DIVE LOG

Dive #: ATV 177

ATV DIVE LOG

Laney Chouest
August 21-23, 1996

Date (GMT)	Time (GMT)	Depth (ft)	Depth (m)	ATV Heading	ATV Lat	ATV Long	Observations & Comments	8mm	VHS
8/21	2237	8767	2672	265.0	44 12.5640	129 38.1088	ATV in water (depth from surface)		
8/21	2304	14	4	351.6	44 12.6019	129 38.3538	Cameras on (testing)		
8/21	2318						Problems with hydraulic system & flooded sound dome, bringing ATV on board		
8/22	0634						ATV in water (second attempt)		
8/22	0703	112	34	039.4	44 12.6487	129 38.2133	ATV starting descent		
8/22	0857			047.4	44 12.6051	129 38.3611	No pressure depth, altimeter sees bottom <500 ft.		
8/22	0914	11295	3443	049.1	44 12.6318	129 38.3526	ATV on bottom, pillows	1	1
8/22	0923			000.0	44 12.5753	129 38.3039	Pillows & critters	1	1
8/22	0930				44 12.656	129 38.334	Good navigation fix	1	1
8/22	0933						Fractured and intact pillow tubes	1	1
8/22	0940				44 12.6511	129 38.3502	Pillows, 35mm photos taken (frames 5,6,7)	1	1
8/22	0949			007.0	44 12.6650	129 38.3415	Back in visual range (poor visibility), out of visible range	1	1
8/22	0957				44 12.7020	129 38.2680	Pillows	1	1
8/22	1005				44 12.7221	129 38.2769		1	1
8/22	1008	11234	3424				Depth recording from Van	1	1
8/22	1010			313.0	44 12.7289	129 38.3649	Pillows, scattering of organisms	1	1
8/22	1012	11260	3432	315.0	44 12.7591	129 38.3485	Should be on target, searching for depth contour	1	1
8/22	1014			314.0	44 12.7695	129 38.3465		1	1
8/22	1019	11300	3444	348.0	44 12.6405	129 38.5070	Some elongated pillows, bad navigation fix (?)	1	1
8/22	1020				44 12.688	129 38.45	Bad Navigation fix (?)	1	1
8/22	1023			355.0	44 12.7251	129 38 4598	On bottom, pillow (not elongated)	1	1

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8/22	1026			023.0	44 12.7044	129 38.4579	Moving up pillow slope	1	1
8/22	1031			005.0	44 12.8178	129 38.2276	Bottom out of site, might have seen something on pass but lost telemetry	1	1
8/22	1037	11075	3375	240.0	44 12.8013	129 38.2084	Driving downslope (SW)	1	1
8/22	1044			220.0	44 12 7025	129 38.4397	Not receiving depth measurement, only pressure	1	1
8/22	1048	11280	3438	206.0	44 12.7091	129 38.4583	Turning around to the North	1	1
8/22	1050			079.0	44 12.7135	129 38.4570	In same place as 1023 fix	1	1
8/22	1053			083.0	44 12.6899	129 38.4606	Pillows	1	1
8/22	1054				44 12.7563	129 38.3139		1	1
8/22	1104				44 12.80	129 38.23		1	1
8/22	1108			266.0	44 12.81	129 38.24	Floculant material in water column	1	1
8/22	1110						Nice close-up of sponges on 3-chip camera	1	1
8/22	1114	11030	3362		44 12.70	129 38.46	Stopped to plot location	2	2
8/22	1204			355.0	44 12.8274	129 38.2131	ATV moving, pillows	2	2
8/22	1207			353.0	44 12.8449	129 38.2286	Probably on top of slope, change heading to 260	2	2
8/22	1209	11140	3395	278.0	44 12.8449	129 38.2311		2	2
8/22	1211	11140	3395	264.0	44 12.8514	129 38.2345		2	2
8/22	1214	11140	3395	276.0	44 12.8429	129 38.2589		2	2
8/22	1218	11140	3395	320.0	44 12.837	129 38.287		2	2
8/22	1222			208.0	44 12.8482	129 38.2696	Coming to course heading of 180	2	2
8/22	1225	11136	3394	174.0	44 12.7033	129 38.5374	Bad navigation fix (?)	2	2
8/22	1226				44 12.7264	129 38.4933		2	2

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8/22	1229	11130	3392	081.0	44 12.7264	129 38.4707	Anomalous area, top of mound, sediment patch	2	2
8/22	1234	11240	3426	277.0	44 12.7244	129 38.4598	Organisms on pillow slope	2	2
8/22	1236		0		44 12.7114	129 38.4655		2	2
8/22	1238		0	264.0	44 12.7146	129 38.4595		2	2
8/22	1241	11240	3426	011.0	44 12.6977	129 38.4676	Heading towards interesting rocks on slope	2	2
8/22	1243	11240	3426	081.0	44 12.6928	129 38.4662	Pillow lavas	2	2
8/22	1248	11230	3423	133.0	44 12.6895	129 38.4869	Following 11230 ft. contour	2	2
8/22	1251	11240	3426	072.0	44 12.6911	129 38.4644	Following along pillows	2	2
8/22	1255	11240	3426	082.0	44 12.7889	129 38.2493	Too shallow, going to turn west, pillow	2	2
8/22	1305	11240	3426	285.0	44 12.801	129 38.2378	Going down pillow slope	2	2
8/22	1309	11180	3407	294.0	44 12.6907	129 38.515	Bad navigation fix (?)	2	2
8/22	1313	11180	3407	297.0	44 12.7673	129 38.4398		2	2
8/22	1318				44 12.7602	129 38.4402		2	2
8/22	1324						Moving to ship's position 2 years ago (44 12.8'N/129 38.37'W)	2	2
8/22	1326	11370	3465	285.0			End of seafloor in view	2	2
8/22	1327	11370	3465	290.0			Seafloor visible, basalt & pillows (fresh), sparse to moderate sessile biota	3	2
8/22	1330	11370	3465	056.0	44 12.7081	129 38.4255	Navigation not updating	3	2
8/22	1332						No intact pillows, dusty rocks-white	3	2
8/22	1338	11259	3432		44 12.7247	129 38.4587	Back in sediment patch	3	2
8/22	1340			068.0	44 12.7193	129 38.4588	Sediment patches	3	2
8/22	1341	11219	3419					3	2

