchmarks for total coliform (> 10,000 CFU/100 mL), fecal coliform (> 400 CFU/100 mL), *Enterococcus* (> 104 CFU/100 mL), and/or the FTR criterion (total coliforms > 1000 CFU/100 mL and F:T > 0.10).

Station Group	Date	Depth (m)	Total	Fecal	Entero	F:T
Shore Stations						
D11	3-Jan-19	—	200	58	**160**	0.29
D11	4-Feb-19	—	6400	**840**	20	**0.13**
D11	13-Mar-19	—	5400	160	**110**	0.03
D7	17-Jul-19	—	200	2	**280**	0.01
D8-B	17-Jul-19	—	20	2	**400**	0.10
D9	17-Jul-19	—	400	14	**2000**	0.04
D4	4-Sep-19	—	20	32	**240**	1.60
D10	4-Sep-19	—	40	16	**200**	0.40
D7	16-Oct-19	—	1600	**600**	**920**	**0.38**
D7	13-Nov-19	—	2000	80	**760**	0.04
D7	20-Nov-19	—	400	280	**200**	0.70
D8-B	20-Nov-19	—	200	220	**200**	1.10
D8-B	25-Nov-19	—	200	26	**140**	0.13
D7	4-Dec-19	—	2800	320	**680**	**0.11**
D8-B	4-Dec-19	—	3600	100	**700**	0.03
D8-B[a]	5-Dec-19	—	—	—	**2600**	—
D4	26-Dec-19	—	440	80	**220**	0.18
D10	26-Dec-19	—	3400	140	**360**	0.04
Kelp Stations						
A1	23-Jan-19	12	4800	300	**160**	0.06
A1	23-Jan-19	18	1600	320	**280**	**0.20**
A7	23-Jan-19	18	1800	220	80	**0.12**
A6	19-Feb-19	18	1500	320	60	**0.21**
C7	4-Nov-19	1	2	2	**120**	1.00
C7	4-Nov-19	18	4	2	**560**	0.50
Offshore Stations						
F10	6-Mar-19	60	—	—	**180**	—

[a]Resample

Addendum 3-1 *continued*

Station Group	Date	Depth (m)	Total	Fecal	Entero	F:T
F11	6-Mar-19	60	—	—	**110**	—
F12	6-Mar-19	60	—	—	**240**	—
F19	7-Mar-19	80	—	—	**180**	—
F30	7-May-19	60	—	—	**440**	—
F31	7-May-19	80	—	—	**400**	—
F33	7-May-19	80	—	—	**220**	—
F25	9-May-19	60	—	—	**120**	—
F30	7-Aug-19	80	—	—	**140**	—
F34	5-Nov-19	60	—	—	**560**	—
F34	5-Nov-19	80	—	—	**200**	—
F35	5-Nov-19	98	—	—	**110**	—
F36	5-Nov-19	80	—	—	**200**	—
F36	5-Nov-19	98	—	—	**140**	—
F21	7-Nov-19	80	—	—	**540**	—

Addendum 3-2

Summary of elevated bacteria densities in samples collected from SBOO shore, kelp, and offshore stations during 2019. Bold values exceed benchmarks for total coliform (> 10,000 CFU/100 mL), fecal coliform (> 400 CFU/100 mL), *Enterococcus* (> 104 CFU/100 mL), and/or the FTR criterion (total coliforms > 1000 CFU/100 mL and F:T > 0.10).

Station Group	Date	Depth (m)	Total	Fecal	Entero	F:T
Shore Stations South of the USA/Mexico Border						
S0	8-Jan-19	—	**12,000**	**420**	**1800**	0.04
S2	8-Jan-19	—	7600	**560**	80	0.07
S3	8-Jan-19	—	**16,000**	**1100**	**220**	0.07
S0	15-Jan-19	—	7400	**740**	**1400**	0.10
S2	15-Jan-19	—	**15,000**	**2200**	**5200**	**0.15**
S3	15-Jan-19	—	**16,000**	**1400**	**2000**	0.09
S0	22-Jan-19	—	**16,000**	**2000**	**2200**	**0.13**
S3	22-Jan-19	—	2600	340	42	**0.13**
S0	6-Feb-19	—	**16,000**	**9200**	**5200**	**0.58**
S2	6-Feb-19	—	4600	**440**	**260**	0.10
S3	6-Feb-19	—	6000	380	**240**	0.06
S0	12-Feb-19	—	6400	**560**	**500**	0.09
S0	19-Feb-19	—	**16,000**	**6800**	**7200**	**0.43**
S2	19-Feb-19	—	6400	280	**400**	0.04
S3	19-Feb-19	—	9200	380	**440**	0.04
S0	26-Feb-19	—	1000	44	**160**	0.04
S2	5-Mar-19	—	1100	160	2	**0.15**
S0	12-Mar-19	—	**14,000**	**1300**	**2200**	0.09
S3	12-Mar-19	—	2600	320	100	**0.12**
S0	9-Apr-19	—	4200	**620**	**500**	**0.15**
S0	16-Apr-19	—	**16,000**	**3800**	**2200**	**0.24**
S0	23-Apr-19	—	2000	280	**220**	**0.14**
S0	30-Apr-19	—	3200	400	**820**	**0.13**
S0	14-May-19	—	**12,000**	**1600**	**1200**	**0.13**
S0	21-May-19	—	7800	**1000**	**580**	**0.13**
S3	21-May-19	—	**16,000**	**5600**	**120**	**0.35**
S0	28-May-19	—	7200	**880**	**2000**	**0.12**
S0	18-Jun-19	—	140	28	**140**	**0.20**

Addendum 3-2 *continued*

Station Group	Date	Depth (m)	Total	Fecal	Entero	F:T
S0	25-Jun-19	—	2400	**640**	**900**	**0.27**
S0	30-Jul-19	—	**16,000**	**800**	**560**	0.05
S0	6-Aug-19	—	5800	**640**	**220**	**0.11**
S0	20-Aug-19	—	**16,000**	**1000**	**6400**	0.06
S0	3-Sep-19	—	**12,000**	**5000**	**5000**	**0.42**
S3	3-Sep-19	—	60	2	**4200**	0.03
S0	10-Sep-19	—	280	100	**120**	**0.36**
S2	10-Sep-19	—	2600	60	**140**	0.02
S0	1-Oct-19	—	3600	280	**280**	0.08
S0	8-Oct-19	—	**13,000**	**3200**	**5400**	**0.25**
S0	15-Oct-19	—	9800	**1000**	**900**	0.10
S0	5-Nov-19	—	2400	140	**880**	0.06
S0	19-Nov-19	—	10,000	**2400**	**2200**	**0.24**
S0	26-Nov-19	—	**12,000**	**1200**	**900**	0.10
S2	26-Nov-19	—	**16,000**	**2800**	**420**	**0.18**
S0	3-Dec-19	—	2800	**800**	**600**	**0.29**
S2	3-Dec-19	—	4000	**500**	100	**0.13**
S3	3-Dec-19	—	**12,000**	**1000**	**520**	0.08
S0	10-Dec-19	—	4600	**720**	**340**	**0.16**
S2	10-Dec-19	—	4000	280	**260**	0.07
S0	17-Dec-19	—	2800	**520**	**320**	**0.19**
S2	17-Dec-19	—	**16,000**	**1600**	**520**	0.10
S3	17-Dec-19	—	5800	**1600**	**360**	**0.28**
S0	23-Dec-19	—	740	140	**420**	0.19
S2	23-Dec-19	—	9600	**1600**	**2200**	**0.17**
S3	23-Dec-19	—	**13,000**	**3400**	**7200**	**0.26**
S0	30-Dec-19	—	**16,000**	**12,000**	**11,000**	**0.75**
S2	30-Dec-19	—	540	24	**120**	0.04
S3	30-Dec-19	—	1200	120	**140**	0.10

Addendum 3-2 *continued*

Station Group	Date	Depth (m)	Total	Fecal	Entero	F:T
Shore Stations North of the USA/Mexico Border						
S5	2-Jan-19	—	**16,000**	**12,000**	**11,000**	**0.75**
S5[a]	4-Jan-19	—	700	80	**220**	0.11
S5[a]	6-Jan-19	—	—	—	**120**	—
S4	8-Jan-19	—	9400	**2400**	**500**	**0.26**
S5	8-Jan-19	—	4600	**940**	**440**	**0.20**
S10	8-Jan-19	—	6800	**840**	**220**	**0.12**
S4[a]	10-Jan-19	—	4600	**700**	**120**	**0.15**
S4[a]	11-Jan-19	—	3000	**480**	66	**0.16**
S4[a]	13-Jan-19	—	**16,000**	**2400**	—	**0.15**
S5	15-Jan-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S6	15-Jan-19	—	**16,000**	**3000**	**1600**	**0.19**
S8	15-Jan-19	—	1800	**480**	62	**0.27**
S11	15-Jan-19	—	**16,000**	**3600**	**2000**	**0.23**
S12	15-Jan-19	—	**15,000**	**2200**	**400**	**0.15**
S4	17-Jan-19	—	420	72	**260**	0.17
S5[a]	17-Jan-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S6[a]	17-Jan-19	—	5600	**1100**	**400**	**0.20**
S11[a]	17-Jan-19	—	**11,000**	**2800**	**580**	**0.25**
S12[a]	17-Jan-19	—	600	**440**	100	0.73
S5[a]	18-Jan-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S12[a]	18-Jan-19	—	—	**440**	—	—
S5[a]	20-Jan-19	—	4800	**1500**	**160**	**0.31**
S4	22-Jan-19	—	3800	**440**	40	**0.12**
S12	22-Jan-19	—	200	14	**160**	0.07
S4[a]	24-Jan-19	—	9400	**2400**	—	**0.26**
S4[a]	25-Jan-19	—	**16,000**	**3600**	—	**0.23**
S4[a]	27-Jan-19	—	**16,000**	**3200**	—	**0.20**
S5	29-Jan-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S6	29-Jan-19	—	320	88	**110**	0.28
S10	29-Jan-19	—	4000	**940**	**260**	**0.24**

[a]Resample

Addendum 3-2 *continued*

Station Group	Date	Depth (m)	Total	Fecal	Entero	F:T
S11	29-Jan-19	—	200	360	**200**	1.80
S5[a]	31-Jan-19	—	1800	**440**	**220**	**0.24**
S10[a]	31-Jan-19	—	1400	160	**140**	**0.11**
S11[a]	31-Jan-19	—	—	—	**140**	—
S5[a]	1-Feb-19	—	**16,000**	**5800**	**7200**	**0.36**
S10[a]	1-Feb-19	—	—	—	**2800**	—
S11[a]	1-Feb-19	—	**16,000**	**12,000**	**200**	**0.75**
S5[a]	3-Feb-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S10[a]	3-Feb-19	—	**16,000**	**900**	**5200**	0.06
S11[a]	3-Feb-19	—	**16,000**	**11,000**	**12,000**	**0.69**
S5[a]	5-Feb-19	—	**16,000**	**12,000**	**11,000**	**0.75**
S10[a]	5-Feb-19	—	**16,000**	**12,000**	**10,000**	**0.75**
S11[a]	5-Feb-19	—	**16,000**	**12,000**	**6000**	**0.75**
S4	6-Feb-19	—	8800	**900**	**820**	0.10
S5	6-Feb-19	—	1800	380	**360**	**0.21**
S6	6-Feb-19	—	580	68	**160**	0.12
S10	6-Feb-19	—	**16,000**	**1800**	**1200**	**0.11**
S11	6-Feb-19	—	600	110	**220**	**0.18**
S4[a]	8-Feb-19	—	9000	**1200**	**880**	**0.13**
S5[a]	8-Feb-19	—	**15,000**	**1100**	**5800**	0.07
S6[a]	8-Feb-19	—	—	—	**240**	—
S10[a]	8-Feb-19	—	**16,000**	**5000**	**1300**	**0.31**
S11[a]	8-Feb-19	—	—	—	**180**	—
S5[a]	10-Feb-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S6[a]	10-Feb-19	—	—	—	**180**	—
S10[a]	10-Feb-19	—	**16,000**	**4800**	**1000**	**0.30**
S11[a]	10-Feb-19	—	—	—	**160**	—
S4	12-Feb-19	—	1400	260	80	**0.19**
S5	12-Feb-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S6	12-Feb-19	—	1600	**480**	**160**	**0.30**
S10	12-Feb-19	—	2200	**600**	100	**0.27**
S11	12-Feb-19	—	7400	**3600**	**720**	**0.49**
S4[a]	14-Feb-19	—	**16,000**	**2400**	—	**0.15**
S5[a]	14-Feb-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S6[a]	14-Feb-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S10[a]	14-Feb-19	—	**16,000**	**2000**	—	**0.13**
S11[a]	14-Feb-19	—	**16,000**	**12,000**	**12,000**	**0.75**

[a]Resample

Addendum 3-2 *continued*

Station Group	Date	Depth (m)	Total	Fecal	Entero	F:T
S4[a]	16-Feb-19	—	**12,000**	**1600**	—	**0.13**
S5[a]	16-Feb-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S6[a]	16-Feb-19	—	**16,000**	**2000**	**4400**	**0.13**
S10[a]	16-Feb-19	—	**16,000**	**12,000**	—	**0.75**
S11[a]	16-Feb-19	—	**16,000**	**4000**	**5800**	**0.25**
S5[a]	18-Feb-19	—	600	90	**120**	0.15
S10[a]	18-Feb-19	—	1200	160	—	**0.13**
S4	19-Feb-19	—	2600	110	**200**	0.04
S5	19-Feb-19	—	340	44	**320**	0.13
S10	19-Feb-19	—	**16,000**	**960**	**360**	0.06
S4[a]	21-Feb-19	—	—	—	**220**	—
S5[a]	21-Feb-19	—	—	—	**260**	—
S10[a]	21-Feb-19	—	940	64	**240**	0.07
S4[a]	22-Feb-19	—	—	—	**12,000**	—
S5[a]	22-Feb-19	—	—	—	**4000**	—
S10[a]	22-Feb-19	—	—	—	**12,000**	—
S4[a]	24-Feb-19	—	—	—	**600**	—
S5[a]	24-Feb-19	—	—	—	**11,000**	—
S10[a]	24-Feb-19	—	—	—	**1100**	—
S5	26-Feb-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S11	26-Feb-19	—	**16,000**	**12,000**	**4400**	**0.75**
S5[a]	28-Feb-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S5[a]	1-Mar-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S5[a]	3-Mar-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S4	5-Mar-19	—	4400	**1000**	14	**0.23**
S5	5-Mar-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S10	5-Mar-19	—	5200	**720**	24	**0.14**
S11	5-Mar-19	—	6000	**1800**	10	**0.30**
S4[a]	7-Mar-19	—	3800	**1000**	—	**0.26**
S5[a]	7-Mar-19	—	3800	**500**	**140**	**0.13**
S10[a]	7-Mar-19	—	**16,000**	**3600**	—	**0.23**
S11[a]	7-Mar-19	—	6200	**960**	—	**0.15**
S4[a]	8-Mar-19	—	**15,000**	**3600**	—	**0.24**

[a]Resample

Addendum 3-2 *continued*

Station Group	Date	Depth (m)	Total	Fecal	Entero	F:T
S5[a]	8-Mar-19	—	2600	**820**	100	**0.32**
S10[a]	8-Mar-19	—	**16,000**	**6400**	—	**0.40**
S11[a]	8-Mar-19	—	1200	380	—	**0.32**
S4[a]	10-Mar-19	—	**16,000**	**5000**	—	**0.31**
S5[a]	10-Mar-19	—	**16,000**	**9800**	—	**0.61**
S10[a]	10-Mar-19	—	**16,000**	**12,000**	—	**0.75**
S4	12-Mar-19	—	**16,000**	**14,000**	**8200**	**0.88**
S5	12-Mar-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S10	12-Mar-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S4[a]	14-Mar-19	—	**16,000**	**12,000**	**1200**	**0.75**
S5[a]	14-Mar-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S10[a]	14-Mar-19	—	**16,000**	**12,000**	**4000**	**0.75**
S5[a]	16-Mar-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S5[a]	18-Mar-19	—	5600	**680**	**400**	**0.12**
S6	20-Mar-19	—	**16,000**	**3200**	40	**0.20**
S11	20-Mar-19	—	5000	**760**	**280**	**0.15**
S12	20-Mar-19	—	**11,000**	**2200**	**380**	**0.20**
S6[a]	22-Mar-19	—	1900	400	—	**0.21**
S11[a]	22-Mar-19	—	3400	**560**	**320**	**0.16**
S11[a]	23-Mar-19	—	1800	220	36	**0.12**
S4	26-Mar-19	—	3800	**1000**	**240**	**0.26**
S5	26-Mar-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S6	26-Mar-19	—	**13,000**	**2400**	**1100**	**0.18**
S9	26-Mar-19	—	20	6	**220**	0.30
S10	26-Mar-19	—	**16,000**	**7000**	**3400**	**0.44**
S11	26-Mar-19	—	**11,000**	**3200**	**1400**	**0.29**
S5[a]	28-Mar-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S10[a]	28-Mar-19	—	5000	**1000**	**720**	**0.20**
S11[a]	28-Mar-19	—	**16,000**	**8200**	**2600**	**0.51**
S5[a]	29-Mar-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S10[a]	29-Mar-19	—	1300	100	**400**	0.08
S5[a]	31-Mar-19	—	1100	180	**120**	**0.16**
S4	2-Apr-19	—	1600	**600**	86	**0.38**

[a]Resample

Addendum 3-2 *continued*

Station Group	Date	Depth (m)	Total	Fecal	Entero	F:T
S5	2-Apr-19	—	560	96	**160**	0.17
S10	2-Apr-19	—	840	**560**	100	0.67
S6	1-May-19	—	3200	**520**	86	**0.16**
S9	1-May-19	—	840	320	**240**	0.38
S12	1-May-19	—	9000	**2200**	**120**	**0.24**
S6[a]	3-May-19	—	8600	**680**	—	0.08
S12[a]	3-May-19	—	5000	**480**	24	0.10
S5	14-May-19	—	1600	200	8	**0.13**
S8	14-May-19	—	9000	**580**	40	0.06
S12	14-May-19	—	**13,000**	**800**	32	0.06
S4	21-May-19	—	**16,000**	**6800**	**1600**	**0.43**
S5	21-May-19	—	**16,000**	**12,000**	**8800**	**0.75**
S10	21-May-19	—	**16,000**	**10,000**	**2000**	**0.63**
S5[a]	23-May-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S10[a]	23-May-19	—	3800	**940**	100	**0.25**
S5[a]	25-May-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S5[a]	27-May-19	—	**16,000**	**12,000**	**7200**	**0.75**
S5	28-May-19	—	**16,000**	**9000**	**1600**	**0.56**
S5[a]	30-May-19	—	3800	400	28	**0.11**
S9	4-Jun-19	—	2800	**1400**	80	**0.50**
S9	15-Oct-19	—	100	32	**500**	0.32
S4	26-Nov-19	—	**16,000**	**3000**	**300**	**0.19**
S5	26-Nov-19	—	2200	280	40	**0.13**
S6	26-Nov-19	—	9400	**880**	**440**	0.09
S10	26-Nov-19	—	**16,000**	**11,000**	**2800**	**0.69**
S11	26-Nov-19	—	**16,000**	400	**120**	0.03
S12	26-Nov-19	—	**16,000**	**1800**	**520**	**0.11**
S4[a]	27-Nov-19	—	**16,000**	**4000**	**740**	**0.25**
S5[a]	27-Nov-19	—	**16,000**	**3600**	—	**0.23**
S6[a]	27-Nov-19	—	—	**2800**	**180**	—
S10[a]	27-Nov-19	—	9600	**1400**	**500**	**0.15**
S11[a]	27-Nov-19	—	**16,000**	—	**240**	—
S12[a]	27-Nov-19	—	200	—	**160**	—

[a]Resample

Addendum 3-2 *continued*

Station Group	Date	Depth (m)	Total	Fecal	Entero	F:T
S12[a]	28-Nov-19	—	—	**640**	—	—
S4[a]	29-Nov-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S5[a]	29-Nov-19	—	**16,000**	**12,000**	—	**0.75**
S6[a]	29-Nov-19	—	—	**12,000**	**12,000**	—
S10[a]	29-Nov-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S11[a]	29-Nov-19	—	**16,000**	—	**12,000**	—
S12[a]	29-Nov-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S4[a]	1-Dec-19	—	600	20	**120**	0.03
S5[a]	1-Dec-19	—	**16,000**	**12,000**	—	**0.75**
S6[a]	1-Dec-19	—	—	**2400**	**1000**	—
S10[a]	1-Dec-19	—	2600	380	**320**	**0.15**
S11[a]	1-Dec-19	—	**16,000**	—	**3000**	—
S4	3-Dec-19	—	**16,000**	**3600**	**1000**	**0.23**
S5	3-Dec-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S6	3-Dec-19	—	460	34	**140**	0.07
S10	3-Dec-19	—	**16,000**	**5600**	**1200**	**0.35**
S11	3-Dec-19	—	540	98	**220**	0.18
S4[a]	5-Dec-19	—	7200	**900**	**1100**	**0.13**
S5[a]	5-Dec-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S6[a]	5-Dec-19	—	—	—	**14,000**	—
S10[a]	5-Dec-19	—	7800	**720**	**1400**	0.09
S11[a]	5-Dec-19	—	—	—	**12,000**	—
S4[a]	7-Dec-19	—	800	160	**160**	**0.20**
S5[a]	7-Dec-19	—	**16,000**	**1000**	**1200**	0.06
S6[a]	7-Dec-19	—	—	—	**800**	—
S10[a]	7-Dec-19	—	—	320	**340**	—
S11[a]	7-Dec-19	—	—	—	**600**	—
S4	9-Dec-19	—	**16,000**	**6000**	**1100**	**0.38**
S5	9-Dec-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S6	9-Dec-19	—	7400	**460**	**1000**	0.06
S10	9-Dec-19	—	**16,000**	**13,000**	**2200**	**0.81**
S11	9-Dec-19	—	5000	**500**	**820**	0.10
S12	9-Dec-19	—	940	100	**160**	0.11
S5[a]	11-Dec-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S10[a]	11-Dec-19	—	2200	360	**110**	**0.16**
S11[a]	11-Dec-19	—	—	**3200**	**220**	—
S5[a]	13-Dec-19	—	1200	380	**640**	**0.32**
S10[a]	13-Dec-19	—	3200	400	**520**	**0.13**

[a]Resample

Addendum 3-2 *continued*

Station Group	Date	Depth (m)	Total	Fecal	Entero	F:T
S11[a]	13-Dec-19	—	—	40	**200**	—
S5[a]	15-Dec-19	—	600	240	**240**	**0.40**
S10[a]	15-Dec-19	—	460	160	**120**	**0.35**
S4	17-Dec-19	—	8600	**4200**	**420**	**0.49**
S5	17-Dec-19	—	**16,000**	**12,000**	**8000**	**0.75**
S10	17-Dec-19	—	**16,000**	**6000**	**1000**	**0.38**
S4[a]	19-Dec-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S5[a]	19-Dec-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S10[a]	19-Dec-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S4[a]	20-Dec-19	—	**16,000**	**12,000**	**4600**	**0.75**
S5[a]	20-Dec-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S10[a]	20-Dec-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S4[a]	22-Dec-19	—	4800	**800**	**220**	**0.17**
S5[a]	22-Dec-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S10[a]	22-Dec-19	—	2600	**720**	**300**	**0.28**
S5	23-Dec-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S6	23-Dec-19	—	5000	**800**	**500**	**0.16**
S11	23-Dec-19	—	1600	**1100**	**360**	**0.69**
S12	23-Dec-19	—	1800	**920**	**800**	**0.51**
S5[a]	24-Dec-19	—	**16,000**	**12,000**	**12,000**	**0.75**
S6[a]	24-Dec-19	—	**16,000**	**3200**	**4400**	**0.20**
S11[a]	24-Dec-19	—	**16,000**	**14,000**	**12,000**	**0.88**
S12[a]	24-Dec-19	—	**16,000**	**2600**	**2000**	**0.16**
S5[a]	25-Dec-19	—	**16,000**	**11,000**	**3200**	**0.69**
S6[a]	25-Dec-19	—	1600	300	**160**	**0.19**
S11[a]	25-Dec-19	—	**16,000**	**1200**	**2400**	0.08
S12[a]	25-Dec-19	—	3600	360	200	0.10
S4	26-Dec-19	—	**10,000**	3000	3200	0.30
S10	26-Dec-19	—	**16,000**	3800	5000	0.24
S4[a]	27-Dec-19	—	**16,000**	**6400**	**11,000**	**0.40**
S5[a]	27-Dec-19	—	**16,000**	**8800**	**11,000**	**0.55**
S6[a]	27-Dec-19	—	**16,000**	**7200**	**12,000**	**0.45**
S10[a]	27-Dec-19	—	**16,000**	**6200**	**12,000**	**0.39**
S11[a]	27-Dec-19	—	**16,000**	**7800**	**12,000**	**0.49**
S12[a]	27-Dec-19	—	—	—	**8200**	—

[a]Resample

Addendum 3-2 *continued*

Station Group	Date	Depth (m)	Total	Fecal	Entero	F:T
S4[a]	29-Dec-19	—	4400	**640**	**2600**	**0.15**
S5[a]	29-Dec-19	—	**16,000**	**4000**	**2800**	**0.25**
S6[a]	29-Dec-19	—	2000	320	**760**	**0.16**
S10[a]	29-Dec-19	—	**16,000**	**4600**	**2400**	**0.29**
S11[a]	29-Dec-19	—	5000	400	**2000**	0.08
S4	30-Dec-19	—	2000	68	**220**	0.03
S5	30-Dec-19	—	**16,000**	**1200**	**740**	0.08
S6	30-Dec-19	—	1600	60	**340**	0.04
S11	30-Dec-19	—	3600	280	**660**	0.08
Kelp Stations						
I40	2-Jan-19	6	7400	**440**	16	0.06
I40	2-Jan-19	9	5400	380	**280**	0.07
I19	7-Jan-19	11	4200	380	**140**	0.09
I24	7-Jan-19	11	1100	180	**160**	**0.16**
I39	7-Jan-19	2	1200	98	**160**	0.08
I39	7-Jan-19	12	3000	300	**320**	0.10
I39	7-Jan-19	18	1200	100	**140**	0.08
I40	7-Jan-19	2	680	98	**110**	0.14
I40	7-Jan-19	6	2200	180	**220**	0.08
I40	7-Jan-19	9	760	20	**120**	0.03
I19	14-Jan-19	6	1600	220	**120**	**0.14**
I19	14-Jan-19	11	1600	180	**260**	**0.11**
I26	14-Jan-19	2	**16,000**	**2800**	**520**	**0.18**
I26	14-Jan-19	6	**16,000**	**2000**	**360**	**0.13**
I26	14-Jan-19	9	**16,000**	**1800**	**740**	**0.11**
I32	14-Jan-19	9	2000	260	96	**0.13**
I40	14-Jan-19	2	**16,000**	**1000**	**220**	0.06
I40	14-Jan-19	6	7400	**960**	**280**	**0.13**
I40	14-Jan-19	9	2600	**540**	**120**	**0.21**
I19	23-Jan-19	6	1600	400	48	**0.25**
I24	23-Jan-19	2	**16,000**	**3000**	**220**	**0.19**
I24	23-Jan-19	6	**16,000**	**1200**	**320**	0.08
I24	23-Jan-19	11	1500	160	50	**0.11**
I40	23-Jan-19	2	**16,000**	**2000**	**220**	**0.13**
I40	23-Jan-19	6	**16,000**	**2200**	**220**	**0.14**
I24	28-Jan-19	2	1800	**720**	**720**	**0.40**
I40	28-Jan-19	2	2000	**440**	**140**	**0.22**
I19	7-Feb-19	2	1200	**460**	52	**0.38**
I24	7-Feb-19	6	2000	280	**140**	**0.14**

[a]Resample

Addendum 3-2 *continued*

Station Group	Date	Depth (m)	Total	Fecal	Entero	F:T
I24	7-Feb-19	11	400	48	**340**	0.12
I25	7-Feb-19	9	200	34	**120**	0.17
I26	7-Feb-19	6	120	12	**200**	0.10
I26	7-Feb-19	9	140	18	**220**	0.13
I32	7-Feb-19	9	200	32	**110**	0.16
I40	7-Feb-19	2	2600	**440**	**110**	**0.17**
I40	7-Feb-19	9	400	220	**180**	0.55
I19	11-Feb-19	2	7200	**1000**	100	**0.14**
I19	19-Feb-19	11	1000	62	**140**	0.06
I40	19-Feb-19	2	**16,000**	**1400**	**1200**	0.09
I40	19-Feb-19	6	1300	36	**180**	0.03
I40	19-Feb-19	9	1000	64	**180**	0.06
I25	25-Feb-19	2	2200	**420**	46	**0.19**
I19	4-Mar-19	6	1500	**680**	14	**0.45**
I40	4-Mar-19	2	**16,000**	**12,000**	**12,000**	**0.75**
I40	4-Mar-19	6	**14,000**	**3600**	100	**0.26**
I19	11-Mar-19	2	**16,000**	**2200**	**680**	**0.14**
I19	11-Mar-19	6	**16,000**	20	100	0.00
I24	11-Mar-19	2	**16,000**	**6200**	**1000**	**0.39**
I25	11-Mar-19	2	**16,000**	**2200**	**580**	**0.14**
I40	11-Mar-19	2	**16,000**	**5000**	**560**	**0.31**
I39	18-Mar-19	2	7600	**740**	80	0.10
I40	18-Mar-19	2	1600	220	16	**0.14**
I19	25-Mar-19	11	5400	**840**	**140**	**0.16**
I40	25-Mar-19	2	2800	**3000**	**2000**	**1.07**
I40	25-Mar-19	6	9600	**2600**	**620**	**0.27**
I19	3-Apr-19	6	2000	400	100	**0.20**
I19	3-Apr-19	11	1300	**520**	100	**0.40**
I19	23-May-19	2	1400	320	26	**0.23**
I19	29-May-19	6	1600	300	16	**0.19**
I40	8-Jul-19	9	3600	**540**	100	**0.15**
I19	10-Sep-19	2	1200	240	**600**	**0.20**
I19	10-Sep-19	6	**11,000**	**480**	**1600**	0.04
I19	10-Sep-19	11	7600	220	**1000**	0.03
I19	25-Nov-19	6	1600	340	36	**0.21**

Addendum 3-2 *continued*

Station Group	Date	Depth (m)	Total	Fecal	Entero	F:T
I19	25-Nov-19	11	800	**500**	74	0.63
I24	25-Nov-19	2	**16,000**	**3400**	**400**	**0.21**
I24	25-Nov-19	6	**16,000**	**1400**	**200**	0.09
I24	25-Nov-19	11	3400	**600**	**200**	**0.18**
I25	25-Nov-19	2	**16,000**	**3000**	**300**	**0.19**
I25	25-Nov-19	6	**16,000**	**3800**	**240**	**0.24**
I25	25-Nov-19	9	5200	**580**	**140**	**0.11**
I26	25-Nov-19	2	**16,000**	**4000**	**300**	**0.25**
I26	25-Nov-19	6	**16,000**	**4000**	**620**	**0.25**
I26	25-Nov-19	9	**16,000**	**2600**	**220**	**0.16**
I32	25-Nov-19	9	320	64	**160**	0.20
I40	25-Nov-19	2	**11,000**	**1400**	**140**	**0.13**
I40	25-Nov-19	6	8400	**1400**	**240**	**0.17**
I40	25-Nov-19	9	7800	**800**	**200**	0.10
I19	2-Dec-19	6	1100	140	**520**	**0.13**
I19	2-Dec-19	11	600	84	**280**	0.14
I24	2-Dec-19	6	1400	240	92	**0.17**
I24	2-Dec-19	11	5600	**600**	**200**	**0.11**
I25	2-Dec-19	6	4800	**420**	**440**	0.09
I25	2-Dec-19	9	2000	340	**380**	**0.17**
I26	2-Dec-19	6	2600	60	**160**	0.02
I26	2-Dec-19	9	1600	140	**120**	0.09
I39	2-Dec-19	2	4800	**700**	**110**	**0.15**
I39	2-Dec-19	12	8800	**660**	84	0.08
I39	2-Dec-19	18	720	82	**130**	0.11
I40	2-Dec-19	2	**16,000**	**2800**	**560**	**0.18**
I40	2-Dec-19	6	**16,000**	**3600**	**800**	**0.23**
I40	2-Dec-19	9	9800	**1200**	**500**	**0.12**
I19	9-Dec-19	2	1400	240	**160**	**0.17**
I19	9-Dec-19	6	1600	180	**140**	**0.11**
I19	9-Dec-19	11	600	120	**160**	0.20
I24	9-Dec-19	2	**16,000**	**12,000**	**8000**	**0.75**
I24	9-Dec-19	11	1600	140	**110**	0.09
I32	9-Dec-19	9	3000	200	**300**	0.07
I40	9-Dec-19	2	**16,000**	**12,000**	**12,000**	**0.75**
I40	9-Dec-19	6	3200	680	**880**	**0.21**
I40	9-Dec-19	9	9200	**1000**	**1000**	**0.11**
I19	16-Dec-19	2	7400	**1600**	**180**	**0.22**
I19	16-Dec-19	6	4000	**920**	**320**	**0.23**
I19	16-Dec-19	11	400	66	**260**	0.17
I40	16-Dec-19	9	100	8	**160**	0.08
I19	22-Dec-19	2	2000	**600**	**160**	**0.30**
I19	22-Dec-19	6	3200	200	**180**	0.06

Addendum 3-2 *continued*

Station Group	Date	Depth (m)	Total	Fecal	Entero	F:T
I19	22-Dec-19	11	1400	360	82	**0.26**
I40	22-Dec-19	2	**16,000**	**12,000**	**13,000**	**0.75**
I40	22-Dec-19	6	3600	**1200**	**240**	**0.33**
I40	22-Dec-19	9	1800	**520**	**140**	**0.29**
Offshore Stations South of the USA/Mexico Border						
I11	12-Feb-19	6	1100	180	26	**0.16**
I30	15-Feb-19	18	8000	**1100**	**800**	**0.14**
I5	12-Aug-19	2	5000	**760**	**420**	**0.15**
Offshore Stations North of the USA/Mexico Border						
I36	15-Feb-19	2	760	100	**150**	0.13
I36	15-Feb-19	6	**10,000**	**800**	**1400**	0.08
I36	15-Feb-19	11	**16,000**	**1400**	**2200**	0.09
I38	15-Feb-19	2	**16,000**	**3000**	**3200**	**0.19**
I38	15-Feb-19	6	**13,000**	**520**	**1600**	0.04
I38	15-Feb-19	11	4800	300	**480**	0.06

Addendum 3-3

Summary of PLOO and SBOO reference stations used during 2019 to calculate out-of-range thresholds (see text for details).

2019	Stations
February	
PLOO	A1, A6, A7, C7, F01, F02, F04, F05, F06, F14, F24, F25, F27, F28, F35, F36
SBOO	I1, I2, I6, I8, I9, I10, I13, I17, I18, I20, I21, I28, I33
May	
PLOO	A1, A6, A7, C7, C8, F01, F02, F03, F04, F21, F29, F36
SBOO	I1, I2, I3, I6, I7, I8, I13, I14, I15, I20, I21, I39
August	
PLOO	A1, F06, F09, F18, F24, F25, F35, F36
SBOO	I1, I2, I7, I8, I9, I10, I17, I18, I20, I21, I22, I28, I31, I39
November	
PLOO	A1, A6, A7, F01, F05, F06, F07, F08, F10, F11, F14, F25, F27, F28, F29, F36
SBOO	I1, I2, I6, I8, I9, I10, I13, I14, I15, I16, I17, I20, I21, I22, I27

Addendum 3-4

Summary of oceanographic data within potential detected plume at PLOO offshore stations and corresponding reference values during 2019. Plume depth is the minimum depth at which CDOM exceeds the 95th percentile while plume width is the number of meters across which that exceedance occurs. Out-of-range values are indicated with an asterisk. DO = dissolved oxygen; XMS = transmissivity; SD = standard deviation; CI = confidence interval.

		Potential Plume					Reference		
Station	Date	Width (m)	Depth (m)	Mean DO	Mean pH	Mean XMS	DO (Mean - SD)	pH (Mean)	XMS (Mean - 95% CI)
F30	5-Mar-19	19	66	3.8	7.8	86	4.0	7.8	85
F31	5-Mar-19	13	83	3.7	7.8	86*	3.9	7.8	87
F32	5-Mar-19	7	89	3.7	7.8	87*	3.8	7.8	87
F33	5-Mar-19	3	86	3.9	7.8	87	4.0	7.8	87
F10[a]	6-Mar-19	1	58	4.0	7.8	81*	4.4	7.9	84
F11[a]	6-Mar-19	9	50	4.0*	7.8	82*	4.5	7.9	85
F12[a]	6-Mar-19	22	39	4.1*	7.8	84*	4.7	8.0	86
F19[a]	7-Mar-19	11	71	3.5*	7.8	86	4.0	7.9	82
F20[a]	7-Mar-19	3	73	3.7	7.8	83	4.0	7.8	81
F21	7-Mar-19	4	79	3.6	7.8	80*	4.0	7.8	83
F22	7-Mar-19	2	78	3.7	7.8	81	3.8	7.9	81
F23	7-Mar-19	4	71	4.0	7.8	86	4.1	7.9	82
F30	7-May-19	36	57	3.5*	7.7	86	3.9	7.8	84
F31	7-May-19	9	72	3.8	7.7	87	3.8	7.8	81
F32	7-May-19	2	69	4.2	7.8	87*	4.1	7.8	88
F34	7-May-19	2	59	4.1	7.8	87	4.1	7.8	85
F07[a]	8-May-19	11	46	4.1	7.8	85*	4.2	7.8	87
F08[a]	8-May-19	12	47	4.1	7.8	84*	4.1	7.8	86
F09[a]	8-May-19	12	48	4.2	7.8	80*	4.1	7.8	86
F10[a]	8-May-19	6	54	4.2	7.8	84*	4.0	7.8	85
F11[a]	8-May-19	3	56	4.2	7.8	77*	3.9	7.8	84
F12[a]	8-May-19	4	55	4.2	7.8	82*	3.9	7.8	84

[a] Station located within State jurisdictional waters

Addendum 3-4 *continued*

		Potential Plume					Reference		
Station	Date	Width (m)	Depth (m)	Mean DO	Mean pH	Mean XMS	DO (Mean - SD)	pH (Mean)	XMS (Mean - 95% CI)
F13[a]	8-May-19	10	49	4.1	7.8	82*	4.1	7.8	86
F14[a]	8-May-19	1	50	4.4	7.8	84*	4.3	7.9	87
F22	9-May-19	1	58	4.1	7.8	82*	3.9	7.8	84
F23	9-May-19	13	56	4.1	7.8	84*	4.1	7.8	86
F28	7-Aug-19	1	50	8.0	8.2	77	7.7	8.2	77
F30	7-Aug-19	32	55	4.3	8.0	83*	4.6	7.9	86
F30	5-Nov-19	29	49	5.2	7.9	84*	5.7	8.0	86
F32	5-Nov-19	8	71	4.9	7.8	85*	5.3	7.9	86
F34	5-Nov-19	11	67	4.9	7.8	85*	5.3	7.9	86
F35	5-Nov-19	7	68	5.0	7.8	86*	5.3	7.9	87
F13[a]	6-Nov-19	1	36	6.7	8.0	86	7.2	8.1	84
F21	7-Nov-19	10	35	5.6	7.9	86	5.6	7.9	86

[a]Station located within State jurisdictional waters

Addendum 3-5

Summary of oceanographic data within potential detected plume at SBOO offshore stations and corresponding reference values during 2019. Plume depth is the minimum depth at which CDOM exceeds the 95th percentile while plume width is the number of meters across which that exceedance occurs. Out-of-range values are indicated with an asterisk. DO = dissolved oxygen; XMS = transmissivity; SD = standard deviation; CI = confidence interval.

		Potential Plume					Reference		
Station	Date	Width (m)	Depth (m)	Mean DO	Mean pH	Mean XMS	DO (Mean - SD)	pH (Mean)	XMS (Mean - 95% CI)
I39[a]	11-Feb-19	3	2	7.6	8.2	82*	7.6	8.1	85
I12[a]	13-Feb-19	8	2	7.8	8.1	86	7.7	8.1	85
I22[a]	13-Feb-19	1	25	6.5	8.0	87	7.2	8.1	85
I27[a]	13-Feb-19	2	2	7.2	8.1	85	7.6	8.1	85
I30	15-Feb-19	2	2	8.1	8.2	78*	7.9	8.1	85
I31[a]	15-Feb-19	7	2	8.0	8.2	50*	7.8	8.1	84
I34[a]	15-Feb-19	1	3	7.9	8.1	80*	7.8	8.1	85
I35[a]	15-Feb-19	3	2	8.0	8.2	70*	7.8	8.1	85
I9	14-May-19	1	13	8.6	8.2	84	8.3	8.2	84
I29	15-May-19	2	10	8.6	8.2	83*	8.4	8.2	86
I18[a]	16-May-19	5	10	8.1	8.1	78*	8.3	8.2	85
I27[a]	16-May-19	1	10	8.0	8.1	81*	8.3	8.2	86
I3	12-Aug-19	1	13	6.2	8.1	69	6.3	8.1	77
I14[a]	13-Aug-19	3	8	7.5	8.1	73*	7.4	8.2	74
I15	13-Aug-19	5	10	5.9*	8.1	77	6.8	8.1	76
I16[a]	13-Aug-19	5	8	7.7	8.2	72*	7.5	8.2	74
I29	14-Aug-19	1	14	6.9	8.1	72*	6.0	8.1	77
I30	14-Aug-19	3	17	4.6*	8.0	75*	5.6	8.1	78

[a]Station located within State jurisdictional waters

Addendum 3-5 *continued*

		Potential Plume					Reference		
Station	**Date**	**Width (m)**	**Depth (m)**	**Mean DO**	**Mean pH**	**Mean XMS**	**DO (Mean - SD)**	**pH (Mean)**	**XMS (Mean - 95% CI)**
I12[a]	14-Nov-19	4	19	7.9	8.1	84	7.6	8.1	83
I34[a]	15-Nov-19	1	2	8.1	8.2	81*	8.1	8.2	82

[a] Station located within State jurisdictional waters

Addendum 4

Sediment Quality

2019 Raw Data

Addendum 4-1

Summary of particle size parameters (%) for each PLOO station sampled during winter 2019. Visual observations are from sieved "grunge" (i.e., particles retained on 1-mm mesh screen and preserved with infauna for benthic community analysis). Gran = Granules; VCS = Very Coarse Sand; CS = Coarse Sand; MS = Medium Sand; FS = Fine Sand; VFS = Very Fine Sand; CSi = Coarse Silt; MSi = Medium Silt; FSi = Fine Silt; VFSi = Very Fine Silt.

		Coarse Particles			Med-Coarse Sands			Fine Sands			Fine Particles						
		Gran	VCS	Total	CS	MS	Total	FS	VFS	Total	CSi	MSi	FSi	VFSi	Clay	Total	Visual Observations
88-m Stations	B11	0.0	2.2	2.2	3.8	4.4	8.2	9.6	20.6	30.2	16.3	14.1	22.3	6.6	0.2	59.4	shell hash
	B8	0.0	0.0	0.0	0.0	0.1	0.1	4.6	27.9	32.5	29.3	16.4	17.7	4.0	0.0	67.4	
	E19	0.0	0.0	0.0	0.0	0.1	0.1	7.0	33.5	40.5	24.8	12.8	17.4	4.4	0.0	59.4	shell hash
	E7	0.0	0.0	0.0	0.0	0.1	0.1	8.0	33.5	41.5	23.0	12.9	17.9	4.6	0.0	58.4	shell hash
	E1	0.0	0.0	0.0	0.0	1.6	1.6	12.2	27.8	40.0	21.6	14.4	17.9	4.6	0.0	58.5	shell hash
98-m Stations	B12	0.0	0.0	0.0	0.0	1.3	1.3	7.9	16.9	24.8	16.0	19.2	31.0	7.5	0.1	73.9	shell hash
	B9	0.0	0.0	0.0	0.0	0.2	0.2	8.8	30.5	39.3	21.5	14.0	19.7	5.2	0.1	60.5	pea gravel
	E26	0.0	0.0	0.0	0.0	0.1	0.1	8.4	33.7	42.1	20.9	11.9	19.3	5.6	0.1	57.8	organics; shell hash
	E25	0.0	0.0	0.0	0.0	0.7	0.7	12.7	39.0	51.7	19.6	9.5	14.4	4.1	0.0	47.6	shell hash
	E23	0.0	0.0	0.0	0.0	0.2	0.2	10.1	37.2	47.3	20.8	11.4	16.3	4.0	0.0	52.5	organics; shell hash
	E20	0.0	0.0	0.0	0.0	0.2	0.2	10.3	38.5	48.8	22.6	11.2	13.8	3.3	0.0	50.9	organics; shell hash
	E17[a]	0.0	0.0	0.0	0.0	0.2	0.2	11.5	39.7	51.2	19.9	10.3	14.6	3.8	0.0	48.6	organics
	E14[a]	0.0	0.0	0.0	0.0	0.8	0.8	16.0	41.7	57.7	16.1	9.2	13.0	3.1	0.0	41.4	shell hash
	E11[a]	0.0	0.0	0.0	0.0	0.8	0.8	15.8	43.4	59.2	16.4	7.8	12.2	3.5	0.0	39.9	
	E8	0.0	0.0	0.0	0.0	0.5	0.5	12.0	37.9	49.9	19.4	10.7	15.5	4.0	0.0	49.6	
	E5	0.0	0.0	0.0	0.0	0.7	0.7	13.5	37.5	51.0	18.8	10.5	15.1	3.9	0.0	48.3	shell hash
	E2	0.0	0.0	0.0	0.0	2.1	2.1	16.2	34.3	50.5	20.2	10.4	13.3	3.6	0.0	47.5	shell hash
116-m Stations	B10	0.0	0.0	0.0	0.0	1.2	1.2	16.0	38.4	54.4	16.4	9.9	14.4	3.6	0.0	44.4	shell hash
	E21	0.0	0.0	0.0	0.0	0.5	0.5	14.1	45.0	59.1	18.3	8.3	11.0	2.8	0.0	40.4	organics
	E15[a]	0.0	0.0	0.0	0.0	0.5	0.5	12.9	40.1	53.0	18.4	10.3	14.3	3.4	0.0	46.4	worm tubes
	E9	0.3	4.3	4.7	4.1	3.7	7.8	12.3	31.4	43.7	15.9	8.5	14.3	5.0	0.1	43.8	black sand; shell hash
	E3	0.0	2.3	2.3	8.2	15.3	23.5	21.0	14.7	35.7	11.5	8.7	12.3	5.7	0.3	38.5	shell hash

[a] Near-ZID station

Addendum 4-1 *continued*

Summary of particle size parameters (%) for each PLOO station sampled during summer 2019. Visual observations are from sieved "grunge" (i.e., particles retained on 1-mm mesh screen and preserved with infauna for benthic community analysis). Gran = Granules; VCS = Very Coarse Sand; CS = Coarse Sand; MS = Medium Sand; FS = Fine Sand; VFS = Very Fine Sand; CSi = Coarse Silt; MSi = Medium Silt; FSi = Fine Silt; VFSi = Very Fine Silt.

		Coarse Particles			Med-Coarse Sands			Fine Sands			Fine Particles						
		Gran	VCS	Total	CS	MS	Total	FS	VFS	Total	CSi	MSi	FSi	VFSi	Clay	Total	Visual Observations
88-m Stations	B11	0.0	0.0	0.0	0.0	0.7	0.7	5.6	13.7	19.3	16.6	21.4	33.6	8.2	0.1	79.9	shell hash, gravel
	B8	0.0	0.0	0.0	0.0	0.1	0.1	3.1	16.1	19.2	21.9	22.6	30.0	6.3	0.0	80.8	
	E19	0.0	0.0	0.0	0.0	0.1	0.1	6.4	27.3	33.7	24.1	16.5	21.1	4.5	0.0	66.2	
	E7	0.0	0.0	0.0	0.0	0.1	0.1	6.7	27.3	34.0	22.7	15.8	22.1	5.2	0.0	65.8	
	E1	0.0	0.0	0.0	0.0	0.9	0.9	10.8	26.0	36.8	19.9	15.6	21.8	5.0	0.0	62.3	shell hash, gravel
98-m Stations	B12	0.0	0.0	0.0	0.7	6.6	7.2	7.1	14.6	21.7	15.2	17.8	29.5	8.3	0.2	71.0	shell hash, gravel
	B9	0.0	0.0	0.0	0.0	0.5	0.5	7.4	23.2	30.6	19.6	16.9	25.8	6.5	0.1	68.9	pea gravel
	E26	0.0	0.0	0.0	0.0	0.1	0.1	6.5	27.1	33.6	23.2	16.6	21.7	4.8	0.0	66.3	
	E25	0.0	0.0	0.0	0.0	0.2	0.2	8.4	27.2	35.6	19.2	14.9	23.9	6.2	0.1	64.3	shell hash
	E23	0.0	0.0	0.0	0.0	0.2	0.2	8.6	30.9	39.5	22.2	14.9	19.1	4.1	0.0	60.3	
	E20	0.0	0.0	0.0	0.0	0.2	0.2	8.6	31.4	40.0	21.1	14.1	19.9	4.7	0.0	59.8	
	E17[a]	5.6	8.3	13.9	0.2	0.3	0.5	9.8	32.5	42.3	15.7	9.9	16.6	4.4	0.0	46.6	worm tubes
	E14[a]	0.0	0.0	0.0	0.0	0.6	0.6	12.2	31.7	43.9	15.3	12.7	22.0	5.5	0.0	55.5	black sand
	E11[a]	0.0	0.0	0.0	0.0	0.5	0.5	9.8	31.0	40.8	19.5	13.8	20.5	4.9	0.0	58.7	
	E8	0.0	0.0	0.0	0.0	0.8	0.8	9.9	27.0	36.9	20.0	16.2	21.7	4.5	0.0	62.4	
	E5	0.0	0.0	0.0	0.0	1.4	1.4	12.1	29.5	41.6	19.7	14.0	18.9	4.4	0.0	57.0	
	E2	0.0	0.0	0.0	0.0	1.4	1.4	10.5	25.2	35.7	20.1	15.8	21.8	5.3	0.0	63.0	shell hash
116-m Stations	B10	0.0	0.0	0.0	0.0	0.8	0.8	14.0	29.6	43.6	14.6	12.6	22.2	6.0	0.1	55.5	shell hash
	E21	0.0	0.0	0.0	0.0	0.7	0.7	10.8	34.0	44.8	21.4	12.9	16.4	3.7	0.0	54.4	
	E15[a]	0.0	0.0	0.0	0.0	0.6	0.6	10.7	32.5	43.2	18.7	12.9	19.7	5.0	0.0	56.3	black sand
	E9	0.0	0.0	0.0	0.0	0.6	0.6	10.1	29.5	39.6	18.2	13.1	22.2	6.1	0.1	59.7	black sand
	E3[s]	1.8	4.0	5.8	7.7	13.3	21.0	37.0	18.3	55.3	18.0	—	—	—	—	18.0	shell hash, gravel

[a] Near-ZID station; [s] measured by sieve (not Horiba; silt and clay fractions are indistinguishable)

Addendum 4-2

Summary of particle size parameters (%) for each SBOO station sampled during winter 2019. Visual observations are from sieved "grunge" (i.e., particles retained on 1-mm mesh screen and preserved with infauna for benthic community analysis). Gran = Granules; VCS = Very Coarse Sand; CS = Coarse Sand; MS = Medium Sand; FS = Fine Sand; VFS = Very Fine Sand; CSi = Coarse Silt; MSi = Medium Silt; FSi = Fine Silt; VFSi = Very Fine Silt.

		Coarse Particles			Med-Coarse Sands			Fine Sands			Fine Particles						
		Gran	VCS	Total	CS	MS	Total	FS	VFS	Total	CSi	MSi	FSi	VFSi	Clay	Total	Visual Observations
19-m Stations	I35	0.0	0.0	0.0	0.0	1.6	1.6	16.3	41.8	58.1	24.1	8.5	6.4	1.4	0.0	40.4	worm tubes; organics
	I34[s]	25.2	18.4	43.6	23.4	22.8	46.2	7.0	0.2	7.2	3.0	—	—	—	—	3.0	shell hash; red relict sand
	I31	0.0	0.0	0.0	0.0	0.2	0.2	17.2	75.8	93.0	4.6	0.0	0.6	1.5	0.2	6.8	
	I23	0.0	3.1	3.1	6.5	4.4	10.9	16.1	32.9	49.0	10.1	6.5	14.0	6.3	0.2	37.1	
	I18	0.0	0.0	0.0	0.0	0.7	0.7	19.9	70.9	90.8	5.8	0.0	0.9	1.6	0.1	8.4	shell hash
	I10	0.0	0.0	0.0	0.0	1.7	1.7	24.9	65.9	90.8	4.8	0.0	1.1	1.6	0.1	7.6	
	I4	0.0	0.0	0.0	0.0	0.1	0.1	1.3	3.4	4.7	8.0	19.3	42.3	21.7	4.0	95.3	shell hash, gravel, cobble
28-m Stations	I33	0.0	0.0	0.0	0.0	4.6	4.6	35.2	40.9	76.1	5.6	2.8	7.0	3.9	0.1	19.3	
	I30	0.0	0.0	0.0	0.0	0.7	0.7	14.1	64.4	78.5	14.5	1.6	2.7	1.9	0.1	20.8	
	I27	0.0	0.0	0.0	0.0	0.6	0.6	13.6	67.9	81.5	12.5	0.9	2.1	2.3	0.2	17.9	
	I22	0.0	0.0	0.0	0.0	2.5	2.5	22.7	57.7	80.4	10.9	1.2	2.6	2.2	0.1	17.0	
	I14[a]	0.0	0.0	0.0	0.0	1.8	1.8	19.2	61.7	80.9	12.0	0.9	2.2	2.1	0.1	17.4	
	I16[a]	0.0	1.7	1.7	18.0	41.5	59.5	29.5	5.6	35.1	1.2	0.9	1.2	0.3	0.0	3.6	
	I15[a]	0.0	0.7	0.7	18.7	60.5	79.2	15.8	2.2	18.0	0.9	0.6	0.7	0.0	0.0	2.1	
	I12[a]	0.0	0.1	0.1	10.6	44.7	55.3	27.5	13.2	40.7	2.2	0.6	0.9	0.2	0.0	3.9	shell hash
	I9	0.0	0.0	0.0	0.0	0.6	0.6	14.6	64.3	78.9	14.1	1.5	2.8	2.0	0.1	20.5	
	I6	0.0	3.2	3.2	37.9	49.6	87.5	8.3	1.0	9.3	0.0	0.0	0.0	0.0	0.0	0.0	shell hash
	I2	0.0	0.5	0.5	14.2	58.7	72.9	24.9	1.7	26.6	0.0	0.0	0.0	0.0	0.0	0.0	
	I3	0.0	0.0	0.0	0.5	4.8	5.3	4.5	5.1	9.6	6.7	18.4	45.1	14.5	0.5	85.2	shell hash; red relict sand
38-m Stations	I29	1.1	5.8	6.8	3.0	3.5	6.6	13.2	34.2	47.4	17.1	7.7	11.1	3.3	0.0	39.3	red relict sand
	I21	0.0	4.2	4.2	43.5	46.0	89.5	6.0	0.3	6.3	0.0	0.0	0.0	0.0	0.0	0.0	
	I13	0.0	5.2	5.2	49.5	41.5	91.0	3.7	0.1	3.7	0.0	0.0	0.0	0.0	0.0	0.0	shell hash
	I8	0.0	9.0	9.0	66.1	20.4	86.5	1.4	0.0	1.4	0.3	1.1	1.3	0.3	0.0	3.0	
55-m Stations	I28	1.5	9.6	11.1	2.9	2.6	5.6	5.2	10.1	15.3	10.5	15.9	31.0	10.2	0.4	68.0	pea gravel
	I20	1.0	25.9	26.9	43.0	13.9	56.9	6.9	1.9	8.8	1.5	2.0	3.0	0.8	0.0	7.3	red relict sand
	I7	0.0	0.4	0.4	16.3	65.5	81.8	5.3	0.7	6.0	0.7	2.4	6.2	2.6	0.0	11.9	red relict sand
	I1	0.0	0.0	0.0	0.0	7.1	7.1	52.3	31.2	83.5	3.0	1.3	3.2	2.0	0.0	9.5	

[a] Near-ZID station; [s] measured by sieve (not Horiba; silt and clay fractions are indistinguishable)

Addendum 4-2 *continued*

Summary of particle size parameters (%) for each SBOO station sampled during summer 2019. Visual observations are from sieved "grunge" (i.e., particles retained on 1-mm mesh screen and preserved with infauna for benthic community analysis). Gran = Granules; VCS = Very Coarse Sand; CS = Coarse Sand; MS = Medium Sand; FS = Fine Sand; VFS = Very Fine Sand; CSi = Coarse Silt; MSi = Medium Silt; FSi = Fine Silt; VFSi = Very Fine Silt.

		Coarse Particles			Med-Coarse Sands			Fine Sands			Fine Particles						
		Gran	VCS	Total	CS	MS	Total	FS	VFS	Total	CSi	MSi	FSi	VFSi	Clay	Total	Visual Observations
19-m Stations	I35	0.0	0.0	0.0	0.0	1.5	1.5	14.8	40.0	54.8	22.7	9.4	9.4	2.2	0.0	43.7	
	I34	0.0	2.6	2.6	28.8	53.8	82.6	12.7	1.2	13.9	0.0	0.1	0.6	0.0	0.0	0.8	shell hash
	I31	0.0	0.0	0.0	0.0	0.5	0.5	18.9	70.5	89.4	5.2	0.1	2.1	2.5	0.2	10.1	
	I23[s]	12.5	17.0	29.5	39.6	26.5	66.1	1.3	0.6	1.9	2.5	—	—	—	—	2.5	shell hash
	I18	0.0	0.0	0.0	0.0	0.5	0.5	18.0	72.4	90.4	5.7	0.0	1.3	1.9	0.1	9.0	
	I10	0.0	0.0	0.0	0.0	2.9	2.9	28.8	57.7	86.5	5.2	0.8	2.5	2.1	0.0	10.5	
	I4[s]	0.0	0.0	0.0	0.0	4.5	4.5	25.7	55.1	80.8	7.9	1.4	3.3	2.2	0.0	14.7	
28-m Stations	I33	0.0	0.0	0.0	0.0	3.7	3.7	32.7	40.1	72.8	6.6	4.2	8.8	3.8	0.0	23.5	
	I30	0.0	0.0	0.0	0.0	0.7	0.7	15.1	56.5	71.6	15.2	4.1	6.2	2.2	0.0	27.7	
	I27	0.0	0.0	0.0	0.0	0.6	0.6	13.8	66.5	80.3	12.8	1.1	2.6	2.4	0.1	19.1	organics
	I22	0.0	0.0	0.0	0.0	2.9	2.9	25.2	54.1	79.3	9.9	1.6	3.7	2.6	0.1	17.8	
	I14[a]	0.0	0.0	0.0	0.0	3.0	3.0	19.9	43.2	63.1	15.7	5.5	9.1	3.7	0.0	34.0	
	I16[a]	5.0	3.8	8.8	11.6	41.0	52.6	17.3	6.3	23.6	4.0	2.2	9.3	0.6	0.0	16.1	
	I15[a]	0.0	0.0	0.0	3.5	22.6	26.1	32.8	28.9	61.7	8.3	1.2	1.6	1.0	0.0	12.1	
	I12[a]	0.0	1.4	1.4	19.7	52.6	72.3	17.4	3.6	21.0	1.5	1.5	1.9	0.5	0.0	5.4	
	I9	0.0	0.0	0.0	0.0	0.9	0.9	16.1	59.1	75.2	14.5	2.5	4.6	2.4	0.0	24.0	
	I6	1.3	11.0	12.3	50.6	30.2	80.8	4.3	1.0	5.3	0.9	0.8	0.8	0.0	0.0	2.5	shell hash
	I2	0.0	0.5	0.5	12.6	54.8	67.4	28.0	2.5	30.5	0.2	0.5	0.8	0.1	0.0	1.7	
	I3	0.0	1.5	1.5	18.8	57.7	76.5	20.8	1.3	22.1	0.0	0.0	0.0	0.0	0.0	0.0	
38-m Stations	I29	0.0	2.0	2.0	5.7	4.6	10.3	12.9	36.6	49.5	18.7	7.0	9.6	3.0	0.0	38.3	
	I21	0.5	6.8	7.3	54.0	35.1	89.1	2.7	0.2	2.9	0.0	0.4	0.8	0.1	0.0	1.2	
	I13	1.3	11.2	12.5	62.6	24.0	86.6	1.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	shell hash
	I8	0.0	0.4	0.4	14.1	55.0	69.1	22.9	3.4	26.3	1.0	1.2	1.7	0.3	0.0	4.2	
55-m Stations	I28	2.8	9.7	12.4	16.1	6.8	22.9	7.4	15.1	22.5	10.7	10.4	17.9	4.9	0.0	43.9	pea gravel
	I20	0.0	0.0	0.0	1.9	6.8	8.7	3.5	5.4	8.8	10.4	24.8	39.8	7.5	0.0	82.5	red relict sand, shell hash
	I7	0.0	0.4	0.4	11.5	16.5	28.0	5.0	5.1	10.1	6.5	15.7	31.7	7.6	0.1	61.5	red relict sand, shell hash
	I1	0.0	0.0	0.0	0.0	3.8	3.8	45.4	37.5	82.9	4.1	1.9	4.7	2.6	0.0	13.3	

[a] Near-ZID station; [s] measured by sieve (not Horiba; silt and clay fractions are indistinguishable)

Addendum 4-3

Concentrations of organic loading indicators detected in sediments from PLOO stations sampled during winter and summer 2019. See Appendix F.1 for MDLs; nd = not detected.

	Winter					Summer				
	BOD (ppm)	Sulfides (ppm)	TN (% wt)	TOC (% wt)	TVS (% wt)	BOD (ppm)	Sulfides (ppm)	TN (% wt)	TOC (% wt)	TVS (% wt)
88-m Stations										
B11	—	4.11	0.100	1.07	3.7	—	2.37	0.091	2.43	3.5
B8	—	1.44	0.077	0.70	2.8	—	2.34	0.069	0.79	2.9
E19	—	2.51	0.067	0.66	2.2	—	2.86	0.051	0.58	2.3
E7	—	1.44	0.066	0.74	2.1	—	3.91	0.040	0.52	2.1
E1	—	0.44	0.059	0.66	1.8	—	1.56	0.047	0.57	2.1
98-m Stations										
B12	—	0.81	0.076	1.21	2.8	448	1.72	0.051	3.27	2.9
B9	—	2.42	0.068	0.67	2.5	261	6.59	0.056	0.89	2.5
E26	—	nd	0.067	0.67	2.2	217	1.35	0.053	0.60	2.3
E25	—	nd	0.043	0.43	1.8	271	1.76	0.042	0.47	2.0
E23	—	0.57	0.057	0.57	1.9	287	1.72	0.049	0.51	2.0
E20	—	nd	0.062	0.61	1.9	243	0.83	0.040	0.44	1.6
E17[a]	—	nd	0.053	0.44	1.7	181	3.10	0.042	0.44	1.7
E14[a]	—	22.40	0.039	0.31	1.6	271	3.31	0.031	0.34	1.4
E11[a]	—	3.71	0.040	0.32	1.8	270	1.49	0.039	0.51	1.7
E8	—	1.44	0.049	0.42	1.7	212	2.20	0.039	0.53	1.9
E5	—	3.26	0.044	0.38	1.8	202	2.10	0.045	0.52	1.9
E2	—	3.35	0.054	0.48	2.3	293	2.02	0.053	0.75	2.5
116-m Stations										
B10	—	3.29	0.047	0.40	1.9	—	1.70	0.044	1.08	2.1
E21	—	nd	0.045	0.44	1.7	—	0.44	0.040	0.42	1.7
E15[a]	—	nd	0.047	0.46	1.9	—	1.61	0.042	0.54	1.9
E9	—	2.39	0.052	0.44	1.9	—	1.36	0.047	1.21	2.1
E3	—	2.46	0.049	0.57	1.4	—	1.83	0.033	0.48	1.7
Detection Rate (%)	—	73	100	100	100	100	100	100	100	100

[a] Near-ZID station

Addendum 4-4

Concentrations of organic indicators detected in sediments from SBOO stations sampled during winter and summer 2019. See Appendix F.1 for MDLs; nd = not detected.

