studyName	Event Number	Event Grouping	Cast Number	Activity	Event Name	Datetime GMT	Datetime PST	Latitude (º)	Longitude (º)	Calculated Grid Line	Calculated Grid Station	Operator	Comments (on ship)	Notes
P1604	1	Test		Ancillary	TEST EVENT	2016-04-18 21:36:55	2016-04-18 13:37:00	32.70668	-117.2363	94.5	27.7	MR		
P1604	2	Test		Ancillary	TEST EVENT	2016-04-18 21:37:02	2016-04-18 13:37:06	32.70668	-117.2363	94.5	27.7	MR		
P1604	3	Test		Ancillary	TEST EVENT	2016-04-19 19:01:31	2016-04-19 11:01:35	32.72017	-117.2007	94.6	27.2	CA		
P1604	4	Test		Ancillary	TEST EVENT	2016-04-19 19:04:35	2016-04-19 11:04:37	32.72015	-117.2007	94.6	27.2	CM	Test at anchorage	
P1604	5	Test		Ancillary	MVP DEPLOYED	2016-04-20 14:41:04	2016-04-20 06:41:12	33.29018	-118.8243	88.6	41	CA	Test casts	
P1604	6	Test		Ancillary	MVP RECOVERED	2016-04-20 15:45:31	2016-04-20 07:45:38	33.31088	-118.9821	88.2	42.6	2M	DAY/NIGHT: Day; SEA CONDITIONS: Calm	
P1604	7.1	Test	1	CTD	CTD DEPLOYED	2016-04-20 16:35:33	2016-04-20 08:35:39	33.31052	-118.9837	88.2	42.6	2M		
P1604	7.2	Test	1	CTD	CTD AT DEPTH	2016-04-20 16:37:10	2016-04-20 08:37:14	33.31053	-118.9837	88.2	42.6	3M	22m	
P1604	7.3	Test	1	CTD	CTD RECOVERED	2016-04-20 17:12:06	2016-04-20 09:12:11	33.31052	-118.9837	88.2	42.6	3M	erase previous event ; SEA CONDITIONS: Calm;DAY/NIGHT: Day	
P1604	7.4	Test	TMC 1	Ancillary	TRACE ROSETTE DEPLOYED- Winch Test	2016-04-20 18:14:25	2016-04-20 10:14:28	33.31051	-118.9837	88.2	42.6	3M	DAY/NIGHT: Day; SEA CONDITIONS: Calm	
P1604	7.5	Test	TMC 1	Ancillary	TRACE ROSETTE RECOVERED (TEST)	2016-04-20 18:48:47	2016-04-20 10:48:50	33.3105	-118.9837	88.2	42.6	CM		
P1604	7.6	Test	TMC 2	Ancillary	TRACE ROSETTE DEPLOYED	2016-04-20 20:06:45	2016-04-20 12:08:47	33.31055	-118.9837	88.2	42.6	CM		
P1604	7.7	Test	TMC 2	Ancillary	TRACE ROSETTE RECOVERED	2016-04-20 20:30:53	2016-04-20 12:30:57	33.31055	-118.9837	88.2	42.6	CM	20-Apr-2016erase previous event ;	
P1604	7.8	Test		BONGO	BONGO DEPLOYED	2016-04-20 21:03:37	2016-04-20 13:03:38	33.3101	-118.9884	88.2	42.7	CM	TEST	
P1604	7.9	Test		BONGO	BONGO RECOVERED	2016-04-20 21:03:52	2016-04-20 13:03:56	33.31007	-118.9884	88.2	42.7	CM		
P1604	8	Test		BONGO	BONGO DEPLOYED	2016-04-20 21:48:21	2016-04-20 13:48:23	33.30486	-118.9856	88.2	42.7	CM	TEST	
P1604	9	Test		BONGO	BONGO RECOVERED	2016-04-20 22:12:29	2016-04-20 14:12:33	33.30371	-118.9959	88.2	42.8	CM		
P1604	10	Test	2	CTD	CTD DEPLOYED	2016-04-20 22:27:09	2016-04-20 14:27:16	33.30218	-118.9974	88.2	42.9	CM		
P1604	11	Test	2	CTD	CTD AT DEPTH	2016-04-20 22:39:51	2016-04-20 14:39:54	33.30037	-118.9959	88.2	42.8	CM		
P1604	12	Test	2	CTD	CTD RECOVERED	2016-04-20 22:48:23	2016-04-20 14:48:31	33.29892	-118.9949	88.2	42.8	CM		
P1604	13	Test		Ancillary	MOCNESS DEPLOYED	2016-04-21 01:08:26	2016-04-20 17:08:30	33.28714	-119.0184	88.2	43.2	3M	DAY/NIGHT: Day; SEA CONDITIONS: Calm; TEST	
P1604	14	Test		Ancillary	MOCNESS RECOVERED	2016-04-21 01:27:21	2016-04-20 17:27:24	33.28845	-119.0315	88.2	43.3	3M	DAY/NIGHT: Day; SEA CONDITIONS: Calm	
P1604	15	Cycle 1		Ancillary	MVP DEPLOYED	2016-04-21 21:18:17	2016-04-21 13:18:20	32.83065	-122.7416	82.4	87.3	CM	DAY/NIGHT: Day; SEA CONDITIONS: Calm; Bowtie 1	
P1604	16	Cycle 1		Ancillary	MVP RECOVERED	2016-04-21 22:03:41	2016-04-21 14:03:44	32.86229	-122.8236	82.1	87.9	CM		
P1604	17	Cycle 1		Ancillary	MVP DEPLOYED	2016-04-21 22:17:45	2016-04-21 14:17:47	32.86598	-122.8315	82	88	CM		
P1604	18	Cycle 1		Ancillary	MVP RECOVERED	2016-04-21 22:53:44	2016-04-21 14:53:50	32.89513	-122.9052	81.7	88.6	CM		
P1604	19	Cycle 1		Ancillary	MVP DEPLOYED	2016-04-21 23:52:59	2016-04-21 15:53:00	32.90622	-122.9334	81.6	88.8	CM		
P1604	20	Cycle 1		Ancillary	MVP BOWTIE 1 WPT 2	2016-04-22 01:34:56	2016-04-21 17:34:58	33.00111	-123.1952	80.7	90.9	3M	SEA CONDITIONS: Calm Bowtie1 WP2	
P1604	21	Cycle 1		Ancillary	MVP RECOVERED	2016-04-22 02:20:49	2016-04-21 18:20:55	32.86929	-123.1402	81.4	91.3	3M		
P1604	22	Cycle 1		Ancillary	MVP DEPLOYED	2016-04-22 02:39:03	2016-04-21 18:39:03	32.83985	-123.1287	81.5	91.4	3M	bowtie1 WP3;DAY/NIGHT: Day; SEA CONDITIONS: Calm;CYCLE: During	
P1604	23	Cycle 1		Ancillary	MVP RECOVERED	2016-04-22 05:22:53	2016-04-21 21:23:00	32.89416	-122.9252	81.7	88.8	3M	Lrw ;DAY/NIGHT: Night; SEA CONDITIONS: Calm;	
P1604	24	Cycle 1	3	CTD	CTD DEPLOYED	2016-04-22 06:08:58	2016-04-21 22:08:59	32.90261	-122.9366	81.7	88.8	3M		
P1604	25	Cycle 1	3	CTD	CTD RECOVERED	2016-04-22 06:35:34	2016-04-21 22:35:41	32.90068	-122.9367	81.7	88.9	3M	SEA CONDITIONS: Calm;DAY/NIGHT: Night;CYCLE: Before	
P1604	26	Cycle 1		Ancillary	SEDIMENT TRAP DEPLOYED	2016-04-22 08:02:52	2016-04-22 00:02:53	32.97446	-123.0302	81.1	89.3	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	28	Cycle 1	4	CTD	CTD DEPLOYED	2016-04-22 09:26:38	2016-04-22 01:26:40	32.97706	-123.0257	81.1	89.2	2M		
P1604	29	Cycle 1	4	CTD	CTD AT DEPTH	2016-04-22 09:50:30	2016-04-22 01:50:30	32.97706	-123.0257	81.1	89.2	2M		
P1604	29.1	Cycle 1	4	CTD	CTD RECOVERED	2016-04-22 10:22:04	2016-04-22 02:22:04	32.97707	-123.0257	81.1	89.2	CA		
P1604	30	Cycle 1	TMC 3	Ancillary	TRACE ROSETTE DEPLOYED	2016-04-22 10:43:53	2016-04-22 02:43:54	32.97761	-123.0208	81.2	89.2	CA		
P1604	31	Cycle 1	TMC 3	Ancillary	TRACE ROSETTE RECOVERED	2016-04-22 11:10:28	2016-04-22 03:10:34	32.97829	-123.0195	81.2	89.2	CA		
P1604	32	Cycle 1		TOWEDARRAY	DRIFTARRAY DEPLOYED	2016-04-22 12:22:21	2016-04-22 04:22:22	32.9848	-123.0089	81.1	89	CA		
P1604	33	Cycle 1		BONGO	BONGO DEPLOYED	2016-04-22 15:41:31	2016-04-22 07:41:35	33.00296	-122.9778	81.1	88.5	2M	Live tow	
P1604	34	Cycle 1		BONGO	BONGO RECOVERED	2016-04-22 16:07:00	2016-04-22 08:07:01	32.99978	-122.9841	81.1	88.6	2M		
P1604	35	Cycle 1		BONGO	BONGO DEPLOYED	2016-04-22 16:33:46	2016-04-22 08:33:50	33.00588	-122.9713	81.1	88.4	2M	Cycle 1, Tow 1	
P1604	36	Cycle 1		BONGO	BONGO RECOVERED	2016-04-22 16:57:02	2016-04-22 08:57:05	33.00488	-122.9791	81.1	88.5	3M		
P1604	37	Cycle 1	5	CTD	CTD DEPLOYED	2016-04-22 18:07:47	2016-04-22 10:07:50	33.01798	-122.9693	81.1	88.3	3M		
P1604	38	Cycle 1	5	CTD	CTD AT DEPTH	2016-04-22 18:42:24	2016-04-22 10:44:09	33.01961	-122.9661	81.1	88.3	3M	Late Entry: LT 1124 Max Wire 506m 33-01.17N 122-58.07W	
P1604	38.1	Cycle 1	5	CTD	CTD RECOVERED	2016-04-22 18:56:03	2016-04-22 10:56:03	33.01982	-122.9657	81.1	88.2	CM		
P1604	39	Cycle 1		Ancillary	MOCNESS DEPLOYED	2016-04-22 22:37:02	2016-04-22 14:37:03	33.03124	-122.9335	81.1	87.8	CM	HAUL 1	
P1604	40	Cycle 1		Ancillary	MOCNESS RECOVERED	2016-04-23 00:16:54	2016-04-22 16:16:53	33.03588	-122.9929	81	88.4	CA	CYCLE: During; SEA CONDITIONS: Calm;DAY/NIGHT: Day	
