C 455-10-13

Dr. W. L. Ball.

J. L. Monkman. April 9th, 1956.

Herewith list of materials and equipment necessary for a laboratory at Yellowknife.

The person employed to operate this laboratory should be at least Chemist II or preferably Chemist III.

J. L. Monkman.

JLM/ds

## CHEMICAL LABORATORY, YELLOWKNIFE

The above laboratory should have a minimum of 25 feet running bench space, an 8 foot fume hood, and enough space for a desk and files. The cost of this amount of bench space may run to about $3000. A fume hood of the size suggested may be expected to cost $1000. There should be a glass washing sink 28" x 20" x 10". In stainless steel this may cost $500.

Electrical, hot and cold water, gas and compressed air services should be available. A list of specific items of materials and equipment is appended.

This is a preliminary list, and may not be absolutely complete in all details.

Available from Fisher Scientific Co.

| | | |
|---|---|---|
| 1 | Stop Watch 14-647 | 24.00 |
| 2 | Flask Safety Tongs 10-063 | 9.98 |
| 2 | Crucible Tongs 15-190 | 7.80 |
| 6 | Scoopolas 14-357 | 1.33 |
| 1 | Book Lens Paper 11-995 | 0.60 |
| 1 | Pair Watch Glasses 3" counter poised 2-195 | 1.25 |
| 1 | Pair Shears Trimming 8" 14-275 | 4.01 |
| 1 | Balance Pan Brush ½" 3-665 | 0.80 |
| 1 | Beaker Brush 3-540 | 2.00 |
| 1 | Beaker Brush 3-541 | 1.33 |
| 2 | Burette Brushes 3-614 | 0.48 |
| 1 | Balance Harvard Double Beam 2-037 | 26.44 |
| 1 | Laboratory Pulverizer 8-301 | 282.00 |
| 2 | Lbs. Alumina Adsorption A-540 | 5.50 |
| 100 | Grams Sodium Diethyldithiocarbamate S-287 | 3.25 |
| 1 | Quart Pyridine ACS P-368 | 7.36 |
| 1 | Lb. Chromium Trioxide A-98 | 1.55 |
| 6 | Measuring Rules celluloid 9-016 | 1.80 |
| 2 | Bottles Nonaq Stopcock Grease 14-633 | 2.60 |
| 1 | Lb. Glass Wool Pyrex 11-388 | 4.07 |

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| 10 | Feet Tube Cleaner Size A 3-642 | 0.27 |
| 10 | Feet Tube Cleaner Size B 3-642 | 0.53 |
| 10 | Feet Tube Cleaner Size C 3-642 | 0.67 |
| 1 | Barnstead Still Capacity ½ gallon per hour 1300 watts 9-018 | 123.50 |
| 1 | Refrigerator unit for 115 volts 60 cycles AC 17-180 | 296.93 |
| 1 | Analytical Balance Christian Becker Chainomatic AB4 1-948 | 441.25 |
| 1 | Set Balance Weights Permas, Class S, 2-216 | 53.20 |
| 5 | Gallons Absolute Alcohol A-406 | 6.50 |
| 5 | Gallons Acetone A-18 | 14.10 |
| 1 | Gross Bottles, sample, screw cap, square 4 oz. 3-325 | 168.40 |
| 1 | Drying Oven Isotemp 13-245 115 volt AC | 199.50 |
| 1 | Safety Visor 11-409 | 3.25 |
| 2 | Graduated Cylinders Exax 100 ml. 8-554 | 4.02 |
| 2 | Graduated Cylinders Exax 50 ml. 8-554 | 3.46 |
| 2 | Graduated Cylinders Exax 25 ml. 8-554 | 3.02 |
| 2 | Graduated Cylinders Exax 10 ml. 8-554 | 2.80 |
| 2 | Pipettes Exax 1 ml. 13-649 | 1.50 |
| 2 | Pipettes Exax 2 ml. 13-649 | 1.50 |
| 2 | Pipettes Exax 3 ml. 13-649 | 1.72 |
| 2 | Pipettes Exax 4 ml. 13-649 | 1.82 |
| 2 | Pipettes Exax 5 ml. 13-649 | 1.82 |
| 2 | Pipettes Exax 10 ml. 13-649 | 1.94 |
| 2 | Pipettes Exax 15 ml. 13-649 | 2.42 |
| 2 | Pipettes Exax 20 ml. 13-649 | 2.46 |
| 2 | Pipettes Exax 25 ml. 13-649 | 2.46 |
| 2 | Burettes 50 ml. ultramax 3-702 | 13.08 |
| 2 | Boxes Arsenic Strips 1-413 | 15.96 |
| 3 | Celluloid Shields Size No. 7 2-653M | 27.93 |
| 24 | Polyethylene Bottles with caps 8 oz. 2-923 | 13.20 |
| 36 | Reagent Bottles Pyrex 125 ml. 2-905 | 20.43 |
| 24 | Reagent Bottles Pyrex 250 ml. 2-905 | 16.83 |
| 12 | Reagent Bottles Pyrex 500 ml. 2-905 | 10.80 |

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| 12 | Reagent Bottles Pyrex 1000 ml. 2-905 | 16.83 |
| 6 | Reagent Bottles Pyrex 2000 ml. 2-905 | 14.85 |
| 1 | Constant Temperature Water Bath 15-454A (115 volts, 60 cycles AC) | 253.50 |
| 1 | Hotplate Electric Lindberg Large 20" x 12" 11-499 | 123.50 |
| 1 | Hotplate Electric 3 heat size No. 22 18" x 13" 11-497 | 83.20 |
| 2 | Heaters Ful Kontrol 750 watts, 115 volts, 60 cycles AC (11-427) | 145.60 |
| 2 | Thermometers Centigrade -20° to +110° 14-985 | 3.36 |
| 2 | Thermometers Centigrade -20° to +180° 14-985 | 3.60 |

Available from J. T. Baker Chemical Co.

