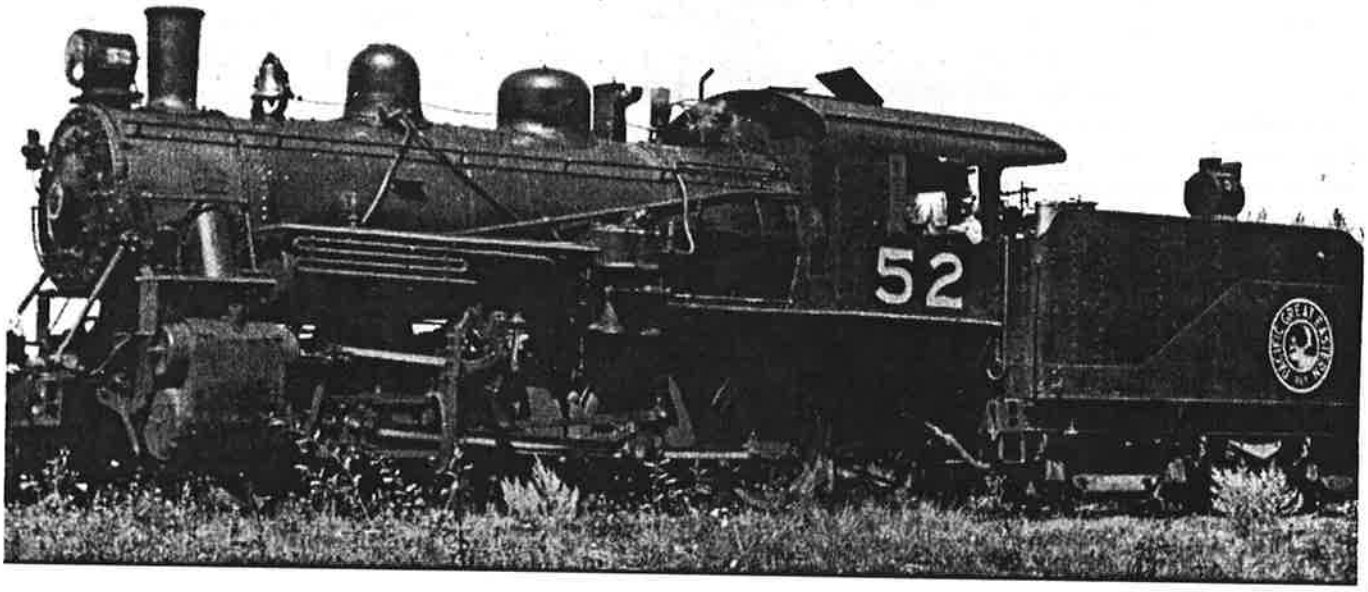
The CARIBOO

The British Columbia Railway Historical & Technical Society



Issue 20

April 1995

Intermodal Vehicles

Copper Concentrate

Cariboo Operations

Just Business

Our circulation numbers continue to grow. Thanks to everyone for their subscription referrals. Plus *The Cariboo* is now available in a growing number of hobby shops in both Canada and the USA. If there's a shop in your area that you think may be interested in stocking our newsletter, please drop us a note. ❐

The amount of mail being received at the BCRH&TS world headquarters has taken a sharp turn upwards. Please ensure that your name and address is clearly marked on all correspondence. Otherwise it may become necessary to call in a graphologist --or better yet, a psychic. ❐

Member Roy Smith has been elected president of The Central B.C. Railway & Forest Museum Society/Prince George Railway Museum. Congratulations, Roy! ❐

Our subscriber referral program continues in effect whereby a one issue subscription extension is earned for each new member referral. One referral, one extra issue. Four new members, and you receive a year of *The Cariboo* free!

Just two rules apply. First, all referrals must be for new members only. Second, you must request credit for the referral at the time the new subscription order is placed. ❐

On Our Cover...

PGE locomotive #52, a MLW-built Consolidation (2-8-0). Delivered to the railway on November 13, 1913, #52 would spend much of her career hauling both passenger and freight trains on the Prince George Subdivision.

Date and location of photograph unknown. A.H. Cloverdale Collection, courtesy of Keith Sirman.

The CARIBOO

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All contributions are welcome. It is helpful if submissions are on a 3.5" disk in IBM Word for Windows, IBM WordPerfect, as a "flat" ASCII file, or typewritten.

All submissions are subject to editing as a condition of publication. Material will be retained unless other arrangements have been agreed upon in advance.

The editors encourage submission of photographs and illustrations which help reinforce the content of material submitted. Appropriate captions should be included. Photographs may be either black and white prints, colour prints, or colour slides.

Authors are responsible for all original statements made in their work. Submissions are accepted with the understanding that they are not under consideration elsewhere.

IN THE NEWS

Edited by Jim Moore

The removal of passenger service subsidy by the provincial government last year, combined with financial losses stemming from the 1993 labour disruption, has BC Rail examining the future of its passenger service. At present, the winter schedule is being operated as before, although a maximum of two Budd cars north of Lillooet is in effect. Rumour has it that next summer's schedule will see a reduction of daily service north to Prince George. For the time being, four cars are operating the entire passenger service, with the remaining fleet placed in storage for the winter. (WCRA *News*) ❐

Continuing...With the above in mind, there is little credence to the rumour that BC Rail was looking to purchase some additional Budd cars from Via Rail. (Paul J. Crozier Smith) ❐

Construction was underway in late September on the new station at Squamish. The previous facility was destroyed by fire in January 1993. ❐

Westcoast Energy's recently announced plan to build a natural gas processing plant in Tumbler Ridge has meant new challenges for BC Rail. The plant is worth $550 million and will increase the capacity of the newly expanded Pine River gas plant and Grizzly Valley pipeline by a further 80 percent.

The expansion has prompted West Coast to team up with BC Rail. The railway has presented plans illustrating the initial design for a 4-kilometre rail loop to service the sulphur facility. Estimated cost for the track is $3 million.

In addition to the sulphur trackage, BC Rail has proposed that a stub track be built to accommodate the inbound movement and unloading of plant equipment.

This new business opportunity could increase sulphur shipments on the railway from approximately 8,700 cars to approximately 12,000 cars per year if its decided that sulphur produced at the plant will be shipped instead of being poured to block. Construction is expected to begin in mid-1995, with completion expected in November 1996. (BC Rail *Carrier*) ❐

A passenger extra departed North Vancouver at 1400 hours on Sunday, November 20. The train was powered by a pair of SD40-2s with the US steam tender, baggage car *Prince George* with steam generator operating, two of the former VIA Rail *Royal Hudson* coaches, and two NRHS green heavy-weight passenger cars. (WCRA *News*) ❐

BC Rail is investing nearly $8 million in 55 articulated intermodal railcars, the first of which began arriving in December. The cars, known as "doubles", have two platforms and offer more space than the cars formerly used. The new cars (series BCQL 3xx) will complement the existing triple cars used in Prince George service. (BC Rail *Carrier*) ❐

In mid October, a very interesting former CPR steam locomotive tender turned up at the Royal Hudson steam shop in North Vancouver. The tender, ex CPR #415818, had been in work service and most recently in the collection of Heritage Park in Calgary. It was originally mated with CPR Class G3f Pacific (4-6-2) #2366.

How did it get to be here? Well, BC Rail desired a new auxiliary tender for #3716 and the #415818 was the best candidate in terms of both functionality and esthetics as a match for the current 3716 tender. As part of the deal, BCR obtained another ex CPR work tender to trade to Heritage Park from a private party in Windermere, B.C. He provided his tender in exchange for a retired BCR steel caboose. (Grant Ferguson/WCRA *News*) ❐

Also in mid October, the track leads to the North Vancouver Steam Shop were being rebuilt to accommodate new track pans. These are sheet metal or concrete pans under the tracks where the locomotives are spotted for service and fuel. They are designed to capture any fuel spillage and the usual lubricant drips, collecting them in a storage tank for later disposal. (Grant Ferguson/WCRA *News*) ❐

BCR Properties has announced new developments in Squamish and Prince George. In Squamish, BCRP hopes to transform a portion of land near Hwy 99 into a five-building commercial/retail development. In Prince George, BCRP plans to build a five-storey, 50,000 square foot office building which will serve as the northern headquarters for Westel Telecommunications. (BC Rail *Carrier*) ❐

Besides locomotive rebuilds with CAT power, CATs of another breed are on the prowl at BC Rail. The long proven concept of placing heavy excavating machinery on rail cars recently got a shot in the arm with a new CAT 320L Excavator mounted on a Hytracker Transporter.

Requirements for regular maintenance coupled with relatively short summer work seasons in the northern regions of the province require versatility and quick mobility. To access remote areas --and avoid having to travel via regular freight-- the Hytracker gets it propulsion and braking from the CAT 320L on board. Specially modified to allow coupling of hydraulics, the Hytracker can travel up 2.2% grades at up to 32 kph. And, if required, the excavator can crawl off the cart on its treads to work away from the track. (Dave Emmington/WCRA *News*) ❐

BC Rail's Dawson Creek terminal is closing and its one employee is being reassigned to Chetwynd. Traffic handling and customer service responsibilities will now be handled by Chetwynd and Ft. St. John terminals.

Dawson Creek terminal, which opened in 1958, burned downed in March 1993. Since then, temporary station facilities have been used. Due to current traffic levels -- three trains per week-- BC Rail is unable to justify the cost associated with rebuilding the destroyed terminal. (BC Rail *Coupler*) ❐

Weldwood of Canada has built a round wood chipping plant in Williams Lake which began operations in late November. The plant produces approximately 20 carloads of woodchips daily which are railed to Cariboo Pulp and Paper. (BC Rail *Carrier*) ❐

It's been quite a year for the film industry on BC Rail lines. According to BC Rail's Marketing Services, many feature films, television series, and commercials have been filmed on BCR property. Movies include *Intersection, State of Terror, Underground,* as well as *The Commish, Highlander,* and *Marshall* television series. (BC Rail *Coupler*) ❐

Slocan is proceeding with construction of a $100 million oriented strand board mill in Fort Nelson. The plant will use pulp quality logs and wood residues to produce a strong type of panel board which Slocan will call Huskyboard. The plant will be operational in early 1996. BC Rail will ship an estimated 10 carloads per day, seven days per week from the mill. (BC Rail *Carrier* and Doug Davies) ❐

The piles have been driven, cement foundation poured, and steel frame erected for the new yard office soon to open next to the south leg of the wye near the foot of Philip Avenue in North Vancouver. The new yard office is expected to open in early 1995. (BC Rail *Coupler*) ❐

West Fraser Timber has recently announced plans for a $110 million medium density fibreboard plant in Quesnel. Construction is scheduled to begin in March. (BC Rail *Carrier*) ❐

The *Royal Hudson* shop employees have reached an important milestone in their safety program. On July 13, they reached three years without a lost time accident for all employees in the shop. (BC Rail *Coupler*) ❐

Ainsworth Lumber has begun operation of its oriented strand board plant in 100 Mile House. The plant, which is one of the world's largest, will produce 365 million square feet of OSB per year and over 1,500 carloads for BC Rail annually.

Ainsworth Lumber operates seven plants throughout the province. Three of its lumber mills and one veneer plant are on BC Rail's line. The new plant will be the first in the world with the flexibility to produce panels for Japanese markets with no waste. (BC Rail *Carrier*) ❐

Coupler, BC Rail's employee newsletter, recently celebrated its 35th anniversary. Congratulations to Managing Editor Barrie Wall and Editor Jeanine Aylsworth! ❐

BC Rail has welcomed a new customer, GBA Logging Ltd. of Squamish, which is involved in the movement of logs between the Coast and Interior mills. GBA has leased a seven acre parcel of land in Squamish which will be initially used as a log sort yard. BC Rail will receive several hundred carloads of traffic from GBA in its first year of operation. The contract took effect in January. (BC Rail *Carrier*) ❐

There is yet another book about BC Rail in the making. Andy Wegmuller is preparing a book about the railway's physical beginnings, old track sites, wooden trestles, bridges, and other track structures along it right-of-way. It will contain facts and figures on the main track, spurs, sidings, stations, and terminals along the entire 2,314 km

run from North Vancouver to the northern terminus at Fort Nelson. (BC Rail *Coupler*) ❐

Logging in the Lovell Cove area (mile 197) on BC Rail's Takla Subdivision has been going on since late 1990. Access to timber is controlled by the Takla Indian band, which is a minority member of the logging consortium (Takla Track and Timber) taking lumber out for milling at the Rustad Brothers sawmill in Prince George. This logging has provided, so far, the only business on the Takla Sub. A dissatisfied "partner" of the Takla band is the Gitskan Indian band, which for government administrative purposes was forced into an amalgamation with the Takla in 1959 -- both bands are settled in the Takla Landing area. The regions of land claims, and therefore timber rights claims, of the Takla and Gitskan overlap, resulting in a dispute over planned logging of timber some seventy miles northwest from Lovell. The Gitskan claim this is their territory, and in May of 1994 set up a blockage of forestry roads near BC Rail's mile 221 to prevent logging and shipping from the Minaret Creek area (mile 274). Some logs had been hauled out of here by BC Rail in 1993. Although there are some forestry roads into the region, BC Rail's line is the only practical way to freight out any timber.

A court injunction cleared the Gitskan blockade on August 29, but on August 30 two BC Rail trestles near Takla Landing mysteriously caught fire effectively halting all log shipping on the Takla Sub. At mile 183.6, the 165-foot Maclaing Creek trestle went up in smoke, and at mile 186.2, the 220-foot Hudson's Bay Creek trestle was destroyed. The Takla band denounced the action, while the Gitskan band's denied involvement. No charges were laid by the RCMP. Negotiations to settle the claims dispute are underway. BC Rail immediately began repairing the trestles, with damages estimated at $3.5 million, expecting to reopen traffic in six weeks. In the meanwhile, a main line/log load operation was attempted south of the burned-out trestles. This failed, however, when as a result of poor temporary roads, a logging truck overturned. Reconstruction of the trestles was completed on September 24, and on September 29 a train of empty log cars reached Lovell -- the first in a month to do so. Next day, forty carloads of logs arrived at Fort St. James bound for Prince George. (Eric L. Johnson) ❐

The heroic rescue of a 3-year old girl from BC Rail tracks became a feature story in the November edition of *Reader's Digest*. The rescue, which took place in 1993, continues to receive nation-wide attention. (*Coupler*) ❐

BC Rail and Petrosul have signed a five-year contract valued at $75 million to ship sulphur from the Petrosul plant in Hasler Flats (outside Chetwynd) to Vancouver Wharves. The new tonnage is a result of the recent expansion to Westcoast Energy's Pine River gas plant. The expansion will boost BCR's sulphur shipments from 1,300 tons to 1,800 tons per day. (BC Rail *Carrier*) ❐

BC Rail has launched a pilot project to dispose of used wooden rail ties. There are over 100,000 used ties piled up in rail yards and along the line. Komac Services Ltd. was contracted to chip the first lot of ties. Once the ties are chipped by a machine called a tub grinder, they are transported by rail to Prince George where they are incinerated at a local mill. The project, which has been approved by the Ministry of Environment, is seen as an energy efficient way to dispose of wood waste as it utilizes the energy value of wood. To date, over 20,000 ties have been chipped. (BC Rail *Coupler*) ❐

UPDATE: In Issue 19, we published Eric Johnson's profile of the Takla Subdivision. Eric tells us that BC Rail trackage beyond Lovell was upgraded and has been ready for use as far as Minaret Creek (mile 274) since 1993. Some logs had been hauled out (by rail) in 1993, and the line stands ready for further use (notwithstanding the blockages detailed above).

Regarding Eric's map on page 13: The Canfor sawmill indicated is the former Intercontinental Pulp facility. Missing from the map is Pinewood Holdings (aka Northern Pole Co.) Pinewood, which operates from a short spur located just across from the Apollo sawmill trackage, ships a few car loads of poles each month via BC Rail. The unmarked spur (on the map) is now occupied by Ft. St. James Specialty Wood Products. This spur, which was formerly used by Pinewood, is presently unused as the new company is not an on-line customer.

We received a rather detailed letter from Patrick O. Hind containing several observations regarding David Morgan's article tracing PGE maritime operations (Issue 18). Patrick's comments include:

- "I disagree with the feature's opening sentence. PGE's North Shore was connected to CPR by way of the original Second Narrows Bridge." While Patrick's point is well taken, the focus of David's article is the Squamish barge operation--the very existence of which was brought about by the railway's isolation south of this point.