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8/22	1343						Heading to the west	3	2
8/22	1348	11210	3417	318.0	44 12.7226	129 38.4573	Broken pillows	3	2
8/22	1358			060.0	44 12.7108	129 38.4599	More of a sediment dusting, broken pillows	3	2
8/22	1359			046.3	44 12.7101	129 383.4670	Sediment around broken pillows	3	2
8/22	1402	11116	3388	048.7	44 12.6993	129 38.4791	20 feet off the bottom, water depth too shallow	3	2
8/22	1406	11085	3379	042.4	44 12.8250	129 38.2434	ATV coming up	3	2
8/22	1410	11069	3374	048.6	44 12.8262	129 38.2392	Water depth decreasing	3	2
8/22	1421	11036	3364	044.0	44 12.8375	129 38.2041	Currently on top of hill going downslope due South (location-under ship)	3	3
8/22	1428			183.5	44 12.8459	129 38.1838	Heading south to correct contour depth & then heading north	3	3
8/22	1430	11135	3394	177.5	44 12.8453	129 38.1834	On seafloor	3	3
8/22	1434	11097	3382	169.6	44 12.7838	129 38.1978	Yellowish-orange surface on rocks	3	3
8/22	1438	11132	3393	159.2	44 12.7656	129 38.2094	Going down, water depth increasing, on seafloor	3	3
8/22	1442	11161	3402	129.0	44 12.7324	129 38.1926	Moving ship due south, organism (sponge)	3	3
8/22	1447	11165	3403	191.2	44 12.7110	129 38.1995	Large pillows, organisms (golf balls)	3	3
8/22	1450			266.7	44 12.7193	129 38.2223	Boundary between intact and broken pillows, organisms	3	3
8/22	1454	11187	3410	293.4	44 12.7153	129 38.2630	Navigation fix	3	3
8/22	1456	11220	3420	278.1	44 12.5672	129 38.4708	Going down	3	3
8/22	1458	11275	3436	266.0	44 12.6784	129 38.2548	At seafloor, organisms	3	3
8/22	1503			304.6	44 12.6796	129 38.3670	Continue heading West	3	3
8/22	1504	11315	3449	306.9	44 12.6251	129 38.4158	Going down	3	3
8/22	1507	11347	3458	322.0	44 12.7284	129 38.4185	Going to try another traverse to the North	3	3

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8/22	1508	11335	3455	005.9	44 12.6696	129 38.4552	Heading North, large pillows	3	3
8/22	1512	11280	3438	009.7	44 12.7361	129 38.3756	Intact pillows with dusting	3	3
8/22	1515	11264	3433	009.9	44 12.7364	129 38.3814	Intact pillows, sediment between boulders, break in slope	3	3
8/22	1517			009.9	44 12.7466	129 38.3814	Pillows and sediments (not hydrothermal)	3	3
8/22	1518	11245	3427	023.6	44 12.7384	129 38.3802	Continuing upslope, more pillows	3	3
8/22	1520	11222	3420	023.5	44 12.8155	129 38.2872	Pillows, large patches of sediment	3	3
8/22	1522	11193	3411	353.8	44 12.8158	129 38.2781	This area looks promising, following sediment zone to the west, CTFM on ATV not operational	3	3
8/22	1529	11209	3416	359.0	44 12.8396	129 38.3032	Bacteria and brittles, close-up of stained rock, freshly broken rock	3	3
8/22	1540	11209	3416	014.0	44 12.7799	129 38.4531	**SAMPLE# - ATV177-1R (altered pillow)**, stained pillows, rock put in left basket(B)	4	3
8/22	1545			009.9	44 12.7641	129 38.4681	Cracked pillows, greenish areas, broken & glassy, brown pillows, zone of alteration	4	3
8/22	1548	11182	3408	343.0	44 12.7755	129 38.4640	Out of altered section, turning to heading 009 - altered section visible, turning to heading 077.4 - steep slope of sediments	4	3
8/22	1552			133.4	44 12.7582	129 38.466	Heading 120.0, stay near the bottom	4	3
8/22	1554	11183	3408	134.9	44 12.7573	129 38.4527	Trying to stay near the bottom, small pillows & basalt boulders, open patches of sediment	4	3
8/22	1557	11184	3409	124.0	44 12.7213	129 38.4546	Slowing going downslope, sediment & pillows, sparse organisms	4	3
8/22	1559	11181	3408	123.7	44 12.7054	129 38.4611	Turning due South, in water column - limited view	4	3
8/22	1604			169.0	44 12.6861	129 38.4582	New heading of 330.0	4	3
8/22	1606	11272	3436	324.0	44 12.6870	129 38.4592	Heading downslope, pillows & rubble	4	3
8/22	1610	11304	3445	313.0	44 12.6960	129 38.38.45 96	Pillows, depth increasing	4	3
8/22	1612			304.6	44 12.6646	129 38.4723	New ship location (44 12.76'N/129 38.75'W), organisms (brittle star), pillows	4	3
8/22	1617	11329	3453	313.0	44 12.7291	129 38.4478	Limited view, pillows, sparse organisms, ship moving 1600 ft. due west	4	3
8/22	1623	11392	3472	262.5	44 12.6737	129 38.4184	Sediment cover (sediment plateau, abundant organisms (sea cucumber)	4	4

