NBP07-09 Science Equipment/Systems Allocation					Qty = total in inventory
					Req = number requested for cruise
					Rem = remaining in inventory
Product	**Qty**	**Req**	**Rem**	O-270 Ackley	**Cruise Questions:**
ANALYTICAL INSTRUMENTS AND EQUIPMENT					
Autoclave					
Autoclave, Market Forge, STM-EL Sterilmatic, 110 - 121°C	0	0	0	0	
Balance					
Balance, Motion Compensated, POLS S-182, Accuracy ± 0.1g up to 0.3kg; ± 0.2g up to 0.6kg; ± 0.5g up to 1.5kg	1	0	1	0	
Balance, topload, portable, 600g x 0.1g, 10.2 cm diameter pan, auto-calibration, Ohaus CT-600	2	0	2	0	
Balance, topload, 200g x 0.01g, 10cm diameter pan, built-in calibration, Mettler AE-240S (for use in port at Punta Arenas, Chile unless otherwise requested)	1	0	1	0	
Balance, topload, 2100g x 0.01g, Mettler PG2002-S	1	0	1	0	
Balance, topload, 4100g x 0.1g, 17cm diameter pan, Mettler PM4000	1	0	1	0	
Balance, triple beam, 2610g x 0.1g, 13cm diameter pan, Ohaus	2	0	2	0	
Scale, hanging 0-110 lbs - Salter 235 6S	1	0	1	0	
Bath					
Bath, Circulating, Neslab RTE-10, -25°C to +150°C, +/- 0.01°C, Bath 8.8" x 9.4" x 6", 10L	3	1	2	1	
Bath, circulating, Neslab RTE-110D, -30º to 130ºC, +/- 0.01ºC, Bath 5" x 5" x 5", 5L	1	1	0	1	
Bath, Circulating, Neslab RTE-17, -25°C to +150°C, +/- 0.01°C, Bath 8.8" x 9.4" x 9", 17L	3	1	2	1	
Bath, circulating, Neslab RTE-211D, -28º to 130ºC, +/- 0.01ºC, Bath 10x10x5 3/4", 12.3L	8	0	8	0	
Bath, circulating, Polyscience, -28º to 130ºC, +/-0.01ºC, Bath 5x5	2	0	2	0	
Bath, dri, modular, six block, ambient to 150ºC, +/-0.5ºC, with 50, 15, 1.5ml tube size blocks, VWR 13259-038	3	0	3	0	
Bath, dri, modular, three block, 25º to 110ºC, +/- 0.1ºC, with 6, 13, 16mm tube size blocks, Thermolyne 16525	2	0	2	0	
Bath, heat, shaking, Yamato YB521, 5º to 70ºC, +/- 0.1ºC, timer	1	0	1	0	

Bath, heated, analog, VWR 1212, 5°C above ambient to 37°C, 14L capacity, chamber 12 29/32" x 11 3/4" x 6"	1	0	1	0	
Bath, Ultrasonic, 12x6x6"D, 6L, Branson 3200	1	0	1	0	
Bath, Ultrasonic, 12x9x6", 10L, heat, timer, degassing, Ney 300, Fisher 15-336-6	1	0	1	0	
Heat block, 12 x 15ml conical, VWR 13259-250	3	0	3	0	
Heat block, 12 x 16mm, Thermolyne BK 165X7A	2	0	2	0	
Heat block, 20 x 1.5ml microtaper, VWR 13259-286	2	0	2	0	
Heat block, 20 x 13mm, Thermolyne BK 165X5A	3	0	3	0	
Heat block, 30x 6mm, Thermolyne BK 165X3A	2	0	2	0	
Heat block, 5 x 50ml microtaper, VWR 13259-254	1	0	1	0	
Immersion cryo-cooler with 3/4" dia x 7" length probe, FTS systems, Flexicool FC100A10, 110V, -100°C	1	0	1	0	
Immersion cryo-cooler with 9-1/4" x 3" OD probe, Cole Parmer EW-01283-61, 240V, -60°C to -20°C	1	0	1	0	
Centrifuge					
Adapter for 4-place bucket rotor, for Beckman GS-6 - Specify required adapters	1	0	1	0	
Centrifuge, clinical, non-refrigerated, 3300 rpm max, 1580 xg max Clay Adams Dynac	2	1	1	1	
Centrifuge, micro, non-refrigerated, 14000 rpm max, Eppendorf 5415C	2	1	1	1	
Centrifuge, micro, non-refrigerated, variable speed up to 13,200 rpm / 16,110 x g, Eppendorf 5415D	4	0	4	0	
Centrifuge, micro, non-refrigerated, variable speed up to 16,400 rpm / 25,000 x g, Eppendorf 5417C	2	0	2	0	
Centrifuge, micro, refrigerated, -9º to 40ºC, variable speed up to 16,400 rpm / 25,000 x g, Eppendorf 5417R	1	0	1	0	
Centrifuge, non-refrigerated, 3800 rpm / 3200 g max, Beckman GS-6	1	0	1	0	
Centrifuge, refrigerated, -20º to 40ºC, variable speed up to 15,300 rpm, Beckman Allegra 21R	1	0	1	0	
Rotor, 30º, fixed, 6 x 30ml, 20,450 RCF/g max, Beckman F0630, for Beckman Allegra 21R	1	0	1	0	
Rotor, 4-place, bucket, for 1L bottles, Beckman P/N GH 3.8, 3,750 rpm max, 3,200g, for Beckman GS-6	0	0	0	0	
Rotor, fixed, 18-place, for 1.5-2ml microfuge tubes, 11mm bore, 14,000 rpm max / 16,000 x g, for Eppendorf 5415C	2	1	1	1	
Rotor, fixed, 24-place, for 1.5-2ml microfuge tubes, 11mm bore, 13,200 rpm max / 16,110 x g, for Eppendorf 5415D	4	0	4	0	
Rotor, fixed, 24-place, for 15ml tubes, for Clay Adams Dynac II	2	1	1	1	
Rotor, fixed, 30-place, for 1.5-2ml microfuge tubes, 11mm bore, 14,000 rpm max / 20,800 x g, for Eppendorf 5417C	2	0	2	0	