	Winter				Summer			
	Sulfides (ppm)	TN (% wt)	TOC (% wt)	TVS (% wt)	Sulfides (ppm)	TN (% wt)	TOC (% wt)	TVS (% wt)
19-m Stations								
I35	4.83	0.032	0.31	1.3	3.05	0.032	0.30	1.4
I34	0.86	nd	0.91	0.7	0.82	nd	0.12	0.5
I31	0.40	nd	0.10	0.5	nd	nd	0.15	0.7
I23	nd	nd	0.13	0.8	1.61	0.024	1.84	1.0
I18	0.65	nd	0.14	0.6	nd	nd	0.15	0.6
I10	nd	nd	0.14	0.7	nd	nd	0.16	0.8
I4	nd	nd	nd	0.3	nd	nd	0.15	0.7
28-m Stations								
I33	1.96	0.026	0.19	1.3	4.16	0.023	0.27	1.3
I30	3.13	0.020	0.19	0.9	1.94	0.024	0.24	1.0
I27	0.94	0.023	0.19	0.8	1.58	nd	0.18	1.0
I22	nd	0.021	0.17	0.7	nd	0.022	0.21	0.8
I14 [a]	1.40	0.028	0.25	1.0	2.33	0.024	0.19	1.0
I16 [a]	0.70	nd	0.14	0.6	1.22	nd	0.12	0.6
I15 [a]	nd	nd	0.17	0.4	1.40	nd	0.18	0.6
I12 [a]	nd	nd	0.12	0.4	0.51	nd	0.12	0.5
I9	2.08	0.026	0.23	1.0	nd	0.026	0.24	1.0
I6	nd	nd	0.09	0.4	nd	nd	0.13	0.4
I2	nd	nd	nd	0.4	nd	nd	0.09	0.4
I3	nd	nd	nd	0.3	nd	nd	0.09	0.3
38-m Stations								
I29	0.99	0.027	0.27	1.1	0.82	0.030	0.33	1.6
I21	nd	nd	nd	0.5	nd	nd	0.15	0.5
I13	nd	nd	nd	0.4	nd	nd	0.09	0.4
I8	nd	nd	0.10	0.4	nd	nd	0.13	0.5
55-m Stations								
I28	1.03	0.050	0.50	1.6	2.41	0.062	0.86	1.3
I20	nd	nd	0.16	0.5	nd	0.023	0.22	0.4
I7	nd	nd	nd	0.4	nd	nd	0.15	0.5
I1	nd	0.024	0.18	0.9	nd	0.023	0.20	1.0
Detection Rate (%)	44	37	78	100	44	41	100	100

[a] Near-ZID station

Addendum 4-5

Concentrations of trace metals (ppm) detected in sediments from PLOO stations sampled during winter 2019. See Appendix F.1 for MDLs; nd = not detected; na = not available.

	Al	Sb	As	Ba	Be	Cd	Cr	Cu	Fe	Pb	Mn	Hg	Ni	Se	Ag	Tl	Sn	Zn
88-m Stations																		
B11	7950	nd	2.24	30.8	0.25	0.05	21.1	6.8	17,000	4.4	115.0	0.024	6.4	nd	nd	nd	0.8	34.3
B8	9040	nd	2.41	39.4	0.23	nd	19.6	4.9	13,100	4.9	105.0	0.033	7.8	nd	nd	nd	0.9	30.8
E19	10,200	nd	3.09	35.9	0.19	0.05	17.8	4.2	12,200	4.0	103.0	0.025	6.7	nd	nd	nd	0.9	27.4
E7	8590	nd	3.11	34.9	0.19	0.05	16.6	4.1	10,800	3.7	93.4	0.027	6.4	nd	nd	nd	0.9	28.4
E1	7990	nd	2.97	35.8	0.18	0.02	15.0	4.5	10,400	4.3	84.7	0.033	5.5	nd	nd	nd	0.9	27.2
98-m Stations																		
B12	6840	nd	5.07	14.9	0.27	0.03	25.4	5.8	20,800	3.1	59.3	0.010	4.0	nd	nd	nd	0.5	31.9
B9	8890	nd	2.90	35.0	0.22	0.04	19.7	3.8	14,000	3.5	92.7	0.021	5.9	nd	nd	nd	0.7	28.4
E26	9420	nd	2.89	31.5	0.18	0.05	16.7	3.9	11,400	3.7	96.2	0.023	6.4	nd	nd	nd	0.8	25.4
E25	7600	nd	2.62	23.2	0.15	0.04	13.6	2.7	9350	2.9	80.4	0.016	4.9	nd	nd	nd	0.6	20.4
E23	8920	nd	2.92	27.7	0.17	0.05	15.9	4.0	10,700	3.4	89.1	0.022	6.0	nd	nd	nd	0.8	23.6
E20	7920	nd	3.08	24.7	0.16	0.07	14.7	3.8	10,300	3.1	80.7	0.018	5.7	nd	nd	nd	0.6	22.0
E17[a]	6050	nd	1.83	21.8	0.14	0.07	13.4	5.0	8830	3.1	64.2	0.018	5.0	nd	nd	nd	0.6	20.9
E14[a]	4380	nd	1.57	16.0	0.11	0.08	10.6	3.9	6680	2.1	51.9	0.011	3.8	nd	nd	nd	0.4	16.4
E11[a]	5240	nd	1.38	18.7	0.12	0.07	11.6	4.0	7660	2.4	56.9	0.012	4.0	nd	nd	nd	0.5	18.1
E8	5500	nd	1.32	22.0	0.14	0.04	12.4	3.8	8130	2.8	63.9	0.015	4.5	nd	nd	nd	0.6	19.3
E5	5940	nd	1.61	24.5	0.15	0.05	12.7	3.2	8840	2.7	69.0	0.015	4.7	nd	nd	nd	0.5	20.2
E2	7530	nd	1.57	33.3	0.18	nd	15.4	5.1	11,400	3.9	84.4	0.029	5.4	nd	nd	nd	0.7	26.0
116-m Stations																		
B10	5110	nd	1.62	18.6	0.16	0.05	14.2	3.2	9700	2.6	57.3	0.011	3.9	nd	nd	nd	0.4	20.6
E21	6510	nd	2.42	19.7	0.13	0.07	12.6	3.1	8450	2.7	68.8	0.016	4.5	nd	nd	nd	0.5	18.2
E15[a]	6590	nd	2.55	19.2	0.14	0.06	13.0	3.7	8680	2.6	70.2	0.015	4.4	nd	nd	nd	0.5	19.1
E9	5170	nd	2.19	16.5	0.14	nd	15.0	6.0	10,500	3.2	51.4	0.012	3.6	nd	nd	nd	0.5	24.3
E3	7370	0.2	2.00	41.5	0.15	nd	12.8	6.1	10,200	6.7	84.6	0.031	3.7	nd	nd	nd	0.7	30.4
Detection Rate (%)	100	5	100	100	100	82	100	100	100	100	100	100	100	0	0	0	100	100
ERL[b]	na	na	8.2	na	na	1.2	81	34	na	46.7	na	0.15	20.9	na	1.0	na	na	150
ERM[b]	na	na	70.0	na	na	9.6	370	270	na	218	na	0.71	51.6	na	3.7	na	na	410

[a] Near-ZID station

[b] From Long et al. 1995

Addendum 4-5 *continued*

Concentrations of trace metals (ppm) detected in sediments from PLOO stations sampled during summer 2019. See Appendix F.1 for MDLs; nd = not detected; na = not available.

	Al	Sb	As	Ba	Be	Cd	Cr	Cu	Fe	Pb	Mn	Hg	Ni	Se	Ag	Tl	Sn	Zn
88-m Stations																		
B11	8970	1.6	4.17	34.2	nd	0.08	19.9	10.2	15,700	4.2	97.2	0.028	7.6	nd	nd	nd	0.8	32.6
B8	11,300	1.5	3.98	44.6	0.24	0.08	21.8	9.8	14,400	5.3	120.0	0.039	9.5	nd	nd	nd	1.1	36.3
E19	9020	1.1	3.34	38.8	0.20	0.08	17.6	7.8	11,700	4.1	101.0	0.034	7.6	nd	nd	nd	0.9	30.4
E7	8480	1.3	2.87	34.5	0.20	0.10	16.1	7.2	10,800	3.0	95.9	0.022	7.3	nd	nd	nd	0.7	26.7
E1	8320	1.1	3.32	36.9	0.17	0.06	15.5	8.2	11,000	6.9	88.7	0.044	6.6	nd	nd	nd	0.9	27.6
98-m Stations																		
B12	6380	1.6	5.30	19.2	0.29	0.07	25.2	6.7	20,900	3.1	57.8	0.013	5.0	nd	nd	nd	0.4	36.6
B9	8880	1.3	3.25	87.5	0.24	0.07	20.4	7.1	14,300	3.8	99.6	0.053	7.4	nd	nd	nd	0.7	34.4
E26	8360	1.2	2.88	32.2	0.19	0.08	16.5	6.7	11,100	3.6	87.8	0.033	6.9	nd	nd	nd	0.7	25.5
E25	7050	1.1	2.43	26.9	0.16	0.07	13.9	5.6	9480	2.9	78.8	0.018	5.7	nd	nd	nd	0.6	22.7
E23	7270	1.1	2.89	30.5	0.18	0.08	15.0	6.5	10,200	3.4	84.3	0.024	6.6	nd	nd	nd	0.7	24.9
E20	6700	1.0	2.38	26.3	0.16	0.09	13.6	5.8	9080	3.0	77.7	0.020	5.9	nd	nd	nd	0.6	22.5
E17[a]	6370	0.9	2.82	22.5	0.14	0.08	12.8	5.5	8430	2.8	70.0	0.020	5.3	nd	nd	nd	0.6	21.8
E14[a]	4780	0.7	2.32	17.0	0.11	0.09	10.5	4.4	6700	2.0	58.5	0.012	4.2	nd	nd	nd	0.5	17.5
E11[a]	6050	0.8	2.62	21.1	0.14	0.08	12.2	5.0	8170	2.5	67.1	0.014	4.9	nd	nd	nd	0.5	20.3
E8	6580	1.0	2.29	24.0	0.15	0.07	13.3	5.1	9160	2.5	69.5	0.018	5.0	nd	nd	nd	0.6	20.7
E5	6640	1.1	2.60	25.0	0.15	0.06	14.0	5.8	9580	3.0	68.6	0.022	5.5	nd	nd	nd	0.6	21.3
E2	9220	1.3	2.78	41.2	0.22	0.07	17.3	9.1	12,500	4.1	101.0	0.035	7.1	nd	nd	nd	0.8	31.7
116-m Stations																		
B10	5970	0.9	2.61	20.9	nd	0.07	15.8	5.2	10,800	2.7	65.3	0.017	4.7	nd	nd	nd	0.6	23.6
E21	6400	0.9	2.48	23.3	0.14	0.09	13.0	5.3	8460	2.9	71.7	0.019	5.5	nd	nd	nd	0.6	20.9
E15[a]	5270	0.8	2.06	18.9	nd	0.07	12.2	5.0	7710	2.6	59.7	0.016	4.8	nd	nd	nd	0.5	18.1
E9	6670	1.2	3.35	22.2	0.18	0.07	16.5	7.8	11,500	3.2	69.9	0.027	5.4	nd	nd	nd	0.6	29.2
E3	7810	1.2	2.76	45.7	0.17	0.04	13.1	9.8	11,200	5.9	86.0	0.040	5.0	nd	nd	nd	0.7	29.0
Detection Rate (%)	100	100	100	100	86	100	100	100	100	100	100	100	100	0	0	0	100	100
ERL[b]	na	na	8.2	na	na	1.2	81	34	na	46.7	na	0.15	20.9	na	1.0	na	na	150
ERM[b]	na	na	70.0	na	na	9.6	370	270	na	218	na	0.71	51.6	na	3.7	na	na	410

[a] Near-ZID station

[b] From Long et al. 1995

Addendum 4-6

Concentrations of trace metals (ppm) detected in sediments from SBOO stations sampled during winter 2019. See Appendix F.1 for MDLs; nd=not detected; na=not available.

	Al	Sb	As	Ba	Be	Cd	Cr	Cu	Fe	Pb	Mn	Hg	Ni	Se	Ag	Tl	Sn	Zn
19-m Stations																		
I35	7000	nd	2.38	34.1	0.13	0.04	12.4	nd	8370	2.6	93.6	0.019	3.4	nd	nd	nd	0.6	22.3
I34	1100	nd	2.62	3.4	0.02	nd	2.5	1.5	2460	1.4	27.9	nd	0.4	nd	nd	nd	0.1	4.1
I31	3010	nd	1.20	20.0	0.05	0.02	6.9	nd	3520	1.1	56.9	nd	1.0	nd	nd	nd	0.3	7.9
I23	3970	nd	1.52	22.8	0.07	nd	7.6	nd	4310	1.0	53.8	nd	1.4	nd	nd	nd	0.3	9.8
I18	4160	0.5	1.50	34.6	0.08	nd	10.2	1.9	5740	1.2	64.7	nd	1.6	nd	nd	nd	0.3	11.5
I10	4430	0.4	1.21	23.7	0.08	nd	9.4	2.2	5720	1.2	60.2	nd	1.8	nd	nd	nd	0.3	11.8
I4	798	0.2	1.18	2.3	0.03	nd	4.3	nd	1730	1.0	15.0	nd	0.4	nd	nd	nd	0.1	2.6
28-m Stations																		
I33	3980	0.4	1.53	18.7	0.08	nd	8.6	3.4	5810	2.5	67.5	0.010	1.7	nd	nd	nd	0.5	13.9
I30	5780	nd	1.73	26.9	0.10	0.03	10.4	nd	5890	1.5	60.8	nd	2.6	nd	nd	nd	0.3	15.7
I27	5230	nd	1.65	24.1	0.09	nd	9.5	nd	5480	1.2	59.3	nd	2.2	nd	nd	nd	0.3	13.7
I22	4800	0.2	1.31	27.1	0.09	nd	9.4	nd	5040	1.3	60.7	nd	2.3	nd	nd	nd	0.3	12.7
I14[a]	6120	0.6	1.53	34.1	0.10	0.02	10.7	2.9	6860	1.4	69.0	nd	2.7	nd	nd	nd	0.4	17.2
I16[a]	2530	0.4	1.43	11.0	0.06	0.02	7.2	nd	3860	1.2	36.4	nd	0.9	nd	nd	nd	0.2	9.0
I15[a]	1760	0.4	2.19	4.7	0.06	nd	8.2	nd	3930	1.4	19.5	nd	0.6	nd	nd	nd	0.1	7.1
I12[a]	2610	0.4	1.46	15.3	0.06	nd	6.9	nd	4030	1.0	36.9	nd	0.9	nd	nd	nd	0.2	8.5
I9	6840	0.7	1.64	37.9	0.11	nd	11.9	3.3	7550	1.1	74.8	nd	3.3	nd	nd	nd	0.4	19.2
I6	1010	0.4	4.46	2.4	0.04	0.03	8.0	nd	3800	1.5	10.4	nd	nd	nd	nd	nd	0.1	3.7
I2	955	0.2	0.83	1.8	0.02	0.03	5.2	nd	1140	0.8	9.8	nd	0.6	nd	nd	nd	0.1	2.2
I3	779	nd	1.98	1.5	0.03	0.02	5.6	nd	1930	0.8	9.4	nd	0.6	nd	nd	nd	0.1	2.6
38-m Stations																		
I29	4640	nd	2.30	20.9	0.10	0.02	10.0	1.3	6390	1.9	53.8	0.006	2.6	nd	nd	nd	0.4	13.6
I21	941	0.6	9.62	1.2	0.07	0.06	11.3	nd	8060	3.0	11.7	nd	nd	nd	nd	nd	0.1	5.7
I13	861	0.4	6.56	1.1	0.05	0.06	9.1	nd	5390	2.2	13.5	nd	nd	nd	nd	nd	0.1	4.6
I8	1310	0.3	2.14	2.4	0.05	nd	6.8	nd	3510	0.9	14.6	nd	0.4	nd	nd	nd	0.1	5.4
55-m Stations																		
I28	3220	0.3	1.88	12.7	0.08	nd	6.3	2.7	5240	1.8	35.8	0.008	2.8	nd	nd	nd	0.3	17.1
I20	1240	0.3	2.57	2.7	0.06	nd	5.0	nd	4360	1.4	15.8	nd	0.4	nd	nd	nd	0.1	6.1
I7	1250	0.6	6.45	1.3	0.05	0.04	8.7	nd	7030	2.1	16.3	nd	nd	nd	nd	nd	0.1	5.5
I1	2530	0.3	1.13	9.0	0.06	0.02	6.9	1.7	3600	1.5	38.0	0.005	2.1	nd	nd	nd	0.2	7.4
Detection Rate (%)	100	70	100	100	100	48	100	33	100	100	100	19	85	0	0	0	100	100
ERL[b]	na	na	8.2	na	na	1.2	81	34	na	46.7	na	na	20.9	na	1.0	na	na	150
ERM[b]	na	na	70.0	na	na	9.6	370	270	na	218	na	na	51.6	na	3.7	na	na	410

[a] Near-ZID station

[b] From Long et al. 1995

Addendum 4-6 *continued*

Concentrations of trace metals (ppm) detected in sediments from SBOO stations sampled during summer 2019. See Appendix F.1 for MDLs; nd=not detected; na=not available.

	Al	Sb	As	Ba	Be	Cd	Cr	Cu	Fe	Pb	Mn	Hg	Ni	Se	Ag	Tl	Sn	Zn
19-m Stations																		
I35	6900	1.0	1.66	36.6	nd	0.07	12.6	4.5	8690	3.0	83.2	0.015	3.9	nd	nd	nd	0.6	22.6
I34	1790	0.4	1.48	7.7	nd	nd	3.6	nd	2910	1.5	23.9	0.004	0.8	nd	nd	nd	0.1	5.9
I31	3410	0.5	0.64	12.9	0.06	0.03	7.5	1.6	3850	1.1	52.0	nd	1.7	nd	nd	nd	0.2	9.5
I23	1380	0.3	3.34	5.8	0.02	0.03	4.1	3.8	3570	1.8	26.1	nd	0.7	nd	nd	nd	0.1	6.3
I18	4300	0.8	0.74	37.7	nd	0.02	11.5	4.8	6180	1.2	66.4	nd	2.2	nd	nd	nd	0.3	13.1
I10	4930	0.7	0.99	27.5	0.09	0.03	9.4	2.6	5720	1.2	62.4	nd	2.6	nd	nd	nd	0.3	13.4
I4	3820	0.6	1.04	29.8	0.07	nd	9.9	2.4	5190	1.3	59.0	0.004	2.8	nd	nd	nd	0.3	10.2
28-m Stations																		
I33	4330	0.7	1.58	17.7	nd	0.03	8.3	3.3	5920	2.9	60.5	0.015	2.3	nd	nd	nd	0.5	14.8
I30	5790	0.6	1.30	28.0	0.10	0.05	10.8	3.1	6380	1.8	63.1	0.005	3.2	nd	nd	nd	0.3	16.3
I27	5670	0.7	1.00	28.6	0.10	0.06	10.4	3.0	6210	1.5	64.0	0.004	3.1	nd	nd	nd	0.3	16.4
I22	4970	0.6	1.09	23.4	0.09	0.03	10.0	2.5	5640	1.4	61.4	0.004	2.8	nd	nd	nd	0.3	13.4
I14[a]	6230	0.7	1.69	36.7	nd	0.03	11.1	3.6	6850	1.5	74.0	0.004	3.6	nd	nd	nd	0.3	16.9
I16[a]	2640	0.5	1.31	10.9	nd	0.03	6.8	1.2	3800	1.1	38.8	nd	1.4	nd	nd	nd	0.2	8.3
I15[a]	3740	0.6	1.90	15.3	nd	0.02	10.1	1.8	5450	1.4	48.4	nd	2.2	nd	nd	nd	0.3	11.7
I12[a]	3010	0.5	1.78	13.0	nd	nd	7.2	1.3	4450	1.1	43.6	nd	1.4	nd	nd	nd	0.2	9.2
I9	7500	0.8	1.01	39.8	0.13	0.03	12.6	3.9	8140	1.2	83.4	0.004	4.3	nd	nd	nd	0.4	21.2
I6	938	0.6	5.01	3.0	0.04	0.04	8.3	nd	3790	1.6	9.8	nd	0.7	nd	nd	nd	0.1	3.7
I2	971	0.3	0.85	2.0	0.02	0.02	5.2	nd	1130	0.9	6.9	nd	0.7	nd	nd	nd	nd	2.2
I3	741	0.2	0.84	1.3	0.02	nd	5.9	nd	1090	0.9	5.3	nd	0.6	nd	nd	nd	nd	1.7
38-m Stations																		
I29	7090	0.8	1.15	36.4	0.14	0.05	13.8	5.1	8910	2.7	81.6	0.015	5.2	nd	nd	nd	0.6	22.9
I21	1160	0.9	8.55	3.4	0.07	0.06	12.7	nd	8130	3.2	13.7	nd	0.8	nd	nd	nd	0.1	6.5
I13	984	0.6	7.01	2.6	0.06	0.05	10.0	nd	5870	2.4	14.4	nd	0.7	nd	nd	nd	0.1	5.6
I8	1820	0.4	1.86	4.6	0.06	0.02	9.4	nd	4240	1.2	22.7	nd	1.1	nd	nd	nd	0.1	7.6
55-m Stations																		
I28	4630	0.7	1.82	20.3	nd	0.05	9.2	4.2	6450	2.7	45.7	0.020	4.5	nd	nd	nd	0.4	15.4
I20	1370	0.4	2.74	4.7	0.06	0.02	4.4	nd	4420	1.4	18.8	nd	0.9	nd	nd	nd	0.1	5.9
I7	1220	0.6	5.10	3.1	0.06	0.04	7.8	nd	5840	2.1	15.4	nd	1.0	nd	nd	nd	0.1	5.5
I1	2470	0.5	0.84	8.7	0.06	0.07	6.6	1.6	3360	1.5	37.3	0.005	2.4	nd	nd	nd	0.2	7.2
Detection Rate (%)	100	100	100	100	67	85	100	67	100	100	100	44	100	0	0	0	93	100
ERL[b]	na	na	8.2	na	na	1.2	81	34	na	46.7	na	na	20.9	na	1.0	na	na	150
ERM[b]	na	na	70.0	na	na	9.6	370	270	na	218	na	na	51.6	na	3.7	na	na	410

[a] Near-ZID station

[b] From Long et al. 1995

Addendum 4-7

Concentrations of pesticides (ppt), PCB (ppt), and PAH (ppb) detected in sediments from PLOO stations sampled during winter and summer 2019. See Appendix F.1 for MDLs; tChlor = total chlordane; na = not available; nd = not detected; nr = not reportable; DR = detection rate.

	Winter						Summer					
	Pesticides						Pesticides					
	tChlor	tDDT	tHCH	HCB	tPCB	tPAH	tChlor	tDDT	tHCH	HCB	tPCB	tPAH
88-m Stations												
B11	nd	868	nd	nr	641	25[c]	nd	538	nd	nd	426	23[c]
B8	nd	932	nd	3250	1007	45	nd	769	nd	nd	860	42[c,g]
E19	5	672	nd	nr	808	43	nd	443	nd	nd	419	17[c]
E7	12	1042[f]	nd	nr	1090	32	nd	510	nd	nd	569	26[c]
E1	34	943[f]	nd	nr	2275	132[c]	32	586	nd	nd	2518	109[c,g]
98-m Stations												
B12	nd	442	nd	nr	323	16[c]	nd	384	nd	25	458	8[c]
B9	nd	848	nd	nr	486	16[c]	nd	865	nd	nd	428	17[c]
E26	nd	630	nd	nr	492	9[c]	nd	355	nd	190	286	12[c]
E25	nd	388	nd	nr	280	126[c]	nd	358	nd	nd	147	19[c]
E23	29	649	34	nr	1117	19[c]	nd	281	nd	nd	238	11[c]
E20	nd	535	12	nr	481	30	nd	289	nd	nd	270	13[c]
E17[a]	nd	431[f]	nd	nr	775	11	nd	215	nd	nd	340	11[c]
E14[a]	nd	429[f]	nd	nr	442	4	nd	190	nd	nd	145	9[c]
E11[a]	nd	384[f]	nd	nr	479	8	nd	176	nd	nd	157	17[c]
E8	nd	582[f]	nd	nr	591	14	10	273	nd	23	860	22[c]
E5	nd	619[f]	nd	nr	561	15	nd	372	nd	nd	419	28
E2	13	920[f]	nd	nr	1868	192[c]	13	725	nd	nd	1621	175[c,d,g]
116-m Stations												
B10	nd	620	nd	nr	419	3[c]	nd	284	nd	nd	189	15[c]
E21	nd	378	nd	nr	304	11[c]	nd	278	nd	nd	213	9[c]
E15[a]	nd	380	nd	nd	486	10	nd	239	nd	nd	193	11[c]
E9	nd	380[f]	nd	nr	1128	57	nd	331	nd	nd	723	25[c]
E3	549	727[f]	43[e]	nr	5054	363[c]	71	434	nd	nd	2783	221[c,d,g]
DR (%)	27	100	14	50	100	100	18	100	0	14	100	100
ERL[b]	na	1580	na	na	na	4022	na	1580	na	na	na	4022
ERM[b]	na	46,100	na	na	na	44,792	na	46,100	na	na	na	44,792

[a] Near-ZID station; [b] From Long et al. 1995; [c] missing bipheynl; [d] missing anthracene; [e] missing *beta*-HCH; [f] missing o,p-DDE; [g] missing phenanthrene

Addendum 4-8

Concentrations of pesticides (ppt), PCB (ppt) and PAH (ppb) detected in sediments from SBOO stations sampled during winter and summer 2019. See Appendix F.1 for MDLs; tChlor = total chlordane; na = not available; nd = not detected; nr = not reportable; DR = detection rate.

	Winter				Summer						
	Pesticides				Pesticides						
	tDDT	HCB	tPCB	tPAH	tChlor	tDDT	Dieldrin	tHCH	HCB	tPCB	tPAH
19-m Stations											
I35	288	nd	313	37	nd	178	nd	nd	nd	154	nr
I34	8	nd	nd	nd	nd	nd	nd	nd	nd	nd	nr
I31	37	nr	nd	nd[c]	nd	26	nd	nd	nd	nd	3[c,d]
I23	26	nr	nd	nd[c]	nd	10	nd	nd	509	nd	nd[c,d]
I18	21[e]	nr	nd[g]	29	nd	23	nd	nd	221	nd	4[c,d,h]
I10	17[e]	nr	nd[g]	nd[c]	nd	25	nd	nd	156	nd[f]	3[c]
I4	nd[e]	nr	nd[g]	nd[c]	nd	18	nd	nd	nd	nd	3[c]
28-m Stations											
I33	27	nd	9	9	nd	40	nd	nd	nd	33	nr
I30	104	nr	nd	6[c]	nd	94	nd	nd	nd	nd	5[c,d]
I27	83	nr	nd	4[c]	nd	200	nd	nd	nd	nd	4[c,d]
I22	93	nr	nd	3[c]	nd	48	nd	nd	nd	nd	4[c,d]
I14[a]	83[e]	nr	nd[g]	3	nd	82	nd	nd	nd	nd	5[c]
I16[a]	24[e]	nr	nd[g]	3	nd	29	nd	nd	113	nd	nd[c]
I15[a]	19[e]	nr	nd[g]	nd	nd	55	nd	nd	nd	941	3[c]
I12[a]	17[e]	1320	nd[g]	3	nd	4	nd	nd	nd	nd	1[c]
I9	43[e]	nr	nd[g]	5[c]	nd	62	nd	13	126	nd	5[c]
I6	nd[e]	nr	nd[g]	nd[c]	nd	90	nd	53	nd	200	nd[c]
I2	nd[e]	nr	nd[g]	nd[c]	80	53	60	134	618	nd	4[c]
I3	nd[e]	nr	nd[g]	nd[c]	nd	nd	nd	nd	nd	nd	nd
38-m Stations											
I29	919	nr	123	85	nd	945	nd	nd	2000	186	7[c,d]
I21	8[e]	nr	nd[g]	3	nd	17	nd	nd	nd	nd	nd[c,d]
I13	6[e]	nr	nd[g]	4[c]	nd	11	nd	nd	nd	nd	11[c]
I8	nd[e]	nr	nd[g]	nd[c]	nd	nd	nd	nd	473	nd	18[c]
55-m Stations											
I28	619	nd	297	29	nd	5753	nd	nd	22	801	nr
I20	36[e]	nr	nd[g]	4	nd	26	nd	nd	nd	nd	nd[c,d]
I7	nd[e]	nr	nd[g]	nd[c]	nd	nd	nd	nd	nd	nd	nd[c]
I1	23[e]	nr	nd[g]	nd[c]	nd	60	nd	nd	nd	nd	3[c]
DR (%)	78	20	15	56	4	85	4	11	33	22	70
ERL[b]	1580	na	na	4022	na	1580	na	na	na	na	4022
ERM[b]	46,100	na	na	44,792	na	46,100	na	na	na	na	44,792

[a] Near-ZID station; [b] From Long et al. 1995; [c] missing bipheynl; [d] missing acenaphthylene; [e] missing o,p-DDT; [f] missing PCB 18; [g] missing PCB 206; [h] phenanthrene

Addendum 4-9

Summary of the constituents that make up total chlordane, total DDT, total HCH, total PCB, and total PAH in sediments from the PLOO region during 2019; nd = not detected; nr = not reportable.

Station	Class	Constituent	Winter	Summer	Units
B8	DDT	o,p-DDD	24	18	ppt
B8	DDT	o,p-DDE	27	28	ppt
B8	DDT	o,p-DDT	28	22	ppt
B8	DDT	p,-p-DDMU	44	36	ppt
B8	DDT	p,p-DDD	59	52	ppt
B8	DDT	p,p-DDE	672	550	ppt
B8	DDT	p,p-DDT	78	63	ppt
B8	PAH	2,6-dimethylnaphthalene	6	9	ppb
B8	PAH	3,4-benzo(B)fluoranthene	6	10	ppb
B8	PAH	Benzo[A]pyrene	8	8	ppb
B8	PAH	Dibenzo(A,H)anthracene	5	nr	ppb
B8	PAH	Fluoranthene	6	nr	ppb
B8	PAH	Indeno(1,2,3-CD)pyrene	7	5	ppb
B8	PAH	Pyrene	7	10	ppb
B8	PCB	PCB 28	14	20	ppt
B8	PCB	PCB 44	13	15	ppt
B8	PCB	PCB 49	15	17	ppt
B8	PCB	PCB 52	20	25	ppt
B8	PCB	PCB 66	24	25	ppt
B8	PCB	PCB 70	21	21	ppt
B8	PCB	PCB 87	17	18	ppt
B8	PCB	PCB 99	34	34	ppt
B8	PCB	PCB 101	50	56	ppt
B8	PCB	PCB 105	nr	27	ppt
B8	PCB	PCB 110	55	57	ppt
B8	PCB	PCB 118	63	60	ppt
B8	PCB	PCB 128	21	18	ppt
B8	PCB	PCB 138	79	83	ppt
B8	PCB	PCB 149	60	72	ppt
B8	PCB	PCB 151	14	20	ppt
B8	PCB	PCB 153/168	103	111	ppt
B8	PCB	PCB 156	15	nr	ppt
B8	PCB	PCB 170	32	25	ppt
B8	PCB	PCB 177	17	19	ppt
B8	PCB	PCB 180	57	41	ppt
B8	PCB	PCB 183	15	nr	ppt
B8	PCB	PCB 187	50	40	ppt
B8	PCB	PCB 194	30	20	ppt
B8	PCB	PCB 206	190	38	ppt
B9	DDT	o,p-DDD	33	28	ppt
B9	DDT	o,p-DDE	25	26	ppt
B9	DDT	o,p-DDT	33	59	ppt
B9	DDT	p,-p-DDMU	40	39	ppt
B9	DDT	p,p-DDD	61	88	ppt
B9	DDT	p,p-DDE	558	433	ppt
B9	DDT	p,p-DDT	99	192	ppt
B9	PAH	2,6-dimethylnaphthalene	6	8	ppb
B9	PAH	Fluoranthene	4	nr	ppb
B9	PAH	Indeno(1,2,3-CD)pyrene	nr	4	ppb
B9	PAH	Pyrene	6	5	ppb
B9	PCB	PCB 28	nr	10	ppt
B9	PCB	PCB 44	nr	9	ppt

Addendum 4-9 *continued*

Station	Class	Constituent	Winter	Summer	Units
B9	PCB	PCB 49	10	10	ppt
B9	PCB	PCB 52	9	12	ppt
B9	PCB	PCB 66	15	14	ppt
B9	PCB	PCB 70	10	13	ppt
B9	PCB	PCB 87	9	nr	ppt
B9	PCB	PCB 99	23	19	ppt
B9	PCB	PCB 101	26	25	ppt
B9	PCB	PCB 105	14	15	ppt
B9	PCB	PCB 110	30	23	ppt
B9	PCB	PCB 118	37	32	ppt
B9	PCB	PCB 128	16	nr	ppt
B9	PCB	PCB 138	52	48	ppt
B9	PCB	PCB 149	38	40	ppt
B9	PCB	PCB 151	nr	11	ppt
B9	PCB	PCB 153/168	67	60	ppt
B9	PCB	PCB 170	18	14	ppt
B9	PCB	PCB 177	12	12	ppt
B9	PCB	PCB 180	29	25	ppt
B9	PCB	PCB 187	27	nr	ppt
B9	PCB	PCB 194	16	15	ppt
B9	PCB	PCB 206	29	23	ppt
B10	DDT	o,p-DDE	16	11	ppt
B10	DDT	p,-p-DDMU	20	13	ppt
B10	DDT	p,p-DDD	40	16	ppt
B10	DDT	p,p-DDE	335	225	ppt
B10	DDT	p,p-DDT	208	19	ppt
B10	PAH	2,6-dimethylnaphthalene	3	8	ppb
B10	PAH	Fluoranthene	nr	4	ppb
B10	PAH	Pyrene	nr	3	ppb
B10	PCB	PCB 52	12	nr	ppt
B10	PCB	PCB 70	11	nr	ppt
B10	PCB	PCB 87	14	nr	ppt
B10	PCB	PCB 99	18	13	ppt
B10	PCB	PCB 101	33	15	ppt
B10	PCB	PCB 105	17	10	ppt
B10	PCB	PCB 110	41	10	ppt
B10	PCB	PCB 118	37	17	ppt
B10	PCB	PCB 138	52	28	ppt
B10	PCB	PCB 149	38	20	ppt
B10	PCB	PCB 153/168	62	35	ppt
B10	PCB	PCB 170	15	nr	ppt
B10	PCB	PCB 177	12	nr	ppt
B10	PCB	PCB 187	18	13	ppt
B10	PCB	PCB 194	10	nr	ppt
B10	PCB	PCB 206	28	27	ppt
B11	DDT	o,p-DDD	23	13	ppt
B11	DDT	o,p-DDE	28	21	ppt
B11	DDT	o,p-DDT	24	13	ppt
B11	DDT	p,-p-DDMU	35	23	ppt
B11	DDT	p,p-DDD	50	29	ppt
B11	DDT	p,p-DDE	632	376	ppt
B11	DDT	p,p-DDT	77	62	ppt
B11	PAH	2,6-dimethylnaphthalene	4	7	ppb

Addendum 4-9 *continued*

Station	Class	Constituent	Winter	Summer	Units
B11	PAH	Benzo[G,H,I]perylene	9	6	ppb
B11	PAH	Fluoranthene	5	5	ppb
B11	PAH	Pyrene	6	5	ppb
B11	PCB	PCB 28	12	nr	ppt
B11	PCB	PCB 49	13	nr	ppt
B11	PCB	PCB 52	15	nr	ppt
B11	PCB	PCB 66	17	13	ppt
B11	PCB	PCB 70	15	11	ppt
B11	PCB	PCB 87	15	nr	ppt
B11	PCB	PCB 99	31	26	ppt
B11	PCB	PCB 101	37	24	ppt
B11	PCB	PCB 110	41	25	ppt
B11	PCB	PCB 118	50	34	ppt
B11	PCB	PCB 128	20	nr	ppt
B11	PCB	PCB 138	74	51	ppt
B11	PCB	PCB 149	47	36	ppt
B11	PCB	PCB 151	11	nr	ppt
B11	PCB	PCB 153/168	89	69	ppt
B11	PCB	PCB 156	11	nr	ppt
B11	PCB	PCB 170	27	17	ppt
B11	PCB	PCB 177	21	13	ppt
B11	PCB	PCB 180	nr	19	ppt
B11	PCB	PCB 187	45	30	ppt
B11	PCB	PCB 194	18	14	ppt
B11	PCB	PCB 206	31	45	ppt
B12	DDT	o,p-DDD	11	nr	ppt
B12	DDT	o,p-DDE	20	24	ppt
B12	DDT	o,p-DDT	nr	14	ppt
B12	DDT	p,-p-DDMU	16	24	ppt
B12	DDT	p,p-DDD	22	20	ppt
B12	DDT	p,p-DDE	348	277	ppt
B12	DDT	p,p-DDT	24	25	ppt
B12	PAH	1-methylphenanthrene	3	nr	ppb
B12	PAH	2-methylnaphthalene	3	nr	ppb
B12	PAH	2,6-dimethylnaphthalene	5	5	ppb
B12	PAH	Naphthalene	5	nr	ppb
B12	PAH	Pyrene	nr	3	ppb
B12	PCB	PCB 28	nr	12	ppt
B12	PCB	PCB 37	nr	12	ppt
B12	PCB	PCB 44	nr	15	ppt
B12	PCB	PCB 49	nr	13	ppt
B12	PCB	PCB 52	nr	20	ppt
B12	PCB	PCB 66	10	19	ppt
B12	PCB	PCB 70	nr	18	ppt
B12	PCB	PCB 74	nr	12	ppt
B12	PCB	PCB 77	nr	11	ppt
B12	PCB	PCB 81	nr	10	ppt
B12	PCB	PCB 87	nr	17	ppt
B12	PCB	PCB 99	16	23	ppt
B12	PCB	PCB 101	17	30	ppt
B12	PCB	PCB 105	nr	18	ppt
B12	PCB	PCB 110	18	25	ppt
B12	PCB	PCB 118	21	29	ppt
B12	PCB	PCB 128	10	9	ppt

Addendum 4-9 *continued*

Station	Class	Constituent	Winter	Summer	Units
B12	PCB	PCB 138	35	40	ppt
B12	PCB	PCB 149	30	31	ppt
B12	PCB	PCB 151	nr	14	ppt
B12	PCB	PCB 153/168	51	49	ppt
B12	PCB	PCB 170	14	9	ppt
B12	PCB	PCB 177	18	nr	ppt
B12	PCB	PCB 187	42	nr	ppt
B12	PCB	PCB 194	15	nr	ppt
B12	PCB	PCB 206	28	22	ppt
E1	Chlordane	Alpha(cis)Chlordane	19	nr	ppt
E1	Chlordane	Gamma(trans)Chlordane	16	32	ppt
E1	DDT	o,p-DDD	30	22	ppt
E1	DDT	o,p-DDE	nr	16	ppt
E1	DDT	o,p-DDT	33	nr	ppt
E1	DDT	p,-p-DDMU	44	26	ppt
E1	DDT	p,p-DDD	79	66	ppt
E1	DDT	p,p-DDE	660	398	ppt
E1	DDT	p,p-DDT	97	59	ppt
E1	PAH	2-methylnaphthalene	2	nr	ppb
E1	PAH	2,6-dimethylnaphthalene	7	7	ppb
E1	PAH	3,4-benzo(B)fluoranthene	20	18	ppb
E1	PAH	Benzo[A]pyrene	15	13	ppb
E1	PAH	Benzo[e]pyrene	13	11	ppb
E1	PAH	Benzo[G,H,I]perylene	15	11	ppb
E1	PAH	Benzo[K]fluoranthene	7	7	ppb
E1	PAH	Chrysene	nr	12	ppb
E1	PAH	Fluoranthene	12	10	ppb
E1	PAH	Indeno(1,2,3-CD)pyrene	11	9	ppb
E1	PAH	Naphthalene	1	nr	ppb
E1	PAH	Perylene	5	nr	ppb
E1	PAH	Phenanthrene	7	nr	ppb
E1	PAH	Pyrene	17	12	ppb
E1	PCB	PCB 28	24	15	ppt
E1	PCB	PCB 44	22	18	ppt
E1	PCB	PCB 49	40	32	ppt
E1	PCB	PCB 52	42	38	ppt
E1	PCB	PCB 66	51	37	ppt
E1	PCB	PCB 70	41	32	ppt
E1	PCB	PCB 74	19	14	ppt
E1	PCB	PCB 77	10	nr	ppt
E1	PCB	PCB 87	41	38	ppt
E1	PCB	PCB 99	93	72	ppt
E1	PCB	PCB 101	140	160	ppt
E1	PCB	PCB 105	60	46	ppt
E1	PCB	PCB 110	140	120	ppt
E1	PCB	PCB 118	150	120	ppt
E1	PCB	PCB 119	14	9	ppt
E1	PCB	PCB 123	16	nr	ppt
E1	PCB	PCB 128	59	44	ppt
E1	PCB	PCB 138	200	240	ppt
E1	PCB	PCB 149	200	270	ppt
E1	PCB	PCB 151	44	80	ppt
E1	PCB	PCB 153/168	290	360	ppt
E1	PCB	PCB 156	34	27	ppt

Addendum 4-9 *continued*

Station	Class	Constituent	Winter	Summer	Units
E1	PCB	PCB 158	22	26	ppt
E1	PCB	PCB 167	13	nr	ppt
E1	PCB	PCB 170	69	100	ppt
E1	PCB	PCB 177	53	72	ppt
E1	PCB	PCB 180	130	220	ppt
E1	PCB	PCB 183	33	52	ppt
E1	PCB	PCB 187	120	150	ppt
E1	PCB	PCB 194	42	69	ppt
E1	PCB	PCB 206	63	58	ppt
E2	Chlordane	Gamma(trans)Chlordane	13	13	ppt
E2	DDT	o,p-DDD	27	24	ppt
E2	DDT	o,p-DDE	nr	23	ppt
E2	DDT	o,p-DDT	37	22	ppt
E2	DDT	p,-p-DDMU	49	42	ppt
E2	DDT	p,p-DDD	75	46	ppt
E2	DDT	p,p-DDE	587	505	ppt
E2	DDT	p,p-DDT	145	63	ppt
E2	PAH	2-methylnaphthalene	nr	3	ppb
E2	PAH	2,6-dimethylnaphthalene	7	10	ppb
E2	PAH	3,4-benzo(B)fluoranthene	25	25	ppb
E2	PAH	Acenaphthylene	nr	4	ppb
E2	PAH	Anthracene	8	nr	ppb
E2	PAH	Benzo[A]anthracene	6	nr	ppb
E2	PAH	Benzo[A]pyrene	18	17	ppb
E2	PAH	Benzo[e]pyrene	14	14	ppb
E2	PAH	Benzo[G,H,I]perylene	15	15	ppb
E2	PAH	Benzo[K]fluoranthene	8	11	ppb
E2	PAH	Chrysene	19	12	ppb
E2	PAH	Dibenzo(A,H)anthracene	nr	8	ppb
E2	PAH	Fluoranthene	22	15	ppb
E2	PAH	Indeno(1,2,3-CD)pyrene	11	13	ppb
E2	PAH	Naphthalene	nr	4	ppb
E2	PAH	Perylene	4	9	ppb
E2	PAH	Phenanthrene	11	nr	ppb
E2	PAH	Pyrene	23	16	ppb
E2	PCB	PCB 28	17	27	ppt
E2	PCB	PCB 37	nr	9	ppt
E2	PCB	PCB 44	17	19	ppt
E2	PCB	PCB 49	36	36	ppt
E2	PCB	PCB 52	36	36	ppt
E2	PCB	PCB 66	45	45	ppt
E2	PCB	PCB 70	34	34	ppt
E2	PCB	PCB 74	15	14	ppt
E2	PCB	PCB 77	10	nr	ppt
E2	PCB	PCB 87	35	26	ppt
E2	PCB	PCB 99	86	78	ppt
E2	PCB	PCB 101	120	97	ppt
E2	PCB	PCB 105	52	43	ppt
E2	PCB	PCB 110	130	96	ppt
E2	PCB	PCB 118	130	120	ppt
E2	PCB	PCB 119	12	nr	ppt
E2	PCB	PCB 123	15	12	ppt
E2	PCB	PCB 128	51	43	ppt
E2	PCB	PCB 138	170	150	ppt

Addendum 4-9 *continued*

Station	Class	Constituent	Winter	Summer	Units
E2	PCB	PCB 149	140	130	ppt
E2	PCB	PCB 151	32	26	ppt
E2	PCB	PCB 153/168	240	210	ppt
E2	PCB	PCB 156	30	18	ppt
E2	PCB	PCB 158	18	14	ppt
E2	PCB	PCB 170	54	39	ppt
E2	PCB	PCB 177	34	30	ppt
E2	PCB	PCB 18	nr	15	ppt
E2	PCB	PCB 180	100	98	ppt
E2	PCB	PCB 183	28	nr	ppt
E2	PCB	PCB 187	95	78	ppt
E2	PCB	PCB 194	33	31	ppt
E2	PCB	PCB 206	54	49	ppt
E3	Chlordane	Alpha(cis)Chlordane	152	nr	ppt
E3	Chlordane	CisNonachlor	73	nr	ppt
E3	Chlordane	Gamma(trans)Chlordane	192	41	ppt
E3	Chlordane	Heptachlor	13	nr	ppt
E3	Chlordane	Heptachlor.epoxide	15	nr	ppt
E3	Chlordane	TransNonachlor	103	29	ppt
E3	DDT	o,p-DDD	57	29	ppt
E3	DDT	o,p-DDE	nr	13	ppt
E3	DDT	p,-p-DDMU	43	23	ppt
E3	DDT	p,p-DDD	173	82	ppt
E3	DDT	p,p-DDE	374	253	ppt
E3	DDT	p,p-DDT	80	34	ppt
E3	HCH	HCH, Alpha isomer	27	nr	ppt
E3	HCH	HCH, Gamma isomer	16	nr	ppt
E3	PAH	1-methylphenanthrene	nr	5	ppb
E3	PAH	2-methylnaphthalene	nr	5	ppb
E3	PAH	2,6-dimethylnaphthalene	5	12	ppb
E3	PAH	3,4-benzo(B)fluoranthene	43	31	ppb
E3	PAH	Acenaphthene	2	5	ppb
E3	PAH	Acenaphthylene	1	6	ppb
E3	PAH	Anthracene	11	nr	ppb
E3	PAH	Benzo[A]anthracene	14	nr	ppb
E3	PAH	Benzo[A]pyrene	35	22	ppb
E3	PAH	Benzo[e]pyrene	24	18	ppb
E3	PAH	Benzo[G,H,I]perylene	27	18	ppb
E3	PAH	Benzo[K]fluoranthene	16	16	ppb
E3	PAH	Chrysene	27	17	ppb
E3	PAH	Dibenzo(A,H)anthracene	nr	8	ppb
E3	PAH	Fluoranthene	45	17	ppb
E3	PAH	Indeno(1,2,3-CD)pyrene	22	15	ppb
E3	PAH	Naphthalene	2	8	ppb
E3	PAH	Perylene	8	nr	ppb
E3	PAH	Phenanthrene	32	nr	ppb
E3	PAH	Pyrene	50	20	ppb
E3	PCB	PCB 28	71	44	ppt
E3	PCB	PCB 37	15	12	ppt
E3	PCB	PCB 44	110	90	ppt
E3	PCB	PCB 49	100	75	ppt
E3	PCB	PCB 52	170	120	ppt
E3	PCB	PCB 66	160	97	ppt
E3	PCB	PCB 70	150	110	ppt

Addendum 4-9 *continued*

Station	Class	Constituent	Winter	Summer	Units
E3	PCB	PCB 74	68	43	ppt
E3	PCB	PCB 77	21	13	ppt
E3	PCB	PCB 87	160	56	ppt
E3	PCB	PCB 99	200	110	ppt
E3	PCB	PCB 101	390	180	ppt
E3	PCB	PCB 105	160	80	ppt
E3	PCB	PCB 110	440	190	ppt
E3	PCB	PCB 118	400	190	ppt
E3	PCB	PCB 119	24	12	ppt
E3	PCB	PCB 123	37	19	ppt
E3	PCB	PCB 128	100	56	ppt
E3	PCB	PCB 138	420	220	ppt
E3	PCB	PCB 149	340	190	ppt
E3	PCB	PCB 151	78	46	ppt
E3	PCB	PCB 153/168	540	290	ppt
E3	PCB	PCB 156	68	26	ppt
E3	PCB	PCB 157	17	nr	ppt
E3	PCB	PCB 158	43	20	ppt
E3	PCB	PCB 167	26	12	ppt
E3	PCB	PCB 170	100	50	ppt
E3	PCB	PCB 177	66	34	ppt
E3	PCB	PCB 18	nr	32	ppt
E3	PCB	PCB 180	220	120	ppt
E3	PCB	PCB 183	51	27	ppt
E3	PCB	PCB 187	170	87	ppt
E3	PCB	PCB 194	61	34	ppt
E3	PCB	PCB 206	79	100	ppt
E5	DDT	o,p-DDD	13	nr	ppt
E5	DDT	o,p-DDE	nr	9	ppt
E5	DDT	o,p-DDT	42	22	ppt
E5	DDT	p,-p-DDMU	23	15	ppt
E5	DDT	p,p-DDD	37	31	ppt
E5	DDT	p,p-DDE	384	227	ppt
E5	DDT	p,p-DDT	120	68	ppt
E5	PAH	2,6-dimethylnaphthalene	nr	6	ppb
E5	PAH	3,4-benzo(B)fluoranthene	nr	8	ppb
E5	PAH	Biphenyl	7	nr	ppb
E5	PAH	Chrysene	nr	6	ppb
E5	PAH	Fluoranthene	4	nr	ppb
E5	PAH	Indeno(1,2,3-CD)pyrene	nr	2	ppb
E5	PAH	Pyrene	4	5	ppb
E5	PCB	PCB 28	nr	9	ppt
E5	PCB	PCB 49	10	9	ppt
E5	PCB	PCB 52	11	11	ppt
E5	PCB	PCB 66	16	13	ppt
E5	PCB	PCB 70	12	10	ppt
E5	PCB	PCB 87	10	nr	ppt
E5	PCB	PCB 99	26	22	ppt
E5	PCB	PCB 101	37	33	ppt
E5	PCB	PCB 105	17	16	ppt
E5	PCB	PCB 110	35	29	ppt
E5	PCB	PCB 118	43	40	ppt
E5	PCB	PCB 128	17	nr	ppt
E5	PCB	PCB 138	60	56	ppt

Addendum 4-9 *continued*

Station	Class	Constituent	Winter	Summer	Units
E5	PCB	PCB 149	45	45	ppt
E5	PCB	PCB 151	9	10	ppt
E5	PCB	PCB 153/168	77	75	ppt
E5	PCB	PCB 170	18	11	ppt
E5	PCB	PCB 177	15	nr	ppt
E5	PCB	PCB 180	24	nr	ppt
E5	PCB	PCB 183	10	nr	ppt
E5	PCB	PCB 187	30	nr	ppt
E5	PCB	PCB 206	39	29	ppt
E7	Chlordane	Gamma(trans)Chlordane	12	nr	ppt
E7	DDT	o,p-DDD	30	nr	ppt
E7	DDT	o,p-DDE	nr	15	ppt
E7	DDT	o,p-DDT	66	21	ppt
E7	DDT	p,-p-DDMU	41	27	ppt
E7	DDT	p,p-DDD	85	36	ppt
E7	DDT	p,p-DDE	522	351	ppt
E7	DDT	p,p-DDT	299	60	ppt
E7	PAH	2,6-dimethylnaphthalene	nr	8	ppb
E7	PAH	3,4-benzo(B)fluoranthene	nr	8	ppb
E7	PAH	Benzo[A]pyrene	8	nr	ppb
E7	PAH	Benzo[e]pyrene	7	nr	ppb
E7	PAH	Biphenyl	5	nr	ppb
E7	PAH	Chrysene	nr	4	ppb
E7	PAH	Fluoranthene	5	nr	ppb
E7	PAH	Pyrene	6	6	ppb
E7	PCB	PCB 28	17	nr	ppt
E7	PCB	PCB 44	15	nr	ppt
E7	PCB	PCB 49	20	11	ppt
E7	PCB	PCB 52	25	14	ppt
E7	PCB	PCB 66	26	16	ppt
E7	PCB	PCB 70	23	12	ppt
E7	PCB	PCB 74	11	nr	ppt
E7	PCB	PCB 87	25	nr	ppt
E7	PCB	PCB 99	46	28	ppt
E7	PCB	PCB 101	68	37	ppt
E7	PCB	PCB 105	34	21	ppt
E7	PCB	PCB 110	72	37	ppt
E7	PCB	PCB 118	78	48	ppt
E7	PCB	PCB 119	10	nr	ppt
E7	PCB	PCB 128	32	nr	ppt
E7	PCB	PCB 138	110	67	ppt
E7	PCB	PCB 149	74	50	ppt
E7	PCB	PCB 151	18	nr	ppt
E7	PCB	PCB 153/168	133	83	ppt
E7	PCB	PCB 156	22	nr	ppt
E7	PCB	PCB 158	13	nr	ppt
E7	PCB	PCB 170	33	24	ppt
E7	PCB	PCB 177	17	10	ppt
E7	PCB	PCB 180	56	38	ppt
E7	PCB	PCB 183	13	nr	ppt
E7	PCB	PCB 187	45	26	ppt
E7	PCB	PCB 194	20	15	ppt
E7	PCB	PCB 206	34	33	ppt

Addendum 4-9 *continued*

Station	Class	Constituent	Winter	Summer	Units
E8	Chlordane	Gamma(trans)Chlordane	nr	10	ppt
E8	DDT	o,p-DDD	14	10	ppt
E8	DDT	o,p-DDE	nr	18	ppt
E8	DDT	o,p-DDT	42	15	ppt
E8	DDT	p,-p-DDMU	26	18	ppt
E8	DDT	p,p-DDD	47	23	ppt
E8	DDT	p,p-DDE	322	168	ppt
E8	DDT	p,p-DDT	131	22	ppt
E8	PAH	2,6-dimethylnaphthalene	nr	6	ppb
E8	PAH	Benzo[A]pyrene	5	nr	ppb
E8	PAH	Benzo[G,H,I]perylene	nr	6	ppb
E8	PAH	Biphenyl	5	nr	ppb
E8	PAH	Indeno(1,2,3-CD)pyrene	nr	6	ppb
E8	PAH	Pyrene	4	3	ppb
E8	PCB	PCB 28	19	29	ppt
E8	PCB	PCB 37	nr	15	ppt
E8	PCB	PCB 44	nr	33	ppt
E8	PCB	PCB 49	14	19	ppt
E8	PCB	PCB 52	16	38	ppt
E8	PCB	PCB 66	17	39	ppt
E8	PCB	PCB 70	14	42	ppt
E8	PCB	PCB 74	nr	22	ppt
E8	PCB	PCB 77	nr	11	ppt
E8	PCB	PCB 87	nr	19	ppt
E8	PCB	PCB 99	25	30	ppt
E8	PCB	PCB 101	32	53	ppt
E8	PCB	PCB 105	18	19	ppt
E8	PCB	PCB 110	35	46	ppt
E8	PCB	PCB 118	41	46	ppt
E8	PCB	PCB 119	nr	11	ppt
E8	PCB	PCB 128	14	nr	ppt
E8	PCB	PCB 138	56	57	ppt
E8	PCB	PCB 149	44	61	ppt
E8	PCB	PCB 151	9	25	ppt
E8	PCB	PCB 153/168	78	81	ppt
E8	PCB	PCB 170	20	21	ppt
E8	PCB	PCB 177	14	10	ppt
E8	PCB	PCB 18	nr	20	ppt
E8	PCB	PCB 180	35	59	ppt
E8	PCB	PCB 187	37	nr	ppt
E8	PCB	PCB 194	19	24	ppt
E8	PCB	PCB 206	36	31	ppt
E9	DDT	o,p-DDD	13	nr	ppt
E9	DDT	o,p-DDE	nr	12	ppt
E9	DDT	p,-p-DDMU	20	17	ppt
E9	DDT	p,p-DDD	25	27	ppt
E9	DDT	p,p-DDE	297	243	ppt
E9	DDT	p,p-DDT	25	33	ppt
E9	PAH	1-methylnaphthalene	7	nr	ppb
E9	PAH	2,6-dimethylnaphthalene	nr	7	ppb
E9	PAH	3,4-benzo(B)fluoranthene	nr	8	ppb
E9	PAH	Benzo[A]pyrene	7	nr	ppb
E9	PAH	Benzo[e]pyrene	9	nr	ppb

Addendum 4-9 *continued*

Station	Class	Constituent	Winter	Summer	Units
E9	PAH	Benzo[G,H,I]perylene	8	nr	ppb
E9	PAH	Biphenyl	9	nr	ppb
E9	PAH	Fluoranthene	5	nr	ppb
E9	PAH	Indeno(1,2,3-CD)pyrene	nr	5	ppb
E9	PAH	Perylene	6	nr	ppb
E9	PAH	Pyrene	6	4	ppb
E9	PCB	PCB 44	12	12	ppt
E9	PCB	PCB 49	15	11	ppt
E9	PCB	PCB 52	27	21	ppt
E9	PCB	PCB 66	18	15	ppt
E9	PCB	PCB 70	22	16	ppt
E9	PCB	PCB 87	38	17	ppt
E9	PCB	PCB 99	45	29	ppt
E9	PCB	PCB 101	85	52	ppt
E9	PCB	PCB 105	36	24	ppt
E9	PCB	PCB 110	95	47	ppt
E9	PCB	PCB 118	88	57	ppt
E9	PCB	PCB 123	9	nr	ppt
E9	PCB	PCB 128	26	24	ppt
E9	PCB	PCB 138	110	81	ppt
E9	PCB	PCB 149	83	57	ppt
E9	PCB	PCB 151	17	13	ppt
E9	PCB	PCB 153/168	139	92	ppt
E9	PCB	PCB 156	26	nr	ppt
E9	PCB	PCB 158	11	nr	ppt
E9	PCB	PCB 170	29	25	ppt
E9	PCB	PCB 177	21	12	ppt
E9	PCB	PCB 180	50	34	ppt
E9	PCB	PCB 183	10	nr	ppt
E9	PCB	PCB 187	49	31	ppt
E9	PCB	PCB 194	20	21	ppt
E9	PCB	PCB 206	47	35	ppt
E11	DDT	o,p-DDD	14	nr	ppt
E11	DDT	o,p-DDT	12	nr	ppt
E11	DDT	p,-p-DDMU	20	12	ppt
E11	DDT	p,p-DDD	25	16	ppt
E11	DDT	p,p-DDE	256	148	ppt
E11	DDT	p,p-DDT	57	nr	ppt
E11	PAH	1-methylphenanthrene	nr	2	ppb
E11	PAH	2-methylnaphthalene	nr	3	ppb
E11	PAH	2,6-dimethylnaphthalene	3	9	ppb
E11	PAH	Biphenyl	5	nr	ppb
E11	PAH	Pyrene	nr	3	ppb
E11	PCB	PCB 52	14	nr	ppt
E11	PCB	PCB 66	13	nr	ppt
E11	PCB	PCB 70	12	nr	ppt
E11	PCB	PCB 87	16	nr	ppt
E11	PCB	PCB 99	24	10	ppt
E11	PCB	PCB 101	37	14	ppt
E11	PCB	PCB 110	39	10	ppt
E11	PCB	PCB 118	44	21	ppt
E11	PCB	PCB 128	9	nr	ppt
E11	PCB	PCB 138	51	25	ppt
E11	PCB	PCB 149	37	20	ppt

Addendum 4-9 *continued*

Station	Class	Constituent	Winter	Summer	Units
E11	PCB	PCB 153/168	65	33	ppt
E11	PCB	PCB 170	20	nr	ppt
E11	PCB	PCB 177	11	nr	ppt
E11	PCB	PCB 180	27	nr	ppt
E11	PCB	PCB 187	25	nr	ppt
E11	PCB	PCB 194	12	nr	ppt
E11	PCB	PCB 206	24	24	ppt
E14	DDT	o,p-DDD	16	nr	ppt
E14	DDT	o,p-DDT	15	nr	ppt
E14	DDT	p,-p-DDMU	35	13	ppt
E14	DDT	p,p-DDD	24	16	ppt
E14	DDT	p,p-DDE	294	128	ppt
E14	DDT	p,p-DDT	46	33	ppt
E14	PAH	2,6-dimethylnaphthalene	nr	9	ppb
E14	PAH	Biphenyl	4	nr	ppb
E14	PCB	PCB 28	9	nr	ppt
E14	PCB	PCB 49	11	nr	ppt
E14	PCB	PCB 52	10	nr	ppt
E14	PCB	PCB 66	14	nr	ppt
E14	PCB	PCB 70	10	nr	ppt
E14	PCB	PCB 87	9	nr	ppt
E14	PCB	PCB 99	24	10	ppt
E14	PCB	PCB 101	26	14	ppt
E14	PCB	PCB 110	25	12	ppt
E14	PCB	PCB 118	33	16	ppt
E14	PCB	PCB 128	11	nr	ppt
E14	PCB	PCB 138	39	24	ppt
E14	PCB	PCB 149	38	18	ppt
E14	PCB	PCB 151	9	nr	ppt
E14	PCB	PCB 153/168	62	30	ppt
E14	PCB	PCB 170	16	nr	ppt
E14	PCB	PCB 177	10	nr	ppt
E14	PCB	PCB 180	21	nr	ppt
E14	PCB	PCB 187	28	nr	ppt
E14	PCB	PCB 194	11	nr	ppt
E14	PCB	PCB 206	26	21	ppt
E15	DDT	o,p-DDD	13	nr	ppt
E15	DDT	o,p-DDE	13	nr	ppt
E15	DDT	p,-p-DDMU	28	16	ppt
E15	DDT	p,p-DDD	25	15	ppt
E15	DDT	p,p-DDE	301	194	ppt
E15	DDT	p,p-DDT	nr	14	ppt
E15	PAH	2,6-dimethylnaphthalene	nr	8	ppb
E15	PAH	Biphenyl	5	nr	ppb
E15	PAH	Pyrene	5	3	ppb
E15	PCB	PCB 52	11	nr	ppt
E15	PCB	PCB 66	13	nr	ppt
E15	PCB	PCB 70	11	nr	ppt
E15	PCB	PCB 87	10	nr	ppt
E15	PCB	PCB 99	27	11	ppt
E15	PCB	PCB 101	32	16	ppt
E15	PCB	PCB 110	34	15	ppt
E15	PCB	PCB 118	39	19	ppt

Addendum 4-9 *continued*

Station	Class	Constituent	Winter	Summer	Units
E15	PCB	PCB 138	55	33	ppt
E15	PCB	PCB 149	44	23	ppt
E15	PCB	PCB 153/168	73	40	ppt
E15	PCB	PCB 170	20	nr	ppt
E15	PCB	PCB 177	12	nr	ppt
E15	PCB	PCB 180	32	14	ppt
E15	PCB	PCB 187	24	nr	ppt
E15	PCB	PCB 194	19	nr	ppt
E15	PCB	PCB 206	30	22	ppt
E17	DDT	o,p-DDD	16	9	ppt
E17	DDT	o,p-DDT	14	nr	ppt
E17	DDT	p,-p-DDMU	26	14	ppt
E17	DDT	p,p-DDD	29	13	ppt
E17	DDT	p,p-DDE	304	160	ppt
E17	DDT	p,p-DDT	42	19	ppt
E17	PAH	2,6-dimethylnaphthalene	5	8	ppb
E17	PAH	Pyrene	6	3	ppb
E17	PCB	PCB 28	89	10	ppt
E17	PCB	PCB 37	15	nr	ppt
E17	PCB	PCB 44	26	nr	ppt
E17	PCB	PCB 49	27	nr	ppt
E17	PCB	PCB 52	33	18	ppt
E17	PCB	PCB 66	28	11	ppt
E17	PCB	PCB 70	25	13	ppt
E17	PCB	PCB 74	14	nr	ppt
E17	PCB	PCB 87	9	nr	ppt
E17	PCB	PCB 99	22	16	ppt
E17	PCB	PCB 101	26	33	ppt
E17	PCB	PCB 105	13	nr	ppt
E17	PCB	PCB 110	29	33	ppt
E17	PCB	PCB 118	33	34	ppt
E17	PCB	PCB 128	15	nr	ppt
E17	PCB	PCB 138	43	44	ppt
E17	PCB	PCB 149	35	31	ppt
E17	PCB	PCB 153/168	62	48	ppt
E17	PCB	PCB 170	17	nr	ppt
E17	PCB	PCB 177	12	nr	ppt
E17	PCB	PCB 18	98	nr	ppt
E17	PCB	PCB 180	33	22	ppt
E17	PCB	PCB 187	25	nr	ppt
E17	PCB	PCB 194	13	9	ppt
E17	PCB	PCB 206	33	19	ppt
E19	Chlordane	Alpha(cis)Chlordane	5	nr	ppt
E19	DDT	o,p-DDD	20	nr	ppt
E19	DDT	o,p-DDE	19	13	ppt
E19	DDT	o,p-DDT	26	nr	ppt
E19	DDT	p,-p-DDMU	33	22	ppt
E19	DDT	p,p-DDD	50	35	ppt
E19	DDT	p,p-DDE	430	324	ppt
E19	DDT	p,p-DDT	95	49	ppt
E19	PAH	2,6-dimethylnaphthalene	nr	8	ppb
E19	PAH	Benzo[G,H,I]perylene	12	nr	ppb
E19	PAH	Biphenyl	6	nr	ppb

Addendum 4-9 *continued*

Station	Class	Constituent	Winter	Summer	Units
E19	PAH	Fluoranthene	6	4	ppb
E19	PAH	Indeno(1,2,3-CD)pyrene	10	nr	ppb
E19	PAH	Pyrene	9	5	ppb
E19	PCB	PCB 28	14	nr	ppt
E19	PCB	PCB 37	5	nr	ppt
E19	PCB	PCB 44	8	nr	ppt
E19	PCB	PCB 49	14	nr	ppt
E19	PCB	PCB 52	19	11	ppt
E19	PCB	PCB 66	21	14	ppt
E19	PCB	PCB 70	19	12	ppt
E19	PCB	PCB 74	5	nr	ppt
E19	PCB	PCB 87	23	nr	ppt
E19	PCB	PCB 99	34	21	ppt
E19	PCB	PCB 101	55	31	ppt
E19	PCB	PCB 105	25	nr	ppt
E19	PCB	PCB 110	55	28	ppt
E19	PCB	PCB 118	62	38	ppt
E19	PCB	PCB 128	27	12	ppt
E19	PCB	PCB 138	76	62	ppt
E19	PCB	PCB 149	57	45	ppt
E19	PCB	PCB 151	12	nr	ppt
E19	PCB	PCB 153/168	98	73	ppt
E19	PCB	PCB 156	7	nr	ppt
E19	PCB	PCB 158	5	nr	ppt
E19	PCB	PCB 170	25	17	ppt
E19	PCB	PCB 177	15	10	ppt
E19	PCB	PCB 180	40	nr	ppt
E19	PCB	PCB 183	5	nr	ppt
E19	PCB	PCB 187	34	nr	ppt
E19	PCB	PCB 194	19	15	ppt
E19	PCB	PCB 206	29	31	ppt
E20	DDT	o,p-DDD	18	11	ppt
E20	DDT	o,p-DDE	15	11	ppt
E20	DDT	o,p-DDT	18	12	ppt
E20	DDT	p,-p-DDMU	32	20	ppt
E20	DDT	p,p-DDD	38	23	ppt
E20	DDT	p,p-DDE	348	192	ppt
E20	DDT	p,p-DDT	67	20	ppt
E20	HCH	HCH, Beta isomer	12	nr	ppt
E20	PAH	1-methylphenanthrene	3	nr	ppb
E20	PAH	2-methylnaphthalene	3	nr	ppb
E20	PAH	2,6-dimethylnaphthalene	7	9	ppb
E20	PAH	Biphenyl	6	nr	ppb
E20	PAH	Naphthalene	4	nr	ppb
E20	PAH	Pyrene	6	4	ppb
E20	PCB	PCB 52	12	nr	ppt
E20	PCB	PCB 66	13	11	ppt
E20	PCB	PCB 70	11	nr	ppt
E20	PCB	PCB 87	12	nr	ppt
E20	PCB	PCB 99	23	17	ppt
E20	PCB	PCB 101	34	18	ppt
E20	PCB	PCB 105	22	13	ppt
E20	PCB	PCB 110	34	16	ppt
E20	PCB	PCB 118	40	23	ppt

Addendum 4-9 *continued*

Station	Class	Constituent	Winter	Summer	Units
E20	PCB	PCB 128	10	nr	ppt
E20	PCB	PCB 138	48	35	ppt
E20	PCB	PCB 149	36	30	ppt
E20	PCB	PCB 151	nr	11	ppt
E20	PCB	PCB 153/168	65	47	ppt
E20	PCB	PCB 170	19	11	ppt
E20	PCB	PCB 177	10	nr	ppt
E20	PCB	PCB 180	30	17	ppt
E20	PCB	PCB 187	22	nr	ppt
E20	PCB	PCB 194	17	nr	ppt
E20	PCB	PCB 206	25	22	ppt
E21	DDT	o,p-DDD	13	nr	ppt
E21	DDT	o,p-DDE	15	10	ppt
E21	DDT	p,-p-DDMU	24	14	ppt
E21	DDT	p,p-DDD	24	20	ppt
E21	DDT	p,p-DDE	276	206	ppt
E21	DDT	p,p-DDT	27	28	ppt
E21	PAH	2,6-dimethylnaphthalene	4	9	ppb
E21	PAH	Benzo[e]pyrene	4	nr	ppb
E21	PAH	Pyrene	3	nr	ppb
E21	PCB	PCB 28	nr	9	ppt
E21	PCB	PCB 66	12	nr	ppt
E21	PCB	PCB 99	19	nr	ppt
E21	PCB	PCB 101	19	15	ppt
E21	PCB	PCB 110	21	14	ppt
E21	PCB	PCB 118	26	17	ppt
E21	PCB	PCB 138	35	29	ppt
E21	PCB	PCB 149	26	24	ppt
E21	PCB	PCB 153/168	47	39	ppt
E21	PCB	PCB 170	11	nr	ppt
E21	PCB	PCB 177	9	nr	ppt
E21	PCB	PCB 180	22	18	ppt
E21	PCB	PCB 187	21	14	ppt
E21	PCB	PCB 194	13	10	ppt
E21	PCB	PCB 206	22	25	ppt
E23	Chlordane	Alpha(cis)Chlordane	15	nr	ppt
E23	Chlordane	Gamma(trans)Chlordane	14	nr	ppt
E23	DDT	o,p-DDD	24	nr	ppt
E23	DDT	o,p-DDE	25	9	ppt
E23	DDT	o,p-DDT	33	nr	ppt
E23	DDT	p,-p-DDMU	31	16	ppt
E23	DDT	p,p-DDD	47	20	ppt
E23	DDT	p,p-DDE	407	206	ppt
E23	DDT	p,p-DDT	82	29	ppt
E23	HCH	HCH, Alpha isomer	10	nr	ppt
E23	HCH	HCH, Beta isomer	24	nr	ppt
E23	PAH	2,6-dimethylnaphthalene	4	7	ppb
E23	PAH	Benzo[G,H,I]perylene	5	nr	ppb
E23	PAH	Fluoranthene	4	nr	ppb
E23	PAH	Pyrene	5	4	ppb
E23	PCB	PCB 28	12	9	ppt
E23	PCB	PCB 44	26	nr	ppt

Addendum 4-9 *continued*

Station	Class	Constituent	Winter	Summer	Units
E23	PCB	PCB 49	19	nr	ppt
E23	PCB	PCB 52	52	10	ppt
E23	PCB	PCB 66	23	9	ppt
E23	PCB	PCB 70	35	nr	ppt
E23	PCB	PCB 74	12	nr	ppt
E23	PCB	PCB 87	44	nr	ppt
E23	PCB	PCB 99	45	14	ppt
E23	PCB	PCB 101	99	23	ppt
E23	PCB	PCB 105	37	10	ppt
E23	PCB	PCB 110	97	22	ppt
E23	PCB	PCB 118	85	23	ppt
E23	PCB	PCB 128	36	nr	ppt
E23	PCB	PCB 138	99	27	ppt
E23	PCB	PCB 149	78	27	ppt
E23	PCB	PCB 151	16	nr	ppt
E23	PCB	PCB 153/168	116	40	ppt
E23	PCB	PCB 158	11	nr	ppt
E23	PCB	PCB 170	28	nr	ppt
E23	PCB	PCB 177	19	nr	ppt
E23	PCB	PCB 183	13	nr	ppt
E23	PCB	PCB 187	38	nr	ppt
E23	PCB	PCB 194	25	nr	ppt
E23	PCB	PCB 206	54	25	ppt
E25	DDT	o,p-DDD	nr	10	ppt
E25	DDT	o,p-DDE	11	23	ppt
E25	DDT	p,-p-DDMU	22	19	ppt
E25	DDT	p,p-DDD	27	25	ppt
E25	DDT	p,p-DDE	297	245	ppt
E25	DDT	p,p-DDT	31	37	ppt
E25	PAH	2,6-dimethylnaphthalene	5	7	ppb
E25	PAH	3,4-benzo(B)fluoranthene	14	nr	ppb
E25	PAH	Benzo[A]pyrene	11	nr	ppb
E25	PAH	Benzo[e]pyrene	13	nr	ppb
E25	PAH	Benzo[G,H,I]perylene	13	5	ppb
E25	PAH	Benzo[K]fluoranthene	11	nr	ppb
E25	PAH	Chrysene	9	3	ppb
E25	PAH	Dibenzo(A,H)anthracene	12	nr	ppb
E25	PAH	Fluoranthene	5	nr	ppb
E25	PAH	Indeno(1,2,3-CD)pyrene	13	nr	ppb
E25	PAH	Perylene	9	nr	ppb
E25	PAH	Phenanthrene	5	nr	ppb
E25	PAH	Pyrene	6	4	ppb
E25	PCB	PCB 66	9	nr	ppt
E25	PCB	PCB 99	13	11	ppt
E25	PCB	PCB 101	18	13	ppt
E25	PCB	PCB 110	19	14	ppt
E25	PCB	PCB 118	23	17	ppt
E25	PCB	PCB 138	34	20	ppt
E25	PCB	PCB 149	25	21	ppt
E25	PCB	PCB 153/168	50	30	ppt
E25	PCB	PCB 170	10	nr	ppt
E25	PCB	PCB 180	24	nr	ppt
E25	PCB	PCB 187	22	nr	ppt

Addendum 4-9 *continued*

Station	Class	Constituent	Winter	Summer	Units
E25	PCB	PCB 194	11	nr	ppt
E25	PCB	PCB 206	22	21	ppt
E26	DDT	o,p-DDD	23	nr	ppt
E26	DDT	o,p-DDE	20	13	ppt
E26	DDT	o,p-DDT	23	nr	ppt
E26	DDT	p,-p-DDMU	31	14	ppt
E26	DDT	p,p-DDD	46	25	ppt
E26	DDT	p,p-DDE	435	268	ppt
E26	DDT	p,p-DDT	53	35	ppt
E26	PAH	2,6-dimethylnaphthalene	5	6	ppb
E26	PAH	Pyrene	5	5	ppb
E26	PCB	PCB 28	nr	9	ppt
E26	PCB	PCB 52	10	nr	ppt
E26	PCB	PCB 66	14	11	ppt
E26	PCB	PCB 70	12	nr	ppt
E26	PCB	PCB 99	24	16	ppt
E26	PCB	PCB 101	29	19	ppt
E26	PCB	PCB 105	20	nr	ppt
E26	PCB	PCB 110	31	15	ppt
E26	PCB	PCB 118	38	22	ppt
E26	PCB	PCB 128	15	nr	ppt
E26	PCB	PCB 138	53	27	ppt
E26	PCB	PCB 149	39	31	ppt
E26	PCB	PCB 153/168	74	47	ppt
E26	PCB	PCB 170	18	10	ppt
E26	PCB	PCB 177	11	nr	ppt
E26	PCB	PCB 180	30	32	ppt
E26	PCB	PCB 187	30	nr	ppt
E26	PCB	PCB 194	16	15	ppt
E26	PCB	PCB 206	28	32	ppt

Addendum 4-10

Summary of the constituents that make up total chlordane, total DDT, total HCH, total PCB, and total PAH in sediments from the SBOO region during 2019; nd = not detected; nr = not reportable.