▪ During the time frame covered by David's article, the PGE had an active connection to Seattle by Foss Tug and Barge. Foss, which utilized its own marine fleet, operated into Squamish to load/unload "foreign" cars to the PGE.

▪ The bell and wheel from the *Point Ellice* are still extant as of 1994. These items, as well as a number of excellent photos of the tug are in the Capitol Iron store that presently occupies a portion of the former Wagner, Stein, and Greene site in Victoria.

▪ Regarding the sinking of the *Dola*: The *Dola* was run down in fog, by the *Lady Cynthia* which ironically was returning from Squamish with passengers from afternoon train No. 2. Patrick was aboard CPR's *Princess Joan*, as Assistant Purser, when the *Joan* was called to assist in the rescue of the tug's crew. The barge was secured by a CPR tug that was outgoing light at the time. It was towed back to the CPR Burrard Dock, and was later picked up by the *Point Ellice*.

▪ The steel truss rod arrangements found on the barges were known as hog posts, and were quite common on early barges and sternwheelers. The barges were actually self-steering, and had large wheels located in the wheelhouse aft of the barge.

▪ Regarding *Conveyor, Operator*, and *Cottonwood:* These were used in the early construction and also around Squamish in later years. It is also believed that one of them was taken to Seton Lake when the BC Electric operation started at Shalalth.

▪ Regarding maritime operations: The tug usually reduced its tow line between Point Atkinson and First Narrows. There is always a chop there, and at times they are shortened up before heading into the run into Vancouver.

▪ The barge service to Vancouver Island was to the Esquimalt and Nanaimo Railway at Ladysmith (mile 57.5) and Jayem (mile 84.4). Both slips served the E&N for north and southbound trains. This operation was normally handled by CPR tugs and barges, although Patrick states that he knows of two runs made to Ladysmith by the *Point Ellice* and a PGE barge in the 1930s.

No sooner had we published Andy Barber's feature spotlighting the former CN vans now used on the Tumbler Ridge Sub, when we came across an advert for a scale model version.

Atabasca Scale Models offers an HO scale version, priced at $81.00 USD. According to the company, this all-brass kit is designed to be assembled using CA cement instead of the traditional use of solder.

And then, *Model Railroader* (December 94) featured terrific scale drawings of the vans by Bill Brillinger. Veteran *Cariboo* readers may remember Bill from his involvement with Andy Barber's sulphur hopper project (Issue 6).

Greg M. Kennelly advises of a correction concerning a photo we published on page 19 of Issue 19. The photo on the lower half of the page was taken inside the Pacific Shipyard complex in North Vancouver rather than at the railway's Squamish shops.

According to Greg, the cars' gin-pole arrangement made them unacceptable for interchange movement. Therefore, upon their completion, the Swanson cars were loaded aboard flat cars and delivered by CN to PGE's North Vancouver yard.

We received further information concerning the fate of PGE's gas car #107 (Issue 16, page 19). Gary Oliver says that #107 made her final run on a WCRA fan trip to Squamish on August 5, 1961. On the return trip, the main generator blew just south of Squamish. She was towed back to North Vancouver by locomotive #556. The generator and prime mover were removed at North Vancouver, and the gas car was sold to a scrapper in Burnaby in June 1962. #107 sat in the scrapper's yard for many years before finally being cut up. ❐

HIGHWAY VEHICLES AND TRAILERS OF THE BRITISH COLUMBIA RAILWAY

(PART I)

By Laszlo Dora

Though I must admit that I am not altogether that knowledgeable about highway trucks and trailers, after collecting some information --primarily in the form of photographs, a few measurements, and of course data from the *B.C. Rail Revenue Freight Car Catalogue*--, it became apparent that with relative ease, a fair portion of the fleet could be reproduced in model form using a combination of kit-bashing and scratch-building techniques.

After further advanced studies carried out by Andy Barber, the highway fleet of B.C. Rail became all the more interesting; for there is indeed variety, luckily to a limited extent so as not to overwhelm a BCR modeller. Several of the truck cabs are available in HO scale as well as decals both in HO and N scales.

MERCEDES STRAIGHT TRUCK

Amongst the imports of B.C. Rail's truck fleet, there are a number of Mercedes straight trucks, of which two types have been observed to date. One version has a 24' paneled box, while the other has a curtain-sided box. In general, the curtain-sided version is used for bulky cargoes such as kiln-dried lumber.

Being a common European truck, several European model manufacturers offer the correct cab with various bodies and frame lengths. Because the prototype has various versions of the cab, engine, and wheel drive, I have been unable to produce a specific model number.

The best source for obtaining a model truck is an European hobby shop, or as an alternative Walthers also carries a few appropriate kits. Being a common European truck, several model manufacturers offer the trucks with the correct cab. It is my opinion that the Herpa version is the most accurate, with those offered by Kibri following very closely behind. The Herpa model was found equipped as an auto carrier and had no specific manufacturers kit number assigned to it. Pay attention, for other truck cabs have also been observed. The following Kibri kits may be used:

KIBRI	10392	tipper lorry
KIBRI	10450	small truck with trailer
WALTHERS	405-10392	tipper lorry

With either type of model, whether Herpa or Kibri, the frame will be either too short or too long. Cut the frame in an appropriate location (where the members are parallel), and then perform modifications as need be. The new body will assist in keeping the frame together. Strengthen the frame from the inside using styrene strips, and fill the gap on

the exterior if the frame is being lengthened. The frame will be painted black, so perfection is not critical. Save your energy for the body work which follows.

The drawings are quite detailed and contain most of the required information. The following modifications were also carried out; though not necessarily in the order discussed.

A) Add some lights onto the roof of the cab. Each light on the models is an amber-coloured Kibri tractor roof light, which was cut in half. The surface which was cut, and the bottom end of the light (back of the light when located on the cab), were painted aluminum. Then glue in place.

B) The cab side blinkers were installed just above the cab steps at the front. Use either the clear or chrome round light from Roco light accessory set (#1753) . Paint with a clear amber paint.

C) On the radiators of the Kibri models, paint the Mercedes symbol "aluminum". There is also a tiny one just above the radiator.

D) On the upper front cab corners (just above the mirrors), and on the mirrors themselves, paint on some reflectors. Do this by first applying some aluminum paint and then --on top of it-- some clear amber paint. With regard to the rear lights, do likewise but apply clear amber paint over the aluminum base. Tamiya makes clear paints.

E) Paint all exposed black plastic with black paint. This would include the front bumper, radiator, mirrors, wind deflectors, and the frame.

F) On the Kibri models, paint the front bumper headlight recesses aluminum prior to inserting the clear lights.

G) Paint the surface of the mirrors aluminum.

H) Below the BC Rail herald on the doors, apply a line of N scale boxcar data to simulate the writing below the herald. More will be said about decals later.

With regards to the truck with the dogwood scheme, I have no solid evidence that it was ever painted as such (except that a reliable railroader clearly recalled seeing a Mercedes truck).

J) Exhaust stacks have been observed being either chrome or black.

K) On the curtain-sided truck, the curtain was made from onion-skin drafting-tracing paper which was folded appropriately and glued into place. Afterwards the curtain was painted "tarp blue".

L) The rope at the bulkhead of the curtain-sided box is a very thin brass wire. The ends of each "V"were dipped into contact cement and put into place. Afterwards each "V" was lifted slightly and painted 'rope yellow' and then pushed back into place.

M) Some of the mud flaps have the BC Rail or dogwood herald. To create the BC Rail herald, I applied a pair of herald decals onto dark plastic. I reduced them on a photocopier to a size slightly shorter then the width of the dual tires. Onto the backside of the reductions, a piece of black paper was glued and after the flaps were cut out, the

perimeter edges were painted black using a marker pen. For the dogwood herald, N scale dogwoods were applied onto styrene which had previously been painted black.

PAINTING OF THE MODELS

The following paint formulae were matched to actual paint samples which Andy Barber had prepared using authentic colours obtained from BC Rail. The formulae were developed to be used with Floquil paints and in order to obtain a true colour match to new BC Rail, a coat of 'Gloss' or 'Clear Coat' must be applied or otherwise the paint will resemble a weathered surface. Because most of the decals are the wet type, a gloss surface will be required in order to obtain good results. Dry rub-on decals adhere better to non-gloss surfaces, so if being used, they may be applied prior to the gloss coat. Be sure to "thin out" the paint to a minimum one-third Diosol mixture prior to using it in an airbrush.

LIGHT GREEN	4	parts	110009	primer
	6	parts	110087	depot buff
	1	part	110010	engine black
	32	parts	110048	coach green
	11	parts	110011	reefer white
	7	parts		crystal coat or gloss
DARK GREEN	3	parts	110010	engine black
	11	parts	110035	BN Green
	1	part	110031	reefer yellow
	*			crystal coat or gloss

* as needed

DECALS

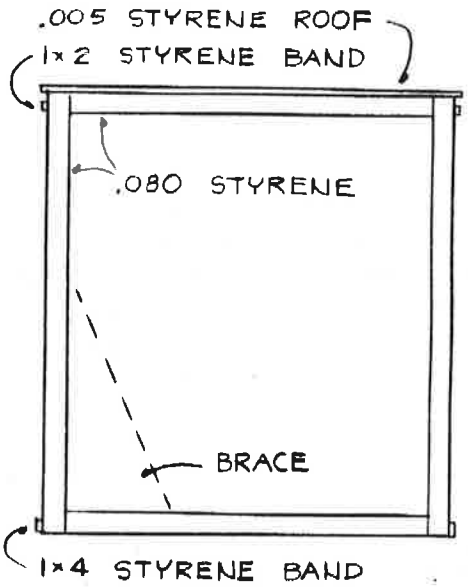
For the trucks with the BC Rail INTERMODAL herald, the markings were taken from Andy W. Scale Models sheet 1000. This is true for all except the one inch white stripe which is from Microscale N scale set 60-783.

The curtain-sided version is similar to the above noted truck except that the mud flaps also have the BC Rail herald.

For the truck with the dogwood herald, the decals on the doors and mud flaps --along with the white stripes-- were taken from Microscale N scale set 60-783. The dogwood herald on the side of the box may be taken from any CDS N scale boxcar dry transfer set.

CONCLUSION

I found this project very exciting, and relatively quick and simple. Now the beginning of the model intermodal fleet is in existence. There will be more highway vehicles and trailers to follow, and one day a decent-sized fleet will exist on the layout.

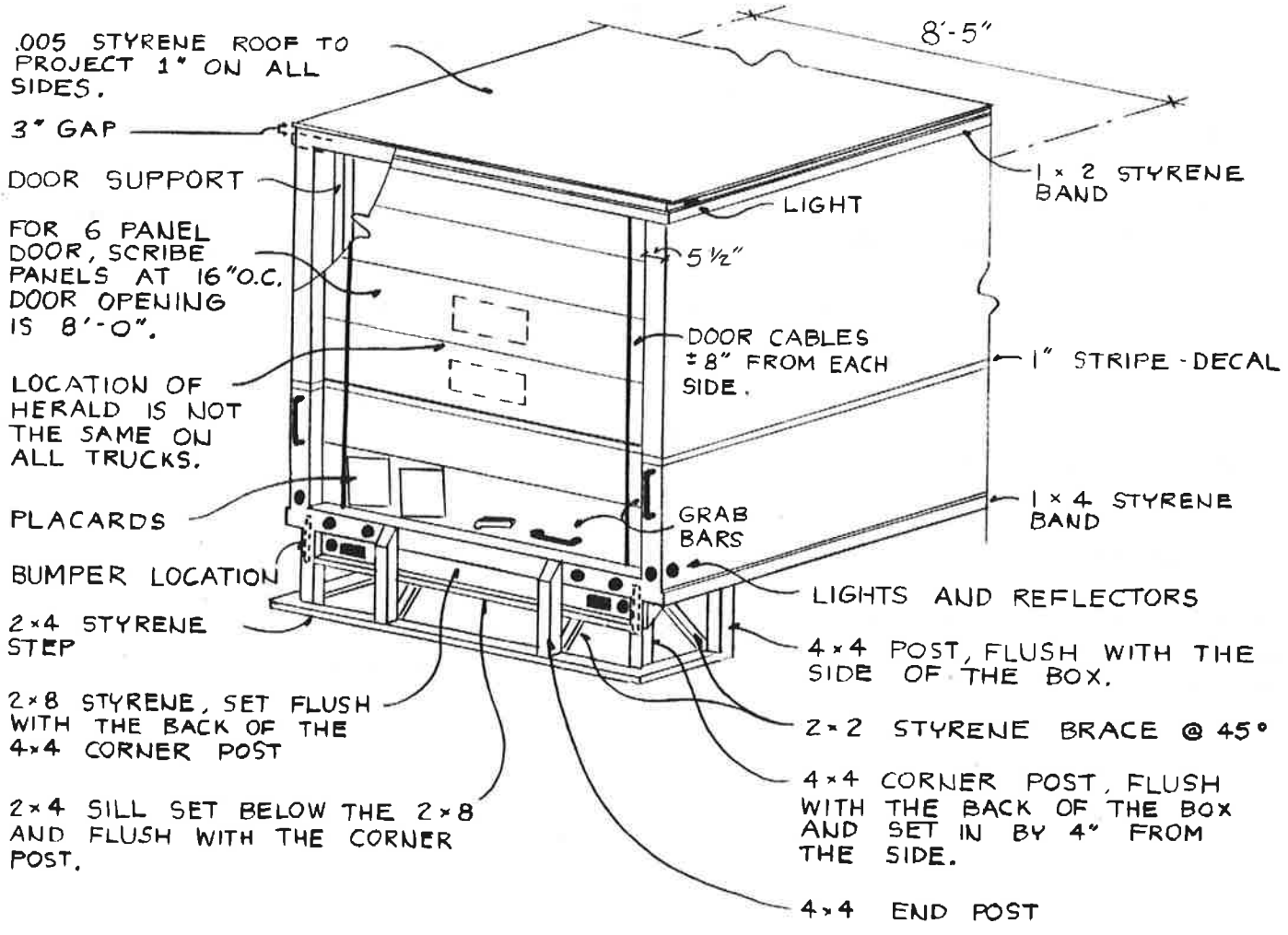


DRAWING 1 (Left)

The typical cross-section of a box, as built on the models. The noted method of construction will hide most of the assembly joints, thereby making for a better model. All drawings produced by the author.

DRAWING 2 (Below)

This drawing illustrates the construction of the detailing found at the back end of a typical BC Rail intermodal truck.