Rotor, fixed, 30-place, for 1.5-2ml microfuge tubes, 11mm bore, 14,000 rpm max / 20,800 x g, for Eppendorf 5417R	2	0	2	0	
Rotor, fixed, 36-place, for 1.5-2ml microfuge tubes, 19,280 RCF/g max, Beckman F3602, for Beckman Allegra 21R	1	0	1	0	
Rotor, fixed, 4-place, for 50ml tubes, for Clay Adams Dynac II	1	0	1	0	
Rotor, horizontal, 4-place, 5450 RCF/g max, Beckman S4180, for Beckman Allegra 21R - Specify required inserts	1	0	1	0	
Rotor, horizontal, 4-place, for 50ml tubes, for Clay Adams Dynac II	2	0	2	0	
Rotor, microplate/microtitor, 1,107 RCF/g max, Beckman S2096, for Beckman Allegra 21R	1	0	1	0	
Conductivity Meter					
Conductivity Cell, 1.0k constant, plastic body with thermistor, Orion 011050	2	1	1	1	
Conductivity Meter, portable, Orion 115	1	1	0	1	
Crimper					
Crimper, hand operated for 20mm seals- Wheaton 224303	1	0	1	0	
Dark Room					
Camera Holder, 0 to 60 cm H, 14x14", Beseler CS14 (limited use due to vibration)	1	0	1	0	
Counter top, temperature controlled (part of sink in Darkroom)	1	0	1	0	
Darkbag and film development canister	1	0	1	0	
Dispenser					
Dispenser, 1-5ml, bottle top, 28, 38, 45mm adapters, Brinkmann 022-22-100-1	4	0	4	0	
Dispenser, 10-50ml, bottle top, 28, 38, 45mm adapters, Brinkmann 50-10-050-2	2	1	1	1	
Dispenser, 2-10ml, bottle top, 24, 28, 38mm adapters, Brinkmann 50-10-030-8	7	1	6	1	
Dispenser, 5-25ml, bottle top, 28, 38, 45mm adapters, Brinkmann 50-10-040-5	6	0	6	0	
Dispenser, repipet, 0-0.5ml, with square amber glass jar	3	0	3	0	
Dispenser, repipet, 0-2.5ml, with square amber glass jar	3	0	3	0	
Dispenser, repipet, 0-5ml, with square amber glass jar	3	1	2	1	
Dispensor, 0-0.5mL, Barnstead Repipet Jr - for aqeous solutions only Acid/Base OK	4	0	4	0	
Electrophoresis					
Camera, GelCam, Digital, Polaroid PDC 2300Z, Kit includes: Gel Pro Express Software and Hood	1	0	1	0	
Fluorometer					
Attenuator plate, 1:5, Turner Designs 10-318(square)/10-318R(round)	1	1	0	1	
Cuvette Holder, 13mm and 25mm, Turner Designs 10AU-030	1	1	0	1	
Filter kit, Ammonium/CDOM filter set, Turner Designs 10-303	2	0	2	0	

Filter kit, Chlorophyll-a in Vivo & extractive (Acidification), Turner Designs, 10-037R	2	0	2	0	
Filter kit, Chlorophyll-a in Vivo & extractive (NON-Acidification), Turner Designs, 10-040R	2	0	2	0	
Filter, >570nm, cs 3-66, em:rhodamine, Turner Designs 10-052	1	1	0	1	
Filter, >570nm, cs-16, em:chlorophyll, Turner Designs 10-053	1	1	0	1	
Filter, >610nm, cs 29, em:chlorophyll, Turner Designs 10-054	1	1	0	1	
Filter, >665nm, cs2-64, em:chlorophyll acidification method, Turner Designs 10-051/10-51R	1	1	0	1	
Filter, 1 N.D., square, Turner Designs 10-032	1	1	0	1	
Filter, 2 N.D., square, Turner Designs 10-035	1	1	0	1	
Filter, 310 - 390nm, ex: Ammonium/DOM, round, Turner Designs 10-102	1	0	1	0	
Filter, 340 - 500nm, cs 5-60, ex: chlorophyll acidification method, Turner Designs 10-050/10-050R	1	1	0	1	
Filter, 410 - 600nm, em: Ammonium/DOM, round, Turner Designs 10-110R-C	1	1	0	1	
Filter, bandpass 7-37, 300-400nm, square, Turner Designs 10-069	1	1	0	1	
Fluorometer, Benchtop, Turner TD700, rotating drum for multiple filter sets	0	0	0	0	
Fluorometer, digital, Turner 10-AU-005 (benchtop). Please select filters required.	2	1	1	1	
Solid Standard, Secondary Chl-A standard	1	1	0	1	
Freezer/Refrigerator					
Freezer, -20ºC, upright, 15 cu ft, 17 x 50 x 23"D, Fisher Scientific	1	1	0	1	
Freezer, ultralow, -40º to -80ºC, chest, 20 cu ft, 70L x 19W x 26"D, Revco	1	1	0	1	
Freezer, ultralow, -40º to -80ºC, upright, 15 cu ft, five compartments, Revco	1	0	1	0	
Refrigerator, underbench, 4 cu ft, with 0.5 cu.ft. freezer	4	0	4	0	
Refrigerator, upright, 11.8 cu ft, w/2.1 cu ft freezer, Baxter FSR54AOC, Helo Workshop	1	0	1	0	
Furnace					
Furnace, Muffle, Barnstead Thermolyne F6038CM	1	0	1	0	
Gas Chromatograph					
Agilent 6890N GC system, configured with Packet inlet with EPC septum purge, Capillary Split/Splitless inlet with EPC, Single Flame Photometric Detector (FPD), Micro Electron Capture Detector (ECD), Flame Ionization Detector (FID), and liquid nitrogen cryogenic cooling accessory; Chem Station software	0	0	0	0	
Homogenizer					
Generator, Safety sealed chamber assembly, stainless steel, 70ml, 1" blade, treatable volume 10-65ml	0	0	0	0	