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8/22	1624	11350	3459	288.5	44 12.6987	129 38.4345	Highly altered outcrop (orange-brown), **SAMPLE# - ATV177-2C** (sediments - core tube 10), actual sample time is 1635, breccia (?)	4	4
8/22	1642	11350	3459	296.4	44 12.765	129 38.318	**SAMPLE# - ATV177-3C** (sediments - core tube 11), Navigation data questionable	4	4
8/22	1651	11350	3459	272.7	44 12.7242	129 38.4008	**SAMPLE# - ATV177-4H** (heat flow - in sediments), begin: 1651 end: 1707, area is cold, gradient = 61 milideg C/m	4	4
8/22	1658	11350	3459	285.4	44 12.5343	129 38.5778	Navigation data questionable, have not moved from sample location	4	4
8/22	1716	11350	3459	270.3	44 12.7561	129 38.3150	Going upslope, rubble & pillows	4	4
8/22	1720	11300	3444	284.7	44 12.7890	129 38.3854	Bathymetry leveling off, sediment ponds & pillows, organisms (tunicate)	4	4
8/22	1723	11273	3436	278.1	44 12.7337	129 38.3230	Pillows & rubble, light sediment dusting	4	4
8/22	1726	11242	3426	280.4	44 12.7401	129 38.3261	Beautiful pillows, going upslope	4	4
8/22	1728	11220	3420	293.4	44 12.7400	129 38.3255	Classic pillows, organism (chrinoid)	4	4
8/22	1731	11184	3409	282.7	44 12.7400	129 38.3251	Pillows sloping down from the right, organism (brittle star)	4	4
8/22	1735	11162	3402	280.5	44 12.8146	129 38.5399	Going up in water column, seafloor out of view	5	4
8/22	1739	11193	3411	268.3	44 12.8146	129 38.5399	Seafloor in view, pillows, no sediments	5	4
8/22	1746	11181	3408	272.4	44 12.7888	129 38.6475	Broken pillow but not transported, some staining	5	4
8/22	1752	11182	3408	248.1	44 12.8028	129 38.6511	Bottom in distance, vague to out of sight	5	4
8/22	1757	11250	3429	168.3	44 12.7996	129 38.7123	Seafloor in site, seafloor out of site	5	4
8/22	1801	11305	3446	262.4	44 12.7650	129 33.7188	Seafloor in site, pillow rubble (finer), organisms (brittle star, shrimp)	5	4
8/22	1803	11331	3454	261.9	44 12.7655	129 38.7368	Large pillows buried in sediments, plentiful organisms (rattail, chrinoid, millipede, Fe-rich tunicate, shrimp, brittle star, holotherian, sponge)	5	4
8/22	1820	11302	3445	086.0	44 12.7485	129 38.7155	Heading due East to intersect 11230 ft. contour, pillows & rubble	5	4
8/22	1823	11309	3447	071.1	44 12.7485	129 38.7155	Heading East, pillows, floating debris in water column, organisms	5	4
8/22	1826	11300	3444	082.5	44 12.7745	129 38.6506	Heading East, pillows (elongate & others, many broken)	5	5
8/22	1830	11319	3450	080.7	44 12.7391	129 38.6359	Large pillows, organisms (sea cucumber), heading East, change course to 070.	5	5