Station	Class	Constituent	Winter	Summer	Units
I1	DDT	p,p-DDE	23	60	ppt
I1	PAH	2,6-dimethylnaphthalene	nr	3	ppb
I2	Chlordane	Gamma(trans)Chlordane	nr	18	ppt
I2	Chlordane	Heptachlor.epoxide	nr	63	ppt
I2	DDT	p,p-DDE	nr	53	ppt
I2	HCH	HCH, Alpha isomer	nr	43	ppt
I2	HCH	HCH, Beta isomer	nr	38	ppt
I2	HCH	HCH, Gamma isomer	nr	53	ppt
I2	PAH	2-methylnaphthalene	nr	2	ppb
I2	PAH	2,6-dimethylnaphthalene	nr	2	ppb
I4	DDT	p,p-DDE	nr	18	ppt
I4	PAH	2,6-dimethylnaphthalene	nr	3	ppb
I6	DDT	o,p-DDE	nr	15	ppt
I6	DDT	p,-p-DDMU	nr	10	ppt
I6	DDT	p,p-DDD	nr	39	ppt
I6	DDT	p,p-DDE	nr	26	ppt
I6	HCH	HCH, Alpha isomer	nr	12	ppt
I6	HCH	HCH, Beta isomer	nr	19	ppt
I6	HCH	HCH, Delta isomer	nr	11	ppt
I6	HCH	HCH, Gamma isomer	nr	11	ppt
I6	PCB	PCB 18	nr	13	ppt
I6	PCB	PCB 28	nr	17	ppt
I6	PCB	PCB 37	nr	14	ppt
I6	PCB	PCB 44	nr	14	ppt
I6	PCB	PCB 49	nr	11	ppt
I6	PCB	PCB 52	nr	14	ppt
I6	PCB	PCB 66	nr	14	ppt
I6	PCB	PCB 70	nr	12	ppt
I6	PCB	PCB 74	nr	13	ppt
I6	PCB	PCB 77	nr	11	ppt
I6	PCB	PCB 99	nr	12	ppt
I6	PCB	PCB 101	nr	14	ppt
I6	PCB	PCB 110	nr	10	ppt
I6	PCB	PCB 118	nr	10	ppt
I6	PCB	PCB 119	nr	12	ppt
I6	PCB	PCB 151	nr	9	ppt
I8	PAH	1-methylnaphthalene	nr	1	ppb
I8	PAH	2,6-dimethylnaphthalene	nr	2	ppb
I8	PAH	Acenaphthylene	nr	1	ppb
I8	PAH	Benzo[A]pyrene	nr	1	ppb
I8	PAH	Benzo[e]pyrene	nr	2	ppb
I8	PAH	Benzo[K]fluoranthene	nr	2	ppb
I8	PAH	Chrysene	nr	2	ppb
I8	PAH	Dibenzo(A,H)anthracene	nr	2	ppb
I8	PAH	Fluoranthene	nr	1	ppb
I8	PAH	Indeno(1,2,3-CD)pyrene	nr	2	ppb
I8	PAH	Perylene	nr	1	ppb
I8	PAH	Pyrene	nr	1	ppb

Addendum 4-10 *continued*

Station	Class	Constituent	Winter	Summer	Units
I9	DDT	p,p-DDE	43	62	ppt
I9	HCH	HCH, Beta isomer	nr	13	ppt
I9	PAH	2,6-dimethylnaphthalene	5	5	ppb
I10	DDT	p,p-DDE	17	25	ppt
I10	PAH	2,6-dimethylnaphthalene	nr	3	ppb
I12	DDT	p,p-DDE	17	4	ppt
I12	PAH	2,6-dimethylnaphthalene	nr	1	ppb
I12	PAH	Biphenyl	3	nr	ppb
I13	DDT	p,p-DDE	6	11	ppt
I13	PAH	1-methylphenanthrene	nr	3	ppb
I13	PAH	2-methylnaphthalene	nr	2	ppb
I13	PAH	2,6-dimethylnaphthalene	nr	2	ppb
I13	PAH	Naphthalene	4	3	ppb
I14	DDT	p,p-DDD	12	10	ppt
I14	DDT	p,p-DDE	71	73	ppt
I14	PAH	2,6-dimethylnaphthalene	nr	5	ppb
I14	PAH	Biphenyl	3	nr	ppb
I15	DDT	p,p-DDE	19	55	ppt
I15	PAH	2,6-dimethylnaphthalene	nr	3	ppb
I15	PCB	PCB 87	nr	26	ppt
I15	PCB	PCB 99	nr	23	ppt
I15	PCB	PCB 101	nr	47	ppt
I15	PCB	PCB 105	nr	43	ppt
I15	PCB	PCB 110	nr	62	ppt
I15	PCB	PCB 118	nr	76	ppt
I15	PCB	PCB 128	nr	58	ppt
I15	PCB	PCB 138	nr	190	ppt
I15	PCB	PCB 149	nr	95	ppt
I15	PCB	PCB 151	nr	11	ppt
I15	PCB	PCB 153/168	nr	159	ppt
I15	PCB	PCB 156	nr	39	ppt
I15	PCB	PCB 158	nr	23	ppt
I15	PCB	PCB 167	nr	9	ppt
I15	PCB	PCB 170	nr	23	ppt
I15	PCB	PCB 180	nr	28	ppt
I15	PCB	PCB 187	nr	13	ppt
I15	PCB	PCB 206	nr	18	ppt
I16	DDT	p,p-DDE	24	29	ppt
I16	PAH	Biphenyl	3	nr	ppb
I18	DDT	p,p-DDE	21	23	ppt
I18	PAH	1-methylphenanthrene	6	nr	ppb
I18	PAH	2-methylnaphthalene	6	nr	ppb
I18	PAH	2,6-dimethylnaphthalene	nr	4	ppb
I18	PAH	Biphenyl	9	nr	ppb
I18	PAH	Naphthalene	8	nr	ppb
I20	DDT	p,p-DDE	22	26	ppt
I20	DDT	p,p-DDT	14	nr	ppt

Addendum 4-10 *continued*

Station	Class	Constituent	Winter	Summer	Units
I20	PAH	Biphenyl	4	nr	ppb
I21	DDT	p,p-DDE	8	17	ppt
I21	PAH	Biphenyl	3	nr	ppb
I22	DDT	p,p-DDD	5	nr	ppt
I22	DDT	p,p-DDE	77	48	ppt
I22	DDT	p,p-DDT	11	nr	ppt
I22	PAH	2,6-dimethylnaphthalene	3	4	ppb
I23	DDT	p,p-DDE	26	10	ppt
I27	DDT	p,p-DDD	nr	14	ppt
I27	DDT	p,p-DDE	71	150	ppt
I27	DDT	p,p-DDT	12	36	ppt
I27	PAH	2,6-dimethylnaphthalene	4	4	ppb
I28	DDT	o,p-DDD	14	14	ppt
I28	DDT	o,p-DDE	11	16	ppt
I28	DDT	o,p-DDT	nr	44	ppt
I28	DDT	p,-p-DDMU	24	67	ppt
I28	DDT	p,p-DDD	56	152	ppt
I28	DDT	p,p-DDE	340	450	ppt
I28	DDT	p,p-DDT	174	5010	ppt
I28	PAH	2,6-dimethylnaphthalene	4	nr	ppb
I28	PAH	3,4-benzo(B)fluoranthene	6	nr	ppb
I28	PAH	Benzo[G,H,I]perylene	6	nr	ppb
I28	PAH	Biphenyl	3	nr	ppb
I28	PAH	Fluoranthene	4	nr	ppb
I28	PAH	Pyrene	6	nr	ppb
I28	PCB	PCB 28	nr	12	ppt
I28	PCB	PCB 44	nr	10	ppt
I28	PCB	PCB 49	14	42	ppt
I28	PCB	PCB 52	11	25	ppt
I28	PCB	PCB 66	12	23	ppt
I28	PCB	PCB 70	nr	14	ppt
I28	PCB	PCB 87	nr	9	ppt
I28	PCB	PCB 99	27	58	ppt
I28	PCB	PCB 101	28	58	ppt
I28	PCB	PCB 105	nr	16	ppt
I28	PCB	PCB 110	23	39	ppt
I28	PCB	PCB 118	29	56	ppt
I28	PCB	PCB 128	nr	23	ppt
I28	PCB	PCB 138	37	79	ppt
I28	PCB	PCB 149	27	71	ppt
I28	PCB	PCB 151	nr	13	ppt
I28	PCB	PCB 153/168	56	108	ppt
I28	PCB	PCB 170	nr	19	ppt
I28	PCB	PCB 177	nr	11	ppt
I28	PCB	PCB 180	17	38	ppt
I28	PCB	PCB 183	nr	11	ppt
I28	PCB	PCB 187	16	27	ppt
I28	PCB	PCB 194	nr	14	ppt
I28	PCB	PCB 206	nr	25	ppt

Addendum 4-10 *continued*

Station	Class	Constituent	Winter	Summer	Units
I29	DDT	o,p-DDD	34	30	ppt
I29	DDT	o,p-DDE	nr	18	ppt
I29	DDT	o,p-DDT	40	nr	ppt
I29	DDT	p,-p-DDMU	36	53	ppt
I29	DDT	p,p-DDD	72	66	ppt
I29	DDT	p,p-DDE	613	725	ppt
I29	DDT	p,p-DDT	124	54	ppt
I29	PAH	2,6-dimethylnaphthalene	2	7	ppb
I29	PAH	Acenaphthylene	4	nr	ppb
I29	PAH	Benzo[A]pyrene	11	nr	ppb
I29	PAH	Benzo[e]pyrene	8	nr	ppb
I29	PAH	Fluoranthene	12	nr	ppb
I29	PAH	Indeno(1,2,3-CD)pyrene	6	nr	ppb
I29	PAH	Phenanthrene	15	nr	ppb
I29	PAH	Pyrene	26	nr	ppb
I29	PCB	PCB 66	nr	10	ppt
I29	PCB	PCB 99	11	13	ppt
I29	PCB	PCB 101	12	17	ppt
I29	PCB	PCB 110	nr	11	ppt
I29	PCB	PCB 118	13	18	ppt
I29	PCB	PCB 138	17	22	ppt
I29	PCB	PCB 149	15	19	ppt
I29	PCB	PCB 153/168	30	33	ppt
I29	PCB	PCB 180	11	19	ppt
I29	PCB	PCB 187	14	nr	ppt
I29	PCB	PCB 206	nr	22	ppt
I30	DDT	p,p-DDD	nr	10	ppt
I30	DDT	p,p-DDE	104	84	ppt
I30	PAH	2,6-dimethylnaphthalene	3	5	ppb
I30	PAH	Benzo[e]pyrene	3	nr	ppb
I31	DDT	p,p-DDE	26	26	ppt
I31	DDT	p,p-DDT	12	nr	ppt
I31	PAH	2,6-dimethylnaphthalene	nr	3	ppb
I33	DDT	p,p-DDE	27	40	ppt
I33	PAH	2,6-dimethylnaphthalene	1	nr	ppb
I33	PAH	Biphenyl	5	nr	ppb
I33	PAH	Phenanthrene	1	nr	ppb
I33	PAH	Pyrene	2	nr	ppb
I33	PCB	PCB 101	nr	9	ppt
I33	PCB	PCB 138	nr	13	ppt
I33	PCB	PCB 149	nr	11	ppt
I33	PCB	PCB 194	9	nr	ppt
I34	DDT	p,p-DDE	8	nr	ppt
I35	DDT	o,p-DDD	11	nr	ppt
I35	DDT	o,p-DDT	13	nr	ppt
I35	DDT	p,-p-DDMU	22	14	ppt
I35	DDT	p,p-DDD	31	14	ppt
I35	DDT	p,p-DDE	174	129	ppt
I35	DDT	p,p-DDT	36	22	ppt
I35	PAH	2,6-dimethylnaphthalene	7	nr	ppb

Addendum 4-10 *continued*

Station	Class	Constituent	Winter	Summer	Units
I35	PAH	3,4-benzo(B)fluoranthene	7	nr	ppb
I35	PAH	Benzo[A]pyrene	6	nr	ppb
I35	PAH	Benzo[e]pyrene	5	nr	ppb
I35	PAH	Benzo[G,H,I]perylene	7	nr	ppb
I35	PAH	Fluoranthene	6	nr	ppb
I35	PCB	PCB 28	9	10	ppt
I35	PCB	PCB 52	11	10	ppt
I35	PCB	PCB 66	12	13	ppt
I35	PCB	PCB 70	9	9	ppt
I35	PCB	PCB 99	16	11	ppt
I35	PCB	PCB 101	27	16	ppt
I35	PCB	PCB 110	22	10	ppt
I35	PCB	PCB 118	27	15	ppt
I35	PCB	PCB 128	9	nr	ppt
I35	PCB	PCB 138	36	18	ppt
I35	PCB	PCB 149	25	14	ppt
I35	PCB	PCB 153/168	49	29	ppt
I35	PCB	PCB 180	16	nr	ppt
I35	PCB	PCB 187	22	nr	ppt
I35	PCB	PCB 206	23	nr	ppt

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Addendum 5

Macrobenthic Communities

2019 Raw Data

Addendum 5-1

Macrofaunal community parameters by grab for PLOO benthic stations sampled during 2019. SR = species richness; Abun = abundance; H' = Shannon diversity index; J' = Pielou's evenness; Dom = Swartz dominance; BRI = benthic response index. Stations are listed north to south from top to bottom for each depth contour.

Depth Contour	Station	Survey	SR	Abun	H'	J'	Dom	BRI
88-m	B11	winter	127	479	4.1	0.86	38	9
		summer	102	379	3.7	0.80	30	7
	B8	winter	80	349	3.6	0.83	23	7
		summer	68	377	3.1	0.73	15	13
	E19	winter	85	658	3.6	0.80	18	11
		summer	74	554	3.4	0.79	17	10
	E7	winter	81	492	3.6	0.82	20	12
		summer	73	414	3.6	0.83	18	11
	E1	winter	84	443	3.7	0.83	21	8
		summer	97	529	3.8	0.82	25	7
98-m	B12	winter	96	294	4.1	0.90	40	15
		summer	136	520	4.1	0.84	43	13
	B9	winter	94	355	4.0	0.89	32	9
		summer	101	368	3.9	0.84	33	10
	E26	winter	105	494	3.9	0.85	30	12
		summer	86	378	3.8	0.85	26	13
	E25	winter	79	499	3.6	0.82	20	11
		summer	90	641	3.6	0.79	20	10
	E23	winter	81	611	3.6	0.81	20	10
		summer	80	544	3.7	0.84	22	12
	E20	winter	85	604	3.5	0.79	18	11
		summer	68	398	3.5	0.84	19	14
	E17[a]	winter	100	739	3.5	0.75	18	13
		summer	75	788	3.2	0.75	15	12
	E14[a]	winter	95	404	3.9	0.85	26	26
		summer	80	603	3.4	0.77	15	33
	E11[a]	winter	88	510	3.6	0.80	20	14
		summer	76	567	3.4	0.79	18	14
	E8	winter	101	440	4.0	0.86	31	12
		summer	88	435	3.8	0.84	25	9
	E5	winter	98	432	3.9	0.86	31	7
		summer	82	374	3.9	0.87	26	10
	E2	winter	92	411	4.0	0.88	29	10
		summer	107	394	4.1	0.89	36	9

[a] Near-ZID station

Addendum 5-1 *continued*

Depth Contour	Station	Survey	SR	Abun	H'	J'	Dom	BRI
116-m	B10	winter	81	284	3.7	0.85	26	15
		summer	82	249	3.7	0.84	28	15
	E21	winter	85	531	3.3	0.75	17	17
		summer	70	586	3.2	0.76	15	13
	E15[a]	winter	63	382	3.2	0.78	18	12
		summer	72	556	3.3	0.78	15	16
	E9	winter	97	444	3.7	0.80	26	12
		summer	86	429	3.7	0.83	26	8
	E3	winter	103	324	4.1	0.88	40	11
		summer	83	241	3.9	0.89	34	7
		Mean	88	466	3.7	0.82	25	12
		95% CI	4	33	0.1	0.01	2	1
		Minimum	63	241	3.1	0.73	15	7
		Maximum	136	788	4.1	0.90	43	33

[a] Near-ZID station

Addendum 5-2

Macrofaunal community parameters by grab for SBOO benthic stations sampled during 2019. SR = species richness; Abun = abundance; H' = Shannon diversity index; J' = Pielou's evenness; Dom = Swartz dominance; BRI = benthic response index. Stations are listed north to south from top to bottom for each depth contour.

Depth Contour	Station	Survey	SR	Abun	H'	J'	Dom	BRI
19-m	I35	winter	36	123	3.0	0.83	11	25
		summer	78	189	4.0	0.92	35	26
	I34	winter	50	828	2.5	0.64	6	21
		summer	54	342	2.3	0.59	7	6
	I31	winter	20	33	2.8	0.95	12	21
		summer	48	169	3.2	0.82	16	19
	I23	winter	37	81	3.2	0.90	18	12
		summer	39	288	2.5	0.68	6	5
	I18	winter	27	54	3.1	0.94	14	13
		summer	49	167	3.2	0.83	17	17
	I10	winter	57	160	3.1	0.77	19	14
		summer	70	209	3.6	0.86	24	22
	I4	winter	20	42	2.7	0.92	10	4
		summer	34	74	3.1	0.87	16	27
28-m	I33	winter	69	164	3.9	0.93	33	28
		summer	83	253	3.9	0.89	33	23
	I30	winter	39	59	3.5	0.96	25	24
		summer	65	247	3.5	0.83	20	23
	I27	winter	48	103	3.6	0.92	23	24
		summer	60	183	3.5	0.85	21	19
	I22	winter	61	161	3.8	0.93	27	27
		summer	77	275	3.7	0.85	25	26
	I14 [a]	winter	58	126	3.8	0.93	27	22
		summer	80	262	3.9	0.89	31	24
	I16 [a]	winter	30	121	2.5	0.74	10	10
		summer	45	114	3.1	0.83	18	15
	I15 [a]	winter	32	86	2.9	0.82	12	12
		summer	33	104	2.9	0.84	11	23
	I12 [a]	winter	48	142	2.9	0.76	15	16
		summer	33	102	2.7	0.76	11	17
	I9	winter	43	80	3.6	0.95	24	20
		summer	63	150	3.7	0.90	28	26
	I6	winter	25	114	2.0	0.61	3	5
		summer	28	72	2.9	0.87	13	5
	I2	winter	24	82	2.6	0.82	9	12
		summer	25	108	2.4	0.76	8	12
	I3	winter	33	65	3.2	0.92	17	7
		summer	27	162	2.4	0.74	7	8

[a] Near-ZID station

Addendum 5-2 *continued*

Depth Contour	Station	Survey	SR	Abun	H'	J'	Dom	BRI
38-m	I29	winter	90	223	4.0	0.89	37	18
		summer	116	428	4.0	0.84	39	18
	I21	winter	24	62	2.8	0.89	11	6
		summer	48	161	3.1	0.80	16	15
	I13	winter	23	52	2.9	0.94	12	6
		summer	37	110	3.0	0.83	16	15
	I8	winter	40	79	3.3	0.90	21	15
		summer	47	110	3.1	0.80	20	24
55-m	I28	winter	132	578	4.0	0.82	35	16
		summer	124	473	4.2	0.87	41	10
	I20	winter	56	283	3.1	0.77	13	10
		summer	68	254	3.3	0.79	19	11
	I7	winter	45	169	2.8	0.74	14	3
		summer	47	142	3.5	0.90	20	8
	I1	winter	91	318	3.9	0.85	32	11
		summer	83	353	3.6	0.82	27	15
		Mean	52	183	3.2	0.84	19	16
		95% CI	7	38	0.1	0.02	3	2
		Minimum	20	33	2.0	0.59	3	3
		Maximum	132	828	4.2	0.96	41	28

Addendum 5-3

Summary taxonomic listing of benthic infauna taxa identified from PLOO stations during 2019. Data are total number of individuals (n). Taxonomic arrangement follows SCAMIT (2018).

Taxonomic Classification				n
Cnidaria				
	Hydrozoa			
		Campanulariidae	*Laomedea calceolifera*	5
	Anthozoa			
		Virgulariidae	*Stylatula* sp A	5
			Stylatula sp	3
			Virgularia agassizii	1
			Virgularia sp	1
		Ceriantharia		4
		Actiniaria		2
		Edwardsiidae		32
			Edwardsia juliae	2
			Edwardsia olguini	30
			Edwardsia sp SD1	1
			Scolanthus triangulus	83
		Halcampidae	*Halcampa decemtentaculata*	2
			Halianthella sp A	9
Platyhelminthes				
	Rhabditophora			
		Polycladida		1
		Plehniidae	*Diplehnia caeca*	8
		Leptoplanoidea		3
		Leptoplanidae	Leptoplanidae sp A	2
Nemertea				
	Anopla			3
		Palaeonemertea		4
		Carinomidae	*Carinoma mutabilis*	5
		Tubulanidae		18
			Tubulanus cingulatus	26
			Tubulanus polymorphus	59
			Tubulanus sp A	3
			Tubulanidae sp B	1
			Tubulanidae sp E	3
		Heteronemertea		5
		Lineidae		25
			Cerebratulus californiensis	5
			Lineidae sp SD1	5
			Lineus bilineatus	37
			Maculaura alaskensis Cmplx	3
			Zygeupolia rubens	1
			Heteronemertea sp SD2	138
	Enopla			
		Hoplonemertea		6
		Emplectonematidae	*Paranemertes californica*	6
		Amphiporidae	*Amphiporus flavescens*	1
Mollusca				
	Caudofoveata			
		Chaetodermatidae	*Chaetoderma pacificum*	1

Addendum 5-3 *continued*

Taxonomic Classification			n
Gastropoda			
	Solariellidae	*Solariella peramabilis*	5
	Cerithiidae	*Lirobittium rugatum* Cmplx	6
	Rissoidae	*Alvania rosana*	1
	Caecidae	*Caecum crebricinctum*	8
	Eulimidae	*Balcis micans*	1
	Columbellidae	*Amphissa undata*	1
	Mangeliidae	*Kurtzina beta*	8
	Pseudomelatomidae	*Antiplanes catalinae*	1
		Megasurcula carpenteriana	1
	Acteonidae	*Rictaxis punctocaelatus*	6
	Pyramidellidae	*Odostomia* sp	10
		Turbonilla chocolata	3
		Turbonilla santarosana	6
		Turbonilla sp A	3
		Turbonilla sp SD6	1
		Turbonilla sp SD8	1
		Turbonilla sp	2
	Rhizoridae	*Volvulella californica*	2
		Volvulella cylindrica	3
		Volvulella panamica	2
	Acteocinidae	*Acteocina cerealis*	8
	Philinidae	*Philine auriformis*	2
	Aglajidae	*Aglaja ocelligera*	3
	Cylichnidae	*Cylichna diegensis*	13
	Diaphanidae	*Diaphana californica*	2
Bivalvia			4
	Nuculidae	*Acila castrensis*	4
		Ennucula tenuis	51
	Solemyidae	*Solemya pervernicosa*	10
	Nuculanidae	*Nuculana hamata*	4
		Nuculana sp A	250
	Mytilidae	*Amygdalum pallidulum*	5
	Carditidae	*Cyclocardia ventricosa*	2
	Lucinidae	*Parvilucina tenuisculpta*	80
		Lucinoma annulatum	29
	Thyasiridae	*Adontorhina cyclia*	27
		Axinopsida serricata	1824
		Thyasira flexuosa	1
	Lasaeidae	*Kurtiella tumida*	4
		Kurtiella sp D	1
	Cardiidae	*Keenaea centifilosum*	21
	Tellinidae	*Tellina carpenteri*	269
		Tellina sp B	350
		Tellina sp	9
	Hiatellidae	*Saxicavella pacifica*	4
	Veneridae	*Nutricola cymata*	2
	Petricolidae	*Cooperella subdiaphana*	1
	Lyonsiidae		3

Addendum 5-3 *continued*

Taxonomic Classification				n
			Lyonsia californica	3
		Cuspidariidae		1
			Cuspidaria parapodema	2
		Verticordiidae	*Trigonulina novemcostatus*	1
	Scaphopoda			
		Gadilidae	*Polyschides quadrifissatus*	23
Sipuncula				1
	Sipunculidea			
		Golfingiidae	*Nephasoma diaphanes*	1
			Thysanocardia nigra	3
		Phascolionidae	*Phascolion* sp A	27
Annelida				
	Polychaeta			
		Thalassematidae	*Listriolobus pelodes*	1
		Amphinomidae	*Chloeia pinnata*	37
		Eunicidae		2
			Eunice multicylindri	1
		Lumbrineridae		1
			Lumbrineridae Group III	1
			Eranno lagunae	8
			Lumbrineris cruzensis	26
			Lumbrineris latreilli	15
			Lumbrineris ligulata	4
			Lumbrineris sp Group I	26
			Lumbrineris sp Group II	4
			Ninoe tridentata	3
			Scoletoma tetraura Cmplx	16
			Scoletoma sp	2
		Oenonidae		4
			Drilonereis falcata	7
			Drilonereis sp	13
			Notocirrus californiensis	2
		Onuphidae		17
			Diopatra sp	1
			Mooreonuphis exigua	11
			Mooreonuphis nebulosa	15
			Mooreonuphis segmentispadix	3
			Mooreonuphis sp	9
			Nothria occidentalis	7
			Nothria sp	6
			Onuphis iridescens	4
			Onuphis sp A	14
			Onuphis sp	8
			Paradiopatra parva	645
		Aphroditidae	*Aphrodita* sp	2
		Polynoidae		1
			Malmgreniella baschi	2
			Malmgreniella liei	1
			Malmgreniella macginitiei	3

Addendum 5-3 *continued*

Taxonomic Classification			n
		Malmgreniella sanpedroensis	1
		Malmgreniella sp A	16
		Subadyte mexicana	1
		Tenonia priops	4
	Pholoidae	*Pholoe glabra*	81
	Sigalionidae		1
		Sigalion spinosus	26
		Sthenelais tertiaglabra	6
		Sthenelais sp	1
		Sthenelanella uniformis	21
	Glyceridae	*Glycera americana*	2
		Glycera nana	126
		Glycera sp	1
	Goniadidae	*Glycinde armigera*	44
		Goniada brunnea	7
		Goniada maculata	97
	Hesionidae	*Podarkeopsis glabrus*	8
	Nereididae	*Alitta succinea*	1
		Nereis sp A	20
	Pilargidae	*Sigambra setosa*	1
	Syllidae		4
		Eusyllis sp SD2	1
		Paraehlersia articulata	1
		Exogone dwisula	1
		Exogone lourei	6
		Syllis heterochaeta	3
	Nephtyidae	*Aglaophamus verrilli*	13
		Bipalponephtys cornuta	7
		Nephtys caecoides	21
		Nephtys ferruginea	82
		Nephtys sp	3
	Sphaerodoridae	*Sphaerodoridium* sp A	1
	Phyllodocidae	*Eteone brigitteae*	1
		Eteone pigmentata	1
		Eulalia levicornuta Cmplx	3
		Eumida longicornuta	3
		Sige sp A	12
		Sige sp B	8
		Paranaitis polynoides	2
		Phyllodoce groenlandica	1
		Phyllodoce hartmanae	23
		Phyllodoce longipes	7
		Phyllodoce pettiboneae	25
	Oweniidae	*Galathowenia pygidialis*	1
		Myriochele gracilis	22
		Myriochele olgae	3
		Myriochele striolata	3
	Sabellidae		3
		Acromegalomma splendidum	1

Addendum 5-3 *continued*

Taxonomic Classification			n
		Dialychone albocincta	22
		Dialychone trilineata	166
		Dialychone veleronis	5
		Euchone arenae	5
		Euchone hancocki	12
		Euchone incolor	79
		Euchone sp A	9
		Euchone sp	1
		Jasmineira sp B	8
		Myxicola sp	2
		Paradialychone harrisae	9
		Paradialychone paramollis	5
		Potamethus sp A	3
	Longosomatidae	*Heterospio catalinensis*	5
	Magelonidae	*Magelona berkeleyi*	7
		Magelona hartmanae	4
		Magelona sp A	1
		Magelona sp	1
	Spionidae		1
		Dipolydora socialis	2
		Laonice cirrata	25
		Laonice nuchala	12
		Malacoceros indicus	2
		Microspio pigmentata	157
		Paraprionospio alata	241
		Prionospio dubia	218
		Prionospio jubata	614
		Prionospio lighti	15
		Prionospio pygmaeus	4
		Prionospio sp	1
		Spio filicornis	1
		Spio maculata	1
		Spiophanes berkeleyorum	28
		Spiophanes duplex	1902
		Spiophanes kimballi	471
		Spiophanes norrisi	1
		Spiophanes wigleyi	2
		Spiophanes sp	1
	Cirratulidae		7
		Aphelochaeta glandaria Cmplx	589
		Aphelochaeta monilaris	46
		Aphelochaeta petersenae	1
		Aphelochaeta phillipsi	14
		Aphelochaeta tigrina	19
		Aphelochaeta williamsae	6
		Aphelochaeta sp LA1	39
		Aphelochaeta sp SD5	4
		Aphelochaeta sp SD18	1
		Aphelochaeta sp	3

Addendum 5-3 *continued*

Taxonomic Classification			n
		Chaetozone hartmanae	166
		Chaetozone lunula	8
		Chaetozone sp SD3	2
		Chaetozone sp SD5	8
		Chaetozone sp SD7	45
		Chaetozone sp	44
		Kirkegaardia cryptica	25
		Kirkegaardia siblina	80
		Kirkegaardia tesselata	25
		Kirkegaardia sp SD9	10
		Protocirrineris sp B	2
	Fauveliopsidae	*Fauveliopsis* sp SD1	29
	Flabelligeridae	*Brada pilosa*	2
		Brada pluribranchiata	5
		Pherusa neopapillata	1
	Sternaspidae	*Sternaspis affinis*	220
	Ampharetidae		25
		Amage anops	8
		Amage scutata	30
		Ampharete finmarchica	10
		Ampharete labrops	1
		Ampharete sp	4
		Ampharetidae sp SD1	3
		Amphicteis scaphobranchiata	21
		Amphisamytha bioculata	2
		Anobothrus gracilis	78
		Asabellides lineata	4
		Eclysippe trilobata	899
		Lysippe sp A	50
		Lysippe sp B	63
		Samytha californiensis	3
		Sosane occidentalis	14
		Melinna oculata	7
	Pectinariidae	*Pectinaria californiensis*	97
	Terebellidae		1
		Amaeana occidentalis	13
		Polycirrus californicus	68
		Polycirrus sp I	1
		Polycirrus sp A	190
		Polycirrus sp OC1	407
		Polycirrus sp SD3	3
		Polycirrus sp	267
		Artacama coniferi	1
		Lanassa venusta venusta	334
		Phisidia sanctaemariae	641
		Pista brevibranchiata	2
		Pista estevanica	53
		Pista moorei	1
		Pista wui	3

Addendum 5-3 *continued*

Taxonomic Classification			n
		Proclea sp A	13
		Streblosoma sp B	2
		Streblosoma sp SF1	1
		Streblosoma sp	2
	Trichobranchidae	*Terebellides californica*	12
		Terebellides sp Type C	1
		Terebellides sp	1
		Trichobranchus hancocki	2
	Chaetopteridae		2
		Mesochaetopterus sp	1
		Phyllochaetopterus sp	1
		Spiochaetopterus costarum Cmplx	80
	Capitellidae		2
		Capitella teleta	40
		Decamastus gracilis	47
		Mediomastus sp	1007
		Notomastus hemipodus	82
		Notomastus latericeus	3
		Notomastus sp	10
	Cossuridae	*Cossura candida*	3
		Cossura sp A	2
		Cossura sp	1
	Maldanidae		177
		Euclymeninae	95
		Clymenura gracilis	131
		Euclymeninae sp A	26
		Euclymeninae sp B	113
		Isocirrus longiceps	1
		Petaloclymene pacifica	51
		Praxillella gracilis	2
		Praxillella pacifica	489
		Maldane sarsi	71
		Metasychis disparidentatus	5
		Nicomache lumbricalis	1
		Petaloproctus neoborealis	1
		Rhodine bitorquata	135
	Opheliidae	*Armandia brevis*	2
		Ophelina sp	1
	Orbiniidae		1
		Leitoscoloplos pugettensis	1
		Naineris sp	2
		Scoloplos acmeceps	3
		Scoloplos armiger Cmplx	288
		Scoloplos sp	1
	Paraonidae		1
		Aricidea (Acmira) catherinae	37
		Aricidea (Acmira) lopezi	12
		Aricidea (Acmira) rubra	1
		Aricidea (Acmira) simplex	33

Addendum 5-3 *continued*

Taxonomic Classification				n
			Aricidea (Acmira) sp SD3	1
			Aricidea (Acmira) sp	4
			Aricidea (Aricidea) pseudoarticulata	3
			Aricidea (Aricidea) wassi	2
			Aricidea (Strelzovia) antennata	33
			Aricidea (Strelzovia) hartleyi	1
			Aricidea (Strelzovia) sp A	11
			Aricidea (Strelzovia) sp	1
			Levinsenia gracilis	12
			Levinsenia kirbyae	4
			Levinsenia sp	1
			Paradoneis sp	2
		Scalibregmatidae	*Scalibregma californicum*	57
		Travisiidae	*Travisia brevis*	297
	Clitellata			
		Oligochaeta		2
Arthropoda				
	Ostracoda			
		Cylindroleberididae		1
			Xenoleberis californica	1
		Philomedidae	*Euphilomedes carcharodonta*	12
			Euphilomedes producta	58
			Scleroconcha trituberculata	1
	Malacostraca			
		Mysidae	*Mysidella americana*	1
		Caprellidae	*Mayerella banksia*	4
		Photidae	*Gammaropsis thompsoni*	3
			Photis californica	2
			Photis lacia	18
			Photis macrotica	1
			Photis sp SD10	1
			Photis sp	1
			Podoceropsis ociosa	1
		Aoridae	*Aoroides* sp A	4
			Aoroides sp	6
		Corophiidae	*Protomedeia articulata* Cmplx	27
		Oedicerotidae		1
			Americhelidium shoemakeri	15
			Americhelidium sp SD1	1
			Americhelidium sp SD4	3
			Bathymedon pumilus	11
			Deflexilodes norvegicus	13
			Hartmanodes hartmanae	2
			Monoculodes emarginatus	10
			Westwoodilla tone	23
		Eusiridae	*Rhachotropis* sp A	1
		Liljeborgiidae	*Listriella goleta*	5
			Listriella melanica	1
		Pardaliscidae	*Halicoides synopiae*	1

Addendum 5-3 *continued*

Taxonomic Classification			n
		Nicippe tumida	5
	Ampeliscidae	*Ampelisca agassizi*	5
		Ampelisca brachycladus	1
		Ampelisca brevisimulata	53
		Ampelisca cf *brevisimulata*	6
		Ampelisca careyi	177
		Ampelisca cristata microdentata	1
		Ampelisca hancocki	13
		Ampelisca indentata	1
		Ampelisca pacifica	123
		Ampelisca pugetica	94
		Ampelisca romigi	1
		Ampelisca sp	9
		Byblis millsi	8
	Argissidae	*Argissa hamatipes*	1
	Urothoidae	*Urothoe elegans* Cmplx	10
	Phoxocephalidae		2
		Foxiphalus similis	5
		Rhepoxynius bicuspidatus	297
		Rhepoxynius lucubrans	1
		Rhepoxynius menziesi	39
		Eyakia robusta	8
		Metaphoxus frequens	3
		Heterophoxus ellisi	10
		Heterophoxus oculatus	76
		Heterophoxus sp	6
	Lysianassidae	*Aruga holmesi*	1
		Aruga oculata	1
	Uristidae	*Anonyx lilljeborgi*	1
	Tryphosidae	*Hippomedon* sp A	2
	Pakynidae	*Pachynus barnardi*	1
	Cirolanidae	*Eurydice caudata*	1
	Gnathiidae	*Caecognathia crenulatifrons*	60
	Anthuridae	*Haliophasma geminata*	16
	Serolidae	*Heteroserolis carinata*	1
	Paramunnidae	*Pleurogonium californiense*	1
	Tanaidacea		2
	Akanthophoreidae	*Akanthophoreus phillipsi*	1
		Chauliopleona dentata	8
	Anarthruridae	Anarthruridae sp 3	1
		Siphonolabrum californiensis	4
	Leptocheliidae	*Chondrochelia dubia* Cmplx	56
	Tanaellidae	*Araphura breviaria*	65
		Tanaella propinquus	3
	Typhlotanaidae	*Typhlotanais williamsae*	3
	Tanaopsidae	*Tanaopsis cadieni*	16
	Leuconidae	*Eudorella pacifica*	1
	Nannastacidae	*Procampylaspis caenosa*	16
	Diastylidae	*Diastylis crenellata*	14

Addendum 5-3 *continued*

Taxonomic Classification				n
		Paguridae	*Pagurus hartae*	1
		Cyclodorippidae	*Deilocerus planus*	1
		Pinnotheridae	*Pinnixa occidentalis* Cmplx	8
Nematoda				5
Echinodermata				
	Asteroidea			27
		Astropectinidae	*Astropecten californicus*	2
	Ophiuroidea			13
		Ophiuridae	*Ophiura luetkenii*	1
		Amphiuridae		261
			Amphichondrius granulatus	36
			Amphiodia digitata	41
			Amphiodia urtica	793
			Amphiodia sp	260
			Amphioplus strongyloplax	2
			Amphioplus sp	2
			Amphipholis squamata	1
			Amphiura arcystata	10
			Dougaloplus amphacanthus	11
			Dougaloplus sp A	4
	Echinoidea			2
		Toxopneustidae	*Lytechinus pictus*	3
	Holothuroidea			
		Phyllophoridae	*Pentamera populifera*	2
			Pentamera sp	1
		Synaptidae	*Leptosynapta* sp	20
		Chiridotidae	*Chiridota* sp	9
Phoronida				1
		Phoronidae	*Phoronis* sp SD1	3
			Phoronis sp	5
Chordata				
	Enteropneusta			3
		Spengeliidae	*Schizocardium* sp	1
		Harrimaniidae	*Saccoglossus* sp	2
			Stereobalanus sp	23
	Ascidiacea			1

Addendum 5-4

Summary taxonomic listing of benthic infauna taxa identified from SBOO stations during 2019. Data are total number of individuals (n). Taxonomic arrangement follows SCAMIT (2018).

Taxonomic Classification				n
Cnidaria				
	Hydrozoa			
		Corymorphidae	*Corymorpha bigelowi*	2
			Euphysa sp A	8
		Campanulariidae	*Laomedea calceolifera*	7
		Virgulariidae		1
			Stylatula elongata	1
			Stylatula sp A	3
			Stylatula sp	4
			Virgularia californica	1
		Ceriantharia		8
		Arachnactidae	*Arachnanthus* sp A	1
		Actiniaria		16
		Edwardsiidae		21
			Edwardsia juliae	15
			Edwardsia olguini	8
			Scolanthus triangulus	25
			Edwardsiidae sp SD1	5
		Halcampidae	*Halcampa decemtentaculata*	15
			Halianthella sp A	1
			Pentactinia californica	2
		Isanthidae	*Zaolutus actius*	8
		Haloclavidae	*Anemonactis* sp A	2
Platyhelminthes				
	Rhabditophora			
		Stylochidae	*Stylochus exiguus*	2
		Cryptocelidae	*Cryptocelis occidentalis*	1
		Leptoplanoidea		1
			Rhabditophora sp C	4
Nemertea				1
	Anopla			2
		Cephalotrichidae	*Cephalothrix* sp	7
		Palaeonemertea		13
		Carinomidae		2
			Carinoma mutabilis	45
			Carinomella lactea	1
		Tubulanidae		14
			Tubulanus cingulatus	19
			Tubulanus polymorphus	40
			Tubulanus sp A	2
			Tubulanidae sp B	2
		Heteronemertea		9
		Lineidae		38
			Cerebratulus californiensis	1
			Cerebratulus sp	1
			Lineidae sp SD1	4
			Lineus bilineatus	12
			Maculaura alaskensis Cmplx	7

Addendum 5-4 *continued*

Taxonomic Classification				n
			Zygeupolia rubens	4
			Heteronemertea sp SD2	35
			Heteronemertea sp SD3	8
	Enopla			4
		Hoplonemertea		7
		Emplectonematidae	*Cryptonemertes actinophila*	1
			Paranemertes californica	7
		Prosorhochmidae	*Prosorhochmus albidus*	1
		Oerstediidae	*Oerstedia dorsalis* Cmplx	2
		Amphiporidae	*Amphiporus flavescens*	1
			Zygonemertes virescens	1
		Tetrastemmatidae	*Quasitetrastemma nigrifrons*	1
			Tetrastemma candidum	9
			Tetrastemma sp HYP1	1
			Hoplonemertea sp D	8
Mollusca				
	Caudofoveata			
		Chaetodermatidae	*Chaetoderma marinelli*	1
			Falcidens longus	1
	Gastropoda			1
		Calyptraeidae	*Calyptraea fastigiata*	4
			Crepidula glottidiarum	2
			Crepidula sp	2
			Crepipatella orbiculata	1
		Naticidae	*Neverita recluziana*	6
			Sinum scopulosum	2
		Barleeiidae	*Lirobarleeia kelseyi*	6
		Caecidae	*Caecum crebricinctum*	5
		Bursidae	*Crossata ventricosa*	2
		Epitoniidae	*Epitonium bellastriatum*	3
		Eulimidae	*Balcis oldroydae*	6
			Eulima raymondi	1
			Polygireulima rutila	26
		Buccinidae	*Kelletia kelletii*	5
		Nassariidae	*Caesia perpinguis*	2
		Olivellidae	*Callianax baetica*	8
		Borsoniidae	*Ophiodermella inermis*	2
		Mangeliidae	*Kurtziella plumbea*	7
			Kurtzina beta	5
		Terebridae	*Terebra hemphilli*	5
			Terebra pedroana	3
		Acteonidae	*Rictaxis punctocaelatus*	5
		Pyramidellidae	*Odostomia* sp	2
			Turbonilla santarosana	5
		Arminidae	*Armina californica*	1
		Rhizoridae	*Volvulella californica*	4
			Volvulella cylindrica	3
			Volvulella sp	1
		Acteocinidae	*Acteocina culcitella*	2

Addendum 5-4 *continued*

Taxonomic Classification				n
			Acteocina harpa	2
			Acteocina sp	1
		Philinidae	*Philine auriformis*	5
			Philine ornatissima	1
		Aglajidae	*Aglaja ocelligera*	1
		Gastropteridae	*Gastropteron pacificum*	2
		Philinoglossidae	*Philinoglossa* sp A	1
		Cylichnidae	*Cylichna diegensis*	10
		Diaphanidae	*Diaphana californica*	1
	Bivalvia			6
		Nuculidae	*Ennucula tenuis*	3
		Solemyidae	*Solemya pervernicosa*	2
		Nuculanidae	*Nuculana hamata*	3
			Nuculana taphria	6
			Nuculana sp A	1
		Glycymerididae	*Glycymeris septentrionalis*	1
		Mytilidae	Modiolinae	7
			Crenella decussata	6
			Mytilus sp	20
			Amygdalum pallidulum	3
		Pectinidae		1
			Leptopecten latiauratus	17
		Carditidae	*Cyclocardia ventricosa*	9
		Lucinidae	*Lucinisca nuttalli*	1
			Parvilucina tenuisculpta	9
			Lucinoma annulatum	4
		Thyasiridae	*Adontorhina cyclia*	1
			Axinopsida serricata	11
			Thyasira flexuosa	1
		Lasaeidae	*Kurtiella grippi*	3
			Kurtiella tumida	30
		Cardiidae	*Keenaea centifilosum*	18
		Tellinidae		1
			Tellina carpenteri	3
			Tellina modesta	27
			Tellina sp B	4
			Tellina sp SD1	3
			Macoma yoldiformis	29
			Macoma sp	4
		Semelidae	*Semele venusta*	1
		Solenidae	*Solen sicarius*	6
		Pharidae	*Ensis myrae*	10
		Veneridae	Venerinae	3
			Compsomyax subdiaphana	6
		Petricolidae	*Cooperella subdiaphana*	65
		Mactridae	*Simomactra falcata*	16
		Pandoridae	*Pandora bilirata*	1
		Lyonsiidae		6
			Lyonsia californica	11

Addendum 5-4 *continued*

Taxonomic Classification				n
		Thracioidea		1
		Thraciidae		2
		Periplomatidae	*Periploma* sp	2
		Cuspidariidae	*Cardiomya pectinata*	1
			Cardiomya planetica	1
	Scaphopoda			2
		Gadilidae	*Polyschides quadrifissatus*	23
			Gadila aberrans	36
Sipuncula				17
	Sipunculidea			
		Golfingiidae	*Thysanocardia nigra*	42
		Phascolionidae	*Phascolion* sp A	13
	Phascolosomatidea			
		Phascolosomatidae	*Apionsoma misakianum*	46
Annelida				
	Polychaeta			
		Amphinomidae	*Chloeia pinnata*	30
			Paramphinome sp	27
			Pareurythoe californica	218
		Dorvilleidae	*Meiodorvillea* sp SD1	1
			Parougia caeca	1
			Parougia sp	1
			Protodorvillea gracilis	104
		Eunicidae	*Leodice americana*	1
			Marphysa disjuncta	1
		Lumbrineridae	*Lumbrinerides platypygos*	89
			Lumbrineris cruzensis	6
			Lumbrineris latreilli	52
			Lumbrineris ligulata	17
			Lumbrineris sp Group I	6
			Lumbrineris sp Group II	1
			Lumbrineris sp	1
			Scoletoma tetraura Cmplx	9
			Scoletoma sp	1
		Oenonidae	*Drilonereis falcata*	3
			Drilonereis sp	2
		Onuphidae		15
			Diopatra splendidissima	2
			Diopatra tridentata	8
			Diopatra sp	12
			Mooreonuphis nebulosa	21
			Mooreonuphis sp SD1	86
			Mooreonuphis sp	3
			Nothria occidentalis	4
			Onuphis affinis	5
			Onuphis eremita parva	4
			Onuphis iridescens	12
			Onuphis sp A	58
			Onuphis sp	25

Addendum 5-4 *continued*

Taxonomic Classification			n
		Paradiopatra parva	40
		Paradiopatra sp	6
		Rhamphobrachium longisetosum	1
	Aphroditidae	*Aphrodita refulgida*	1
		Aphrodita sp	3
	Polynoidae		1
		Malmgreniella sp A	2
		Tenonia priops	10
		Pholoe glabra	1
	Sigalionidae	*Pisione* sp	163
		Sigalion spinosus	113
		Sthenelais tertiaglabra	10
		Sthenelanella uniformis	58
	Glyceridae	*Glycera macrobranchia*	2
		Glycera nana	6
		Glycera oxycephala	114
		Glycera tesselata	1
		Hemipodia borealis	8
	Goniadidae	*Glycinde armigera*	63
		Goniada littorea	30
		Goniada maculata	9
	Chrysopetalidae		1
	Hesionidae	*Gyptis brunnea*	1
		Heteropodarke heteromorpha	1
		Micropodarke dubia	6
		Oxydromus pugettensis	11
		Podarkeopsis glabrus	2
	Nereididae	*Nereis latescens*	3
	Nereididae	*Nereis* sp A	36
		Nereis sp	1
		Platynereis bicanaliculata	9
	Pilargidae	*Pilargis berkeleyae*	1
	Syllidae		17
		Proceraea sp	1
		Eusyllis habei	1
		Eusyllis transecta	10
		Eusyllis sp SD2	23
		Eusyllis sp	1
		Odontosyllis phosphorea	8
		Exogone lourei	13
		Parexogone breviseta	1
		Sphaerosyllis californiensis	2
		Syllis farallonensis	1
		Syllis heterochaeta	37
		Syllis sp SD1	3
		Syllis sp SD2	3
		Trypanosyllis sp	1
	Nephtyidae	*Bipalponephtys cornuta*	4
		Nephtys caecoides	23

Addendum 5-4 *continued*

Taxonomic Classification			n
		Nephtys ferruginea	6
		Nephtys simoni	6
		Nephtys sp SD2	5
	Phyllodocidae	*Eteone* sp	1
		Eulalia sp SD1	7
		Eulalia sp SD4	1
		Eumida longicornuta	11
		Hesionura coineaui difficilis	135
		Mystides sp	43
		Sige sp A	5
		Sige sp B	2
		Clavadoce sp	2
		Nereiphylla sp 2	2
		Nereiphylla sp SD1	3
		Phyllodoce hartmanae	43
		Phyllodoce longipes	31
		Phyllodoce medipapillata	4
		Phyllodoce pettiboneae	23
		Phyllodoce sp	1
	Fabriciidae	*Pseudofabriciola californica*	2
	Oweniidae	*Galathowenia pygidialis*	10
		Myriochele olgae	7
		Myriochele striolata	26
		Owenia collaris	11
	Sabellariidae		1
		Sabellaria gracilis	1
	Sabellidae		4
		Acromegalomma pigmentum	5
		Acromegalomma splendidum	1
		Dialychone albocincta	9
		Dialychone trilineata	5
		Dialychone veleronis	74
		Dialychone sp	1
		Euchone arenae	23
		Euchone hancocki	2
		Euchone incolor	13
		Euchone sp A	2
		Euchone sp	1
		Jasmineira sp B	178
		Paradialychone bimaculata	10
		Paradialychone ecaudata	4
		Paradialychone harrisae	53
		Paradialychone paramollis	21
		Potamethus sp A	1
	Apistobranchidae	*Apistobranchus ornatus*	1
	Magelonidae	*Magelona berkeleyi*	4
		Magelona hartmanae	1
		Magelona sacculata	5
	Poecilochaetidae	*Poecilochaetus johnsoni*	37

Addendum 5-4 *continued*

Taxonomic Classification			n
	Spionidae	*Aonides* sp SD1	3
		Dipolydora giardi	2
		Dipolydora socialis	5
		Dipolydora sp	1
		Dispio sp SD1	30
		Laonice cirrata	11
		Laonice nuchala	1
		Malacoceros indicus	1
		Microspio pigmentata	15
		Paraprionospio alata	49
		Polydora cirrosa	55
		Prionospio dubia	34
		Prionospio jubata	92
		Prionospio lighti	2
		Prionospio pygmaeus	21
		Scolelepis (Parascolelepis) texana	2
		Scolelepis (Scolelepis) occidentalis	1
		Spio maculata	25
		Spiophanes berkeleyorum	19
		Spiophanes duplex	621
		Spiophanes kimballi	3
		Spiophanes norrisi	915
		Spiophanes sp	1
	Cirratulidae		2
		Aphelochaeta glandaria Cmplx	14
		Aphelochaeta monilaris	6
		Aphelochaeta sp LA1	9
		Aphelochaeta sp	2
		Caulleriella hamata	2
		Caulleriella pacifica	7
		Chaetozone armata	5
		Chaetozone columbiana	4
		Chaetozone corona	56
		Chaetozone hartmanae	64
		Chaetozone lunula	6
		Chaetozone sp SD2	5
		Chaetozone sp SD5	7
		Chaetozone sp SD7	7
		Chaetozone sp	13
		Cirriformia sp SD2	59
		Kirkegaardia cryptica	3
		Kirkegaardia siblina	72
		Kirkegaardia tesselata	12
	Flabelligeridae	*Flabelligera* sp SD1	2
		Pherusa neopapillata	3
	Sternaspidae	*Sternaspis affinis*	9
	Ampharetidae		17
		Amage anops	4
		Ampharete finmarchica	4

Addendum 5-4 *continued*

Taxonomic Classification			n
		Ampharete labrops	57
		Ampharete sp	2
		Ampharetidae sp SD1	4
		Amphicteis scaphobranchiata	15
		Amphisamytha bioculata	4
		Anobothrus gracilis	25
		Asabellides lineata	2
		Eclysippe trilobata	64
		Lysippe sp A	26
		Lysippe sp B	11
		Sabellides manriquei	5
		Schistocomus hiltoni	1
		Melinna oculata	34
	Pectinariidae	*Pectinaria californiensis*	16
	Terebellidae		1
		Amaeana occidentalis	3
		Polycirrus sp I	4
		Polycirrus sp A	38
		Polycirrus sp OC1	1
		Polycirrus sp SD3	24
		Polycirrus sp	20
		Lanassa venusta venusta	106
		Phisidia sanctaemariae	16
		Pista brevibranchiata	3
		Pista estevanica	96
		Pista moorei	1
		Pista wui	50
		Pista sp	5
		Streblosoma crassibranchia	3
		Streblosoma sp B	7
		Streblosoma sp C	9
		Streblosoma sp SF1	4
		Streblosoma sp	3
	Trichobranchidae	*Terebellides californica*	1
		Trichobranchus hancocki	5
	Chaetopteridae	*Phyllochaetopterus* sp	2
		Spiochaetopterus costarum Cmplx	100
	Capitellidae	*Capitella teleta*	3
		Decamastus gracilis	1
		Mediomastus acutus	5
		Mediomastus sp	182
		Notomastus hemipodus	15
		Notomastus latericeus	22
		Notomastus lineatus	7
		Notomastus sp	12
	Cossuridae	*Cossura candida*	2
		Cossura sp A	2
	Maldanidae		38
		Euclymeninae	13

Addendum 5-4 *continued*

Taxonomic Classification				n
			Axiothella sp	2
			Clymenella complanata	1
			Clymenella sp A	1
			Clymenura gracilis	3
			Euclymeninae sp A	14
			Euclymeninae sp B	26
			Isocirrus longiceps	1
			Petaloclymene pacifica	12
			Praxillella pacifica	46
			Maldane sarsi	4
			Metasychis disparidentatus	15
			Petaloproctus neoborealis	1
			Praxillura maculata	1
			Rhodine bitorquata	10
		Opheliidae		2
			Ophelia pulchella	12
		Orbiniidae	*Leitoscoloplos pugettensis*	2
			Naineris uncinata	2
			Scoloplos armiger Cmplx	75
			Scoloplos sp	2
		Paraonidae		2
			Aricidea (Acmira) catherinae	9
			Aricidea (Acmira) cerrutii	2
			Aricidea (Acmira) lopezi	1
			Aricidea (Acmira) simplex	9
			Aricidea (Acmira) sp SD3	1
			Aricidea (Aedicira) pacifica	4
			Aricidea (Aricidea) sp SD1	2
			Aricidea (Strelzovia) antennata	6
			Aricidea (Strelzovia) hartleyi	1
			Aricidea (Strelzovia) sp A	1
			Cirrophorus furcatus	2
			Levinsenia gracilis	6
			Levinsenia kirbyae	1
			Paradoneis sp SD1	19
			Paradoneis sp	4
		Scalibregmatidae	*Scalibregma californicum*	7
		Travisiidae	*Travisia brevis*	2
		Saccocirridae	*Saccocirrus* sp	85
	Clitellata			
		Oligochaeta		4
Arthropoda				
	Pycnogonida			
		Phoxichilidiidae	*Anoplodactylus erectus*	2
			Anoplodactylus nodosus	1
	Ostracoda			
		Cylindroleberididae	*Leuroleberis sharpei*	7
		Philomedidae	*Euphilomedes carcharodonta*	82
		Sarsiellidae	*Eusarsiella thominx*	3

Addendum 5-4 *continued*

Taxonomic Classification			n
Malacostraca			
	Nebaliidae	*Nebalia daytoni*	5
	Hemisquillidae	*Hemisquilla californiensis*	2
	Mysidae	*Heteromysis odontops*	1
		Acanthomysis californica	3
		Alienacanthomysis macropsis	1
		Neomysis kadiakensis	1
		Mysidopsis californica	1
		Mysidopsis intii	1
	Caprellidae	*Caprella mendax*	16
		Caprella verrucosa	1
		Mayerella banksia	9
	Ischyroceridae	*Ericthonius brasiliensis*	5
		Notopoma sp A	37
	Kamakidae	*Amphideutopus oculatus*	13
	Photidae	*Ampelisciphotis podophthalma*	24
		Gammaropsis martesia	1
		Gammaropsis thompsoni	6
		Photis bifurcata	3
		Photis brevipes	16
		Photis californica	29
		Photis lacia	15
		Photis macinerneyi	6
		Photis sp C	3
		Photis sp OC1	25
		Photis sp	12
	Aoridae	*Aoroides inermis*	1
		Aoroides sp A	1
		Aoroides sp	3
	Unciolidae	*Rudilemboides stenopropodus*	1
	Corophiidae	*Laticorophium baconi*	24
		Protomedeia articulata Cmplx	1
		Hornellia occidentalis	5
	Megaluropidae	*Gibberosus myersi*	1
		Megaluropidae sp A	8
	Oedicerotidae	*Americhelidium shoemakeri*	12
		Americhelidium sp SD1	14
		Americhelidium sp SD4	2
		Deflexilodes norvegicus	1
		Hartmanodes hartmanae	7
		Westwoodilla tone	14
	Liljeborgiidae	*Listriella goleta*	1
		Listriella melanica	1
	Stenothoidae	*Metopa dawsoni*	1
	Melphidippidae	*Melphisana bola* Cmplx	1
	Ampeliscidae	*Ampelisca agassizi*	20
		Ampelisca brachycladus	30
		Ampelisca brevisimulata	79
		Ampelisca cf *brevisimulata*	2

Addendum 5-4 *continued*

Taxonomic Classification			n
		Ampelisca careyi	39
		Ampelisca cristata cristata	51
		Ampelisca cristata microdentata	138
		Ampelisca hancocki	1
		Ampelisca indentata	16
		Ampelisca pugetica	44
		Ampelisca romigi	3
		Ampelisca sp	5
		Byblis millsi	15
	Synopiidae	*Garosyrrhoe bigarra*	1
		Tiron biocellata	4
	Argissidae	*Argissa hamatipes*	4
	Platyischnopidae	*Tiburonella viscana*	4
	Phoxocephalidae	*Foxiphalus golfensis*	3
		Foxiphalus obtusidens	85
		Foxiphalus sp	1
		Metharpinia jonesi	2
		Rhepoxynius daboius	1
		Rhepoxynius fatigans	4
		Rhepoxynius heterocuspidatus	142
		Rhepoxynius lucubrans	16
		Rhepoxynius menziesi	118
		Rhepoxynius stenodes	20
		Rhepoxynius variatus	5
		Heterophoxus oculatus	1
		Heterophoxus sp	2
	Lysianassidae	*Aruga oculata*	2
	Tryphosidae	*Hippomedon zetesimus*	10
		Lepidepecreum serraculum	4
		Orchomenella decipiens	1
		Orchomenella pacifica	1
	Acidostomatidae	*Acidostoma hancocki*	2
	Pakynidae	*Pachynus barnardi*	1
	Cirolanidae	*Eurydice caudata*	25
	Gnathiidae	*Caecognathia crenulatifrons*	21
	Anthuridae	*Haliophasma geminata*	7
	Arcturidae	*Neastacilla californica*	1
	Idoteidae	*Edotia sublittoralis*	17
		Edotia sp B	1
	Leptocheliidae	*Chondrochelia dubia* Cmplx	181
	Tanaellidae	*Araphura* sp SD1	1
	Tanaopsidae	*Tanaopsis cadieni*	1
	Bodotriidae	*Cyclaspis nubila*	4
	Nannastacidae	*Campylaspis canaliculata*	5
		Campylaspis rubromaculata	1
		Procampylaspis caenosa	3
	Lampropidae	*Hemilamprops californicus*	45
		Mesolamprops bispinosus	5
	Diastylidae	*Anchicolurus occidentalis*	2

Addendum 5-4 *continued*

Taxonomic Classification				n
			Diastylis californica	9
			Diastylopsis tenuis	2
			Oxyurostylis pacifica	9
		Penaeidae	*Farfantepenaeus californiensis*	3
		Crangonidae	*Crangon alaskensis*	1
		Diogenidae	*Paguristes ulreyi*	9
		Paguridae	*Pagurus hartae*	1
		Albuneidae	*Lepidopa californica*	1
		Blepharipodidae	*Blepharipoda occidentalis*	1
		Cyclodorippidae	*Deilocerus* sp	5
		Majoidea		1
		Inachidae	*Erileptus spinosus*	2
		Cancridae		2
			Metacarcinus gracilis	3
			Romaleon antennarium	1
		Panopeidae	*Lophopanopeus* sp	1
		Pinnotheridae	*Pinnixa franciscana*	4
			Pinnixa longipes	4
			Pinnixa occidentalis Cmplx	1
			Pinnixa sp	1
	Hexanauplia			
		Scalpellidae	*Hamatoscalpellum californicum*	5
		Balanidae		1
Nematoda				152
Echinodermata				
	Asteroidea			50
		Astropectinidae	*Astropecten californicus*	10
			Astropecten sp	1
	Ophiuroidea			5
		Ophiuridae	*Ophiura luetkenii*	5
		Ophioscolecidae	*Ophiuroconis bispinosa*	34
		Amphiuridae		17
			Amphiodia digitata	3
			Amphiodia psara	2
			Amphiodia sp	12
			Amphioplus sp	5
			Amphipholis squamata	23
			Amphipholis sp	3
			Amphiura arcystata	1
			Dougaloplus sp A	1
		Ophiotrichidae	*Ophiothrix spiculata*	1
	Echinoidea			3
		Toxopneustidae	*Lytechinus pictus*	3
		Dendrasteridae	*Dendraster terminalis*	105
		Spatangoida		4
		Loveniidae	*Lovenia cordiformis*	22
	Holothuroidea			
		Dendrochirotida		1
		Psolidae		1

Addendum 5-4 *continued*

Taxonomic Classification				n
		Phyllophoridae		2
			Pentamera populifera	1
			Pentamera pseudopopulifera	1
			Pentamera rigida	1
			Pentamera sp	2
		Synaptidae	*Leptosynapta* sp	9
		Chiridotidae	*Chiridota* sp	1
Phoronida				16
		Phoronidae	*Phoronis* sp SD1	10
			Phoronis sp	47
			Phoronopsis sp	3
Brachiopoda				
	Lingulata			
		Lingulidae	*Glottidia albida*	123
Chordata				
	Enteropneusta			1
		Ptychoderidae	*Balanoglossus* sp	4
		Spengeliidae	*Schizocardium* sp	3
		Harrimaniidae	*Saccoglossus* sp	3
	Ascidiacea			
		Agneziidae	*Agnezia septentrionalis*	2
		Stolidobranchiata		1
		Styelidae	*Cnemidocarpa rhizopus*	4
		Molgulidae		2
			Eugyra arenosa californica	3
			Molgula regularis	1
	Leptocardii			
		Branchiostomatidae	*Branchiostoma californiense*	15

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Addendum 6

San Diego Regional Benthic Stations

2019 Raw Data

Addendum 6-1

Summary of particle size parameters (%) for sediments from the 2019 San Diego regional benthic stations. Visual observations are from sieved "grunge" (i.e., particles retained on 1-mm mesh screen and preserved with infauna for benthic community analysis). Gran = Granules; VCS = Very Coarse Sand; CS = Coarse Sand; MS = Medium Sand; FS = Fine Sand; VFS = Very Fine Sand; CSi = Coarse Silt; MSi = Medium Silt; FSi = Fine Silt; VFSi = Very Fine Silt.