Generator, saw, chamber size 7 x 150mm, stainless steel, treatable volume 0.1-10ml	0	0	0	0	
Homogenizer, w/stand, for sample vol. 0.3ml-20L, 10000 to 30000 RPM, Pro Scientific 250	2	0	2	0	
Immersion sonicator, Omni Ruptor 400 Ultrasonic Homogenizer, with 400W control unit and generator with variable power output	0	0	0	0	
Intermediate Tip for Ultrasonic Homogenizer, 3/8" (9.5mm) diameter, 8.6" (21.8cm) length, 10ml - 250ml processing volume, Medium intensity, Solid Titanium construction	0	0	0	0	
Micro-Tip for Ultrasonic Homogenizer, 5/32" (3.8mm) diameter, 10.1" (25.6cm) length, 250 µl -10ml processing volume, High intensity, Solid Titanium construction	0	0	0	0	
Hood					
Filter unit, Laminar Flow, Mac 10, 2' x 4', three speed fan setting, 120V	0	0	0	0	
Filters for Acid use	1	0	1	0	
Filters for Formaldehyde use	1	1	0	1	
Filters for Solvent use	0	0	0	0	
Hood, absorber, portable, 31.5x25" working space, 87 cu ft/min, Captair Labx	0	1	-1	1	
Hood, fume, 32Dx48"W working area, Fisher Hamilton Safeair, installed in Bio Lab	2	1	1	1	
Hood, fume, portable, Flowsciences 34 x 30", contains own blower for lab vans	1	0	1	0	
Hood, laminar flow station, vertical, tall version, Air Clean Systems, 32", metal free, Class 100, 40" external height 30" internal height	0	0	0	0	
Hood, laminar flow, bench model, 2x2' working area, corrosion-res, Envirco 100-Plus (welded steel cabinet),	2	0	2	0	
Hood, laminar flow, bench model, 31" x 23" x 22", Airclean systems, trace metal use,	1	0	1	0	
Hood, laminar flow, bench model, 36" x 24" x 28", Terra Universal, trace metal use	3	0	3	0	
Hood, snorkel, portable, ceiling mounted, Alisident System 100	3	0	3	0	
Hot Plate/Stirrer					
Hot Plate/Stirrer, 6x8", 65º to 510ºC, Corning PC-320	3	1	2	1	
Hot Plate/Stirrer, 8x8", 65º to 500ºC, Thermolyne SP46925	2	0	2	0	
Stir Plate, 10" x 10", Corning PC-610	2	0	2	0	
Ice Maker					
Ice maker - shaved ice - installed in Hydro Lab	1	1	0	1	
Incubator		0	0		
Incubator, lighted, -10º to +50ºC, +/- 1-3ºC, Percival Model I-36LLVL, in Aft Dry Lab	2	1	1	1	

Irradiance Sensor					
Data Logger, Li-Cor LI-1000	2	1	1	1	
Irradiance Sensor, frame, lowering, f/LI-193SA	2	1	1	1	
Irradiance Sensor, handheld, immersible, scalar, quantum, Biospherical Instruments QSL-100	1	0	1	0	
Irradiance Sensor, pyranometer, BNC 50', LI-COR LI-200SA	3	0	3	0	
Irradiance Sensor, pyranometer, non-BNC 50', LI-COR LI-200SZ	3	0	3	0	
Irradiance Sensor, quantum, BNC 50', LI-COR LI-190SA	3	1	2	1	
Irradiance Sensor, quantum, non-BNC, 50', LI-COR LI-190SZ	3	0	3	0	
Irradiance Sensor, underwater spherical, LI-COR LI-193SA	3	1	2	1	
Light Table					
Light Table, 16x20", Searight WTB 16/2, for viewing photographic slides	1	0	1	0	
Liquid Scintillation Counter					
Liquid Scintillation Counter, Perkin Elmer Tri-carb 2900. If requested, you must also request a rad van under the Systems tab.	0	0	0	0	
Liquid scintillation counter, w/monitor, external disk, printer, Beckman LS6500. If requested, you must also request a rad van under the Systems tab.	3	1	2	1	
Quench Standards, 14-C	1	1	0	1	
Quench Standards, 3-H	1	1	0	1	
Rack Adapters for 2ml microfuge tubes	1	1	0	1	
Rack Adapters for 4ml bio vials	1	1	0	1	
Racks for 20 ml scintillation vials	1	1	0	1	
Racks for 7 ml scintillation vials	1	1	0	1	
Unquenched Standards, blank, 3-H, 14-C	3	1	2	1	
Microscope					
Base, Darkfield w/ illuminator, M3C	2	0	2	0	
Cold Stage, for Petri Dish, -1.8ºC to ambient temperature, +/- 0.1ºC	0	1	-1	1	
Cold Stage, for slides, -1.8ºC to ambient temperature, +/- 0.1ºC, Instec STC 200	1	2	-1	2	
Epi-Fluoroscent Filter, Nikon E800 - BLUE (96165)	1	1	0	1	
Epi-Fluoroscent Filter, Nikon E800 - BLUE LP (11001)	1	1	0	1	
Epi-Fluoroscent Filter, Nikon E800 - DAPI (31000)	1	1	0	1	
Epi-Fluoroscent Filter, Nikon E800 - FITC (31001)	1	1	0	1	
Epi-Fluoroscent Filter, Nikon E800 - RHODAMINE/TRITC (31002)	1	1	0	1	
Epi-Fluoroscent Filter, Nikon E800 - TEXAS RED (96109)	1	1	0	1	
Epi-Fluoroscent Filter, Zeiss Axioskop 50 - Acridine Orange/FITC (CZ909)	1	0	1	0	
Epi-Fluoroscent Filter, Zeiss Axioskop 50 - DAPI (CZ902)	1	0	1	0	
Epi-Fluoroscent Filter, Zeiss Standard 25 - DAPI (487702)	1	0	1	0	