P1604	41	Cycle 1	6	CTD	CTD DEPLOYED	2016-04-23 00:59:52	2016-04-22 16:59:53	33.03775	-122.9479	81	87.9	CA		
P1604	42	Cycle 1	6	CTD	CTD AT DEPTH	2016-04-23 01:14:37	2016-04-22 17:14:39	33.03849	-122.9464	81	87.9	3M		
P1604	43	Cycle 1	6	CTD	CTD RECOVERED	2016-04-23 01:47:11	2016-04-22 17:47:10	33.0396	-122.9431	81.1	87.9	3M		
P1604	44	Cycle 1		BONGO	BONGO DEPLOYED	2016-04-23 04:31:55	2016-04-22 20:31:55	33.06133	-122.9185	81	87.4	3M		
P1604	45	Cycle 1		BONGO	BONGO RECOVERED	2016-04-23 04:36:06	2016-04-22 20:36:05	33.06179	-122.9187	81	87.4	3M		
P1604	45.1	Cycle 1		BONGO	BONGO DEPLOYED	2016-04-23 04:43:06	2016-04-22 20:43:04	33.06362	-122.9204	81	87.4	3M	Cycle 1, Tow 2	
P1604	45.2	Cycle 1		BONGO	BONGO RECOVERED	2016-04-23 05:07:33	2016-04-22 21:07:33	33.07235	-122.9292	80.9	87.4	3M		
P1604	46	Cycle 1		Ancillary	MOCNESS DEPLOYED	2016-04-23 05:56:17	2016-04-22 21:56:15	33.04663	-122.9035	81.1	87.4	3M	CYCLE: During; SEA CONDITIONS: Moderate;DAY/NIGHT: Night; HAUL 2	
P1604	47	Cycle 1		Ancillary	MOCNESS RECOVERED	2016-04-23 08:07:34	2016-04-23 00:07:33	33.12131	-122.9623	80.7	87.4	2M		
P1604	48	Cycle 1	7	CTD	CTD DEPLOYED	2016-04-23 09:23:38	2016-04-23 01:23:37	33.08709	-122.9422	80.8	87.5	2M		
P1604	49	Cycle 1	7	CTD	CTD AT DEPTH	2016-04-23 09:37:12	2016-04-23 01:37:05	33.08709	-122.9422	80.8	87.5	2M		
P1604	50	Cycle 1	7	CTD	CTD RECOVERED	2016-04-23 10:11:27	2016-04-23 02:11:27	33.08709	-122.9422	80.8	87.5	2M		
P1604	51	Cycle 1	TMC 4	Ancillary	TRACE ROSETTE DEPLOYED	2016-04-23 10:23:48	2016-04-23 02:23:47	33.08708	-122.9422	80.8	87.5	2M		
P1604	52	Cycle 1	TMC 4	Ancillary	TRACE ROSETTE RECOVERED	2016-04-23 10:43:50	2016-04-23 02:43:44	33.08709	-122.9422	80.8	87.5	2M		
P1604	53	Cycle 1		TOWEDARRAY	DRIFTARRAY RECOVERED	2016-04-23 12:02:10	2016-04-23 04:02:10	33.10939	-122.9307	80.8	87.2	2M		
P1604	54	Cycle 1		TOWEDARRAY	DRIFTARRAY DEPLOYED	2016-04-23 12:04:49	2016-04-23 04:04:45	33.10947	-122.9313	80.8	87.2	2M		
P1604	55	9 Mile Bank		Ancillary	MVP DEPLOYED	2016-04-24 20:37:52	2016-04-24 12:37:44	32.62366	-117.2866	94.8	28.9	CA	Bowtie 2 - Nine Mile Bank	
P1604	55.1	9 Mile Bank		Ancillary	MVP BOWTIE 1 WPT 1	2016-04-24 21:31:00	2016-04-24 13:30:56	32.70143	-117.3248	94.4	28.8	CM		
P1604	55.2	9 Mile Bank		Ancillary	MVP BOWTIE 2 WPT 2	2016-04-25 00:06:23	2016-04-24 16:06:20	32.61125	-117.577	94.2	32.2	CM	SEA CONDITIONS: Calm;DAY/NIGHT: Day	
P1604	56	9 Mile Bank		Ancillary	MVP BOWTIE 2 WPT 3	2016-04-25 00:23:57	2016-04-24 16:23:49	32.5884	-117.5481	94.4	32.1	CM		
P1604	57	9 Mile Bank		Ancillary	MVP RECOVERED	2016-04-25 02:44:16	2016-04-24 18:44:09	32.69928	-117.3262	94.4	28.8	3M		
P1604	58	9 Mile Bank	8	CTD	CTD DEPLOYED	2016-04-25 03:16:20	2016-04-24 19:16:16	32.6985	-117.3635	94.3	29.2	3M		
P1604	60	9 Mile Bank	8	CTD	CTD AT DEPTH	2016-04-25 03:41:26	2016-04-24 19:41:20	32.6952	-117.3607	94.3	29.2	3M	32-41.78 117-2.73 2024LT 0341GMT	
P1604	61	9 Mile Bank	8	CTD	CTD RECOVERED	2016-04-25 03:41:36	2016-04-24 19:41:29	32.69518	-117.3607	94.3	29.2	3M		
P1604	62	9 Mile Bank		Ancillary	RING NET DEPLOYED	2016-04-25 04:05:29	2016-04-24 20:05:22	32.69659	-117.3673	94.3	29.3	3M		
P1604	63	9 Mile Bank		Ancillary	RING NET RECOVERED	2016-04-25 04:13:14	2016-04-24 20:13:05	32.69636	-117.3698	94.3	29.3	3M		
P1604	64	9 Mile Bank		BONGO	BONGO DEPLOYED	2016-04-25 04:27:33	2016-04-24 20:27:26	32.69909	-117.3756	94.3	29.3	3M	NMB 1	
P1604	65	9 Mile Bank		BONGO	BONGO RECOVERED	2016-04-25 04:50:39	2016-04-24 20:50:29	32.69376	-117.3849	94.3	29.5	3M		
P1604	66	9 Mile Bank		BONGO	BONGO DEPLOYED	2016-04-25 05:05:19	2016-04-24 21:05:12	32.69106	-117.394	94.3	29.6	3M	NMB 2	
P1604	67	9 Mile Bank		BONGO	BONGO RECOVERED	2016-04-25 05:30:18	2016-04-24 21:30:11	32.6871	-117.4029	94.3	29.7	3M		
P1604	68	9 Mile Bank		BONGO	BONGO DEPLOYED	2016-04-25 06:06:47	2016-04-24 22:06:44	32.66272	-117.4505	94.3	30.4	3M	NMB 3	
P1604	69	9 Mile Bank		BONGO	BONGO RECOVERED	2016-04-25 06:21:07	2016-04-24 22:21:01	32.65953	-117.4556	94.3	30.5	3M		
P1604	70	9 Mile Bank		BONGO	BONGO DEPLOYED	2016-04-25 06:39:31	2016-04-24 22:39:28	32.65447	-117.4653	94.3	30.7	3M	NMB 4	
P1604	71	9 Mile Bank		BONGO	BONGO RECOVERED	2016-04-25 07:06:24	2016-04-24 23:06:19	32.64656	-117.4747	94.3	30.8	3M		
P1604	72	9 Mile Bank		BONGO	BONGO DEPLOYED	2016-04-25 07:42:07	2016-04-24 23:41:59	32.63321	-117.5058	94.3	31.3	3M	NMB 5	
P1604	73	9 Mile Bank		BONGO	BONGO RECOVERED	2016-04-25 08:06:56	2016-04-25 00:06:50	32.62656	-117.5145	94.3	31.4	3M		
P1604	74	9 Mile Bank		BONGO	BONGO DEPLOYED	2016-04-25 08:24:35	2016-04-25 00:24:32	32.62408	-117.5227	94.3	31.5	3M	NMB 6	
P1604	75	9 Mile Bank		BONGO	BONGO RECOVERED	2016-04-25 08:51:36	2016-04-25 00:51:33	32.61999	-117.5343	94.3	31.7	3M		
P1604	76	CU	9	CTD	CTD DEPLOYED	2016-04-25 14:06:37	2016-04-25 06:06:30	32.79888	-117.5322	93.5	30.4	CM		
P1604	77	CU	9	CTD	CTD AT DEPTH	2016-04-25 14:25:22	2016-04-25 06:25:14	32.79971	-117.5319	93.5	30.3	CM		
P1604	78	CU	9	CTD	CTD RECOVERED	2016-04-25 14:56:24	2016-04-25 06:56:15	32.79916	-117.532	93.5	30.4	CM		
P1604	79	CU	TMC 5	Ancillary	TRACE ROSETTE DEPLOYED	2016-04-25 15:39:07	2016-04-25 07:38:58	32.79992	-117.5334	93.5	30.4	2M	SEA CONDITIONS: Moderate;DAY/NIGHT: Day	
P1604	80	CU	TMC 5	Ancillary	TRACE ROSETTE RECOVERED	2016-04-25 16:15:42	2016-04-25 08:15:37	32.79993	-117.5334	93.5	30.4	2M		
P1604	81	transit	10	CTD	CTD DEPLOYED	2016-04-27 17:27:10	2016-04-27 09:26:57	33.43133	-122.6295	80	81.4	CA	SEA CONDITIONS: Moderate;DAY/NIGHT: Day; Glider calibration cast	
P1604	83	transit	10	CTD	CTD AT DEPTH	2016-04-27 18:15:31	2016-04-27 10:15:24	33.43246	-122.628	80	81.4	CA	SEA CONDITIONS: Moderate;DAY/NIGHT: Day	
P1604	83.1	transit	10	CTD	CTD RECOVERED	2016-04-27 18:15:31	2016-04-27 10:15:41	33.43246	-122.628	80	81.4	CA	SEA CONDITIONS: Moderate;DAY/NIGHT: Day	
P1604	83.2	Cycle 1		Ancillary	SEDIMENT TRAP RECOVERED	2016-04-27 23:29:32	2016-04-27 15:29:25	33.39125	-123.2114	79	88	CM		
P1604	83.3	Cycle 1	11	CTD	CTD DEPLOYED	2016-04-27 23:30:39	2016-04-27 15:30:34	33.39125	-123.2117	79	88	CM		
P1604	84	Cycle 1	11	CTD	CTD AT DEPTH	2016-04-27 23:46:15	2016-04-27 15:46:05	33.39338	-123.2152	79	88	CM		
P1604	85	Cycle 1	11	CTD	CTD RECOVERED	2016-04-28 00:13:21	2016-04-27 16:13:10	33.39424	-123.2183	79	88.1	CA	SEA CONDITIONS: Moderate;DAY/NIGHT: Day	
P1604	86	Cycle 2		Ancillary	MVP DEPLOYED	2016-04-28 15:10:43	2016-04-28 07:10:37	33.66848	-122.2674	79.8	75.7	2M	DAY/NIGHT: Day;SEA CONDITIONS: Rough; Bowtie 3	
P1604	87	Cycle 2		Ancillary	MVP RECOVERED	2016-04-28 16:01:21	2016-04-28 08:01:07	33.57523	-122.18	80.3	75.5	2M	SEA CONDITIONS: Rough;DAY/NIGHT: Day	