	Depth	Coarse Particles			Med-Coarse Sands			Fine Sands			Fine Particles						
Station	(m)	Gran	VCS	Total	CS	MS	Total	FS	VFS	Total	CSi	MSi	FSi	VFSi	Clay	Total	Visual Observations
Inner Shelf																	
8815	11	0.0	0.0	0.0	0.0	0.8	0.8	10.2	33.4	43.6	32.0	13.9	8.3	1.4	0.0	55.6	
8805	12	0.0	0.0	0.0	0.0	1.8	1.8	18.6	48.8	67.4	19.9	5.3	4.5	1.2	0.0	30.9	
8813	16	0.0	0.0	0.0	0.0	1.4	1.4	15.1	51.2	66.3	16.5	5.6	7.9	2.3	0.0	32.3	
8844	16	0.0	0.1	0.1	4.3	10.1	14.4	16.1	22.8	38.9	13.0	12.6	17.5	3.5	0.0	46.6	
8842	17	0.0	0.0	0.0	0.0	1.9	1.9	17.3	45.1	62.4	18.1	7.0	8.7	2.0	0.0	35.8	
8837	22	0.0	0.0	0.0	0.0	3.6	3.6	45.7	43.4	89.1	2.2	0.6	2.5	2.1	0.0	7.3	
8802	23	0.0	0.0	0.0	0.0	1.8	1.8	23.1	54.8	77.9	8.0	2.2	6.1	3.8	0.1	20.3	
Middle Shelf																	
8808	31	0.0	0.0	0.0	0.0	0.2	0.2	10.7	51.2	61.9	21.4	5.9	8.2	2.4	0.0	37.9	
8801	36	4.0	11.4	15.4	8.7	11.5	20.2	17.9	14.7	32.6	12.7	7.8	9.1	4.4	0.3	34.3	
8807	41	0.0	0.0	0.0	0.0	2.1	2.1	15.0	31.6	46.6	17.9	11.6	17.2	4.6	0.0	51.3	
8821	43	0.0	0.0	0.0	0.0	0.9	0.9	8.2	15.1	23.3	13.4	19.8	34.5	8.1	0.1	75.9	
8827	57	0.0	0.0	0.0	0.0	0.6	0.6	9.6	30.6	40.2	22.2	14.6	18.3	4.1	0.0	59.2	
8812	58	0.0	0.0	0.0	0.0	0.8	0.8	10.9	30.8	41.7	19.5	13.2	19.7	5.0	0.0	57.4	
8828	58	0.0	0.0	0.0	0.0	0.7	0.7	9.2	28.0	37.2	21.4	15.3	20.6	4.8	0.0	62.1	shell hash
8824	72	0.0	0.0	0.0	0.0	0.1	0.1	6.1	24.4	30.5	22.0	17.0	24.2	6.1	0.1	69.4	
8833 [s]	85	9.2	8.4	17.6	6.1	8.3	14.4	8.0	15.8	23.8	44.1	—	—	—	—	44.1	pea gravel
8840	86	0.0	0.0	0.0	0.0	0.2	0.2	7.2	28.7	35.9	21.3	13.9	22.0	6.6	0.1	63.9	
8814	87	0.0	0.0	0.0	0.0	0.2	0.2	7.2	25.5	32.7	21.0	16.3	24.1	5.7	0.0	67.1	
8811 [s]	107	3.6	5.6	9.1	10.3	17.5	27.8	30.8	14.7	45.5	17.6	—	—	—	—	17.6	pea gravel
8816 [s]	110	1.8	6.0	7.7	6.6	5.2	11.7	8.9	36.9	45.8	34.7	—	—	—	—	34.7	cobble
8826	115	1.6	11.7	13.3	5.1	0.5	5.6	5.0	16.7	21.7	15.7	15.6	23.8	5.5	0.0	60.6	shell hash

[s] measured by sieve (not Horiba; silt and clay fractions are indistinguishable)

Addendum 6-1 *continued*

Station	Depth (m)	Coarse Particles			Med-Coarse Sands			Fine Sands			Fine Particles						Visual Observations
		Gran	VCS	Total	CS	MS	Total	FS	VFS	Total	CSi	MSi	FSi	VFSi	Clay	Total	
Outer Shelf																	
8806	135	0.0	0.0	0.0	0.0	1.4	1.4	10.3	24.4	34.7	17.5	14.9	24.9	6.5	0.1	63.9	shell hash, organics
8822	137	0.0	0.0	0.0	0.0	0.1	0.1	6.3	28.0	34.3	20.6	15.5	23.6	5.9	0.0	65.6	
8803	151	0.0	0.0	0.0	0.0	0.2	0.2	7.4	28.4	35.8	20.2	13.5	23.5	6.8	0.1	64.1	shell hash
8823	167	0.0	0.0	0.0	0.0	0.2	0.2	6.5	26.1	32.6	20.1	13.8	24.9	8.2	0.2	67.2	organics
8804	168	0.0	0.0	0.0	0.0	0.7	0.7	8.4	21.8	30.2	18.1	16.9	27.2	6.9	0.1	69.2	shell hash, cobble
8818	172	0.0	0.0	0.0	0.0	0.1	0.1	5.6	22.2	27.8	18.9	15.7	28.6	8.8	0.2	72.2	organics
8832	176	0.0	0.0	0.0	0.0	0.1	0.1	7.8	38.8	46.6	22.1	10.8	16.1	4.3	0.0	53.3	organics
8829 [s]	178	2.2	4.0	6.2	10.8	25.2	36.0	20.3	23.3	43.6	14.3	—	—	—	—	14.3	shell hash
8825	180	0.0	0.0	0.0	0.0	0.1	0.1	5.8	33.2	39.0	26.6	12.9	16.6	4.7	0.1	61.0	
8810	189	0.0	0.0	0.0	0.0	1.7	1.7	11.2	18.9	30.1	16.6	17.7	27.3	6.5	0.1	68.2	shell hash, cobble
8836	190	0.0	0.0	0.0	0.0	0.1	0.1	5.6	38.1	43.7	27.7	11.0	14.0	3.5	0.0	56.2	
8835	192	0.0	0.0	0.0	0.0	0.1	0.1	5.9	32.1	38.0	23.6	12.8	19.7	5.7	0.1	61.9	
8838	198	0.0	0.0	0.0	0.0	0.4	0.4	9.6	37.4	47.0	20.1	11.0	17.1	4.5	0.0	52.7	organics
Upper Slope																	
8820	218	0.0	0.0	0.0	0.0	0.1	0.1	3.8	18.4	22.2	23.1	20.7	27.5	6.4	0.1	77.8	worm tubes
8831	218	0.0	0.0	0.0	0.0	0.1	0.1	5.8	35.7	41.5	25.4	13.3	16.2	3.7	0.0	58.6	
8834	246	0.0	0.0	0.0	0.0	0.1	0.1	5.2	25.5	30.7	22.0	14.7	24.0	8.1	0.4	69.2	worm tubes
8809	271	0.0	0.0	0.0	0.0	1.6	1.6	7.7	12.0	19.7	13.9	21.0	35.5	8.2	0.1	78.7	shell hash
8839	307	0.0	0.0	0.0	0.0	0.1	0.1	3.5	11.0	14.5	15.0	23.6	37.8	8.9	0.2	85.5	
8817	314	0.0	0.0	0.0	0.0	0.1	0.1	5.4	17.6	23.0	17.8	20.0	31.5	7.5	0.1	76.9	

[s] measured by sieve (not Horiba; silt and clay fractions are indistinguishable)

Addendum 6-2

Concentrations of organic indicators detected in sediments from the 2019 San Diego regional benthic stations. See Appendix F.1 for MDLs; nd=not detected.

	Station	Depth (m)	Sulfides (ppm)	TN (% wt)	TOC (% wt)	TVS (% wt)
Inner Shelf	8815	11	nd	0.024	0.22	1.2
	8805	12	10.70	0.027	0.22	1.3
	8813	16	2.12	0.027	0.22	0.8
	8844	16	3.11	0.027	0.26	1.0
	8842	17	2.05	0.017	0.12	0.8
	8837	22	0.70	nd	0.10	0.8
	8802	23	0.68	nd	0.22	0.8
Mid Shelf	8808	31	nd	0.026	0.24	1.0
	8801	36	0.80	0.033	0.43	2.3
	8807	41	1.58	0.031	0.30	0.9
	8821	43	3.24	0.040	0.70	1.5
	8827	57	2.64	0.047	0.54	2.3
	8812	58	3.62	0.051	0.56	2.3
	8828	58	2.61	0.059	0.64	2.1
	8824	72	2.36	0.073	0.80	2.8
	8833	85	8.45	0.080	1.96	3.6
	8840	86	nd	0.057	0.62	2.3
	8814	87	1.35	0.055	0.56	2.2
	8811	107	3.15	0.043	0.55	1.5
	8816	110	1.84	0.042	1.27	2.2
	8826	115	0.89	0.050	0.63	2.1
Outer Shelf	8806	135	5.43	0.069	0.93	3.0
	8822	137	407.00	0.044	0.63	2.2
	8803	151	1.31	0.091	1.40	4.0
	8823	167	2.42	0.071	0.90	2.9
	8804	168	3.09	0.108	1.72	4.3
	8818	172	6.95	0.085	1.33	3.6
	8832	176	2.73	0.042	0.69	2.4
	8829	178	2.25	0.062	3.31	3.1
	8825	180	3.04	0.078	0.87	3.1
	8810	189	3.73	0.089	1.12	3.4
	8836	190	1.42	0.058	0.75	2.7
	8835	192	6.21	0.061	0.77	2.7
	8838	198	3.03	0.053	0.65	2.3
Upper Slope	8820	218	4.10	0.164	2.51	6.3
	8831	218	2.26	0.056	1.04	3.1
	8834	246	3.73	0.097	1.34	4.2
	8809	271	1.62	0.170	2.53	3.8
	8839	307	25.90	0.237	2.54	7.5
	8817	314	4.84	0.210	3.36	7.6
	Detection Rate (%)		93	95	100	100

Addendum 6-3

Concentrations of trace metals (ppm) detected in sediments from the 2019 San Diego regional benthic stations. See Appendix F.1 for MDLs; nd = not detected; na = not available.

	Station	Depth (m)	Al	Sb	As	Ba	Be	Cd	Cr	Cu	Fe
Inner Shelf	8815	11	6830	1.0	1.78	36.8	nd	0.07	12.1	4.2	8700
	8805	12	8040	1.2	1.41	54.9	nd	0.04	13.6	5.0	10,200
	8813	16	4160	0.6	1.29	15.5	nd	0.08	8.5	2.2	4710
	8844	16	5060	0.9	1.70	23.2	nd	0.03	10.3	3.1	7690
	8842	17	6110	0.9	0.98	37.9	nd	0.03	12.3	3.3	7900
	8837	22	4180	0.7	1.75	22.8	nd	nd	8.8	2.4	5480
	8802	23	4920	0.6	0.93	21.2	0.09	0.02	9.2	2.4	5450
Mid Shelf	8808	31	5840	0.8	0.85	27.5	nd	0.05	10.6	3.4	6080
	8801	36	10,600	1.3	0.85	79.2	0.19	0.06	18.1	8.0	13,200
	8807	41	4420	0.7	1.53	17.2	nd	0.04	9.5	3.1	5720
	8821	43	3590	0.6	1.15	18.0	nd	0.05	7.8	3.1	5100
	8827	57	8210	1.2	3.13	42.7	0.16	0.14	15.7	6.1	10,600
	8812	58	9090	1.4	1.14	42.6	nd	0.10	16.6	7.8	11,500
	8828	58	8820	1.2	3.39	43.7	nd	0.15	16.6	6.5	11,500
	8824	72	10,700	1.5	2.49	50.5	nd	0.12	20.8	9.8	14,100
	8833	85	8440	1.5	3.44	55.5	0.18	0.11	16.9	10.1	12,000
	8840	86	9300	1.5	1.87	50.0	nd	0.10	18.9	7.1	14,400
	8814	87	8060	1.2	1.69	34.7	nd	0.06	16.0	7.8	10,900
	8811	107	6890	1.4	1.50	36.5	0.14	0.04	11.2	6.9	9940
	8816	110	5900	1.1	3.04	21.9	0.17	0.06	15.2	6.5	11,000
	8826	115	6650	0.9	2.65	24.2	nd	0.08	13.6	5.4	9160
Outer Shelf	8806	135	9730	1.4	2.45	41.5	nd	nd	18.9	12.1	12,200
	8822	137	7620	1.1	2.39	27.9	nd	nd	15.6	6.7	9880
	8803	151	11,500	1.5	2.70	49.2	nd	nd	22.2	12.5	13,700
	8823	167	9190	1.6	0.94	36.7	nd	0.16	18.8	8.8	11,800
	8804	168	11,500	1.6	2.94	69.4	nd	nd	23.4	13.6	14,100
	8818	172	11,800	1.6	2.74	43.3	nd	nd	24.2	13.7	14,300
	8832	176	6960	1.2	2.25	30.5	0.17	0.29	15.7	5.9	10,100
	8829	178	6730	1.5	4.76	20.3	nd	0.11	21.6	8.1	17,200
	8825	180	9200	1.4	1.00	39.1	nd	0.18	18.9	8.8	11,800
	8810	189	12,600	1.8	2.60	64.7	0.25	nd	23.6	20.0	15,400
	8836	190	8640	1.6	2.25	40.7	0.20	0.42	18.9	7.5	12,100
	8835	192	8200	1.6	2.52	36.9	0.19	0.39	18.2	7.2	11,600
	8838	198	7760	1.5	2.44	37.2	0.18	0.42	16.7	6.7	10,900
Upper Slope	8820	218	16,100	2.0	4.01	66.0	0.34	nd	32.3	19.7	17,600
	8831	218	8390	1.4	2.41	37.3	0.20	0.36	18.1	7.9	11,300
	8834	246	10,600	2.0	3.00	48.9	0.25	0.34	23.3	11.1	14,200
	8809	271	8470	1.5	2.93	47.2	nd	nd	21.9	11.2	11,500
	8839	307	19,200	3.2	6.85	89.7	0.45	0.38	34.9	20.4	22,900
	8817	314	15,500	2.2	3.66	79.7	nd	nd	34.1	19.9	17,500
	Detection Rate (%)		100	100	100	100	38	75	100	100	100
		ERL[a]:	na	na	8.2	na	na	1.2	81	34	na
		ERM[a]:	na	na	70.0	na	na	9.6	370	270	na

[a]From Long et al. 1995

Addendum 6-3 *continued*

	Station	Depth (m)	Pb	Mn	Hg	Ni	Se	Ag	Tl	Sn	Zn
Inner Shelf	8815	11	2.6	87.4	0.012	4.0	nd	nd	nd	0.5	24.2
	8805	12	2.4	99.1	0.006	5.1	nd	nd	nd	0.5	27.5
	8813	16	1.5	47.9	0.008	2.2	nd	nd	nd	0.4	12.6
	8844	16	2.8	64.8	0.010	2.7	nd	nd	nd	0.4	17.8
	8842	17	1.9	69.3	0.004	3.5	nd	nd	nd	0.4	17.3
	8837	22	1.3	69.2	nd	2.7	nd	nd	nd	0.2	14.3
	8802	23	1.4	59.7	0.004	2.5	nd	nd	nd	0.3	13.0
Mid Shelf	8808	31	1.7	65.4	0.007	3.6	nd	nd	nd	0.4	15.9
	8801	36	2.9	130.0	0.011	7.2	nd	nd	nd	1.2	36.0
	8807	41	2.2	47.1	0.009	3.3	nd	nd	nd	0.4	13.3
	8821	43	2.4	48.6	0.015	2.4	nd	nd	nd	0.4	13.5
	8827	57	3.6	104.0	0.023	5.7	nd	nd	nd	0.8	28.4
	8812	58	5.0	95.0	0.032	6.7	nd	nd	nd	1.0	30.1
	8828	58	3.8	113.0	0.023	6.2	nd	nd	nd	0.8	30.0
	8824	72	5.8	122.0	0.046	9.0	nd	nd	nd	1.2	37.4
	8833	85	3.9	98.6	0.018	6.9	nd	nd	nd	0.7	30.8
	8840	86	4.4	114.0	0.017	6.7	nd	nd	nd	0.7	34.2
	8814	87	4.6	83.8	0.040	6.8	nd	nd	nd	0.8	26.6
	8811	107	3.2	73.2	0.029	4.1	nd	nd	nd	0.5	23.3
	8816	110	2.9	60.8	0.022	5.0	nd	nd	nd	0.5	25.0
	8826	115	3.0	75.7	0.018	5.8	nd	nd	nd	0.6	22.1
Outer Shelf	8806	135	5.2	100.0	0.056	8.7	nd	nd	nd	1.1	35.1
	8822	137	3.3	81.5	0.025	6.8	0.25	nd	nd	0.6	25.0
	8803	151	8.8	116.0	0.051	10.7	0.24	nd	nd	1.2	37.9
	8823	167	4.0	97.3	0.036	9.0	nd	nd	nd	0.8	31.3
	8804	168	9.4	112.0	0.052	12.0	0.38	nd	nd	1.1	39.8
	8818	172	5.1	111.0	0.061	10.9	0.27	nd	nd	1.1	37.8
	8832	176	3.5	81.0	0.021	6.4	nd	nd	nd	0.5	25.8
	8829	178	3.5	58.1	0.017	5.6	0.27	nd	nd	0.5	31.5
	8825	180	4.0	99.7	0.032	9.2	nd	nd	nd	0.8	31.7
	8810	189	6.7	131.0	0.072	9.6	nd	nd	nd	1.3	44.8
	8836	190	4.0	105.0	0.034	7.7	nd	nd	nd	0.7	31.8
	8835	192	4.0	95.3	0.026	7.6	nd	nd	nd	0.6	29.3
	8838	198	3.7	92.6	0.021	6.5	nd	nd	nd	0.6	28.2
Upper Slope	8820	218	5.9	144.0	0.075	18.5	0.64	nd	nd	1.3	50.5
	8831	218	3.6	93.6	0.026	8.1	nd	nd	nd	0.6	30.7
	8834	246	4.4	118.0	0.036	10.9	nd	nd	nd	0.9	39.1
	8809	271	4.3	72.8	0.045	10.5	0.31	nd	nd	0.8	29.3
	8839	307	8.5	185.0	0.079	16.5	nd	nd	nd	1.7	65.3
	8817	314	6.0	131.0	0.063	19.5	0.63	nd	nd	1.4	51.0
	Detection Rate (%)		100	100	98	100	20	0	0	100	100
		ERL[a]:	46.7	na	0.15	20.9	na	1.0	na	na	150
		ERM[a]:	218.0	na	0.71	51.6	na	3.7	na	na	410

[a]From Long et al. 1995

Addendum 6-4

Concentrations of pesticides (ppt), total PCB (ppt), and total PAH (ppb) detected in sediments from the 2019 San Diego regional benthic stations. See Appendix F.1 for MDLs and Addendum 6-5 for values of individual constituents; tChlor = total chlordane; HCB = hexachlorobenzene; nd = not detected; nr = not reportable; na = not available.

	Station	Depth (m)	Aldrin	tChlor	tDDT	HCB	tHCH	tPCB	tPAH[b]
Inner Shelf	8815	11	nd	nd	46	nd	nd	108	4
	8805	12	nd	nd	120	nd	nd	18	4
	8813	16	nd	nd	30	nd	nd	19	3
	8844	16	nd	nd	28	nd	nd	nd	nr
	8842	17	nd	nd	20	nd	nd	nd	nr
	8837	22	nd	nd	13	nd	nd	nd	3
	8802	23	nd	nd	39	nd	nd	20	8
Mid Shelf	8808	31	nd	nd	193	nd	nd	22	12
	8801	36	nd	nd	11,006	24	11	666	29[c]
	8807	41	nd	nd	258	nd	nd	330	5
	8821	43	nd	nd	136	nd	nd	341	nr
	8827	57	nd	nd	350	73	nd	1043	24
	8812	58	nd	12	851	23	nd	40,838	nr
	8828	58	nd	73	345	nd	nd	398	20
	8824	72	nd	nd	618	nd	nd	723	60
	8833	85	24	10	493	nd	nd	332	14
	8840	86	nd	nd	459	nd	nd	110	19
	8814	87	nd	nd	652	35	nd	1138	nr
	8811	107	nd	22	247	nd	nd	1027	313
	8816	110	nd	nd	207	nd	nd	616	19
	8826	115	nd	nd	279	nd	nd	179	16
Outer Shelf	8806	135	nd	18	775	262	nd	8314	1381
	8822	137	nd	nd	482	nd	nd	576	27
	8803	151	nd	17	939	21	nd	1692	128
	8823	167	nd	10	859	nd	nd	741	71
	8804	168	nd	nd	772	33	nd	1584	115
	8818	172	nd	28	972	nd	nd	2496	150
	8832	176	nd	nd	327	nd	nd	94	14
	8829	178	nd	nd	513	nd	9	929	12
	8825	180	nd	nd	853	nd	nd	692	111
	8810	189	nd	241	921	590	nd	5645	2120[d]
	8836	190	nd	nd	385	24	nd	130	9
	8835	192	nd	nd	461	nd	nd	202	14
	8838	198	nd	nd	237	54	nd	117	10
Upper Slope	8820	218	nd	23	1969	243	nd	4219	135
	8831	218	nd	nd	521	nd	nd	175	14
	8834	246	nd	nd	1862	43	nd	561	16
	8809	271	nd	nd	613	26	nd	758	56
	8839	307	nd	nd	2489	nd	nd	1177	99
	8817	314	nd	nd	2041	50	nd	1405	61
	Detection Rate (%)		3	25	100	35	5	93	100
		ERL[a]:	na	na	1580	na	na	na	4022
		ERM[a]:	na	na	46,100	na	na	na	44,792

[a] From Long et al. 1995; [b] all samples missing biphenyl; [c] missing acenaphthylene; [d] missing naphthalene

Addendum 6-5

Summary of the constituents that make up total chlordane, total DDT, total HCH, total PCB, and total PAH in sediments from the 2019 San Diego regional benthic stations.

Station	Class	Constituent	Value	Units
8801	DDT	o,p-DDD	279	ppt
8801	DDT	o,p-DDE	136	ppt
8801	DDT	o,p-DDT	343	ppt
8801	DDT	p,-p-DDMU	489	ppt
8801	DDT	p,p-DDD	859	ppt
8801	DDT	p,p-DDE	7020	ppt
8801	DDT	p,p-DDT	1880	ppt
8801	HCH	HCH, Beta isomer	11	ppt
8801	PAH	1-methylphenanthrene	3	ppb
8801	PAH	2-methylnaphthalene	4	ppb
8801	PAH	2,6-dimethylnaphthalene	9	ppb
8801	PAH	Fluoranthene	4	ppb
8801	PAH	Naphthalene	5	ppb
8801	PAH	Pyrene	5	ppb
8801	PCB	PCB 28	16	ppt
8801	PCB	PCB 44	11	ppt
8801	PCB	PCB 49	18	ppt
8801	PCB	PCB 52	17	ppt
8801	PCB	PCB 66	18	ppt
8801	PCB	PCB 70	14	ppt
8801	PCB	PCB 99	31	ppt
8801	PCB	PCB 101	39	ppt
8801	PCB	PCB 110	34	ppt
8801	PCB	PCB 118	31	ppt
8801	PCB	PCB 138	53	ppt
8801	PCB	PCB 149	52	ppt
8801	PCB	PCB 151	14	ppt
8801	PCB	PCB 153/168	86	ppt
8801	PCB	PCB 170	19	ppt
8801	PCB	PCB 177	12	ppt
8801	PCB	PCB 18	11	ppt
8801	PCB	PCB 180	52	ppt
8801	PCB	PCB 183	17	ppt
8801	PCB	PCB 187	46	ppt
8801	PCB	PCB 194	25	ppt
8801	PCB	PCB 206	48	ppt
8802	DDT	p,p-DDE	39	ppt
8802	PAH	2,6-dimethylnaphthalene	8	ppb
8802	PCB	PCB 206	20	ppt
8803	Chlordane	Gamma(trans)Chlordane	17	ppt
8803	DDT	o,p-DDD	19	ppt
8803	DDT	o,p-DDE	35	ppt
8803	DDT	o,p-DDT	17	ppt
8803	DDT	p,-p-DDMU	38	ppt
8803	DDT	p,p-DDD	68	ppt
8803	DDT	p,p-DDE	678	ppt
8803	DDT	p,p-DDT	84	ppt
8803	PAH	2,6-dimethylnaphthalene	10	ppb
8803	PAH	3,4-benzo(B)fluoranthene	19	ppb
8803	PAH	Acenaphthylene	3	ppb
8803	PAH	Benzo[A]pyrene	15	ppb

Addendum 6-5 *continued*

Station	Class	Constituent	Value	Units
8803	PAH	Benzo[e]pyrene	13	ppb
8803	PAH	Benzo[G,H,I]perylene	14	ppb
8803	PAH	Benzo[K]fluoranthene	8	ppb
8803	PAH	Chrysene	10	ppb
8803	PAH	Fluoranthene	12	ppb
8803	PAH	Indeno(1,2,3-CD)pyrene	11	ppb
8803	PAH	Pyrene	14	ppb
8803	PCB	PCB 28	130	ppt
8803	PCB	PCB 44	61	ppt
8803	PCB	PCB 49	120	ppt
8803	PCB	PCB 52	140	ppt
8803	PCB	PCB 66	43	ppt
8803	PCB	PCB 70	170	ppt
8803	PCB	PCB 74	120	ppt
8803	PCB	PCB 87	31	ppt
8803	PCB	PCB 99	200	ppt
8803	PCB	PCB 101	21	ppt
8803	PCB	PCB 105	31	ppt
8803	PCB	PCB 110	29	ppt
8803	PCB	PCB 118	43	ppt
8803	PCB	PCB 128	71	ppt
8803	PCB	PCB 138	26	ppt
8803	PCB	PCB 149	100	ppt
8803	PCB	PCB 151	19	ppt
8803	PCB	PCB 153/168	29	ppt
8803	PCB	PCB 156	35	ppt
8803	PCB	PCB 170	57	ppt
8803	PCB	PCB 177	37	ppt
8803	PCB	PCB 180	43	ppt
8803	PCB	PCB 187	14	ppt
8803	PCB	PCB 194	51	ppt
8803	PCB	PCB 206	72	ppt
8804	DDT	o,p-DDD	18	ppt
8804	DDT	o,p-DDE	37	ppt
8804	DDT	o,p-DDT	13	ppt
8804	DDT	p,-p-DDMU	41	ppt
8804	DDT	p,p-DDD	60	ppt
8804	DDT	p,p-DDE	567	ppt
8804	DDT	p,p-DDT	36	ppt
8804	PAH	2,6-dimethylnaphthalene	7	ppb
8804	PAH	3,4-benzo(B)fluoranthene	18	ppb
8804	PAH	Benzo[A]pyrene	13	ppb
8804	PAH	Benzo[e]pyrene	12	ppb
8804	PAH	Benzo[G,H,I]perylene	13	ppb
8804	PAH	Benzo[K]fluoranthene	9	ppb
8804	PAH	Chrysene	9	ppb
8804	PAH	Fluoranthene	12	ppb
8804	PAH	Indeno(1,2,3-CD)pyrene	11	ppb
8804	PAH	Pyrene	12	ppb
8804	PCB	PCB 28	110	ppt
8804	PCB	PCB 44	50	ppt
8804	PCB	PCB 49	110	ppt
8804	PCB	PCB 52	120	ppt
8804	PCB	PCB 66	11	ppt

Addendum 6-5 *continued*

Station	Class	Constituent	Value	Units
8804	PCB	PCB 70	170	ppt
8804	PCB	PCB 74	130	ppt
8804	PCB	PCB 87	27	ppt
8804	PCB	PCB 99	210	ppt
8804	PCB	PCB 101	17	ppt
8804	PCB	PCB 105	41	ppt
8804	PCB	PCB 110	28	ppt
8804	PCB	PCB 118	60	ppt
8804	PCB	PCB 123	67	ppt
8804	PCB	PCB 138	41	ppt
8804	PCB	PCB 149	80	ppt
8804	PCB	PCB 151	19	ppt
8804	PCB	PCB 153/168	19	ppt
8804	PCB	PCB 156	31	ppt
8804	PCB	PCB 170	40	ppt
8804	PCB	PCB 177	43	ppt
8804	PCB	PCB 180	37	ppt
8804	PCB	PCB 187	17	ppt
8804	PCB	PCB 194	36	ppt
8804	PCB	PCB 206	70	ppt
8805	DDT	p,p-DDE	95	ppt
8805	DDT	p,p-DDT	25	ppt
8805	PAH	2,6-dimethylnaphthalene	4	ppb
8805	PCB	PCB 206	18	ppt
8806	Chlordane	Gamma(trans)Chlordane	18	ppt
8806	DDT	o,p-DDD	24	ppt
8806	DDT	o,p-DDE	27	ppt
8806	DDT	o,p-DDT	38	ppt
8806	DDT	p,-p-DDMU	38	ppt
8806	DDT	p,p-DDD	103	ppt
8806	DDT	p,p-DDE	479	ppt
8806	DDT	p,p-DDT	66	ppt
8806	PAH	1-methylnaphthalene	12	ppb
8806	PAH	2,6-dimethylnaphthalene	9	ppb
8806	PAH	3,4-benzo(B)fluoranthene	185	ppb
8806	PAH	Acenaphthene	4	ppb
8806	PAH	Acenaphthylene	29	ppb
8806	PAH	Anthracene	73	ppb
8806	PAH	Benzo[A]anthracene	98	ppb
8806	PAH	Benzo[A]pyrene	163	ppb
8806	PAH	Benzo[e]pyrene	97	ppb
8806	PAH	Benzo[G,H,I]perylene	50	ppb
8806	PAH	Benzo[K]fluoranthene	71	ppb
8806	PAH	Chrysene	183	ppb
8806	PAH	Dibenzo(A,H)anthracene	18	ppb
8806	PAH	Fluoranthene	120	ppb
8806	PAH	Fluorene	11	ppb
8806	PAH	Indeno(1,2,3-CD)pyrene	54	ppb
8806	PAH	Perylene	49	ppb
8806	PAH	Phenanthrene	51	ppb
8806	PAH	Pyrene	106	ppb
8806	PCB	PCB 28	810	ppt
8806	PCB	PCB 37	330	ppt

Addendum 6-5 *continued*

Station	Class	Constituent	Value	Units
8806	PCB	PCB 44	850	ppt
8806	PCB	PCB 49	20	ppt
8806	PCB	PCB 52	770	ppt
8806	PCB	PCB 66	37	ppt
8806	PCB	PCB 70	62	ppt
8806	PCB	PCB 74	190	ppt
8806	PCB	PCB 77	760	ppt
8806	PCB	PCB 87	510	ppt
8806	PCB	PCB 99	100	ppt
8806	PCB	PCB 101	800	ppt
8806	PCB	PCB 105	110	ppt
8806	PCB	PCB 110	22	ppt
8806	PCB	PCB 114	96	ppt
8806	PCB	PCB 118	39	ppt
8806	PCB	PCB 119	130	ppt
8806	PCB	PCB 123	65	ppt
8806	PCB	PCB 128	18	ppt
8806	PCB	PCB 138	220	ppt
8806	PCB	PCB 149	48	ppt
8806	PCB	PCB 151	140	ppt
8806	PCB	PCB 153/168	59	ppt
8806	PCB	PCB 156	170	ppt
8806	PCB	PCB 157	28	ppt
8806	PCB	PCB 158	12	ppt
8806	PCB	PCB 167	200	ppt
8806	PCB	PCB 170	100	ppt
8806	PCB	PCB 177	420	ppt
8806	PCB	PCB 18	110	ppt
8806	PCB	PCB 180	280	ppt
8806	PCB	PCB 183	69	ppt
8806	PCB	PCB 187	20	ppt
8806	PCB	PCB 194	380	ppt
8806	PCB	PCB 206	340	ppt
8807	DDT	o,p-DDD	10	ppt
8807	DDT	o,p-DDE	9	ppt
8807	DDT	p,-p-DDMU	21	ppt
8807	DDT	p,p-DDD	22	ppt
8807	DDT	p,p-DDE	195	ppt
8807	PAH	2,6-dimethylnaphthalene	5	ppb
8807	PCB	PCB 101	44	ppt
8807	PCB	PCB 110	37	ppt
8807	PCB	PCB 118	33	ppt
8807	PCB	PCB 138	42	ppt
8807	PCB	PCB 149	29	ppt
8807	PCB	PCB 153/168	53	ppt
8807	PCB	PCB 206	26	ppt
8807	PCB	PCB 44	10	ppt
8807	PCB	PCB 52	13	ppt
8807	PCB	PCB 66	10	ppt
8807	PCB	PCB 70	12	ppt
8807	PCB	PCB 99	21	ppt
8808	DDT	o,p-DDE	10	ppt
8808	DDT	p,p-DDD	21	ppt

Addendum 6-5 *continued*

Station	Class	Constituent	Value	Units
8808	DDT	p,p-DDE	162	ppt
8808	PAH	1-methylnaphthalene	1	ppb
8808	PAH	2,6-dimethylnaphthalene	5	ppb
8808	PAH	Chrysene	2	ppb
8808	PAH	Fluoranthene	2	ppb
8808	PAH	Phenanthrene	1	ppb
8808	PAH	Pyrene	1	ppb
8808	PCB	PCB 206	22	ppt
8809	DDT	o,p-DDD	21	ppt
8809	DDT	o,p-DDE	24	ppt
8809	DDT	p,-p-DDMU	24	ppt
8809	DDT	p,p-DDD	50	ppt
8809	DDT	p,p-DDE	446	ppt
8809	DDT	p,p-DDT	49	ppt
8809	PAH	2,6-dimethylnaphthalene	11	ppb
8809	PAH	3,4-benzo(B)fluoranthene	11	ppb
8809	PAH	Benzo[A]pyrene	10	ppb
8809	PAH	Benzo[G,H,I]perylene	8	ppb
8809	PAH	Fluoranthene	8	ppb
8809	PAH	Pyrene	8	ppb
8809	PCB	PCB 28	48	ppt
8809	PCB	PCB 44	33	ppt
8809	PCB	PCB 49	55	ppt
8809	PCB	PCB 52	68	ppt
8809	PCB	PCB 66	92	ppt
8809	PCB	PCB 70	69	ppt
8809	PCB	PCB 87	98	ppt
8809	PCB	PCB 99	13	ppt
8809	PCB	PCB 101	13	ppt
8809	PCB	PCB 105	19	ppt
8809	PCB	PCB 110	36	ppt
8809	PCB	PCB 118	23	ppt
8809	PCB	PCB 138	44	ppt
8809	PCB	PCB 149	15	ppt
8809	PCB	PCB 153/168	12	ppt
8809	PCB	PCB 170	13	ppt
8809	PCB	PCB 177	21	ppt
8809	PCB	PCB 180	18	ppt
8809	PCB	PCB 187	20	ppt
8809	PCB	PCB 194	19	ppt
8809	PCB	PCB 206	28	ppt
8810	Chlordane	Alpha(cis)Chlordane	67	ppt
8810	Chlordane	CisNonachlor	35	ppt
8810	Chlordane	Gamma(trans)Chlordane	89	ppt
8810	Chlordane	TransNonachlor	51	ppt
8810	DDT	o,p-DDD	44	ppt
8810	DDT	o,p-DDE	28	ppt
8810	DDT	p,-p-DDMU	60	ppt
8810	DDT	p,p-DDD	149	ppt
8810	DDT	p,p-DDE	583	ppt
8810	DDT	p,p-DDT	58	ppt
8810	PAH	1-methylnaphthalene	21	ppb
8810	PAH	2-methylnaphthalene	18	ppb

Addendum 6-5 *continued*

Station	Class	Constituent	Value	Units
8810	PAH	2,6-dimethylnaphthalene	14	ppb
8810	PAH	3,4-benzo(B)fluoranthene	117	ppb
8810	PAH	Acenaphthylene	17	ppb
8810	PAH	Anthracene	432	ppb
8810	PAH	Benzo[A]anthracene	124	ppb
8810	PAH	Benzo[A]pyrene	92	ppb
8810	PAH	Benzo[e]pyrene	53	ppb
8810	PAH	Benzo[G,H,I]perylene	44	ppb
8810	PAH	Benzo[K]fluoranthene	49	ppb
8810	PAH	Chrysene	149	ppb
8810	PAH	Dibenzo(A,H)anthracene	17	ppb
8810	PAH	Fluoranthene	370	ppb
8810	PAH	Fluorene	83	ppb
8810	PAH	Indeno(1,2,3-CD)pyrene	42	ppb
8810	PAH	Perylene	19	ppb
8810	PAH	Phenanthrene	213	ppb
8810	PAH	Pyrene	246	ppb
8810	PCB	PCB 28	350	ppt
8810	PCB	PCB 37	190	ppt
8810	PCB	PCB 44	400	ppt
8810	PCB	PCB 49	440	ppt
8810	PCB	PCB 52	23	ppt
8810	PCB	PCB 66	46	ppt
8810	PCB	PCB 70	130	ppt
8810	PCB	PCB 74	650	ppt
8810	PCB	PCB 77	460	ppt
8810	PCB	PCB 87	95	ppt
8810	PCB	PCB 99	730	ppt
8810	PCB	PCB 101	59	ppt
8810	PCB	PCB 105	17	ppt
8810	PCB	PCB 110	43	ppt
8810	PCB	PCB 118	25	ppt
8810	PCB	PCB 119	150	ppt
8810	PCB	PCB 123	100	ppt
8810	PCB	PCB 128	14	ppt
8810	PCB	PCB 138	270	ppt
8810	PCB	PCB 149	74	ppt
8810	PCB	PCB 151	250	ppt
8810	PCB	PCB 153/168	99	ppt
8810	PCB	PCB 156	10	ppt
8810	PCB	PCB 157	120	ppt
8810	PCB	PCB 158	33	ppt
8810	PCB	PCB 167	16	ppt
8810	PCB	PCB 170	58	ppt
8810	PCB	PCB 177	82	ppt
8810	PCB	PCB 18	110	ppt
8810	PCB	PCB 180	110	ppt
8810	PCB	PCB 183	100	ppt
8810	PCB	PCB 187	44	ppt
8810	PCB	PCB 194	28	ppt
8810	PCB	PCB 201	110	ppt
8810	PCB	PCB 206	210	ppt
8811	Chlordane	Gamma(trans)Chlordane	22	ppt
8811	DDT	o,p-DDD	10	ppt

Addendum 6-5 *continued*

Station	Class	Constituent	Value	Units
8811	DDT	o,p-DDT	14	ppt
8811	DDT	p,-p-DDMU	12	ppt
8811	DDT	p,p-DDD	28	ppt
8811	DDT	p,p-DDE	159	ppt
8811	DDT	p,p-DDT	23	ppt
8811	PAH	2,6-dimethylnaphthalene	5	ppb
8811	PAH	3,4-benzo(B)fluoranthene	53	ppb
8811	PAH	Acenaphthylene	3	ppb
8811	PAH	Anthracene	4	ppb
8811	PAH	Benzo[A]anthracene	28	ppb
8811	PAH	Benzo[A]pyrene	33	ppb
8811	PAH	Benzo[e]pyrene	25	ppb
8811	PAH	Benzo[G,H,I]perylene	19	ppb
8811	PAH	Benzo[K]fluoranthene	23	ppb
8811	PAH	Chrysene	44	ppb
8811	PAH	Dibenzo(A,H)anthracene	6	ppb
8811	PAH	Fluoranthene	20	ppb
8811	PAH	Indeno(1,2,3-CD)pyrene	17	ppb
8811	PAH	Perylene	6	ppb
8811	PAH	Pyrene	29	ppb
8811	PCB	PCB 28	97	ppt
8811	PCB	PCB 44	38	ppt
8811	PCB	PCB 49	94	ppt
8811	PCB	PCB 52	98	ppt
8811	PCB	PCB 66	110	ppt
8811	PCB	PCB 70	88	ppt
8811	PCB	PCB 74	18	ppt
8811	PCB	PCB 99	136	ppt
8811	PCB	PCB 101	17	ppt
8811	PCB	PCB 105	12	ppt
8811	PCB	PCB 110	25	ppt
8811	PCB	PCB 118	33	ppt
8811	PCB	PCB 138	28	ppt
8811	PCB	PCB 149	12	ppt
8811	PCB	PCB 151	20	ppt
8811	PCB	PCB 153/168	27	ppt
8811	PCB	PCB 170	43	ppt
8811	PCB	PCB 177	32	ppt
8811	PCB	PCB 180	32	ppt
8811	PCB	PCB 187	9	ppt
8811	PCB	PCB 206	58	ppt
8812	Chlordane	Gamma(trans)Chlordane	12	ppt
8812	DDT	o,p-DDD	27	ppt
8812	DDT	o,p-DDE	16	ppt
8812	DDT	o,p-DDT	28	ppt
8812	DDT	p,-p-DDMU	53	ppt
8812	DDT	p,p-DDD	81	ppt
8812	DDT	p,p-DDE	559	ppt
8812	DDT	p,p-DDT	86	ppt
8812	PCB	PCB 28	4000	ppt
8812	PCB	PCB 44	2100	ppt
8812	PCB	PCB 49	4200	ppt
8812	PCB	PCB 52	100	ppt
8812	PCB	PCB 66	5100	ppt

Addendum 6-5 *continued*

Station	Class	Constituent	Value	Units
8812	PCB	PCB 70	140	ppt
8812	PCB	PCB 74	370	ppt
8812	PCB	PCB 77	1200	ppt
8812	PCB	PCB 87	5100	ppt
8812	PCB	PCB 99	2800	ppt
8812	PCB	PCB 101	500	ppt
8812	PCB	PCB 105	4500	ppt
8812	PCB	PCB 110	800	ppt
8812	PCB	PCB 114	180	ppt
8812	PCB	PCB 118	640	ppt
8812	PCB	PCB 119	280	ppt
8812	PCB	PCB 123	670	ppt
8812	PCB	PCB 128	270	ppt
8812	PCB	PCB 138	1000	ppt
8812	PCB	PCB 149	290	ppt
8812	PCB	PCB 151	400	ppt
8812	PCB	PCB 153/168	33	ppt
8812	PCB	PCB 156	250	ppt
8812	PCB	PCB 157	14	ppt
8812	PCB	PCB 158	110	ppt
8812	PCB	PCB 167	20	ppt
8812	PCB	PCB 170	200	ppt
8812	PCB	PCB 177	160	ppt
8812	PCB	PCB 180	520	ppt
8812	PCB	PCB 183	270	ppt
8812	PCB	PCB 187	950	ppt
8812	PCB	PCB 189	210	ppt
8812	PCB	PCB 194	62	ppt
8812	PCB	PCB 201	1900	ppt
8812	PCB	PCB 206	1500	ppt
8813	DDT	p,p-DDE	30	ppt
8813	PAH	2,6-dimethylnaphthalene	3	ppb
8813	PCB	PCB 206	19	ppt
8814	DDT	o,p-DDD	17	ppt
8814	DDT	o,p-DDE	15	ppt
8814	DDT	o,p-DDT	26	ppt
8814	DDT	p,-p-DDMU	37	ppt
8814	DDT	p,p-DDD	49	ppt
8814	DDT	p,p-DDE	447	ppt
8814	DDT	p,p-DDT	59	ppt
8814	PCB	PCB 28	64	ppt
8814	PCB	PCB 44	40	ppt
8814	PCB	PCB 49	72	ppt
8814	PCB	PCB 52	92	ppt
8814	PCB	PCB 66	9	ppt
8814	PCB	PCB 70	24	ppt
8814	PCB	PCB 87	130	ppt
8814	PCB	PCB 99	89	ppt
8814	PCB	PCB 101	20	ppt
8814	PCB	PCB 105	141	ppt
8814	PCB	PCB 110	18	ppt
8814	PCB	PCB 118	11	ppt
8814	PCB	PCB 123	40	ppt

Addendum 6-5 *continued*

Station	Class	Constituent	Value	Units
8814	PCB	PCB 128	24	ppt
8814	PCB	PCB 138	54	ppt
8814	PCB	PCB 149	17	ppt
8814	PCB	PCB 151	47	ppt
8814	PCB	PCB 153/168	27	ppt
8814	PCB	PCB 156	38	ppt
8814	PCB	PCB 158	13	ppt
8814	PCB	PCB 170	11	ppt
8814	PCB	PCB 177	18	ppt
8814	PCB	PCB 180	20	ppt
8814	PCB	PCB 183	26	ppt
8814	PCB	PCB 187	23	ppt
8814	PCB	PCB 194	25	ppt
8814	PCB	PCB 206	44	ppt
8815	DDT	p,p-DDE	46	ppt
8815	PAH	2,6-dimethylnaphthalene	4	ppb
8815	PCB	PCB 52	21	ppt
8815	PCB	PCB 101	16	ppt
8815	PCB	PCB 110	13	ppt
8815	PCB	PCB 118	9	ppt
8815	PCB	PCB 149	21	ppt
8815	PCB	PCB 153/168	19	ppt
8815	PCB	PCB 206	10	ppt
8816	DDT	p,-p-DDMU	12	ppt
8816	DDT	p,p-DDD	21	ppt
8816	DDT	p,p-DDE	175	ppt
8816	PAH	2,6-dimethylnaphthalene	7	ppb
8816	PAH	3,4-benzo(B)fluoranthene	7	ppb
8816	PAH	Pyrene	5	ppb
8816	PCB	PCB 49	65	ppt
8816	PCB	PCB 52	63	ppt
8816	PCB	PCB 66	66	ppt
8816	PCB	PCB 70	77	ppt
8816	PCB	PCB 87	56	ppt
8816	PCB	PCB 99	92	ppt
8816	PCB	PCB 101	14	ppt
8816	PCB	PCB 110	34	ppt
8816	PCB	PCB 118	19	ppt
8816	PCB	PCB 138	34	ppt
8816	PCB	PCB 149	17	ppt
8816	PCB	PCB 153/168	20	ppt
8816	PCB	PCB 194	21	ppt
8816	PCB	PCB 206	38	ppt
8817	DDT	o,p-DDD	52	ppt
8817	DDT	o,p-DDE	87	ppt
8817	DDT	p,-p-DDMU	95	ppt
8817	DDT	p,p-DDD	114	ppt
8817	DDT	p,p-DDE	1590	ppt
8817	DDT	p,p-DDT	102	ppt
8817	PAH	2,6-dimethylnaphthalene	10	ppb
8817	PAH	3,4-benzo(B)fluoranthene	12	ppb
8817	PAH	Benzo[A]pyrene	10	ppb

Addendum 6-5 *continued*

Station	Class	Constituent	Value	Units
8817	PAH	Fluoranthene	11	ppb
8817	PAH	Indeno(1,2,3-CD)pyrene	7	ppb
8817	PAH	Pyrene	11	ppb
8817	PCB	PCB 28	78	ppt
8817	PCB	PCB 44	58	ppt
8817	PCB	PCB 49	86	ppt
8817	PCB	PCB 52	123	ppt
8817	PCB	PCB 66	39	ppt
8817	PCB	PCB 70	180	ppt
8817	PCB	PCB 77	117	ppt
8817	PCB	PCB 87	26	ppt
8817	PCB	PCB 99	162	ppt
8817	PCB	PCB 101	18	ppt
8817	PCB	PCB 105	56	ppt
8817	PCB	PCB 110	83	ppt
8817	PCB	PCB 118	34	ppt
8817	PCB	PCB 128	83	ppt
8817	PCB	PCB 138	15	ppt
8817	PCB	PCB 149	18	ppt
8817	PCB	PCB 151	25	ppt
8817	PCB	PCB 153/168	37	ppt
8817	PCB	PCB 156	30	ppt
8817	PCB	PCB 180	33	ppt
8817	PCB	PCB 187	13	ppt
8817	PCB	PCB 194	37	ppt
8817	PCB	PCB 206	54	ppt
8818	Chlordane	Gamma(trans)Chlordane	28	ppt
8818	DDT	o,p-DDD	26	ppt
8818	DDT	o,p-DDE	33	ppt
8818	DDT	p,-p-DDMU	65	ppt
8818	DDT	p,p-DDD	95	ppt
8818	DDT	p,p-DDE	695	ppt
8818	DDT	p,p-DDT	58	ppt
8818	PAH	2,6-dimethylnaphthalene	8	ppb
8818	PAH	3,4-benzo(B)fluoranthene	25	ppb
8818	PAH	Anthracene	6	ppb
8818	PAH	Benzo[A]pyrene	19	ppb
8818	PAH	Benzo[e]pyrene	14	ppb
8818	PAH	Benzo[G,H,I]perylene	16	ppb
8818	PAH	Benzo[K]fluoranthene	11	ppb
8818	PAH	Chrysene	11	ppb
8818	PAH	Fluoranthene	13	ppb
8818	PAH	Indeno(1,2,3-CD)pyrene	12	ppb
8818	PAH	Pyrene	16	ppb
8818	PCB	PCB 28	120	ppt
8818	PCB	PCB 44	89	ppt
8818	PCB	PCB 49	150	ppt
8818	PCB	PCB 52	180	ppt
8818	PCB	PCB 66	11	ppt
8818	PCB	PCB 70	69	ppt
8818	PCB	PCB 74	310	ppt
8818	PCB	PCB 77	210	ppt
8818	PCB	PCB 87	42	ppt
8818	PCB	PCB 99	330	ppt

Addendum 6-5 *continued*

Station	Class	Constituent	Value	Units
8818	PCB	PCB 101	23	ppt
8818	PCB	PCB 105	16	ppt
8818	PCB	PCB 110	15	ppt
8818	PCB	PCB 118	72	ppt
8818	PCB	PCB 119	53	ppt
8818	PCB	PCB 128	130	ppt
8818	PCB	PCB 138	31	ppt
8818	PCB	PCB 149	130	ppt
8818	PCB	PCB 151	49	ppt
8818	PCB	PCB 153/168	76	ppt
8818	PCB	PCB 156	20	ppt
8818	PCB	PCB 158	25	ppt
8818	PCB	PCB 167	39	ppt
8818	PCB	PCB 170	49	ppt
8818	PCB	PCB 177	50	ppt
8818	PCB	PCB 180	42	ppt
8818	PCB	PCB 183	18	ppt
8818	PCB	PCB 187	15	ppt
8818	PCB	PCB 194	47	ppt
8818	PCB	PCB 206	86	ppt
8820	Chlordane	Gamma(trans)Chlordane	23	ppt
8820	DDT	o,p-DDD	46	ppt
8820	DDT	o,p-DDE	83	ppt
8820	DDT	o,p-DDT	43	ppt
8820	DDT	p,-p-DDMU	140	ppt
8820	DDT	p,p-DDD	124	ppt
8820	DDT	p,p-DDE	1430	ppt
8820	DDT	p,p-DDT	103	ppt
8820	PAH	1-methylphenanthrene	4	ppb
8820	PAH	2-methylnaphthalene	5	ppb
8820	PAH	2,6-dimethylnaphthalene	10	ppb
8820	PAH	3,4-benzo(B)fluoranthene	21	ppb
8820	PAH	Acenaphthylene	4	ppb
8820	PAH	Benzo[A]pyrene	14	ppb
8820	PAH	Benzo[e]pyrene	13	ppb
8820	PAH	Benzo[G,H,I]perylene	12	ppb
8820	PAH	Benzo[K]fluoranthene	10	ppb
8820	PAH	Chrysene	9	ppb
8820	PAH	Fluoranthene	12	ppb
8820	PAH	Indeno(1,2,3-CD)pyrene	10	ppb
8820	PAH	Pyrene	14	ppb
8820	PCB	PCB 28	280	ppt
8820	PCB	PCB 37	160	ppt
8820	PCB	PCB 44	300	ppt
8820	PCB	PCB 49	340	ppt
8820	PCB	PCB 52	14	ppt
8820	PCB	PCB 66	34	ppt
8820	PCB	PCB 70	102	ppt
8820	PCB	PCB 74	450	ppt
8820	PCB	PCB 77	290	ppt
8820	PCB	PCB 87	72	ppt
8820	PCB	PCB 99	450	ppt
8820	PCB	PCB 101	56	ppt
8820	PCB	PCB 105	38	ppt

Addendum 6-5 *continued*

Station	Class	Constituent	Value	Units
8820	PCB	PCB 110	23	ppt
8820	PCB	PCB 118	104	ppt
8820	PCB	PCB 119	62	ppt
8820	PCB	PCB 123	170	ppt
8820	PCB	PCB 128	61	ppt
8820	PCB	PCB 138	150	ppt
8820	PCB	PCB 149	85	ppt
8820	PCB	PCB 151	200	ppt
8820	PCB	PCB 153/168	24	ppt
8820	PCB	PCB 156	13	ppt
8820	PCB	PCB 158	56	ppt
8820	PCB	PCB 167	60	ppt
8820	PCB	PCB 170	140	ppt
8820	PCB	PCB 177	70	ppt
8820	PCB	PCB 180	104	ppt
8820	PCB	PCB 183	31	ppt
8820	PCB	PCB 187	22	ppt
8820	PCB	PCB 194	120	ppt
8820	PCB	PCB 206	140	ppt
8821	DDT	o,p-DDE	11	ppt
8821	DDT	p,-p-DDMU	14	ppt
8821	DDT	p,p-DDD	6	ppt
8821	DDT	p,p-DDE	105	ppt
8821	PCB	PCB 28	25	ppt
8821	PCB	PCB 37	24	ppt
8821	PCB	PCB 44	27	ppt
8821	PCB	PCB 49	28	ppt
8821	PCB	PCB 52	30	ppt
8821	PCB	PCB 66	11	ppt
8821	PCB	PCB 70	41	ppt
8821	PCB	PCB 74	11	ppt
8821	PCB	PCB 99	12	ppt
8821	PCB	PCB 101	11	ppt
8821	PCB	PCB 110	12	ppt
8821	PCB	PCB 118	9	ppt
8821	PCB	PCB 138	12	ppt
8821	PCB	PCB 149	12	ppt
8821	PCB	PCB 151	16	ppt
8821	PCB	PCB 153/168	15	ppt
8821	PCB	PCB 18	15	ppt
8821	PCB	PCB 180	10	ppt
8821	PCB	PCB 206	20	ppt
8822	DDT	o,p-DDD	15	ppt
8822	DDT	o,p-DDE	16	ppt
8822	DDT	p,-p-DDMU	32	ppt
8822	DDT	p,p-DDD	32	ppt
8822	DDT	p,p-DDE	346	ppt
8822	DDT	p,p-DDT	41	ppt
8822	PAH	1-methylphenanthrene	3	ppb
8822	PAH	2,6-dimethylnaphthalene	10	ppb
8822	PAH	3,4-benzo(B)fluoranthene	4	ppb
8822	PAH	Benzo[A]pyrene	4	ppb
8822	PAH	Pyrene	6	ppb

Addendum 6-5 *continued*

Station	Class	Constituent	Value	Units
8822	PCB	PCB 49	37	ppt
8822	PCB	PCB 52	23	ppt
8822	PCB	PCB 66	39	ppt
8822	PCB	PCB 70	51	ppt
8822	PCB	PCB 87	20	ppt
8822	PCB	PCB 99	76	ppt
8822	PCB	PCB 101	52	ppt
8822	PCB	PCB 105	12	ppt
8822	PCB	PCB 110	80	ppt
8822	PCB	PCB 118	24	ppt
8822	PCB	PCB 128	27	ppt
8822	PCB	PCB 138	13	ppt
8822	PCB	PCB 149	29	ppt
8822	PCB	PCB 151	10	ppt
8822	PCB	PCB 153/168	16	ppt
8822	PCB	PCB 180	15	ppt
8822	PCB	PCB 187	14	ppt
8822	PCB	PCB 194	13	ppt
8822	PCB	PCB 206	23	ppt
8823	Chlordane	Gamma(trans)Chlordane	10	ppt
8823	DDT	o,p-DDD	20	ppt
8823	DDT	o,p-DDE	33	ppt
8823	DDT	p,-p-DDMU	43	ppt
8823	DDT	p,p-DDD	55	ppt
8823	DDT	p,p-DDE	632	ppt
8823	DDT	p,p-DDT	76	ppt
8823	PAH	2,6-dimethylnaphthalene	13	ppb
8823	PAH	3,4-benzo(B)fluoranthene	11	ppb
8823	PAH	Benzo[A]pyrene	9	ppb
8823	PAH	Benzo[e]pyrene	8	ppb
8823	PAH	Benzo[G,H,I]perylene	9	ppb
8823	PAH	Chrysene	5	ppb
8823	PAH	Fluoranthene	8	ppb
8823	PAH	Pyrene	8	ppb
8823	PCB	PCB 28	48	ppt
8823	PCB	PCB 44	28	ppt
8823	PCB	PCB 49	44	ppt
8823	PCB	PCB 52	54	ppt
8823	PCB	PCB 66	77	ppt
8823	PCB	PCB 70	60	ppt
8823	PCB	PCB 87	10	ppt
8823	PCB	PCB 99	109	ppt
8823	PCB	PCB 101	25	ppt
8823	PCB	PCB 105	15	ppt
8823	PCB	PCB 110	33	ppt
8823	PCB	PCB 118	34	ppt
8823	PCB	PCB 138	17	ppt
8823	PCB	PCB 149	51	ppt
8823	PCB	PCB 151	11	ppt
8823	PCB	PCB 153/168	11	ppt
8823	PCB	PCB 170	14	ppt
8823	PCB	PCB 177	18	ppt
8823	PCB	PCB 180	22	ppt
8823	PCB	PCB 187	17	ppt

Addendum 6-5 *continued*

Station	Class	Constituent	Value	Units
8823	PCB	PCB 194	16	ppt
8823	PCB	PCB 206	30	ppt
8824	DDT	o,p-DDD	17	ppt
8824	DDT	o,p-DDE	17	ppt
8824	DDT	p,-p-DDMU	34	ppt
8824	DDT	p,p-DDD	50	ppt
8824	DDT	p,p-DDE	417	ppt
8824	DDT	p,p-DDT	83	ppt
8824	PAH	2,6-dimethylnaphthalene	13	ppb
8824	PAH	3,4-benzo(B)fluoranthene	10	ppb
8824	PAH	Benzo[A]pyrene	8	ppb
8824	PAH	Benzo[G,H,I]perylene	8	ppb
8824	PAH	Fluoranthene	9	ppb
8824	PAH	Indeno(1,2,3-CD)pyrene	5	ppb
8824	PAH	Pyrene	8	ppb
8824	PCB	PCB 28	51	ppt
8824	PCB	PCB 49	41	ppt
8824	PCB	PCB 52	57	ppt
8824	PCB	PCB 66	89	ppt
8824	PCB	PCB 70	57	ppt
8824	PCB	PCB 99	10	ppt
8824	PCB	PCB 101	100	ppt
8824	PCB	PCB 110	26	ppt
8824	PCB	PCB 118	10	ppt
8824	PCB	PCB 138	61	ppt
8824	PCB	PCB 149	37	ppt
8824	PCB	PCB 151	18	ppt
8824	PCB	PCB 153/168	45	ppt
8824	PCB	PCB 170	15	ppt
8824	PCB	PCB 177	13	ppt
8824	PCB	PCB 180	13	ppt
8824	PCB	PCB 187	26	ppt
8824	PCB	PCB 194	15	ppt
8824	PCB	PCB 206	39	ppt
8825	DDT	o,p-DDD	16	ppt
8825	DDT	o,p-DDE	37	ppt
8825	DDT	p,-p-DDMU	36	ppt
8825	DDT	p,p-DDD	51	ppt
8825	DDT	p,p-DDE	714	ppt
8825	PAH	1-methylphenanthrene	5	ppb
8825	PAH	2-methylnaphthalene	5	ppb
8825	PAH	2,6-dimethylnaphthalene	17	ppb
8825	PAH	3,4-benzo(B)fluoranthene	11	ppb
8825	PAH	Acenaphthene	6	ppb
8825	PAH	Acenaphthylene	6	ppb
8825	PAH	Benzo[A]pyrene	10	ppb
8825	PAH	Benzo[G,H,I]perylene	8	ppb
8825	PAH	Fluoranthene	12	ppb
8825	PAH	Fluorene	6	ppb
8825	PAH	Indeno(1,2,3-CD)pyrene	7	ppb
8825	PAH	Naphthalene	6	ppb
8825	PAH	Pyrene	12	ppb
8825	PCB	PCB 44	44	ppt