Epi-Fluoroscent Filter, Zeiss Standard 25 - FITC (487709)	1	0	1	0	
Epi-Fluoroscent Filter, Zeiss Standard 25 - Rhodamine (487715)	1	0	1	0	
Illuminator, fiber optic, two arm, Dolan-Jenner MI-150F	9	1	8	1	
Microscope Imaging, Camera, Digital, Nikon Coolpix 1500	1	1	0	1	
Microscope Imaging, Camera, Digital, Nikon Coolpix 5000	1	1	0	1	
Microscope Imaging, Camera, Digital, SPOT RT Slider	1	0	1	0	
Microscope Imaging, Camera, Digital, SPOT RT Slider	1	1	0	1	
Microscope Imaging, Camera, Slide Film, Zeiss MC80	1	0	1	0	
Microscope Imaging, Camera, Video, Sony DXC-390	1	1	0	1	
Microscope, compound, Brightfield, DIC, Epi-Fluorescence, Phase Contrast, Objectives (10X Ph1, 20X Ph2, 40X Ph2, 100X Ph3) Zeiss Axioskop 50	1	1	0	1	
Microscope, Compound, Brightfield, DIC, Epi-Fluoroscent, Phase Contrast (10X), Objectives (10X Ph1, 20X, 40X, 60X, 100X) Nikon E800	1	1	0	1	
Microscope, Compound, Brightfield, Epi-Fluorescence, Phase Contrast, Objectives (10X Ph1, 20X Ph1, 40X Ph2, 100X) Zeiss Standard 25	1	0	1	0	
Microscope, Compound, Petrographic, Polarizing, Objectives (4X, 10X, 40X) Nikon Labophot	2	0	2	0	
Microscope, Stereo, Leica/Wild M3C with standard base	4	1	3	1	
Reticle, dia 26mm linear 0-100um, Klaraman KR-207	1	2	-1	2	
Reticle, dia 26mm, 100 div grid, Klaraman KR-406A	1	2	-1	2	
Reticle, dia 26mm, full x hairs, Klaraman KR-301	1	2	-1	2	
Vibration free slab, vibraplane, microscopy, max 275 lbs, 20x24" surface, Kinetic Sys Benchmate	3	0	3	0	
Vibration free table, installed in Microscope Room	2	1	1	1	
Mixer					
Mixer, vortex	5	0	5	0	
Nutrient Analyzer					
Nutrient Analyzer, Lachat Quickchem 8000, 5-channel nitrate, nitrite, ammonia, phosphate, and silicate rapid flow analyzer with auto sampler. Please provide details in 'Nutrient analysis and oxygen titrations' section. See	1	1	0	1	
Oven		0	0		
Oven, bench, gravity convection, 40º to 260ºC, ID 16Wx14Dx16"H, Blue M	3	0	3	0	
Oxygen Titrator					
Oxygen titrator (Langdon/LDEO amperometric), auto, with printer, PC clone, dosimats, etc (please request chemicals under 'Supplies' tab)	2	0	2	0	
PCR Machine					
PCR machine, Eppendorf Mastercycler gradient	0	0	0	0	

pH Meter					
pH Electrode, combi, Orion 8102BN	11	0	11	0	
pH Electrode, Triode, Orion 9157BN	1	1	0	1	
pH meter, 0-15.99, resolution 0.001/0.01/0.1, temp -5º to 100ºC in 0.1ºC, Beckman PHI34	1	0	1	0	
pH meter, digital, -2-19.99, resolution 0.01/0.1, temp -5º to 105ºC in 0.1ºC, Orion 520A	7	1	6	1	
Pipettor					
Pipettor, adjustable volume, 0.5-10ul, Rainin/Gilson P-10	7	2	5	2	
Pipettor, adjustable volume, 1-10 ml, Rainin/Gilson P-10ML	4	3	1	3	
Pipettor, adjustable volume, 10-100ul, Rainin/Gilson P-100	7	2	5	2	
Pipettor, adjustable volume, 100-1000ul, Rainin/Gilson P-1000	10	3	7	3	
Pipettor, adjustable volume, 2-20ul, Rainin/Gilson P-20	9	2	7	2	
Pipettor, adjustable volume, 50-200ul, Rainin/Gilson P-200	13	3	10	3	
Pipettor, adjustable volume, 500-2500 ul, autoclavable, Eppendorf 4810	1	2	-1	2	
Pipettor, adjustable volume, 500-5000ul, Rainin/Gilson P-5000	8	3	5	3	
Pipettor, fixed volume, 100ul, Eppendorf Series 2000-2247 115-5	2	2	0	2	
Pipettor, repeater, 1-5000ul, Eppendorf 4780, for combi-tips	3	2	1	2	
Plankton Counter					
Plankton Counter, Multi-Channel, w/probe, Interface Sys MCC-20A	1	0	1	0	
Pump					
Pump, aquarium air pump with stones	1	0	1	0	
Pump, vacuum, diaphragm, Gast DOAP104AA	15	4	11	4	
Pump, vacuum, hand-operated, 15 cc, Nalgene 6131-0010	1	0	1	0	
Pump, vacuum, hand-operated, 36 cc, Nalgene 6130-0020	1	0	1	0	
Pump, vacuum, oil, impeller, GAST 0523V4AG180DX	1	0	1	0	
Pump, water, Self Priming 3gpm/12Lpm, Jabsco 31801-0115	1	0	1	0	
Vacuum trap, 20L glass carboy	0			1	
Radiation Survey Meter		0	0		
Radiation Survey Meter (Geiger counter), Inspector IM	1	0	1	0	
Refractometer					
Refractometer, clinical, handheld, temperature compensated, Schuco 5711-2021	1	1	0	1	
Refractometer, salinity, handheld, temperature compensated, Reichert-Jung (Leica) 10419	1	0	1	0	
Salinometer					
Salinometer, Autosal, Guildline 8400B	2	1	1	1	
Square sample bottles	1	1	0	1	
Standard Seawater, IAPSO	1	1	0	1	
Scanning Spectrofluorometer					

