

APPENDIX B

Table B-1

Cost Estimate - Bulk Plants - Distillate Storage Only

Case A.

Intermediate Bulk Plant drop-off storage for subsequent delivery to local area home heat customers. Construction on Island portion of province.

Item Description	Thruput up to 3,500,000 Litres per year			Thruput >3,500,000 to 5,000,000 Litres per year			Thruput >5,000,000 to 7,500,000 Litres per year		
	Qty	Unit Price	Amount	Qty	Unit Price	Amount	Qty	Unit Price	Amount
Land Purchase - 1 Acre	1	\$30,000	\$30,000	1	\$30,000	\$30,000	1	\$30,000	\$30,000
Site preparation	1	\$15,000	\$15,000	1	\$15,000	\$15,000	1	\$15,000	\$15,000
Concrete Load Pad with drain to Oil/Water Separator	1	\$6,000	\$6,000	1	\$6,000	\$6,000	1	\$6,000	\$6,000
Chain Link Fencing c/w with 2- double gates installed (Lineal Feet)	800	\$15	\$12,000	800	\$15	\$12,000	800	\$15	\$12,000
10000 imperial gallon (45,461 litre) capacity GEEP* Units for Furnace Oil	1	\$32,800	\$32,800	2	\$32,800	\$65,600	3	\$32,800	\$98,400
5000 imperial gallon (22,730 litre) capacity GEEP Units for Furnace Oil	1	\$15,600	\$15,600	0	\$15,600	\$15,600	0	\$15,600	\$15,600
10000 imperial gallon (45,461 litre) capacity GEEP Units for Stove Oil	0	\$32,800	\$0	0	\$32,800	\$0	1	\$32,800	\$32,800
5000 Imperial gallon (22,730 litre) capacity GEEP Unit for Stove Oil	1	\$15,600	\$15,600	1	\$15,600	\$15,600	0	\$15,600	\$15,600
Load - Transport and Place GEEP Units on Site	3	\$1,000	\$3,000	3	\$1,000	\$3,000	4	\$1,000	\$4,000
2 - 5 HP Centrifugal Pumps c/w base	2	\$3,800	\$7,600	2	\$3,800	\$7,600	2	\$3,800	\$7,600
3" Meters with air eliminator and strainers	2	\$6,200	\$12,400	2	\$6,200	\$12,400	2	\$6,200	\$12,400
3" Loading Arms complete	2	\$4,300	\$8,600	2	\$4,300	\$8,600	2	\$4,300	\$8,600
3" Flanged steel Gate Valves	6	\$260	\$1,560	6	\$260	\$1,560	8	\$260	\$2,080
3" Flanged steel Check Valves	2	\$260	\$520	2	\$260	\$520	3	\$260	\$780
Oil Water Separator (5000 Litre)	1	\$7,200	\$7,200	1	\$7,200	\$7,200	1	\$7,200	\$7,200
Structural Steel Loading System c/w, loading arm supports, ramp, catwalk, stairs, railings etc. installed.	1	\$18,000	\$18,000	1	\$18,000	\$18,000	1	\$18,000	\$18,000
Mechanical hook-up c/w all associated piping and other materials and Labour	1	\$25,000	\$25,000	1	\$25,000	\$25,000	1	\$25,000	\$25,000
Electrical hook-up c/w all necessary wiring, circuit breakers, poles etc.	1	\$18,000	\$18,000	1	\$18,000	\$18,000	1	\$18,000	\$18,000
Oil spill response drum	1	\$650	\$650	1	\$650	\$650	1	\$650	\$650
Over fill Alarm Systems	3	\$1,000	\$3,000	3	\$1,000	\$3,000	3	\$1,000	\$3,000
Emergency Eye wash Kit	1	\$100	\$100	1	\$100	\$100	1	\$100	\$100
20 lb ABC Fire Extinguishers	2	\$500	\$1,000	2	\$500	\$1,000	2	\$500	\$1,000
6 ft by 8 ft Utility Shed c/w concrete floor, insulated walls, wiring, electric baseboard heat and lockable steel door.	1	\$5,200	\$5,200	1	\$5,200	\$5,200	1	\$5,200	\$5,200
Total Cost - Identified Items			\$238,830			\$271,630			\$339,010
Provision for contingencies		15%	\$36,170		15%	\$40,370		15%	\$50,990
Total Bulk Plant Cost Estimate			<u>\$275,000</u>			<u>\$312,000</u>			<u>\$390,000</u>

*GEEP Units are portable self-dyked storage tanks complete with vents, piping connections and other appurtenances.

APPENDIX B

Table B-2

Cost Estimate - Bulk Plants - Gasoline and Distillate Storage
(Small nominal sized Plant only)

Case B. Intermediate Bulk Plant drop-off storage for subsequent delivery to local area home heat customers and Gasoline& Diesel storage for local Tank Wagon deliveries to small retail outlets. Construction on Island portion of province.