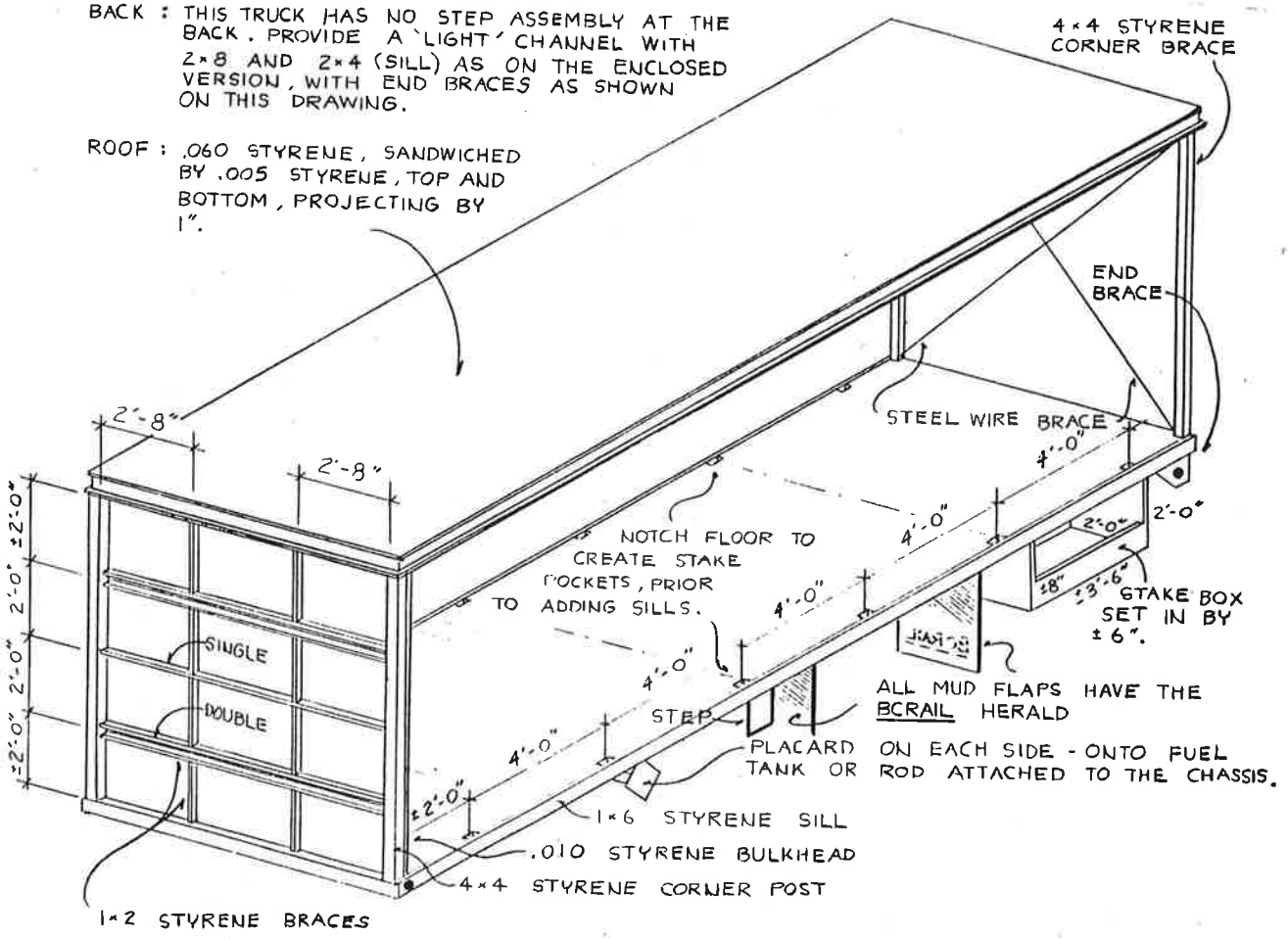


PAINT : ENTIRE BODY IS PAINTED DARK GREEN ; MUD FLAPS ARE BLACK. THE ROOF WAS NOT VERIFIED .

FLOOR : THE FLOOR IS NOT KNOWN BUT MAY BE ASSUMED TO BE A WOOD DECK. THE 1×6 SILL SHOULD BE SET HIGHER THAN THE STYRENE BASE WITH STAINED WOOD ADDED AFTER THE MODEL HAS BEEN PAINTED.

BACK : THIS TRUCK HAS NO STEP ASSEMBLY AT THE BACK . PROVIDE A 'LIGHT' CHANNEL WITH 2×8 AND 2×4 (SILL) AS ON THE ENCLOSED VERSION , WITH END BRACES AS SHOWN ON THIS DRAWING.

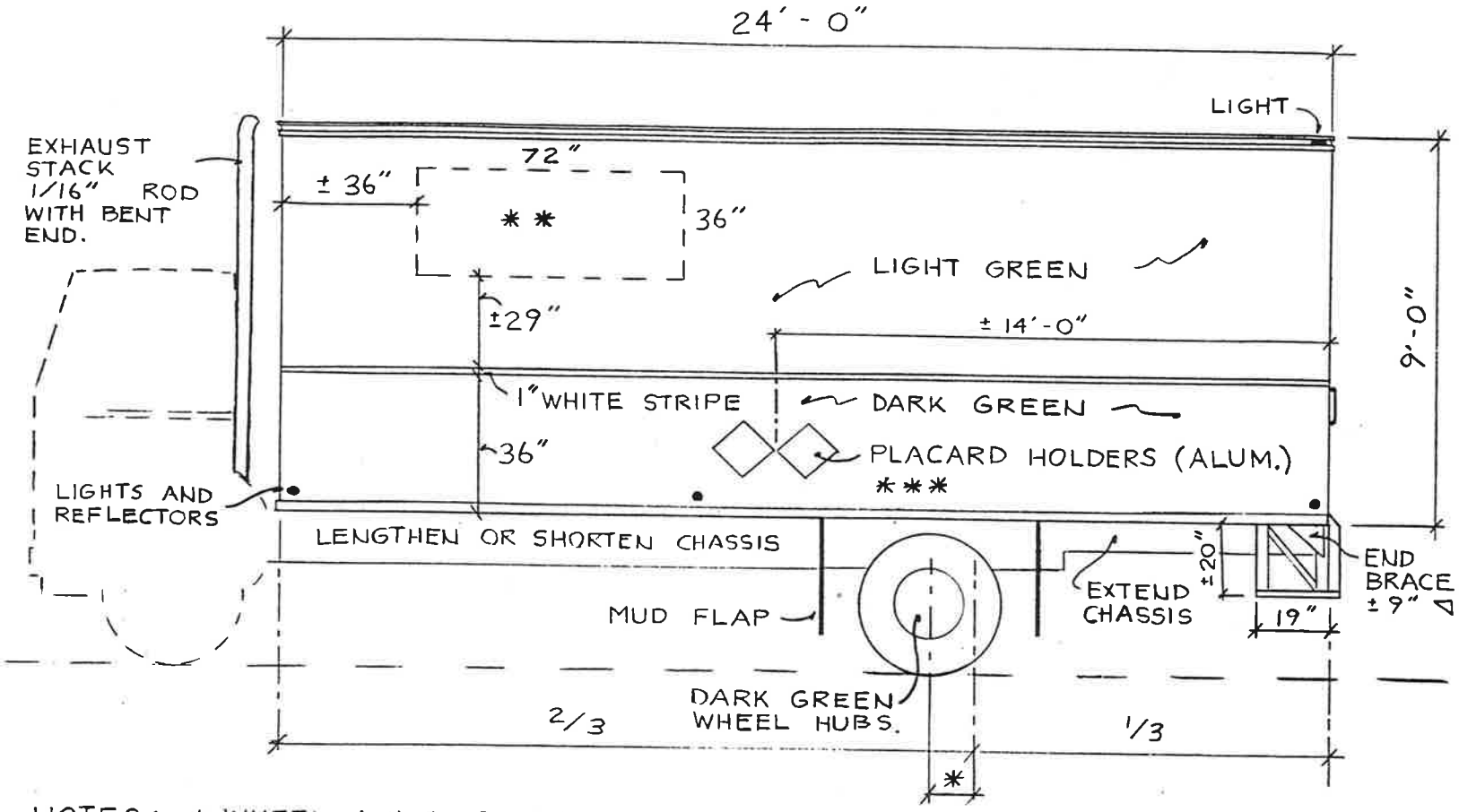
ROOF : .060 STYRENE , SANDWICHED BY .005 STYRENE , TOP AND BOTTOM , PROJECTING BY 1".



NOTE : ALL DIMENSIONS WERE ESTIMATED , USING PHOTOGRAPHS AS A REFERENCE. THE SIZE OF THE "BOX" APPEARS SIMILAR TO THE ENCLOSED VERSION.

DRAWING 3 (above) and DRAWING 4 (next page)

These two drawings illustrate how the models were assembled and the various dimensions used. Except for the box itself, most of the remaining details are Evergreen strip styrene cut to the specified lengths. Note the absence of a spare tire. This is prototypically correct. When a tire needs to be replaced, a service truck is dispatched.

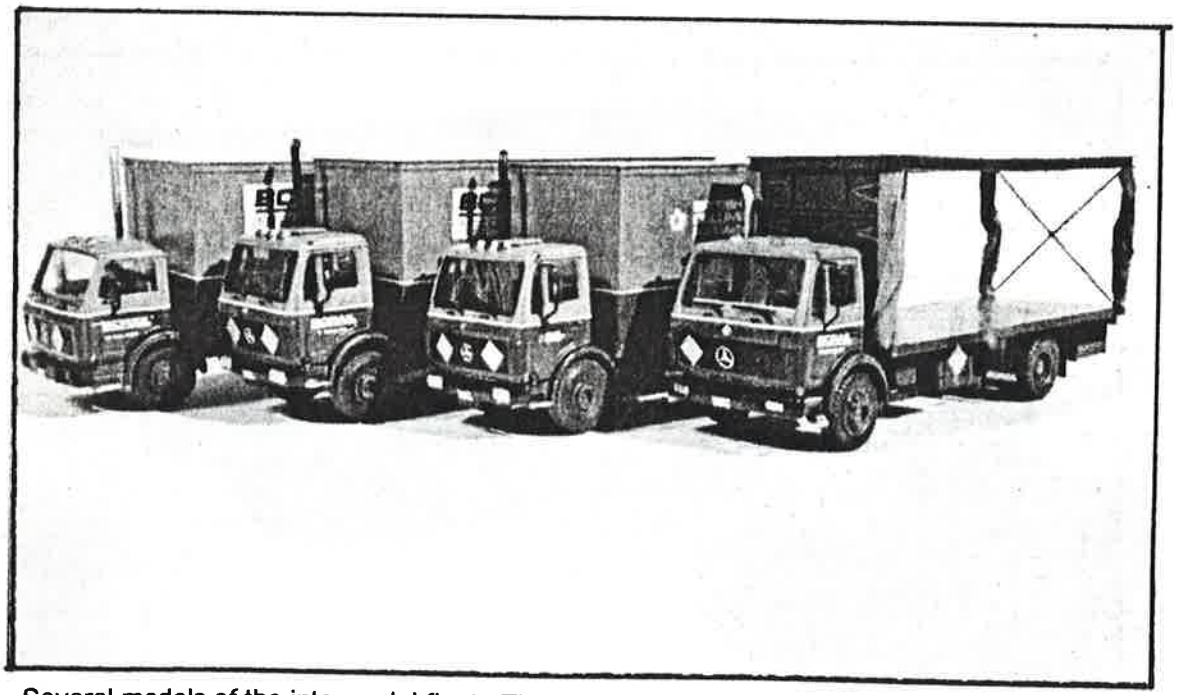


NOTES: * WHEEL AXLE IS SLIGHTLY INFRONT OF THE 1/3 MARK BY ABOUT 12" TO 18".

** THERE ARE VARIATIONS IN THE POSITIONING OF THE HERALD BOARD. ADJUST THE SIZE OF THE BOARD TO SUIT THE BRAND OF DECAL BEING USED. ON THE A.W.S. DECAL, THE RED 'BC' IS SLIGHTLY OFFSET AND SHOULD BE APPLIED SEPARATELY FOR OTHERWISE THE HERALD WILL APPEAR CROOKED.

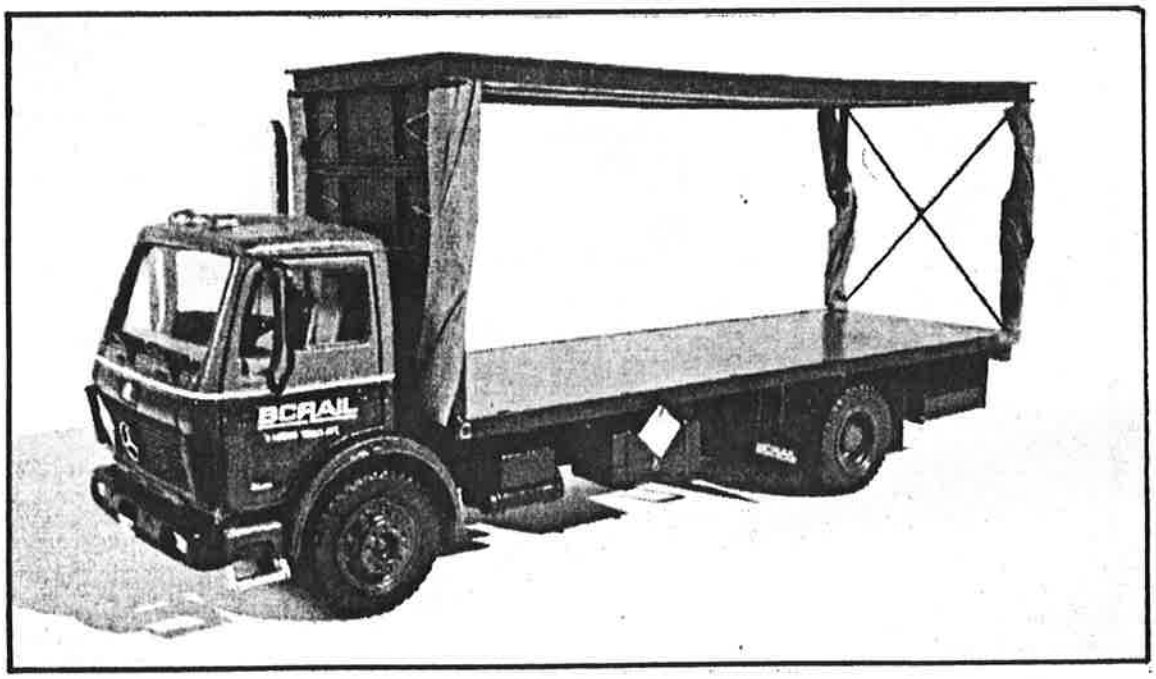
*** MOST TRUCKS HAVE 2 PER SIDE (AS SHOWN) AND SOME WILL HAVE 3. THE CURTAIN SIDED VERSION HAS ONLY 1 PER SIDE.

Several of BC Rail's Mercedes straight trucks are lined up at the North Vancouver freight shed. Andy Wegmuller.



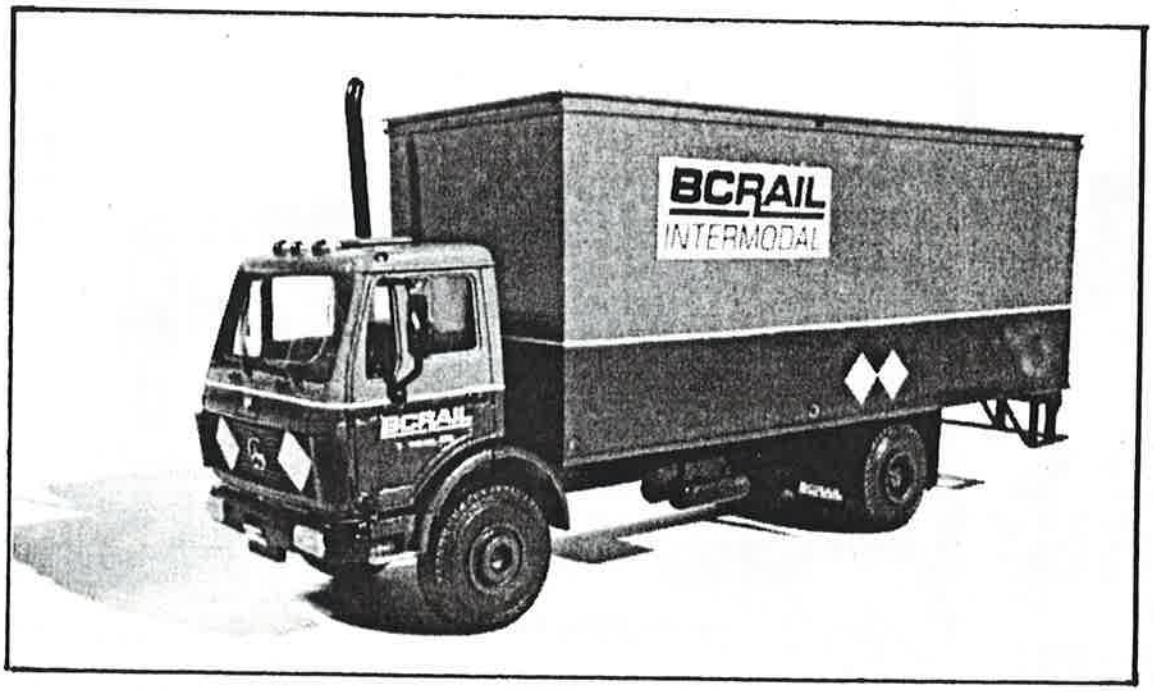
Several models of the intermodal fleet. The nearest curtain-sided truck has a Herpa cab. The next two have Kibri cabs. The furthest model has a Preiser cab. Marcel Devlieger.

A close-up of the curtain-sided truck. It appears that this type have shorter chrome exhaust stacks. All have BC Rail heralds on their mud flaps. Andy Wegmuller.



A close-up of the curtain-sided model. On the model, pegs may be inserted along the edge of the flat bed as found on the prototype. Marcel Devlieger.