P1604	88	Cycle 2	12	CTD	CTD DEPLOYED	2016-04-28 22:48:37	2016-04-28 14:48:32	33.5966	-122.2011	80.2	75.5	CM	Cycle 2 CTD ;CYCLE: During; SEA CONDITIONS: Moderate;DAY/NIGHT: Day	
P1604	89	Cycle 2	12	CTD	CTD AT DEPTH	2016-04-28 23:17:07	2016-04-28 15:17:00	33.5955	-122.2025	80.2	75.6	CM	CTD failed at 600 m	
P1604	90	Cycle 2	12	CTD	CTD RECOVERED	2016-04-28 23:31:11	2016-04-28 15:31:03	33.59442	-122.2026	80.2	75.6	CM		
P1604	91	Cycle 2	13	CTD	CTD DEPLOYED	2016-04-29 02:35:10	2016-04-28 18:34:59	33.59154	-122.1996	80.2	75.6	3M	L33-35.72N 122-12.04W	
P1604	92	Cycle 2	13	CTD	CTD AT DEPTH	2016-04-29 02:55:48	2016-04-28 18:55:39	33.5913	-122.2003	80.2	75.6	3M	3000M	
P1604	93	Cycle 2	13	CTD	CTD RECOVERED	2016-04-29 04:28:28	2016-04-28 20:28:20	33.58782	-122.1931	80.3	75.5	3M	LE 2100 CTD OD	
P1604	94	Cycle 2		BONGO	BONGO DEPLOYED	2016-04-29 04:35:28	2016-04-28 20:35:18	33.58815	-122.1947	80.3	75.5	3M	Cycle 2, Tow 1	
P1604	95	Cycle 2		BONGO	BONGO RECOVERED	2016-04-29 05:01:02	2016-04-28 21:00:50	33.5905	-122.201	80.2	75.6	3M		
P1604	96	Cycle 2		Ancillary	SEDIMENT TRAP DEPLOYED	2016-04-29 07:57:50	2016-04-28 23:57:40	33.59193	-122.2086	80.2	75.7	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Moderate	
P1604	97	Cycle 2	14	CTD	CTD DEPLOYED	2016-04-29 09:06:57	2016-04-29 01:06:44	33.58624	-122.2102	80.2	75.7	2M	SEA CONDITIONS: Moderate;DAY/NIGHT: Night	
P1604	98	Cycle 2	14	CTD	CTD AT DEPTH	2016-04-29 09:25:30	2016-04-29 01:40:40	33.58625	-122.2102	80.2	75.7	2M	SEA CONDITIONS: Moderate;DAY/NIGHT: Night	
P1604	99	Cycle 2	14	CTD	CTD RECOVERED	2016-04-29 10:00:29	2016-04-29 02:00:26	33.58625	-122.2102	80.2	75.7	2M		
P1604	100	Cycle 2		TOWEDARRAY	DRIFTARRAY DEPLOYED	2016-04-29 11:54:11	2016-04-29 03:54:02	33.58888	-122.2068	80.2	75.7	2M	SEA CONDITIONS: Moderate;DAY/NIGHT: Night	
P1604	101	Cycle 2	TMC 6	Ancillary	TRACE ROSETTE DEPLOYED	2016-04-29 13:09:00	2016-04-29 05:08:49	33.5899	-122.2016	80.2	75.6	2M		
P1604	103	Cycle 2	TMC 6	Ancillary	TRACE ROSETTE RECOVERED	2016-04-29 13:37:08	2016-04-29 05:37:01	33.59182	-122.1972	80.2	75.5	3M		
P1604	104	Cycle 2		BONGO	BONGO DEPLOYED	2016-04-29 15:35:13	2016-04-29 07:35:00	33.58233	-122.1813	80.3	75.4	2M	DAY/NIGHT: Day; SEA CONDITIONS: Moderate; Live tow	
P1604	105	Cycle 2		BONGO	BONGO RECOVERED	2016-04-29 16:01:08	2016-04-29 08:00:58	33.58619	-122.1869	80.3	75.5	2M		
P1604	108	Cycle 2		BONGO	BONGO DEPLOYED	2016-04-29 16:42:55	2016-04-29 08:42:40	33.59063	-122.1752	80.3	75.3	2M	Cycle 2, Tow 2	
P1604	109	Cycle 2		BONGO	BONGO RECOVERED	2016-04-29 17:09:31	2016-04-29 09:09:21	33.59661	-122.1798	80.2	75.3	3M		
P1604	110	Cycle 2	15	CTD	CTD DEPLOYED	2016-04-29 18:01:41	2016-04-29 10:01:30	33.59075	-122.1573	80.3	75.1	3M		
P1604	111	Cycle 2	15	CTD	CTD AT DEPTH	2016-04-29 20:11:24	2016-04-29 12:11:11	33.55518	-122.129	80.5	75.1	3M		
P1604	112	Cycle 2	15	CTD	CTD RECOVERED	2016-04-29 20:11:29	2016-04-29 12:11:19	33.55515	-122.1289	80.5	75.1	3M		
P1604	113	Cycle 2		Ancillary	MOCNESS DEPLOYED	2016-04-29 20:23:35	2016-04-29 12:23:21	33.5584	-122.1327	80.5	75.1	CM	HAUL 3	
P1604	114	Cycle 2		Ancillary	MOCNESS RECOVERED	2016-04-29 20:47:07	2016-04-29 12:46:55	33.57204	-122.1412	80.4	75.1	CM		
P1604	115	Cycle 2	16	CTD	CTD DEPLOYED	2016-04-30 01:06:59	2016-04-29 17:06:48	33.56926	-122.1231	80.5	74.9	3M		
P1604	116	Cycle 2	16	CTD	CTD AT DEPTH	2016-04-30 01:19:22	2016-04-29 17:19:14	33.56833	-122.123	80.5	74.9	3M		
P1604	117	Cycle 2	16	CTD	CTD RECOVERED	2016-04-30 01:51:26	2016-04-29 17:51:16	33.56462	-122.122	80.5	74.9	3M		
P1604	118	Cycle 2		Ancillary	MVP DEPLOYED	2016-04-30 02:26:13	2016-04-29 18:26:04	33.56926	-122.1275	80.5	75	3M	Test new MVP cable	
P1604	119	Cycle 2		Ancillary	MVP RECOVERED	2016-04-30 03:43:00	2016-04-29 19:42:53	33.63506	-122.1472	80.2	74.7	3M		
P1604	120	Cycle 2		BONGO	BONGO DEPLOYED	2016-04-30 04:36:46	2016-04-29 20:36:34	33.54409	-122.0684	80.7	74.5	3M		
P1604	121	Cycle 2		BONGO	BONGO RECOVERED	2016-04-30 04:40:51	2016-04-29 20:40:39	33.54421	-122.0694	80.7	74.5	3M		
P1604	122	Cycle 2		Ancillary	MOCNESS DEPLOYED	2016-04-30 05:46:08	2016-04-29 21:45:55	33.52975	-122.0517	80.8	74.4	3M	HAUL 4	
P1604	123	Cycle 2		Ancillary	MOCNESS RECOVERED	2016-04-30 07:06:02	2016-04-29 23:05:47	33.57469	-122.0547	80.6	74.1	2M	SEA CONDITIONS: Moderate;DAY/NIGHT: Night	
P1604	124	Cycle 2	17	CTD	CTD DEPLOYED	2016-04-30 09:06:24	2016-04-30 01:06:14	33.52361	-122.0599	80.8	74.6	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Moderate	
P1604	125	Cycle 2	17	CTD	CTD AT DEPTH	2016-04-30 09:41:58	2016-04-30 01:41:46	33.52115	-122.0636	80.8	74.6	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Moderate	
P1604	126	Cycle 2	17	CTD	CTD AT RECOVERED	2016-04-30 10:06:21	2016-04-30 02:06:14	33.52065	-122.0643	80.8	74.6	2M	SEA CONDITIONS: Moderate;DAY/NIGHT: Night	
P1604	127	Cycle 2		TOWEDARRAY	DRIFTARRAY RECOVERED	2016-04-30 12:18:50	2016-04-30 04:18:39	33.52817	-122.0624	80.8	74.6	2M	SEA CONDITIONS: Moderate;DAY/NIGHT: Night	
P1604	128	Cycle 2		TOWEDARRAY	DRIFTARRAY DEPLOYED	2016-04-30 12:25:35	2016-04-30 04:25:23	33.52779	-122.063	80.8	74.6	2M	SEA CONDITIONS: Moderate;DAY/NIGHT: Night	
P1604	129	Cycle 2	TMC 7	Ancillary	TRACE ROSETTE DEPLOYED	2016-04-30 13:02:25	2016-04-30 05:02:11	33.52125	-122.0675	80.8	74.7	2M		
P1604	130	Cycle 2	TMC 7	Ancillary	TRACE ROSETTE RECOVERED	2016-04-30 14:13:37	2016-04-30 06:13:25	33.52178	-122.0664	80.8	74.7	2M		
P1604	131	Cycle 2		BONGO	BONGO DEPLOYED	2016-04-30 16:44:20	2016-04-30 08:44:04	33.53567	-122.0453	80.8	74.3	2M	SEA CONDITIONS: Rough;DAY/NIGHT: Day; Cycle 2, Tow 3	
P1604	132	Cycle 2		BONGO	BONGO RECOVERED	2016-04-30 17:09:09	2016-04-30 09:08:54	33.53876	-122.055	80.8	74.4	3M		
P1604	132.1	Cycle 2	18	CTD	CTD DEPLOYED	2016-04-30 18:14:44	2016-04-30 10:14:44	33.526333	-122.036	80.8	74.3		bridge did not log ctd event; deployment date/time/location from ctd cast log	
P1604	132.2	Cycle 2	18	CTD	CTD AT DEPTH	2016-04-30 18:34:00	2016-04-30 10:34:00	33.526333	-122.036	80.8	74.3		bridge did not log ctd event; date/time/location estimates from deployment	
P1604	132.3	Cycle 2	18	CTD	CTD RECOVERED	2016-04-30 18:54:00	2016-04-30 10:54:00	33.526333	-122.036	80.8	74.3		bridge did not log ctd event; date/time/location estimates from deployment	
P1604	133	Cycle 2		Ancillary	MOCNESS DEPLOYED	2016-04-30 20:16:50	2016-04-30 12:16:34	33.4791	-122.0013	81.1	74.3	CM	HAUL 5	
P1604	134	Cycle 2		Ancillary	MOCNESS RECOVERED	2016-04-30 21:23:28	2016-04-30 13:23:15	33.51545	-122.018	80.9	74.2			