Qty	Item Description	Unit Price	Amount
1	Land Purchase - 1 Acre	\$30,000	\$30,000
1	Site preparation	\$15,000	\$15,000
1	Concrete Load Pad with drain to Oil/Water Separator	\$6,000	\$6,000
800	Feet - Chain Link Fencing c/w with 2- double gates installed	\$15	\$12,000
2	10000 Imperial gallon (45,461 litre) capacity GEEP Units for Gasoline	\$32,800	\$65,600
1	10000 Imperial gallon (45,461 litre) capacity GEEP Units for Furnace Oil	\$32,800	\$32,800
1	5000 Imperial gallon (22,730 litre) capacity GEEP Units for Furnace Oil/ Diesel	\$15,600	\$15,600
1	5000 Imperial gallon (22,730 litre) capacity GEEP Unit for Stove Oil	\$15,600	\$15,600
5	Load - Transport and Place GEEP Units on Site	\$1,000	\$5,000
3	2 - 5 HP Centrifugal Pumps c/w base	\$3,800	\$11,400
3	3" Meters with air eliminator and strainers	\$6,200	\$18,600
3	3" Loading Arms complete	\$4,300	\$12,900
10	3" Flanged steel Gate Valves	\$260	\$2,600
5	3" Flanged steel Check Valves	\$260	\$1,300
1	Oil Water Separator (5000 Litre)	\$7,200	\$7,200
1	Structural Steel Loading System c/w, loading arm supports, ramp, catwalk, stairs, railings etc. all installed	\$26,000	\$26,000
1	Mechanical hook-up c/w all associated piping and other materials and Labour	\$32,000	\$32,000
1	Electrical hook-up c/w all necessary wiring, circuit breakers, poles etc.	\$22,000	\$22,000
2	Oil spill response drum	\$650	\$1,300
5	Over fill Alarm Systems	\$1,000	\$5,000
1	Emergency Eye wash Kit	\$100	\$100
3	20 lb ABC Fire Extinguishers	\$500	\$1,500
1	6 ft by 8 ft Utility Shed c/w concrete floor, insulated walls, wiring, electric baseboard heat and steel door.	\$5,200	\$5,200
	Total Cost - Identified Items		\$344,700
	Provision for contingencies	15%	\$51,705
	Total Bulk Plant Cost Estimate		<u>\$396,000</u>

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Table B-3

Cost Estimate - Bulk Plants - Labrador South Coast

Case C.

Bulk Plant - South Labrador Coast supplied via Tank Wagon

(Supply from Labrador Straits Storage)

Stove oil storage for subsequent delivery to local area home heat customers.

Storage for gasoline and diesel for local delivery via Tank Wagon to retail outlets.

Includes provision for one onsite dispensing pump.

Estimated Annual Consumer Gasoline Consumer Consumption/ demand (Litres)

Estimated Annual Home Heat Product Consumer Consumption/ demand (Litres)

Supply via Tank Wagon from L'Anse au Loup	
Charlottetown	
864,800	Gasoline
187,375	Stove Oil
Volumes are Approximate Deliveries via Tank-Wagon	

Item Description	Qty	Unit Price	Amount
Land Purchase - 1 Acre	1	\$20,000	\$20,000
Site preparation	1	\$18,000	\$18,000
Concrete Load Pad with drain to Oil/Water Separator	1	\$7,200	\$7,200
Feet - Chain Link Fencing c/w with 2- double gates installed	800	\$18	\$14,400
15000 imperial gallon (68,190 litre) capacity GEEP Units for Gasoline	6	\$53,000	\$318,000
10000 imperial gallon (45,461 litre) capacity GEEP Units for Gasoline	0	\$0	\$0
15000 imperial gallon (68,190 litre) capacity GEEP Units for Stove Oil / Diesel	2	\$53,000	\$106,000
10000 imperial gallon (45,461 litre) capacity GEEP Units for Stove Oil/ Diesel	0	\$0	\$0
5000 Imperial gallon (22,730 litre) capacity GEEP Unit for Stove Oil /Diesel	0	\$0	\$0
Load - Transport and Place GEEP Units on Site	8	\$2,000	\$16,000
2 - 5 HP Centrifugal Pumps c/w base	2	\$3,800	\$7,600
3" Meters with air eliminator and strainers	3	\$6,200	\$18,600
Retail Dispensing Pump with hose reel and auto-shut-off nozzles	1	\$7,500	\$7,500
3" Loading Arms complete	2	\$4,300	\$8,600
3" Flanged steel Gate Valves	16	\$260	\$4,160
3" Flanged steel Check Valves	8	\$260	\$2,080
Oil Water Separator (5000 Litre)	1	\$7,200	\$7,200
Transport materials other than GEEP Units to site	1	\$1,000	\$1,000
Structural Steel Loading System c/w, loading arm supports, ramp, catwalk, stairs, railings etc. (installed)	1	\$30,000	\$30,000
Mechanical Hook-up c/w all associated piping and other materials and Labour	1	\$38,400	\$38,400
Electrical hook-up c/w all necessary wiring, circuit breakers, poles etc.	1	\$26,400	\$26,400
Oil spill response drum	2	\$780	\$1,560
Over fill Alarm Systems	8	\$1,200	\$9,600
Emergency Eye wash Kit	1	\$120	\$120
20 lb ABC Fire Extinguishers	3	\$600	\$1,800
6 ft by 8 ft Utility Shed c/w concrete floor, insulated walls, wiring, electric baseboard heat and steel door.	1	\$6,240	\$6,240

Total Cost - Identified Items		\$670,460
Provision for contingencies	15%	\$100,540
Total Cost Estimate		\$771,000

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Table B-4

Cost Estimate - Marine Storage Depots - Labrador South Coast

Case D.

Marine Depots - Labrador South Coast supplied via Coastal Tanker

Stove oil storage for subsequent delivery to local area home heat customers.
Storage for gasoline and diesel for local delivery via Tank Wagon to retail outlets. Includes provision for one onsite dispensing pump.

Estimated Annual Consumer Gasoline Consumer Consumption/ demand (Litres)
Estimated Annual Home Heat Product Consumer Consumption/ demand (Litres)

Supply via Coastal Marine Tanker	
Combined Cartwright & Port Hope Simpson	
1,193,000	Gasoline
256,000	Stove Oil
Approximate Deliveries via	