A close-up of a regular Mercedes straight truck. Variations exist within the fleet, ranging from colour of exhaust stack and wheel rims, to number and location of placard holders. Some trucks also have a slightly different box. Andy Barber.



This model has a Kibri cab. Marcel Devlieger.

PHOTOFILE

The PGE and BCR have operated a variety of inspection equipment during their collective histories. Perhaps none was more interesting --or popular amongst employees and railfans alike--than Gas Car #106.

Built by Westminster Iron Works in 1923, #106 was a four-wheeled unit and featured a drive-train from Kitchener Auto Company. Commonly known as "Sparky", its main duty was hauling workers between the docks at Squamish and the railway's shops. #106 was scrapped in 1956.

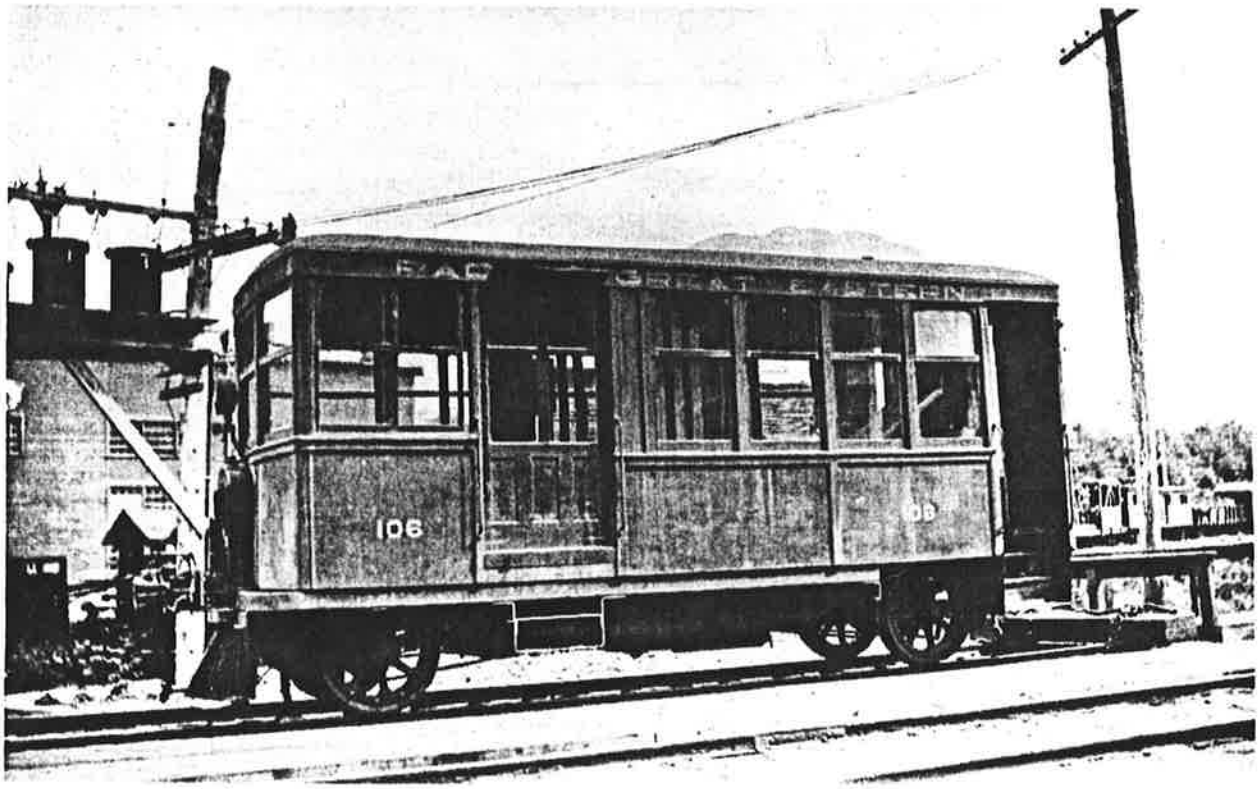
We present two views of #106 as photographed by Jack Work. The first (Squamish, date unknown) depicts the car as built.

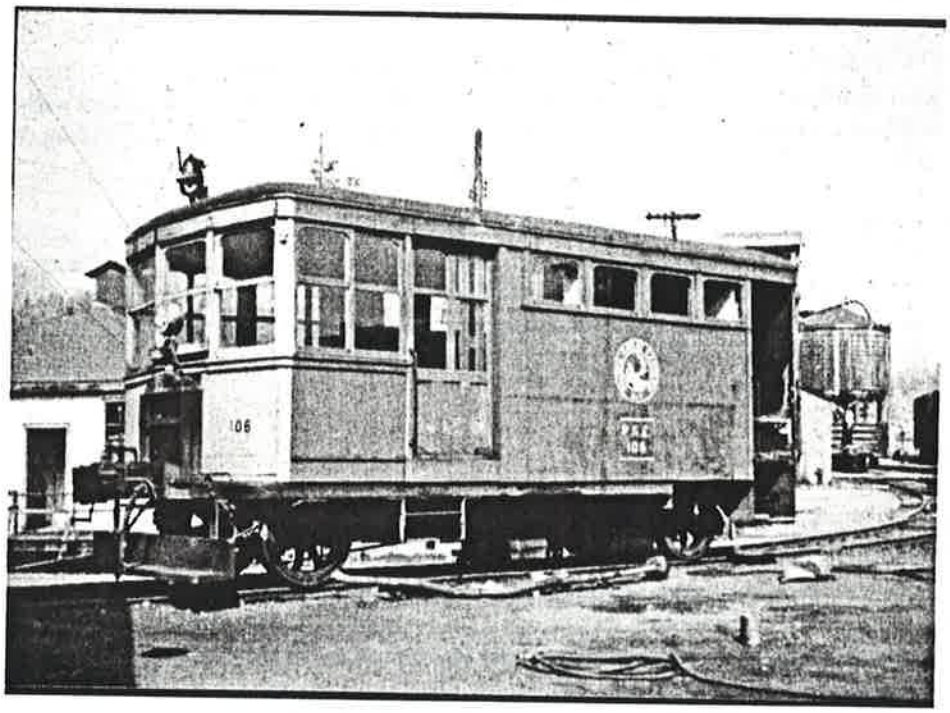
The second photo (Squamish north yard near old mile 3.5; circa 1951) shows a modified #106. Wood sheathing has been installed over the lower portion of the passenger windows (on both sides of the car). The car body is painted boxcar red while the front face is a pale yellow. The railway's caribou herald was applied following this modification.

Note the water tank (to the right of #106), built in 1947 to service PGE steam locomotives. Its of timber construction, with a capacity of 60,000 gallons.

At various times during its history, gas car #106 wore diagonal safety striping on its face.

Both photographs courtesy of Andy Barber. ❐





Flashback: FMC's New Squamish Plant First Stage of Growth Program

If the forests can't come to the chemical plant -- FMC will bring the chemical plant to the forests. That is the proud claim of FMC Chemicals Ltd. which has been producing chlorine and caustic soda at its new Squamish plant since the beginning of the year.

Because of its location, the Squamish operation is a key chemical producing plant. Its products today are serving the giant Canadian paper manufacturing industries.

The Pacific Great Eastern Railway also is playing its part in moving a portion of FMC's production to West Coast markets. The PGE also handles all rail switching at the plant.

Utilizing the latest design mercury cells, the Squamish plant has a production capacity of more than 150 tons per day of chlorine and approximately an equal amount of caustic soda.

FMC's involvement with the pulp and paper industry is not new. The Company was a pioneer in the field of groundwood beaching. It also was responsible for many innovations in processing of kraft and other types of pulps.

The Squamish plant is providing a valuable source of quality materials for the pulp and paper industry, as well as providing technical service assistance and special lab facilities.

This *Flashback* originally appeared in the July 1966 edition of *The Coupler*, and is reprinted courtesy of BC Rail.

Copper Concentrate: An On-Line Industry

Eric Johnson

Until 1965, the PGE maintained a 41-car siding at Macalister station, 30.7 miles north of Williams Lake. The tremendous expansion of business on the railroad around this time demanded longer sidings, and with little space avaialble at Macalister (also the site of a small community), the company built a new, 114-car Macalister siding three miles north of the original site.

The abandoned site was reactivated in 1972 when a new copper mine in the area, Gibraltar Mines Ltd., contracted with the PGE to ship its copper concentrate to tidewater. Extra trackage was laid for the new Gibraltar station, and the mining company built a storage shed and installed equipment here to load gondola cars. BCR timetables have never listed Gibraltar as a siding, simply as a station. First shown as extra trackage of 22-car capacity, the figure was increased to 2300 feet in 1973 when a short section of track was added at the north end. Although trackage remained unchanged, the capacity figure was relisted to only 1374 feet in 1990.

Gibraltar Mines Ltd.

Gibraltar Mines Ltd. was incorporated in the province of British Columbia in 1962, and at that time acquired the rights to a large group of copper-molybdenum claims situated just off Highway 97, six miles due north of McLeese Lake. Exploration and drilling from 1965 to 1968 outlined four separate zones of low grade ore located just below ground surface. It was determined that in total there were 358 million tons of ore at an average grade of 0.373% copper and 0.016% molybdenite. Only a large scale open pit mining operation could economically exploit ore of such low-grade. Accordingly, in 1971, Gibraltar began construction of an 80,000-ton per day mining plant and a 30,000-ton per day mill. The *Western Miner* (June 1972) reported, "During 1971, a total of 783 cars were unloaded for the development phase of Gibraltar." It is assumed these were railcars carrying construction-related materials. Thereafter, BC Rail served Gibraltar only for bulk haulage.

Over the years, mining has been done in four pits adjacent to the mill site. As in all mines, a substantial amount of barren rock, or ore of too low a grade, must be removed. The waste-to-ore ratio remains at about 2.5 to 1. By late fall of 1971, ore was being stockpiled and in March of 1972, the mill began producing copper concentrate for shipment. By this time, the newly renamed British Columbia Railway had its Gibraltar trackage in place, and began moving concentrate to North Vancouver.

Milling at Gibraltar

Following crushing and milling of the ore, the important mineral chalcopyrite is recovered as a concentrate in a separation process known as floatation. The milling process is not entirely efficient, and only 82% of the chalcopyrite can be economically recovered. The balance remains in the mill waste, which is discharged into settling ponds, in the form of a slurry known as tailings. According to Tom Milner, manager of Gibraltar Mines Ltd., following further purification and refinement, the copper concentrate is dried (to about 10% moisture) and stored in a large shed of 3000-ton capacity at the mill site.

From the mill site, the concentrate is trucked over nine miles of gravel road and six miles of (paved) B.C. Highway 97 to Gibraltar station. Initially, trucking was contracted to Vancouver-Merritt Freight Lines, which used Kenworth trucks towing 25-ton, end-dump, Columbia trailers. These units had to back into the storage building at ground level to dump loads. The height of the raised hopper demanded high clearance, hence the large door opening on the building's east end. Two heavy pipe gratings set in the roadway served to bounce the truck, jarring loose concentrate which may have adhered to the hopper. In September 1994, a newer type of tractor-trailer of 46-ton capacity was introduced by the hauling contractor, Lomak Transport. These more complex rigs (see photo) consist of three side-dump hoppers mounted on a pair of trailers towed by Freightliner trucks. Instead of backing into the storage building at floor level to dump, these units now drive up a newly built ramp on the east end of the building. Here the hoppers are raised, one at a time, and emptied.

Tractor-trailers are loaded at the mill storage shed using a rubber-tired, front-end loader. At the railhead storage building, the concentrate is scooped up from the floor and loaded into gondolas by a similar front-end loader. Cars utilized for concentrate transport fall within the series BCOL 9036-9425. The railcars are moved into the building with the front-end loader (the company is contemplating the installation of a cable-tugger system), and positioned on scales, one under each truck, within the building. Gondolas are equipped with fiberglass covers which are lifted from the cars with an overhead cable hoist during the loading process. As loading proceeds, the operator watches a digital readout for uniform weight distribution, filling the cars with 100 tons of concentrate, and then refastens the covers. There are two styles of covers, each with its own serial number.

Except for 1978 and 1988 when strikes halted activity, and the shutdown of 1993-94, annual production of concentrate has been fairly consistent from year to year. At present, calculated ore reserves are almost 190 million tons at 0.3% copper. In 1992, a full production year, 14 million tons of ore were processed. Thus, at this milling rate, there is ore enough for another thirteen years of production. In the twenty-two years of operation, the Gibraltar mine has produced almost three million tons of copper concentrate, which translates to almost 800,000 tons of pure copper.

Cathode Copper and Molybdenite

The development of new copper recovery technology prompted installation in 1985 of a cathode copper/leaching plant at the Gibraltar mine/mill site. In a leaching process of nearby unmilled mine waste, dumps containing less than 0.25% copper were extracted by an electrolytic process. This process yields "cathode copper" of 99.9% purity with low production costs. In 1987, the second year of cathode copper production, over seven million pounds were produced. This figure jumped to eleven million pounds in 1988. Since that time, however, production has slowly declined.

A by-product of the Gibraltar ore is molybdenite which is separated in the milling process for copper concentrate. The demand for molybdenum varies widely from year to year, thus the recovery circuit is not operated at all times. In the best of times, 800-900 tons of the metal were produced annually. Molybdenite concentrate from Gibraltar is shipped to an affiliated mining and milling company, Endako Mines Ltd. This facility, which is located 115 miles west of Prince George, roasts the concentrate for metal recovery.

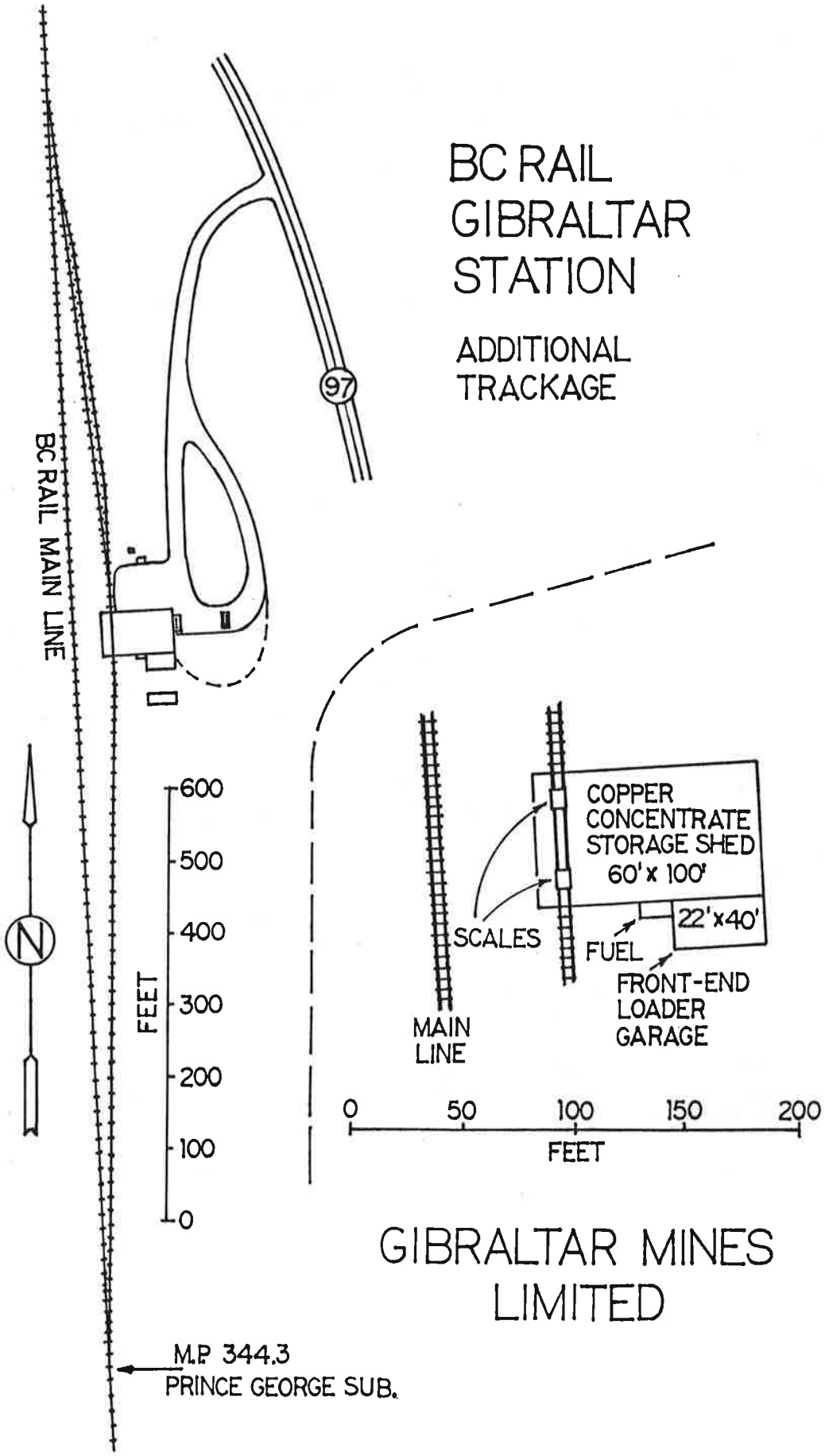
Since trucking freight rates are very competitive, neither cathode copper nor molybdenite concentrate are handled by BC Rail. Similarly, mining and milling supplies are also shipped in to Gibraltar Mines by truck.