P1604	135	Cycle 2	19	CTD	CTD DEPLOYED	2016-05-01 02:11:03	2016-04-30 18:10:51	33.47682	-121.9989	81.1	74.3			
P1604	136	Cycle 2	19	CTD	CTD AT DEPTH	2016-05-01 02:18:30	2016-04-30 18:41:54	33.47547	-122.0004	81.1	74.3	3M		
P1604	138	Cycle 2	19	CTD	CTD RECOVERED	2016-05-01 03:21:03	2016-04-30 19:20:48	33.47547	-121.9911	81.2	74.2			
P1604	139	Cycle 2		BONGO	BONGO DEPLOYED	2016-05-01 04:30:00	2016-04-30 20:29:45	33.47645	-121.9843	81.2	74.1		Cycle 2, Tow 4	
P1604	140	Cycle 2		BONGO	BONGO RECOVERED	2016-05-01 05:18:42	2016-04-30 21:18:26	33.47136	-121.9537	81.3	73.8		previous bongo ended at 21:52; event not recorded	
P1604	141	Cycle 2		Ancillary	MOCNESS DEPLOYED	2016-05-01 05:52:01	2016-04-30 21:51:48	33.47945	-121.9635	81.2	73.9		HAUL 6	
P1604	142	Cycle 2		Ancillary	MOCNESS RECOVERED	2016-05-01 06:51:41	2016-04-30 22:51:28	33.50144	-121.9967	81	74.1	2M	SEA CONDITIONS: Moderate;DAY/NIGHT: Night	
P1604	143	Cycle 2	20	CTD	CTD DEPLOYED	2016-05-01 09:07:09	2016-05-01 01:06:58	33.46751	-121.9669	81.2	74	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Moderate	
P1604	144	Cycle 2	20	CTD	CTD AT DEPTH	2016-05-01 09:25:29	2016-05-01 01:25:12	33.46712	-121.9671	81.2	74	2M	SEA CONDITIONS: Moderate;DAY/NIGHT: Night	
P1604	145	Cycle 2	20	CTD	CTD RECOVERED	2016-05-01 09:52:52	2016-05-01 01:52:36	33.46701	-121.9672	81.2	74	2M		
P1604	146	Cycle 2		TOWEDARRAY	DRIFTARRAY RECOVERED	2016-05-01 11:37:45	2016-05-01 04:08:52	33.46827	-121.9519	81.3	73.8	2M	erase previous event ;DAY/NIGHT: Night; SEA CONDITIONS: Moderate	
P1604	147	Cycle 2		TOWEDARRAY	DRIFTARRAY DEPLOYED	2016-05-01 11:45:19	2016-05-01 04:09:41	33.46808	-121.9523	81.3	73.8	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Moderate	
P1604	148	Cycle 2	TMC 8	Ancillary	TRACE ROSETTE DEPLOYED	2016-05-01 12:57:35	2016-05-01 04:57:22	33.47074	-121.9565	81.3	73.9	CM	SEA CONDITIONS: Moderate;DAY/NIGHT: Night	
P1604	149	Cycle 2	TMC 8	Ancillary	TRACE ROSETTE RECOVERED	2016-05-01 13:22:24	2016-05-01 05:22:09	33.47074	-121.9565	81.3	73.9	CM		
P1604	150	Cycle 2		Ancillary	TEST EVENT	2016-05-01 14:29:24	2016-05-01 06:29:20	33.4515	-121.9372	81.4	73.8	MR	event log issues - numbers reset to 0, then negative events - renumbered in file	
P1604	151	Cycle 2		Ancillary	TEST EVENT	2016-05-01 14:31:43	2016-05-01 06:31:33	33.45257	-121.938	81.4	73.8	MR		
P1604	152	Cycle 2		BONGO	BONGO DEPLOYED	2016-05-01 15:28:53	2016-05-01 07:28:43	33.46408	-121.9399	81.3	73.7	2M	DAY/NIGHT: Day; SEA CONDITIONS: Moderate; Live tow	
P1604	153	Cycle 2		BONGO	BONGO RECOVERED	2016-05-01 15:55:30	2016-05-01 07:55:21	33.4665	-121.9543	81.3	73.9	2M		
P1604	154	Cycle 2		BONGO	BONGO DEPLOYED	2016-05-01 16:33:22	2016-05-01 08:33:12	33.47138	-121.9297	81.3	73.6	2M	SEA CONDITIONS: Moderate;DAY/NIGHT: Day; Cycle 2, Tow 5	
P1604	155	Cycle 2		BONGO	BONGO RECOVERED	2016-05-01 16:57:30	2016-05-01 08:57:13	33.47567	-121.9405	81.3	73.6	3M	DAY/NIGHT: Day; SEA CONDITIONS: Moderate	
P1604	156	Cycle 2	21	CTD	CTD DEPLOYED	2016-05-01 18:00:41	2016-05-01 10:00:25	33.47396	-121.9401	81.3	73.7	3M		
P1604	157	Cycle 2	21	CTD	CTD AT DEPTH	2016-05-01 18:20:07	2016-05-01 10:19:53	33.47333	-121.9383	81.3	73.6	3M		
P1604	158	Cycle 2	21	CTD	CTD RECOVERED	2016-05-01 18:51:19	2016-05-01 10:51:05	33.47112	-121.934	81.3	73.6	3M		
P1604	159	Cycle 2		Ancillary	MVP DEPLOYED	2016-05-01 20:03:32	2016-05-01 12:03:19	33.55241	-121.952	80.9	73.2	CM	DAY/NIGHT: Day; SEA CONDITIONS: Moderate; Bowtie 4	
P1604	160	Cycle 2		Ancillary	OTHER	2016-05-01 20:44:18	2016-05-01 12:44:06	33.46498	-121.9182	81.4	73.5	CM	Crossing center of bowtie matrix	
P1604	161	Cycle 2		Ancillary	OTHER	2016-05-01 22:45:45	2016-05-01 14:45:34	33.46791	-121.9217	81.3	73.5	CA	Crossing center of Bowtie #4 enroute station 4	
P1604	162	Cycle 2		Ancillary	OTHER	2016-05-02 00:13:24	2016-05-01 16:13:10	33.54739	-121.9542	80.9	73.2	CA	Complete MVP bowtie 4	1</TABLE>
P1604	163	Cycle 2		Ancillary	MVP RECOVERED	2016-05-02 00:18:47	2016-05-01 16:18:34	33.55433	-121.9502	80.9	73.2	CA	CYCLE: During; SEA CONDITIONS: Calm;DAY/NIGHT: Day	
P1604	164	Cycle 2	22	CTD	CTD DEPLOYED	2016-05-02 02:51:42	2016-05-01 18:51:29	33.4475	-121.8996	81.5	73.4	3M		
P1604	165	Cycle 2	22	CTD	CTD AT DEPTH	2016-05-02 03:15:09	2016-05-01 19:14:52	33.44817	-121.898	81.5	73.4	3M		

P1604	166	Cycle 2	22	CTD	CTD RECOVERED	2016-05-02 03:24:43	2016-05-01 19:24:29	33.44878	-121.897	81.5	73.4	3M		
P1604	167	Cycle 2		Ancillary	RING NET DEPLOYED	2016-05-02 03:54:23	2016-05-01 19:54:12	33.44432	-121.8928	81.5	73.4	3M		
P1604	168	Cycle 2		Ancillary	RING NET RECOVERED	2016-05-02 04:02:09	2016-05-01 20:01:58	33.44723	-121.8953	81.5	73.4	3M		
P1604	169	Cycle 2		BONGO	BONGO DEPLOYED	2016-05-02 04:28:29	2016-05-01 20:28:18	33.4474	-121.8952	81.5	73.4	3M	Cycle 2, Tow 6	
P1604	170	Cycle 2		BONGO	BONGO RECOVERED	2016-05-02 04:51:50	2016-05-01 20:51:37	33.45298	-121.9005	81.4	73.4	3M		
P1604	171	Cycle 2		Ancillary	MOCNESS DEPLOYED	2016-05-02 06:00:13	2016-05-01 22:00:03	33.44087	-121.876	81.6	73.2	3M	HAUL 7	
P1604	172	Cycle 2		Ancillary	MOCNESS RECOVERED	2016-05-02 07:02:57	2016-05-01 23:02:45	33.4632	-121.9055	81.4	73.4	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	173	Cycle 2	23	CTD	CTD DEPLOYED	2016-05-02 09:01:21	2016-05-02 01:01:08	33.46013	-121.8701	81.5	73	2M	SEA CONDITIONS: Calm;DAY/NIGHT: Night	
P1604	174	Cycle 2	23	CTD	CTD AT DEPTH	2016-05-02 09:18:24	2016-05-02 01:18:11	33.45971	-121.8704	81.5	73	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	175	Cycle 2	23	CTD	CTD RECOVERED	2016-05-02 10:08:21	2016-05-02 02:08:07	33.45601	-121.8677	81.5	73	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	176	Cycle 2	TMC 9	Ancillary	TRACE ROSETTE DEPLOYED	2016-05-02 10:10:34	2016-05-02 02:10:15	33.45598	-121.8678	81.5	73	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	177	Cycle 2	TMC 9	Ancillary	TRACE ROSETTE RECOVERED	2016-05-02 10:48:55	2016-05-02 02:48:43	33.45612	-121.8676	81.5	73	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	178	Cycle 2		TOWEDARRAY	DRIFTARRAY RECOVERED	2016-05-02 11:23:33	2016-05-02 03:23:20	33.45647	-121.8595	81.5	72.9	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	179	Cycle 2		Ancillary	SEDIMENT TRAP RECOVERED	2016-05-02 13:21:02	2016-05-02 05:20:50	33.48388	-121.8427	81.4	72.5	CM	;DAY/NIGHT: Day; SEA CONDITIONS: Calm	
P1604	180	Cycle 3		Ancillary	MVP DEPLOYED	2016-05-02 23:46:13	2016-05-02 15:45:57	34.78597	-121.2447	77	56.3	CM	Bowtie 5	
P1604	180.1	Cycle 3		Ancillary	Wrong Way - MVP Turning around to restart Survey	2016-05-02 00:23:55	2016-05-02 16:11:15	34.8	-121.25	77	56.3	CM	Started up wrong leg of MVP.	