Addendum 6-5 *continued*

Station	Class	Constituent	Value	Units
8825	PCB	PCB 52	51	ppt
8825	PCB	PCB 66	59	ppt
8825	PCB	PCB 70	76	ppt
8825	PCB	PCB 99	65	ppt
8825	PCB	PCB 101	106	ppt
8825	PCB	PCB 110	22	ppt
8825	PCB	PCB 118	14	ppt
8825	PCB	PCB 138	35	ppt
8825	PCB	PCB 149	40	ppt
8825	PCB	PCB 153/168	16	ppt
8825	PCB	PCB 170	57	ppt
8825	PCB	PCB 177	13	ppt
8825	PCB	PCB 180	15	ppt
8825	PCB	PCB 187	22	ppt
8825	PCB	PCB 194	18	ppt
8825	PCB	PCB 206	39	ppt
8826	DDT	o,p-DDE	13	ppt
8826	DDT	p,-p-DDMU	15	ppt
8826	DDT	p,p-DDD	20	ppt
8826	DDT	p,p-DDE	231	ppt
8826	PAH	2,6-dimethylnaphthalene	8	ppb
8826	PAH	Fluoranthene	4	ppb
8826	PAH	Pyrene	4	ppb
8826	PCB	PCB 99	11	ppt
8826	PCB	PCB 101	14	ppt
8826	PCB	PCB 110	18	ppt
8826	PCB	PCB 118	24	ppt
8826	PCB	PCB 138	18	ppt
8826	PCB	PCB 149	44	ppt
8826	PCB	PCB 153/168	11	ppt
8826	PCB	PCB 187	28	ppt
8826	PCB	PCB 206	12	ppt
8827	DDT	o,p-DDE	12	ppt
8827	DDT	p,-p-DDMU	17	ppt
8827	DDT	p,p-DDD	30	ppt
8827	DDT	p,p-DDE	254	ppt
8827	DDT	p,p-DDT	37	ppt
8827	PAH	2,6-dimethylnaphthalene	11	ppb
8827	PAH	Fluoranthene	6	ppb
8827	PAH	Pyrene	6	ppb
8827	PCB	PCB 28	88	ppt
8827	PCB	PCB 44	26	ppt
8827	PCB	PCB 49	80	ppt
8827	PCB	PCB 52	80	ppt
8827	PCB	PCB 66	35	ppt
8827	PCB	PCB 70	100	ppt
8827	PCB	PCB 87	82	ppt
8827	PCB	PCB 99	19	ppt
8827	PCB	PCB 101	125	ppt
8827	PCB	PCB 105	30	ppt
8827	PCB	PCB 110	15	ppt
8827	PCB	PCB 118	48	ppt
8827	PCB	PCB 128	43	ppt

Addendum 6-5 *continued*

Station	Class	Constituent	Value	Units
8827	PCB	PCB 138	26	ppt
8827	PCB	PCB 149	35	ppt
8827	PCB	PCB 151	13	ppt
8827	PCB	PCB 153/168	19	ppt
8827	PCB	PCB 170	17	ppt
8827	PCB	PCB 177	39	ppt
8827	PCB	PCB 180	23	ppt
8827	PCB	PCB 187	24	ppt
8827	PCB	PCB 194	31	ppt
8827	PCB	PCB 206	46	ppt
8828	Chlordane	Alpha(cis)Chlordane	29	ppt
8828	Chlordane	CisNonachlor	15	ppt
8828	Chlordane	Gamma(trans)Chlordane	29	ppt
8828	DDT	o,p-DDD	12	ppt
8828	DDT	o,p-DDE	19	ppt
8828	DDT	o,p-DDT	20	ppt
8828	DDT	p,-p-DDMU	19	ppt
8828	DDT	p,p-DDD	28	ppt
8828	DDT	p,p-DDE	209	ppt
8828	DDT	p,p-DDT	39	ppt
8828	PAH	2,6-dimethylnaphthalene	9	ppb
8828	PAH	Benzo[G,H,I]perylene	5	ppb
8828	PAH	Pyrene	6	ppb
8828	PCB	PCB 28	25	ppt
8828	PCB	PCB 49	21	ppt
8828	PCB	PCB 66	24	ppt
8828	PCB	PCB 70	36	ppt
8828	PCB	PCB 99	41	ppt
8828	PCB	PCB 101	69	ppt
8828	PCB	PCB 110	19	ppt
8828	PCB	PCB 118	12	ppt
8828	PCB	PCB 138	31	ppt
8828	PCB	PCB 149	13	ppt
8828	PCB	PCB 153/168	31	ppt
8828	PCB	PCB 170	13	ppt
8828	PCB	PCB 177	10	ppt
8828	PCB	PCB 187	18	ppt
8828	PCB	PCB 194	11	ppt
8828	PCB	PCB 206	26	ppt
8829	DDT	o,p-DDE	27	ppt
8829	DDT	p,-p-DDMU	19	ppt
8829	DDT	p,p-DDD	26	ppt
8829	DDT	p,p-DDE	402	ppt
8829	DDT	p,p-DDT	39	ppt
8829	HCH	HCH, Beta isomer	9	ppt
8829	PAH	2,6-dimethylnaphthalene	9	ppb
8829	PAH	Pyrene	3	ppb
8829	PCB	PCB 37	100	ppt
8829	PCB	PCB 44	50	ppt
8829	PCB	PCB 49	86	ppt
8829	PCB	PCB 52	88	ppt
8829	PCB	PCB 66	15	ppt
8829	PCB	PCB 70	66	ppt

Addendum 6-5 *continued*

Station	Class	Constituent	Value	Units
8829	PCB	PCB 74	69	ppt
8829	PCB	PCB 87	111	ppt
8829	PCB	PCB 99	10	ppt
8829	PCB	PCB 101	28	ppt
8829	PCB	PCB 105	40	ppt
8829	PCB	PCB 110	10	ppt
8829	PCB	PCB 118	26	ppt
8829	PCB	PCB 128	19	ppt
8829	PCB	PCB 138	47	ppt
8829	PCB	PCB 149	23	ppt
8829	PCB	PCB 153/168	32	ppt
8829	PCB	PCB 177	14	ppt
8829	PCB	PCB 187	49	ppt
8829	PCB	PCB 206	47	ppt
8831	DDT	o,p-DDD	17	ppt
8831	DDT	o,p-DDE	22	ppt
8831	DDT	p,-p-DDMU	19	ppt
8831	DDT	p,p-DDD	28	ppt
8831	DDT	p,p-DDE	410	ppt
8831	DDT	p,p-DDT	24	ppt
8831	PAH	2,6-dimethylnaphthalene	9	ppb
8831	PAH	Pyrene	5	ppb
8831	PCB	PCB 66	17	ppt
8831	PCB	PCB 99	17	ppt
8831	PCB	PCB 101	24	ppt
8831	PCB	PCB 110	31	ppt
8831	PCB	PCB 118	22	ppt
8831	PCB	PCB 138	41	ppt
8831	PCB	PCB 149	10	ppt
8831	PCB	PCB 153/168	13	ppt
8832	DDT	o,p-DDE	15	ppt
8832	DDT	p,p-DDD	20	ppt
8832	DDT	p,p-DDE	276	ppt
8832	DDT	p,p-DDT	16	ppt
8832	PAH	2,6-dimethylnaphthalene	10	ppb
8832	PAH	Pyrene	5	ppb
8832	PCB	PCB 101	10	ppt
8832	PCB	PCB 118	14	ppt
8832	PCB	PCB 138	16	ppt
8832	PCB	PCB 149	10	ppt
8832	PCB	PCB 153/168	23	ppt
8832	PCB	PCB 206	21	ppt
8833	Chlordane	Gamma(trans)Chlordane	10	ppt
8833	DDT	o,p-DDD	12	ppt
8833	DDT	o,p-DDE	26	ppt
8833	DDT	o,p-DDT	19	ppt
8833	DDT	p,-p-DDMU	26	ppt
8833	DDT	p,p-DDD	31	ppt
8833	DDT	p,p-DDE	327	ppt
8833	DDT	p,p-DDT	52	ppt
8833	PAH	2,6-dimethylnaphthalene	8	ppb
8833	PAH	Pyrene	6	ppb

Addendum 6-5 *continued*

Station	Class	Constituent	Value	Units
8833	PCB	PCB 28	22	ppt
8833	PCB	PCB 66	19	ppt
8833	PCB	PCB 99	28	ppt
8833	PCB	PCB 101	42	ppt
8833	PCB	PCB 110	37	ppt
8833	PCB	PCB 118	62	ppt
8833	PCB	PCB 138	13	ppt
8833	PCB	PCB 149	21	ppt
8833	PCB	PCB 153/168	18	ppt
8833	PCB	PCB 170	29	ppt
8833	PCB	PCB 180	10	ppt
8833	PCB	PCB 194	14	ppt
8833	PCB	PCB 206	19	ppt
8834	DDT	o,p-DDD	28	ppt
8834	DDT	o,p-DDE	43	ppt
8834	DDT	o,p-DDT	143	ppt
8834	DDT	p,-p-DDMU	42	ppt
8834	DDT	p,p-DDD	74	ppt
8834	DDT	p,p-DDE	899	ppt
8834	DDT	p,p-DDT	634	ppt
8834	PAH	2,6-dimethylnaphthalene	11	ppb
8834	PAH	Pyrene	6	ppb
8834	PCB	PCB 28	49	ppt
8834	PCB	PCB 37	44	ppt
8834	PCB	PCB 49	54	ppt
8834	PCB	PCB 52	22	ppt
8834	PCB	PCB 66	60	ppt
8834	PCB	PCB 70	45	ppt
8834	PCB	PCB 74	67	ppt
8834	PCB	PCB 87	37	ppt
8834	PCB	PCB 99	22	ppt
8834	PCB	PCB 101	12	ppt
8834	PCB	PCB 110	19	ppt
8834	PCB	PCB 118	22	ppt
8834	PCB	PCB 128	23	ppt
8834	PCB	PCB 138	25	ppt
8834	PCB	PCB 149	12	ppt
8834	PCB	PCB 153/168	17	ppt
8834	PCB	PCB 206	31	ppt
8835	DDT	o,p-DDD	11	ppt
8835	DDT	o,p-DDE	23	ppt
8835	DDT	p,-p-DDMU	23	ppt
8835	DDT	p,p-DDD	33	ppt
8835	DDT	p,p-DDE	344	ppt
8835	DDT	p,p-DDT	27	ppt
8835	PAH	2,6-dimethylnaphthalene	8	ppb
8835	PAH	Pyrene	6	ppb
8835	PCB	PCB 28	18	ppt
8835	PCB	PCB 52	13	ppt
8835	PCB	PCB 66	18	ppt
8835	PCB	PCB 70	28	ppt
8835	PCB	PCB 101	23	ppt
8835	PCB	PCB 110	37	ppt

Addendum 6-5 *continued*

Station	Class	Constituent	Value	Units
8835	PCB	PCB 118	21	ppt
8835	PCB	PCB 138	12	ppt
8835	PCB	PCB 149	10	ppt
8835	PCB	PCB 153/168	12	ppt
8835	PCB	PCB 206	10	ppt
8836	DDT	o,p-DDE	15	ppt
8836	DDT	p,-p-DDMU	21	ppt
8836	DDT	p,p-DDD	24	ppt
8836	DDT	p,p-DDE	301	ppt
8836	DDT	p,p-DDT	24	ppt
8836	PAH	2,6-dimethylnaphthalene	9	ppb
8836	PCB	PCB 66	15	ppt
8836	PCB	PCB 101	10	ppt
8836	PCB	PCB 110	16	ppt
8836	PCB	PCB 118	18	ppt
8836	PCB	PCB 138	14	ppt
8836	PCB	PCB 149	26	ppt
8836	PCB	PCB 153/168	20	ppt
8836	PCB	PCB 206	11	ppt
8837	DDT	p,p-DDE	13	ppt
8837	PAH	2,6-dimethylnaphthalene	3	ppb
8838	DDT	o,p-DDE	13	ppt
8838	DDT	p,-p-DDMU	12	ppt
8838	DDT	p,p-DDE	212	ppt
8838	PAH	2,6-dimethylnaphthalene	10	ppb
8838	PCB	PCB 101	14	ppt
8838	PCB	PCB 110	11	ppt
8838	PCB	PCB 118	16	ppt
8838	PCB	PCB 138	18	ppt
8838	PCB	PCB 149	11	ppt
8838	PCB	PCB 153/168	27	ppt
8838	PCB	PCB 206	20	ppt
8839	DDT	o,p-DDD	43	ppt
8839	DDT	o,p-DDE	161	ppt
8839	DDT	o,p-DDT	41	ppt
8839	DDT	p,-p-DDMU	280	ppt
8839	DDT	p,p-DDD	172	ppt
8839	DDT	p,p-DDE	1620	ppt
8839	DDT	p,p-DDT	172	ppt
8839	PAH	2,6-dimethylnaphthalene	6	ppb
8839	PAH	3,4-benzo(B)fluoranthene	14	ppb
8839	PAH	Benzo[A]pyrene	12	ppb
8839	PAH	Benzo[G,H,I]perylene	11	ppb
8839	PAH	Chrysene	7	ppb
8839	PAH	Fluoranthene	20	ppb
8839	PAH	Indeno(1,2,3-CD)pyrene	9	ppb
8839	PAH	Pyrene	21	ppb
8839	PCB	PCB 28	77	ppt
8839	PCB	PCB 44	29	ppt
8839	PCB	PCB 49	65	ppt
8839	PCB	PCB 52	77	ppt

Addendum 6-5 *continued*

Station	Class	Constituent	Value	Units
8839	PCB	PCB 66	99	ppt
8839	PCB	PCB 70	91	ppt
8839	PCB	PCB 87	18	ppt
8839	PCB	PCB 99	142	ppt
8839	PCB	PCB 101	25	ppt
8839	PCB	PCB 105	25	ppt
8839	PCB	PCB 110	23	ppt
8839	PCB	PCB 118	70	ppt
8839	PCB	PCB 138	55	ppt
8839	PCB	PCB 149	36	ppt
8839	PCB	PCB 151	72	ppt
8839	PCB	PCB 153/168	37	ppt
8839	PCB	PCB 170	23	ppt
8839	PCB	PCB 177	33	ppt
8839	PCB	PCB 18	31	ppt
8839	PCB	PCB 180	41	ppt
8839	PCB	PCB 187	30	ppt
8839	PCB	PCB 194	18	ppt
8839	PCB	PCB 206	63	ppt
8840	DDT	o,p-DDE	26	ppt
8840	DDT	p,-p-DDMU	26	ppt
8840	DDT	p,p-DDD	31	ppt
8840	DDT	p,p-DDE	377	ppt
8840	PAH	2,6-dimethylnaphthalene	11	ppb
8840	PAH	Fluoranthene	4	ppb
8840	PAH	Pyrene	4	ppb
8840	PCB	PCB 101	11	ppt
8840	PCB	PCB 138	22	ppt
8840	PCB	PCB 149	16	ppt
8840	PCB	PCB 153/168	32	ppt
8840	PCB	PCB 206	28	ppt
8842	DDT	p,p-DDE	20	ppt
8844	DDT	p,p-DDE	28	ppt

Addendum 6-6

Macrofaunal community parameters calculated for the 2019 San Diego regional benthic stations. SR = species richness; Abun = abundance; H' = Shannon Diversity Index; J' = Pielou's Evenness Index; Dom = Swartz Dominance Index; BRI = Benthic Response Index; n = 1 grab per station.

	Station	Depth (m)	SR	Abun	H'	J'	Dom	BRI[a]
Inner Shelf	8815	11	33	210	2.3	0.65	6	22
	8805	12	35	169	3.0	0.86	11	20
	8813	16	31	84	2.8	0.82	12	26
	8844	16	38	89	3.3	0.91	16	21
	8842	17	57	249	3.1	0.76	15	21
	8837	22	47	208	3.2	0.84	16	23
	8802	23	52	142	3.5	0.87	22	24
Mid Shelf	8808	31	99	309	3.9	0.84	32	22
	8801	36	131	595	4.0	0.82	39	18
	8807	41	105	391	3.9	0.83	31	16
	8821	43	123	586	4.0	0.83	35	21
	8827	57	62	142	3.7	0.89	28	16
	8812	58	109	341	4.1	0.88	38	15
	8828	58	62	169	3.5	0.85	22	14
	8824	72	71	353	3.5	0.82	21	11
	8833	85	119	622	4.1	0.86	38	13
	8840	86	92	506	3.7	0.81	22	16
	8814	87	85	429	3.6	0.82	23	11
	8811	107	91	300	4.0	0.89	37	18
	8816	110	78	287	3.8	0.86	26	11
	8826	115	81	323	3.8	0.85	29	11
Outer Shelf	8806	135	63	191	3.5	0.85	23	13
	8822	137	58	314	3.2	0.80	14	15
	8803	151	70	265	3.5	0.83	21	17
	8823	167	63	464	3.1	0.74	11	23
	8804	168	64	247	3.5	0.84	19	8
	8818	172	36	149	2.8	0.77	9	24
	8832	176	24	130	2.5	0.77	7	25
	8829	178	50	119	3.3	0.85	21	15
	8825	180	50	282	2.9	0.73	10	23
	8810	189	57	230	3.3	0.82	19	16
	8836	190	31	216	2.6	0.75	6	30
	8835	192	35	254	2.6	0.73	8	26
	8838	198	32	267	2.6	0.74	7	26
Upper Slope	8820	218	29	74	2.8	0.82	11	—
	8831	218	33	135	2.7	0.77	9	—
	8834	246	40	155	2.7	0.74	10	—
	8809	271	64	174	3.7	0.89	26	—
	8839	307	7	20	1.5	0.76	3	—
	8817	314	26	48	3.0	0.93	15	—

[a]BRI statistic not calculated for stations located at depths < 10 m or > 200 m

Addendum 6-7

Summary taxonomic listing of benthic infauna taxa identified from the 2019 San Diego regional benthic stations. Data are total number of individuals (n). Taxonomic arrangement follows SCAMIT (2018).

Taxonomic Classification				n
CNIDARIA				
	Hydrozoa			
		Corymorphidae	*Corymorpha bigelowi*	2
			Euphysa sp A	8
		Campanulariidae	*Laomedea calceolifera*	2
	Anthozoa			
		Pennatulacea		1
		Virgulariidae	*Stylatula* sp A	5
			Stylatula sp	5
			Virgularia californica	1
			Virgularia sp	1
		Ceriantharia		8
		Arachnactidae	*Arachnanthus* sp A	1
		Actiniaria		14
		Edwardsiidae		42
			Edwardsia californica	1
			Edwardsia juliae	10
			Edwardsia olguini	19
			Scolanthus triangulus	58
		Halcampidae	*Halcampa decemtentaculata*	5
			Halianthella sp A	5
		Isanthidae	*Zaolutus actius*	26
		Limnactiniidae	Limnactiniidae sp A	2
		Haloclavidae	*Anemonactis* sp A	1
PLATYHELMINTHES				
	Rhabditophora			
		Polycladida		1
		Stylochidae	*Stylochus exiguus*	2
		Cryptocelidae	*Cryptocelis occidentalis*	1
		Plehniidae	*Diplehnia caeca*	1
		Leptoplanoidea		2
		family uncertain	Rhabditophora sp C	4
NEMERTEA				
	Anopla			4
		Cephalotrichidae	*Cephalothrix* sp	7
		Palaeonemertea		21
		Carinomidae	*Carinoma mutabilis*	43

Addendum 6-7 *continued*

Taxonomic Classification				n
			Carinomella lactea	2
		Tubulanidae		24
			Tubulanus cingulatus	31
			Tubulanus polymorphus	103
			Tubulanus sp A	3
			Tubulanidae sp B	2
		Heteronemertea		10
		Lineidae		55
			Cerebratulus californiensis	6
			Cerebratulus sp	1
			Lineidae sp SD1	10
			Lineus bilineatus	42
			Maculaura alaskensis Cmplx	7
			Zygeupolia rubens	7
		family unknown	Heteronemertea sp SD2	126
	Enopla			2
		Hoplonemertea		8
		Emplectonematidae	*Paranemertes californica*	9
		Prosorhochmidae	*Prosorhochmus albidus*	1
		Oerstediidae	*Oerstedia dorsalis* Cmplx	1
		Amphiporidae	*Amphiporus flavescens*	1
		Tetrastemmatidae	*Quasitetrastemma nigrifrons*	1
			Tetrastemma candidum	5
		family uncertain	Hoplonemertea sp D	1
MOLLUSCA				
	Caudofoveata			
		Chaetodermatidae	*Chaetoderma pacificum*	3
			Falcidens longus	1
		Limifossoridae	*Limifossor fratula*	2
	Gastropoda			1
		Calliotropidae	*Cidarina cidaris*	1
		Solariellidae	*Solariella peramabilis*	8
		Cerithiidae	*Lirobittium rugatum* Cmplx	5
		Calyptraeidae	*Calyptraea fastigiata*	5
			Crepidula sp	5
		Naticidae	*Neverita recluziana*	3
			Sinum scopulosum	1
		Caecidae	*Caecum crebricinctum*	4
		Bursidae	*Crossata ventricosa*	1

Addendum 6-7 *continued*

Taxonomic Classification			n
	Epitoniidae	*Epitonium bellastriatum*	6
	Eulimidae	*Balcis micans*	1
		Balcis oldroydae	5
		Eulima raymondi	4
		Polygireulima rutila	13
	Nassariidae	*Caesia perpinguis*	1
	Olivellidae	*Callianax baetica*	2
	Borsoniidae	*Ophiodermella inermis*	3
	Mangeliidae		1
		Kurtzia arteaga	6
		Kurtziella plumbea	4
		Kurtzina beta	9
	Pseudomelatomidae	*Antiplanes catalinae*	1
		Megasurcula carpenteriana	1
	Terebridae	*Terebra pedroana*	3
	Acteonidae	*Rictaxis punctocaelatus*	6
	Pyramidellidae	*Odostomia* sp	17
		Turbonilla chocolata	4
		Turbonilla santarosana	6
		Turbonilla sp A	7
		Turbonilla sp	3
	Opisthobranchia		1
	Onchidorididae	*Acanthodoris rhodoceras*	1
	Facelinidae		1
	Rhizoridae	*Volvulella californica*	7
		Volvulella cylindrica	6
		Volvulella panamica	2
		Volvulella sp	1
	Acteocinidae	*Acteocina cerealis*	1
		Acteocina harpa	3
	Philinidae	*Philine auriformis*	10
	Aglajidae	*Aglaja ocelligera*	1
	Gastropteridae	*Gastropteron pacificum*	3
	Philinoglossidae	*Philinoglossa* sp A	1
	Cylichnidae	*Cylichna diegensis*	21
	Diaphanidae	*Diaphana californica*	1
	family uncertain	*Bullomorpha* sp A	1
Bivalvia			16
	Nuculidae	*Acila castrensis*	4

Addendum 6-7 *continued*

Taxonomic Classification			n
		Ennucula tenuis	33
	Solemyidae	*Solemya pervernicosa*	9
	Nucinellidae	*Huxleyia munita*	1
	Nuculanidae	*Nuculana conceptionis*	1
		Nuculana hamata	5
		Nuculana taphria	10
		Nuculana sp A	228
	Yoldiidae	*Yoldia cooperii*	4
	Glycymerididae	*Glycymeris septentrionalis*	1
	Mytilidae	*Crenella decussata*	2
		Modiolinae	6
		Amygdalum pallidulum	9
	Pectinidae		4
		Leptopecten latiauratus	11
	Carditidae	*Cyclocardia gouldii*	1
		Cyclocardia ventricosa	6
	Lucinidae	*Lucinisca nuttalli*	1
		Parvilucina tenuisculpta	95
		Lucinoma annulatum	27
	Thyasiridae	*Adontorhina cyclia*	20
		Axinopsida serricata	1294
		Thyasira flexuosa	8
	Lasaeidae	*Kurtiella grippi*	3
		Kurtiella tumida	37
		Kurtiella sp D	1
	Cardiidae	*Keenaea centifilosum*	24
	Tellinidae	*Tellina carpenteri*	236
		Tellina modesta	26
		Tellina sp B	319
		Tellina sp SD1	3
		Tellina sp	8
		Macoma carlottensis	3
		Macoma nasuta	2
		Macoma yoldiformis	37
		Macoma sp	13
	Donacidae	*Donax gouldii*	5
	Solenidae	*Solen sicarius*	8
	Pharidae	*Ensis myrae*	17
		Siliqua lucida	20

Addendum 6-7 *continued*

Taxonomic Classification				n
		Veneridae	Venerinae	7
			Compsomyax subdiaphana	11
			Nutricola cymata	2
		Petricolidae	*Cooperella subdiaphana*	103
		Mactridae		10
			Mactromeris hemphillii	9
			Simomactra falcata	14
		Pandoridae	*Pandora bilirata*	3
		Lyonsiidae		12
			Lyonsia californica	23
		Thracioidea		1
		Periplomatidae	*Periploma discus*	5
			Periploma sp	2
		Cuspidariidae		1
			Cuspidaria parapodema	8
		Verticordiidae	*Haliris aequacostata*	1
	Scaphopoda			5
		Dentaliidae	*Dentalium vallicolens*	1
		Rhabdidae	*Rhabdus rectius*	2
		Gadilidae	*Polyschides quadrifissatus*	34
			Gadila aberrans	43
SIPUNCULA				4
	Sipunculidea			
		Golfingiidae	*Nephasoma diaphanes*	1
			Thysanocardia nigra	10
		Phascolionidae	*Phascolion* sp A	58
	Phascolosomatidea			
		Phascolosomatidae	*Apionsoma misakianum*	15
ANNELIDA				
	Polychaeta			
		Amphinomidae	*Chloeia pinnata*	110
			Paramphinome sp	27
		Dorvilleidae	*Meiodorvillea* sp SD1	1
			Parougia caeca	2
			Parougia sp	1
			Protodorvillea gracilis	21
		Eunicidae		2
			Leodice americana	3
			Marphysa sp	4

Addendum 6-7 *continued*

Taxonomic Classification			n
	Lumbrineridae		2
		Lumbrineridae Group III	11
		Eranno bicirrata	1
		Eranno lagunae	6
		Lumbrinerides platypygos	56
		Lumbrineris cruzensis	31
		Lumbrineris latreilli	31
		Lumbrineris ligulata	17
		Lumbrineris limicola	1
		Lumbrineris sp Group I	11
		Lumbrineris sp Group II	1
		Lumbrineris sp	2
		Ninoe tridentata	6
		Scoletoma tetraura Cmplx	88
		Scoletoma sp	10
	Oenonidae		5
		Arabella sp	4
		Drilonereis falcata	14
		Drilonereis sp	10
		Notocirrus californiensis	1
	Onuphidae		23
		Diopatra ornata	5
		Diopatra splendidissima	3
		Diopatra tridentata	35
		Diopatra sp	76
		Mooreonuphis exigua	11
		Mooreonuphis nebulosa	32
		Mooreonuphis segmentispadix	2
		Mooreonuphis sp SD1	22
		Mooreonuphis sp	24
		Nothria occidentalis	11
		Nothria sp	1
		Onuphis affinis	5
		Onuphis eremita parva	3
		Onuphis iridescens	20
		Onuphis sp A	76
		Onuphis sp	46
		Paradiopatra parva	615
	Aphroditidae	*Aphrodita refulgida*	1

Addendum 6-7 *continued*

Taxonomic Classification			n
		Aphrodita sp	8
	Polynoidae		3
		Lepidasthenia longicirrata	1
		Malmgreniella baschi	5
		Malmgreniella liei	1
		Malmgreniella macginitiei	4
		Malmgreniella nigralba	4
		Malmgreniella sanpedroensis	4
		Malmgreniella scriptoria	2
		Malmgreniella sp A	13
		Malmgreniella sp	1
		Subadyte mexicana	3
		Tenonia priops	15
	Pholoidae	*Pholoe glabra*	97
	Sigalionidae		1
		Sigalion spinosus	102
		Sthenelais fusca	3
		Sthenelais tertiaglabra	8
		Sthenelais sp	1
		Sthenelanella uniformis	102
	Glyceridae	*Glycera americana*	5
		Glycera macrobranchia	3
		Glycera nana	99
		Glycera oxycephala	73
		Glycera tesselata	1
		Glycera sp	1
		Hemipodia borealis	3
	Goniadidae	*Glycinde armigera*	87
		Goniada brunnea	15
		Goniada littorea	70
		Goniada maculata	113
	Chrysopetalidae		1
	Hesionidae	*Micropodarke dubia*	1
		Podarkeopsis glabrus	12
	Nereididae		1
		Alitta succinea	1
		Nereis latescens	1
		Nereis sp A	48
		Nereis sp	1

Addendum 6-7 *continued*

Taxonomic Classification			n
		Platynereis bicanaliculata	7
	Pilargidae	*Hermundura ocularis*	1
		Pilargis berkeleyae	2
		Sigambra bassi	1
		Sigambra setosa	1
	Syllidae		32
		Epigamia-Myrianida Cmplx	1
		Proceraea sp	1
		Eusyllis habei	2
		Eusyllis transecta	11
		Eusyllis sp SD2	14
		Odontosyllis phosphorea	8
		Paraehlersia articulata	3
		Exogone lourei	14
		Salvatoria californiensis	2
		Sphaerosyllis californiensis	2
		Syllis heterochaeta	66
		Syllis sp SD1	2
		Syllis sp SD2	1
	Nephtyidae	*Aglaophamus erectans*	3
		Aglaophamus verrilli	17
		Bipalponephtys cornuta	14
		Nephtys caecoides	50
		Nephtys ferruginea	101
		Nephtys sp SD2	3
		Nephtys sp	1
	Sphaerodoridae		1
		Sphaerodoridium sp A	1
		Sphaerodoropsis biserialis	1
	Phyllodocidae		2
		Eteone pigmentata	1
		Eteone sp	1
		Eulalia levicornuta Cmplx	3
		Eumida longicornuta	19
		Hesionura coineaui difficilis	36
		Mystides sp	43
		Sige sp A	12
		Sige sp B	3
		Sige sp	1

Addendum 6-7 *continued*

Taxonomic Classification			n
		Clavadoce sp	2
		Nereiphylla sp *2*	1
		Nereiphylla sp SD1	1
		Paranaitis polynoides	1
		Phyllodoce cuspidata	2
		Phyllodoce hartmanae	77
		Phyllodoce longipes	13
		Phyllodoce pettiboneae	52
	Oweniidae		3
		Galathowenia pygidialis	9
		Myriochele gracilis	5
		Myriochele olgae	6
		Myriochele striolata	21
		Owenia collaris	27
	Sabellariidae		2
		Neosabellaria cementarium	3
		Sabellaria gracilis	13
	Sabellidae		6
		Acromegalomma pigmentum	3
		Acromegalomma splendidum	3
		Bispira sp	1
		Dialychone albocincta	17
		Dialychone trilineata	97
		Dialychone veleronis	52
		Dialychone sp	1
		Euchone arenae	20
		Euchone hancocki	13
		Euchone incolor	76
		Euchone sp	3
		Jasmineira sp B	92
		Myxicola sp	3
		Paradialychone bimaculata	1
		Paradialychone ecaudata	4
		Paradialychone harrisae	19
		Paradialychone paramollis	5
		Potamethus sp A	6
	Apistobranchidae	*Apistobranchus ornatus*	1
	Longosomatidae	*Heterospio catalinensis*	5
	Magelonidae	*Magelona berkeleyi*	10

Addendum 6-7 *continued*

Taxonomic Classification			n
		Magelona hartmanae	5
		Magelona sacculata	7
		Magelona sp A	1
		Magelona sp B	8
		Magelona sp	1
	Poecilochaetidae	*Poecilochaetus johnsoni*	40
	Spionidae		1
		Dipolydora socialis	7
		Dipolydora sp	1
		Dispio sp SD1	21
		Laonice cirrata	39
		Laonice nuchala	28
		Malacoceros indicus	1
		Microspio pigmentata	130
		Paraprionospio alata	715
		Polydora cirrosa	90
		Polydora cornuta	78
		Polydora sp	63
		Prionospio dubia	213
		Prionospio ehlersi	13
		Prionospio jubata	736
		Prionospio lighti	19
		Prionospio pygmaeus	41
		Prionospio sp	2
		Scolelepis (Parascolelepis) texana	2
		Scolelepis (Scolelepis) occidentalis	1
		Spio filicornis	3
		Spio maculata	8
		Spiophanes berkeleyorum	55
		Spiophanes duplex	2603
		Spiophanes fimbriata	4
		Spiophanes kimballi	688
		Spiophanes norrisi	832
		Spiophanes wigleyi	1
		Spiophanes sp	2
	Cirratulidae		16
		Aphelochaeta elongata	1
		Aphelochaeta glandaria Cmplx	497
		Aphelochaeta monilaris	36

Addendum 6-7 *continued*

Taxonomic Classification			n
		Aphelochaeta phillipsi	15
		Aphelochaeta tigrina	41
		Aphelochaeta williamsae	2
		Aphelochaeta sp LA1	48
		Aphelochaeta sp SD18	1
		Aphelochaeta sp	22
		Caulleriella hamata	2
		Chaetozone armata	4
		Chaetozone columbiana	4
		Chaetozone corona	22
		Chaetozone hartmanae	158
		Chaetozone lunula	8
		Chaetozone sp SD2	4
		Chaetozone sp SD3	5
		Chaetozone sp SD5	12
		Chaetozone sp SD7	22
		Chaetozone sp	51
		Kirkegaardia cryptica	54
		Kirkegaardia serratiseta	1
		Kirkegaardia siblina	111
		Kirkegaardia tesselata	57
		Kirkegaardia sp SD9	9
		Kirkegaardia sp	1
	Fauveliopsidae	*Fauveliopsis* sp SD1	32
	Flabelligeridae	*Brada pilosa*	6
		Brada pluribranchiata	1
		Flabelligera sp SD1	2
		Pherusa neopapillata	5
		Trophoniella harrisae	2
	Sternaspidae	*Sternaspis affinis*	175
	Ampharetidae		36
		Amage anops	8
		Amage scutata	22
		Ampharete finmarchica	10
		Ampharete labrops	49
		Ampharete sp	19
		Ampharetidae sp SD1	4
		Amphicteis scaphobranchiata	34
		Amphisamytha bioculata	3

Addendum 6-7 *continued*

Taxonomic Classification			n
		Anobothrus gracilis	82
		Asabellides lineata	3
		Eclysippe trilobata	644
		Lysippe sp A	66
		Lysippe sp B	69
		Sabellides manriquei	8
		Samytha californiensis	3
		Schistocomus sp A	1
		Schistocomus sp	3
		Sosane occidentalis	6
		Melinna heterodonta	3
		Melinna oculata	53
	Pectinariidae	*Pectinaria californiensis*	119
	Terebellidae		3
		Amaeana occidentalis	14
		Polycirrus californicus	24
		Polycirrus sp I	1
		Polycirrus sp A	67
		Polycirrus sp OC1	159
		Polycirrus sp	163
		Lanassa venusta venusta	105
		Phisidia sanctaemariae	217
		Pista brevibranchiata	5
		Pista estevanica	112
		Pista moorei	2
		Pista wui	54
		Pista sp	6
		Proclea sp A	11
		Streblosoma crassibranchia	13
		Streblosoma sp B	10
		Streblosoma sp C	10
		Streblosoma sp SF1	4
		Streblosoma sp	4
	Trichobranchidae	*Terebellides californica*	8
		Terebellides sp Type C	1
		Terebellides sp	2
		Trichobranchus hancocki	2
	Chaetopteridae		1
		Mesochaetopterus sp	2

Addendum 6-7 *continued*

Taxonomic Classification			n
		Phyllochaetopterus limicolus	246
		Phyllochaetopterus sp	3
		Spiochaetopterus costarum Cmplx	336
	Capitellidae	*Capitella teleta*	8
		Decamastus gracilis	22
		Mediomastus acutus	3
		Mediomastus sp	966
		Notomastus hemipodus	77
		Notomastus latericeus	20
		Notomastus lineatus	7
		Notomastus sp	19
	Cossuridae	*Cossura candida*	29
		Cossura sp A	5
		Cossura sp	2
	Maldanidae		183
		Euclymeninae	153
		Axiothella sp	2
		Clymenella sp A	2
		Clymenura gracilis	94
		Clymenura sp	2
		Euclymeninae sp A	28
		Euclymeninae sp B	148
		Isocirrus longiceps	1
		Petaloclymene pacifica	115
		Praxillella gracilis	2
		Praxillella pacifica	341
		Maldaninae	1
		Maldane sarsi	85
		Metasychis disparidentatus	42
		Petaloproctus neoborealis	1
		Praxillura maculata	1
		Rhodine bitorquata	91
	Opheliidae		2
		Armandia brevis	2
		Ophelia pulchella	3
		Ophelina acuminata	1
		Ophelina sp	1
	Orbiniidae	*Leitoscoloplos pugettensis*	11
		Naineris uncinata	1

Addendum 6-7 *continued*

Taxonomic Classification				n
			Scoloplos acmeceps	5
			Scoloplos armiger Cmplx	263
			Scoloplos sp	1
		Paraonidae		7
			Aricidea (Acmira) catherinae	43
			Aricidea (Acmira) cerrutii	2
			Aricidea (Acmira) lopezi	12
			Aricidea (Acmira) rubra	1
			Aricidea (Acmira) simplex	31
			Aricidea (Acmira) sp SD3	1
			Aricidea (Acmira) sp	3
			Aricidea (Aedicira) pacifica	2
			Aricidea (Aricidea) pseudoarticulata	2
			Aricidea (Aricidea) wassi	3
			Aricidea (Aricidea) sp SD1	2
			Aricidea (Aricidea) sp SD3	3
			Aricidea (Aricidea) sp	1
			Aricidea (Strelzovia) antennata	26
			Aricidea (Strelzovia) hartleyi	7
			Aricidea (Strelzovia) sp A	22
			Aricidea (Strelzovia) sp	1
			Cirrophorus furcatus	4
			Levinsenia gracilis	27
			Levinsenia kirbyae	9
			Paradoneis sp SD1	110
			Paradoneis sp	15
		Scalibregmatidae	*Scalibregma californicum*	62
		Travisiidae	*Travisia brevis*	200
		Saccocirridae	*Saccocirrus* sp	84
ARTHROPODA				
	Pycnogonida			
		Phoxichilidiidae	*Anoplodactylus erectus*	1
			Anoplodactylus nodosus	2
	Ostracoda			
		Cylindroleberididae		1
			Leuroleberis sharpei	1
			Xenoleberis californica	2
		Philomedidae	*Euphilomedes carcharodonta*	69
			Euphilomedes producta	23

Addendum 6-7 *continued*

Taxonomic Classification			n
	Sarsiellidae	*Eusarsiella thominx*	1
	Rutidermatidae	*Rutiderma lomae*	3
Malacostraca			
	Nebaliidae	*Nebalia daytoni*	3
	Mysidae	*Heteromysis odontops*	1
		Acanthomysis californica	3
		Neomysis kadiakensis	3
		Pacifacanthomysis nephrophthalma	1
		Mysidopsis californica	1
	Caprellidae	Caprellinae	6
		Caprella californica Cmplx	1
		Caprella kennerlyi	2
		Caprella mendax	14
		Caprella verrucosa	1
		Mayerella banksia	17
		Tritella laevis	2
	Podoceridae	*Podocerus brasiliensis*	1
	Ischyroceridae		1
		Ericthonius brasiliensis	5
		Jassa sp	1
		Notopoma sp A	35
	Kamakidae	*Amphideutopus oculatus*	19
	Photidae	*Ampelisciphotis podophthalma*	29
		Gammaropsis thompsoni	3
		Photis bifurcata	3
		Photis brevipes	12
		Photis californica	18
		Photis lacia	19
		Photis macinerneyi	3
		Photis sp C	4
		Photis sp OC1	27
		Photis sp	7
		Podoceropsis ociosa	1
	Aoridae	*Aoroides* sp A	10
		Aoroides sp	6
		Bemlos audbettius	2
		Bemlos sp	1
	Unciolidae	*Rudilemboides stenopropodus*	1
	Ampithoidae		1

Addendum 6-7 *continued*

Taxonomic Classification			n
	Corophiidae	*Laticorophium baconi*	9
		Protomedeia articulata Cmplx	10
	Hornelliidae	*Hornellia occidentalis*	3
	Megaluropidae	Megaluropidae sp A	4
	Oedicerotidae	*Americhelidium shoemakeri*	23
		Americhelidium sp SD1	9
		Americhelidium sp SD4	5
		Americhelidium sp	1
		Bathymedon pumilus	9
		Deflexilodes norvegicus	14
		Hartmanodes hartmanae	10
		Monoculodes emarginatus	6
		Westwoodilla tone	44
	Liljeborgiidae	*Listriella goleta*	8
		Listriella melanica	2
	Stenothoidae	*Metopa dawsoni*	2
	Pardaliscidae	*Nicippe tumida*	7
	Ampeliscidae	*Ampelisca agassizi*	11
		Ampelisca brachycladus	15
		Ampelisca brevisimulata	98
		Ampelisca cf *brevisimulata*	9
		Ampelisca careyi	159
		Ampelisca cristata cristata	22
		Ampelisca cristata microdentata	145
		Ampelisca hancocki	10
		Ampelisca indentata	18
		Ampelisca pacifica	77
		Ampelisca pugetica	130
		Ampelisca romigi	5
		Ampelisca sp	16
		Byblis millsi	12
	Synopiidae	*Garosyrrhoe bigarra*	1
		Tiron biocellata	1
	Argissidae	*Argissa hamatipes*	6
	Haustoriidae	*Eohaustorius barnardi*	23
	Platyischnopidae	*Tiburonella viscana*	2
	Urothoidae	*Urothoe elegans* Cmplx	8
	Phoxocephalidae		2
		Foxiphalus golfensis	1

Addendum 6-7 *continued*

Taxonomic Classification			n
		Foxiphalus obtusidens	51
		Foxiphalus similis	5
		Metharpinia jonesi	2
		Rhepoxynius bicuspidatus	216
		Rhepoxynius fatigans	4
		Rhepoxynius heterocuspidatus	71
		Rhepoxynius lucubrans	5
		Rhepoxynius menziesi	113
		Rhepoxynius stenodes	10
		Rhepoxynius variatus	8
		Eyakia robusta	8
		Metaphoxus frequens	1
		Heterophoxus ellisi	12
		Heterophoxus oculatus	72
		Heterophoxus sp	11
	Lysianassidae	*Aruga oculata*	1
	Opisidae	*Opisa tridentata*	1
	Uristidae	*Anonyx lilljeborgi*	2
	Tryphosidae	*Hippomedon zetesimus*	7
		Hippomedon sp A	2
		Lepidepecreum serraculum	2
	Acidostomatidae	*Acidostoma hancocki*	5
	Pakynidae	*Pachynus barnardi*	1
		Prachynella lodo	1
	Cirolanidae	*Eurydice caudata*	12
	Gnathiidae	*Caecognathia crenulatifrons*	25
	Anthuridae	*Haliophasma geminata*	18
	Arcturidae	*Neastacilla californica*	1
	Idoteidae	*Edotia sublittoralis*	11
		Edotia sp B	1
	Paramunnidae	*Pleurogonium californiense*	1
	Tanaidacea		2
	Akanthophoreidae	*Akanthophoreus phillipsi*	1
		Chauliopleona dentata	8
	Anarthruridae	Anarthruridae sp 3	1
	Leptocheliidae	*Chondrochelia dubia* Cmplx	148
	Tanaellidae	*Araphura breviaria*	50
		Araphura cuspirostris	2
		Tanaella propinquus	2

Addendum 6-7 *continued*

Taxonomic Classification			n
	Typhlotanaidae	*Typhlotanais williamsae*	1
	Tanaopsidae	*Tanaopsis cadieni*	5
	Bodotriidae	*Cyclaspis nubila*	2
	Leuconidae	*Eudorella pacifica*	5
	Nannastacidae	*Campylaspis canaliculata*	3
		Procampylaspis caenosa	8
	Lampropidae	*Hemilamprops californicus*	49
		Mesolamprops bispinosus	6
	Diastylidae	*Anchicolurus occidentalis*	1
		Diastylis californica	6
		Diastylis crenellata	10
		Diastylopsis tenuis	16
		Oxyurostylis pacifica	9
	Ogyrididae	*Ogyrides* sp A	1
	Crangonidae	*Crangon alaskensis*	1
		Crangon alba	2
	Callianassidae	*Neotrypaea* sp	1
	Paguridae	*Pagurus hartae*	1
	Albuneidae	*Lepidopa californica*	1
	Blepharipodidae	*Blepharipoda occidentalis*	1
	Cyclodorippidae	*Deilocerus planus*	1
		Deilocerus sp	2
	Inachidae	*Erileptus spinosus*	1
	Cancridae		2
		Metacarcinus gracilis	3
	Panopeidae	*Lophopanopeus* sp	1
	Pinnotheridae	*Pinnixa franciscana*	8
		Pinnixa longipes	1
		Pinnixa occidentalis Cmplx	11
		Pinnixa sp	2
Hexanauplia			
	Scalpellidae	*Hamatoscalpellum californicum*	5
	Balanidae		1
NEMATODA			109
ECHINODERMATA			
Asteroidea			93
	Astropectinidae	*Astropecten californicus*	10
Ophiuroidea			11
	Ophiuridae	*Ophiura luetkenii*	3

Addendum 6-7 *continued*

Taxonomic Classification				n
		Ophioscolecidae	*Ophiuroconis bispinosa*	14
		Amphiuridae		226
			Amphichondrius granulatus	30
			Amphiodia digitata	40
			Amphiodia psara	2
			Amphiodia urtica	684
			Amphiodia sp	220
			Amphioplus strongyloplax	10
			Amphioplus sp A	5
			Amphioplus sp	8
			Amphipholis squamata	25
			Amphipholis sp	5
			Amphiura arcystata	13
			Dougaloplus amphacanthus	41
			Dougaloplus sp A	7
			Dougaloplus sp	1
		Ophiotrichidae	*Ophiothrix spiculata*	1
	Echinoidea			3
		Toxopneustidae	*Lytechinus pictus*	4
		Strongylocentrotidae	*Strongylocentrotus fragilis*	1
		Dendrasteridae	*Dendraster terminalis*	65
		Spatangoida		2
		Schizasteridae	*Brisaster latifrons*	3
			Brisaster townsendi	1
		Brissidae	*Brissopsis pacifica*	8
		Spatangidae	*Spatangus californicus*	1
		Loveniidae	*Lovenia cordiformis*	13
	Holothuroidea			
		Psolidae		1
		Phyllophoridae	*Pentamera pseudopopulifera*	1
			Pentamera rigida	1
			Pentamera sp	3
		Synaptidae	*Leptosynapta* sp	16
		Chiridotidae	*Chiridota* sp	10
		Molpadiidae	*Molpadia intermedia*	2
PHORONIDA				33
		Phoronidae	*Phoronis* sp SD1	23
			Phoronis sp	104
BRACHIOPODA				

Addendum 6-7 *continued*

Taxonomic Classification				n
	Lingulata			
		Lingulidae	*Glottidia albida*	168
BRYOZOA				
	Gymnolaemata			
		Clavoporidae	*Ascorhiza occidentalis*	1
CHORDATA				
	Enteropneusta			1
		Ptychoderidae	*Balanoglossus* sp	2
		Spengeliidae	*Schizocardium* sp	7
		Harrimaniidae	*Saccoglossus* sp	3
			Stereobalanus sp	36
	Ascidiacea			1
		Agneziidae	*Agnezia septentrionalis*	3
		Stolidobranchiata		1
		Styelidae	*Cnemidocarpa rhizopus*	3
		Molgulidae		1
			Eugyra arenosa californica	3
	Leptocardii			
		Branchiostomatidae	*Branchiostoma californiense*	7

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Addendum 7

Demersal Fishes and Megabenthic Invertebrates

2019 Raw Data

Addendum 7-1

Total abundance by species and station for demersal fish collected at PLOO trawl stations during 2019.

Species	Winter 2019						Species Abundance by Survey
	SD7	SD8	SD10	SD12	SD13	SD14	
Halfbanded Rockfish	25	30	1740	3	24	153	1975
Pacific Sanddab	122	167	246	157	146	258	1096
Longspine Combfish	9	11	70	42	10	133	275
Dover Sole	11	20	21	23	18	59	152
Plainfin Midshipman	70	12	9	2	2	44	139
Yellowchin Sculpin	100	20				4	124
English Sole	5	7	25	28	16	11	92
Pink Seaperch	6	6	19	9	9	8	57
Shortspine Combfish	3	24	9		3	4	43
Pacific Argentine	24						24
Hornyhead Turbot		1	3	2	10	8	24
California Lizardfish	8	3	8	2		2	23
California Tonguefish	5	5	2			5	17
California Scorpionfish			5	6	2		13
Stripetail Rockfish			5			7	12
Longfin Sanddab		4			6	1	11
Vermilion Rockfish						6	6
Bigmouth Sole	2	1				2	5
Greenstriped Rockfish		4					4
Curlfin Sole				1	3		4
White Croaker		1	2				3
Rockfish Unidentified		1				2	3
Spotted Cusk-eel		2					2
Specklefin Midshipman	2						2
Shiner Perch						1	1
Roughback Sculpin	1						1
California Skate		1					1
Bluebanded Ronquil		1					1
Survey Total	393	321	2164	275	249	708	4110

Addendum 7-1 *continued*

Species	Summer 2019						Species Abundance by Survey
	SD7	SD8	SD10	SD12	SD13	SD14	
Pacific Sanddab	108	166	55	105	129	224	787
Dover Sole	7	47	30	46	66	44	240
Halfbanded Rockfish	2	131	3		16	13	165
Shortspine Combfish	8	10	8	3	18	16	63
Plainfin Midshipman	1	14			1	19	35
English Sole		1	11	4	10	9	35
Pink Seaperch			5	1	9	6	21
Hornyhead Turbot	2	2	2	4	2	2	14
Stripetail Rockfish	3	1	1		3	4	12
Spotted Cusk-eel		1	1	6	3	1	12
Slender Sole	1	1		4		5	11
Longspine Combfish	1	2	6		2		11
Pacific Argentine	5	1					6
Yellowchin Sculpin	1	4					5
Longfin Sanddab		2		1	1	1	5
Bigmouth Sole	1		1			1	3
Spotfin Sculpin		2					2
California Lizardfish			1			1	2
Bigfin Eelpout						2	2
Rosy Rockfish			1				1
Greenspotted Rockfish					1		1
Cowcod					1		1
California Skate						1	1
Survey Total	140	385	125	174	262	349	1435
Annual total	533	706	2289	449	511	1057	5545

Addendum 7-2

Total abundance by species and station for demersal fish collected at SBOO trawl stations during 2019.

Species	Winter 2019							Species Abundance by Survey
	SD15	SD16	SD17	SD18	SD19	SD20	SD21	
Speckled Sanddab	33	45	23	58	163	174	39	535
White Croaker		6	155			3	35	199
California Tonguefish	2	9	10	31	46	26	23	147
California Lizardfish		46	10	7	21	35	10	129
Northern Anchovy			1	25	12		41	79
Hornyhead Turbot		5	1	7	6	6	4	29
Longfin Sanddab		1	1	16	6			24
California Halibut	1		2	9		1		13
Round Stingray		2		1	1		7	11
Queenfish			8					8
Specklefin Midshipman			1		2		1	4
Kelp Pipefish		1		1		1		3
Fantail Sole		1		1			1	3
Shovelnose Guitarfish		1					1	2
Pacific Sanddab				1		1		2
Barcheek Pipefish				2				2
Thornback		1						1
Sarcastic Fringehead				1				1
Pygmy Poacher							1	1
Pacific Sardine				1				1
Pacific Pompano				1				1
Longspine Combfish				1				1
California Skate		1						1
Basketweave Cusk-eel							1	1
Barred Sand Bass			1					1
Survey Total	36	119	213	163	257	247	164	1199

Addendum 7-2 *continued*

Species	Summer 2019							Species Abundance by Survey
	SD15	SD16	SD17	SD18	SD19	SD20	SD21	
Speckled Sanddab	46	31	67	69	90	110	49	462
Longfin Sanddab		10	38	22	48	39	77	234
California Lizardfish		11	5	4	21	1	3	45
Yellowchin Sculpin		1	1		4	28	8	42
English Sole		1		1	3	13	4	22
California Tonguefish		1	3	2	6	3	6	21
Hornyhead Turbot		1		2	3	4	3	13
Longspine Combfish						11		11
California Halibut	1	2	1	1	1	4	1	11
Roughback Sculpin	2	1				5		8
Spotted Turbot		1	1			2	2	6
Fantail Sole			2			1	2	5
Specklefin Midshipman			1		1	1		3
California Scorpionfish	1					1	1	3
California Skate				2				2
Plainfin Midshipman						1		1
Pacific Sanddab			1					1
Kelp Pipefish						1		1
Survey Total	50	60	120	103	177	225	156	891
Annual Total	86	179	333	266	434	472	320	2090

Addendum 7-3

Biomass (kg) by species and station for demersal fish collected at the PLOO trawl stations during 2019.

Species	Winter 2019						Species Biomass by Survey
	SD7	SD8	SD10	SD12	SD13	SD14	
Halfbanded Rockfish	0.3	0.3	18.7	0.1	0.1	1.6	21.1
Pacific Sanddab	0.2	1.1	5.8	3.8	3.4	1.4	15.7
English Sole	0.1	0.2	1.5	0.9	0.1	0.5	3.3
Longspine Combfish	0.1	0.2	0.5	0.1	0.1	0.9	1.9
Dover Sole	0.1	0.1	0.5	0.2	0.1	0.8	1.8
California Scorpionfish			0.3	1.0	0.2		1.5
California Lizardfish	0.1	0.3	0.7	0.1		0.1	1.3
Plainfin Midshipman	0.1	0.1	0.2	0.1	0.1	0.5	1.1
Hornyhead Turbot		0.1	0.2	0.1	0.1	0.3	0.8
Shortspine Combfish	0.1	0.2	0.2		0.1	0.1	0.7
Pink Seaperch	0.1	0.2	0.1	0.1	0.1	0.1	0.7
Bigmouth Sole	0.2	0.1				0.3	0.6
Yellowchin Sculpin	0.2	0.1				0.1	0.4
Vermilion Rockfish						0.4	0.4
California Tonguefish	0.1	0.1	0.1			0.1	0.4
California Skate		0.4					0.4
White Croaker		0.2	0.1				0.3
Longfin Sanddab		0.1			0.1	0.1	0.3
Curlfin Sole				0.1	0.2		0.3
Stripetail Rockfish			0.1			0.1	0.2
Rockfish Unidentified		0.1				0.1	0.2
Pacific Argentine	0.2						0.2
Spotted Cusk-eel		0.1					0.1
Specklefin Midshipman	0.1						0.1
Shiner Perch						0.1	0.1
Roughback Sculpin	0.1						0.1
Greenstriped Rockfish		0.1					0.1
Bluebanded Ronquil		0.1					0.1
Survey Total	2.1	4.2	29.0	6.6	4.7	7.6	54.2

Addendum 7-3 *continued*

Species	Summer 2019						Species Biomass by Survey
	SD7	SD8	SD10	SD12	SD13	SD14	
Pacific Sanddab	3.3	1.0	2.4	3.3	4.1	2.4	16.5
Dover Sole	0.9	0.9	0.9	1.0	0.8	1.5	6.0
Halfbanded Rockfish	0.1	2.0	0.1		0.3	0.4	2.9
English Sole		0.2	0.7	0.4	0.4	1.0	2.7
Hornyhead Turbot	0.9	0.2	0.1	0.3	0.1	0.1	1.7
Shortspine Combfish	0.8	0.1	0.1	0.1	0.2	0.3	1.6
Bigmouth Sole	0.8		0.1			0.1	1.0
Slender Sole	0.1	0.1		0.2		0.4	0.8
Spotted Cusk-eel		0.1	0.1	0.2	0.1	0.1	0.6
Stripetail Rockfish	0.1	0.1	0.1		0.1	0.1	0.5
Plainfin Midshipman	0.1	0.1			0.1	0.2	0.5
Longfin Sanddab		0.2		0.1	0.1	0.1	0.5
Pink Seaperch			0.1	0.1	0.1	0.1	0.4
Longspine Combfish	0.1	0.1	0.1		0.1		0.4
California Skate						0.4	0.4
California Lizardfish			0.1			0.2	0.3
Yellowchin Sculpin	0.1	0.1					0.2
Pacific Argentine	0.1	0.1					0.2
Spotfin Sculpin		0.1					0.1
Rosy Rockfish			0.1				0.1
Greenspotted Rockfish					0.1		0.1
Cowcod					0.1		0.1
Bigfin Eelpout						0.1	0.1
Survey Total	7.4	5.4	5.0	5.7	6.7	7.5	37.7
Annual Total	9.5	9.6	34.0	12.3	11.4	15.1	91.9

Addendum 7-4

Biomass (kg) by species and station for demersal fish collected at SBOO trawl stations during 2019.

	Winter 2019							
Name	**SD15**	**SD16**	**SD17**	**SD18**	**SD19**	**SD20**	**SD21**	**Species Biomass by Survey**
California Halibut	0.1		0.4	6.4		4.3		11.2
White Croaker		0.1	4.9			0.1	1.1	6.2
Speckled Sanddab	0.1	0.1	0.1	0.3	1.3	1.1	0.2	3.2
California Tonguefish	0.1	0.1	0.1	0.7	0.5	0.1	0.2	1.8
Fantail Sole		0.2		0.2			1.3	1.7
Round Stingray		0.4		0.2	0.5		0.6	1.7
Longfin Sanddab		0.1	0.1	1.2	0.1			1.5
Hornyhead Turbot		0.1	0.1	0.7	0.1	0.4	0.1	1.5
California Lizardfish		0.2	0.1	0.2	0.1	0.1	0.1	0.8
Shovelnose Guitarfish		0.1					0.5	0.6
Northern Anchovy			0.1	0.1	0.1		0.2	0.5
Specklefin Midshipman			0.1		0.1		0.1	0.3
Kelp Pipefish		0.1		0.1		0.1		0.3
Barred Sand Bass			0.3					0.3
Thornback		0.2						0.2
Pacific Sanddab				0.1		0.1		0.2
California Skate		0.2						0.2
Sarcastic Fringehead				0.1				0.1
Queenfish			0.1					0.1
Pygmy Poacher							0.1	0.1
Pacific Sardine				0.1				0.1
Pacific Pompano				0.1				0.1
Longspine Combfish				0.1				0.1
Basketweave Cusk-eel							0.1	0.1
Barcheek Pipefish				0.1				0.1
Survey Total	0.3	1.9	6.4	10.7	2.8	6.3	4.6	33.0

Addendum 7-4 *continued*

Name	Summer 2019							Species Biomass by Survey
	SD15	SD16	SD17	SD18	SD19	SD20	SD21	
California Halibut	0.7	1.9	0.3	0.3	0.8	4.3	0.7	9.0
Longfin Sanddab		0.2	0.6	0.5	1.4	1.4	3.0	7.1
Speckled Sanddab	0.5	0.3	0.7	0.4	0.9	1.2	0.5	4.5
English Sole		0.1		0.1	0.1	0.9	0.7	1.9
Fantail Sole			0.5			0.7	0.5	1.7
California Lizardfish		0.1	0.3	0.4	0.7	0.1	0.1	1.7
Hornyhead Turbot		0.1		0.3	0.4	0.3	0.5	1.6
California Skate				0.8				0.8
California Tonguefish		0.1	0.1	0.1	0.2	0.1	0.1	0.7
Yellowchin Sculpin		0.1	0.1		0.1	0.2	0.1	0.6
Spotted Turbot		0.2	0.1			0.1	0.2	0.6
California Scorpionfish	0.2					0.1	0.2	0.5
Specklefin Midshipman			0.1		0.1	0.1		0.3
Roughback Sculpin	0.1	0.1				0.1		0.3
Longspine Combfish						0.2		0.2
Plainfin Midshipman						0.1		0.1
Pacific Sanddab			0.1					0.1
Kelp Pipefish						0.1		0.1
Survey Total	1.5	3.2	2.9	2.9	4.7	10.0	6.6	31.8
Annual Total	1.8	5.1	9.3	13.6	7.5	16.3	11.2	64.8

Addendum 7-5

Total abundance by species and station for megabenthic invertebrates collected at PLOO trawl stations during 2019.

Species	Winter 2019						Species Abundance by Survey
	SD7	SD8	SD10	SD12	SD13	SD14	
Pleuroncodes planipes	2	20	13	6111	11,188	1	17,335
Lytechinus pictus	384	1903	5	1630	58	70	4050
Sicyonia ingentis		11	3	19	9	46	88
Platymera gaudichaudii	1	1	2	38	5		47
Crangon alaskensis			15	1		26	42
Luidia foliolata	4	8	1		1	1	15
Apostichopus californicus	2	3	1		6	2	14
Crangonidae	13						13
Sicyonia penicillata	7					2	9
Luidia armata	3	5					8
Ophiura luetkenii	1	6					7
Astropecten californicus	1	1	2		1	1	6
Octopus rubescens						3	3
Neocrangon zacae						3	3
Lepidozona retiporosa		3					3
Pandalus danae		2					2
Ophiopholis bakeri		2					2
Paguristes turgidus						1	1
Ophiothrix spiculata		1					1
Ophiacantha diplasia		1					1
Megasurcula carpenteriana		1					1
Lepidozona scrobiculata		1					1
Doryteuthis opalescens		1					1
Dallinella occidentalis		1					1
Adelogorgia phyllosclera		1					1
Acanthoptilum sp		1					1
Acanthodoris brunnea		1					1
Survey Total	418	1974	42	7799	11,268	156	21,657

Addendum 7-5 *continued*

Species	Summer 2019						Species Abundance by Survey
	SD7	SD8	SD10	SD12	SD13	SD14	
Pleuroncodes planipes	15	6	16,989	11,649	11,136	1	39,796
Lytechinus pictus	1	875	168	5	12	5	1066
Strongylocentrotus fragilis				68	116	214	398
Sicyonia ingentis	66		112	38	62	1	279
Platymera gaudichaudii	2	1		4	3		10
Octopus rubescens		3			1	2	6
Apostichopus californicus	1	3		1			5
Luidia foliolata	4						4
Ophiopholis bakeri		2					2
Suberites latus		1					1
Pleurobranchaea californica		1					1
Paguristes bakeri		1					1
Neverita draconis	1						1
Florometra serratissima	1						1
Coryrhynchus lobifrons	1						1
Astropecten californicus		1					1
Araiofusus eueides		1					1
Aphorme horrida		1					1
Survey Total	92	896	17,269	11,765	11,330	223	41,575
Annual Total	510	2870	17,311	19,564	22,598	379	63,232

Addendum 7-6

Total abundance by species and station for megabenthic invertebrates collected at SBOO trawl stations during 2019.

	Winter 2019							
Species	**SD15**	**SD16**	**SD17**	**SD18**	**SD19**	**SD20**	**SD21**	**Species Abundance by Survey**
Crangon nigromaculata	1	84	27	24	29	35	55	255
Portunus xantusii	4	3	3	3	41	45	54	153
Sicyonia penicillata	1	5	13	7	40	25	12	103
Farfantepenaeus californiensis			9		1		51	61
Astropecten californicus	8			1	6			15
Ophiothrix spiculata	2	2		9				13
Lytechinus pictus	5			6				11
Crangon alba	7		4					11
Pagurus spilocarpus			1	2		3	3	9
Loxorhynchus grandis	1		1	7				9
Lovenia cordiformis	9							9
Dendraster terminalis	9							9
Crossata ventricosa		1			1	1	3	6
Paguristes bakeri		2		1		1		4
Metacarcinus gracilis		3					1	4
Calliostoma tricolor		3					1	4
Octopus rubescens		1		2				3
Kelletia kelletii					1		2	3
Platymera gaudichaudii						2		2
Luidia armata		1		1				2
Hemisquilla californiensis				1	1			2
Suberites latus		1						1
Randallia ornata						1		1
Pteropurpura festiva		1						1
Philine auriformis	1							1
Pagurus armatus		1						1
Neverita recluziana	1							1
Metacarcinus anthonyi	1							1
Heptacarpus stimpsoni							1	1
Heptacarpus brevirostris				1				1
Doryteuthis opalescens		1						1
Crassispira semiinflata			1					1
Aphrodita armifera					1			1
Acanthodoris brunnea				1				1
Survey Total	50	109	59	66	121	113	183	703

Addendum 7-6 *continued*

Species	Summer 2019							Species Abundance by Survey
	SD15	SD16	SD17	SD18	SD19	SD20	SD21	
Dendraster terminalis	31							31
Astropecten californicus	5	1	1		15	5	3	30
Ophiothrix spiculata	1		13				1	15
Sicyonia penicillata		1			2	3	6	12
Platymera gaudichaudii	3		2			3		8
Lytechinus pictus	6			1				7
Ericerodes hemphillii			1				5	6
Lovenia cordiformis	3			1				4
Luidia armata			2		1			3
Heptacarpus stimpsoni							3	3
Crangon nigromaculata				1	1	1		3
Heptacarpus brevirostris							2	2
Suberites sp			1					1
Pyromaia tuberculata							1	1
Pugettia producta							1	1
Pleurobranchaea californica			1					1
Pandalus platyceros							1	1
Pagurus spilocarpus			1					1
Octopus rubescens						1		1
Metacarcinus anthonyi					1			1
Heptacarpus palpator							1	1
Dendronotus venustus						1		1
Crossata ventricosa				1				1
Calliostoma gloriosum			1					1
Acanthodoris rhodoceras							1	1
Survey Total	49	2	23	4	20	14	25	137
Annual Total	99	112	82	70	142	128	208	838

Addendum 8

Contaminants in Marine Fishes

2019 Raw Data

Addendum 8-1

Lengths and weights of fishes used for each composite (Comp) tissue sample from PLOO trawl and rig fishing zones during 2019. Data are summarized as number of individuals (n), minimum, maximum, and mean values.