Option 1) 1938 Cut-on, high-pass filters with low fluorescence background, set of 5 filters 1x2 inch cut-on at 370, 399, 450, 500, and 550nm	0	1	-1	1	
Option 2) 1939 Filters ideal for order sorting or Rayleigh line blocking. Increased sensitivity when a monochrometer is not required. 2 x 2 inch cut-on at 370, 399, 450, 500, and 550nm	0	0	0	0	
Option 3) Quartz Cuvette - 4ml, 1cmx1cm	0	1	-1	1	
Option 4) Low volume cell 250uL	0	1	-1	1	
Spectrofluorometer, scanning, HORIBAJOBIN YVON Fluoromax-3, red sensitive PMT, fully automated emission shutter, Thermostated 4-position sample holder, Datamax software	0	1	-1	1	
Shaker					
Platform, 28 x 34 cm, holds 25/50/250 mL flasks	0	0	0	0	
Platform, describe requirements	0	0	0	0	
Shaker, orbital, IKA KS 130 Control	0	0	0	0	
Shaker, orbital, 4-400 orbits/min, Labline 3520, 28 x 34 cm table	5	0	5	0	
Spectrophotometer					
Cell, 100mm, quartz, cylindrical, 28.2mL volume	1	0	1	0	
Cell, 100mm, quartz, rectangular, semi-micro, 7.0mL volume	1	0	1	0	
Cell, 10mm, quartz	1	0	1	0	
Cell, 10mm, quartz flow cell, 0.420mL volume	1	0	1	0	
Labsphere, Perkin-Elmer RSA-PE-18	1	1	0	1	
Single cell holder, 10mm - can be temp controlled with aditional water bath requested separately	1	0	1	0	
Single cell holder, cylindrical, 100mm - can be temp controlled with additional water bath	1	0	1	0	
Single cell holder, rectangular, adjustable 10-50mm, no temperature control	1	0	1	0	
Sipper Cell, for Beckman DU640B	1	0	1	0	
Specify cell requirements for Beckman DU640B	1	0	1	0	
Specify cell requirements for Perkin Elmer Lambda 18	1	1	0	1	
Spectrophotometer, UV/Vis, 200-850nm, Ocean Optics ChemUSB2-UV/VIS	1	0	1	0	
Spectrophotometer, UV/VIS, Scanning, dual beam, Perkin Elmer Lambda 18	1	1	0	1	
Spectrophotometer, UV/Vis, w/monitor, 1 w/printer, Beckman DU640B	2	0	2	0	
Thermometer		0	0		
Thermometer, digital, -55º to 150ºC (no F), Tegam 866	11			0	
Thermometer, digital, C/F, 0.1º degree resolution, K-type probe, VWR 6122060	3	0	3	0	
Thermometer, digital, waterproof, C/F, 1.0º degree resolution, K-type probe, Fisher 1507714	8	0	8	0	

Water Filtration					
Clamp	0	0	0	0	
Filter holder, for pressure filtration, 142mm, ss, 1.5L capacity, 125 psig inlet, 9/16" ID, silicone gasket, Millipore 316	5	0	5	0	
Filtration Assembly, polysulfone, 250mL funnel with 25mm base	16	2	14	2	
Filtration manifold, 10-place, for 25mm filters, Hoefer FH225V, RAD USE	1	0	1	0	
Filtration manifold, 12-place, for 25mm filters, circular, Millipore, RAD USE	1	0	1	0	
Filtration manifold, 3-place, stainless steel	8	0	8	0	
Filtration manifold, 6-place, PVC	7	3	4	3	
Glass Base, 25mm fritted glass screen	25	1	24	1	
Glass Base, 25mm, stainless steel screen	15	4	11	4	
Glass Base, 47mm, fritted glass screen	7	0	7	0	
Glass Base, 47mm, stainless steel screen	16	4	12	4	
Glass Funnel, 1000ml with 25mm flange	12	1	11	1	
Glass Funnel, 150ml with 25mm flange	3	1	2	1	
Glass Funnel, 15ml with 25mm flange	26	1	25	1	
Glass Funnel, 300ml with 25mm flange	16	1	15	1	
Glass Funnel, 300ml with 47mm flange	23	1	22	1	
Water Purification System					
Seawater Purification, Cole Parmer "Big Blue" 10" high capacity with 50um, 25um, 10um, 5um filters	1	1	0	1	
Seawater Purification, US Filter PP, 0.2um filter	1	1	0	1	
Water Purification System, Barnstead Diamond UV, virtually TOC-free, installed in Hydro Lab	1	1	0	1	
Water Purification System, E-Pure, 4 module w/ pump, installed in Aft Dry Lab	1	1	0	1	
AQUARIA, DECK INCUBATORS AND SEAWATER SUPPLY					
Aquaria					
Fiberglass non-insulated 2' x 4' x 4' located in Aquarium Room.	2	0	2	0	
Tank, polyethylene double wall w/2" insulation. Portable to back deck. I.D. 44" L x 39" W x 27" H, 678-L volume. 3 tanks available in Aquarium Room, 2 tanks available in Wet Lab.	5	0	5	0	
Deck Incubator (UV)					
Acrylic tube inserts, UV-absorbent, for UV-0 incubations, 3 1/2" I.D. x 30" L	7	0	7	0	
UV transparent (UVT), 4x4 ft, on insulated base	2	0	2	0	
Uncontaminated Seawater System					
Required in Aquarium Room (see lab diagrams under Laboratory/Lab Space)	1	0	1	0	
Required in Hydrolab (see lab diagrams under Laboratory/Lab Space)	1	1	0	1	