P1604	181	Cycle 3		Ancillary	MVP DEPLOYED	2016-05-03 00:33:48	2016-05-02 16:33:36	34.76555	-121.2348	77.2	56.3	CM		
P1604	182	Cycle 3		Ancillary	LE2208 MVP RECOVERED	2016-05-03 06:07:05	2016-05-02 22:06:49	34.79482	-121.2584	77	56.3	3M		
P1604	183	Cycle 3	24	CTD	CTD DEPLOYED	2016-05-03 06:32:29	2016-05-02 22:32:12	34.8049	-121.27	76.9	56.4	3M		
P1604	184	Cycle 3	24	CTD	CTD AT DEPTH	2016-05-03 06:50:49	2016-05-02 22:50:34	34.80234	-121.2711	76.9	56.4	3M		
P1604	185	Cycle 3	24	CTD	CTD RECOVERED	2016-05-03 07:04:58	2016-05-02 23:04:38	34.80073	-121.2711	76.9	56.4	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	186	Cycle 3		Ancillary	SEDIMENT TRAP DEPLOYED	2016-05-03 08:13:46	2016-05-03 00:15:13	34.79821	-121.2781	76.9	56.5	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	187	Cycle 3	25	CTD	CTD DEPLOYED	2016-05-03 08:13:46	2016-05-03 01:02:23	34.79821	-121.2781	76.9	56.5	2M	DAY/NIGHT: Day; SEA CONDITIONS: Calm	
P1604	188	Cycle 3	25	CTD	CTD AT DEPTH	2016-05-03 08:13:46	2016-05-03 01:21:19	34.79821	-121.2781	76.9	56.5	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	189	Cycle 3	25	CTD	CTD RECOVERED	2016-05-03 09:44:40	2016-05-03 01:44:22	34.78769	-121.2892	76.9	56.7	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	190	Cycle 3	TMC 10	Ancillary	TRACE ROSETTE DEPLOYED	2016-05-03 09:51:09	2016-05-03 01:50:50	34.78672	-121.2902	77	56.7	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	191	Cycle 3	TMC 10	Ancillary	TRACE ROSETTE RECOVERED	2016-05-03 10:12:53	2016-05-03 02:12:35	34.78436	-121.2924	77	56.8	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	192	Cycle 3		TOWEDARRAY	DRIFTARRAY DEPLOYED	2016-05-03 11:23:45	2016-05-03 03:23:28	34.78867	-121.2869	76.9	56.7	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	193	Cycle 3		BONGO	BONGO DEPLOYED	2016-05-03 15:28:52	2016-05-03 07:28:40	34.76517	-121.2813	77.1	56.8	2M	DAY/NIGHT: Day; SEA CONDITIONS: Calm; Live tow	
P1604	194	Cycle 3		BONGO	BONGO RECOVERED	2016-05-03 15:54:15	2016-05-03 07:54:02	34.76939	-121.2925	77	56.9	2M		
P1604	195	Cycle 3		BONGO	BONGO DEPLOYED	2016-05-03 16:29:24	2016-05-03 08:29:07	34.76074	-121.285	77.1	56.9	2M	DAY/NIGHT: Day; SEA CONDITIONS: Calm; Cycle 3, Tow 1	
P1604	196	Cycle 3		BONGO	BONGO RECOVERED	2016-05-03 16:54:07	2016-05-03 08:53:53	34.76336	-121.295	77	57	3M	DAY/NIGHT: Day; SEA CONDITIONS: Calm	
P1604	196.1	Cycle 3	26	CTD	CTD DEPLOYED	2016-05-03 18:07:56	2016-05-03 10:07:56	34.763833	-121.292833	76.9	56.4		bridge did not log ctd event; date/time/location taken from ctd cast log	
P1604	196.2	Cycle 3	26	CTD	CTD AT DEPTH	2016-05-03 18:27:00	2016-05-03 10:27:00	34.763833	-121.292833	76.9	56.4		bridge did not log ctd event; date/time/location estimates from deployment	
P1604	196.3	Cycle 3	26	CTD	CTD RECOVERED	2016-05-03 18:47:00	2016-05-03 10:47:00	34.763833	-121.292833	76.9	56.4		bridge did not log ctd event; date/time/location estimates from deployment	
P1604	197	Cycle 3		Ancillary	MOCNESS DEPLOYED	2016-05-03 20:07:35	2016-05-03 12:07:19	34.73994	-121.2671	77.2	56.8	CM	DAY/NIGHT: Day; SEA CONDITIONS: Calm; HAUL 8	
P1604	198	Cycle 3		Ancillary	MOCNESS RECOVERED	2016-05-03 21:20:59	2016-05-03 13:20:40	34.76412	-121.3041	77	57.1	CM		
P1604	199	Cycle 3	27	CTD	CTD DEPLOYED	2016-05-04 01:07:16	2016-05-03 17:07:02	34.72403	-121.281	77.2	57.1	CM		
P1604	200	Cycle 3	27	CTD	CTD AT DEPTH	2016-05-04 01:15:32	2016-05-03 17:15:16	34.72321	-121.2801	77.2	57.1	CM		
P1604	201	Cycle 3	27	CTD	CTD RECOVERED	2016-05-04 01:39:34	2016-05-03 17:39:16	34.72096	-121.2788	77.3	57.1	CM		
P1604	202	Cycle 3	TMC 11	Ancillary	TRACE ROSETTE DEPLOYED	2016-05-04 02:54:03	2016-05-03 18:53:44	34.71495	-121.2756	77.3	57.1	CM	LE 1917	
P1604	203	Cycle 3	TMC 11	Ancillary	TRACE ROSETTE RECOVERED	2016-05-04 02:54:13	2016-05-03 18:53:56	34.71491	-121.2756	77.3	57.1	CM	LE 1938	
P1604	204	Cycle 3		Ancillary	RING NET DEPLOYED	2016-05-04 03:29:56	2016-05-03 19:29:43	34.70705	-121.2778	77.3	57.2	CM		
P1604	205	Cycle 3		Ancillary	RING NET RECOVERED	2016-05-04 03:34:27	2016-05-03 19:34:10	34.70742	-121.2787	77.3	57.2	CM		
P1604	206	Cycle 3		BONGO	BONGO DEPLOYED	2016-05-04 04:29:20	2016-05-03 20:29:02	34.7061	-121.2786	77.3	57.2	CM	Cycle 3, Tow 2	
P1604	207	Cycle 3		BONGO	BONGO RECOVERED	2016-05-04 04:52:05	2016-05-03 20:51:49	34.71118	-121.2834	77.3	57.2	3M		
P1604	208	Cycle 3		Ancillary	MOCNESS DEPLOYED	2016-05-04 05:34:58	2016-05-03 21:34:41	34.68737	-121.2542	77.5	57.1	3M	HAUL 9	
P1604	209	Cycle 3		Ancillary	MOCNESS RECOVERED	2016-05-04 06:37:32	2016-05-03 22:37:17	34.69753	-121.2876	77.3	57.4	3M		
P1604	210	Cycle 3	28	CTD	CTD DEPLOYED	2016-05-04 09:02:54	2016-05-04 01:02:35	34.67556	-121.2801	77.5	57.5	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	211	Cycle 3	28	CTD	CTD AT DEPTH	2016-05-04 09:43:39	2016-05-04 01:43:21	34.66748	-121.2795	77.5	57.5	2M		
P1604	212	Cycle 3	28	CTD	CTD RECOVERED	2016-05-04 09:46:23	2016-05-04 01:46:08	34.66706	-121.2794	77.5	57.5	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	213	Cycle 3	TMC 12	Ancillary	TRACE ROSETTE DEPLOYED	2016-05-04 09:56:26	2016-05-04 01:56:06	34.66514	-121.2794	77.5	57.5	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	214	Cycle 3	TMC 12	Ancillary	TRACE ROSETTE RECOVERED	2016-05-04 10:10:20	2016-05-04 02:10:03	34.66227	-121.2792	77.5	57.6	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	215	Cycle 3		TOWEDARRAY	DRIFTARRAY RECOVERED	2016-05-04 11:28:14	2016-05-04 03:27:55	34.66153	-121.2708	77.5	57.5	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	216	Cycle 3		TOWEDARRAY	DRIFTARRAY DEPLOYED	2016-05-04 11:35:30	2016-05-04 04:12:10	34.6595	-121.27017	77.6	57.5	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	217	Cycle 3		BONGO	BONGO DEPLOYED	2016-05-04 15:30:01	2016-05-04 07:29:44	34.63033	-121.2414	77.7	57.4	2M	DAY/NIGHT: Day; SEA CONDITIONS: Calm; Live tow	
P1604	218	Cycle 3		BONGO	BONGO RECOVERED	2016-05-04 15:55:46	2016-05-04 07:55:31	34.63076	-121.2503	77.7	57.5	2M	DAY/NIGHT: Day; SEA CONDITIONS: Calm	
P1604	219	Cycle 3		BONGO	BONGO DEPLOYED	2016-05-04 16:28:19	2016-05-04 08:28:01	34.62931	-121.2396	77.7	57.4	2M	DAY/NIGHT: Day; SEA CONDITIONS: Calm; Cycle 3, Tow 3	
P1604	220	Cycle 3		BONGO	BONGO RECOVERED	2016-05-04 16:54:29	2016-05-04 08:54:10	34.62762	-121.2508	77.7	57.5	3M	DAY/NIGHT: Day; SEA CONDITIONS: Calm	
P1604	221	Cycle 3	29	CTD	CTD DEPLOYED	2016-05-04 18:21:44	2016-05-04 10:21:28	34.6145	-121.2491	77.8	57.6	3M		
P1604	222	Cycle 3	29	CTD	CTD AT DEPTH	2016-05-04 18:17:20	2016-05-04 10:22:45	34.61442	-121.2491	77.8	57.6	3M		
P1604	222.1	Cycle 3	29	CTD	CTD RECOVERED	2016-05-04 19:17:35	2016-05-04 11:17:19	34.59991	-121.2399	77.9	57.6	3M		
P1604	223	Cycle 3		Ancillary	MOCNESS DEPLOYED	2016-05-04 19:17:35	2016-05-04 12:06:23	34.59991	-121.2399	77.9	57.6	CM	HAUL 10	
P1604	223.1	Cycle 3		Ancillary	MOCNESS RECOVERED	2016-05-04 21:11:55	2016-05-04 13:11:39	34.60681	-121.2486	77.8	57.6	CA	CYCLE: During; SEA CONDITIONS: Calm;DAY/NIGHT: Day	
P1604	224	Cycle 3		Ancillary	UNDERWAY SAMPLE	2016-05-04 21:29:55	2016-05-04 13:29:47	34.61528	-121.2545	77.8	57.6	TK	DAY/NIGHT: Day; SEA CONDITIONS: Calm;CYCLE: During	
P1604	225	Cycle 3	TMC 13	Ancillary	TRACE ROSETTE DEPLOYED	2016-05-05 00:11:24	2016-05-04 16:11:08	34.57013	-121.219	78	57.6	CA	CYCLE: During; SEA CONDITIONS: Calm;DAY/NIGHT: Day	
P1604	226	Cycle 3	TMC 13	Ancillary	TRACE ROSETTE RECOVERED	2016-05-05 00:28:06	2016-05-04 16:27:53	34.5671	-121.215	78.1	57.6	CA		
P1604	227	Cycle 3	30	CTD	CTD DEPLOYED	2016-05-05 02:07:24	2016-05-04 18:07:07	34.55819	-121.2018	78.1	57.5	CA		
P1604	227.1	Cycle 3	30	CTD	CTD AT DEPTH	2016-05-05 02:08:21	2016-05-04 18:08:03	34.55798	-121.2017	78.1	57.5	3M		
P1604	228	Cycle 3	30	CTD	CTD RECOVERED	2016-05-05 02:18:09	2016-05-04 18:17:55	34.55574	-121.2003	78.1	57.5	3M		
P1604	229	Cycle 3		Ancillary	RING NET DEPLOYED	2016-05-05 04:08:13	2016-05-04 20:07:58	34.54379	-121.1885	78.2	57.5	3M		
P1604	230	Cycle 3		Ancillary	RING NET RECOVERED	2016-05-05 04:08:24	2016-05-04 20:08:03	34.54377	-121.1885	78.2	57.5	3M		
P1604	231	Cycle 3		BONGO	BONGO DEPLOYED	2016-05-05 04:29:42	2016-05-04 20:29:21	34.53874	-121.1888	78.2	57.5	3M	Cycle 3, Tow 4	
P1604	232	Cycle 3		BONGO	BONGO RECOVERED	2016-05-05 04:53:34	2016-05-04 20:53:18	34.52985	-121.1966	78.3	57.7	3M		
P1604	233	Cycle 3		Ancillary	MOCNESS DEPLOYED	2016-05-05 05:34:59	2016-05-04 21:34:41	34.55114	-121.1738	78.2	57.3	3M	HAUL 11	
P1604	234	Cycle 3		Ancillary	MOCNESS RECOVERED	2016-05-05 06:48:21	2016-05-04 22:48:02	34.50546	-121.2061	78.3	57.9	3M		
P1604	235	Cycle 3	31	CTD	CTD DEPLOYED	2016-05-05 09:01:16	2016-05-05 01:01:01	34.50228	-121.2228	78.3	58.1	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	236	Cycle 3	31	CTD	CTD AT DEPTH	2016-05-05 09:20:26	2016-05-05 01:20:06	34.49893	-121.2228	78.3	58.2	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	237	Cycle 3	31	CTD	CTD RECOVERED	2016-05-05 09:47:58	2016-05-05 01:47:38	34.49435	-121.2232	78.4	58.2	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	238	Cycle 3	TMC 14	Ancillary	TRACE ROSETTE DEPLOYED	2016-05-05 09:52:45	2016-05-05 01:52:31	34.49378	-121.2231	78.4	58.2	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	239	Cycle 3	TMC 14	Ancillary	TRACE ROSETTE RECOVERED	2016-05-05 10:06:37	2016-05-05 02:06:20	34.49192	-121.2224	78.4	58.2	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	240	Cycle 3		TOWEDARRAY	DRIFTARRAY RECOVERED	2016-05-05 11:24:33	2016-05-05 03:24:15	34.48074	-121.2086	78.4	58.2	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	241	Cycle 3		TOWEDARRAY	DRIFTARRAY DEPLOYED	2016-05-05 11:31:07	2016-05-05 03:30:51	34.47983	-121.2088	78.4	58.2	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	242	Cycle 3		BONGO	BONGO DEPLOYED	2016-05-05 15:38:11	2016-05-05 07:37:56	34.41781	-121.1964	78.7	58.5	2M	DAY/NIGHT: Day; SEA CONDITIONS: Calm; Live tow	
P1604	243	Cycle 3		BONGO	BONGO RECOVERED	2016-05-05 15:45:20	2016-05-05 08:08:58	34.41639	-121.205	78.8	58.6	2M	Early Recovery due to vessel overspeed.	