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8/22	1833	11320	3450	071.3	44 12.6761	129 38.6018	Large pillows, course change upslope	5	5
8/22	1834	11325	3452	072.7	44 12.6796	129 38.5836	Pillows, depth increasing (?), slope to the left, turn to go up slope	5	5
8/22	1836	11300	3444	001.5	44 12.6323	129 38.7106	Red sediments between pillows, elongated & intact pillows, going upslope	5	5
8/22	1838	11270	3435	342.4	44 12.7143 6	129 38.4839	Nice pillows, organism (shrimp)	5	5
8/22	1838	11260	3432	344.8	44 12.7270	129 38.4736	Continuing up steep slope	5	5
8/22	1839	11250	3429	344.8	44 12.7471	129 38.5018	Going upslope, pillows	5	5
8/22	1839	11240	3426	344.9	44 12.7266	129 38.4922	Turning to follow contour, pillows, slope to the left	5	5
8/22	1840	11238	3425	060.8	44 12.6562	129 38.5925	Following contour East, momentarily lost site of bottom	5	5
8/22	1845	11235	3424	078.4	44 12.6844	129 38.5002	Lost site of bottom	5	5
8/22	1848	11232	3423	184.0	44 12.8110	129 38.4773	Change Van watch, bottom back in site, fragmented basalt pillows, Good navigation fix	5	5
8/22	1852	11224	3421	090.5	44 12.6485	129 38.4577	Moving ship East, ATV holding position, basalt cobbles, navigation fix not good	5	5
8/22	1900	11227	3422	093.0	44 12.7265	129 38.4481	Moving East along contour, mostly pillow rubble, visibility limited, bottom coming in and out of view	5	5
8/22	1904	11246	3428	179.3	44 12.6121	129 38.3481	At bottom, poor visibility, pillow rubble, turning a bit South to follow contour	5	5
8/22	1907	11230	3423	182.4	44 12.6243	129 38.3766	Pillows, poor visibility	5	5
8/22	1910	11312	3448	113.4	44 12.5331	129 38.3830	At bottom, have traveled downslope a bit, pillows, organisms (seapen, cucumber)	5	5
8/22	1915	11285	3440	026.2	44 12.6994	129 38.4358	Bottom now visible (poor), pillows, rubble, good navigation fix	5	5
8/22	1921	11234	3424	010.1	44 12.7319	129 38.4084	ATV in water column (alt.=120 ft.), unable to follow contour	5	5
8/22	1923	11340	3456	000.1	44 12.7388	129 38.3904	At bottom, some pillows but mostly rubble (basalt fragments), change heading to NW	5	5
8/22	1926	11306	3446	316.0	44 12.7012	129 38.3644	Sediments and basalt fragments (finer), slope	5	5
8/22	1927	11270	3435	321.3	44 12.6124	129 38.3464	Climbing upslope, basalt fragments, organism (brittle star)	5	5
8/22	1930	11247	3428	020.1	44 12.5673	129 38.2319	ATV in water column, navigation data questionable	5	5

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8/22	1933	11276	3437	183.0	44 12.6097	129 38.3243	Turning vehicle to go due East (090), ATV in water column	5	5
8/22	1938	11355	3461	088.0	44 12.7356	129 38.3848	Sediments with a few basalt fragments	5	5
8/22	1943	11295	3443	096.7	44 12.7368	129 38.2652	Basalt fragments, pillows with orange coating (sediment)	6	5
8/22	1945	11277	3437	090.5	44 12.7382	129 38.2561	Pillows & basalt fragments, orange coating on some	6	5
8/22	1947	11277	3437	106.7	44 12.7047	129 38.2460	Intact pillows, pillow fragments, light sediment coating	6	5
8/22	1949	11232	3423	144.5	44 12.6899	129 38.2365	Finer basalt fragments	6	5
8/22	1950	11222	3420	110.8	44.12.70 32	129 38.3573	Basalt fragments, talus slope, poor visibility	6	5
8/22	1953	11222	3420	072.6	44 12.7205	129 38.3595	Bottom visibility poor, basalt fragments	6	5
8/22	1955	11224	3421	070.3	44 12.7205	129 38.3595	Flat area (?), basalt fragments, broken pillows	6	5
8/22	1958	11225	3421	134.4	44 12.7192	129 38.3158	Slope on the left, intact pillows (elongated)	6	5
8/22	2001	11234	3424	084.1	44 12.6882	129 38.2980	Intact pillows, poor visibility	6	5
8/22	2007	11245	3427	104.9	44 12.6959	129 38.2685	Intact pillows, poor visibility	6	5
8/22	2012			001.5	44 12.6569	129 38.2706	Heading due North 10 11180 ft. contour, follow contour west, small patch of sediment	6	5
8/22	2019	11207	3416	015.5	44 12.6156	129 38.2784	Heading North-Northeast, pillows, slight orange coating	6	5
8/22	2025	11232	3423	012.6	44 12.6858	129 38.2683	ATV position plotted, new heading Northward along contour	6	5
8/22	2028	11246	3428	359.3	44 12.6903	129 38.2684	At bottom, basalt fragments	6	5
8/22	2031	11225	3421	359.3	44 12.5421	129 38.4549	Finer basalt fragments, larger pillow going upslope	6	6
8/22	2033	11203	3415	001.9	44 12.7416	129 38.2450	Sediment patch, possible sample area (?), pillows, continue upslope (North)	6	6
8/22	2039	11184	3409	360.5	44 12.6093	129 38.4472	Continuing upslope (North), elongated crack pillows, yellow-orange sediments	6	6
8/22	2042	11164	3403	359.8	44 12.6091	129 38.3599	Navigation data questionable	6	6
8/22	2044	11154	3400	357.8	44 12.8258	129 38.185	Pillows & basalt fragments, this navigation data correct (?)	6	6