				Length (cm, size class)			Weight (g)		
Zone	**Comp**	**Species**	**n**	**Min**	**Max**	**Mean**	**Min**	**Max**	**Mean**
RF1	1	Vermilion Rockfish	3	21	27	25	250	480	402
RF1	2	Vermilion Rockfish	3	23	26	24	338	582	449
RF1	3	Vermilion Rockfish	3	22	26	24	292	473	368
RF2	1	Starry Rockfish	3	21	28	24	191	614	356
RF2	2	Greenstriped Rockfish	3	20	21	20	168	181	172
RF2	3	Mixed Rockfish[a]	3	20	30	24	164	639	372
TZ1	1	Pacific Sanddab	3	17	21	19	85	189	133
TZ1	2	Pacific Sanddab	5	14	21	17	41	167	93
TZ1	3	Pacific Sanddab	3	20	22	21	125	191	148
TZ2	1	Pacific Sanddab	3	18	21	19	105	170	131
TZ2	2	Pacific Sanddab	4	19	21	20	124	147	140
TZ2	3	Pacific Sanddab	3	17	22	20	72	227	166
TZ3	1	Pacific Sanddab	3	19	20	20	115	154	135
TZ3	2	Pacific Sanddab	3	18	23	20	98	208	137
TZ3	3	Pacific Sanddab	3	15	23	19	63	248	156
TZ4	1	Pacific Sanddab	3	21	23	22	162	234	188
TZ4	2	Pacific Sanddab	3	19	21	20	124	157	141
TZ4	3	Pacific Sanddab	3	18	22	20	105	186	158

[a]Includes Flag, Greenspotted, and Speckled Rockfish

Addendum 8-2

Lengths and weights of fishes used for each composite (Comp) tissue sample from SBOO trawl and rig fishing stations during 2019. Data are summarized as number of individuals (n), minimum, maximum, and mean values.

				Length (cm, size class)			Weight (g)		
Zone	**Comp**	**Species**	**n**	**Min**	**Max**	**Mean**	**Min**	**Max**	**Mean**
RF3	1	California Scorpionfish	3	18	28	24	172	639	452
RF3	2	California Scorpionfish	3	22	28	25	353	719	533
RF3	3	Mixed Rockfish[a]	3	14	15	15	95	98	96
RF4	1	California Scorpionfish	3	22	31	26	341	930	554
RF4	2	California Scorpionfish	3	25	27	26	435	601	515
RF4	3	California Scorpionfish	3	22	30	25	298	831	546
TZ5	1	Longfin Sanddab	10	11	14	13	34	66	43
TZ5	2	Longfin Sanddab	9	13	16	14	37	97	55
TZ5	3	Hornyhead Turbot	8	12	19	15	52	166	87
TZ6	1	Longfin Sanddab	9	12	15	13	36	72	44
TZ6	2	Longfin Sanddab	11	11	13	12	30	52	38
TZ6	3	Longfin Sanddab	11	11	14	13	30	66	48
TZ7	1	Longfin Sanddab	15	11	14	12	29	56	36
TZ7	2	Hornyhead Turbot	9	12	18	15	40	187	90
TZ7	3	Fantail Sole	4	15	33	22	61	667	281
TZ8	1	Longfin Sanddab	8	12	15	13	36	71	44
TZ8	2	Hornyhead Turbot	4	15	21	18	92	208	144
TZ8	3	Fantail Sole	9	16	23	18	86	248	136
TZ9	1	Spotted Turbot	3	13	15	14	52	74	65
TZ9	2	Fantail Sole	3	15	24	21	65	274	179
TZ9	3	No sample	—	—	—	—	—	—	—

[a]Includes Brown Rockfish and Treefish

Addendum 8-3

Concentrations of metals (ppm) detected in liver tissues of fishes collected from PLOO and SBOO trawl zones during 2019. See Appendix J.1 for MDLs; nd = not detected; nr = not reportable.

				Trace Metals																	
	Zone	Comp	Species	Al	Sb	As	Ba	Be	Cd	Cr	Cu	Fe	Pb	Mn	Hg	Ni	Se	Ag	Tl	Sn	Zn
PLOO	TZ1	1	Pacific Sanddab	nd	nd	5.9	nd	nd	1.64	nd	nr	65.0	nd	1.0	0.125	nd	0.87	nd	nd	2.2	26.8
		2	Pacific Sanddab	nd	nd	7.7	nd	nd	3.47	nd	nr	105.0	nd	0.9	0.170	nd	0.95	nd	nd	2.3	30.8
		3	Pacific Sanddab	nd	nd	7.5	nd	nd	1.94	nd	nr	65.0	nd	1.1	0.133	nd	0.90	nd	nd	2.2	29.2
	TZ2	1	Pacific Sanddab	nd	nd	6.7	nd	nd	3.03	nd	nr	99.8	nd	0.9	0.111	nd	0.92	nd	nd	2.4	32.1
		2	Pacific Sanddab	nd	nd	6.4	nd	nd	1.80	nd	nr	64.6	nd	1.0	0.135	nd	nd	nd	nd	2.4	28.8
		3	Pacific Sanddab	nd	nd	5.8	nd	nd	1.78	nd	4.6	45.2	nd	0.7	0.094	nd	0.66	nd	nd	1.7	20.8
	TZ3	1	Pacific Sanddab	nd	nd	4.6	nd	nd	1.83	nd	3.4	47.6	nd	1.2	0.104	nd	0.67	nd	nd	1.7	21.2
		2	Pacific Sanddab	nd	nd	7.2	nd	nd	1.94	nd	4.1	47.9	nd	1.0	0.122	nd	0.63	nd	nd	1.8	21.0
		3	Pacific Sanddab	nd	nd	8.5	nd	nd	4.33	nd	nr	65.4	nd	0.9	0.208	nd	1.18	nd	nd	2.3	29.9
	TZ4	1	Pacific Sanddab	nd	nd	6.3	nd	nd	3.87	nd	5.6	55.9	nd	1.4	0.280	nd	0.78	nd	nd	1.7	27.3
		2	Pacific Sanddab	nd	nd	6.3	nd	nd	2.32	0.15	nr	78.1	nd	1.0	0.111	nd	0.55	nd	nd	2.3	27.0
		3	Pacific Sanddab	nd	nd	7.8	nd	nd	2.81	nd	nr	52.3	nd	1.1	0.189	nd	0.63	nd	nd	2.0	26.1
			Detection Rate (%)	0	0	100	0	0	100	8	100	100	0	100	100	0	92	0	0	100	100
SBOO	TZ5	1	Longfin Sanddab	nd	nd	6.7	nd	nd	1.23	nd	6.4	95.5	nd	0.9	0.041	nd	0.77	nd	nd	2.0	26.4
		2	Longfin Sanddab	nd	nd	8.1	nd	nd	1.54	0.11	7.2	103.0	nd	0.9	0.057	nd	1.01	0.1	nd	2.0	23.6
		3	Hornyhead Turbot	nd	nd	6.2	nd	nd	3.99	nd	8.5	86.7	nd	0.8	0.089	nd	1.00	0.2	nd	1.0	66.0
	TZ6	1	Longfin Sanddab	nd	nd	5.8	nd	nd	0.90	nd	6.5	81.6	nd	0.7	0.036	nd	0.71	nd	nd	2.1	22.1
		2	Longfin Sanddab	nd	nd	4.6	nd	nd	0.62	nd	4.2	67.1	nd	0.6	0.042	nd	0.59	nd	nd	2.0	18.1
		3	Longfin Sanddab	nd	nd	5.4	nd	nd	1.39	nd	7.0	104.0	nd	0.7	0.066	nd	1.08	nd	nd	2.0	25.4
	TZ7	1	Longfin Sanddab	nd	nd	5.2	nd	nd	0.72	nd	4.3	62.1	nd	0.7	0.032	nd	0.29	0.1	nd	2.2	19.2
		2	Hornyhead Turbot	nd	nd	18.8	nd	nd	7.10	0.31	41.7	263.0	0.6	3.2	0.071	0.10	3.38	0.3	nd	3.6	233.0
		3	Fantail Sole	nd	nd	8.9	nd	nd	5.21	nd	28.7	225.0	nd	1.2	0.138	nd	0.87	0.2	nd	1.0	117.0
	TZ8	1	Longfin Sanddab	nd	nd	5.9	nd	nd	1.17	nd	5.7	80.3	nd	0.8	0.040	nd	0.70	nd	nd	1.5	19.8
		2	Hornyhead Turbot	nd	nd	14.8	nd	nd	5.23	nd	10.5	78.4	nd	0.8	0.083	nd	1.56	0.2	nd	0.9	86.4
		3	Fantail Sole	nd	nd	13.0	nd	nd	2.23	nd	20.2	179.0	nd	0.9	0.072	nd	1.00	0.2	nd	0.8	83.1
	TZ9	1	Spotted Turbot	nd	nd	11.6	nd	nd	0.98	nd	5.9	157.0	nd	1.4	0.052	nd	nd	nd	nd	2.3	37.0
		2	Fantail Sole	nd	nd	9.6	nd	nd	7.08	nd	36.6	227.0	nd	1.1	0.074	nd	1.11	0.2	nd	0.9	103.0
		3	No sample	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			Detection Rate (%)	0	0	100	0	0	100	14	100	100	7	100	100	7	93	57	0	100	100

Addendum 8-4

Concentrations of pesticides (ppb), total PCB (ppb), total PAH (ppb,) and lipids (% weight) detected in liver tissues of fishes collected from PLOO and SBOO trawl zones during 2019. See Appendix J.1 for list of constituents with MDLs and Addendum 8-7 for values of individual constituents summed for total chlordane (tChlor), total DDT, total HCH, total PCB, and total PAH; B-Endo = *beta*-endosulfan ; na = not analyzed; nd = not detected; nr = not reportable.

			Pesticides									
Zone	**Comp**	**Species**	**tChlor**	**tDDT**	**Dieldrin**	**B-Endo**	**HCB**	**tHCH**	**Mirex**	**tPCB**	**tPAH**	**Lipids**
PLOO												
TZ1	1	Pacific Sanddab	6.5	289.4	2.8	nd	10.9	3.9	0.5	156.1[c]	60.0	48.6
	2	Pacific Sanddab	12.2	531.9	3.2	nd	12.3	7.2	1.0	300.1	nd	50.5
	3	Pacific Sanddab	7.3	290.1	nd	nd	11.1	3.9	0.6	209.3[c]	60.0	44.8
TZ2	1	Pacific Sanddab	12.2	370.3	2.3	nd	11.8	4.5	0.6	245.0[d]	nd	54.7
	2	Pacific Sanddab	8.5	362.5	3.1	nd	8.9	3.3	nd	206.6[c]	nd	49.1
	3	Pacific Sanddab	5.8	299.4	2.5	nd	9.1	3.6	nd	143.2[c]	41.9	49.6
TZ3	1	Pacific Sanddab	11.7	302.8	nd	nd	nr	2.7[b]	1.1	331.3	50.0	42.1
	2	Pacific Sanddab	6.6	390.1	nd	nd	9.9	1.7[b]	nd	324.0	60.0	43.0
	3	Pacific Sanddab	10.2	294.5	nd	nd	8.7	15.5	nd	371.7	nd	44.5
TZ4	1	Pacific Sanddab	9.1	259.2	nd	nd	8.2	4.2	1.0	256.5[c]	50.0	41.0
	2	Pacific Sanddab	13.1	451.7	nd	4.7	nr	2.8	1.1	290.3[c]	60.0	47.5
	3	Pacific Sanddab	7.3	301.2	nd	nd	8.1	2.8	nd	3193.5	80.0	40.0
		Detection Rate (%)	100	100	42	8	100	100	58	100	67	100
SBOO												
TZ5	1	Longfin Sanddab	4.8	203.1	nd	nd	nr	2.0	nd	113.0[f]	nd[i]	41.9
	2	Longfin Sanddab	8.8	284.3	nd	nd	nr	5.2[b]	nd	179.2	nd[h]	37.5
	3	Hornyhead Turbot	nd[a]	58.2	nd	nd	nr	0.4	nd	25.4[g]	nd[h]	8.8
TZ6	1	Longfin Sanddab	2.8	256.6	nd	nd	nr	nd[b]	nd	139.9	nd[h]	41.7
	2	Longfin Sanddab	3.2	277.3	nd	nd	nr	nd[b]	nd	146.2	nd[h]	41.5
	3	Longfin Sanddab	5.0	305.8	nd	nd	nr	nd[b]	nd	172.3	nd[h]	40.6
TZ7	1	Longfin Sanddab	4.4	209.1	nd	nd	nr	nd[b]	nd	273.6	nd[i]	48.3
	2	Hornyhead Turbot	nd	33.4	nd	nd	nr	nd	nd	37.8	nd[h]	7.9
	3	Fantail Sole	nd	33.0	nd	nd	nr	nd	nd	32.5	13.7[h]	6.3
TZ8	1	Longfin Sanddab	1.6	122.0	nd	nd	nr	nd	nd	64.8	nd[i]	36.9
	2	Hornyhead Turbot	nd	30.9	nd	nd	nr	nd	nd	16.1	19.0[h]	7.8
	3	Fantail Sole	nd	21.3	nd	nd	nr	nd[b]	nd	16.4	25.7[i]	4.0
TZ9	1	Spotted Turbot	8.8	12.6	nd	nd	nr	nd	nd	154.2	nd	3.5
	2	Fantail Sole	1.7	62.4	nd	nd	nr	nd	nd	95.6	nd[h]	5.9
	3	No sample	—	—	—	—	—	—	—	—	—	—
		Detection Rate (%)	64	100	0	0	—	21	0	100	21	100

[a]missing *trans*-nonachlor; [b]missing *beta*-HCH; [c]missing PCB 28, PCB 206; [d]missing PCB 206; [e]missing PCB 18, PCB 206; [f]missing PCB 28, PCB 52, PCB 70, PCB 206; [g]missing PCB 28, PCB 52, PCB 66, PCB 206; [h]missing biphenyl; [i]missing biphenyl and naphthalene

Addendum 8-5

Concentrations of metals (ppm) detected in muscle tissues of fishes collected from PLOO and SBOO rig fishing zones during 2019. See Appendix J.1 for MDLs; na = not available; nd = not detected; nr = not reportable.

				Trace Metals																	
	Zone	Comp	Species	Al	Sb	As	Ba	Be	Cd	Cr	Cu	Fe	Pb	Mn	Hg	Ni	Se	Ag	Tl	Sn	Zn
PLOO	RF1	1	Vermilion Rockfish	nd	nd	6.27	nd	nd	0.072	0.061	0.28	2.30	nd	nd	0.070	nd	0.439	nd	nd	0.84	4.06
		2	Vermilion Rockfish	nd	nd	4.07	nd	nd	0.049	0.082	0.50	3.39	nd	nd	0.052	0.050	0.412	nd	nd	0.74	4.00
		3	Vermilion Rockfish	nd	nd	4.97	nd	0.002	0.055	0.043	nd	3.44	nd	nd	0.071	nd	0.425	nd	nd	0.85	3.89
	RF2	1	Starry Rockfish	nd	nd	1.60	nd	nd	0.023	0.114	0.21	1.67	nd	nd	0.125	0.035	0.331	nd	nd	0.82	3.00
		2	Greenstriped Rockfish	nd	nd	4.31	nd	0.001	0.053	0.056	0.50	3.12	nd	nd	0.184	0.028	0.451	nd	nd	0.88	3.18
		3	Mixed Rockfish	nd	nd	2.23	nd	nd	0.029	0.068	0.21	257.00	nd	nd	0.094	nd	0.379	nd	nd	1.36	3.83
			Detection Rate (%)	0	0	100	0	33	100	100	83	100	0	0	100	50	100	0	0	100	100
SBOO	RF3	1	California Scorpionfish	nd	nd	1.94	nd	nd	0.032	0.064	0.89	3.13	nd	nd	0.202	0.089	0.265	nd	nd	0.85	4.34
		2	California Scorpionfish	nd	nd	2.34	nd	nd	0.040	1.010	0.31	10.30	nd	nd	0.229	0.057	0.331	nd	nd	0.85	3.63
		3	Mixed Rockfish	nd	nd	2.31	nd	nd	0.038	0.052	0.20	4.46	nd	nd	0.053	0.033	0.298	nd	nd	0.81	4.74
	RF4	1	California Scorpionfish	nd	nd	3.18	nd	nd	0.034	0.053	0.63	1.18	nd	nd	0.117	0.058	0.493	nd	nd	0.75	3.34
		2	California Scorpionfish	nd	nd	3.01	nd	nd	0.032	0.071	0.95	1.57	nd	nd	0.149	0.073	0.485	nd	nd	0.72	3.40
		3	California Scorpionfish	nd	nd	1.93	nd	nd	0.025	0.047	0.30	4.47	nd	nd	0.173	nd	0.567	nd	nd	0.73	3.49
			Detection Rate (%)	0	0	100	0	0	100	100	100	100	0	0	100	83	100	0	0	100	100
OEHHA[a]				na	na	na	na	na	na	na	na	na	na	na	0.22	na	7.4	na	na	na	na
USFDA Action Limit[b]				na	na	na	na	na	na	na	na	na	na	na	1.0	na	na	na	na	na	na
Median IS[b]				na	na	1.4	na	na	1.0	1.0	20	na	na	na	0.50	na	0.3	na	na	175	70

[a] From the California OEHHA (Klasing and Brodberg 2008)

[b] From Mearns et al. 1991. USFDA action limits for mercury and all international standards are for shellfish, but are often applied to fish

Addendum 8-6

Concentrations of pesticides (ppb), total PCB (ppb), total PAH (ppb), and lipids (% weight) detected in muscle tissues of fishes collected from PLOO and SBOO rig fishing zones during 2019. See Appendix J.1 for list of constituents with MDLs and Addendum 8-7 for values of individual constituents summed for total chlordane (tChlor), total DDT, total HCH, total PCB, and total PAH; na = not available; nd = not detected; nr = not reportable.

				Pesticides							
	Zone	Comp	Species	tChlor	tDDT	Dieldrin	HCB	tHCH	tPCB	tPAH[u]	Lipids
PLOO	RF1	1	Vermilion Rockfish	0.1	5.6[d,e,f,i]	nd	nr	nd	4.9[j,k]	nd	0.4
		2	Vermilion Rockfish	0.3	11.9[e,f,i]	0.1	nr	0.07	6.6[j,l]	61.4	1.0
		3	Vermilion Rockfish	0.0	6.3[e]	nd	4.8	nd	3.0[j,m]	nd	0.4
	RF2	1	Starry Rockfish	nd	5.5[e,f,i]	nd	nr	0.04	2.1[j,n]	nd	0.3
		2	Greenstriped Rockfish	nd	3.1[d,e,f,i]	nd	1.3	nd	1.7[j,o]	nd	0.3
		3	Mixed Rockfish	nd	6.1[d,e,f,i]	nd	nr	nd	2.3[j,p]	nd	0.4
			Detection Rate (%)	50	100	17	100	33	100	17	100
SBOO	RF3	1	California Scorpionfish	0.2	14.3[e,f]	nd	nr	0.09	7.9[j,q]	nd	0.7
		2	California Scorpionfish	nd	2.9[f,h]	nd	nd	nd	1.7[j,r]	nd	0.2
		3	Mixed Rockfish	nd	nd[g]	nd	nr	nd	0.4	nd	0.2
	RF4	1	California Scorpionfish	0.1	34.9[e,f]	nd	nr	nd	3.5[j,s]	14.1	0.3
		2	California Scorpionfish	nd[c]	1.2[f,i]	nd	nr	nd	0.3[j,t]	nd	0.1
		3	California Scorpionfish	0.2	11.8	nd	nr	nd	11.0	nd	0.3
			Detection Rate (%)	50	83	0	0	17	100	17	100
OEHHA[a]				5.6	21	na	na	na	3.6	na	—
USFDA Action Limit[b]				300	5000	300	na	na	na	na	—
Median International Standard[b]				100	5000	400	na	na	na	na	—

[a]From the California OEHHA (Klasing and Brodberg 2008); [b]From Mearns et al. 1991. USFDA action limits for mercury and all international standards are for shellfish, but are often applied to fish; [c]missing *cis*-nonachlor; [d]missing o,p-DDD; [e]missing o,p,-DDE; [f]missing p,p-DDD; [g]missing p,p-DDE; [h]missing p,p-DDMU; [i]missing p,p-DDT; [j]missing PCB 206; [k]missing PCB 28, PCB 48, PCB 52, PCB 66, PCB 70, PCB 74; [l]missing PCB 28, PCB 44, PCB 74; [m]missing PCB 49, PCB 52, PCB 66, PCB 70; [n]missing PCB 49, PCB 52; [o]missing PCB 52, PCB 66; [p]missing PCB 28, PCB 52, PCB 66; [q]missing PCB 28; [r]missing PCB 66; [s]missing PCB 44, PCB 49, PCB 52, PCB 74; [t]missing PCB 28, PCB 44, PCB 49, PCB 70, PCB 74; [u]missing biphenyl, naphthalene

Addendum 8-7

Summary of constituents that make up total Chlordane, total DDT, total HCH, total PCB, and total PAH in composite (Comp) tissue samples from the PLOO and SBOO regions during 2019.

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
RF1	1	Vermilion Rockfish	Muscle	Chlordane	Alpha(cis)Chlordane	0.05	ppb
RF1	1	Vermilion Rockfish	Muscle	DDT	o,p-DDT	0.06	ppb
RF1	1	Vermilion Rockfish	Muscle	DDT	p,-p-DDMU	0.36	ppb
RF1	1	Vermilion Rockfish	Muscle	DDT	p,p-DDE	5.21	ppb
RF1	1	Vermilion Rockfish	Muscle	PCB	PCB 87	0.07	ppb
RF1	1	Vermilion Rockfish	Muscle	PCB	PCB 99	0.30	ppb
RF1	1	Vermilion Rockfish	Muscle	PCB	PCB 101	0.24	ppb
RF1	1	Vermilion Rockfish	Muscle	PCB	PCB 105	0.24	ppb
RF1	1	Vermilion Rockfish	Muscle	PCB	PCB 110	0.26	ppb
RF1	1	Vermilion Rockfish	Muscle	PCB	PCB 118	0.65	ppb
RF1	1	Vermilion Rockfish	Muscle	PCB	PCB 123	0.06	ppb
RF1	1	Vermilion Rockfish	Muscle	PCB	PCB 128	0.18	ppb
RF1	1	Vermilion Rockfish	Muscle	PCB	PCB 138	0.69	ppb
RF1	1	Vermilion Rockfish	Muscle	PCB	PCB 149	0.16	ppb
RF1	1	Vermilion Rockfish	Muscle	PCB	PCB 151	0.06	ppb
RF1	1	Vermilion Rockfish	Muscle	PCB	PCB 153/168	0.94	ppb
RF1	1	Vermilion Rockfish	Muscle	PCB	PCB 156	0.10	ppb
RF1	1	Vermilion Rockfish	Muscle	PCB	PCB 158	0.06	ppb
RF1	1	Vermilion Rockfish	Muscle	PCB	PCB 170	0.12	ppb
RF1	1	Vermilion Rockfish	Muscle	PCB	PCB 177	0.05	ppb
RF1	1	Vermilion Rockfish	Muscle	PCB	PCB 180	0.35	ppb
RF1	1	Vermilion Rockfish	Muscle	PCB	PCB 183	0.05	ppb
RF1	1	Vermilion Rockfish	Muscle	PCB	PCB 187	0.21	ppb
RF1	1	Vermilion Rockfish	Muscle	PCB	PCB 194	0.10	ppb
RF1	2	Vermilion Rockfish	Muscle	Chlordane	Alpha(cis)Chlordane	0.16	ppb
RF1	2	Vermilion Rockfish	Muscle	Chlordane	TransNonachlor	0.16	ppb
RF1	2	Vermilion Rockfish	Muscle	DDT	o,p-DDT	0.08	ppb
RF1	2	Vermilion Rockfish	Muscle	DDT	p,-p-DDMU	0.97	ppb
RF1	2	Vermilion Rockfish	Muscle	DDT	p,p-DDE	10.80	ppb
RF1	2	Vermilion Rockfish	Muscle	HCH	HCH, Alpha isomer	0.07	ppb
RF1	2	Vermilion Rockfish	Muscle	PAH	Acenaphthene	26.2	ppb
RF1	2	Vermilion Rockfish	Muscle	PAH	Acenaphthylene	27.7	ppb
RF1	2	Vermilion Rockfish	Muscle	PAH	Fluorene	7.5	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 18	0.04	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 49	0.16	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 52	0.18	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 66	0.16	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 70	0.10	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 87	0.13	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 99	0.39	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 101	0.47	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 105	0.18	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 110	0.29	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 118	0.62	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 123	0.07	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 128	0.11	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 138	0.70	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 149	0.38	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 151	0.08	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 153/168	1.37	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 156	0.04	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 158	0.04	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 167	0.05	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 170	0.15	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 177	0.07	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 180	0.41	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 187	0.34	ppb
RF1	2	Vermilion Rockfish	Muscle	PCB	PCB 194	0.09	ppb
RF1	3	Vermilion Rockfish	Muscle	Chlordane	Alpha(cis)Chlordane	0.04	ppb
RF1	3	Vermilion Rockfish	Muscle	DDT	p,-p-DDMU	0.49	ppb
RF1	3	Vermilion Rockfish	Muscle	DDT	p,p-DDE	5.82	ppb
RF1	3	Vermilion Rockfish	Muscle	PCB	PCB 87	0.04	ppb
RF1	3	Vermilion Rockfish	Muscle	PCB	PCB 99	0.20	ppb
RF1	3	Vermilion Rockfish	Muscle	PCB	PCB 101	0.20	ppb
RF1	3	Vermilion Rockfish	Muscle	PCB	PCB 105	0.13	ppb
RF1	3	Vermilion Rockfish	Muscle	PCB	PCB 110	0.12	ppb
RF1	3	Vermilion Rockfish	Muscle	PCB	PCB 118	0.35	ppb
RF1	3	Vermilion Rockfish	Muscle	PCB	PCB 123	0.02	ppb
RF1	3	Vermilion Rockfish	Muscle	PCB	PCB 128	0.06	ppb
RF1	3	Vermilion Rockfish	Muscle	PCB	PCB 138	0.42	ppb
RF1	3	Vermilion Rockfish	Muscle	PCB	PCB 149	0.13	ppb
RF1	3	Vermilion Rockfish	Muscle	PCB	PCB 151	0.02	ppb
RF1	3	Vermilion Rockfish	Muscle	PCB	PCB 153/168	0.68	ppb
RF1	3	Vermilion Rockfish	Muscle	PCB	PCB 158	0.02	ppb
RF1	3	Vermilion Rockfish	Muscle	PCB	PCB 170	0.07	ppb
RF1	3	Vermilion Rockfish	Muscle	PCB	PCB 180	0.20	ppb
RF1	3	Vermilion Rockfish	Muscle	PCB	PCB 183	0.05	ppb
RF1	3	Vermilion Rockfish	Muscle	PCB	PCB 187	0.20	ppb
RF1	3	Vermilion Rockfish	Muscle	PCB	PCB 194	0.05	ppb
RF2	1	Starry Rockfish	Muscle	DDT	p,-p-DDMU	0.21	ppb
RF2	1	Starry Rockfish	Muscle	DDT	p,p-DDE	5.33	ppb
RF2	1	Starry Rockfish	Muscle	HCH	HCH, Alpha isomer	0.04	ppb
RF2	1	Starry Rockfish	Muscle	PCB	PCB 99	0.15	ppb
RF2	1	Starry Rockfish	Muscle	PCB	PCB 101	0.18	ppb
RF2	1	Starry Rockfish	Muscle	PCB	PCB 105	0.07	ppb
RF2	1	Starry Rockfish	Muscle	PCB	PCB 110	0.10	ppb
RF2	1	Starry Rockfish	Muscle	PCB	PCB 118	0.22	ppb
RF2	1	Starry Rockfish	Muscle	PCB	PCB 128	0.05	ppb
RF2	1	Starry Rockfish	Muscle	PCB	PCB 138	0.31	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
RF2	1	Starry Rockfish	Muscle	PCB	PCB 149	0.12	ppb
RF2	1	Starry Rockfish	Muscle	PCB	PCB 151	0.04	ppb
RF2	1	Starry Rockfish	Muscle	PCB	PCB 153/168	0.57	ppb
RF2	1	Starry Rockfish	Muscle	PCB	PCB 180	0.11	ppb
RF2	1	Starry Rockfish	Muscle	PCB	PCB 187	0.14	ppb
RF2	1	Starry Rockfish	Muscle	PCB	PCB 194	0.06	ppb
RF2	2	Greenstriped Rockfish	Muscle	DDT	o,p-DDT	0.07	ppb
RF2	2	Greenstriped Rockfish	Muscle	DDT	p,-p-DDMU	0.15	ppb
RF2	2	Greenstriped Rockfish	Muscle	DDT	p,p-DDE	2.86	ppb
RF2	2	Greenstriped Rockfish	Muscle	PCB	PCB 77	0.03	ppb
RF2	2	Greenstriped Rockfish	Muscle	PCB	PCB 99	0.10	ppb
RF2	2	Greenstriped Rockfish	Muscle	PCB	PCB 101	0.09	ppb
RF2	2	Greenstriped Rockfish	Muscle	PCB	PCB 105	0.09	ppb
RF2	2	Greenstriped Rockfish	Muscle	PCB	PCB 110	0.05	ppb
RF2	2	Greenstriped Rockfish	Muscle	PCB	PCB 118	0.16	ppb
RF2	2	Greenstriped Rockfish	Muscle	PCB	PCB 123	0.03	ppb
RF2	2	Greenstriped Rockfish	Muscle	PCB	PCB 128	0.06	ppb
RF2	2	Greenstriped Rockfish	Muscle	PCB	PCB 138	0.23	ppb
RF2	2	Greenstriped Rockfish	Muscle	PCB	PCB 149	0.07	ppb
RF2	2	Greenstriped Rockfish	Muscle	PCB	PCB 151	0.03	ppb
RF2	2	Greenstriped Rockfish	Muscle	PCB	PCB 153/168	0.39	ppb
RF2	2	Greenstriped Rockfish	Muscle	PCB	PCB 156	0.06	ppb
RF2	2	Greenstriped Rockfish	Muscle	PCB	PCB 158	0.04	ppb
RF2	2	Greenstriped Rockfish	Muscle	PCB	PCB 170	0.04	ppb
RF2	2	Greenstriped Rockfish	Muscle	PCB	PCB 180	0.15	ppb
RF2	2	Greenstriped Rockfish	Muscle	PCB	PCB 187	0.08	ppb
RF2	2	Greenstriped Rockfish	Muscle	PCB	PCB 194	0.04	ppb
RF2	3	Mixed Rockfish	Muscle	DDT	o,p-DDT	0.07	ppb
RF2	3	Mixed Rockfish	Muscle	DDT	p,-p-DDMU	0.15	ppb
RF2	3	Mixed Rockfish	Muscle	DDT	p,p-DDE	5.84	ppb
RF2	3	Mixed Rockfish	Muscle	PCB	PCB 99	0.17	ppb
RF2	3	Mixed Rockfish	Muscle	PCB	PCB 101	0.11	ppb
RF2	3	Mixed Rockfish	Muscle	PCB	PCB 105	0.12	ppb
RF2	3	Mixed Rockfish	Muscle	PCB	PCB 110	0.04	ppb
RF2	3	Mixed Rockfish	Muscle	PCB	PCB 118	0.26	ppb
RF2	3	Mixed Rockfish	Muscle	PCB	PCB 138	0.35	ppb
RF2	3	Mixed Rockfish	Muscle	PCB	PCB 149	0.08	ppb
RF2	3	Mixed Rockfish	Muscle	PCB	PCB 153/168	0.60	ppb
RF2	3	Mixed Rockfish	Muscle	PCB	PCB 167	0.04	ppb
RF2	3	Mixed Rockfish	Muscle	PCB	PCB 170	0.09	ppb
RF2	3	Mixed Rockfish	Muscle	PCB	PCB 180	0.14	ppb
RF2	3	Mixed Rockfish	Muscle	PCB	PCB 183	0.04	ppb
RF2	3	Mixed Rockfish	Muscle	PCB	PCB 187	0.13	ppb
RF2	3	Mixed Rockfish	Muscle	PCB	PCB 194	0.09	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
RF3	1	California Scorpionfish	Muscle	Chlordane	TransNonachlor	0.17	ppb
RF3	1	California Scorpionfish	Muscle	DDT	p,-p-DDMU	0.28	ppb
RF3	1	California Scorpionfish	Muscle	DDT	p,p-DDE	14.00	ppb
RF3	1	California Scorpionfish	Muscle	HCH	HCH, Alpha isomer	0.09	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 49	0.18	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 52	0.18	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 66	0.17	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 74	0.12	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 99	0.43	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 101	0.31	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 105	0.18	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 110	0.10	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 118	0.66	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 123	0.08	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 128	0.18	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 138	1.01	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 149	0.19	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 151	0.10	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 153/168	1.91	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 156	0.09	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 158	0.05	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 167	0.07	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 170	0.25	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 177	0.13	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 180	0.53	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 183	0.14	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 187	0.61	ppb
RF3	1	California Scorpionfish	Muscle	PCB	PCB 194	0.20	ppb
RF3	2	California Scorpionfish	Muscle	DDT	p,p-DDE	2.87	ppb
RF3	2	California Scorpionfish	Muscle	PCB	PCB 99	0.13	ppb
RF3	2	California Scorpionfish	Muscle	PCB	PCB 101	0.07	ppb
RF3	2	California Scorpionfish	Muscle	PCB	PCB 118	0.21	ppb
RF3	2	California Scorpionfish	Muscle	PCB	PCB 138	0.31	ppb
RF3	2	California Scorpionfish	Muscle	PCB	PCB 153/168	0.59	ppb
RF3	2	California Scorpionfish	Muscle	PCB	PCB 180	0.13	ppb
RF3	2	California Scorpionfish	Muscle	PCB	PCB 187	0.20	ppb
RF3	2	California Scorpionfish	Muscle	PCB	PCB 194	0.05	ppb
RF3	3	Mixed Rockfish	Muscle	PCB	PCB 99	0.03	ppb
RF3	3	Mixed Rockfish	Muscle	PCB	PCB 101	0.05	ppb
RF3	3	Mixed Rockfish	Muscle	PCB	PCB 118	0.06	ppb
RF3	3	Mixed Rockfish	Muscle	PCB	PCB 138	0.08	ppb
RF3	3	Mixed Rockfish	Muscle	PCB	PCB 153/168	0.14	ppb
RF4	1	California Scorpionfish	Muscle	Chlordane	TransNonachlor	0.10	ppb
RF4	1	California Scorpionfish	Muscle	DDT	p,-p-DDMU	2.89	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
RF4	1	California Scorpionfish	Muscle	DDT	p,p-DDE	32.00	ppb
RF4	1	California Scorpionfish	Muscle	PAH	Pyrene	14.1	ppb
RF4	1	California Scorpionfish	Muscle	PCB	PCB 66	0.13	ppb
RF4	1	California Scorpionfish	Muscle	PCB	PCB 87	0.06	ppb
RF4	1	California Scorpionfish	Muscle	PCB	PCB 99	0.27	ppb
RF4	1	California Scorpionfish	Muscle	PCB	PCB 101	0.26	ppb
RF4	1	California Scorpionfish	Muscle	PCB	PCB 105	0.17	ppb
RF4	1	California Scorpionfish	Muscle	PCB	PCB 110	0.15	ppb
RF4	1	California Scorpionfish	Muscle	PCB	PCB 118	0.51	ppb
RF4	1	California Scorpionfish	Muscle	PCB	PCB 123	0.05	ppb
RF4	1	California Scorpionfish	Muscle	PCB	PCB 138	0.45	ppb
RF4	1	California Scorpionfish	Muscle	PCB	PCB 149	0.10	ppb
RF4	1	California Scorpionfish	Muscle	PCB	PCB 153/168	0.81	ppb
RF4	1	California Scorpionfish	Muscle	PCB	PCB 170	0.08	ppb
RF4	1	California Scorpionfish	Muscle	PCB	PCB 180	0.18	ppb
RF4	1	California Scorpionfish	Muscle	PCB	PCB 183	0.04	ppb
RF4	1	California Scorpionfish	Muscle	PCB	PCB 187	0.17	ppb
RF4	1	California Scorpionfish	Muscle	PCB	PCB 194	0.07	ppb
RF4	2	California Scorpionfish	Muscle	DDT	p,p-DDE	1.22	ppb
RF4	2	California Scorpionfish	Muscle	PCB	PCB 118	0.06	ppb
RF4	2	California Scorpionfish	Muscle	PCB	PCB 138	0.06	ppb
RF4	2	California Scorpionfish	Muscle	PCB	PCB 153/168	0.15	ppb
RF4	3	California Scorpionfish	Muscle	Chlordane	TransNonachlor	0.16	ppb
RF4	3	California Scorpionfish	Muscle	DDT	p,-p-DDMU	0.27	ppb
RF4	3	California Scorpionfish	Muscle	DDT	p,p-DDE	11.50	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 52	0.10	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 66	0.17	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 87	0.07	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 99	0.72	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 101	0.31	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 105	0.31	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 118	1.17	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 119	0.04	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 123	0.12	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 128	0.20	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 138	1.43	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 149	0.15	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 151	0.08	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 153/168	2.87	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 156	0.19	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 157	0.04	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 158	0.09	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 167	0.09	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 170	0.27	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 177	0.22	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
RF4	3	California Scorpionfish	Muscle	PCB	PCB 180	0.93	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 183	0.29	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 187	0.88	ppb
RF4	3	California Scorpionfish	Muscle	PCB	PCB 194	0.24	ppb
TZ1	1	Pacific Sanddab	Liver	Chlordane	Alpha(cis)Chlordane	1.81	ppb
TZ1	1	Pacific Sanddab	Liver	Chlordane	CisNonachlor	0.76	ppb
TZ1	1	Pacific Sanddab	Liver	Chlordane	TransNonachlor	3.88	ppb
TZ1	1	Pacific Sanddab	Liver	DDT	o,p-DDE	0.82	ppb
TZ1	1	Pacific Sanddab	Liver	DDT	p,-p-DDMU	7.67	ppb
TZ1	1	Pacific Sanddab	Liver	DDT	p,p-DDD	2.18	ppb
TZ1	1	Pacific Sanddab	Liver	DDT	p,p-DDE	277.00	ppb
TZ1	1	Pacific Sanddab	Liver	DDT	p,p-DDT	1.72	ppb
TZ1	1	Pacific Sanddab	Liver	HCH	HCH, Alpha isomer	0.90	ppb
TZ1	1	Pacific Sanddab	Liver	HCH	HCH, Beta isomer	2.69	ppb
TZ1	1	Pacific Sanddab	Liver	HCH	HCH, Gamma isomer	0.30	ppb
TZ1	1	Pacific Sanddab	Liver	PAH	Naphthalene	60.0	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 44	0.33	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 49	0.85	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 52	1.12	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 66	2.63	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 70	0.70	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 74	0.67	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 87	0.67	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 99	8.00	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 118	12.90	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 119	0.47	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 123	1.95	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 128	5.01	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 138	20.90	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 149	2.01	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 151	0.81	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 153/168	36.40	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 156	2.55	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 157	0.74	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 158	0.96	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 167	1.63	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 170	6.28	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 177	1.96	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 180	15.40	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 183	4.49	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 187	11.30	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 189	0.48	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 194	5.78	ppb
TZ1	1	Pacific Sanddab	Liver	PCB	PCB 201	0.38	ppb
TZ1	2	Pacific Sanddab	Liver	Chlordane	Alpha(cis)Chlordane	2.71	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ1	2	Pacific Sanddab	Liver	Chlordane	CisNonachlor	1.43	ppb
TZ1	2	Pacific Sanddab	Liver	Chlordane	Heptachlor	0.90	ppb
TZ1	2	Pacific Sanddab	Liver	Chlordane	TransNonachlor	7.20	ppb
TZ1	2	Pacific Sanddab	Liver	DDT	o,p-DDE	2.47	ppb
TZ1	2	Pacific Sanddab	Liver	DDT	o,p-DDT	0.84	ppb
TZ1	2	Pacific Sanddab	Liver	DDT	p,-p-DDMU	16.70	ppb
TZ1	2	Pacific Sanddab	Liver	DDT	p,p-DDD	4.91	ppb
TZ1	2	Pacific Sanddab	Liver	DDT	p,p-DDE	504.00	ppb
TZ1	2	Pacific Sanddab	Liver	DDT	p,p-DDT	3.02	ppb
TZ1	2	Pacific Sanddab	Liver	HCH	HCH, Alpha isomer	1.99	ppb
TZ1	2	Pacific Sanddab	Liver	HCH	HCH, Beta isomer	3.63	ppb
TZ1	2	Pacific Sanddab	Liver	HCH	HCH, Gamma isomer	1.53	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 28	1.14	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 44	0.54	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 49	1.63	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 52	2.32	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 66	4.12	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 70	1.50	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 74	1.39	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 77	0.30	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 87	1.08	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 99	14.30	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 101	5.51	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 105	7.71	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 110	4.16	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 114	0.62	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 118	25.40	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 119	0.77	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 123	3.74	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 128	8.49	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 138	40.40	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 149	4.00	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 151	1.69	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 153/168	65.90	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 156	4.53	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 157	1.32	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 158	2.22	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 167	2.82	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 170	11.50	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 177	3.83	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 180	29.70	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 183	7.89	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 187	20.40	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 189	0.67	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 194	10.60	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 201	0.89	ppb
TZ1	2	Pacific Sanddab	Liver	PCB	PCB 206	7.06	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ1	3	Pacific Sanddab	Liver	Chlordane	Alpha(cis)Chlordane	1.91	ppb
TZ1	3	Pacific Sanddab	Liver	Chlordane	CisNonachlor	0.87	ppb
TZ1	3	Pacific Sanddab	Liver	Chlordane	Gamma(trans)Chlordane	0.49	ppb
TZ1	3	Pacific Sanddab	Liver	Chlordane	TransNonachlor	4.05	ppb
TZ1	3	Pacific Sanddab	Liver	DDT	o,p-DDE	0.79	ppb
TZ1	3	Pacific Sanddab	Liver	DDT	o,p-DDT	0.50	ppb
TZ1	3	Pacific Sanddab	Liver	DDT	p,-p-DDMU	8.05	ppb
TZ1	3	Pacific Sanddab	Liver	DDT	p,p-DDD	2.25	ppb
TZ1	3	Pacific Sanddab	Liver	DDT	p,p-DDE	277.00	ppb
TZ1	3	Pacific Sanddab	Liver	DDT	p,p-DDT	1.55	ppb
TZ1	3	Pacific Sanddab	Liver	HCH	HCH, Alpha isomer	0.86	ppb
TZ1	3	Pacific Sanddab	Liver	HCH	HCH, Beta isomer	2.66	ppb
TZ1	3	Pacific Sanddab	Liver	HCH	HCH, Gamma isomer	0.38	ppb
TZ1	3	Pacific Sanddab	Liver	PAH	Naphthalene	60.0	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 44	0.45	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 49	1.11	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 52	1.65	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 66	3.05	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 70	1.02	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 74	0.88	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 77	0.25	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 87	0.94	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 99	10.00	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 101	5.16	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 105	5.50	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 110	3.50	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 114	0.48	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 118	18.30	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 119	0.50	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 123	2.62	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 128	5.78	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 138	26.90	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 149	3.75	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 151	1.36	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 153/168	46.10	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 156	3.06	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 157	0.92	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 158	1.62	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 167	2.20	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 170	7.83	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 177	2.72	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 180	22.30	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 183	5.91	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 187	14.90	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 189	0.54	ppb
TZ1	3	Pacific Sanddab	Liver	PCB	PCB 194	8.01	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ2	1	Pacific Sanddab	Liver	Chlordane	Alpha(cis)Chlordane	2.26	ppb
TZ2	1	Pacific Sanddab	Liver	Chlordane	CisNonachlor	1.49	ppb
TZ2	1	Pacific Sanddab	Liver	Chlordane	Gamma(trans)Chlordane	0.39	ppb
TZ2	1	Pacific Sanddab	Liver	Chlordane	TransNonachlor	8.03	ppb
TZ2	1	Pacific Sanddab	Liver	DDT	o,p-DDE	1.04	ppb
TZ2	1	Pacific Sanddab	Liver	DDT	p,-p-DDMU	10.50	ppb
TZ2	1	Pacific Sanddab	Liver	DDT	p,p-DDD	2.77	ppb
TZ2	1	Pacific Sanddab	Liver	DDT	p,p-DDE	353.00	ppb
TZ2	1	Pacific Sanddab	Liver	DDT	p,p-DDT	2.99	ppb
TZ2	1	Pacific Sanddab	Liver	HCH	HCH, Alpha isomer	0.89	ppb
TZ2	1	Pacific Sanddab	Liver	HCH	HCH, Beta isomer	3.25	ppb
TZ2	1	Pacific Sanddab	Liver	HCH	HCH, Gamma isomer	0.35	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 28	0.96	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 44	0.42	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 49	1.23	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 52	1.71	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 66	2.96	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 70	1.04	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 74	1.08	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 87	1.00	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 99	11.30	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 101	4.72	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 105	5.98	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 110	3.59	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 114	0.52	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 118	19.20	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 119	0.53	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 123	3.09	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 128	7.03	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 138	32.00	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 149	2.97	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 151	2.13	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 153/168	59.80	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 156	3.33	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 157	1.03	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 158	1.43	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 167	2.41	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 170	9.76	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 177	3.52	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 180	24.90	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 183	6.81	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 187	19.80	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 189	0.57	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 194	7.56	ppb
TZ2	1	Pacific Sanddab	Liver	PCB	PCB 201	0.59	ppb
TZ2	2	Pacific Sanddab	Liver	Chlordane	Alpha(cis)Chlordane	1.57	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ2	2	Pacific Sanddab	Liver	Chlordane	CisNonachlor	1.04	ppb
TZ2	2	Pacific Sanddab	Liver	Chlordane	TransNonachlor	5.93	ppb
TZ2	2	Pacific Sanddab	Liver	DDT	o,p-DDE	1.12	ppb
TZ2	2	Pacific Sanddab	Liver	DDT	o,p-DDT	0.52	ppb
TZ2	2	Pacific Sanddab	Liver	DDT	p,-p-DDMU	8.64	ppb
TZ2	2	Pacific Sanddab	Liver	DDT	p,p-DDD	1.98	ppb
TZ2	2	Pacific Sanddab	Liver	DDT	p,p-DDE	348.00	ppb
TZ2	2	Pacific Sanddab	Liver	DDT	p,p-DDT	2.27	ppb
TZ2	2	Pacific Sanddab	Liver	HCH	HCH, Alpha isomer	0.79	ppb
TZ2	2	Pacific Sanddab	Liver	HCH	HCH, Beta isomer	2.36	ppb
TZ2	2	Pacific Sanddab	Liver	HCH	HCH, Gamma isomer	0.15	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 44	0.36	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 49	0.91	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 52	1.28	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 66	3.90	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 70	0.83	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 74	1.06	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 87	0.74	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 99	10.80	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 101	3.76	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 105	6.93	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 110	2.65	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 114	0.45	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 118	19.40	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 119	0.55	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 123	2.96	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 128	6.26	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 138	28.50	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 149	2.39	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 151	1.36	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 153/168	47.30	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 156	3.11	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 157	0.95	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 158	1.44	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 167	2.08	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 170	7.91	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 177	2.42	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 180	20.00	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 183	5.38	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 187	13.80	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 189	0.51	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 194	6.38	ppb
TZ2	2	Pacific Sanddab	Liver	PCB	PCB 201	0.21	ppb
TZ2	3	Pacific Sanddab	Liver	Chlordane	Alpha(cis)Chlordane	1.37	ppb
TZ2	3	Pacific Sanddab	Liver	Chlordane	CisNonachlor	0.71	ppb
TZ2	3	Pacific Sanddab	Liver	Chlordane	TransNonachlor	3.74	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ2	3	Pacific Sanddab	Liver	DDT	o,p-DDE	0.83	ppb
TZ2	3	Pacific Sanddab	Liver	DDT	o,p-DDT	0.51	ppb
TZ2	3	Pacific Sanddab	Liver	DDT	p,-p-DDMU	8.62	ppb
TZ2	3	Pacific Sanddab	Liver	DDT	p,p-DDD	1.56	ppb
TZ2	3	Pacific Sanddab	Liver	DDT	p,p-DDE	286.00	ppb
TZ2	3	Pacific Sanddab	Liver	DDT	p,p-DDT	1.91	ppb
TZ2	3	Pacific Sanddab	Liver	HCH	HCH, Alpha isomer	0.77	ppb
TZ2	3	Pacific Sanddab	Liver	HCH	HCH, Beta isomer	2.53	ppb
TZ2	3	Pacific Sanddab	Liver	HCH	HCH, Gamma isomer	0.30	ppb
TZ2	3	Pacific Sanddab	Liver	PAH	Naphthalene	41.9	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 44	0.30	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 49	0.73	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 52	1.02	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 66	2.36	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 70	0.73	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 74	0.64	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 87	0.59	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 99	7.09	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 101	2.92	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 105	3.98	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 110	2.00	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 118	12.10	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 119	0.32	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 123	1.93	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 128	4.74	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 138	20.10	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 149	1.87	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 151	0.80	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 153/168	33.20	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 156	2.39	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 157	0.70	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 158	0.89	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 167	1.57	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 170	5.99	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 177	1.66	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 180	14.50	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 183	3.53	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 187	9.20	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 189	0.42	ppb
TZ2	3	Pacific Sanddab	Liver	PCB	PCB 194	4.95	ppb
TZ3	1	Pacific Sanddab	Liver	Chlordane	Alpha(cis)Chlordane	3.73	ppb
TZ3	1	Pacific Sanddab	Liver	Chlordane	CisNonachlor	2.09	ppb
TZ3	1	Pacific Sanddab	Liver	Chlordane	Heptachlor	0.36	ppb
TZ3	1	Pacific Sanddab	Liver	Chlordane	TransNonachlor	5.53	ppb
TZ3	1	Pacific Sanddab	Liver	DDT	o,p-DDE	2.06	ppb
TZ3	1	Pacific Sanddab	Liver	DDT	o,p-DDT	0.83	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ3	1	Pacific Sanddab	Liver	DDT	p,-p-DDMU	9.93	ppb
TZ3	1	Pacific Sanddab	Liver	DDT	p,p-DDD	4.19	ppb
TZ3	1	Pacific Sanddab	Liver	DDT	p,p-DDE	283.00	ppb
TZ3	1	Pacific Sanddab	Liver	DDT	p,p-DDT	2.76	ppb
TZ3	1	Pacific Sanddab	Liver	HCH	HCH, Alpha isomer	1.38	ppb
TZ3	1	Pacific Sanddab	Liver	HCH	HCH, Gamma isomer	1.33	ppb
TZ3	1	Pacific Sanddab	Liver	PAH	Naphthalene	50.0	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 18	0.36	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 28	1.25	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 44	1.20	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 49	4.43	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 52	5.63	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 66	5.04	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 70	3.44	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 74	2.01	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 87	3.88	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 99	22.00	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 101	18.90	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 105	7.42	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 110	13.70	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 114	0.63	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 118	26.80	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 119	1.43	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 123	3.55	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 128	7.10	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 138	34.20	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 149	18.00	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 151	4.30	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 153/168	62.00	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 156	2.81	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 157	0.89	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 158	2.90	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 167	2.46	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 170	7.25	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 177	4.84	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 180	20.40	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 183	6.88	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 187	25.50	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 194	5.40	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 201	0.94	ppb
TZ3	1	Pacific Sanddab	Liver	PCB	PCB 206	3.78	ppb
TZ3	2	Pacific Sanddab	Liver	Chlordane	CisNonachlor	1.32	ppb
TZ3	2	Pacific Sanddab	Liver	Chlordane	TransNonachlor	5.27	ppb
TZ3	2	Pacific Sanddab	Liver	DDT	o,p-DDE	1.98	ppb
TZ3	2	Pacific Sanddab	Liver	DDT	p,-p-DDMU	13.00	ppb
TZ3	2	Pacific Sanddab	Liver	DDT	p,p-DDD	4.41	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ3	2	Pacific Sanddab	Liver	DDT	p,p-DDE	368.00	ppb
TZ3	2	Pacific Sanddab	Liver	DDT	p,p-DDT	2.67	ppb
TZ3	2	Pacific Sanddab	Liver	HCH	HCH, Alpha isomer	1.01	ppb
TZ3	2	Pacific Sanddab	Liver	HCH	HCH, Gamma isomer	0.66	ppb
TZ3	2	Pacific Sanddab	Liver	PAH	Naphthalene	60.0	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 28	1.16	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 44	1.08	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 49	2.97	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 52	4.20	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 66	4.57	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 70	2.58	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 74	1.55	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 87	2.59	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 99	16.30	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 101	12.10	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 105	8.14	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 110	9.33	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 118	26.90	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 119	1.11	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 123	3.46	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 128	8.46	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 138	38.00	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 149	9.74	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 151	2.89	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 153/168	70.70	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 156	4.90	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 157	1.26	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 158	2.71	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 167	3.14	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 170	9.59	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 177	4.31	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 18	0.35	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 180	27.80	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 183	7.22	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 187	19.30	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 194	8.53	ppb
TZ3	2	Pacific Sanddab	Liver	PCB	PCB 206	7.01	ppb
TZ3	3	Pacific Sanddab	Liver	Chlordane	Alpha(cis)Chlordane	2.70	ppb
TZ3	3	Pacific Sanddab	Liver	Chlordane	Gamma(trans)Chlordane	1.53	ppb
TZ3	3	Pacific Sanddab	Liver	Chlordane	Heptachlor	1.15	ppb
TZ3	3	Pacific Sanddab	Liver	Chlordane	TransNonachlor	4.77	ppb
TZ3	3	Pacific Sanddab	Liver	DDT	o,p-DDE	1.51	ppb
TZ3	3	Pacific Sanddab	Liver	DDT	p,-p-DDMU	7.72	ppb
TZ3	3	Pacific Sanddab	Liver	DDT	p,p-DDD	3.10	ppb
TZ3	3	Pacific Sanddab	Liver	DDT	p,p-DDE	280.00	ppb
TZ3	3	Pacific Sanddab	Liver	DDT	p,p-DDT	2.20	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ3	3	Pacific Sanddab	Liver	HCH	HCH, Alpha isomer	3.59	ppb
TZ3	3	Pacific Sanddab	Liver	HCH	HCH, Beta isomer	6.45	ppb
TZ3	3	Pacific Sanddab	Liver	HCH	HCH, Gamma isomer	5.45	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 18	0.43	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 28	1.28	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 44	1.47	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 49	3.31	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 52	5.05	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 66	4.63	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 70	2.89	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 74	1.79	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 87	2.18	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 99	20.10	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 101	10.50	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 105	8.20	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 110	8.55	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 114	0.70	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 118	30.40	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 119	1.21	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 123	3.89	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 128	9.96	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 138	44.90	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 149	6.88	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 151	4.33	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 153/168	75.90	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 156	5.09	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 157	1.37	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 158	3.59	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 167	3.47	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 170	12.60	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 177	3.95	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 180	36.90	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 183	10.50	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 187	24.80	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 189	0.89	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 194	11.40	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 201	1.10	ppb
TZ3	3	Pacific Sanddab	Liver	PCB	PCB 206	7.45	ppb
TZ4	1	Pacific Sanddab	Liver	Chlordane	Alpha(cis)Chlordane	2.51	ppb
TZ4	1	Pacific Sanddab	Liver	Chlordane	CisNonachlor	1.36	ppb
TZ4	1	Pacific Sanddab	Liver	Chlordane	Gamma(trans)Chlordane	0.72	ppb
TZ4	1	Pacific Sanddab	Liver	Chlordane	Heptachlor	0.38	ppb
TZ4	1	Pacific Sanddab	Liver	Chlordane	TransNonachlor	4.12	ppb
TZ4	1	Pacific Sanddab	Liver	DDT	o,p-DDE	1.49	ppb
TZ4	1	Pacific Sanddab	Liver	DDT	o,p-DDT	1.26	ppb
TZ4	1	Pacific Sanddab	Liver	DDT	p,-p-DDMU	8.19	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ4	1	Pacific Sanddab	Liver	DDT	p,p-DDD	4.81	ppb
TZ4	1	Pacific Sanddab	Liver	DDT	p,p-DDE	232.00	ppb
TZ4	1	Pacific Sanddab	Liver	DDT	p,p-DDT	11.40	ppb
TZ4	1	Pacific Sanddab	Liver	HCH	HCH, Alpha isomer	1.20	ppb
TZ4	1	Pacific Sanddab	Liver	HCH	HCH, Beta isomer	2.30	ppb
TZ4	1	Pacific Sanddab	Liver	HCH	HCH, Gamma isomer	0.73	ppb
TZ4	1	Pacific Sanddab	Liver	PAH	Naphthalene	50.0	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 28	1.23	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 44	1.29	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 49	2.88	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 52	4.19	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 66	3.84	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 70	2.37	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 74	1.35	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 77	0.26	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 87	2.06	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 99	13.60	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 101	9.52	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 105	5.56	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 110	8.18	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 114	0.55	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 118	21.50	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 119	0.91	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 123	2.89	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 128	5.57	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 138	28.00	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 149	8.84	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 151	4.49	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 153/168	51.00	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 156	2.87	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 157	0.78	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 158	2.41	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 167	2.34	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 170	7.92	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 177	3.80	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 180	22.80	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 183	6.51	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 187	19.30	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 189	0.59	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 194	6.40	ppb
TZ4	1	Pacific Sanddab	Liver	PCB	PCB 201	0.72	ppb
TZ4	2	Pacific Sanddab	Liver	Chlordane	Alpha(cis)Chlordane	3.32	ppb
TZ4	2	Pacific Sanddab	Liver	Chlordane	CisNonachlor	2.30	ppb
TZ4	2	Pacific Sanddab	Liver	Chlordane	TransNonachlor	7.46	ppb
TZ4	2	Pacific Sanddab	Liver	DDT	o,p-DDE	2.74	ppb
TZ4	2	Pacific Sanddab	Liver	DDT	o,p-DDT	1.10	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ4	2	Pacific Sanddab	Liver	DDT	p,-p-DDMU	11.40	ppb
TZ4	2	Pacific Sanddab	Liver	DDT	p,p-DDD	5.47	ppb
TZ4	2	Pacific Sanddab	Liver	DDT	p,p-DDE	427.00	ppb
TZ4	2	Pacific Sanddab	Liver	DDT	p,p-DDT	3.94	ppb
TZ4	2	Pacific Sanddab	Liver	HCH	HCH, Alpha isomer	0.71	ppb
TZ4	2	Pacific Sanddab	Liver	HCH	HCH, Beta isomer	2.07	ppb
TZ4	2	Pacific Sanddab	Liver	PAH	Naphthalene	60.0	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 28	0.99	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 44	1.11	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 49	2.53	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 52	3.59	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 66	3.98	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 70	2.01	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 74	1.88	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 77	0.30	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 87	2.18	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 99	18.90	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 101	12.10	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 105	7.24	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 110	6.92	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 114	0.59	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 118	22.30	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 119	1.03	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 123	2.81	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 128	7.93	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 138	35.80	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 149	9.90	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 151	4.71	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 153/168	57.90	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 156	3.28	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 157	0.87	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 158	2.81	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 167	2.11	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 170	7.79	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 177	4.84	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 180	22.20	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 183	7.42	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 187	24.40	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 189	0.64	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 194	6.17	ppb
TZ4	2	Pacific Sanddab	Liver	PCB	PCB 201	1.05	ppb
TZ4	3	Pacific Sanddab	Liver	Chlordane	Alpha(cis)Chlordane	2.17	ppb
TZ4	3	Pacific Sanddab	Liver	Chlordane	CisNonachlor	1.29	ppb
TZ4	3	Pacific Sanddab	Liver	Chlordane	TransNonachlor	3.86	ppb
TZ4	3	Pacific Sanddab	Liver	DDT	p,-p-DDMU	11.00	ppb
TZ4	3	Pacific Sanddab	Liver	DDT	p,p-DDD	3.05	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ4	3	Pacific Sanddab	Liver	DDT	p,p-DDE	285.00	ppb
TZ4	3	Pacific Sanddab	Liver	DDT	p,p-DDT	2.15	ppb
TZ4	3	Pacific Sanddab	Liver	HCH	HCH, Alpha isomer	0.79	ppb
TZ4	3	Pacific Sanddab	Liver	HCH	HCH, Beta isomer	2.04	ppb
TZ4	3	Pacific Sanddab	Liver	PAH	Naphthalene	80.0	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 28	1.19	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 44	0.79	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 49	6.67	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 52	5.50	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 66	57.30	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 70	9.57	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 74	52.10	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 87	3.93	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 99	328.00	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 101	30.70	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 105	275.00	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 110	12.00	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 114	18.50	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 118	767.00	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 119	6.23	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 123	58.40	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 126	0.43	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 128	144.00	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 138	509.00	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 149	20.60	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 151	3.36	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 153/168	477.00	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 156	81.60	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 157	19.30	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 158	70.10	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 167	31.30	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 170	42.80	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 177	4.90	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 180	87.30	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 183	18.60	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 187	26.80	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 189	2.69	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 194	13.20	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 201	0.63	ppb
TZ4	3	Pacific Sanddab	Liver	PCB	PCB 206	6.99	ppb
TZ5	1	Longfin Sanddab	Liver	Chlordane	Alpha(cis)Chlordane	1.77	ppb
TZ5	1	Longfin Sanddab	Liver	Chlordane	CisNonachlor	0.94	ppb
TZ5	1	Longfin Sanddab	Liver	Chlordane	TransNonachlor	2.12	ppb
TZ5	1	Longfin Sanddab	Liver	DDT	o,p-DDD	0.49	ppb
TZ5	1	Longfin Sanddab	Liver	DDT	o,p-DDE	2.44	ppb
TZ5	1	Longfin Sanddab	Liver	DDT	p,-p-DDMU	5.73	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ5	1	Longfin Sanddab	Liver	DDT	p,p-DDD	3.09	ppb
TZ5	1	Longfin Sanddab	Liver	DDT	p,p-DDE	189.00	ppb
TZ5	1	Longfin Sanddab	Liver	DDT	p,p-DDT	2.38	ppb
TZ5	1	Longfin Sanddab	Liver	HCH	HCH, Alpha isomer	0.68	ppb
TZ5	1	Longfin Sanddab	Liver	HCH	HCH, Beta isomer	1.31	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 49	0.46	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 66	1.36	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 74	0.75	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 87	0.42	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 99	6.15	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 101	2.49	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 105	2.21	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 110	1.04	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 114	0.26	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 118	9.45	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 123	0.92	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 128	2.56	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 138	15.00	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 149	2.98	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 151	1.59	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 153/168	30.80	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 156	1.11	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 157	0.40	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 158	0.83	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 167	1.05	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 170	2.98	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 177	2.39	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 180	7.09	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 183	2.59	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 187	13.40	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 194	2.37	ppb
TZ5	1	Longfin Sanddab	Liver	PCB	PCB 201	0.39	ppb
TZ5	2	Longfin Sanddab	Liver	Chlordane	Alpha(cis)Chlordane	2.69	ppb
TZ5	2	Longfin Sanddab	Liver	Chlordane	CisNonachlor	1.63	ppb
TZ5	2	Longfin Sanddab	Liver	Chlordane	Gamma(trans)Chlordane	1.57	ppb
TZ5	2	Longfin Sanddab	Liver	Chlordane	TransNonachlor	2.93	ppb
TZ5	2	Longfin Sanddab	Liver	DDT	o,p-DDD	0.81	ppb
TZ5	2	Longfin Sanddab	Liver	DDT	o,p-DDE	3.72	ppb
TZ5	2	Longfin Sanddab	Liver	DDT	o,p-DDT	0.57	ppb
TZ5	2	Longfin Sanddab	Liver	DDT	p,-p-DDMU	8.73	ppb
TZ5	2	Longfin Sanddab	Liver	DDT	p,p-DDD	5.26	ppb
TZ5	2	Longfin Sanddab	Liver	DDT	p,p-DDE	262.00	ppb
TZ5	2	Longfin Sanddab	Liver	DDT	p,p-DDT	3.19	ppb
TZ5	2	Longfin Sanddab	Liver	HCH	HCH, Alpha isomer	2.00	ppb
TZ5	2	Longfin Sanddab	Liver	HCH	HCH, Gamma isomer	3.20	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 37	0.52	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 49	0.89	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 52	1.41	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 66	2.35	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 70	0.83	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 74	1.25	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 77	0.93	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 81	0.79	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 99	10.20	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 101	4.98	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 105	3.39	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 110	2.26	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 114	1.14	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 118	12.80	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 119	0.59	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 123	1.97	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 126	0.83	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 128	4.35	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 138	20.90	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 149	6.10	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 151	2.82	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 153/168	44.30	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 156	2.01	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 157	1.05	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 158	1.70	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 167	2.12	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 170	4.20	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 177	3.26	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 180	11.70	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 183	3.60	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 187	15.30	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 189	1.06	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 194	3.71	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 201	1.07	ppb
TZ5	2	Longfin Sanddab	Liver	PCB	PCB 206	2.85	ppb
TZ5	3	Hornyhead Turbot	Liver	DDT	o,p-DDE	0.79	ppb
TZ5	3	Hornyhead Turbot	Liver	DDT	p,-p-DDMU	1.99	ppb
TZ5	3	Hornyhead Turbot	Liver	DDT	p,p-DDD	1.18	ppb
TZ5	3	Hornyhead Turbot	Liver	DDT	p,p-DDE	53.40	ppb
TZ5	3	Hornyhead Turbot	Liver	DDT	p,p-DDT	0.79	ppb
TZ5	3	Hornyhead Turbot	Liver	HCH	HCH, Beta isomer	0.44	ppb
TZ5	3	Hornyhead Turbot	Liver	PCB	PCB 101	1.20	ppb
TZ5	3	Hornyhead Turbot	Liver	PCB	PCB 105	0.55	ppb
TZ5	3	Hornyhead Turbot	Liver	PCB	PCB 110	0.33	ppb
TZ5	3	Hornyhead Turbot	Liver	PCB	PCB 118	2.25	ppb
TZ5	3	Hornyhead Turbot	Liver	PCB	PCB 128	0.64	ppb
TZ5	3	Hornyhead Turbot	Liver	PCB	PCB 138	3.38	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ5	3	Hornyhead Turbot	Liver	PCB	PCB 149	0.84	ppb
TZ5	3	Hornyhead Turbot	Liver	PCB	PCB 151	0.29	ppb
TZ5	3	Hornyhead Turbot	Liver	PCB	PCB 153/168	6.80	ppb
TZ5	3	Hornyhead Turbot	Liver	PCB	PCB 156	0.29	ppb
TZ5	3	Hornyhead Turbot	Liver	PCB	PCB 167	0.27	ppb
TZ5	3	Hornyhead Turbot	Liver	PCB	PCB 170	0.79	ppb
TZ5	3	Hornyhead Turbot	Liver	PCB	PCB 180	2.41	ppb
TZ5	3	Hornyhead Turbot	Liver	PCB	PCB 183	0.64	ppb
TZ5	3	Hornyhead Turbot	Liver	PCB	PCB 187	2.35	ppb
TZ5	3	Hornyhead Turbot	Liver	PCB	PCB 194	0.74	ppb
TZ5	3	Hornyhead Turbot	Liver	PCB	PCB 99	1.59	ppb
TZ6	1	Longfin Sanddab	Liver	Chlordane	TransNonachlor	2.83	ppb
TZ6	1	Longfin Sanddab	Liver	DDT	o,p-DDD	0.94	ppb
TZ6	1	Longfin Sanddab	Liver	DDT	o,p-DDE	3.37	ppb
TZ6	1	Longfin Sanddab	Liver	DDT	p,-p-DDMU	7.75	ppb
TZ6	1	Longfin Sanddab	Liver	DDT	p,p-DDD	4.29	ppb
TZ6	1	Longfin Sanddab	Liver	DDT	p,p-DDE	236.00	ppb
TZ6	1	Longfin Sanddab	Liver	DDT	p,p-DDT	4.24	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 49	0.84	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 52	1.29	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 66	1.95	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 70	0.75	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 74	0.94	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 99	8.55	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 101	3.67	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 105	2.94	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 110	1.45	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 118	11.30	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 123	1.43	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 128	3.04	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 138	16.40	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 149	5.13	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 151	2.39	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 153/168	34.70	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 156	1.52	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 157	0.46	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 158	0.98	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 167	1.39	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 170	3.42	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 177	3.03	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 180	8.65	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 183	2.83	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 187	15.00	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 194	3.32	ppb
TZ6	1	Longfin Sanddab	Liver	PCB	PCB 206	2.54	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ6	2	Longfin Sanddab	Liver	Chlordane	TransNonachlor	3.20	ppb
TZ6	2	Longfin Sanddab	Liver	DDT	o,p-DDD	1.11	ppb
TZ6	2	Longfin Sanddab	Liver	DDT	o,p-DDE	3.29	ppb
TZ6	2	Longfin Sanddab	Liver	DDT	p,-p-DDMU	8.96	ppb
TZ6	2	Longfin Sanddab	Liver	DDT	p,p-DDD	4.43	ppb
TZ6	2	Longfin Sanddab	Liver	DDT	p,p-DDE	257.00	ppb
TZ6	2	Longfin Sanddab	Liver	DDT	p,p-DDT	2.52	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 49	0.84	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 52	1.24	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 66	2.19	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 70	0.77	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 74	0.99	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 99	11.10	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 101	4.13	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 105	2.69	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 110	1.68	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 118	11.40	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 123	1.41	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 128	3.07	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 138	19.40	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 149	4.67	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 151	2.76	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 153/168	33.60	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 156	1.45	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 158	1.01	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 167	1.18	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 170	3.85	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 177	3.03	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 180	8.20	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 183	2.81	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 187	17.70	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 194	2.92	ppb
TZ6	2	Longfin Sanddab	Liver	PCB	PCB 206	2.10	ppb
TZ6	3	Longfin Sanddab	Liver	Chlordane	CisNonachlor	1.36	ppb
TZ6	3	Longfin Sanddab	Liver	Chlordane	TransNonachlor	3.60	ppb
TZ6	3	Longfin Sanddab	Liver	DDT	o,p-DDE	3.67	ppb
TZ6	3	Longfin Sanddab	Liver	DDT	p,-p-DDMU	7.27	ppb
TZ6	3	Longfin Sanddab	Liver	DDT	p,p-DDD	3.81	ppb
TZ6	3	Longfin Sanddab	Liver	DDT	p,p-DDE	288.00	ppb
TZ6	3	Longfin Sanddab	Liver	DDT	p,p-DDT	3.01	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 28	0.81	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 44	0.45	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 49	1.03	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 52	1.33	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 66	1.95	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 70	0.95	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 74	1.38	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 77	0.44	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 81	0.42	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 87	0.89	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 99	9.87	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 101	3.71	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 105	3.51	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 110	1.85	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 118	12.70	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 119	0.50	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 123	2.08	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 126	0.38	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 128	3.57	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 138	23.40	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 149	4.43	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 151	2.88	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 153/168	41.10	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 156	1.99	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 157	0.92	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 158	1.49	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 167	1.82	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 170	4.09	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 177	3.06	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 180	11.40	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 183	3.48	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 187	17.70	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 194	3.97	ppb
TZ6	3	Longfin Sanddab	Liver	PCB	PCB 206	2.75	ppb
TZ7	1	Longfin Sanddab	Liver	Chlordane	CisNonachlor	1.56	ppb
TZ7	1	Longfin Sanddab	Liver	Chlordane	TransNonachlor	2.79	ppb
TZ7	1	Longfin Sanddab	Liver	DDT	o,p-DDD	0.72	ppb
TZ7	1	Longfin Sanddab	Liver	DDT	o,p-DDE	2.73	ppb
TZ7	1	Longfin Sanddab	Liver	DDT	p,-p-DDMU	5.93	ppb
TZ7	1	Longfin Sanddab	Liver	DDT	p,p-DDD	4.15	ppb
TZ7	1	Longfin Sanddab	Liver	DDT	p,p-DDE	193.00	ppb
TZ7	1	Longfin Sanddab	Liver	DDT	p,p-DDT	2.56	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 28	2.09	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 44	0.52	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 49	2.02	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 52	2.74	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 66	4.37	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 70	1.45	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 74	1.93	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 87	1.57	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 99	16.90	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 101	8.97	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 105	5.31	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 110	3.92	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 118	25.20	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 123	2.57	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 128	6.17	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 138	35.80	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 149	8.96	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 151	4.59	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 153/168	60.70	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 156	2.87	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 157	0.94	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 158	2.36	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 167	2.51	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 170	6.23	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 177	4.46	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 180	18.20	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 183	5.11	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 187	24.70	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 194	5.80	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 201	0.86	ppb
TZ7	1	Longfin Sanddab	Liver	PCB	PCB 206	3.77	ppb
TZ7	2	Hornyhead Turbot	Liver	DDT	p,p-DDE	33.40	ppb
TZ7	2	Hornyhead Turbot	Liver	PCB	PCB 28	0.55	ppb
TZ7	2	Hornyhead Turbot	Liver	PCB	PCB 49	0.67	ppb
TZ7	2	Hornyhead Turbot	Liver	PCB	PCB 52	0.55	ppb
TZ7	2	Hornyhead Turbot	Liver	PCB	PCB 66	0.91	ppb
TZ7	2	Hornyhead Turbot	Liver	PCB	PCB 70	0.38	ppb
TZ7	2	Hornyhead Turbot	Liver	PCB	PCB 74	0.37	ppb
TZ7	2	Hornyhead Turbot	Liver	PCB	PCB 99	2.64	ppb
TZ7	2	Hornyhead Turbot	Liver	PCB	PCB 101	2.03	ppb
TZ7	2	Hornyhead Turbot	Liver	PCB	PCB 105	0.87	ppb
TZ7	2	Hornyhead Turbot	Liver	PCB	PCB 110	0.70	ppb
TZ7	2	Hornyhead Turbot	Liver	PCB	PCB 118	3.28	ppb
TZ7	2	Hornyhead Turbot	Liver	PCB	PCB 128	0.98	ppb
TZ7	2	Hornyhead Turbot	Liver	PCB	PCB 138	4.91	ppb
TZ7	2	Hornyhead Turbot	Liver	PCB	PCB 149	1.33	ppb
TZ7	2	Hornyhead Turbot	Liver	PCB	PCB 153/168	8.03	ppb
TZ7	2	Hornyhead Turbot	Liver	PCB	PCB 170	1.24	ppb
TZ7	2	Hornyhead Turbot	Liver	PCB	PCB 180	2.97	ppb
TZ7	2	Hornyhead Turbot	Liver	PCB	PCB 183	0.93	ppb
TZ7	2	Hornyhead Turbot	Liver	PCB	PCB 187	3.13	ppb
TZ7	2	Hornyhead Turbot	Liver	PCB	PCB 206	1.31	ppb
TZ7	3	Fantail Sole	Liver	DDT	p,p-DDE	32.30	ppb
TZ7	3	Fantail Sole	Liver	DDT	p,-p-DDMU	0.70	ppb
TZ7	3	Fantail Sole	Liver	PAH	Pyrene	13.7	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ7	3	Fantail Sole	Liver	PCB	PCB 52	0.28	ppb
TZ7	3	Fantail Sole	Liver	PCB	PCB 66	0.49	ppb
TZ7	3	Fantail Sole	Liver	PCB	PCB 99	2.06	ppb
TZ7	3	Fantail Sole	Liver	PCB	PCB 105	0.69	ppb
TZ7	3	Fantail Sole	Liver	PCB	PCB 118	3.52	ppb
TZ7	3	Fantail Sole	Liver	PCB	PCB 128	0.57	ppb
TZ7	3	Fantail Sole	Liver	PCB	PCB 138	3.89	ppb
TZ7	3	Fantail Sole	Liver	PCB	PCB 149	1.23	ppb
TZ7	3	Fantail Sole	Liver	PCB	PCB 153/168	9.01	ppb
TZ7	3	Fantail Sole	Liver	PCB	PCB 167	0.51	ppb
TZ7	3	Fantail Sole	Liver	PCB	PCB 177	1.12	ppb
TZ7	3	Fantail Sole	Liver	PCB	PCB 180	3.71	ppb
TZ7	3	Fantail Sole	Liver	PCB	PCB 183	0.98	ppb
TZ7	3	Fantail Sole	Liver	PCB	PCB 187	4.44	ppb
TZ8	1	Longfin Sanddab	Liver	Chlordane	TransNonachlor	1.59	ppb
TZ8	1	Longfin Sanddab	Liver	DDT	o,p-DDE	4.03	ppb
TZ8	1	Longfin Sanddab	Liver	DDT	p,-p-DDMU	1.92	ppb
TZ8	1	Longfin Sanddab	Liver	DDT	p,p-DDE	116.00	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 49	0.40	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 52	0.70	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 66	1.10	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 70	0.48	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 74	0.55	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 99	4.15	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 101	2.06	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 105	1.84	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 110	0.88	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 118	5.80	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 128	1.67	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 138	8.28	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 149	2.46	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 151	1.21	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 153/168	14.80	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 156	0.58	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 158	0.47	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 167	0.58	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 177	1.45	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 180	3.66	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 183	1.43	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 187	8.04	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 194	1.26	ppb
TZ8	1	Longfin Sanddab	Liver	PCB	PCB 206	0.95	ppb
TZ8	2	Hornyhead Turbot	Liver	DDT	o,p-DDE	0.43	ppb
TZ8	2	Hornyhead Turbot	Liver	DDT	p,-p-DDMU	1.39	ppb
TZ8	2	Hornyhead Turbot	Liver	DDT	p,p-DDE	29.10	ppb
TZ8	2	Hornyhead Turbot	Liver	PAH	Pyrene	19.0	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ8	2	Hornyhead Turbot	Liver	PCB	PCB 37	0.45	ppb
TZ8	2	Hornyhead Turbot	Liver	PCB	PCB 52	0.35	ppb
TZ8	2	Hornyhead Turbot	Liver	PCB	PCB 66	0.68	ppb
TZ8	2	Hornyhead Turbot	Liver	PCB	PCB 70	0.38	ppb
TZ8	2	Hornyhead Turbot	Liver	PCB	PCB 74	0.39	ppb
TZ8	2	Hornyhead Turbot	Liver	PCB	PCB 77	0.50	ppb
TZ8	2	Hornyhead Turbot	Liver	PCB	PCB 81	0.56	ppb
TZ8	2	Hornyhead Turbot	Liver	PCB	PCB 99	1.21	ppb
TZ8	2	Hornyhead Turbot	Liver	PCB	PCB 101	0.95	ppb
TZ8	2	Hornyhead Turbot	Liver	PCB	PCB 128	0.64	ppb
TZ8	2	Hornyhead Turbot	Liver	PCB	PCB 149	0.70	ppb
TZ8	2	Hornyhead Turbot	Liver	PCB	PCB 151	0.34	ppb
TZ8	2	Hornyhead Turbot	Liver	PCB	PCB 153/168	4.01	ppb
TZ8	2	Hornyhead Turbot	Liver	PCB	PCB 156	0.68	ppb
TZ8	2	Hornyhead Turbot	Liver	PCB	PCB 167	0.64	ppb
TZ8	2	Hornyhead Turbot	Liver	PCB	PCB 18	0.39	ppb
TZ8	2	Hornyhead Turbot	Liver	PCB	PCB 183	0.64	ppb
TZ8	2	Hornyhead Turbot	Liver	PCB	PCB 187	1.32	ppb
TZ8	2	Hornyhead Turbot	Liver	PCB	PCB 189	0.55	ppb
TZ8	2	Hornyhead Turbot	Liver	PCB	PCB 206	0.71	ppb
TZ8	3	Fantail Sole	Liver	DDT	p,-p-DDMU	1.01	ppb
TZ8	3	Fantail Sole	Liver	DDT	p,p-DDD	0.57	ppb
TZ8	3	Fantail Sole	Liver	DDT	p,p-DDE	19.70	ppb
TZ8	3	Fantail Sole	Liver	PAH	2-methylnaphthalene	25.7	ppb
TZ8	3	Fantail Sole	Liver	PCB	PCB 44	0.30	ppb
TZ8	3	Fantail Sole	Liver	PCB	PCB 52	0.34	ppb
TZ8	3	Fantail Sole	Liver	PCB	PCB 66	0.52	ppb
TZ8	3	Fantail Sole	Liver	PCB	PCB 70	0.32	ppb
TZ8	3	Fantail Sole	Liver	PCB	PCB 74	0.33	ppb
TZ8	3	Fantail Sole	Liver	PCB	PCB 110	0.59	ppb
TZ8	3	Fantail Sole	Liver	PCB	PCB 118	1.46	ppb
TZ8	3	Fantail Sole	Liver	PCB	PCB 128	0.51	ppb
TZ8	3	Fantail Sole	Liver	PCB	PCB 138	1.74	ppb
TZ8	3	Fantail Sole	Liver	PCB	PCB 149	0.96	ppb
TZ8	3	Fantail Sole	Liver	PCB	PCB 151	0.50	ppb
TZ8	3	Fantail Sole	Liver	PCB	PCB 153/168	3.92	ppb
TZ8	3	Fantail Sole	Liver	PCB	PCB 157	0.30	ppb
TZ8	3	Fantail Sole	Liver	PCB	PCB 167	0.33	ppb
TZ8	3	Fantail Sole	Liver	PCB	PCB 170	0.53	ppb
TZ8	3	Fantail Sole	Liver	PCB	PCB 177	0.59	ppb
TZ8	3	Fantail Sole	Liver	PCB	PCB 183	0.53	ppb
TZ8	3	Fantail Sole	Liver	PCB	PCB 187	1.90	ppb
TZ8	3	Fantail Sole	Liver	PCB	PCB 206	0.68	ppb
TZ9	1	Spotted Turbot	Liver	Chlordane	CisNonachlor	3.32	ppb
TZ9	1	Spotted Turbot	Liver	Chlordane	TransNonachlor	5.43	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ9	1	Spotted Turbot	Liver	DDT	p,p-DDD	0.48	ppb
TZ9	1	Spotted Turbot	Liver	DDT	p,p-DDE	12.10	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 49	1.07	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 52	1.19	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 66	2.35	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 74	0.52	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 87	0.75	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 99	5.79	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 101	10.60	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 105	4.23	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 110	3.22	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 118	11.80	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 123	1.16	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 128	4.56	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 138	18.80	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 149	6.20	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 151	3.44	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 153/168	30.40	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 156	1.39	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 157	0.66	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 158	1.14	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 167	1.58	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 170	5.69	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 180	13.10	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 183	4.95	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 187	10.40	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 194	4.90	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 201	0.87	ppb
TZ9	1	Spotted Turbot	Liver	PCB	PCB 206	3.43	ppb
TZ9	2	Fantail Sole	Liver	Chlordane	TransNonachlor	1.68	ppb
TZ9	2	Fantail Sole	Liver	DDT	p,-p-DDMU	1.57	ppb
TZ9	2	Fantail Sole	Liver	DDT	p,p-DDD	0.77	ppb
TZ9	2	Fantail Sole	Liver	DDT	p,p-DDE	60.10	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 49	0.40	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 52	1.13	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 66	1.09	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 70	0.37	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 74	0.63	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 87	1.38	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 99	6.10	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 101	5.57	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 105	2.62	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 110	2.52	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 118	9.15	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 123	1.15	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 128	1.62	ppb