Required in Wetlab (see lab diagrams under Laboratory/Lab Space)	1	1	0	1	
CORING AND BOTTOM SAMPLING					
Coring Equipment					
10ft barrel	5	0	5	0	
20ft barrel	1	0	1	0	
Coring, Jumbo Piston, max. core length ca. 80'	1	0	1	0	
Coring, Kasten, head, for 10' or 20' cores	4	0	4	0	
Coring, Standard Piston, max. core length 30'	1	0	1	0	
Dredges - Rock Sampling					
Dredge, basket, small, for rock and megafauna sampling	2	0	2	0	
Dredge, chain, large, for rock sampling	2	0	2	0	
Dredge, chain, small, for rock sampling	1	0	1	0	
Epibenthic Sled					
Epibenthic Sled, for sampling benthic and benthopelagic faunas	1	0	1	0	
net, 1000um mesh size	1	0	1	0	
net, 363um mesh size	1	0	1	0	
net, 500um mesh size	1	0	1	0	
Sample Collection Bucket, Detachable, 10cm diameter, 1000um mesh size	1	0	1	0	
Sample Collection Bucket, Detachable, 10cm diameter, 363um mesh size	1	0	1	0	
Sample Collection Bucket, Detachable, 10cm diameter, 500um mesh size	1	0	1	0	
Sediment Sampling Equipment					
Sediment sampling, Box Corer (0.25 sq M surface), for sediment surface sampling	1	0	1	0	
Sediment sampling, Mega Corer (Bowers & Connelly), max. 12 ea. 10cm diameter core tubes, for sampling undisturbed sediment surface. See	1	0	1	0	
Sediment sampling, Smith-MacIntyre grab, surface area approx. 13" L x 13" W, with stand	3	0	3	0	
GEOPHYSICAL SYSTEMS					
Gravity Meter					
LaCoste & Romberg Air-Sea gravity meter, gyro stabilized	0	0	0	0	
Magnetometer		0	0		
Marine Magnetics system 300-M SeaSPY Overhauser sensing marine magnetometer system	0	0	0	0	
Seismic Equipment					
Seismic Acquisition Display and Logging System, 48-channel reflective OYO DAS-1 seismograph networked to Triton Elics Delph Seismic data logger. See	0	0	0	0	
Seismic Sources					

Bolt Long-Life 1500LL airgun array, 6 gun array totaling 3000 cu. in. consisting of 1000 cu. in., 500 cu. in., 450 cu. in., 400 cu. in., 350 cu. in., and 300 cu. in. guns	6	0	6	0	
G.I. Airguns, 210 cu. in. (7 each, 2 can be configured to 50 cu. in.)	0	0	0	0	
S.S.I. water gun, 15 cu. in.	0	0	0	0	
Seismic source, Controller, Syntron GCS-90	0	0	0	0	
Streamer Leveling System					
Syntron CUS-8301 Controller with I/O Digicourse 5000 series leveling birds	0	0	0	0	
Streamers					
Single-channel Bethos Streamer	0	0	0	0	
Streamer, 1200-M, 48 channel solid array with 25-M group spacing	0	0	0	0	
Streamer, Single-channel, ITI	0	0	0	0	
Time Delay Generator					
BNC-555 Time Delay Generator	0	0	0	0	
ICE CORING					
Ice Coring Equipment					
Hand saw	0	2	-2	2	
Ice thickness measuring kit	0	2	-2	2	
Kovac corers	0	2	-2	2	
Power heads (Jiffy or Badger)	0	2	-2	2	
Shovel	0	2	-2	2	
Sled	0	2	-2	2	
LABORATORY & SCIENCE VANS AND WALK-IN COOLER					
Freezer Van					
Freezer Van -25ºC - Designed for processing ice cores at -25ºC temperature. See	0	1	-1	1	
Radioisotope Vans					
Rad Van #3 - Designed for research involving radioisotopes. This van is the preferred lab for Tritium (3H) research. See	0	0	0	0	
Rad Van #4 - Designed for research involving radioisotopes. This van is the preferred lab for Carbon 14 (14C) research. See	0	1	-1	1	
Rad Van #5 - Designed for research involving radioisotopes. This van is the preferred lab for Carbon 14 (14C) research.	0	0	0	0	
TMC Lab and Garage Van					
TMC Lab and Garage Van - Contains a garage section for the deployment of a Trace Metal Clean rosette and a lab section for sample processing. See	0	1	-1	1	
Walk-In Cooler (Constant Temperature Room)					
Constant Temperature Room, opens to main corridor and to Biolab, temperature to -10ºC +/- 1ºC, "Big Antarctica"	0	1	-1	1	
Constant Temperature Room, opens to main corridor, temperature to -10ºC +/- 1ºC, "Little Antarctica"	0	1	-1	1	