Item Description	Qty	Unit Price	Amount
Land Purchase - 1 Acre	1	\$20,000	\$20,000
Site preparation	1	\$18,000	\$18,000
Concrete Load Pad with drain to Oil/Water Separator	1	\$7,200	\$7,200
Feet - Chain Link Fencing c/w with 2- double gates installed	800	\$18	\$14,400
15000 imperial gallon (68,190 litre) capacity GEEP Units for Gasoline	13	\$53,000	\$689,000
10000 imperial gallon (45,461 litre) capacity GEEP Units for Gasoline	0	\$32,800	\$0
15000 imperial gallon (68,190 litre) capacity GEEP Units for Stove / Diesel	3	\$53,000	\$159,000
10000 imperial gallon (45,461 litre) capacity GEEP Units for Stove / Diesel	0	\$32,800	\$0
5000 Imperial gallon (22,730 litre) capacity GEEP Unit for Stove / Diesel	0	\$15,600	\$0
Load - Transport and Place GEEP Units on Site	16	\$2,000	\$32,000
2 - 5 HP Centrifugal Pumps c/w base	2	\$3,800	\$7,600
3" Meters with air eliminator and strainers	3	\$6,200	\$18,600
Retail Dispensing Pumps with hose reel and auto-shut-off nozzles	1	\$7,500	\$7,500
3" Loading Arms complete	2	\$4,300	\$8,600
3" Flanged steel Gate Valves	32	\$260	\$8,320
3" Flanged steel Check Valves	16	\$260	\$4,160
Oil Water Separator (5000 Litre)	1	\$7,200	\$7,200
Transport materials other than GEEP Units to site	1	\$1,000	\$1,000
Structural Steel Loading System c/w, loading arm supports, ramp, catwalk, stairs, railings etc. (installed)	1	\$30,000	\$30,000
Mechanical Hook-up c/w all associated piping and other materials and Labour	1	\$38,400	\$38,400
Electrical hook-up c/w all necessary wiring, circuit breakers, poles etc.	1	\$26,400	\$26,400
Oil spill response drum	2	\$780	\$1,560
Over fill Alarm Systems	16	\$1,200	\$19,200
Emergency Eye wash Kit	1	\$120	\$120
20 lb ABC Fire Extinguishers	3	\$600	\$1,800
6 ft by 8 ft Utility Shed c/w concrete floor, insulated walls, wiring, electric baseboard heat and steel door.	1	\$6,240	\$6,240

Total Cost - Identified Items \$1,126,300

Provision for contingencies 15% \$168,700

Total Cost Estimate **\$1,295,000**

APPENDIX B

Table B-5

Cost Estimate - Specific Marine Storage Depots - Labrador Coast

Case E.

Marine Depots - Labrador Coast supplied via Coastal Tanker

Gasoline and Stove oil and Diesel storage for dispensing to customers at Depot into drums and / or other containers.

		Rigolet	
Estimated Annual Consumer Gasoline Consumer Consumption/ demand (Litres)		210,508	Gasoline
Estimated Annual Home Heat Product Consumer Consumption/ demand (Litres)		83,047	Stove Oil
Item Description	Qty	Unit Price	Amount
Land Purchase - 1 Acre	1	\$20,000	\$20,000
Site preparation	1	\$22,500	\$22,500
Concrete Load Pad with drain to Oil/Water Separator	1	\$9,000	\$9,000
Feet - Chain Link Fencing c/w with 2- double gates installed	800	\$23	\$18,000
15000 imperial gallon (68,190 litre) capacity GEEP Units for Gasoline	2	\$53,000	\$106,000
10000 imperial gallon (45,461 litre) capacity GEEP Units for Gasoline	2	\$32,800	\$65,600
15000 imperial gallon (68,190 litre) capacity GEEP Units for Stove / Diesel	0	\$0	\$0
10000 imperial gallon (45,461 litre) capacity GEEP Units for Stove / Diesel	2	\$32,800	\$65,600
5000 Imperial gallon (22,730 litre) capacity GEEP Unit for Stove / Diesel	0	\$0	\$0
Load - Transport and Place GEEP Units on Site	6	\$2,500	\$15,000
2 - 5 HP Centrifugal product transfer pumps c/w base	2	\$3,800	\$7,600
3" Flanged steel Gate Valves	12	\$260	\$3,120
3" Flanged steel Check Valves	6	\$260	\$1,560
Retail Dispensing Pumps with hose reel and auto-shut-off nozzles	3	\$7,500	\$22,500
Oil Water Separator (5000 Litre)	1	\$7,200	\$7,200
Transport materials other than GEEP Units to site	1	\$1,250	\$1,250
Mechanical Hook-up c/w all associated piping and other materials and Labour	1	\$48,000	\$48,000
Electrical hook-up c/w all necessary wiring, circuit breakers, poles etc.	1	\$33,000	\$33,000
Oil spill response drum	2	\$975	\$1,950
Over fill Alarm Systems	6	\$1,500	\$9,000
Emergency Eye wash Kit	1	\$150	\$150
20 lb ABC Fire Extinguishers	3	\$750	\$2,250
6 ft by 8 ft Utility Shed c/w concrete floor, insulated walls, wiring, electric baseboard heat and steel door.	1	\$7,800	\$7,800
Total Cost - Identified Items			\$467,080
Provision for contingencies		15%	\$69,920
Total Cost Estimate			<u>\$537,000</u>

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Table B-6

Cost Estimate - Specific Marine Storage Depots - Labrador Coast

Case E.

Marine Depots - Labrador Coast supplied via Coastal Tanker

Gasoline and Stove oil and Diesel storage for dispensing to customers at Depot into drums and / or other containers.