P1604	244	Cycle 3		BONGO	BONGO DEPLOYED	2016-05-05 16:07:08	2016-05-05 08:06:52	34.41279	-121.2009	78.8	58.6	2M	DAY/NIGHT: Day; SEA CONDITIONS: Calm; Live tow	
P1604	245	Cycle 3		BONGO	BONGO RECOVERED	2016-05-05 16:32:32	2016-05-05 08:32:11	34.4107	-121.2135	78.7	58.7	2M	DAY/NIGHT: Day; SEA CONDITIONS: Calm	
P1604	246	Cycle 3		BONGO	BONGO DEPLOYED	2016-05-05 16:55:01	2016-05-05 08:54:38	34.40851	-121.2073	78.8	58.7	3M	DAY/NIGHT: Day; SEA CONDITIONS: Calm; Cycle 3, Tow 5	
P1604	247	Cycle 3		BONGO	BONGO RECOVERED	2016-05-05 18:01:10	2016-05-05 10:00:50	34.41698	-121.2215	78.7	58.8	3M	previous bongo ended at 10:19; event not recorded	
P1604	248	Cycle 3	32	CTD	CTD DEPLOYED	2016-05-05 18:03:12	2016-05-05 10:02:56	34.41687	-121.2216	78.7	58.8	3M	issue with ctd?	
P1604	249	Cycle 3	32	CTD	CTD AT DEPTH	2016-05-05 18:03:12	2016-05-05 10:08:21	34.41687	-121.2216	78.7	58.8	3M	issue with ctd	
P1604	249.1	Cycle 3	32	CTD	CTD RECOVERED	2016-05-05 18:08:55	2016-05-05 10:08:35	34.41669	-121.2221	78.7	58.8	3M	issue with ctd	
P1604	250	Cycle 3	32	CTD	CTD DEPLOYED	2016-05-05 18:36:33	2016-05-05 10:36:16	34.41732	-121.2226	78.7	58.8	2M		
P1604	251	Cycle 3	32	CTD	CTD AT DEPTH	2016-05-05 18:59:44	2016-05-05 10:59:28	34.41723	-121.2227	78.7	58.8	3M		
P1604	252	Cycle 3	32	CTD	CTD RECOVERED	2016-05-05 19:52:41	2016-05-05 11:52:18	34.41433	-121.2205	78.7	58.8	3M		
P1604	252.1	Cycle 3		Ancillary	MVP DEPLOYED	2016-05-05 20:50:00	2016-05-05 12:50:00						event not recorded by bridge - Test messenger positions	
P1604	252.2	Cycle 3		Ancillary	MVP RECOVERED	2016-05-05 21:05:00	2016-05-05 13:05:00						event not recorded by bridge	
P1604	253	Cycle 3	33	CTD	CTD DEPLOYED	2016-05-05 21:48:24	2016-05-05 13:48:08	34.40615	-121.2133	78.8	58.8	CM		
P1604	254	Cycle 3	33	CTD	CTD AT DEPTH	2016-05-05 21:48:55	2016-05-05 13:48:35	34.40615	-121.2132	78.8	58.8	CM		
P1604	255	Cycle 3	33	CTD	CTD RECOVERED	2016-05-05 23:21:11	2016-05-05 15:20:57	34.40738	-121.2135	78.8	58.8	CM		
P1604	255.1	Cycle 3		Ancillary	MVP DEPLOYED	2016-05-05 23:30:00	2016-05-05 15:30:00						event not recorded by bridge - MVP vs. UVP5 comparison	
P1604	255.2	Cycle 3		Ancillary	MVP RECOVERED	2016-05-06 00:40:00	2016-05-05 16:40:00						event not recorded by bridge	
P1604	256	Cycle 3	37	CTD	CTD DEPLOYED	2016-05-06 01:03:44	2016-05-05 17:03:23	34.40127	-121.2117	78.8	58.8	3M		
P1604	257	Cycle 3	37	CTD	CTD AT DEPTH	2016-05-06 01:18:19	2016-05-05 17:17:59	34.39715	-121.2102	78.8	58.8	3M		
P1604	258	Cycle 3	37	CTD	CTD RECOVERED	2016-05-06 02:41:40	2016-05-05 18:41:24	34.38137	-121.1995	78.9	58.8	3M		
P1604	259	Cycle 3	TMC 15	Ancillary	TRACE ROSETTE DEPLOYED	2016-05-06 03:22:25	2016-05-05 19:22:06	34.32216	-121.1869	79.2	59.1	3M		
P1604	260	Cycle 3	TMC 15	Ancillary	TRACE ROSETTE RECOVERED	2016-05-06 03:47:29	2016-05-05 19:47:09	34.31908	-121.1841	79.2	59.1	3M		
P1604	261	Cycle 3		BONGO	BONGO DEPLOYED	2016-05-06 04:29:42	2016-05-05 20:29:23	34.31542	-121.1771	79.2	59.1	3M	Cycle 3, Tow 6	
P1604	262	Cycle 3		BONGO	BONGO RECOVERED	2016-05-06 04:53:39	2016-05-05 20:53:20	34.31184	-121.1873	79.2	59.2	3M		
P1604	263	Cycle 3	42	CTD	CTD DEPLOYED	2016-05-06 09:00:40	2016-05-06 01:00:21	34.2802	-121.1745	79.4	59.3	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	264	Cycle 3	42	CTD	CTD AT DEPTH	2016-05-06 09:18:38	2016-05-06 01:18:19	34.2771	-121.172	79.4	59.3	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	265	Cycle 3	42	CTD	CTD RECOVERED	2016-05-06 09:46:25	2016-05-06 01:46:06	34.27283	-121.1669	79.4	59.3	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	266	Cycle 3	TMC 16	Ancillary	TRACE ROSETTE DEPLOYED	2016-05-06 09:50:10	2016-05-06 01:49:49	34.27225	-121.1663	79.4	59.3	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	267	Cycle 3	TMC 16	Ancillary	TRACE ROSETTE RECOVERED	2016-05-06 10:39:56	2016-05-06 02:39:36	34.26463	-121.1583	79.5	59.2	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	268	Cycle 3		TOWEDARRAY	DRIFTARRAY RECOVERED	2016-05-06 11:05:40	2016-05-06 03:05:22	34.26776	-121.1714	79.4	59.3	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	269	Cycle 3		Ancillary	SEDIMENT TRAP RECOVERED	2016-05-06 13:31:05	2016-05-06 05:30:46	34.43356	-121.2233	78.6	58.7	CM	;DAY/NIGHT: Day; SEA CONDITIONS: Calm	
P1604	270	Cycle 3	43	CTD	CTD DEPLOYED	2016-05-06 16:02:39	2016-05-06 08:02:17	34.38506	-121.2236	78.8	59	CM	DAY/NIGHT: Day; SEA CONDITIONS: Calm	
P1604	271	Cycle 3	43	CTD	CTD AT DEPTH	2016-05-06 16:12:43	2016-05-06 08:12:26	34.38338	-121.2244	78.8	59.1	CM	DAY/NIGHT: Day; SEA CONDITIONS: Calm	
P1604	272	Cycle 3	43	CTD	CTD RECOVERED	2016-05-06 16:26:18	2016-05-06 08:25:57	34.38134	-121.2258	78.8	59.1	CM	DAY/NIGHT: Day; SEA CONDITIONS: Calm	
P1604	273	Cycle 4		Ancillary	MVP DEPLOYED	2016-05-06 19:58:08	2016-05-06 11:57:50	34.42765	-120.7605	79.6	53.7	CM	Bowtie 6	
P1604	274	Cycle 4		Ancillary	MVP RECOVERED	2016-05-06 20:04:58	2016-05-06 12:04:37	34.42555	-120.7534	79.6	53.7	CM		
P1604	275	Cycle 4		Ancillary	MVP DEPLOYED	2016-05-06 20:17:00	2016-05-06 12:16:43	34.42386	-120.7471	79.6	53.6	CM		
P1604	276	Cycle 4		Ancillary	MVP RECOVERED	2016-05-06 22:35:45	2016-05-06 14:35:26	34.50347	-120.7179	79.4	52.7	CA		
P1604	277	Cycle 4		Ancillary	MVP DEPLOYED	2016-05-06 22:52:49	2016-05-06 14:52:29	34.49819	-120.7153	79.4	52.7	CM		
P1604	278	Cycle 4		Ancillary	OTHER - MVP bowtie 7 - Cross last point	2016-05-07 00:13:22	2016-05-06 16:13:00	34.42027	-120.7403	79.7	53.6	CM	CYCLE: Before; SEA CONDITIONS: Calm;DAY/NIGHT: Day	
P1604	279	Cycle 4		Ancillary	MVP RECOVERED	2016-05-07 00:20:01	2016-05-06 16:19:39	34.4217	-120.7492	79.7	53.6	CA	CYCLE: Before; SEA CONDITIONS: Calm;DAY/NIGHT: Day	
P1604	280	Cycle 4		Ancillary	RING NET DEPLOYED	2016-05-07 03:44:59	2016-05-06 19:44:37	34.4345	-120.689	79.7	52.9	3M		
P1604	281	Cycle 4		Ancillary	RING NET RECOVERED	2016-05-07 03:45:04	2016-05-06 19:44:43	34.43451	-120.689	79.7	52.9	3M		
P1604	282	Cycle 4	44	CTD	CTD DEPLOYED	2016-05-07 06:09:00	2016-05-06 22:08:36	34.43512	-120.6899	79.7	52.9	3M		
P1604	283	Cycle 4	44	CTD	CTD AT DEPTH	2016-05-07 06:18:48	2016-05-06 22:18:28	34.43634	-120.6905	79.7	52.9	3M		
P1604	284	Cycle 4	44	CTD	CTD RECOVERED	2016-05-07 06:34:14	2016-05-06 22:33:59	34.43751	-120.6923	79.7	52.9	3M		
P1604	285	Cycle 4		Ancillary	SEDIMENT TRAP DEPLOYED	2016-05-07 08:05:12	2016-05-07 00:04:52	34.43888	-120.6904	79.7	52.9	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	286	Cycle 4	45	CTD	CTD DEPLOYED	2016-05-07 09:19:26	2016-05-07 01:19:06	34.44227	-120.7008	79.7	53	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	287	Cycle 4	45	CTD	CTD AT DEPTH	2016-05-07 09:32:34	2016-05-07 01:32:13	34.44363	-120.7007	79.7	53	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	288	Cycle 4	45	CTD	CTD RECOVERED	2016-05-07 09:52:45	2016-05-07 01:52:23	34.44522	-120.701	79.7	52.9	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	289	Cycle 4	TMC 17	Ancillary	TRACE ROSETTE DEPLOYED	2016-05-07 09:59:15	2016-05-07 01:58:50	34.44547	-120.7012	79.7	52.9	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	290	Cycle 4	TMC 17	Ancillary	TRACE ROSETTE RECOVERED	2016-05-07 10:13:09	2016-05-07 02:12:52	34.44651	-120.701	79.6	52.9	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	291	Cycle 4		TOWEDARRAY	DRIFTARRAY DEPLOYED	2016-05-07 11:35:20	2016-05-07 03:34:56	34.44881	-120.7037	79.6	52.9	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	292	Cycle 4		BONGO	BONGO DEPLOYED	2016-05-07 15:31:43	2016-05-07 07:31:20	34.45201	-120.7221	79.6	53.1	2M	DAY/NIGHT: Day; SEA CONDITIONS: Calm; Live tow	