Concentrate Shipping and the BCR

For twenty-two years, Gibraltar Mines has provided the railway with a significant tonnage of copper concentrate. Today, BC Rail's Prince George-Williams Lake through freight (the PW/WP) usually services Gibraltar, setting out empties at the north end of the extra trackage and picking up loaded cars at the south end. Although Gibraltar produces about 300 tons of concentrate per day, BC Rail does not make pickups every day. Generally, from six to ten cars at a time, but as many as fifteen, are positioned right behind the locomotives for the trip southward. At Williams Lake, the train becomes the Cariboo-North Vancouver (CV/VC) through freight. As few as 500 cars, to more than 2000 cars, per year have been picked up and transported to North Vancouver where the concentrate is unloaded and stored at Vancouver Wharves. Almost all concentrate is shipped via bulk ocean carriers to smelters in southeast Asia, initially mainly to Japan, but in current times also to Korea, Taiwan, China and the Philippines.

References: Western Miner (June 1972), Gibraltar Mines project
Gibraltar Mines Ltd., annual reports, 1971-1993.

Thanks also to Tom Milner, manager, Gibraltar Mines Limited.


BC RAIL
GIBRALTAR
STATION
ADDITIONAL
TRACKAGE
97
BC RAIL MAIN LINE
N
600
500
400
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200
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0
FEET
COPPER
CONCENTRATE
STORAGE SHED
60' x 100'
22'x40'
SCALES
FUEL
FRONT-END
LOADER
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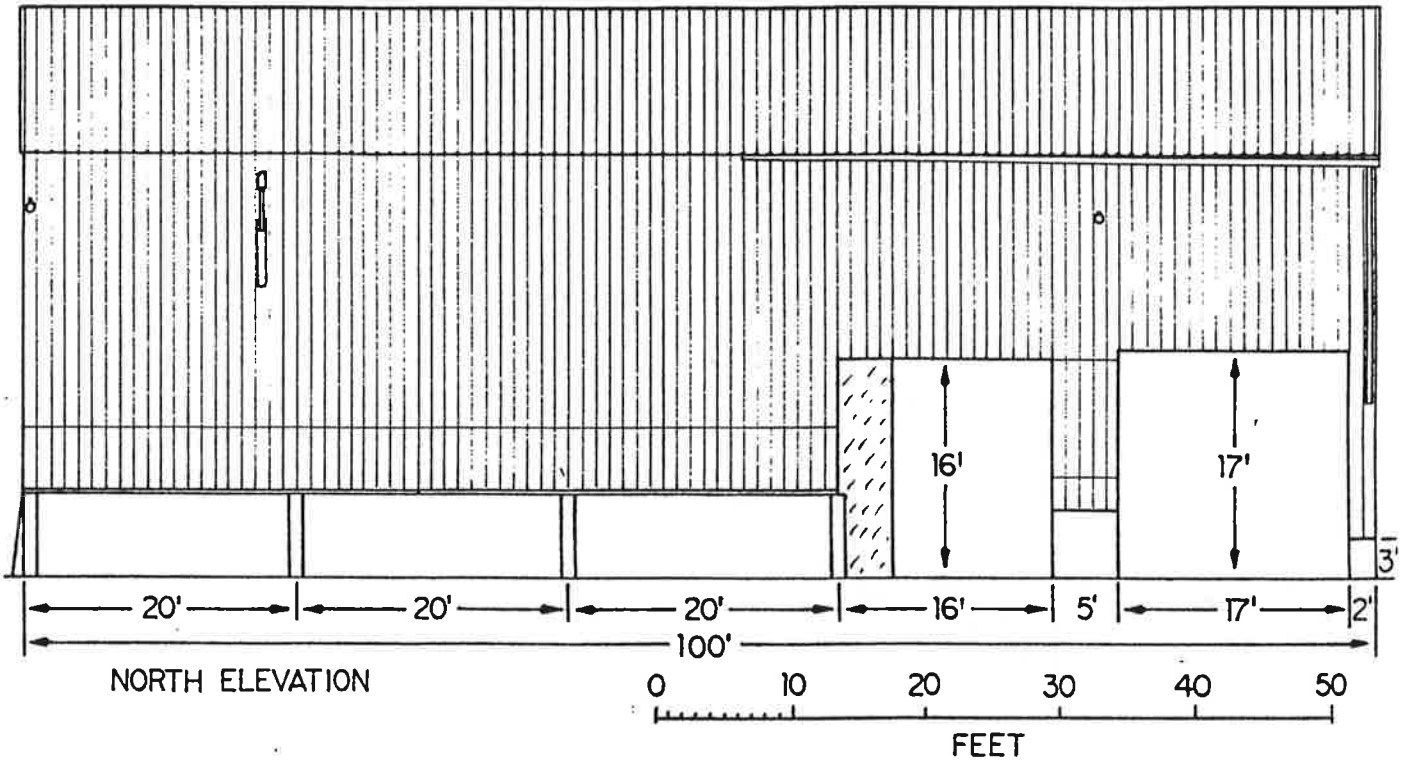
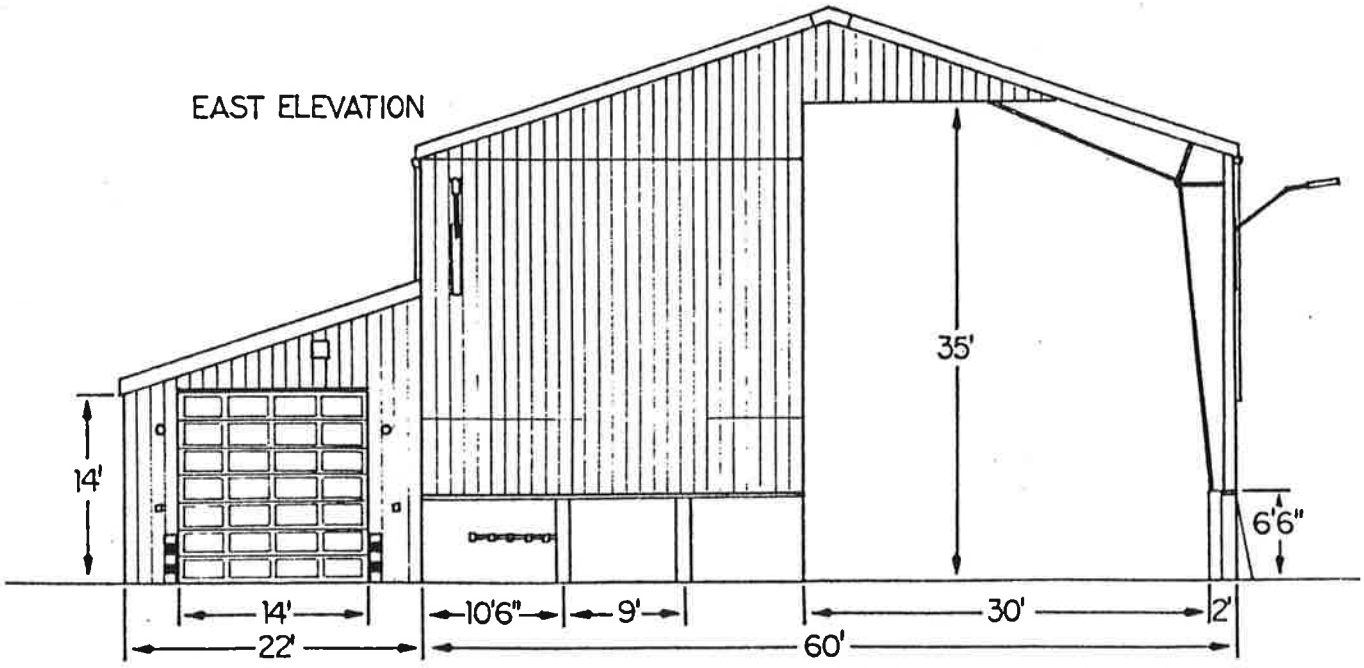
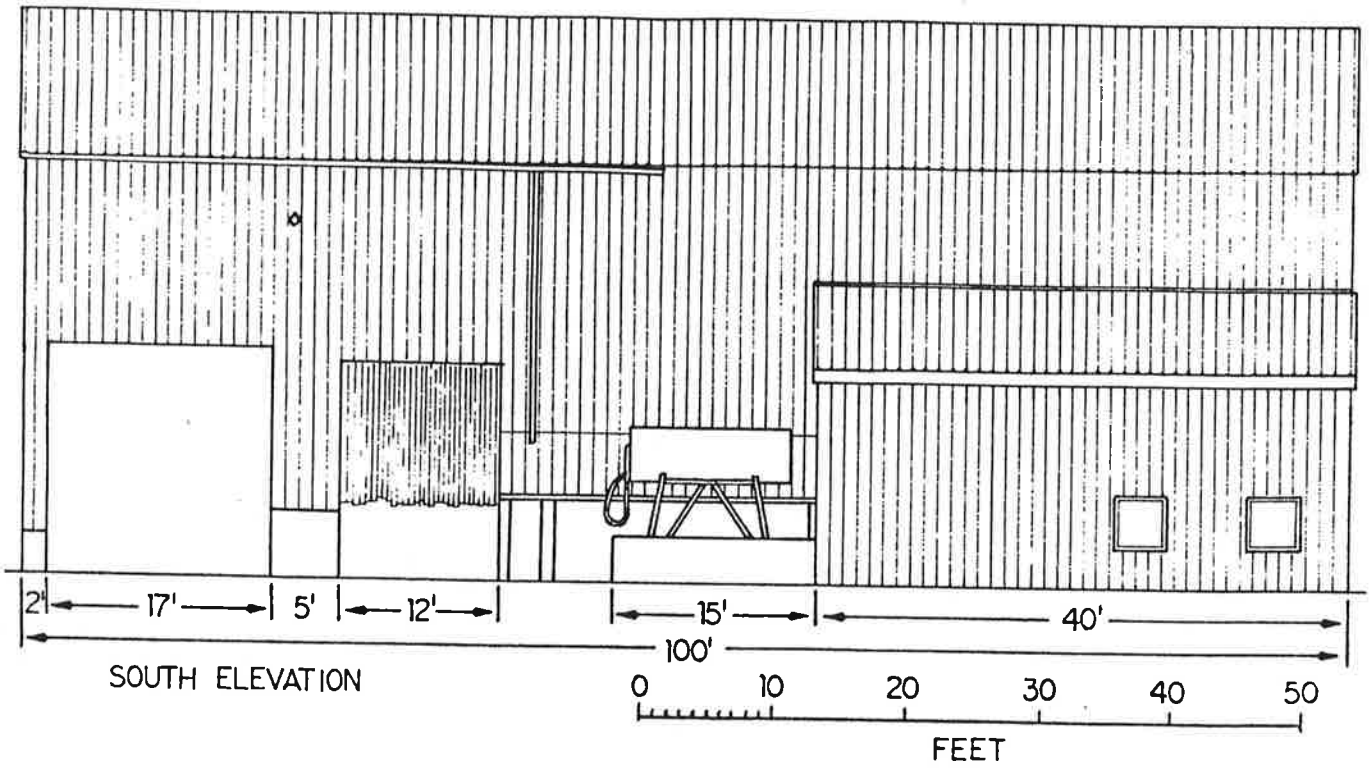
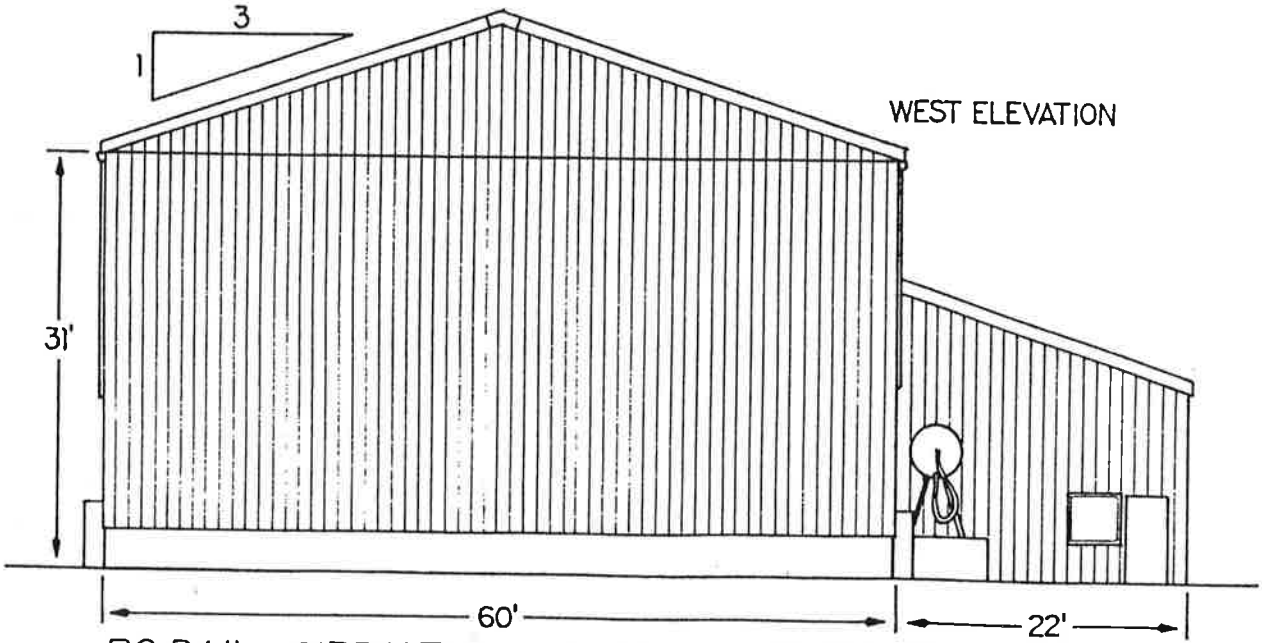
M.P. 344.3
PRINCE GEORGE SUB.