		Makkovik	
Estimated Annual Consumer Gasoline Consumer Consumption/ demand (Litres)		237,933	Gasoline
Estimated Annual Home Heat Product Consumer Consumption/ demand (Litres)		118,275	Stove Oil
Item Description	Qty	Unit Price	Amount
Land Purchase - 1 Acre	1	\$20,000	\$20,000
Site preparation	1	\$22,500	\$22,500
Concrete Load Pad with drain to Oil/Water Separator	1	\$9,000	\$9,000
Feet - Chain Link Fencing c/w with 2- double gates installed	800	\$23	\$18,000
15000 imperial gallon (68,190 litre) capacity GEEP Units for Gasoline	3	\$53,000	\$159,000
10000 imperial gallon (45,461 litre) capacity GEEP Units for Gasoline	1	\$32,800	\$32,800
15000 imperial gallon (68,190 litre) capacity GEEP Units for Stove / Diesel	2	\$53,000	\$106,000
10000 imperial gallon (45,461 litre) capacity GEEP Units for Stove / Diesel	0	\$0	\$0
5000 Imperial gallon (22,730 litre) capacity GEEP Unit for Stove / Diesel	0	\$0	\$0
Load - Transport and Place GEEP Units on Site	6	\$2,500	\$15,000
2 - 5 HP Centrifugal product transfer pumps c/w base	2	\$3,800	\$7,600
3" Flanged steel Gate Valves	12	\$260	\$3,120
3" Flanged steel Check Valves	6	\$260	\$1,560
Retail Dispensing Pumps with hose reel and auto-shut-off nozzles	3	\$7,500	\$22,500
Oil Water Separator (5000 Litre)	1	\$7,200	\$7,200
Transport materials other than GEEP Units to site	1	\$1,250	\$1,250
Mechanical Hook-up c/w all associated piping and other materials and Labour	1	\$48,000	\$48,000
Electrical hook-up c/w all necessary wiring, circuit breakers, poles etc.	1	\$33,000	\$33,000
Oil spill response drum	2	\$975	\$1,950
Over fill Alarm Systems	6	\$1,500	\$9,000
Emergency Eye wash Kit	1	\$150	\$150
20 lb ABC Fire Extinguishers	3	\$750	\$2,250
6 ft by 8 ft Utility Shed c/w concrete floor, insulated walls, wiring, electric baseboard heat and steel door.	1	\$7,800	\$7,800
Total Cost - Identified Items			\$527,680
Provision for contingencies		15%	\$79,320
Total Cost Estimate			<u>\$607,000</u>

APPENDIX B

Table B-7

Cost Estimate - Specific Marine Storage Depots - Labrador Coast

Case E.

Marine Depots - Labrador Coast supplied via Coastal Tanker

Gasoline and Stove oil and Diesel storage for dispensing to customers at Depot into drums and / or other containers.

	Qty	Postville	
		Unit Price	Amount
Estimated Annual Consumer Gasoline Consumer Consumption/ demand (Litres)		179,759	Gasoline
Estimated Annual Home Heat Product Consumer Consumption/ demand (Litres)		69,825	Stove Oil
Item Description	Qty	Unit Price	Amount
Land Purchase - 1 Acre	1	\$20,000	\$20,000
Site preparation	1	\$22,500	\$22,500
Concrete Load Pad with drain to Oil/Water Separator	1	\$9,000	\$9,000
Feet - Chain Link Fencing c/w with 2- double gates installed	800	\$23	\$18,000
15000 imperial gallon (68,190 litre) capacity GEEP Units for Gasoline	2	\$53,000	\$106,000
10000 imperial gallon (45,461 litre) capacity GEEP Units for Gasoline	1	\$32,800	\$32,800
15000 imperial gallon (68,190 litre) capacity GEEP Units for Stove / Diesel	1	\$53,000	\$53,000
10000 imperial gallon (45,461 litre) capacity GEEP Units for Stove / Diesel	0	\$0	\$0
5000 Imperial gallon (22,730 litre) capacity GEEP Unit for Stove / Diesel	1	\$15,600	\$15,600
Load - Transport and Place GEEP Units on Site	5	\$2,500	\$12,500
2 - 5 HP Centrifugal product transfer pumps c/w base	2	\$3,800	\$7,600
3" Flanged steel Gate Valves	10	\$260	\$2,600
3" Flanged steel Check Valves	5	\$260	\$1,300
Retail Dispensing Pumps with hose reel and auto-shut-off nozzles	3	\$7,500	\$22,500
Oil Water Separator (5000 Litre)	1	\$7,200	\$7,200
Transport materials other than GEEP Units to site	1	\$1,250	\$1,250
Mechanical Hook-up c/w all associated piping and other materials and Labour	1	\$48,000	\$48,000
Electrical hook-up c/w all necessary wiring, circuit breakers, poles etc.	1	\$33,000	\$33,000
Oil spill response drum	2	\$975	\$1,950
Over fill Alarm Systems	5	\$1,500	\$7,500
Emergency Eye wash Kit	1	\$150	\$150
20 lb ABC Fire Extinguishers	3	\$750	\$2,250
6 ft by 8 ft Utility Shed c/w concrete floor, insulated walls, wiring, electric baseboard heat and steel door.	1	\$7,800	\$7,800
Total Cost - Identified Items			\$432,500
Provision for contingencies		15%	\$64,500
Total Cost Estimate			<u>\$497,000</u>

APPENDIX B

Table B-8

Cost Estimate - Specific Marine Storage Depots - Labrador Coast

Case E.

Marine Depots - Labrador Coast supplied via Coastal Tanker

Gasoline and Stove oil and Diesel storage for dispensing to customers at Depot into drums and / or other containers.

	Qty	Hopedale	
		250,000	Gasoline
Estimated Annual Consumer Gasoline Consumer Consumption/ demand (Litres)		250,000	Gasoline
Estimated Annual Home Heat Product Consumer Consumption/ demand (Litres)		161,154	Stove Oil
Item Description	Qty	Unit Price	Amount
Land Purchase - 1 Acre	1	\$20,000	\$20,000
Site preparation	1	\$30,000	\$30,000
Concrete Load Pad with drain to Oil/Water Separator	1	\$12,000	\$12,000
Feet - Chain Link Fencing c/w with 2- double gates installed	800	\$30	\$24,000
15000 imperial gallon (68,190 litre) capacity GEEP Units for Gasoline	4	\$53,000	\$212,000
10000 imperial gallon (45,461 litre) capacity GEEP Units for Gasoline	0	\$0	\$0
15000 imperial gallon (68,190 litre) capacity GEEP Units for Stove / Diesel	2	\$53,000	\$106,000
10000 imperial gallon (45,461 litre) capacity GEEP Units for Stove / Diesel	1	\$32,800	\$32,800
5000 Imperial gallon (22,730 litre) capacity GEEP Unit for Stove / Diesel	0	\$0	\$0
Load - Transport and Place GEEP Units on Site	7	\$2,500	\$17,500
2 - 5 HP Centrifugal product transfer pumps c/w base	2	\$3,800	\$7,600
3" Flanged steel Gate Valves	14	\$260	\$3,640
3" Flanged steel Check Valves	7	\$260	\$1,820
Retail Dispensing Pumps with hose reel and auto-shut-off nozzles	3	\$7,500	\$22,500
Oil Water Separator (5000 Litre)	1	\$7,200	\$7,200
Transport materials other than GEEP Units to site	1	\$1,250	\$1,250
Mechanical Hook-up c/w all associated piping and other materials and Labour	1	\$48,000	\$48,000
Electrical hook-up c/w all necessary wiring, circuit breakers, poles etc.	1	\$33,000	\$33,000
Oil spill response drum	2	\$975	\$1,950
Over fill Alarm Systems	7	\$1,500	\$10,500
Emergency Eye wash Kit	1	\$150	\$150
20 lb ABC Fire Extinguishers	3	\$750	\$2,250
6 ft by 8 ft Utility Shed c/w concrete floor, insulated walls, wiring, electric baseboard heat and steel door.	1	\$7,800	\$7,800
Total Cost - Identified Items			\$601,960
Provision for contingencies		15%	\$90,040
Total Cost Estimate			<u>\$692,000</u>