Addendum 8-7 *continued*

Zone	Comp	Species	Tissue	Class	Constituent	Value	Units
TZ9	2	Fantail Sole	Liver	PCB	PCB 138	12.00	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 149	2.36	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 151	0.75	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 153/168	22.50	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 156	1.49	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 158	1.02	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 167	1.11	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 170	2.40	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 177	1.25	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 180	6.53	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 183	1.70	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 187	5.69	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 194	1.65	ppb
TZ9	2	Fantail Sole	Liver	PCB	PCB 206	1.40	ppb

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Addendum 9

Real-Time Oceanographic Mooring Systems

2017 – 2019 Supplemental Analyses

Addendum 9-1

Location, depth, and dates for each year-long deployment of the SBOO and PLOO RTOMS. Dates are displayed by deployment, recovery, and period of real-time (RT) data availability. All times are Pacific Standard Time; DD = decimal degrees.

Site	Deployment #	Lat (DD)	Long (DD)	Total Depth (m)	Deployment	RTdata Start	RTdata End	Recovery
SBOO	1	32.53185	-117.18644	31	12/21/2016 12:00	12/21/2016 13:30	10/13/2017 1:00	12/16/2017
	2	32.53185	-117.18644	31	8/3/2018 11:50	8/3/2018 14:00	9/18/2019 10:20	9/18/2019
	3	32.53185	-117.18644	31	12/18/2019 11:30	12/18/2019 12:30	Present	
PLOO	1	32.67049	-117.32714	102	3/1/2018 12:45	3/2/2018 17:00	3/15/2019 12:00	3/15/2019
	2	32.66959	-117.32298	95	10/7/2019 12:40	10/7/2019 13:00	Present	

Addendum 9-2

Data qualifier definitions for QC data flags. Follows national data standards for summary real-time data flagging (US IOOS 2017), and post-processing data flagging (ARGO 2020).

QC_Flag	Designation	Use
1	Pass/good	For data reviewed both automatically and manually
2	Provisional/unreviewed	For data that are not reviewed; or passed automated test only
3	Suspect/questionable	Failed automated test but not unreasonable (such as climatology test) or manually flagged as possible instrument drift (such as due to biofouling)
4	Bad	Failed automated test (such as out of range test) or manually flagged as clearly bad (such as due to instrument malfunction)
5	Value changed/drift-corrected	Used only in post-processing. Values have been corrected based on new information, such as water sample results to correct for drift or new calibration factors. For data use purposes, this flag can be treated as a “pass.” Original data are also to be retained separately.
9	Missing	Placeholder to show missing real-time data; may be able to be filled in later by downloaded data after mooring recovery

Addendum 9-3

Ranges used for automated QC data flagging for each parameter for the gross range test. Ranges were defined by manufacturers for each sensor configuration. Turner optical sensors were used for CDOM and chlorophyll *a* for the first deployment at each site and Sea-Bird ECO triplet sensors were used for CDOM, chlorophyll *a*, and turbidity for subsequent deployments, so both ranges are given.

Parameter	Units	Min	Max	Qualifer to assign if outside of min/max	Applies to which deployments
BOD equivalent	mg/L	0	50	4	All
CDOM - Turner	ppb	0	1250	4	PLOO_1 and SBOO_1
CDOM - ECO triplet	ppb	0	375	4	PLOO_2 and SBOO_2 & 3
Chl - Turner	µg/L	0	500	4	PLOO_1 and SBOO_1
Chl - ECO triplet	µg/L	0	30	4	PLOO_2 and SBOO_2 & 3
$xC0_2$	ppm	0	2000	4	All
NO3 (Nitrate plus Nitrite)	uM	0	3000	4	All
NTU (Turbidity)	NTU	0	10	4	All - PLOO_2 and SBOO_2 & 3
0_2 (DO)	mg/L	0.1	20	4	All
pH (total; both internal and external)	total pH	6.5	9	4	All
Salinity (Sal)	PSU	2	42	4	All
Temperature (Temp)	degC	-2.5	35	4	All

Addendum 9-4

Annual ranges used for automated QC data flagging for each parameter, site, and depth for the climatological range test. Temperature, salinity, DO, and pH ranges were based on the minimum and maximum values recorded at each site and depth range where the sensors were found to be functional and in reasonable agreement with historical CTD ranges from the City's quarterly surveys. BOD ranges were based on the maximum value observed from all deployments, since a new parameter and historical data were not available. CDOM ranges were based on maximum of multiple readings recorded at the PLOO mooring due to proximity to plume. Chlorophyll *a* and turbidity ranges were based on the maximum of historical CTD ranges for the Turner sensor and on the maximum sensor range for the ECO triplet. Nitrate ranges were based on the maximum value plus one standard deviation of each mooring data record where the sensor was found to be functional, and verified in a reasonable range compared to nearshore data collected by the California Cooperative Oceanic Fisheries Investigations (see: https://calcofi.org). Ranges for $xC0_2$ were determined by the minimum and maximum ranges recorded from the 10-year historical record at the closest NOAA/SIO carbon program mooring (CCE2, see: https://www.pmel.noaa.gov/$c0_2$/story/CCE2).

		PLOO RTOMS						SBOO RTOMS						
		1 m		Mid depths		Bottom depth (>85 m)		1 m		Mid depths		Bottom depth (>25 m)		Qualifer to assign if outside of site/ depth range
Parameter	**Units**	**Min**	**Max**	**Min**	**Max**	**Min**	**Max**	**Min**	**Max**	**Min**	**Max**	**Min**	**Max**	
BOD equivalent	mg/L	—	—	0	10	0	10	—	—	—	—	0	10	3
CDOM-Turner	ppb	0	50	0	50	0	50	0	50	0	50	0	50	3
CDOM-ECO triplet	ppb	0	50	0	50	0	50	0	50	0	50	0	50	3
Chl-Turner	µg/L	0	75	0	75	0	75	0	75	0	75	0	75	3
Chl-ECO triplet	µg/L	0	30	0	30	0	30	0	30	0	30	0	30	3
$xC0_2$	ppm	200	800	—	—	—	—	200	800	—	—	—	—	3
NO3 (Nitrate/Nitrite)	uM	0	10	—	—	0	39	0	39	—	—	0	39	3
NTU (Turbidity)-ECO-triplet	NTU	0	10	0	10	0	10	0	10	0	10	0	10	3
0_2 (DO)	mg/L	5.5	15	3	9.5	2.5	7.5	5.5	15	3	11	2.5	9.5	3
pH (total; both internal and external)	total pH	7.6	8.7	7.5	8.1	7.5	8.1	7.6	8.7	—	—	7.5	8.1	3
Sal (Salinity)	PSU	32.3	34	32.3	34	33	34.3	31.2	34	32	34	33	34	3
vv	degC	12	26.5	9	24.5	9	15	12	26.5	10	26	9	19	3

Addendum 9-5

Sample intervals used for RTOMS data for each parameter. Intervals were consistent for CDOM, chlorophyll *a* (chl), turbidity (NTU), BOD, nitrate (NO3), and current velocity (ADCP), but varied for temperature (T), salinity (S), DO, pH, and $xC0_2$ depending on depth, site, and deployment number.

	Parameter	Special cases that vary by depth and date:		
Sample Interval	**(all depths/sites)**	**Parameter**	**Depth (m)**	**Deployments**
10 min	CDOM, chl, NTU, BOD, ADCP	T, S, DO	10[a], 18, 20, 45, 60, 75	SBOO and PLOO all
20 min	—	T, S, DO	1, 26	SBOO_01 only
30 min	—	T, S, DO	30	PLOO_01 only
1 hr	NO3	T, S, DO	1, 26, 89	SBOO_02 and PLOO_01
50 min	—	pH	1, 26, 30, 89	SBOO_01, SBOO_02, PLOO_01
18 hrs 20 min	—	$xC0_2$	1	SBOO_01, SBOO_02, PLOO_01
10 hrs	—	$xC0_2$	1	SBOO_03 and PLOO_02

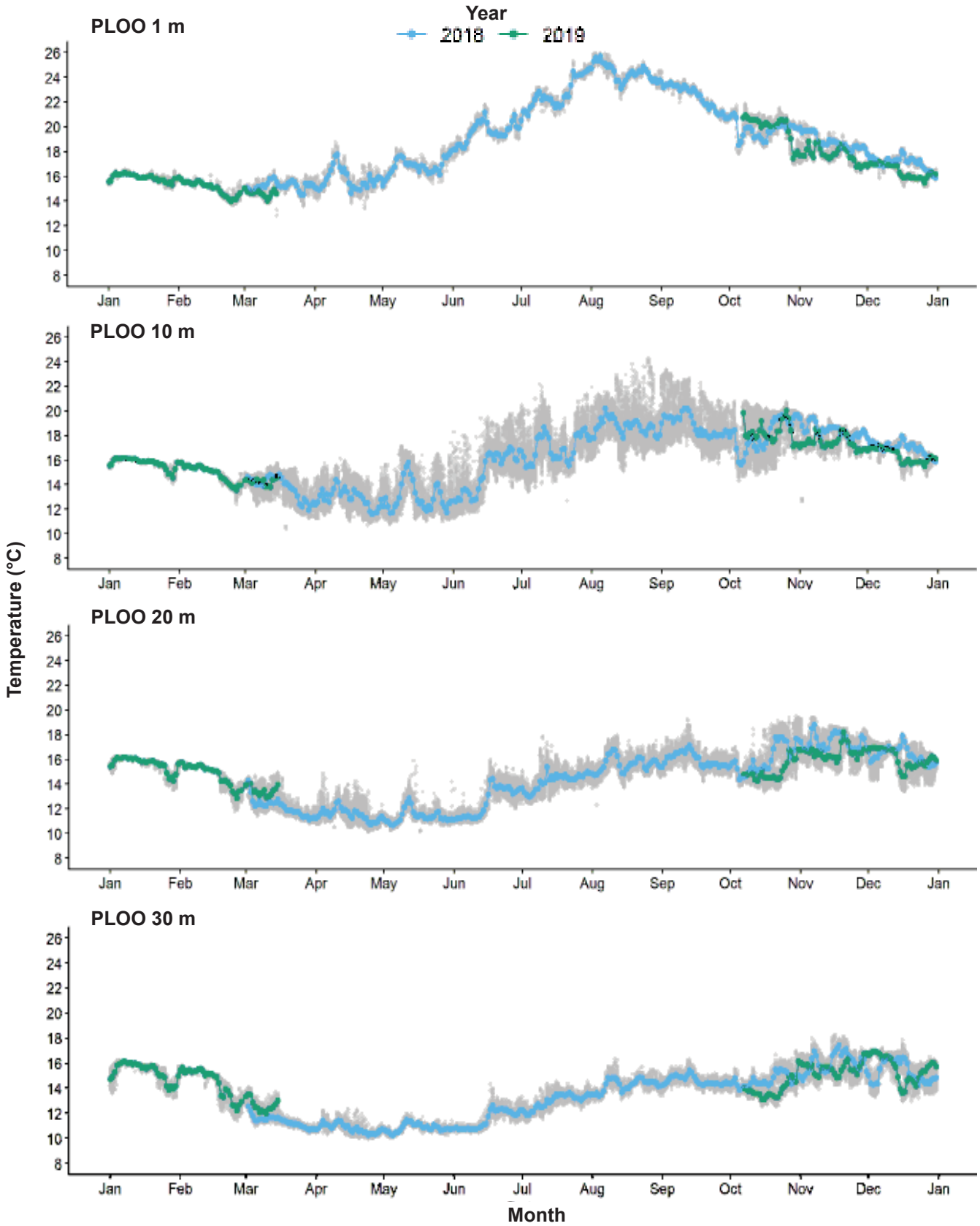
[a]2019 exception: T, S, DO, and pH begins at 10 min intervals at all depths starting with SBOO_03 and PLOO_02

Addendum 9-6

Location, depth, and dates for each deployment of static moorings located at the SBOO and PLOO. DD = decimal degrees.

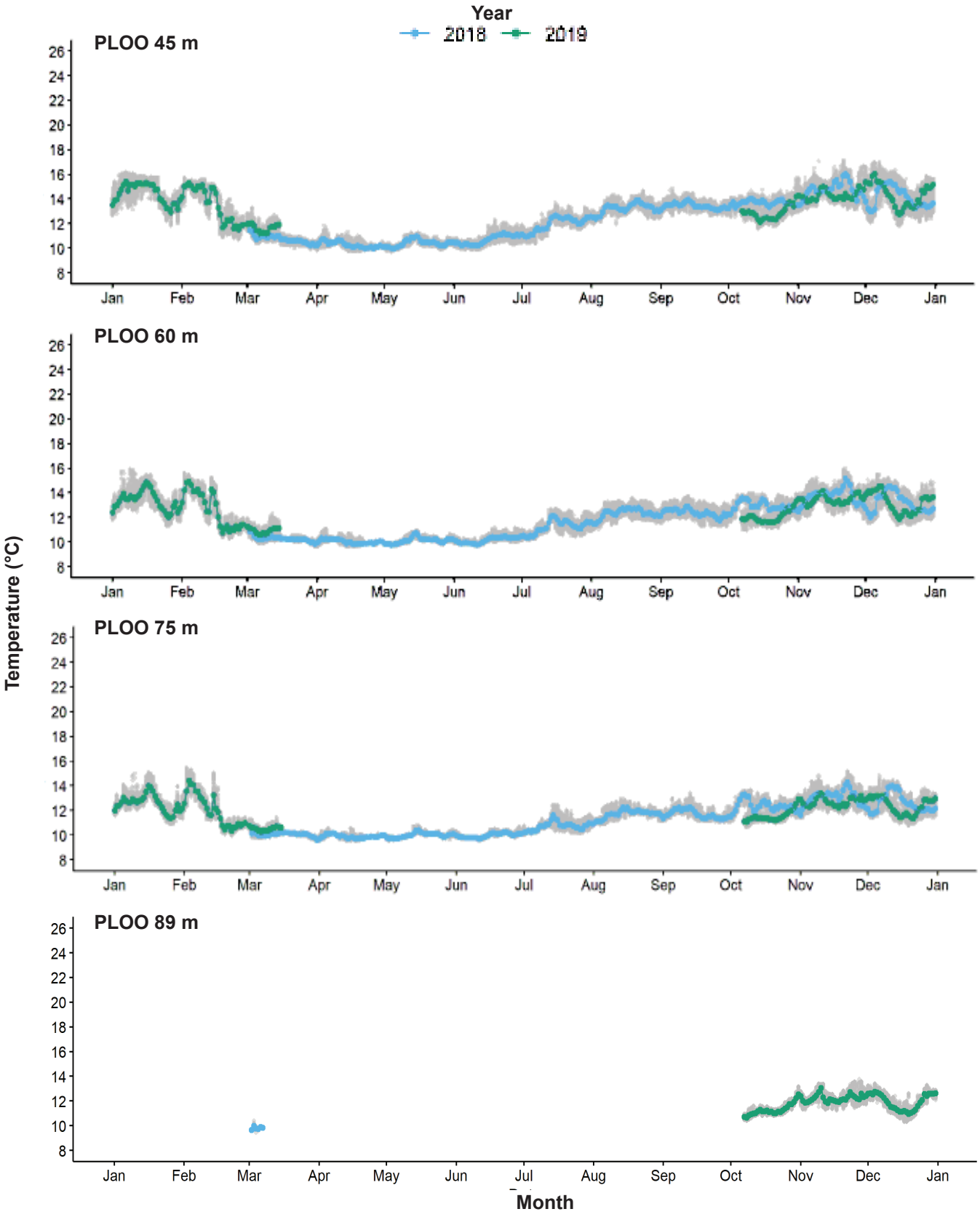
Site	Deployment #	Lat (DD)	Long (DD)	Total Depth (m)	Date of Last Deployment
PLOO	ADCP (#2)	32.66641	117.32647	100 m	9/12/2019
SBOO	ADCP (#3)	32.53677	117.19833	36 m	12/11/2019
PLOO	Thermistor (#1)	32.66138	117.32739	100 m	1/22/2020
PLOO	Thermistor (#2)	32.66421	117.32842	100 m	9/4/2019
SBOO [a]	Thermistor (#5)	32.53429	117.20134	36 m	2/20/2019
SBOO	Thermistor (#6)	32.53044	117.20095	36 m	12/11/2019

[a] NOT IN SERVICE (removed 6/12/2019)



Addendum 9-7

Temperature, salinity, DO, pH (total), chlorophyll *a,* CDOM, turbidity, nitrate plus nitrite, BOD, and $xC0_2$ recorded at various depths by the PLOO RTOMS during 2018 and 2019 and by the SBOO RTOMS from 2017 to 2019.



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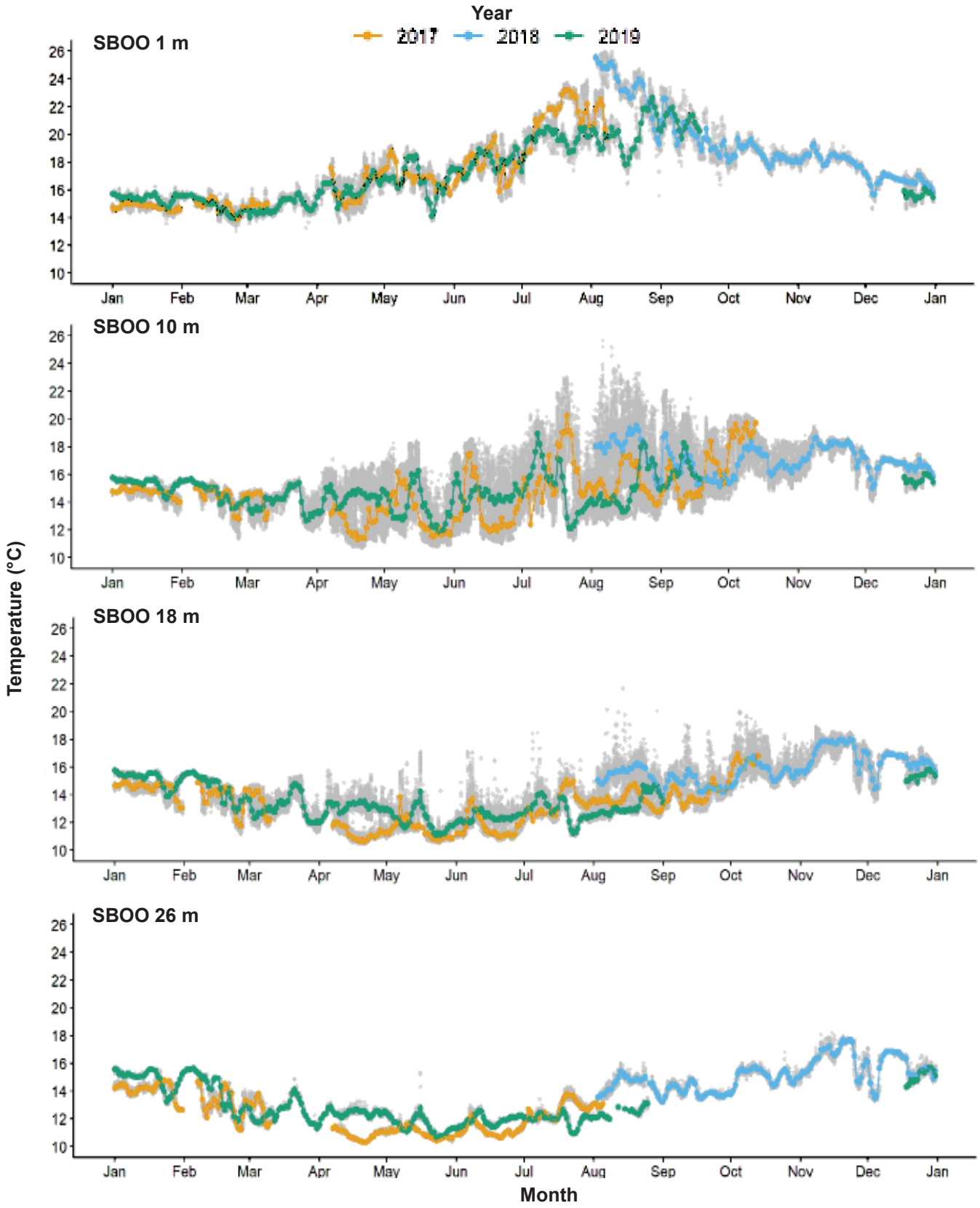

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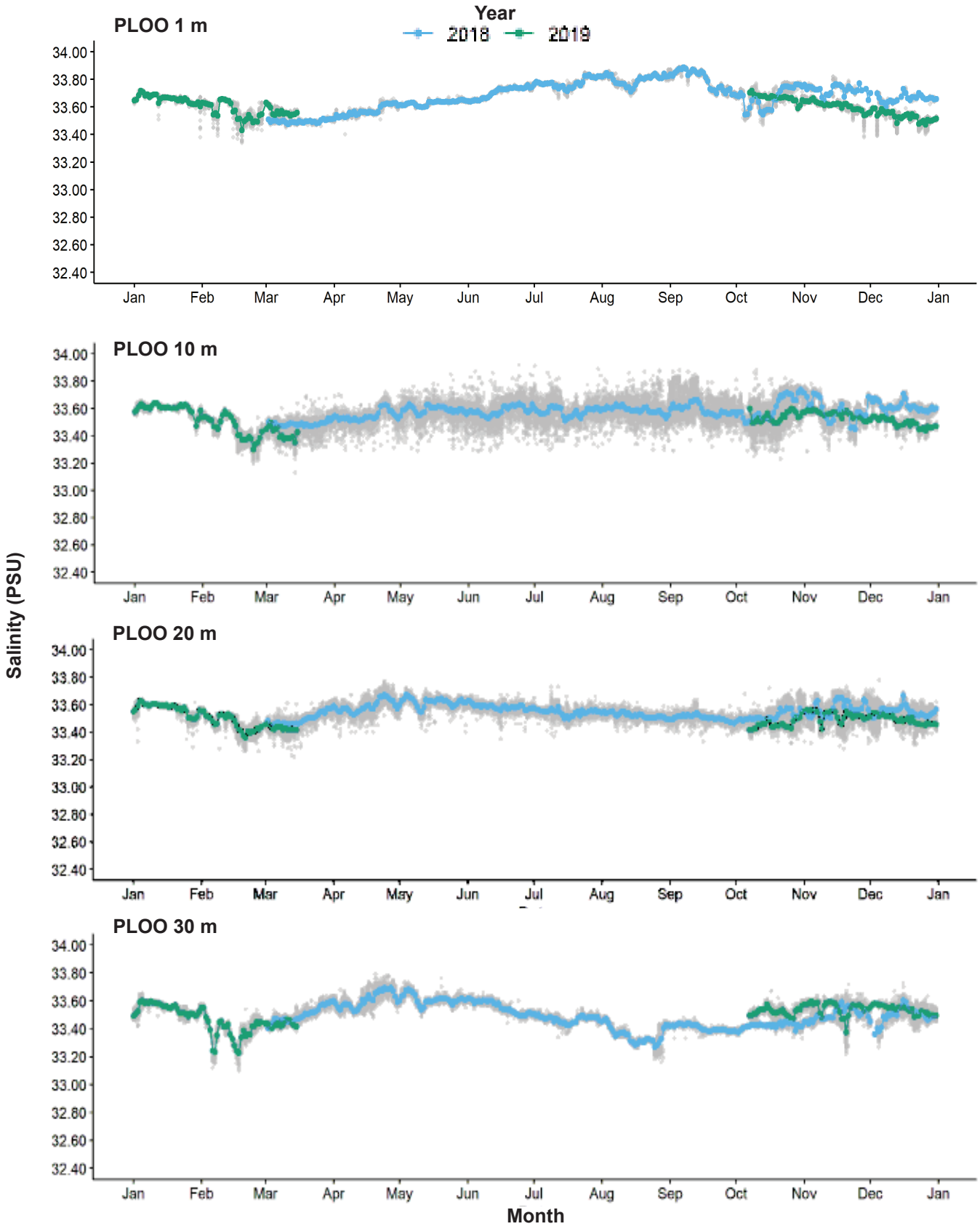

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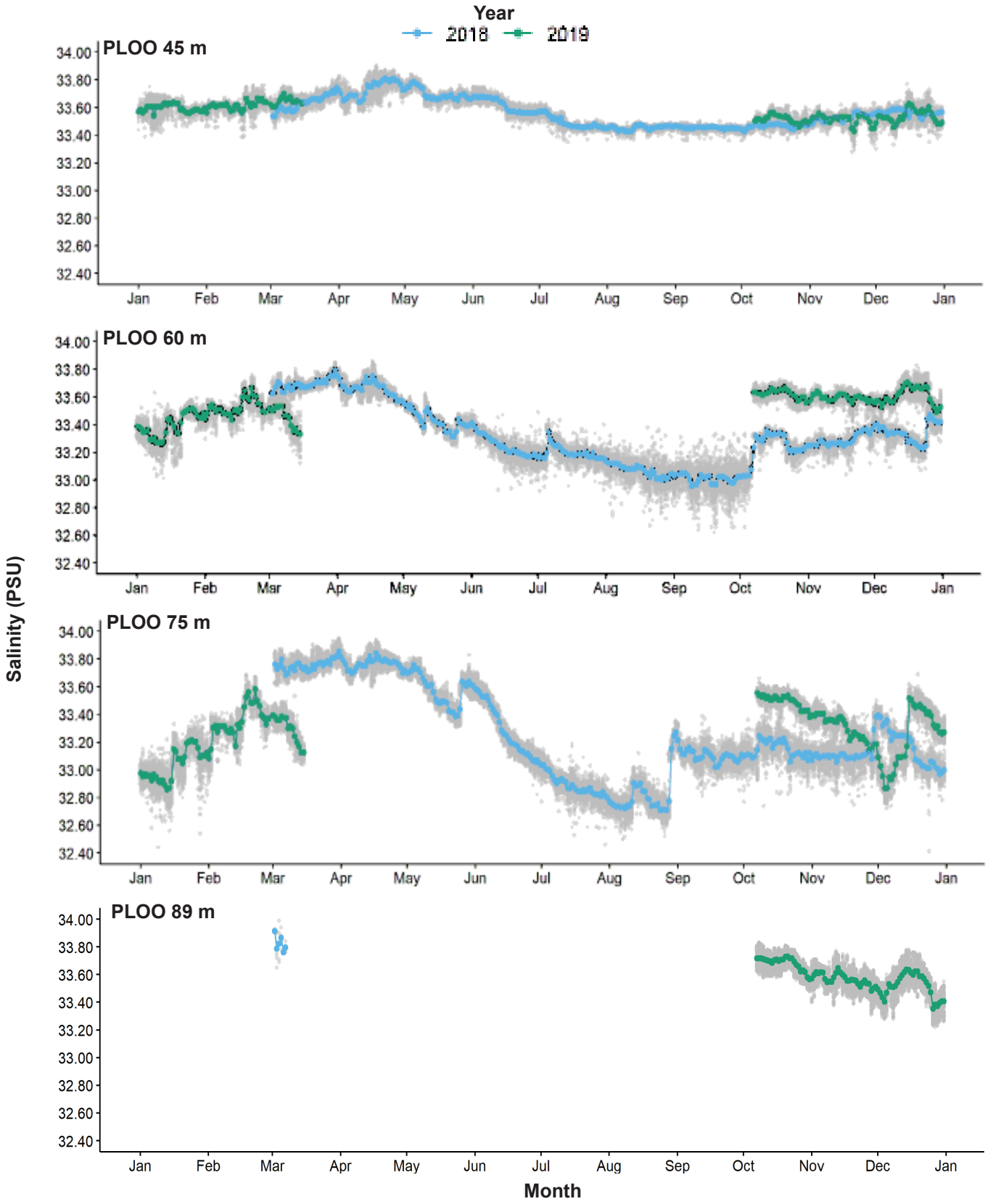

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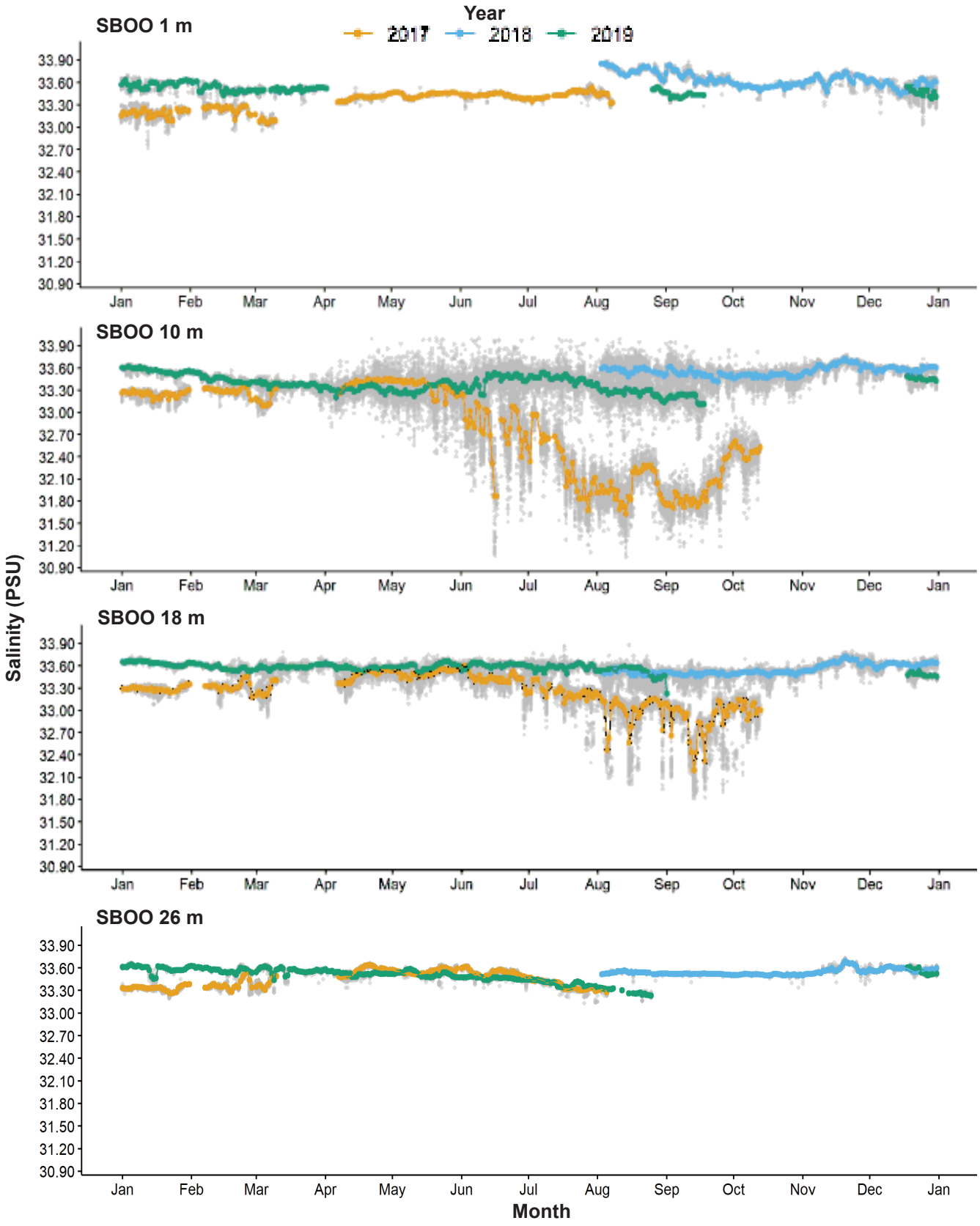

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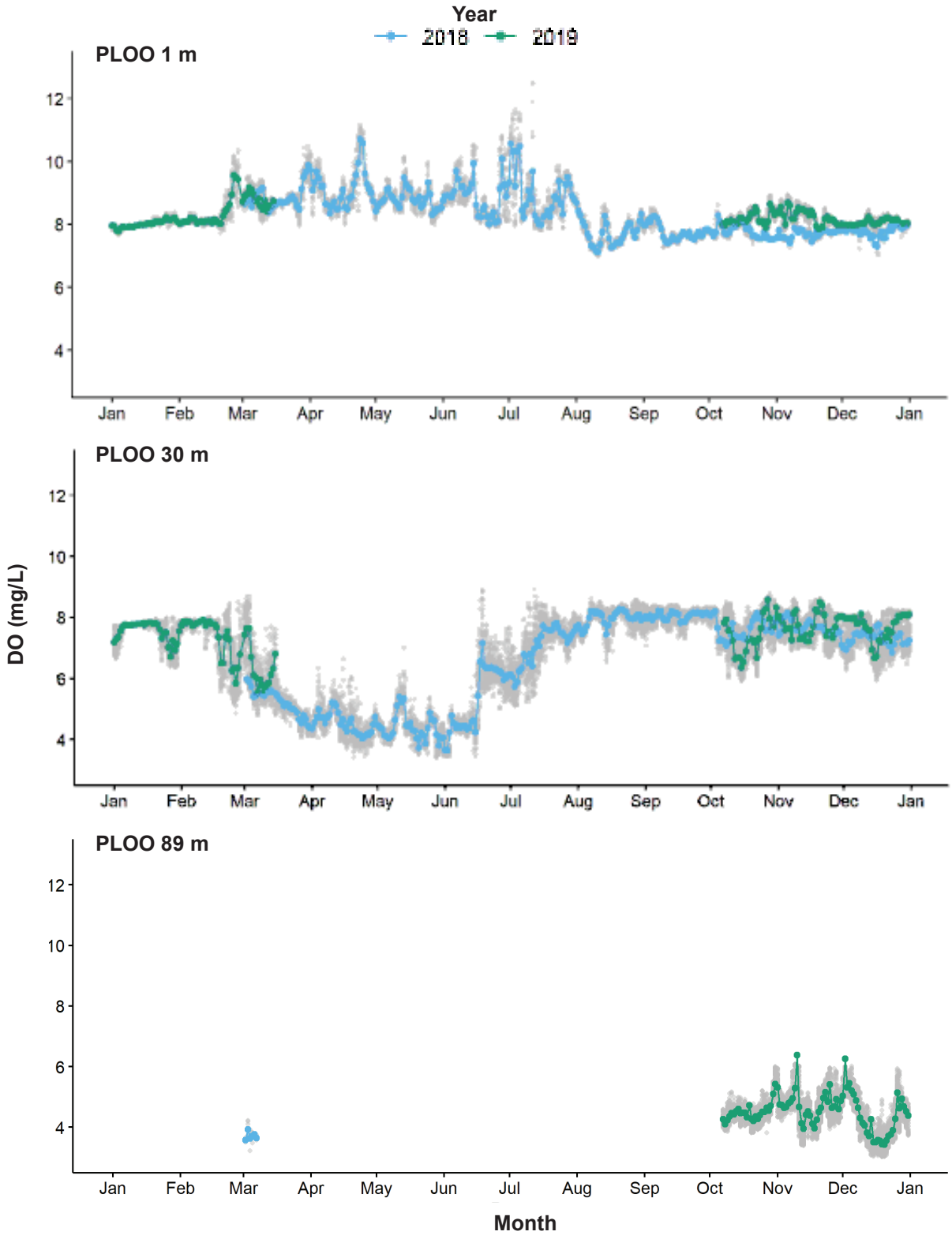

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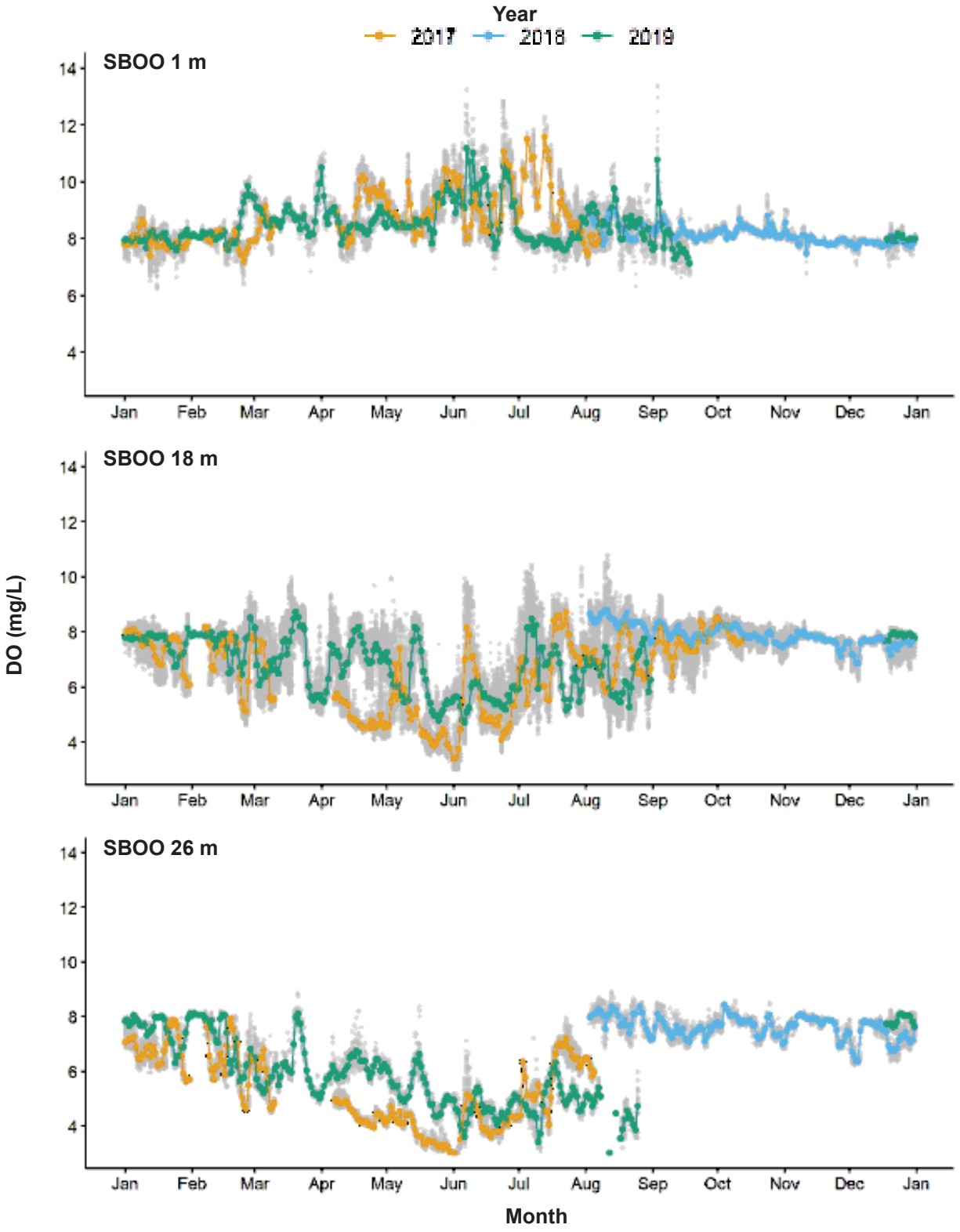

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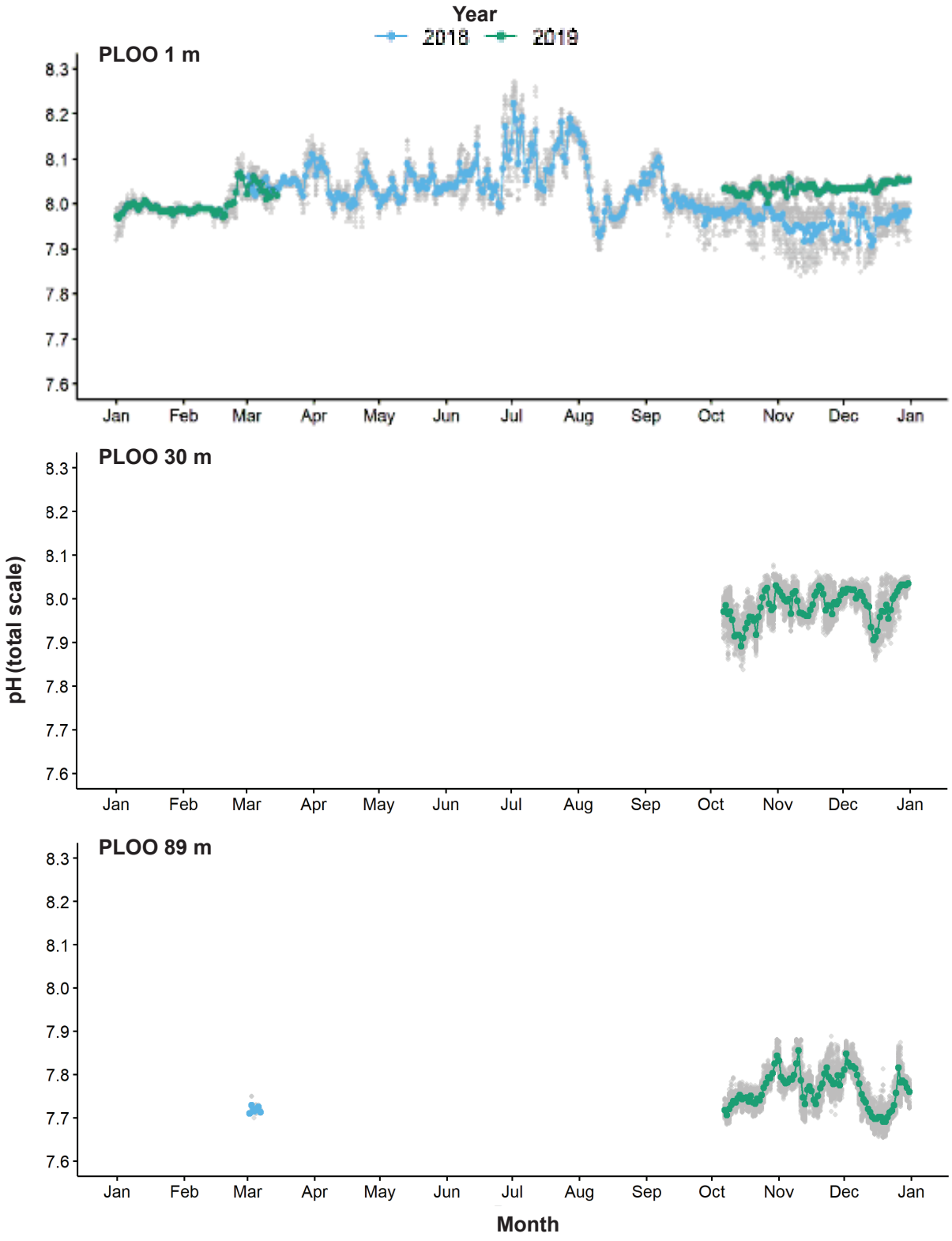

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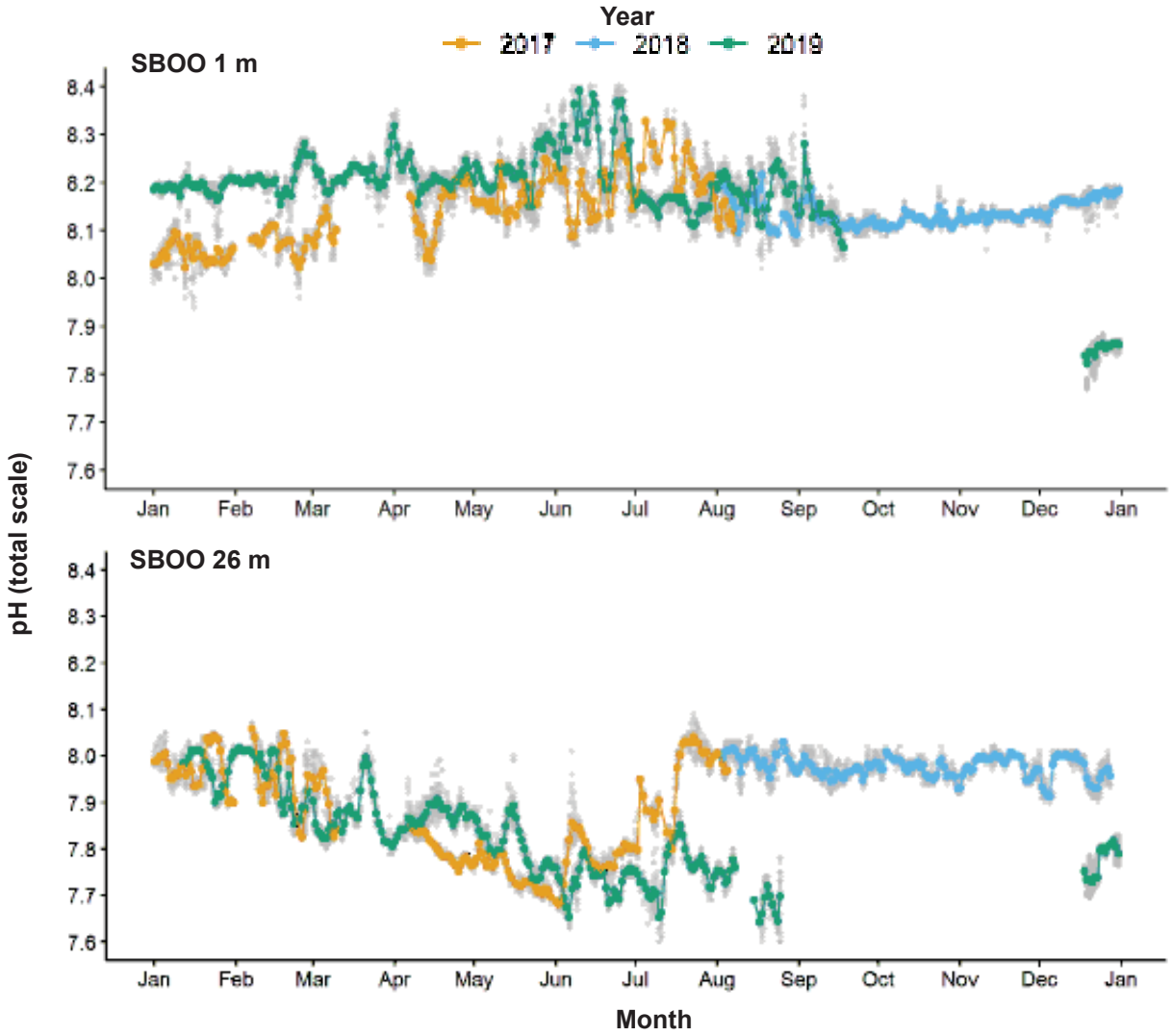