MARINE MAMMAL SURVEY EQUIPMENT					
Sonobuoy System					
Greeneridge Sciences VHF Radio for sonobuoy reception, Primary system	0	0	0	0	
Sonobuoy - please give specifications, manufacturer and vendor information in Comments field below	0	0	0	0	
Sonobuoy antenna and 4-channel receiver	0	0	0	0	
Yaesu VHF Radio for sonobuoy reception, Backup	0	0	0	0	
NETS AND TRAWLS					
Bottom Trawls					
Blake Trawl, 5-ft., frame and net, for survey of unknown seafloor conditions or rocky bottoms	1	0	1	0	
Otter Trawl, 18-ft., for survey of soft to moderately hard seafloor	2	0	2	0	
Otter Trawl, 30-ft., use for survey of soft to moderately hard seafloor	9	0	9	0	
Otter Trawl, 30-ft., with roller gear ('Rock Hopper net'), for survey of rocky seafloor	6	0	6	0	
Plankton Nets and Trawls					
cod-end, 10" diameter, for 1-M ring	1	0	1	0	
cod-end, 10cm diameter, for 1/4-M ring	1	0	1	0	
cod-end, 4" diameter, for 1-M ring	1	0	1	0	
cod-end, 6" diameter, for 1-M ring	5	0	5	0	
Conductivity sensor, Seabird	0	0	0	0	
Dissolved O2 sensor, SeaBird	0	0	0	0	
Flow meter, General Oceanics 202-R	5	0	5	0	
Fluorometer, Wet Labs	0	0	0	0	
Midwater Trawl, Isaac Kidd 1-M frame, designed for catching small organisms (including small fish) at great depth	1	0	1	0	
MOCNESS (Multiple Opening and Closing Net Environmental Sampling System), 1-M net frame, series of 8 nets can be opened and closed remotely, also collects real-time water column data. See	9	0	9	0	
MOCNESS (Multiple Opening and Closing Net Environmental Sampling System), 10-M net frame, series of 6 nets can be opened and closed remotely, also collects real-time water column data. See	1	0	1	0	
Net frame, ring, 1-M	0	0	0	0	
Net frame, ring, 1/4-M, hand-deployed	4	0	4	0	
net, 1200um mesh size, for Tucker Trawl	2	0	2	0	
net, 180um mesh size, for 1-M Mocness	1	0	1	0	
net, 202um mesh size, for 1-M ring	9	0	9	0	
net, 202um ring, 25mm diameter, 1M length, for 1/4-M ring	4	0	4	0	
net, 3000um mesh size, for 10-M Mocness	2	0	2	0	

net, 333um mesh size, for 1-M Mocness	2	0	2	0	
net, 500um mesh size for 1-M Mocness	33	0	33	0	
net, 64um mesh size, for 1-M ring	1	0	1	0	
net, 64um ring, 25mm diameter, 1M length, for 1/4-M ring	2	0	2	0	
net, 80um mesh size, for 1-M Mocness	5	0	5	0	
net, other mesh size (please indicate under Comments), for 1-M ring	1	0	1	0	
net, other mesh size (please indicate under Comments), for 1/4-M ring	1	0	1	0	
Optical plankton counter - note that mounting bracket for OPC precludes the use of a Transmissometer, Fluorometer, and dissolved O2 sensor	3	0	3	0	
Plankton Trawl, Tucker, opening/closing, 1-M frame, 3 nets	3	0	3	0	
Seabird Conductivity, Temp, and Dissolved O2 Probes , and 1 each Wet Labs Transmissometers and Fluorometers	0	0	0	0	
Temperature sensor, SeaBird	0	0	0	0	
Transmissometer, Wet Labs	0	0	0	0	
REMOTE SENSING/ICE IMAGERY					
Remote Sensing/Ice Imagery					
Total ice concentration as a percentage, TeraScan satellite-imaging, SSMI data, resolution 15 km per pixel. See	1	1	0	1	
Visible/Infrared DMSP imagery, TeraScan, satellite-imaging, resolution up to 0.55 km per pixel. See	1	1	0	1	
Visible/Infrared HRPT imagery, TeraScan satellite-imaging, resolution 1.1 km per pixel. See	1	1	0	1	
SONAR SYSTEMS					
Bathymetry and Seismic Plotters					
Thermal Graphic Recorder, EPC-1086, 10" width, for pinger and side-scan plotting	0	0	0	0	
Thermal Graphic Recorder, EPC-9802, for Sonar or Seismic plotting	0	0	0	0	
Thermal Graphic Recorder, Raytheon TDU-850, for Bathy 2000W plotting	0	0	0	0	
Hull-mounted Sonars					
Hull-mounted 12 kHz sonar, Precision Depth Recorder, Raytheon PTR, for 12 kHz pinger tracking	0	0	0	0	
Hull-mounted 3.5 kHz and 12 kHz sonar, Knudsen 320 B/R; 3.5 kHz for sub-bottom profiling or 12 kHz for bottom-tracking	0	0	0	0	
Hull-mounted 3.5 kHz or 12 kHz sonar, Bathy 2000W, 3.5 kHz for sub-bottom profiling or 12 kHz for bottom-tracking, 8300 Watts	0	0	0	0	
Hull-mounted ADCP, 38kHz phased array, RD Instruments OS-38 (Ocean Surveyor), for current profiling and measuring backscatter in water column-deep and medium resolution (1200-M). See	0	1	-1	1	