APPENDIX B

Table B-9

Cost Estimate - Specific Marine Storage Depots - Labrador Coast

Case E.

Marine Depots - Labrador Coast supplied via Coastal Tanker

Gasoline and Stove oil and Diesel storage for dispensing to customers at Depot into drums and / or other containers.

		Nain	
Estimated Annual Consumer Gasoline Consumer Consumption/ demand (Litres)		436,603	Gasoline
Estimated Annual Home Heat Product Consumer Consumption/ demand (Litres)		330,600	Stove Oil
Item Description	Qty	Unit Price	Amount
Land Purchase - 1 Acre	1	\$20,000	\$20,000
Site preparation	1	\$30,000	\$30,000
Concrete Load Pad with drain to Oil/Water Separator	1	\$12,000	\$12,000
Feet - Chain Link Fencing c/w with 2- double gates installed	800	\$30	\$24,000
15000 imperial gallon (68,190 litre) capacity GEEP Units for Gasoline	6	\$53,000	\$318,000
10000 imperial gallon (45,461 litre) capacity GEEP Units for Gasoline	1	\$32,800	\$32,800
15000 imperial gallon (68,190 litre) capacity GEEP Units for Stove / Diesel	5	\$53,000	\$265,000
10000 imperial gallon (45,461 litre) capacity GEEP Units for Stove / Diesel	0	\$0	\$0
5000 Imperial gallon (22,730 litre) capacity GEEP Unit for Stove / Diesel	0	\$0	\$0
Load - Transport and Place GEEP Units on Site	12	\$2,500	\$30,000
2 - 5 HP Centrifugal product transfer pumps c/w base	2	\$3,800	\$7,600
3" Flanged steel Gate Valves	24	\$260	\$6,240
3" Flanged steel Check Valves	12	\$260	\$3,120
Retail Dispensing Pumps with hose reel and auto-shut-off nozzles	3	\$7,500	\$22,500
Oil Water Separator (5000 Litre)	1	\$7,200	\$7,200
Transport materials other than GEEP Units to site	1	\$1,250	\$1,250
Mechanical Hook-up c/w all associated piping and other materials and Labour	1	\$48,000	\$48,000
Electrical hook-up c/w all necessary wiring, circuit breakers, poles etc.	1	\$33,000	\$33,000
Oil spill response drum	2	\$975	\$1,950
Over fill Alarm Systems	12	\$1,500	\$18,000
Emergency Eye wash Kit	1	\$150	\$150
20 lb ABC Fire Extinguishers	3	\$750	\$2,250
6 ft by 8 ft Utility Shed c/w concrete floor, insulated walls, wiring, electric baseboard heat and steel door.	1	\$7,800	\$7,800
Total Cost - Identified Items			\$890,860
Provision for contingencies		15%	\$133,140
Total Cost Estimate			<u>\$1,024,000</u>

APPENDIX B

Table B-10

Estimated Annual Operating Cost of Typical 'Drop-Off' Bulk Plant for Distillates per Study Model

Nominal Storage Capacity (Litres)	90,922	90,922	90,922	90,922	90,922	90,922	136,383
Capital Cost Estimate ¹	\$275,000	\$275,000	\$275,000	\$275,000	\$275,000	\$275,000	\$312,000
Straight Line Depreciation - 20 Years	\$13,750	\$13,750	\$13,750	\$13,750	\$13,750	\$13,750	\$15,600

Annual Thruput (Litres)	1,000,000	1,500,000	2,000,000	2,500,000	3,000,000	3,500,000	4,000,000
Estimated Annual Costs							
Part-time Salary for Plant Operation ²	\$10,000	\$10,500	\$11,000	\$11,500	\$12,000	\$12,500	\$13,000
Electrical Power	\$1,000	\$1,050	\$1,100	\$1,150	\$1,200	\$1,250	\$1,300
Maintenance	\$1,500	\$2,250	\$3,000	\$3,750	\$4,500	\$5,250	\$6,000
Insurance ³	\$10,489	\$10,489	\$10,489	\$10,489	\$10,489	\$10,489	\$10,730
Municipal Taxes ⁴	\$2,750	\$2,750	\$2,750	\$2,750	\$2,750	\$2,750	\$3,120
Stock Losses at 0.25% of thruput @ 50 cpl	\$1,250	\$1,875	\$2,500	\$3,125	\$3,750	\$4,375	\$5,000
Sub-Total	<u>\$26,989</u>	<u>\$28,914</u>	<u>\$30,839</u>	<u>\$32,764</u>	<u>\$34,689</u>	<u>\$36,614</u>	<u>\$39,150</u>
Direct Operating Costs CPL (All Stock valued at 50 cpl)	<u>2.70</u>	<u>1.93</u>	<u>1.54</u>	<u>1.31</u>	<u>1.16</u>	<u>1.05</u>	<u>0.98</u>
Add Depreciation	\$13,750	\$13,750	\$13,750	\$13,750	\$13,750	\$13,750	\$15,600
Total Annual Cost	<u>\$40,739</u>	<u>\$42,664</u>	<u>\$44,589</u>	<u>\$46,514</u>	<u>\$48,439</u>	<u>\$50,364</u>	<u>\$54,750</u>
Operating Cost CPL	<u>4.07</u>	<u>2.84</u>	<u>2.23</u>	<u>1.86</u>	<u>1.61</u>	<u>1.44</u>	<u>1.37</u>