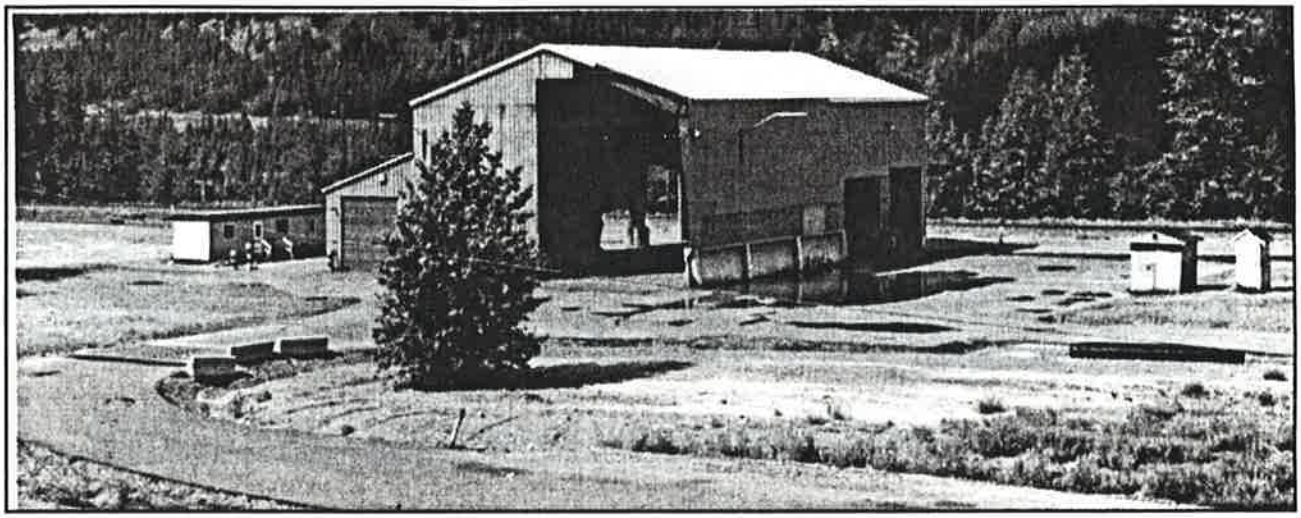


BC RAIL - GIBRALTAR STATION GIBRALTAR MINES LTD.
COPPER CONCENTRATE LOADING FACILITY

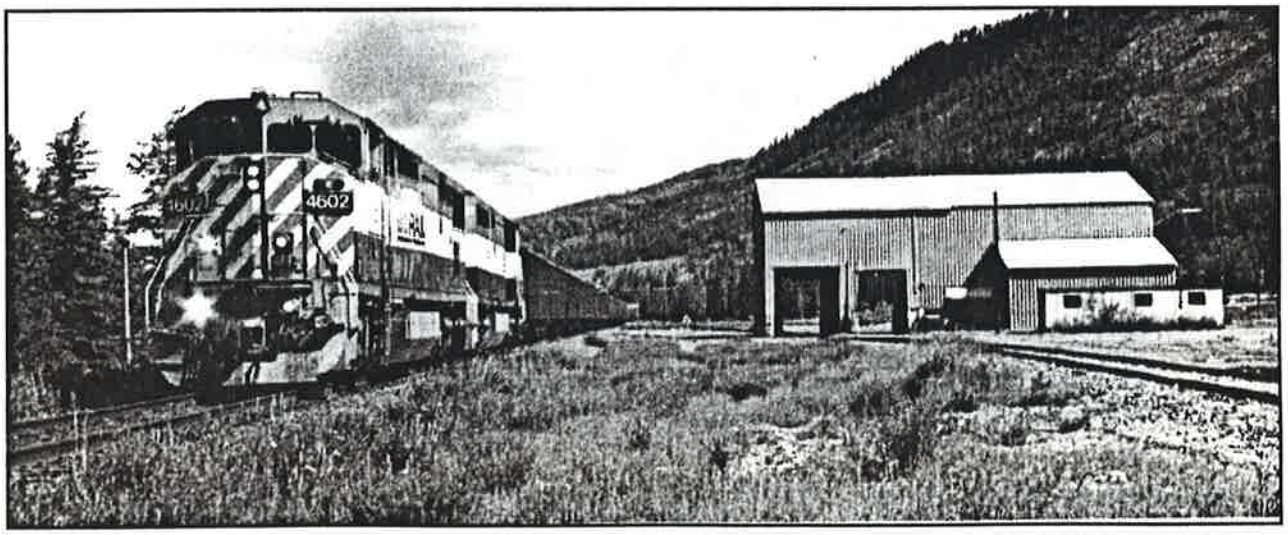




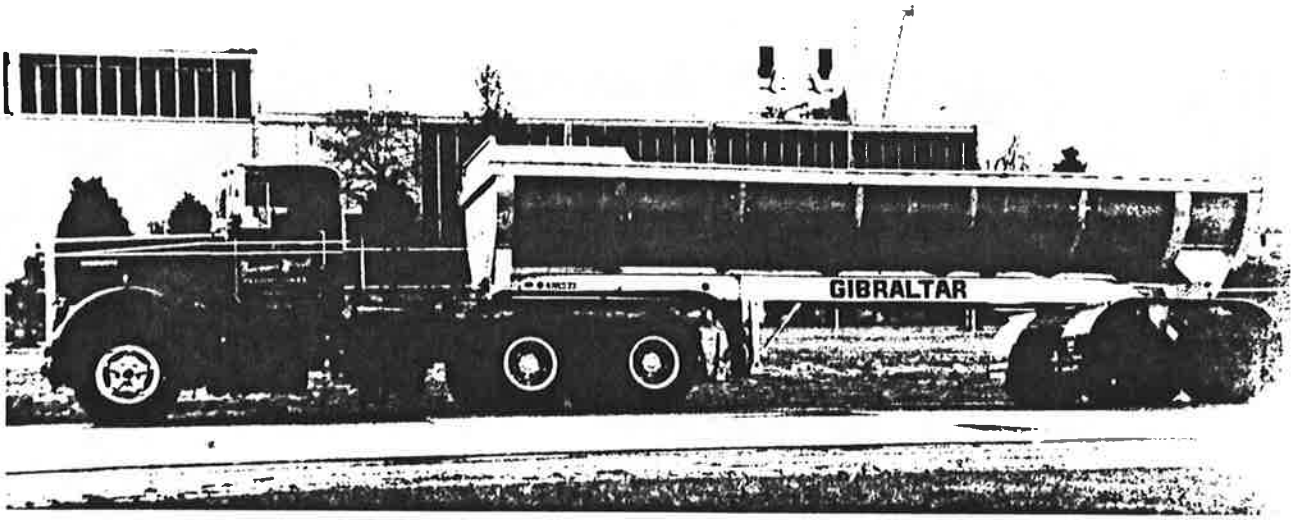
BC RAIL - GIBRALTAR STATION GIBRALTAR MINES LTD.
COPPER CONCENTRATE LOADING FACILITY



The Gibraltar Mines storage and loading facility at BC Rail's Gibraltar station in June 1994, during a period of no shipments. The portable building to the left (south) is an office. The lean-to on the main building houses the front-loader. To the north are a water hydrant shelter and a biffy. A paved road loops in front of the loading door. Two pipe grates can be seen set in the pavement --one at the threshold of the main door, the other 100 feet to the east. These serve to jar loose any concentrate remaining in the hopper after dumping. Eric L. Johnson photo.

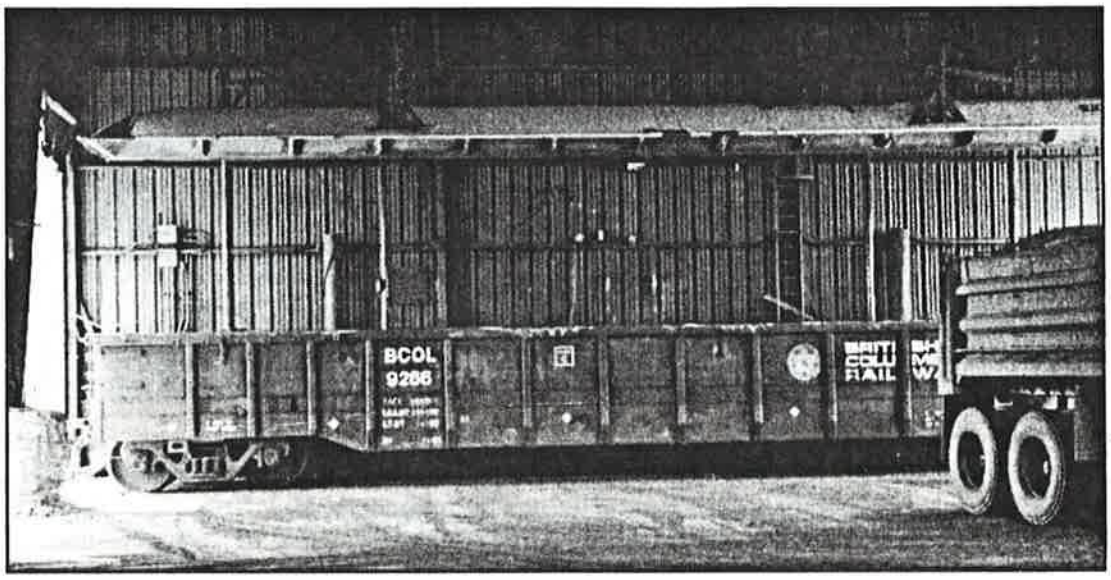


June 8, 1994, noon: the PV (Prince George-North Vancouver through freight) passes by Gibraltar which has not shipped any concentrate in six months. The 1800 feet of extra trackage passes through the storage building. Eric L. Johnson photo.

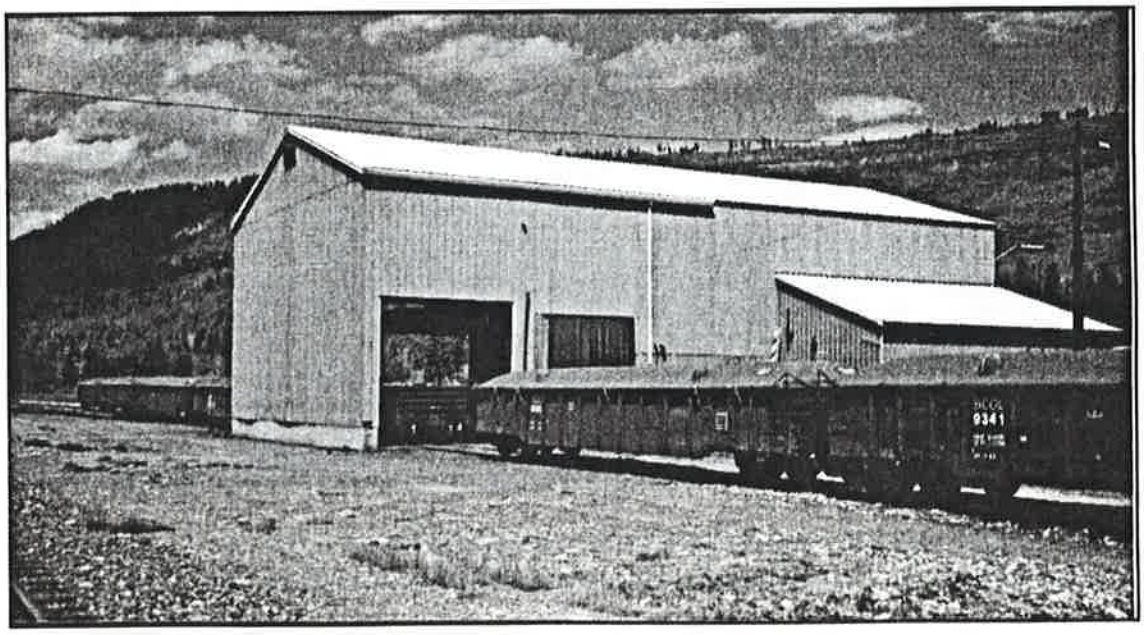


When Gibraltar Mines first began shipping, this tractor-trailer rig owned by contractor Vancouver-Merritt Freight Lines was used. The long, semi-cylindrical hopper needed a high door opening for clearance when end-dumping within the building. Later, a more conventional --but still long-- trailer hopper of rectangular cross-section was used. Eric L. Johnson collection.

In the storage building at Gibraltar station, copper concentrate has been dumped on the floor, delivered from the mill by truck. The front-end loader then lads the concentrate into BC Rail gondolas, filling each to 100 tons net. Several different models of loaders have been used over the years. The latest is this Komatsu belonging to haul contractor Lomak Transport. Eric L. Johnson photo.



A gondola is positioned for loading in June 1993. Note the fiberglass cover suspended on a cable-hoist rig. Each car truck rests on a scale which is read by the loader operator in the course of loading. Note the more conventional concentrate haul trailer at the right. Jim Moore photo.



Also in June 1993 are loaded cars in the foreground (south end of track), empties on the far side, and one in position inside for loading. The rubber-tired front-end loader shoves the cars into position.
Jim Moore photo.

In September 1994, this new tractor-trailer was introduced by contractor Lomak Transport (Lomak Bulk Carriers) of Prince George. Note the fabric hopper covers on Conestoga-like hoops, which are cranked (note mechanism at front of each hopper) forward before side-dumping the load. To accommodate the new method of dumping, a five-foot high ramp has been built at the east end of the storage building. Eric L. Johnson photo.

May 10, 1992: Vancouver Wharves #827 (ex BCR #502) has pushed a gondola of copper concentrate onto the unloading track. The cable-hoist is lifting the fiberglass cover from the car. Eric L. Johnson photo.

Notes on the Building

The copper concentrate storage and loading facility at Gibraltar is of sheet metal construction. The panels, which are mustard-yellow in colour, are 3-foot wide. The building's roof, which is also of sheet metal, is white. The concrete base upon which the structure sits is white, as is most of the building's trim. The building's door are painted royal blue.

It appears that all of the sheet metal siding may have originally been full length. Evidence suggests that portions have been damaged over the years (perhaps by the loader?), and were the subject of various repairs. Note the assorted joints on the north, east and south sides.

The truck door opening on the east end appears to have been changed greatly from the original configuration. The north loader door was probably the same in size as the south door now is. It may also have had the same type of curtain closure.

Note the 5-foot square concrete buffers separating loader doors from rail doors.

Two large (mercury or sodium?) vapor lamps are mounted on the east and north sides. Six smaller incandescent lamps can also be seen: 2 on the north, 2 on the south, and 2 on the loader garage walls.

A 4-foot diameter fuel tank was previously west of the trailer, without concrete catchment basin.

Post Script

Eleven months and 43 cents a pound later, Gibraltar Mines wants to fill 69 full-time jobs at its McLeese Lake copper mine.

Gibraltar said yesterday it has resumed full production after a 10 1/2-month shutdown caused by low copper prices. According to a company official, copper prices dipped to 72 cents US a pound about the time McLeese Lake closed last year. Yesterday, they reached 115 cents US a pound on the London Metals Exchange.

Vancouver Province (September 27, 1994), courtesy of Eric L. Johnson

The author wishes to thank Andy Barber, Jim Moore, and Ron Tuff for their asssistance in the prepartion of this article.

MOTIVE POWER NOTES

Edited by Paul Crozier Smith

The new power, which will begin arriving in March, will be GE Dash 9-44CWL units. Unlike the Dash 8-40CMs, these units will have a regular long hood as opposed to the Draper Taper. This change due to the large price differential between hood types. The new units will continue to feature cowl style cabs, new GE trucks, split cooling, and electronic fuel injection. Road numbers for the 4400 h.p. engines will range from 4641 to 4644. ❑

BC Rail has received the two *Rocky Mountaineer* B36-7s (#7488 and #7498) on lease from GE. As part of BC Rail's new locomotive purchase, GE included the use of three B36-7s for a one year period. The two *Rocky Mountaineer* units will be replaced in early 1995 with three more units presently on lease to the Santa Fe. This arrangement was designed to temporarily alleviate the need to purchase branchline power. ❑

Helm Financial has purchased the entire Kennecott locomotive fleet, including the seven SD40-2s which were leased to BC Rail on a long-term basis (#736 -- #742). This provided BCR with the opportunity to modify the terms of the motive power lease. (WCRA *News*) ❑

The Caterpillar RS-18 re-engineering program continues with the release of #629 in May 1994 and #603 in July 1994. Units #612 and #615 were under construction at the end of 1994. ❑

BC Rail has begun performing maintenance on approximately one CP Rail unit (SD40s) per month due to a work backlog at the latter's motive power shops. CP Rail #5561 was the first unit to arrive last October. ❑

Helm Leasing GP-40 #3060, which was leased by BC Rail in late March 94, was returned in May. The unit was subsequently leased to CP Rail.

Helm Leasing GP-40s #656 and #661 were leased in early May.

Helm Leasing GP-40s #656, #659, and #661 were returned in July.

Helm Leasing GP-40u #4402 was leased in early August, but was returned later that same month.

Rumor has it that BC Rail was not pleased with the performance of the GP-40s -- believing that a CAT-powered RS-18 was a more powerful alternative. ❑

In late May, BC Rail sent SD40-2 #746 to CN to pay off engine hours. This unit returned to BCR later in the summer. Then in September, SD40-2s #739 and #748 went to CN to pay off hours. Finally, towards the end of the year, units #746 and #747 were leased to CP Rail.

BC Rail SD40-2s #736, 738, and #741 (Helm Leasing-owned) were returned and have subsequently been leased to CN. #738 and #741 were renumbered HCLX 6206 and 6209, respectively. #736 is expected to become HCLX 6204. BC Rail has not officially retired these units, but they are not expected to return. The remaining ex Kennecott Copper SD40-2s are expected to be returned to the lessor when the new Dash 9-44CWs arrive in the first quarter of 1995.