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8/22	2048			311.9	44 12.6833	129 38.4072	New run to the West (280), depth range (11155-11220 ft.)	6	6
8/22	2051	11176	11176	315.2	44 12.6833	129 38.4072	Continue on heading if possible (280), navigation data questionable	6	6
8/22	2056	11258		293.0	4 12.680	29 38.564	Steep cliff to the left (change to rear camera, cliff actually to the right of vehicle), large pillows, navigation data questionable	6	6
8/22	2100			337.0	44 12.7893	129 38.5274	New heading of 330, large pillows & rubble, navigation data questionable	6	6
8/22	2105	11225	3421	330.9	44 12.7081	129 38.4553	Camera position back up front, broken pillows & large basalt fragments	6	6
8/22	2108	11162	3402	335.1	44 12.7734	129 38.4574	Smaller basalt fragments, some sediment, yellow coloring on rocks, navigation data questionable	6	6
8/22	2112	11104	3384	333.5	44 12.7987	129 38.4590	Steep slope to the right of vehicle, elongated pillows, water depth too shallow, change heading to 250, switch 3-chip with forward cam, CTF sonar out	6	6
8/22	2117	11095	3382	263.3	44 12.8693	129 38.3048	Alt.=27 ft., sediment and basalt rocks, poor visibility, good navigation fix	6	6
8/22	2121	11170	3404	299.0	44 12.7089	129 38.5167	Go to contour 11170 ft. & head 280, possible bacterial mat, camera tow site (?), navigation data questionable	6	6
8/22	2138	11170	3404	343.3	44 12.7089	129 38.5961	Crack in rock with white bacterial mat, lots of sediment with yellow patches, good navigation fix	6	6
8/22	2152	11170	3404	341.5	44 12.7542	129 38.6111	Close up of yellow patches, 35 mm photos taken (check van log), maybe 1994 camera tow site	7	6
8/22	2203	11170	3404	343.0	44 12.7678	129 38.4975	**SAMPLE# - ATV177-5H** (heat flow in sediments), begin: 2200 end: 2210, all sensors rose to ~35 deg C	7	6
8/22	2214	11170	3404	002.3	44 12.7736	129 38.5264	Water seeping from hole used for heat flow measurement	7	6
8/22	2221	11170	3404	012.0	44 12.7663	129 38.5405	Temperature probe use to measure water temperature at Niskin sample location, maneuvering	7	6
8/22	2230	11170	3404	014.3	44 12.6781	129 38.5395	Water temperature up to 39 deg C from ATV temperature probe	7	6
8/22	2238	11170	3404	014.3	44 12.6781	129 38.5395	Navigation check	7	7
8/22	2243	11170	3404	351.7	44 12.6454	129 38.7946	Preparing to trip niskin bottle	7	7
8/22	2255	11170	3404	343.3	44 12.7723	129 38.4885	**SAMPLE # - ATV177-6N** (water sample), Niskin bottle tripped	7	7
8/22	2259	11175	3406	359.2	44 12.7798	129 38.5167	**SAMPLE # - ATV177-7C** (15 in. core, barrel #12), sediment on outside of core barrel, repeated penetration of core	7	7
8/22	2310	11175	3406	018.0	44 12.7666	129 38.4779	Looking for water flow from core location, flow coming from core site	7	7
8/22	2315	11175	3406	080.1	44 12.7880	129 38.4683	**PARTY HAT #2 w/MTR #202 down**, puffs of hot water or mud coming from party hat	7	7

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ATV DIVE LOG

Laney Chouest
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Date (GMT)	Time (GMT)	Depth (ft)	Depth (m)	ATV Heading	ATV Lat	ATV Long	Observations & Comments	8mm	VHS
8/22	2321	11175	3406	064.2	44 12.7775	129 38.4712	**MARKER #20** down, marking party hat location	7	7
8/22	2324	11175	3406	056.4	44 12.7822	129 38.4647	Moving to another core location, stirring up sediments, change camera position to the rear	7	7
8/22	2328			347.1	44 12.7935	129 38.4526	Searching for core location (larger bacterial mats)	7	7
8/22	2332	11164	3403	018.2	44 12.8058	129 38.4681	Out of vent area, pillows, some yellow stained basalts	7	7
8/22	2338			056.2	44 12.7736	129 38.4893	Sediments in water column, poor visibility, looking for vent site	7	7
8/22	2344	11173	3405	111.1	44 12.8008	129 38.4546	Yellow patches visible, waiting for sediment to settle, found new coring site	7	7
8/22	2351	11173	3405	111.1	44 12.7846	129 38.4560	Possible barite formation	8	7
8/22	2356	11173	3405	119.1	44 12.7835	129 38.4560	**SAMPLE # - ATV177-8C** (15in. core barrel #9), sediments	8	7
8/23	0003	11173	3405	038.2	44 12.7946	129 38.4535	Attempt to collect barite sample (failed), 35 mm photos (frames 20,21,22)	8	7
8/23	0005	11173	3405	062.3	44 12.7924	129 38.4830	Attempting to collect sample cause disturbance of sediments, poor visibility	8	7
8/23	0009	11173	3405	056.6	44 12.7701	129 38.4897	Waiting for clearing, seafloor now visible	8	7
8/23	0023	11173	3405	062.3	44 12.7842	129 38.4651	Second attempt at barite sample (failed), sediments disturbed (dust out)	8	7
8/23	0024						Waiting for sediments to clear to pick up barite sample, barite more than 1meter long and 3/4 meter high	8	7
8/23	0027	11173	3405	066.0	44 12.7786	129 38.4789	Panning site with color camera while waiting for sediments to clear	8	7
8/23	0038			062.0			Attempted to sample barite again but sediments disturbed	8	8
8/23	0040						Marker #20 visible	8	8
8/23	0041	11172	3405	064.0	44 12.8093	129 38.4540	Sediments settling, attempt top sample barite one more time	8	8
8/23	0058			085.0	44 12.7814	129 38.4523	Speckled rock, small sponges	8	8
8/23	0108			085.0	44 12.8009	129 38.4593	Above party hat and marker #20	8	8
8/23	0111				44 12.7925	129 38.46		8	8
8/23	0112				12.7840 44 12.7891	38.4618 129 38.4654	Variation in navigation above party hat	8	8