Nominal Storage Capacity (Litres)	136,383	136,383	181,844	181,844	181,844	181,844	181,844
Capital Cost Estimate ¹	\$312,000	\$312,000	\$390,000	\$390,000	\$390,000	\$390,000	\$390,000
Straight Line Depreciation - 20 Years	\$15,600	\$15,600	\$19,500	\$19,500	\$19,500	\$19,500	\$19,500

Annual Thruput (Litres)	4,500,000	5,000,000	5,500,000	6,000,000	6,500,000	7,000,000	7,500,000
Estimated Annual Costs							
Part-time Salary for Plant Operation ²	\$13,500	\$14,000	\$14,500	\$15,000	\$15,500	\$16,000	\$16,500
Electrical Power	\$1,350	\$1,400	\$1,450	\$1,500	\$1,550	\$1,600	\$1,650
Maintenance	\$6,750	\$7,500	\$8,250	\$9,000	\$9,750	\$10,500	\$11,250
Insurance ³	\$10,730	\$10,730	\$11,177	\$11,177	\$11,177	\$11,177	\$11,177
Municipal Taxes ⁴	\$3,120	\$3,120	\$3,900	\$3,900	\$3,900	\$3,900	\$3,900
Stock Losses at 0.25% of thruput @ 50 cpl	\$5,625	\$6,250	\$6,875	\$7,500	\$8,125	\$8,750	\$9,375
Sub-Total	<u>\$41,075</u>	<u>\$43,000</u>	<u>\$46,152</u>	<u>\$48,077</u>	<u>\$50,002</u>	<u>\$51,927</u>	<u>\$53,852</u>
Direct Operating Costs CPL (All Stock valued at 50 cpl)	<u>0.91</u>	<u>0.86</u>	<u>0.84</u>	<u>0.80</u>	<u>0.77</u>	<u>0.74</u>	<u>0.72</u>
Add Depreciation	\$15,600	\$15,600	\$19,500	\$19,500	\$19,500	\$19,500	\$19,500
Total Annual Cost	<u>\$56,675</u>	<u>\$58,600</u>	<u>\$65,652</u>	<u>\$67,577</u>	<u>\$69,502</u>	<u>\$71,427</u>	<u>\$73,352</u>
Operating Cost CPL	<u>1.26</u>	<u>1.17</u>	<u>1.19</u>	<u>1.13</u>	<u>1.07</u>	<u>1.02</u>	<u>0.98</u>

Notes:

¹ Based on the use of self dyked GEEP Units - for Furnace Oil and one for Stove Oil with 2 pumps, meters, 2 loading arms, land, fencing, dykes, water separator and other required equipment for current standards. (Distillate storage only as required for thruput)

² Balance of salary provided for by commercial volumes handled through bulk plant and/ or tank wagon

³ Insurance cost estimate would be \$0.50 per \$100 for physical property and inventory. First and Third party Liability premiums assuming the Plant meets all environmental and safety standards would be \$9000 + HST. (Inventory valued at 50 cpl and insured at 50% of storage capacity)

⁴ Municipal Taxes assumed to be 1% of capital value per annum (i.e. 10 mils)

APPENDIX B

Table B-11

Estimated Annual Costs for Specific Bulk Plants and Marine Depots Labrador - Using Study Model

Nominal Storage Capacity (Litres)	545,520	409,140	136,380	1,159,230	954,660	204,570
Capital Cost Estimate ¹	\$771,000	\$771,000	\$771,000	\$1,295,000	\$1,295,000	\$1,295,000
Straight Line Depreciation - 20 Years	\$38,550	\$38,550	\$38,550	\$64,750	\$64,750	\$64,750
	(Storage for 50% of annual Volume)			(Storage for 70% of annual Volume)		
Location	Charlottetown, Labrador			Port Hope Simpson, Labrador		
	All Product	Gasoline	Distillate	All Product	Gasoline	Distillate
Gasolines Thruput	864,800	864,800		1,193,325	1,193,325	
Distillates Thruput	187,375		187,375	255,713		255,713
Total Annual Thruput (Litres)	1,052,175	864,800	187,375	1,449,038	1,193,325	255,713
Estimated Annual Costs	Totals	Prorate on Thruput		Totals	Prorate on Thruput	
Part-time Salary for Plant Operation ²	\$11,000	\$9,041	\$1,959	\$11,000	\$9,059	\$1,941
Electrical Power ⁵	\$1,905	\$1,566	\$339	\$1,945	\$1,602	\$343
Maintenance	\$1,578	\$1,297	\$281	\$2,174	\$1,790	\$384
Insurance ³	\$13,537	\$11,126	\$2,411	\$13,537	\$11,148	\$2,389
Municipal Taxes ⁴	\$7,710	\$6,337	\$1,373	\$7,710	\$6,349	\$1,361
Stock Losses for gasoline 1.5 % of thruput @ 50 cpl	\$6,486	\$6,486		\$8,950	\$8,950	
Stock Losses for distillate 0.75 % of thruput @ 50 cpl	\$703		\$703	\$959		\$959
Sub-Total	\$42,919	\$35,853	\$7,066	\$46,274	\$38,898	\$7,376
Direct Operating Costs CPL	<u>4.08</u>	<u>4.15</u>	<u>3.77</u>	<u>3.19</u>	<u>3.26</u>	<u>2.88</u>
Add Depreciation	\$38,550	\$31,685	\$6,865	\$64,750	\$53,324	\$11,426
Total Annual Cost	\$81,469	\$67,538	\$13,931	\$111,024	\$92,221	\$18,803
Annual Operating Cost CPL	<u>7.74</u>	<u>7.81</u>	<u>7.43</u>	<u>7.66</u>	<u>7.73</u>	<u>7.35</u>

Average annual cost for Gasoline

7.77 CPL

Average annual cost for Stove Oil Heating Fuel and Diesel Fuel

7.39 CPL

¹ Storage based on tankage and equipment per Tables B-3 and B-4 of Appendix B. Labour for construction assumed at 120% of rates on Island of Newfoundland.