In early September, SD40-2's #739 and #748 were seen idling in CN's Lynn Creek yard. #739 is ex Kennecott Copper, and #748 is ex Oneida and Western. ❑

The four wrecked M420's are presently stored unserviceable at Squamish pending settlement with the railway's insurance carrier. It appears that this issue will be settled in court in late 1995. ❑

Patrick Lawson contributed to this report.

CAR SHOP

The first group of BC Rail's new 73-foot centerbeam flat cars will be numbered BCOL 730500-730600. These 100-ton cars are being manufactured by Trenton Works in Nova Scotia. (Patrick Lawson)

1989 Train Operations on the Cariboo Division

David Barone

One of my favorite aspects of model railroading is prototypical operation. Even through I am years away from operating my own version of the Prince George Subdivision, I still enjoy planning the railroad's operation.

My version of the Prince George Sub will be modeled in the summer of 1989. I feel that this was the most colorful period in the railway's modern history. With this date in mind, I set out to document the prototype's operation: how trains moved over the railway and what was their purpose.

I created a train flow chart (see Figure 1) showing the three subdivisions that make up the Cariboo Division. After seeing how the trains operated, I needed to know what type of equipment my trains should be composed of., and how the traffic was generated. In reviewing the railway's annual reports, I came up with the carload information contained in Figure 2. This provided me with the number of carloadings and percentage of car types I needed. Finally, I looked at what the railway was hauling on an average day. Figure 3 shows where the carloads are coming from, along with the number of cars which were moved that day. Bear in mind that this only shows loaded cars. You need to assume a similar number of empty cars are also needed.

If you compare the carloadings with the industry map (Figure 4), you get a good idea where the major shippers are located and where traffic is likely to be the heaviest. Based on my research, I decided to switch from modeling the Lillooet Sub to the Prince George Sub. I felt I could have a much better operating session by featuring an area with a heavy traffic pattern.

Lets take a look at how BC Rail moves freight. On an average day, there are three northbound and three southbound trains operating between North Vancouver and Prince George. This number will vary from day to day depending on traffic levels.

The following is a brief description of trains:

- There is usually an Extra north called for mid to late morning. The train handles empty chip cars from Fibreco and any other empties that may have come in from the CN interchange going north. If heavy traffic warrants, a second Extra north will be called out of North Vancouver in the mid to late afternoon.

- Number 23, the VP (Vancouver-Peace), is scheduled for a 2130 departure from North Vancouver. Normally laden with intermodal business, this daily train is considered by many to be the premier freight train on the railway. This train sets out and picks up cars at Williams Lake and Quesnel. Pick ups include loaded wood chip hoppers for Prince George or Williams Lake. Upon arriving in Prince George, the train is reclassified before departing to Chetwynd. Southbound, the PV (Peace-Vancouver) train handles loads of all types , with intemodal traffic on the rear of the consist. Normally a very heavy train, it frequently requires the assistance of the Pemberton helpers between Darcy and Mons.

- The VO (Vancouver-Omenica) is a junk train between North Vancouver and Prince George. This train works most yards along the route, setting out empties and picking up loads to forward north. Southbound, the OV (Omenica-Vancouver) handles all local work south. Loads are mostly chips and finished lumber on flat and in boxcars. Picks up helpers between Darcy and Mons.

- The VC (Vancouver-Cariboo) is a secondary train that handles overflow traffic as conditions warrant. The VC works anything between North Vancouver and Williams Lake. On occasion, it will work through to Prince George. Normally, the VC will set out cars in Williams Lake, and any that needs forwarding will be picked up by the VO or the WP. Southbound, the CV (Cariboo-Vancouver) handles the same type of traffic as its northbound counterpart, normally working Exeter and Lillooet. Frequently requires helper engines between Darcy and Mons.

- The WP (Williams Lake-Prince George) way freight departs Williams Lake in the evening, working northbound to Prince George. The train works Quesnel, Dunkley, and any other switching enroute. May forward cars left by the VC. Southbound, the PW (Prince George-Williams Lake) normally departs Prince George mid-morning, arriving in Williams

Lake late in the afternoon. Cars from the PW may be combined with tonnage in the Williams Lake yard to create a CV train.

- The Squamish way freight works between Squamish and Lillooet, running northbound every Tuesday and Thursday morning. Southbound counterparts are run on Wednesday and Friday mornings. This train handles any local work enroute, including dropping off supplies and mail to isolated areas.

- The Lillooet switcher works a turn between Lillooet and the large Ainsworth lumber mill just north of Clinton at mile 213. Switches the sidings at Pavilion and Lime, as well as any other local work..

Unlike the northbound trains which are Extras, the southbound freights are assigned train numbers. When a train is ready to depart, it is assigned a number reflecting its departure time. To aid in dispatching, southbound trains are considered superior and have priority over northbound trains. Due to padding built into the schedule, southbound trains change numbers on each of the different subdivisions. For example, a PV departing Prince George could be Number 32 on the Prince George Sub, but could end up as Number 16 on the Squamish Sub!

Due to fluctuations in traffic levels, the dispatcher can annul a scheduled train in favor of running a second section of another train. This may sound confusing, so here is an example. If traffic does not warrant running any morning trains, the dispatcher can annul Trains 22 and 24, canceling them from the day's schedule. This lets the crews on other trains know that they do not have to protect against the canceled trains. Confused yet? If traffic gets too heavy in the afternoon, and there is more traffic than the scheduled afternoon train can handle, the dispatcher may order a second section of a scheduled train. For example, say Train 26 is scheduled for a 1315 departure from Williams Lake. The dispatcher could issue an order for a second Train 26 to run two hours behind the first Train 26. First 26 would depart as close to the scheduled time as possible, flying green flags and markers indicating a second section to follow. If an Extra north was to meet first 26 in a siding, he would have to remain there until the second section showed up or until he received new orders from the dispatcher!

Several years ago, my friend Eric and I were spending the day railfanning around Williams Lake. We heard the dispatcher give orders for the first and second Train 23. I though that was interesting, figuring intermodal business must be booming if he needed to run two sections. After awhile, first Train 23 showed up flying green markers. Sure enough, there was a second section following. After about forty-five minutes, we heard a rumble to the south. We knew this was the train we had been waiting for, and got our cameras ready. As second Train 23 popped around a curve, our mouths dropped open. No M630, nor a SD40-2. Not even a freight train. Second Train 23 turned out to be the RGM-1, BC Rail's self-propelled rail grinding train deadheading to Prince George for maintenance! The dispatcher had used Train 23's time to avoid having to cut orders for an additional Extra north. I am sure the crew on RGM-1 had kind words for the dispatcher that day.

Passenger service between North Vancouver and Prince George is handled by Train 1 northbound and Train 2 southbound. Train 1 is scheduled out of North Vancouver at 0745. The train makes all scheduled stops as well as some flag stops on its way to Lillooet. At Lillooet, the train is split into two. During the summer (specifically between June 26 and September 17), the first two cars of the train continue on to Prince George. Any other time of year, the train only goes to Prince George on Sunday, Wednesday, and Friday.

Southbound Train 2 is scheduled to depart Prince George at 0700 daily, between June 26 and September 18. The rest of the year, the train operates on Monday, Thursday, and Saturday. After arriving in Lillooet, the train is combined with the 3-5 cars left earlier. Now longer, train 2 departs Lillooet at 1450, arriving North Vancouver at 2035. Again, keep in mind that this is the way the trains were scheduled to operate in the summer of 1989. These times may not reflect current schedules.

In addition to the Budd cars, the railway operates the Royal Hudson steam excursion between North Vancouver and Squamish. Both the Budds and the Royal Hudson are considered first class trains in the timetable. Northbound, the steam train is Train 3, southbound it operates as Train 4. The Royal Hudson operates daily May 21 through September 24.

The only other unusual operation on the Cariboo Division is the school train. Operating as Train 10 southbound and Train 11 northbound, the school train operates between Lillooet and Seton Portage. During the school year, the Lillooet yard crew

will take a locomotive and the Budd-wiser coach (an ex GM&O coach) down to the isolated Seton Portage area. The train departs Seton Portage at 0710, making stops to pick up kids on its way back to Lillooet. The train arrives in Lillooet at 0810, where it makes a connection with a school bus. This train only operates in the morning, as the kids take Train 2 home in the afternoon.

I hope this article provides some insight into how BC Rail operates their trains, and why. Throw in work trains and Extra welded rail train now and then, and you have a moderately busy operation that is a natural to model. Please feel free to write with any comments or corrections.

FIGURE TWO: Carloading Data

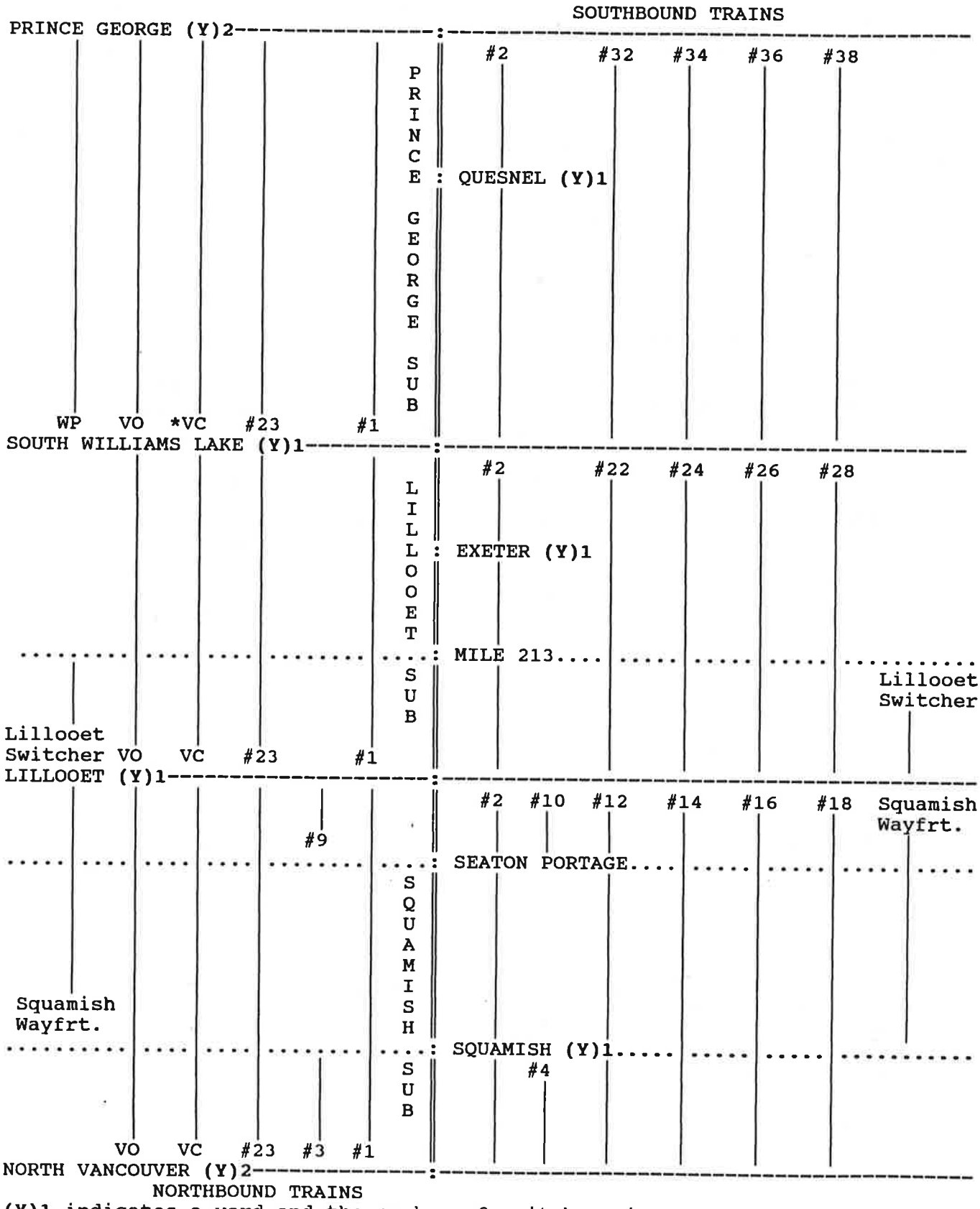
The following carloading data is taken from BC Rail's annual reports. It shows what the railroad is hauling and what percentage of business it represents for the railroad.

Commodity Loaded	1988	1990	% Change
Coal	30%	42%	+8%
Woodchips	23%	18%	-5%
Lumber	16%	14%	-2%
Other Commodities	14%	11%	-3%
Pulp	9%	9%	0
Misc. Forest Products	8%	6%	-2%

	1988	1989	1990
Total Carloadings loaded on line	222,762	215,651	197,643
Received from connections	3,209	2,991	2,101
Total Carloadings	225,971	218,642	199,744
Tons Hauled	17,340,000	16,955,000	15,851,000
Total # of BC Rail revenue freight cars	9908	9914	9958
Passenger Cars	9	9	9
MOW	469	505	472
Motive Power			
Diesel	116	114	114
Electric	7	7	7

FIGURE ONE

BC RAIL CARIBOO DIVISION



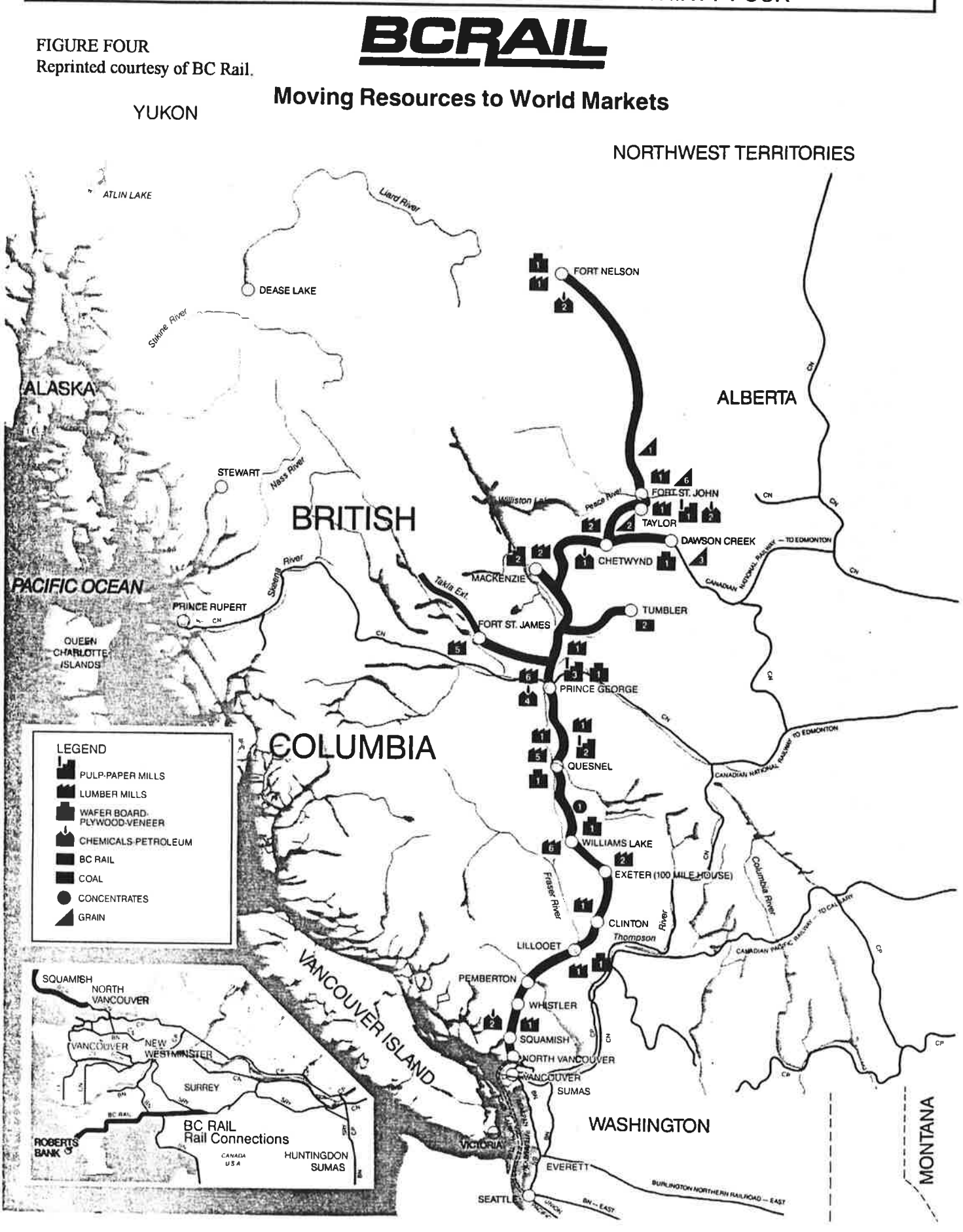
(Y)1 indicates a yard and the number of switch engines sets assigned to it.