Hull-mounted ADCP, RDI, 150 kHz Narrow-Band, VM-150, for current profiling and measuring backscatter in water column - shallow and high-resolution (400-M). See	0	1	-1	1	
Hull-mounted Bioacoustic Sonar, 38kHz, 120 kHz and 200 kHz, Simrad EK-500, 38kHz for bottom tracking and biomass measurements (acoustic backscatter), 120 and 200kHz for biomass measurements	0	0	0	0	
Hull-mounted multibeam sonar, 12 kHz, Simrad EM-120, for swath bathymetry. See	0	1	-1	1	
Towed Sonars					
Towed Bioacoustic Sonar, BioSonics, for measuring biomass in water column (acoustic backscatter), 120 kHz	0	0	0	0	
Towed Bioacoustic Sonar, HTI, 38 kHz & 120 kHz	0	0	0	0	
Towed Datasonics Side-Scan Sonar/Sub-Bottom Profiler, 90-100 kHz for side-scan and 2-7 kHz for sub-bottom, depth rating 1000-M	0	0	0	0	
UNDERWATER IMAGERY					
Seafloor Photography					
Towed Benthic Camera System (analog video, 'Mud-Scud')	1	0	1	0	
VEHICLE REQUIREMENTS					
Boat					
Landing Craft, aluminum hull, 20 ft., 8 ft. beam, drop-bow ramp, twin engine, with wheelhouse	0	0	0	0	
Zodiac Mark V, 19 ft.	0	1	-1	1	
Snowmobile					
Skandic SWT Ski-Doo, Deep Snow Flotation	0	2	-2	2	
WATER COLUMN PROFILING AND CTD					
CTD Rosette and Bottles					
N-Butyl / Buna-N O-Rings	1	1	0	1	
Rosette Frame, 12 Position, 30L bottles	1	0	1	0	
Rosette Frame, 24 Position, Sea-Bird Electronics	2	1	1	1	
Sample bottle, 10-L, bullister type, SIO	24	24	0	24	
Sample bottle, 30-L, Niskin, General Oceanics	0	0	0	0	
Silicone O-Rings	1	1	0	1	
Viton O-Rings	1	1	0	1	
CTD Sensors					
Bottom Contact Switch, Sea-Bird Electronics	1	1	0	1	
Conductivity and Temperature sensor, depth rating 6800-M, Sea-Bird Electronics (primary and secondary sets)	1	1	0	1	
Dissolved Oxygen sensor, depth rating 7000-M, Sea-Bird Electronics	1	1	0	1	
Fluorometer, depth rating 6000-M, WetLabs	1	1	0	1	

PAR sensor (Photosynthetically Active Radiation, 400-700nm), depth rating 1000-M, Biospherical Instruments.	1	1	0	1	
Pressure sensor, depth rating 6800-M, Sea-Bird Electronics	1	1	0	1	
Pumps, depth rating 6800-M, Sea-Bird Electronics (primary and secondary)	1	1	0	1	
Transmissometer, (25cm pathlength), depth rating 6000-M, WETLabs	1	1	0	1	
Expendable Probes					
XBT (Expendable Bathythermograph), Sippican T-10, 200-M @ 10kts	1	0	1	0	
XBT (Expendable Bathythermograph), Sippican T-11, 460-M @ 6kts, high resolution (18cm)	1	0	1	0	
XBT (Expendable Bathythermograph), Sippican T-5, 1830-M @ 6kts	1	12	-11	12	
XBT (Expendable Bathythermograph), Sippican T-6, 460-M @ 15kts	1	36	-35	36	
XBT (Expendable Bathythermograph), Sippican T-7, 760-M @ 15kts	1	36	-35	36	
XCTD (Expendable Conductivity, Temperature and Depth Profiler), Sippican, 1000-M @ 12 kts	1	0	1	0	
XCTD Deep (Expendable Conductivity, Temperature and Depth Profile), Sippican, 1850-M @ 3.5 kts	0	0	0	0	
XSV (Expendable Sound Velocimeter), Sippican XSV-01, 850-M @ 15kts	1	0	1	0	
XSV (Expendable Sound Velocimeter), Sippican XSV-02, 2000-M @ 8kts	1	0	1	0	
FRRF (Fast Repetition Rate Fluorometer)					
FRRF (Fast Repetition Rate Fluorometer), Chelsea Instruments, for measurement of variable fluorescence parameters in real time and in-situ. Please note: this system is generally in use by LTER from November to March.	1	1	0	1	
Radiometers					
PRR (Profiling Reflectance Radiometer), Biospherical Instruments, water-column and ground profiling sets which include: PAR (400-700 nm), Natural Fluorescence (upwelling radiance only), 313, 320, 340, 380, 395, 412, 443, 490, 510, 555, 565, 625, 665 & 670 nm- upwelling radiance and downwelling irradiance	3	1	2	1	
UV-Meter, Profiling (PUV), and Ground (GUV), 305, 313, 320, 340, 380, 395 nm, and PAR (400-700 nm), biospherical Instruments	1	1	0	1	
WINCHES AND WIRE					
Hydrographic and Trawl Winches					
0.322 EM cable, 3 conductor, 10,000-M, for DUSH-5	1	0	1	0	
0.322 EM cable, 3 conductor, 10,000-M, for DUSH-5-5	1	0	1	0	

0.322 EM Cable, 3 conductor, 3000-M, for Dynacon	1	0	1	0	
0.680 coaxial cable, 10,000-M	1	0	1	0	
3/8" 16-gauge 4-conductor Kevlar cable, 1500-M, for trace metal work, for Dynacon	1	0	1	0	
5/16" wire rope, 10,000-M	1	0	1	0	
9/16" wire rope, 10,000-M	1	0	1	0	
Winch, deep-Sea trawl, DUSH-9-11	1	0	1	0	
Winch, electrohydraulic, with focal 4 conductor slip ring, Dynacon	2	0	2	0	
Winch, Free-Fall, for water-column profiling	1	0	1	0	
Winch, hydrographic, located in Baltic room, DUSH-5, for CTD deployments	1	0	1	0	
Winch, hydrographic, waterfall, DUSH-5-5	1	0	1	0	
Mooring Winches					
Winch, TSE Mooring, for mooring deployment and recovery	1	0	1	0	
Seismic Winches					
Winch, Gun, for seismic operations	1	0	1	0	
Winch, Multi-channel streamer, Dynacon, for seismic operations	1	0	1	0	
Winch, Single-Channel Streamer	1	0	1	0	
Utility Winches					
1/4" wire rope, 300-M	1	1	0	1	
Winch, Deck Utility	1	1	0	1	
Winch, Tugger, for moving gear on deck and equipment recovery	6	1	5	1	
CROSS-CATEGORY ITEMS					
Depth sensor, records temperatures from -5ºC to 35ºC and depths to 680 meters, Minilog 8-TDR-5/+35-680m-064K, Vemco	1	0	1	0	