² Balance of salary provided for by commercial volumes handled through bulk plant and/ or tank wagon deliveries.

³ Insurance cost estimated at \$0.50 per \$100 of physical property and inventory. First and Third party Liability assuming the plant meets all environmental and safety standards would be \$9000 + HST. Inventory valued at 50 cpl and insured at 50% of capacity.

⁴ Municipal Taxes assumed to be 1% of capital value per annum (I.e. 10 mils)

⁵ Electricity costs assumed to double that on Island portion of province.

APPENDIX B

Table B-12

Estimated Annual Costs for Specific Marine Depots Labrador Coast - Using Study Estimate Model

	All Product	Gasoline	Distillate	All Product	Gasoline	Distillate
Nominal Storage Capacity (Litres)	318,224	90,922	227,302	386,411	250,031	136,380
Capital Cost Estimate ¹	\$537,000	\$537,000	\$537,000	\$607,000	\$607,000	\$607,000
Straight Line Depreciation - 20 Years	\$26,850	\$26,850	\$26,850	\$30,350	\$30,350	\$30,350
Location	Rigolet, Labrador			Makkovik, Labrador		
Population 2001 Census	317			384		
Gasolines Thruput	210,508	210,508		237,933	237,933	
Distillates Thruput	83,047		83,047	118,275		118,275
Total Annual Thruput (Litres)	293,555	210,508	83,047	356,208	237,933	118,275
<u>Estimated Annual Costs</u>	Totals	Prorate on Thruput		Totals	Prorate on Thruput	
Part-time Salary for Plant Operation ²	\$11,000	\$7,888	\$3,112	\$11,000	\$7,348	\$3,652
Electrical Power ⁵	\$1,829	\$1,312	\$518	\$1,836	\$1,226	\$609
Maintenance	\$440	\$316	\$125	\$534	\$357	\$177
Insurance ³	\$12,083	\$8,665	\$3,418	\$12,518	\$8,362	\$4,156
Municipal Taxes ⁴	\$2,685	\$1,925	\$760	\$3,035	\$2,027	\$1,008
Stock Losses for gasoline 5 % of thruput	\$5,263	\$5,263		\$5,948	\$5,948	
Stock Losses for distillate 2 % of thruput	\$830		\$830	\$1,183		\$1,183
Sub-Total	\$34,131	\$25,368	\$8,762	\$36,054	\$25,268	\$10,786
Direct Operating Costs CPL	<u>11.63</u>	<u>12.05</u>	<u>10.55</u>	<u>10.12</u>	<u>10.62</u>	<u>9.12</u>
Add Depreciation	\$26,850	\$19,254	\$7,596	\$30,350	\$20,273	\$10,077
Total Annual Cost	\$60,981	\$44,622	\$16,358	\$66,404	\$45,540	\$20,864
Operating Cost CPL	<u>20.77</u>	<u>21.20</u>	<u>19.70</u>	<u>18.64</u>	<u>19.14</u>	<u>17.64</u>

¹ Storage based on tankage and equipment per Tables B-5 and B-6 of Appendix B. Labour for construction assumed at 150% of rates on Island of Newfoundland.

² Balance of salary provided for by dispensing fuel to customers - (provided for in retail margin)

³ Insurance cost estimated at \$0.50 per \$100 of physical property and inventory. First and Third party Liability assuming the plant meets all environmental and safety standards would be \$9000 + HST. Inventory valued at 50 cpl and insured at 50% of capacity.

⁴ Municipal Taxes Labrador Communities assumed to be 0.5% of capital value per annum (i.e. 5 mils)

⁵ Electricity costs assumed to double that on Island portion of province.

APPENDIX B

Table B-13

Estimated Annual Costs for Specific Marine Depots Labrador North - Using Study Estimate Model

	All Product	Gasoline	Distillate	All Product	Gasoline	Distillate
Nominal Storage Capacity (Litres)	250,031	181,841	68,190	454,601	272,760	181,841
Capital Cost Estimate ¹	\$497,000	\$497,000	\$497,000	\$692,000	\$692,000	\$692,000
Straight Line Depreciation - 20 Years	\$24,850	\$24,850	\$24,850	\$34,600	\$34,600	\$34,600
Location	Postville, Labrador			Hopedale, Labrador		
Population 2001 Census	215			559		
Gasolines Thruput	179,759	179,759		250,000	250,000	
Distillates Thruput	69,825		69,825	161,154		161,154
Total Annual Thruput (Litres)	249,584	179,759	69,825	411,154	250,000	161,154
<u>Estimated Annual Costs</u>	Totals	Prorate on Thruput		Totals	Prorate on Thruput	
Part-time Salary for Plant Operation ²	\$11,000	\$7,923	\$3,077	\$11,000	\$6,688	\$4,312
Electrical Power ⁵	\$1,825	\$1,314	\$511	\$1,841	\$1,119	\$722
Maintenance	\$374	\$270	\$105	\$617	\$375	\$242
Insurance ³	\$11,798	\$8,497	\$3,301	\$13,028	\$7,922	\$5,106
Municipal Taxes ⁴	\$2,485	\$1,790	\$695	\$3,460	\$2,104	\$1,356
Stock Losses for gasoline 5 % of thruput	\$4,494	\$4,494		\$6,250	\$6,250	
Stock Losses for distillate 2 % of thruput	\$698		\$698	\$1,612		\$1,612
Sub-Total	\$32,674	\$24,287	\$8,387	\$37,808	\$24,459	\$13,349
Direct Operating Costs CPL	13.09	13.51	12.01	9.20	9.78	8.28
Add Depreciation	\$24,850	\$17,898	\$6,952	\$34,600	\$21,038	\$13,562
Total Annual Cost	\$57,524	\$42,185	\$15,339	\$72,408	\$45,497	\$26,911
Operating Cost CPL	23.05	23.47	21.97	17.61	18.20	16.70

¹ Storage based on tankage and equipment per Tables B-7 and B-8 of Appendix B. Labour for construction assumed at 150% of rates on Island of Newfoundland.