FIGURE THREE: Average Daily Carloadings, 20 November 90

	NVA	SQU	PMB	LIL	EXT	WLK	QUE	PRG	MCZ	CHT	DAW	JHN	JMS	NEL	Total
Grain Exp.	-	-	-	-	-	-	-	-	-	-	4	1	-	-	= 5
Grain Dom.	-	-	-	-	-	-	-	-	-	-	1	-	-	-	= 1
Concentrates	-	-	-	-	-	3	-	-	-	-	-	-	-	-	= 3
Sulpher	-	-	-	-	-	-	-	-	-	11	-	-	-	3	= 14
Cement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	= 0
Chemicals	-	2	-	-	-	-	-	1	-	-	-	-	-	-	= 3
LPG	-	-	-	-	-	-	-	-	-	-	-	16	-	-	= 16
Petroleum	-	-	-	-	-	-	-	1	-	-	-	8	-	-	= 9
Inter Rcvd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	= 0
Misc. Bulk	-	1	-	-	-	-	1	-	1	-	-	-	-	-	= 3
Coal	-	-	-	-	-	-	-	100	-	-	-	-	-	-	= 100
Logs/Poles	-	-	-	-	-	-	-	-	1	-	-	-	-	-	= 1
Lumber ER	-	-	-	-	13	26	6	23	22	10	-	9	4	2	= 115
Lumber REBL	-	-	-	-	-	3	-	-	-	-	-	-	-	-	= 3
Lumber Exp.	-	-	-	-	-	-	-	3	-	-	-	-	-	-	= 3
Lumber Loc.	-	-	-	-	-	-	-	-	-	-	-	-	1	1	= 2
Lumber Cargo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	= 0
Plywood Dom.	-	-	-	-	-	2	1	1	-	-	-	-	-	-	= 4
Plywood Exp.	-	-	-	-	-	1	-	2	-	-	-	-	-	-	= 3
Waferboard	-	-	-	-	-	-	-	-	-	-	15	-	-	-	= 15
Veneer	-	-	-	1	-	-	-	-	-	-	-	-	-	-	= 1
Chips Exp.	-	-	-	7	29	38	-	-	-	-	-	-	-	9	= 83
Chips MIT	-	-	-	-	-	30	-	14	-	58	-	-	21	1	= 124
Pulp Dom.	-	-	-	-	-	-	2	5	5	-	-	4	-	-	= 16
Pulp Exp.	-	-	-	-	-	-	30	10	3	-	-	4	-	-	= 47
Newsprint	-	-	-	-	-	-	-	-	8	-	-	-	-	-	= 8
Paper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	= 0
Other For Pro	-	-	-	-	-	-	5	-	-	-	-	-	1	-	= 6
Trlr. Flats	27	-	-	-	-	1	4	30	-	-	1	1	-	1	= 65
Company Svc.	-	1	-	-	-	-	-	3	-	-	-	-	-	-	= 4
TOTAL CARS	27	4	0	8	42	104	49	193	40	79	21	43	27	17	= 654
INTERMODAL															
All LTL Frt.	5	-	-	-	-	-	-	1	-	-	-	-	-	-	= 6
Containers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	= 0
Chassis	-	-	-	-	-	-	-	3	-	-	-	-	-	2	= 5
Vans	2	-	-	-	-	-	-	3	-	-	-	-	-	-	= 5
Flatdeck	17	-	-	-	-	1	5	5	-	-	-	-	-	-	= 28
Reefer	10	-	-	-	-	-	-	17	-	-	1	-	-	-	= 28
Insl./Htd.	4	-	-	-	-	-	-	2	-	-	-	-	-	-	= 6
Lowbed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	= 0
Foreign	-	-	-	-	-	1	-	7	-	-	-	-	-	-	= 8
TOTAL	38	0	0	0	0	2	5	38	0	0	1	0	0	2	= 86

KEY:
NVA=North Vancouver SQU=Squamish PMB=Pemberton LIL=Lillooet EXT=Exeter
WLK=Williams Lake QUE=Quesnel PRG=Prince George MCZ=Mackenzie
CHT=Chetwynd DAW=Dawson Creek JHN=Fort St John JMS=Fort St James
NEL=Fort Nelson

FIGURE FOUR
Reprinted courtesy of BC Rail.



PHOTOFILE

Thanks to *Cariboo* editor Andy Barber, we are able to present two views of BC Rail's new North Vancouver yard office. Located south of the shop trackage, the new building will house Operations, Engineering, and Intermodal yard personnel. The structure will feature a 40-foot high observation deck overlooking the terminal yard.

The photographs were taken in mid November, and the new facility was expected to be operational on January 1.

Victoria Show A Success!

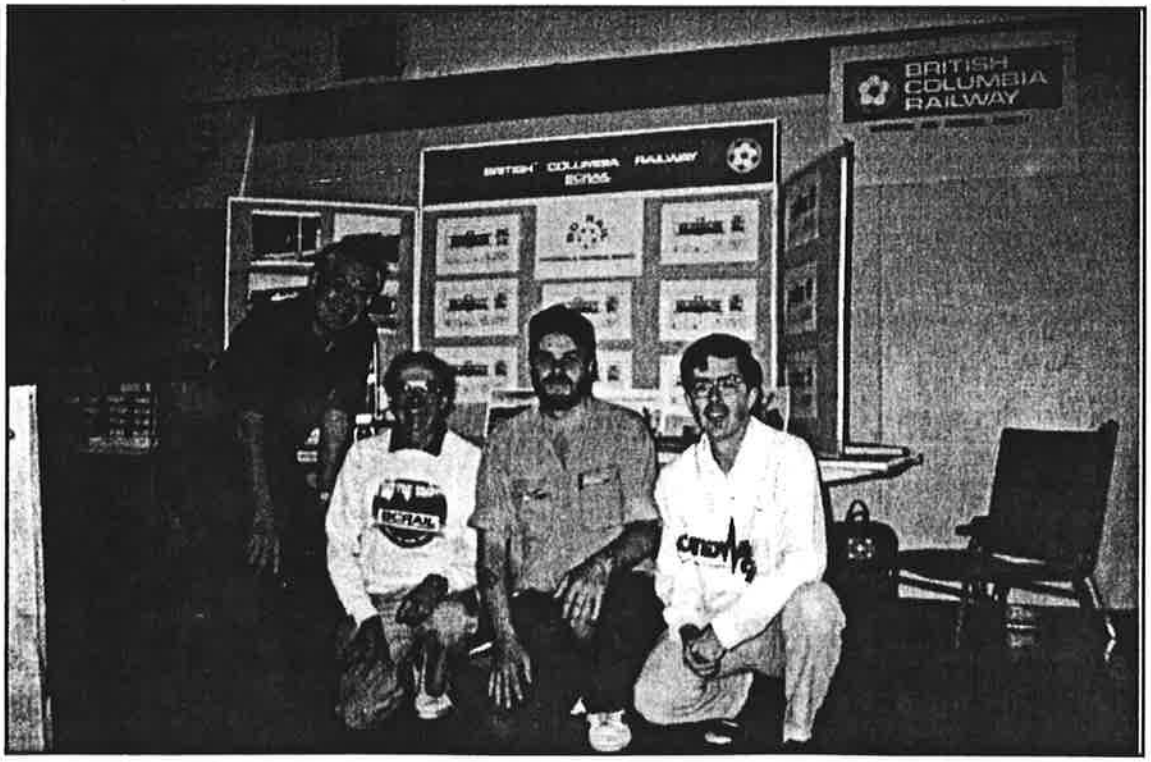
NMRA/PNR 7th Division's annual Victoria Model Railway Show was held on September 25, and the BCRH&TS was well represented.

Our Society had a display booth on site, which was organized and staffed by members Andy Barber, Tim Horton, Greg M. Kennelly, and Dan Rowsell.

Greg and Tim provided the display's backdrop, N scale freight cars for display, and scale drawings of BC Rail caboose scale drawings. Meanwhile, Dan, an avid scale modeler, displayed several items from his PGE/BCR collection, including a few of his latest scratch-built projects.

Sample copies of *The Cariboo* were available for distribution, along with promotional fliers describing our Society.

Left to right: Andy, Greg, Dan, and Tim. Dan Rowsell photo.



Flashback: Gas Service Ends After 28 Faithful Years

January 23rd was the end of another era.

This was the day the PGE Gas Car discontinued service after 28 years. It operated every consecutive day since 1933, and has more than justified its usefulness. It was a great and speedy service to the miners when time was of essence and money was being spent.

Not Needed

If the Moha road is maintained, the gas car is not needed. Should business warrant it, or another mining boom hits, the Budd passenger could probably manage a flat or two from four to six vehicles.

The Railway has lost money on the service for the past three years. It made money, however, in those days when five and six flat cars would trail with from 12 to 18 vehicles.

The reorganization of Bralorne brought thousands of people to Bridge River, and there was no road of access, only from the railways on Seton Lake over Mission Mountain.

Lives Again

The PGE remembered it had the old gas car with a big GMC motor for power, left over from the hey day of 1914-15. The crate was fetched to Lillooet, and the shop gang worked it over. By mid-summer of 1933 it was hauling thousands of cars of people who had, or made business with the Mines of Bridge River.

A ferry that was set up couldn't compete with the rails and soon had to quit. The gas car made three trips a day, only two men operated it -- Frank Conway the conductor, and Mr. Giles, the motorman. The service was excellent, and for eight years the car never missed a trip.

In good and bad times, stormy weather and sunshine, the faithful old gas car served the short line between Lillooet and Shalalth. Bridge River was the focal point in 1933, but by 1949 Shalalth was the only stop.

The gas car (affectionately known as the "Galloping Goose") has been blessed and it has been cursed. It has carried great sorrow with the dead; and it has carried gay conventions. No matter what the reason, the service was always the same -- par excellence.

This *Flashback* originally appeared in the February 1961 edition of *The Coupler,* and is reprinted courtesy of BC Rail. The gas car referred to in the text was PGE #107. For further details of PGE's gas car fleet, see *Cariboo* #16.

RESEARCH RESOURCES

Dave Shaw (2046 Limerick Court, Mississauga, ON L5H 3Z8) has acquired a portion of the Paterson-George Collection of railroad-oriented photographs. In addition to these holdings, Dave has his own collection of both black & white and colour photographs (all of which were taken while Dave resided in western Canada from 1975 until 1983).

The P-G Collection is comprised primarily of steam- era material, while Dave's own material is diesel-oriented. ❐

The latest issue of *The Timetable Collector*, published by the National Association of Timetable Collectors, features material from several Canadian railways. Included therein are copies of 15 items published by the PGE (circa 1913 through 1961). For more information, contact the NAOTC at 125 American Inn Road, Villa Ridge, MO 63089. ❐

Wil Whittaker (25 Blithedale Terrace, Mill Valley, CA 94941) has a selection of PGE and BCR black and white prints available for purchase. The photos, which feature both motive power and rolling stock, range from the 1950s through 1980s. ❐

Kindly mention *The Cariboo* when contacting suppliers.

INTERCHANGE

Mike Jackson (5759 Claremont Avenue #D, Oakland, CA 94618) would like to receive information regarding BULKtainer usage by any Canadian railway, or ownership by any Canadian company.

NEW PRODUCTS

Patrick O. Hind has released a series of 12 note cards featuring colour photos of British Columbia railway subjects (e.g. BCR, CPR, CNR, BC Forest Museum, Island industrials). The cards sell for $2.50 CDN each, which includes card, envelope, and plastic seal for protection which in transit. Shipment is made promptly, and Patrick will custom tailor the photograph mix to suit the purchaser. Contact Patrick at 180 Hickey Avenue, Parksville, B.C. V9P 1L8. ❐

Stewart Hobbies has announced the release of its HO scale 3-bay, 70-ton offset-side hopper. This kit, was has never before been available in plastic (injection-molded styrene), features the most common offset-side version (9 panel). The car's usage spanned the late-1930s through 1970 eras. The PGE operated 20 of these 1935 AAR offset-side triple hoppers (series #261-280).

The hopper is available both as undecorated and with dimensional data only (black w/ white data) for $9.98 per car. (Richard Yaremko) ❐

A new video featuring BC Rail action within the scenic Fraser River canyon is now available. The video is 49 minutes in length and sells for $19.95 (plus $4.00 postage and handling. Big E Productions, POB 75, Greenland NH 03840. ❐

We have further information concerning the newly released HO scale 50-foot PS-1 boxcars from E & C Shops.

According to promotional info provided by the manufacturer, their PS-1 version is of a later production model with short ladders and no running boards. The car features a standard 8-foot Youngstown corrugated door, and future release plans include a double-door version.

The overall car colour is close. However, the reproduction of the dogwood herald leaves much to be desired (inaccurate colour match, poor printing quality).

The car is priced at $8.95. The British Columbia Railway version (#204) is available in four different road numbers. An undecorated version (#200) is also available. (Carter Cram and Laszlo Dora) ❐

Focus on the Prototype: Fleet Management

In Issue 19, we published the first installment of an occasional series detailing BC Rail's fleet management policy. This issue, we present two further chapters: assignment of woodchip gondolas and priority tonnage listings.

T-4 Assignment of System Woodchip Gondolas

General

Shippers are to be advised that movement of woodchip gondolas MUST be made by APPROVED METHODS ONLY, (car puller, cables, placed in the designated location on cars, or trackmobiles). The pushing of gondolas with forklifts, loader and other equipment causes damage to the gondola, resulting in shortages for loading And costly repairs. To minimize shortages that occur when gondolas are bad ordered, we must ensure that they are not being mishandled.

Loaded and empty gondolas must have their doors closed and wedges properly in place to secure the door.

To ensure the fleet is being utilized to its full potential, a daily report of woodchip gondolas on hand from each terminal is required.

The following list of woodchip gondolas and their capacities are provided to assist all concerned in protecting proper freight charges.

INTS	NUMBERS	NO. OF CARS	CAR TYPE	CUBIC FEET	UNITS
PGE/BCOL	9501 - 9765*1	217	G9	6400	32.00
	9766 - 9825*1	56	G9	6650	33.25
	90001 - 90140	125	G9	6565	33.00
	90141 - 90340	186	C9	6619	33.00
	90341 - 90840	474	G9	6600	33.00

All woodchip gondolas are suitable for all consignees at Prince George, Quesnel, Mackenzie and North Vancouver.

*1 9501-9825 gondolas are NOT SUITABLE FOR INTERCHANGE

NOTE: Cariboo Pulp and Paper requires all gondolas shipped to them be spotted with the end door facing north to facilitate dumping.

T-18 Priority Tonnage Listings

General

The following Priority Tonnage Listing is to be used unless otherwise advised by Fleet Management.

From time to time there is more tonnage available both northbound and southbound than can be handled on existing freight. As required, notwithstanding this T-Circular, Fleet Management will designate Priority tonnage that **must not** be delayed.

Once designated, Priority Tonnage will be expedited by the Market Manager, Forest Products on **X wires** and is to be handled on the **first available train.**

PRIORITY TONNAGE LIST

NORTHBOUND	SOUTHBOUND
1. Expedited Cars	1. Expedited Cars
2. TOFC Traffic	2. TOFC and Reload Traffic
3. Empty Tank Cars	3. LPG Traffic
4. Chemicals	4. Newsprint
5. Petroleum Products	5. Petroleum Products
6. Concentrate Cars	6. "Old Date" Lumber - ie: Cars delayed 24 hours after billing
7. Lime - Cement Cars	7. Waferboard
8. Center Beams Flat Cars	8. Export Lumber, Plywood and Woodpulp
9. Woodchip Cars	9. Veneer
10. Newsprint Cars	10. Sulphur
11. Other Box Cars	11. Grain
12. Grain Cars	12. Concentrates
13. Sulphur Cars	13. Woodchips
14. Others	14. Others