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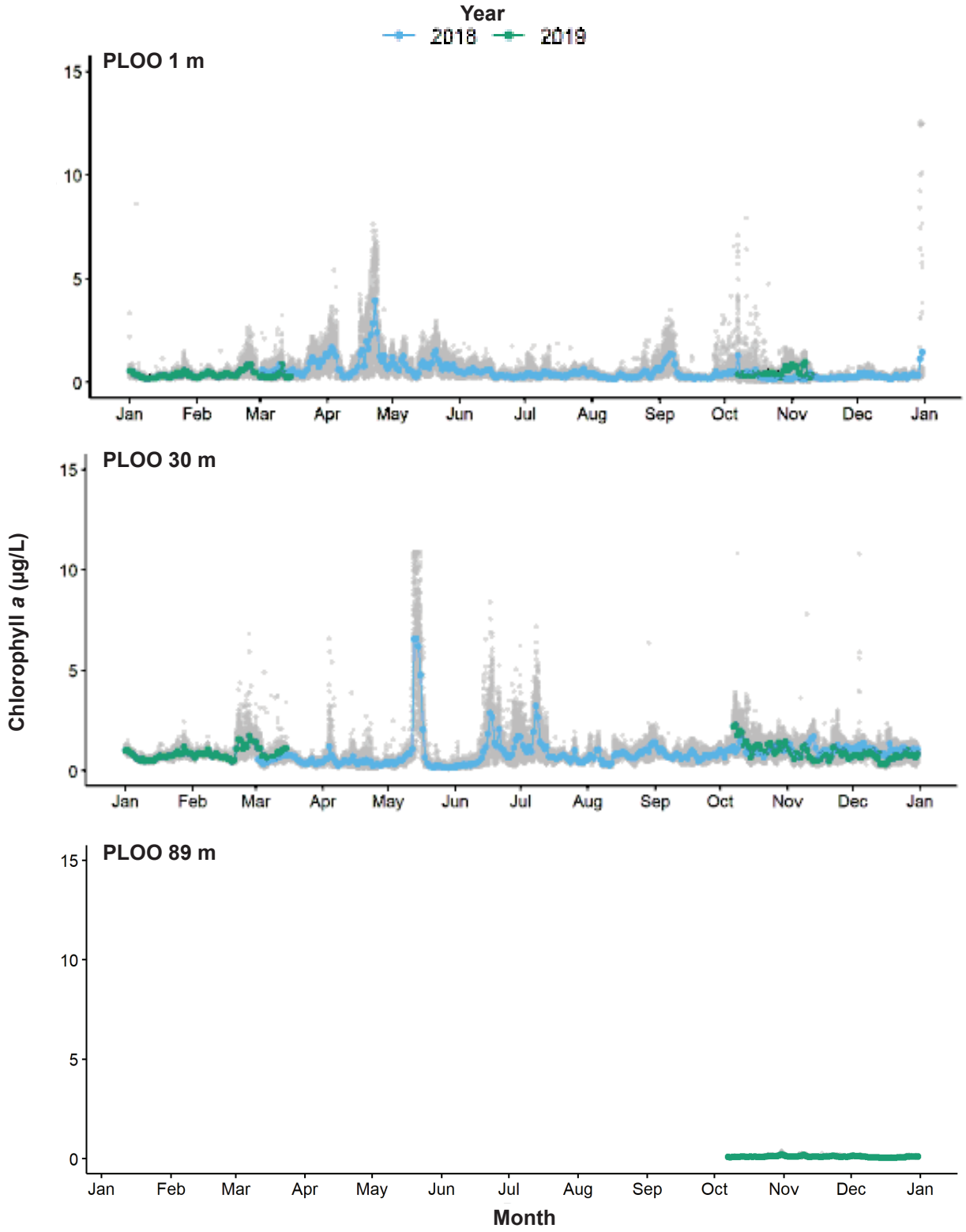

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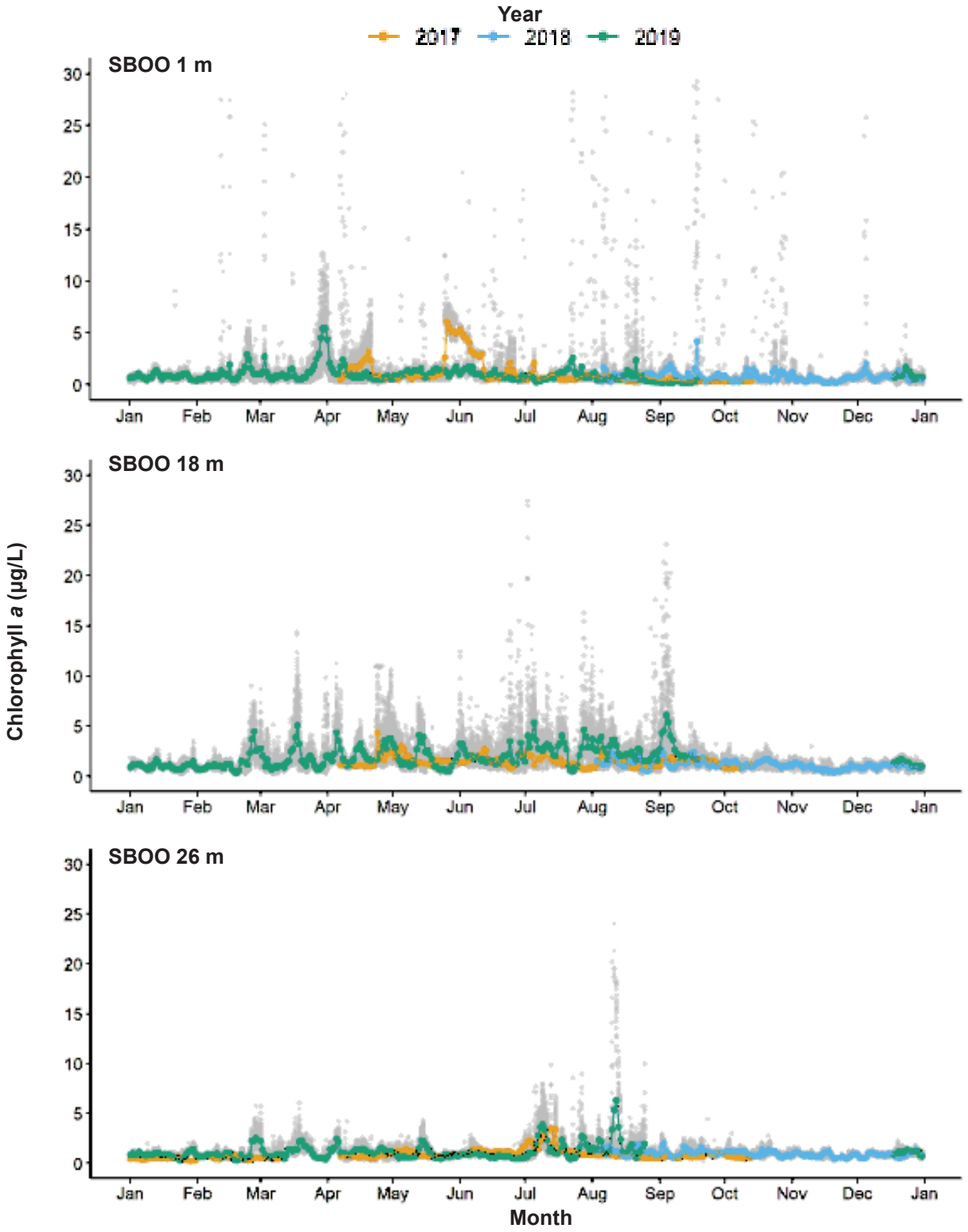

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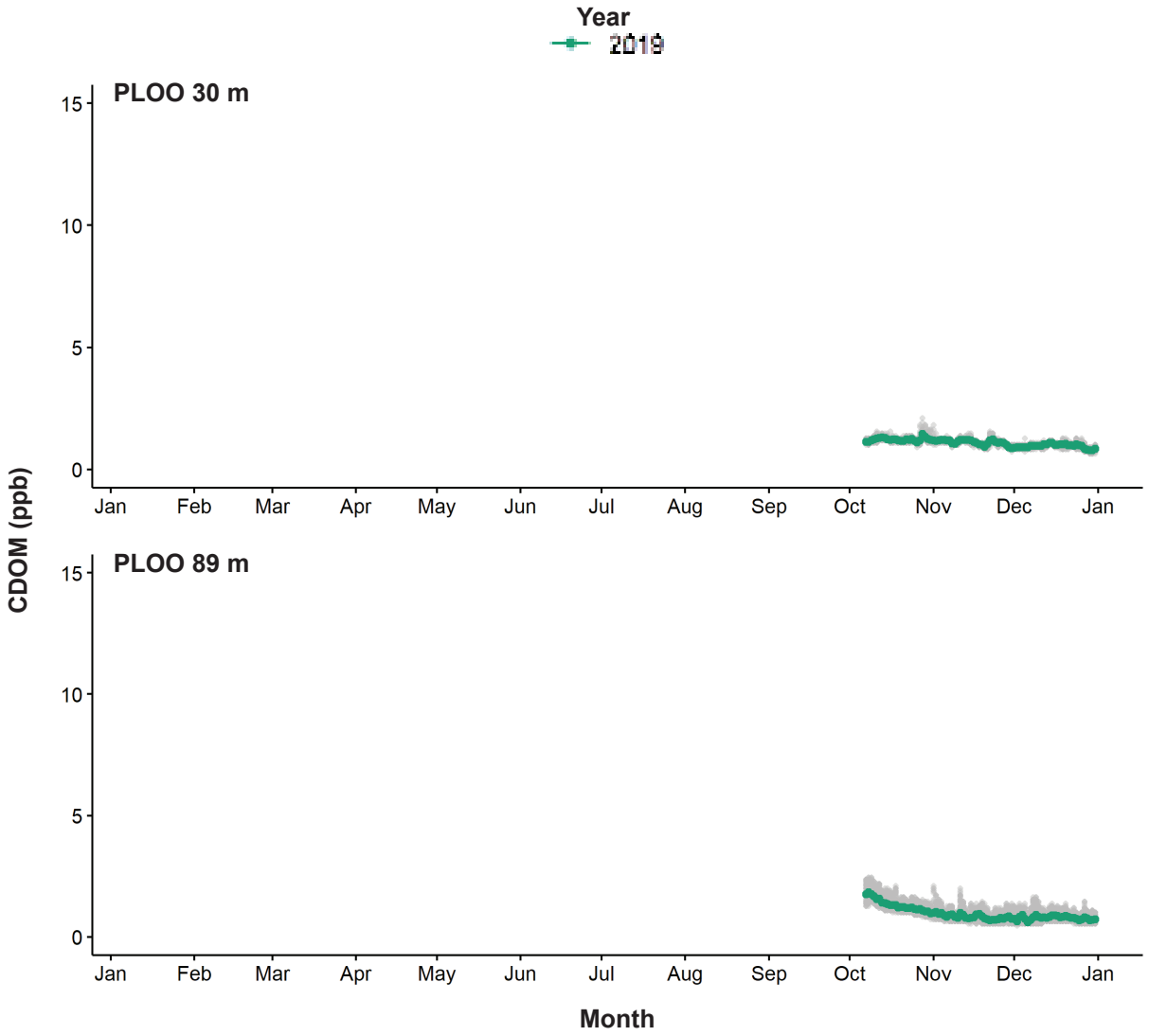

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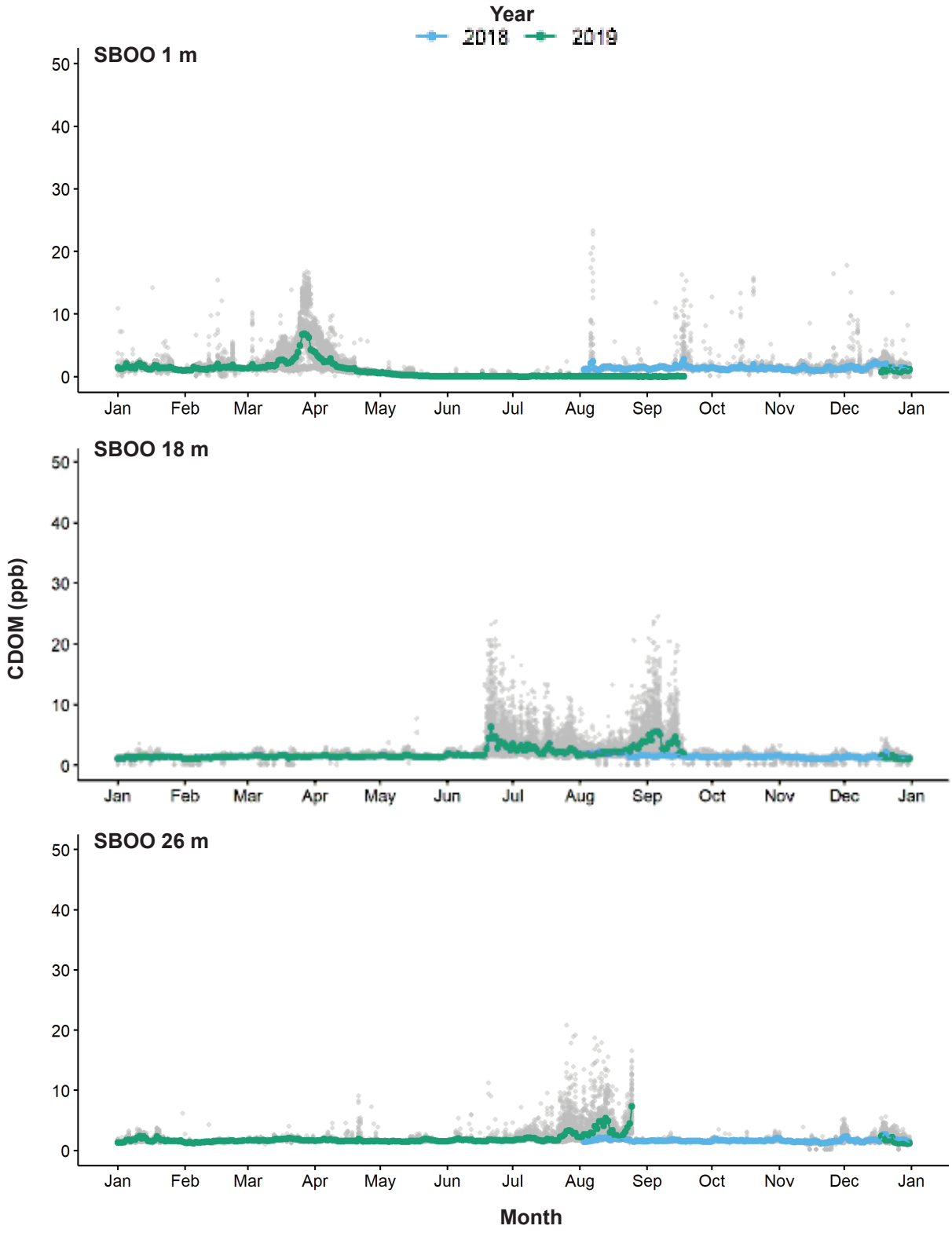

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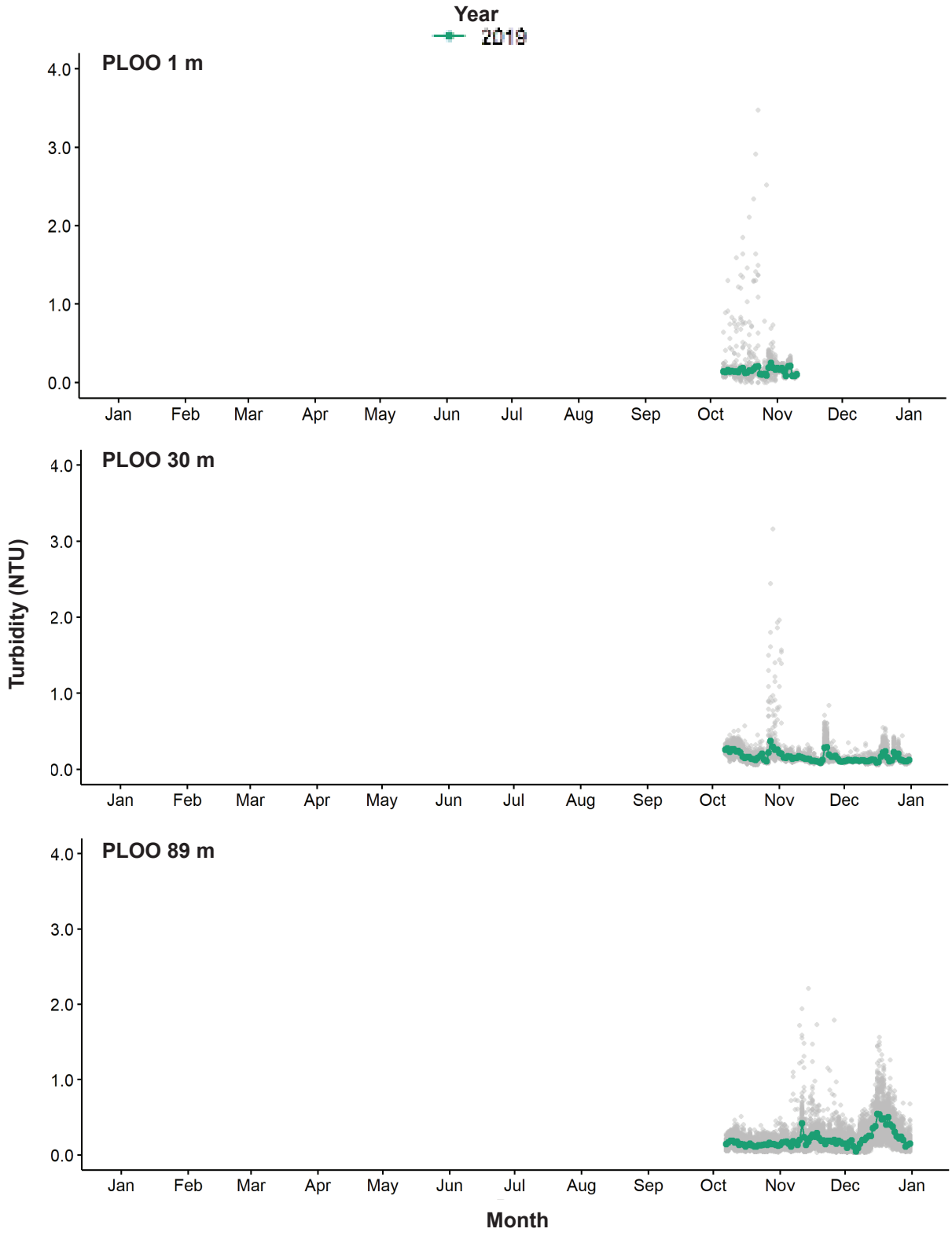
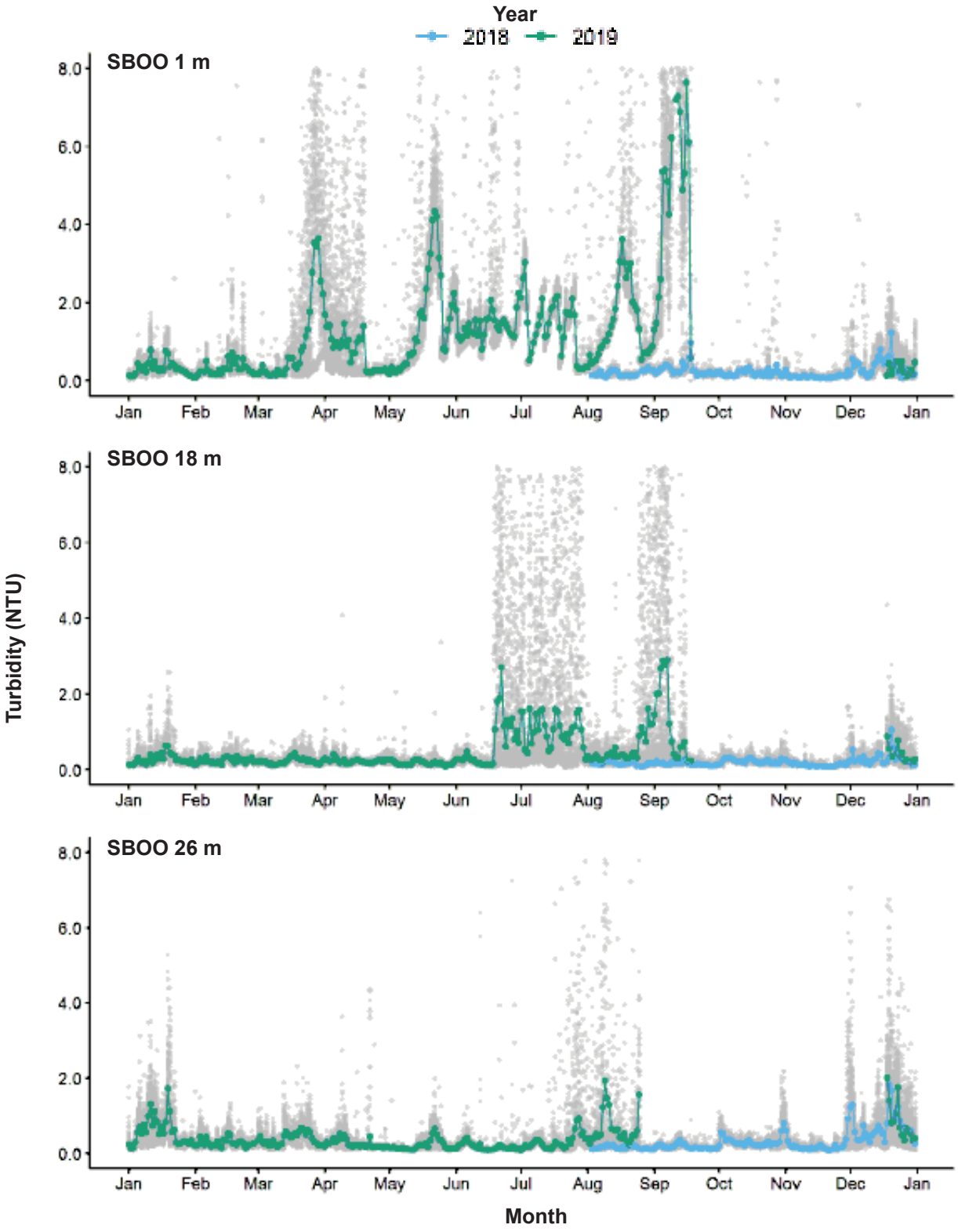


Addendum 9-7 *continued*



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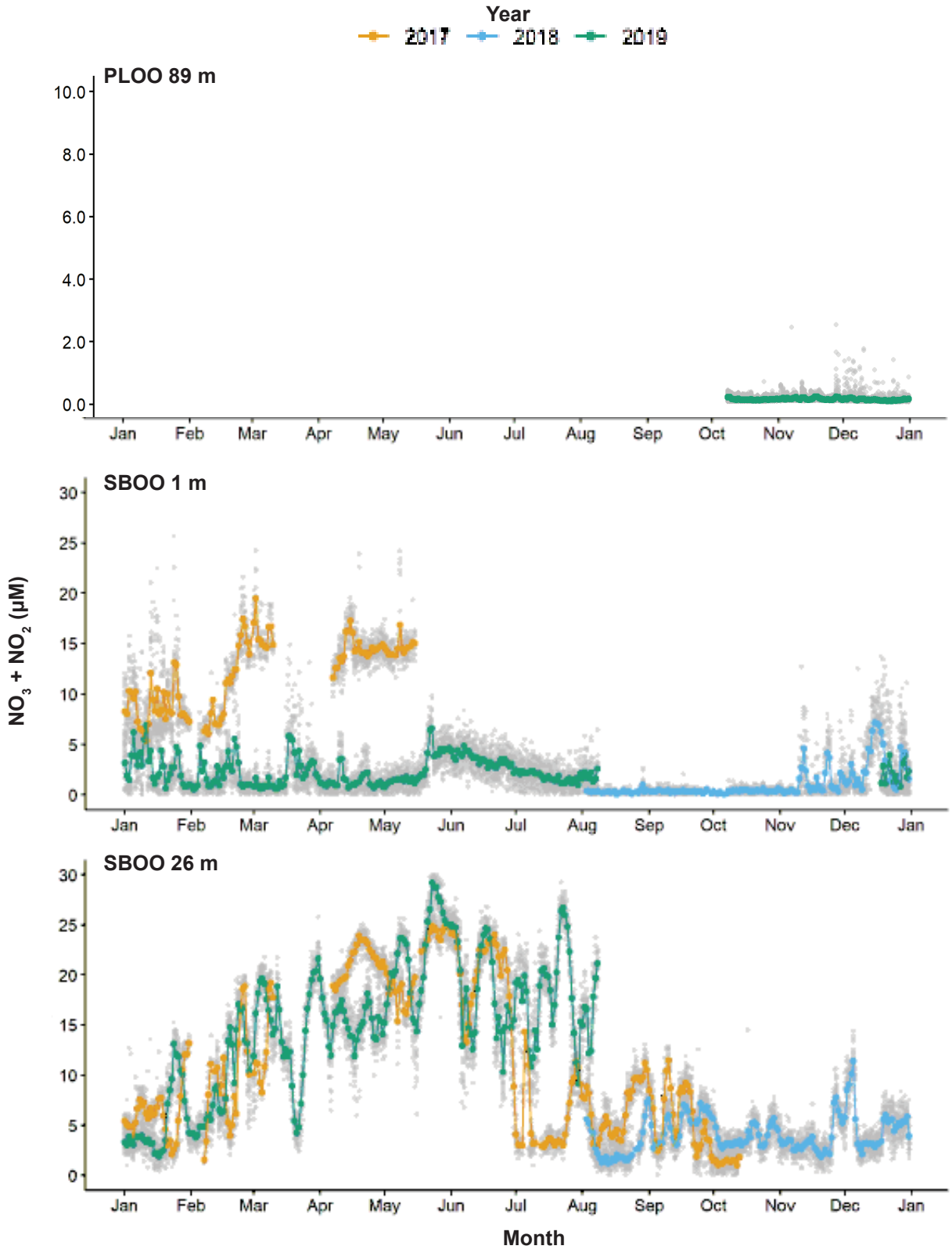
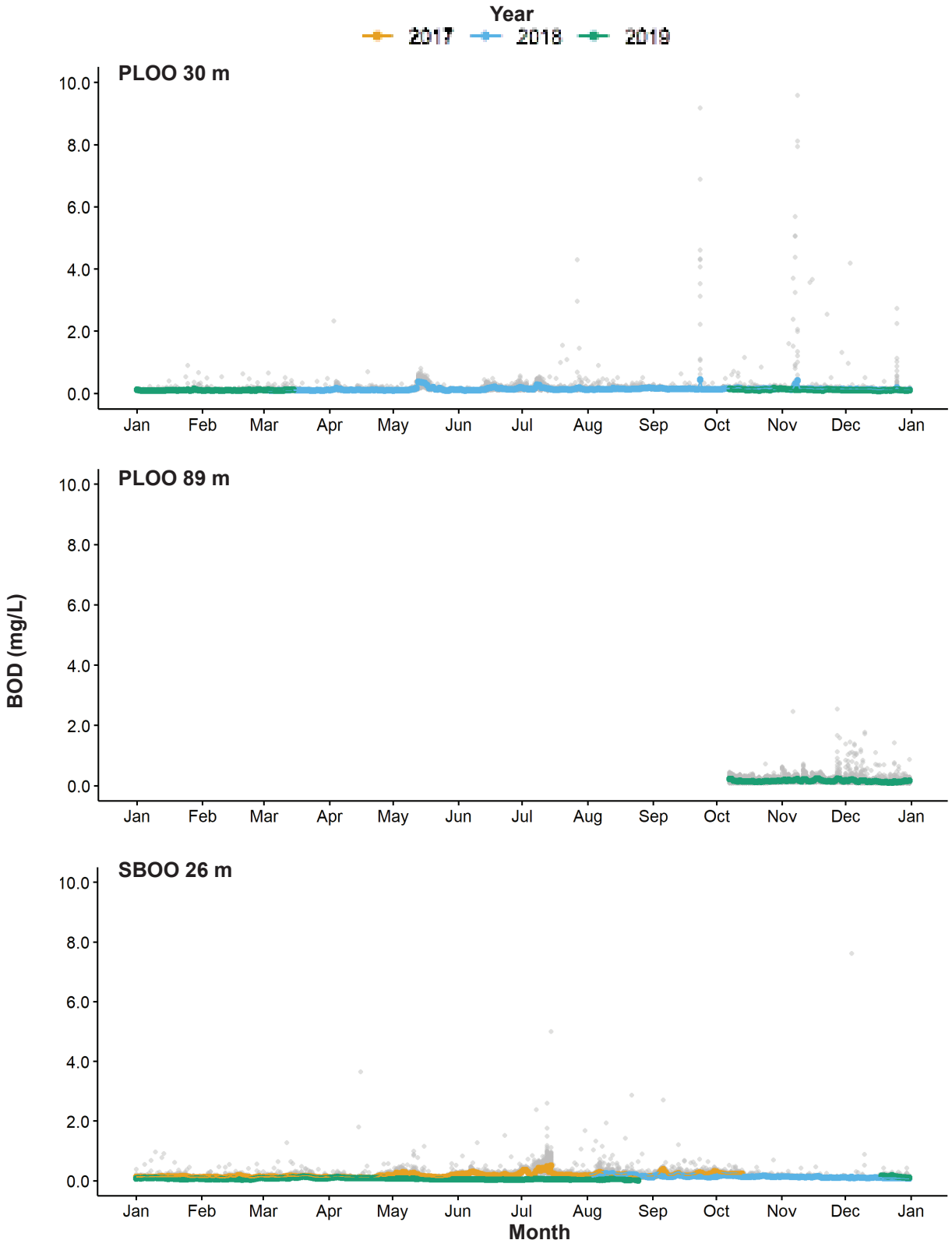


Addendum 9-7 *continued*



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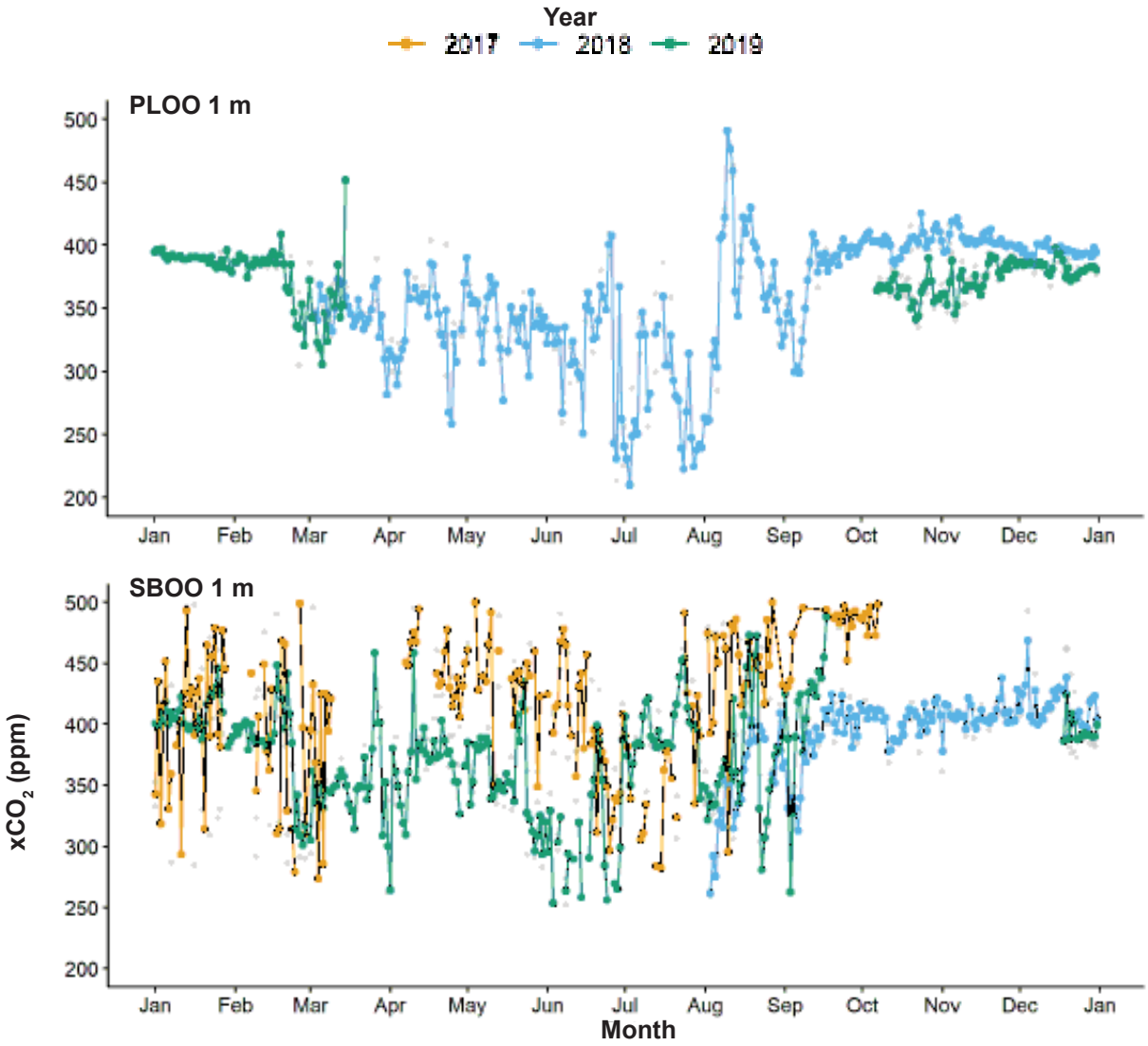


Addendum 9-7 *continued*

Addendum 9-8

Summary of dissolved oxygen, pH (total), chlorophyll *a*, CDOM, turbidity, nitrate plus nitrite, BOD, and $xC0_2$ recorded at various depths by the PLOO and SBOO RTOMS. Data include sample size (n), minimum, maximum and mean values for each depth by season. Sample sizes differed due to variations in sampling interval, deployment date, and data quality (Addenda 9-1 to 9-5); id = insufficient data (see text).

Parameter	Site	Year	Season		1 m	30 m	89 m
Oxygen (mg/L)	PLOO	2018	Winter	n	id	id	id
			Spring	min	7.9	3.4	—
				max	11.2	8.9	—
				mean	8.9	4.8	—
				n	2079	4158	0
			Summer	min	7.0	5.1	—
				max	12.5	8.9	—
				mean	8.2	7.7	—
				n	2032	4151	0
			Fall	min	7.0	6.3	—
				max	8.6	8.3	—
				mean	7.8	7.5	—
				n	1237	4325	0
		2019	Winter	min	7.7	4.8	—
				max	10.4	8.7	—
				mean	8.3	7.3	—
				n	1685	3480	0
			Fall	min	7.7	5.9	3.0
				max	8.9	8.8	6.1
				mean	8.2	7.6	4.5
				n	12,311	11,051	10,774

Addendum 9-8 *continued*

Parameter	Site	Year	Season		1 m	18 m	26 m
Oxygen (mg/L)	SBOO	2017	Winter	min	6.2	4.6	4.5
				max	9.4	8.5	8.2
				mean	8.0	7.3	6.7
				n	2890	7126	3294
			Spring	min	7.2	3.0	2.8
				max	12.9	10.0	7.1
				mean	9.2	5.0	4.1
				n	6186	9261	5339
			Summer	min	—	4.7	—
				max	—	9.5	—
				mean	—	7.3	—
				n	id	10,395	id
			Fall	n	0	id	0
		2018	Summer	min	7.5	7.0	6.9
				max	9.5	10.8	8.9
				mean	8.3	8.2	7.7
				n	1329	7994	1330
			Fall	min	6.7	6.2	6.2
				max	9.5	8.5	8.6
				mean	8.0	7.7	7.6
				n	2179	13,146	2174
		2019	Winter	min	6.6	5.0	4.8
				max	10.7	10.0	8.9
				mean	8.4	7.4	6.9
				n	2084	12,671	2089
			Spring	min	7.0	3.9	3.3
				max	13.3	9.3	8.4
				mean	9.0	6.3	5.3
				n	2102	12,839	2111
		2019	Summer	min	6.3	4.2	2.5
				max	14.0	10.4	7.2
				mean	8.2	6.6	4.9
				n	1868	8712	1080
			Fall	n	id	id	id

Addendum 9-8 *continued*

Parameter	Site	Year	Season		1 m	30 m	89 m
pH (total pH)	PLOO	2018	Winter	n	id	0	id
			Spring	min	8.0	—	—
				max	8.2	—	—
				mean	8.1	—	—
				n	2078	0	0
			Summer	min	7.9	—	—
				max	8.4	—	—
				mean	8.1	—	—
				n	2061	0	0
			Fall	min	7.8	—	—
				max	8.0	—	—
				mean	8.0	—	—
				n	1985	0	0
		2019	Winter	min	7.9	—	—
				max	8.1	—	—
				mean	8.0	—	—
				n	1719	0	0
			Fall	min	8.0	7.8	7.7
				max	8.1	8.1	7.9
				mean	8.0	8.0	7.8
				n	12,300	11,064	10,762

Addendum 9-8 *continued*

Parameter	Site	Year	Season		1 m	26 m
pH (total pH)	SBOO	2017	Winter	min	7.9	7.8
				max	8.2	8.1
				mean	8.1	8.0
				n	1409	1421
			Spring	min	8.01	7.67
				max	8.3	8.0
				mean	8.2	7.8
				n	1943	1931
			Summer	n	id	id
		2018	Summer	min	8.1	7.9
				max	8.2	8.0
				mean	8.1	8.0
				n	1330	1331
			Fall	min	8.1	7.9
				max	8.2	8.0
				mean	8.1	8.0
				n	2180	2100
		2019	Winter	min	8.1	7.8
				max	8.3	8.1
				mean	8.2	7.9
				n	2081	1820
			Spring	min	8.1	7.6
				max	8.5	8.0
				mean	8.3	7.8
				n	1701	2111
			Summer	min	8.0	7.6
				max	8.4	7.9
				mean	8.2	7.7
				n	1603	1080
			Fall	min	7.8	7.7
				max	7.9	7.8
				mean	7.9	7.8
				n	1946	1947

Addendum 9-8 *continued*

Parameter	Site	Year	Season		1 m	30 m	89 m
Chlorophyll *a*	PLOO	2018	Winter	n	id	id	0
(µg/L)			Spring	min	0.1	0.1	—
				max	7.6	10.9	—
				mean	0.8	0.9	—
				n	12,421	12,481	0
			Summer	min	0.1	0.2	—
				max	3.5	7.2	—
				mean	0.4	0.9	—
				n	12,393	12,454	0
			Fall	min	0.1	0.4	—
				max	12.6	10.8	—
				mean	0.3	1.1	—
				n	12,969	12,981	0
		2019	Winter	min	0.1	0.4	—
				max	8.6	6.8	—
				mean	0.4	0.9	—
				n	10,428	10,435	0
			Fall	min	0.0	0.1	0.0
				max	4.8	3.9	0.4
				mean	0.5	0.9	0.1
				n	4640	11,191	10,858

Addendum 9-8 *continued*

Parameter	Site	Year	Season		1 m	18 m	26 m
Chlorophyll *a*	SBOO	2017	Winter	min	—	—	0.1
(µg/L)				max	—	—	1.0
				mean	—	—	0.5
				n	0	0	5407
			Spring	min	0.3	0.5	0.2
				max	12.5	11.0	2.8
				mean	1.6	1.6	0.9
				n	9427	9301	7715
			Summer	min	0.2	0.6	0.4
				max	3.4	4.3	9.8
				mean	0.5	1.4	0.9
				n	10,480	10,421	10,146
			Fall	min	0.3	0.6	0.3
				max	0.8	1.6	3.0
				mean	0.4	0.9	0.6
				n	1438	1433	1431
		2018	Summer	min	0.1	0.2	0.2
				max	29.2	4.5	3.7
				mean	0.8	1.5	1.2
				n	7945	8004	7983
			Fall	min	0.0	0.2	0.2
				max	25.8	3.2	2.8
				mean	0.7	1.0	0.9
				n	13,109	13,140	13,126
		2019	Winter	min	0.0	0.2	0.2
				max	28.1	14.4	6.1
				mean	1.1	1.3	0.9
				n	12,645	12,678	12,659
			Spring	min	0.1	0.3	0.3
				max	28.1	19.1	4.3
				mean	1.1	2.0	1.0
				n	12,815	12,840	12,810
			Summer	min	0.0	0.3	0.3
				max	28.2	30.6	24.0
				mean	0.7	2.7	1.6
				n	11,211	11,227	6601
			Fall	n	id	id	id

Addendum 9-8 *continued*

Parameter	Site	Year	Season		1 m	30 m	89 m
CDOM (ppb)	PLOO	2018	Winter	n	id	id	id
			Spring	n	id	id	id
			Summer	n	id	id	id
			Fall	n	id	id	id
		2019	Winter	n	id	id	id
			Fall	min	—	0.64	0.45
				max	—	2.09	2.45
				mean	—	1.09	0.95
				n	id	11,191	10,860

Addendum 9-8 *continued*

Parameter	Site	Year	Season		1 m	18 m	26 m
CDOM (ppb)	SBOO	2017	Winter	n	id	id	id
			Spring	n	id	id	id
			Summer	n	id	id	id
		2018	Summer	min	0.09	0.09	1.18
				max	23.32	3.72	2.91
				mean	1.45	1.71	1.69
				n	7952	8004	7982
			Fall	min	0	0.09	0.18
				max	17.76	4.26	5.64
				mean	1.35	1.36	1.66
				n	13,105	13,139	13,126
		2019	Winter	min	0	0.09	1.00
				max	16.76	3.63	6.18
				mean	1.91	1.38	1.66
				n	12,617	12,676	12,654
			Spring	min	0	0.09	1.27
				max	9.75	23.67	11.27
				mean	0.62	1.83	1.64
				n	12,784	12,836	12,809
			Summer	min	0	0.09	1.36
				max	5.28	24.49	20.82
				mean	0.03	2.75	2.52
				n	11,107	11,220	6619
			Fall	n	id	id	id

Addendum 9-8 *continued*

Parameter	Site	Year	Season		1 m	30 m	89 m
Turbidity	PLOO	2019	Fall	min	0.00	0.06	0.03
(NTU)				max	9.74	3.16	2.21
				mean	0.38	0.16	0.20
				n	11,827	11,191	10,860

Addendum 9-8 *continued*

Parameter	Site	Year	Season		1 m	18 m	26 m
Turbidity (NTU)	SBOO	2018	Summer	min	0.06	0.06	0.07
				max	8.75	1.28	1.36
				mean	0.24	0.17	0.17
				n	7944	8004	7983
			Fall	min	0.03	0.05	0.06
				max	7.69	4.36	7.06
				mean	0.22	0.22	0.41
				n	13,099	13,140	13,125
		2019	Winter	min	0.01	0.06	0.08
				max	8.99	2.58	5.28
				mean	0.52	0.25	0.42
				n	12,609	12,677	12,658
			Spring	min	0.11	0.06	0.06
				max	8.98	8.94	7.24
				mean	1.23	0.35	0.21
				n	12,767	12,817	12,809
			Summer	min	0	0.06	0.06
				max	9.00	9.00	7.81
				mean	1.88	0.88	0.40
				n	10,393	11,082	6530
			Fall	n	id	id	id

Addendum 9-8 *continued*

Parameter	Site	Year	Season		1 m	89 m
Nitrate plus nitrite (µM)	PLOO	2018	Winter	n	id	id
			Spring	n	id	id
			Summer	n	id	id
			Fall	n	id	id
		2019	Winter	n	id	id
			Fall	min	—	8.18
				max	—	29.14
				mean	—	18.93
				n	0	1936

Addendum 9-8 *continued*

Parameter	Site	Year	Season		1 m	26 m
Nitrate plus nitrite (µM)	SBOO	2017	Winter	min	4.09	0.79
				max	32.44	20.39
				mean	10.34	7.95
				n	1180	972
			Spring	min	—	4.11
				max	—	30.81
				mean	—	20.83
				n	id	1524
			Summer	min	—	0.04
				max	—	17.39
				mean	—	5.89
				n	0	1695
			Fall	n	0	id
		2018	Summer	min	—	0.04
				max	—	9.53
				mean	—	4.00
				n	id	1329
			Fall	min	0	0.32
				max	13.70	14.53
				mean	2.07	4.13
				n	1362	2179
		2019	Winter	min	0	0.48
				max	17.87	25.81
				mean	2.45	9.64
				n	1904	2090
			Spring	min	0	5.97
				max	9.79	31.42
				mean	2.62	18.62
				n	1901	2110
			Summer	min	—	6.88
				max	—	29.25
				mean	—	17.84
				n	id	887
			Fall	n	id	0

Addendum 9-8 *continued*

Parameter	Site	Year	Season		30 m	89 m
BOD (mg/L)	PLOO	2018	Winter	n	id	0
			Spring	min	0.08	—
				max	2.32	—
				mean	0.14	—
				n	12,470	0
			Summer	min	0.09	—
				max	9.18	—
				mean	0.15	—
				n	12,447	0
			Fall	min	0.08	—
				max	9.58	—
				mean	0.14	—
				n	12,986	0
		2019	Winter	min	0.07	—
				max	0.90	—
				mean	0.10	—
				n	10,429	0
			Spring	n	0	0
			Summer	n	0	0
			Fall	min	0.07	0.07
				max	0.96	2.55
				mean	0.11	0.16
				n	10,960	9915

Addendum 9-8 *continued*

Parameter	Site	Year	Season		26 m
BOD (mg/L)	SBOO	2017	Winter	min	0.09
				max	1.28
				mean	0.13
				n	12,950
			Spring	min	0.08
				max	3.65
				mean	0.18
				n	13,103
			Summer	min	0.12
				max	5.00
				mean	0.22
				n	13,248
			Fall	n	id
		2018	Summer	min	0.10
				max	1.04
				mean	0.17
				n	7979
			Fall	min	0.07
				max	7.62
				mean	0.12
				n	13,130
		2019	Winter	min	0.04
				max	0.43
				mean	0.08
				n	12,645
			Spring	min	0.03
				max	0.25
				mean	0.07
				n	12,808
		2019	Summer	min	0
				max	2.87
				mean	0.05
				n	6485
			Fall	n	id

Addendum 9-8 *continued*

Parameter	Site	Year	Season		1 m
xCO2 (ppm)	PLOO	2018	Winter	n	id
			Spring	min	213.8
				max	409.1
				mean	334.3
				n	115
			Summer	min	209.8
				max	490.8
				mean	341.5
				n	115
			Fall	min	377.3
				max	425.4
				mean	400.75
				n	18
		2019	Winter	min	305.2
				max	451.5
				mean	377.2
				n	97
			Fall	min	334.8
				max	399.7
				mean	374.4
				n	205

Addendum 9-8 *continued*

Parameter	Site	Year	Season		1 m
xCO2 (ppm)	SBOO	2017	Winter	min	273.4
				max	498.7
				mean	389.0
				n	74
			Spring	min	296.5
				max	499.6
				mean	417.5
				n	85
			Summer	min	282.2
				max	499.6
				mean	428.7
				n	76
			Winter	n	id
		2018	Summer	min	258.3
				max	428
				mean	368.7
				n	76
			Fall	min	361.2
				max	492.8
				mean	408.6
				n	123
		2019	Winter	min	262.7
				max	490.4
				mean	379.9
				n	119
			Spring	min	251.9
				max	458.5
				mean	347.5
				n	107
			Summer	min	262
				max	487.8
				mean	386.2
				n	104
			Fall	n	id

Addendum 9-9

Summary of current velocity magnitude and direction from the PLOO RTOMS ADCP from 2018 to 2019. Data are presented as seasonal means with 95% confidence intervals. Minimum and maximum angles of velocity are not shown due to the circular nature of the measurement.

		Magnitude (mm/s)				Angle	
	Depth (m)	Min	Max	Mean	95% CI	Mean	95% CI
Winter	3	3	430	109	2	170	17
	5	0	426	122	2	169	16
	9	2	386	115	2	162	16
	13	1	370	106	2	159	18
	17	0	377	96	2	156	16
	21	1	367	78	2	161	15
	25	5	368	83	2	149	15
	29	1	347	75	1	149	14
	33	9	309	77	1	136	15
	37	5	293	75	1	125	17
	41	0	263	70	1	108	17
	45	2	260	68	1	96	19
	49	4	230	67	1	69	22
	53	1	222	67	1	56	23
	57	1	210	63	1	25	23
	61	1	191	64	1	24	24
	65	0	153	60	1	26	22
	69	4	134	57	1	67	28
	73	10	139	56	1	75	32
	77	4	142	44	2	115	34
	81	3	112	32	2	102	29
	85	9	77	30	1	103	32
	89	15	74	42	1	118	21
	93	14	71	38	1	114	38
Spring	3	6	543	151	2	178	20
	5	14	560	163	2	175	21
	9	6	525	155	2	169	21
	13	5	479	137	2	170	21
	17	1	426	123	2	170	20
	21	1	356	106	1	174	22
	25	2	342	103	1	161	24
	29	0	293	91	1	171	26
	33	0	270	87	1	139	26
	37	0	247	80	1	90	26
	41	3	246	75	1	55	27
	45	0	226	67	1	25	27
	49	1	210	64	1	15	27
	53	0	194	61	1	2	25

Addendum 9-9 *continued*

		Magnitude (mm/s)				Angle	
	Depth (m)	Min	Max	Mean	95% CI	Mean	95% CI
	57	0	170	59	1	348	24
	61	1	176	63	1	350	25
	65	3	174	62	1	346	24
	69	0	157	60	1	351	22
	73	0	146	57	1	357	21
	77	0	133	53	1	37	17
	81	1	134	54	1	95	14
	85	10	154	59	1	113	14
	89	12	169	64	1	123	16
	93	20	130	60	1	126	19
Summer	3	9	469	215	2	170	20
	5	11	424	225	2	168	21
	9	31	411	224	2	164	22
	13	21	378	197	1	163	21
	17	45	339	172	1	163	21
	21	35	308	126	1	166	20
	25	27	302	124	1	157	20
	29	7	297	92	1	155	20
	33	0	281	93	1	145	19
	37	5	268	82	1	132	19
	41	0	258	74	1	111	19
	45	0	250	68	1	56	19
	49	1	239	67	1	46	18
	53	0	227	68	1	26	20
	57	1	215	68	1	14	23
	61	8	202	69	1	10	24
	65	9	195	68	1	2	25
	69	13	190	65	1	5	24
	73	6	185	62	1	25	24
	77	3	124	49	1	79	25
	81	2	62	33	1	119	31
	85	7	55	32	1	135	48
	89	11	56	40	1	151	64
	93	23	73	46	1	187	54
Fall	3	2	412	167	2	188	21
	5	1	516	186	2	180	20
	9	2	535	189	2	180	19
	13	2	538	181	2	178	18
	17	1	485	172	2	177	17
	21	1	376	145	2	185	18

Addendum 9-9 *continued*

	Magnitude (mm/s)				Angle	
Depth (m)	Min	Max	Mean	95% CI	Mean	95% CI
25	4	389	144	1	170	19
29	1	342	126	1	169	20
33	8	344	122	1	150	19
37	10	339	114	1	128	19
41	8	340	106	1	105	19
45	5	335	102	1	77	17
49	4	330	100	1	68	17
53	1	317	94	1	44	16
57	0	291	86	1	32	15
61	5	280	80	1	45	13
65	3	260	70	2	46	13
69	0	134	50	1	34	16
73	9	101	38	1	24	20
77	5	83	37	1	37	22
81	8	59	30	1	64	13
85	11	60	34	1	125	22
89	16	69	46	1	152	38
93	27	82	57	1	165	48

Addendum 9-10

Summary of current velocity magnitude and direction from the SBOO RTOMS ADCP from 2017 to 2019. Data are presented as seasonal means with 95% confidence intervals. Minimum and maximum angles of velocity are not shown due to the circular nature of the measurement.

		Magnitude (mm/s)				Angle	
	Depth (m)	Min	Max	Mean	95% CI	Mean	95% CI
Winter	3	0	338	101	1	176	20
	6	2	395	98	1	149	20
	10	1	390	100	1	132	21
	14	2	302	97	1	116	20
	18	4	282	96	1	96	20
	22	3	223	74	1	43	18
	26	5	214	70	1	8	26
	30	2	145	41	0	92	55
Spring	3	5	310	106	1	161	24
	6	0	319	100	1	152	22
	10	0	300	84	1	141	23
	14	0	243	78	1	96	22
	18	7	216	78	1	71	22
	22	3	173	67	1	26	19
	26	4	148	54	1	20	25
	30	0	102	34	0	89	58
Summer	3	0	352	104	1	153	29
	6	1	640	122	1	147	30
	10	1	305	81	1	140	31
	14	2	203	66	1	120	26
	18	2	201	67	1	89	22
	22	1	152	61	0	48	22
	26	8	131	52	0	47	26
	30	0	117	37	0	69	46
Fall	3	0	261	91	1	291	21
	6	0	286	89	1	347	19
	10	1	267	83	1	9	20
	14	1	262	86	1	13	21
	18	4	287	87	1	10	22
	22	3	221	76	1	354	24
	26	4	223	63	1	349	28
	30	2	104	38	0	91	48

Addendum 9-11

Summary of current velocity magnitude and direction from the bottom-mounted 100-m ADCP at the PLOO from 2018 to 2019. Data are presented as seasonal means with 95% confidence intervals. Minimum and maximum angles of velocity are not shown due to the circular nature of the measurement.

		Magnitude (mm/s)				Angle	
	Depth (m)	Min	Max	Mean	95% CI	Mean	95% CI
Winter	9	2	285	104	3	152	22
	13	4	331	117	3	173	22
	17	1	322	109	3	170	22
	21	1	316	103	3	170	22
	25	2	302	99	3	169	22
	29	0	316	96	3	164	22
	33	2	320	93	3	151	21
	37	0	273	89	3	357	22
	41	0	263	84	3	354	22
	45	1	258	81	3	355	23
	49	0	251	79	2	357	23
	53	1	242	77	2	358	22
	57	1	239	75	2	357	22
	61	1	240	72	2	354	21
	65	6	234	69	2	353	22
	69	4	224	66	2	357	22
	73	1	210	62	2	5	23
	77	1	192	60	2	19	23
	81	1	174	58	2	50	23
	85	2	153	56	1	97	24
	89	2	150	52	1	142	28
	93	0	130	46	1	174	35
Spring	9	1	461	135	3	166	22
	13	2	473	141	3	180	22
	17	2	408	128	3	186	24
	21	1	368	116	3	194	25
	25	1	334	106	2	212	27
	29	1	302	97	2	255	28
	33	2	277	89	2	302	29
	37	0	253	82	2	327	30
	41	0	240	77	2	336	31
	45	2	228	72	2	337	32
	49	0	222	68	1	334	33
	53	1	214	66	1	330	34
	57	1	200	66	1	326	33
	61	0	191	65	1	324	32
	65	1	186	64	1	323	31
	69	1	184	62	1	326	29

Addendum 9-11 *continued*

		Magnitude (mm/s)				Angle	
	Depth (m)	Min	Max	Mean	95% CI	Mean	95% CI
	73	0	177	58	1	332	25
	77	1	171	55	1	346	22
	81	0	172	54	1	14	19
	85	1	178	54	1	51	18
	89	1	185	52	1	81	18
	93	2	185	45	1	106	20
Summer	9	4	452	144	3	156	22
	13	1	408	148	3	160	21
	17	3	381	132	2	161	21
	21	2	369	115	2	161	21
	25	4	358	99	2	157	21
	29	1	335	87	2	150	21
	33	5	309	77	2	137	21
	37	2	292	71	1	81	21
	41	0	273	66	1	27	21
	45	2	246	64	1	8	22
	49	1	227	63	1	359	23
	53	1	217	62	1	355	24
	57	0	204	61	1	351	25
	61	1	200	61	1	345	24
	65	1	198	63	1	341	24
	69	2	191	63	1	340	24
	73	3	182	61	1	343	23
	77	1	171	57	1	349	20
	81	1	168	54	1	2	18
	85	1	170	52	1	21	17
	89	2	173	49	1	45	19
	93	1	147	40	1	70	24
Fall	9	5	452	174	6	176	18
	13	4	489	184	6	177	18
	17	18	438	175	5	173	17
	21	6	379	159	4	169	17
	25	2	350	146	4	163	18
	29	1	357	135	4	155	18
	33	1	365	127	4	143	18
	37	5	340	118	4	115	17
	41	1	329	112	4	90	17
	45	2	330	109	4	76	17
	49	2	315	108	3	62	16
	53	2	305	105	3	50	16

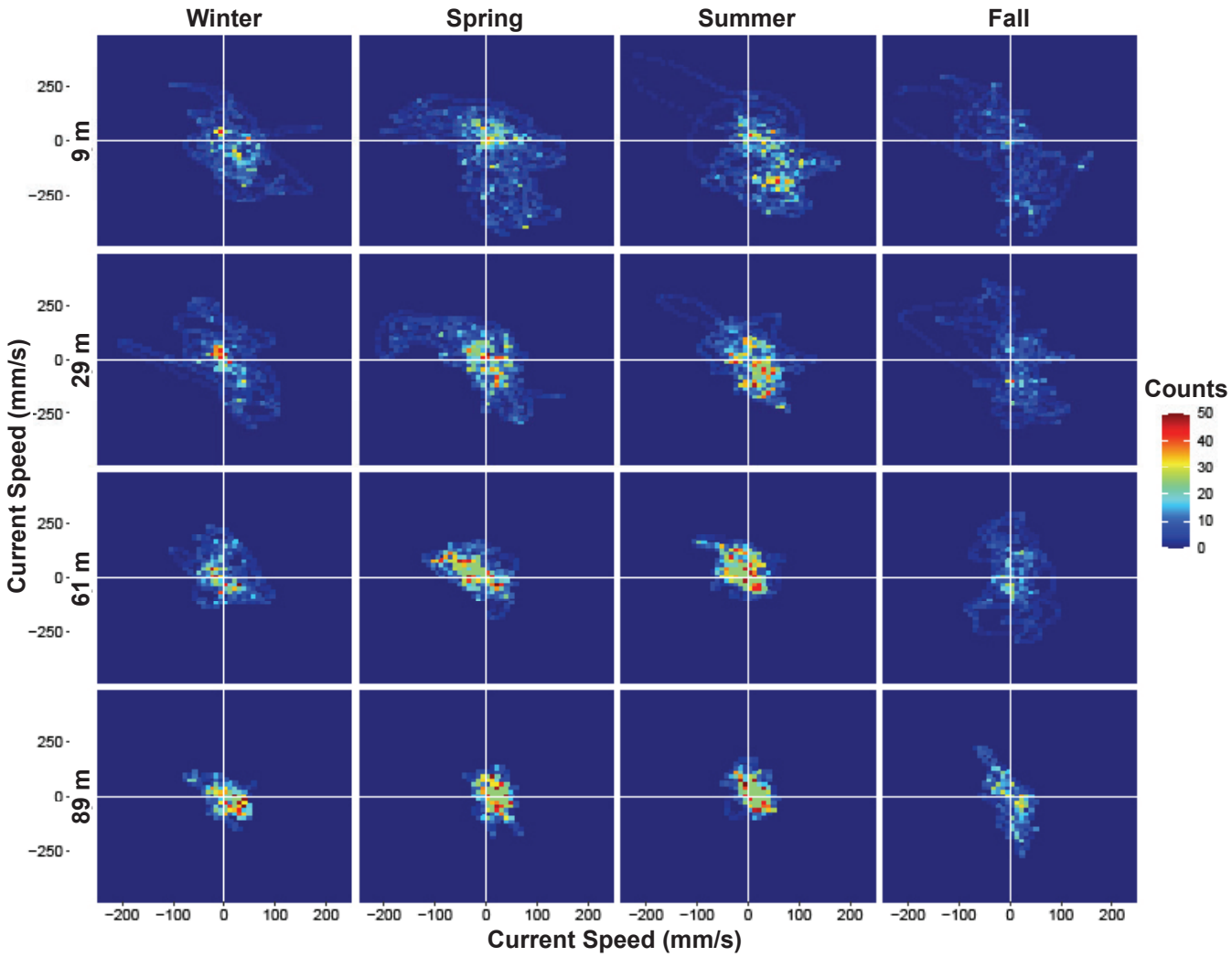
Addendum 9-11 *continued*

	Magnitude (mm/s)				Angle	
Depth (m)	Min	Max	Mean	95% CI	Mean	95% CI
57	1	300	103	3	42	15
61	1	294	101	3	34	15
65	5	302	100	3	26	14
69	3	304	98	3	19	13
73	1	308	96	3	21	12
77	2	316	94	3	37	12
81	1	319	92	3	88	12
85	2	307	90	3	149	12
89	3	269	85	3	173	14
93	2	206	74	2	191	16

Addendum 9-12

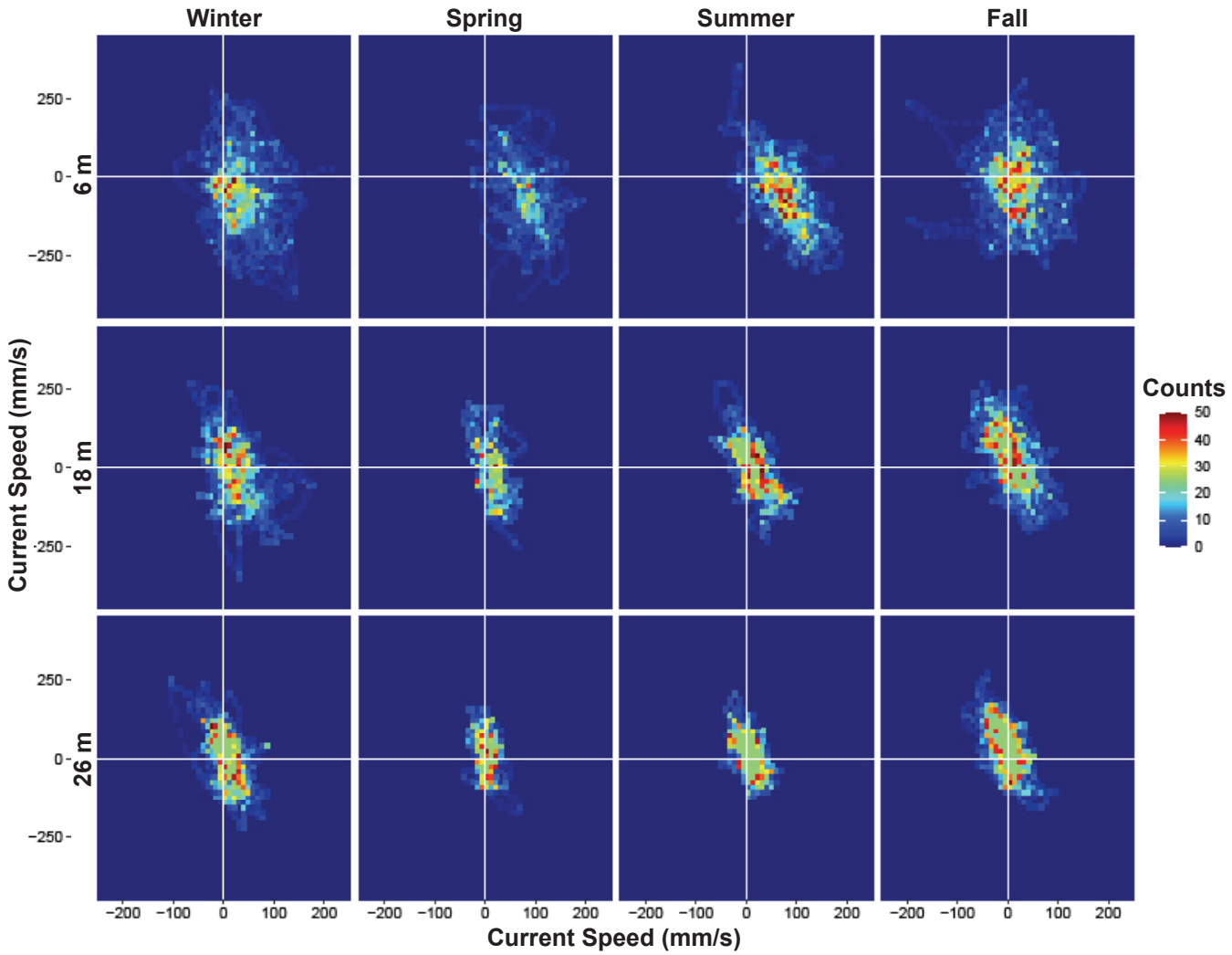
Summary of current velocity magnitude and direction from the bottom-mounted 36-m ADCP at the SBOO from 2017 to 2019. Data are presented as seasonal means with 95% confidence intervals. Minimum and maximum angles of velocity are not shown due to the circular nature of the measurement.

		Magnitude (mm/s)				Angle	
	Depth (m)	Min	Max	Mean	95% CI	Mean	95% CI
Winter	6	3	447	115	2	142	20
	10	1	459	95	2	145	20
	14	2	410	93	2	127	20
	18	1	347	90	2	112	21
	22	0	283	82	1	92	19
	26	0	278	72	1	49	18
	30	0	235	58	1	355	22
Spring	6	13	417	134	2	124	20
	10	2	364	105	2	151	16
	14	10	281	92	2	128	15
	18	1	255	78	2	94	14
	22	0	226	67	2	61	14
	26	1	180	54	1	23	14
	30	0	127	40	1	1	15
Summer	6	2	354	128	2	129	23
	10	2	302	104	2	145	22
	14	2	268	85	1	128	22
	18	0	281	70	1	101	20
	22	1	258	58	1	57	19
	26	0	204	51	1	25	19
	30	0	141	43	1	4	20
Fall	6	0	307	101	2	144	24
	10	1	296	95	1	20	21
	14	0	288	90	1	21	20
	18	1	279	85	1	15	20
	22	1	262	79	1	7	20
	26	1	266	69	1	355	19
	30	1	214	55	1	338	19



Addendum 9-13

Frequency distribution by season of current speed (mm/s) and direction from 2018 through 2019 at the bottom-mounted 100-m ADCP near the PLOO at representative depth bins. On the x-axis, positive values indicate an eastward direction while negative values indicate a westward direction. On the y-axis, positive values indicate a northward direction while negative values indicate a southward direction.



Addendum 9-14

Frequency distribution by season of current speed (mm/s) and direction from 2017 through 2019 at the bottom-mounted 36-m ADCP near the SBOO at representative depth bins. On the x-axis, positive values indicate an eastward direction while negative values indicate a westward direction. On the y-axis, positive values indicate a northward direction while negative values indicate a southward direction.

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