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ATV DIVE LOG

Laney Chouest
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Date (GMT)	Time (GMT)	Depth (ft)	Depth (m)	ATV Heading	ATV Lat	ATV Long	Observations & Comments	8mm	VHS
8/23	0117	11176	3406	095.0	44 12.7965	129 38.4531	Temperature probe doesn't fit into the the party hat, measurement taken at the top of party hat, **TEMPERATURE PROBE** (from 36.2 to 38.7 F)	8	8
8/23	0126						3-chip views of mats from behind vehicle	8	8
8/23	0132			040.0	44 12.7921	129 38.4563	Turning North from party hat, looking for more mats	8	8
8/23	0133			033.0	44 12.804	129 38.4563	Now facing barite	8	8
8/23	0134			021.0	44 12.8056	129 38.4472	Out of active area, just pillows	8	8
8/23	0135	11151	3399	026.0	44 12.8050	129 38.4780	Alt. = 27 ft., pillows	8	8
8/23	0136			002.0	44 12.8171	129 38.4632	Back at active site, going to work spokes of wheel	8	8
8/23	0138			003.0	44 12.8319	129 38.4544	Lots of sediment and exposed rocks	8	8
8/23	0139	11155	3400	016.0	44 12.8192	129 38.4885		8	8
8/23	0141			039.0	44 12.8272	129 38.4861	Barite sediments (?)	8	8
8/23	0143	11168	3404	029.0	44 12.8195	129 38.4754		8	8
8/23	0147			003.0	44 12.8098	129 38.4756	Back near Marker #20	9	8
8/23	0151	11142	3396		44 12.8120	129 38.465	Alt. = 23 ft., Backing down	9	8
8/23	0152	11153	3399	004.0	44 12.8101	129 38.4660	Going down pillow slope	9	8
8/23	0153	11160	3401	004.0			Alt. = 22 ft.	9	8
8/23	0153	11170	3404	011.0				9	8
8/23	0154			042.0	44 12.8018	129 38.4775	View of Marker #20 from color cam	9	8
8/23	0156	11181	3408	177.0	44 12.7898	129 38.4463	Heading South from party hat	9	8
8/23	0157	11203	3415	206.0	44 12.7759	129 38.4567	Switched to forward camera, sediments	9	8
8/23	0158	11221	3420	179.0	44 12.7711	129 38.4436	This is the big mound ----- maybe not (NO)	9	8
8/23	0200			054.0	44 12.6945	129 38.4405	Coming around to face the hill	9	8

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Laney Chouest
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Date (GMT)	Time (GMT)	Depth (ft)	Depth (m)	ATV Heading	ATV Lat	ATV Long	Observations & Comments	8mm	VHS
8/23	0201			040.0	44 12.7720	129 38.4434	Maybe more sulfur and/or barite - huge	9	8
8/23	0202	11230	3423	040.0	44 12.7646	129 38.4600		9	8
8/23	0204			028.0	44 12.7562	129 38.464	Moving back up to 11220 ft. contour to look at possible mats	9	8
8/23	0205	11219	3419	046.0			Looks mineralized	9	8
8/23	0206	11228	3422	045.0	44 12.7473		Alt. = 13 ft., Linear staining visible from 3-chip camera	9	8
8/23	0207	11235	3424	060.0	44 12.7666	129 38.4408	Alt. = 6 ft., in barite features	9	8
8/23	0210	11237	3425	027.0	44 12.7598	129 38.4335	Looking for rock sample site	9	8
8/23	0213			008.0	44 12.6667	129 38.4481	Crumbly small piece of barite	9	8
8/23	0214			010.0	44 12.6988	129 38.4453	**SAMPLE # ATV177-9R1** (rock from barite mound) put in basket A	9	8
8/23	0217	11237	3425	036.0	44 12.7660	129 38.4552	**SAMPLE # ATV177-9R2** (rock)	9	8
8/23	0219			036.0	44 12.7590	129 38.4607	Backing downslope, vehicle heading 036	9	8
8/23	0221	11252	3429	020.0	44 12.7566	129 38.4670	Backing downslope	9	8
8/23	0222	11255	3430	023.0	44 12.7600	129 38.4672	Backing downslope	9	8
8/23	0224	11278	3437	040.0	44 12.758	129 38.459	Backing downslope	9	8
8/23	0225	11281	3438	027.0	44 12.762	129 38.436	Backing downslope	9	8
8/23	0227	11300	3444	006.0	44 12.765	129 38.432	Bathymetry flattening out	9	8
8/23	0230	11310	3447	343.0	44 12.753	129 38.4238	ATV sitting down on seafloor	9	8
8/23	0232			327.0	44 12.7475	129 38.4312	Deploy marker #25 and then head 330	9	8
8/23	0234	11318	3450	334.0	44 12.7553	129 38.4497	Alt. = 5 ft., **MARKER #25** deployed	9	8
8/23	0236			327.0	44 12.7511	129 38.4547	Good view of marker #25	9	9
8/23	0238	11265	3433	357.0	44 12.6982	129 38.4342	Taking 35mm photos	9	9