P1604	293	Cycle 4		BONGO	BONGO RECOVERED	2016-05-07 16:00:37	2016-05-07 08:00:13	34.45362	-120.7143	79.6	53	2M	DAY/NIGHT: Day; SEA CONDITIONS: Calm	
P1604	294	Cycle 4		BONGO	BONGO DEPLOYED	2016-05-07 16:31:49	2016-05-07 08:31:30	34.45585	-120.7012	79.6	52.9	2M	DAY/NIGHT: Day; SEA CONDITIONS: Calm; Cycle 4, Tow 1	
P1604	295	Cycle 4		BONGO	BONGO RECOVERED	2016-05-07 16:55:46	2016-05-07 08:55:24	34.46417	-120.7047	79.6	52.8	3M	DAY/NIGHT: Day; SEA CONDITIONS: Calm	
P1604	296	Cycle 4		Ancillary	UNDERWAY SAMPLE	2016-05-07 17:19:23	2016-05-07 09:19:11	34.46371	-120.7131	79.5	52.9	TK	DAY/NIGHT: Day; SEA CONDITIONS: Calm;CYCLE: During	
P1604	297	Cycle 4	46	CTD	CTD DEPLOYED	2016-05-07 18:33:51	2016-05-07 10:33:28	34.46778	-120.7077	79.5	52.9	3M		
P1604	298	Cycle 4	46	CTD	CTD AT DEPTH	2016-05-07 18:33:56	2016-05-07 10:33:34	34.46778	-120.7077	79.5	52.9	3M		
P1604	299	Cycle 4	46	CTD	CTD RECOVERED	2016-05-07 18:34:01	2016-05-07 10:33:40	34.46778	-120.7077	79.5	52.9	3M		
P1604	300	Cycle 4		Ancillary	MOCNESS DEPLOYED	2016-05-07 20:10:40	2016-05-07 12:10:20	34.49348	-120.7343	79.4	52.9	CM	HAUL 12	
P1604	301	Cycle 4		Ancillary	MOCNESS RECOVERED	2016-05-07 21:10:20	2016-05-07 13:10:00	34.46527	-120.7142	79.5	52.9	CM		
P1604	302	Cycle 4	47	CTD	CTD DEPLOYED	2016-05-08 01:11:18	2016-05-07 17:10:59	34.47388	-120.7331	79.5	53.1	3M		
P1604	303	Cycle 4	47	CTD	CTD AT DEPTH	2016-05-08 01:19:03	2016-05-07 17:18:46	34.47458	-120.7328	79.5	53.1	3M		
P1604	304	Cycle 4	47	CTD	CTD RECOVERED	2016-05-08 01:28:20	2016-05-07 17:28:03	34.47491	-120.7318	79.5	53.1	3M		
P1604	305	Cycle 4	TMC 18	Ancillary	TRACE ROSETTE DEPLOYED	2016-05-08 01:45:59	2016-05-07 17:45:41	34.47836	-120.7324	79.4	53	3M		
P1604	306	Cycle 4	TMC 18	Ancillary	TRACE ROSETTE RECOVERED	2016-05-08 02:08:28	2016-05-07 18:08:07	34.47935	-120.7302	79.4	53	3M		
P1604	307	Cycle 4		Ancillary	RING NET DEPLOYED	2016-05-08 03:31:05	2016-05-07 19:30:43	34.48683	-120.7457	79.4	53.1	3M		
P1604	308	Cycle 4		Ancillary	RING NET RECOVERED	2016-05-08 03:36:48	2016-05-07 19:36:27	34.48557	-120.7454	79.4	53.1	3M		
P1604	309	Cycle 4		BONGO	BONGO DEPLOYED	2016-05-08 04:27:12	2016-05-07 20:26:50	34.48907	-120.7538	79.4	53.2	3M	Cycle 4, Tow 2	
P1604	310	Cycle 4		BONGO	BONGO RECOVERED	2016-05-08 04:50:51	2016-05-07 20:50:33	34.48433	-120.7528	79.4	53.2	3M		
P1604	311	Cycle 4		Ancillary	MOCNESS DEPLOYED	2016-05-08 05:32:46	2016-05-07 21:32:23	34.5183	-120.7625	79.2	53.1	3M	HAUL 13	
P1604	312	Cycle 4		Ancillary	MOCNESS RECOVERED	2016-05-08 06:25:16	2016-05-07 22:24:53	34.49892	-120.7529	79.3	53.1	3M		
P1604	313	Cycle 4	48	CTD	CTD DEPLOYED	2016-05-08 09:00:26	2016-05-08 01:00:00	34.49954	-120.7815	79.2	53.4	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	314	Cycle 4	48	CTD	CTD AT DEPTH	2016-05-08 09:15:20	2016-05-08 01:14:55	34.49891	-120.7824	79.3	53.4	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	315	Cycle 4	48	CTD	CTD RECOVERED	2016-05-08 09:35:47	2016-05-08 01:35:27	34.49879	-120.7828	79.3	53.4	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	316	Cycle 4	TMC 19	Ancillary	TRACE ROSETTE DEPLOYED	2016-05-08 09:44:13	2016-05-08 01:43:53	34.49986	-120.7834	79.2	53.4	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	317	Cycle 4	TMC 19	Ancillary	TRACE ROSETTE RECOVERED	2016-05-08 09:53:26	2016-05-08 01:53:07	34.50031	-120.784	79.2	53.4	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	318	Cycle 4		TOWEDARRAY	DRIFTARRAY RECOVERED	2016-05-08 11:25:20	2016-05-08 03:24:58	34.51093	-120.7919	79.2	53.4	CA	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	319	Cycle 4		TOWEDARRAY	DRIFTARRAY DEPLOYED	2016-05-08 11:31:53	2016-05-08 03:31:31	34.51133	-120.7909	79.2	53.4	2M	;DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	320	Cycle 4		BONGO	BONGO DEPLOYED	2016-05-08 15:31:41	2016-05-08 07:31:21	34.52163	-120.7979	79.1	53.4	2M	DAY/NIGHT: Day; SEA CONDITIONS: Calm; Live tow	
P1604	321	Cycle 4		BONGO	BONGO RECOVERED	2016-05-08 15:57:36	2016-05-08 07:57:14	34.51187	-120.7973	79.2	53.5	2M	DAY/NIGHT: Day; SEA CONDITIONS: Calm	
P1604	322	Cycle 4		BONGO	BONGO DEPLOYED	2016-05-08 16:30:46	2016-05-08 08:30:27	34.52055	-120.8	79.1	53.5	2M	DAY/NIGHT: Day; SEA CONDITIONS: Calm; Cycle 4, Tow 3	
P1604	323	Cycle 4		BONGO	BONGO RECOVERED	2016-05-08 16:54:13	2016-05-08 08:53:54	34.51144	-120.8023	79.2	53.5	3M	DAY/NIGHT: Day; SEA CONDITIONS: Calm	
P1604	324	Cycle 4	49	CTD	CTD DEPLOYED	2016-05-08 18:03:02	2016-05-08 10:02:39	34.5148	-120.7986	79.1	53.5	3M		
P1604	325	Cycle 4	49	CTD	CTD AT DEPTH	2016-05-08 18:18:07	2016-05-08 10:17:45	34.51473	-120.8002	79.1	53.5	3M		
P1604	326	Cycle 4	49	CTD	CTD RECOVERED	2016-05-08 18:28:26	2016-05-08 10:28:02	34.51464	-120.801	79.1	53.5	3M		
P1604	327	Cycle 4		Ancillary	MOCNESS DEPLOYED	2016-05-08 20:01:42	2016-05-08 12:02:06	34.49191	-120.7822	79.3	53.5	CM	DAY/NIGHT: Day; SEA CONDITIONS: Calm;CYCLE: HAUL 14	
P1604	328	Cycle 4		Ancillary	MOCNESS RECOVERED	2016-05-08 21:07:46	2016-05-08 13:07:24	34.52526	-120.8278	79	53.7	CM		
P1604	329	Cycle 4	TMC 20	Ancillary	TRACE ROSETTE DEPLOYED	2016-05-08 20:01:42	2016-05-08 16:55:40	34.49191	-120.7822	79	53.7	3M	8-May-16	
P1604	330	Cycle 4	TMC 20	Ancillary	TRACE ROSETTE RECOVERED	2016-05-09 01:36:44	2016-05-08 17:36:17	34.53055	-120.8311	79	53.7	3M		
P1604	331	Cycle 4	50	CTD	CTD DEPLOYED	2016-05-09 01:59:18	2016-05-08 17:58:58	34.53289	-120.8358	79	53.7	3M		
P1604	332	Cycle 4	50	CTD	CTD AT DEPTH	2016-05-09 02:10:34	2016-05-08 18:10:12	34.53174	-120.8359	79	53.8	3M		

P1604	333	Cycle 4	50	CTD	CTD RECOVERED	2016-05-09 02:19:06	2016-05-08 18:18:44	34.53081	-120.8363	79	53.8	3M		
P1604	334	Cycle 4		BONGO	BONGO DEPLOYED	2016-05-09 04:30:02	2016-05-08 20:30:33	34.52705	-120.8467	79	53.9	3M	Cycle 4, Tow 4	
P1604	335	Cycle 4		BONGO	BONGO RECOVERED	2016-05-09 04:52:40	2016-05-08 20:52:18	34.53004	-120.8564	79	54	3M		
P1604	336	Cycle 4		Ancillary	MOCNESS DEPLOYED	2016-05-09 05:34:01	2016-05-08 21:33:40	34.52424	-120.8155	79.1	53.6	3M	HAUL 15	
P1604	337	Cycle 4		Ancillary	MOCNESS RECOVERED	2016-05-09 06:32:30	2016-05-08 22:32:07	34.52475	-120.8593	79	54.1	3M		
P1604	338	Cycle 4	51	CTD	CTD DEPLOYED	2016-05-09 09:01:53	2016-05-09 01:01:30	34.5341	-120.8705	78.9	54.1	2M	DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	339	Cycle 4	51	CTD	CTD AT DEPTH	2016-05-09 09:17:29	2016-05-09 01:17:05	34.53391	-120.8731	78.9	54.1	2M	DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	340	Cycle 4	51	CTD	CTD RECOVERED	2016-05-09 09:38:57	2016-05-09 01:38:38	34.53411	-120.8762	78.9	54.2	2M	DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	341	Cycle 4	TMC 21	Ancillary	TRACE ROSETTE DEPLOYED	2016-05-09 09:46:01	2016-05-09 01:45:41	34.53394	-120.88	78.9	54.2	2M	DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	342	Cycle 4	TMC 21	Ancillary	TRACE ROSETTE RECOVERED	2016-05-09 10:06:34	2016-05-09 02:06:11	34.53398	-120.8848	78.9	54.3	2M	DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	343	Cycle 4		TOWEDARRAY	DRIFTARRAY RECOVERED	2016-05-09 11:35:22	2016-05-09 03:34:54	34.54643	-120.8894	78.8	54.2	2M	DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	344	Cycle 4		TOWEDARRAY	DRIFTARRAY DEPLOYED	2016-05-09 11:36:34	2016-05-09 03:36:10	34.54659	-120.8893	78.8	54.2	2M	DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	345	Cycle 4		BONGO	BONGO DEPLOYED	2016-05-09 15:33:29	2016-05-09 07:33:09	34.55753	-120.8842	78.8	54.2	2M	DAY/NIGHT: Day; SEA CONDITIONS: Calm; Live tow	