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| 1 | Lb. Stannous Chloride Reagent 1-3980 | 3.67 |
| 1/4 | Lb. Silver Nitrate Reagent 4-3426 | 4.14 |
| 1/4 | Lb. Mercuric Bromide Reagent 4-9043 | 3.71 |
| 2 | Lbs. Potassium Iodide Reagent 1-3164 | 8.56 |
| 5 | Lbs. Zinc Granular 10 mesh 5-4240 | 7.65 |
| 5 | Lbs. Zinc Granular 20 mesh 5-4244 | 10.10 |
| 5 | 1 Lb. Bottles Sodium Hydroxide 1-3722 | 5.20 |
| 1 | Lb. Ammonium Oxalate Reagent 1-0746 | 1.91 |
| 2 | 6 Lb. Bottles Hydrochloric Acid 5-9534 | 5.52 |
| 2 | 9 Lb. Bottles Sulfuric Acid 5-9680 | 8.46 |
| 2 | 7 Lb. Bottles Nitric Acid 2-9600 | 6.44 |
| 1 | 7 Lb. Bottle Nitric Acid Fuming 2-9624 | 7.07 |
| 5 | 1 Lb. Bottles Perchloric Acid 1-9650 | 9.75 |
| 1/4 | Lb. Arsenic Trioxide Reagent 4-0061 | 2.07 |

Available from Scientific Glass Apparatus Co.

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| 4 | Dozen Gutzeit Apparatus J-422 | 196.56 |
| 48 | Erlenmeyer Flasks Pyrex 125 ml. with lip and 19/38 standard taper neck J 1714 | 66.96 |
| 1 | Lb. Glass Beads, perforated, pyrex, 3 mm. dia. J 1229 | 5.00 |

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| **Available from J. T. Baker** | | |
| 1 | Lb. Lead Acetate 1-2270 | 1.00 |
| **Available from Fisher Scientific** | | |
| 5 | Lb. Drierite, 8 mesh 7-577 | 4.50 |
| 36 | Beakers, 30 ml. 2-540 | 12.24 |
| 12 | Beakers, 100 ml. 2-540 | 4.08 |
| 12 | Beakers, 250 ml. 2-540 | 4.08 |
| 36 | Beakers, 600 ml. 2-540 | 18.36 |
| 2 | Beakers, 1000 ml. 2-540 | 1.98 |
| 1 | Tray, Pyrex 18" x 12" x 2½" 15-241 | 8.89 |
| 6 | Bottles, Dropping with Pipettes ℄ 125 ml. Corning 1340 | 10.86 |
| 12 | Rubber Bulbs-dropping bottles 2 ml. 14-065 | .75 |
| 2 | Rubber Bulbs 60 ml. 14-070 | 1.00 |
| 36 | Flasks, Volumetric, 100 ml. ℄ stoppered 10-210R | 101.16 |
| 2 | Flasks, Volumetric 500 ml. ℄ stoppered 10-210R | 8.74 |
| 2 | Flasks, Volumetric 1000 ml. ℄ stoppered 10-210R | 10.60 |
| 2 | Tubes, Chromatographic, course porosity fritted disc 40 x 600 mm. Corning 38450 | 11.82 |
| 12 | Funnels, Bunsen filtering 65 x 150 mm. 10-326 | 6.72 |
| 1 | Support Stand, Porcelain 14-667 | 7.80 |
| 1 | Clamp-Double Burette Holder 5-779 | 3.25 |
| 6 | Rings, Support id. 2 3/8" 14-050 | 4.38 |
| 1 | Colorimeter, (Fisher Electrophotometer) 7-101 | 312.50 |
| 1 | Microabsorption assembly, round cells 7-102-60 | 18.75 |
| 1 | Dessicator, Vacuum id. 200 mm. 8-631 | 30.49 |
| 1 | Dessicator Plate 190 mm. 8-640 | 6.83 |
| 24 | Rubber Policemen 3/16" 14-105 | 1.26 |
| 24 | Glass Rods 3/16" 14-120 | 1.26 |
| 1 | Forceps, Specimen Jar 250 mm. 10-316 | 2.60 |
| 12 | Rubber Tubing, Pressure and Vacuum wall thickness 3/16" id 3/16" 14-173 | 4.80 |
| 2 | Flask, filtering 1000 ml. 10-175 | 5.12 |
| 2 | Pkg. Filter Paper, Whatman No. 1 11 cm. diam. 9-805 | 0.72 |
| 1 | Airejector 9-956 | 2.28 |
| | TOTAL ESTIMATE | $ 3,451.45 |