ATV DIVE LOG

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Date (GMT)	Time (GMT)	Depth (ft)	Depth (m)	ATV Heading	ATV Lat	ATV Long	Observations & Comments	8mm	VHS
8/23	0239	11230	3423	345.0	44 12.7754	129 38.4330		9	9
8/23	0240			317.0	44 12.9037	129 38.3468	Going West along contours, off bottom - no view	9	9
8/23	0243	11233	3424	257.0	44 12.7719	129 38.3725	Going up slope	9	9
8/23	0245	11227	3422	270.0	44 12.8454	129 38.2938	Sediment areas, turning to head 330	9	9
8/23	0246	11216	3418	331.0	44 12.7966	129 38.3610	Alt. = 7 ft., organisms	9	9
8/23	0247						Going up to bacteria mats for temperature & box core	9	9
8/23	0248			335.0	44 12.8184	129 38.3612		9	9
8/23					44 12.7769	129 38.4120	SHIP POSITION	9	9
8/23	0252			318.0	44 12.7860 4	129 38.3429	Taking water temperature	9	9
8/23	0253	11217	3419	319.0	44 12.7218 4	129 38.3411	**SAMPLE# - ATV177-10T** (temperature), high 47.8 deg, bad navigation data (?)	9	9
8/23	0300			317.0	44 12.7901 4	129 38.3592	Ready for heat probe of same feature, bad navigation data (?)	9	9
8/23	0304				44 12.7237	129 38.3435	Bad navigation data (?)	9	9
8/23	0307			333.0	44 12.8017	129 38.3734	Heat probe positioning	9	9
8/23	0308			333.0	44 12.7623	129 38.5039	**SAMPLE # - ATV177-10H** (heat flow), hot, gradient = 49 deg C/m, no conductivity (K), bad navigation data (?)	9	9
8/23	0325				44 12.8081	129 38.3619	Good navigation data	9	9
8/23	0329						Core bottle 1 had something in it when pulled up	9	9
8/23	0330			335.0	44 12.7805	129 38.3608	**SAMPLE # - ATV177-11C** (core) at same mat site, double cored	9	9
8/23	0337			344.0			**SAMPLE # ATV177-12C** (core tube #7), same site as previous sample, navigation data bad	9	9
8/23	0340	11216	3418	357.0			Good 3-chip view, bacteria (bright yellow), stalked animals	9	9
8/23	0346	11216	3418	001.0	44 12.7194	129 38.9176	Box core attempt - too small	10	9
8/23	0351	11216	3418	335.0	44 12.7980	129 38.3513	**SAMPLE # - ATV177-13BC** (box core). box core in big bacterial mat (same site)	10	9

ATV DIVE LOG

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Date (GMT)	Time (GMT)	Depth (ft)	Depth (m)	ATV Heading	ATV Lat	ATV Long	Observations & Comments	8mm	VHS
8/23	0358	11216	3418	331.0	44 12.7957	129 38.3505	Trying to close box core, navigation data looks good	10	9
8/23	0408	11216	3418	000.0	44 12.7899	129 38.3504	Box core closed, good 3-chip views, navigation data looks good	10	9
8/23	0410			341.0	44 12.7755	129 38.3486	Turning west to drive along contour	10	9
8/23	0411	11190	3411	262.0			Alt. = 25 ft., heading west	10	9
8/23	0413	11212	3417	256.0	44 12.7706	129 38.3653	Alt. = 8 ft., heading west, sediment	10	9
8/23	0415	11215	3418	268.0	44 12.7683	129 38.3599	Alt. = 14 ft., heading west, poor visibility	10	9
8/23	0417	11220	3420	263.0			Alt. = 18 ft., bad navigation data	10	9
8/23	0419	11230	3423	292.0			Alt. = 10 ft., bad navigation data	10	9
8/23	0421	11218	3419	311.0	44 12.9110	129 38.4461	Alt. = 20 ft., bad navigation data, some staining	10	9
8/23	0424	11214	3418	322.0	44 12.9120	129 38.4646	Alt. = 22 ft., bad navigation data, backing downslope then turning Northeast	10	9
8/23	0425			340.0	44 12.888	129 38.4526	Pillows, less/little sediment	10	9
8/23	0426	11249	3429	341.0	44 12.8844	129 38.4500	Alt. = 22 ft.	10	9
8/23	0427	11258	3431	040.0	44 12.8873	129 38.4476	Turning Northeast	10	9
8/23		11240	3426				Orange shining animals	10	9
8/23	0430	11214	3418	044.0			Area to sample crust - barite (?)	10	9
8/23	0431				44 12.8869	129 38.4449		10	9
8/23	0435				44 12.9019	129 38.434	Rock sample in jaws	10	10
8/23	0437	11214	3418		44 12.9038	129 38.4336	**SAMPLE # - ATV177-14R** (rock), crumbly - mineralized	10	10
8/23	0441	11214	3418		44 12.9038	129 38.4336	Mineralized slope, scanning with cameras	10	10
8/23	0442						Decided to do heat flow measurement here (same site as rock sample)	10	10
8/23	0443	11213	3418		44 12.8899	129 38.4293	35 mm photos of mineral slopes (frame 28)	10	10