P1604	346	Cycle 4		BONGO	BONGO RECOVERED	2016-05-09 15:59:59	2016-05-09 07:59:35	34.54917	-120.8937	78.8	54.3	2M	DAY/NIGHT: Day; SEA CONDITIONS: Calm	
P1604	347	Cycle 4		BONGO	BONGO DEPLOYED	2016-05-09 16:27:51	2016-05-09 08:27:28	34.53796	-120.8921	78.8	54.2	2M	DAY/NIGHT: Day; SEA CONDITIONS: Calm; Cycle 4, Tow 5	
P1604	348	Cycle 4		BONGO	BONGO RECOVERED	2016-05-09 16:50:27	2016-05-09 08:50:03	34.5499	-120.8893	78.8	54.2	3M	DAY/NIGHT: Day; SEA CONDITIONS: Calm	
P1604	349	Cycle 4	52	CTD	CTD DEPLOYED	2016-05-09 18:08:56	2016-05-09 10:08:33	34.5377	-120.8847	78.9	54.2	3M		
P1604	350	Cycle 4	52	CTD	CTD AT DEPTH	2016-05-09 18:29:13	2016-05-09 10:28:51	34.53614	-120.8859	78.9	54.3	3M		
P1604	351	Cycle 4	52	CTD	CTD RECOVERED	2016-05-09 18:49:41	2016-05-09 10:49:15	34.53671	-120.8877	78.9	54.3	3M		
P1604	352	Cycle 4	TEST	TM-GOFLO	GO FLO	2016-05-09 21:08:08	2016-05-09 13:07:44	34.53589	-120.903	78.8	54.5	3M	go-flo test cast	
P1604	353	Cycle 4	53	CTD	CTD DEPLOYED	2016-05-09 23:42:49	2016-05-09 15:42:23	34.54676	-120.9018	78.8	54.4	CM		
P1604	353.1	Cycle 4	53	CTD	CTD AT DEPTH	2016-05-09 23:57:18	2016-05-09 15:56:54	34.54898	-120.9023	78.8	54.3	CM		
P1604	354	Cycle 4	53	CTD	CTD RECOVERED	2016-05-10 00:07:01	2016-05-09 16:06:37	34.54914	-120.902	78.8	54.3	CA	CYCLE: During; SEA CONDITIONS: Calm;DAY/NIGHT: Day	
P1604	355	Cycle 4	TMC 22	Ancillary	TRACE ROSETTE DEPLOYED	2016-05-10 01:05:08	2016-05-09 17:04:42	34.5535	-120.9152	78.7	54.5	3M		
P1604	356	Cycle 4	TMC 22	Ancillary	TRACE ROSETTE RECOVERED	2016-05-10 01:36:15	2016-05-09 17:35:48	34.55281	-120.9143	78.7	54.4	3M		
P1604	357	Cycle 4		BONGO	BONGO DEPLOYED	2016-05-10 04:29:40	2016-05-09 20:29:16	34.54599	-120.9081	78.8	54.4	3M	Cycle 4, Tow 6	
P1604	358	Cycle 4		BONGO	BONGO RECOVERED	2016-05-10 04:51:44	2016-05-09 20:51:22	34.54753	-120.9162	78.8	54.5	3M		
P1604	359	Cycle 4	54	CTD	CTD DEPLOYED	2016-05-10 08:54:03	2016-05-10 00:53:40	34.54258	-120.9372	78.7	54.8	2M	DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	360	Cycle 4	54	CTD	CTD AT DEPTH	2016-05-10 09:11:11	2016-05-10 01:10:47	34.54394	-120.9405	78.7	54.8	2M	DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	361	Cycle 4	54	CTD	CTD RECOVERED	2016-05-10 09:38:06	2016-05-10 01:37:42	34.54496	-120.944	78.7	54.8	2M	DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	362	Cycle 4		TOWEDARRAY	DRIFTARRAY RECOVERED	2016-05-10 11:16:53	2016-05-10 03:16:28	34.55858	-120.9585	78.6	54.9	2M	DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	363	Cycle 4		Ancillary	SEDIMENT TRAP RECOVERED	2016-05-10 14:05:13	2016-05-10 06:04:45	34.38705	-121.1016	79.1	57.7	CM	DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	364	Cycle 4	55	CTD	CTD DEPLOYED	2016-05-10 14:24:24	2016-05-10 06:24:03	34.38167	-121.1006	79.1	57.7	CM		
P1604	365	Cycle 4	55	CTD	CTD AT DEPTH	2016-05-10 14:33:52	2016-05-10 06:33:28	34.38089	-121.0998	79.1	57.7	CM		
P1604	366	Cycle 4	55	CTD	CTD RECOVERED	2016-05-10 14:39:45	2016-05-10 06:39:19	34.38074	-121.0995	79.1	57.7	CM		
P1604	367	BBL	56	CTD	CTD DEPLOYED	2016-05-10 19:42:46	2016-05-10 11:42:24	35.08551	-120.7708	76.7	48.9	CM		
P1604	368	BBL	56	CTD	CTD AT DEPTH	2016-05-10 19:51:38	2016-05-10 11:51:10	35.08661	-120.7697	76.7	48.9	CM		
P1604	369	BBL	56	CTD	CTD RECOVERED	2016-05-10 19:55:54	2016-05-10 11:55:30	35.08628	-120.7694	76.7	48.9	CM		
P1604	370	BBL	GO FLO 1	TM-GOFLO	GO FLOW	2016-05-10 20:42:33	2016-05-10 12:42:07	35.0848	-120.7709	76.7	49	CM	GO FLO	
P1604	371	BBL	57	CTD	CTD DEPLOYED	2016-05-10 22:16:15	2016-05-10 14:15:49	34.88793	-120.7388	77.7	50.1	CA	CYCLE: After; SEA CONDITIONS: Calm;DAY/NIGHT: Day	
P1604	372	BBL	57	CTD	CTD AT DEPTH	2016-05-10 22:33:33	2016-05-10 14:33:10	34.88518	-120.7376	77.7	50.1	CA		
P1604	373	BBL	57	CTD	CTD RECOVERED	2016-05-10 22:33:49	2016-05-10 14:33:23	34.88513	-120.7377	77.7	50.1	CM		
P1604	374	BBL	GO FLO 2	TM-GOFLO	GO FLOW	2016-05-10 22:56:59	2016-05-10 14:56:36	34.88109	-120.7362	77.7	50.1	CM	GO FLO	
P1604	375	BBL	58	CTD	CTD DEPLOYED	2016-05-11 00:21:49	2016-05-10 16:21:24	34.69553	-120.71	78.5	51.2	CA	CYCLE: Before; SEA CONDITIONS: Calm;DAY/NIGHT: Day	
P1604	376	BBL	58	CTD	CTD AT DEPTH	2016-05-11 00:40:19	2016-05-10 16:39:55	34.69517	-120.7097	78.5	51.2	CM		
P1604	377	BBL	58	CTD	CTD RECOVERED	2016-05-11 00:56:50	2016-05-10 16:56:25	34.69417	-120.71	78.6	51.2	CM		
P1604	378	BBL	GO FLO 3	TM-GOFLO	GO FLOW	2016-05-11 00:57:26	2016-05-10 16:57:02	34.69403	-120.7099	78.6	51.2	3M	GO FLOW	
P1604	379	BBL	GO FLO 3	TM-GOFLO	GO FLOW	2016-05-11 01:05:42	2016-05-10 17:05:19	34.69214	-120.7093	78.6	51.2	3M	GOFLABD	
P1604	380	BBL	59	CTD	CTD DEPLOYED	2016-05-11 02:14:23	2016-05-10 18:13:59	34.56226	-120.711	79.1	52.2	3M		
P1604	381	BBL	59	CTD	CTD AT DEPTH	2016-05-11 02:20:36	2016-05-10 18:20:13	34.56226	-120.7112	79.1	52.2	3M		
P1604	382	BBL	59	CTD	CTD RECOVERED	2016-05-11 02:26:49	2016-05-10 18:26:24	34.5624	-120.7114	79.1	52.2	3M		
P1604	383	BBL	GO FLO 4	TM-GOFLO	GO FLOW	2016-05-11 02:37:59	2016-05-10 18:37:34	34.56255	-120.7116	79.1	52.2	3M	(WATER JUG)	
P1604	384	BBL	60	CTD	CTD DEPLOYED	2016-05-11 04:27:32	2016-05-10 20:27:10	34.45546	-120.5205	80	50.9	3M		
P1604	385	BBL	60	CTD	CTD AT DEPTH	2016-05-11 04:32:34	2016-05-10 20:32:10	34.45625	-120.5208	80	50.9	3M		
P1604	386	BBL	60	CTD	CTD RECOVERED	2016-05-11 04:36:34	2016-05-10 20:36:07	34.45691	-120.521	80	50.9	3M		
P1604	387	BBL	GO FLO 5	TM-GOFLO	GO FLOW	2016-05-11 04:47:54	2016-05-10 20:47:31	34.45823	-120.5208	80	50.9	3M		
P1604	388	BBL	GO FLO 5	TM-GOFLO	GO FLOW	2016-05-11 04:55:15	2016-05-10 20:54:50	34.45915	-120.5209	80	50.9	3M		
P1604	389	BBL	61	CTD	CTD DEPLOYED	2016-05-11 05:58:10	2016-05-10 21:57:46	34.41507	-120.4119	80.4	50	3M		
P1604	390	BBL	61	CTD	CTD AT DEPTH	2016-05-11 06:08:19	2016-05-10 22:07:54	34.41412	-120.4127	80.4	50.1	3M		
P1604	391	BBL	61	CTD	CTD RECOVERED	2016-05-11 06:08:29	2016-05-10 22:07:59	34.41411	-120.4127	80.4	50.1	3M		
P1604	392	BBL	GO FLO 6	TM-GOFLO	GO FLOW	2016-05-11 06:17:26	2016-05-10 22:17:02	34.41302	-120.4139	80.4	50.1	3M		
P1604	393	BBL	GO FLO 6	TM-GOFLO	GO FLOW	2016-05-11 06:27:50	2016-05-10 22:27:27	34.41172	-120.4152	80.4	50.1	3M		
P1604	394	Th cast	62	CTD	CTD DEPLOYED	2016-05-11 10:05:20	2016-05-11 02:04:55	34.00801	-120.9546	81	59	2M	DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	395	Th cast	62	CTD	CTD AT DEPTH	2016-05-11 10:34:33	2016-05-11 02:34:08	34.00734	-120.9557	81	59	2M	DAY/NIGHT: Night; SEA CONDITIONS: Calm	
P1604	396	Th cast	62	CTD	CTD RECOVERED	2016-05-11 11:28:16	2016-05-11 03:27:56	34.00777	-120.9546	81	59	2M	DAY/NIGHT: Night; SEA CONDITIONS: Calm	