² Balance of salary provided for by dispensing fuel to customers - (provided for in retail margin)

³ Insurance cost estimated at \$0.50 per \$100 of physical property and inventory. First and Third party Liability assuming the plant meets all environmental and safety standards would be \$9000 + HST. Inventory valued at 50 cpl and insured at 50% of capacity.

⁴ Municipal Taxes Labrador Communities assumed to be 0.5% of capital value per annum (i.e. 5 mils)

⁵ Electricity costs assumed to double that on Island portion of province.

APPENDIX B

Table B-14

Estimated Annual Costs for Specific Marine Depots Labrador North - Using Study Estimate Model

	All Product	Gasoline	Distillate
Nominal Storage Capacity (Litres)	795,551	454,601	340,950
Capital Cost Estimate ¹	\$1,024,000	\$1,024,000	\$1,024,000
Straight Line Depreciation - 20 Years	\$51,200	\$51,200	\$51,200
Location	Nain, Labrador		
Population 2001 Census	1,159		
Gasolines Thruput	436,603	436,603	
Distillates Thruput	330,600		330,600
Total Annual Thruput (Litres)	767,203	436,603	330,600
<u>Estimated Annual Costs</u>	Totals	Prorate on Thruput	
Part-time Salary for Plant Operation ²	\$22,000	\$12,520	\$9,480
Electrical Power ⁵	\$1,877	\$1,068	\$809
Maintenance	\$1,151	\$655	\$496
Insurance ³	\$15,114	\$8,601	\$6,513
Municipal Taxes ⁴	\$5,120	\$2,914	\$2,206
Stock Losses for gasoline 5 % of thruput	\$10,915	\$10,915	
Stock Losses for distillate 2 % of thruput	\$3,306		\$3,306
Sub-Total	\$59,483	\$36,673	\$22,810
Direct Operating Costs CPL	<u>7.75</u>	<u>8.40</u>	<u>6.90</u>
Add Depreciation	\$51,200	\$29,137	\$22,063
Total Annual Cost	\$110,683	\$65,810	\$44,873
Operating Cost CPL	<u>14.43</u>	<u>15.07</u>	<u>13.57</u>

¹ Storage based on tankage and equipment per Table B-9 of Appendix B. Labour for construction assumed at 150% of rates on Island of Newfoundland.

² Balance of salary provided for by dispensing fuel to customers - (provided for in retail margin)

³ Insurance cost estimated at \$0.50 per \$100 of physical property and inventory. First and Third party Liability assuming the plant meets all environmental and safety standards would be \$9000 + HST. Inventory valued at 50 cpl and insured at 50% of capacity.

⁴ Municipal Taxes Labrador Communities assumed to be 0.5% of capital value per annum (i.e. 5 mils)

⁵ Electricity costs assumed to double that on Island portion of province.

APPENDIX B

Table B-15

Estimated Annual Costs for Specific Marine Depots Labrador North - Using Study Estimate Model

Average of 5 North Coast Marine Depots	All Product	Gasoline	Distillate
Nominal Storage Capacity (Litres)	440,964	250,031	190,933
Capital Cost Estimate ¹	\$671,400	\$671,400	\$671,400
Straight Line Depreciation - 20 Years	\$33,570	\$33,850	\$33,850
Location - All five Communities	North Labrador Coast		
Total Population 2001 Census	2,634		
Average Population - Five Communities	527		
	AVERAGES		
Gasolines Thruputs (Average)	262,961	262,961	
Distillates Thruputs (Average)	152,580		152,580
Total Annual Thruputs- Litres (Average)	415,541	262,961	152,580
Estimated Annual Costs	Totals	rate on Thruput	
Part-time Salary for Plant Operation ²	\$13,200	\$8,473	\$4,727
Electrical Power ⁵	\$1,842	\$1,208	\$634
Maintenance	\$623	\$394	\$229
Insurance ³	\$12,908	\$8,409	\$4,499
Municipal Taxes ⁴	\$3,357	\$2,152	\$1,205
Stock Losses for gasoline 5 % of thruput	\$6,574	\$6,574	\$0
Stock Losses for distillate 2 % of thruput	\$1,526	\$0	\$1,526
Sub-Total	\$40,030	\$27,211	\$12,819
Direct Operating Costs CPL	9.63	10.35	8.40
(For Stock Losses Product valued at 50 cpl)			
Add Depreciation	\$33,570	\$21,520	\$12,050
Total Annual Cost	\$73,600	\$48,731	\$24,869
Total operating Cost CPL	17.39	17.98	16.48
Less allowance for portion of retail margin included in plant operation- cents per litre		2.39	2.39
Net Average Marine Depot Operating Cost CPL		15.59	14.09

¹ Average Capital Cost of all Five North Labrador Coast Communities

² Balance of salary provided for by dispensing fuel to customers - (provided for in retail margin)

³ Insurance cost estimated at \$0.50 per \$100 of physical property and inventory. First and Third party Liability assuming the plant meets all environmental and safety standards would be \$9000 + HST. Inventory valued at 50 cpl and insured at 50% of capacity.

⁴ Municipal Taxes Labrador Communities assumed to be 0.5% of capital value per annum (I.e. 5 mils)

⁵ Electricity costs assumed to double that on Island portion of province.