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Date (GMT)	Time (GMT)	Depth (ft)	Depth (m)	ATV Heading	ATV Lat	ATV Long	Observations & Comments	8mm	VHS
8/23	0450	11213	3418		44 12.8914	129 38.4308	**SAMPLE # - ATV177-15H** (heat flow), gradient = 172 milideg C/m, low heat flow = 158mw/m2, good conductivity (K)	10	10
8/23	0457	11213	3418		44 12.8922	129 38.4294	Photo of anenome (very pretty)	10	10
8/23	0459	11213	3418				Photo of mineral slope	10	10
8/23	0504	11213	3418		44 12.8918	129 38.4319	End of heat probe measurement, no heat - cold	10	10
8/23	0510				44 12.8999	129 38.4312	Ready to head east	10	10
8/23	0512	11210	3417	085.0	44 12.8878	129 38.4283	Alt. = 5ft., driving east over sediment	10	10
8/23	0513			086.0	44 12.8840	129 38.4268	Bacterial stains	10	10
8/23	0515	11185	3409	084.0	44 12.8987	129 38.3891	Barite edifices, NAVIGATION LOOKS BAD FOR ALL FIXES FROM 0427 - 0515	10	10
8/23							Change heading to 110 to go downslope	10	10
8/23	0516			100.0	44 12.7752	129 38.3572	Bacterial mats, good navigation data	10	10
8/23	0518	11203	3415	091.0	44 12.7566	129 38.3427	Big mat, back at box core site (?) (different depth ?)	10	10
8/23	0522	11203	3415	128.0	44 12.8196	129 38.3584	Holding for heat probe	10	10
8/23	0525			118.0	44 12.8200	129 38.3574	Heat probe	10	10
8/23	0526						Heat probe deployed	10	10
8/23	0529	11204	3415	100.0			Repositioning for better probe	10	10
8/23	0536	11204		323.0	44 12.8222	129 38.3534	Turned North	10	10
8/23	0539	11204	3415	339.0	44 12.8212	129 38.3558	**SAMPLE # - ATV177-16H** (heat flow), begin heat flow	10	10
8/23	0554	11204	3415				End heat flow measurement, Highest gradient = 87 deg C/m	11	10
8/23	0557	11204	3415				Warm water coming out of hole produce by heat flow measurement	11	10
8/23	0558	11204	3415		44 12.8213	129 38.3560	Heading 110 after secure	11	10
8/23	0600			083.0			Turning and driving	11	10

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Date (GMT)	Time (GMT)	Depth (ft)	Depth (m)	ATV Heading	ATV Lat	ATV Long	Observations & Comments	8mm	VHS
8/23	0603	11246	3428		44 12.8137	129 38.3521	Stained mat slope, white fracture along rock	11	10
8/23	0604	11242	3426		44 12.7544	129 38.4686	Taking photos	11	10
8/23	0605	11245	3427	028.0	44 12.7404	129 38.4992		11	10
8/23	0608	11242	3426	023.0	44 12.8391	129 38.4141	Alt. = 16 ft., photo of white stain	11	10
8/23	0610			080.0	44 12.7761	129 38.4612	Turning to 100	11	10
8/23	0612	11236	3425				Steep slope, poor visual on camera	11	10
8/23	0613	11251	3429	102.0			Floc in water, pillow basalts, bad navigation data	11	10
8/23	0615			050.0	44 12.7529	129 38.4379	Turning North up hill, pillows	11	10
8/23	0616	11222	3420				Out of stained area, some white stains on pillows	11	10
8/23	0618	11204	3415	015.0			Turning West, edge of pillow field	11	10
8/23	0618			346.0	44 12.7459	129 38.4261	Edge of cliff, lost bottom	11	10
8/23	0619				44 12.7737	129 38.4759		11	10
8/23	0621			322.0	44 12.7883	129 38.4828	See marker #20, back at party hat	11	10
8/23	0622	11179	3407	276.0	44 12.7908	129 38.4918	Continuing West	11	10
8/23	0626			270.0	44 12.7526	129 38.4714	Golf ball biology	11	10
8/23	0627						Lost bottom visual	11	10
8/23	0629	11225	3421	277.0	44 12.7875	129 38.4447	Back in sediment	11	10
8/23	0635	11190	3411	277.0			Mineralized mound, bad navigation data	11	11
8/23	0638			260.0			Continuing West at 250	11	11
8/23	0642	11213	3418	250.0			Alt. = 9.4 ft., bad navigation data, continuing at 250	11	11
8/23	0645			250.0			Switched from color to aft camera	11	11

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Date (GMT)	Time (GMT)	Depth (ft)	Depth (m)	ATV Heading	ATV Lat	ATV Long	Observations & Comments	8mm	VHS
8/23	0646	11270	3435	250.0			Sediment area on aft camera, navigation data bad	11	11
8/23	0647			290.0			Turn to 280, navigation data bad	11	11
8/23	0648			281.0			Barite mounds in patches - sediment	11	11
8/23	0649			277.0			Aft camera - pillows in sediment	11	11
8/23	0650	11290	3441	290.0	44 12.8633	129 38.4191	Sediment - heavy ? pillow rubble margin	11	11
8/23	0651						Basalt only, boundary of sediment area	11	11
8/23	0653			320.0	44 12.8617	129 38.4129	Change heading to 0 (North) up to contour 11220 ft. then go West, still in pillows	11	11
8/23	0654			330.0			Fuzzy pillows, pillow slope	11	11
8/23	0655	11225	3421		44 12.9004	129 38.4907	Some elongated pillows and sediment	11	11
8/23	0656			080.0			Turning east, more sediment	11	11
8/23	0657	11225	3421	083.0	44 12.9031	129 38.4735	In pillows (broken)	11	11
8/23	0658			089.0	44 12.8893	129 38.4501	Out of pillows, back in sediments	11	11
8/23	0700	11229	3422	182.0			Alt. = 10ft.	11	11
8/23	0701			072.0			Staining in sediment	11	11
8/23	0702	11227	3422	092.0			Alt. = 8 ft., staining	11	11
8/23	0703	11197	3413	087.0			Lots of floc in water, staining , steep slope	11	11
8/23	0705			120.0			Stopping for a look	11	11
8/23	0710	11259	3432	348.0	44 12.7732	129 38.4647	Preparing for heat probe	11	11
8/23	0719	11260	3432				Still waiting for dust to settle	11	11